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ERRATA

List of inventions, page xxxv, issue of Nov. 8, title of inventions, for "Multiple coil spring washer" read *spring washer*.

323044

LIST OF TRADE-MARK APPLICANTS

PUBLISHED FOR OPPOSITION

[Act of Feb. 20, 1905, Sec. 6, as amended Mar. 2, 1907]

Adams, Walter A., doing business as Adams Machine Company, Rochester, N. Y. Industrial furniture. Serial No. 329,732; Nov. 1. Class 23.

Advance Manufacturing Company, Milwaukee, Wis. Roller skates. Serial No. 330,612; Nov. 1. Class 22.

Alpine Ice Cream Co. Inc., Corona, Long Island, N. Y. Ice cream. Serial No. 329,666; Nov. 1. Class 46.

American Beauty Macaroni Company, The. (See The Kansas City Macaroni & Importing Company.)

Amick, James J., doing business as James J. Amick & Son, Detroit, Mich. Medicinal compound. Serial No. 324,278; Nov. 1. Class 6.

Anthracite Equipment Corporation, New York, N. Y. Filtering media. Serial No. 328,932; Nov. 1. Class 31.

Associated Seed Growers, Incorporated, New Haven, Conn. Garden and field seeds, bulbs, and plants. Serial No. 328,208; Nov. 1. Class 1.

Associated Seed Growers, Incorporated, New Haven, Conn. Garden and field seeds, bulbs, and plants. Serial No. 329,106; Nov. 1. Class 1.

Atlas Publishing Company, Inc., New York, N. Y. Magazine. Serial No. 312,747; Nov. 1. Class 38.

Barnard Company. (See Peoples Drug Stores, Inc.)

Baumheier Chemical Company, Inc., New York, N. Y. Water proofing agent for textile fabrics. Serial No. 329,367; Nov. 1. Class 6.

Bausch & Lomb Optical Company, Rochester, N. Y. Ophthalmic lenses. Serial Nos. 330,287–8; Nov. 1. Class 26.

Behr-Manning Corporation, Troy, N. Y. Composition sheet material. Serial Nos. 330,058–60; Nov. 1. Class 50.

Bergs, E. A., Fabriks Aktiebolag Eskilstuna, Sweden. Plane irons, chisels, tongs, etc. Serial No. 328,835; Nov. 1. Class 28.

Bio Medico, Inc., New York, N. Y. Medicinal preparation. Serial No. 330,080; Nov. 1. Class 6.

Bob, H. D., Company, Inc., New York, N. Y. Shirts, pajamas, union suits, etc. Serial No. 329,598; Nov. 1. Class 39.

Bonttoo Corn Salve Company, The, Toledo, Ohio. Salve. Serial No. 327,086; Nov. 1. Class 6.

Boon Manufacturing Co., Inc., New York, N. Y. Cream and ointment. Serial No. 329,764; Nov. 1. Class 6.

Boon Manufacturing Co., Inc., New York, N. Y. Ointment and cream. Serial No. 329,765; Nov. 1. Class 6.

Borg & Beck Company, The, Chicago, Ill. Mechanical clutches, clutch plates, and parts thereof. Serial No. 329,931; Nov. 1. Class 23.

Bradstone Rubber Company, Woodbine, N. J. Rubber heels, soles, and half soles. Serial No. 330,157; Nov. 1. Class 39.

Breck, John H., Inc., Springfield, Mass. Shampoo preparations. Serial No. 330,392; Nov. 1. Class 6.

Brooklandwood Farms. (See Emerson, (Mrs.) Anne P.)

Brown, Worth A., Capitola, Calif. Maltless beverages and sirups and extracts for making same. Serial No. 330,332; Nov. 1. Class 45.

Bryant Manufacturing Company, The, Wapakoneta, Ohio. Handles for hoes, hay forks, manure forks, etc. Serial No. 329,935; Nov. 1. Class 23.

Burnol Petroleum Co., Los Angeles, Calif. Chemical compounds to be added to gasoline to improve combustion. Serial No. 326,276; Nov. 1. Class 6.

Capital Paper Company, Indianapolis, Ind. Toilet paper. Serial No. 330,225; Nov. 1. Class 37.

Carbide and Carbon Chemicals Corporation, New York, N. Y. Denatured alcohol and alcohol other than pure ethyl alcohol. Serial No. 329,886; Nov. 1. Class 6.

Carmel Oil Co., New York, N. Y. Edible white oil. Serial No. 329,040; Nov. 1. Class 46.

Champion Hardware Company, Geneva, Ohio. Barn door catches, chain bolts, thumb and sash fasteners, etc. Serial No. 330,448; Nov. 1. Class 25.

Charlain Co., The. (See Jackson, Charles E.)

Chautauqua Malted Milk, Inc., Mayville, N. Y. Powdered skim and whole milk, ice cream mix, malted milk. Serial No. 328,661; Nov. 1. Class 46.

Citra Packing Co., The, Citra, Fla. Oranges, lemons, grape-fruit, etc. Serial No. 329,420; Nov. 1. Class 46.

Citrovite Tooth Paste Co. (See Mattison, Charles W.)

Coble, John M., jr., doing business as Red Cee Bottling Company, Burlington, N. C. Maltless beverages. Serial No. 327,214; Nov. 1. Class 45.

Continental Car-Na-Var Corporation, Brazil, Ind. Liquid floor waxes and polishes. Serial No. 326,622; Nov. 1. Class 16.

Contoure Laboratories, Inc., New York, N. Y. Cleansing cream, tissue cream, foundation cream, etc. Serial No. 329,887; Nov. 1. Class 6.

Cooper Products Corporation, New York, N. Y. Razor blades. Serial No. 330,419; Nov. 1. Class 28.

Corn & Ware, Calipatria, Calif. Fresh vegetables, fruits, melons, etc. Serial No. 311,322; Nov. 1. Class 46.

Coryell, L. L., & Son, Lincoln, Nebr. Automobile tires, tubes and portable tire patch outfits. Serial No. 329,740; Nov. 1. Class 85.

Cover Lawn Seed Company. (See Goldberg, Benjamin S.)

Crompton-Richmond Co., Inc., Crompton, R. I. Pile fabrics. Serial No. 330,061; published Nov. 1, 1932. Class 42.

Cutler-Hammer, Inc., Milwaukee, Wis. Automatic thermo-electric gas mixing control apparatus. Serial No. 327,344; Nov. 1. Class 26.

Dean, John, San Francisco, Calif. Wall board. Serial No. 320,493; Nov. 1. Class 12.

De Leon Peanut Company, De Leon, Tex. Shelled peanuts. Serial No. 330,039; Nov. 1. Class 46.

Dentay Company, The. (See Tuvin, Julius H.)

Distillers Corporation Limited, Montreal, Quebec, Canada. Spirits, whiskey and liquors. Serial Nos. 330,456–58; Nov. 1. Class 49.

Distillers Corporation Limited, Montreal, Quebec, Canada. Spirits, whiskey and liquors. Serial Nos. 330,461–2; Nov. 1. Class 49.

Distillers Corporation Limited, Montreal, Quebec, Canada. Spirits, whiskey and liquors. Serial Nos. 330,465–71; Nov. 1. Class 49.

Dormont Company. (See Goldberg, Max.)

Drewry & Sons Co., St. Paul, Minn. Maltless beverages. Serial No. 328,727; Nov. 1. Class 45.

Dure. (See Glatzer, Frances.)

Eastern Brass & Copper Co. Inc., New York, N. Y. Strips, sheets, rods and similar members of non-ferrous metals and alloys thereof. Serial No. 329,983; Nov. 1. Class 14.

Emerson, (Mrs.) Anne P., doing business as Brooklandwood Farms, Brooklandville and Baltimore, Md. Composition of milk, chocolate syrup and marshmallow. Serial No. 329,892; Nov. 1. Class 46.

Enterprise Aluminum Company, The, Massillon, Ohio. Percolators. Serial No. 330,342; Nov. 1. Class 13.

Esslinger's Inc., Philadelphia, Pa. Malt beverages. Serial No. 330,421; Nov. 1. Class 48.

Ever-Nu Enamel Co., Inc., Chicago, Ill. Paint enamel. Serial No. 330,041; Nov. 1. Class 16.

Fairchild-Wood Vimaphone Corporation, New York, N. Y. Phonographs with signals indicating the progress of the records. Serial No. 327,651; Nov. 1. Class 36.

Fankhauser, Walter A., doing business as Walters Shoe Company, New York, N. Y. Leather shoes. Serial No. 328,983; Nov. 1. Class 39.

Ferguson, George M., doing business as Ferguson Manufacturing Company, Portland, Oreg. Compound for protecting automobile radiators from leakage. Serial No. 329,664; Nov. 1. Class 6.

Fitzgerald Mfg. Company, The, Torrington, Conn. Electric mixer juice extractor. Serial No. 330,248; Nov. 1. Class 21.

Flaten, Helen G., Los Angeles and Huntington Park, Calif. Hair dressing preparations and brilliantine. Serial No. 329,046; Nov. 1. Class 6.

Fretwell, Charles B., doing business as Spartan Grain & Mill Co. and Sparco Laboratories, Spartanburg, S. C. Worm tablets for poultry, ointment, medicine, etc. Serial No. 329,443; Nov. 1. Class 6.

Geist & Geist, Inc., New York, N. Y. Knitted outer garments for women and children. Serial No. 330,010; Nov. 1. Class 39.

Gellman Manufacturing Co., Rock Island, Ill. Bread slicing machines. Serial No. 322,691; Nov. 1. Class 28.

General Kontrolar Company, Inc., Dayton, Ohio. Electrically operated chimes. Serial No. 615,257; Nov. 1. Class 21.

Georgia Foods, Inc., Atlanta, Ga. Canned combination of vegetables and meat. Serial No. 315,907; Nov. 1. Class 46.

Glasurit-Werke M. Winkelmann Aktien-Gesellschaft, Hamburg, Germany. Paints, paint enamels, varnishes, etc. Serial No. 325,823; Nov. 1. Class 16.

Glatzer, Frances, doing business as Dure, New York, N. Y. Toilet articles. Serial No. 330,011; Nov. 1. Class 6.

Gly-Ser-Dine Chemical Company, Milwaukee, Wis. Tooth paste. Serial No. 329,414; Nov. 1. Class 6.

Goldberg, Benjamin S., doing business as Cover Lawn Seed Company, Baltimore, Md. Lawn and field grass seeds. Serial Nos. 330,030–1; Nov. 1. Class 1.

Goldberg, Max, doing business as Dormont Company, New York, N. Y. Coated fabrics, coated applique materials, and backed fabrics. Serial No. 321,560; Nov. 1. Class 50.

Goodier, Elwood J., doing business as The Goodier Company, Dallas, Tex. Astringents, astringent cerates, bleach creams, etc. Serial No. 329,260; Nov. 1. Class 6.

LIST OF TRADE-MARK APPLICANTS

PUBLISHED FOR OPPOSITION

[Act of Feb. 20, 1905, Sec. 6, as amended Mar. 2, 1907]

Gordon, Roberta, San Francisco, Calif. Hair dressing oil and hair restorer. Serial No. 328,351; Nov. 1. Class 6.

Heine, Anna B., Geneva, Ill. Pastry cones filled with ice cream. Serial No. 327,147; Nov. 1. Class 46.

Hook, Ltd., Los Angeles, Calif. Leather, silk, and wool coats, jackets, breeches, caps, dresses, etc. Serial No. 329,019; Nov. 1. Class 39.

Hoppe, Frank A., Incorporated, Philadelphia, Pa. Gun greases and lubricating oils. Serial No. 330,091; Nov. 1. Class 15.

Horton, Emily A., doing business as The Swedish Laboratories, Cambridge, Mass. Shampoo. Serial No. 330,064; Nov. 1. Class 6.

Ice-It Products. (See Wolf, Sidney B.)

Illinois Lumber and Tile Co., St. Louis, Mo. Toy. Serial No. 329,601; Nov. 1. Class 22.

International Nickel Company, Inc., The, New York, N. Y. Sinks. Serial Nos. 330,015–16; Nov. 1. Class 13.

Ipswich Mills, Inc., Gloucester, Mass. Hosiery. Serial No. 326,145; Nov. 1. Class 39.

Jackson, Charles E., doing business as The Charlain Co., Philadelphia, Pa. Preparation for the treatment of skin diseases. Serial No. 328,063; Nov. 1. Class 6.

Jones, Almon E., Philadelphia, Pa. Electrically driven fans. Serial No. 319,095; Nov. 1. Class 21.

Kansas City Macaroni & Importing Company, The, doing business as The American Beauty Macaroni Company, Kansas City, Mo. Combination of macaroni and beans. Serial No. 329,950; Nov. 1. Class 46.

Kansas City Macaroni & Importing Company, The, doing business as The American Beauty Macaroni Company, Kansas City, Mo. Macaroni. Serial No. 329,951; Nov. 1. Class 46.

Kansas Milling Company, The, Wichita, Kans. Wheat flour. Serial No. 330,093; Nov. 1. Class 46.

Keasbey & Mattison Company, Ambler, Pa. Asbestos-cement product. Serial No. 329,424; Nov. 1. Class 12.

Kendall Company, The, Chicago, Ill., and Boston, Mass. Bandage compress, dental floss, gauze, etc. Serial No. 325,099; Nov. 1. Class 44.

Kennedy Company, The, doing business as Kennedy's, Boston, Mass. Men's dress-suit cases. Serial No. 329,858; Nov. 1. Class 3.

King & Queen Canneries. (See Taylor, Henry P.)

Kiviette. (See Pomeranz, Kiviette.)

Koch Beverage & Ice Company, The, Wapakoneta, Ohio. Malt cereal beverages. Serial No. 318,741; Nov. 1. Class 48.

Kress, S. H., & Co., New York, N. Y. Razors, safety razors, razor blades, scissors, etc. Serial No. 330,265; Nov. 1. Class 23.

Lorraine Manufacturing Co., Pawtucket, R. I. Textile fabrics in the piece. Serial No. 329,605; Nov. 1. Class 42.

Majestic Coal Mining Company, Kansas City, Mo. Coal. Serial No. 327,852; Nov. 1. Class 1.

Majewics, Constanty, doing business as Peg-O-Loop Mfg. Co., Dearborn, Mich. Outdoor game. Serial No. 330,230; Nov. 1. Class 22.

Mantle Lamp Company of America, The, Chicago, Ill. Heating and lighting apparatus, parts of and accessories therefor. Serial No. 328,560; Nov. 1. Class 34.

Marden Mfg. Co., Minneapolis, Minn. Machine used by the individual smoker to form cigarettes. Serial No. 328,872; Nov. 1. Class 8.

Mattison, Charles W., doing business as Citrovite Tooth Paste Co., Los Angeles, Calif. Tooth paste. Serial No. 329,997; Nov. 1. Class 6.

McCune, Gladys V., New York, N. Y. Beauty creams. Serial No. 324,215; Nov. 1. Class 6.

Melton Farms Inc. (See Melton, J. T.)

Melton, J. T., doing business as Melton Farms Inc., Fort Lauderdale, Fla. Fresh citrus fruits, deciduous fruits and vegetables. Serial No. 326,392; Nov. 1. Class 46.

Meteor Electric Corporation, New York, and Brooklyn, N. Y. Heater plugs, wall plates, canopy switches, etc. Serial No. 323,348; Nov. 1. Class 21.

Metro Chemical Products Co., Brooklyn, N. Y. Soap and metal polish preparations. Serial No. 325,027; Nov. 1. Class 4.

Michigan Alkali Company, Wyandotte, Mich. Calcium chloride and carbon dioxide. Serial No. 329,806; Nov. 1. Class 6.

Michigan Alkali Company, Wyandotte, Mich. Carbon dioxide. Serial No. 329,807; Nov. 1. Class 6.

Morris & Company, Incorporated, Baltimore, Md. Uniforms, aprons and house garments. Serial No. 329,833; Nov. 1. Class 39.

Motor Wheel Corporation, Lansing, Mich. Wheels. Serial No. 318,918; Nov. 1. Class 19.

Mülhens, Ferd., Inc., New York, N. Y. Eau de Cologne. Serial No. 329,119; Nov. 1. Class 6.

Nikostop Ipari és Kereskedelmi Részvény Tarsaság, Budapest, Hungary. Cigar and cigarette holders, smoke filtering devices, etc. Serial No. 315,973; Nov. 1. Class 8.

Nordmark-Werke G. m. b. H., Hamburg, Germany. Liver food preparations and tonic food preparations, malt and fodder. Serial No. 325,237; Nov. 1. Class 46.

O-Do-Co. (See Smith, Clyde S.)

Odorono Company, Inc., The, New York, N. Y. Deodorants and preparations for preventing excessive perspiration. Serial No. 322,264; Nov. 1. Class 6.

Oliver, Webster J., New York, N. Y. Paper, metal, and fiber waste and garbage receptacles. Serial No. 329,772; Nov. 1. Class 2.

Osgood & Sons Inc., Decatur, Ill. Children's dresses, pajamas, creepers, etc. Serial No. 328,103; Nov. 1. Class 39.

Oswego Falls Corporation, Fulton, N. Y. Paper cans and covers therefor. Serial No. 325,073; Nov. 1. Class 2.

Pacific Wire Products Company, Los Angeles, Calif. Tinned bronze wire insect screening. Serial No. 330,350; Nov. 1. Class 13.

Panther Oil & Grease Mfg. Co., Fort Worth, Tex. Lubricating oils. Serial No. 302,329; Nov. 1. Class 15.

Paper Novelty Manufacturing Company, New York, N. Y. Shredded foil for Christmas-tree and other decorations. Serial No. 330,379; Nov. 1. Class 22.

Paragon Distributing Corp., New York, N. Y. Antiseptic oil. Serial No. 323,870; Nov. 1. Class 6.

Paragon Distributing Corp., New York, N. Y. Hair coloring remover. Serial No. 323,871; Nov. 1. Class 6.

Paramount Taxicab Corporation, New York, N. Y. Automobiles. Serial No. 329 057; Nov. 1. Class 19.

Pearce-Duffy Company, Mount Pleasant, Mich. Hosiery, underwear, etc. Serial No. 329,815; Nov. 1. Class 39.

Peg-O-Loop Mfg. Co. (See Majewics, Constanty.)

Peoples Drug Stores, Inc., doing business as Barnard Company, Washington, D. C. Cleansing tissues. Serial No. 330,274; Nov. 1. Class 37.

Perolin Company of America, The, Chicago, Ill. Lubricating oils and greases. Serial No. 326,731; Nov. 1. Class 15.

Pfeiffer, S., Mfg. Co., St. Louis, Mo. Medicinal preparation. Serial No. 324,569; Nov. 1. Class 6.

Pinchot-Neumann Holding Corp., New York, N. Y. Sensitized gelatine coated paper sheets for use in photographic and colo-type printing. Serial No. 288,980; Nov. 1. Class 26.

Pomeranz, Kiviette, doing business as Kiviette, New York, N. Y. Gowns, dresses, and coats. Serial No. 330,164; Nov. 1. Class 39.

Portland Maine Publishing Company, Portland, Me. Newspaper column. Serial No. 328,874; Nov. 1. Class 38.

Ramapo Ajax Corporation, New York, N. Y. Switch stands. Serial No. 304,888; Nov. 1. Class 23.

Red Cee Bottling Company. (See Coble, John M., jr.)

Rossie Velvet Company, Mystic, Conn. Velvets in the piece. Serial No. 330,606; Nov. 1. Class 42.

Safety Car Heating & Lighting Company, The, New Haven, Conn., and New York, N. Y. Plumbing, steam-fitting valves, etc. Serial No. 292,012; Nov. 1. Class 13.

Sandoz Chemical Works, Inc., New York, N. Y. Medicinal garlic preparations, ergot preparations, etc. Serial No. 325,920; Nov. 1. Class 6.

Sani-Fil, Inc., Newton Centre, Mass. Paper bags. Serial No. 330,638; Nov. 1. Class 2.

Schering & Glatz, Inc., New York, N. Y. Medicinal preparation. Serial No. 330,552; Nov. 1. Class 6.

Schuman, Irving, doing business as Vitadent Laboratories, Jersey City, N. J. Dentifrice. Serial No. 326,304; Nov. 1. Class 6.

Selberling Latex Products Company, Barberton, Ohio. Golf balls. Serial No. 328,860; Nov. 1. Class 22.

Simpson, Wm., Sons & Co., Philadelphia, Pa. Cotton goods in the piece. Serial No. 317,618; Nov. 1. Class 42.

Smith, Clyde S., doing business as O-Do-Co., Dallas, Tex. Preparation for use as a deodorant and perspiration corrective. Serial No. 328,719; Nov. 1. Class 6.

Sparco Laboratories. (See Fretwell, Charles B.)

Spartan Grain & Mill Co. (See Fretwell, Charles B.)

Stenhaao Brothers, Philadelphia, Pa. Cigarettes. Serial No. 330,583; Nov. 1. Class 17.

Stewart, Jesse C., Co., Pittsburgh, Pa. Laundry blue powder. Serial No. 313,396; Nov. 1. Class 6.

Straus, Rover & Strass, Inc., Baltimore, Md. Dresses, blouses, playsuits, etc. Serial No. 329,483; Nov. 1. Class 39.

Swann Chemical Company, Birmingham, Ala. Fertilizer. Serial Nos. 318,331–2; Nov. 1. Class 10.

Swedish Laboratories, The. (See Horton, Emily A.)

Sylph Laboratories, Inc., New York, N. Y. Medicinal herb teas. Serial No. 329,691; Nov. 1. Class 6.

Tate, Elizabeth J., Washington, D. C. Hair tonic. Serial No. 330,671; Nov. 1. Class 6.

Taylor, Henry P., doing business as King & Queen Canneries, Walkerton, Va. Canned vegetables and sweet potato dessert preparation. Serial No. 330,212; Nov. 1. Class 46.

Tomkins, William, Point Loma, Calif. Title for newspaper feature articles. Serial No. 330,235; Nov. 1. Class 38.

Tuvin, Julius H., doing business as The Dentay Company, New York, N. Y. Preparation for holding artificial teeth in place. Serial No. 329,206; Nov. 1. Class 6.

Union Malt Products Company, Detroit, Mich. Malt syrup. Serial No. 324,286; Nov. 1. Class 46.

LIST OF TRADE-MARK APPLICANTS

PUBLISHED FOR OPPOSITION

[Act of Feb. 20, 1905, Sec. 6, as amended Mar. 2, 1907]

Unique Glove Company, Inc., The, Gloversville, N. Y. Gloves. Serial No. 328,746; Nov. 1. Class 39.

Universal Lubricating Systems, Inc., Pittsburgh, Pa. Metered dispensing pumps. Serial No. 327,034; Nov. 1. Class 26.

Utility Manufacturing Company, Inc., New York, N. Y. Cameras and parts thereof. Serial No. 328,747; Nov. 1. Class 26.

Vapor Phase Oils, Inc., New York, N. Y. Preparation to be added to a motor fuel. Serial No. 330,530; Nov. 1. Class 6.

Vernon, S. E. & M., Inc., New York, N. Y. Loose leaf note books and blank books. Serial No. 329,969; Nov. 1. Class 37.

Vitadent Laboratories. (See Schuman, Irving.)

Volunteer Stores, Inc., Chattanooga, Tenn. Grape juice, ginger ale. Serial No. 330,279; Nov. 1. Class 45.

Walfix Specialties, Inc., New York, N. Y. Wall bathroom fixtures. Serial No. 328,734; Nov. 1. Class 13.

Walters Shoe Company. (See Fankhauser, Walter A.)

Washington Maid, Incorporation, Washington, D. C. Ice creams and ices. Serial No. 330,026; Nov. 1. Class 46.

Wells-Lamont-Smith Corporation; Minneapolis, Minn. Work gloves. Serial Nos. 330,149–50; Nov. 1. Class 39.

West Coast Kalsomine Co., Berkeley, Calif. Cold water paint, kalsomine, etc. Serial No. 328,878; Nov. 1. Class 16.

Western Auto Supply Agency of Los Angeles, Los Angeles, Calif. Piston rings. Serial No. 325,862; Nov. 1. Class 35.

Whittemore, Edwin, doing business as The Wit-Mor Laboratories, Baltimore, Md. Rheumatic preparation. Serial No. 330,185; Nov. 1. Class 6.

Williams, Joseph D., Bellflower, Calif. Newspaper. Serial No. 330,187; Nov. 1. Class 38.

Winnie-Mae Dresses, Inc., New York, N. Y. Frocks and dresses. Serial No. 330,554; Nov. 1. Class 39.

Wisconsin Abrasive Co., Milwaukee, Wis. Razor hones. Serial Nos. 330,501–2; Nov. 1. Class 4.

Wit-Mor Laboratories, The. (See Whittemore, Edwin.)

Wolf, Sidney B., doing business as Ice-It Products, New York, N. Y. Antiseptic, astringent and styptic preparations. Serial No. 330,002; Nov. 1. Class 6.

Young, L. A., Company, The, Detroit, Mich. Wood and metal golf clubs. Serial No. 330,561; Nov. 1. Class 22.

Zigzag Sharpener Co., Tulsa, Okla. Razor sharpeners. Serial No. 330,137; Nov. 1. Class 23.

Zotos Corporation, New York, N. Y. Hair waving pads. Serial No. 328,112; Nov. 1. Class 44.

LIST OF REGISTRANTS OF TRADE-MARKS

A. & J. Manufacturing Company, Binghamton, N. Y., assignor to A. & J. Kitchen Tool Co., Chicago, Ill. Bowl and mechanical mixer for salads and the like. 298,682; Nov. 1; Serial No. 303,078; published Aug. 23, 1932. Class 28.

A. & J. Manufacturing Company, The, Binghamton, N. Y., assignor to A. & J. Kitchen Tool Co., Chicago, Ill. Spoons, spatulas, knives, etc. 298,712; Nov. 1; Serial No. 317,294; published Aug. 23, 1932. Class 28.

Advance Pattern Co., Inc., New York, N. Y. Patterns. 298,557; Nov. 1; Serial No. 325,205; published Aug. 23, 1932. Class 26.

Alto Mfg. Co. (not Incorporated). (See Brandstetter, Josef.)

Aluminum Cooking Utensil Company, The, New Kensington, Pa. Aluminum and aluminum alloy cooking hollow ware. 298,529; Nov. 1; Serial No. 328,388; published Aug. 23, 1932. Class 13.

Aluminum Cooking Utensil Company, The, New Kensington, Pa. Aluminum and aluminum alloy cooking hollow ware. 298,545; Nov. 1; Serial No. 328,389; published Aug. 23, 1932. Class 13.

American Bemberg Aktiengesellschaft. (See I. P. Bemberg Aktiengesellschaft, assignor.)

American Bemberg Corporation, New York, N. Y. Thread and yarn. 298,624; Nov. 1; Serial No. 328,207; published Aug. 2, 1932. Class 43.

American Bemberg Corporation, New York, N. Y. Thread and yarn. 298,625; Nov. 1; Serial No. 328,205; published Aug. 2, 1932. Class 43.

American Biochemical Corporation, Cleveland, Ohio. Combination of mineral salts. 298,635; Nov. 1; Serial No. 326,997; published Aug. 9, 1932. Class 6.

American Health Products Co., Washington, D. C. Preparation having bowel lubricating, laxative, and bowel regulation properties. 298,609; Nov. 1; Serial No. 327,331; published July 26, 1932. Class 6.

American Rotary Tools Company, Inc., New York, N. Y. Rotary drills, cutters, files, etc. 298,735; Nov. 1; Serial No. 324,979; published Aug. 16, 1932. Class 23.

Amtorg Trading Corporation, New York, N. Y. Insecticide, vermicide and animal dip. 298,655; Nov. 1; Serial No. 327,816; published Aug. 9, 1932. Class 6.

Anderson, Ethel G., Chicago, Ill. Perfumes, facial creams, rouges, etc. 298,668; Nov. 1; Serial No. 327,124; published Aug. 9, 1932. Class 6.

Arbuckle Brothers, New York, N. Y. Sugar. 89,978; renewed Jan. 28, 1933.

Arcadia Food Co., New York, N. Y. Maltless powder. 298,595; Nov. 1; Serial No. 328,470; published Aug. 23, 1932. Class 45.

Armour Fertilizer Works. (See Morris Fertilizer Co.)

Artcraft Silk Hosiery Mills, Inc., Philadelphia, Pa. Hosiery. 298,560; Nov. 1; Serial No. 328,774; published Aug. 23, 1932. Class 39.

Assembled Products Company, Inc., New York, N. Y. Spools of thread. 298,576; Nov. 1; Serial No. 327,181; published June 28, 1932. Class 43.

Associated Attleboro Mfrs., Inc., Attleboro, Mass. Small parts for spinning and twisting machines. 298,531; Nov. 1; Serial No. 328,113; published Aug. 16, 1932. Class 23.

Avery, Winnie, doing business as Madam W. Avery Company, Dallas, Tex. Hair dressing pomade. 298,703; Nov. 1; Serial No. 321,931; published Aug. 16, 1932. Class 6.

Bander, Abe J., doing business as Rednab Co., Dallas, Tex. Preparation for constipation, sluggish liver, etc. 298,540; Nov. 1; Serial No. 328,573; published Aug. 16, 1932. Class 6.

Bechtol and Tratsch, Chicago, Ill. Coin-controlled ball-projecting amusement device. 298,615; Nov. 1; Serial No. 327,241; published Aug. 23, 1932. Class 22.

Belmet Products, Inc., Brooklyn, N. Y. Portable shoulder shower. 298,544; Nov. 1; Serial No. 328,465; published Aug. 23, 1932. Class 13.

Berger, Robins & Freyman, Inc., New York, N. Y. Clothing. 298,523; Nov. 1; Serial No. 328,568; published Aug. 23, 1932. Class 39.

Bianchini, Férier, Lyon, France. Piece goods. 298,565; Nov. 1; Serial No. 328,656; published Aug. 16, 1932. Class 42.

Bianchini, Férier, Lyon, France. Piece goods. 298,662; Nov. 1; Serial No. 328,657; published Aug. 16, 1932. Class 42.

Bianchini, Férier, Lyon, France. Piece goods. 298,696; Nov. 1; Serial No. 327,969; published Aug. 9, 1932. Class 42.

Birmingham Small Arms Company Limited, The, Birmingham, England. Firearms and parts thereof. 89,812; renewed Jan. 14, 1933.

Bloch Bros. Tobacco Co., The, Wheeling, W. Va. Chewing and smoking tobacco. 298,756; Nov. 1. Class 17.

Block, H. & L., Ltd., San Francisco, Calif. Coats and leather coats, leather jackets, leather vests, etc. 298,726; Nov. 1; Serial No. 327,496; published Aug. 23, 1932. Class 39.

Bloomingdale Bros., Inc., New York, N. Y. Spirits of camphor, spirits of nitre, tincture of iodine, etc. 298,664; Nov. 1; Serial No. 327,386; published Aug. 9, 1932. Class 6.

Bloom-Rosenblum-Klein Company, The, doing business as The Golden Treat Malt Extract Company, Youngstown, Ohio. Malt syrup. 298,719; Nov. 1; Serial No. 317,702; published Aug. 16, 1932. Class 46.

Blumenthal, Sidney, & Co. Inc., New York, N. Y. Pile fabrics. 298,689; Nov. 1; Serial No. 315,781; published Aug. 2, 1932. Class 42.

Blumenthal, Sidney, & Co. Inc., New York, N. Y. Pile fabrics. 298,729; Nov. 1; Serial No. 309,671; published Aug. 16, 1932. Class 42.

Boga, Frank E., doing business as Du-Best Family Remedy Co., Brooklyn, N. Y. Salve and ointment. 298,648; Nov. 1; Serial No. 327,384; published Aug. 9, 1932. Class 6.

Borden Quality, Inc., New York, N. Y. Dressed poultry and eggs. 298,718; Nov. 1; Serial No. 317,969; published Aug. 16, 1932. Class 46.

Borden Quality, Inc., New York, N. Y. Cheese, butter, dressed poultry, and eggs. 298,721; Nov. 1; Serial No. 317,500; published Aug. 16, 1932. Class 46.

Bossert Corporation, The, Utica, N. Y. Sinks. 298,547; Nov. 1; Serial No. 328,084; published Aug. 23, 1932. Class 13.

Boston Leather Specialties, Inc., Everett, Mass. Baby hammocks, hammock stands, suspended seats, etc. 298,522; Nov. 1; Serial No. 328,593; published Aug. 16, 1932. Class 32.

Bowers, Charles E., doing business as The Bu-Win-Zo Co., Findlay, Ohio. Preparation for the treatment and relief of rheumatism, arthritis, acidosis, etc. 298,608; Nov. 1; Serial No. 327,337; published July 26, 1932. Class 6.

Brady, Frank C., Seattle, Wash. Stereopticon slide. 298,551; Nov. 1; Serial No. 327,843; published Aug. 23, 1932. Class 26.

Bragg-Kliesrath Corporation, South Bend, Ind. Automatic clutch operators. 298,708; Nov. 1; Serial No. 319,606; published Aug. 16, 1932. Class 23.

Brandstetter, Josef, doing business as Alto Mfg. Co., Chicago, Ill. Cans and bins. 298,581; Nov. 1; Serial No. 325,638; published July 10, 1932. Class 2.

Brandstetter, Josef, doing business as Alto Mfg. Co. (Not Incorporated), Chicago, Ill. Receptacles. 298,706; Nov. 1; Serial No. 320,661; published July 19, 1932. Class 2.

Brigman, R. H., Company, Olin, N. C. Pneumonia salve. 298,722; Nov. 1; Serial No. 324,128; published Aug. 9, 1932. Class 6.

Bromberg, William, doing business as W. Bromberg Company, Bronx, N. Y. Foot powder. 298,614; Nov. 1; Serial No. 327,243; published July 26, 1932. Class 6.

Brown, F. C., & Company, Chicago, Ill. Gelatine preparation. 298,550; Nov. 1; Serial No. 327,866; published Aug. 16, 1932. Class 46.

Brunswick-Balke-Collender Company, Wilmington, Del., and Chicago, Ill. Carom balls for billiards. 298,598; Nov. 1; Serial No. 327,901; published Aug. 23, 1932. Class 22.

Brunswick-Balke-Collender Company, doing business as Phoenix Slate Company, Wilmington, Del., and Chicago, Ill. Billiard tables and parts, etc. 298,619; Nov. 1; Serial No. 327,042; published Aug. 23, 1932. Class 22.

Bu-Cu-Mint Company, Binghamton, N. Y. Medicine. 298,645; Nov. 1; Serial No. 327,577; published Aug. 9, 1932. Class 6.

Burnett, R. B., Beckley, W. Va. Medicinal preparation. 298,602; Nov. 1; Serial No. 327,550; published July 26, 1932. Class 6.

Burton Brothers & Co. Inc., New York, N. Y. Cotton piece goods. 298,694; Nov. 1; Serial No. 328,300; published Aug. 2, 1932. Class 42.

Burton-Dixie Corporation, Chicago, Ill. Pillows. 298,526; Nov. 1; Serial No. 328,520; published Aug. 16, 1932. Class 32.

Cabot, Samuel, Incorporated, Boston, Mass. Fire proof insulating and sound deadening materials. 298,583; Nov. 1; Serial No. 328,158; published Aug. 16, 1932. Class 12.

California Concentrating Company, San Jose, Calif. Laxative. 298,607; Nov. 1; Serial No. 327,425; published July 26, 1932. Class 6.

Cast-R-Ette Mfg. Co. (See Duncan, Thomas P., jr.).

Champion Spark Plug Company, Toledo, Ohio. Spark plug testers. 298,552; Nov. 1; Serial No. 327,678; published Aug. 23, 1932. Class 26.

Chester-Pollard Amusement Co. Inc., New York, N. Y. Table billiards-golf game, table baseball game, etc. 298,597; Nov. 1; Serial No. 328,237; published Aug. 23, 1932. Class 22.

Citra Fruit Company, The, assignor to Citra Packing Co., Ocala, Fla. Oranges, lemons, grape-fruit, etc. 88,846; renewed Oct. 29, 1932.

Clay Cough Drop Co. (See Haeseler, Loren M.)

Coffey-Humber, San Francisco, Calif. Extracts of biological glands. 298,646; Nov. 1; Serial No. 327,619; published July 26, 1932. Class 6.

Cracker Jack Co., The. (See Shotwell Mfg. Co., assignor.)

D C A Drug Stores Inc., Portland, Oreg. Face cream and powder. 298,631; Nov. 1; Serial No. 327,625; published Aug. 9, 1932. Class 6.

Damrow, George E., Brooklyn, N. Y. Paper cartons. 298,579; Nov. 1; Serial No. 326,178; published Aug. 2, 1932. Class 2.

Dan-Gon Manufacturers, The. (See Kloeppinger, Peter F.)

Davenport's Sanitary Service, Ridgewood, N. Y. Insecticides and deodorants. 298,734; Nov. 1; Serial No. 319,977; published Apr. 19, 1932. Class 6.

Del Turco, L., & Bros., Inc., Harrison, N. J. Steps, flooring sections, etc. 298,589; Nov. 1; Serial No. 327,091; published Aug. 9, 1932. Class 12.

Dexter, C. H., & Sons, assignor to C. H. Dexter & Sons, Incorporated, Windsor Locks, Conn. Writing, printing, and tissue paper. 88,555–6; renewed Oct. 1, 1932.

Dick, A. B., Company, Chicago, Ill. Sheet feeding and impression rollers for rotary duplicating and like machines. 298,738; Nov. 1; Serial No. 324,550; published Aug. 23, 1932. Class 23.

Di Fiore, Joseph E., doing business as Jedco Products Co., Brooklyn, N. Y. Cement and plaster mixtures. 298,586; Nov. 1; Serial No. 327,186; published Aug. 16, 1932. Class 12.

Duart Manufacturing Co., Ltd., San Francisco, Calif. Oils, lotions, and shampoo preparations. 298,616; Nov. 1; Serial No. 327,216; published July 26, 1932. Class 6.

Du-Best Family Remedy Co. (See Boga, Frank E.)

Du Bois, H. A., & Sons, Inc., Cobden, Ill. Insecticides and fungicides. 298,537; Nov. 1; Serial No. 328,728; published Aug. 16, 1932. Class 6.

Duncan, Donald F., assignor to Donald F. Duncan, Inc., Chicago, Ill. Bandelore toy spinning tops. 298,697; Nov. 1; Serial No. 308,361; published Mar. 8, 1932. Class 22.

Duncan, Thomas P., jr., doing business as Cast-R-Ette Mfg. Co., Newport News, Va. Furniture casters. 298,528; Nov. 1; Serial No. 328,418; published Aug. 16, 1932. Class 13.

Du Pont, E. I., de Nemours and Company, Wilmington, Del. Repellent of moths, peach tree borers, and other insects. 298,671; Nov. 1; Serial No. 326,936; published Aug. 9, 1932. Class 6.

Duty Lumber Co., The, Wheeling, W. Va. Lumber and wood shingles. 298,582; Nov. 1; Serial No. 328,269; published Aug. 9, 1932. Class 12.

Eastman Kodak Company, Rochester, N. Y. Artificial silk thread and yarn. 298,573; Nov. 1; Serial No. 327,428; published July 5, 1932. Class 43.

Economy Nursery Company, Little Silver, N. J. Trees, plants, and seeds. 298,752; Nov. 1. Class 1.

Enterprise Manufacturing Company, The, Akron, Ohio. Fishing reels. 298,593; Nov. 1; Serial No. 328,783; published Aug. 23, 1932. Class 22.

Eppstein, Milton L., assignor to Monie Weixel, Fort Worth, Tex. Champagne, scuppernong claret, etc. 88,744; renewed Oct. 22, 1932.

Essan-Kay Company, The, Carlisle, Pa. Preparation for relief of contagious abortion in cattle. 298,648; Nov. 1; Serial No. 327,681; published July 26, 1932. Class 6.

Etablissements Rene Beziers, Douarnenez, France. Canned fish. 298,714; Nov. 1; Serial No. 324,272; published Aug. 16, 1932. Class 46.

Eyglo Company, Inc., New York, N. Y. Eye wash. 298,603; Nov. 1; Serial No. 327,504; published July 26, 1932. Class 6.

Falcon Packing Co. (See Valk, S. J., & Bro., assignors.)

Farbenfabriken of Elberfeld Co., assignor, by mesne assignments, to Winthrop Chemical Company, Inc., New York, N. Y. Urinary antiseptic. 89,580; renewed Dec. 30, 1932.

Flameking Company, Inc., New York, N. Y. Burners for solid carbonaceous fuel. 298,549; Nov. 1; Serial No. 327,929; published Aug. 23, 1932. Class 34.

Fleischer, I., & Sons, Cincinnati, Ohio. Thread. 298,690; Nov. 1; Serial No. 315,197; published Aug. 2, 1932. Class 43.

Flexible Steel Lacing Company, Chicago, Ill. Wrenches, boring bits, and punches. 298,525; Nov. 1; Serial No. 328,524; published Aug. 16, 1932. Class 23.

Ford, J. B., Company, The, Wyandotte, Mich. Sterilizing material. 298,611; Nov. 1; Serial No. 327,310; published July 26, 1932. Class 6.

Franklin Oil & Gas Company, The, Bedford, Ohio. Preparation for prevention and elimination of rust. 298,641; Nov. 1; Serial No. 325,945; published Aug. 9, 1932. Class 6.

Fruit Industries, Ltd. (See Garrett & Co., assignor.)

Gallagher, Mary, New York, N. Y. Cream used as a tissue builder. 298,733; Nov. 1; Serial No. 317,380; published Aug. 9, 1932. Class 6.

Gantner & Mattern Company, San Francisco, Calif. Swimming suits, swimming trunks, sweaters, and underwear. 298,534; Nov. 1; Serial No. 326,815; published Aug. 23, 1932. Class 39.

Garrett & Co., Norfolk, Va., assignor, by mesne assignments, to Fruit Industries, Ltd., Los Angeles, Calif. Wine made from scuppernong-grape. 88,622; renewed Oct. 8, 1932.

Garrett & Co., Norfolk, Va., assignor, by mesne assignments, to Fruit Industries, Ltd., Los Angeles, Calif. Blackberry-wine. 88,623; renewed Oct. 8, 1932.

Garrett & Co., Norfolk, Va., assignor, by mesne assignments, to Fruit Industries, Ltd., Los Angeles, Calif. Wine made from the scuppernong-grape. 88,624; renewed Oct. 8, 1932.

Garrett & Co., Norfolk, Va., assignor, by mesne assignments, to Fruit Industries, Ltd., Los Angeles, Calif. Wine made from the scuppernong-grape. 88,670; renewed Oct. 15, 1932.

Gaylord, Robert, Incorporated, St. Louis, Mo. Fiberboard boxes. 298,506; Nov. 1; Serial No. 327,938; published Aug. 9, 1932. Class 2.

General Mills, Inc. (See Larrowe Milling Co., The, assignor.)

General Motors Corporation. (See Olds Motor Works, assignor.)

Gensh, Otto, New York, N. Y. Medicinal teas. 298,725; Nov. 1; Serial No. 324,102; published Aug. 9, 1932. Class 6.

Gibbons, Floyd, New York, N. Y. Shirts. 298,530; Nov. 1; Serial No. 328,328; published Aug. 23, 1932. Class 39.

Gibson, William, and Company, to William Gibson & Co., Limited, Kinghorn, Scotland. Golf-cleeks, golf irons and wooden golf-clubs. 88,272; renewed Sept. 10, 1932.

Gift Shop Necessities Co., Kansas City, Mo. Decorative base metal boxes, cans, baskets, etc., and lids and covers therefor. 298,705; Nov. 1; Serial No. 321,711; published Aug. 9, 1932. Class 2.

Gly-Ser-Dine Chemical Company, Milwaukee, Wis. Solution containing iodine for external application. 298,647; Nov. 1; Serial No. 327,654; published July 26, 1932. Class 6.

Golden Treat Malt Extract Company, The. (See Bloom-Rosenblum-Klein Company.)

Goodier, Elwood J., doing business as The Goodier Company, Dallas, Tex. Hand lotion. 298,669; Nov. 1; Serial No. 327,054; published Aug. 9, 1932. Class 6.

Goodyear Rubber Company, San Francisco, Calif. High pressure rubber hose. 298,555; Nov. 1; Serial No. 326,610; published Aug. 16, 1932. Class 35.

Goodyear Tire & Rubber Company, The, Akron, Ohio. Hose. 298,543; Nov. 1; Serial No. 328,485; published Aug. 16, 1932. Class 35.

Graton & Knight Company, Worcester, Mass. Leather belting. 298,524; Nov. 1; Serial No. 328,527; published Aug. 16, 1932. Class 35.

Gray, William S., & Co., New York, N. Y. Chemical products. 298,612; Nov. 1; Serial No. 327,276; published July 26, 1932. Class 6.

Grimes Mfg. Co., Walnut Ridge, Ark. Maltless beverages and sirups and extracts for making the same. 298,757; Nov. 1. Class 45.

Groves Thread Company, Inc., Gastonia, N. C. Cotton thread and yarns. 298,564; Nov. 1; Serial No. 327,669; published July 12, 1932. Class 43.

Gum Tragasol Supply Company Limited, The, by change of name to Tragasol Products Limited, Hooten, England. Starch sizing. 90,698; renewed Mar. 18, 1933.

Gum Tragasol Supply Company Limited, The, by change of name to Tragasol Products Limited, Hooten, England. Adhesive sizings. 90,805–6; renewed Mar. 25, 1933.

Haeseler, Loren M., doing business as Clay Cough Drop Co., Chicago, Ill. Syrup for coughs, cough drops, etc. 298,742; Nov. 1; Serial No. 322,463; published Aug. 9, 1932. Class 6.

Hampden Paint & Chemical Company, Springfield, Mass. Water-proofing chemicals. 298,667; Nov. 1; Serial No. 327,221; published Aug. 9, 1932. Class 6.

Hanford, G. C., Mfg. Co., Syracuse, N. Y. Antiseptic dressing. 298,620; Nov. 1; Serial No. 327,012; published July 26, 1932. Class 6.

Hanson, W. T., Co., Schenectady, N. Y. Corn-salve. 90,700; renewed Mar. 18, 1933.

Hardwick & Magee Company, Philadelphia, Pa. Textile carpets. 298,693; Nov. 1; Serial No. 328,305; published Aug. 2, 1932. Class 42.

Harrower Laboratory, Inc., The, Glendale, Calif. Preparation for treatment of menorrhagia and metrorrhagia. 298,610; Nov. 1; Serial No. 327,312; published July 26, 1932. Class 6.

Herbaria Herb Co., Chicago, Ill. Mixtures of herbs. 298,685; Nov. 1; Serial No. 327,297; published Aug. 9, 1932. Class 6.

Hinkle, Mrs. Z. B., doing business as Pep Laboratories, Atlanta, Ga. Talcum powder, hair dressing, skin cream, rouge, lipstick, etc. 298,675; Nov. 1; Serial No. 326,052; published Aug. 16, 1932. Class 6.

Hoffmann-Hayman Coffee Co., San Antonio, Tex. Empty glass jars. 298,634; Nov. 1; Serial No. 327,191; published Aug. 9, 1932. Class 33.

Holliston Mills, Inc., The, Norwood, Mass. Cotton piece goods. 298,572; Nov. 1; Serial No. 327,439; published Aug. 2, 1932. Class 42.

Holmes Bakery and Confectionery, Inc. (See Norman Baking Company, The, assignor.)

Hoover Company, The, North Canton, Ohio. Dust filtering and collecting bags. 298,728; Nov. 1; Serial No. 313,361; published June 23, 1931. Class 2.

Horn, A. C., Company, Long Island City, N. Y. Waterproofing compound. 298,716; Nov. 1; Serial No. 321,567; published Aug. 16, 1932. Class 12.

Horn, A. C., Company, Long Island City, N. Y. Integral waterproofing for concrete, cement, etc. 298,717; Nov. 1; Serial No. 321,565; published Aug. 9, 1932. Class 12.

Hygienic Products Company, The, Canton, Ohio. Cleaning powder for automobile radiators. 298,650–1; Nov. 1; Serial Nos. 327,755–6; published Aug. 9, 1932. Class 6.

Hyland, George H., doing business as Standard Homeopathic Company, Los Angeles, Calif. Laxative preparation. 298,630; Nov. 1; Serial No. 327,794; published Aug. 9, 1932. Class 6.

I. P. Bemberg Aktiengesellschaft, Wuppertal-Oberbarmen and Wuppertal-Elberfeld, Germany, assignor to American Bemberg Corporation, New York, N. Y. Thread and yarn. 298,638–9; Nov. 1; Serial Nos. 326,663–4; published July 26, 1932. Class 43.

I. P. Bemberg Aktiengesellschaft, Wuppertal-Oberbarmen and Wuppertal-Elberfeld, Germany, assignor to American Bemberg Corporation, New York, N. Y. Thread and yarn. 298,640; Nov. 1; Serial No. 326,659; published July 26, 1932. Class 43.

Independent Grocers' Alliance Distributing Co., Chicago, Ill. Canned asparagus, beans, chile, soup, etc. 298,688; Nov. 1; Serial No. 315,838; published Aug. 16, 1932. Class 46.

Ironsides Company, The, Columbus, Ohio. Lubricants. 39,047; renewed Oct. 14, 1932.

Ironsides Company, The, Columbus, Ohio. Lubricants and lubricating compounds. 39,155; renewed Oct. 28, 1932.

Ironsides Company, The, Columbus, Ohio. Cable and rope fillers. 88,574–5; renewed Oct. 1, 1932.

Jarvis, Anna, Philadelphia, Pa. Badges and buttons. 90,708; renewed Mar. 18, 1933.

Jedco Products Co. (See Di Fiore, Joseph E.)

Johnson & Johnson, New Brunswick, N. J. Diapers. 298,567; Nov. 1; Serial No. 327,909; published Aug. 9, 1932. Class 42.

Johnson's, Iver, Arms & Cycle Works, Fitchburg, Mass. Revolvers. 298,750; Nov. 1. Class 9.

Johnstown Orthopedic Co. (See Parsons, Robert V.)

Kay, Frank, Bolton, England. Metal pipe-joints. 298,642; Nov. 1; Serial No. 327,362; published Aug. 23, 1932. Class 13.

Keepaway Laboratory, London, England. Veterinary or sanitary preparation. 298,736; Nov. 1; Serial No. 324,712; published Aug. 9, 1932. Class 6.

Kelly-Springfield Tire Company, New York, N. Y. Tires. 298,546; Nov. 1; Serial No. 328,332; published Aug. 9, 1932. Class 35.

Kelp Laboratories. (See Walsh, Michael J.)

King Cotton Mills Corporation, Richmond, Va. Cotton yarns. 298,659–60; Nov. 1; Serial Nos. 328,431–2; published Aug. 9, 1932. Class 43.

Kirby, Block & Fischer, Inc., New York, N. Y. Textile diapers. 298,663; Nov. 1; Serial No. 327,910; published Aug. 2, 1932. Class 42.

Kloeppinger, Peter F., doing business as The Dan-Gon Manufacturers, Denver, Colo. Liquid dandelion killer. 298,642; Nov. 1; Serial No. 327,362; published Aug. 9, 1932. Class 6.

Kohn, Bernhard, doing business as The Medicinal Products Co., Long Island City, N. Y. Medicinal preparation. 298,629; Nov. 1; Serial No. 327,850; published Aug. 9, 1932. Class 6.

Krause, Earnest J., doing business as Radiobar Company of America, Beverly Hills, Calif. Cabinets for radio receiving sets. 298,535; Nov. 1; Serial No. 326,874; published Aug. 23, 1932. Class 32.

Kress, S. H. & Co., New York, N. Y. Threads and yarns. 298,661; Nov. 1; Serial No. 328,435; published Aug. 9, 1932. Class 43.

Kress, S. H., & Co., New York, N. Y. Hammers, house axes, screw drivers, etc. 298,743; Nov. 1; Serial No. 323,011; published Apr. 12, 1932. Class 23.

La Compagnie Pharmaceutique Desbergers, Montreal, Quebec, Canada. Liver powder. 298,678; Nov. 1; Serial No. 325,004; published Aug. 16, 1932. Class 6.

La Rosa, Jos., & Sons, Modesto, Calif. Fresh grapes. 298,715; Nov. 1; Serial No. 322,320; published Aug. 16, 1932. Class 46.

Larrowe Milling Co., The, Cohocton, N. Y., assignor, by mesne assignments, to General Mills, Inc., Minneapolis, Minn. Mixed feed for dairy cattle. 90,351; renewed Feb. 18, 1933.

Larrowe Milling Co., The, Cohocton, N. Y., and Detroit, Mich., assignor, by mesne assignments, to General Mills, Inc., Minneapolis, Minn. Dried beet-pulp for stock food. 90,899; renewed Apr. 1, 1933.

Leea, Mona, Ltd., New York, N. Y. Cosmetic creams. 298,709; Nov. 1; Serial No. 318,406; published Aug. 9, 1932. Class 6.

Lehmann, Ernst Paul, to Ernst Paul Lehmann, Patentwerk, successor. Brandenburg-on-the-Havel, Germany. Toys. 88,682; renewed Oct. 15, 1932.

Leo, Beniamino, Chicago, Ill. Maltless beverage. 298,542; Nov. 1; Serial No. 328,533; published Aug. 23, 1932. Class 45.

Lever Brothers Company, Cambridge, Mass. Vegetable shortening. 298,548; Nov. 1; Serial No. 328,064; published Aug. 16, 1932. Class 46.

Levine, H., doing business as H. Levine Cooperage, Los Angeles, Calif. Barrels and kegs. 298,729; Nov. 1; Serial No. 324,292; published Aug. 2, 1932. Class 2.

Little Bear Specialties Co., Inc., Kansas City, Mo. Top of the bandalore type and parts therefor. 298,596; Nov. 1; Serial No. 328,438; published Aug. 23, 1932. Class 22.

Lonsdale Company, Providence, R. I. Cotton piece goods. 298,577; Nov. 1; Serial No. 327,226; published Aug. 9, 1932. Class 42.

Louisville Varnish Company, Louisville, Ky. Wood-stains. 89,676; renewed Dec. 31, 1932.

Luntz, Joseph, Brooklyn, N. Y. Laxative tonic. 298,672; Nov. 1; Serial No. 326,826; published Aug. 9, 1932. Class 6.

Lyons Fertilizer Company, Tampa, Fla. Soil conditioner. 298,590; Nov. 1; Serial No. 326,687; published Aug. 23, 1932. Class 10.

Mallinger, Samuel, Company, Pittsburgh, Pa. Glass jars. 298,704; Nov. 1; Serial No. 321,809; published July 19, 1932. Class 33.

Mann, William, Company, Philadelphia, Pa. Paper and envelopes. 39,898; renewed Mar. 10, 1933.

Marine Chemicals Company, Ltd., South San Francisco and San Francisco, Calif. Pharmaceutical preparation. 298,737; Nov. 1; Serial No. 324,688; published Aug. 9, 1932. Class 6.

Massachusetts Chocolate Company, Boston, Mass. Chocolate and cocoa. 90,720; renewed Mar. 18, 1933.

Master Metal Products, Inc., Buffalo, N. Y. Utility chests. 298,571; Nov. 1; Serial No. 327,598; published July 12, 1932. Class 2.

Matthews, C. Emmett, doing business as Matthews Chemical Co., Roanoke Rapids, N. C. Medicinal preparation. 298,621; Nov. 1; Serial No. 326,999; published July 26, 1932. Class 6.

Maxim Silencer Company, The, Hartford, Conn. Silencers for quieting gas flow noises at exhausts, etc. 298,702; Nov. 1; Serial No. 321,774; published Aug. 16, 1932. Class 23.

Mayers & Schiller, Inc., New York, N. Y. Ladies' undergarments. 298,741; Nov. 1; Serial No. 324,145; published Aug. 23, 1932. Class 39.

McGowan, Frank J., New York, N. Y. Wool, worsteds, cheviot, and cashmere suitings and coatings. 298,679; Nov. 1; Serial No. 327,959; published Aug. 16, 1932. Class 42.

McLaren, L. M., Yuma, Ariz. Fresh vegetables. 298,554; Nov. 1; Serial No. 327,159; published Aug. 16, 1932. Class 46.

Mechling Brothers Chemical Company, Camden, N. J. Insecticides. 298,606; Nov. 1; Serial No. 327,445; published July 26, 1932. Class 6.

Medicinal Products Co. (See Kohn, Bernhard.)

Mergenthaler Linotype Co., New York, to Mergenthaler Linotype Company, Brooklyn, N. Y. Linotype supplies. 90,360; renewed Feb. 18, 1933.

Miller, Charles N., assignor to Charles N. Miller Company, Boston, Mass. Candy. 88,913; renewed Oct. 29, 1932.

Missouri Casket Company, Kansas City, Mo. Burial caskets and vaults. 298,569; Nov. 1; Serial No. 327,916; published Aug. 9, 1932. Class 2.

Mono Service Co., Newark, N. J. Cartons. 298,749; Nov. 1; Serial No. 322,301; published July 19, 1932. Class 2.

Morgan Sabalol Products, Inc., New York, N. Y. Nose and throat medication. 298,623; Nov. 1; Serial No. 328,223; published Aug. 16, 1932. Class 6.

Morris Fertilizer Co., Atlanta, Ga., to Armour Fertilizer Works, Chicago, Ill., successor. Fertilizer. 88,776; renewed Oct. 22, 1932.

Naamloose Vennootschap Eau de Cologne Fabriek J. C. Boldoot, Amsterdam, Netherlands. Perfumery, toilet creams, shampoos, etc. 298,707; Nov. 1; Serial No. 320,366; published Aug. 9, 1932. Class 6.

Naamloose Vennootschap Vereenigde Chemische Fabrieken, Utrecht, Netherlands. Manure. 298,720; Nov. 1; Serial No. 317,525; published Aug. 23, 1932. Class 10.

National Broadcasting Company, Inc., New York, N. Y. Motion picture film. 298,745–6; Nov. 1; Serial Nos. 322,857–8; published Aug. 16, 1932. Class 26.

Neiman-Marcus Co., Dallas, Tex. Cream for reducing the body. 298,632; Nov. 1; Serial No. 327,596; published Aug. 16, 1932. Class 6.

Nicholas, Francis C., Gambrills, Md. Antiseptic medicinal preparation. 298,599; Nov. 1; Serial No. 327,613; published July 26, 1932. Class 6.

Nobirca Beauty Preparations, Inc., New York, N. Y. Astringents, astringent cerates, bleach and beauty creams, etc. 298,539; Nov. 1; Serial No. 328,644; published Aug. 16, 1932. Class 6.

Norman Baking Company, The, Minneapolis, Minn., assignor, by mesne assignments, to Holmes Bakery and Confectionery, Inc., Chicago, Ill. Bread. 87,910; renewed Aug. 13, 1932.

Oldmill Paper Products Corp., Brooklyn, N. Y. Paper baking cups, dishes, etc. 298,580; Nov. 1; Serial No. 326,299; published July 5, 1932. Class 2.

Olds Motor Works, Detroit and Lansing, assignor to General Motors Corporation, Detroit, Mich. Automobiles. 39,405; renewed Dec. 2, 1932.

Onondaga Silk Company, Inc., Syracuse and New York, N. Y. Silk fabrics. 298,699–701; Nov. 1; Serial Nos. 328,499–501; published Aug. 9, 1932. Class 42.

P. & M. Company, The, Chicago, Ill. Metal rail-anchors, anticreepers, tie-plate, etc. 89,292; renewed Dec. 3, 1932.

Palmer Products, Inc., Waukesha, Wis. Floor dressing. 298,755; Nov. 1. Class 12.

Para Thread Company, Inc., Woonsocket, R. I. Rubber thread. 298,563; Nov. 1; Serial No. 327,773; published Aug. 9, 1932. Class 43.

Parfumerie St. Denis, New York, N. Y. Astringents, bleach creams, beauty creams, etc. 298,644; Nov. 1; Serial No. 327,407; published Aug. 9, 1932. Class 6.

Parke, Davis & Co., Detroit, Mich. Iron citrate and copper nucleate. 298,600; Nov. 1; Serial No. 327,602; published July 26, 1932. Class 6.

Parke, Davis & Co., Detroit, Mich. Digitalis. 296,601; Nov. 1; Serial No. 327,601; published July 26, 1932. Class 6.

Parker Rust-Proof Company, Detroit, Mich. Phosphoric acid and phosphate compounds. 298,605; Nov. 1; Serial No. 327,448; published July 26, 1932. Class 6.

Parsons, Robert V., doing business as Johnstown Orthopedic Co., Johnstown, Pa. Arch supports and foot pads and cushions for use in shoes. 298,744; Nov. 1; Serial No. 323,353; published Apr. 26, 1932. Class 44.

Pascall, James, Limited, London, to James, Pascall, Limited, Mitcham, England. Confectionery. 39,304; renewed Nov. 18, 1932.

Patterson-Sargent Company, The, Cleveland, Ohio. Dry and ready-mixed paints, paint enamels, lacquers and varnishes. 298,754; Nov. 1. Class 16.

Paul, Henry A., doing business as Paul's Pharmacy Inc., Daytona Beach, Fla. Skin lotion. 298,687; Nov. 1; Serial No. 315,412; published Aug. 9, 1932. Class 6.

Paul, Israel, doing business as Russ Pharmaco Products, Philadelphia, Pa. Medicinal preparation. 298,613; Nov. 1; Serial No. 327,258; published Aug. 16, 1932. Class 6.

Penn-Jersey Auto Stores, Inc., Easton, Pa. Liquid radiator stop leak compound. 298,633; Nov. 1; Serial No. 327,286; published Aug. 9, 1932. Class 6.

Pep Laboratories. (See Hinkle, Mrs. Z. B.)

Peres, Marcelino, & Company, Tampa, Fla. Cigars. 298,585; Nov. 1; Serial No. 328,029; published Aug. 23, 1932. Class 17.

Phoenix Slate Company. (See Brunswick-Balke-Collender Company.)

Plymouth Laboratories. (See Towns & James, Inc.)

Pond's Extract Company, New York, N. Y. Face powder. 298,652; Nov. 1; Serial No. 327,770; published Aug. 9, 1932. Class 6.

Poster Products, Inc., Chicago, Ill. Games. 298,594; Nov. 1; Serial No. 328,536; published Aug. 23, 1932. Class 22.

Radiobar Company of America. (See Krause, Earnest J.)

Raymond, J. Harvey, San Francisco, Calif. Insecticide and deodorizer. 298,677; Nov. 1; Serial No. 325,112; published Aug. 16, 1932. Class 6.

Rednab Co. (See Bander, Abe J.)

Regina Art Embroidery Company, Lynn, Mass. Furniture scarfs, buffet sets, luncheon cloths, etc. 298,578; Nov. 1; Serial No. 326,508; published Aug. 16, 1932. Class 42.

Reiss, Dr. Rudolf, Rheumasan- und Lenicet-Fabrik, Berlin-Charlottenburg, Germany. Suppositories, medicines, etc. 298,731; Nov. 1; Serial No. 309,150; published Aug. 9, 1932. Class 6.

Reiss, Dr. Rudolf, Rheumasan- und Lenicet-Fabrik, Berlin-Charlottenburg, Germany. Medicine. 298,732; Nov. 1; Serial No. 309,144; published Aug. 9, 1932. Class 6.

Riess Manufacturing Company, Dayton, Ohio. Testing apparatus, gauges, and equipment. 298,527; Nov. 1; Serial No. 328,507; published Aug. 16, 1932. Class 26.

Rosenau Bros. Inc., Philadelphia, Pa. Children's dresses, suits, and rompers. 298,532; Nov. 1; Serial No. 327,921; published Aug. 23, 1932. Class 39.

Rosengart, Sylvain, Paris, France. Liquid treatment for eyes. 298,649; Nov. 1; Serial No. 327,738; published July 26, 1932. Class 6.

Roussos, Phofa, doing business as Madam Roussos, Richmond Hill, N. Y. Facial creams. 298,723; Nov. 1; Serial No. 323,590; published July 26, 1932. Class 6.

Royal Laboratories, Inc., Newark, N. J., and New York, N. Y. Germicidal preparation. 298,653; Nov. 1; Serial No. 327,806; published Aug. 9, 1932. Class 6.

Royal Laboratories, Inc., Newark, N. J., and New York, N. Y. Preparation for the treatment of the gums. 298,654; Nov. 1; Serial No. 327,807; published Aug. 9, 1932. Class 6.

Royal Laboratories, Inc., Newark, N. J. Preparation for the treatment of athlete's foot and impetigo. 298,656; Nov. 1; Serial No. 327,835; published Aug. 9, 1932. Class 6.

Rubber Shock Insulator Corporation, The, Bridgeport, Conn. Rubber vibration eliminating supports for machinery. 298,685; Nov. 1; Serial No. 284,746; published Aug. 23, 1932. Class 23.

Russ Pharmaco Products. (See Paul, Israel.)

Rutherford, Edward E., Toronto, Ontario, Canada. Medical preparation. 298,670; Nov. 1; Serial No. 326,966; published Aug. 9, 1932. Class 6.

Ru-Win-Zo Co., The. (See Bowers, Charles R.)

S. M. Laboratories, Inc., Seattle, Wash. Silver and mercury in a colloidal state. 298,673; Nov. 1; Serial No. 326,233; published July 26, 1932. Class 6.

St. Louis Basket & Box Corporation, St. Louis, Mo. Fiberboard boxes. 298,570; Nov. 1; Serial No. 327,775; published Aug. 2, 1932. Class 2.

Schnackel's, C., Son, Inc., Rochester, N. Y. Oil filters and pads. 298,533; Nov. 1; Serial No. 327,836; published Aug. 23, 1932. Class 23.

Scott, Cashius M., doing business as Scott's Scalp Preparation Company, Chicago, Ill. Hair grower, dressing, and pressing oil. 298,711; Nov. 1; Serial No. 317,407; published June 21, 1932. Class 6.

Sellers Manufacturing Co., Saxapahaw, N. C. Cotton yarns. 298,628; Nov. 1; Serial No. 327,949; published July 26, 1932. Class 43.

Shotwell Mfg. Co., assignor to The Cracker Jack Co., Chicago, Ill. Popcorn coated with candy. 89,382; renewed Dec. 10, 1932.

Simonds Saw and Steel Company, Fitchburg, Mass. Files. 298,558; Nov. 1; Serial No. 328,041; published Aug. 23, 1932. Class 23.

Sky Specialties Corporation, Detroit, Mich. Air compression starters and parts thereof. 298,684; Nov. 1; Serial No. 299,523; published Aug. 16, 1932. Class 23.

Smith, Alice C., Madison, N. J. Hair tonic, grower, straightening oil, and restorer. 298,674; Nov. 1; Serial No. 326,166; published Aug. 9, 1932. Class 6.

Societe Anonyme des Eaux Minerales d'Evian-les-Bains, Paris, France. Mineral waters. 298,618; Nov. 1; Serial No. 327,111; published Aug. 23, 1932. Class 45.

Southland Chemical Co. (See Tippey, Jesse M.)

Sozonian Vault Company, The, Bucyrus, Ohio. Burial vaults. 298,567–8; Nov. 1; Serial Nos. 328,106–7; published Aug. 9, 1932. Class 2.

Sponge Rubber Products Co., The, Derby, Conn. Sponge rubber. 298,584; Nov. 1; Serial No. 328,079; published Aug. 23, 1932. Class 1.

Squibb, E. R., & Sons, New York, N. Y. Laxatives. 298,536; Nov. 1; Serial No. 328,741; published Aug. 16, 1932. Class 6.

Stafford, S. S., Inc., New York, N. Y. Bottles of writing ink. 298,691; Nov. 1; Serial No. 314,661; published Aug. 23, 1932. Class 11.

Standard Brands Incorporated, New York, N. Y. Coffee. 298,683; Nov. 1; Serial No. 302,261; published Aug. 16, 1932. Class 46.

Standard-Coosa-Thatcher Company, Chattanooga, Tenn. Cotton thread. 298,626–7; Nov. 1; Serial Nos. 328,138–9; published Aug. 2, 1932. Class 43.

Standard Homeopathic Company. (See Hyland, George H.)

Strutwear Knitting Company, Minneapolis, Minn. Hosiery and underwear. 298,561; Nov. 1; Serial No. 328,707; published Aug. 23, 1932. Class 39.

Sun Radio, Inc., Akron, Ohio. Golf balls. 298,592; Nov. 1; Serial No. 328,821; published Aug. 23, 1932. Class 22.

Superior Products Corporation, Elizabeth, N. J. Compacts and vanity cases. 298,574; Nov. 1; Serial No. 327,378; published July 12, 1932. Class 2.

Superior Products Corporation, Elizabeth, N. J. Cases, compacts, and lip stick cases. 298,575; Nov. 1; Serial No. 327,377; published July 12, 1932. Class 2.

Timken-Detroit Axle Company, Detroit, Mich. Differential gearing. 298,710; Nov. 1; Serial No. 317,861; published Aug. 23, 1932. Class 23.

Tippey, Jesse M., doing business as Southland Chemical Co., St. Petersburg, Fla. Insecticide. 298,657; Nov. 1; Serial No. 328,255; published Aug. 16, 1932. Class 6.

Towns & James, Inc., doing business as Plymouth Laboratories, Brooklyn, N. Y. Pharmaceutical and medicinal preparations. 298,636; Nov. 1; Serial No. 326,835; published Aug. 9, 1932. Class 6.

Trattner, Rosa K., Los Angeles, Calif. Nutritious herbal preparation. 298,637; Nov. 1; Serial No. 326,696; published Aug. 9, 1932. Class 6.

Trees Candy Company. (See Zimetbaum, Samuel.)

Troy Blanket Mills, Troy, N. H. Piece goods and blankets. 298,692; Nov. 1; Serial No. 328,341; published Aug. 16, 1932. Class 42.

Ulmann, Bernhard, Co. Inc., New York, N. Y. Worsted yarns. 298,658; Nov. 1; Serial No. 328,407; published Aug. 9, 1932. Class 48.

United Brotherhood of Carpenters & Joiners of America, Indianapolis, Ind. Publications. 90,664; renewed Mar. 11, 1933.

United Drug Company, assignor, by mesne assignments, to United Drug Company, Boston, Mass. Mosquito-repelling preparation. 90,763; renewed Mar. 18, 1933.

United Elastic Corporation, Easthampton, Mass. Elastic fabrics. 298,698; Nov. 1; Serial No. 308,143; published Aug. 2, 1932. Class 42.

United States Rubber Company, New York, N. Y. Belts. 298,686; Nov. 1; Serial No. 316,458; published Aug. 16, 1932. Class 35.

Universal Chemical Corporation, Akron, Ohio. Shampoo. 298,676; Nov. 1; Serial No. 326,005; published July 26, 1932. Class 6.

Vaccaro, Leopold, doing business as The Wisnova Company, Philadelphia, Pa. Pharmaceutical preparation. 298,604; Nov. 1; Serial No. 327,488; published July 26, 1932. Class 6.

Valk, S. J., & Bro., assignor to Falcon Packing Co., Inc., New York, N. Y. Olives. 90,485; renewed Feb. 25, 1933.

Vanderbilt, R. T., Company, Inc., New York, N. Y. Clay used in manufacture of paper, paints, etc. 298,587–8; Nov. 1; Serial Nos. 327,176–7; published Aug. 23, 1932. Class 1.

Varnol Chemical Corporation, Long Island City, N. Y. Synthetic resins. 298,538; Nov. 1; Serial No. 328,674; published Aug. 16, 1932. Class 6.

Victor Manufacturing & Gasket Company, Chicago, Ill. Gaskets. 298,727; Nov. 1; Serial No. 313,397; published Aug. 9, 1932. Class 35.

Viennese Scalp Remedies, Inc., The, Baltimore, Md. Preparation for the scalp. 298,724; Nov. 1; Serial No. 324,022; published July 26, 1932. Class 6.

Vince Laboratories, Inc., New York, N. Y. Mouth-wash. 298,730; Nov. 1; Serial No. 314,828; published Aug. 9, 1932. Class 6.

Visnova Company, The. (See Vaccaro, Leopold.)

Wag Foods, Inc., Syracuse, N. Y. Wheat flour, canned soup, evaporated milk, etc. 298,553; Nov. 1; Serial No. 327,535; published Aug. 16, 1932. Class 46.

Wagner, H., & Adler Co., New York, N. Y. Billiard cloth in the piece. 298,680–1; Nov. 1; Serial Nos. 327,926–7; published Aug. 2, 1932. Class 42.

Walsh, Michael J., doing business as Kelp Laboratories, San Diego, Calif. Dried sea plant products. 298,617; Nov. 1; Serial No. 327,156; published July 26, 1932. Class 6.

Warner Brothers Company, The, Bridgeport, Conn. Corsets. 88,812; renewed Oct. 22, 1932.

Washington, G., Coffee Refining Company, Morris Plains, N. J. Coffee. 298,556; Nov. 1; Serial No. 326,120; published Aug. 16, 1932. Class 46.

Weixel, Monie. (See Eppstein, Milton L., assignor.)

West Disinfecting Company, Long Island City, N. Y. Chemical preparation used to prevent rust and corrosion. 298,622; Nov. 1; Serial No. 328,232; published Aug. 16, 1932. Class 6.

Western Bottle Mfg. Co., doing business as The Western Company, Chicago, Ill. Handkerchiefs. 298,695; Nov. 1; Serial No. 328,044; published Aug. 9, 1932. Class 42.

Westinghouse Electric & Manufacturing Company, East Pittsburgh, Pa. Electric motor units. 298,753; Nov. 1. Class 21.

Whitney, P. N., Cedar Vale, to P. N. Whitney, doing business as The Dr. Whitney Medicine Co., Arkansas City, Kans. Antiseptic prescription. 90,609; renewed Mar. 4, 1933.

Wiegand, Edwin L., Company, Pittsburgh, Pa. Electric heating units, electric heating elements, and parts therefor. 298,751; Nov. 1. Class 21.

Wilson, Andrew, Inc., Springfield, N. J. Fungicides. 298,541; Nov. 1; Serial No. 328,513; published Aug. 16, 1932. Class 6.

Winthrop Chemical Company, Inc. (See Farbenfabriken of Elberfeld Co., assignor.)

Wood Parts, Incorporated, West Helena, Ark. Toys, toy vehicles, etc. 298,747–8; Nov. 1; Serial Nos. 322,150–1; published Aug. 23, 1932. Class 22.

Worthington Ball Company, Elyria, Ohio. Golf balls. 89,787; renewed Jan. 7, 1933.

York and Company, Grand Rapids, Mich. Salt. 298,666; Nov. 1; Serial No. 327,268; published Aug. 9, 1932. Class 6.

Young, L. A., Company, Detroit, Mich. Wood and metal golf clubs. 298,591; Nov. 1; Serial No. 328,901; published Aug. 23, 1932. Class 22.

Zimetbaum, Samuel, doing business as Trees Candy Company, Newark, N. J. Chocolate syrup. 298,712; Nov. 1; Serial No. 324,729; published Aug. 16, 1932. Class 46.

Zupanski, James, Philadelphia, Pa. Preparation for the treatment of scalp diseases. 298,740; Nov. 1; Serial No. 324,206; published Aug. 9, 1932. Class 6.

LIST OF REGISTRANTS OF LABELS

All American Products Co. (See American Auto Accessories Stores.)

American Auto Accessories Stores, doing business as All American Products Co., Wilkes-Barre, Pa. All American. For Touch Up Black. 41,344; Nov. 1.

American Auto Accessories Stores, doing business as All American Products Co., Wilkes-Barre, Pa. All American. For Black Top Dressing. 41,345; Nov. 1.

American Auto Accessories Stores, doing business as All American Products Co., Wilkes-Barre, Pa. All American. For Radiator Stop Leak. 41,346; Nov. 1.

Beech-Nut Packing Company, Canajoharie, N. Y. Beech-Nut Black Cough Drops. For Cough Drops. 41,347–9; Nov. 1.

Beech-Nut Packing Company, Canajoharie, N. Y. Beech-Nut Menthol Cough Drops. For Cough Drops. 41,350–2; Nov. 1.

Beech-Nut Packing Company, Canajoharie, N. Y. Beech-Nut Oven Baker Beans. For Baked Beans. 41,353; Nov. 1.

Bunte Brothers, Chicago, Ill. Blizzard Bar. For Candy. 41,354; Nov. 1.

Claff, M. B., & Sons, Inc., Randolph, Mass. Chic Girl. For Shoes. 41,355; Nov. 1.

Dairy Corporation of America, Bloomington, Del., Milwaukee, Wis., and Chicago, Ill. Super-Milk Bread. For Bread. 41,356; Nov. 1.

Daniels, Cady L., Inc., Colorado Springs, Colo. One Fil Anti-Freeze. For Anti-Freeze Solution for Motor Vehicle Radiators. 41,357; Nov. 1.

Foley & Co., Chicago, Ill. Foley's Medicated Cough Drops. For Cough Drops. 41,358; Nov. 1.

Franklin Stores Co., Newark, N. J. Franklin Chocolate Malt Syrup. For Chocolate Malt Syrup. 41,359; Nov. 1.

General Laboratories Products. (See Williams, Rollin H.)

Goodman Chemical Co., The, Brooklyn, N. Y. Silver Nymphe Talc. For Talc. 41,360; Nov. 1.

Heller, B., & Company, Chicago, Ill. Heller's Punch-Ola. For Powder for Making Fruit Flavored Drinks. 41,361; Nov. 1.

Hills Brothers Company, The, New York, N. Y. Dromedary Cocoanut. For Cocoanut. 41,362; Nov. 1.

Hoague-Sprague Corporation, Lynn, Mass. London Shoe. For Boxes. 41,363; Nov. 1.

Hois, L. J., Milwaukee, Wis. I. G. A. 'Up-Side-Down' or Loaf Cake Pan. For Pans. 41,364; Nov. 1.

Hurd, S. J., Doing business as S. J. Hurd & Company, Mendota, Ill. Hurd's Wonder Ointment. For Ointment. 41,365; Nov. 1.

McCormick & Co., Inc., Baltimore, Md. Banquet Tea-Paks. For Tea. 41,366; Nov. 1.

McLean-Jones Oil Co. Inc., Boston, Mass. Penneald. For Motor Oil. 41,367; Nov. 1.

Pacific Lumber Company, The, San Francisco, Calif. Dry-O-Lit Poultry Litter "For Happy Hens". For Poultry Litter. 41,368; Nov. 1.
Raffa, Carmelo, Bakerton, Elmora P. O., Pa. Ice Cream On Toast. For Ice Cream Confection. 41,369; Nov. 1.
Reed Candy Company, Chicago, Ill. Canoodles. For Butterscotch. 41,370; Nov. 1.
Robertson, J. T., Company Inc., The, Syracuse, N. Y. Robertson Granulated Soap. For Granulated Soap. 41,371; Nov. 1.
Seiler, Karl, & Sons, Philadelphia, Pa. Oven Browned Virginia Style Ham. For Hams. 41,372; Nov. 1.
Soliz, Alberto, Los Angeles, Calif. La Perla Del Oriente. For Liniment. 41,373; Nov. 1.
Standard Brands Incorporated, New York, N. Y. Chase & Sanborn's Diamond 60. For Tea. 41,374; Nov. 1.
Sutorius Bread Company, Newton and Salina, Kans. Our Gang Bread Pan-Dandy Bread. For Bread. 41,375; Nov. 1.
Swift Manufacturing Company, Columbus, Ga. Columbus Mitcheline Quilt. For Quilts. 11,945; renewed Mar. 7, 1933.
Wilbert Products Co. Inc., The, New York, N. Y. Wilbert's No-Rub. For Floor Wax. 41,376; Nov. 1.
Williams, Rollin H., doing business as General Laboratories Products, Chicago, Ill. Klenzit. For Glass Cleaning Compound. 41,377; Nov. 1.
Wrigley, Wm., Jr. Company, Chicago, Ill. Wrigley's P. K. For Chewing Gum. 41,378–9; Nov. 1.

LIST OF REGISTRANTS OF PRINTS

Cream of Wheat Corporation, The, Minneapolis, Minn. People Began to Think We Were Neglecting Doris. For Wheat Breakfast Food. 13,952; Nov. 1.
Everson, Franklin E., doing business as Everson Display, New York, N. Y. Eskimo. For Electric Fans. 13,953; Nov. 1.
General Mills, Inc., Minneapolis, Minn. Free! Women! Accept Betty Crocker's Improved Cake Cooling Rack Free. For Cake Flour. 13,954; Nov. 1.
Kinney, G. R., Co., Inc., New York, N. Y. Boys—Girls.—Draw Pictures on Your Sneakers. For Sneakers. 13,955; Nov. 1.
Pura-Smoke Company, Inc., The, Burlington, N. C. Pura-Smoke. For Pipes, Cigar, and Cigarette Holders and Filter Cartridges Therefor. 13,956; Nov. 1.
Wrigley, Wm., Jr. Company, Chicago, Ill. Wrigley's P. K. For Chewing Gum. 13,957; Nov. 1.

CLASSIFIED LIST OF TRADE-MARKS REGISTERED

CLASS 1

Clay. R. T. Vanderbilt Company. 298,587–8; Nov. 1; Serial Nos. 327,176–7; published Aug. 23, 1932.
Sponge rubber. Sponge Rubber Products Co. 298,584; Nov. 1; Serial No. 328,079; published Aug. 23, 1932.
Trees, plants, seeds. Economy Nursery Company. 298,752; Nov. 1.

CLASS 2

Bags. Dust filtering and collecting. Hoover Company. 298,728; Nov. 1; Serial No. 313,361; published June 23, 1931.
Barrels and kegs. H. Levine. 298,739; Nov. 1; Serial No. 324,292; published Aug. 2, 1932.
Boxes, cans, etc., and lids and covers therefor. Gift Shop Necessities Co. 298,705; Nov. 1; Serial No. 321,711; published Aug. 9, 1932.
Boxes, Fiberboard. Robert Gaylord Incorporated. 298,566; Nov. 1; Serial No. 327,938; published Aug. 9, 1932.
Boxes, Fiberboard. St. Louis Basket & Box Corporation. 298,570; Nov. 1; Serial No. 327,775; published Aug. 2, 1932.
Cans and bins. J. Brandstetter. 298,581; Nov. 1; Serial No. 325,638; published July 19, 1932.
Cartons. Mono Service Co. 298,749; Nov. 1; Serial No. 322,301; published July 19, 1932.
Cartons, Paper. G. E. Damrow. 298,579; Nov. 1; Serial No. 326,178; published Aug. 2, 1932.
Cases, compacts, and lip stick cases, Vanity. Superior Products Corporation. 298,575; Nov. 1; Serial No. 327,377; published July 12, 1932.
Caskets and vaults, Burial. Missouri Casket Company. 298,569; Nov. 1; Serial No. 327,916; published Aug. 9, 1932.
Chests, Utility. Master Metal Products, Inc. 298,571; Nov. 1; Serial No. 327,593; published July 12, 1932.
Compacts and vanity cases. Superior Products Corporation. 298,574; Nov. 1; Serial No. 327,378; published July 12, 1932.
Cups, dishes, boxes, etc. Oldmill Paper Products Corp. 298,580; Nov. 1; Serial No. 326,299; published July 5, 1932.
Receptacles. J. Brandstetter. 298,706; Nov. 1; Serial No. 320,661; published July 19, 1932.
Vaults, Burial. Sozonian Vault Company. 298,567–8; Nov. 1; Serial Nos. 328,106–7; published Aug. 9, 1932.

CLASS 4

Cable and rope fillers. Ironsides Company. 88,574–5; renewed Oct. 1, 1932.

CLASS 5

Adhesive sizings. Gum Tragasol Supply Company Limited. 90,805–6; renewed Mar. 25, 1933.

CLASS 6

Acid and phosphate compounds, Phosphoric. Parker Rust-Proof Company. 298,605; Nov. 1; Serial No. 327,448; published July 26, 1932.
Antiseptic dressing. G. C. Hanford Mfg. Co. 298,620; Nov. 1; Serial No. 327,012; published July 26, 1932.
Antiseptic medicinal preparation. F. C. Nicholas. 298,599; Nov. 1; Serial No. 327,613; published July 26, 1932.
Antiseptic prescription. P. N. Whitney. 90,609; renewed Mar. 4, 1933.
Antiseptic, Urinary. Farbenfabriken of Elberfeld Co. 39,580; renewed Dec. 30, 1932.
Astringents, astringent cerates, bleach and beauty creams, etc. Nobirca Beauty Preparations, Inc. 298,539; Nov. 1; Serial No. 328,644; published Aug. 16, 1932.
Astringents, bleach creams, beauty creams, etc. Parfumerie St. Denis. 298,644; Nov. 1; Serial No. 327,407; published Aug. 9, 1932.
Chemical preparation used to prevent rust and corrosion. West Disinfecting Company. 298,622; Nov. 1; Serial No. 328,232; published Aug. 16, 1932.
Chemical products. W. S. Gray & Co. 298,612; Nov. 1; Serial No. 327,276; published July 26, 1932.
Chemicals, Water-proofing. Hampden Paint & Chemical Company. 298,667; Nov. 1; Serial No. 327,221; published Aug. 9, 1932.
Cleaning powder for automobile radiators. Hygienic Products Company. 298,650–1; Nov. 1; Serial Nos. 327,755–6; published Aug. 9, 1932.
Cream. M. Gallagher. 298,733; Nov. 1; Serial No. 317,380; published Aug. 9, 1932.
Cream and powder, Face. D C A Drug Stores Inc. 298,631; Nov. 1; Serial No. 327,625; published Aug. 9, 1932.
Cream for reducing the body. Neiman-Marcus Co. 298,632; Nov. 1; Serial No. 327,596; published Aug. 16, 1932.
Creams, Cosmetic. Mona Lees, Ltd. 298,709; Nov. 1; Serial No. 318,406; published Aug. 9, 1932.
Creams, Facial. P. Roussos. 298,723; Nov. 1; Serial No. 323,590; published July 26, 1932.
Digitalis. Parke, Davis & Co. 298,601; Nov. 1; Serial No. 327,601; published July 26, 1932.
Extracts of biological glands. Coffey-Humber. 298,646; Nov. 1; Serial No. 327,619; published July 26, 1932.
Eye wash. Eygio Company. 298,603; Nov. 1; Serial No. 327,504; published July 26, 1932.
Fungicides. Andrew Wilson, Inc. 298,541; Nov. 1; Serial No. 328,513; published Aug. 16, 1932.
Germicidal preparation. Royal Laboratories, Inc. 298,653; Nov. 1; Serial No. 327,806; published Aug. 9, 1932.
Hair grower, dressing, and pressing oil. C. M. Scott. 298,711; Nov. 1; Serial No. 317,407; published June 21, 1932.
Hair tonic, grower, straightening oil, and hair restorer. A. C. Smith. 298,674; Nov. 1; Serial No. 326,166; published Aug. 9, 1932.
Herbal preparation, Nutritious. R. K. Trattner. 298,637; Nov. 1; Serial No. 326,696; published Aug. 9, 1932.
Herbs, Mixtures of. Herbaria Herb Co. 298,665; Nov. 1; Serial No. 327,297; published Aug. 9, 1932.
Insecticide. J. M. Tippey. 298,657; Nov. 1; Serial No. 328,255; published Aug. 16, 1932.
Insecticide and deodorizer. J. H. Raymond. 298,677; Nov. 1; Serial No. 325,112; published Aug. 16, 1932.
Insecticide, vermicide and animal dip. Amtorg Trading Corporation. 298,655; Nov. 1; Serial No. 327,816; published Aug. 9, 1932.
Insecticides. Mechling Brothers Chemical Company. 298,606; Nov. 1; Serial No. 327,445; published July 26, 1932.

Insecticides and deodorants. Davenport's Sanitary Service. 298,734; Nov. 1; Serial No. 319,977; published Apr. 19, 1932.
Insecticides and fungicides. H. A. Du Bois & Sons, Inc. 298,537; Nov. 1; Serial No. 328,728; published Aug. 16, 1932.
Iron citrate and copper nucleate. Parke, Davis & Co. 298,600; Nov. 1; Serial No. 327,602; published July 26, 1932.
Laxative. California Concentrating Company. 298,607; Nov. 1; Serial No. 327,425; published July 26, 1932.
Laxative preparation. G. H. Hyland. 298,630; Nov. 1; Serial No. 327,794; published Aug. 9, 1932.
Laxative tonic. J. Luntz. 298,672; Nov. 1; Serial No. 326,826; published Aug. 9, 1932.
Laxatives. E. R. Squibb & Sons. 298,536; Nov. 1; Serial No. 328,741; published Aug. 16, 1932.
Liquid dandelion killer. P. F. Kloeppinger. 298,642; Nov. 1; Serial No. 327,302; published Aug. 9, 1932.
Liquid radiator stop leak compound. Penn-Jersey Auto Stores, Inc. 298,633; Nov. 1; Serial No. 327,286; published Aug. 9, 1932.
Liquid treatment for eyes. S. Rosengart. 298,649; Nov. 1; Serial No. 327,738; published July 26, 1932.
Liver powder. La Compagnie Pharmaceutique Desbergers. 298,678; Nov. 1; Serial No. 325,004; published Aug. 16, 1932.
Lotion, Hand. E. J. Goodier. 298,669; Nov. 1; Serial No. 327,054; published Aug. 9, 1932.
Lotion, Skin. H. A. Paul. 298,687; Nov. 1; Serial No. 315,412; published Aug. 9, 1932.
Medicinal preparation. R. B. Burnett. 298,602; Nov. 1; Serial No 327,550; published July 26, 1932.
Medicinal preparation. B. Kohn. 298,629; Nov. 1; Serial No. 327,850; published Aug. 9, 1932.
Medicinal preparation. C. E. Matthews. 298,621; Nov. 1; Serial No. 326,999; published July 26, 1932.
Medicinal preparation. I. Paul. 298,613; Nov. 1; Serial No. 327,258; published July 26, 1932.
Medicnl preparation. E. E. Rutherford. 298,670; Nov. 1; Serial No. 326,966; published Aug. 9, 1932.
Medicinal teas. O. Gensh. 298,725; Nov. 1; Serial No. 324,102; published Aug. 9, 1932.
Medicine. Bu-Cu-Mint Company. 298,645; Nov. 1; Serial No. 327,577; published Aug. 9, 1932.
Medicine. Dr. Rudolf Reiss Rheumasan- und Lenicet-Fabrik. 298,732; Nov. 1; Serial No. 309,144; published Aug. 9, 1932.
Mineral salts, Combination of. American Biochemical Corporation. 298,635; Nov. 1; Serial No. 326,997; published Aug. 9, 1932.
Mosquito-repelling preparation. United Drug Company. 90,763; renewed Mar. 18, 1933.
Mouth-wash. Vince Laboratories, Inc. 298,730; Nov. 1; Serial No. 314,828; published Aug. 9, 1932.
Nose and throat medication. Morgan Sabalol Products, Inc. 298,623; Nov. 1; Serial No. 328,223; published Aug. 16, 1932.
Oils, lotions, and shampoo preparations. Duart Manufacturing Co. 298,616; Nov. 1; Serial No. 327,216; published July 26, 1932.
Perfumery, toilet creams, shampoos, etc. Naamlooze Vennootschap Eau de Cologne Fabriek J. C. Boldoot. 298,707; Nov. 1; Serial No. 320,366; published Aug. 9, 1932.
Perfumes, facial creams, rouges, etc. E. G. Anderson. 298,668; Nov. 1; Serial No. 327,124; published Aug. 9, 1932.
Pharmaceutical and medicinal preparations. Towns & James, Inc. 298,636; Nov. 1; Serial No. 326,835; published Aug. 9, 1932.
Pharmaceutical preparation. Marine Chemicals Company. 298,737; Nov. 1; Serial No. 324,688; published Aug. 9, 1932.
Pharmaceutical preparation. L. Vaccaro. 298,604; Nov. 1; Serial No. 327,488; published July 26, 1932.
Pomade, Hair dressing. W. Avery. 298,703; Nov. 1; Serial No. 321,931; published Aug. 16, 1932.
Powder, Face. Pond's Extract Company. 298,652; Nov. 1; Serial No. 327,770; published Aug. 9, 1932.
Powder, Foot. W. Bromberg. 298,614; Nov. 1; Serial No. 327,243; published July 26, 1932.
Powder, hair dressing, skin cream, rouge, lipstick, etc., Talcum. Mrs. Z. B. Hinkle. 298,675; Nov. 1; Serial No. 326,052; published Aug. 16, 1932.
Preparation for constipation, sluggish liver, etc. A. J. Bander. 298,540; Nov. 1; Serial No. 328,573; published Aug. 16, 1932.
Preparation for prevention and elimination of rust. Franklin Oil & Gas Company. 298,641; Nov. 1; Serial No. 325,945; published Aug. 9, 1932.
Preparation for relief of contagious abortion in cattle. Essan-Kay Company. 298,648; Nov. 1; Serial No. 327,681; published July 26, 1932.
Preparation for the scalp. Viennese Scalp Remedies, Inc. 298,724; Nov. 1; Serial No. 324,022; published July 26, 1932.
Preparation for the treatment and relief of rheumatism, arthritis, acidosis, etc. C. R. Bowers. 298,608; Nov. 1; Serial No. 327,337; published July 26, 1932.
Preparation for the treatment of athlete's foot and impetigo. Royal Laboratories, Inc. 298,656; Nov. 1; Serial No. 327,835; published Aug. 9, 1932.
Preparation for the treatment of scalp diseases. J. Zupanski. 298,740; Nov. 1; Serial No. 324,206; published Aug. 9, 1932.
Preparation for the treatment of the gums. Royal Laboratories, Inc. 298,654; Nov. 1; Serial No. 327,807; published Aug. 9, 1932.
Preparation for treatment of menorrhagia and metrorrhagia. Harrower Laboratory, Inc. 298,610; Nov. 1; Serial No. 327,312; published July 26, 1932.
Preparation having bowel lubricating, laxative, and bowel regulation properties. American Health Products Co. 298,609; Nov. 1; Serial No. 327,331; published July 26, 1932.
Repellent of moths, peach tree borers, and other insects. E. I. du Pont de Nemours and Company. 298,671; Nov. 1; Serial No. 326,936; published Aug. 9, 1932.
Resins, Synthetic. Varnol Chemical Corporation. 298,538; Nov. 1; Serial No. 328,674; published Aug. 16, 1932.
Salt. York and Company. 298,666; Nov. 1; Serial No. 327,268; published Aug. 9, 1932.
Salve and ointment. F. E. Boga. 298,643; Nov. 1; Serial No. 327,384; published Aug. 9, 1932.
Salve, Corn. W. T. Hanson Co. 90,700; renewed Mar. 18, 1933.
Salve, Pneumonia. R. H. Brigman Company. 298,722; Nov. 1; Serial No. 324,128; published Aug. 9, 1932.
Sea plant products, Dried. M. J. Walsh. 298,617; Nov. 1; Serial No. 327,156; published July 26, 1932.
Shampoo. Universal Chemical Corporation. 298,676; Nov. 1; Serial No. 326,005; published July 26, 1932.
Silver and mercury in a colloidal state. S. M. Laboratories, Inc. 298,673; Nov. 1; Serial No. 326,233; published July 26, 1932.
Solution containing Iodine. Gly-Ser-Dine Chemical Company. 298,647; Nov. 1; Serial No. 327,654; published July 26, 1932.
Spirits of camphor, spirits of nitre, tincture of iodine, etc. Bloomingdale Bros., Inc. 298,664; Nov. 1; Serial No. 327,336; published Aug. 9, 1932.
Starch sizing. Gum Tragasol Supply Company Limited. 90,698; renewed Mar. 18, 1933.
Sterilizing material. J. B. Ford Company. 298,611; Nov. 1; Serial No. 327,310; published July 26, 1932.
Suppositories, medicines, etc. Dr. R. R. Rheumasan- und Lenicet-Fabrik. 298,731; Nov. 1; Serial No. 309,150; published Aug. 9, 1932.
Syrup for coughs, etc. L. M. Haeseler. 298,742; Nov. 1; Serial No. 322,463; published Aug. 9, 1932.
Veterinary or sanitary preparation. Keepaway Laboratory. 298,736; Nov. 1; Serial No. 324,712; published Aug. 9, 1932.

CLASS 9

Firearms and parts thereof. Birmingham Small Arms Company Limited. 89,812; renewed Jan. 14, 1933.
Revolvers. Iver Johnson's Arms & Cycle Works. 298,750; Nov. 1.

CLASS 10

Fertilizer. Morris Fertilizer Co. 88,776; renewed Oct. 22, 1932.
Manure. Naamlooze Vennootschap Vereenigde Chemische Fabrieken. 298,720; Nov. 1; Serial No. 317,525; published Aug. 23, 1932.
Soil conditioner. Lyons Fertilizer Company. 298,590; Nov. 1; Serial No. 326,687; published Aug. 23, 1932.

CLASS 11

Ink, Bottles of writing. S. S. Stafford, Inc. 298,691; Nov. 1; Serial No. 314,661; published Aug. 23, 1932.

CLASS 12

Cement and plaster mixtures. J. E. Di Fiore. 298,586; Nov. 1; Serial No. 327,186; published Aug. 16, 1932.
Dressing, Floor. Palmer Products, Inc. 298,755; Nov. 1.
Insulating and deadening materials, Fire proof. Samuel Cabot Incorporated. 298,583; Nov. 1; Serial No. 328,158; published Aug. 16, 1932.
Shingles, Lumber and wood. Duty Lumber Co. 298,582; Nov. 1; Serial No. 328,269; published Aug. 9, 1932.
Steps, flooring sections, etc. L. Del Turco & Bros. 298,589; Nov. 1; Serial No. 327,091; published Aug. 9, 1932.
Waterproofing compound. A. C. Horn Company. 298,716; Nov. 1; Serial No. 321,567; published Aug. 16, 1932.
Waterproofing for concrete, cement, etc., Integral. A. C. Horn Company. 298,717; Nov. 1; Serial No. 321,565; published Aug. 9, 1932.

CLASS 13

Aluminum and aluminum alloy cooking hollow ware. Aluminum Cooking Utensil Company. 298,529; Nov. 1; Serial No. 328,388; published Aug. 23, 1932.
Aluminum and aluminum alloy cooking hollow ware. Aluminum Cooking Utensil Company. 298,545; Nov. 1; Serial No. 328,389; published Aug. 23, 1932.
Casters, Furniture. T. P. Duncan, jr. 298,528; Nov. 1; Serial No. 328,418; published Aug. 16, 1932.
Pipe-joints, Metal. F. Kay. 298,559; Nov. 1; Serial No. 328,792; published Aug. 23, 1932.
Shower, Portable shoulder. Belmet Products, Inc. 298,544; Nov. 1; Serial No. 328,465; published Aug. 23, 1932.

Sinks. Bossert Corporation. 298,547; Nov. 1; Serial No. 328,084; published Aug. 23, 1932.

CLASS 14

Rail-anchors, anticreepers, tie-plate, etc., Metal. P. & M. Company. 89,292; renewed Dec. 3, 1932.

CLASS 15

Lubricants. Ironsides Company. 39,047; renewed Oct. 14, 1932.
Lubricants and lubricating compounds. Ironsides Company. 39,155; renewed Oct. 28, 1932.

CLASS 16

Paints, enamels, lacquers, etc. Dry and ready-mixed. Patterson-Sargent Company. 298,754; Nov. 1.
Stains, Wood. Louisville Varnish Company. 89,676; renewed Dec. 31, 1932.

CLASS 17

Cigars. Marcelino Perez & Company. 298,585; Nov. 1; Serial No. 328,029; published Aug. 23, 1932.
Tobacco, Chewing and smoking. Bloch Bros. Tobacco Co. 298,756; Nov. 1.

CLASS 19

Automobiles. Olds Motor Works. 39,405; renewed Dec. 2, 1932.

CLASS 21

Heating units and elements and parts therefor, Electric. Edwin L. Wiegand Company. 298,751; Nov. 1.
Motor units, Electric. Westinghouse Electric & Manufacturing Company. 298,753; Nov. 1.

CLASS 22

Amusement device, Coin controlled. Bechtol and Tratsch. 298,615; Nov. 1; Serial No. 327,241; published Aug. 23, 1932.
Balls for billiards, Carom. Brunswick-Balke-Collender Company. 298,598; Nov. 1; Serial No. 327,901; published Aug. 23, 1932.
Billiard tables and parts, etc. Brunswick-Balke-Collender Company. 298,619; Nov. 1; Serial No. 327,042; published Aug. 23, 1932.
Fishing reels. Enterprise Manufacturing Company. 298,593; Nov. 1; Serial No. 328,783; published Aug. 23, 1932.
Games. Poster Products, Inc. 298,594; Nov. 1; Serial No. 328,536; published Aug. 23, 1932.
Games, Table and coin-controlled. Chester-Pollard Amusement Co. Inc. 298,597; Nov. 1; Serial No. 328,237; published Aug. 23, 1932.
Golf balls. Sun Radio, Inc. 298,592; Nov. 1; Serial No. 328,821; published Aug. 23, 1932.
Golf balls. Worthington Ball Company. 89,787; renewed Jan. 7, 1933.
Golf cleeks, golf-irons and wooden golf-clubs. William Gibson and Company. 88,272; renewed Sept. 10, 1932.
Golf clubs. L. A. Young Company. 298,591; Nov. 1; Serial No. 328,901; published Aug. 23, 1932.
Top and parts therefor. Little Bear Specialties Co. 298,596; Nov. 1; Serial No. 328,438; published Aug. 23, 1932.
Toy spinning tops, Bandelore. D. F. Duncan. 298,697; Nov. 1; Serial No. 308,361; published Mar. 8, 1932.
Toys. E. P. Lehmann. 88,682; renewed Oct. 15, 1932.
Toys. Wood Parts, Incorporated. 298,747–8; Nov. 1; Serial Nos. 322,150–1; published Aug. 23, 1932.

CLASS 23

Bowl and mechanical mixer. A. & J. Manufacturing Company. 298,682; Nov. 1; Serial No. 303,078; published Aug. 23, 1932.
Clutch operators, Automatic. Bragg-Kliesrath Corporation. 298,708; Nov. 1; Serial No. 319,606; published Aug. 16, 1932.
Drills, cutters, files, etc., Rotary. American Rotary Tools Company. 298,735; Nov. 1; Serial No. 324,978; published Aug. 16, 1932.
Files. Simonds Saw and Steel Company. 298,558; Nov. 1; Serial No. 328,041; published Aug. 23, 1932.
Filters and pads, Oil. C. Schnackel's Son, Inc. 298,533; Nov. 1; Serial No. 327,836; published Aug. 23, 1932.
Gearing, Differential. Timken-Detroit Axle Company. 298,710; Nov. 1; Serial No. 317,861; published Aug. 23, 1932.
Hammers, house axes, screw drivers, etc. S. H. Kress & Co. 298,743; Nov. 1; Serial No. 323,011; published Apr. 12, 1932.
Linotype supplies. Mergenthaler Linotype Co. 90,360; renewed Feb. 18, 1933.
Parts for spinning and twisting machines, Small. Associated Attleboro Mfrs., Inc. 298,531; Nov. 1; Serial No. 328,113; published Aug. 16, 1932.
Rollers for rotary duplicating and like machines, Sheet feeding and impression. A. B. Dick Company. 298,738; Nov. 1; Serial No. 324,550; published Aug. 23, 1932.
Silencers for quieting gas flow noises at exhausts, etc. Maxim Silencer Company. 298,702; Nov. 1; Serial No. 321,774; published Aug. 16, 1932.
Spoons, spatulas, knives, etc. A. & J. Manufacturing Company. 298,712; Nov. 1; Serial No. 317,294; published Aug. 23, 1932.
Starters and parts thereof, Air compression. Sky Specialties Corporation. 298,684; Nov. 1; Serial No. 299,528; published Aug. 16, 1932.
Supports for machinery, Rubber vibration eliminating. Rubber Shock Insulator Corporation, The. 298,685; Nov. 1; Serial No. 284,746; published Aug. 23, 1932.
Wrenches, boring bits, and punches. Flexible Steel Lacing Company. 298,525; Nov. 1; Serial No. 328,524; published Aug. 16, 1932.

CLASS 26

Patterns. Advance Pattern Co. 298,557; Nov. 1; Serial No. 325,205; published Aug. 23, 1932.
Picture film, Motion. National Broadcasting Company. 298,745–6; Nov. 1; Serial Nos. 322,857–8; published Aug. 16, 1932.
Plug testers, Spark. Champion Spark Plug Company. 298,552; Nov. 1; Serial No. 327,678; published Aug. 23, 1932.
Stereopticon slide. F. C. Brady. 298,551; Nov. 1; Serial No. 327,843; published Aug. 23, 1932.
Testing apparatus, gauges, and equipment. Riess Manufacturing Company. 298,527; Nov. 1; Serial No. 328,507; published Aug. 16, 1932.

CLASS 32

Cabinets for radio receiving sets. E. J. Krause. 298,535; Nov. 1; Serial No. 326,374; published Aug. 23, 1932.
Hammocks, hammock stands, suspended seats, Baby. Boston Leather Specialties, Inc. 298,522; Nov. 1; Serial No. 328,593; published Aug. 16, 1932.
Pillows. Burton-Dixie Corporation. 298,526; Nov. 1; Serial No. 328,520; published Aug. 16, 1932.

CLASS 33

Jars, Empty glass. Hoffmann-Hayman Coffee Co. 298,634; Nov. 1; Serial No. 327,191; published Aug. 9, 1932.
Jars, Glass. Samuel Mallinger Company. 298,704; Nov. 1; Serial No. 321,809; published July 19, 1932.

CLASS 34

Burners for solid carbonaceous fuel. Flameking Company. 298,549; Nov. 1; Serial No. 327,929; published Aug. 23, 1932.

CLASS 35

Belting, Leather. Graton & Knight Company. 298,524; Nov. 1; Serial No. 328,527; published Aug. 16, 1932.
Belts. United States Rubber Company. 298,686; Nov. 1; Serial No. 316,458; published Aug. 16, 1932.
Gaskets. Victor Manufacturing & Gasket Company. 298,727; Nov. 1; Serial No. 313,397; published Aug. 9, 1932.
Hose. Goodyear Tire & Rubber Company. 298,543; Nov. 1; Serial No. 328,485; published Aug. 16, 1932.
Hose, High pressure rubber. Goodyear Rubber Company. 298,555; Nov. 1; Serial No. 326,610; published Aug. 16, 1932.
Tires. Kelly-Springfield Tire Company. 298,546; Nov. 1; Serial No. 328,332; published Aug. 9, 1932.

CLASS 37

Paper and envelopes. William Mann Company. 39,898; renewed Mar. 10, 1933.
Paper, Writing, printing, and tissue. C. H. Dexter & Sons. 88,555–6; renewed Oct. 1, 1932.

CLASS 38

Publications. United Brotherhood of Carpenters & Joiners of America. 90,664; renewed Mar. 11, 1933.

CLASS 39

Clothing. Berger, Robins & Freyman, Inc. 298,523; Nov. 1; Serial No. 328,568; published Aug. 23, 1932.
Coats, jackets, vests, etc., Leather. H. & L. Block, Ltd. 298,726; Nov. 1; Serial No. 327,496; published Aug. 23, 1932.
Corsets. Warner Brothers Company. 88,812; renewed Oct. 22, 1932.
Dresses, suits, and rompers. Rosenau Bros. Inc. 298,532; Nov. 1; Serial No. 327,921; published Aug. 23, 1932.
Hosiery. Artcraft Silk Hosiery Mills, Inc. 298,560; Nov. 1; Serial No. 328,774; published Aug. 23, 1932.
Hosiery and underwear. Strutwear Knitting Company. 298,561; Nov. 1; Serial No. 328,707; published Aug. 23, 1932.
Shirts. F. Gibbons. 298,530; Nov. 1; Serial No. 328,328; published Aug. 23, 1932.
Suits, trunks, etc., Swimming. Ganter & Mattern Company. 298,534; Nov. 1; Serial No. 326,815; published Aug. 23, 1932.
Undergarments, Ladies'. Mayers & Schiller, Inc. 298,741; Nov. 1; Serial No. 324,145; published Aug. 23, 1932.

CLASS 42

Carpets, Textile. Hardwick & Magee Company. 298,693; Nov. 1; Serial No. 328,305; published Aug. 2, 1932.

Cloth in the piece, Billiard. H. Wagner & Adler Co. 298,680–1; Nov. 1; Serial Nos. 327,926–7; published Aug. 2, 1932.
Cotton piece goods. Burton Brothers & Co. Inc. 298,694; Nov. 1; Serial No. 328,300; published Aug. 2, 1932.
Cotton piece goods. Holliston Mills. 298,572; Nov. 1; Serial No. 327,439; published Aug. 2, 1932.
Cotton piece goods. Lonsdale Company. 298,577; Nov. 1; Serial No. 327,226; published Aug. 9, 1932.
Diapers. Johnson & Johnson. 298,562; Nov. 1; Serial No. 327,909; published Aug. 9, 1932.
Diapers, Textile. Kirby, Block & Fischer, Inc. 298,663; Nov. 1; Serial No. 327,910; published Aug. 2, 1932.
Fabrics, Elastic. United Elastic Corporation. 298,698; Nov. 1; Serial No. 308,143; published Aug. 2, 1932.
Fabrics, Pile. Sidney Blumenthal & Co. Inc. 298,689; Nov. 1; Serial No. 315,781; published Aug. 2, 1932.
Goods and blankets, Piece. Troy Blanket Mills. 298,692; Nov. 1; Serial No. 328,341; published Aug. 16, 1932.
Handkerchiefs. Western Bottle Mfg. Co. 298,695; Nov. 1; Serial No. 328,044; published Aug. 9, 1932.
Piece goods. Bianchini, Férier. 298,565; Nov. 1; Serial No. 328,656; published Aug. 16, 1932.
Piece goods. Bianchini, Férier. 298,662; Nov. 1; Serial No. 328,657; published Aug. 16, 1932.
Piece goods. Bianchini, Férier. 298,696; Nov. 1; Serial No. 327,969; published Aug. 9, 1932.
Pile Fabrics. Sidney Blumenthal & Co. Inc. 298,729; Nov. 1; Serial No. 309,671; published Aug. 16, 1932.
Scarfs, buffet sets, luncheon cloths, etc., Furniture. Regina Art Embroidery Co. 298,578; Nov. 1; Serial No. 326,508; published Aug. 16, 1932.
Silk fabrics. Onondaga Silk Company. 298,699–701; Nov. 1; Serial Nos. 328,499–501; published Aug. 9, 1932.
Suitings and coatings, Wools, worsteds, cheviots, and cashmere. F. J. McGowan. 298,679; Nov. 1; Serial No. 327,959; published Aug. 16, 1932.

CLASS 43

Thread. I. Fleischer & Sons. 298,690; Nov. 1; Serial No. 315,197; published Aug. 2, 1932.
Thread and yarn. American Bemberg Corporation. 298,624; Nov. 1; Serial No. 328,207; published Aug. 2, 1932.
Thread and yarn. American Bemberg Corporation. 298,625; Nov. 1; Serial No. 328,205; published Aug. 2, 1932.
Thread and yarn. I. P. Bemberg Aktiengesellschaft. 298,638–9; Nov. 1; Serial Nos. 326,663–4; published July 26, 1932.
Thread and yarn. I. P. Bemberg Aktiengesellschaft. 298,640; Nov. 1; Serial No. 326,659; published July 26, 1932.
Thread and yarn, Artificial silk. Eastman Kodak Company. 298,573; Nov. 1; Serial No. 327,428; published July 5, 1932.
Thread and yarns, Cotton. Groves Thread Company. 298,564; Nov. 1; Serial No. 327,669; published July 12, 1932.
Thread, Cotton. Standard-Coosa-Thatcher Company. 298,626–7; Nov. 1; Serial Nos. 328,138–9; published Aug. 2, 1932.
Thread, Rubber. Para Thread Company. 298,563; Nov. 1; Serial No. 327,773; published Aug. 9, 1932.
Thread, Spools of. Assembled Products Company. 298,576; Nov. 1; Serial No. 327,181; published June 28, 1932.
Threads and yarns. S. H. Kress & Co. 298,661; Nov. 1; Serial No. 328,435; published Aug. 9, 1932.
Yarns, Cotton. King Cotton Mills Corporation. 298,659–60; Nov. 1; Serial Nos. 328,431–2; published Aug. 9, 1932.
Yarns, Cotton. Sellers Manufacturing Co. 298,628; Nov. 1; Serial No. 327,949; published July 26, 1932.
Yarns, Worsted. Bernhard Ulmann Co. Inc. 298,658; Nov. 1; Serial No. 328,407; published Aug. 9, 1932.

CLASS 44

Arch supports and foot pads and cushions for use in shoes. R. V. Parsons. 298,744; Nov. 1; Serial No. 323,353; published Apr. 26, 1932.

CLASS 45

Beverage, Maltless. B. Leo. 298,542; Nov. 1; Serial No. 328,533; published Aug. 23, 1932.
Beverages and sirups and extracts for making the same, Maltless. Grimes Mfg. Co. 298,757; Nov. 1.
Powder, Maltless. Arcadia Food Co. 298,595; Nov. 1; Serial No. 328,470; published Aug. 23, 1932.
Waters, Mineral. Societe Anonyme des Eaux Minerales d'Evian-les-Bains. 298,618; Nov. 1; Serial No. 327,111; published Aug. 23, 1932.

CLASS 46

Beet-pulp, Dried. Larrowe Milling Co. 90,899; renewed Apr. 1, 1933.
Bread. Norman Baking Company. 87,910; renewed Aug. 13, 1932.
Candy. C. N. Miller. 88,913; renewed Oct. 29, 1932.
Canned asparagus, beans, chile, soup, etc. Independent Grocers' Alliance Distributing Co. 298,688; Nov. 1; Serial No. 315,838; published Aug. 16, 1932.
Canned fish. Etablissements Rene Beziers. 298,714; Nov. 1; Serial No. 324,272; published Aug. 16, 1932.
Cheese, butter, dressed poultry, and eggs. Borden Quality, Inc. 298,721; Nov. 1; Serial No. 317,500; published Aug. 16, 1932.
Chocolate and cocoa. Massachusetts Chocolate Company. 90,720; renewed Mar. 18, 1933.
Confectionery. James Pascall, Limited. 39,304; renewed Nov. 18, 1932.
Coffee. Standard Brands Incorporated. 298,683; Nov. 1; Serial No. 302,261; published Aug. 16, 1932.
Coffee. G. Washington Coffee Refining Company. 298,556; Nov. 1; Serial No. 326,120; published Aug. 16, 1932.
Feed, Mixed. Larrowe Milling Co. 90,351; renewed Feb. 18, 1933.
Flour, canned soup, evaporated milk, etc., Wheat. Wag Foods, Inc. 298,553; Nov. 1; Serial No. 327,535; published Aug. 16, 1932.
Gelatine preparation. F. C. Brown & Company. 298,550; Nov. 1; Serial No. 327,866; published Aug. 16, 1932.
Grapes, Fresh. Jos. La Rosa & Sons. 298,715; Nov. 1; Serial No. 322,320; published Aug. 16, 1932.
Olives. S. J. Valk & Bro. 90,485; renewed Feb. 25, 1933.
Oranges, lemons, grape-fruit, etc. Citra Fruit Company. 88,846; renewed Oct. 29, 1932.
Popcorn coated with candy. Shotwell Mfg. Co. 89,382; renewed Dec. 10, 1932.
Poultry and eggs, Dressed. Borden Quality, Inc. 298,718; Nov. 1; Serial No. 317,969; published Aug. 16, 1932.
Shortening, Vegetable. Lever Brothers Company. 298,548; Nov. 1; Serial No. 328,064; published Aug. 16, 1932.
Sugar. Arbuckle Brothers. 89,978; renewed Jan. 28, 1933.
Syrup, chocolate. S. Zimetbaum. 298,713; Nov. 1; Serial No. 324,729; published Aug. 16, 1932.
Syrup, Malt. Bloom-Rosenblum-Klein Company. 298,719; Nov. 1; Serial No. 317,702; published Aug. 16, 1932.
Vegetables, Fresh. L. M. McLaren. 298,554; Nov. 1; Serial No. 327,159; published Aug. 16, 1932.

CLASS 47

Champagne, scuppernong, claret, etc. M. L. Eppstein. 88,744; renewed Oct. 22, 1932.
Wine. Garrett & Co. 88,622; renewed Oct. 8, 1932.
Wine. Garrett & Co. 88,624; renewed Oct. 8, 1932.
Wine. Garrett & Co. 88,670; renewed Oct. 15, 1932.
Wine, Blackberry. Garrett & Co. 88,623; renewed Oct. 8, 1932.

CLASS 50

Badges and buttons. A. Jarvis. 90,708; renewed Mar. 18, 1933.

LIST OF LABELS

All American. For Touch Up Black. American Auto Accessories Stores. 41,344; Nov. 1.
All American. For Black Top Dressing. American Auto Accessories Stores. 41,345; Nov. 1.
All American. For Radiator Stop Leak. American Auto Accessories Stores. 41,346; Nov. 1.
Banquet Tea-Paks. For Tea. McCormick & Co. 41,366; Nov. 1.
Beech-Nut Black Cough Drops. For Cough Drops. Beech-Nut Packing Company. 41,347–9; Nov. 1.
Beech-Nut Menthol Cough Drops. For Cough Drops. Beech-Nut Packing Company. 41,350–2; Nov. 1.
Beech-Nut Oven Baked Beans. For Baked Beans. Beech-Nut Packing Company. 41,353; Nov. 1.
Blizzard Bar. For Candy. Bunte Brothers. 41,354; Nov. 1.
Canoodles. For Butterscotch. Reed Candy Company. 41,370; Nov. 1.
Chase & Sanborn's Diamond 60. For Tea. Standard Brands Incorporated. 41,374; Nov. 1.
Chic Girl. For Shoes. M. B. Claff & Sons, Inc. 41,355; Nov. 1.
Columbus Mitcheline Quilt. For Quilts. Swift Manufacturing Company. 11,945; renewed Mar. 7, 1933.
Dromedary Cocoanut. For Cocoanut. Hills Brothers Company. 41,362; Nov. 1.
Dry-O-Lit Poultry Litter "For Happy Hens". For Poultry Litter. Pacific Lumber Company. 41,368; Nov. 1.

Foley's Medicated Cough Drops. For Cough Drops. Foley & Co. 41,358; Nov. 1.
Franklin Chocolate Malt Syrup. For Chocolate Malt Syrup. Franklin Stores Co. 41,359; Nov. 1.
Heller's Punch-Ola. For Powder for Making Fruit Flavored Drinks. B. Heller & Company. 41,361; Nov. 1.
Hurd's Wonder Ointment. For Ointment. S. J. Hurd. 41,365; Nov. 1.
I. G. A. 'Up-Side-Down' or Loaf Cake Pan. For Pans. L. J. Hois. 41,364; Nov. 1.
Ice Cream On Toast. For Ice Cream Confection. C. Raffa. 41,369; Nov. 1.
Klenzit. For Glass Cleaning Compound. R. H. Williams. 41,377; Nov. 1.
La Perla Del Oriente. For Liniment. A. Feliz. 41,373; Nov. 1.
London Shoe. For Boxes. Hoague-Sprague Corporation. 41,363; Nov. 1.
One Fil Anti-Freeze. For Anti-Freeze Solution for Motor Vehicle Radiators. Cady L. Daniels, Inc. 41,357; Nov. 1.
Our Gang Bread Pan-Dandy Bread. For Bread. Sutorius Bread Company. 41,375; Nov. 1.
Oven Browned Virginia Style Ham. For Hams. Karl Seiler & Sons. 41,372; Nov. 1.
Pennseald. For Motor Oil. McLean-Jones Oil Co. Inc. 41,367; Nov. 1.
Robertson Granulated Soap. For Granulated Soap. J. T. Robertson Company Inc. 41,371; Nov. 1.
Silver Nymphe Talc. For Talc. Goodman Chemical Co. 41,360; Nov. 1.
Super-Milk Bread. For Bread. Dairy Corporation of America. 41,356; Nov. 1.
Wilbert's No-Rub. For Floor Wax. Wilbert Products Co. Inc. 41,376; Nov. 1.
Wrigley's P. K. For Chewing Gum. Wm. Wrigley Jr. Company. 41,378–9; Nov. 1.

LIST OF PRINTS

Boys—Girls.—Draw Pictures on Your Sneakers. For Sneakers. G. R. Kinney Co. 13,955; Nov. 1.
Eskimo. For Electric Fans. F. E. Everson. 13,953; Nov. 1.
Free! Women! Accept Betty Crocker's Improved Cake Cooling Rack Free! For Cake Flour. General Mills, Inc. 13,954; Nov. 1.
People Began to Think We Were Neglecting Doris. For Wheat Breakfast Food. Cream of Wheat Corporation. 13,952; Nov. 1.
Pura-Smoke. For Pipes, Cigar and Cigarette Holders, and Filter Cartridges Therefor. Pura-Smoke Company. 13,956; Nov. 1.
Wrigley's P. K. For Chewing Gum. Wm. Wrigley Jr. Company. 13,957; Nov. 1.

LIST OF PATENTEES

TO WHOM

PATENTS WERE ISSUED ON THE 1ST DAY OF NOVEMBER, 1932

NOTE.—Arranged in accordance with the first significant character or word of the name (in accordance with city and telephone directory practice). Includes patents, reissues, and designs.

A C Spark Plug Company. (See Hampton, Leon N., assignor.)
A. G. fur Halbzellstoff Industrie. (See Hoyer, Fritz, assignor.)
Abel, Frank J., Massapequa, N. Y., assignor to Henry Hyman, Brooklyn, N. Y. Clock case. 88,139; Nov. 1.
Abendroth, Wilhelm, Berlin-Charlottenburg, and H. Gleichmann, Berlin-Siemensstadt, assignors to Siemens-Schuckertwerke Gesellschaft mit beschrankter Haftung, Siemensstadt, Germany. Generating working steam. 1,886,076; Nov. 1.
Abercrombie, James S. (See King, Walter E., assignor.)
Abrams, Allen, Wausau, assignor to Marathon Paper Mills Company, Rothschild, Wis. Machine for treating paper board and process. 1,885,167; Nov. 1.
Accounting & Tabulating Corporation of Great Britain Limited, The. (See Thomas, A., and Power, assignors.)
Acme Steel Company. (See MacChesney, C. M., Norton, and Ott, assignors.)
Acton, John P., El Paso, Tex. Garment hanger. 1,885,503; Nov. 1.
Adams, Arthur H., La Grange, Ill., assignor to Troy Laundry Machinery Company, Inc., New York, N. Y. Ironing roll and pad. 1,885,211; Nov. 1.
Adams, Lytle S., Washington, D. C. System of railway mail collection. 1,885,212; Nov. 1.
Adams, Raymond F. (See Greenstreet, Charles J., assignor.)
Adlake Company, The. (See Hamm, William S., assignor.)
Aerocrete Corporation of America, The. (See Sahlberg, Rolf K. O., assignor.)
Aeromarine Plane & Motor Company. (See Boland, Joseph J., assignor.)
Affel, Herman A., Ridgewood, N. J., assignor to American Telephone and Telegraph Company. Concentric conducting system. 1,885,168; Nov. 1.
Agfa Ansco Corporation. (See Bornmann, Carl, assignor.)
Ainsworth, Chester D., Wollaston, assignor to Condit Electrical Manufacturing Corporation, South Boston, Mass. Multibreak electric switch. 1,885,101; Nov. 1.
Aitken, William J., Chicago, Ill., assignor, by mesne assignments, to National Parking Garages, Incorporated. Automobile parking apparatus. 1,885,218; Nov. 1.
Aktiebolaget Svenska Flaktfabriken. (See Edholm, Harold, assignor.)
Aktiebolaget Tonsor. (See Kylberg, Folke, assignor.)
Alderfer, John M., Sharon Center, Ohio. Shell. 1,885,789; Nov. 1.
Alexander, Elliot Ritchie, Orlando, Fla., assignor, by mesne assignments, to The Vitamin Company, of America. Homogenised citrus fruit concentrate. 1,885,401; Nov. 1.
Allegheny Steel Company. (See Ponce, Lucien G., assignor.)
Alma Manufacturing Company. (See Ford, Malcolm J., assignor.)
Almquist, Milton L., Maplewood, and A. C. Thompson, Mountain Lakes, N. J., assignors to American Telephone and Telegraph Company. Signaling system. 1,885,214; Nov. 1.
Alonso, Guillermo A. (See Oliva, Florentino, assignor.)
Alpine Aktien-Gesellschaft Machinenfabrik & Eisengiesserei. (See Gaiser, Otto, assignor.)
Altvater, Arthur W., University City, Mo. Ornamenting die. 1,885,169; Nov. 1.
Aluminum Company of America. (See Wheeler, Roy L., assignor.)
Aluminum Cooking Utensil Company, The. (See Wood, Irving W., assignor.)
Alvord, Earl B., Cleveland Heights, assignor, by mesne assignments, to The Grasselli Chemical Company, Cleveland, Ohio. Insecticide and processes of making same. 1,885,884; Nov. 1.
American Brass Company, The. (See Damon, John C., assignor.)
American Container Corporation. (See Chamberlain, Rufus N., assignor.)
American Engineering Company. (See Koons, Charles V., assignor.)
American Exchange National Bank of St. Louis. (See Baumann, A., and Horlacher, assignors.)
American Foundry Equipment Company, The. (See Peik, Louis D., assignor.)
American Glanzstoff Corporation. (See Elssner, R., and Carter, assignors.)
American La France and Foamite Corporation. (See Harris, George H., assignor.)
American Machine & Foundry Company. (See Bronander, Wilhelm B., assignor.)
American Machine & Foundry Company. (See Gwinn, G. W., and Arelt, assignors.)
American Machine & Foundry Company. (See McAllister, David, assignor.)
American Machine & Foundry Company. (See Patterson, Morehead, assignor.)
American Machine & Foundry Company. (See Schmitt, Frank R., assignor.)
American Machine & Foundry Company. (See Wiener, Alfred E., assignor.)
American Radiator & Standard Sanitary Corporation. (See Murray, Thomas E., assignor.)
American Radiator & Standard Sanitary Corporation. (See Murray, T. E., jr., and Reynolds, assignors.)
American Radiator Company. (See Brabee, C. W., and Goerg, assignors.)
American Reenforced Paper Company. (See Moore, Henry D., assignor.)
American Reenforced Paper Company. (See Weber, Lester N., assignor.)
American Telephone and Telegraph Company. (See Affel, Herman A., assignor.)
American Telephone and Telegraph Company. (See Almquist, M. L., and Thompson, assignors.)
American Telephone and Telegraph Company. (See Brand, Smart, assignor.)
American Telephone and Telegraph Company. (See Green, Estill I., assignor.)
American Telephone and Telegraph Company. (See Holden, W. H. T., and Bonell, assignors.)
American Telephone and Telegraph Company. (See Schramm, Fred W., assignor.)
American Thermos Bottle Company, The. (See Schlumbohm, Peter, assignor.)
Amiesite Asphalt Company of America. (See Hepburn, Donald M., assignor.)
Amyot, Pierre U. J., assignor to Les Fils De Virgile Amyot, Les Gras, Doubs, France. Chuck. 1,885,790; Nov. 1.
Andersen, Fred C., Bayport, Minn. Window frame. 1,886,145; Nov. 1.
Anderson, Glenn, Onawa, Iowa. Portable hoisting apparatus. 1,885,170; Nov. 1.
Anderson, Harry J., assignor to Hills-McCanna Company, Chicago, Ill. Grease pump and the like. 1,885,314; Nov. 1.
Anderson, Harry J., and F. Gordon, Chicago, Ill. Grease pump and the like. 1,885,315; Nov. 1.
Anderson, Samuel M., Sharon, assignor to B. F. Sturtevant Company, Hyde Park, Mass. Fluid conditioning method and apparatus. 1,885,791; Nov. 1.
Andreianov, Boris P., Moscow, Union of Socialist Soviet Republics. Rail fastening. 1,886,265; Nov. 1.
Andrews, Charles W. (See Knowles, A. S., and Andrews.)
Andrews, Frederick H., Taihape, assignor to Leo Brooks, Karori, Wellington, New Zealand. Adjustable wrench. 1,886,146; Nov. 1.
Angelucci, Ottorino, Rome, Italy. Apparatus for continuous evaporation or distillation, especially with vacuum. 1,885,402; Nov. 1.
Anglo-Persian Oil Company. (See Fraser, John, assignor.)
Antiseptol Liquid Soap Company. (See McDow, Everett E., assignor.)
App, John H., Medford, Mass. Attachment for heating water. 1,885,669; Nov. 1.
Apparatus Design Company. (See Williams, Jewell R., assignor.)
Arden Box Toe Company. (See Lurie, Joseph M., assignor.)
Arelt, Charles. (See Gwinn, G. W., and Arelt.)
Arens, John A., Mount Vernon, N. Y., assignor to International Screw Company, Wilmington, Del. Machine for cutting double thread, single point screws. 1,885,792; Nov. 1.
Arens, John A., Mount Vernon, N. Y., assignor to International Screw Co., Wilmington, Del. Screw cutting tool. 1,886,240; Nov. 1.
Arrow-Hart & Hegeman Electric Company, The. (See Smith, Percy C., assignor.)
Associated Electric Laboratories, Inc. (See Doyle, Frederick W., assignor.)
Associated Electric Laboratories, Inc. (See Lesh, Laurence J., assignor.)
Associated Electric Laboratories, Inc. (See Neir, E. R., and Witt, assignors.)
Associated Oil Company. (See Lasar, Arthur, assignor.)
Associated Telephone and Telegraph Company. (See Taylor, R., and Beale, assignors.)

Astley, John William, Prescot, assignor to British Cables Insulated Limited, Prescot, Lancashire, England. Connecting device for use with stranded metal cables. 1,885,316; Nov. 1.

Atwater Kent Manufacturing Company. (See Silva, Albert D., assignor.)

Atwater Kent Manufacturing Company. (See Tarzian, Sarkes, assignor.)

Auerbaan, Joseph J., assignor to J. H. Worthington, Brooklyn, N. Y. Amplifying horn. 1,885,403; Nov. 1.

Austin, Arthur O., near Barberton, assignor, by mesne assignments, to The Ohio Brass Company, Mansfield, Ohio. Transmission line support. 1,885,317; Nov. 1.

Austin, Arthur O., near Barberton, assignor, by mesne assignments, to The Ohio Brass Company, Mansfield, Ohio. Transmission line support. 1,885,318; Nov. 1.

Austin, Arthur O., near Barberton, assignor, by mesne assignments, to The Ohio Brass Company, Mansfield, Ohio. Transmission line. 1,885,504; Nov. 1.

Auto Fount Limited. (See McLellan, James H., assignor.)

Automatic Recording Safe Company, The. (See Grunwald, Albert C., assignor.)

Avery, B. F., & Sons. (See Ray, Charles T., assignor.)

Avery, True M., Glens Falls, assignor to Union Bag & Paper Corporation, Hudson Falls, N. Y. Foil lined bag. 1,885,670; Nov. 1.

Avis, Samuel W., Millbrook, Greenwich, Conn., assignor to Russell, Burdsall & Ward Bolt & Nut Company, Port Chester, N. Y. Dial arrangement for nut making apparatus. 1,885,215; Nov. 1.

Axe, Roy T., assignor to The O. M. Edwards Company, Inc., Syracuse, N. Y. Window and window sash construction. 1,885,216; Nov. 1.

Azarraga, Luis, Hempstead, N. Y. Camera. 1,885,102; Nov. 1.

Bahr, Gustave F., Fairfield, assignor to Columbia Phonograph Company, Inc., Bridgeport, Conn. Winding mechanism. 1,885,885; Nov. 1.

Bailey, Arnold B., Lynn, Mass. Refrigeration motor and pump. 1,885,793; Nov. 1.

Bailey, Walter C., Norwalk, Calif. Hydraulic driving apparatus for wells. 1,885,794; Nov. 1.

Bain, William H., University City, Mo. Making shoes. 1,885,574; Nov. 1.

Baker, David B., and N. O. Panzegrau, Chicago, Ill., assignors to International Harvester Company. Oil and dirt seal for tractor truck rollers. 1,886,147; Nov. 1.

Balle, Gerhard. (See Persiel, H. Balle, and Sponsel.)

Balmer, Leslie G., St. Louis, Mo. Pencil lead indicator. 1,885,171; Nov. 1.

Balzhiser, E. C., et al. (See Fabbro, Louis M., assignor.)

Bamberg, Edward C., Tujunga, and L. M. Sylva, Los Angeles, Calif. Oven rack operating mechanism. 1,885,404; Nov. 1.

Banks, Charles G., Los Angeles, Calif. Universal connection for all metal rotary hose for oil wells. 1,885,886; Nov. 1.

Banks, Charles L., St. Louis, Mo. Finger massage machine. 1,885,575; Nov. 1.

Barco Manufacturing Company. (See Bertram, Clarence C., assignor.)

Barkeij, Jean A. H., Altadena, Calif. Internal combustion engine. 1,885,576; Nov. 1.

Barnes, Eugene L., Buffalo, N. Y. Evaporating unit. 1,886,671; Nov. 1.

Barnett, Isaac, Bronx, N. Y. Display fixture. 1,885,103; Nov. 1.

Barredo, José B., Los Angeles, Calif. Musical string instrument. 1,885,672; Nov. 1.

Barrows, Earl M., Minneapolis, Minn. Vehicle. 1,885,795; Nov. 1.

Bartling, Friedrich, Munich, Germany. Rotary annular sole oven. 1,885,673; Nov. 1.

Basquin, Olin H., assignor to G. R. Meyercord, Chicago, Ill. Cotton harvesting appliance. 1,885,405; Nov. 1.

Bassick Company, The. (See Claud-Mantle, Arthur, assignor.)

Bates, William E. P., Orlando, Fla. Basket. 1,885,104; Nov. 1.

Baum, Lorin D. (See Watkins, T., and Baum.)

Baumann, Adolf, and C. P. Horlacher, St. Louis, Mo., assignors, by mesne assignments, to The American Exchange National Bank of St. Louis. Calculating machine. 1,886,148; Nov. 1.

Baumann, Fritz, Leverkusen-on-the-Rhine, Germany, assignor to General Aniline Works, Inc., New York, N. Y. New derivatives of 1.2.7.8 - diphthaloylcarbazole. 1,885,172; Nov. 1.

Baumgardner, Versal F., Celina, Ohio. Spreading machine. 1,885,319; Nov. 1.

Bausch & Lomb Optical Company. (See Gallasch, George B., assignor.)

Bead Chain Manufacturing Company, The. (See Gagnon, William J., assignor.)

Beadle, Lynn C., assignor, by mesne assignments, to Timken Silent Automatic Company, Detroit, Mich. Liquid fuel burner. 1,885,674; Nov. 1.

Beal, George D., and R. R. McGregor, Pittsburgh, Pa., assignors to Mellon Institute of Industrial Research, trustee. Carroting fur. 1,885,887; Nov. 1.

Beal, George D., and R. R. McGregor, Pittsburgh, Pa., assignors to Mellon Institute of Industrial Research, trustee. Carroting fur. 1,885,888; Nov. 1.

Beale, Charles E. (See Taylor, R., and Beale.)

Beall, William L., Chattanooga, Tenn., assignor to International Harvester Company. Grain planter. 1,886,149; Nov. 1.

Beam, Harry L., Otter, Mont. Aircraft landing float. 1,885,889; Nov. 1.

Beatty, Floyd A., Corliss Station, assignor to Lewis Foundry & Machine Company, Groveton, Pa. Automatic centering and shearing machine. 1,885,320; Nov. 1.

Béchereau, Louis, Paris, assignor to Societe Anonyme: Avions Kellner-Bechereau, Boulogne, Sur-Seine, France. Manufacture of hollow bodies. 1,885,406; Nov. 1.

Becker, Julius H. (See Davis, Trayharn, assignor.)

Beckette, Edmund S., East St. Louis, assignor to General Steel Castings Corporation, Granite City, Ill. Railway truck and bolster locking device. 1,885,890; Nov. 1.

Beckwith Manufacturing Company. (See Daly, John J., assignor.)

Bedford, Frederick G. H., executor. (See Cook, S. S., Bennett, and Parsons.)

Beers, Roland F., Boston, assignor to Raytheon, Inc., Cambridge, Mass. Electron discharge device. 1,886,150; Nov. 1.

Bégin, Lucien, Paris, France, assignor of one-half to William B. Weaver, Birmingham, Ala., and Harold F. Wilhelm, New York, N. Y. Electron discharge device. 1,885,217; Nov. 1.

Belcher, Alva. (See Fehl, J. T., and Belcher.)

Bell, Kenneth E., Marblehead, assignor to A. C. Lawrence Leather Company, Boston, Mass. Drier. 1,885,505; Nov. 1.

Bell Telephone Laboratories, Incorporated. (See Keith, Clyde R., assignor.)

Bell Telephone Laboratories, Incorporated. (See Sterba, Ernest J., assignor.)

Benjamin, Bert R., Oak Park, Ill., assignor to International Harvester Company. Cotton stripper. 1,886,151; Nov. 1.

Benjamin, Bert R., Oak Park, Ill., assignor to International Harvester Company. Tractor row-crop harvester. 1,886,152; Nov. 1.

Benn, Howard H., Jackson, assignor to F. L. Parsons, Detroit, Mich. Pipe coupling. 1,885,321; Nov. 1.

Benn, Stephen J., assignor to Merchant & Evans Company, Philadelphia, Pa. Cap for water coolers. Des. 88,140; Nov. 1.

Bennett, Andrew Philip. (See Cook, S. S., Bennett, and Parsons.)

Benoit, Leon. (See Levine, Henry, assignor.)

Bensabat, Alfred. (See Rico, Gerardo G., assignor.)

Bensing, Le Rue P., assignor to Lebanon Steel Foundry, Lebanon, Pa. Mold for high temperature castings. 1,886,249; Nov. 1.

Bentley, Percival A., C. F. Manger, and C. H. Wainwright, Leicester, England. Knitting machine. 1,885,322; Nov. 1.

Berchtold, Frank J., and L. Cleven, Washington, D. C. Furnace draft control. 1,885,506; Nov. 1.

Berifein, Milton W., New York, N. Y. Pillow cover or the like. Des. 88,206; Nov. 1.

Berlin, Ludwig W. (See Kraenslein, G., Müller, and Berlin.)

Berman, Phoebus, Los Angeles, Calif. Nozzle for aseptic discharge of liquids. 1,885,218; Nov. 1.

Bertram, Clarence C., assignor to Barco Manufacturing Company, Chicago, Ill. Reversing gear mechanism. 1,885,173; Nov. 1.

Bethune, John. (See Thomas, H. T., Bethune, and Hays.)

Bigelow-Sanford Carpet Co. (See Smidlein, Anthony E., assignor.)

Billington, James H., Company. (See Hall, Washington L., assignor.)

Bills, Claud H., La Habra, and G. G. Griswold, Pico, Calif. Spray head. 1,885,219; Nov. 1.

Bingesser, Carl. (See Wolf, John M., assignor.)

Bishinger, Robert, Allison Park, Pa. Hair waving appliance. 1,885,577; Nov. 1.

Bishop, Sereno W., Long Beach, Calif. Tire deflation alarm. 1,886,160; Nov. 1.

Bixby, Leo A., assignor to Unit Corporation of America, Milwaukee, Wis. Speed transmission. 1,886,154; Nov. 1.

Bizzarri, Anthony, New York, N. Y. Hydraulic grease dispensing system. 1,885,220; Nov. 1.

Bjornson, Bernard T., Duluth, Minn. Vending machine. 1,885,324; Nov. 1.

Black, Lee J., Beaumont, Tex. Walking beam. 1,885,675; Nov. 1.

Blaisdell, Sidney B., Wyncote, assignor to Fidelity Machine Company, Philadelphia, Pa. Braided brake lining and machine for making same. 1,885,676; Nov. 1.

Bleicher, Adolph & Co. A.-G. (See Rubin, Adolf, assignor.)

Bloch, Jacob, and A. G. Wagner, assignors to The Wolf Machine Company, Cincinnati, Ohio. Cloth cutting machine. 1,886,077; Nov. 1.

Blott, John F. (See Gabriel, L. G., and Blott.)

Blue Ridge Glass Corporation. (See Pond, Leander N., assignor.)

Boake, A., Roberts and Company Limited. (See Boake, E. J., and Townsend, assignors.)

Boake, A., Roberts and Company Limited. (See Durrans, Thomas H., assignor.)

Boake, Edmond Johnson, and L. W. E. Townsend, Stratford, London, assignors to A. Boake, Roberts and Company Limited, London, England. Conduct of exothermic acetaldehyde condensation reactions. 1,885,221; Nov. 1.

Bobrick, Arthur L., Los Angeles, Calif. Dispenser for dry materials. 1,885,978; Nov. 1.

Bobrick, Arthur L., Los Angeles, Calif. Soap dispenser. 1,885,979; Nov. 1.

Bobroff, Bornett L., Racine, Wis. Switch for signaling systems for vehicles. 1,886,078; Nov. 1.

Bocchieri, Corinna, et al. (See Maniscalco, Pietro, assignor.)

Bocchieri, Joseph, et al. (See Maniscalco, Pietro, assignor.)

Bocs, Alexander J., Detroit, Mich. Harmonic antivibrator. 1,886,246; Nov. 1.

Boden, Ernest G., assignor to The Timken Roller Bearing Company, Canton, Ohio. Assembling roller bearings. 1,885,980; Nov. 1.

Boehler, Raymond F., jr., Springfield, Ohio. Steel wool machine. 1,885,677; Nov. 1.

Boeing Airplane Company. (See Butler, Leo M., assignor.)

Bogardus, Charles C., Los Angeles, Calif. Upper cylinder oiler. 1,885,981; Nov. 1.

Bogley, Preston P., Chicago, Ill. Broiler plate. 1,885,325; Nov. 1.

Bohlman, Ernest A., assignor to Jefferson Electric Company, Chicago, Ill. Fuse wrench. 1,886,155; Nov. 1.

Böhme, Erhard. (See Ludwig, L., and Böhme.)

Bohnet, Herman C., Lansing, Mich. Ventilated stop signal casing. 1,885,912; Nov. 1.

Boland, Joseph J., assignor, by mesne assignments, to Aeromarine Plane & Motor Company, Inc., Keyport, N. J. Lubricating system. 1,885,222; Nov. 1.

Bonell, Ralph K. (See Holden, W. H. T., and Bonell.)

Bordeaux, Claude G., Slingerlands, N. Y. Heating system. 1,885,225; Nov. 1.

Borden, Stephen W. (See Roe, Ralph C., assignor.)

Bormans, Emile, Villemomble, assignor to Georges Touranchet, Vincennes, France. Utilizing ivory scrap. 1,885,563; Nov. 1.

Bornhauser, Oskar, Frankfort-on-the-Main, Germany. Photographic film picture and producing the same. 1,886,266; Nov. 1.

Bornmann, Carl, assignor to Agfa Ansco Corporation, Binghamton, N. Y. Focusing device for cameras. 1,885,982; Nov. 1.

Boudette, Clayton M., Revere, Mass. Combined envelope sealer and opener. 1,885,105; Nov. 1.

Boulet, Georges, Sevres, France. Valve operating mechanism. 1,885,796; Nov. 1.

Boundy, Ray H. (See Grebe, J. J., and Boundy.)

Bouslog, John G., Long Beach, Calif. Rod rack. 1,885,223; Nov. 1.

Bowen, Herbert C., and J. R. Heidloff, Detroit, Mich., assignors to Hydraulic Brake Company, Los Angeles, Calif. Brake mechanism. 1,885,174; Nov. 1.

Bowen Products Corporation. (See Gleason, Frederick H., assignor.)

Boye, James H., assignor to James H. Boye Manufacturing Company, Chicago, Ill. Curtain crane support. 1,885,407; Nov. 1.

Boye, James H. Manufacturing Company. (See Boye, James H., assignor.)

Boyer, Harold R., Grosse Pointe Farms, Mich. Carbonating vessel. 1,885,678; Nov. 1.

Boykow, Johann M., Berlin-Lichterfelde-West, Germany. Apparatus for use in controlling aircraft. 1,885,578; Nov. 1.

Boynton, Walter, assignor of one-half to F. Weir, Carthage, N. Y. Tappet adjusting tool. 1,885,579; Nov. 1.

Brabbée, Charles W., Bronxville, and B. Goerg, Mount Vernon, assignors to American Radiator Company, New York, N. Y. Boiler. 1,885,175; Nov. 1.

Bracke, Robert F., Chicago, assignor to C. B. Camp, trustee, Glencoe, Ill. Fuel feed system for motor vehicles. 1,885,408; Nov. 1.

Bradbury, Clifford C., Glencoe, Ill., assignor to Hydraulic Brake Company, Los Angeles, Calif. Brake mechanism. 1,885,580; Nov. 1.

Bradbury, James G., assignor to Erie Malleable Iron Company, Erie, Pa. Conduit fitting. 1,885,581; Nov. 1.

Brady, Thomas, East Orange, N. J., assignor to Otis Elevator Company, New York, N. Y. Indicator. 1,886,079; Nov. 1.

Bragg, Thomas A., assignor to Owens-Illinois Glass Company, Toledo, Ohio. Glassware forming machine. 1,885,409; Nov. 1.

Brand, Smart, Yonkers, N. Y., assignor to American Telephone and Telegraph Company. Transmission regulation. 1,885,798; Nov. 1.

Brandt Automatic Cashier Company. (See Brandt, Edward J., assignor.)

Brandt, Edward J., assignor to Brandt Automatic Cashier Company, Watertown, Wis. Coin delivery chute. 1,885,582; Nov. 1.

Branica, Fortunato, Brooklyn, N. Y. Coin controlled vending apparatus. 1,885,797; Nov. 1.

Brauer, Arthur J., and F. P. Wagner, St. Louis, Mo. Process and apparatus for forming the heel end of a sole. 1,886,157; Nov. 1.

Brauning, Karl A., assignor to The Yale & Towne Manufacturing Company, Stamford, Conn. Lock. 1,885,983; Nov. 1.

Bredel, Frederick, deceased, assignor of thirty one-hundredths to T. D. Miller, St. Louis, Mo.; L. W. Grant, administrator. Heating muffles, retorts and the like. 1,885,583; Nov. 1.

Breese, James L., jr., Santa Fe, N. Mex., assignor to Oil Devices Corporation, Chicago, Ill. Heater. 1,885,891; Nov. 1.

Breese, James L., jr., Santa Fe, N. Mex., assignor to Oil Devices Corporation, Chicago, Ill. Heater. 1,886,156; Nov. 1.

Brenneis, Louis, assignor to Brenneis Manufacturing Company, Oxnard, Calif. Bearing construction. 1,885,410; Nov. 1.

Brenneis Manufacturing Company. (See Brenneis, Louis, assignor.)

Bridgeport Brass Company. (See Brown, Gregory, assignor.)

Briggs, John J., Indianapolis, Ind. Treatment of diseases of the genito-urinary tract. 1,885,106; Nov. 1.

Briggs & Stratton Corporation. (See Fitzgerald, John W., assignor.)

Brinkman, Earl W., and H. S. Kline, assignors to Davenport Machine Tool Co., Rochester, N. Y. Automatic tool machine. 1,885,224; Nov. 1.

Brisbois, Odilon, Gary, Ind., assignor, by direct and mesne assignments, of one-fourth to C. T. Brown, Chicago, Ill., and one-half to J. Weidenhoff. Joining type characters and type bars. 1,885,584; Nov. 1.

Brisbois, Odilon, Gary, Ind., assignor of one-fourth to C. T. Brown, Chicago, Ill., and one-half to J. Weidenhoff. Type bar soldering machine. 1,886,257; Nov. 1.

Bristol Company, The. (See Koester, Herman, assignor.)

Bristol, Cyrus J., assignor to Globe Machinery & Supply Company, Des Moines, Iowa. Guide device for automobile lifts. 1,885,984; Nov. 1.

British Insulated Cables Limited. (See Astley, John W., assignor.)

Britton, Edgar C., and F. Byrner, assignors to The Dow Chemical Company, Midland, Mich. Separating phenylphenols. 1,885,176; Nov. 1.

Bronander, Wilhelm B., Montclair, N. J. Fire extinguisher. 1,885,226; Nov. 1.

Bronander, Wilhelm B., Montclair, N. J., assignor to American Machine & Foundry Company. Two-speed collector belt for cigarette machines. 1,885,892; Nov. 1.

Bronander, Wilhelm B., Montclair, N. J., assignor to American Machine & Foundry Company. Plunger operating mechanism for wrapping machines. 1,885,893; Nov. 1.

Brooks, Benjamin T., Greenwich, Conn., assignor to Petroleum Chemical Corporation. Sulphation of ethylene and the sulphation of a mixture of ethylene and propylene. 1,885,585; Nov. 1.

Brooks, Leo. (See Andrews, Frederick H., assignor.)

Brooks, Manley E. (See Gans, J. A., and Brooks.)

Brooks, Robert R., Pensacola, Fla. Tool and constructing the same. 1,885,679; Nov. 1.

Brown Brothers Welding Company. (See Brown, Hugh F., assignor.)

Brown, Charles T., et al. (See Brisbois, Odilon, assignor.)

Brown Clutch Company, The. (See Hottman, Charles W., jr., assignor.)

Brown, Edward M., Toledo, Ohio. Making enzymatised stock feed. 1,885,411; Nov. 1.

Brown, George R. (See Naab, G. F., and Brown.)

Brown, Gregory, Fairfield, assignor to Bridgeport Brass Company, Bridgeport, Conn. Pump for pressure tanks. 1,886,158; Nov. 1.

Brown, Hugh F., assignor to Brown Brothers Welding Company, San Francisco, Calif. Pipe cutting machine. 1,885,107; Nov. 1.

Brown, John R., assignor to The Reliance Gauge Column Company, Cleveland, Ohio. Gauge cock. 1,886,109; Nov. 1.

Browne, George H., Prince Bay, N. Y., assignor to The S. S. White, Dental Manufacturing Company. Headrest. 1,885,507; Nov. 1.

Brownell, George L., assignor to G. L. Brownell, Inc., Worcester, Mass. Apparatus for drying filamentary material. 1,885,799; Nov. 1.

Brownell, G. L., Inc. (See Brownell, George L., assignor.)

Brozincevic, Max, Wetzikon, Switzerland. Auto of six or more wheels. 1,885,508; Nov. 1.

Brubaker, Walter S., Oakland, assignor to Granberg Meter Corporation, San Francisco, Calif. Resettable counter. 1,885,680; Nov. 1.

Bruce, E. L., Company. (See Bruce, Robert G., assignor.)

Bruce, Robert G., assignor to E. L. Bruce Company, Memphis, Tenn. Classifying wood products. 1,885,177; Nov. 1.

Brundage, Seth W. (See Miller, C. F., and Brundage.)

Brune, William H., Chicago, Ill. Digging teeth and means for mounting them upon excavating implements. 1,885,326; Nov. 1.

Bryan, Joseph M., and B. Smartt, Indianapolis, Ind. Self lubricating bearing. 1,885,586; Nov. 1.

Bryner, Fred. (See Britton, E. C., and Bryner.)

Bsteh, Rudolf, Vienna, Austria. Die lapping and grinding machine. 1,885,178; Nov. 1.
Buchanan, Stephen N., New York, N. Y., assignor to The Thomas & Betts Co., Elizabeth, N. J. Grounding device. 1,885,227; Nov. 1.
Buchanan, Stephen N., assignor to The Thomas & Betts Co., Elizabeth, N. J. Cable connecter. 1,885,228; Nov. 1.
Buck, David. (See Sandig, M., and Buck.)
Buckels, Christopher C., assignor, by mesne assignments, to Chicago Mechanical Manufacturing Co., Chicago, Ill. Outlet box and hanger and making the same. 1,886,161; Nov. 1.
Buckeye Blower Company, The. (See Harnett, Lewis D., assignor.)
Buckeye Traction Ditcher Company, The. (See George, Charles L., assignor.)
Buckwalter, Tracy V., assignor to The Timken Roller Bearing Company, Canton, Ohio. Axle bearing mounting. 1,885,985; Nov. 1.
Buhrle, Paul, Bronx, N. Y. Clock case. Des. 88,141; Nov. 1.
Bullinger, Frederic H., Bronxville, N. Y., assignor to Ward Leonard Electric Company. Terminal connection and making the same. 1,885,108; Nov. 1.
Bullinger, Frederic H., Bronxville, N. Y., assignor to Ward Leonard Electric Company. Rheostat. 1,886,080; Nov. 1.
Bungay, George W., Plainfield, N. J., assignor, by mesne assignments, to Bungay-Wolf Corporation, New York, N. Y. Juice extractor. 1,886,250; Nov. 1.
Bungay-Wolf Corporation. (See Bungay, George W., assignor.)
Burkart, Harry J., Kirkwood, Mo. Article of upholstery and making same. 1,886,325; Nov. 1.
Buren, Newton J., Tacoma, Wash. Piston construction. 1,885,681; Nov. 1.
Burger, Heinrich, Berlin-Charlottenburg, Germany. Impregnating leather. 1,885,179; Nov. 1.
Burkart, Harry J., Kirkwood, Mo. Upholstery. 1,885,109; Nov. 1.
Burkhardt, Jakob, Detroit, Mich., assignor to Third Dimension Pictures, Inc., New York, N. Y. Printing machine for moving picture films. 1,885,229; Nov. 1.
Burnet, Samuel F., Webster Groves, assignor to Laclede Christy Clay Products Company, St. Louis, Mo. Suspended flat arch for furnaces, kilns, and the like. 1,885,800; Nov. 1.
Burnham, Laurence H., Lexington, Mass., assignor to The B. F. Goodrich Company, New York, N. Y. Making rubber boots. 1,885,327; Nov. 1.
Burrell, Howard A., et al. (See Gonsett, Robert R., assignor.)
Burton, Ralph P., Chicago Heights, Ill. Spirally coiled paper tubing and making. 1,885,587; Nov. 1.
Buskett, Evans W., Joplin, Mo. Process of and apparatus for treating metallic ores. 1,885,412; Nov. 1.
Butler, Charles W., Wilkinsburg, and A. T. Johnston, Mount Lebanon, assignors to The Union Switch & Signal Company, Swissvale, Pa. Electrical translating apparatus. 1,885,328; Nov. 1.
Butler, Leo M., assignor to Boeing Airplane Company, Seattle, Wash. Bolt-end spinning tool. 1,885,986; Nov. 1.
Byers, Horace G., Montclair, N. J., assignor to Rubber Service Laboratories Company, Akron, Ohio. Manufacture of a vulcanized rubber product. 1,885,509; Nov. 1.
Byers Machine Company. (See Lotte, Charles H., assignor.)
Byrnes, Townsend & Potter. (See Williams, Walter G., assignor.)
Cadbury, George N., West Bromwich, England. Brake control. 1,885,588; Nov. 1.
Cadieux, Joseph O., assignor to Connecticut Telephone & Electric Corporation, Meriden, Conn. Gas signal light apparatus. 1,886,326; Nov. 1.
Caldemeyer, Daniel H., Evansville, Ind. Folding davenport bed. 1,886,081; Nov. 1.
Callow, Olaf C. (See Whitcomb, A. J., and Callow.)
Cameron, Daniel W., Grand Island, Nebr. Burglar ward. 1,885,180; Nov. 1.
Camp, Curtis B., trustee. (See Bracke, Robert F., assignor.)
Campbell, Argyle, assignor to Enterprise Railway Equipment Company, Chicago, Ill. Door construction for hopper cars. 1,885,181; Nov. 1.
Campbell, Charles A., Watertown, N. Y., assignor to The New York Air Brake Company. Drain cup for air brakes. 1,885,894; Nov. 1.
Canada Gypsum and Alabastine Limited. (See Thomson, George M., assignor.)
Canadian Line Materials Limited. (See Kleinsteiber, William H., assignor.)
Canfield, Robert W., West Hartford, assignor to Hartford-Empire Company, Hartford, Conn. Apparatus for forming glassware. 1,885,682; Nov. 1.
Capehart Corporation, The. (See Collison, Edward E., assignor.)
Capilizer Holding Corporation. (See Czarny, M., and Frolander, assignors.)
Cappa, Giulio Cesare, assignor to Societa Anonima Automobili Ansaldo, Turin, Italy. Change speed gear for motor cars. 1,885,413; Nov. 1.
Carbide & Carbon Chemicals Corp. (See Ray, Arthur B., assignor.)
Carey, Edward J., Pasadena, Calif. Tool. 1,885,895; Nov. 1.
Carey, Philip, Manufacturing Company, The. (See Fischer, Albert C., assignor.)
Carlson, Edward, Tombstone, Ariz. Safety motor for aircraft. 1,886,327; Nov. 1.
Carr, Ubel U., and M. R. McKinley, Monongahela, Pa. Pipe line stopper. 1,885,896; Nov. 1.
Carter, Ralph H. (See Elssner, R., and Carter.)
Cartier, Societe Anonyme. (See Lenfant, Louis, assignor.)
Casanas, Ben C. (See Hassey, Charles, assignor.)
Cash, A. W., Company. (See Temple, Paul C., assignor.)
Cash, A. W., Company. (See Terry, Charles M., assignor.)
Cassell, William H., and F. E. Dahn; said Dahn assignor to said Cassell, Wenatchee, Wash. Protective collar for boxes. 1,885,589; Nov. 1.
Caterpillar Tractor Co. (See Wickersham, Elmer E., assignor.)
Celanese Corporation of America. (See Whitehead, W., and Kuhl, assignors.)
Central Tube Company. (See Laughlin, Alexander, jr., assignor.)
Chaffee, Edward F., assignor to The O. M. Edwards Company Inc., Syracuse, N. Y. Sheet metal sash and ventilator. 1,885,230; Nov. 1.
Chamberlain, Rufus N., Chicago, Ill., assignor, by mesne assignments, to American Container Corporation, St. Paul, Minn. Composition for battery boxes. 1,886,269; Nov. 1.
Chapman, Frank D., Berlin, Wis. Quality gravity separating materials. 1,885,987; Nov. 1.
Chapman, Frank D., Berlin, Wis. Quality grading. 1,885,988; Nov. 1.
Chapman, Fred J., Douglas, Ariz. Glare screen or visor for motor vehicles. 1,885,510; Nov. 1.
Chapman, Mearl J., Cleveland, Ohio, assignor to Great Lakes Aircraft Corporation. Radius forming fixture. 1,886,082; Nov. 1.
Chapman, Mearl J., Cleveland Heights, Ohio, assignor, by mesne assignments, to Chicago Pneumatic Tool Company, New York, N. Y. Pneumatic rivet squeezer. 1,886,241; Nov. 1.
Charles, Maurice, Courbevoie, France. Brake wheel for airplanes. 1,885,683; Nov. 1.
Charlin, André M. B., Montrouge, and P. M. G. Toulon, Puteaux, France. Device reproducing the sounds recorded on a talking cinematographic film. 1,885,989; Nov. 1.
Charney, Aaron, Chicago, Ill. Glove palm. 1,885,182; Nov. 1.
Chase Companies, The. (See Stuart, Charles J., assignor.)
Chaudron, Georges. (See Jolibois, P., and Chaudron.)
Chemical Works formerly Sandoz. (See Leemann, H., Lier, and Knecht, assignors.)
Chemipulp Process Inc. (See Kenety, William H., assignor.)
Chemipulp Process Inc. (See Stevens, J. W., and Kenety, assignors.)
Cherdron, Otto P., and C. W. Scott, Salt Lake City, Utah. Shed construction. 1,885,329; Nov. 1.
Cherdron, Otto P., and C. W. Scott, Salt Lake City, Utah. Building construction. 1,885,330; Nov. 1.
Chesnutt, Seibert W., Kansas City, Mo. Swivel caster. 1,885,990; Nov. 1.
Chessin, Alexander, New York, N. Y. Gyrostabilizer. 1,885,414; Nov. 1.
Chester, Frank R., New York, N. Y., assignor, by mesne assignments, to Chesterfield Control Company, Dover, Del. Display table. 1,885,801; Nov. 1.
Chester, Frank R., New York, N. Y., assignor to Chesterfield Control Company, New York, N. Y. Game. 1,885,802; Nov. 1.
Chesterfield Control Company. (See Chester, Frank R., assignor.)
Chicago Bridge and Iron Company. (See Horton, George T., assignor.)
Chicago Mechanical Manufacturing Co. (See Buckels, Christopher C., assignor.)
Chicago Pneumatic Tool Company. (See Chapman, Mearl J., assignor.)
Chicago Telephone Supply Company. (See Schellenger, Newton C., assignor.)
Chong, Jue L. (See Chong, Look L., J. L., and S. L.)
Chong, Look L., J. L., and S. L., Isleton, Calif. Cutting blade mounting for ground working implements. 1,885,231; Nov. 1.
Chong, Sam L. (See Chong, Look L., J. L., and S. L.)
Christensen, Nelson, Brooklyn, N. Y., assignor to International Cigar Machinery Company. Automatic cigar handling device. 1,885,897; Nov. 1.
Christensen, Niels C., Salt Lake City, Utah. Treating sulphide ores of zinc. 1,886,162; Nov. 1.
Christensen, Niels C., Salt Lake City, Utah. Treatment of oxidized ores. 1,886,163; Nov. 1.
Christensen, Niels C., Salt Lake City, Utah. Apparatus for compressing gases. 1,886,164; Nov. 1.
Christensen, Niels C., Salt Lake City, Utah. Precipitation of zinc sulphide and the manufacture of zinc sulphide pigments. 1,886,165; Nov. 1.

Church, Albert E., New Britain, assignor to The Union Manufacturing Company, New Britain, Conn. Chuck. 1,886,083; Nov. 1.
Churchill Cabinet Company. (See Gullicksen, Ole, assignor.)
Cincinnati Car Corporation, The. (See Ellis, Charles J., assignor.)
Cincinnati Shaper Company, The. (See Hazelton, Robert T., assignor.)
Clark, J. R., Co. (See Kalgren, John E., assignor.)
Claud-Mantle, Arthur, assignor to The Bassick Company, Bridgeport, Conn. Lock. 1,885,590; Nov. 1.
Clawson, Anna I., executrix. (See Clawson, Monroe S., assignor.)
Clawson, Monroe S., deceased, Montclair, N. J.; Anna I. Clawson, executrix. Multiple permanent mold. 1,886,084; Nov. 1.
Cleven, Louis. (See Berchtold, F. J., and Cleven.)
Climax Motorenwerke und Schiffswerft Linz A. G. (See Mandler, Eugen, assignor.)
Cliot Closet Moth Proofer, Inc. (See Kliot, Hyman, assignor.)
Clipper Belt Lacer Company. (See Diamond, James K., assignor.)
Cochran, Joseph T., Chicago, Ill. Sign character. 1,885,991; Nov. 1.
Cocks, Edgar, Los Angeles, Calif. Folding bed end attaching device. 1,885,511; Nov. 1.
Coffman, Samuel M., Kansas City, Mo., assignor to National Postage Machines Co. Ltd., Reno, Nev. Vending machine. 1,885,898; Nov. 1.
Coffman, Samuel M., Kansas City, Mo., assignor to National Postage Machines Co. Ltd., Reno, Nev. Combination vending, change making, and coin distributing machine. 1,885,899; Nov. 1.
Cohen-Venezian, Carlo, Turin, Italy. Vehicle. 1,886,319; Nov. 1.
Colas Roads Inc. (See Gabriel, L. G., and Blott, assignors.)
Colbert, William H., Brackenridge, Pa., assignor to Duplate Corporation. Mirror. 1,885,232; Nov. 1.
Cole, Charles M., South Weymouth, assignor to Wheeler Reflector Company, Boston, Mass. Film socket filler. 1,885,684; Nov. 1.
Cole, Elmer K., Winterset, Iowa. Cable splice. 1,886,247; Nov. 1.
Cole, Raymond A., assignor to Norton Company, Worcester, Mass. Fluid pressure operated steadyrest. 1,885,233; Nov. 1.
Colignon, William C., Chicago, Ill. Foldable table. 1,885,685; Nov. 1.
Collins, Douglas, Salisbury, N. C. Automatic choke. 1,885,331; Nov. 1.
Collins, Roberg G., St. Albans, N. Y. Window closing device. 1,885,183; Nov. 1.
Collison, Edward E., assignor to The Capehart Corporation, Fort Wayne, Ind. Flexible phonograph record holder. 1,885,415; Nov. 1.
Colomb, Henri, Tavennes, Switzerland. Attaching means for timepiece dials. 1,886,166; Nov. 1.
Colonial Steel Company. (See Nimick, Francis B., assignor.)
Coloxide Patents Corporation. (See Groggins, Stanley S., assignor.)
Columbia Burner Company, The. (See Hall, Ernest A., assignor.)
Columbia Phonograph Company. (See Bahr, Gustave F., assignor.)
Columbia Products, Incorporated. (See Wells, Richard, assignor.)
Columbia Steel Equipment Company. (See Dawson, George H., assignor.)
Columbus Auto Brass Company, The. (See Frame, Augustus J., assignor.)
Compagnie pour la Fabrication des Compteurs et Materiel d'Usines a Gaz. (See Dubusc, R., and Illovici, assignors.)
Comstock & Wescott, Inc. (See Mancib, Alvin S., assignor.)
Condit Electrical Manufacturing Corporation. (See Ainsworth, Chester D., assignor.)
Condit Electrical Manufacturing Corporation. (See MacNeil, Frederick H., assignor.)
Condit Electrical Manufacturing Corporation. (See O'Keefe, George W., assignor.)
Cone, Samuel I., assignor to Cone Worm Gearing Corporation, Norfolk, Va. Method of and apparatus for cutting worm gearing. 1,885,686; Nov. 1.
Cone Worm Gearing Corporation. (See Cone, Samuel I., assignor.)
Conklin, Henry E., Roslyn, N. Y. Building. Des. 88,142; Nov. 1.
Connecticut Telephone & Electric Corporation. (See Cadieux, Joseph O., assignor.)
Connelly, Emmett L., Los Angeles, Calif. Lathering device. 1,885,416; Nov. 1.
Connolly, Gerald C. (See Miller, E. B., and Connolly.)
Conroy, Jess J., Maracaibo, Venezuela. Casing head construction. 1,886,167; Nov. 1.
Container Corporation of America. (See Gallistel, Clarence P., assignor.)
Continental Can Company. (See Coyle, J., and Plumb, assignors.)
Continental Can Company. (See Dodge, M. L., and Pearson, assignors.)
Continental Can Company. (See Fink, Henry A., assignor.)
Continental Motors Corporation. (See Meyer, Andre J., and Kalb, assignors.)
Continental Oil Company. (See Griswold, Edward H., assignor.)
Continental Roll & Steel Foundry Company. (See Reese, Franklin T., assignor.)
Cook Electric Company. (See Persons, Lawrence M., assignor.)
Cook, Fred A., Rock Island, Ill. Shim. 1,886,168; Nov. 1.
Cook, Stanley Smith, A. P. Bennett, and C. A. Parsons, deceased, Newcastle-on-Tyne, by K. Parsons, Kirkwhelpington, V. Thompson, Newcastle-on-Tyne, and F. G. H. Bedford, Wylam-on-Tyne, England, executors. Turbine. 1,885,512; Nov. 1.
Copland, George W., Lawrence, N. Y. Oil tester. 1,886,085; Nov. 1.
Corby, John S., Windsor, England. Presser and stretcher for trousers or other fabric garments or articles. 1,885,803; Nov. 1.
Corning Glass Works. (See Locke, Fred M. and F. J., assignors.)
Cornwall, Clement A. K., Victoria, British Columbia, Canada. Wheel lock and easy starting device for vehicles. 1,886,169; Nov. 1.
Coulthard, Albert, and E. H. Rodd, Blackley, Manchester, assignors to Imperial Chemical Industries Limited, London, England. Manufacture of new Xanthen dyes. 1,885,591; Nov. 1.
Coulthard, Albert, and E. H. Rodd, Blackley, Manchester, assignors to Imperial Chemical Industries Limited, London, England. Manufacture of new xanthene dyes. 1,885,592; Nov. 1.
Courtaulds Limited. (See Morton, Eric A., assignor.)
Cowan, Glen P. (See Kellogg, H. C., and May, assignors.)
Cowan, Grace A., executrix. (See Kellogg, H. C., and May.)
Coyle, John, Baltimore, Md., and W. Plumb, Jersey City, N. J., assignors to Continental Can Company, Inc., New York, N. Y. Machine for soldering nozzles to can bodies. 1,885,992; Nov. 1.
Crabbe, Lindsay T., assignor to Phoenix Metal Cap Co., Inc., Chicago, Ill. Jar closure. 1,885,687; Nov. 1.
Craig, Charles F., et al. (See Moreton, Henry H., assignor.)
Crane Co. (See Houser, A. M., and Fennema, assignors.)
Cremer, Henry, South Gate, Calif. Steering apparatus. 1,885,417; Nov. 1.
Crites, Bert O. (See Textor, O., and Crites.)
Crosby, Arthur P., Minneapolis, Minn. Radiator return trap. 1,885,993; Nov. 1.
Crosley Radio Corporation, The. (See Langley, Ralph H., assignor.)
Crowell, Joyce H. (See Rogers, D. G., Ogilvie, and Crowell.)
Crowell, William J., jr., Wyncote, Pa. Flow meter. 1,885,184; Nov. 1.
Crowley, Henry L., East Orange, and R. M. Crowley, Jersey City, assignors to Henry L. Crowley & Co. Inc., East Orange, N. J. Ceramics. 1,885,234; Nov. 1.
Crowley, Henry L., & Co. Inc. (See Crowley, Henry L. and R. M., assignors.)
Crowley, Robert M. (See Crowley, Henry L. and R. M.)
Cruser, Frederick V. D., Oswego, N. Y., assignor, by mesne assignments, to The Diamond Match Company. Treating fibrous material with sulphur. 1,886,170; Nov. 1.
Crystal Tissue Company, The. (See Wilson, Joseph C., assignor.)
Cuff, Fred A., and Maurice H. Keating, assignors to H. D. Hudson Manufacturing Company, Minneapolis, Minn. Sprayer. 1,885,332; Nov. 1.
Cundiff, Charles W., assignor to Owensboro Ditcher & Grader Co., Inc., Owensboro, Ky. Terracer, road grader, and ditcher. 1,885,804; Nov. 1.
Cunningham, M. E., Company. (See Speicher, Franklin S., assignor.)
Curtis, Francis J., Belmont, assignor to Merrimac Chemical Company, Inc., Boston, Mass. Sizing fibrous material. 1,885,185; Nov. 1.
Curtis, William H., Portland, Oreg., assignor to Granberg Meter Corporation, San Francisco, Calif. Liquid meter system. 1,886,328; Nov. 1.
Czarny, Martin, Roselle, and Frank C. Frolander, Elizabeth, N. J., assignors to Capilizer Holding Corporation, New York, N. Y. Oil rectifying apparatus. 1,885,333; Nov. 1.
Dahn, Floyd E. (See Cassell, William H.)
Daimler Company, The. (See Martin, Percy, assignor.)
Daly, John J., West Newton, assignor by mesne assignments, to Beckwith Manufacturing Company, Boston, Mass. Box toe blank and producing the same. 1,886,329; Nov. 1.
Dammer, Joseph. (See Kunz, J., and Dammer.)
Damon, John C., Cheshire, assignor to The American Brass Company, Waterbury, Conn. Connector for cables. 1,886,086; Nov. 1.
Dardelet Threadlock Corporation. (See Hoke, W. E., and Thomson, assignors.)
Dardelet Threadlock Corporation. (See Thomson, Robert, assignor.)
Darrah, William A., Chicago, Ill. Process and equipment for forming sheets. 1,885,334; Nov. 1.
Darrah, William A., Chicago, Ill. Heat application and equipment therefor. 1,885,418; Nov. 1.

Daudt, Herbert W., Carneys Point, N. J., assignor to E. I. du Pont de Nemours & Company, Wilmington, Del. Making di-substituted guanidines. 1,886,087; Nov. 1.
Davenport Machine Tool Co. (See Brinkman, E. W., and Kline, assignors.)
Davenport Machine Tool Co. (See Davenport, William S., assignor.)
Davenport, William S., assignor to Davenport Machine Tool Co., Inc., Rochester, N. Y. Friction clutch. 1,885,236; Nov. 1.
Davis, Ernest, assignor to The Prosperity Company Inc., Syracuse, N. Y. Follow-up actuating mechanism for pressing machines. 1,885,235; Nov. 1.
Davis, Thomas A. (See Watson, Alec V., assignor.)
Davis, Trayharn, Lomita, assignor of one-half to Julius H. Becker, San Francisco, Calif. Liquid fuel burner. 1,885,688; Nov. 1.
Dawson, George H., Boston, Mass., assignor to Columbia Steel Equipment Company, Philadelphia, Pa. Linoleum topped filing cabinet. 1,885,805; Nov. 1.
Day-Brite Reflector Company. (See Klingsick, Oswald W., assignor.)
Dayton Pump & Mfg. Company, The. (See Eickmeyer, E. E., and Eichhoff, assignors.)
Deere & Company. (See Silver, Walter H., assignor.)
Defiance Pressed Steel Company, The. (See Herbolsheimer, Emil L., assignor.)
De Forest, Lee, Hollywood, Calif., assignor to General Talking Pictures Corporation, New York, N. Y. Talking motion picture attachment. 1,885,900; Nov. 1.
Defoy, Leonce, Three Rivers, Quebec, Canada. Furniture latch. 1,885,186; Nov. 1.
De Laval Separator Company, The. (See Hulbert, John L., assignor.)
De Laval Separator Company, The. (See Strezynski, G. J., and Fraser, assignors.)
De Mask, Martin J., Pittsfield, Mass. Multiple electrical conduit receptacle and plug. 1,885,513; Nov. 1.
Denison, Alberta E. (See Denison, Louis S., assignor.)
Denison, Louis S., assignor to A. E. Denison, Santa Cruz, Calif. Drain pipe for flushing attachments. 1,885,977; Nov. 1.
De Rohden, Charles, Baltimore, Md., assignor, by mesne assignments, to Krebs Pigment and Color Corporation, Newark, N. J. Production of titanium pigments. 1,885,187; Nov. 1.
Detroit Body Die Company. (See Purdy, Emmett G., assignor.)
Deubler, Lewis T., Scranton, Pa. Canopy fastener. 1,885,514; Nov. 1.
Deutsch, Fritz, Memphis, Tenn., assignor, by mesne assignments, to Sparta Foundry Company, Sparta, Mich. Arbor for ring splitting machines. 1,885,188; Nov. 1.
De Vilbiss Company, The. (See Whitmore, Edson G., assignor.)
Dews, Joseph W., assignor to Scovill Manufacturing Company, Waterbury, Conn. Snap fastener. 1,885,806; Nov. 1.
Diamond, James K., assignor to Clipper Belt Lacer Company, Grand Rapids, Mich. Belt clip card. 1,885,237; Nov. 1.
Diamond Match Company, The. (See Cruser, Frederick V. D., assignor.)
Diamond Power Specialty Corporation. (See Snow, Norman L., assignor.)
Dicker, Joseph H., Jersey City, N. J. Wafer container for ice cream and the like. Des. 88,143; Nov. 1.
Diesel, William F., assignor to Sargent & Greenleaf, Inc., Rochester, N. Y. Locking mechanism. 1,885,238; Nov. 1.
Dietzgen, Eugene, Co. (See Langsner, Adolph, assignor.)
Dieux, Jean, Paris, France. Talking machine. 1,885,994; Nov. 1.
Dilas, George A., Bay City, Mich. Luring machine. 1,885,335; Nov. 1.
Di Lorenzio, Charles, et al. (See Fabbro, Louis M., assignor.)
Dina, Augusto, New York, N. Y. Dowser. 1,885,419; Nov. 1.
Dixon, Joseph, Crucible Company. (See Mix, Frederick H., assignor.)
Dodge, Merton L., and P. E. Pearson, Seattle, Wash., assignors to Continental Can Company, Inc. Nesting can bodies. 1,886,171; Nov. 1.
Doetsch, Laura, Chicago, Ill. Nest of chairs. 1,886,172; Nov. 1.
Doherty, Henry L., New York, N. Y. Production of oil from oil sands in the earth. 1,885,807; Nov. 1.
Domkee, John H., assignor to The Wire Novelty Manufacturing Company, West Haven, Conn. Slide buckle. 1,885,239; Nov. 1.
Domkee, John H., assignor to The Wire Novelty Manufacturing Company, West Haven, Conn. Slide buckle. 1,885,240; Nov. 1.
Domkee, John H., assignor to The Wire Novelty Manufacturing Company, West Haven, Conn. Button loop. 1,885,336; Nov. 1.
Donohue, Anthony J., assignor to Simplex Gas Products Corporation, Philadelphia, Pa. Thermostatic burner control. 1,885,515; Nov. 1.
Dorman, Neal W., assignor to The Toledo Machine & Tool Company, Toledo, Ohio. Adjustable tripping device. 1,885,420; Nov. 1.
Dorschel, John L., Kitchener, Canada. Check valve for smoking articles. 1,885,689; Nov. 1.
Dow Chemical Company, The. (See Britton, E. C., and Bryner, assignors.)
Dow Chemical Company, The. (See Gann, John A., assignor.)
Dow Chemical Company, The. (See Gann, J. A., and Brooks, assignors.)
Dow Chemical Company, The. (See Gann, J. A., and Reynolds, assignors.)
Dow Chemical Company, The. (See Grebe, J. J., and Boundy, assignors.)
Dow Chemical Company, The. (See Putnam, Mark E. assignor.)
Dow, Warren R., Watertown, Mass., assignor to The B. F. Goodrich Company, New York, N. Y. Apparatus for molding footwear. 1,885,337; Nov. 1.
Dowick, Benjamin, Jersey City, N. J. Hair retainer. 1,885,995; Nov. 1.
Downer, Arthur J., Minneapolis, Minn. Under pressure faucet and valve tool. 1,885,593; Nov. 1.
Doyle, Frederick W., assignor, by mesne assignments, to Associated Electric Laboratories, Inc., Chicago, Ill. Assembling machine and jig. 1,885,690; Nov. 1.
Dressler, Philip D'Huc, Cleveland, Ohio, assignor to New Castle Refractories Company, New Castle, Pa. Ware support. 1,885,691; Nov. 1.
Dronsfield, James, Atlas Works, Oldham, England. Apparatus for grinding and treating wire clothed rollers. 1,886,088; Nov. 1.
Dronsfield, James, Atlas Works, Oldham, England. Grinding machine. 1,886,089; Nov. 1.
Drury, Wendell B., Stamford, Conn. Antiglare mirror attachment. 1,885,594; Nov. 1.
Dubusc, Roger, and A. D. Illiovici, Paris, assignors to Compagnie pour la Fabrication des Compteurs et Material d'Usines a Gaz, Montrouge, France. Circuit protecting device. 1,885,189; Nov. 1.
Ducker, William L., Norman, Okla. Tape for controlling electrical apparatus. 1,885,808; Nov. 1.
Duckworth, Charles B., Magna, Utah. Crushing roll. 1,885,241; Nov. 1.
Duffin, John V., Chicago, Ill. Container for paper in rolls. 1,885,996; Nov. 1.
Dufford, John R. (See Hough, A., Dufford, and Leonhard.)
Dugan, Ira E., Ponca City, Okla. Record container for motor vehicles. 1,885,692; Nov. 1.
Dunlap, Charles K., assignor to Sonoco Products Company, Hartsville, S. C. Spool. 1,885,693; Nov. 1.
Dunlop Rubber Company Limited. (See Murphy, E. A., James, and Twiss, assignors.)
Duplate Corporation. (See Colbert, William H., assignor.)
Duplate Corporation. (See Fix, Earl L., assignor.)
Duplate Corporation. (See Lytle, William O., assignor.)
Du Pont, E. I., de Nemours & Company. (See Daudt, Herbert W., assignor.)
Du Pont, E. I., de Nemours & Company. (See Richardson, Roger W., assignor.)
Du Pont Viscoloid Company. (See Terhune, Leonard B., assignor.)
Dupuis, Philippe. (See Milette, A., and Dupuis.)
Durham, Donald, Des Moines, Iowa. Floor waxer and polisher. 1,885,997; Nov. 1.
During, William J., Syracuse, N. Y., and N. Lester, Cleveland, Ohio, assignors to Precision Castings Company, Inc., Syracuse, N. Y. Die-casting machine. 1,885,421; Nov. 1.
Durrans, Thomas H., Stratford, London, assignor to A. Boake, Roberts and Company Limited, London, England. Manufacture of aldols. 1,885,242; Nov. 1.
Duryea, William C., Princeton, N. J. Prime mover. 1,885,328; Nov. 1.
Dyckerhoff, Adolf, Cologne-on-the-Rhine, Germany. Lock nut. 1,885,694; Nov. 1.
Eagle Machine Company. (See Yount, Horace J., assignor.)
Eckert, Wilhelm, and H. Greune, Frankfort-on-the-Main-Hochst, Germany, assignors to General Aniline Works, Inc. Vat dyestuff and making same. Re18,643; Nov. 1.
Edholm, Harald, Solsidan, Saltsjobaden, assignor to Aktiebolaget Svenska Flaktfabriken, Stockholm, Sweden. Treatment of grainy materials. 1,885,998; Nov. 1.
Edwards, O. M., Company, The. (See Axe, Roy T., assignor.)
Edwards, O. M., Company Inc., The. (See Chaffee, Edward F., assignor.)
Edwards, Ralph D., Osceola, Ind. Siphon. 1,885,695; Nov. 1.
Egloff, Gustav, assignor to Universal Oil Products Company, Chicago, Ill. Stabilizing gasoline and the like. 1,885,190; Nov. 1.
Ehrenzweig, Alexander, Zurich, Switzerland. Display apparatus. 1,885,595; Nov. 1.
Eichhoff, George W. (See Eickmeyer, E. E., and Eichhoff.)
Eichorn, Fred A., Chattanooga, Tenn. Combined packing and expansion ring. 1,885,696; Nov. 1.
Eickmeyer, Earl E., and George W. Eichhoff, assignors to The Dayton Pump & Mfg. Company, Dayton, Ohio. Gasoline or other article dispensing pump. Des. 88,144; Nov. 1.

Ekberg, Carl, Lombard, Ill. Display box for tools. Des. 88,145; Nov. 1.
Electric Steel Foundry Company. (See Gorbutt, Sidney B., assignor.)
Ellenberger, Clarence M., Indianapolis, Ind., assignor to Lyon Cover Company, Detroit, Mich. Tire cover. 1,886,270; Nov. 1.
Elliott-Fisher Company. (See Lippert, Walter E., assignor.)
Ellis, Carleton, Montclair, N. J., assignor to Ellis-Foster Company. Compositions containing a synthetic resin or balsam. 1,886,242; Nov. 1.
Ellis, Charles J., assignor, by mesne assignments, to The Cincinnati Car Corporation, Cincinnati, Ohio. Car truck. 1,885,191; Nov. 1.
Ellis-Foster Company. (See Ellis, Carleton, assignor.)
Ellis, Leo A., Brooklyn, N. Y. Apparatus for handling tires. 1,885,809; Nov. 1.
Ellsworth, Ross J., assignor to Holmes Disappearing Bed Company, Woodstock, Ill. Recess bed. 1,885,999; Nov. 1.
Ellsworth, Ross J., assignor to Holmes Disappearing Bed Company, Woodstock, Ill. Bed end. 1,886,000; Nov. 1.
Elsner, Richard, and R. H. Carter, Johnson City, Tenn., assignors to American Glanzstoff Corporation, New York, N. Y. Spool and holder therefor. 1,885,192; Nov. 1.
Embree, John L., Omaha, Nebr. Radiocabinet. Des. 88,146; Nov. 1.
Emmerich, Edward E. (See Scannell, John P., assignor.)
Emmert, Rodger J., assignor to General Motors Radio Corporation, Dayton, Ohio. Electrical apparatus. 1,885,596; Nov. 1.
Englisch, O. B., et al. (See Moreton, Henry H., assignor.)
Ennis, William Francis, Zamalek, Cairo, Egypt. Solid and pneumatic tired wheel. 1,885,901; Nov. 1.
Enterprise Railway Equipment Company. (See Campbell, Argyle, assignor.)
Erdmann, Raymond A. (See Kosanovich, Burke B., assignor.)
Erie Malleable Iron Company. (See Bradbury, James G., assignor.)
Erie Malleable Iron Company. (See Swanson, Elmer J. S., assignor.)
Esmarch, Wilhelm, Berlin-Halensee, assignor to Siemens & Halske Aktiengesellschaft, Siemensstadt, near Berlin, Germany. Separation of electrically charged particles from fluids with the aid of an electric current. 1,885,810; Nov. 1.
Estep, Adrian C., Seattle, Wash. Fuel relief valve. 1,885,338; Nov. 1.
Eufinger, Peter, Frankfort-on-the-Main, and Wilhelm Quante, Wupperthal-Elberfeld, Germany. Machine for splicing cables. 1,885,902; Nov. 1.
Eureka Photo Mechanical Equipment, Inc. (See Mazzocco, Dante V., assignor.)
Evans, Benjamin A., Cuyahoga Falls, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y. Rubber bearing structure. 1,885,339; Nov. 1.
Evans, John T., Kingston, Pa. Radiator hanger. 1,886,330; Nov. 1.
Ewald, Warren, Ardsley-Philadelphia, and P. P. Henshall, assignors to John J. Nesbitt, Inc., Philadelphia, Pa. Double damper for heating and ventilating units. 1,885,248; Nov. 1.
Exact Weight Scale Company, The. (See Flanagan, Thomas B., assignor.)
Eynon, Howard B., Wellsville, N. Y. Motor brush. 1,885,903; Nov. 1.
Fabbro, Anna M., et al. (See Fabbro, Louis M., assignor.)
Fabbro, Louis M., assignor of forty-five per cent to A. M. Fabbro and forty per cent to E. C. Balshiser, Cleveland, Ohio, and fifteen per cent to C. Di Lorensio. Vaporizer and supercharger for internal combustion engines. 1,885,697; Nov. 1.
Fabbro, Louis M., assignor of forty-five per cent to A. M. Fabbro and forty per cent to E. C. Balshiser, Cleveland, Ohio, and fifteen per cent to C. Di Lorensio. Vaporizer and supercharger for internal combustion engines. 1,885,698; Nov. 1.
Fairbanks, Morse & Co. (See Goldberg, Morris J., assignor.)
Fanargian, John, et al. (See Kasparian, Mehran, assignor.)
Faries Manufacturing Company. (See Smith, Joseph L., assignor.)
Fast, Gustave, Engineering Corporation. (See Fast, Gustave, assignor.)
Fast, Gustave, assignor to Gustave Fast Engineering Corporation, Annapolis, Md. Brake and clutch construction. 1,885,516; Nov. 1.
Fauser, Gustave M., Ardsley-on-the-Hudson, N. J. Printed floor covering. Des. 88,147; Nov. 1.
Fautrad, Germaine, New York, N. Y. Kimono. 1,885,422; Nov. 1.
Fehl, John T., and A. Belcher, Jersey City, N. J. Bedside unit. 1,885,597; Nov. 1.
Febrle, Alfred, Bad-Soden-on-Taunus, Germany, assignor to Winthrop Chemical Company, Inc., New York, N. Y. Readily soluble salts of acridine bases substituted in 9-position by basic residues. 1,886,001; Nov. 1.
Feldblet, Herman L., New York, N. Y. Metal form holder for concrete wall construction. 1,885,699; Nov. 1.
Fennema, Richard. (See Houser, A. M., and Fennema.)
Fenner, J. H. & Company. (See Hainsworth, Sydney B., assignor.)
Fenton, John A., North Andover, Mass. Stop motion. 1,885,423; Nov. 1.
Ferneding, George, and H. N. West, Cincinnati, assignors to Weir Kilby Corporation, Norwood, Ohio. Railroad highway crossing. 1,885,244; Nov. 1.
Feiser, John, Pittsburgh, Pa. Tunnel kiln. 1,885,811; Nov. 1.
Fiat Societa Anonima. (See Vitalba, Leo, assignor.)
Fichtenbaum, Harry, et al. (See Fichtenbaum, Oscar, assignor.)
Fichtenbaum, Joseph P., et al. (See Fichtenbaum, Oscar, assignor.)
Fichtenbaum, Oscar, assignor to J. P. Fichtenbaum and H. Fichtenbaum, Brooklyn, N. Y. Folding bed or couch. 1,885,812; Nov. 1.
Fickelssen, Edward P., Richmond Hill, N. Y. Train coupling. 1,885,813; Nov. 1.
Fidelity Machine Company. (See Blaisdell, Sidney B., assignor.)
Fifth Avenue Coach Company. (See Willems, George L., assignor.)
Figge, Carroll C., Chicago, Ill. Building gasket. 1,885,193; Nov. 1.
Fink, Colin G., New York, N. Y. Electroplating and producing same. 1,885,700; Nov. 1.
Fink, Colin G., New York, N. Y. Substantially pure tungsten plating and producing same. 1,885,702; Nov. 1.
Fink, Colin G., and F. L. Jones, New York, N. Y.; said Jones assignor to said Fink. Tungsten plating and producing same. 1,885,701; Nov. 1.
Fink, Henry A., assignor to Continental Can Company, New York, N. Y. Machine for forming closure units for containers. 1,885,703; Nov. 1.
Fiorelli, Ferdinando, assignor to Terni Societa per L'Industria E L Elettricita, Terni, Italy. Regenerator of Siemens-Martin furnaces. 1,885,704; Nov. 1.
Fischer, Albert C., Chicago, Ill., assignor to The Philip Carey Manufacturing Company. Waterproof expansion joint. Re18,642; Nov. 1.
Fischer, Leo A., Springfield, Ohio. Hydraulic control faucet and ball cock. 1,885,424; Nov. 1.
Fischman & Sons. (See Greenberg, William, assignor.)
Fish, Mortimer W., assignor to Frigidaire Corporation, Dayton, Ohio. Refrigerating apparatus. 1,886,331; Nov. 1.
Fitz Gerald, John W., assignor to Briggs & Stratton Corporation, Milwaukee, Wis. Padlock. 1,885,425; Nov. 1.
Fix, Earl L., New Kensington, Pa., assignor to Duplate Corporation. Apparatus for separating composite glass plates. 1,885,245; Nov. 1.
Flagg, Warren W., Orono, Me. Safety-razor. 1,885,814; Nov. 1.
Flanagan, Thomas B., assignor to The Exact Weight Scale Company, Columbus, Ohio. Weighing scale. 1,885,705; Nov. 1.
Flavin, Walter K., Arlington, Mass. Noise eliminator. 1,886,332; Nov. 1.
Fleming, Ambrose, West Lynn, Mass. Magazine pencil. 1,886,333; Nov. 1.
Flint, James A., assignor to The Traylor Vibrator Company, Denver, Colo. Screen. 1,886,173; Nov. 1.
Flint, James A., and F. T. Haseltine, assignors to The Traylor Vibrator Company, Denver, Colo. Apparatus for the wet screening or separation of intermixed materials. 1,886,174; Nov. 1.
Flokaus, Howard A., assignor to The Willys-Overland Company, Toledo, Ohio. 1,885,815; Nov. 1.
Flood, Oscar S., assignor to Sellstrom Manufacturing Company, Chicago, Ill. Helmet. 1,885,426; Nov. 1.
Fluga Aktiengesellschaft. (See Heylandt, Christian W. P., assignor.)
Fold-Well Table Co. Inc. (See Lewis, George W., assignor.)
Folmer Graflex Corporation, The. (See Petit, W. H., and Hineline, assignors.)
Ford, Malcolm J., assignor to Alma Manufacturing Company, Baltimore, Md. Fastener. 1,885,816; Nov. 1.
Forgrove Machinery Company Limited, The. (See Grover, Frederick, assignor.)
Forman, Paris R., Rahway, N. J., assignor to National Pneumatic Company, New York, N. Y. Automatic return toggle switch. 1,885,246; Nov. 1.
Forman, Paris R., Rahway, N. J., assignor to National Pneumatic Company, New York, N. Y. Switch. 1,885,904; Nov. 1.
Fort Wayne Engineering and Manufacturing Company. (See Tannehill, Vernon L., assignor.)
Foti, Charles, assignor of one-seventh to A. Saulle, one-seventh to M. Guidice, Arnold, one-seventh to S. Tamburo, one-seventh to F. Mangone, New Kensington, one-seventh to Dominick Verteramo and one-seventh to Ferdinando Gatto, Arnold, Pa. Pen holding device for inkwells. 1,886,002; Nov. 1.
Fox, John P., Gary, Ind. Sailboat. 1,885,247; Nov. 1.
Frame, Augustus J., assignor to The Columbus Auto Brass Company, Columbus, Ohio. Motor vehicle radiator shield. 1,885,248; Nov. 1.
Francis, Robert L., Hendersonville, N. C. Hydraulic automobile steering mechanism. 1,885,194; Nov. 1.

Fraser, John, Leckmelm by Garve, Scotland, assignor, by mesne assignments, to Anglo-Persian Oil Company, London, England. Flow meter for the measurement of liquid. 1,885,517; Nov. 1.
Fraser, Norman A. (See Strezynski, G. J., and Fraser.)
Fremont, George B., Charleston, S. C. Radio tuning mechanism. Re18,640; Nov. 1.
Frey, Howard C., Maplewood, N. J. Curb pipe. 1,886,041; Nov. 1.
Freygang, Walter H., Weehawken, N. J., assignor to Walter Kidde & Company, Inc., New York, N. Y. Discharging a fire extinguishing medium. 1,885,817; Nov. 1.
Freygang, Walter H., Weehawken, N. J., assignor to Walter Kidde & Company, Inc., New York, N. Y. Charging containers with carbon dioxide. 1,886,175; Nov. 1.
Freyn Engineering Company. (See Whitcomb, A. J., and Callow, assignors.)
Frigidaire Corporation. (See Fish, Mortimer W., assignor.)
Frigidaire Corporation. (See Hull, Harry B., assignor.)
Frigidaire Corporation. (See Kettering, Charles F., assignor.)
Frigidaire Corporation. (See Summers, Otto M., assignor.)
Frolander, Frank C. (See Czarny, M., and Frolander.)
Frost, Clinton E., Youngstown, Ohio, assignor, by mesne assignments, to The Pittsburgh Plate Glass Company, Pittsburgh, Pa. Polishing brush. 1,885,706; Nov. 1.
Frost, Frank L., jr., East Cleveland, assignor to The Grasselli Chemical Company, Cleveland, Ohio. Tri-sodium phosphate hydrate-soap compositions. 1,885,905; Nov. 1.
Fry, Benjamin L., assignor to National Sales Machine Company, St. Louis, Mo. Coin receptacle for vending machines. 1,885,249; Nov. 1.
Frye, Lee, San Francisco, Calif. Bootblack stand foot rest construction. 1,885,250; Nov. 1.
Füber, Maximilian, Lubeck, assignor to W. Krakow, Schlutup, near Lubeck, Germany. Doorlock with multiple action spring. 1,885,707; Nov. 1.
Fulda, Edward. (See Lachman, L. S., and Fulda.)
Fulton Sylphon Company, The. (See Giesler, Jean V., assignor.)
Furbush, Frank L., assignor to C. G. Sargent's Sons Corporation, Graniteville, Mass. Joint for conveyers. 1,885,818; Nov. 1.
Gabli, Jacob, Lincoln Park, Mich. Driving mechanism for motor vehicles. 1,885,427; Nov. 1.
Gabriel, Leonard G., and J. F. Blott, London, England, assignors, by mesne assignments, to Colas Roads Inc., Boston, Mass. Emulsion containing india rubber. 1,886,334; Nov. 1.
Gagnon, William J., assignor to The Bead Chain Manufacturing Company, Bridgeport, Conn. Method of and apparatus for molding pins in radio tube bases. 1,886,176; Nov. 1.
Gairing, Emil, assignor to Gairing Tool Company, Detroit, Mich. Boring tool and holder. 1,886,177; Nov. 1.
Gairing Tool Company. (See Gairing, Emil, assignor.)
Gaiser, Otto, Augsburg, assignor to Firm Alpine Aktien-Gesellschaft Machinenfabrik & Eisengiesserei, Augsburg-Goggingen, Germany. Crushing and grinding machine. 1,885,251; Nov. 1.
Gaisman, Henry J., Hartsdale, N. Y. Cash register. 1,885,252; Nov. 1.
Gallasch, George B., assignor to Bausch & Lomb Optical Company, Rochester, N. Y. Liquid level. 1,885,428; Nov. 1.
Gallistel, Clarence P., assignor to Container Corporation of America, Chicago, Ill. Carton. 1,885,906; Nov. 1.
Gann, John A., assignor to The Dow Chemical Company, Midland, Mich. Magnesium-manganese-zinc alloys. 1,886,251; Nov. 1.
Gann, John A., and M. E. Brooks, assignors to The Dow Chemical Company, Midland, Mich. Casting freely oxidizable metal. 1,886,252; Nov. 1.
Gann, John A., and F. L. Reynolds, assignors to The Dow Chemical Company, Midland, Mich. Magnesium base alloys. 1,885,429; Nov. 1.
Gantner & Mattern Company. (See Upland, Theodore R., assignor.)
Garlutzo, Charles S., Ludlow, Colo. Dispensing device. 1,885,907; Nov. 1.
Garrison, Allen Darnaby, Houston, Tex. Automobile transmission. 1,886,003; Nov. 1.
Gates, Charles C., Denver, Colo. Machine for making belts. 1,885,708; Nov. 1.
Gatto, Ferdinando. (See Foti, Charles, assignor.)
Gaynor, Arthur C., Stratford, Conn. Electric switch. 1,885,709; Nov. 1.
Gebruder Haff G. m. b. H. (See Haff, Heinrich, assignor.)
Geddes, Charles I., Arlington, assignor to Peter Gray & Sons Inc., Cambridge, Mass. Supporting device. 1,886,000; Nov. 1.
Geffcken, Heinrich H., and H. R. Richter, Leipzig, Germany. Photo-electric tube. 1,885,819; Nov. 1.
Gehri, George F., Tacoma, Wash. Air washer for furnaces. 1,885,340; Nov. 1.
Gem Manufacturing Company. (See Hobart, Louis C., assignor.)
General American Tank Car Corporation. (See Pierce, Raymond C., assignor.)
General Aniline Works, Inc. (See Baumann, Fritz, assignor.)
General Aniline Works, Inc. (See Eckert, W., and Greune, assignors.)
General Aniline Works, Inc. (See Honold, Ernst, assignor.)
General Chemical Company. (See Lohmann, W. H., and Kaestner, assignors.)
General Electric Company. (See Rice, Chester W., assignor.)
General Electric Company. (See Suits, Chauncey G., assignor.)
General Electric Company. (See Traver, Oliver C., assignor.)
General Motors Radio Corporation. (See Emmert, Rodger J., assignor.)
General Motors Radio Corporation. (See Newill, Edward B., assignor.)
General Refractories Company. (See Heuer, Russell P., assignor.)
General Steel Castings Corporation. (See Beckette, Edmund S., assignor.)
General Talking Pictures Corporation. (See De Forest, Lee, assignor.)
Gentry, Carlyle W. (See Gentry, Chalmus C., and C. W.)
Gentry, Chalmus C., Bluefield, W. Va., and C. W. Gentry, Pocahontas, Va. Windshield wiper. 1,885,710; Nov. 1.
George, Charles L., assignor to The Buckeye Traction Ditcher Company, Findlay, Ohio. Endless belt traction device. 1,885,430; Nov. 1.
Gerber, Walter H. J., assignor to Schutte and Koerting Company, Philadelphia, Pa. Electrically controlled regulating means. 1,885,196; Nov. 1.
Gessmer, Ernst, Aktiengesellschaft. (See Wenzel, Emil, assignor.)
Geyser, Mathilde T., Elmhurst, N. Y. Signal lamp. 1,886,004; Nov. 1.
Gibson, Alfred, Boston, Mass. Desk set. 1,886,091; Nov. 1.
Giesler, Jean V., assignor to The Fulton Sylphon Company, Knoxville, Tenn. Temperature or pressure regulator. 1,885,711; Nov. 1.
Gilbert, Albert P., assignor to The Gilbert Shoe Co., Thiensville, Wis. Shoe construction. 1,885,598; Nov. 1.
Gilbert Shoe Co., The. (See Gilvert Albert P. assignor.)
Gilson, Robert M., Pittsburgh, assignor to The Union Switch & Signal Company, Swissvale, Pa. Apparatus for charging storage batteries. 1,885,908; Nov. 1.
Gilson, Robert M., Pittsburgh, assignor to The Union Switch & Signal Company, Swissvale, Pa. Apparatus for signaling between two points on a railroad train. 1,885,909; Nov. 1.
Glasier, Harold H., Los Angeles, Calif. Power plow. 1,886,005; Nov. 1.
Glasier, Harold H., Los Angeles, Calif. Power spader. 1,886,335; Nov. 1.
Glasser, Percy B., et al. (See Medlock, Wendyl R., assignor.)
Gleason, Frederick H., assignor to Bowen Products Corporation, Auburn, N. Y. Lubricator. 1,886,006; Nov. 1.
Gleason, George H., Montclair, N. J., and A. C. Loonam, Brooklyn, assignors to Guggenheim Brothers, New York, N. Y. Treating sewage. 1,886,267; Nov. 1.
Gleichmann, Hans. (See Abendroth, W., and Gleichmann.)
Globe Machinery & Supply Company. (See Bristol, Cyrus J., assignor.)
Globe Steel Abrasive Company, The. (See Martin, David, assignor.)
Goddard, Charles A., Seattle, Wash. Soil cultivator. 1,886,178; Nov. 1.
Goddu, George, Winchester, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Making shoes. 1,885,197; Nov. 1.
Goerg, Bernhard. (See Brabée, C. W., and Goerg.)
Goldberg, David D., Chicago, Ill. Valve. 1,886,007; Nov. 1.
Goldberg, Morris J., Beloit, Wis., assignor to Fairbanks, Morse & Co., Chicago, Ill. Fuel supply and injection means. 1,886,248; Nov. 1.
Goldsmith, Maurice, New York, N. Y. Toilet kit. 1,885,518; Nov. 1.
Gonsett, Robert R., assignor of one-tenth to V. V. Ullom, one-sixth to H. A. Burrell, one-tenth to W. D. Spencer, Los Angeles, and three-fifteenths to Buck Walter, Whittier, Calif. Agitating mechanism. 1,885,253; Nov. 1.
Goodloe, Meade, Los Angeles, Calif. Connection for liquid level indicators. 1,886,179; Nov. 1.
Goodman, William W., et al. (See Medlock, Wendyl R., assignor.)
Goodrich, B. F., Company, The. (See Burnham, Laurence H., assignor.)
Goodrich, B. F., Company, The. (See Dow, Warren R., assignor.)
Goodrich, B. F., Company, The. (See Evans, Benjamin A., assignor.)
Goodrich, B. F., Company, The. (See Griffiths, Richard T., assignor.)
Goodrich, B. F., Company, The. (See Jones, Paul C., assignor.)
Goodrich, B. F., Company, The. (See Karrer, Enoch, assignor.)
Goodrich, B. F., Company, The. (See Kuhne, Bernhard G., assignor.)
Goodrich, B. F., Company, The. (See Semon, Waldo L., assignor.)

Goodrich, B. F., Company, The. (See Smiley, Pearl Y., assignor.)
Goodrich, B. F., Company, The. (See Taylor, B. S., and Jones, assignors.)
Goodrich, B. F., Company, The. (See Thompson, W. B., and Merrill, assignors.)
Goodwin, William N., jr., assignor to Weston Electrical Instrument Corp., Newark, N. J. Testing vacuum tubes. Des. 18,641; Nov. 1.
Gorbutt, Sidney B., assignor to Electric Steel Foundry Company, Portland, Oreg. Articulated drive shaft for flat screens. 1,885,254; Nov. 1.
Gordon, David L., Pittsburgh, Pa. Absorption refrigeration apparatus. 1,886,243; Nov. 1.
Gordon, Frank. (See Anderson, H. J., and Gordon.)
Gorman, Frank F., Bristow, Okla. Treating petroleum oils. 1,886,008; Nov. 1.
Gotham Silk Hosiery Company. (See Tobin, Clarke W., assignor.)
Gothard, Thomas J., Los Angeles, and R. Wunn, Hynes, Calif. Pumping apparatus. 1,885,820; Nov. 1.
Goulds Pumps, Inc. (See Mann, John, assignor.)
Graham, Edwin C., assignor to National Electrical Supply Company, Washington, D. C. Citrous fruit juice extractor. 1,886,092; Nov. 1.
Granberg Meter Corporation. (See Brubaker, Walter S., assignor.)
Granberg Meter Corporation. (See Curtis, William H., assignor.)
Grant, John. (See Santiago, James J., assignor.)
Grant, Lee W., administrator. (See Bredel, Frederick.)
Grasselli Chemical Company. (See Alvord, Earl B., assignor.)
Grasselli Chemical Company, The. (See Frost, Frank L., jr.)
Grauert, Erich, Halberstadt, Germany. Exchangeable heel. 1,885,341; Nov. 1.
Graves, Jacob H., Lexington, Ky. Stock treating appliance. 1,885,342; Nov. 1.
Gray, Peter, & Sons Inc. (See Geddes, Charles I., assignor.)
Great Lakes Aircraft Corporation. (See Chapman, Mearl J., assignor.)
Grebe, John J., and R. H. Boundy, assignors to The Dow Chemical Company, Midland, Mich. Continuous process for recovering bromine from sea water and the like. 1,885,255; Nov. 1.
Green, Cecil H., Brookline, assignor to Raytheon Inc., Cambridge, Mass. Voltage smoothing and regulating system. 1,886,180; Nov. 1.
Green, Estill I., East Orange, N. J., assignor to American Telephone and Telegraph Company. Concentric conductor transmission system. 1,885,195; Nov. 1.
Green, Richard D., assignor to John A. Roebling's Sons Company, Trenton, N. J. Wire rope and making the same. 1,885,821; Nov. 1.
Greenberg, William, assignor to Fischman & Sons, Philadelphia, Pa. Insulating collar for ice cream cabinets. 1,885,712; Nov. 1.
Greenstreet, Charles J., assignor, by mesne assignments, to Raymond F. Adams, New York, N. Y. Treating hydrocarbon oils. 1,886,093; Nov. 1.
Greulich, Gerald G., Cleveland, Ohio. Metallic lath construction. 1,885,343; Nov. 1.
Greune, Heinrich. (See Eckert, W., and Greune.)
Griffiths, Richard T., Akron, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y. Fountain pen. 1,885,344; Nov. 1.
Grigsby-Grunow Company. (See Osborne, Fred H., assignor.)
Grigsby-Grunow Company. (See Parker, William, assignor.)
Griswold, Edward H., assignor to Continental Oil Company, Ponca City, Okla. Device for preserving natural gas pressure in oil wells. 1,886,009; Nov. 1.
Griswold, Glenn G. (See Bills, Claud H.)
Groggins, Stanley S., Brooklyn, N. Y., assignor to Coloxide Patents Corporation, New York, N. Y. Bleaching and decolorizing hair, animal fibers, and fur skins. 1,885,822; Nov. 1.
Grote, Edwin R., Wimbledon, London, England. Electric incandescent lamp and holder thereof. 1,885,481; Nov. 1.
Grover, Frederick, assignor to The Forgrove Machinery Company Limited, Leeds, England. Method of and apparatus for folding wrappers around tablets. 1,885,543; Nov. 1.
Grunwald, Albert C., assignor to The Automatic Recording Safe Company, Chicago, Ill. Savings bank. 1,886,181; Nov. 1.
Guenard, José L. M., Ponce, Puerto Rico. Pneumatic tire. 1,886,094; Nov. 1.
Guggenheim Brothers. (See Gleason, G. H., and Loonam, assignors.)
Guidice, Menotti, et al. (See Foti, Charles, assignor.)
Guil, Adolf Ewald, London, England. Manufacture of artificial silk. 1,885,256; Nov. 1.
Gullett Gin Company. (See Wallace, Jeffery J., assignor.)
Gullicksen, Ole, assignor to Churchill Cabinet Company, Chicago, Ill. Telephone booth. 1,885,432; Nov. 1.
Gunn, Ross, Washington, D. C. Induction compass. 1,886,336; Nov. 1.
Guthrie, Charles C., Pittsburgh, Pa. Protecting surfaces. 1,885,345; Nov. 1.
Gwinn, George W., Hewlett, and C. Arelt, Richmond Hill, N. Y., assignors to American Machine & Foundry Company. Packaging cigarettes. 1,885,910; Nov. 1.
Gyro Process Company. (See Harnsberger, Audley E., assignor.)
H & R Sales Company, The. (See Henning, L. G., and Rein, assignors.)
Haanel, Walter L. (See Hutchings, Stephen B.)
Haas, Louis W. (See Reece, W. W., and Haas.)
Haddock, Joseph F., Valley Park, Mo. Apparatus for and method of spiking rails. 1,886,010; Nov. 1.
Haff, Heinrich, assignor to the Firm Gebruder Haff G. m. b. H., Pfronten-Ried, Bavaria, Germany. Rulingpen. 1,886,258; Nov. 1.
Hagie, John L. (See Ridpath, J. E., and Hagie.)
Hahn, Joseph, et al. (See Wood, Sidney, C., assignor.)
Hainsworth, Sydney B., assignor to J. H. Fenner & Company, Ltd., Kingston-upon-Hull, England. Multiple ply textile fabrics. 1,886,244; Nov. 1.
Hale Marine Corporation. (See Hale, Warren L., assignor.)
Hale, Warren L., East Hartford, Conn., assignor to Hale Marine Corporation, New York, N. Y. Hull structure. 1,885,198; Nov. 1.
Hall, Ernest A., assignor to The Columbia Burner Company, Toledo, Ohio. Gas controlling means. 1,885,433; Nov. 1.
Hall, Washington L., assignor to James H. Billington Company, Philadelphia, Pa. Shuttle. 1,885,823; Nov. 1.
Hallen, Morris. (See Wilson, A. B., Seeman, and Hallen.)
Haltenberger, Jules, assignor, by mesne assignments, to Joseph C. Schaf, jr., Indianapolis, Ind. Sleeve valve engine. 1,885,911; Nov. 1.
Halvorsen, Severin, Chicago, Ill., assignor to The Newspaper Stuffing Machine Company, Seattle, Wash. Feeding device for stuffing machines. 1,885,434; Nov. 1.
Hamada, Hatsujiro, Tokyo-Fu, Japan. Machine for making printing plates. 1,886,182; Nov. 1.
Hamby, Joseph E., assignor of one-third to J. H. Ward, one-third to George Irwin, and one-third to C. Harris, Pawhuska, Okla. Battery terminal clamp. 1,886,095; Nov. 1.
Hamm, William S., Elkhart, Ind., assignor to The Adlake Company, Chicago, Ill. Sash construction. 1,886,011; Nov. 1.
Hamm, William S., Elkhart, Ind., assignor to The Adlake Company, Chicago, Ill. Sash lock. 1,886,183; Nov. 1.
Hammalian, Jacob M., et al. (See Kasparian, Mehran, assignor.)
Hammalian, John M. (See Kasparian, Mehran, assignor.)
Hammalian, Paul M., et al. (See Kasparian, Mehran, assignor.)
Hammerly, Herman J., New Britain, assignor to The Trumbull Electric Manufacturing Company, Plainville, Conn. Electric switch box latch and handle. 1,885,713; Nov. 1.
Hammond, Milton B., assignor to Wolverine Bumper & Specialty Company, Grand Rapids, Mich. Bumper for vehicles. 1,885,435; Nov. 1.
Hampton, Leon N., New York, N. Y. Signal for vehicles. 1,885,714; Nov. 1.
Hampton, Leon N., New York, N. Y., assignor to A C Spark Plug Company. Fluid transfer device. 1,885,436; Nov. 1.
Hancock, G. Allan. (See Kelley, William V. D., assignor.)
Handy, George W. (See Porter, J. M., and Handy.)
Hansen Canning Machinery Corporation. (See Hansen, Oswald H., assignor.)
Hansen, Oswald H., assignor to Hansen Canning Machinery Corporation, Cedarburg, Wis. Can filling machine. 1,886,012; Nov. 1.
Hanson, Louis, Spokane, Wash. Ventilating lavatory bowl. 1,885,715; Nov. 1.
Harazin, Charles, assignor to G. R. Meyercord, Chicago, Ill. Cotton elevator. 1,885,437; Nov. 1.
Hardman, Coy H., and M. H. Thomas, Zanesville, Ohio, assignors to Hazel-Atlas Glass Company, Wheeling, W. Va. Ware-steadying mechanism. 1,886,096; Nov. 1.
Hardwick, Christopher L. Cleveland, Tenn. Stove. Des. 88,148; Nov. 1.
Harig, Nicolaus, Pirmasens, Palatinate, Germany, assignor to United Shoe Machinery Corporation, Paterson, N. J. Making shoes and heels. 1,885,257; Nov. 1.
Harnett, Lewis D., assignor to The Buckeye Blower Company, Columbus, Ohio. Unit heater. 1,886,337; Nov. 1.
Harnsberger, Audley E., Chicago, Ill., assignor to Gyro Process Company, Detroit, Mich. Oil converter. 1,885,716; Nov. 1.
Harris, Charles E., Montpelier, Idaho. Tank cap lock. 1,886,013; Nov. 1.
Harris, Charley, et al. (See Hamby, Joseph E., assignor.)
Harris, Fred, Anchorage, Alaska. Magnetic separator. 1,885,717; Nov. 1.
Harris, George H., Utica, assignor to American La France and Foamite Corporation, New York, N. Y. Foam extinguishing system. 1,885,258; Nov. 1.
Harris, Sol. W., et al. (See Weinman, Edwin L., assignor.)
Harrison Steel Castings Company, The. (See Woodhall, William H., assignor.)
Harshberger, Norman P., Scarsdale, N. Y. Shingle element 1,885,346; Nov. 1.
Hartford-Empire Company. (See Canfield, Robert W., assignor.)

Hartford-Empire Company. (See Lorenz, Edward H., assignor.)
Hartford-Empire Company. (See Waugh, Thomas, jr., assignor.)
Hartwell, Benjamin F., Winchester, Mass. Apparatus for producing crepe rubber spring-heeled shoe bottoms. 1,885,718; Nov. 1.
Haselton, Page S., Evanston, Ill. Radio apparatus. 1,885,913; Nov. 1.
Hassensall, Louis W., Toledo, Ohio. Bottle support. 1,885,519; Nov. 1.
Hassey, Charles, assignor of one-half to Ben C. Casanas, New Orleans, La. Bank window. 1,885,560; Nov. 1.
Hastings, Shirrel A., assignor to The Timken Roller Bearing Company, Canton, Ohio. Bearing construction. 1,886,014; Nov. 1.
Hatton, William, Antwerp, Belgium, assignor to International Standard Electric Corporation, New York, N. Y. Automatic telephone system. 1,886,097; Nov. 1.
Havener, Arthur R., Wayland, assignor to Judson L. Thomson Manufacturing Co., Waltham, Mass. Duplex riveting machine. 1,885,347; Nov. 1.
Hawaiian Pineapple Company. (See Hjelte, Marshall C., assignor.)
Hays, Albert B. (See Thomas, H. T., Bethune, and Hays.)
Hazel-Atlas Glass Company. (See Hardman, C. H., and Thomas, assignors.)
Hazeltine, Francis T. (Set Flint, J. A., and Hazeltine.)
Hazelton, Robert T., assignor to The Cincinnati Shaper Company, Cincinnati, Ohio. Metal shears. 1,885,438; Nov. 1.
Heber, Michael, San Jose, Calif. Mop wringer. 1,886,184; Nov. 1.
Hedglon, Mead, assignor to De Banks M. Henward, jr., Syracuse, N. Y. Oil changing system. 1,886,098; Nov. 1.
Heidelberg, Victor, Bensberg, near Cologne, assignor to Motorenfabrik Deutz, Aktiengesellschaft Cologne-Deutz, Germany. Combustion chamber for internal combustion engines. 1,885,719; Nov. 1.
Heidloff, Joseph R. (See Bowen, H. C., and Heidloff.)
Heim, Lewis B., Danbury, Conn. Bearing construction. 1,885,914; Nov. 1.
Heise, William H., Los Angeles, Calif. Mop. 1,885,439; Nov. 1.
Heilthaler, Theodor, Granschutz, and E. Peter, Webau, assignors to Firm A. Riebeck'sche Montanwerke Aktiengesellschaft, Halle, Germany. Separating the hydroxy-acids from the oxidation products of hydrocarbons. 1,885,199; Nov. 1.
Hendrick, Victor P., Manhattan Beach, Calif. Fishing spoon. 1,885,440; Nov. 1.
Hennicke, Carl R., Cleveland, Ohio. Hood fastener. 1,885,824; Nov. 1.
Henning, Leslie G., Lakewood, and J. Rein, assignors to The H & R Sales Company, Cleveland, Ohio. Fixture for holding bird food. 1,886,015; Nov. 1.
Henshall, Percival P. (See Ewald, W., and Henshall.)
Henward, De Banks M., jr. (See Hedglon, Mead, assignor.)
Hepburn, Donald M., assignor to Amiesite Asphalt Company of America, Philadelphia, Pa. Road construction. 1,885,200; Nov. 1.
Herbolsheimer, Emil L., assignor to The Defiance Pressed Steel Company, Defiance, Ohio. Sheet metal case. 1,885,441; Nov. 1.
Hermann, Ludwig M. (See Neuber, Freidrich and T., and Hermann.)
Heuer, Russell P., Haverford, Pa., assignor to General Refractories Company. Refractory brick and method. 1,886,185; Nov. 1.
Hewett, Hilda E. (See Hewett, Louis F., assignor.)
Hewett, Louis F., New York, assignor to Hilda E. Hewett, Brooklyn, N. Y. Composite paving block. 1,885,720; Nov. 1.
Heylandt, Christian W. P., Berlin-Britz, Germany, assignor to Fluga Aktiengesellschaft, St. Moritz, Switzergases. Re18,646; Nov. 1.
Hieber, Karl V., Graz, Austria. Scale bearing. 1,885,721; Nov. 1.
Higgins, John C., San Diego, Calif. Air valve structure for pipe lines. 1,885,348; Nov. 1.
Hile, Leslie M., Benton Harbor, Mich. Basket handle machine. 1,885,599; Nov. 1.
Hilgenberg, Henry, assignor to Neon Electric Sign Co., Chicago, Ill. Electrode for neon tubes. 1,886,186; Nov. 1.
Hill, N. N., Brass Company. (See Wood, William C., assignor.)
Hills-McCanna Company. (See Anderson, Harry J., assignor.)
Hilpman, John H., Hollis, N. Y., assignor to Mergenthaler Linotype Company. Typographical distributing machine. 1,886,099; Nov. 1.
Hineline, Edson S. (See Petit, W. H., and Hineline.)
Hirshfield, Morris, Brooklyn, N. Y. Adjustable arch construction for shoes. 1,885,259; Nov. 1.
Hirth, Louis S., Oak Park, assignor of one-half to L. C. Sahm, Chicago, Ill. Cleaning material supporting device. 1,886,338; Nov. 1.
Hitner, Harry F., Oakmont, Pa., assignor to Pittsburgh Plate Glass Company. Melting glass by electricity. 1,885,722; Nov. 1.
Hjelte, Marshall C., assignor to Hawaiian Pineapple Company, Limited, Honolulu, Hawaii. Fruit cutting machine. 1,885,600; Nov. 1.
Hobart, Louis C., Avalon, Pa., assignor to Gem Manufacturing Company. Chaplet making machine. 1,885,349; Nov. 1.
Hobson, Stanley H., assignor to Geo. D. Roper Corporation, Rockford, Ill. Range or similar article. Des. 88,149; Nov. 1.
Hobson, Stanley H., assignor to Geo. D. Roper Corporation, Rockford, Ill. Panel for a range or similar article. Des. 88,150; Nov. 1.
Hochstrasser, Alfred R., Vienna, Austria. Friction-wheel lighter for solid fuel. 1,886,100; Nov. 1.
Hockensmith, Wilbur D., jr., Irwin, Pa. Mine car. 1,886,187; Nov. 1.
Hodsdon, Floyd G., La Grange, Ill., assignor to International Harvester Company. Valve mechanism for pumps. 1,886,190; Nov. 1.
Hoe, R., & Co. (See Horton, Albert J., assignor.)
Hoe, R., & Co. (See Zuckerman, Adolph M., assignor.)
Hoffmann, Edward A., Reading, Pa. Apparatus for transporting and conditioning ready-mixed concrete. 1,885,350; Nov. 1.
Hoffmann, Ernest V., St. Albans, and J. E. Soons, Yonkers, assignors to Hoffmann-Soons Electrical & Engineering Corporation, New York, N. Y. Shutter apparatus for moving picture machines. 1,885,825; Nov. 1.
Hoffmann-Soons Electrical & Engineering Corporation. (See Hoffmann, E. V., and Soons, assignors.)
Hoglind, Karl Christian, Jersey City, N. J. Stick game. 1,885,260; Nov. 1.
Hohn, Max P. E., Dresden-A, assignor to Universelle Cigarettenmaschinen-Fabrik J. C. Muller & Co., Dresden, Germany. Detecting device for cigarette turning machines. 1,886,016; Nov. 1.
Hoke, William E., Baltimore, Md., and R. Thomson, Newark, N. J., assignors to Dardelet Threadlock Corporation, New York, N. Y. Pliers. 1,886,271; Nov. 1.
Holden, William H. T., Brooklyn, N. Y., and R. K. Bonell, East Orange, N. J., assignors to American Telephone and Telegraph Company. System of photography employing frequency modulation. 1,885,826; Nov. 1.
Holed-Tite Packing Corporation. (See Mann, Leon, assignor.)
Holland, Harvison C., Des Moines, Iowa. Combined brake and clutch pedal structure. 1,885,442; Nov. 1.
Holley, Clarence M., Highland Park, Mich. Vending machine. 1,885,201; Nov. 1.
Holmes Disappearing Bed Company. (See Ellsworth, Ross J., assignor.)
Holt, Walter E., Dover, Del. Oil burner foot. 1,885,443; Nov. 1.
Honold, Ernst, Frankfort-on-the-Main-Fechenheim, Germany, assignor to General Aniline Works, Inc., New York, N. Y. 1-hydroxy-4-halogen-anthraquinone-2-sulfonic-acid and making same. 1,886,017; Nov. 1.
Hooley, John W., Larchmont, N. Y. Match package. 1,885,723; Nov. 1.
Hoover Company, The. (See Smellie, Donald G., assignor.)
Horger, Oscar J., assignor to The Timken Roller Bearing Company, Canton, Ohio. Journal box construction. 1,886,018; Nov. 1.
Horii, Shinjiro, Kanda-Ku, Tokyo, Japan. Stencil sheet. 1,885,281; Nov. 1.
Horlacher, Carl P. (See Baumann, A., and Horlacher.)
Horton, Albert J., White Plains, assignor to R. Hoe & Co., Inc., New York, N. Y. Mechanism for supplying webs of paper to a rotary printing press. 1,885,262; Nov. 1.
Horton, Albert J., White Plains, assignor to R. Hoe & Co., Inc., New York, N. Y. Web roll controlling mechanism. 1,885,351; Nov. 1.
Horton, Ernest J., Pittsburgh, Pa., assignor to Ruud Manufacturing Company. Automatic cut-off valve. 1,885,724; Nov. 1.
Horton, George T., Chicago, Ill., assignor to Chicago Bridge and Iron Company. Container. 1,885,601; Nov. 1.
Hottman, Charles W., jr., assignor to The Brown Clutch Company, Sandusky, Ohio. Hoist clutch control mechanism. 1,885,827; Nov. 1.
Hough, Arthur, Passaic, J. R. Dufford, Paterson, and William C. Leonhard, Passaic, N. J. Treating wood pulp for nitration. 1,885,852; Nov. 1.
Hough, Clinton W., assignor to Wired Radio, Inc., New York, N. Y. High frequency generator and modulator. 1,886,188; Nov. 1.
Hough, Clinton W., assignor to Wired Radio, Inc., New York, N. Y. Facsimile system. 1,886,189; Nov. 1.
Houghton, Orley C., Racine, Wis. Distributing apparatus. 1,885,828; Nov. 1.
Houser, Arthur M., Oak Park, and R. Fennema, assignors to Crane Co., Chicago, Ill. Lubricated plug cock. 1,885,202; Nov. 1.
Hover, Fritz, Kothen, Germany, assignor to A. G. fur Halbzellstoff Industrie, Basel, Switzerland. Process of and apparatus for treating fibrous material. 1,886,020; Nov. 1.
Howe, Frank W., Sidney, assignor, by mesne assignments, to Clyde H. Phelps, Mount Vernon, N. Y. Automobile wheel alining device. 1,886,019; Nov. 1.

Howland, Gerald S., Brookline, Mass. Making multicolor printing plates. 1,885,725; Nov. 1.
Hubbard and Company. (See Peirce, Charles L., jr., assignor.)
Huber, Henry A., Toronto, Ontario, Canada. Stropper. 1,885,444; Nov. 1.
Hudson, H. D., Manufacturing Company. (See Cuff, F. A., and Keating, assignors.)
Hueseman, William M., Dillsboro, Ind. Buckle. 1,885,445; Nov. 1.
Huff, George D., Bellingham, Wash. Cigarette package opener. 1,886,021; Nov. 1.
Hughes, James R., assignor to The Studebaker Corporation, South Bend, Ind. Combined radiator, hood, and fenders for vehicles. Des. 88,151; Nov. 1.
Hulbert, John L., Poughkeepsie, assignor to The De Laval Separator Company, New York, N. Y. Milking machine pulsator. 1,885,110; Nov. 1.
Hulett, Schuyler C., Spokane, Wash. Clothes hanger. 1,885,263; Nov. 1.
Hull, Harry B., assignor to Frigidaire Corporation, Dayton, Ohio. Refrigerating apparatus. 1,885,264; Nov. 1.
Hulse, George E., and J. D. Strobell, New Haven, Conn., assignor to Safety Car Heating & Lighting Company. Apparatus for cooling. 1,885,353; Nov. 1.
Hund, Walter J. (See Rosenstein, Ludwig.)
Hunt, Andrew M., New York, N. Y., assignor to The Standard Stoker Company, Incorporated. Mechanical stoker. 1,885,203; Nov. 1.
Hunt, William H., National City, Calif. Fish fin and tail guide means for filleting machines. 1,885,829; Nov. 1.
Hunt, W. S. (See Moodyman, Edwin F., assignor.)
Hurley, Joseph M., Minneapolis, Minn. File index device. 1,885,354; Nov. 1.
Hush, Foss C., Lincoln, Nebr. Fuse box. 1,885,111; Nov. 1.
Hutchings, Stephen B., and W. L. Haanel, Chicago, Ill.; said Haanel assignor to said Hutchings. Portable electric fountain. 1,885,830; Nov. 1.
Hutchinson, Mackintosh. (See Monroe, Frederick W., assignor.)
Hutchinson, Mackintosh, Philadelphia, Pa. Woodworking machine. 1,885,520; Nov. 1.
Hutton, Albert D., assignor, by mesne assignments, to Delbert L. Rand, Minneapolis, Minn. Liquid dispensing and measuring device. 1,886,022; Nov. 1.
Hydraulic Brake Company. (See Bowen, H. C., and Heidloff, assignors.)
Hydraulic Brake Company. (See Bradbury, Clifford C., assignor.)
Hydraulic Brake Company. (See Loweke, Erwin F., assignor.)
Hydraulic Brake Company. (See Scott, Donald O., assignor.)
Hyman, Henry. (See Abel, Frank J., assignor.)
I. G. Farbenindustrie Aktiengesellschaft. (See Fraenslein, G., Müller, and Berlin, assignors.)
I. G. Farbenindustrie Aktiengesellschaft. (See Persiel, H., Balle, and Sponsel, assignors.)
I. G. Farbenindustrie Aktiengesellschaft. (See van Zütphen, Ludwig, assignor.)
Ickes, Elwood T., Pittsburgh, Pa. Cleaning scale from bars. 1,885,602; Nov. 1.
Identograph Company, The. (See Satterlee, Henry S., assignor.)
Ilberg, Waldemar, assignor to Telefunken Gesellschaft fur Drahtlose Telegraphie m. b. H., Berlin, Germany. Multiplex communication system. 1,886,263; Nov. 1.
Illovici, Avram D. (See Dubusc, R., and Illovici.)
Illig, Kurt, Berlin-Wilmersdorf, and N. Schönfeldt, Berlin-Charlottenburg, assignors to Siemens-Elektro-Osmose G. m. b. H., Siemensstadt, near Berlin, Germany. Separation of rubber. 1,885,831; Nov. 1.
Imperial Chemical Industries Limited. (See Coulthard, A., and Rodd, assignors.)
Imperial Chemical Industries Limited. (See Jones, D. C. R., Thomson, and Thomas, assignors.)
Indiana Lamp Corporation. (See Neuner, Frederick W. C., assignor.)
International Cigar Machinery Company. (See Christensen, Nelson, assignor.)
International Fire Equipment Corporation. (See Wagner, Edward P., assignor.)
International Harvester Company. (See Baker, D. B., and Panzegrau, assignors.)
International Harvester Company. (See Beall, William L., assignor.)
International Harvester Company. (See Benjamin, Bert R., assignor.)
International Harvester Company. (See Hodsdon, Floyd G., assignor.)
International Harvester Company. (See Lyford, Robert E., assignor.)
International Harvester Company. (See Robinson, Charles W., assignor.)
International Harvester Company. (See Welty, Albert B., assignor.)
International Screw Company. (See Arenz, John A., assignor.)
International Standard Electric Corporation. (See Hatton, William, assignor.)
International Standard Electric Corporation. (See Sandeman, Edward K., assignor.)
International Standard Electric Corporation. (See Smith, C. P., and Newton, assignors.)
International Standard Electric Corporation. (See Stevens, C. E., and Schooneman, assignors.)
Intertype Corporation. (See Sperry, Samuel E., assignor.)
Irwin, George, et al. (See Hamby, Joseph E., assignor.)
Isabella, Gioachino B., Turin, Italy. Rail cleaning and greasing apparatus. 1,885,726; Nov. 1.
Jackson, Charles A., Ridgewood, N. J. Hydraulic turbine governor. 1,885,265; Nov. 1.
Jaeger, Alphons O., Crafton, assignor, by mesne assignments, to The Selden Research & Engineering Corporation, Pittsburgh, Pa. Catalytic oxidation of anthracene. 1,885,832; Nov. 1.
Jaeger, Alphons O., Crafton, assignor to The Selden Company, Pittsburgh, Pa. Contact sulphuric acid process. 1,885,833; Nov. 1.
Jaeger, Alphons O., Crafton, assignor to The Selden Company, Pittsburgh, Pa. Catalytic oxidation of anthracene. 1,886,023; Nov. 1.
Jaeger, Alphons O., Mount Lebanon, assignor, by mesne assignments, to The Selden Research & Engineering Corporation, Pittsburgh, Pa. Production of monocarboxylic acids and their derivatives. 1,885,834; Nov. 1.
Jagschitz, Konrad, Mainz, assignor to Maschinenfabrik Augsburg-Nuernberg A.-G., Nuremberg, Germany. Gasometer. 1,886,101; Nov. 1.
Jähne, Ernst H., assignor to the Firm Universelle Cigarettenmaschinen-Fabrik, J. C. Muller & Co., Dresden, Germany. Device for detaching labels from a pile. 1,886,102; Nov. 1.
Jail, Peter V., Portland, Oreg. Pulverizing machine. 1,886,103; Nov. 1.
James, Robert G. (See Murphy, E. A., James, and Twiss.)
Jankisz, Martin, Brooklyn, N. Y. Handtruck. 1,885,112; Nov. 1.
Janssen, Frederick W., Detroit, Mich. Toothbrush. 1,886,024; Nov. 1.
Jefferson Electric Company. (See Bohlman, Ernest A., assignor.)
Jenkins, Thomas, assignor to Norristown Magnesia & Asbestos Company, Norristown, Pa. Water and flameproof paper. 1,885,113; Nov. 1.
Jenkins Petroleum Process Company. (See Swartz, Stephen, assignor.)
Jepsen, Hans J., and K. C. Nielsen, Copenhagen, Denmark. Savings-box calendar. 1,886,104; Nov. 1.
Jereczek, Viktor, Berlin-Steglitz, Germany. Twist drill grinding machine. 1,886,025; Nov. 1.
Jetliek, Eduard. (See Thoerig, C. W., and Jetliek.)
Johanson, Carl H., Los Angeles, Calif. Fourchette-less duplex-finger system glove. 1,885,446; Nov. 1.
Johnson Brothers Engineering Corporation. (See Johnson, Louis J., assignor.)
Johnson, Jeners, Los Angeles, Calif. Rotary drill. 1,885,266; Nov. 1.
Johnson, Louis J., assignor to Johnson Brothers Engineering Corporation, South Bend, Ind. Shock absorbing device for outboard motor drives. 1,886,191; Nov. 1.
Johnson, Raymond L., Chicago, Ill. Pattern maker's dowel. 1,885,204; Nov. 1.
Johnson, Samuel J., assignor to The Seinsheimer Paper Company, Cincinnatal, Ohio. Hat delivery container. 1,885,205; Nov. 1.
Johnson, Walter, East Auburn, Me. Tire chain tightener. 1,885,603; Nov. 1.
Johnston, Allan T. (See Butler, C. W., and Johnston.)
Jolibois, Pierre, Paris, and G. Chaudron, Lille, France. Preparation of a chloro-phosphate of lead. 1,885,447; Nov. 1.
Jones, Andrew U., Montreal, Quebec, Canada. Humidifying radiator. 1,886,192; Nov. 1.
Jones, Carl P., Grass Valley, Calif. Adjustable traction ankle splint. 1,885,448; Nov. 1.
Jones, David C. P., Polmont, Scotland, R. F. Thomson, Carlisle, England, and J. Thomas, Polmont, Scotland, assignors to Imperial Chemical Industries Limited. Coloring matters and intermediates of the benzanthrone series. 1,885,449; Nov. 1.
Jones, Frank H., Upper Sandusky, Ohio. Clutch. 1,886,193; Nov. 1.
Jones, Frank L. (See Fink, Colin G.)
Jones, Paul C., Cuyahoga Falls, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y. Making secondary aromatic amines. 1,885,355; Nov. 1.
Jones Superior Machine Co. (See Walker, Fred G., assignor.)
Jones, Webster N. (See Taylor, B. S., and Jones.)
Julin, Clarence E., Jamestown, N. Y. Window construction. 1,886,105; Nov. 1.
Kaestner, George W. (See Lohmann, W. H., and Kaestner.)
Kahl, John, Kansas City, Mo. Passenger car for amusement parks. 1,885,206; Nov. 1.
Kahn, Edgar E., Mount Vernon, N. Y. Bottle or similar article. Des. 88,152; Nov. 1.
Kalb, Lewis P. (See Meyer, A. J., and Kalb.)
Kalfus, Victor, New York, N. Y. Fluid heating device. 1,885,267; Nov. 1.
Kalgren, John E., assignor to J. R. Clark Co., Minneapolis, Minn. Ironing board. 1,885,915; Nov. 1.

Karolus, August, Leipzig, Germany, assignor to Radio Corporation of America. Instantaneous control of light. 1,885,604; Nov. 1.

Karrer, Enoch, Akron, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y. Weighing. 1,885,356; Nov. 1.

Karvaly, Hugo. (See Thoerig, C. W., and Jetlek, assignors.)

Kasparian, Mehran, Jersey City, N. J., assignor of one-half to J. Fanarjian, Jersey City, N. J., and one-half to P. M. J. M., and J. M. Hammalian. Foldable desk. 1,885,835; Nov. 1.

Katzman, Herbert, assignor to William Willheim Co., Inc., New York, N. Y. Textile fabric or similar article. Des. 88,153; Nov. 1.

Katzman, Herbert, assignor to William Willheim Co., Inc., New York, N. Y. Textile fabric or similar article. Des. 88,154; Nov. 1.

Katzman, Herbert, assignor to William Willheim Co., Inc., New York, N. Y. Textile fabric or similar article. Des. 88,155; Nov. 1.

Katzman, Herbert, assignor to William Willheim Co., Inc., New York, N. Y. Textile fabric or similar article. Des. 88,207; Nov. 1.

Katzman, Herbert, assignor to William Willheim Co., Inc., New York, N. Y. Textile fabric or similar article. Des. 88,208; Nov. 1.

Kaufman, Dorothy, New York, N. Y. Plaited curtain. 1,885,916; Nov. 1.

Kaufman, Isaac, et al. (See Zaiden, David, assignor.)

Kaufman, Jacob, et al. (See Zaiden, David, assignor.)

Kaufman, Samuel, et al. (See Zaiden, David, assignor.)

Kean, Gerald P., Homestead, Pa. Dispensing device. 1,886,106; Nov. 1.

Keating, Maurice H. (See Cuff, F. A., and Keating.)

Keesey, Edgar B., Mammoth, W. Va. Hand brake for railroad cars. 1,885,727; Nov. 1.

Keilen, Saul, assignor to The Standard Electric Time Company, Springfield, Mass. Electric clock system. 1,886,107; Nov. 1.

Keith, Clyde R., Aldwych, London, England, assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Harmonic generating and selecting system. 1,885,728; Nov. 1.

Kelemen, Lewis, and Z. Keleti, Budapest, Hungary. Inflatable rubber article. 1,885,917; Nov. 1.

Keleti, Zoltan. (See Kelemen, Lewis, assignor.)

Kellems, Edgar E., assignor to Kellems Products, Inc., New York, N. Y. Open-mesh woven wire tube. 1,886,026; Nov. 1.

Kellems Products, Inc. (See Kellems, Edgar E., assignor.)

Kelley, William V. D., Hollywood, assignor of one-half to G. Allan Hancock, Los Angeles, Calif. Color-photography. 1,885,450; Nov. 1.

Kellogg, Herbert C., and E. M. May, assignors to G. P. Cowan, Detroit, Mich.; G. A. Cowan executrix of said Glen P. Cowan, deceased. Refrigerating apparatus and lubricating same. 1,885,836; Nov. 1.

Kellogg, Herbert C., and E. M. May, assignors to G. P. Cowan, Detroit, Mich.; G. A. Cowan executrix of said Glen P. Cowan, deceased. Refrigerating apparatus and means of lubricating same. 1,885,837; Nov. 1.

Kellogg, Herbert C., and E. M. May, assignors to G. P. Cowan, Detroit, Mich.; G. A. Cowan executrix of said Glen P. Cowan, deceased. Evaporator for refrigerating apparatus. 1,885,838; Nov. 1.

Kemmerer, Ralph R., assignor to The Union Switch & Signal Company, Swissvale, Pa. Railway traffic controlling apparatus. 1,885,521; Nov. 1.

Kenety, William H. (See Stevens, J. W., and Kenety.)

Kenety, William H., Cloquet, Minn., assignor to Chemipulp Process Inc., Watertown, N. Y. Recovery of relief material. 1,885,918; Nov. 1.

Kennedy, Luther L., Brooklyn, N. Y., assignor to Mergenthaler Linotype Company. Typographical composing machine. 1,886,108; Nov. 1.

Keown, Shirley G. (See Whittington, Loring M., assignor.)

Kern, Fernando C. (See Kern, Ludwig and F. C.)

Kern, Ludwig, and F. C., Webster Groves, Mo. Binder material for coal, coke, and the like, and the manufacture thereof. 1,885,839; Nov. 1.

Kettering, Charles F., assignor to Frigidaire Corporation, Dayton, Ohio. Refrigerating apparatus. 1,886,330; Nov. 1.

Kidde, Walter, & Company. (See Freygang, Walter H., assignor.)

Kightlinger, Frank J., Brea, Calif. Pipe tong. 1,885,605; Nov. 1.

Kiliefer Manufacturing Company. (See Lytle, Harry R., assignor.)

Killian, Fred L., Akron, Ohio. Apparatus for manufacturing thin rubber articles. 1,885,115; Nov. 1.

Kimmel, John L., Bronx, N. Y. Safety swimming device. 1,885,606; Nov. 1.

King, Geiston T., Brookline, Mass. Tennis court and treating same. 1,885,207; Nov. 1.

King, John, Dayton, Ohio. Machine for making plating barrels. 1,885,522; Nov. 1.

King, Walter E., assignor to J. S. Abercrombie, Houston, Tex. Combined blow-out preventer and valve. 1,886,340; Nov. 1.

Kirby, William J., Somerville, N. J. Oven door. 1,885,357; Nov. 1.

Kirk, Edward B., New Haven, Conn., assignor to Kirk Holding Corporation, New York, N. Y. Display method and apparatus. 1,886,341; Nov. 1.

Kirk Holding Corporation. (See Kirk, Edward B., assignor.)

Klein, Frederick, College Point, N. Y., assignor to Sipp-Eastwood Corporation, Paterson, N. J. Creel. 1,885,114; Nov. 1.

Kleinsteiber, William H., Toronto, assignor to Canadian Line Materials Limited, Scarboro Junction, Ontario, Canada. Parallel groove clamp. 1,886,195; Nov. 1.

Klentzer, Fred, Lafayette, Ind. Wheel construction. 1,885,729; Nov. 1.

Kline, Edward S. (See Brinkman, E. W., and Kline.)

Kling, Aloys W., Dayton, Ohio. Display device. 1,885,268; Nov. 1.

Klingsick, Oswald W., assignor to Day-Brite Reflector Company, St. Louis, Mo. Copyholder light. 1,886,027; Nov. 1.

Kliot, Hyman, Bronx, assignor to Cliot Closet Moth Proofer, Inc., New York, N. Y. Mothproofing cabinet. 1,885,919; Nov. 1.

Klosterman, Hugo G., Louisville, Ky. Register cover. 1,886,028; Nov. 1.

Knapp, Andrew S., assignor to Knapp-Monarch Company, Belleville, Ill. Electric cooking oven. Des. 88,156; Nov. 1.

Knapp-Monarch Company. (See Knapp, Andrew S., assignor.)

Knecht, Oskar. (See Leemann, H., Lier, and Knecht.)

Knight, Ralph F., Beverly, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Manufacture of heels. 1,885,840; Nov. 1.

Knowles, Alexander S., and C. W. Andrews, assignors to Tar & Petroleum Process Company, Chicago, Ill. Treating liquid hydrocarbons. 1,885,920; Nov. 1.

Knox, Luther L., Bellevue, assignor to Knox Products Company, Pittsburgh, Pa. Making compound wall structures. 1,885,607; Nov. 1.

Knox Products Company. (See Knox, Luther L., assignor.)

Koch, William J., Midland Park, assignor to Van Vlaanderen Machine Company, Paterson, N. J. Controlling speed of and expanding cloth. 1,886,342; Nov. 1.

Koeppe, Leonhard, Halle-on-the-Saale, Germany. Projection screen. 1,885,208; Nov. 1.

Koester, Herman, assignor to The Bristol Company, Waterbury, Conn. Paper stretch tester. 1,885,209; Nov. 1.

Kohm, Christian, Providence, assignor to E. F. M. Speidel, Cranston, R. I. Method and apparatus for chain making. 1,886,194; Nov. 1.

Kolodny, Charles, Brookline, Mass. Combination bath chair and cabinet. Des. 88,209; Nov. 1.

Kons, Charles V., assignor to American Engineering Company, Philadelphia, Pa. Multiple rudder steering mechanism. 1,885,210; Nov. 1.

Koopmans, Lambert C., Chicago, Ill. Side bearing. 1,885,358; Nov. 1.

Kops Brothers, Inc. (See Kops, Waldemar, assignor.)

Kops, Waldemar, assignor to Kops Brothers, Inc., New York, N. Y. Box or similar container. Des. 88,157; Nov. 1.

Kosanovich, Burke B., assignor of one-fourth to R. A. Erdmann, Milwaukee, Wis. Automatic air or steam coupling for railway cars. 1,885,523; Nov. 1.

Kraenzlein, Georg, Frankfort-on-the-Main-Hochst, R. K. Müller, Bad-Soden-on-Taunus, and L. W. Berlin, Frankfort-on-the-Main-Hochst, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Preparing an active mass for cathodes of electric alkaline accumulators. 1,885,451; Nov. 1.

Krag, Franz K., Chicago, and J. V. Nelson, Maywood, assignors to U. S. Manufacturing Corporation, Decatur, Ill. Extension handle for utensils, such as fly swatters and the like. 1,885,730; Nov. 1

Krajac, Milos, Detroit, Mich. Aeroplane signal. 1,886,245; Nov. 1.

Krakow, Wilhelm. (See Füber, Maximilian, assignor.)

Kramer, Andrew A., Kansas City, Mo. Tank vehicle. 1,886,196; Nov. 1.

Kramer, Andrew A., Kansas City, Mo. Semitrailer tank vehicle. 1,886,197; Nov. 1.

Kramer, Elsie M. (See Willey, Leo C., assignor.)

Kraner, Jacob C., Pickerington, Ohio. Folding chair. 1,885,269; Nov. 1.

Kraus, Charles E., Brooklyn, N. Y., assignor to Sialco, Incorporated. Plasticizing hydraulic cement. 1,885,731; Nov. 1.

Kranter, Hermann, Vienna, Austria. Massaging and stimulating implement. 1,886,029; Nov. 1.

Krebs Pigment and Color Corporation. (See de Rohden, Charles, assignor.)

Krebs Pigment and Color Corporation. (See Kubin, Gabriel, assignor.)

Krebs Pigment & Color Corporation. (See Mayer, Max, assignor.)

Krebs Pigment & Color Corporation. (See McBerty, Ford H., assignor.)

Krebs Pigment & Color Corporation. (See Mowlds, K. S., and Sequine.)

Kroczek, Anton M., Chicago, Ill. Bird cage. 1,885,359; Nov. 1.

Krohn, Fritz, Essen-Ruhr, Germany. Raising and traversing mechanism for suspended street lamps. 1,885,732; Nov. 1.

Krueger, Harvey H., South Bend, Ind. Tree holder. 1,886,198; Nov. 1.

Krummel, Frederic C., Brightwaters, N. Y. Shutter wing for airships. 1,885,733; Nov. 1.

Krupnik, Phillip, Chicago, Ill. Sign projection apparatus. 1,885,841; Nov. 1.

Kubin, Gabriel, Aussig-Czechoslovakia, assignor, by mesne assignments, to Krebs Pigment and Color Corporation, New York, N. Y. Reducing the oil absorption of titanium dioxide pigment. 1,885,921; Nov. 1.

Kuchner, Charles P., North Providence, R. I. Linking machine. 1,885,116; Nov. 1.

Kuhl, Henry W. (See Whitehead, W., and Kuhl.)

Kuhne, Bernhard G., Akron, Ohio. Abrading, buffing, or polishing drum. 1,885,452; Nov. 1.

Kuhne, Bernard G., Akron, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y. Mold manipulating apparatus. 1,885,360; Nov. 1.

Kulka, Eugene R., assignor to C. D. Wood Electric Co., Inc., New York, N. Y. Plug receptacle. 1,886,199; Nov. 1.

Kunz, John, and J. Dammer, Richmond Hill, N. Y. Closure strip for windows. 1,885,922; Nov. 1.

Kurtz, Henry F., Rochester, N. Y., assignor to B. L. Singley, Meadville, Pa. Indicating lamp for vehicles. 1,885,842; Nov. 1.

Kylberg, Folke, assignor to Aktiebolaget Tonsor, Gottenborg, Sweden. Grinding apparatus. 1,886,274; Nov. 1.

L. A. B. Company, The. (See Laughlin, William C., assignor.)

Lachman, Laurence S., Forest Hills, and E. Fulda, New York, N. Y. Ribbon reel. 1,885,734; Nov. 1.

Laclede Christy Clay Products Company. (See Burnet, Samuel F., assignor.)

La Franca, Salvatore, New York, N. Y. Pipe. 1,886,200; Nov. 1.

Laing, Bryan. (See Nielsen, H., and Laing.)

Lambot, Maurice, Forest-Brussels, Belgium. Continuous process for the treatment of iron and other ores. 1,885,923; Nov. 1.

Land, Artbur A. G., Chicago, Ill. Chain-link wire fabric. 1,885,361; Nov. 1.

Land, Arthur A. G., Chicago, Ill. Chain-link wire fabric. 1,885,362; Nov. 1.

Lane, George W., Clifton, assignor to Van Vlaanderen Machine Company, Paterson, N. J. Method of and apparatus for drying cloth. 1,886,030; Nov. 1.

Lane, Harold. (See Woodcock, R. B., and Lane.)

Lange, Robert S., Gore, New Zealand. Washing machine. 1,886,201; Nov. 1.

Langer, Friedrich J., South Euclid, Ohio. Musical novelty. 1,885,843; Nov. 1.

Langley, Ralph H., assignor to The Crosley Radio Corporation, Cincinnati, Ohio. Mechanical construction of loud speakers. 1,886,031; Nov. 1.

Langsner, Adolph, assignor to Eugene Dietzgen Co., Chicago, Ill. Printing apparatus. 1,886,202; Nov. 1.

Larkin, Lester U., assignor to Larkin-Warren Refrigerating Corporation, Atlanta, Ga. Control device for mechanical refrigeration machine. 1,885,608; Nov. 1.

Larkin-Warren Refrigerating Corporation. (See Larkin, Lester U., assignor.)

Larson, Sven P., Berkeley, Calif. Pan greasing machine. 1,885,453; Nov. 1.

Lasher, Harry L., Jersey City, N. J., assignor to Martin-Copeland Company, Providence, R. I. Center bar for ophthalmic mountings. Des. 88,158; Nov. 1.

Lassiter, Leon Y., Tulsa, Okla. Automatic reminder. 1,885,270; Nov. 1.

Laughlin, Alexander, jr., Margaret M. Laughlin, and The Union Trust Co., Pittsburgh, executors of A. Laughlin, jr., deceased, assignors to Central Tube Company, Pittsburgh, Pa. Method and apparatus for the manufacture of tubes. 1,885,924; Nov. 1.

Laughlin, Margaret M., et al., executor. (See Laughlin, Alexander, jr.)

Laughlin, William C., Glendale, Calif., assignor to The L. A. B. Company, New York, N. Y. Centripetal separator. 1,885,735; Nov. 1.

Laurency, Guillaume C., La Hulpe, Belgium. Process for converting the webs from the carding engines into fine rovings for spinning. 1,885,271; Nov. 1.

Lauterbur, Edward J. (See Lauterbur, Frank X., and E. J., and Mintchell.)

Lauterbur, Frank X., E. J. Lauterbur, and H. L. Mintchell, assignors to The Peerless Bread Machine Company, Sidney, Ohio. Water softening apparatus and process of softening water. 1,885,454; Nov. 1.

Lavoie, Alexis, St. Gabriel East, Quebec, Canada. Animal trap. 1,886,203; Nov. 1.

Lawrence, A. C., Leather Company. (See Bell, Kenneth E., assignor.)

Lazar, Arthur, Associated, assignor to Associated Oil Company, San Francisco, Calif. Treating hydrocarbon oils. 1,885,524; Nov. 1.

Lazich, Branko, Edgewood, assignor to The Union Switch & Signal Company, Swissvale, Pa. Apparatus for the control of highway crossing signals. 1,885,925; Nov. 1.

Lebanon Steel Foundry. (See Bensing, Le Rue P., assignor.)

Leemann, Hans, H. Lier, and O. Knecht, assignors to Chemical Works formerly Sandoz, Basel, Switzerland. Manufacture of polyazo dyestuffs. 1,885,609; Nov. 1.

Leitner, Lawrence L., San Luis Obispo, Calif. Air signal valve. 1,885,363; Nov. 1.

Lemaire, Louis P., La Garenne, France. Prism carrier for cameras and the like optic apparatus. 1,886,204; Nov. 1.

Lemert, Louis, Pawnee, Okla. Revolving plant rack. 1,885,117; Nov. 1.

L'Enfant, Charles, New York, N. Y. Coin purse. 1,885,736; Nov. 1.

Lenfant, Louis, assignor to Cartier, Societe Anonyme, Paris, France. Multiple ash tray composed of nested elements. 1,886,109; Nov. 1.

Leonhard, William C. (See Hough, A., Dufford, and Leonhard.)

Les Fils De Virgile Amyot. (See Amyot, Pierre U. J., assignor.)

Lesh, Laurence J., assignor, by mesne assignments, to Associated Electric Laboratories, Inc., Chicago, Ill. Oscillation device. 1,885,118; Nov. 1.

Lesser, Paul, Brooklyn, N. Y., assignor to William Willheim Co., Inc., New York, N. Y. Textile fabric or similar article. Des. 88,159; Nov. 1.

Lesser, Paul, Brooklyn, N. Y., assignor to William Willheim Co., Inc., New York. Textile fabric or similar article. Des. 88,160; Nov. 1.

Lester, Nathan. (See During, W. J., and Lester.)

Leveque, Bernard T. Wenham, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Lockstitch sewing machine. 1,885,927; Nov. 1.

Levine, Henry, Philadelphia, Pa., assignor to Leon Benoit, Chicago, Ill. Two-piece box or carton. Re18,639; Nov. 1.

Levine, Henry, Philadelphia, Pa., assignor to Leon Benoit, Chicago, Ill. Box or carton. 1,885,455; Nov. 1.

Lewandowski, Edward H., Neenah, Wis., assignor to The Menasha Products Company, Chicago, Ill. Cutter receptacle. 1,885,610; Nov. 1.

Lewis Foundry & Machine Company. (See Beatty, Floyd A., assignor.)

Lewis, George K., assignor to Met-L-Wood Corporation, Chicago, Ill. Insulating material and making the same. 1,885,364; Nov. 1.

Lewis, George W., Berlin, Mass., assignor, by mesne assignments, to Fold-Well Table Co. Inc. Ironing table cover. 1,885,737; Nov. 1.

Lewis, Harry T., Hampton, Va. Liquid measuring device. 1,885,926; Nov. 1.

Lewis, Roy L., Atlanta, Ga. License plate. 1,885,844; Nov. 1.

Lieberknecht, Karl, G. m. b. H. (See Lieberknecht, Karl R., assignor.)

Lieberknecht, Karl R., Oberlungwitz, Germany. Bracket for electric motors. 1,886,259; Nov. 1.

Lieberknecht, Karl R., assignor to Karl Lieberknecht, G. m. b. H., Oberlungwitz, Germany. Straight knitting machine. 1,885,738; Nov. 1.

Lier, Heinrich. (See Leemann, H., Lier, and Knecht.)

Lilley, Charles H., Newburgh, N. Y. Snowplow equipment for automobiles. 1,885,611; Nov. 1.

Lilly, Mark R., assignor to Monroe Calculating Machine Company, Orange, N. J. Accounting device. 1,885,928; Nov. 1.

Lindhard, Povl T., Brooklyn, assignor to F. L. Smidth & Co., New York, N. Y. Manufacture of hydraulic cement. 1,885,845; Nov. 1.

Lippert, Walter E., assignor to Elliott-Fisher Company, Harrisburg, Pa. Public service billing machine. 1,885,525; Nov. 1.

Lippstadt, Isabel G., New York, N. Y. Key holder. 1,886,110; Nov. 1.

Lisenby Manufacturing. (See Low, Charles L., assignor.)

Littell, Frederick J., assignor to F. J. Littell Machine Company, Chicago, Ill. Power driven reel. 1,885,612; Nov. 1.

Littell, Frederick J., assignor to F. J. Littell Machine Company, Chicago, Ill. Automatic centering reel. 1,885,613; Nov. 1.

Littell, F. J., Machine Company. (See Littell, Frederick J., assignor.)

Littlefield, Edgar E., West Hollywood, Los Angeles, Calif. Valve and its operation. 1,885,846; Nov. 1.

Livergood, Gerald R., deceased; M. E. Livergood, administratrix, Houston, Tex. Pipe engaging device. 1,886,848; Nov. 1.

Livergood, Marie E., administratrix. (See Livergood, Gerald R.)

Lloyd, Lester T., Oak Park, and H. Olsen, Chicago, Ill., assignors to W. G. Lloyd Company. Visible card rack. 1,885,929; Nov. 1.

Lloyd, W. G., Company. (See Lloyd, L. T., and Olsen, assignors.)

Locke, Fred J. (See Locke, Fred M. and F. J.)

Locke, Fred M. and F. J., deceased; M. P. Locke, administratrix, Victor, assignor to Corning Glass Works, Corning, N. Y. Ultra violet ray transmitting glass and to a batch and method for making the same. 1,886,280; Nov. 1.

Locke, Mercie P., administratrix. (See Locke, Fred M., and F. J.)

Loeb, Russel C., Myerstown, Pa. Piston and connecting rod. 1,885,538; Nov. 1.

Loewy, Julius E., Philadelphia, Pa. Grinding tool. 1,885,119; Nov. 1.
Lohmann, William H., Wilmington, Del., and G. W. Kaestner, Montclair, N. J., assignors to General Chemical Company, New York, N. Y. Shipping container. 1,885,456; Nov. 1.
Lombardi, William A., East Stroudsburg, Pa. Chocking device for automobiles and aeroplanes. 1,885,120; Nov. 1.
Long, W. E., Co. (See Reece, W. W., and Haas, assignors.)
Loonam, Alfred C. (See Gleason, G. H., and Loonam.)
Lord, Hugh C., and I. P. Whitehouse, Erie, Pa.; said Whitehouse assignor to said Lord. Diaphragm mechanism. 1,885,457; Nov. 1.
Lorentsen, Laurits I., Vancouver, British Columbia, Canada. Centrifugal mineral separator. 1,886,111; Nov. 1.
Lorenz, Edward H., West Hartford, assignor to Hartford-Empire Company, Hartford, Conn. Apparatus for fabricating glassware. 1,885,739; Nov. 1.
Lorenz, Edward H., West Hartford, assignor to Hartford-Empire Company, Hartford, Conn. Parison transfer mechanism. 1,885,740; Nov. 1.
Lothar Ludwig G. m. b. H. (See Ludwig, L., and Böhme, assignors.)
Lotte, Charles H., assignor to Byers Machine Company, Ravenna, Ohio. Excavating machine. 1,886,032; Nov. 1.
Louis, Theodore E., Berkeley, Calif. Sign. Des. 88,161; Nov. 1.
Low, Charles L., assignor to Lisenby Manufacturing Company, Fresno, Calif. Automatic trip mechanism for printing presses. 1,886,281; Nov. 1.
Low, Charles L., Benton Harbor, Mich., assignor to Lisenby Manufacturing Company, Fresno, Calif. Elevator control mechanism for printing presses. 1,886,282; Nov. 1.
Loweke, Erwin F., assignor to Hydraulic Brake Company, Detroit, Mich. Valve mechanism. 1,885,121; Nov. 1.
Lowery, Hugh, Alton, assignor to Standard Oil Company, Chicago, Ill. Removal of wax from hydrocarbon oils. 1,886,344; Nov. 1.
Lowy, James, New York, N. Y. Ring guard. 1,885,930; Nov. 1.
Luarde, Joseph A., McDonald, Ohio. Adjustable cushion support. 1,886,112; Nov. 1.
Lucas, Samuel C., assignor to The Timken Roller Bearing Company, Canton, Ohio. Automatic feeding device. 1,886,033; Nov. 1.
Lucius, William, Gainesville, Fla. Signal switch for motor cars. 1,885,526; Nov. 1.
Ludwig, Lothar, Dresden, and E. Böhme, Dresden-Leuben, assignors to the Firm Lothar Ludwig G. m. b. H., Dresden, Germany. Camera shutter. 1,886,283; Nov. 1.
Luft, Arthur, Lynbrook, N. Y. Garment. 1,885,527; Nov. 1.
Lukns, Julia, New York, N. Y. Textile fabric or the like. Des. 88,162; Nov. 1.
Lukas, Julia, New York, N. Y. Textile fabric or the like. Des. 88,163; Nov. 1.
Lukas, Julia, New York, N. Y. Textile fabric or the like. Des. 88,164; Nov. 1.
Lupton's, David, Sons Company. See Walton, Howard T., assignor.)
Lurie, Joseph M., Brookline, assignor, by mesne assignments, to Arden Box Toe Company, Watertown, Mass. Shoe stiffener manufacture. 1,886,345; Nov. 1.
Lutes, Simpson, Louisville, Ky. Power shovel. 1,885,741; Nov. 1.
Luther, John B., Grass Valley, Calif. Electric switch. 1,886,284; Nov. 1.
Lutton, George E., Kalispell, Mont. Automatic rifle. 1,886,113; Nov. 1.
Lyford, Robert E., Chicago, Ill., assignor to International Harvester Company. Spring pressure contact element. 1,886,205; Nov. 1.
Lynch, Samuel. (See Spurgeon, F. R., and Lynch.)
Lyon Cover Company. (See Ellenberger, Clarence M., assignor.)
Lyon Metal Products, Incorporated. (See Vance, Walter N., assignor.)
Lytle, Harry R., North Sacramento, assignor to Killefer Manufacturing Company, Los Angeles, Calif. Scraper. 1,885,528; Nov. 1.
Lytle, William O., New Kensington, Pa., assignor to Duplate Corporation. Making laminated glass. 1,885,272; Nov. 1.
Macallum, Alexander D., Niagara Falls, assignor to The Roessler & Haaslacher Chemical Company, New York, N. Y. Odorant for refrigeration. 1,886,034; Nov. 1.
MacChesney, Chester M., R. H. Norton, and J. E. Ott, assignors to Acme Steel Company, Chicago, Ill. Strap stretching device. 1,885,742; Nov. 1.
MacNeil, Frederick H., Boston, assignor to Condit Electrical Manufacturing Corporation, South Boston, Mass. Inclosed electric switch. 1,885,365; Nov. 1.
MacNeil Frederick H., Boston, assignor to Condit Electrical Manufacturing Corporation, South Boston, Mass. Electric switch and supporting mechanism therefor. 1,886,346; Nov. 1.
Madine, John J., Los Angeles, Calif. Electrode for neon signs. 1,885,529; Nov. 1.
Magee Carpet Co., The. (See McCollum, Alfred F., assignor.)
Magruder, George M., Blackville, S. C. Pole or mast construction. 1,885,743; Nov. 1.
Maine, Sidney A., Duluth, Minn. Air hose coupling. 1,885,614; Nov. 1.
Malcolm, Robert, Chicago, Ill. Welder's device. 1,885,744; Nov. 1.
Malcolm, Robert, Chicago, Ill. Helmet. 1,885,745; Nov. 1.
Maliette, Joseph M., New London, Conn. Automobile signal. 1,885,274; Nov. 1.
Malpas, Ellis G., assignor to The Piston Ring Company, Muskegon, Mich. Piston ring. 1,885,273; Nov. 1.
Mancib, Alvin S., Somerville, assignor to Comstock & Wescott, Inc., Boston, Mass. Combustion apparatus. 1,885,530; Nov. 1.
Mandler, Eugen, assignor to the firm Climax Motorenwerke und Schiffewerft Linz A. G., Vienna, Austria. Rotary blower. 1,886,206; Nov. 1.
Manger, Charles F. (See Bentley, P. A., Manger, and Wainright.)
Mangone, Frank, et al. (See Foti, Charles, assignor.)
Maniscalco, Joseph et al. (See Maniscalco, Pietro, assignor.)
Maniscalco, Pietro, assignor of one-fourth to J. Maniscalco, one-fourth to J. Bocchieri, and one-fourth to C. Bocchieri, St. Louis, Mo. Speed control for elevators. 1,885,458; Nov. 1.
Mann, John, assignor to Goulds Pumps, Inc., Seneca Falls, N. Y. Bed plate. 1,886,035; Nov. 1.
Mann, Leon, Mount Vernon, N. Y., assignor to Holed-Tite Packing Corporation. Cushion seat. 1,885,847; Nov. 1.
Manning & Co. (See Ronan, Kenneth, M. assignor.)
Manning, Robert W., Cleveland, Ohio. Advertising novelty. 1,885,122; Nov. 1.
Manville, E. J., Machine Company, The. (See Pracny, John E., assignor.)
Marathon Paper Mills Company. (See Abrams, Allen, assignor.)
March, Norris E., Muskegon, Mich., assignor, by mesne assignments, to United Research Corporation, Long Island City, N. Y. Machine for smoothing the edges of phonograph records. 1,885,848; Nov. 1.
Marcella, Silvio, assignor to The F. H. White Company, Philadelphia, Pa. Traveling case. 1,885,849; Nov. 1.
Marcus, Morris M., Philadelphia, Pa. Separable lamp stand. 1,885,275; Nov. 1.
Margolin, Julius. (See Starr, Jacob, assignor.)
Marley, Wilfrid, Workington, Cumberland, England. Operating gear for furnace bells. 1,885,531; Nov. 1.
Marshall, Clyde R., Cedar Rapids, and F. D. Marshall, Center Point, Iowa. Hose reel. 1,886,207; Nov. 1.
Marshall, Frank D. (See Marshall, C. R., and F. D.)
Marter, Richard G., assignor to National Enameling & Stamping Company, Milwaukee, Wis. Strainer. 1,885,850; Nov. 1.
Martin-Copeland Company. (See Lasher, Harry L., assignor.)
Martin, David, assignor to The Globe Steel Abrasive Company, Mansfield, Ohio. Making metal abrasive material. 1,886,285; Nov. 1.
Martin, Jesse C., jr., Los Angeles, Calif. Boiler. 1,885,931; Nov. 1.
Martin, Jesse C., jr., Los Angeles, Calif. Self supporting water bottom. 1,885,932; Nov. 1.
Martin, Leo I., Seattle, Wash. Electric clothes drier. 1,886,286; Nov. 1.
Martin, Percy, Coventry, assignor to The Daimler Company, Limited, Coventry, Warwickshire, England. Power transmission mechanism. 1,885,746; Nov. 1.
Martini, Biagio, Pittsburgh, Pa. Railroad track-switch. 1,885,366; Nov. 1.
Marx, Frank A., Cincinnati, Ohio. Cardboard display device. 1,886,036; Nov. 1.
Maschinenfabrik Augsburg Nuernberg A. G. (See Jagchitz, Konrad, assignor.)
Masterench Corporation. (See Mead, Homer A., assignor.)
Masters, Irvin W., assignor to The National Lock Washer Company, Newark, N. J. Boat meter. 1,885,933; Nov. 1.
Mattison, Carl L., assignor to Mattison Machine Works, Rockford, Ill. Sanding drum. 1,885,123; Nov. 1.
Mattison Machine Works. (See Mattison, Carl L., assignor.)
Maurer, Alfred, Milan, Italy. Drawing apparatus with pivotally movable lips for the manufacture of cellulose films of various thicknesses. 1,885,747; Nov. 1.
Maurer, John F., jr., Woodcliff, N. J. Box construction. 1,885,748; Nov. 1.
Maute, Joseph, Buffalo, N. Y. Taper boring attachment for milling machines and the like. 1,886,287; Nov. 1.
May, Edward M. (See Kellogg, H. C., and May.)
Mayer, Max., Carlsbad, Czechoslovakia, assignor, by mesne assignments, to Krebs Pigment & Color Corporation, Newark, N. J. Producing oxides of the fourth group metals. 1,885,934; Nov. 1.
Mazzocco, Dante V., assignor to Eureka Photo Mechanical Equipment, Inc., New York, N. Y. Photomechanical machine. 1,885,532; Nov. 1.
McAllister, David, Seattle, Wash., assignor to American Machine & Foundry Company. Sliced bread transfer. 1,885,935; Nov. 1.
McAvoy, Peter T., Brooklyn, N. Y. Bottle closure 1,886,347; Nov. 1.

McBerty, Ford H., Wilmington, assignor, by mesne assignments, to Krebs Pigment & Color Corporation, Wilmington, Del. Dust catching and quenching device. 1,885,936; Nov. 1.
McCollum, Alfred F., assignor to The Magee Carpet Co., Bloomsburg, Pa. Sewing machine. 1,885,124; Nov. 1.
McCullough, Frederick S., Edgewood Borough, Pa. Electrical discharge device. 1,885,125; Nov. 1.
McDonnell, Aloysius S., Chicago, Ill. Lock-nut. 1,885,459; Nov. 1.
McDougall, James, Glasgow, Scotland. Distilling apparatus. 1,886,037; Nov. 1.
McDow, Everett E., Wilmette, assignor to Antiseptol Liquid Soap Company, Chicago, Ill. Dispensing device. 1,886,288; Nov. 1.
McElhaney, Robert S., Shadyside, Ohio. Gap indicating mechanism for railway switch signals. 1,885,460; Nov. 1.
McGinley, William L., Dallas, Tex. Detachable service tray. 1,885,615; Nov. 1.
McGiveron, Hugh E., Haslett, assignor to Motor Wheel Corporation. Lansing, Mich. Oil and dust guard. 1,886,038; Nov. 1.
McGregor, Rob R. (See Beal, G. D., and McGregor.)
McKay, Robert C., Swampscott, Mass. Automatic card shuffler and dealer. 1,885,276; Nov. 1.
McKee, Garnet W., Rockford, Ill. Control device. 1,885,367; Nov. 1.
McKee, Garnet W., Rockford, Ill. Regulator. 1,885,851; Nov. 1.
McKenna, James J., et al. (See Weinman, Edwin L., assignor.)
McKinley, Major R. (See Carr, Uhel U.)
McLellan, James H., assignor to Auto Fount, Limited, Vancouver, British Columbia, Canada. Dispensing device. 1,885,368; Nov. 1.
McMillan Book Company. (See McMillan, John L., assignor.)
McMillan, John L., assignor to McMillan Book Company, Syracuse, N. Y. Loose leaf binder. 1,885,461; Nov. 1.
McMullen, Allen, Number Four, N. Y. Trap. 1,886,114; Nov. 1.
McPherson, Verstille G. (See Rathbone, W. R., and McPherson.)
McWilliams Dredging Company. (See McWilliams, George A., assignor.)
McWilliams, George A., assignor to McWilliams Dredging Company, Chicago, Ill. Boom swinging apparatus. 1,885,937; Nov. 1.
Mead, Homer A., assignor to Masterench Corporation, Turlock, Calif. Wrench. 1,885,616; Nov. 1.
Medlock, Wendyl R., assignor of twenty-four and one-half per cent to P. B. Glasser and twenty-four and one-half per cent to W. W. Goodman, Pocatello, Idaho. Tear gas gun. 1,885,126; Nov. 1.
Medved, Nicholas, Canton, Ohio. Double thrust roller bearing. 1,885,852; Nov. 1.
Megroz, Roger, Bronxville, N. Y. Textile fabric or the like. Des. 88,165; Nov. 1.
Mehler, Hugo, Philadelphia, Pa. Elastic lace braid. 1,885,749; Nov. 1.
Meissner, Alexander, assignor to Telefunken Gesellschaft für Drahtlose Telegraphie m. b. H., Berlin, Germany. Making high grade dielectric materials. 1,886,234; Nov. 1.
Meissner, Alexander, assignor to Telefunken Gesellschaft für Drahtlose Telegraphie m. b. H., Berlin, Germany. Stabilizing noncrystalline piezo-electric microphone diaphrams. 1,886,235; Nov. 1.
Meissner, Alexander, assignor to Telefunken Gesellschaft für Drahtlose Telegraphie m. b. H., Berlin, Germany. Making wound (roll) condensers of greater breakdown strength. 1,886,236; Nov. 1.
Meldahl, Horace S., New York, N. Y. Wall radiator. 1,885,938; Nov. 1.
Mellon Institute of Industrial Research, trustee. (See Beal, G. D., and McGregor, assignors.)
Menasha Products Company, The. (See Lewandowski, Edward H., assignor.)
Merchant & Evans Company. (See Benn, Stephen J., assignor.)
Merchants Association, Inc. (See Nelson, Nels H., assignor.)
Mergenthaler Linotype Company. (See Hilpman, John H., assignor.)
Mergenthaler Linotype Company. (See Kennedy, Luther L., assignor.)
Merrill, Allan B. (See Thompson, W. B., and Merrill.)
Merrimac Chemical Company. (See Curtis, Francis J., assignor.)
Merritt, Glenn W., assignor to Mining Safety Device Company, Bowerston, Ohio. Cage lock. 1,885,277; Nov. 1.
Metlox Corporation, Ltd. (See Wilson, William B., assignor.)
Met-L-Wood Corporation. (See Lewis, George K., assignor.)
Metropolitan Device Corporation. (See Murray, Thomas E., assignor.)
Metropolitan Engineering Company. (See Murray, Thomas E., assignor.)
Meyer, Albert C., San Diego, Calif. Calculator. 1,885,617; Nov. 1.
Meyer, Andre J., and L. P. Kalb, assignors to Continental Motors Corporation, Detroit, Mich. Internal combustion engine. 1,885,369; Nov. 1.
Meyercord, G. B. (See Basquin, Olin H., assignor.)
Meyercord, G. B. (See Harazin, Charles, assignor.)
Mieres, José, Buenos Aires, Argentina. Garter. 1,886,208; Nov. 1.
Milette, Alphonse, and P. Dupuis, Montreal, Quebec, Canada. Antifreezing device for windows, windshields, and the like. 1,885,127; Nov. 1.
Millan, Hilary, jr., New York, N. Y. Commercial envelope. 1,886,348; Nov. 1.
Miller, Albert D., Goshen, Ind. Insect destroyer. 1,886,039; Nov. 1.
Miller, Arthur E., Sacramento, and H. M. Salisbury, Walnut Grove, Calif. Variable camber propeller. 1,886,289; Nov. 1.
Miller, Calvin L., jr., Concord, N. C. Leg support for automobile drivers. 1,885,750; Nov. 1.
Miller, Charles, New York, N. Y. Shoe. Des. 88,166; Nov. 1.
Miller, Charles F., and S. W. Brundage, Miami, Fla. Convertible awning and shutter. 1,885,462; Nov. 1.
Miller, Dorr, Detroit, Mich., assignor to The Toledo Alloyed Castings Company, Toledo, Ohio. Piston blank and method of manufacturing pistons. 1,885,463; Nov. 1.
Miller, Ernest B., assignor to The Silica Gel Corporation, Baltimore, Md. Refining liquid hydrocarbons. 1,886,260; Nov. 1.
Miller, Ernest B., and G. C. Connolly, assignors to The Silica Gel Corporation, Baltimore, Md. Refining liquid hydrocarbons. 1,886,261; Nov. 1.
Miller, Frank R. (See Miller, Morton G., assignor.)
Miller, James, Brixton, London, and A. Simon, Bow, London, England. Apparatus for embossing fabrics. 1,885,618; Nov. 1.
Miller, James G., Buffalo, N. Y. Burial vault. 1,886,290; Nov. 1.
Miller, John R., Baldwin Park, Calif. Valve. 1,885,939; Nov. 1.
Miller, Morton G., Summit Grove, assignor of one-fourth to Frank R. Miller, Terre Haute, Ind. Rug cleaning machine. 1,885,464; Nov. 1.
Miller, Thomas D. (See Breidel, Frederick, assignor.)
Mills, Robert K., Sherwood, Nottingham, England. Knitting machine needle. 1,886,291; Nov. 1.
Miner, Charles R., assignor of one-fourth to M. Tambor and one-fourth to S. Bowell, San Francisco, Calif. Internal combustion engine. 1,885,853; Nov. 1.
Mining Safety Device Company. (See Merritt, Glenn W., assignor.)
Minkow, Robert, New York, N. Y. Combined adjusting and gauge heads for corner cutting machines. 1,885,370; Nov. 1.
Mintchell, Howard L. (See Lauterbur, Frank X., E. J., and Mintchell.)
Mitchell, Ralph A., Edgeworth, Pa., assignor to Pittsburgh Forgings Company. Making cupped forgings. 1,886,210; Nov. 1.
Mittelstadt, Roy L. (See Prosser, T. W., Wahlbeck, and Mittelstadt.)
Mix, Frederick H., Brooklyn, N. Y., assignor to Joseph Dixon Crucible Company, Jersey City, N. J. Box. 1,886,211; Nov. 1.
Modine, Arthur B., assignor to Modine Manufacturing Company, Racine, Wis. Heating apparatus. 1,885,371; Nov. 1.
Modine, Arthur B., assignor to Modine Manufacturing Company, Racine, Wis. Heating device. 1,885,751; Nov. 1.
Modine, Arthur B., assignor to Modine Manufacturing Company, Racine, Wis. Radiator. 1,886,292; Nov. 1.
Modine Manufacturing Company. (See Modine, Arthur B., assignor.)
Molitor, Carl S., Dobbs Ferry, N. Y. Apparatus for the delivery of materials. 1,885,533; Nov. 1.
Monett, Chauncey D., San Francisco, Calif. Money sterilizer. 1,885,278; Nov. 1.
Monk, Nora. (See Monk, Sidney J., assignor.)
Monk, Sidney J., assignor to Nora Monk, Washington, D. C. Illuminating means. 1,885,279; Nov. 1.
Monroe Calculating Machine Company. (See Lilly, Mark R., assignor.)
Monroe, Frederick W., Atlantic City, N. J., assignor to M. Hutchinson, Philadelphia, Pa. Mortising machine. 1,885,752; Nov. 1.
Montellano, Néstor, Buenos Aires, Argentina. Apparatus for killing insects. 1,885,854; Nov. 1.
Montgomery, Stonewall J., Cedar Vale, Kans. Load binder. 1,885,128; Nov. 1.
Moodyman, Edwin F., assignor of one-tenth to W. S. Hunt, Houston, Tex. Electric motor. 1,886,040; Nov. 1.
Moore, Henry D., assignor to American Reenforced Paper Company, Attleboro, Mass. Reenforced paper and making the same. 1,885,280; Nov. 1.
Moore & White Company, The. (See White, Joseph A., assignor.)
Moran, William C., Laurel Springs, N. J., assignor to Riehle Bros. Testing Machine Company, Philadelphia, Pa. Testing machine. 1,885,855; Nov. 1.
Moreland Motor Truck Company. (See Moreland, Watt L., assignor.)

Moreland, Watt L., Los Angeles, assignor of one-half to Moreland Motor Truck Company, Burbank, Calif. Motor vehicle. 1,886,349; Nov. 1.
Moreton, Henry H., Santa Monica, Calif., assignor of one-third to O. B. Englisch, Chicago, Ill., and one-third to C. F. Craig, Los Angeles, Calif. Compound for purifying oils. 1,885,619; Nov. 1.
Morrill, Elliott, Chicago, Ill. Treating oils and composition therefor. 1,886,293; Nov. 1.
Morris, Bert M., Los Angeles, Calif. Desk calendar stand. 1,885,129; Nov. 1.
Morris, I. P., & De La Vergne, Incorporated. (See Nonnenbruch, Otto, assignor.)
Morris, James J., Chicago, Ill. Friction clutch. 1,886,294; Nov. 1.
Morris, Ross, Zillah, Wash. Fruit feeding device. 1,886,295; Nov. 1.
Morton, Eric A., Coventry, assignor to Courtaulds Limited, London, England. Process and apparatus in and relating to the manufacture and production of artificial threads, filaments, and the like. 1,885,753; Nov. 1.
Moscrop, John R., Stege, assignor to Stauffer Chemical Company, San Francisco, Calif. Cap for carboy casing. 1,885,534; Nov. 1.
Moser, Jakob O. (See Rosat, C., Moser, and Reymond.)
Moses, Herbert B., San Francisco, Calif., assignor to I. H. Moses. Lubricating system. 1,886,067; Nov. 1.
Moses, Irma H. (See Moses, Herbert B., assignor.)
Motorenfabrik Deutz, Aktiengesellschaft. (See Heidelberg, Victor, assignor.)
Motor Wheel Corporation. (See McGiveron, Hugh E., assignor.)
Moulton, Lloyd W., Syracuse, N. Y. Centrifugal gang-casting machine. 1,885,465; Nov. 1.
Mowids, Kenneth S., Hillcrest, and W. Seguine, jr., Newport, assignors, by mesne assignments, to Krebs Pigment & Color Corporation, Wilmington, Del. Manufacture of sunfast and inert lithopone. 1,885,940; Nov. 1.
Moyer, William W., West Collingswood, N. J. Traveling lawn sprinkler for irrigating extensive surfaces. 1,885,620; Nov. 1.
Mueller, Herman G., assignor to Skinner Engine Company, Erie, Pa. Exhaust valve mechanism. 1,886,212; Nov. 1.
Muller, Carl W., Dresden-Weisser Hirsch, Germany. Tube-like container for cigars. 1,886,115; Nov. 1.
Müller, Richard K. (See Kraenzlein, G., Müller, and Berlin.)
Murphy, Edward A., Wylde Green, R. G. James, Birmingham, and D. F. Twiss, Wylde Green, assignors to Dunlop Rubber Company Limited, Birmingham, England. Manufacture of rubber articles. 1,886,351; Nov. 1.
Murphy, John R., Cottonwood, Ala. Elevator safety appliance. 1,886,213; Nov. 1.
Murray, John F., et al., executors. (See Murray, Thomas E.)
Murray, Joseph B., et al., executors. (See Murray, Thomas E.)
Murray, Thomas E., jr., et al., executors. (See Murray, Thomas E.)
Murray, Thomas E., deceased, Brooklyn, N. Y.; J. B. Murray, T. E. Murray, jr., and J. F. Murray, executors, assignors to Metropolitan Device Corporation. Circuit controlling mechanism. 1,885,535; Nov. 1.
Murray, Thomas E., deceased, Brooklyn, N. Y., by J. F. Murray, J. B. Murray, and T. E. Murray, jr., executors, assignors, by mesne assignments, to American Radiator & Standard Sanitary Corporation. Radiator. 1,885,536; Nov. 1.
Murray, Thomas E., jr., Brooklyn, and F. C. Reynolds, New York, N. Y., assignors, by mesne assignments, to American Radiator & Standard Sanitary Corporation. Radiator inclosure. 1,885,537; Nov. 1.
Murray, Thomas E., deceased, Brooklyn, N. Y.; J. B. Murray, T. E. Murray, jr., and J. F. Murray, executors, assignors to Metropolitan Engineering Company. Boiler. 1,886,214; Nov. 1.
Naab, George F., and G. R. Brown, assignors to The North American Manufacturing Company, Cleveland, Ohio. Proportional valve. 1,885,130; Nov. 1.
Nachtigall, Richard J., assignor of one-half to A. Pecsi, Philadelphia, Pa. Self-sharpening and balancing shears or scissors. 1,885,754; Nov. 1.
National Aniline & Chemical Company. (See Rogers, D. G., Ogilvie, and Crowell, assignors.)
National Electrical Supply Company. (See Graham, Edwin C., assignor.)
National Enameling & Stamping Company. (See Marter, Richard G., assignor.)
National Lead Company. (See Newnam, William E., assignor.)
National Lock Washer Company, The. (See Masters, Irvin W., assignor.)
National Malleable and Steel Castings Company. (See Shafer, James A., assignor.)
National Paper Products Company. (See Stanton, Frederick L., assignor.)
National Parking Garages, Incorporated. (See Aitken, William J., assignor.)
National Pneumatic Company. (See Forman, Paris B., assignor.)
National Postage Machines Co. Ltd. (See Coffman, Samuel M., assignor.)
National Sales Machine Company. (See Fry, Benjamin L., assignor.)
Neal, Theophilus E., Prairie View, Tex. Automatic blow-off. 1,885,466; Nov. 1.
Nebel, Ernst O., Jenkintown, Pa. Equalizing device for knitting machines. 1,885,539; Nov. 1.
Neir, Earl R., Wilmette, and S. E. Witt, Geneva, assignors, by mesne assignments, to Associated Electric Laboratories, Inc., Chicago, Ill. Telephone system. 1,886,296; Nov. 1.
Nell, Bernhardt, assignor to the Firm Vereinigte Stahlwerke Aktiengesellschaft, Dusseldorf, Germany. Joining pipe ends. 1,886,275; Nov. 1.
Nelson, Horatio D., et al. (See Wood, Sidney C., assignor.)
Nelson, John V. (See Krag, F. K., and Nelson.)
Nelson, Nels H., assignor to Merchants Association, Inc., Dayton, Ohio. Printing press. 1,885,131; Nov. 1.
Neon Electric Sign Co. (See Helgenberg, Henry, assignor.)
Nereim, Roy O., Highland Park, Ill. Combined set of toilet accessory containers and holder therefor. Des. 88,167; Nov. 1.
Nesbitt, John J., Inc. (See Ewald, W., and Henshall, assignors.)
Neuber, Friedrich, T. Neuber, née Drehmann, and L. M. Hermann, Hamburg, Germany. Cooking plate. 1,886,297; Nov. 1.
Neuber, Therese, née Drehmann. (See Neuber, Friedrich and T., and Hermann.)
Neuner, Frederick W. C., assignor to Indiana Lamp Corporation, Connersville, Ind. Electrical contact for lamps. 1,885,467; Nov. 1.
Nevin, Howard J., Escondido, Calif. Combined dump truck and road drag. 1,885,468; Nov. 1.
New Castle Refractories Company. (See Dressler, Philip d'Huc, assignor.)
Newhall, Henry B., Corporation. (See Tulloch, David, assignor.)
Newill, Edward B., assignor to General Motors Radio Corporation, Dayton, Ohio. Electrical apparatus. 1,885,621; Nov. 1.
Newnam, William E., Collinsville, Ill., assignor to National Lead Company, St. Louis, Mo. Bag house. 1,886,215; Nov. 1.
Newspaper Stuffing Machine Company, The. (See Halvorsen, Severin, assignor.)
Newton, Geoffrey. (See Smith, C. P., and Newton.)
Newton, Roy C., assignor to Swift and Company, Chicago, Ill. Neutralizing fatty-acids in oils and fats. 1,885,281; Nov. 1.
New York Air Brake Company, The. (See Campbell, Charles A., assignor.)
Nicholas, Charles W., assignor to Union Metal Products Company, Chicago, Ill. Diaphragm buffer mechanism. 1,885,469; Nov. 1.
Nicholson, Frank H. (See Thompson, H. A., and Nicholson.)
Nickerson, William H., jr., Newton, Mass. License plate holder for motor vehicles. 1,886,352; Nov. 1.
Nielsen, Harald, Bromley, and B. Laing, of Petty, France, Westminster, England. Distillation of carbonaceous materials. 1,886,262; Nov. 1.
Nielsen, Harald, Muswell Hill, and B. Laing, Matfield, England. Distilling solid carbonizable material. 1,886,350; Nov. 1.
Nielsen, Kai C. (See Jepsen, H. J., and Nielsen.)
Nilsson, Nils E., assignor to Telefonaktiebolaget L. M. Ericsson, Stockholm, Sweden. Electrical signaling and operating circuit. 1,886,216; Nov. 1.
Nimick, Francis B., Coraopolis, assignor to Colonial Steel Company, Pittsburgh, Pa. Shaping composite rods. 1,885,132; Nov. 1.
Noetzli, Fred A., Los Angeles County, Calif. Dam and constructing the same. 1,885,470; Nov. 1.
Nolan, Joseph A., Fort Pierce, Fla. Fish lure. 1,886,116; Nov. 1.
Nonnenbruch, Otto, Phiadelphia, Pa., assignor to I. P. Norris & De La Vergne, Incorporated. Cylinder construction. 1,885,755; Nov. 1.
Noonan, George W., New York, N. Y. Folding table. 1,886,217; Nov. 1.
Nordvall, Christina, Birch River, Manitoba, Canada. Garment hanger. 1,886,298; Nov. 1.
Norquist, Glenn H. (See Norquist, Ralph A., and G. H.)
Norquist, Ralph A., and G. H. Norquist, Jamestown, N. Y. Window screen. 1,885,756; Nov. 1.
Norristown Magnesia & Asbestos Company. (See Jenkins, Thomas, assignor.)
North American Manufacturing Company, The. (See Nanb, G. F., and Brown, assignors.)
Norton Company. (See Cole, Raymond A., assignor.)
Norotn, Ralph H. (See MacChesney, C. M., Norton, and Ott.)
Novotny, Emil E., and C. J. Romieux, Logan, assignors to J. S. Stokes, Huntingdon Valley, Pa. Synthetic resin and making same. 1,886,353; Nov. 1.
Nuehling, Emil L., Reading, Pa. Fire hydrant attachment. 1,885,372; Nov. 1.
Oberti, James M., San Francisco, Calif. Brush head swinging device and control. 1,885,540; Nov. 1.
O'Brien, James R., Chicago, Ill., assignor, by mesne assignments, to Rubber Products Corporated, Dover, Del. Road marker. 1,885,941; Nov. 1.

O'Connor, Frank J., Dwight, Ill. Advertising sign for a vehicle top. 1,885,282; Nov. 1.
Oehrl, Ernest A., Grand Rapids, Mich. Chair. 1,885,471; Nov. 1.
Ogilvie, James. (See Rogers, D. G., Ogilvie, and Crowell.)
Ohio Brass Company, The. (See Austin, Arthur O., assignor.)
Ohio Steel Foundry Company, The. (See Stewart, Carlyle V., assignor.)
Oil Devices Corporation. (See Breese, James L., jr., assignor.)
O'Keeffe, George W., Milton, assignor to Condit Electrical Manufacturing Corporation, South Boston, Mass. Thermal relay. 1,886,354; Nov. 1.
O'Keeffe, George W., Milton, assignor to Condit Electrical Manufacturing Corporation, South Boston, Mass. Thermoresponsive device. 1,886,355; Nov. 1.
O'Keeffe, George W., Milton, assignor to Condit Electrical Manufacturing Corporation, South Boston, Mass. Thermal relay and cut-out. 1,886,356; Nov. 1.
O'Keefe, Joseph F., Dumont, N. J. Handy chart and pencil. 1,885,541; Nov. 1.
Olin, John M., and A. G. Schuricht, Alton, assignors to Western Cartridge Company, East Alton, Ill. Gun barrel and finishing the same. 1,886,218; Nov. 1.
Oliva, Florentino, assignor of one-half to Guillermo A. Alonso, Mexico, Mexico. Oil burner. 1,885,542; Nov. 1.
Oliver, Samuel J., East Orange, N. J. Upholstery and drapery fabric. Des. 88,168; Nov. 1.
Olsen, Henry. (See Lloyd, L. T., and Olsen.)
O'Meara, Thomas J., Pittsburgh, assignor to The Union Switch & Signal Company, Swissvale, Pa. Light signal. 1,885,622; Nov. 1.
O'Neil, Leo S., Detroit, Mich. Fuse plug. 1,886,299; Nov. 1.
Oppenheimer, William S., St. Petersburg, Fla. Detergent. 1,885,133; Nov. 1.
Orkin, Ernest M., assignor to William Willheim Co., Inc., New York, N. Y. Textile fabric or similar article. Des. 88,169; Nov. 1.
Orkin, Ernest M., assignor to William Willheim Co., Inc., New York, N. Y. Textile fabric or similar article. Des. 88,170; Nov. 1.
Orkin, Ernest M., assignor to William Willheim Co., Inc., New York, N. Y. Textile fabric or similar article. Des. 88,171; Nov. 1.
Oriopp, Platt M., Chicago, Ill. Mixing plastic or fluid substances. 1,885,757; Nov. 1.
Osborne, Fred H., Chicago, Ill., assignor, by mesne assignments, to Grigsby-Grunow Company. Refrigerator. 1,886,042; Nov. 1.
Oslund, John E., Hartford, Conn. Die maker's template holder. 1,886,300; Nov. 1.
Ostermann, Walter, Oschersleben, Germany, assignor, by mesne assignments, to Travis Process Corporation, Jersey City, N. J. Colloid mill. 1,885,283; Nov. 1.
Ostwald, Fred A., Los Angeles, Calif. Dispenser for liquids. Des. 88,172; Nov. 1.
Otis Elevator Company. (See Brady, Thomas, assignor.)
Ott, John E. (See MacChesney, C. M., Norton, and Ott.)
Otto, Curt, New York, N. Y. Vehicle tire pump. 1,885,284; Nov. 1.
Owens-Illinois Glass Company. (See Bragg, Thomas A., assignor.)
Owensboro Ditcher & Grader Co. (See Cundiff, Charles W., assignor.)
Paas, Clemens L., Spring Lake, Mich. Doorlock. 1,885,942; Nov. 1.
Pacific Copper and Brass Works, Incorporated. (See Travis, Bertram C., assignor.)
Palmer, Charles H., assignor to The Palmer Match Company, Akron, Ohio. Safety match container. 1,885,856; Nov. 1.
Palmer Match Company, The. (See Palmer, Charles H., assignor.)
Panzegrau, Norman O. (See Baker, D. B., and Panzegrau.)
Paone, Vincenzo, Utica, N. Y. Oil can. 1,885,472; Nov. 1.
Paramount Textile Machinery Co. (See Prosser, T. W., Wahlbeck, and Mittelstadt, assignors.)
Pardee, Frank, jr., Hazelton, Pa. Combined car dumping and coal lowering apparatus. 1,886,117; Nov. 1.
Parker, Clara B., executrix. (See Twomley, Herbert E., assignor.)
Parker, George D. (See Twomley, Herbert E., assignor.)
Parker, John W., Detroit, Mich. Bearing. 1,886,210; Nov. 1.
Parker, William, Oak Park, assignor to Grigsby-Grunow Company, Chicago, Ill. Radio apparatus. 1,885,758; Nov. 1.
Parson, Harold A., Fawn Lake, Alberta, Canada. Railway crossing signal and guard. 1,885,759; Nov. 1.
Parsons, Charles Algernon. (See Cook, S. S., Bennett, and Parsons.)
Parsons, F. L. (See Benn, Howard H., assignor.)
Parsons, Katherine, executrix. (See Cook, S. S., Bennett, and Parsons.)
Pass & Seymour, Inc. (See Russell, Mark N., assignor.)
Pat, Louis, Chicago, Ill. Exercising device. 1,885,473; Nov. 1.
Pat, Louis, Chicago, Ill. Automobile bumper. 1,885,474; Nov. 1.
Patterson, Morehead, New York, N. Y., assignor to American Machine & Foundry Company. Inclined feed for cigarette machines. 1,885,943; Nov. 1.
Paul, Samuel, Pittsburgh, Pa. Steam generator. 1,885,374; Nov. 1.
Paxson, Claude M., Tipton, Okla. Automobile speedometer. 1,885,134; Nov. 1.
Payne, Raymond J., Isanti, Minn. Speed boat racing tank. 1,886,220; Nov. 1.
Pearl, William E., Brooklyn, N. Y. Spray device. 1,885,135; Nov. 1.
Pearson, Paul E. (See Dodge, M. L., and Pearson.)
Pecsi, Andrew. (See Nachtigall, Richard J., assignor.)
Pedersen, John A., Brooklyn, N. Y., assignor to John A. Roebling's Sons Company, Trenton, N. J. Cable cutting and skinning tool. 1,885,944; Nov. 1.
Peerless Bread Machine Company, The. (See Lauterbur, Frank X. and C. J., and Mintchell, assignors.)
Peik, Louis D., Mishawaka, Ind., assignor to The American Foundry Equipment Company, New York, N. Y. Sand blast system. 1,885,760; Nov. 1.
Peirce, Charles L., jr., Pittsburgh, Pa., assignor of one-half to Hubbard and Company. Lock washer. 1,885,761; Nov. 1.
Penney, J. C., Company. (See Rader, Robert J., assignor.)
Pereau, Paris, Exeter, Calif. Disappearing grave marker. 1,885,136; Nov. 1.
Perrotti, Francesco, Milan, Italy. Electric switch. 1,886,153; Nov. 1.
Persiel, H., Hornau-in-Taunus, G. Balle and K. Sponsel, Hochst-on-Main, Germany, assignors to I. G. Farbenindustrie Aktiengeselischaft, Frankfort-on-the-Main, Germany. Artificial product from cellulose derivatives and preparing the same. 1,885,475; Nov. 1.
Persons, Lawrence M., St. Louis, Mo., assignor to Cook Electric Company, Chicago, Ill. Heat motor. 1,885,285; Nov. 1.
Peter, Erich. (See Heilthaler, T., and Peter.)
Peters, Adolph. (See Scisinger, Harry A., assignor.)
Peterson, Adolphe C., Minneapolis, Minn. Air braking means. 1,886,301; Nov. 1.
Petit, William H., and E. S. Hineline, assignors to The Folmer Graflex Corporation, Rochester, N. Y. Rotary camera back. 1,885,286; Nov. 1.
Petroleum Chemical Corporation. (See Brooks, Benjamin T., assignor.)
Pettit, Ernest N., jr., Little Rock, Ark. Shape retaining device for neckties. 1,885,476; Nov. 1.
Pfeil, John C., assignor of one-half to V. F. Scott, Johnstown, Pa. Fire preventing device for moving picture machines. 1,886,043; Nov. 1.
Pflueger, Timothy L., assignor to Standard Stations, Inc., San Francisco, Calif. Service station. Des. 88,173; Nov. 1.
Phelps, Clyde H. (See Howe, Frank W., assignor.)
Phillips, Ralph A., Torrance, Calif. Fish unscrewing tool. 1,885,623; Nov. 1.
Phoenix Metal Cap Co. (See Crabbe, Lindsay T., assignor.)
Pickard, Fred, assignor to Joseph Pickard's Sons Co., Philadelphia, Pa. Making pile wires. 1,885,137; Nov. 1.
Pickard's Sons, Joseph Co. (See Pickard, Fred, assignor.)
Piepmeyer & Co., Kommanditgesellschaft. (See Stammreich, Hanns, assignor.)
Pierce, Raymond C., assignor to General American Tank Car Corporation, Chicago, Ill. Refrigerator car ice bunker. 1,885,624; Nov. 1.
Pilblad, Sven A., Boston, Mass. Gem setting. 1,885,544; Nov. 1.
Pilson, Sam, Benton, Ill. Mechanical arm. 1,885,138; Nov. 1.
Piston Ring Company, The. (See Malpas, Ellis G., assignor.)
Pittsburgh Forgings Company. (See Mitchell, Ralph A., assignor.)
Pittsburgh Plate Glass Company, The. (See Frost, Clinton E., assignor.)
Pittsburgh Plate Glass Company. (See Hitner, Harry F., assignor.)
Pittsburgh Plate Glass Company. (See Showers, Lee, assignor.)
Pittsburgh Plate Glass Company. (See Soderberg, Jacob, assignor.)
Planche, René B., Villefranche-sur-Saone, France. Variable rheostat. 1,885,873; Nov. 1.
Plumb, Walter. (See Coyle, J., and Plumb.)
Pohlhausen, Karl, Berlin-Halensee, assignor to Siemens-Schuckertwerke Aktiengesellschaft, Berlin-Siemensstadt, Germany. Electron tube. 1,886,264; Nov. 1.
Polushkin, Eugene P., New York, N. Y. Screen. 1,885,762; Nov. 1.
Ponce, Lucien G., Parnassus, assignor to Allegheny Steel Company, Brackenridge, Pa. Pipe thread protector. 1,885,375; Nov. 1.
Pond, Leander N., assignor to Blue Ridge Glass Corporation, Kingsport, Tenn. Apparatus for rolling glass sheets. 1,886,302; Nov. 1.
Popper, Julius S., Elizabeth, N. J. Leaf hinge clip. 1,886,303; Nov. 1.
Porter, Clarence H., Washington, D. C. Refrigerating apparatus. 1,885,139; Nov. 1.
Porter, John M., and G. W. Handy, Elizabeth, assignors to Structural Gypsum Corporation, Linden, N. J. Cleaning mold parts. 1,885,287; Nov. 1.

Potter Company, The. (See Potter, Earl F., assignor.)
Potter, Earl F., Waukegan, assignor to The Potter Company, North Chicago, Ill. Terminal. 1,885,477; Nov. 1.
Pottsgrove, Philip N., Altoona, Pa. Agitator. 1,886,118; Nov. 1.
Powell, Simeon, et al. (See Miner, Charles B., assignor.)
Power, Richard F. (See Thomas, A., and Power.)
Powers, Milton A., assignor to The Timken Silent Automatic Company, Detroit, Mich. Combined oil and gas burner. 1,885,478; Nov. 1.
Pracny, John E., assignor to The E. J. Manville Machine Company, Waterbury, Conn. Machine for making cap screw blanks. 1,885,288; Nov. 1.
Precision Castings Company. (See During, W. J., and Lester, assignors.)
Price, Samuel J. T., Macon, Ga. Envelope filling mechanism. 1,886,119; Nov. 1.
Printing Machinery Company, The. (See Thiel, Emil E., assignor.)
Prosperity Company Inc., The. (See Davis, Ernest, assignor.)
Prosser, Thomas W., J. H. Wahlbeck, and R. L. Mittelstadt, Kankakee, assignors to Paramount Textile Machinery Co., Chicago, Ill. Hosiery drying form. 1,885,289; Nov. 1.
Purdy, Emmett G., Detroit, Mich., assignor to Detroit Body Die Company. Motor vehicle construction. 1,886,221; Nov. 1.
Putnam, Mark E., assignor to The Dow Chemical Company, Midland, Mich. Making aromatic amines. 1,885,625; Nov. 1.
Quaedvlieg, Victor, Keremeos, British Columbia, Canada. Churn. 1,885,626; Nov. 1.
Quality Mattress Company. (See Williams, William F., assignor.)
Quante, Wilhelm. (See Eufinger, Peter.)
Quinn, Frank, and L. Wild, Bolton, England. Machine for the scutching, opening, and like treatment of cotton and like fibrous materials. 1,886,044; Nov. 1.
Rader, Robert J., New Rochelle, N. Y., assignor to J. C. Penney Company. Toy vehicle. 1,885,627; Nov. 1.
Radio Corporation of America (See Karolus, August, assignor.)
Raffold Process Corporation. (See Rafton, Harold R., assignor.)
Rafton, Harold R., Andover, Mass., assignor to Raffold Process Corporation. Paper manufacture. 1,886,120; Nov. 1.
Rand, Delbert L. (See Hutton, Albert D., assignor.)
Rangel Felipe R., Habana, Cuba. Vehicle wheel. 1,885,545; Nov. 1.
Ransy, Ulric, Stavelot, Belgium. Veterinary appliance for facilitating the parturition of cows in calf. 1,885,945; Nov. 1.
Rathbone, Wofford R., Hammond, and V. G. McPherson, New Orleans, La. Gauge. 1,886,304; Nov. 1.
Ray, Arthur B., Bayside, N. Y., assignor to Carbide & Carbon Chemical Corp. Making absorptive carbon and product thereof. 1,885,141; Nov. 1.
Ray, Charles T., assignor to B. F. Avery & Sons, Louisville, Ky. Traction wheel. 1,885,376; Nov. 1.
Ray, Charles T., assignor to B. F. Avery & Sons, Louisville, Ky. Tillage implement. 1,885,763; Nov. 1.
Raymond Bag Company, The. (See Sharkey, William E., assignor.)
Raymond, Fred I., River Forest, Ill. Heating by steam. 1,886,222; Nov. 1.
Raymond, Fred I., River Forest, Ill. Steam heating system. 1,886,223; Nov. 1.
Raytheon, Inc. (See Beers, Roland F., assignor.)
Raytheon Inc. (See Green, Cecil H., assignor.)
Records, Chester E., Columbus, Ohio. Well screen. 1,886,121; Nov. 1.
Redinger, Joseph M., Johnston, R. I. Cone chuck. 1,886,224; Nov. 1.
Redler, Arnold, Sharpness Docks, England, assignor to Redler Conveyor Company, Quincy, Mass. Self-cleaning chain. 1,885,946; Nov. 1.
Redler Conveyor Company. (See Redler, Arnold, assignor.)
Reece, Wade W., and L. W. Haaa, Chicago, Ill., assignors to The W. E. Long Co. Cooling bakery products. 1,885,142; Nov. 1.
Reese, Franklin T., Pittsburgh, Pa., assignor, by mesne assignments, to Continental Roll & Steel Foundry Company, Wilmington, Del. Side roller bearing. 1,886,254; Nov. 1.
Rehse, Matthias, Rotenhahn, near Voorde, Holstein, Germany. Submerged alternating current drive. 1,885,140; Nov. 1.
Reich, Gustave T., Anaheim, Calif. Utilization of waste organic mixtures. 1,886,045; Nov. 1.
Reiland, Ernest S., and P. M. Reiland, assignors to Universal Piston Company, Saint Paul, Minn. Piston. 1,885,290; Nov. 1.
Reiland, Peter M. (See Reiland, Ernest S. and P. M.)
Rein, John. (See Henning, L. G., and Rein.)
Reinecker, J. E., A. G. (See Reinecker, Richard, assignor.)
Reinecker, Richard, assignor to J. E. Reinecker, A. G., Chemnitz, Germany. Arbor support for gear cutting machines. 1,885,628; Nov. 1.
Reliance Gauge Column Company, The. (See Brown, John R., assignor.)
Reo Motor Car Company. (See Thomas, H. T., Bethune, and Hays, assignors.)
Republic Steel Corporation. (See Schmitz, Fred A., assignor.)
Reutter, Jean Léon, Paris, France. Device for automatically re-winding clocks or other mechanisms by the variations of the atmospheric temperature. 1,885,479; Nov. 1.
Reymond, Paul. (See Rosat, C., Moser, and Reymond.)
Reynolds, Charles H., Evanston, assignor to The Reynolds-Schier Co., Inc., Chicago, Ill. Hectograph machine. Des. 88,174; Nov. 1.
Reynolds, Damian L., Hillsborough, assignor of one-half to L. L. Yates, San Francisco, Calif. Refrigerator car. 1,886,225; Nov. 1.
Reynolds, Frank C. (See Murray, T. E., jr., and Reynolds.)
Reynolds, Fred L. (See Gann, J. A., and Reynolds.)
Reynolds-Schier Co., The. (See Reynolds, Charles H., assignor.)
Rheinische Kampfer-Fabrik Gesellschaft mit beschrankter Haftung. (See Skraup, S., Schöllkopf, and Serini, assignors.)
Rice, Barton & Fales, Incorporated. (See Stafford, S. B., and Smith, assignors.)
Rice, Chester W., Schenectady, N. Y., assignor to General Electric Company. Liquid film seal. 1,885,546; Nov. 1.
Rice, John S. (See Trew, James W., assignor.)
Rice, John S., assignor to Rice, Trew & Rice Co., Inc., Biglerville, Pa. Basket liner. 1,885,480; Nov. 1.
Rice, Trew & Rice Co., Inc. (See Rice, John S., assignor.)
Rich, Claude R., assignor to Teesdale Manufacturing Co., Grand Rapids, Mich. Gauge. 1,885,629; Nov. 1.
Richards, Daniel W., Roanoke, Va. Railway signaling apparatus. 1,885,947; Nov. 1.
Richards, Daniel W. Glenvar, Va. Railway signaling apparatus. 1,885,948; Nov. 1.
Richards, Edward C., Fayette, Iowa. Hollow grinder for hamburger knives and the like. 1,886,305; Nov. 1.
Richardson, Roger W., assignor to E. I. du Pont de Nemours & Company, Wilmington, Del. Pulp manufacture. 1,885,764; Nov. 1.
Richter, Hans R. (See Geffcken, H H., and Richter.)
Rickenbacker, Adolph, Los Angeles, Calif. Container-handling device. 1,885,291; Nov. 1.
Ricks, George A., Lafayette, Ind. Pick-up and release device for aircraft. 1,885,765; Nov. 1.
Rico, Gerardo G., Habana, Cuba, assignor to A. Beusabat, New York, N. Y. Apparatus for sealing straps. 1,886,046; Nov. 1.
Rider, Fred A., Watertown Township, Clinton County, Mich. Gas tank lock. 1,885,547; Nov. 1.
Ridpath, Jay R., and J. L. Hagie, Minneapolis, Minn. Electrical device for operating rear curtains of automobiles. 1,885,766; Nov. 1.
Riebeck'sche Montanwerke Aktiengesellschaft. (See Hellthaler, T., and Peter, assignors.)
Riehle Bros. Testing Machine Company. (See Moran, William C., assignor.)
Rienerth, Andrew, Cleveland, Ohio. Differential for automobiles. 1,886,226; Nov. 1.
Riesner, Milton, Pelham Manor, N. Y. Adjustable linen band. 1,886,227; Nov. 1.
Ritscher, Arthur, assignor to United Cigarette Machine Company, A.-G., Dresden-A., Germany. Cigarette packing machine. 1,886,047; Nov. 1.
Ritter, Richard M., Kew Gardens, N. Y. Mothproofing composition. 1,885,292; Nov. 1.
Roberts, Beecham, Kobe, Japan. Phonograph. 1,886,228; Nov. 1.
Roberts, William, Oakland, Calif. Multiple speed transmission. 1,885,857; Nov. 1.
Robertson, James R., London, England. Simultaneous recording or reproduction of sounds and moving pictures. 1,885,293; Nov. 1.
Robertson, Robert R., Chicago, Ill. Corrugating sheet metal. 1,885,294; Nov. 1.
Robinson, Charles W., Hamilton, Ontario, Canada, assignor, by mesne assignments, to International Harvester Company, Chicago, Ill. Field cultivator. 1,886,229; Nov. 1.
Robinson, William J., Muskegon, Mich. Weeding implement. 1,885,377; Nov. 1.
Robinson, William T., Logan, W. Va. Mining machine. 1,885,295; Nov. 1.
Rockwell, Edward A., Chicago, Ill. Power mechanism. 1,885,767; Nov. 1.
Rodd, Ernest H. (See Coulthard, A., and Rodd.)
Roe, Ralph C., Englewood, assignor of one-half to Stephen W. Borden, Summit, N. J. Weighing machine. 1,885,378; Nov. 1.
Roebling's, John A., Sons Company. (See Green, Richard D., assignor.)
Roebling's, John A., Sons Company. (See Pedersen, John A., assignor.)
Roessler & Hasslacher Chemical Company, The. (See Macallum, Alexander D., assignor.)
Rogers, Donald G., Hamburg, J. Ogilvie, and J. H. Crowell, Buffalo, assignors to National Aniline & Chemical Company, Inc., New York, N. Y. Production of benzoyl-o-benzoic acid derivatives and anthraquinone bodies therefrom. 1,886,237; Nov. 1.
Roller, Frances W., St. Paul, Minn. Combination hose supporter and waist-encircling garment. 1,885,379; Nov. 1.

Romieux, Charles J. (See Novotny, E. E., and Romieux.)
Ronan, Kenneth M., Wayne, Mich., assignor to Manning & Co., Chicago, Ill. Chair. 1,885,630; Nov. 1.
Roper, Geo. D., Corporation. (See Hobson, Stanley H., assignor.)
Rosat, Charles, deceased, Boudry, J. O. Moser, Bern, and P. Reymond, Colombier, Switzerland; Rose-Lucy Rosat, née Böle, administratrix. Electric adjusting device for the hands of clock mechanisms. 1,885,858; Nov. 1.
Rosat, Rose-Lucy, née Böle, administratrix. (See Rosat, Charles.
Rose, Alfred G., assignor to Rose Brothers (Gainsborough) Limited, Gainsborough, England. Machine for packing articles into boxes. 1,886,122; Nov. 1.
Rose Brothers (Gainsborough) Limited. (See Rose, Alfred G., assignor.)
Rosenberg, Heyman, New York, N. Y. Screw bolt or similar article. Des. 88,175; Nov. 1.
Rosenberg, Heyman, New York, N. Y. Screw bolt or similar article. Des. 88,176; Nov. 1.
Rosenberg, Heyman, New York, N. Y. Damper apparatus. 1,885,548; Nov. 1.
Rosenstein, Ludwig, and W. J. Hund, San Francisco, Calif. Refining vegetable oils. 1,885,859; Nov. 1.
Rothblum, Benjamin, New York, N. Y. Garment. 1,886,048; Nov. 1.
Rothblum, Benjamin, New York, N. Y. Garment. 1,886,049; Nov. 1.
Rouleau, Flora L., Oakland, Calif. Clasp. 1,885,296; Nov. 1.
Roussel, Jules Paul Antoine, Paris, France. Filing device for phonograph disks. 1,885,481; Nov. 1.
Rowe, Alvin V., Galesburg, Ill. Ice scoring machine. 1,885,143; Nov. 1.
Rowe, Charles R., Maplewood, N. J., assignor to Wired Radio, Inc., New York, N. Y. Radio receiving system. 1,886,230; Nov. 1.
Rowe, Guy Landis, Dallas, Tex. Lamp for advertising purposes. 1,885,860; Nov. 1.
Rubber Products Corporation. (See O'Brien, James R., assignor.)
Rubber Service Laboratories Company. (See Byers, Horace G., assignor.)
Rubber Service Laboratories Company, The. (See Scott, Winfield, assignor.)
Rubber Service Laboratories Company, The. (See ter Horst, William P., assignor.)
Rubin, Adolf, assignor to Firm Adolph Bleichert & Co. A.-G., Leipsig, Germany. Working of passenger ropeways with continuous traffic. 1,886,050; Nov. 1.
Rumsey, John J., Trenton, N. J., assignor to The Vulcanized Rubber Company, New York, N. Y. Comb. 1,886,357; Nov. 1.
Rueby, John M., assignor to The United Gas Improvement Company, Philadelphia, Pa. Diffusion plates in gas generators. 1,885,549; Nov. 1.
Ruskin, Simon L., New York, N. Y. Organic compounds of manganese and making same. 1,885,949; Nov. 1.
Russell, Burdsall & Ward Bolt & Nut Company. (See Avis, Samuel W., assignor.)
Russell, Mark N., assignor to Pass & Seymour, Inc., Syracuse, N. Y. Electric fixture. 1,886,306; Nov. 1.
Rust, William F., Pittsburgh, Pa. Automatic fastening device. 1,886,123; Nov. 1.
Ruud Manufacturing Company. (See Horton, Ernest J., assignor.)
Ryding, Herbert C., Birmingham, Ala. Method of making rails. 1,885,861; Nov. 1.
Rygmyr, Derven T., Forest City, Iowa. Safety razor. 1,885,768; Nov. 1.
S. and D. Engineering Company. (See Sawtelle, Charles A., assignor.)
Saar, Adolf H., jr., Omaha, Nebr. Time controlled switch. 1,885,482; Nov. 1.
Safety Car Heating & Lighting Company. (See Hulse, G. E., and Strobell, assignors.)
Sager, Solomon M., Evanston, Ill. Fountain pen section. 1,886,307; Nov. 1.
Sager, Solomon M., Glencoe, Ill. Feed bar and pen point. 1,885,862; Nov. 1.
Sague, George, Oakes, N. Y., assignor to George Sague Mfg. Corp. Coating device. 1,886,231; Nov. 1.
Sague, George, Mfg. Corp. (See Sague, George, assignor.)
Sahlberg, Rolf K. O., assignor to The Aerocrete Corporation of America, New York, N. Y. Cellular concrete. 1,886,232; Nov. 1.
Sahm, Louis C. (See Hirth, Louis S., assignor.)
Saint John, Erastus R., New York, N. Y. Roof support for buildings. 1,885,781; Nov. 1.
Saliger, Alois B., New York, N. Y. Automatic time-controlled suggestion machine. 1,886,358; Nov. 1.
Salisbury, Hervey M. (See Miller, A. E., and Salisbury.)
Salisbury, Moses B., Chicago, Ill. Making rubber sleeves. 1,885,951; Nov. 1.
Samantas, Nicholas, San Francisco, Calif. Permanent hair waving device. 1,886,051; Nov. 1.
Samuelson, Frank E., Jamestown, N. Y. Tray. 1,885,483; Nov. 1.
Sandeman, Edward K., Aldwych, London, England, assignor to International Standard Electric Corporation, New York, N. Y. Transmission system for telephony. 1,885,144; Nov. 1.
Sanders, Arthur H., Fresno, Calif. Treatment of dried fruits and raisins. 1,886,233; Nov. 1.
Sandig, Maxmilian, and D. Buck, Vienna, Austria. Toothbrush. 1,885,950; Nov. 1.
Santiago, James J., assignor to J. Grant, Los Angeles, Calif. Swinging cutter expanding reamer. 1,885,550; Nov. 1.
Santori, Amerigo, South Range, Mich. Shoe. 1,885,297; Nov. 1.
Sapier, Abraham, assignor to Universal Stamping & Mfg. Co., Chicago, Ill. Motion picture projecting machine. 1,885,631; Nov. 1.
Sargent & Greenleaf, Inc. (See Diesel, William F., assignor.)
Sargent's Sons Corporation. (See Furbush, Frank L., assignor.)
Sasser, Edward C., Chevy Chase, Md. Smoker's pipe. 1,886,124; Nov. 1.
Satterlee, Henry S., New York, N. Y., assignor to The Identograph Company, Inc. Identifying apparatus. 1,885,863; Nov. 1.
Saulle, Antonio, et al. (See Foti, Charles, assignor.)
Sawtelle, Charles A., assignor, by direct and mesne assignments, to S. and D. Engineering Company, Detroit, Mich. Variable leverage brake mechanism. 1,885,551; Nov. 1.
Sawtelle, Charles A., assignor, by direct and mesne assignments, to S and D. Engineering Company, Detroit, Mich. Hydraulic brake control mechanism. 1,885,552; Nov. 1.
Scannell, John P., Oak Park, assignor to Edward E. Emmerich, Chicago, Ill. Autographing photographic film. 1,886,052; Nov. 1.
Scannell, John P., Oak Park, assignor to E. E. Emmerich, Chicago, Ill. Autographic film cartridge. 1,886,053; Nov. 1.
Scene-In-Action Corporation. (See Zeledon, Alfred H., assignor.)
Schaf, Joseph C., jr. (See Haltenberger, Jules, assignor.)
Scheibell, Gordon B., Newark, N. J. Photocell compensating system. 1,886,125; Nov. 1.
Schell, Arthur A., Marysville, Calif. Internal combustion engine. 1,885,298; Nov. 1.
Schelleng, John C., Millburn, N. J., assignor to Western Electric Company, New York, N. Y. Oscillation generator. 1,885,632; Nov. 1.
Schellenger, Newton C., assignor to Chicago Telephone Supply Company, Elkhart, Ind. Hum balancer. 1,885,633; Nov. 1.
Schieferstein, Georg H., Berlin-Charlottenburg, Germany. Transforming oscillatory movement into rotary movement. 1,885,553; Nov. 1.
Schiller, Albert T., Walla Walla, Wash. Tidal motor. 1,885,866; Nov. 1.
Schlumbohm, Peter, Berlin, Germany, assignor to The American Thermos Bottle Company, Norwich, Conn. Using and storing dry-ice. 1,885,769; Nov. 1.
Schmiedel, Alfred J., assignor to the Firm "Universelle" Cigarettenmaschinen-Fabrik J. C. Muller & Co., Dresden, Germany. Device for producing box parts with inserted edge lining. 1,886,054; Nov. 1.
Schmiedel, Johannes, assignor to the Firm Universelle Cigarettenmaschinen-Fabrik J. C. Muller & Co., Dresden, Germany. Forming boxes consisting of two parts one of which has a curved wall. 1,886,055; Nov. 1.
Schmitt, Frank R., Queens Village, N. Y., assignor to American Machine & Foundry Company. Automatic package conveyor control for wrapping machines. 1,885,952; Nov. 1.
Schmitt, Heinrich, Witten-on-the-Ruhr, Germany. Stop valve. 1,885,864; Nov. 1.
Schmitz, Fred A., Canton, assignor to Republic Steel Corporation, Youngstown, Ohio. Edge construction for desk tops and the like. 1,885,554; Nov. 1.
Schmutz, Julius, Louisville, Ky. Sheet metal printing machine. 1,885,634; Nov. 1.
Schneider, George J., Detroit, Mich. Electrical switch. 1,885,865; Nov. 1.
Schneider, Hermann. (See Straub, F., and Schneider.)
Schoenborn, Clarence E., Conklin, Mich. Two wheel drive differential. 1,885,871; Nov. 1.
Schöllkopf, Karl. (See Skraup, S., Schöllkopf, and Serini.)
Schönfeldt, Nikolaus. (See Illig, K., and Schönfeldt.)
Schooneman, Johannus C. (See Stevens, C. E., and Schooneman.)
Schotel, Gerritt, The Hague, Netherlands. Thermionic transmitter and receiver. 1,885,770; Nov. 1.
Schrader's A. Son, Incorporated. (See Williams, Selden T., assignor.)
Schramm, Fred W., East Orange, N. J., assignor to American Telephone and Telephone Company. Monitoring system. 1,885,299; Nov. 1.
Schroeder, Simon E., Miner, Ill. Washing machine. 1,885,953; Nov. 1.
Schultes, Paul, Leichlingen, Germany. Spring seat with laths covering. 1,886,308; Nov. 1.
Schuricht, Alfons G. (See Olin, J. M., and Schuricht.)
Schutte and Koerting Company. (See Gerber, Walter H. J., assignor.)
Schwartz, Carl, New York, N. Y. Garment. 1,886,056; Nov. 1.
Schwartz, Carl, New York, N. Y. Collar attaching means. 1,886,057; Nov. 1.
Schwartz, Charles W., New York, N. Y. Apparatus for titling movie films. 1,885,555; Nov. 1.
Schweitzer, Paul, State College, Pa. Table. 1,885,635; Nov. 1.

Schweyer, Daniel H., Easton, Pa. Induction cab signal system. 1,885,636; Nov. 1.
Seisinger, Harry A., assignor of one-half to A. Peters, Toledo, Ohio. Wrench. 1,885,954; Nov. 1.
Scott, Carl W. (See Cherdron, Otto P.)
Scott, Donald O., assignor to Hydraulic Brake Company, Detroit, Mich. Hydraulic braking mechanism. 1,886,809; Nov. 1.
Scott, Murray D., London, England. Free wheel clutch mechanism for use in hoisting and load-carrying machines. 1,885,771; Nov. 1.
Scott, Vernon F. (See Pfeil, John C., assignor.)
Scott, Winfield, Nitro, W. Va., assignor to The Rubber Service Laboratories Company, Akron, Ohio. Vulcanization of rubber and products obtained thereby. 1,885,556; Nov. 1.
Scovill Manufacturing Company. (See Dews, Joseph W., assignor.)
Scully, John T., New York, N. Y. Razor blade and holder therefor. 1,886,238; Nov. 1.
Seeman, Robert. (See Wilson, A. R., Seeman, and Hallen.)
Segal Founders Corporation. (See Segal, Hyman R., assignor.)
Segal, Hyman R., New York, N. Y., assignor to Segal Founders Corporation. Razor. 1,885,300; Nov. 1.
Seguine, William, jr. (See Mowlds, K. S., and Seguine.)
Selnshelmer Paper Company, The. (See Johnson, Samuel J., assignor.)
Selden Company, The. (See Jaeger, Alphons O., assignor.)
Selden Research and Engineering Corporation, The. (See Jaeger, Alphons O., assignor.)
Sellstrom Manufacturing Company. (See Flood, Oscar S., assignor.)
Semon, Waldo L., Cuyahoga Falls, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y. Rubber composition and preparing the same. 1,886,310; Nov. 1.
Serini, Arthur. (See Skraup, S., Schöllkopf, and Serini.)
Serra, Luigi M., Rome, Italy. Rotary engine. 1,885,557; Nov. 1.
Sesko, Mike, assignor of one-half to R. Yannucci, Warren, Ohio. Apparatus for cleaning iron bars. 1,885,772; Nov. 1.
Sessions, Ivy, Oakland, Calif. Garment hanger. 1,886,126; Nov. 1.
Shafer, James A., East Cleveland, assignor to National Malleable and Steel Castings Company, Cleveland, Ohio. Box car door. 1,885,145; Nov. 1.
Shafer, James A., East Cleveland, assignor to National Malleable and Steel Castings Company, Cleveland, Ohio. Box car door. 1,885,146; Nov. 1.
Sharkey, William E., assignor to The Raymond Bag Company, Middletown, Ohio. Tape cutter. 1,885,867; Nov. 1.
Shoemaker, Alvin H., Seattle, Wash. Pneumatic tire and wheel. 1,885,484; Nov. 1.
Shoemaker, Edward J., Canton, Ohio. Faucet. 1,886,058; Nov. 1.
Shoemaker, Harry C., Freeport, Ill. Line boring machine. 1,885,773; Nov. 1.
Showers, Lee, Charleroi, Pa., assignor to Pittsburgh Plate Glass Company. Clay pouring apparatus. 1,885,774; Nov. 1.
Sialco, Incorporated. (See Kraus, Charles E., assignor.)
Siemens Brothers & Company Limited. (See Tees, James E., assignor.)
Siemens-Elektro-Osmose G. m. b. H. (See Illig, K., and Schönfeldt, assignors.)
Siemens & Halske Aktiengesellschaft. (See Emarch, Wilhelm, assignor.)
Siemens-Schuckertwerke Aktiengesellschaft. (See Pohlhausen, Karl, assignor.)
Siemens-Schuckertwerke Gesellschaft mit beschrankter Haftung. (See Abendroth, W., and Gleichmann, assignors.)
Siers, John A. H., Jersey City, N. J. Terminal fastening device. 1,885,868; Nov. 1.
Silica Gel Corporation, The. (See Miller, Ernest B., assignor.)
Silica Gel Corporation, The. (See Miller, E. B., and Connolly, assignors.)
Silva, Albert D., assignor to Atwater Kent Manufacturing Company, Philadelphia, Pa. Amplifying system. 1,885,301; Nov. 1.
Silver, Walter H., assignor to Deere & Company, Moline, Ill. Agricultural implement. 1,885,955; Nov. 1.
Silvis, Robert E., Mill City, Oreg. Tweezers. 1,886,127; Nov. 1.
Simon, Abram. (See Miller, J., and Simon.)
Simplex Engineering Company. (See Sylvester, Julius, assignor.)
Simplex Gas Products Corporation. (See Donohue, Anthony J., assignor.)
Simpson, Kenneth M., New York, N. Y. Producing ferrochrome and other similar alloys. 1,885,380; Nov. 1.
Simpson, Kenneth M., New York, N. Y. Process for the production of iron. 1,885,381; Nov. 1.
Simson, Isidor, Milwaukee, Wis. Necktie. 1,885,956; Nov. 1.
Singleton, Roscoe Elwood, Chicago, Ill. Automatic key case. 1,885,957; Nov. 1.
Singley, Benneville L. (See Kurtz, Henry F., assignor.)
Sipp-Eastwood Corporation. (See Klein, Frederick, assignor.)
Skinner Engine Company. (See Mueller, Herman G., assignor.)
Skraup, Siegfried, Wurzburg, K. Schöllkopf, Dusseldorf-Oberkassel, and A. Serini, Dusseldorf-Heerdt, assignors to Rheinische Kampfer-Fabrik Gesellschaft mit beschränkter Haftung, Dusseldorf-Oberkassel, Germany. Preparing thymol. 1,886,311; Nov. 1.
Sky Specialties Corporation. (See Stover, Frank B., assignor.)
Slick, Edwin E., Pittsburgh, Pa. Glass working apparatus. 1,885,802; Nov. 1.
Slick, Edwin E., Pittsburgh, Pa. Method and apparatus for molding plastics. 1,885,303; Nov. 1.
Small, Chesley T., St. Louis, Mo. Key construction. 1,886,128; Nov. 1.
Smartt, Brinay. (See Bryan, J. M., and Smartt.)
Smellie, Donald G., Canton, Ohio, assignor to The Hoover Company. Suction cleaner agitator. 1,885,382; Nov. 1.
Smellie, Donald G., Canton, Ohio, assignor to The Hoover Company. Suction cleaner agitator. 1,886,129; Nov. 1.
Smidlein, Anthony E., Yonkers, N. Y., assignor to Bigelow-Sanford Carpet Co., Inc. Carpet. Des. 88,177; Nov. 1.
Smiley, Pearl Y., Akron, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y. Making footwear. 1,885,383; Nov. 1.
Smith, Arthur C., San Antonio, Tex. Toy. 1,886,130; Nov. 1.
Smith, Charles P., and G. Newton, London, England, assignors to International Standard Electric Corporation, New York, N. Y. Automatic switching mechanism. 1,886,059; Nov. 1.
Smith, Earle E., West Springfield, Mass. Combined street and traffic sign. 1,885,776; Nov. 1.
Smith, Elvira S., Newark, N. J. Bed covering. 1,885,558; Nov. 1.
Smith, F. L., & Co. (See Lindhard, Povl T., assignor.)
Smith, Herman A. (See Stafford, S. B., and Smith.)
Smith, Hubert P., Emsworth, Pa. Storage tank. 1,886,131; Nov. 1.
Smith, John W., Syracuse, N. Y. Fuel mixing device for internal combustion engines. 1,885,559; Nov. 1.
Smith, Joseph L., Buffalo, N. Y., assignor, by mesne assignments, to Farles Manufacturing Company, Decatur, Ill. Lighter. 1,885,869; Nov. 1.
Smith, Percy C., assignor to The Arrow-Hart & Hegeman Electric Company, Hartford, Conn. Plural switch operating means. 1,885,147; Nov. 1.
Smith, Philip A., Hamden, assignor, by mesne assignments, to Winchester Repeating Arms Company, New Haven, Conn. Apparatus for electroplating. 1,885,148; Nov. 1.
Smyth, William H., Berkeley, Calif. Convertible noiseless tracklayer tractor. 1,885,485; Nov. 1.
Smyth, William H., Berkeley, Calif. Convertible tractor. 1,885,486; Nov. 1.
Snedden, Robert J., Kansas City, Mo. Adjustable printer's chase. 1,885,958; Nov. 1.
Snow, Eugene A., Oceanside, Calif. Card table. 1,885,384; Nov. 1.
Snow, Norman L., New Canaan, Conn., assignor to Diamond Power Specialty Corporation, Detroit, Mich. Boiler cleaner. 1,886,060; Nov. 1.
Snyder, Chester, Yonkers, N. Y. Flame-proofing and product formed thereby. 1,885,870; Nov. 1.
Societa Anonima Automobili Ansaldo. (See Cappa, Giulio Cesare, assignor.)
Societe Anonyme: Avions Kelener-Bechereau. (See Bechereau, Louis, assignor.)
Societe de Condensation et d'Applications Mecaniques. (See Touly, Marcel L., assignor.)
Societe Nouvelle de Constructions Telephoniques. (See Tchoubritch, Michel, assignor.)
Society of Chemical Industry in Basle. (See Straub, F., and Schneider, assignors.)
Soderberg, Jacob, Pittsburgh, Pa., assignor to Pittsburgh Plate Glass Company. Process and apparatus for supplying sand to grading apparatus. 1,885,775; Nov. 1.
Sommer, John C., St. Louis, Mo. Combination drawing instrument. 1,885,149; Nov. 1.
Sonoco Products Company. (See Dunlap, Charles K., assignor.)
Soons, James E. (See Hoffmann, E. V., and Soons.)
Sparta Foundry Company. (See Deutsch, Fritz, assignor.)
Spector, Jacob, Keystone, W. Va. Sun and rain protector for rumble seats. 1,885,150; Nov. 1.
Speicher, Franklin S., Pittsburgh, Pa., assignor to M. E. Cunningham Company. Die. 1,885,385; Nov. 1.
Speidel, Edwin F. M. (See Kohm, Christian, assignor.)
Speidel, Robert. Pforzheim, Germany. Apparatus for peeling potatoes. 1,886,061; Nov. 1.
Spencer, Wesley D., et al. (See Gonsett, Robert R., assignor.)
Sperry, Samuel E., Hollis, assignor to Intertype Corporation, Brooklyn, N. Y. Mold for typographical machines. 1,885,777; Nov. 1.
Sponsel, Kurt. (See Persiel, H., Balle, and Sponsel.)
Sprague, Frank D., assignor to Sprague Specialties Company, Quincy, Mass. Winding machine. 1,886,063; Nov. 1.
Sprague, Frank J., New York, N. Y. Train control. 1,886,062; Nov. 1.

Sprague Specialties Company. (See Sprague, Frank D., assignor.)
Sprenger, Arthur, Berlin-Karlshorst, Germany. Producing refractory bodies. 1,886,268; Nov. 1.
Spurgeon, Frank R., and S. Lynch, Sabina, Ohio. Clamp. 1,886,132; Nov. 1.
Squires, John, Detroit, Mich. Propeller. 1,885,487; Nov. 1.
Stafford, Stephen B., Oxford, and H. A. Smith, assignors to Rice, Barton & Fales, Incorporated, Worcester, Mass. Doctor vibrator. 1,885,872; Nov. 1.
Stammreich, Hanns, Charlottenburg, near Berlin, assignor to Piepmeyer & Co., Kommanditgesellschaft, Kassel-Wilhelmshohe, Germany. Metal arc lamp. 1,885,637; Nov. 1.
Standard Boiler & Steel Works. (See Ulmann, Edgar A., assignor.)
Standard Electric Time Company, The. (See Kellien, Saul, assignor.)
Standard Lift Company. (See Stukenborg, Louis C., assignor.)
Standard Oil Company. (See Lowery, Hugh, assignor.)
Standard Stations, Inc. (See Pflueger, Timothy L., assignor.)
Standard Stoker Company, The. (See Hunt, Andrew M., assignor.)
Standard Stoker Company, The. (See Turner, Edwin A., assignor.)
Stanger, Eddy A. K., Columbus, Ohio. Sanitary cigarette rolling device. 1,885,304; Nov. 1.
Stanton, Frederick L., assignor to National Paper Products Company, Carthage, N. Y. Paper folding machine. 1,886,312; Nov. 1.
Starr, Jacob, Bronx, assignor of one-half to J. Margolin, New York, N. Y. Attachment for raising and lowering awnings and the like. 1,885,778; Nov. 1.
Stäubli, Gebr. & Co. (See Stäubli, Hugo, assignor.)
Stäubli, Huga, Zurich, assignor to Gebr. Stäubli & Co., Horgen, Switzerland. Shedding mechanism for looms. 1,886,133; Nov. 1.
Stauffer Chemical Company. (See Moscrop, John R., assignor.)
Stebli, Henry J., Cedar Grove, N. J. Pallet for sintering machines. 1,885,152; Nov. 1.
Stein, George E., Marietta, Ohio. Potato ricer. 1,885,873; Nov. 1.
Steinmetz, Samuel Kispest, Hungary. Doormat. 1,885,638; Nov. 1.
Steinmuller, L. & C. (See Steinmuller, Lebrecht, assignor.)
Steinmuller, Lebrecht, assignor to the Firm L. & C. Steinmuller, Gummersbach, Rheinland, Germany. Furnace. 1,886,004; Nov. 1.
Stephani, Sophie, Zurich, Switzerland. Massage apparatus. 1,885,562; Nov. 1.
Sterba, Ernest J., Asbury Park, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Directive antenna system. 1,885,151; Nov. 1.
Sternberg, Harold H., Los Angeles, Calif. Fire preventive device for motion picture apparatus. 1,885,488; Nov. 1.
Stevens, Charles E., and J. C. Schooneman, Antwerp, Belgium, assignors to International Standard Electric Corporation, New York, N. Y. Automatic telephone system. 1,886,065; Nov. 1.
Stevens, Jerry W., and W. H. Kenety, Cloquet, Minn., assignors to Chemipulp Process, Inc., Watertown, N. Y. Accumulator system. 1,885,561; Nov. 1.
Stevens, Robert Herbert, Edmonton, Alberta, Canada. Apparatus for the filtration of radio wave signals. 1,885,959; Nov. 1.
Stewart, Alexander W., Glasgow, Scotland. Ventilating apparatus. 1,886,313; Nov. 1.
Stewart, Allan, Dearborn, Mich. Crossing signal. 1,885,153; Nov. 1.
Stewart, Carlyle V., Springfield, assignor to The Ohio Steel Foundry Company, Lima, Ohio. Tube connection for oil refinery fittings. 1,885,779; Nov. 1.
Stille, Ernst T., Chicago, Ill. Wood filler composition. 1,885,780; Nov. 1.
Stokes, John S. (See Novotny, E. E., and Romieux, assignors.)
Stover, Frank B., assignor to Sky Specialties Corporation, Detroit, Mich. Pressure regulator. 1,885,639; Nov. 1.
Strandgren, Carl B., Versailles, France. Turbine wheel propeller and motor. 1,885,640; Nov. 1.
Straub, Fritz, Basle, and H. Schneider, Riehen, near Basle, assignors to Society of Chemical Industry in Basle, Basel, Switzerland. Dyestuffs containing metals and making same. 1,885,641; Nov. 1.
Strezynski, George J., and N. A. Fraser, Poughkeepsie, assignors to The De Laval Separator Company, New York, N. Y. Producing concentrated and purified rubber latex. 1,885,154; Nov. 1.
Strobell, John D. (See Hulse, G. E., and Strobell.)
Ströber, Karl, Rothenkirchen, Germany. Hair roll. 1,885,386; Nov. 1.
Strong, Herbert T., Chatham, N. J. Theater floodlight. 1,885,642; Nov. 1.
Strongson, Herman L., New York, N. Y. Shielded tube and socket. 1,885,782; Nov. 1.
Structural Gypsum Corporation. (See Porter, J. M., and Handy, assignors.)
Stuart, Charles J., Cheshire, assignor to The Chase Companies, Incorporated, Waterbury, Conn. Finned-tube radiator and the like. 1,886,066; Nov. 1.
Studebaker Corporation, The. (See Hughes, James R., assignor.)
Stuebing, William, jr., Cincinnati, Ohio, assignor, by mesne assignments, to The Yale & Towne Manufacturing Company, Stamford, Conn. Lifting truck. 1,885,649; Nov. 1.
Stukenborg, Louis C., assignor to Standard Lift Company, Memphis, Tenn. Multiple plunger lift. 1,886,253; Nov. 1.
Sturtevant, B. F., Company. (See Anderson, Samuel M., assignor.)
Suits, Chauncey G., Schenectady, N. Y., assignor to General Electric Company. Control of constant current circuits. 1,885,155; Nov. 1.
Summers, Otto M., assignor to Frigidaire Corporation, Dayton, Ohio. Refrigerating apparatus. 1,885,783; Nov. 1.
Sunderland, Katherine B., Danbury, Conn. Attachment for shoes. 1,886,134; Nov. 1.
Sundstrand Corporation. (See Sundstrand, Oscar J., assignor.)
Sundstrand, Oscar J., Rockford, Ill., assignor to Sundstrand Corporation, Wilmington, Del. Decimal and nondecimal adding and subtracting machine. 1,885,489; Nov. 1.
Sundstrand, Oscar J., Rockford, Ill., assignor to Sundstrand Corporation, Wilmington, Del. Computing machine. 1,885,960; Nov. 1.
Sutter, Louis M. (See Tevis, A. M., and Sutter.)
Sutton, Roy C., University City, Mo. Apparatus for heating liquids. 1,885,305; Nov. 1.
Swanson, Elmer J. S., assignor to Erie Malleable Iron Company, Erie, Pa. Conduit fitting. 1,885,490; Nov. 1.
Swanson, Peter, Ely, Minn. Railroad switch stand dog. 1,885,961; Nov. 1.
Swartz, Stephen, assignor to Jenkins Petroleum Process Company, Chicago, Ill. Method and apparatus for producing motor fuel from residual oils. 1,885,387; Nov. 1.
Swenson, Alvin L., and O. Swenson, Independence, Mo. Anchor strings for archery bows. 1,885,962; Nov. 1.
Swenson, Orvar. (See Swenson, Alvin L. and O.)
Swift and Company. (See Newton, Roy C., assignor.)
Sylva, Lawrence M. (See Ramberg, Edward C.)
Sylvester, Julius, assignor to Simplex Engineering Company, Washington, Pa. Conveyer roller. 1,885,306; Nov. 1.
Tambor, Mike, et al. (See Miner, Charles R., assignor.)
Tamburo, Salvatore, et al. (See Foti, Charles, assignor.)
Tannehill, Vernon L., assignor to Fort Wayne Engineering and Manufacturing Company, Fort Wayne, Ind. Water heater. 1,886,135; Nov. 1.
Tar & Petroleum Process Company. (See Knowles, A. S., and Andrews, assignors.)
Tarzian, Sarkes, assignor to Atwater Kent Manufacturing Company, Philadelphia, Pa. Volume control. 1,885,307; Nov. 1.
Taylor, Bert S., and W. N. Jones, Akron, Ohio, assignors to The B. F. Goodrich Company, New York, N. Y. Transfer composition. 1,885,388; Nov. 1.
Taylor, John E. S., Alexandria, Va., assignor to Universal Power Tool Company, Inc., Baltimore, Md. Polisher. 1,886,136; Nov. 1.
Taylor, Reginald, Liverpool, and C. E. Beale, London, England, assignors to Associated Telephone and Telegraph Company, Chicago, Ill. Telephone system. 1,885,650; Nov. 1.
Tchoubritch, Michel, assignor to Societe Nouville de Constructions Telephoniques, Paris, France. Automatic telephone system. 1,885,491; Nov. 1.
Teeple, Lawrence R., Portland, Oreg. Stoker control switch. 1,885,963; Nov. 1.
Tees, James E., assignor to Siemens Brothers & Company Limited, London, England. Automatic switch. 1,885,784; Nov. 1.
Teesdale Manufacturing Co. (See Rich, Claude R., assignor.)
Telefonaktiebolaget L. M. Ericsson. (See Nilsson, Nils E., assignor.)
Telefunken Gesellschaft fur Drahtlose Telegraphie m. b. H. (See Ilberg, Waldemar, assignor.)
Telefunken Gesellschaft für Drahtlose Telegraphie m. b. H. (See Meissner, Alexander, assignor.)
Temple, Paul C., assignor to A. D. Cash Company, Decatur, Ill. Pressure reducing and regulating valve. 1,885,389; Nov. 1.
Tenney, Edward H., Webster Groves, Mo. Tubular wall structure. 1,886,314; Nov. 1.
TerHorst, William P., Nitro, W. Va., assignor to The Rubber Service Laboratories Company, Akron, Ohio. Manufacture of vulcanized rubber compounds. 1,885,564; Nov. 1.
Terhune, Leonard B., Newark, N. J., assignor to Du Pont Viscoloid Company, Wilmington, Del. Holding means for brushes. 1,885,651; Nov. 1.
Terni Societa per l'Industria e l'Elettricita. (See Fiorelli, Ferdinando, assignor.)
Terry, Charles M., assignor to A. W. Cash Company, Decatur, Ill. Fluid pressure actuated control mechanism. 1,885,565; Nov. 1.

Tevis, Anthony M., and L. M. Sutter, Eureka, Calif. Engine block. 1,885,566; Nov. 1.
Textor, Oscar, Shaker Heights, and B. O. Crites, Cleveland, Ohio. Cleaning composition. 1,885,390; Nov. 1.
Thacher, George H., Melrose, Mass. Valve. 1,886,315; Nov. 1.
Thiel, Emil E., assignor to The Printing Machinery Company, Cincinnati, Ohio. Printer's registering device. 1,885,965; Nov. 1.
Thiemann, William B., Albert City, Iowa. Steering device for tractors. 1,885,964; Nov. 1.
Third Dimension Pictures, Inc. (See Burkhardt, Jakob, assignor.)
Thoerig, Conrad W., and E. Jetilek, Vienna, Austria, said Jetilek assignor to Hugo Karvaly, Neuilly, Seine, France. Mechanical contrivance for popular amusement. 1,885,643; Nov. 1.
Tholin, Charles F., Rockford, Ill. Wall cabinet for telephones. 1,886,068; Nov. 1.
Thomas, Adolph A., New York, N. Y. Loud speaker. 1,885,308; Nov. 1.
Thomas, Arthur, T. Heath, and R. F. Power, Hampstead, London, assignors to The Accounting & Tabulating Corporation of Great Britain, Limited, London, England. Card feeding mechanism. 1,885,874; Nov. 1.
Thomas & Betts Co., The. (See Buchanan, Stephen N., assignor.)
Thomas, Horace T., and J. Bethune, Lansing, Mich., and A. B. Hays, Rochester, N. Y., assignors to Reo Motor Car Company, Lansing, Mich. Transmission mechanism. 1,885,156; Nov. 1.
Thomas, John. (See Jones, D. C. R., Thomson, and Thomas.)
Thomas, Martin H. (See Hardman, C. H., and Thomas.)
Thomas, Stephen S., Lebanon, Ohio. Expansion tube for liquid gas systems. 1,885,644; Nov. 1.
Thompson, Albert C. (See Almquist, M. L., and Thompson.)
Thompson, Alice, New York, N. Y. Textile fabric or the like. 88,178; Nov. 1.
Thompson, Howard A., and F. H. Nicholson, Edgewood, assignors to The Union Switch & Signal Company, Swissvale, Pa. Railway traffic controlling apparatus. 1,885,875; Nov. 1.
Thompson, Vincent, et al., executor. (See Cook, S. S., Bennett, and Parsons.)
Thompson, William B., and A. B. Merrill, Akron, Ohio, assignors to The B. F. Goodrich Company, New York, N. Y. Expansion joint. 1,885,391; Nov. 1.
Thomson, George M., Caledonia, Ontario, assignor to Canada Gypsum and Alabastine Limited, Paris, Ontario, Canada. Apparatus for making foam. 1,885,785; Nov. 1.
Thomson, Judson L., Manufacturing Co. (See Havener, Arthur R., assignor.)
Thomson, Robert. (See Hoke, W. E., and Thomson.)
Thomson, Robert, Arlington, N. J., assignor to Dardelet Threadlock Corporation, New York, N. Y. Pliers. 1,886,272; Nov. 1.
Thomson, Robert, Arlington, N. J., assignor to Dardelet Threadlock Corporation, New York, N. Y. Shears. 1,886,273; Nov. 1.
Thomson, Robert F. (See Jones, D. C. R., Thomson, and Thomas.)
Timkin Roller Bearing Company, The. (See Boden, Ernest G.)
Timken Roller Bearing Company, The. (See Buckwalter, Tracy V., assignor.)
Timken Roller Bearing Company, The. (See Hastings, Shirrel A., assignor.)
Timken Roller Bearing Company, The. (See Horger, Oscar J., assignor.)
Timken Roller Bearing Company, The. (See Lucas, Samuel C., assignor.)
Timken Silent Automatic Company. (See Beadle, Lynn C., assignor.)
Timken Silent Automatic Company, The. (See Powers, Milton A., assignor.)
Tobin, Clarke W., East Orange, N. J., assignor to Gotham Silk Hosiery Company, Inc. Hosiery. 1,885,567; Nov. 1.
Toledo Alloyed Castings Company, The. (See Miller, Dorr, assignor.)
Toledo Machine & Tool Company, The. (See Dorman, Neal W., assignor.)
Toledo Machine and Tool Company, The. (See Williamson, Larkin R., assignor.)
Toulon, Pierre M. G. (See Charlin, A. M. B., and Toulon.)
Touly, Marcel L., Boulogne-sur-Seine, assignor to Societe de Condensation et d'Applications Mecaniques, Paris, France. Method and apparatus for taking soundings. 1,885,652; Nov. 1.
Touranchet, Georges. (See Bormans, Emile, assignor.)
Townsend, Leonard W. E. (See Boake, E. J., and Townsend.)
Traver, Oliver C., Drevel Hill, Pa., assignor to General Electric Company. Control of electric switches. 1,885,157; Nov. 1.
Travis, Bertram C., assignor of one-half to Pacific Copper and Brass Works, Incorporated, Los Angeles, Calif. Junction box. 1,886,316; Nov. 1.
Travis Process Corporation. (See Ostermann, Walter, assignor.)
Traylor Vibrator Company, The. (See Flint, James A., assignor.)
Traylor Vibrator Company, The. (See Flint, J. A., and Hazeltine, assignors.)
Trew, James W., Baltimore, Md., assignor to John S. Rice, Biglerville, Pa. Basket liner. 1,885,492; Nov. 1.
Troy Laundry Machinery Company. (See Adams, Arthur H., assignor.)
Trumbull Electric Manufacturing Company, The. (See Hammerly, Herman J., assignor.)
Tucker, John B., Tyseley, Birmingham, England. Electrical plug and socket connection. 1,886,137; Nov. 1.
Tulloch, David, assignor to Henry B. Newhall Corporation, Garwood, N. J. Method and apparatus for galvanizing. 1,885,876; Nov. 1.
Turner, Edwin A., New York, N. Y., assignor to The Standard Stoker Company, Incorporated. Locomotive tender. 1,886,317; Nov. 1.
Tuten, James. Hopedale, Mass. Aeroplane. 1,885,392; Nov. 1.
Twiss, Douglas F. (See Murphy, E. A., James, and Twiss.)
Twomley, Herbert E., Riverside, Calif., assignor to C. B. Parker, executrix of the estate of George D. Parker, deceased. Extensible conveyer. 1,885,568; Nov. 1.
Tyler, Williard G., Denver, Colo. Automobile baby crib. 1,885,493; Nov. 1.
Ullom, Virgil V., et al. (See Gonsett, Robert R., assignor.)
Ulmann, Edgar A., assignor to Standard Boiler & Steel Works, Los Angeles, Calif. Exhaust box. 1,885,494; Nov. 1.
Union Bag & Paper Corporation. (See Avery, True M., assignor.)
Union Manufacturing Company, The. (See Church, Albert E., assignor.)
Union Metal Products Company. (See Nicholas, Charles W., assignor.)
Union Switch & Signal Company, The. (See Butler, C. W., and Johnston, assignors.)
Union Switch & Signal Company, The. (See Gilson, Robert M., assignor.)
Union Switch & Signal Company, The. (See Kemmerer, Ralph R., assignor.)
Union Switch & Signal Company, The. (See Lasich, Branko, assignor.)
Union Switch & Signal Company, The. (See O'Meara, Thomas J., assignor.)
Union Switch & Signal Company, The. (See Thompson, H. A., and Nicholson, assignors.)
Union Trust Co., et al., executor. (See Laughlin, Alexander, jr.)
Unit Corporation of America. (See Bixby, Leo A., assignor.)
United Cigarette Machine Company A.-G. (See Ritscher, Arthur, assignor.)
United Gas Improvement Company, The. (See Rusby, John M., assignor.)
United Research Corporation. (See March, Norris E., assignor.)
United Shoe Machinery Corporation. (See Goddu, George, assignor.)
United Shoe Machinery Corporation. (See Harig, Nicolaus, assignor.)
United Shoe Machinery Corporation. (See Knight, Ralph F., assignor.)
United Shoe Machinery Corporation. (See Leveque, Bernard T., assignor.)
United Shoe Machinery Corporation. (See Woodcock, R. B., and Lane, assignors.)
U. S. Manufacturing Corporation. (See Krag, F. K., and Nelson, assignors.)
Universal Oil Products Company. (See Egloff, Gustav, assignor.)
Universal Piston Company. (See Reiland, Ernest S., and P. M., assignors.)
Universal Power Tool Company. (See Taylor, John E. S., assignor.)
Universal Stamping & Mfg. Co. (See Sapier, Abraham, assignor.)
Universelle Cigarettenmaschinen-Fabrik J. C. Muller & Co. (See Hohn, Max P. E., assignor.)
Universelle Cigarettenmaschinen-Fabrik J. C. Muller & Co. (See Jähne, Ernst H., assignor.)
"Universelle" Cigarettenmaschinen-Fabrik J. C. Muller & Co. (See Schmiedel, Alfred J., assignor.)
Universelle Cigarettenmaschinen-Fabrik J. C. Muller & Co. (See Werner, Albert, assignor.)
Upland, Theodore R., Burlingame, assignor to Gantner & Mattern Company, San Francisco, Calif. Swimming and sun bathing trunk. 1,886,255; Nov. 1.
Urbinati, Mario, Rome, Italy. Starting device for mercury arc rectifiers. 1,885,495; Nov. 1.
Usener, John F., jr. (See Usener, J. F., sr., and J. F., jr.)
Usener, John F., sr., and J. F. Usener, jr., Houston, Tex. Control circuit. 1,885,569; Nov. 1.
Vance, Walter N., North Aurora, assignor to Lyon Metal Products, Incorporated, Aurora, Ill. Shelf rack construction. 1,886,318; Nov. 1.
Van De Riet, George, assignor to West Michigan Furniture Company, Holland, Mich. Dressing table. Des. 88,179; Nov. 1.
Van De Riet, George, assignor to West Michigan Furniture Co., Holland, Mich. Bedstead. Des. 88,180; Nov. 1.
Van Meter, jr., Solomon L., Washington, D. C. Aircraft. 1,885,570; Nov. 1.

Van Schaack Bros. Chemical Works, Inc. (See Van Schaack, Robert H., jr.)
Van Schaack, jr., Robert H., Evanston, assignor to Van Schaack Bros. Chemical Works, Inc., Chicago, Ill. Drying liquids by dialysis. 1,885,393; Nov. 1.
Van Vlaanderen Machine Company. (See Koch, William J., assignor.)
Van Vlaanderen Machine Company. (See Lane, George W., assignor.)
Van Zütphen, Ludwig, Frankfort-on-the-Main-Hochst, assignor to I. G. Farbenindustrie, Aktiengesellschaft, Frankfort-on-the-Main, Germany. Polymerizing hydrocarbons of the butadiene series. 1,885,653; Nov. 1.
Vawter, John T., Los Angeles, Calif. Cement gun nozzle. 1,885,645; Nov. 1.
Venzie, Frederick M., Philadelphia, Pa. Building construction. 1,885,496; Nov. 1.
Vercelli, Alfredo J., Buenos Aires, Argentina. Container and case combined for use as a lipstick. 1,885,654; Nov. 1.
Vereinigte Stahlwerke Aktiengesellschaft. (See Neil, Bernhardt, assignor.)
Verteramo, Dominick, et al. (See Foti, Charles, assignor.)
Vest, Clarence E., Troutdale, Oreg. Reel. 1,886,209; Nov. 1.
Viry, Pierre, Chatellerault, France. Automatic rotary machine heating by induction. 1,885,966; Nov. 1.
Vitalba, Leo, assignor to Fiat Societa Anonima, Turin, Italy. Change speed mechanism. 1,885,967; Nov. 1.
Vitamin Company of America, The. (See Alexander, Elliot Ritchie, assignor.)
Vogt, Clarence, Wenonah, N. J. Roller skate. 1,885,158; Nov. 1.
Volk, Joseph A., South Norwalk, Conn. Shade holder. 1,885,655; Nov. 1.
Vulcanized Rubber Company, The. (See Rugaber, John J., assignor.)
Wagner, Albert G. (See Bloch, J., and Wagner.)
Wagner, Edward P., assignor to International Fire Equipment Corporation, West New Brighton, N. Y. Fire extinguisher. 1,885,309; Nov. 1.
Wagner, Frederick P. (See Brauer, A. J., and Wagner.)
Wahlbeck, John H. (See Prosser, T. W., Wahlbeck, and Mittelstadt.)
Wainwright, Carlyle H. (See Bentley, P. A., Manger, and Wainwright.)
Waite, Roy, Los Angeles, Calif. Metal trim. 1,886,320; Nov. 1.
Waitt, Walter G., Lakewood, Ohio. Dry cell and seal therefor. 1,885,786; Nov. 1.
Walker, Buck, et al. (See Gonsett, Robert R., assignor.)
Walker, Fred G., assignor to Jones Superior Machine Co., Chicago, Ill. Attachment for band saws. 1,886,321; Nov. 1.
Walker, Harry E., Fairfield, Me. Separable connecter. 1,885,657; Nov. 1.
Wallace, Jeffrey J., assignor to Gullett Gin Company, Amite, La. Double conveyer distributor. 1,885,656; Nov. 1.
Walton, Howard T., Collingswood, N. J., assignor to David Lupton's Sons Company, Philadelphia, Pa. Window latch. 1,885,658; Nov. 1.
Walton, Oliver Herbert, Needham Heights, Mass. Surgical stocking. 1,885,394; Nov. 1.
Wandscheer, Ben, et al. (See Wandscheer, Dan, assignor.)
Wandscheer, Dan, assignor of one-fourth to G. Wandscheer, one-fourth to J. Wandscheer and one-fourth to Ben Wandscheer, Dubuque, Iowa. Snow remover. 1,886,069; Nov. 1.
Wandscheer, Gerrit, et al. (See Wandscheer, Dan, assignor.)
Wandscheer, Jacob, et al. (See Wandscheer, Dan, assignor.)
Ward, J. H., et al. (See Hamby, Joseph E., assignor.)
Ward Leonard Electric Company. (See Bullinger, Frederic H., assignor.)
Warner, Archibald A., Royal Oak, Mich. Universal joint. 1,885,646; Nov. 1.
Warner Electric Brake Corporation. (See Whyte, John, assignor.)
Waterbury Farrel Foundry and Machine Company, The. (See Wilcox, Richard L., assignor.)
Waterval, Ivar W., Evanston, Ill. Receptacle actuated faucet. 1,885,647; Nov. 1.
Watkins, Thomas, and L. D. Baum, Berkeley, Calif. Winding device. 1,885,497; Nov. 1.
Watson, Alec V., St. Albans, assignor of one-half to Thomas A. Davis, London, England. Safety razor and stropping device. 1,885,659; Nov. 1.
Waugh, Thomas, jr., West Hartford, assignor to Hartford-Empire Company, Hartford, Conn. Method of and apparatus for manufacturing glassware. 1,885,660; Nov. 1.
Waugh, Thomas, jr., West Hartford, assignor to Hartford-Empire Company, Hartford, Conn. Apparatus for forming glassware. 1,885,661; Nov. 1.
Waxman, Carl F., Oakland, Calif. Gate valve. 1,885,159; Nov. 1.
Weaver, William B., et al. (See Bégin, Lucien, assignor.)
Weber, Herbert O., Philadelphia, Pa. Finger position indicating means for violins and the like. 1,886,070; Nov. 1.
Weber, Lester N., Chicago, Ill., assignor to American Reenforced Paper Company, Attleboro, Mass. Base for wall paper. 1,885,310; Nov. 1.
Wedemann, Richard G., Milwaukee, Wis. Collapsible umbrella. 1,885,968; Nov. 1.
Weidenhoff, Joseph, et al. (See Brisbois, Odilon, assignor.)
Weiler, Sigmond G., Milwaukee, Wis. Stove. 1,886,239; Nov. 1.
Weinman, Edwin L., assignor of one-tenth to J. J. McKenna and S. W. Harris, Chicago, Ill. Combination folding bed and davenport. 1,885,160; Nov. 1.
Weir, Frederick. (See Boynton, Walter, assignor.)
Weir Kilby Corporation. (See Ferneding, G., and West, assignors.)
Weisser, Richard J., Braunau, Czechoslovakia. Motor sled. 1,885,787; Nov. 1.
Weitling, Terijon, New York, N. Y. Antenna. 1,886,322; Nov. 1.
Weitz, Irene A., Brooklyn, N. Y. Textile fabric or the like. Des. 88,181; Nov. 1.
Weitz, Irene A., Brooklyn, N. Y. Textile fabric or the like. Des. 88,182; Nov. 1.
Weitz, Irene A., Brooklyn, N. Y. Textile fabric or the like. Des. 88,183; Nov. 1.
Wells, Loren E., Modesto, Calif. Safety hook. 1,886,138; Nov. 1.
Wells, Richard, assignor, by mesne assignments, to Columbia Products, Incorporated, Bartlesville, Okla. Gate valve. 1,886,139; Nov. 1.
Welty, Albert B., Chicago, Ill., assignor to International Harvester Company. Straw spreader for harvester threshers. 1,886,140; Nov. 1.
Wemhöner, Wilhelm, Berlin-Niederschonweide, Germany. Carburetor. 1,885,395; Nov. 1.
Wemp, Ernest E., Detroit, Mich. Clutch. 1,886,323; Nov. 1.
Wenzel, Emil, assignor to Ernst Gessner Aktiengesellschaft, Aue, Germany. Conditioning machine for cloths. 1,885,396; Nov. 1.
Wernberg, Niels E., Copenhagen, Denmark. Machine for cleaning carcasses of hogs. 1,885,161; Nov. 1.
Werner, Albert, Dresden, assignor to Universelle Cigarettenmaschinen-Fabrik J. C. Muller & Co., Dresden, Germany. Cigarette rod machine. 1,885,969; Nov. 1.
Werner, Le Roy O., Wheeling, W. Va. Advertising system. 1,885,162; Nov. 1.
West, Herbert N. (See Ferneding, G., and West.)
West Michigan Furniture Company. (See Van De Riet, George, assignor.)
Westburg, Joel, Onamia, Minn. Can holder. 1,885,788; Nov. 1.
Western Cartridge Company. (See Olin, J. M., and Schuricht, assignors.)
Western Electric Company. (See Schelleng, John C., assignor.)
Westling, Carl J., Chicago, Ill. Antifriction screw. 1,885,970; Nov. 1.
Weston Electrical Instrument Corp. (See Goodwin, William N., jr., assignor.)
Wheelden, Harry L., Bangor, Me. Pole setting apparatus and the like. 1,885,877; Nov. 1.
Wheeler Reflector Company. (See Cole, Charles M., assignor.)
Wheeler, Roy L., Mount Oliver, assignor to Aluminum Company of America, Pittsburgh, Pa. Tread plate. Des. 88,184; Nov. 1.
Wheeler, Roy L., Mount Oliver, assignor to Aluminum Company of America, Pittsburgh, Pa. Floor plate. Des. 88,185; Nov. 1.
Whitcomb, Arthur J., and O. C. Callow, assignors to Freyn Engineering Company, Chicago, Ill. Test rod. 1,885,397; Nov. 1.
Whitcomb, Joseph C., Princeton, Minn. Float for fishlines. 1,885,311; Nov. 1.
White, Alexander P., Caldwell, assignor of one-half to E. T. Wilkinson, Montclair, N. J. Traffic sign for road surfaces. 1,886,324; Nov. 1.
White, F. H., Company, The. (See Marella, Silvio, assignor.)
White, Joseph A., Melrose Park, assignor to The Moore & White Company, Philadelphia, Pa. Take-up for Fourdrinier machines. 1,885,163; Nov. 1.
White, Joseph A., Melrose Park, assignor to The Moore & White Company, Philadelphia, Pa. Fourdrinier machine. 1,885,164; Nov. 1.
White, S. S., Dental Manufacturing Company, The. (See Browne, George H., assignor.)
Whitehead, William, and H. W. Kuhl, Cumberland, Md., assignors to Celanese Corporation of America. Identifiable material and making same. 1,885,378; Nov. 1.
Whitehorn, Harold K., Maidstone, England. Electric railway system. 1,885,602; Nov. 1.
Whitehouse, Irving P. (See Lord, H. C., and Whitehouse.)
Whitmore, Edson G., assignor to The De Vilbiss Company, Toledo, Ohio. Spray coating exhaust system. Re18,645; Nov. 1.
Whittington, Loring M., Seattle, assignor to Shirley G. Keown, Renton, Wash. Greeting card. 1,885,879; Nov. 1.
Whyte, John, Beloit, Wis., assignor to Warner Electric Brake Corporation, South Beloit, Ill. 1,886,141; Nov. 1.
Wickersham, Elmer E., assignor to Caterpillar Tractor Co., San Leandro, Calif. Pick-up. 1,885,971; Nov. 1.

Widney, Ralph L., La Harpe, Ill. Chicken feeder. 1,886,276; Nov. 1.
Wiener, Alfred E., Brooklyn, N. Y., assignor to American Machine & Foundry Company. Constant level tobacco feed for cigarette machines. 1,885,880; Nov. 1.
Wilcox, Richard L., assignor to The Waterbury Farrel Foundry and Machine Company, Waterbury, Conn. Upsetting mechanism. 1,885,648; Nov. 1.
Wild, Leonard. (See Quinn, Frank, and Wild.)
Wiley, Hugh A., Memphis, Tenn. Battery replacement box. 1,886,071; Nov. 1.
Wilhelm, Harold F., et al. (See Begin, Lucien, assignor.)
Wilkinson, Edward T. (See White, Alexander P., assignor.)
Willems, George L., New York, N. Y., assignor to Fifth Avenue Coach Company. Armored cashier's wicket structure. 1,885,165; Nov. 1.
Willey, Leo C., Glendale, assignor of five per cent to Elsie M. Kramer, Los Angeles County, Calif. Backstop for automotive vehicles. 1,885,498; Nov. 1.
Willheim, William, Co. (See Katzman, Herbert, assignor.)
Willheim, William, Co. (See Lesser, Paul, assignor.)
Willheim, William Co. (See Orkin, Ernest M., assignor.)
Willheim, William, New York, N. Y. Textile fabric or similar article. Des. 88,186; Nov. 1.
Willheim, William, New York, N. Y. Textile fabric or similar article. Des. 88,187; Nov. 1.
Willheim, William, New York, N. Y. Textile fabric or similar article. Des. 88,188; Nov. 1.
Willheim, William, New York, N. Y. Textile fabric or similar article. Des. 88,189; Nov. 1.
Willheim, William, New York, N. Y. Textile fabric or similar article. Des. 88,190; Nov. 1.
Willheim, William, New York, N. Y. Textile fabric or similar article. Des. 88,191; Nov. 1.
Willheim, William, New York, N. Y. Textile fabric or similar article. Des. 88,192; Nov. 1.
Willheim, William, New York, N. Y. Textile fabric or similar article. Des. 88,193; Nov. 1.
Willheim, William, New York, N. Y. Textile fabric or similar article. Des. 88,194; Nov. 1.
Willheim, William, New York, N. Y. Textile fabric or similar article. Des. 88,195; Nov. 1.
Willheim, William, New York, N. Y. Textile fabric or similar article. Des. 88,196; Nov. 1.
Willheim, William, New York, N. Y. Textile fabric or similar article. Des. 88,197; Nov. 1.
Willheim, William, New York, N. Y. Textile fabric or similar article. Des. 88,198; Nov. 1.
Willheim, William, New York, N. Y. Textile fabric or similar article. Des. 88,199; Nov. 1.
Willheim, William, New York, N. Y. Textile fabric or similar article. Des. 88,200; Nov. 1.
Willheim, William, New York, N. Y. Textile fabric or similar article. Des. 88,201; Nov. 1.
Willheim, William, New York, N. Y. Textile fabric or similar article. Des. 88,202; Nov. 1.
Willheim, William, New York, N. Y. Textile fabric or similar article. Des. 88,203; Nov. 1.
Willheim, William, New York, N. Y. Textile fabric or similar article. Des. 88,204; Nov. 1.
Willheim, William, New York, N. Y. Textile fabric or similar article. Des. 88,210; Nov. 1.
Willheim, William, New York, N. Y. Textile fabric or similar article. Des. 88,211; Nov. 1.
Willheim, William, New York, N. Y. Textile fabric or similar article. Des. 88,212; Nov. 1.
Willheim, William, New York, N. Y. Textile fabric or similar article. Des. 88,213; Nov. 1.
Willheim, William, New York, N. Y. Textile fabric or similar article. Des. 88,214; Nov. 1.
Willheim, William, New York, N. Y. Textile fabric or similar article. Des. 88,215; Nov. 1.
Willheim, William, New York, N. Y. Textile fabric or similar article. Des. 88,216; Nov. 1.
Willheim, William, New York, N. Y. Textile fabric or similar article. Des. 88,217; Nov. 1.
Willheim, William, New York, N. Y. Textile fabric or similar article. Des. 88,218; Nov. 1.
Willheim, William, New York, N. Y. Textile fabric or similar article. Des. 88,219; Nov. 1.
Williams, Jewell R., assignor to Apparatus Design Company, Little Rock, Ark. Radio tube tester. Des. 88,220; Nov. 1.
Williams, Robert G., Toledo, Ohio. Flash light lantern. Des. 88,205; Nov. 1.
Williams, Roy C., Wayne, Ohio. Brooder. 1,885,499; Nov. 1.
Williams, Selden T., Forest Hills, assignor to A. Schrader's Son, Incorporated, Brooklyn, N. Y. Streamline wire separator. 1,886,072; Nov. 1.
Williams, Walter G., Plainfield, N. J., assignor to Byrnes, Townsend & Potter, Washington, D. C. Fractional distillation process and apparatus. 1,866,142; Nov. 1.
Williams, William F., assignor to Quality Mattress Company, Rochester, N. Y. Stabilizer for glider seats. 1,885,663; Nov. 1.
Williamson, Larkin R., assignor to The Toledo Machine and Tool Company, Toledo, Ohio. Lubricating system. 1,885,500; Nov. 1.
Willys-Overland Company, The. (See Flogaus, Howard A., assignor.)
Wilson, Allen R., Lansdowne, Pa., Robert Seeman, Merrick, and M. Hallen, Long Island City, N. Y. Repairing flange angles. 1,885,398; Nov. 1.
Wilson, Brayton F., Cambridge, Mass. Aeroplane. 1,885,571; Nov. 1.
Wilson, Charles H., Pelham, assignor to Wilson Mechanical Instrument Co. Inc., New York, N. Y. Hardness testing gauge. 1,885,972; Nov. 1.
Wilson, Joseph C., assignor to The Crystal Tissue Company, Middletown, Ohio. Flat sheet dispensing package. 1,885,501; Nov. 1.
Wilson, Mack, Woodside, N. Y. Material handling device. 1,885,312; Nov. 1.
Wilson Mechanical Instrument Co. Inc. (See Wilson, Charles H., assignor.)
Wilson, Richard C., Miami, Fla. Automatic safety landing reversing propeller. 1,886,278; Nov. 1.
Wilson, William B., Los Angeles, assignor, by mesne assignments, to Metlox Corporation, Ltd., Manhattan Beach, Calif. Display device. 1,885,973; Nov. 1.
Winchester Repeating Arms Company. (See Smith, Philip A., assignor.)
Wine, William E., Toledo, Ohio. Railway car. 1,885,502; Nov. 1.
Winkler, Alfred, Pforzheim, Germany. Method and apparatus for galvanizing fancy chains and the like. 1,886,277; Nov. 1.
Winn, John Albert, Salem, Ark. Sectional mattress. 1,885,974; Nov. 1.
Winselman, William J., Brooklyn, N. Y. Rumble seat. 1,885,975; Nov. 1.
Winthrop Chemical Company. (See Fehrle, Alfred, assignor.)
Wire Novelty Manufacturing Company, The. (See Domkee, John H., assignor.)
Wired Radio, Inc. (See Hough, Clinton W., assignor.)
Wired Radio, Inc. (See Rowe, Charles R., assignor.)
Witt, Samuel E. (See Neir, E. R., and Witt.)
Wittliff, Theodore H., Cleveland, Ohio. Furniture brace. 1,885,664; Nov. 1.
Wolf, Gabriel, Bratislava, Czechoslovakia. Safety frame for airplanes. 1,885,881; Nov. 1.
Wolf, Gabriel, Bratislava, Czechoslovakia. Hanging chassis. 1,885,882; Nov. 1.
Wolf, John M., assignor of one-half to C. Bingesser, Kansas City, Mo. Fluid motor. 1,885,665; Nov. 1.
Wolf Machine Company, The. (See Bloch, J., and Wagner, assignors.)
Wolverine Bumper & Specialty Company. (See Hammond, Milton B., assignor.)
Wood, C. D., Electric Co., Inc. (See Kulks, Eugene R., assignor.)
Wood, Irving W., assignor to The Aluminum Cooking Utensil Company, New Kensington, Pa. Coffee pot. 1,885,666; Nov. 1.
Wood, Sidney C., Noank, Conn., assignor to H. D. Nelson and J. Hahn, Jersey City, N. J. Massaging gloves. 1,885,572; Nov. 1.
Wood, William C., assignor to The N. N. Hill Brass Company, East Hampton, Conn. Doll carriage. 1,886,073; Nov. 1.
Woodcock, Reginald B., and H. Lane, Leicester, England, assignors to United Shoe Machinery Corporation, Paterson, N. J. Lasting machine. 1,886,279; Nov. 1.
Woodhall, William H., Attica, Ind., assignor to The Harrison Steel Castings Company. Steel alloy. 1,885,667; Nov. 1.
Worthington, John H. (See Auerhaan, Joseph J., assignor.)
Wortmann, Dietrich, Brooklyn, N. Y. Storage tank. 1,886,074; Nov. 1.
Wren, Vincent T., Lakeville, Minn. Freight loading and unloading device for vehicles. 1,885,399; Nov. 1.
Wunn, Richard. (See Gothard, T. J., and Wunn.)
Wurster, Oscar H., Chicago, Ill. Process of and apparatus for distilling glycerine. 1,885,166; Nov. 1.
Wurster, Oscar H., Chicago, Ill. Process of and apparatus for distilling liquids. 1,886,256; Nov. 1.
Yale & Towne Manufacturing Company, The. (See Brauning, Karl A., assignor.)
Yale & Towne Manufacturing Company, The. (See Stuebing, William, jr., assignor.)
Yandell, William H., Davenport, Iowa. Connecting rod. 1,885,976; Nov. 1.
Yaniz y Diaz, Jose A., Habana, Cuba. Ventilating device for vehicles. 1,885,668; Nov. 1.
Yannucci, Rocco. (See Sesko, Mike, assignor.)
Yates, Luther L. (See Reynolds, Damian L., assignor.)
Yger, Albert Karlsson, New York, N. Y. Curtain roller. 1,885,400; Nov. 1.
Young, Horace J., deceased, by Eagle Machine Company, Incorporated, Indianapolis, Ind., assignee. Repairing engine cylinders. Re18,644; Nov. 1.
Young, Howard F., assignor of one-half to L. S. Young, Kalamazoo, Mich. Joist construction. 1,885,883; Nov. 1.
Young, Leonie S. (See Young, Howard, F. assignor.)
Zaiden, David, Brooklyn, assignor of one-fourth to I. Kaufman, one-fourth to S. Kaufman, Forest Hills, and one-fourth to J. Kaufman, Brooklyn, N. Y. Movable eyes for dolls. 1,885,573; Nov. 1.
Zaparka, Edward F., New York, N. Y. Automatic take-up bushing. 1,886,143; Nov. 1.
Zeledon, Alfred H., assignor to Scene-In-Action Corporation, Chicago, Ill. Display device. 1,886,144; Nov. 1.
Zorsch, Edward A., Rochester, N. Y. Knife and spoon pan rack. 1,886,075; Nov. 1.
Zuckerman, Adolph M., assignor to R. Hoe & Co., New York, N. Y. Folder for printing machines. 1,885,313; Nov. 1.

LIST OF INVENTIONS

FOR WHICH

PATENTS WERE ISSUED ON THE 1st DAY OF NOVEMBER, 1932

NOTE.—Arranged in accordance with the first significant character or word of the name (in accordance with city and telephone directory practice). Includes patents, reissues, and designs.

Accounting device. M. R. Lilly. 1,885,928; Nov. 1.
Accumulator system. J. W. Stevens and W. H. Kenety. 1,885,561; Nov. 1.
Acid and making same, 1-hydroxy-4-halogen-anthraquinone-2-sulphonic-. E. Honold. 1,886,017; Nov. 1.
Acid derivatives and anthraquinone bodies therefrom, Production of benzoyl-o-benzoic. D. G. Rogers, J. Ogilvie, and J. H. Crowell. 1,886,287; Nov. 1.
Acid process, Contact sulphuric. A. O. Jaeger. 1,885,833; Nov. 1.
Acids and their derivatives, Production of monocarboxylic. A. O. Jaeger. 1,885,834; Nov. 1.
Adding and subtracting machine, Decimal and non-decimal. O. J. Sundstrand. 1,885,489; Nov. 1.
Adjustable wrench. F. H. Andrews. 1,886,146; Nov. 1.
Advertising system. L. O. Werner. 1,885,162; Nov. 1.
Aeroplane. J. M. Tuten. 1,885,892; Nov. 1.
Aeroplane. B. F. Wilson. 1,885,571; Nov. 1.
Aeroplane signal. M. Krajac. 1,886,245; Nov. 1.
Agitating mechanism. R. R. Gonsett. 1,885,253; Nov. 1.
Agitator. P. N. Pottsgrove. 1,886,118; Nov. 1.
Agitator, Suction cleaner. D. G. Smellie. 1,885,382; Nov. 1.
Agitator, Suction cleaner. D. G. Smellie. 1,886,129; Nov. 1.
Air braking means. A. C. Peterson. 1,886,301; Nov. 1.
Aircraft. S. L. Van Meter, jr. 1,885,570; Nov. 1.
Aircraft, Apparatus for use in controlling. J. M. Boykow. 1,885,578; Nov. 1.
Air hose coupling. S. A. Main. 1,885,614; Nov. 1.
Air washer for furnaces. G. F. Gehri. 1,885,340; Nov. 1.
Alarm: *See*—
Tire deflation alarm.
Aldols, Manufacture of. T. H. Durrans. 1,885,242; Nov. 1.
Alloy, Steel. W. H. Woodhall. 1,885,667; Nov. 1.
Alloys, Magnesium base. J. A. Gann and F. L. Reynolds. 1,885,429; Nov. 1.
Alloys, Magnesium-manganese-zinc. J. A. Gann. 1,886,251; Nov. 1.
Amines, Making aromatic. M. E. Putnam. 1,885,625; Nov. 1.
Amines, Making secondary aromatic. P. G. Jones. 1,885,355; Nov. 1.
Amplifying system. A. D. Silva. 1,885,301; Nov. 1.
Angles, Repairing flange. A. R. Wilson, R. Seeman, and M. Hallen. 1,885,398; Nov. 1.
Animal trap. A. Lavoie. 1,886,203; Nov. 1.
Antenna. T. Weitling. 1,886,322; Nov. 1.
Antenna system, Directive. E. J. Sterba. 1,885,151; Nov. 1.
Anthracene, Catalytic oxidation of. A. O. Jaeger. 1,885,832; Nov. 1.
Anthracene, Catalytic oxidation of. A. O. Jaeger. 1,886,023; Nov. 1.
Antifreezing device for windows, windshields and the like. A. Milette and P. Dupuis. 1,885,127; Nov. 1.
Antivibrator, Harmonic. A. J. Bocz. 1,886,246; Nov. 1.
Arbor for ring splitting machines. F. Deutsch. 1,885,188; Nov. 1.
Arch for furnaces, kilns and the like, Suspended flat. S. F. Burnet. 1,885,800; Nov. 1.
Arm, Mechanical. S. Pilson. 1,885,138; Nov. 1.
Article of upholstery and making same. H. J. Burkart. 1,886,325; Nov. 1.
Articles, Apparatus for manufacturing thin rubber. F. L. Killian. 1,885,115; Nov. 1.
Assembling machine and jig. F. W. Doyle. 1,885,690; Nov. 1.
Auto of six or more wheels. M. Brozincevic. 1,885,508; Nov. 1.
Automatic centering reel. F. J. Littell. 1,885,613; Nov. 1.
Automatic key case. R. E. Singleton. 1,885,957; Nov. 1.
Automatic return toggle switch. P. R. Forman. 1,885,246; Nov. 1.
Automatic switch. J. E. Tees. 1,885,784; Nov. 1.
Automatic tool machine. E. W. Brinkman and E. S. Kline. 1,885,224; Nov. 1.
Automobile parking apparatus. W. J. Aitken. 1,885,218; Nov. 1.
Automobile signal. J. M. Mallette. 1,885,274; Nov. 1.
Awning and shutter, Convertible. C. F. Miller and S. W. Brundage. 1,885,462; Nov. 1.
Awnings and the like, Attachment for raising and lowering. J. Starr. 1,885,778; Nov. 1.
Bag: *See*—
Foil tined bag.
Bag house. W. E. Newnam. 1,886,215; Nov. 1.
Bank, Savings. A. C. Grunwald. 1,886,181; Nov. 1.
Bar and pen point, Feed. S. M. Sager. 1,885,862; Nov. 1.
Bar for ophthalmic mountings, Center. H. L. Lasher. Des. 88,158; Nov. 1.
Bars, Apparatus for cleaning iron. M. Sesko. 1,885,772; Nov. 1.
Base for wall paper. L. N. Weber. 1,885,810; Nov. 1.
Basket. W. E. P. Bates. 1,885,104; Nov. 1.
Basket handle machine. L. M. Hile. 1,885,599; Nov. 1.
Batteries, Apparatus for charging storage. R. M. Gilson. 1,885,908; Nov. 1.
Battery replacement box. H. A. Wiley. 1,886,071; Nov. 1.
Battery terminal clamp. J. E. Hamby. 1,886,095; Nov. 1.
Beam, Walking. L. J. Black. 1,885,675; Nov. 1.
Bearing. J. W. Parker. 1,886,219; Nov. 1.
Bearing construction. L. Brennels. 1,885,410; Nov. 1.
Bearing construction. S. A. Hastings. 1,886,014; Nov. 1.
Bearing construction. L. R. Heim. 1,885,914; Nov. 1.
Bearing, Double thrust roller. N. Medved. 1,885,852; Nov. 1.
Bearing, Scale. K. V. Hieber. 1,885,721; Nov. 1.
Bearing, Self lubricating. J. M. Bryan and B. Smartt. 1,885,586; Nov. 1.
Bearing, Side. L. C. Koopmans. 1,885,358; Nov. 1.
Bearing, Side roller. F. T. Reese. 1,886,254; Nov. 1.
Bearing structure, Rubber. B. A. Evans. 1,885,339; Nov. 1.
Bearings, Assembling roller. E. G. Boden. 1,885,980; Nov. 1.
Bed and attaching device, Folding. E. Cocks. 1,885,511; Nov. 1.
Bed and davenport, Combination folding. E. L. Weinman. 1,885,160; Nov. 1.
Bed end. R. J. Ellsworth. 1,886,000; Nov. 1.
Bed, Folding davenport. D. H. Caldemeyer. 1,886,081; Nov. 1.
Bed or couch, Folding. O. Fichtenbaum. 1,885,812; Nov. 1.
Bed, Recess. R. J. Ellsworth. 1,885,999; Nov. 1.
Bedside unit. J. T. Fehl and A. Belcher. 1,885,597; Nov. 1.
Bedstead. G. Van De Riet. Des. 88,180; Nov. 1.
Belt for cigarette machines, Two-speed collector. W. B. Bronander. 1,885,892; Nov. 1.
Belt traction device, Endless. C. L. George. 1,885,430; Nov. 1.
Benzanthrone series, Coloring matters and intermediates of the. D. C. R. Jones, R. F. Thomson, and J. Thomas. 1,885,449; Nov. 1.
Billing machine, Public service. W. E. Lippert. 1,885,525; Nov. 1.
Binder, Load. S. J. Montgomery. 1,885,128; Nov. 1.
Binder, Loose leaf. J. L. McMillan. 1,885,461; Nov. 1.
Block: *See*—
Composite paving block. Engine block.
Blow-off, Automatic. T. E. Neal. 1,885,466; Nov. 1.
Blow out preventer and valve, Combined. W. E. King. 1,886,340; Nov. 1.
Blower, Rotary. E. Mandler. 1,886,206; Nov. 1.
Board: *See*—
Ironing board.
Boat meter. I. W. Masters. 1,885,933; Nov. 1.
Boat racing tank, Speed. R. J. Payne. 1,886,220; Nov. 1.
Boat, Sail. J. P. Fox. 1,885,247; Nov. 1.
Bodies, Manufacture of hollow. L. Becherau. 1,885,406; Nov. 1.
Boiler. C. W. Barbbée and B. Goerg. 1,885,175; Nov. 1.
Boiler. J. C. Martin, jr. 1,885,931; Nov. 1.
Boiler. T. E. Murray. 1,886,214; Nov. 1.
Boiler cleaner. N. L. Snow. 1,886,060; Nov. 1.
Bolt or similar article, Screw. H. Rosenberg. Des. 88,175–6; Nov. 1.
Boom swinging apparatus. G. A. McWilliams. 1,885,937; Nov. 1.
Booth, Telephone. O. Gullicksen. 1,885,432; Nov. 1.
Boots, Making rubber. L. H. Burnham. 1,885,327; Nov. 1.
Bottle closure. P. T. McAvoy. 1,886,347; Nov. 1.
Bottle or similar article. E. E. Kohn. Des. 88,152; Nov. 1.
Bowl, Ventilating lavatory. L. Hanson. 1,885,715; Nov. 1.
Box: *See*—
Battery displacement box. Fuse box.
Exhaust box.
Box. F. H. Mix. 1,886,211; Nov. 1.
Box and hanger and making the same, Outlet. C. C. Buckels. 1,886,161; Nov. 1.
Box construction. J. F. Maurer, jr. 1,885,748; Nov. 1.

Box for tools, Display. C. Ekberg. Des. 88,145; Nov. 1.
Box or carton. H. Levine. 1,885,455; Nov. 1.
Box or carton, Two-piece. H. Levine. Re18,639; Nov. 1.
Box or similar container. W. Kops. Des. 88,157; Nov. 1.
Box parts with inserted edge lining, Device for producing. A. J. Schmiedel. 1,886,054; Nov. 1.
Box toe blank and producing the same. J. J. Daly. 1,886,329; Nov. 1.
Boxes consisting of two parts one of which has a curved wall, Forming. J. Schmiedel. 1,886,055; Nov. 1.
Brace: *See*—
Furniture brace.
Bracket for electric motors. K. R. Lieberknecht. 1,886,259; Nov. 1.
Braid, Elastic lace. H. Mehler. 1,885,749; Nov. 1.
Brake. J. Whyte. 1,886,141; Nov. 1.
Brake and clutch construction. G. Fast. 1,885,516; Nov. 1.
Brake and clutch pedal structure, Combined. H. C. Holland. 1,885,442; Nov. 1.
Brake control. G. N. Cadbury. 1,885,588; Nov. 1.
Brake control mechanism, Hydraulic. C. A. Sawtelle. 1,885,552; Nov. 1.
Brake for railroad cars, Hand. E. B. Keesey. 1,885,727; Nov. 1.
Brake lining and machine for making same, Braided. S. B. Blaisdell. 1,885,676; Nov. 1.
Brake mechanism. H. C. Bowen and J. R. Heidloff. 1,885,174; Nov. 1.
Brake mechanism. C. C. Bradbury. 1,885,580; Nov. 1.
Brake mechanism, Variable leverage. C. A. Sawtelle. 1,885,551; Nov. 1.
Braking mechanism, Hydraulic. D. O. Scott. 1,886,309; Nov. 1.
Bread transfer, Sliced. D. McAllister. 1,885,935; Nov. 1.
Brick and method, Refractory. R. P. Heuer. 1,886,185; Nov. 1.
Bromine from sea water and the like, Continuous process for recovering. J. J. Grebe and R. H. Boundy. 1,885,255; Nov. 1.
Brooder. R. C. Williams. 1,885,499; Nov. 1.
Brush head swinging device and control. J. M. Oberti. 1,885,540; Nov. 1.
Brush, Motor. H. B. Eynon. 1,885,903; Nov. 1.
Brush, Polishing. C. E. Frost. 1,885,706; Nov. 1.
Buckle. W. M. Hueseman. 1,885,445; Nov. 1.
Buckle, Slide. J. H. Domkee. 1,885,239–40; Nov. 1.
Buffer mechanism, Diaphragm. C. W. Nicholas. 1,885,469; Nov. 1.
Building. H. E. Conklin. Des. 88,142; Nov. 1.
Building construction. O. P. Cherdron and C. W. Scott. 1,885,330; Nov. 1.
Building construction. F. M. Venzie. 1,885,496; Nov. 1.
Bumper, Automobile. L. Pat. 1,885,474; Nov. 1.
Bumper for vehicles. M. B. Hammond. 1,885,435; Nov. 1.
Bunker, Refrigerator car ice. R. C. Pierce. 1,885,624; Nov. 1.
Burner: *See*—
Combined oil and gas burner. Oil burner.
Liquid fuel burner.
Burner control, Thermostatic. A. J. Donohue. 1,885,515; Nov. 1.
Burner foot, Oil. W. E. Holt. 1,885,443; Nov. 1.
Bushing, Automatic take-up. E. F. Zaparka. 1,886,143; Nov. 1.
Button loop. J. H. Domkee. 1,885,336; Nov. 1.
Cabinet for telephones, Wall. C. F. Tholin. 1,886,068; Nov. 1.
Cabinet, Linoleum topped filing. G. H. Dawson. 1,885,805; Nov. 1.
Cabinet, Mothproofing. H. Kliot. 1,885,919; Nov. 1.
Cable splice. E. K. Cole. 1,886,247; Nov. 1.
Cage, Bird. A. M. Kroczek. 1,885,359; Nov. 1.
Cage lock. G. W. Merritt. 1,885,277; Nov. 1.
Calculating machine. A. Baumann and C. P. Horlacher. 1,886,148; Nov. 1.
Calculator. A. C. Meyer. 1,885,617; Nov. 1.
Calendar, Saving-box. H. J. Jepsen and K. C. Nielsen. 1,886,104; Nov. 1.
Camera. L. Azarraga. 1,885,102; Nov. 1.
Camera back, Rotary. W. H. Petit and E. S. Hineline. 1,885,286; Nov. 1.
Camera shutter. L. Ludwig and E. Böhme. 1,886,283; Nov. 1.
Cameras and the like optic apparatus, Prism carrier for. L. P. Lemaire. 1,886,204; Nov. 1.
Can: *See*—
Oil can.
Can bodies, Nesting. M. L. Dodge and P. E. Pearson. 1,886,171; Nov. 1.
Can filling machine. O. H. Hansen. 1,886,012; Nov. 1.
Cap for carboy casing. J. R. Moscrop. 1,885,534; Nov. 1.
Cap for water coolers. S. J. Benn. Des. 88,140; Nov. 1.
Car dumping and coal lowering apparatus, Combined. F. Pardee, jr. 1,886,117; Nov. 1.
Car for amusement parks, Passenger. J. Kahl. 1,885,206; Nov. 1.
Car, Mine. W. D. Hockensmith, jr. 1,886,187; Nov. 1.
Car, Railway. W. E. Wine. 1,885,502; Nov. 1.
Car, Refrigerator. D. L. Reynolds. 1,886,225; Nov. 1.
Carbon and product thereof, Making absorptive. A. B. Ray. 1,885,141; Nov. 1.
Carbonaceous materials, Distillation of. H. Nielsen and B. Laing. 1,886,262; Nov. 1.
Carburetor. W. Wemhöner. 1,885,395; Nov. 1.
Card, Belt clip. J. K. Diamond. 1,885,237; Nov. 1.
Cardboard display device. F. A. Marx. 1,886,036; Nov. 1.
Card feeding mechanism. A. T. H. Thomas and R. F. Power. 1,885,874; Nov. 1.
Card, Greeting. L. M. Whittington. 1,885,879; Nov. 1.
Card table. E. A. Snow. 1,885,384; Nov. 1.
Carpet. A. E. Smidlein. Des. 88,177; Nov. 1.
Carriage, Doll. W. C. Wood. 1,886,073; Nov. 1.
Carton. C. P. Gallistel. 1,885,906; Nov. 1.
Cartridge, Autographic film. J. P. Scannell. 1,886,053; Nov. 1.
Case: *See*—
Sheet metal case. Traveling case.
Casing head construction. J. J. Conroy. 1,886,167; Nov. 1.
Casing, Ventilated stop signal. H. C. Bohnet. 1,885,912; Nov. 1.
Cash register. H. J. Gaisman. 1,885,252; Nov. 1.
Caster, Swivel. S. W. Cheanutt. 1,885,990; Nov. 1.
Cellulose derivatives and preparing the same, Artificial products from. H. Persiel, G. Balle, and K. Sponsel. 1,885,475; Nov. 1.
Cement, Manufacture of hydraulic. P. T. Lindhard. 1,885,845; Nov. 1.
Cement, Plasticizing hydraulic. C. E. Kraus. 1,885,731; Nov. 1.
Centering and shearing machine, Automatic. F. A. Beatty. 1,885,320; Nov. 1.
Centrifugal mineral separator. L. I. Lorentsen. 1,886 111; Nov. 1.
Centripetal separator. W. C. Laughlin. 1,885,735; Nov. 1.
Ceramics. H. L. and R. M. Crowley. 1,885,234; Nov. 1.
Chain link wire fabric. A. A. G. Land. 1,885,361–2; Nov. 1.
Chain making, Method and apparatus for. C. Kohm. 1,886,194; Nov. 1.
Chain, Self-cleaning. A. Redler. 1,885,946; Nov. 1.
Chains and the like, Method and apparatus for galvanizing fancy. A. Winkler. 1,886,277; Nov. 1.
Chair: *See*—
Folding chair.
Chair. E. A. Oehrl. 1,885,471; Nov. 1.
Chair. K. M. Ronan. 1,885,630; Nov. 1.
Chair and cabinet, Combination bath. C. Kolodny. Des. 88,209; Nov. 1.
Chairs, Nest of. L. Doetsch. 1,886,172; Nov. 1.
Chaplet making machine. L. C. Hobart. 1,885,340; Nov. 1.
Chart and pencil, Handy. J. F. O'Keefe. 1,885,541; Nov. 1.
Chase, Adjustable printer's. R. J. Snedden. 1,885,958; Nov. 1.
Chassis, Hanging. G. Wolf. 1,885,882; Nov. 1.
Chloro-phosphate of lead, Preparation of a. P. Jolibois and G. Chaudron. 1,885,447; Nov. 1.
Chocking device for automobiles and aeroplanes. W. A. Lombardi. 1,885,120; Nov. 1.
Choke, Automatic. D. Collins. 1,885,331; Nov. 1.
Chuck. P. U. J. Amyot. 1,885,790; Nov. 1.
Chuck. A. E. Church. 1,886,083; Nov. 1.
Chuck, Cone. J. M. Redinger. 1,886,224; Nov. 1.
Churn. V. Quaedvlieg. 1,885,626; Nov. 1.
Chute, Coin delivery. E. J. Brandt. 1,885,582; Nov. 1.
Cigar handling device, Automatic. N. Christensen. 1,885,897; Nov. 1.
Cigarette packing machine. A. Ritscher. 1,886,047; Nov. 1.
Cigarette rod machine. A. Werner. 1,885,969; Nov. 1.
Cigarette rolling device, Sanitary. E. A. K. Stanger. 1,885,304; Nov. 1.
Cigarettes, Packaging. G. W. Gwinn and C. Arelt. 1,885,910; Nov. 1.
Circuit, Control. J. F. Usener, sr., and J. F. Usener, jr. 1,885,569; Nov. 1.
Circuit controlling mechanism. T. E. Murray. 1,885,535; Nov. 1.
Circuit, Electrical signaling and operating. N. E. Nilsson. 1,886,216; Nov. 1.
Circuit protecting device. R. Dubusc and A. D. Illovici. 1,885,189; Nov. 1.
Circuits, Control of constant current. C. G. Suits. 1,885,155; Nov. 1.
Clamp: *See*—
Battery terminal clamp. Parallel groove clamp.
Clamp. F. R. Spurgeon and S. Lynch. 1,886,132; Nov. 1.
Clasp. F. L. Rouleau. 1,885,296; Nov. 1.
Clay pouring apparatus. L. Showers. 1,885,774; Nov. 1.
Cleaner: *See*—
Boiler cleaner.
Cleaning composition. O. Textor and B. O. Crites. 1,885,390; Nov. 1.
Clock case. F. J. Abel. Des. 88,139; Nov. 1.
Clock case. P. Buhrle. Des. 88,141; Nov. 1.
Clock system, Electric. S. Keilien. 1,886,107; Nov. 1.
Closure, Jar. L. T. Crabbe. 1,885,687; Nov. 1.
Cloth, Controlling speed of and expanding. W. J. Koch. 1,886,342; Nov. 1.

Cloth cutting machine. J. Bloch and A. G. Wagner. 1,886,077; Nov. 1.
Cloth, Method of and apparatus for drying. G. W. Lane. 1,886,030; Nov. 1.
Clothes hanger. S. C. Hulett. 1,885,263; Nov. 1.
Clutch. F. H. Jones. 1,886,193; Nov. 1.
Clutch. E. E. Wemp. 1,886,323; Nov. 1.
Clutch control mechanism, Hoist. C. W. Hottman, jr. 1,885,827; Nov. 1.
Clutch, Friction. W. S. Davenport. 1,885,236; Nov. 1.
Clutch, Friction. J. J. Morris. 1,886,294; Nov. 1.
Clutch mechanism for use in hoisting and load-carrying machine, Free wheel. M. D. Scott. 1,885,771; Nov. 1.
Coal, coke, and the like and manufacture thereof, Binder material for. L. and F. C. Kern. 1,885,839; Nov. 1.
Coating device. G. Sague. 1,886,231; Nov. 1.
Cock, Gauge. J. R. Brown. 1,886,159; Nov. 1.
Cock, Lubricated plug. A. M. Houser and R. Fennema. 1,885,202; Nov. 1.
Coffee pot. I. W. Wood. 1,885,666; Nov. 1.
Collar attaching means. C. Schwartz. 1,886,057; Nov. 1.
Collar for ice cream cabinets, Insulating. W. Greenberg. 1,885,712; Nov. 1.
Colloid Mill. W. Ostermann. 1,885,283; Nov. 1.
Color-photography. W. V. D. Kelley. 1,885,450; Nov. 1.
Comb. J. J. Rugaber. 1,886,357; Nov. 1.
Combined oil and gas burner. M. A. Powers. 1,885,478; Nov. 1.
Combustion apparatus. A. S. Mancib. 1,885,530; Nov. 1.
Combustion chamber for internal combustion engines. V. Heidelberg. 1,885,719; Nov. 1.
Communication system, Multiplex. W. Ilberg. 1,886,263; Nov. 1.
Compass, Induction. R. Gunn. 1,886,336; Nov. 1.
Composite paving block. L. F. Hewett. 1,885,720; Nov. 1.
Composition for battery boxes. B. N. Chamberlain. 1,886,269; Nov. 1.
Compositions containing a synthetic resin or balsam. C. Ellis. 1,886,242; Nov. 1.
Compound for purifying oils. H. H. Moreton. 1,885,619; Nov. 1.
Computing machine. O. J. Sundstrand. 1,885,960; Nov. 1.
Concentric conducting system. H. A. Affel. 1,885,168; Nov. 1.
Concrete, Apparatus for transporting and conditioning ready-mixed. E. A. Hoffmann. 1,885,350; Nov. 1.
Concrete, Cellular. R. K. O. Sahlberg. 1,886,232; Nov. 1.
Condensers of greater breakdown strength, Making wound (roll). A. Meissner. 1,886,236; Nov. 1.
Conditioning machine for cloths. E. Wenzel. 1,885,396; Nov. 1.
Conduit fitting. E. J. S. Swanson. 1,885,490; Nov. 1.
Conduit fittings. J. G. Bradbury. 1,885,581; Nov. 1.
Connecter, Cable. S. N. Buchanan. 1,885,228; Nov. 1.
Connecter for cables. J. C. Damon. 1,886,086; Nov. 1.
Connecter, Separable. H. E. Walker. 1,885,657; Nov. 1.
Connecting device for use with stranded metal cables. J. W. Astley. 1,885,316; Nov. 1.
Connecting rod. W. H. Yandell. 1,885,976; Nov. 1.
Connection and making the same, Terminal. F. H. Bullinger. 1,885,108; Nov. 1.
Connection, Electrical plug and socket. J. B. Tucker. 1,886,137; Nov. 1.
Connection for all metal rotary hose for oil wells, Universal. C. G. Banks. 1,885,886; Nov. 1.
Connection for liquid level indicators. M. Goodloe. 1,886,179; Nov. 1.
Connection for oil refinery fittings, Tube. C. V. Stewart. 1,885,779; Nov. 1.
Contact for lamps, Electrical. F. W. C. Neuner. 1,885,467; Nov. 1.
Container. G. T. Horton. 1,885,601; Nov. 1.
Container and case combined for use as a lipstick. A. J. Vercelli. 1,885,654; Nov. 1.
Container for cigars, Tube-like. C. W. Müller. 1,886,115; Nov. 1.
Container for ice cream and the like, Wafer. J. H. Dicker. Des. 88,143; Nov. 1.
Container for motor automobiles, Record. I. E. Dugan. 1,885,692; Nov. 1.
Container for paper in rolls. J. V. Duffin. 1,885,996; Nov. 1.
Container handling device. A. Rickenbacker. 1,885,291; Nov. 1.
Container, Hat delivery. S. J. Johnson. 1,885,205; Nov. 1.
Container, Safety match. C. H. Palmer. 1,885,856; Nov. 1.
Container, Shipping. W. H. Lohmann and G. W. Kaestner. 1,885,456; Nov. 1.
Containers and holder therefor, Combined set of toilet accessory. R. O. Nereim. Des. 88,167; Nov. 1.
Containers with carbon dioxide, Charging. W. H. Freygang. 1,886,175; Nov. 1.
Control device. G. W. McKee. 1,885,367; Nov. 1.
Control mechanism for printing presses, Elevator. C. L. Low. 1,886,282; Nov. 1.
Conveyer control for wrapping machines, Automatic package. F. R. Schmitt. 1,885,952; Nov. 1.
Conveyer, Extensible. H. E. Twomley. 1,885,568; Nov. 1.
Conveyer roller. J. Sylvester. 1,885,806; Nov. 1.
Cooling, Apparatus for. G. E. Hulse and J. D. Strobell. 1,885,353; Nov. 1.
Cooling bakery products. W. W. Reece and L. W. Haas. 1,885,142; Nov. 1.
Copyholder light. O. W. Klingsick. 1,886,027; Nov. 1.
Corner cutting machines, Combined adjusting and gauge heads for. B. Minkow. 1,885,270; Nov. 1.
Cotton elevator. C. Haraxin. 1,885,437; Nov. 1.
Cotton stripper. B. R. Benjamin. 1,886,151; Nov. 1.
Counter, Resettable. W. S. Brubaker. 1,885,680; Nov. 1.
Coupling: *See*—
Air hose coupling. Train coupling.
Pipe coupling.
Coupling for railway cars, Automatic air or steam. B. B. Kosanovich. 1,885,523; Nov. 1.
Court and treating same, Tennis. G. T. King. 1,885,207; Nov. 1.
Cover or the like, Pillow. M. W. Berlfein. Des. 88,206; Nov. 1.
Cover, Register. H. G. Klosterman. 1,886,028; Nov. 1.
Cover, Tire. C. M. Ellenberger. 1,886,270; Nov. 1.
Covering, Bed. E. S. Smith. 1,885,558; Nov. 1.
Covering, Printed floor. G. M. Fauser. Des. 88,147; Nov. 1.
Creel. F. Klein. 1,885,114; Nov. 1.
Crib, Automobile baby. W. G. Tyler. 1,885,492; Nov. 1.
Crossing, Railway highway. G. Ferneding and H. N. West. 1,885,244; Nov. 1.
Crossing signal. A. Stewart. 1,885,153; Nov. 1.
Crushing and grinding machine. O. Gaiser. 1,885,251; Nov. 1.
Cultivator, Field. C. W. Robinson. 1,886,229; Nov. 1.
Cultivator, Soil. C. A. Goddard. 1,886,178; Nov. 1.
Cup for air brakes, Drain. C. A. Campbell. 1,885,894; Nov. 1.
Curb pipe. H. C. Frey. 1,886,041; Nov. 1.
Current drive, Submerged alternating. M. Rebse. 1,885,140; Nov. 1.
Curtain, Plaited. D. Kaufman. 1,885,916; Nov. 1.
Curtain roller. A. K. Ygger. 1,885,400; Nov. 1.
Cushion seat. L. Mann. 1,885,847; Nov. 1.
Cylinder construction. O. Nonnenbruch. 1,885,755; Nov. 1.
Cylinders, Repairing engine. H. J. Yount. Re18,644; Nov. 1.
Dam and constructing the same. F. A. Noetzli. 1,885,470; Nov. 1.
Damper apparatus. H. Rosenberg. 1,885,548; Nov. 1.
Damper for heating and ventilating units, Double. W. Ewald and P. P. Henshall. 1,885,243; Nov. 1.
Derivatives of 1.2.7.8-diphthaloylcarbazole, New. F. Baumann. 1,885,172; Nov. 1.
Desk calendar stand. B. M. Morris. 1,885,129; Nov. 1.
Desk, Foldable. M. Kasparian. 1,885,835; Nov. 1.
Desk set. A. Gibson. 1,886,091; Nov. 1.
Detecting device for cigarette turning machines. M. P. E. Hohn. 1,886,016; Nov. 1.
Detergent. W. S. Oppenheimer. 1,885,133; Nov. 1.
Device for automatically re-winding clocks or other mechanisms by the variations of the atmospheric temperatures. J. L. Reutter. 1,885,479; Nov. 1.
Diaphragm mechanism. H. C. Lord and I. P. Whitehouse. 1,885,457; Nov. 1.
Die: *See*—
Ornamenting die.
Die. F. S. Speicher. 1,885,385; Nov. 1.
Die-casting machine. W. J. During and N. Lester. 1,885,421; Nov. 1.
Die lapping and grinding machine. R. Bsteh. 1,885,178; Nov. 1.
Differential for automobiles. A. Rienerth. 1,886,226; Nov. 1.
Differential, Two wheel drive. C. E. Schoenborn. 1,885,871; Nov. 1.
Diseases of the genito-urinary tract, Treatment of. J. J. Briggs. 1,885,106; Nov. 1.
Dispenser for dry materials. A. L. Bobrick. 1,885,978; Nov. 1.
Dispenser for liquids. F. A. Ostwald. Des. 88,172; Nov. 1.
Dispenser, Soap. A. L. Bobrick. 1,885,979; Nov. 1.
Dispensing and measuring device, Liquid. A. D. Hutton. 1,886,022; Nov. 1.
Dispensing device. C. S. Garlutso. 1,885,907; Nov. 1.
Dispensing device. G. P. Kean. 1,886,106; Nov. 1.
Dispensing device. E. E. McDow. 1,886,288; Nov. 1.
Dispensing device. J. H. McLellan. 1,885,368; Nov. 1.
Dispensing system, Hydraulic grease. A. Bizzarri. 1,885,220; Nov. 1.
Display apparatus. A. Ehrenzweig. 1,885,595; Nov. 1.
Display device. A. W. Kling. 1,885,268; Nov. 1.
Display device. W. B. Wilson. 1,885,978; Nov. 1.
Display device. A. H. Zeledon. 1,886,144; Nov. 1.
Display fixture. L. Barnett. 1,885,103; Nov. 1.
Display method and apparatus. E. B. Kirk. 1,886,341; Nov. 1.
Display table. F. R. Chester. 1,885,801; Nov. 1.
Distillation process and apparatus, Fractional. W. G. Williams. 1,886,142; Nov. 1.
Distilling apparatus. J. McDougall. 1,886,037; Nov. 1.
Distributing apparatus. O. C. Houghton. 1,885,828; Nov. 1.

Distributor, Double conveyer. J. J. Wallace. 1,885,656; Nov. 1.
Door, Box car. J. A. Shafer. 1,885,145–6; Nov. 1.
Door construction for hopper cars. A. Campbell. 1,885,181; Nov. 1.
Door lock. C. L. Paas. 1,885,942; Nov. 1.
Doorlock with multiple action, Spring. M. Fuber. 1,885,707; Nov. 1.
Doormat. S. Steinmetz. 1,885,638; Nov. 1.
Door, Oven. W. J. Kirby. 1,885,357; Nov. 1.
Dowel, Pattern maker's. R. L. Johnson. 1,885,204; Nov. 1.
Dowser. A. Dina. 1,885,419; Nov. 1.
Drawing instrument, Combination. J. C. Sommer. 1,885,149; Nov. 1.
Dressing table. G. Van De Riet. Des. 88,179; Nov. 1.
Drier. K. E. Bell. 1,885,505; Nov. 1.
Drill: *See*—
Rock drill. Rotary drill.
Drill grinding machine, Twist. V. Jereczek. 1,886,025; Nov. 1.
Driving apparatus for wells, Hydraulic. W. C. Bailey. 1,885,794; Nov. 1.
Driving mechanism for motor vehicles. J. Gabil. 1,885,427; Nov. 1.
Drum, Abrading, buffing or polishing. B. G. Kuhne. 1,885,452; Nov. 1.
Drum, Sanding. C. L. Mattison. 1,885,123; Nov. 1.
Dry cell and seal therefor. W. G. Waitt. 1,885,786; Nov. 1.
Dry-ice, Using and storing. P. Schlumbohm. 1,885,769; Nov. 1.
Duplex riveting machine. A. R. Havener. 1,885,347; Nov. 1.
Dust catching and quenching device. F. H. McBerty. 1,885,936; Nov. 1.
Dyes, Manufacture of new xanthene. A. Coulthard and E. H. Rodd. 1,885,591–2; Nov. 1.
Dyestuff and making same, Vat. W. Eckert and H. Greune. Re18,643; Nov. 1.
Dyestuffs coutaining metals and making same. F. Straub and H. Schneider. 1,885,641; Nov. 1.
Dyestuffs, Manufacture of Polyazo. H. Leemann, H. Lier, and O. Knecht. 1,885,609; Nov. 1.
Edge construction for desk tops and the like. F. A. Schmitz. 1,885,554; Nov. 1.
Electric adjusting device for the hands of clock mechanisms. C. Rosat, J. O. Moser, and P. Reymond. 1,885,858; Nov. 1.
Electric clothes drier. L. I. Martin. 1,886,286; Nov. 1.
Electric fixture. M. N. Russell. 1,886,306; Nov. 1.
Electric motor. E. F. Moodyman. 1,886,040; Nov. 1.
Electric railway system. H. K. Whitehorn. 1,885,662; Nov. 1.
Electric switch. A. C. Gaynor. 1,885,709; Nov. 1.
Electric switch. J. B. Luther. 1,886,284; Nov. 1.
Electric switch. F. Perrotti. 1,886,153; Nov. 1.
Electrical apparatus. R. J. Emmert. 1,885,596; Nov. 1.
Electrical apparatus. E. B. Newill. 1,885,621; Nov. 1.
Electrical device for operating rear curtains of automobiles. J. R. Ridpath and J. L. Hagle. 1,885,766; Nov. 1.
Electrical discharge device. F. S. McCullough. 1,885,125; Nov. 1.
Electrical switch. G. J. Schneider. 1,885,865; Nov. 1.
Electrical translating apparatus. C. W. Butler and A. T. Johnston. 1,885,328; Nov. 1.
Electrically controlled regulating means. W. H. J. Gerber. 1,885,196; Nov. 1.
Electrode for neon signs. J. J. Madine. 1,885,529; Nov. 1.
Electrode for neon tubes. H. Hilgenberg. 1,886,186; Nov. 1.
Electron discharge device. R. F. Beers. 1,886,150; Nov. 1.
Electron discharge device. L. Bégin. 1,885,217; Nov. 1.
Electron tube. K. Pohlhausen. 1,886,264; Nov. 1.
Electroplating and producing same. C. G. Fink. 1,885,700; Nov. 1.
Electroplating, Apparatus for. P. A. Smith. 1,885,148; Nov. 1.
Elevator: *See*—
Cotton elevator.
Elevator safety appliance. J. B. Murphy. 1,886,213; Nov. 1.
Emulsion containing India rubber. L. G. Gabriel and J. F. Blott. 1,886,334; Nov. 1.
Engine: *See*—
Internal combustion engine. Sleeve valve engine.
Rotary engine.
Engine block. A. M. Tevis and L. M. Sutter. 1,885,566; Nov. 1.
Envelope, Commercial. H. Millan, jr. 1,886,348; Nov. 1.
Envelope filling mechanism. S. J. T. Price. 1,886,119; Nov. 1.
Equalizing device for knitting machines. E. O. Nebel. 1,885,539; Nov. 1.
Ethylene and the sulphation of a mixture of ethylene and propylene, Sulphation of. B. T. Brooks. 1,885,585; Nov. 1.
Evaporation or distillation, especially with vacuum, Apparatus for continuous. O. Angelucci. 1,885,402; Nov. 1.
Evaporator for refrigerating apparatus. H. C. Kellogg and E. M. May. 1,885,838; Nov. 1.
Evaporator unit. E. L. Barnes. 1,885,671; Nov. 1.
Excavating machine. C. H. Lotte. 1,886,032; Nov. 1.
Exercising device. L. Pat. 1,885,473; Nov. 1.
Exhaust box. E. A. Ulmann. 1,885,494; Nov. 1.
Exothermic acetaldehyde condensation reactions, Conduct of. E. J. Boake and L. W. E. Townsend. 1,885,221; Nov. 1.
Expansion joint. W. B. Thompson and A. B. Merrill. 1,885,391; Nov. 1.
Extractor: *See*—
Fruit juice extractor. Juice extractor.
Eyes for dolls, Movable. D. Zaiden. 1,885,573; Nov. 1.
Fabrics, Apparatus for embossing. J. Miller. 1,885,618; Nov. 1.
Facsimile system. C. W. Hough. 1,886,189; Nov. 1.
Fastener. M. J. Ford. 1,885,816; Nov. 1.
Fastener, Canopy. L. T. Deubler. 1,885,514; Nov. 1.
Fastener, Hood. C. R. Hennicke. 1,885,824; Nov. 1.
Fastener, Snap. J. W. Dews. 1,885,806; Nov. 1.
Fastening device, Automatic. W. F. Rust. 1,886,123; Nov. 1.
Faucet. E. J. Shoemaker. 1,886,058; Nov. 1.
Faucet and ball cock, Hydraulic control. L. A. Fischer. 1,885,424; Nov. 1.
Faucet, Receptacle actuated. I. W. Waterval. 1,885,647; Nov. 1.
Feed for cigarette machines, Constant level tobacco. A. E. Wiener. 1,885,880; Nov. 1.
Feed for cigarette machines, Inclined. M. Patterson. 1,885,943; Nov. 1.
Feed, Making enzymatized stock. E. M. Brown. 1,885,411; Nov. 1.
Feeder, Chicken. R. L. Widney. 1,886,276; Nov. 1.
Feeding device, Automatic. S. C. Lucas. 1,886,033; Nov. 1.
Feeding device for stuffing machines. S. Halvorsen. 1,885,434; Nov. 1.
Ferrochrome and other similar alloys, Producing. K. M. Simpson. 1,885,380; Nov. 1.
Fibrous material, Process of and apparatus for treating. F. Hoyer. 1,886,020; Nov. 1.
File index device. J. M. Hurley. 1,885,354; Nov. 1.
Filing device for phonograph disks. J. P. A. Roussel. 1,885,481; Nov. 1.
Filler, Film socket. C. M. Cole. 1,885,684; Nov. 1.
Film, Device for reproducing the sounds recorded on a talking cinematographic. A. M. B. Charlin and P. M. G. Toulon. 1,885,939; Nov. 1.
Films, Apparatus for titling movie. C. W. Schwartz. 1,885,555; Nov. 1.
Films, Autographing photographic. J. P. Scannel. 1,886,052; Nov. 1.
Films of various thicknesses, Drawing apparatus with pivotally movable lips for the manufacture of cellulose. A. Maurer. 1,885,747; Nov. 1.
Films, Printing machine for moving picture. J. Burkhardt. 1,885,229; Nov. 1.
Fire extinguisher. W. B. Bronander. 1,885,226; Nov. 1.
Fire extinguisher. E. P. Wagner. 1,885,309; Nov. 1.
Fire extinguishing medium, Discharging a. W. H. Freygang. 1,885,817; Nov. 1.
Fire preventing device for moving picture machines. J. C. Pfeil. 1,886,043; Nov. 1.
Fire preventive device for motion picture apparatus. H. H. Sternberg. 1,885,488; Nov. 1.
Fish fin and tail guide for filleting machines. W. H. Hunt. 1,885,829; Nov. 1.
Fish lure. J. A. Nolan. 1,886,116; Nov. 1.
Fixture for holding bird food. L. G. Henning and J. Rein. 1,886,015; Nov. 1.
Fixture, Radius forming. M. J. Chapman. 1,886,082; Nov. 1.
Flame-proofing and product formed thereby. C. Snyder. 1,885,870; Nov. 1.
Float, Aircraft landing. H. L. Beam. 1,885,889; Nov. 1.
Float for fishlines. J. C. Whitcomb. 1,885,311; Nov. 1.
Floodlight, Theater. H. T. Strong. 1,885,642; Nov. 1.
Floor plate. R. L. Wheeler. Des. 88,185; Nov. 1.
Flow meter. W. J. Crowell, jr. 1,885,184; Nov. 1.
Fluid conditioning method and apparatus. S. M. Anderson. 1,885,791; Nov. 1.
Fluid heating device. V. Kalfus. 1,885,267; Nov. 1.
Fluid motor. J. M. Wolf. 1,885,665; Nov. 1.
Fluid pressure actuated control mechanism. C. M. Terry. 1,885,565; Nov. 1.
Fluid transfer device. L. N. Hampton. 1,885,436; Nov. 1.
Foam, Apparatus for making. G. M. Thomson. 1,885,785; Nov. 1.
Foam extinguishing system. G. H. Harris. 1,885,258; Nov. 1.
Focusing device for cameras. C. Bornmann. 1,885,982; Nov. 1.
Foil lined bag. T. M. Avery. 1,885,670; Nov. 1.
Foldable table. W. C. Collignon. 1,885,685; Nov. 1.
Folder for printing machines. A. M. Zuckerman. 1,885,313; Nov. 1.
Folding chair. J. C. Kraner. 1,885,269; Nov. 1.
Folding table. G. W. Noonan. 1,886,217; Nov. 1.
Footwear, Apparatus for molding. W. R. Dow. 1,885,337; Nov. 1.
Footwear, Making. P. Y. Smiley. 1,885,383; Nov. 1.
Forgings, Making cupped. R. A. Mitchell. 1,886,210; Nov. 1.
Form, Hosiery drying. T. W. Prosser, J. H. Wahlbeck, and R. L. Mittelstadt. 1,885,289; Nov. 1.

Forming machine, Glassware. T. A. Bragg. 1,885,409; Nov. 1.
Fountain: *See*—
Portable electric fountain.
Fountain pen. R. T. Griffiths. 1,885,344; Nov. 1.
Fourdrinier machine. J. A. White. 1,885,164; Nov. 1.
Fourdrinier machines, Take-up for. J. A. White. 1,885,163; Nov. 1.
Frame: *See*—
Window frame.
Frame for airplanes, Safety. G. Wolf. 1,885,881; Nov. 1.
Freight loading and unloading device for vehicles. V. T. Wren. 1,885,399; Nov. 1.
Fruit concentrate, Homogenized citrus. E. R. Alexander. 1,885,401; Nov. 1.
Fruit cutting machine. M. C. Hjelte. 1,885,600; Nov. 1.
Fruit feeding device. R. Morris. 1,886,295; Nov. 1.
Fruit juice extractor, Citrous. E. C. Graham. 1,886,092; Nov. 1.
Fruits and raisins, Treatment of dried. A. H. Sanders. 1,886,233; Nov. 1.
Fuel feed system for motor vehicles. R. F. Bracke. 1,885,408; Nov. 1.
Fuel from residual oils, Method and apparatus for producing motor. S. Swartz. 1,885,887; Nov. 1.
Fuel mixing device for internal combustion engines. J. W. Smith. 1,885,559; Nov. 1.
Fuel supply and injection means. M. J. Goldberg. 1,886,248; Nov. 1.
Fur, Carroting. G. D. Beal and R. R. McGregor. 1,885,887–8; Nov. 1.
Furnace. L. Steinmuller. 1,886,064; Nov. 1.
Furnace draft control. F. J. Berchtold and L. Cleven. 1,885,506; Nov. 1.
Furniture brace. T. H. Wittliff. 1,885,664; Nov. 1.
Fuse box. F. C. Hush. 1,885,111; Nov. 1.
Fuse wrench. E. A. Bohlman. 1,886,155; Nov. 1.
Galvanising, Method and apparatus for. D. Tulloch. 1,885,876; Nov. 1.
Game. F. R. Chester. 1,885,802; Nov. 1.
Game, Stick. K. Hoglind. 1,885,260; Nov. 1.
Gang-casting machine, Centrifugal. L. W. Moulton. 1,885,465; Nov. 1.
Gap indicating mechanism for railway switch signals. R. S. McElhaney. 1,885,460; Nov. 1.
Garment. A. Luft. 1,885,527; Nov. 1.
Garment. B. Rothblum. 1,886,048–9; Nov. 1.
Garment. C. Schwartz. 1,886,056; Nov. 1.
Garment, Combination hose supporter and waist encircling. F. W. Roller. 1,885,379; Nov. 1.
Garment hanger. J. P. Acton. 1,885,503; Nov. 1.
Garment hanger. C. Nordvall. 1,886,298; Nov. 1.
Garment hanger. I. Sessions. 1,886,126; Nov. 1.
Garter. J. Mieres. 1,886,208; Nov. 1.
Gas controlling means. E. A. Hall. 1,885,433; Nov. 1.
Gas pressure in oil wells, Device for preserving natural. E. H. Griswold. 1,886,009; Nov. 1.
Gas tank lock. F. A. Rider. 1,885,547; Nov. 1.
Gases, Apparatus for compressing. N. C. Christensen. 1,886,164; Nov. 1.
Gases, Method and apparatus for preparing compressed. C. W. P. Heylandt. Re18,646; Nov. 1.
Gasket, Building. C. Figge. 1,885,193; Nov. 1.
Gasoline and the like, Stabilizing. G. Egloff. 1,885,190; Nov. 1.
Gasometer. K. Jagschitz. 1,886,101; Nov. 1.
Gauge: *See*—
Harness testing gauge.
Gauge. W. R. Rathbone and V. G. McPherson. 1,886,304; Nov. 1.
Gauge. C. R. Rich. 1,885,629; Nov. 1.
Gear for furnace bells, Operating. W. Marley. 1,885,531; Nov. 1.
Gear for motor cars, Change speed. G. C. Cappa. 1,885,418; Nov. 1.
Gear mechanism, Reversing. C. C. Bertram. 1,885,173; Nov. 1.
Gearing, Method of and apparatus for cutting worm. S. I. Cone. 1,885,686; Nov. 1.
Gem setting. S. A. Pilblad. 1,885,544; Nov. 1.
Generating and selecting system, Harmonic. C. R. Keith. 1,885,728; Nov. 1.
Generator: *See*—
Oscillation generator. Steam generator.
Generator and modulator, High frequency. C. W. Hough. 1,886,188; Nov. 1.
Glass by electricity, Melting. H. F. Hitner. 1,885,722; Nov. 1.
Glass, Making laminated. W. O. Lytle. 1,885,272; Nov. 1.
Glass plates, Apparatus for separating composite. E. L. Fix. 1,885,245; Nov. 1.
Glass sheets, Apparatus for rolling. L. N. Pond. 1,886,302; Nov. 1.
Glassware, Apparatus for fabricating. E. H. Lorenz. 1,885,739; Nov. 1.
Glassware, Apparatus for forming. R. W. Canfield. 1,885,682; Nov. 1.
Glassware, Apparatus for forming. T. Waugh, jr. 1,885,661; Nov. 1.
Glassware, Method of and apparatus for manufacturing. T. Waugh, jr. 1,885,660; Nov. 1.
Glass working apparatus. E. E. Slick. 1,885,302; Nov. 1.
Glove, Fourchette-less duplex-finger system. C. H. Johanson. 1,885,446; Nov. 1.
Glove, Massaging. S. C. Wood. 1,885,572; Nov. 1.
Glove palm. A. Charney. 1,885,182; Nov. 1.
Glycerine, Process of and apparatus for distilling. O. H. Wurster. 1,885,166; Nov. 1.
Governor, Hydraulic turbine. C. A. Jackson. 1,885,265; Nov. 1.
Grinder for hamburger knives and the like, Hollow. E. C. Richards. 1,886,305; Nov. 1.
Grinding apparatus. F. Kylberg. 1,886,274; Nov. 1.
Grinding machine. J. Dronsfield. 1,886,089; Nov. 1.
Grounding device. S. N. Buchanan. 1,885,227; Nov. 1.
Guanidines, Making di-substituted. H. W. Daudt. 1,886,087; Nov. 1.
Guard, Oil and dust. H. E. McGiveron. 1,886,038; Nov. 1.
Guard, Ring. J. Lowy. 1,885,930; Nov. 1.
Guide device for automobile lifts. C. J. Bristol. 1,885,984; Nov. 1.
Gun barrel and finishing the same. J. M. Olin and A. G. Schuricht. 1,886,218; Nov. 1.
Gun, Tear gas. W. R. Medlock. 1,885,126; Nov. 1.
Gyrostabilizer. A. Chessin. 1,885,414; Nov. 1.
Hair, animal fibers and fur skins, Bleaching and decolorizing. S. S. Groggins. 1,885,822; Nov. 1.
Hair retainer. B. Dowick. 1,885,995; Nov. 1.
Hair waving appliance. R. Bishinger. 1,885,577; Nov. 1.
Hair waving device, Permanent. N. Samantas. 1,886,051; Nov. 1.
Handle for utensils, such as fly swatters and the like, Extension. F. K. Krag and J. V. Nelson. 1,885,730; Nov. 1.
Handtruck. M. Jankisz. 1,885,112; Nov. 1.
Hanger: *See*—
Clothes hanger. Garment hanger.
Harness testing gauge. C. H. Wilson. 1,885,972; Nov. 1.
Harvester, Tractor row-crop. B. R. Benjamin. 1,886,152; Nov. 1.
Harvesting appliance, Cotton. O. H. Basquin. 1,885,405; Nov. 1.
Head rest. G. H. Browne. 1,885,507; Nov. 1.
Heat application and equipment therefor. W. A. Darrah. 1,885,418; Nov. 1.
Heat motor. L. M. Persons. 1,855,285; Nov. 1.
Heater: *See*—
Water heater.
Heater. J. L. Breese, jr. 1,885,891; Nov. 1.
Heater. J. L. Breese, jr. 1,886,156; Nov. 1.
Heating apparatus. A. B. Modine. 1,885,371; Nov. 1.
Heating by steam. F. I. Raymond. 1,886,222; Nov. 1.
Heating device. A. B. Modine. 1,885,751; Nov. 1.
Heating muffles, retorts, and the like. F. Bredel. 1,885,583; Nov. 1.
Heating system. C. G. Bordeaux. 1,885,225; Nov. 1.
Heating system, Steam. F. I. Raymond. 1,886,223; Nov. 1.
Hectograph machine. C. H. Reynolds. Des. 88,174; Nov. 1.
Heel, Exchangeable. E. Grauert. 1,885,341; Nov. 1.
Heels, Manufacture of. R. F. Knight. 1,885,840; Nov. 1.
Helmet. O. S. Flood. 1,885,426; Nov. 1.
Helmet. R. Malcom. 1,885,745; Nov. 1.
Hoisting apparatus, Portable. G. Anderson. 1,885,170; Nov. 1.
Holder, Can. J. Westburg. 1,885,788; Nov. 1.
Holder, Die maker's template. J. E. Oslund. 1,886,300; Nov. 1.
Holder, Flexible phonograph record. E. E. Collison. 1,885,415; Nov. 1.
Holder for concrete wall construction, Metal form. H. L. Feldblet. 1,885,699; Nov. 1.
Holder for motor vehicles, License plate. W. H. Nickerson, jr. 1,886,352; Nov. 1.
Holder, Key. I. G. Lippstadt. 1,886,110; Nov. 1.
Holder, Shade. J. A. Volk. 1,885,655; Nov. 1.
Holder, Tree. H. H. Krueger. 1,886,198; Nov. 1.
Holding means for brushes. L. B. Terhune. 1,885,651; Nov. 1.
Hook: *See*—
Safety hook.
Horn, Amplifying. J. J. Auerhaan. 1,885,403; Nov. 1.
Hose reel. C. R. Marshall and F. D. Marshall. 1,886,207; Nov. 1.
Hosiery. C. W. Tobin. 1,885,567; Nov. 1.
House: *See*—
Bag house.
Hull structure. W. L. Hale. 1,885,198; Nov. 1.
Hum balancer. N. C. Schellenger. 1,885,633; Nov. 1.
Hydrant attachment, Fire. E. L. Nuebling. 1,885,372; Nov. 1.
Hydrocarbons of the butadiene series, Polymerizing. L. Van Zütphen. 1,885,653; Nov. 1.
Hydrocarbons, Refining liquid. E. B. Miller. 1,886,260; Nov. 1.
Hydrocarbons, Refining liquid. E. B. Miller and G. C. Connolly. 1,886,261; Nov. 1.
Hydrocarbons, Treating liquid. A. S. Knowles and C. W. Andrews. 1,885,920; Nov. 1.
Hydroxy-acids from the oxidation products of hydrocarbons, Separating the. T. Hellthaler and E. Peter. 1,885,199; Nov. 1.
Ice scoring machine. A. V. Rowe. 1,885,143; Nov. 1.

Identifying apparatus. H. S. Satterlee. 1,885,863; Nov. 1.
Illuminating means. S. J. Monk. 1,885,279; Nov. 1.
Implement, Agricultural. W. H. Silver. 1,885,955; Nov. 1.
Implement, Massaging and stimulating. H. Krauter. 1,886,029; Nov. 1.
Implement, Tillage. C. T. Ray. 1,885,763; Nov. 1.
Implement, Weeding. W. J. Robinson. 1,885,377; Nov. 1.
Inclosed electric switch. F. H. MacNeil. 1,885,365; Nov. 1.
Indicator. T. Brady. 1,886,079; Nov. 1.
Insect destroyer. A. D. Miller. 1,886,039; Nov. 1.
Insects, Apparatus for killing. N. Montellano. 1,885,854; Nov. 1.
Insecticide and making same. E. B. Alvord. 1,885,884; Nov. 1.
Internal combustion engine. J. A. H. Barkelj. 1,885,576; Nov. 1.
Internal combustion engine. A. J. Meyer and L. P. Kalb. 1,885,369; Nov. 1.
Internal combustion engine. C. E. Miner. 1,885,853; Nov. 1.
Internal combustion engine. A. A. Schell. 1,885,298; Nov. 1.
Iron and other ores, Continuous process for the treatment of. M. Lambot. 1,885,923; Nov. 1.
Iron, Production of. K. M. Simpson. 1,885,381; Nov. 1.
Ironing board. J. E. Kalgren. 1,885,915; Nov. 1.
Ironing tabel cover. G. W. Lewis. 1,885,787; Nov. 1.
Ivory scrap, Utilising. E. Bormans. 1,885,563; Nov. 1.
Joint: *See*—
Expansion joint. Universal joint.
Joint for conveyers. F. L. Furbush. 1,885,818; Nov. 1.
Joist construction. H. F. Young. 1,885,883; Nov. 1.
Journal box construction. O. J. Horger. 1,886,018; Nov. 1.
Juice extractor. G. W. Bungay. 1,886,250; Nov. 1.
Junction box. B. C. Travis. 1,886,316; Nov. 1.
Key construction. C. T. Small. 1,886,128; Nov. 1.
Kiln, Tunnel. J. Fetzer. 1,885,811; Nov. 1.
Kimono. G. Fautrad. 1,885,422; Nov. 1.
Kit, Toilet. M. Goldsmith. 1,885,518; Nov. 1.
Knife and spoon pan rack. E. A. Zorsch. 1,886,075; Nov. 1.
Knitting machine. P. A. Bentley, C. F. Manger, and C. H. Wainwright. 1,885,322; Nov. 1.
Labels from a pile, Device for detaching. E. H. Jähne. 1,886,102; Nov. 1.
Lamp and holder thereof, Electric incandescent. E. R. Grote. 1,885,431; Nov. 1.
Lamp for advertising purposes. G. L. Rowe. 1,885,860; Nov. 1.
Lamp for vehicles, Indicating. H. F. Kurts. 1,885,842; Nov. 1.
Lamp, Metal arc. H. Stammreich. 1,885,637; Nov. 1.
Lamp, Signal. M. T. Geyser. 1,886,004; Nov. 1.
Lantern, Flash light. R. G. Williams. Des. 88,205; Nov. 1.
Lasting machine. R. B. Woodcock and H. Lane. 1,886,279; Nov. 1.
Latch and handle, Electric switch box. H. J. Hammerly. 1,885,713; Nov. 1.
Latch, Furniture. L. Defoy. 1,885,186; Nov. 1.
Latch, Window. H. T. Walton. 1,885,658; Nov. 1.
Latex, Producing concentrated and purified rubber. G. J. Stresynski and N. A. Fraser. 1,885,154; Nov. 1.
Lath construction, Metallic. G. G. Greulich. 1,885,343; Nov. 1.
Lathering device. E. L. Connelly. 1,885,416; Nov. 1.
Leaf hinge clip. J. S. Popper. 1,886,303; Nov. 1.
Leather, Impregnating. H. Burger. 1,885,179; Nov. 1.
Level, Liquid. G. B. Gallasch. 1,885,428; Nov. 1.
License plate. R. L. Lewis. 1,885,844; Nov. 1.
Light: *See*—
Copyholder light.
Light apparatus, Gas signal. J. O. Cadieux. 1,886,326; Nov. 1.
Light, Instantaneous control of. A. Karolus. 1,885,604; Nov. 1.
Light signal. T. J. O'Meara. 1,885,622; Nov. 1.
Lighter. J. L. Smith. 1,885,669; Nov. 1.
Lighter for solid fuel, Friction-wheel. A. R. Hochstrasser. 1,886,100; Nov. 1.
Line boring machine. H. C. Shoemaker. 1,885,773; Nov. 1.
Linen band, Adjustable. M. Riesner. 1,886,227; Nov. 1.
Liner, Basket. J. S. Rice. 1,885,480; Nov. 1.
Liner, Basket. J. W. Trew. 1,885,492; Nov. 1.
Linking machine. C. P. Kuehner. 1,885,116; Nov. 1.
Liquid fuel burner. L. C. Beadle. 1,885,674; Nov. 1.
Liquid fuel burner. T. Davis. 1,885,688; Nov. 1.
Liquid measuring device. H. T. Lewis. 1,885,926; Nov. 1.
Liquid meter system. W. H. Curtis. 1,886,328; Nov. 1.
Lionids, Apparatus for heating. R. C. Sutton. 1,885,805; Nov. 1.
Liquids by dialysis, Drying. R. H. Van Schaack, jr. 1,885,393; Nov. 1.
Lisuids, Process of and apparatus for distilling. O. H. Wurster. 1,886,256; Nov. 1.
Lithopone, Manufacture of sunfast and inert. K. S. Mowlds and W. Seguine, jr. 1,885,940; Nov. 1.
Lock: *See*—
Cage lock. Sash lock.
Door lock. Tank cap lock.
Gas tank lock.
Lock. K. A. Brauning. 1,885,983; Nov. 1.
Lock. A. Claud-Mantle. 1,885,590; Nov. 1.
Lock and easy starting device for vehicles, Wheel. C. A. K. Cornwall. 1,886,169; Nov. 1.
Lock-nut. A. S. McDonnell. 1,885,459; Nov. 1.
Lock washer. C. L. Peirce, jr. 1,885,761; Nov. 1.
Locking mechanism. W. F. Diesel. 1,885,238; Nov. 1.
Looms, Shedding mechanism for. H. Stäbull. 1,886,133; Nov. 1.
Loudspeaker. A. A. Thomas. 1,885,308; Nov. 1.
Loudspeakers, Mechanical construction of. R. H. Langley. 1,886,081; Nov. 1.
Lubricating system. J. J. Boland. 1,885,222; Nov. 1.
Lubricating system. H. B. Moses. 1,886,067; Nov. 1.
Lubricating system. L. R. Williamson. 1,885,500; Nov. 1.
Lubricator. F. H. Gleason. 1,886,006; Nov. 1.
Luring machine. G. A. Dilas. 1,885,335; Nov. 1.
Machine for cleaning carcasses of hogs. N. E. Wernberg. 1,885,161; Nov. 1.
Machine for cutting double thread, single point screws. J. A. Arenz. 1,885,792; Nov. 1.
Machine for forming closure units for containers. H. A. Fink. 1,885,703; Nov. 1.
Machine for making belts. C. C. Gates. 1,885,708; Nov. 1.
Machine for making cap screw blanks. J. E. Pracny. 1,885,288; Nov. 1.
Machine for making plating barrels. J. King. 1,885,522; Nov. 1.
Machine for making printing plates. H. Hamada. 1,886,182; Nov. 1.
Machine for packing articles into boxes. A. G. Rose. 1,886,122; Nov. 1.
Machine for splicing cables. P. Eufinger and W. Quante. 1,885,902; Nov. 1.
Machine for smoothing the edges of phonograph records. N. E. March. 1,885,848; Nov. 1.
Machine for soldering nozzles to can bodies. J. Coyle and W. Plumb. 1,885,992; Nov. 1.
Machine for the scutching, opening, and like treatment of cotton and like fibrous materials. F. Quinn and L. Wild. 1,886,044; Nov. 1.
Machine for treating paper board and process. A. Abrams. 1,885,167; Nov. 1.
Magnetic separator. F. Harris. 1,885,717; Nov. 1.
Manganese and making same, Organic compounds of. S. L. Ruskin. 1,885,949; Nov. 1.
Marker, Disappearing grave. P. Pereau. 1,885,136; Nov. 1.
Marker, Road. J. R. O'Brien. 1,885,941; Nov. 1.
Mass for cathodes of electric alkaline accumulators, Preparing an active. G. Kraenzlein, R. K. Muller, and L. W. Berlin. 1,885,451; Nov. 1.
Massage apparatus. S. Stephani. 1,885,562; Nov. 1.
Massage machine, Finger. C. L. Banks. 1,885,575; Nov. 1.
Match packages. J. W. Hooley. 1,885,723; Nov. 1.
Material and making same, Identifiable. W. Whitehead and H. W. Kuhl. 1,885,878; Nov. 1.
Material and making the same, Insulating. G. K. Lewis. 1,885,364; Nov. 1.
Material, Apparatus for drying filamentary. G. L. Brownell. 1,885,799; Nov. 1.
Material, Distilling solid carbonizable. H. Nielsen and B. Laing. 1,886,350; Nov. 1.
Material handling device. M. Wilson. 1,885,312; Nov. 1.
Material, Recovery of relief. W. H. Kenety. 1,885,918; Nov. 1.
Material with sulphur, Treating fibrous. F. V. D. Cruser. 1,886,170; Nov. 1.
Materials, Apparatus for the delivery of. C. S. Molitor. 1,885,533; Nov. 1.
Materials, Apparatus for the wet screening or separation of intermixed. J. A. Flint and F. T. Haseltine. 1,886,174; Nov. 1.
Materials, Making high grade dielectric. A. Meissner. 1,886,284; Nov. 1.
Materials, Quality gravity separating. F. D. Chapman. 1,885,987; Nov. 1.
Materials, Treatment of grain. H. Edholm. 1,885,998; Nov. 1.
Mattress, Sectional. J. A. Winn. 1,885,974; Nov. 1.
Mechanical contrivance for popular amusement. C. W. Thoerig and E. Jetliek. 1,885,643; Nov. 1.
Metal abrasive material, Making. D. Martin. 1,886,285; Nov. 1.
Metal, Casting freely oxidizable. J. Gann and M. E. Brooks. 1,886,252; Nov. 1.
Metal, Corrugating sheet. R. R. Robertson. 1,885,294; Nov. 1.
Metal shears. R. T. Hazelton. 1,885,438; Nov. 1.
Metal trim. R. Waite. 1,886,320; Nov. 1.
Meter: *See*—
Boat meter.
Meter for the mensurement of liquid, Flow. J. Fraser. 1,885,517; Nov. 1.

Microphone diaphragms, Stabilising non-crystalline piezo-electric. A. Meissner. 1,886,235; Nov. 1.
Mill: *See*—
Colloid mill.
Milling machines and the like, Taper boring attachment for. J. Maute. 1,886,287; Nov. 1.
Mining machine. W. T. Robinson. 1,885,295; Nov. 1.
Mirror. W. H. Colbert. 1,885,232; Nov. 1.
Mirror attachment, Anti-glare. W. B. Drury. 1,885,594; Nov. 1.
Mold: *See*—
Multiple permanent mold.
Mold for high temperature castings. Le R. P. Bensing. 1,886,249; Nov. 1.
Mold for typographical machines. S. E. Sperry. 1,885,777; Nov. 1.
Mold manipulating apparatus. H. G. Kuhne. 1,885,360; Nov. 1.
Mold parts, Cleaning. J. M. Porter and G. W. Handy. 1,885,287; Nov. 1.
Monitoring system. F. W. Schramm. 1,885,299; Nov. 1.
Mop. W. H. Heise. 1,885,439; Nov. 1.
Mop wringer. M. Heber. 1,886,184; Nov. 1.
Mortising machine. F. W. Monroe. 1,885,752; Nov. 1.
Mothproofing composition. R. M. Ritter. 1,885,292; Nov. 1.
Motor: *See*—
Electric motor. Heat motor.
Fluid motor. Tidal motor.
Motor and pump, Refrigeration. A. B. Bailey. 1,885,793; Nov. 1.
Motor for aircraft, Safety. E. Carlson. 1,886,327; Nov. 1.
Mounting, Axle bearing. T. V. Buckwalter. 1,885,985; Nov. 1.
Mounting for ground working implements, Cutting blade. L. L., J. L., and S. L. Chong. 1,885,281; Nov. 1.
Multibreak electric switch. C. D. Ainsworth. 1,885,101; Nov. 1.
Multiple permanent mold. M. S. Clawson. 1,886,084; Nov. 1.
Multiple ply textile fabric. S. B. Hainsworth. 1,886,244; Nov. 1.
Musical string instrument. J. B. Barredo. 1,885,672; Nov. 1.
Necktie. I. Simson. 1,885,956; Nov. 1.
Needle, Knitting machine. R. K. Mills. 1,886,291; Nov. 1.
Noise eliminator. W. K. Flavin. 1,886,332; Nov. 1.
Novelty, Advertising. R. W. Manning. 1,885,122; Nov. 1.
Novelty, Musical. F. J. Langer. 1,885,843; Nov. 1.
Nozzle, Cement gun. J. T. Vawter. 1,885,645; Nov. 1.
Nozzle for a septic discharge of liquids. P. Berman. 1,885,218; Nov. 1.
Nut, Lock. A. Dyckerhoff. 1,885,694; Nov. 1.
Nut making apparatus, Dial arrangement for. S. W. Avis. 1,885,215; Nov. 1.
Odorant for refrigeration. A. D. Macallum. 1,886,034; Nov. 1.
Oil absorption of titanium dioxide pigment, Reducing the. G. Kubin. 1,885,921; Nov. 1.
Oil burner. F. Oliva. 1,885,542; Nov. 1.
Oil can. V. Paone. 1,885,472; Nov. 1.
Oil changing system. M. Hedgion. 1,886,098; Nov. 1.
Oil converter. A. E. Harnsberger. 1,885,716; Nov. 1.
Oil from oil sands in the earth, Production of. H. L. Doherty. 1,885,807; Nov. 1.
Oil tester. G. W. Copland. 1,886,085; Nov. 1.
Oils and composition therefor, Treating. E. Morrill. 1,886,293; Nov. 1.
Oils and fats, Neutralizing fatty-acids in. R. C. Newton. 1,885,261; Nov. 1.
Oils, Refining vegetable. L. Rosenstein and W. J. Hund. 1,885,859; Nov. 1.
Oils, Treating hydrocarbon. C. J. Greenstreet. 1,886,093; Nov. 1.
Oils, Treating hydrocarbon. A. Lazar. 1,885,524; Nov. 1.
Oils, Treating petroleum. F. F. Gorman. 1,886,008; Nov. 1.
Oiler, Upper cylinder. C. C. Bogardus. 1,885,961; Nov. 1.
Open-mesh woven wire tube. E. E. Kellems. 1,886,026; Nov. 1.
Opener, Cigarette package. G. D. Huff. 1,886,021; Nov. 1.
Ores of zinc, Treating sulphide. N. C. Christensen. 1,886,162; Nov. 1.
Ores, Process of and apparatus for treating metallic. E. W. Buskett. 1,885,412; Nov. 1.
Ores, Treatment of oxidized. N. C. Christensen. 1,886,163; Nov. 1.
Ornamenting die. A. W. Altvater. 1,885,169; Nov. 1.
Oscillation device. L. J. Lesh. 1,885,118; Nov. 1.
Oscillation generator. J. C. Schelleng. 1,885,632; Nov. 1.
Oven, Electric cooking. A. S. Knapp. Des. 88,156; Nov. 1.
Oven, Rotary annular sole. F. Bartling. 1,885,673; Nov. 1.
Oxides of the fourth group metals, Producing. M. Mayer. 1,885,934; Nov. 1.
Package, Flat sheet dispensing. J. C. Wilson. 1,885,501; Nov. 1.
Packing and expansion ring, Combined. F. A. Eichorn. 1,885,696; Nov. 1.
Padlock. J. W. Fitzgerald. 1,885,425; Nov. 1.
Pallet for sintering machines. H. J. Stehli. 1,885,152; Nov. 1.
Pan greasing machine. S. P. Larson. 1,885,453; Nov. 1.
Panel for range or similar article. S. H. Hobson. Des. 88,150; Nov. 1.
Paper and making the same, Reenforced. H. D. Moore. 1,885,280; Nov. 1.
Paper folding machine. F. L. Stanton. 1,886,312; Nov. 1.
Paper manufacture. H. R. Rafton. 1,886,120; Nov. 1.
Paper stretch tester. H. Koester. 1,885,209; Nov. 1.
Paper, Water and flameproof. T. Jenkins. 1,885,113; Nov. 1.
Parallel groove clamp. W. H. Kleinsteiber. 1,886,195; Nov. 1.
Pen holding device for inkwells. C. Foti. 1,886,002; Nov. 1.
Pen, Ruling. H. Haff. 1,886,258; Nov. 1.
Pen section, Fountain. S. M. Sager. 1,886,307; Nov. 1.
Pencil lead indicator. L. G. Balmer. 1,885,171; Nov. 1.
Pencil, Magazine. A. Fleming. 1,886,333; Nov. 1.
Phenylphenols, Separating. E. C. Britton and F. Bryner. 1,885,176; Nov. 1.
Phonograph. B. Roberts. 1,886,228; Nov. 1.
Photocell compensating system. G. B. Schelbell. 1,886,125; Nov. 1.
Photo-electric tube. H. H. Geffcken and H. R. Richter. 1,885,819; Nov. 1.
Photo mechanical machine. D. V. Mazzocco. 1,885,532; Nov. 1.
Photography employing frequency modulation, System of. W. H. T. Holden and R. K. Bonell. 1,885,826; Nov. 1.
Pick-up. E. E. Wickersham. 1,885,971; Nov. 1.
Pick-up and release device for aircraft. G. A. Ricks. 1,885,765; Nov. 1.
Picture and producing the same, Photographic film. O. Bornhauser. 1,886,266; Nov. 1.
Picture attachment, Talking motion. L. De Forest. 1,885,900; Nov. 1.
Pigments, Production of titanium. C. de Rohden. 1,885,187; Nov. 1.
Pins in radio tube bases, Method of and apparatus for molding. W. J. Gagnon. 1,886,176; Nov. 1.
Pipe: *See*—
Curb pipe. Smoker's pipe.
Pipe. S. La Franca. 1,886 200; Nov. 1.
Pipe coupling. H. H. Benn. 1,885,321; Nov. 1.
Pipe cutting machine. H. F. Brown. 1,885,107; Nov. 1.
Pipe ends, Joining. B. Nell. 1,886,275; Nov. 1.
Pipe engaging device. G. R. Livergood. 1,886,343; Nov. 1.
Pipe for flushing attachments, Drain. L. S. Denison. 1,885,977; Nov. 1.
Pipe line stopper. U. U. Carr and M. R. McKinley. 1,885,896; Nov. 1.
Piston. E. S. and P. M. Reiland. 1,885,290; Nov. 1.
Piston and connecting rod. R. C. Loeb. 1,885,533; Nov. 1.
Piston blank and manufacturing pistons. D. Miller. 1,885,463; Nov. 1.
Piston construction. N. J. Buren. 1,885,681; Nov. 1.
Piston ring. E. G. Malpas. 1,885,278; Nov. 1.
Planter, Grain. W. L. Beall. 1,886,149; Nov. 1.
Plastics, Method and apparatus for molding. E. E. Slick. 1,885,303; Nov. 1.
Plate, Bed. J. Mann. 1,886,035; Nov. 1.
Plate, Broiler. P. P. Bogley. 1,885,325; Nov. 1.
Plate, Cooking. F. and T. Nuber and L. M. Hermann. 1,886,297; Nov. 1.
Plates in gas generators, Diffusion. J. M. Rusby. 1,885,549; Nov. 1.
Pliers. W. E. Hoke and R. Thomson. 1,886,271; Nov. 1.
Pliers. R. Thomson. 1,886,272; Nov. 1.
Plow, Power. H. H. Glasier. 1,886,005; Nov. 1.
Plug, Fuse. L. S. O'Neil. 1,886,299; Nov. 1.
Plunger lift, Multiple. L. C. Stukenborg. 1,886,253; Nov. 1.
Plunger operating mechanism for wrapping machines. W. B. Bronander. 1,885,893; Nov. 1.
Pole or mast construction. G. M. Magrudger. 1,885,743; Nov. 1.
Pole setting apparatus and the like. H. L. Wheelden. 1,885,877; Nov. 1.
Polisher. J. E. S. Taylor. 1,886,136; Nov. 1.
Portable electric fountain. S. B. Hutchings and W. L. Haanel. 1,885,830; Nov. 1.
Pot: *See*—
Coffee pot.
Potatoes, Apparatus for peeling. R. Speidel. 1,886,061; Nov. 1.
Power driven reel. F. J. Littell. 1,885,612; Nov. 1.
Power mechanism. E. A. Rockwell. 1,885,767; Nov. 1.
Power shovel. S. Lutes. 1,885,741; Nov. 1.
Power transmission mechanism. P. Martin. 1,885,746; Nov. 1.
Press: *See*—
Printing press.
Presser and stretcher for trousers or other fabric garments or articles. J. S. Corby. 1,885,803; Nov. 1.
Pressing machines, Follow-up actuating mechanism for. E. Davis. 1,885,235; Nov. 1.
Prime mover. W. C. Duryea. 1,885,823; Nov. 1.
Printer's registering device. E. Thiel. 1,885,565; Nov. 1.
Printing apparatus. A. Langsner. 1,886,202; Nov. 1.

Printing plates, Making multicolor. G. S. Howland. 1,885,725; Nov. 1.
Printing press. N. H. Nelson. 1,885,131; Nov. 1.
Printing presses, Automatic trip mechanism for. C. L. Low. 1,886,281; Nov. 1.
Projecting machine, Motion picture. A. Sapier. 1,885,631; Nov. 1.
Projection apparatus, Sign. P. Krupnik. 1,885,841; Nov. 1.
Projection screen. L. Koeppe. 1,885,208; Nov. 1.
Propeller. J. Squires. 1,885,487; Nov. 1.
Propeller, Automatic safety landing reversing. R. C. Wilson. 1,886,278; Nov. 1.
Propeller, Variable camber. A. E. Miller and H. M. Salisbury. 1,886,289; Nov. 1.
Protective collar for boxes. W. H. Cassell and F. E. Dahn. 1,885,589; Nov. 1.
Protector for rumble seats, Sun and rain. J. Spector. 1,885,150; Nov. 1.
Protector, Pipe thread. L. G. Ponce. 1,885,375; Nov. 1.
Pulp for nitration, Treating wood. A. Hough, J. R. Dufford, and W. C. Leonhard. 1,885,352; Nov. 1.
Pulp manufacture. R. W. Richardson. 1,885,764; Nov. 1.
Pulsator, Milking machine. J. L. Hulbert. 1,885,110; Nov. 1.
Pulverizing machine. P. V. Jall. 1,886,103; Nov. 1.
Pump and the like, Grease. H. J. Anderson. 1,885,314; Nov. 1.
Pump and the like, Grease. H. J. Anderson and F. Gordon. 1,885,315; Nov. 1.
Pump for pressure tanks. G. Brown. 1,886,158; Nov. 1.
Pump, Gasoline or other article dispensing. E. E. Eickmeyer and G. W. Eichhoff. Des. 88,144; Nov. 1.
Pump, Vehicle tire. C. Otto. 1,885,284; Nov. 1.
Pumping apparatus. T. J. Gothard and R. Wunn. 1,885,820; Nov. 1.
Purse, Coin. C. L'Enfant. 1,885,736; Nov. 1.
Quality grading. F. D. Chapman. 1,885,988; Nov. 1.
Rack: *See*—
Knife and spoon pan rack. Rod rack.
Revolving plant rack. Visible card rack.
Rack operating mechanism, Oven. E. C. Bamberg and M. Sylva. 1,885,404; Nov. 1.
Radiator. A. B. Modine. 1,886,292; Nov. 1.
Radiator. T. E. Murray. 1,885,536; Nov. 1.
Radiator and the like, Finned-tube. C. J. Stuart. 1,886,066; Nov. 1.
Radiator hanger. J. T. Evans. 1,886,330; Nov. 1.
Radiator, hood, and fenders for vehicles, Combined. J. R. Hughes. Des. 88,151; Nov. 1.
Radiator, Humidifying. A. U. Jones. 1,886,192; Nov. 1.
Radiator inclosure. T. E. Murray, jr., and F. C. Reynolds. 1,885,537; Nov. 1.
Radiator return trap. A. P. Crosby. 1,885,993; Nov. 1.
Radiator, Wall. H. S. Meldahl. 1,885,938; Nov. 1.
Radio apparatus. P. S. Haselton. 1,885,913; Nov. 1.
Radio apparatus. W. Parker. 1,885,758; Nov. 1.
Radiocabinet. J. L. Embree. Des. 88,146; Nov. 1.
Radio receiving system. C. R. Rowe. 1,886,230; Nov. 1.
Radio tube tester. J. R. Williams. Des. 88,220; Nov. 1.
Radio tuning mechanism. G. R. Fremont. Re18,640; Nov. 1.
Radio wave signals, Apparatus for the filtration of. R. H. Stevens. 1,885,959; Nov. 1.
Rail cleaning and greasing apparatus. G. B. Isabella. 1,885,726; Nov. 1.
Rail fastening. B. P. Andreianov. 1,886,265; Nov. 1.
Rails, Apparatus for and method of spiking. J. F. Haddock. 1,886,010; Nov. 1.
Rails, Making. H. C. Ryding. 1,885,861; Nov. 1.
Railroad track switch. B. Martini. 1,885,366; Nov. 1.
Railway mail collection, System of. L. S. Adams. 1,885,212; Nov. 1.
Raising and traversing mechanism for suspended street lamps. F. Krohn. 1,885,732; Nov. 1.
Range or similar article. S. H. Hobson. Des. 88,149; Nov. 1.
Razor. H. R. Segal. 1,885,300; Nov. 1.
Razor and stropping device, Safety. A. V. Watson. 1,885,659; Nov. 1.
Razor blade and holder therefor. J. T. Scully. 1,886,238; Nov. 1.
Razor, Safety. W. W. Flagg. 1,885,814; Nov. 1.
Razor, Safety. D. T. Rygmyr. 1,885,768; Nov. 1.
Reamer, Swinging cutter expanding. J. J. Santiago. 1,885,550; Nov. 1.
Receptacle and plug, Multiple electrical conduit. M. J. De Mask. 1,885,513; Nov. 1.
Receptacle, Cutter. E. H. Lewandowski. 1,885,610; Nov. 1.
Receptacle for vending machines, Coin. B. L. Fry. 1,885,249; Nov. 1.
Receptacle, Plug. E. R. Kulka. 1,886,199; Nov. 1.
Recording and reproduction of sounds and moving pictures, Simultaneous. J. R. Robertson. 1,885,293; Nov. 1.
Rectifying apparatus, Oil. M. Czarny and F. C. Frolander. 1,885,333; Nov. 1.
Reel: *See*—
Hose reel. Ribbon reel.
Power driven reel.
Reel, C. E. Vest. 1,886,209; Nov. 1.
Refractory bodies, Producing. A. Sprenger. 1,886,268; Nov. 1.
Refrigerating apparatus. M. W. Fish. 1,886,331; Nov. 1.
Refrigerating apparatus. H. B. Hull. 1,885,264; Nov. 1.
Refrigerating apparatus. C. F. Kettering. 1,886,389; Nov. 1.
Refrigerating apparatus. C. H. Porter. 1,885,139; Nov. 1.
Refrigerating apparatus. O. M. Summers. 1,885,783; Nov. 1.
Refrigerating apparatus and lubricating same. H. C. Kellogg and E. M. May. 1,885,836–7; Nov. 1.
Refrigeration apparatus, Absorption. D. L. Gordon. 1,886,243; Nov. 1.
Refrigeration machine, Control device for mechanical. L. U. Larkin. 1,885,608; Nov. 1.
Refrigerator. F. H. Osborne. 1,886,042; Nov. 1.
Regenerator of Siemens-Martin furnaces. F. Fiorelli. 1,885,704; Nov. 1.
Register: *See*—
Cash register.
Regulator: *See*—
Temperature or pressure regulator. Transmission regulator.
Regulator. G. W. McKee. 1,885,851; Nov. 1.
Regulator, Pressure. F. B. Stover. 1,885,639; Nov. 1.
Relay and cut-out, Thermal. G. W. O'Keeffe. 1,886,356; Nov. 1.
Relay, Thermal. G. W. O'Keeffe. 1,886,354; Nov. 1.
Reminder, Automatic. L. Y. Lassiter. 1,885,270; Nov. 1.
Resin and making same, Synthetic. E. E. Novotny and C. J. Romieux. 1,886,353; Nov. 1.
Revolving plant rack. L. Lemert. 1,885,117; Nov. 1.
Rheostat. F. H. Bullinger. 1,886,080; Nov. 1.
Rheostat, Variable. R. B. Planche. 1,885,373; Nov. 1.
Ribbon reel. L. S. Lachman and E. Fulda. 1,885,734; Nov. 1.
Ricer, Potato. G. E. Stein. 1,885,873; Nov. 1.
Rifle, Automatic. G. E. Lutton. 1,886,113; Nov. 1.
Ring: *See*—
Packing and expansion ring. Piston ring.
Rivet squeezer, Pneumatic. M. J. Chapman. 1,886,241; Nov. 1.
Road construction. D. McK. Hepburn. 1,885,200; Nov. 1.
Rod: *See*—
Connecting rod. Test rod.
Piston and connection rod.
Rod rack. J. G. Bouslog. 1,885,223; Nov. 1.
Rods, Shaping composite. F. G. Nimick. 1,885,132; Nov. 1.
Roll and pad, Ironing. A. H. Adams. 1,885,211; Nov. 1.
Roll, Crushing. C. B. Duckworth. 1,885,241; Nov. 1.
Roll, Hair. K. Ströher. 1,885,386; Nov. 1.
Roller: *See*—
Conveyer roller. Curtain roller.
Roller skate. C. Vogt. 1,885,158; Nov. 1.
Rollers, Apparatus for grinding and treating wire clothed. J. Dronsfield. 1,886,088; Nov. 1.
Rope and make the same, Wire. R. D. Green. 1,885,821; Nov. 1.
Ropeways with continuous traffic, Working of passenger. A. Rubin. 1,886,050; Nov. 1.
Rotary engine. L. M. Serra. 1,885,557; Nov. 1.
Rotary drill. J. Johnson. 1,885,266; Nov. 1.
Rotary machine heating by induction, Automatic. P. Viry. 1,885,966; Nov. 1.
Rubber and products obtained thereby, Vulcanization of. W. Scott. 1,885,556; Nov. 1.
Rubber article, Inflatable. L. Kelemen and Z. Keleti. 1,885,917; Nov. 1.
Rubber articles, Manufacture of. E. A. Murphy, W. Green, R. G. James, and D. F. Twiss. 1,886,351; Nov. 1.
Rubber composition and preparing the same. W. L. Semon. 1,886,310; Nov. 1.
Rubber product, Manufacture of a vulcanized. H. G. Byers. 1,885,509; Nov. 1.
Rubber, Separation of. K. Illig and N. Schonfeldt. 1,885,831; Nov. 1.
Rug cleaning machine. M. G. Miller. 1,885,464; Nov. 1.
Rumble seat. W. J. Winselman. 1,885,975; Nov. 1.
Safety hook. L. E. Wells. 1,886,138; Nov. 1.
Safety swimming device. J. L. Kimmel. 1,885,606; Nov. 1.
Salts of acridine bases substituted in 9-position by basic residues, Readily soluble. A. Febrle. 1,886,001; Nov. 1.
Sand blast system. L. D. Peik. 1,885,760; Nov. 1.
Sand to grading apparatus, Process and apparatus for supplying. J. Soderberg. 1,885,775; Nov. 1.
Sash and ventilator, Sheet metal. E. F. Chaffee. 1,885,230; Nov. 1.
Sash construction. W. S. Hamm. 1,886,011; Nov. 1.
Sash lock. W. S. Hamm. 1,886,183; Nov. 1.
Saws, Attachment for band. F. G. Walker. 1,886,321; Nov. 1.
Scale from bars, Cleaning. E. T. Ickes. 1,885,602; Nov. 1.
Scale, Weighing. T. B. Flanagan. 1,885,705; Nov. 1.
Scraper. H. R. Lytle. 1,885,528; Nov. 1.
Screen: *See*—
Projection screen. Window screen.
Well screen.
Screen. J. A. Flint. 1,886,173; Nov. 1.
Screen. E. P. Polushkin. 1,885,762; Nov. 1.
Screen or visor for motor vehicles, Glare. F. J. Chapman. 1,885,510; Nov. 1.

Screens, Articulated drive shaft for flat. S. B. Gorbutt. 1,885,254; Nov. 1.
Screw, Antifriction. C. J. Westling. 1,885,970; Nov. 1.
Seal for tractor truck rollers, Oil and dirt. D. B. Baker and N. O. Pansegrau. 1,886,147; Nov. 1.
Seal, Liquid film. C. W. Rice. 1,885,546; Nov. 1.
Sealer and opener, Combined envelope. C. M. Boudette. 1,885,105; Nov. 1.
Seat: *See*—
Cushion seat. Rumble seat.
Seat with laths covering, Spring. P. Schultes. 1,886,308; Nov. 1.
Separator: *See*—
Centripetal separator. Magnetic separator.
Separable lamp stand. M. M. Marcus. 1,885,275; Nov. 1.
Separation of electrically charged particles from fluids with the aid of an electric current. W. Esmarch. 1,885,810; Nov. 1.
Service station. T. L. Pflueger. Des. 88,173; Nov. 1.
Sewage, Treating. G. H. Gleason and A. C. Loonam. 1,886,267; Nov. 1.
Sewing machine. A. F. McCollum. 1,885,124; Nov. 1.
Sewing machine, Lockstitch. B. T. Leveque. 1,885,927; Nov. 1.
Shape retaining device for necktles. E. N. Pettit, jr. 1,885,476; Nov. 1.
Shears: *See*—
Metal shears.
Shears. R. Thomson. 1,886,273; Nov. 1.
Shears or scissors, Self-sharpening and balancing. R. J. Nachtigall. 1,885,754; Nov. 1.
Shed construction. O. P. Cherdron and C. W. Scott. 1,885,329; Nov. 1.
Sheet metal case. E. L. Herbolsheimer. 1,885,441; Nov. 1.
Sheet metal printing machine. J. Schmuts. 1,885,634; Nov. 1.
Sheet, Stencil. S. Horii. 1,885,261; Nov. 1.
Sheets, Process and equipment for forming. W. A. Darrah. 1,885,334; Nov. 1.
Shelf rack construction. W. N. Vance. 1,886,318; Nov. 1.
Shell. J. M. Alderfer. 1,885,789; Nov. 1.
Shield, Motor vehicle radiator. A. J. Frame. 1,885,248; Nov. 1.
Shim. F. A. Cook. 1,886,168; Nov. 1.
Shingle element. N. P. Harshberger. 1,885,846; Nov. 1.
Shock absorbing device for outboard motor drives. L. J. Johnson. 1,886,191; Nov. 1.
Shoe. C. Miller. Des. 88,166; Nov. 1.
Shoe. A. Santor. 1,885,297; Nov. 1.
Shoe bottoms, Apparatus for producing crepe rubber spring-heeled. B. F. Hartwell. 1,885,718; Nov. 1.
Shoe construction. A. P. Gilbert. 1,885,598; Nov. 1.
Shoe stiffener manufacture. J. M. Lurie. 1,886,345; Nov. 1.
Shoes, Adjustable arch construction for. M. Hirshfield. 1,885,259; Nov. 1.
Shoes and heels, Making. N. Harig. 1,885,257; Nov. 1.
Shoes, Attachment for. K. B. Sunderland. 1,886,134; Nov. 1.
Shoes, Making. W. H. Bain. 1,885,574; Nov. 1.
Shoes, Making. G. Goddu. 1,885,197; Nov. 1.
Shovel: *See*—
Power shovel.
Shuffler and dealer, Automatic card. R. C. McKay. 1,885,276; Nov. 1.
Shutter apparatus for moving picture machines. E. V. Hoffmann and J. E. Soons. 1,885,825; Nov. 1.
Shuttle. W. L. Hall. 1,885,823; Nov. 1.
Sign. T. E. Louis. Des. 88,161; Nov. 1.
Sign character. J. T. Cochran. 1,885,991; Nov. 1.
Sign, Combined street and traffic. E. E. Smith. 1,885,776; Nov. 1.
Sign for a vehicle top, Advertising. F. J. O'Connor. 1,885,282; Nov. 1.
Sign for road surfaces, Traffic. A. P. White. 1,886,324; Nov. 1.
Signal: *See*—
Aeroplane signal. Light signal.
Crossing signal.
Signal and guard, Railway crossing. H. A. Parson. 1,885,759; Nov. 1.
Signal for vehicles. L. N. Hampton. 1,885,714; Nov. 1.
Signal system, Induction cab. D. H. Schweyer. 1,885,030; Nov. 1.
Signaling apparatus, Railway. D. W. Richards. 1,885,947–8; Nov. 1.
Signaling between two points on a railroad train, Apparatus for. R. M. Gilson. 1,885,900; Nov. 1.
Signaling system. M. L. Almquist and A. C. Thompson. 1,885,214; Nov. 1.
Signals, Apparatus for the control of highway crossing. B. Lasich. 1,885,925; Nov. 1.
Silk, Manufacture of artificial. A. E. Gull. 1,885,256; Nov. 1.
Siphon. R. D. Edwards. 1,885,695; Nov. 1.
Siking fibrous material. F. J. Curtis. 1,885,185; Nov. 1.
Sled, Motor. R. J. Weisser. 1,885,787; Nov. 1.
Sleeve valve engine. J. Haltenberger. 1,885,911; Nov. 1.
Sleeves, Making rubber. M. B. Salisbury. 1,885,951; Nov. 1.
Smoker's pipe. E. C. Sasser. 1,886,124; Nov. 1.
Snowplow equipment for automobiles. C. H. Lilley. 1,885,611; Nov. 1.
Snow remover. D. Wandscheer. 1,886,069; Nov. 1.
Soap compositions, Tri-sodium phosphate hydrate. F. L. Frost, jr. 1,885,905; Nov. 1.
Sole, Process and apparatus for forming the heel end of a. A. J. Brauer and F. P. Wagner. 1,886,157; Nov. 1.
Solid and pneumatic tired wheel. W. F. Ennis. 1,885,901; Nov. 1.
Soundings, Method and apparatus for taking. M. L. Touly. 1,885,652; Nov. 1.
Spader, Power. H. H. Glasier. 1,886,335; Nov. 1.
Speed control for elevators. P. Maniscalco. 1,885,458; Nov. 1.
Speed mechanism, Change. L. Vitalba. 1,885,967; Nov. 1.
Speedometer, Automobile. C. M. Paxson. 1,885,134; Nov. 1.
Splint, Adjustable traction ankle. C. P. Jones. 1,885,448; Nov. 1.
Spool. C. K. Dunlap. 1,885,693; Nov. 1.
Spool and holder therefor. R. Eissner and R. H. Carter. 1,885,192; Nov. 1.
Spoon, Fishing. V. P. Hendrick. 1,885,440; Nov. 1.
Spray coating exhaust system. E. G. Whitmore. Re18,645; Nov. 1.
Spray device. W. E. Pearl. 1,885,135; Nov. 1.
Spray head. C. H. Bills and G. G. Griswold. 1,885,219; Nov. 1.
Sprayer, F. A. Cuff and M. H. Keating. 1,885,332; Nov. 1.
Spreader for harvester threshers, Straw. A. B. Welty. 1,886,140; Nov. 1.
Spreading machine. V. F. Baumgardner. 1,885,319; Nov. 1.
Spring pressure contact element. R. E. Lyford. 1,886,205; Nov. 1.
Sprinkler for irrigating extensive surfaces, Traveling lawn. W. W. Moyer. 1,885,620; Nov. 1.
Stabilizer for glider seats. W. F. Williams. 1,885,663; Nov. 1.
Stand: *See*—
Desk calendar stand. Separable lamp stand.
Stand footrest construction, Bootblack. L. Frye. 1,885,250; Nov. 1.
Starting device for mercury arc rectifiers. M. Urbinati. 1,885,495; Nov. 1.
Steadyrest. Fluid pressure operated. R. A. Cole. 1,885,233; Nov. 1.
Steam, Generating working. W. Abendroth and H. Gleichmann. 1,886,076; Nov. 1.
Steam generator. S. Paul. 1,885,374; Nov. 1.
Steel wool machine. R. F. Boehler, jr. 1,885,677; Nov. 1.
Steering apparatus. H. Cremer. 1,885,417; Nov. 1.
Steering device for tractors. W. B. Thiemann. 1,885,964; Nov. 1.
Steering mechanism, Hydraulic automobile. R. L. Francis. 1,885,194; Nov. 1.
Steering mechanism, Multiple rudder. V. V. Koons. 1,885,210; Nov. 1.
Sterilizer, Money. C. D. Monett. 1,885,278; Nov. 1.
Stock treating appliance. J. H. Graves. 1,885,342; Nov. 1.
Stocking, Surgical. O. H. Walton. 1,885,394; Nov. 1.
Stoker control switch. L. R. Teeple. 1,885,963; Nov. 1.
Stoker, Mechanical. A. M. Hunt. 1,885,203; Nov. 1.
Stop motion. J. A. Fenton. 1,885,423; Nov. 1.
Stopper: *See*—
Pipe line stopper.
Storage tank. H. P. Smith. 1,886,131; Nov. 1.
Storage tank. D. Wortmann. 1,886,074; Nov. 1.
Stove. C. L. Hardwick. Des. 88,148; Nov. 1.
Stove. S. G. Weller. 1,886,289; Nov. 1.
Straight knitting machine. K. R. Lieberknecht. 1,885,738; Nov. 1.
Strainer. E. G. Marter. 1,885,850; Nov. 1.
Strap stretching device. C. M. MacChesney, R. H. Norton, and J. E. Ott. 1,885,742; Nov. 1.
Straps, Apparatus for sealing. G. G. Rico. 1,886,046; Nov. 1.
Streamline wire separator. S. T. Williams. 1,886,072; Nov. 1.
Strings for archery bows, Anchor. A. L. and O. Swenson. 1,885,962; Nov. 1.
Strip for windows, Closure. J. Kunz and J. Dammer. 1,885,922; Nov. 1.
Stropper. H. A. Huber. 1,885,444; Nov. 1.
Substances, Mixing plastic or fluid. P. M. Oriopp. 1,885,757; Nov. 1.
Support, Adjustable cushion. J. A. Luarde. 1,886,112; Nov. 1.
Support, Bottle. L. W. Hassensall. 1,885,519; Nov. 1.
Support, Curtain crane. J. H. Boye. 1,885,407; Nov. 1.
Support, Engine. H. A. Flogaus. 1,885,815; Nov. 1.
Support for automobile drivers, Leg. C. L. Miller, jr. 1,885,750; Nov. 1.
Support for buildings, Roof. E. R. St. John. 1,885,781; Nov. 1.
Support for gear cutting machines, Arbor. R. Reinecker. 1,885,628; Nov. 1.
Support, Transmission line. A. O. Austin. 1,885,317–18; Nov. 1.
Support, Ware. P. D. Dressler. 1,885,691; Nov. 1.
Supporting device. C. I. Geddes. 1,886,090; Nov. 1.
Supporting device, Cleaning material. L. S. Hirth. 1,886,338; Nov. 1.

Surfaces, Protecting. C. C. Guthrie. 1,885,345; Nov. 1.
Switch: *See*—
Automatic switch. Multibreak electric switch.
Electric switch. Stoker control switch.
Electrical switch. Time controlled switch.
Inclosed electric switch.
High current electric switch.
Switch. P. R. Forman. 1,885,904; Nov. 1.
Switch and supporting mechanism therefor, Electric. F. H. MacNeil. 1,886,346; Nov. 1.
Switch for motor cars, Signal. W. Lucius. 1,885,526; Nov. 1.
Switch for signaling systems for vehicles. B. L. Bobroff. 1,886 078; Nov. 1.
Switch operating means, Plural. P. C. Smith. 1,885,147; Nov. 1.
Switch stand dog, Railroad. P. Swanson. 1,885,961; Nov. 1.
Switches, Control of electric. O. C. Traver. 1,885,157; Nov. 1.
Switching mechanism, Automatic. C. P. Smith and G. Newton. 1,886,059; Nov. 1.
Table: *See*—
Card table. Foldable table.
Display table. Folding table.
Table. P. Schweitzer. 1,885,635; Nov. 1.
Tablets, Method and apparatus for folding wrappers around. F. Grover. 1,885,543; Nov. 1.
Talking machine. J. Dieux. 1,885,994; Nov. 1.
Tank: *See*—
Boat racing tank. Storage tank.
Tank cap lock. C. E. Harris. 1,886,013; Nov. 1.
Tape cutter. W. E. Sharkey. 1,885,867; Nov. 1.
Tape for controlling electrical apparatus. W. L. Ducker. 1,885,808; Nov. 1.
Teeth and mounting them upon excavating implements, Digging. W. J. Brune. 1,885,326; Nov. 1.
Telephone system. E. R. Neir and S. E. Witt. 1,886,296; Nov. 1.
Telephone system. R. Taylor and C. E. Beale. 1,885,650; Nov. 1.
Telephone system, Automatic. W. Hatton. 1,886,097; Nov. 1.
Telephone system, Automatic. C. E. Stevens and J. C. Schooneman. 1,886,065; Nov. 1.
Telephone system, Automatic. M. Tchoubritch. 1,885,491; Nov. 1.
Temperature or pressure regulator. J. V. Giesler. 1,885,711; Nov. 1.
Tender, Locomotive. E. A. Turner. 1,886,317; Nov. 1.
Terminal. E. F. Potter. 1,885,477; Nov. 1.
Terminal fastening device. J. A. H. Siers. 1,885,868; Nov. 1.
Terracer, road grader and ditcher. C. W. Cundiff. 1,885,804; Nov. 1.
Test rod. A. J. Whitcomb and O. C. Callow. 1,885,397; Nov. 1.
Testing machine. W. C. Moran. 1,885,855; Nov. 1.
Testing vacuum tubes. W. N. Goodwin, jr. Re18,641; Nov. 1.
Textile fabric or similar article. H. Katzman. Des. 88,153–5; Nov. 1.
Textile fabric or similar article. H. Katzman. Des. 88,207–8; Nov. 1.
Textile fabric or similar article. P. Lesser. Des. 88,159–60; Nov. 1.
Textile fabric or similar article. E. M. Orkin. Des. 88,169–71; Nov. 1.
Textile fabric or similar article. W. Willheim. Des. 88,186–204; Nov. 1.
Textile fabric or similar article. W. Willheim. Des. 88,210–19; Nov. 1.
Textile fabric or the like. J. Lukas. Des. 88,162–4; Nov. 1.
Textile fabric or the like. R. Megroz. Des. 88,165; Nov. 1.
Textile fabric or the like. A. Thompson. Des. 88,178; Nov. 1.
Textile fabric or the like. I. A. Weitz. Des. 88,181–3; Nov. 1.
Thermoresponsive device. G. W. O'Keeffe. 1,886,355; Nov. 1.
Threads, filaments and the like, Process and apparatus in and relating to the manufacture and production of artificial. E. A. Mortoq. 1,885,753; Nov. 1.
Thymol, Preparing. S. Skraup, K. K. Schöllkopf, and A. Serini. 1,886,311; Nov. 1.
Tidal motor. A. T. Schiller. 1,885,866; Nov. 1.
Time-controlled suggestion machine, Automatic. A. B. Saliger. 1,886,358; Nov. 1.
Time controlled switch. A. H. Saar, jr. 1,885,482; Nov. 1.
Timepiece dials, Attaching means for. H. Colomb. 1,886,166; Nov. 1.
Tire and wheel, Pneumatic. A. H. Shoemaker. 1,885,484; Nov. 1.
Tire chain tightener. W. Johnson. 1,885,603; Nov. 1.
Tire deflation alarm. S. W. Bishop. 1,886,160; Nov. 1.
Tire, Pneumatic. J. L. M. Guenard. 1,886,094; Nov. 1.
Tires, Apparatus for handling. L. A. Ellis. 1,885,809; Nov. 1.
Tong, Pipe. F. J. Kightlinger. 1,885,605; Nov. 1.
Tool. E. J. Carey. 1,885,895; Nov. 1.
Tool and constructing the same. R. R. Brooks. 1,885,679; Nov. 1.
Tool and holder, Boring. E. Gairing. 1,886,177; Nov. 1.
Tool, Bolt-end spinning. L. M. Butler. 1,885,986; Nov. 1.
Tool, Cable cutting and skinning. J. A. Pedersen. 1,885,944; Nov. 1.
Tool, Fish unscrewing. R. A. Phillips. 1,885,623; Nov. 1.
Tool, Grinding. J. E. Loewy. 1,885,119; Nov. 1.
Tool, Screw cutting. J. A. Arens. 1,886,240; Nov. 1.
Tool, Tappet adjusting. W. Boynton. 1,885,579; Nov. 1.
Tool, Under pressure faucet and valve. A. J. Downer. 1,885,593; Nov. 1.
Toothbrush. F. W. Janssen. 1,886,024; Nov. 1.
Toothbrush. M. Sandig and D. Buck. 1,885,950; Nov. 1.
Toy. A. C. Smith. 1,886,130; Nov. 1.
Toy vehicle. R. J. Rader. 1,885,627; Nov. 1.
Traction wheel. C. T. Ray. 1,885,876; Nov. 1.
Tractor, Convertible. W. H. Smyth. 1,885,486; Nov. 1.
Tractor, Convertible noiseless tracklayer. W. H. Smyth. 1,885,485; Nov. 1.
Traffic controlling apparatus, Railway. R. R. Kemmerer 1,885,521; Nov. 1.
Traffic controlling apparatus, Railway. H. A. Thompson and F. H. Nicholson. 1,885,875; Nov. 1.
Train control. F. J. Sprague. 1,886,062; Nov. 1.
Train coupling. E. P. Fickeissen. 1,885,813; Nov. 1.
Transfer composition. B. S. Taylor and W. N. Jones. 1,885,388; Nov. 1.
Transfer mechanism, Parison. E. H. Lorenz. 1,885,740; Nov. 1.
Transforming oscillatory movement into rotary movement. G. H. Schieferstein. 1,885,558; Nov. 1.
Transmission, Automobile. A. D. Garrison. 1,886,003; Nov. 1.
Transmission line. A. O. Austin. 1,885,504; Nov. 1.
Transmission mechanism. H. T. Thomas, J. Bethune, and A. B. Hays. 1,885,156; Nov. 1.
Transmission, Multiple speed. W. Roberts. 1,885,857; Nov. 1.
Transmission regulation. S. Brand. 1,885,798; Nov. 1.
Transmission, Speed. L. A. Bixby. 1,886,154; Nov. 1.
Transmission system, Concentric conductor. E. I. Green. 1,885,195; Nov. 1.
Transmission system for telephony. E. K. Sandeman. 1,885,144; Nov. 1.
Transmitter and receiver, Thermionic. G. Schotel. 1,885,770; Nov. 1.
Trap: *See*—
Animal trap. Radiator return trap.
Trap. A. McMullen. 1,886,114; Nov. 1.
Traveling case. S. Marella. 1,885,849; Nov. 1.
Tray. F. E. Samuelson. 1,885,483; Nov. 1.
Tray composed of nested elements, Multiple ash. L. Lenfant. 1,886,109; Nov. 1.
Tray, Detachable service. W. L. McGinley. 1,885,615; Nov. 1.
Tread plate. R. L. Wheeler. Des. 88,184; Nov. 1.
Tripping device, Adjustable. N. W. Dorman. 1,885,420; Nov. 1.
Truck and bolster locking device, Railway. E. S. Beckette. 1,885,890; Nov. 1.
Truck and road drag, Combined dump. H. J. Nevin. 1,885,468; Nov. 1.
Truck, Car. C. J. Ellis. 1,885,191; Nov. 1.
Truck, Lifting. W. Stuebing, jr. 1,885,649; Nov. 1.
Trunks, Swimming and sun bathing. T. R. Upland. 1,886,255; Nov. 1.
Tube: *See*—
Photo electric tube.
Tube and socket, Shielded. H. L. Strongson. 1,885,782; Nov. 1.
Tube for liquid gas systems, Expansion. S. S. Thomas. 1,885,644; Nov. 1.
Tubes, Method and apparatus for the manufacture of. A. Laughlin, jr. 1,885,924; Nov. 1.
Tubing and method of making, Spirally coiled paper. R. P. Burton. 1,885,587; Nov. 1.
Tungsten plating and producing same. C. G. Fink and F. L. Jones. 1 885,701; Nov. 1.
Tungsten plating and producing same, Substantially pure. C. G. Fink. 1,885 702; Nov. 1.
Turbine. S. S. Cook, A. P. Bennett, and C. A. Parsons. 1,885,512; Nov. 1.
Tweezers. R. E. Silvis. 1,886,127; Nov. 1.
Type bar soldering machine. O. Brisbois. 1,886,267; Nov. 1.
Type characters and type bars, Joining. O. Brisbois. 1,885,584; Nov. 1.
Typographical composing machine. L. L. Kennedy. 1,886,108; Nov. 1.
Typographical distributing machine. J. H. Hilpman. 1,886,099; Nov. 1.
Ultra violet ray transmitting glass and to a batch and making the same. F. M. and F. J. Locke. 1,886,280; Nov. 1.
Umbrella, Collapsible. R. G. Wedemann. 1,885,968; Nov. 1.
Unit heater. L. D. Harnett. 1,886,337; Nov. 1.
Universal joint. A. A. Warner. 1,885,646; Nov. 1.
Upholstery. H. J. Burkart. 1,885,109; Nov. 1.
Upholstery and drapery fabric. S. J. Oliver. Des. 88,168; Nov. 1.
Upsetting mechanism. R. L. Wilcox. 1,885,648; Nov. 1.

Valve. D. D. Goldberg. 1,886,007; Nov. 1.
Valve. J. R. Miller. 1,885,939; Nov. 1.
Valve. G. H. Thacher. 1,886,315; Nov. 1.
Valve, Air signal. L. L. Leitner. 1,885,363; Nov. 1.
Valve and its operation. E. E. Littlefield. 1,885,846; Nov. 1.
Valve, Automatic cut-off. E. J. Horton. 1,885,724; Nov. 1.
Valve for smoking articles, Check. J. L. Dorschel. 1,885,689; Nov. 1.
Valve, Fuel relief. A. C. Estep. 1,885,338; Nov. 1.
Valve, Gate. C. F. Waxman. 1,885,159; Nov. 1.
Valve, Gate. R. Wells. 1,886,139; Nov. 1.
Valve mechanism. E. F. Loweke. 1,885,121; Nov. 1.
Valve mechanism, Exhaust. H. G. Mueller. 1,886,212; Nov. 1.
Valve mechanism for pumps. F. G. Hodsdon. 1,886,190; Nov. 1.
Valve operating mechanism. G. Boulet. 1,885,796; Nov. 1.
Valve, Pressure reducing and regulating. P. C. Temple. 1,885,389; Nov. 1.
Valve. Proportional. G. F. Naab and G. B. Brown. 1,885,130; Nov. 1.
Valve, Stop. H. Schmitt. 1,885,864; Nov. 1.
Valve structure for pipe lines, Air. J. C. Higgins. 1,885,848; Nov. 1.
Vaporizer and supercharger for internal combustion engines. L. M. Fabbro. 1,885,697–8; Nov. 1.
Vault, Burial. J. G. Miller. 1,886,290; Nov. 1.
Vehicle. E. M. Barrows. 1,885,795; Nov. 1.
Vehicle. C. Cohen-Venezian. 1,886,319; Nov. 1.
Vehicle construction, Motor. E. G. Purdy. 1,886,221; Nov. 1.
Vehicle, Motor. W. L. Moreland. 1,886,349; Nov. 1.
Vehicle, Semitrailer tank. A. A. Kramer. 1,886,197; Nov. 1.
Vehicle, Tank. A. A. Kramer. 1,886,196; Nov. 1.
Vehicle wheel. F. R. Rangel. 1,885,545; Nov. 1.
Vehicles, Backstop for automotive. L. C. Willey. 1,885,498; Nov. 1.
Vending apparatus, Coin controlled. F. Branica. 1,885 797; Nov. 1.
Vending, change making and coin distributing machine, Combination. S. M. Coffman. 1,885,899; Nov. 1.
Vending machine. B. T. Bjornson. 1,885,324; Nov. 1.
Vending machine. S. M. Coffman. 1,885,898; Nov. 1.
Vending machine. C. M. Holley. 1,885,201; Nov. 1.
Ventilating apparatus. A. W. Stewart. 1,886,313; Nov. 1.
Ventilating device for vehicles. J. A. Yanis y Dias. 1,885,668; Nov. 1.
Vessel, Carbonating. H. R. Boyer. 1,885,678; Nov. 1.
Veterinary appliance for facilitating the parturition of cows in calf. U. Ransy. 1,885,945; Nov. 1.
Vibrator, Doctor. S. B. Stafford and H. A. Smith. 1,885,872; Nov. 1.
Violins and the like, Finger position indicator means for. H. O. Weber. 1,886,070; Nov. 1.
Visible card rack. L. T. Lloyd and H. Olsen. 1,885,929; Nov. 1.
Voltage smoothing and regulating system. C. H. Green. 1,886,180; Nov. 1.
Volume control. S. Tarsian. 1,885,807; Nov. 1.
Vulcanized rubber compounds, Manufacture of. W. P. ter Horst. 1,885,564; Nov. 1.
Wall structure, Tubular. E. H. Tenney. 1,886,314; Nov. 1.
Wall structures, Making compound. L. L. Knox. 1,885,607; Nov. 1.
Ward, Burglar. D. W. Cameron. 1,885,180; Nov. 1.
Ware-steadying mechanism. C. H. Hardman and M. H. Thomas. 1,886,096; Nov. 1.
Washer: *See*—
Lock washer.
Washing machine. R. S. Lange. 1,886,201; Nov. 1.
Washing machine. S. E. Schroeder. 1,885,953; Nov. 1.
Waste organic mixtures, Utilisation of. G. T. Reich. 1,886,045; Nov. 1.
Water, Attachment for heating. J. H. App. 1,885,669; Nov. 1.
Water bottom, Self supporting. J. C. Martin, jr. 1,885,932; Nov. 1.
Water heater. V. L. Tannehill. 1,886,135; Nov. 1.
Waterproof expansion joint. A. C. Fischer. Re18,642; Nov. 1.
Water softening apparatus and process of softening water. F. X. and E. J. Lauterbur and H. L. Mintchell. 1,885,454; Nov. 1.
Wax from hydrocarbon oils, Removal of. H. A. Lowery. 1,886,344; Nov. 1.
Waxer and polisher, Floor. D. Durham. 1,885,997; Nov. 1.
Web roll controlling mechanism. A. J. Horton. 1,885,351; Nov. 1.
Webs from the carding engines into fine rovings for spinning, Converting the. G. C. Laurency. 1,885,271; Nov. 1.
Webs of paper to a rotary printing press, Mechanism for supplying. A. J. Horton. 1,885,262; Nov. 1.
Weighing. E. Karrer. 1,885,356; Nov. 1.
Weighing machine. R. C. Roe. 1,885,878; Nov. 1.
Welder's device. R. Malcom. 1,885,744; Nov. 1.
Well screen. C. E. Records. 1,886,121; Nov. 1.
Wheel: *See*—
Solid and pneumatic tired wheel. Traction wheel.
Vehicle wheel.
Wheel aligning device, Automobile. F. W. Howe. 1,886,019; Nov. 1.
Wheel construction. F. Klentzer. 1,885,729; Nov. 1.
Wheel for airplanes, Brake. M. Charles. 1,885,683; Nov. 1.
Wheel propeller and motor, Turbine. C. B. Strandgren. 1,885,640; Nov. 1.
Wicket structure, Armored cashier's. G. L. Willems. 1,885,165; Nov. 1.
Winding device. T. Watkins and L. D. Baum. 1,885,497; Nov. 1.
Winding machine. F. D. Sprague. 1,886,063; Nov. 1.
Winding mechanism. G. F. Bahr. 1,885,885; Nov. 1.
Window and window sash construction. R. T. Axe. 1,885,216; Nov. 1.
Window, Bank. C. Hassey. 1,885,560; Nov. 1.
Window closing device. R. G. Collins. 1,885,183; Nov. 1.
Window construction. C. E. Julin. 1,886,105; Nov. 1.
Window frame. F. C. Anderson. 1,886,145; Nov. 1.
Window screen. R. A. and G. H. Norquist. 1,885,756; Nov. 1.
Wing for airships, Shutter. F. C. Krummel. 1,885,733; Nov. 1.
Wiper, Windshield. C. C. and C. W. Gentry. 1,885,710; Nov. 1.
Wires, Making pile. F. Pickard. 1,885,137; Nov. 1.
Wood filler composition. E. T. Stille. 1,885,780; Nov. 1.
Woodworking machine. M. Hutchinson. 1,885,520; Nov. 1.
Wrench: *See*—
Adjustable wrench. Fuse wrench.
Wrench. H. A. Mead. 1,885,616; Nov. 1.
Wrench. H. A. Scisinger. 1,885,954; Nov. 1.
Wringer: *See*—
Mop wringer.
Zinc sulphide and the manufacture of zinc sulphide pigments, Precipitation of. N. C. Christensen. 1,886,165; Nov. 1.

CLASSIFICATION OF PATENTS

ISSUED NOVEMBER 1, 1932

NOTE.—First number—class. second number—subclass. third number—patent number.

1— 56: 1,885,237
2— 8: 1,885,426
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93: 1,885,236
94: 1,885,827
150: 1,885,215
193— 35: 1,885,568
194— 1: 1,885,240
2: 1,885,797
63: 1,885,808
196— 1: 1,886,008
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19: 1,886,344
37: 1,885,524
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61: 1,886,093
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147: 1,886,260
151: 1,886,262
197— 128: 1,885,525
198— 36: 1,885,935
30: 1,886,096
76: 1,885,892
122: 1,886,295

198— 127: 1,885,308
168: 1,885,946
193: 1,885,818
199— 18: 1,886,108
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55: 1,885,777
200— 4: 1,886,078
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18: 1,885,147
37: 1,885,482
44: 1,885,904
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52: 1,885,300
59: 1,885,526
67: 1,885,246
83: 1,885,783
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84: 1,886,245
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123: 1,886,356
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145: 1,885,101
157: 1,885,709
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5: 1,885,920
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39: 1,885,166
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102: 1,885,673
159: 1,886,037
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1,885,702
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15: 1,886,163
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58: 1,885,610
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1,885,988
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63: 1,885,576
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66: 1,885,937
213— 104: 1,885,813
214— 3: 1,885,877
36: 1,886,531
45: 1,886,389
55: 1,886,032
215— 38: 1,886,347
95: 1,885,057
217— 3: 1,886,480
31: 1,885,402
1,885,580
8: 1,885,456
52: 1,885,534
65: 1,885,748
218— 0.5: 1,885,347
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1,885,902
1,886,257
220— 1: 1,885,601
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60: 1,885,201
1,885,533

221— 80: 1,886,022
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61: 1,885,263
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65: 1,885,508
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225— 21: 1,885,308
1,885,678
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55: 1,885,670
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98: 1,886,148
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233— 7: 1,886,111
235— 60: 1,885,489
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236— 1: 1,885,433
44: 1,885,791
46: 1,885,903
54: 1,885,466
58: 1,885,903
68: 1,885,515
91: 1,886,223
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1,885,711
237— 12: 1,886,222
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371: 1,886,010
240— 2: 1,886,027
2.1: 1,885,134
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10: 1,885,379
63: 1,885,732
81: 1,885,275
85: 1,885,514
128: 1,885,555
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261: 1,885,644
242— 55: 1,886,063
58: 1,885,202
62: 1,885,497
66: 1,885,612
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21: 1,885,570
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246— 7: 1,885,909
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130: 1,885,926
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160: 1,886,521
182: 1,886,875
203: 1,885,789
208: 1,886,460
412: 1,885,961
415: 1,885,266
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263— 15: 1,885,704
265— 12: 1,885,873
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19: 1,885,313
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39: 1,885,691
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17: 1,885,770
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27: R. 18,641
27.5: 1,885,126
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1,885,788
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1,885,332
40: R. 18,640
251— 43: 1,885,189
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51: 1,885,189
59: 1,885,189
63: 1,885,340
79: 1,885,027
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116: 1,885,647
122: 1,885,844
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253— 1: 1,885,619
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254— 9: 1,885,170
10: 1,885,640
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69: 1,885,742
73: 1,885,128
83: 1,885,122
89: 1,885,694
98: 1,885,253
124: 1,885,199
135: 1,885,057
139: 1,885,285
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146: 1,885,862
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255— 19: 1,885,794
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265— 12: 1,885,873
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265—	54: 1,885,705	273—	153: 1,885,260	280—	51: 1,885,809	286—	19: 1,885,546	299—	4: 1,885,830	306—	11: 1,885,540
	59: 1,885,356		155: 1,885,122		80: 1,885,882	287—	20: 1,886,128		24: 1,885,919	308—	19: 1,885,410
266—	21: 1,885,152	274—	9: 1,886,228		87: 1,885,194		52.01: 1,885,241		54: 1,885,620		37: 1,885,721
	22: 1,885,107		23: 1,885,904		1,885,964		58: 1,885,664		78: 1,886,207		63: 1,885,538
267—	52: 1,886,168		42: 1,885,415		111: 1,886,319		75: 1,886,086		83: 1,885,135		83: 1,886,018
268—	123: 1,885,183	275—	8: 1,886,140		124: 1,886,349		85: 1,886,143		88: 1,885,332		91: 1,885,586
270—	1: 1,885,313		9: 1,886,149	283—	63: 1,885,928	292—	39: 1,885,658		95: 1,885,180		187: 1,886,014
	55: 1,885,494	277—	4: 1,885,130	284—	5: 1,885,523		123: 1,885,824	300—	10: 1,885,651		193: 1,886,219
	73: 1,886,312		45: 1,885,121		17: 1,885,657		128: 1,855,713	301—	6: 1,885,663		207: 1,885,985
271—	29: 1,886,102	279—	52: 1,886,224	285—	20: 1,885,779		169: 1,886,183		28: 1,885,729		214: 1,885,852
	54: 1,885,874		63: 1,885,790		1,886,316		173: 1,885,216		41: 1,885,376		226: 1,885,358
	61: 1,885,131		79: 1,886,177		62: 1,885,614		175: 1,885,186	302—	21: 1,885,437		1,886,254
	62: 1,886,262		110: 1,886,083		90: 1,886,332	293—	54: 1,885,248		60: 1,885,828		238: 1,885,339
272—	10: 1,885,642	280—	5: 1,886,196		96: 1,885,886		55: 1,885,435	303—	3: 1,885,588	312—	15: 1,885,481
	79: 1,885,473		1,886,197		111: 1,886,275		1,885,474		88: 1,885,894		36: 1,885,324
273—	80: 1,885,802		20: 1,885,112		177: 1,885,321	296—	76: 1,885,975	305—	9: 1,885,430		79: 1,885,907
	107.5: 1,885,962		41: 1,886,073	286—	6: 1,886,038		97: 1,885,510		1,885,485		113: 1,886,068
	149: 1,885,276		51: 1,885,795		11: 1,886,147		98: 1,885,150		1,885,486		146: 1,885,597

U. S. GOVERNMENT PRINTING OFFICE: 1933

LIST OF TRADE-MARK APPLICANTS

PUBLISHED FOR OPPOSITION

[Act of Feb. 20, 1905, Sec. 6, as amended Mar. 2, 1907]

Advance Battery Corporation, New York, N. Y. Antifreeze solution for automobile radiators. Serial No. 330,079; Nov. 8. Class 6.

Alta-Vis Oil Company, Portland, Oreg. Lubricating oils. Serial No. 330,613; Nov. 8. Class 15.

American Brass & Steel Products Co., New York, N. Y. Metal stamping dies, button covering machines, eyelet setting machines, etc. Serial No. 289,906; Nov. 8. Class 23.

American Record Corporation, New York, N. Y. Game. Serial No. 330,151; Nov. 8. Class 22.

Angier & Earle, Inc., Boston, Mass. Plastic solder. Serial No. 329,781; Nov. 8. Class 14.

Arena, A., & Co., Ltd., Los Angeles, Calif. Fresh vegetables. Serial No. 305,024; Nov. 8. Class 46.

Armor Products Inc., New York, N. Y. Mechanical packings, belting, hose plastic packings, etc. Serial No. 329,846; Nov. 8. Class 35.

Baldwin City Mills Company. (See Santangelo, Sylvester E.)

Beatrice Creamery Company, Chicago, Ill. Confection. Serial No. 330,289; Nov. 8. Class 46.

Bee Bee Confection Company, The, Dayton, Ohio. Chewing gum. Serial No. 316,229; Nov. 8. Class 46.

Behr-Manning Corporation, Troy, N. Y. Composition sheet material. Serial No. 330,242; Nov. 8. Class 50.

Bettoney, Harry, doing business as The Cundy-Bettoney Co., Boston, Mass. Soprano clarinets, bass and alto clarinets, flutes, piccolos, oboes and bassoons. Serial No. 330,677; Nov. 8. Class 36.

Blue Earth Canning Company, Blue Earth, Minn. Canned vegetables. Serial No. 325,362; Nov. 8. Class 46.

Böhme, H. Th., Aktiengesellschaft, Chemnitz, Germany. Soap preparations. Serial No. 329,495; Nov. 8. Class 4.

Borden, M. C. D., & Sons, Inc., New York, N. Y. Cotton piece goods. Serial No. 330,081; Nov. 8. Class 42.

Borden's Produce Company, Inc., Omaha, Nebr. Condensed buttermilk. Serial No. 330,444; Nov. 8. Class 46.

British Vacuum Cleaner & Engineering Co. Ltd., The, London, England. Suction cleaning machines. Serial No. 330,007; Nov. 8. Class 23.

Brownie's Corn Shop. (See Roschman, Emil C.)

Bruckheimer, Sydney M., doing business as Susco Sales Co., Buffalo, N. Y. Chemical powder. Serial No. 330,197; Nov. 8. Class 6.

Brunswick-Balke-Collender Company, The, Wilmington, Del., and Chicago, Ill. Bowling pins. Serial No. 329,396; Nov. 8. Class 22.

Buffalo Envelope Company, Inc., Buffalo, N. Y. Correspondence and mailing envelopes. Serial No. 329,441; Nov. 8. Class 37.

Bugge, P. O., Bisbee, N. Dak. Medicinal preparation. Serial No. 329,370; Nov. 8. Class 6.

Buttitta, Anthony J., doing business as Contempo, Ltd., Chapel Hill and Durham, N. C. Magazine. Serial No. 329,071; Nov. 8. Class 38.

Carborundum Company, The, Niagara Falls, N. Y. Artificial abrasive grains. Serial No. 330,245; Nov. 8. Class 4.

Chabot. (See Manahan, D. F.)

Citra Packing Company, The, Citra, Fla. Oranges, lemons, grape-fruit, etc. Serial No. 329,421; Nov. 8. Class 46.

Clapp, Otis, & Son, Inc., Boston, Mass. Antacid, antipyretic tablet. Serial No. 329,177; Nov. 8. Class 6.

Contempo, Ltd. (See Buttitta, Anthony J.)

Cottonwood Products, Inc., Reading, Mass. Packing pads and wrappers, insulating mat or sheet for packing pads, etc. Serial No. 321,679; Nov. 8. Class 50.

Cundy-Bettoney Co., The. (See Bettoney, Harry.)

Cupples, Samuel, Envelope Company, St. Louis, Mo. Mailing envelopes. Serial No. 313,771; Nov. 8. Class 37.

Curtis-Martin Newspapers, Inc., Philadelphia, Pa. Column of humor in newspaper publications. Serial No. 330,159; Nov. 8. Class 38.

Darling Valve & Manufacturing Company, Williamsport, Pa. Fabric cups. Serial No. 330,571; Nov. 8. Class 35.

Deinser, John C., doing business as The Hy-Ca-Mel Remedy Co., Hamilton, Ohio. Tonic and cough medicine. Serial No. 318,905; Nov. 8. Class 6.

Desbecker, Harold C., doing business as Tic Toc Toy Company, Buffalo, N. Y. Teething rings or infant pacifiers. Serial No. 302,214; Nov. 8. Class 44.

Deyo, Wm. P., Inc., Brooklyn, N. Y. Horse radish. Serial No. 330,945; Nov. 8. Class 46.

Dunwoody, Bal., Co., Philadelphia, Pa. Cod liver oil. Serial No. 330,610; Nov. 8. Class 6.

Duovac Radio Tube Corp., Brooklyn, N. Y. Electric meter and tone indicator. Serial No. 327,051; Nov. 8. Class 26.

Eagle Knitting Mills, Milwaukee, Wis. Knitted caps, hats and sweaters. Serial No. 329,327; Nov. 8. Class 39.

Electro Auto-Lite Company, The, Toledo, Ohio. Electric generating, storage, and starting systems, etc., and parts therefor. Serial No. 312,905; Nov. 8. Class 21.

Electromaster, Inc., Detroit, Mich. Electric stoves and ranges. Serial No. 326,206; Nov. 8, 1932. Class 21.

Esterbrook Steel Pen Manufacturing Company, The, Camden, N. J. Writing pens of all kinds. Serial Nos. 330,697–700; Nov. 8. Class 37.

Esterbrook Steel Pen Manufacturing Company, The, Camden, N. J. Writing pens of all kinds. Serial No. 330,743; Nov. 8. Class 37.

Excelsior Tobacco Co. Inc., St. Louis, Mo. Cigarettes, cigars and smoking tobacco. Serial No. 323,575; Nov. 8. Class 17.

Fabrique de Chocolat et de Produits Alimentaires de Villars, S. A., Fribourg, Switzerland. Food preparation and ingredient containing malt, milk, etc. Serial No. 325,749; Nov. 8. Class 46.

Fairbanks, Morse & Co., Chicago, Ill. Internal combustion engines, pumps, windmills, etc. Serial No. 329,631; Nov. 8. Class 23.

Faness Industries, Chicago, Ill. Game. Serial No. 330,510; Nov. 8. Class 22.

Federal Composition & Paint Company, Inc., The, New York, N. Y. Nitrocellulose liquid solution. Serial No. 327,957; Nov. 8. Class 6.

Friedman Manufacturing Company, The, doing business as Pantry Maide Products Co., Chicago, Ill. Fruit jellies, apple butter, marmalade, etc. Serial No. 324,555; Nov. 8. Class 46.

Gasteria Incorporated, Indianapolis, Ind. Lubricating oils and greases and gasoline. Serial No. 330,780; Nov. 8. Class 15.

Gatien, Amedee M., doing business as P. W. Co., River Rouge, Mich. Cleaning compound for painted or soiled surfaces, etc. Serial No. 329,943; Nov. 8. Class 4.

General Box Company, Chicago, Ill. Wooden crates and boxes. Serial No. 327,586; Nov. 8. Class 2.

General Mills, Inc., Minneapolis, Minn. Wheat flour. Serial No. 319,485; Nov. 8. Class 46.

General Refining Company, The, Baltimore, Md. Oils and greases. Serial No. 329,679; Nov. 8. Class 15.

Germaine Millinery, Inc., New York, N. Y. Ladies' hats. Serial No. 330,344; Nov. 8. Class 39.

Glovecraft, Inc. Johnstown, N. Y. Leather gloves. Serial No. 329,894; Nov. 8. Class 39.

Gotham Shock-Bilt, Inc., New York, N. Y. Watch bracelets, fobs and chains, card cases, etc. Serial No. 329,708; Nov. 8. Class 28.

Gotham Silk Hosiery Company, Inc., New York, N. Y. Hosiery. Serial No. 330,950; Nov. 8. Class 39.

Gray, Ellsworth, doing business as Saxet Tool Company, Houston, Tex. Oil well supplies. Serial No. 330,257; Nov. 8. Class 23.

Gross, Benjamin & Edward J., Co., Inc., New York, N. Y. Finger rings and mountings therefor. Serial No. 330,702; Nov. 8. Class 28.

Gunite Foundries Corporation, Rockford, Ill. Safes. Serial No. 330,656; Nov. 8. Class 25.

Hadley Company, Inc., The, Providence, R. I. Bracelets. Serial No. 330,815; Nov. 8. Class 28.

Hare Mfg. Co., Philadelphia, Pa. Electric heating pads. Serial No. 330,087; Nov. 8. Class 21.

Hart & Cooley Mfg. Company, New Britain, Conn. Registers. Serial No. 328,609; Nov. 8. Class 34.

Haselton, Guy D., Hollywood, Calif. Motion pictures. Serial No. 328,170; Nov. 8. Class 26.

Hayward Hosiery Company, Ipswich and Waltham, Mass. Woolen piece goods. Serial No. 330,014; Nov. 8. Class 42.

Herbert, Edward J., Mount Vernon, N. Y. Featured published articles. Serial No. 308,508; Nov. 8. Class 38.

Hercules Powder Company, Wilmington, Del. Dynamite. Serial No. 330,424; Nov. 8. Class 9.

Heudebert, Charles, Nanterre, France. Special food preparations. Serial No. 324,789; Nov. 8. Class 46.

Hollywood Knitting Mills, Inc., Los Angeles, Calif. Knitted sweaters, dresses, bathing suits, etc. Serial No. 329,989; Nov. 8. Class 39.

Horton Manufacturing Company, The, Bristol, Conn. Fishing reels. Serial No. 330,599; Nov. 8. Class 22.

Hy-Ca-Mel Remedy Co., The. (See Deinser, John C.)

Inwood Product Corporation. (See Wolbert, Everett D.)

Iowa Soap Company, Burlington, Iowa. Laundry soap. Serial No. 330,627; Nov. 8. Class 4.

Isrin, David S., doing business as D. Isrin Co., New York, N. Y. Tea. Serial No. 328,492; Nov. 8. Class 46.

Jacobs Brothers, Incorporated, Baltimore, Md. One piece outer garment. Serial No. 330,533; Nov. 8. Class 39.

Jay Tobacco Company. (See Josepha, Jean.)

LIST OF TRADE-MARK APPLICANTS

PUBLISHED FOR OPPOSITION

[Act of Feb. 20, 1905, Sec. 6, as amended Mar. 2, 1907]

Jeffery, Alfred, & Co., doing business as Jeffery's Patent Marine Glue Works, London, England. Marine glue. Serial No. 330,370; Nov. 8. Class 5.

Josephs, Jean, doing business as Jay Tobacco Company, Philadelphia, Pa. Cigarettes. Serial No. 330,658; Nov. 8. Class 17.

Karreth, August, Munich, doing business as Luitpold-Werk, Chemisch-Pharmazeutische Fabrik, Munich, Germany. Medicines and chemical preparations. Serial No. 324,225; Nov. 8. Class 6.

Kassekert, Fred, Greenwich, Conn. Razor blades. Serial No. 329,583; Nov. 8. Class 28.

Kats, Chas., New York, N. Y. Dresses. Serial No. 319,696; Nov. 8. Class 39.

Kendall Company, The, Chicago, Ill., and Boston, Mass. Aromatic spirits of ammonia, caster oil, carbolated petroleum, etc. Serial No. 325,098; Nov. 8. Class 6.

Kendall Company, The, Chicago, Ill. Elastic bandages. Serial No. 330,261; Nov. 8. Class 44.

La Gerardine Inc., New York, N. Y. Preparation for restoring the color of hair. Serial No. 329,900; Nov. 8. Class 6.

Lamm, Jacob C., Baltimore, Md. Trench and top coats, trousers, suits, etc. Serial No. 329,974; Nov. 8. Class 39.

Larus & Brother Company, Incorporated, Richmond, Va. Cigarette papers and booklets. Serial No. 320,981; Nov. 8. Class 8.

Lennox Furnace Company, Marshalltown, Iowa. Automatic gas burning units and fuel controlling devices therefor. Serial No. 312,718; Nov. 8. Class 34.

Lever Brothers Company, Cambridge, Mass. Vegetable shortening. Serial No. 330,373; Nov. 8. Class 46.

Lever Brothers Company, Cambridge, Mass. Vegetable oil. Serial Nos. 330,374–6; Nov. 8. Class 46.

Lewis, Samuel, Co. Inc., New York, N. Y. Folding chairs. Serial No. 328,770; Nov. 8. Class 32.

Loft, Inc., Long Island City, N. Y. Ginger ale. Serial No. 330,792; Nov. 8. Class 45.

Luitpold-Werk, Chemisch-Pharmazeutische Fabrik. (See Karreth, August.)

Manahan, D. F., doing business as Chabot, Los Angeles, Calif. Perfumes and other toilet preparations and cosmetics. Serial No. 323,953; Nov. 8. Class 6.

Maynard, Inc., Chicago, Ill. Face creams. Serial No. 330,270; Nov. 8. Class 6.

McLaughlin Gormley King Co., Minneapolis, Minn. Insecticides. Serial No. 330,577; Nov. 8. Class 6.

Menihen Company, The, Rochester, N. Y. Shoes. Serial No. 329,955; Nov. 8. Class 39.

Menth-A-Frost Products. (See Zwick, Jack.)

Millers Falls Paper Company, Millers Falls, Mass. Bond paper. Serial No. 317,645; Nov. 8. Class 37.

Montgomerie & Co. Ltd., Glasgow, Scotland. Bread, cakes, biscuit, etc. Serial No. 326,568; Nov. 8. Class 46.

Moukaetoff, Simeon, Sofia, Bulgaria. Veterinary products. Serial No. 329,090; Nov. 8. Class 6.

Mülhens, Ferd., Inc., New York, N. Y. Eau de Cologne, perfumery, hair tonics, etc. Serial No. 329,118; Nov. 8. Class 6.

Murdock, Peter, doing business as Murdock Pharmacal Co., New York, N. Y. Preparations for skin irritation. Serial No. 330,349; Nov. 8. Class 6.

Myers, E. A., and Sons, Pittsburgh, Pa. Electrically operable hearing aids. Serial No. 318,459; Nov. 8. Class 44.

Nashua Package Sealing Co. Inc., Nashua, N. H. Devices and appliances for moistening and/or serving adhesive or gummed tape, etc. Serial Nos. 330,661–3; Nov. 8. Class 37.

National Biscuit Company, New York, N. Y. Bakery products. Serial No. 329,022; Nov. 8. Class 46.

National Milling & Chemical Company, Philadelphia, Pa. Soap compounds. Serial No. 330,429; Nov. 8. Class 4.

Newark Paraffine & Parchment Paper Co., Newark, N. J. Waxed paper bags and transparent containers. Serial No. 328,247; Nov. 8. Class 2.

Northbilt Manufacturing Co., Minneapolis, Minn. Children's playsuits. Serial No. 330,550; Nov. 8. Class 39.

P. W. Co. (See Gatien, Amedee M.)

Pantry Maide Products Co. (See Friedman Manufacturing Company, The.)

Pepsodent Co., The, Chicago, Ill. Medicinal tablets. Serial No. 330,099; Nov. 8. Class 6.

Pero & Daniels, Inc., Jamaica Plain, Mass. French cord binding. Serial No. 329,239; Nov. 8. Class 40.

Phelps Dodge Copper Products Corporation, Dover, Del., and New York, N. Y. Seamless brass and copper tubing. Serial No. 330,565; Nov. 8. Class 13.

Pidgeon, Mary J., Great Neck, N. Y. Bandages for use in beauty parlors. Serial No. 326,645; Nov. 8. Class 44.

Pioneer Paper Stock Company, Chicago, Ill. Paper excelsior. Serial No. 330,831; Nov. 8. Class 37.

Pi-Ro-Dram Company, Lubbock, Tex. Astringent for the gums. Serial No. 330,071; Nov. 8. Class 6.

Plough, Inc., doing business as Puck Food Products Co., Memphis, Tenn. Food products. Serial No. 328,250; Nov. 8. Class 46.

Popkin, Martin E., New York, N. Y. Preparation for treating the scalp and skin. Serial No. 328,738; Nov. 8. Class 6.

Premier Malt Products Co., Peoria Heights, Ill. Malt beverage. Serial No. 330,381; Nov. 8. Class 48.

Puck Food Products Co. (See Plough, Inc.)

Pure Food Factory "Hansa", Mamaroneck, N. Y. Dog foods. Serial No. 329,316; Nov. 8. Class 46.

Puro Co., Inc., The, St. Louis, Mo. Deodorant. Serial Nos. 330,276–7; Nov. 8. Class 6.

Reserve Officers' Association of the United States, Washington, D. C. Magazine. Serial No. 330,711; Nov. 8. Class 38.

Richards, Elmer, Company, Chicago, Ill. Chemical preservative and fire extinguishing fluid. Serial No. 329,614; Nov. 8. Class 6.

Rimmel, Inc., West Orange, N. J. Astringents, astringent creates, bleach creams, etc. Serial No. 328,075; Nov. 8. Class 6.

Roessel, Louis, & Co., Inc., Hazleton, Pa., and New York, N. Y. Silk goods. Serial No. 330,761; Nov. 8. Class 42.

Roschman, Emil C., doing business as Brownie's Corn Shop, Belvidere, Ill. Popcorn candy confection. Serial No. 318,810; Nov. 8. Class 46.

Safety Car Heating & Lighting Company, The, New Haven, Conn., and New York, N. Y. Globes, shades, and reflectors. Serial No. 292,018; Nov. 8. Class 33.

Santangelo, Sylvester E., doing business as Baldwin City Mills Company, Youngstown, Ohio. Wheat flour. Serial No. 326,594; Nov. 8. Class 46.

Saxet Tool Company. (See Gray, Ellsworth.)

Schutte & Koerting Company, Philadelphia, Pa. Apparatus for measuring by indication the quantity of liquids and gases which involves the principle of flow through an orifice. Serial No. 325,695; Nov. 8. Class 26.

Scophony Limited, London, England. Unitary television transmitting and receiving equipment and parts therefor, etc. Serial No. 328,227; Nov. 8. Class 21.

Secret Food Specialty Co. (See Zuras, Constantine.)

Seth Thomas Clock Company, Thomaston, Conn. Electrical motors. Serial No. 315,479; Nov. 8. Class 21.

Silten, Dr. Ernst, Berlin, Germany. Asthma inhalant. Serial No. 326,762; Nov. 8. Class 6.

Simpson Bros., Inc., doing business as Wakefield Dairy, Washington, D. C. Dairy products. Serial No. 329,904; Nov. 8. Class 46.

Sleeper Products, Inc., Wilmington, Del., and Philadelphia, Pa. Box-springs and mattresses. Serial No. 330,678; Nov. 8. Class 32.

Smith Engineering Company, The, Cleveland, Ohio. Propellers and devices for changing the pitch of propellers. Serial No. 326,792; Nov. 8. Class 19.

Smith, Frederick A. U., doing business as Upsher Smith Co., Minneapolis, Minn. Digitalis in its solid and liquid form. Serial No. 328,540; Nov. 8. Class 6.

Stanco Incorporated, Wilmington, Del., and New York, N. Y. Liquid automobile and furniture cleaning and polishing preparation. Serial No. 330,554; Nov. 8. Class 16.

Standard Oil Company of New Jersey, Wilmington, Del. Lubricating oils. Serial No. 330,210; Nov. 8. Class 15.

Standard Rate & Data Service, Chicago, Ill. Periodical. Serial No. 330,168; Nov. 8. Class 38.

Stark Metal Products Company, The, Massillon, Ohio. Adhesive cement. Serial No. 329,809; Nov. 8. Class 5.

Sterilometer Laboratories, Los Angeles, Calif. Controls comprising a pyro-recording composition. Serial No. 329,565; Nov. 8. Class 26.

Susco Sales Co. (See Bruckheimer, Sydney M.)

Tachette Manufacturing Corporation, Long Island City, N. Y. Packets of absorbent tissue. Serial Nos. 330,054–5; Nov. 8. Class 37.

Therm-A-Mode, Inc., Orange, N. J. Electric blankets and pads. Serial No. 330,319; Nov. 8. Class 44.

Thomas, Edward H., Philadelphia, Pa. Preparation for use in removing odors from refrigerators. Serial No. 329,434; Nov. 8. Class 6.

Tic Toc Toy Company. (See Desbecker, Harold C.)

Tubize Chatillon Corporation, New York, N. Y. Artificial silk yarn and thread. Serial No. 330,608; Nov. 8. Class 43.

United American Bosch Corporation, Springfield, Mass. Electrical condenser testing instruments. Serial No. 329,542; Nov. 8. Class 26.

U. S. Manufacturing Corporation, Decatur, Ill. Impregnated or treated cleaning and polishing cloths, rags, dusters, etc. Serial No. 311,543; Nov. 8. Class 4.

United States Rubber Company, New York, N. Y. Rubber cement. Serial No. 330,768; Nov. 8. Class 5.

Van Wagner, Lester, doing business as Van Wagner & Co., Richmond Hill, N. Y. Sanitary paper sheets. Serial No. 330,353; Nov. 8. Class 37.

Vanity Fair Silk Mills, Reading, Pa. Corsets, hosiery and underwear. Serial Nos. 329,810–11; Nov. 8. Class 39.

Viavi Company, The, San Francisco, Calif. Digestive tablets. Serial No. 322,843; Nov. 8. Class 6.

Vogt Brothers Mfg. Co., Louisville, Ky. Fluid mixing heads and throats for aeration, purification, and treatment. Serial No. 327,240; Nov. 8. Class 13.

PUBLISHED FOR OPPOSITION

[Act of Feb. 20, 1905, Sec. 6, as amended Mar. 2, 1907]

Wahl Company, The, Chicago, Ill. Ink. Serial No. 330,769; Nov. 8. Class 11.

Wakefield Dairy. (See Simpson Bros., Inc.)

Wilckes, Martin, Wilckes Company, New York, N. Y. Carbon black. Serial No. 330,770; Nov. 8. Class 16.

Wilson-Hall Printing Company, Rockford, Ill. Periodical publication. Serial No. 330,771; Nov. 8. Class 38.

Wilson-Jones Company, Chicago, Ill. Covered and bound blank books, note books, index books, etc. Serial No. 330,136; Nov. 8. Class 37.

Wolbert, Everett D., doing business as Inwood Products Corporation, San Francisco, Calif. Finish in the nature of a paint or varnish. Serial No. 327,383; Nov. 8. Class 16.

Worthy Manufacturing Company, Chicago, Ill. Shirts. Serial No. 330,532; Nov. 8. Class 39.

Worthy Paper Company Association, North Agawam, Mass. Bond, ledger, linen and manuscript cover papers. Serial No. 330,173; Nov. 8. Class 37.

Zuras, Constantine, doing business as Secret Food Specialty Co., Washington, D. C. Peanut butter sandwiches. Serial No. 319,426; Nov. 8. Class 46.

Zwick, Jack, doing business as Menth-A-Frost Products, Cleveland Heights, Ohio. Shaving creams. Serial No. 323,927; Nov. 8. Class 4.

LIST OF REGISTRANTS OF TRADE-MARKS

A. & J. Kitchen Tool Co., The, Chicago, Ill. Kitchen tools and utensils. 298,827; Nov. 8; Serial No. 322,786; published Aug. 30. Class 23.

Advance Paint Company, Indianapolis, Ind. Anti-knock compounds. 298,845; Nov. 8; Serial No. 327,963; published Aug. 16, 1932. Class 6.

Aktiengesellschaft der Österreichischen Fezfabriken, Vienna, Austria. Hats and knitted and woven caps. 298,859; Nov. 8; Serial No. 316,800; published Aug. 23, 1932. Class 39.

Albemarle Paper Manufacturing Company, The, Richmond, Va. Blotting paper. 298,874; Nov. 8; Serial No. 328,517; published Aug. 23, 1932. Class 37.

American Can Company, New York, N. Y. Advertising signs. 298,758; Nov. 8; Serial No. 328,415; published Aug. 30, 1932. Class 50.

American Crayon Company, The, Sandusky, Ohio. Poster and construction papers. 298,884; Nov. 8; Serial No. 326,357; published Aug. 30, 1932. Class 37.

American Molasses Co. of New York, The, New York, N. Y. Special bread sugar. 298,796; Nov. 8; Serial No. 327,386; published Aug. 23, 1932. Class 46.

American Radiator Company, East Orange, N. J.; Chicago, Ill.; New York, N. Y.; Philadelphia, Pa.; Boston, Mass.; London, England; Paris, France; and Berlin, Germany, to American Radiator Company, New York, N. Y. Radiators. 88,658; renewed Oct. 15, 1932.

American Sales Book Company, Limited, Toronto, Canada, and Niagara Falls and Elmira, N. Y. Paper and stationery. 298,881; Nov. 8; Serial No. 327,546; published Aug. 23, 1932. Class 37.

American Stores Company, Philadelphia, Pa. Butter. 298,803; Nov. 8; Serial No. 326,970; published Aug. 30, 1932. Class 46.

American Thread Company, The, Jersey City, N. J., and New York, N. Y. Spool cotton, thread, and sewing cotton. 298,896; Nov. 8. Class 43.

American Tissue Mills, Holyoke, Mass. Paper, paper napkins, and handkerchiefs. 298,873; Nov. 8; Serial No. 328,807; published Aug. 23, 1932. Class 37.

Amico Laboratories, Inc., Chicago, Ill. Sulpho ichthyolate of ammonium and medicinal compounds containing the same. 298,855; Nov. 8; Serial No. 326,884; published Aug. 16, 1932. Class 6.

Associated Press, The, New York, N. Y. Newspaper cartoons. 298,812–13; Nov. 8; Serial Nos. 328,629–30; published Aug. 30, 1932. Class 38.

Atlas Supply Company, Wilmington, Del., and Newark, N. J. Storage batteries. 298,767; Nov. 8; Serial No. 328,833; published Aug. 30, 1932. Class 21.

Autofume Sterilizer Company, Oakland, Calif. Apparatus for sterilizing various appliances for manual use. 298,862; Nov. 8; Serial No. 306,545; published Aug. 30, 1932. Class 23.

Bair & Edgerton Boat Works, Glen Cove, Long Island, N. Y. Portable folding rowboats. 298,773; Nov. 8; Serial No. 328,114; published Aug. 23, 1932. Class 19.

Balfour, Guthrie & Co., Limited, San Francisco, Calif. Firecrackers and fireworks. 298,800; Nov. 8; Serial No. 329,108; published Aug. 30, 1932. Class 9.

Baltz, J. & P., Brewing Co., The, Philadelphia, Pa. Malt liquors. 40,011; renewed Mar. 31, 1933.

Beatrice Creamery Company, Chicago, Ill. Frozen custard and sherbet. 298,780; Nov. 8; Serial No. 327,299; published Aug. 23, 1932. Class 46.

Bell, Louise, Sacramento, Calif. Preparation for treatment of hemorrhoids. 298,856; Nov. 8; Serial No. 326,442; published Aug. 16, 1932. Class 6.

Berman-Lurie, Inc., New York, N. Y. Sportswear. 298,840; Nov. 8; Serial No. 327,548; published Aug. 23, 1932. Class 39.

Berthold, Richard E., Richmond Hill, N. Y. Pyrophoric pocket lighters. 298,785; Nov. 8; Serial No. 328,543; published Aug. 30, 1932. Class 34.

Birdsell Manufacturing Co., South Bend, Ind. Clover and alfalfa hullers. 298,824; Nov. 8; Serial No. 323,319; published Apr. 19, 1932. Class 23.

Birk Bros. Malt Products, Inc., Chicago, Ill. Malt syrup. 298,787; Nov. 8; Serial No. 328,348; published Aug. 23, 1932. Class 46.

Birk Bros. Malt Products, Inc., Chicago, Ill. Malt syrup. 298,789; Nov. 8; Serial No. 328,347; published Aug. 23, 1932. Class 46.

Birk Bros. Malt Products, Inc., Chicago, Ill. Malt syrup. 298,790; Nov. 8; Serial No. 328,259; published Aug. 23, 1932. Class 46.

Blish Milling Company, Seymour, Ind. Wheat flour. 298,809; Nov. 8; Serial No. 328,024; published Aug. 30, 1932. Class 46.

Borg & Beck Company, The, Chicago, Ill. Mechanical clutches, clutch plates, and parts thereof. 298,887; Nov. 8. Class 28.

Boston Transcript Company, Boston, Mass. Daily newspaper. 298,815; Nov. 8; Serial No. 328,885; published Aug. 30, 1932. Class 38.

Brittains Limited, Cheddleton, near Leek, England. Tissue papers. 298,882; Nov. 8; Serial No. 327,388; published Aug. 23, 1932. Class 37.

Brittains Limited, Cheddleton, near Leek, England. Tissue papers. 298,883; Nov. 8; Serial No. 326,667; published Aug. 23, 1932. Class 37.

Carson Pirie Scott & Co., Chicago, Ill. Shoes. 298,802; Nov. 8; Serial No. 326,577; published Aug. 30, 1932. Class 39.

Chemical Products Company, Helena, Mont. Polishing and cleaning liquid. 298,900; Nov. 8. Class 16.

Chilton Paint Company, College Point, N. Y. Paints. 298,894; Nov. 8. Class 16.

Classic Novelty Co., New York, N. Y. Brassières and ladies' underwear. 298,888; Nov. 8. Class 39.

Clayton Magazines, Inc., The, New York, N. Y. Periodical. 298,805; Nov. 8; Serial No. 327,461; published Aug. 23, 1932. Class 38.

Conrad Razor Blade Co. Inc., Long Island City, N. Y. Razor blades. 298,821; Nov. 8; Serial No. 323,977; published Aug. 30, 1932. Class 23.

Creme Orange Products Co. Ltd., Los Angeles, Calif. Powder for manufacture of fruit juice beverages. 298,837; Nov. 8; Serial No. 319,599; published Aug. 23, 1932. Class 46.

Crosley Radio Corporation, The, Cincinnati, Ohio. Radio receiving sets. 298,819; Nov. 8; Serial No. 317,455; published Aug. 30, 1932. Class 21.

Cyclops Steel Company, Titusville, Pa. Molybdenum and molybdenum tungsten tool and cutting steel. 298,759; Nov. 8; Serial No. 328,325; published Aug. 30, 1932. Class 14.

Dell'Omo, Joseph, Brooklyn, N. Y. Canned olive oil. 298,867; Nov. 8; Serial No. 317,030; published Aug. 23, 1932. Class 46.

Diacin Chemical Company. (See Stern, Harold H.)

Dixon, Joseph, Crucible Company, Jersey City, N. J. Pencils. 298,872; Nov. 8; Serial No. 328,838; published Aug. 23, 1932. Class 37.

Dodge, C. B., Company, The, Westport, Conn. Preparation for exterminating moles. 298,853; Nov. 8; Serial No. 327,391; published Aug. 16, 1932. Class 6.

Drew, Irving, Co., The, Portsmouth, Ohio. Women's shoes. 298,850; Nov. 8; Serial No. 327,584; published Aug. 23, 1932. Class 39.

Duston, Smith T., to George A. Duston, doing business as Ess-Tee-Dee Company, Chicago, Ill., successor. Remedy for dandruff and a hair and scalp tonic. 38,676; renewed July 29, 1932.

Eaton, George S., New York, N. Y. Mothproofing compound. 298,846; Nov. 8; Serial No. 327,868; published Aug. 16, 1932. Class 6.

Economy Equipment Co., Chicago, Ill. Air conditioning and applying apparatus for food products. 209,863; Nov. 8; Serial No. 309,968; published Aug. 30, 1932. Class 23.

Edgar, John C., doing business as Mid-States Oil Company. Special lubricating oils. 298,774; Nov. 8; Serial No. 327,846; published Aug. 23, 1932. Class 15.

Electric Auto-Lite Company, The, Toledo, Ohio. Electric generating, storage and ignition systems, engine electric starting systems, and parts thereof, etc. 298,865; Nov. 8; Serial No. 312,906; published Aug. 23, 1932. Class 21.

Electric Storage Battery Company, The, Philadelphia, Pa. Electrical emergency lighting apparatus. 298,772; Nov. 8; Serial No. 328,218; published Aug. 30, 1932. Class 21.

Electric Storage Battery Company, The, Philadelphia, Pa. Storage batteries, parts, connectors, etc. 298,776; Nov. 8; Serial No. 327,629; published Aug. 23, 1932. Class 21.

Electro Products Company. (See Stewart, Patterson O.)

Ess-Tee-Dee Company. (See Duston, Smith T.)

Ezywaver Company. (See Kendall, Gladys M.)

Fastik Products, Inc., Chicago, Ill. Machine wire staples for paper, etc. 298,760; Nov. 8; Serial No. 328,058; published Aug. 30, 1932. Class 13.

Federal Composition & Paint Company, The. (See Von Höveling American Composition Company Ltd., assignor.)

Field and Flint Co., Brockton, Mass. Boots and shoes. 298,814; Nov. 8; Serial No. 328,599; published Aug. 23, 1932. Class 39.

Flis Laboratories. (See Lantieri, A. Gabriel.)

Fort Howard Paper Company, Green Bay, Wis. Toilet paper, towels, napkins, etc. 298,870; Nov. 8; Serial No. 328,985; published Aug. 30, 1932. Class 37.

Four Square Products, Inc., Dover, Del. Aspirin, cascara, and soda mint tablets, sinc ointment, etc. 298,852; Nov. 8; Serial No. 327,431; published Aug. 16, 1932. Class 6.

French, R. T., Company, The, Rochester, N. Y. Bird seed, gravel, biscuit, and food. 298,861; Nov. 8; Serial No. 324,663; published June 14, 1932. Class 46.

Frigie Corporation of America, Chicago, Ill. Frozen flavored and sweetened water known as water ice, frozen bar with milk base and chocolate coating, etc. 298,781; Nov. 8; Serial No. 320,420; published Aug. 23, 1932. Class 46.

Garres-Fourché, Bordeaux, France. Maltless beverages and ingredients for making same. 298,798–9; Nov. 8; Serial Nos. 328,525–6; published Aug. 30, 1932. Class 45.

Goodhand, Grafmuller, Inc., New York, N. Y. Gloves. 298,818; Nov. 8; Serial No. 319,244; published Aug. 30, 1932. Class 39.

Goodyear Tire & Rubber Company, The, Akron, Ohio. Hub assemblies. 298,768; Nov. 8; Serial No. 328,423; published Aug. 16, 1932. Class 19.

Graham Paper Company, St. Louis, Mo. Cans, pails, dishes, etc. 298,890; Nov. 8. Class 2.

Grainger, W. B., Packing Company, Salinas, Calif. Fresh vegetables. 298,795; Nov. 8; Serial No. 327,396; published Aug. 23, 1932. Class 46.

Greist Mfg. Co., The, New Haven, Conn. Portable electric lamps. 298,769; Nov. 8; Serial No. 328,386; published Aug. 30, 1932. Class 21.

Guerlain Perfumery Corporation of Delaware, Wilmington, Del., and New York, N. Y. Perfumes. 298,844; Nov. 8; Serial No. 327,978; published Aug. 16, 1932. Class 6.

Gummer Products Company, The, Troy, Ohio. Gummed paper tape. 298,899; Nov. 8. Class 37.

Hancock, John P., doing business as Hansco Products Co., La Plata, Md. Hair dressing. 298,903; Nov. 8. Class 6.

Hanley Oil Co., Inc., Boston, Mass. Motor fuel oil and furnace fuel oil. 298,828; Nov. 8; Serial No. 322,738; published Apr. 26, 1932. Class 15.

Hansco Products Co. (See Hancock, John P.)

Harding, Mary, Utica, N. Y. French dressing. 298,782; Nov. 8; Serial No. 325,275; published Aug. 23, 1932. Class 46.

Harris, Henry E., Boston, Mass. Postage stamp hinges. 298,871; Nov. 8; Serial No. 328,859; published Aug. 30, 1932. Class 37.

Heilbrun, Leo, Co., Inc., New York, N. Y. Leather straps for wrist watches. 298,891; Nov. 8. Class 40.

High Chemical Co., Philadelphia, Pa. Solution of metallic citrates. 298,864; Nov. 8; Serial No. 310,126; published Aug. 16, 1932. Class 6.

High, Joe, Inc., Washington, D. C. Sink traps, faucets, tub wastes, etc. 298,783; Nov. 8; Serial No. 328,691; published Aug. 30, 1932. Class 13.

Hoberg Paper & Fibre Company, Green Bay, Wis. Toilet paper, paper towels, and napkins. 298,875–7; Nov. 8; Serial Nos. 328,487–9; published Aug. 23, 1932. Class 37.

Hoberg Paper & Fibre Company, Green Bay, Wis. Toilet paper. 298,878; Nov. 8; Serial No. 328,490; published Aug. 23, 1932. Class 37.

Holland Shoe Co., Holland, Mich. Boots and shoes and tips therefor. 298,810; Nov. 8; Serial No. 328,125; published Aug. 30, 1932. Class 39.

Howes, S. M., Company, The, Boston, Mass. Electric ice cream freezers. 298,889; Nov. 8. Class 31.

Hygrade Nut Co. Inc., New York, N. Y. Maltless beverage. 298,791; Nov. 8; Serial No. 327,875; published Aug. 9, 1932. Class 45.

Jewelers Syndicate. (See Piper, Warren.)

Kellogg Company, Battle Creek, Mich. Rotary chart. 298,816; Nov. 8; Serial No. 328,956; published Aug. 30, 1932. Class 38.

Kendall, Gladys M., doing business as Ezywaver Company, assignor to Tomlinson I. Moseley, San Francisco, Calif. Non-electrical hair wavers. 298,898; Nov. 8. Class 40.

Klauber-Wangnheim Co., San Diego, Calif. Coffee. 298,901; Nov. 8. Class 46.

Kleinert, I. B., Rubber Company, New York, N. Y. Garters. 298,839; Nov. 8; Serial No. 328,612; published Aug. 23, 1932. Class 39.

Kolster Radio, Inc., Newark, N. J. Radio receiving sets, transformers, coils and condensers, etc. 298,771; Nov. 8; Serial No. 328,242; published Aug. 23, 1932. Class 21.

Kolter, Abraham, Brooklyn, N. Y. Maltless beverage. 298,797; Nov. 8; Serial No. 328,433; published Aug. 30, 1932. Class 45.

Krakauer Bros., New York, N. Y. Pianos. 89,273; renewed Dec. 3, 1932.

Kunzle, C., Ltd., Birmingham, England. Chocolate, cocoa, coffee, etc. 298,902; Nov. 8. Class 46.

Lantieri, A. Gabriel, doing business as Flis Laboratories, Chicago, Ill. Permanent waving solutions. 298,847; Nov. 8; Serial No. 327,941; published Aug. 16, 1932. Class 6.

Leas & McVitty, Incorporated, assignor to Leas & McVitty, Incorporated, Philadelphia, Pa. Tanned leather. 39,760; renewed Feb. 10, 1933.

Lege-On-Aire Beverage Company, Minneapolis, Minn. Maltless Beverage. 298,834; Nov. 8; Serial No. 321,348; published Aug. 30, 1932. Class 45.

Lincoln Electric Company, The, Cleveland, Ohio. Metallic welding electrodes. 298,761–2; Nov. 8; Serial Nos. 328,011–12; published Aug. 30, 1932. Class 14.

Lowe, Joe, Corporation, Brooklyn, N. Y. Blend of pure dehydrated egg yolk, etc. 298,793–4; Nov. 8; Serial Nos. 327,557–8; published Aug. 23, 1932. Class 46.

Lubri-Graph Corporation, The, Cleveland, Ohio. Lubricating oils and greases. 298,770; Nov. 8; Serial No. 328,275; published Aug. 23, 1932. Class 15.

Lux Clock Mfg. Company, Inc., The, Waterbury, Conn. Combined clocks and temperature indicating devices. 298,817; Nov. 8; Serial No. 319,492; published Aug. 16, 1932. Class 27.

Lyndonville Canning Company, Inc., Lyndonville, N. Y. Canned apple sauce and peas. 298,792; Nov. 8; Serial No. 327,633; published Aug. 23, 1932. Class 46.

Marsland, Robert, & Co., Limited, Manchester, England. Cotton yarns. 89,480; renewed Dec. 17, 1932.

Melville Shoe Corporation, New York, N. Y. Shoes. 298,811; Nov. 8; Serial No. 328,359; published Aug. 30, 1932. Class 39.

Melville Shoe Corporation, New York, N. Y. Shoes. 298,842; Nov. 8; Serial No. 328,360; published Aug. 23, 1932. Class 39.

Methodist Book Concern, The, doing business as The Ruter Press, Cincinnati, Ohio. Books and publications in series. 298,897; Nov. 8. Class 38.

Mid-States Oil Company. (See Edgar, John C.)

Minnesota Linseed Oil Paint Company, Minneapolis, Minn. Paints, and wood stains. 90,456; renewed Feb. 25, 1933.

Morey Mercantile Company, The, Denver, Colo. Baking-powder. 90,857; renewed Mar. 25, 1933.

Moseley, Tomlinson I. (See Kendall, Gladys M., assignor.)

National Refining Company, Seattle, Wash. Motor lubricating oils. 298,820; Nov. 8; Serial No. 324,185; published Aug. 23, 1932. Class 15.

Neustadter, A., & Co. Inc., Brooklyn, N. Y. Blank books, pads, pencils, etc. 298,868; Nov. 8; Serial No. 329,091; published Aug. 30, 1932. Class 37.

New York Awning Company, Inc. (See Stevens, Frank.)

Noonan, James L., Cleveland, Ohio. Breath deodorising tablets. 298,851; Nov. 8; Serial No. 327,522; published Aug. 16, 1932. Class 6.

Nu-Set Specialty Co., Inc., New York, N. Y. Gelatine. 298,788; Nov. 8; Serial No. 328,367; published Aug. 23, 1932. Class 46.

Oneida Community Limited, Oneida, N. Y. Flatware, hollow-ware and cutlery. 298,838; Nov. 8; Serial No. 325,967; published Aug. 30, 1932. Class 28.

Orange-Crush Company, Chicago, Ill. Candy and ice cream. 298,829; Nov. 8; Serial No. 322,648; published Aug. 23, 1932. Class 46.

Oxford Paper Company, New York, N. Y. Paper for printing. 298,869; Nov. 8; Serial No. 328,995; published Aug. 30, 1932. Class 37.

Patterson-Sargent Company, The, Cleveland, Ohio. Paints, varnishes, and paint enamels. 298,893; Nov. 8. Class 16.

Penny, J. C., Company, Wilmington, Del., and New York, N. Y. Shoes. 298,841; Nov. 8; Serial No. 328,582; published Aug. 23, 1932. Class 39.

Pernice, Joseph T., New York, N. Y. Financial publication. 298,801; Nov. 8; Serial No. 326,449; published Aug. 23, 1932. Class 38.

Perry, E. S., Limited, London, England. Penpoints, penholders, and inkstands. 298,886; Nov. 8; Serial No. 324,757; published Aug. 23, 1932. Class 37.

Pharis Tire and Rubber Company, The, Newark, Ohio. Pneumatic rubber tires. 298,779; Nov. 8; Serial No. 326,911; published Aug. 30, 1932. Class 35.

Piper, Warren, doing business as Jewelers Syndicate, Chicago, Ill. Bulletins and pamphlets or periodical magazines. 298,825; Nov. 8; Serial No. 323,252; published Aug. 23, 1932. Class 38.

Prest-O-Lite Storage Battery Corporation, Speedway, Ind. Storage batteries. 298,766; Nov. 8; Serial No. 328,893; published Aug. 30, 1932. Class 21.

Red-E-Kut Quilt Patch Company, Kansas City, Mo. Quilt patches. 298,892; Nov. 8. Class 40.

Ripley, Harold A., Washington, D. C. Newspaper column. 298,806; Nov. 8; Serial No. 327,528; published Aug. 23, 1932. Class 38.

Ripley, Harold A., Washington, D. C. Section of magazines and newspapers. 298,807; Nov. 8; Serial No. 327,774; published Aug. 23, 1932. Class 38.

Russ Manufacturing Company, The, Cleveland, Ohio. Soda fountains. 298,836; Nov. 8; Serial No. 320,036; published Aug. 30, 1932. Class 23.

Ruter Press, The. (See Methodist Book Concern, The.)

Safe-T-Lite, Inc., Minneapolis, Minn. Glare deflector for automobile headlights. 298,777; Nov. 8; Serial No. 326,914; published Aug. 23, 1932. Class 19.

Scheidt, Adam, Brewing Company, Norristown, Pa. Malt syrup. 298,786; Nov. 8; Serial No. 328,372; published Aug. 23, 1932. Class 46.

Schepker, Henry, New York, N. Y. Candy. 298,895; Nov. 8. Class 46.

Seminole Paper Corporation, Chicago, Ill. Toilet paper. 298,880; Nov. 8; Serial No. 328,187; published Aug. 30, 1932. Class 37.

Signal Oil and Gas Company, Los Angeles, Calif. Gasoline. 298,826; Nov. 8; Serial No. 322,972; published Aug. 23, 1932. Class 15.

Squibb, E. R., & Sons, New York, N. Y. Germicidal preparations. 298,849; Nov. 8; Serial No. 327,856; published Aug. 16, 1932. Class 6.

Starline, Inc., Harvard, Ill. Barn siphon head ventilators. 298,764; Nov. 8; Serial No. 326,916; published Aug. 30, 1932. Class 34.

Stein, A., & Company, Chicago, Ill. Girdles and hose supporters. 298,808; Nov. 8; Serial No. 327,950; published Aug. 30, 1932. Class 39.

Stern, Harold H., doing business as Diacin Chemical Company, Detroit, Mich. Pharmaceutical preparation. 298,857; Nov. 8; Serial No. 325,121; published Aug. 16, 1932. Class 6.

Stetson, John B., Company, Philadelphia, Pa. Hats and caps. 298,860; Nov. 8; Serial No. 287,209; published Aug. 30, 1932. Class 39.

Stevens, Frank, to New York Awning Company, Inc., successor, New York, N. Y. Awnings and tents. 87,496; renewed July 16, 1932.

Stewart, Patterson O., doing business as Electro Products Company, New York, N. Y. Ignition devices. 298,775; Nov. 8; Serial No. 327,638; published Aug. 23, 1932. Class 21.

Stewart-Warner Corporation, Chicago, Ill. Cameras, projectors, and motion picture apparatus. 298,784; Nov. 8; Serial No. 328,571; published Aug. 30, 1932. Class 26.

Strathmore Paper Company, Mittineague, Mass. Writing and printing paper. 298,885; Nov. 8; Serial No. 325,604; published Aug. 23, 1932. Class 37.

Tas-T-Nut Company. (See Weeks, Walter E.)

Tolfree, Edward R., doing business as "X" Laboratories, New York, N. Y. Lubricating oils. 298,765; Nov. 8; Serial No. 329,000; published Aug. 30, 1932. Class 15.

Tracey, Stanley J., doing business as United Tennis Racket Co., New York, N. Y. Tennis rackets. 298,866; Nov. 8; Serial No. 313,160; published Aug. 30, 1932. Class 22.

U. S. Cast Magnet Steel Corporation, Lawrence, Mass. Non-electrical advertising display signs. 298,858; Nov. 8; Serial No. 313,161; published Aug. 30, 1932. Class 50.

United Tennis Racket Co. (See Tracey, Stanley J.)

Urruela, Manuel, New York, N. Y. Weekly publication. 298,804; Nov. 8; Serial No. 327,035; published Aug. 23, 1932. Class 38.

Viavi Company, The, San Francisco, Calif. Rectal suppositories. 298,830; Nov. 8; Serial No. 322,342; published Aug. 16, 1932. Class 6.

Viavi Company, The, San Francisco, Calif. Medicine. 298,831; Nov. 8; Serial No. 322,341; published Aug. 16, 1932. Class 6.

Viavi Company, The, San Francisco, Calif. Cerate. 298,832; Nov. 8; Serial No. 322,340; published Aug. 16, 1932. Class 6.

Viavi Company, The, San Francisco, Calif. Capsules. 298,833; Nov. 8; Serial No. 322,339; published Aug. 16, 1932. Class 6.

Von Höveling American Composition Company Ltd., assignor to The Federal Composition & Paint Company, Inc. Marine paints and compositions. 89,519; renewed Dec. 17, 1932.

Warren, Northam, Corporation, New York, N. Y. Nail polish. 298,854; Nov. 8; Serial No. 327,066; published Aug. 16, 1932. Class 6.

Warwick Chemical Co., West Warwick, R. I. Chemical products. 298,848; Nov. 8; Serial No. 327,896; published Aug. 16, 1932. Class 6.

Wassell, William S., doing business as The Wassell Pie Bakery, Philadelphia, Pa. Pastries. 298,835; Nov. 8; Serial No. 320,653; published Aug. 23, 1932. Class 46.

Weeks, Walter E., doing business as Tas-T-Nut Company, Baltimore, Md. Salted peanuts, almonds, cashews, etc. 298,904; Nov. 8. Class 46.

Westinghouse Electric & Manufacturing Company, East Pittsburgh, Pa. Ammeters, voltmeters, wattmeters, etc. 298,763; Nov. 8; Serial No. 327,237; published Aug. 30, 1932. Class 24.

Wilson-Jones Company, Chicago, Ill. Blank books, pads, envelopes, etc. 298,879; Nov. 8; Serial No. 328,233; published Aug. 30, 1932. Class 37.

Worthington Pump and Machinery Corporation, New York, N. Y. Rock drills, hammers, sinkers, etc. 298,822; Nov. 8; Serial No. 323,644; published Aug. 9, 1932. Class 23.

Worthington Pump and Machinery Corporation, New York, N. Y. Rock drills and hammers, sinkers, drifters, etc. 298,823; Nov. 8; Serial No. 323,641; published July 26, 1932. Class 23.

"X" Laboratories. (See Tolfree, Edward R.)

Young Radiator Company, Racine, Wis. Heaters, radiators, etc., and parts thereof. 298,778; Nov. 8; Serial No. 328,676; published Aug. 30, 1932. Class 34.

Zeman, Ethel, Los Angeles, Calif. Medicinal preparation for cleansing the teeth, etc. 298,843; Nov. 8; Serial No. 328,023; published Aug. 9, 1932. Class 6.

LIST OF REGISTRANTS OF LABELS

Bagdasarian, D. H., & Sons, Inc., Fresno, Calif. Sweet Bunch. For Fresh Grapes. 41,380; Nov. 8.

Carroccio, T. A., & Sons, New York N. Y. Carroccio's Spaghetti. For Spaghetti. 41,381; Nov. 8.

Crafton Mutual Orchards, Mentone, Calif. Treasure Chest. For Fresh Oranges. 41,382; Nov. 8.

De Lax Sugar Co. (See Fischer, Haydn L.)

Eisenheimer, Charles W., Meriden, Conn. Boursette. For Game. 41,383; Nov. 8.

Fischer, Haydn L., doing business as De Lax Sugar Co., Ottawa, Ill. Dr. Fischer's Laxatized Sugar. For Laxatives. 41,384; Nov. 8.

Heller, B., & Company, Chicago, Ill. Heller's $1000.00 Guaranteed Silver Polish. For Powder for Cleaning Silver, Gold, Chromium, Nickel, Monel Metal, Copper, etc. 41,385; Nov. 8.

Hoague-Sprague Corporation, Lynn, Mass. Lone Eagle. For Boxes. 41,386; Nov. 8.

Hoague-Sprague Corporation, Lynn, Mass. Tom Manning. For Boxes. 41,387; Nov. 8.

Kellom, Charles F., & Co., Inc., Holmesburg Station, Philadelphia, Pa. I-O-C Double Duty Cleaner. For Combined Cleaner and Polisher. 41,388; Nov. 8.

Kellom, Charles F., & Co., Inc., Holmesburg Station, Philadelphia, Pa. I-O-C Auto Polish. For Polisher and Cleaner Combined. 41,389; Nov. 8.

Kocsis, Emrick, Detroit, Mich. Honey. For Honey. 41,390; Nov. 8.

National Biscuit Company, New York, N. Y. Milk-Bone Crumbs. For a Food for Cats, Kittens, Puppies, and Toy Dogs. 41,391; Nov. 8.

O-P Craft Company, Inc., The, Sandusky, Ohio. O-P Craft Color Portfolio. For Color Portfolios. 41,392; Nov. 8.

Orth, Ph., Co., The, Milwaukee, Wis. Milki-Malt. For Cake. 41,393; Nov. 8.

Roper, H. D., Antioch, Calif. Roper. For Fresh Tomatoes. 41,394; Nov. 8.

Sunical Packing Company, San Francisco, Calif. Modern Pak. For Sliced Peaches. 41,395; Nov. 8.

Sunical Packing Company, San Francisco, Calif. Modern Pak. For Halved Peaches. 41,396; Nov. 8.

Sutherland Paper Company, Kalamazoo, Mich. Quality. For Butter. 41,397; Nov. 8.

Sutherland Paper Company, Kalamazoo, Mich. Cushing's Best. For Butter. 41,398; Nov. 8.

Sutherland Paper Company, Kalamazoo, Mich. Perfection's. For Ice Cream. 41,399; Nov. 8.

Sutherland Paper Company, Kalamazoo, Mich. Islay's. For Ice Cream. 41,400; Nov. 8.

Union Salt Company, The, Cleveland, Ohio. Free Running Salt. For Salt. 41,401; Nov. 8.

Wax Paper Products Company, Omaha, Nebr. Holsum Bread. For Bread. 41,402; Nov. 8.

Welagan Tablet Sales, Denver, Colo. Welagan Tablets. For Tablets. 41,403; Nov. 8.

LIST OF REGISTRANTS OF PRINTS

Infantwear, Inc., Wilmington, Del., and Tulsa, Okla. Panti-Diper. For Infant's Breech Cloths or Diapers. 13,958; Nov. 8.

Kolynos Company, The, New Haven, Conn. No. 1121 E. For Dental Cream. 13,959; Nov. 8.

CLASSIFIED LIST OF TRADE-MARKS REGISTERED

CLASS 1

Leather, Tanned. Leas & McVitty, Incorporated. 39,760; renewed Feb. 10, 1933.

CLASS 2

Cans, pails, dishes, etc. Graham Paper Company. 298,890; Nov. 8.

CLASS 6

Anti-knock compounds. Advance Paint Company. 298,845; Nov. 8; Serial No. 327,963; published Aug. 16, 1932.

Aspirin, cascara, soda mint, zinc ointment, etc., tablets. Four Square Products, Inc. 298,852; Nov. 8; Serial No. 327,431; published Aug. 16, 1932.

Breath deodorizing tablets. J. L. Noonan. 298,851; Nov. 8; Serial No. 327,522; published Aug. 16, 1932.

Capsules. Viavi Company. 298,833; Nov. 8; Serial No. 322,339; published Aug. 16, 1932.

Cerate. Viavi Company. 298,832; Nov. 8; Serial No. 322,340; published Aug. 16, 1932.

Chemical products. Warwick Chemical Co. 298,848; Nov. 8; Serial No. 327,856; published Aug. 16, 1932.

Citrates, Solution of metallic. High Chemical Co. 298,864; Nov. 8; Serial No. 310,126; published Aug. 16, 1932.

Germicidal preparations. E. R. Squibb & Sons. 298,849; Nov. 8; Serial No. 327,856; published Aug. 16, 1932.

Hair dressing. J. P. Hancock. 298,903; Nov. 8.

Medicinal preparation. E. Zeman. 298,843; Nov. 8; Serial No. 328,023; published Aug. 9, 1932.

Medicine. Viavi Company. 298,831; Nov. 8; Serial No. 322,341; published Aug. 16, 1932.

Mothproofing compound. G. S. Eaton. 298,846; Nov. 8; Serial No. 327,868; published Aug. 16, 1932.

Nail polish. Northam Warren Corporation. 298,854; Nov. 8; Serial No. 327,066; published Aug. 16, 1932.

Perfumes. Guerlain Perfumery Corporation of Delaware. 298,844; Nov. 8; Serial No. 327,978; published Aug. 16, 1932.

Permanent waving solutions. A. G. Lantieri. 298,847; Nov. 8; Serial No. 327,941; published Aug. 16, 1932.

Pharmaceutical preparations. H. H. Stern. 298,857; Nov. 8; Serial No. 325,121; published Aug. 16, 1932.

Preparation for exterminating moles. C. B. Dolge Company. 298,853; Nov. 8; Serial No. 327,391; published Aug. 16, 1932.

Preparation for treatment of hemorrhoids. L. Beil. 298,856; Nov. 8; Serial No. 326,442; published Aug. 16, 1932.

Remedy for dandruff and a hair and scalp tonic. S. T. Duston. 38,676; renewed July 29, 1932.

Sulpho ichthyolate of ammonium and medicinal compounds containing the same. Amico Laboratories, Inc. 298,855; Nov. 8; Serial No. 326,884; published Aug. 16, 1932.

Suppositories, Rectal. Viavi Company. 298,830; Nov. 8; Serial No. 322,342; published Aug. 16, 1932.

CLASS 9

Firecrackers and fireworks. Balfour, Guthrie & Co. 298,800; Nov. 8; Serial No. 329,108; published Aug. 30, 1932.

CLASS 13

Sink traps, faucets, tub wastes, etc. Joe High, Inc. 298,783; Nov. 8; Serial No. 328,691; published Aug. 30, 1932.

Staples, Machine wire. Fastik Products, Inc. 298,760; Nov. 8; Serial No. 328,058; published Aug. 30, 1932.

CLASS 14

Electrodes, Metallic welding. Lincoln Electric Company. 298,761–2; Nov. 8; Serial Nos. 328 011–12; published Aug. 30, 1932.

Molybdenum and molybdenum tungsten tool and cutting steel. Cyclops Steel Company. 298,759; Nov. 8; Serial No. 328,325; published Aug. 30, 1932.

CLASS 15

Gasoline. Signal Oil and Gas Company. 298,826; Nov. 8; Serial No. 322,972; published Aug. 23, 1932.

Oil, Motor fuel and furnace fuel. Hanley Oil Co. 298,828; Nov. 8; Serial No. 322,738; published Apr. 26, 1932.

Oils and greases, Lubricating. Lubri-Graph Corporation. 298,770; Nov. 8; Serial No. 328,275; published Aug. 23, 1932.

Oils, Lubricating. E. B. Tolfree. 298,765; Nov. 8; Serial No. 329,000; published Aug. 30, 1932.

Oils, Motor lubricating. National Refining Company. 298,820; Nov. 8; Serial No. 324,185; published Aug. 23, 1932.

Oils, Special lubricating. J. C. Edgar. 298,774; Nov. 8; Serial No. 327,846; published Aug. 23, 1932.

CLASS 16

Paints. Chilton Paint Company. 298,894; Nov. 8.

Paints and compositions, Marine. Von Höveling American Composition Company Ltd. 89,519; renewed Dec. 17, 1932.

Paints and wood stains. Minnesota Linseed Oil Paint Company. 90,456; renewed Feb. 25, 1933.

Paints, varnishes, and paint enamels. Patterson-Sargent Company. 298,893; Nov. 8.

Polishing and cleaning liquid. Chemical Products Company. 298,900; Nov. 8.

CLASS 19

Deflector for automobile headlights, Glare. Safe-T-Lite, Inc. 298,777; Nov. 8; Serial No. 326,914; published Aug. 23, 1932.

Hub assemblies. Goodyear Tire & Rubber Company. 298,768; Nov. 8; Serial No. 328,423; published Aug. 16, 1932.

Rowboats, Portable folding. Bair & Edgerton Boat Works. 298,773; Nov. 8; Serial No. 328,114; published Aug. 23, 1932.

CLASS 21

Batteries, parts, connectors, etc., Storage. Electric Storage Battery Company. 298,776; Nov. 8; Serial No. 327,629; published Aug. 23, 1932.

Batteries, Storage. Atlas Supply Company. 298,767; Nov. 8; Serial No. 328,833; published Aug. 30, 1932.

Batteries, Storage. Prest-O-Lite Storage Battery Corporation. 298,766; Nov. 8; Serial No. 328,893; published Aug. 30, 1932.

Electric generating, storage, and ignition systems, connections and parts thereof, etc. Electric Auto-Lite Company. 298,865; Nov. 8; Serial No. 312,906; published Aug. 23, 1932.

Electrical emergency lighting apparatus. Electric Storage Battery Company. 298,772; Nov. 8; Serial No. 328,218; published Aug. 30, 1932.

Ignition devices. P. O. Stewart. 298,775; Nov. 8; Serial No. 327,638; published Aug. 23, 1932.

Lamps, Portable electric. Greist Mfg. Co. 298,769; Nov. 8; Serial No. 328,386; published Aug. 30, 1932.

Radio receiving sets. Crosley Radio Corporation. 298,819; Nov. 8; Serial No. 317,455; published Aug. 30, 1932.

Radio receiving sets, transformers, coils, and condensers, etc. Kolster Radio, Inc. 298,771; Nov. 8; Serial No. 328,242; published Aug. 23, 1932.

CLASS 22

Tennis rackets. S. J. Tracey. 298,866; Nov. 8; Serial No. 313,160; published Aug. 30, 1932.

CLASS 23

Air conditioning and applying apparatus for food products. Economy Equipment Co. 209,863; Nov. 8; Serial No. 309,968; published Aug. 30, 1932.

Apparatus for sterilising various appliances for manual use. Autofume Steriliser Company. 298,862; Nov. 8; Serial No. 306,545; published Aug. 30, 1932.

Clutches, clutch plates, and parts thereof, Mechanical. Borg & Beck Company. 298,887; Nov. 8.

Drills and hammers, sinkers, drifters, etc., Rock. Worthington Pump and Machinery Corporation. 298,823; Nov. 8; Serial No. 323,641; published July 26, 1932.

Drills, hammers, sinkers, etc., Rock. Worthington Pump and Machinery Corporation. 298,822; Nov. 8; Serial No. 323,644; published Aug. 9, 1932.

Fountains, Soda. Russ Manufacturing Company. 298,836; Nov. 8; Serial No. 320,036; published Aug. 30, 1932.

Hullers, Clover and alfalfa. Birdsell Manufacturing Co. 298,824; Nov. 8; Serial No. 323,319; published Apr. 19, 1932.

Razor blades. Conrad Razor Blade Co. Inc. 298,821; Nov. 8; Serial No. 323,977; published Aug. 30, 1932.

Tools and utensils, Kitchen. A. & J. Kitchen Tool Co. 298,827; Nov. 8; Serial No. 322,786; published Aug. 30, 1932.

CLASS 26

Ammeters, voltmeters, wattmeters, etc. Westinghouse Electric & Manufacturing Company. 298,763; Nov. 8; Serial No. 327,287; published Aug. 30, 1932.

Cameras, projectors, and motion picture apparatus. Stewart-Warner Corporation. 298,784; Nov. 8; Serial No. 328,571; published Aug. 30, 1932.

CLASS 27

Clocks and temperature indicating devices, Combined. Lux Clock Mfg. Company. 298,817; Nov. 8; Serial No. 319,492; published Aug. 16, 1932.

CLASS 28

Flatware, hollow-ware, and cutlery. Oneida Community Limited. 298,838; Nov. 8; Serial No. 325,957; published Aug. 30, 1932.

CLASS 31

Freezers, Electric ice cream. S. M. Howes Company. 298,889; Nov. 8.

CLASS 34

Heaters, radiators, etc., and parts thereof. Young Radiator Company. 298,778; Nov. 8; Serial No. 328,676; published Aug. 30, 1932.

Lighters, Pyrophoric pocket. R. E. Berthold. 298,785; Nov. 8; Serial No. 328,543; published Aug. 30, 1932.

Radiators. American Radiator Company. 88,658; renewed Oct. 15, 1932.

Ventilators, Barn siphon head. Starline, Inc. 298,764; Nov. 8; Serial No. 326,916; published Aug. 30, 1932.

CLASS 35

Tires, Pneumatic rubber. Pharis Tire and Rubber Company. 298,779; Nov. 8; Serial No. 326,911; published Aug. 30, 1932.

CLASS 36

Pianos. Krakauer Bros. 89,273; renewed Dec. 3, 1932.

CLASS 37

Books, pads, envelopes, etc., Blank. Wilson-Jones Company. 298,879; Nov. 8; Serial No. 328,233; published Aug. 30, 1932.

Books, pads, pencils, etc., Blank. A. Neustadter & Co. Inc. 298,868; Nov. 8; Serial No. 329,091; published Aug. 30, 1932.

Paper and stationery. American Sales Book Company. 298,881; Nov. 8; Serial No. 327,546; published Aug. 23, 1932.

Paper, Blotting. Albemarle Paper Manufacturing Company. 298,874; Nov. 8; Serial No. 328,517; published Aug. 23, 1932.

Paper for printing. Oxford Paper Company. 298,869; Nov. 8; Serial No. 328,995; published Aug. 30, 1932.

Paper, paper napkins, and handkerchiefs. American Tissue Mills. 298,873; Nov. 8; Serial No. 328,807; published Aug. 23, 1932.

Paper, paper towels and paper napkins, Toilet. Hoberg Paper & Fibre Company. 298,875–7; Nov. 8; Serial Nos. 328,487–9; published Aug. 23, 1932.

Paper tape, Gummed. Gummed Products Company. 298,899; Nov. 8.

Paper, Toilet. Hoberg Paper & Fibre Company. 298,878; Nov. 8; Serial No. 328,490; published Aug. 23, 1932.

Paper, Toilet. Seminole Paper Corporation. 298,880; Nov. 8; Serial No. 328,187; published Aug. 30, 1932.

Paper, towels, napkins, etc., Toilet. Fort Howard Paper Company. 298,870; Nov. 8; Serial No. 328,985; published Aug. 30, 1932.

Paper, Writing and printing. Strathmore Paper Company. 298,885; Nov. 8; Serial No. 325,604; published Aug. 23, 1932.

Papers, Tissue. Brittains Limited. 298,882; Nov. 8; Serial No. 327,388; published Aug. 23, 1932.

Papers, Tissue. Brittains Limited. 298,883; Nov. 8; Serial No. 326,667; published Aug. 23, 1932.

Pencils. Joseph Dixon Crucible Company. 298,872; Nov. 8; Serial No. 328,838; published Aug. 23, 1932.

Penpoints, penholders, and inkstands. E. S. Perry, Limited. 298,886; Nov. 8; Serial No. 324,757; published Aug. 23, 1932.

Postage stamp hinges. H. E. Harris. 298,871; Nov. 8; Serial No. 328,859; published Aug. 30, 1932.

Poster and construction papers. American Crayon Company. 298,884; Nov. 8; Serial No. 326,357; published Aug. 30, 1932.

CLASS 38

Books and publications in series. Methodist Book Concern. 298,897; Nov. 8.

Bulletins and pamphlets or periodical magazines. W. Piper. 298,825; Nov. 8; Serial No. 323,252; published Aug. 23, 1932.

Chart, Rotary. Kellogg Company. 298,816; Nov. 8; Serial No. 328,956; published Aug. 30, 1932.

Magazines and newspapers, Sections of. H. A. Ripley. 298,807; Nov. 8; Serial No. 327,774; published Aug. 23, 1932.

Newspaper column. H. A. Ripley. 298,806; Nov. 8; Serial No. 327,528; published Aug. 23, 1932.

Newspaper, Daily. Boston Transcript Company. 298,815; Nov. 8; Serial No. 328,885; published Aug. 30, 1932.

Periodical. Clayton Magazines, Inc. 298,905; Nov. 8; Serial No. 327,461; published Aug. 23, 1932.

Publication, Financial. J. T. Pernice. 298,801; Nov. 8; Serial No. 326,449; published Aug. 23, 1932.

Publication, Weekly. M. Urruela. 298,804; Nov. 8; Serial No. 327,035; published Aug. 23, 1932.

CLASS 39

Boots and shoes. Field and Flint Co. 298,814; Nov. 8; Serial No. 328,599; published Aug. 23, 1932.

Boots and shoes and tips therefor. Holland Shoe Co. 298,810; Nov. 8; Serial No. 328,125; published Aug. 30, 1932.

Brassières and ladies' underwear. Classic Novelty Co. 298,888; Nov. 8.

Garters. I. B. Kleinert Rubber Company. 298,839; Nov. 8; Serial No. 328,612; published Aug. 23, 1932.

Girdles and hose supporters. A. Stein & Company. 298,808; Nov. 8; Serial No. 327,950; published Aug. 30, 1932.

Gloves. Goodhand-Guofmuller, Inc. 298,818; Nov. 8; Serial No. 319,244; published Aug. 30, 1932.

Hats and caps. John B. Stetson Company. 298,860; Nov. 8; Serial No. 287,209; published Aug. 30, 1932.

Hats and knitted and woven caps. Aktiengesellschaft der Österreichischen Fezfabriken. 298,859; Nov. 8; Serial No. 316,800; published Aug. 23, 1932.

Shoes. Carson Pirie Scott & Co. 298,802; Nov. 8; Serial No. 326,577; published Aug. 30, 1932.

Shoes. Melville Shoe Corporation. 298,811; Nov. 8; Serial No. 328,359; published Aug. 30, 1932.

Shoes. Melville Shoe Corporation. 298,842; Nov. 8; Serial No. 328,360; published Aug. 23, 1932.

Shoes. J. C. Penny Company. 298,841; Nov. 8; Serial No. 328,582; published Aug. 23, 1932.

Shoes, Women's. Irving Drew Co. 298,850; Nov. 8; Serial No. 327,584; published Aug. 23, 1932.

Sportswear. Berman-Lurie, Inc. 298,840; Nov. 8; Serial No. 327,548; published Aug. 23, 1932.

CLASS 40

Hair wavers, Non-electrical. G. M. Kendall. 298,898; Nov. 8.

Quilt patches. Red-E-Kut Patch Company. 298,892; Nov. 8.

Straps for wrist watches, Leather. Leo Heilbrun Co. 298,891; Nov. 8.

CLASS 43

Cotton, thread, and sewing cotton, Spool. American Thread Company. 298,896; Nov. 8.

Yarns, Cotton. Robert Marsland & Co. 89,480; renewed Dec. 17, 1932.

CLASS 45

Beverage, Maltless. Hygrade Nut Co. Inc. 298,791; Nov. 8; Serial No. 327,875; published Aug. 9, 1932.

Beverage, Maltless. A. Kolter. 298,797; Nov. 8; Serial No. 328,433; published Aug. 30, 1932.

Beverage, Maltless. Lege-On-Aire Beverage Company. 298,834; Nov. 8; Serial No. 321,348; published Aug. 30, 1932.

Beverages and ingredients for making same, Maltless. Garres-Fourché. 298,798–9; Nov. 8; Serial Nos. 328,525–6; published Aug. 30, 1932.

CLASS 46

Baking-powder. Morey Mercantile Company. 90,857; renewed Mar. 25, 1933.

Blend of pure dehydrated egg yolk, etc. Joe Lowe Corportion. 298,793–4; Nov. 8; Serial Nos. 327,557–8; published Aug. 23, 1932.

Butter. American Stores Company. 298,803; Nov. 8; Serial No. 326,970; published Aug. 30, 1932.

Candy. H. Schepker. 298,895; Nov. 8.

Candy and ice cream. Orange-Crush Company. 298,829; Nov. 8; Serial No. 322,648; published Aug. 23, 1932.

Canned apple sauce and peas. Lyndonville Canning Company. 298,792; Nov. 8; Serial No. 327,633; published Aug. 23, 1932.

Canned olive oil. J. Dell'Omo. 298,867; Nov. 8; Serial No. 317,080; published Aug. 23, 1932.

Chocolate, cocoa, coffee, etc. C. Kunsle Ltd. 298,902; Nov. 8.

Coffee. Klauber-Wangenheim Co. 298,901; Nov. 8.

Custard and sherbert, Frozen. Beatrice Creamery Company. 298,780; Nov. 8; Serial No. 327,299; published Aug. 23, 1932.

Dressing, French. M. Harding. 298,782; Nov. 8; Serial No. 325,275; published Aug. 23, 1932.

Flour, Wheat. Bilsh Milling Company. 298,809; Nov. 8; Serial No. 328,024; published Aug. 30, 1932.

Gelatine. Nu-Set Specialty Co. 298,788; Nov. 8; Serial No. 328,367; published Aug. 23, 1932.

Pastries. W. S. Wassell. 298,835; Nov. 8; Serial No. 320,653; published Aug. 23, 1932.

Peanuts, almonds, cashews, etc., Salted. W. E. Weeks. 298,904; Nov. 8.

Powder for manufacture of fruit juice beverages. Creme Orange Products Co. 298,837; Nov. 8; Serial No. 319,599; published Aug. 23, 1932.
Seed, gravel, biscuit, and food, Bird. R. T. French Company. 298,861; Nov. 8; Serial No. 324,663; published June 14, 1932.
Sugar, Special bread. American Molasses Co. of New York. 298,796; Nov. 8; Serial No. 327,386; published Aug. 23, 1932.
Syrup, Malt. Birk Bros. Malt Products, Inc. 298,787; Nov. 8; Serial No. 328,348; published Aug. 23, 1932.
Syrup, Malt. Birk Bros. Malt Products, Inc. 298,789; Nov. 8; Serial No. 328,347; published Aug. 23, 1932.
Syrup, Malt. Birk Bros. Malt Products, Inc. 298,790; Nov. 8; Serial No. 328,259; published Aug. 23, 1932.
Syrup, Malt. Adam Scheidt Brewing Company. 298,786; Nov. 8; Serial No. 328,372; published Aug. 23, 1932.
Vegetables, Fresh. W. B. Grainger Packing Company. 298,795; Nov. 8; Serial No. 327,396; published Aug. 23, 1932.
Water known as water ice, frozen bar with milk base and chocolate covering, etc., Frozen flavored and sweetened. Frigie Corporation of America. 298,781; Nov. 8; Serial No. 326,420; published Aug. 23, 1932.

CLASS 48

Cartoons, Newspaper, Associated Press. 298,812–18; Nov. 8; Serial Nos. 328,629–30; published Aug. 30, 1932.
Malt liquors. J. & P. Baltz Brewing Co. 40,011; renewed Mar. 31, 1933.

CLASS 50

Advertising signs. American Can Company. 298,758; Nov. 8; Serial No. 328,415; published Aug. 30, 1932.
Awnings and tents. F. Stevens. 87,496; renewed July 16, 1932.
Signs, Advertising display. U. S. Cast Magnet Steel Corporation. 298,858; Nov. 8; Serial No. 313,161; published Aug. 30, 1932.

LIST OF LABELS

Boursette. For Game. C. W. Elsenheimer. 41,383; Nov. 8.
Carroccio's Spaghetti. For Spaghetti. T. A. Carroccio & Sons. 41,381; Nov. 8.
Cushing's Best. For Butter. Sutherland Paper Company. 41,398; Nov. 8.
Dr. Fischer's Laxatised Sugar. For Laxatives. H. L. Fischer. 41,384; Nov. 8.
Free Running Salt. For Salt. Union Salt Company. 41,401; Nov. 8.
Heller's $1000.00 Guaranteed Silver Polish. For Powder for Cleaning Silver, Gold, Chromium, Nickel, Monel Metal, Copper, Etc. B. Heller & Company. 41,385; Nov. 8.
Holsum Bread. For Bread. Wax Paper Products Company. 41,402; Nov. 8.
Honey. For Honey. E. Kocsis. 41,390; Nov. 8.
I–O–C Auto Polish. For Polisher and Cleaner Combined. Charles F. Kellom & Co. 41,389; Nov. 8.
I–O–C Double Duty Cleaner. For Combined Cleaner and Polisher. Charles F. Kellom & Co. 41,388; Nov. 8.
Islay's. For Ice Cream. Sutherland Paper Company. 41,400; Nov. 8.
Lone Eagle. For Boxes. Hoague-Sprague Corporation. 41,386; Nov. 8.
Milk-Bone Crumbs. For a Food for Cats, Kittens, Puppies, and Toy Dogs. National Biscuit Company. 41,391; Nov. 8.
Milki-Malt. For Cake. Ph. Orth Co. 41,393; Nov. 8.
Modern Pak. For Halved Peaches. Sunical Packing Company. 41,396; Nov. 8.
Modern Pak. For Sliced Peaches. Sunical Packing Company. 41,395; Nov. 8.
O–P Craft Color Portfolio. For Color Portfolios. O–P Craft Company. 41,392; Nov. 8.
Perfection's. For Ice Cream. Sutherland Paper Company. 41,399; Nov. 8.
Quality. For Butter. Sutherland Paper Company. 41,397; Nov. 8.
Roper. For Fresh Tomatoes. H. D. Roper. 41,394; Nov. 8.
Sweet Bunch. For Fresh Grapes. D. H. Bagdasarian & Sons, Inc. 41,380; Nov. 8.
Tom Manning. For Boxes. Hoague-Sprague Corporation. 41,387; Nov. 8.
Treasure Chest. For Fresh Oranges. Crafton Mutual Orchards. 41,382; Nov. 8.
Welagan Tablets. For Tablets. Welagan Tablet Sales Co. 41,403; Nov. 8.

LIST OF PRINTS

No. 1121 E. For Dental Cream. Kolynos Company. 13,959; Nov. 8.
Panti-Diper. For Infant's Breech Cloths or Diapers. Infantwear, Inc. 13,958; Nov. 8.

LIST OF PATENTEES

TO WHOM

PATENTS WERE ISSUED ON THE 8TH DAY OF NOVEMBER, 1932

NOTE.—Arranged in accordance with the first significant character or word of the name (in accordance with city and telephone directory practice). Includes patents, reissues, and designs.

Abbott, John M., Greeley, Colo. Rotary easel. 1,886,929; Nov. 8.
Ackerman, Frank, St. Louis, assignor to Curtis Manufacturing Company, Wellston, Mo. Air compressor. 1,886,359; Nov. 8.
Ackerman, J. Otto, assignor to The Astrup Company, Cleveland, Ohio. Tensioned awning arm. 1,886,512; Nov. 8.
Adams, Clement L., Gay, Mich. Feed distributor for settling tanks. 1,887,177; Nov. 8.
Adams, Eri F., Fort Lauderdale, Fla. Article dispensing device. 1,887,389; Nov. 8.
Adams, Ernest H., Long Beach, Calif., assignor to Trumble Gas Trap Company. Gas trap. 1,887,111; Nov. 8.
Adams, George, Maplecrest, N. Y. Ear cleaner. 1,887,003; Nov. 8.
Addison Investment Company. (See Alverson, James G., assignor.)
Adjusta Company. (See Hirsch, Fred, assignor.)
Adlake Company, The. (See Hamm, William S., assignor.)
Adler, Heinz. (See Ott, L., and Adler.)
Agnew, George B. (See de Simone, Michele G., assignor.)
Ainsworth Manufacturing Corporation. (See Potter, Albert T., assignor.)
Aktiengesellschaft Brown Boveri & Cie. (See Meyer, Adolf, assignor.)
Alder, Stanley, Roker, Sunderland, England. Injection pump for Diesel engines. 1,886,930; Nov. 8.
Alexander, Elliot R., Orlando, Fla., assignor, by mesne assignments, to The Vitamin Company of America. Vitamin fruit composition. 1,886,931; Nov. 8.
Alexander, Focsaneanu, New York, N. Y., assignor to Argco Tube and Television Corporation. Arc lamp. 1,887,277; Nov. 8.
Allegheny Steel Company. (See Stroble, Carl J., assignor.)
Allen Filter Company, The. (See Ramsay, William S., assignor.)
Allen Free-Wheeling Corporation. (See Law, Otis E., assignor.)
Allendorf, Hugo A., assignor to The American Crayon Company, Sandusky, Ohio. Holding device. 1,887,145; Nov. 8.
Allison, Albert J., Dayton, Ohio, assignor, by mesne assignments, to Simonds Worden White Company. Bed plate. 1,886,861; Nov. 8.
Allison, Joseph A. (See King, J. H., and Allison.)
Allith-Prouty Company. (See Lynch, Elmer R., assignor.)
Allmanna Svenska Elektriska Aktiebolaget. (See Sterner, Valdemar, assignor.)
Allpax Company, The. (See Walker, Herbert S., assignor.)
Altieri, Alexander, Philadelphia, Pa. Propeller for aircraft. 1,887,004; Nov. 8.
Aluminum Cooking Utensil Company, The. (See Guild, Lurelle, assignor.)
Aluminum Cooking Utensil Company, The. (See Guild, L., and Matter, assignors.)
Aluminum Cooking Utensil Company, The. (See Towne, Carlton G., assignor.)
Alvares, Jose G. (See Gonsalves, Abelino, assignor.)
Alverson, James G., assignor to Addison Investment Company, Los Angeles, Calif. Magnetic sound recording system. 1,886,616; Nov. 8.
Alvin Corporation, The. (See Staf, Axel H., assignor.)
American Blower Corporation. (See Anderson, Edward L., assignor.)
American Bosch Magneto Corporation. (See Martin, John F., assignor.)
American Brake Shoe and Foundry Company, The. (See Prentice, Allan L., assignor.)
American Brass Company, The. (See Bradley, John C., assignor.)
American Buckle Company. (See Hodge, Robert J., assignor.)
American Can Company. (See Pechy, William, assignor.)
American Crayon Company, The. (See Allendorf, Hugo A., assignor.)
American Electrical Heater Company. (See Kuhn, F., and Thomas, assignors.)
American Flange & Manufacturing Company. (See Sample, Fleck W., assignor.)
American Fork & Hoe Company, The. (See Horstman, John H., assignor.)
American Glanzstoff Corporation. (See Stoeckly, J. J., and Witte, assignors.)
American La France and Foamite Corporation. (See Rollo, Walter R., assignor.)
American Liquid Meter Company. (See Bassler, Carlos J., assignor.)
American Lurgi Corporation. (See von Girsewald, C., Weidmann, and Roesner, assignors.)
American Maize Products Company. (See Daly, Raymond E., assignor.)
American Maize Products Company. (See Woxvold, Einar, assignor.)
American Optical Company. (See Tillyer, E. D., Forshey, and Nott, assignors.)
American Radiator & Standard Sanitary Corporation. (See Murray, Thomas E., jr., assignor.)
American Safety Device Co. (See Davidson, Frederic A., assignor.)
American Sales Book Company. (See Johnston, Clarence L., assignor.)
American Seating Company. (See Hanson, Walter M., assignor.)
American Steel Package Company, The. (See Behringer, Grover F., assignor.)
American Telephone and Telegraph Company. (See Herman, Joseph, assignor.)
American Telephone and Telegraph Company. (See Smith, T. C., and Spowart, assignors.)
American Tube and Cap Corporation. (See Kalb, Walther, assignor.)
American Welding Company. (See Rowland, Charles L.)
Ancolex Limited. (See Edwards, H., Parker, and Arnot, assignors.)
Anderson, Edward L., Grosse Ile, assignor to American Blower Corporation, Detroit, Mich. Angular-flow fan. 1,886,518; Nov. 8.
Anderson, James E., Nashville, Tenn. Filter screen. 1,886,460; Nov. 8.
Anderson, John H., Detroit, Mich. Cracking and gasifying hydrocarbons. 1,887,112; Nov. 8.
Anderson, John P., Koppel, assignor, by mesne assignments, to Koppel Industrial Car and Equipment Company, McKees Rocks, Pa. Car construction. 1,886,360; Nov. 8.
Anderson, Ralph W., Wauwatosa, Wis. Locomotive tender. 1,886,361; Nov. 8.
Anderson, Samuel M., Sharon, assignor to B. F. Sturtevant Company, Boston, Mass. Air conditioning apparatus. 1,886,777; Nov. 8.
Andersson, Ivan, East Hartford, Conn. Airplane. 1,886,932; Nov. 8.
Andreas Daub A.-G. (See Boppenhausen, Willi, assignor.)
Andrews, Admiral L., Shawnee, Okla. Trousers support. 1,886,617; Nov. 8.
Andrews, Isaac, Spartanburg, S. C. Loom reed. 1,886,778; Nov. 8.
Angelini, Mentore L., Montgomery, Ala. Collapsible tube cap. 1,886,514; Nov. 8.
Anstice, Josiah, & Co. (See Anstice, Mortimer K., assignor.)
Anstice, Mortimer K., assignor to Josiah Anstice & Co., Inc., Rochester, N. Y. Slinger for drive units. 1,886,618; Nov. 8.
Anthony, Merton S., Adams, and E. H. Wilson, Pittsfield, Mass. Hydraulic valve lifter. 1,887,390; Nov. 8.
Anthracite Separator Company. (See Pardee, Frank, assignor.)
Antoni, Ugo, London, England. Construction of flexible aeroplane wings having a variable profile. 1,886,362; Nov. 8.
Apple, Vincent G., Dayton, Ohio. Apparatus for insulating coils. 1,887,005; Nov. 8.
Aras, Jean, Duluth, Minn. Device for plotting and measuring curves. 1,887,391; Nov. 8.
Arey, Fred C., Oak Park, Ill., assignor to Vulcan Soot Cleaner Company, DuBois, Pa. Power head for soot cleaners. 1,886,515; Nov. 8.
Argco Tube and Television Corporation. (See Alexander, Focsaneanu, assignor.)
Arnone, Anthony, New York, N. Y. Bottle holder for babies. 1,886,619; Nov. 8.
Arnot, Robert. (See Edwards, H., Parker, and Arnot.)
Aronson, Louis V., Newark, N. J. Registering coin bank. 1,886,779; Nov. 8.
Art Metal Construction Company. (See Ulrich, Charles B., assignor.)
Askenasy, Paul, Karlsruhe, Germany. Producing concrete. 1,886,933; Nov. 8.
Associated Electric Laboratories, Inc. (See Ericksen, John, assignor.)
Associated Electric Laboratories, Inc. (See Graybill, Kenneth W., assignor.)
Associated Electric Laboratories, Inc. (See Wicks, John, assignor.)

Astrup Company, The. (See Ackerman, J. Otto, assignor.)
Atkins, Mack, et al. (See Gordon, William S., assignor.)
Atkinson, Ralph R., Princeton, Ind. Mine timbering machine. 1,886,620; Nov. 8.
Atwater Kent Manufacturing Company. (See Miller, John M., assignor.)
Atwater Kent Manufacturing Company. (See Schade, Otto H., assignor.)
Atwood, Seth B., Rockford, Ill. Door bumper. 1,886,934; Nov. 8.
Aufderheide, Fred C., St. Louis, Mo. Wall veneer. 1,886,363; Nov. 8.
Auster, Louis, New York, N. Y. Hand protector for golfers. 1,887,278; Nov. 8.
Autokal Syndicate Limited, The. (See Isherwood, Harold, assignor.)
Automatic Coal Burner Co. (See Ousdahl, Adolph, assignor.)
Automatic Motor Stop and Start, Inc. (See Good, John, assignor.)
Aviation Patent and Research Corporation, The. (See Markey, Roscoe I., assignor.)
Bacon Banjo Company. (See Day, David L., assignor.)
Bacon, Joseph B., Macomb, Ill. Surgical apparatus. 1,887,392; Nov. 8.
Badgett, Billie B., administratrix. (See Badgett, Fred L.)
Badgett, Fred L., deceased, Chickasha, Okla.; B. B. Badgett, administratrix. Sight feed device. 1,887,393; Nov. 8.
Baensch, Walter, assignor to Schering-Kahlbaum A. G., Berlin, Germany. Packing for the stuffing-boxes and covers or lids of apparatus and machines subjected to a high gas-pressure. 1,887,006; Nov. 8.
Baggiolini, John, Soledad, Calif. Rolling and loading hayrake. 1,887,080; Nov. 8.
Bagwill, William L., Long Beach, Calif. Cracking still and process. 1,886,621; Nov. 8.
Bahan Textile Machinery Company. (See Spearman, Earnest S., assignor.)
Bailey, Albert R., San Bernardino, Calif. Locomotive lubricator. 1,886,622; Nov. 8.
Bailey, Carl, Indianapolis, Ind. Lawn mower sharpener. 1,887,394; Nov. 8.
Bailey, Charles M., San Francisco, Calif. Control apparatus for vacuum heating systems. 1,886,366; Nov. 8.
Bailey, Vernon, Washington, D. C. Animal trap. 1,886,862; Nov. 8.
Baken, William P. (See Hurst, George P., assignor.)
Baker Oil Tools, Inc. (See Little, John Q., assignor.)
Ballinger, Lee O., Lakewood, assignor of one-third to W. J. Wesseler, East Cleveland, Ohio. Cleaning device. 1,887,447; Nov. 8.
Ball, Charles E., Chicago, Ill., assignor to Ball Wagon Grader Co. Scraper bowl construction. 1,886,780; Nov. 8.
Ball Wagon Grader Co. (See Ball, Charles E., assignor.)
Bancel, Paul A., Montclair, assignor to Ingersoll-Rand Company, Jersey City, N. J. Condenser. 1,886,516; Nov. 8.
Bank of America et al., executors. (See Sperry, Lawrence B.)
Barden, Earl M., assignor to Packard Motor Car Company, Detroit, Mich. Painting instrument. 1,886,863; Nov. 8.
Barium Reduction Corporation. (See Pierce, James B., jr., assignor.)
Barnes, William A., assignor to The Swartzbaugh Manufacturing Company, Toledo, Ohio. Liquid dispensing apparatus. 1,886,623; Nov. 8.
Barr, John F., et al. (See de Lange, Henri M., assignor.)
Barrett Company, The. (See Miller, Stuart P., assignor.)
Barron Gray Packing Company. (See Gardner, George D., assignor.)
Bartels, Henry, Chicago, Ill. Attaching tile facings to walls. 1,887,113; Nov. 8.
Barton, Stephen, Astoria, N. Y. Rotary transmission or brake. 1,886,624; Nov. 8.
Bassler, Carlos J., assignor to American Liquid Meter Company, Alhambra, Calif. Displacement meter. 1,886,364; Nov. 8.
Batchelder, Fred A., North Cambridge, Mass. Apparatus for drying and stretching stockings. 1,887,255; Nov. 8.
Batcheller, Hugh W., Worcester, Mass. Electric switch. 1,886,517; Nov. 8.
Baush Machine Tool Company. (See Reynolds, George D., assignor.)
Baustoff, Picklin G. m. b. H. (See Pick, Ernö, assignor.)
Bayer, Otto, Frankfort-on-the-Main, W. Hohenemser, Frankfort-on-the-Main-Fechenheim, and K. Larbig, Frankfort-on-the-Main-Hochst, Germany, assignors to General Aniline Works, Inc., New York, N. Y. New sulphur-dyestuffs and a process of preparing them. 1,886,365; Nov. 8.
Beckwith, Clinton H., Geneva, assignor to Crane Co., Chicago, Ill. Air motor valve. 1,886,518; Nov. 8.
Beekman, Royce A., Schenectady, N. Y., assignor to General Electric Company. Power plant. 1,886,625; Nov. 8.
Behringer, Grover F., assignor to The American Steel Package Company, Defiance, Ohio. Container 1,887,448; Nov. 8.
Behringer, Grover F., assignor to The American Steel Package Company, Defiance, Ohio. Container. 1,887,449; Nov. 8.
Behringer, Grover F., assignor to The American Steel Package Company, Defiance, Ohio. Container. 1,887,485; Nov. 8.
Behrsin, August, Huntington Park, Calif. Oil burner. 1,887,007; Nov. 8.
Belcher, Harry M. (See Macdonald, William J., assignor.)
Belluzzo, Giuseppe, Rome, assignor to Societa Italiana Ernesto Breda per Costruzioni Meccaniche, Milan, Italy. Turbine locomotive. 1,887,178; Nov. 8.
Bendit, Louis C., Kansas City, Mo. Pulley. 1,887,279; Nov. 8.
Benedetto, Giuseppe, Novara, Italy, assignor to Omes Holding Company Limited, London, England. Electric upsetting machine. 1,887,179; Nov. 8.
Bensinger, Norman E. (See Davis, George W., assignor.)
Benson, Bennie, Jamestown, N. Y. Extension table. 1,887,114; Nov. 8.
Bents, Frank J., Miami, Fla. Truck. 1,886,782; Nov. 8.
Berkshire Knitting Mills. (See Schmidt, Paul, assignor.)
Berman, Otto N., Forest Hills, assignor to Standard Devices, Inc., New York, N. Y. Pocket cigar lighter. 1,886,461; Nov. 8.
Bethlehem Steel Company. (See Greenwell, Nevil, assignor.)
Betts, Hobart D., jr., assignor to The Thomas & Betts Co., Elizabeth, N. J. Conduit box. 1,887,192; Nov. 8.
Bever, Miles E., Anaheim, Calif. Reglet and flashing on roofings. 1,886,462; Nov. 8.
Biancalana, Eugene, Brooklyn, N. Y. Bottle heating attachment. 1,887,280; Nov. 8.
Bigelow Sanford Carpet Co. (See Lehner, Charles, assignor.)
Biles, Edgar V., assignor to B. Moore, jr., San Antonio, Tex. Transporting means for road rollers. 1,886,367; Nov. 8.
Billings, Clarence E., New Haven, and D. S. Sammis, Stratford, assignors to The New Haven Sand Blast Company, New Haven, Conn. Sand blast apparatus. 1,887,395; Nov. 8.
Birch, Leland W., assignor to The Ohio Brass Company, Mansfield, Ohio. Catenary hanger. 1,886,463; Nov. 8.
Bixby, Leo A., assignor to Unit Corporation of America, Milwaukee, Wis. Multiple disk clutch. 1,886,865; Nov. 8.
Bizzell, Carey K., Elizabeth, N. J., and J. E. Bizzell, Brooklyn, N. Y. Treating edible nuts. 1,887,256; Nov. 8.
Bizzell, James Eustace. (See Bizzell, Carey K.)
Black, Horace D., (See Webb, Christopher F., assignor.)
Black, Horace D., Uxbridge, England. Ticket issuing machine. 1,886,626; Nov. 8.
Black, Horace D., Uxbridge, England. Ticket-issuing machine. 1,886,627; Nov. 8.
Blair, Henry D., and H. M. West, Johnson City, assignors to Endicott Johnson Corporation, Endicott, N. Y. Gauge for shoe nailing machines. 1,886,628; Nov. 8.
Blake, Eli J., Buffalo, assignor, by mesne assignments, to Simplex Equipment Company, Inc., New York, N. Y. Electrical switch arrangement. 1,886,629; Nov. 8.
Blakesley, George W., Kansas City, Mo. Gas burner. 1,886,866; Nov. 8.
Blancke, August C., Chicago, Ill. Air inlet valve for internal combustion engines. 1,886,368; Nov. 8.
Blaw-Knox Company. (See Venable, William M., assignor.)
Blazek, John Y., Cleveland, assignor to Lempco Products, Inc., Maple Heights, Ohio. Brake drum and shield assembly. 1,887,478; Nov. 8.
Blomquist, Ernst, Lombard, Ill. Fuse. 1,887,281; Nov. 8.
Bloomquist, Ernst, Lombard, Ill. Fuse. 1,887,369; Nov. 8.
Blumenthal, Sidney, & Co. (See Todd, Juanita, assignor.)
Bobroff, Bornett L., Racine, Wis. Switch for signaling systems for automotive vehicles. 1,886,519; Nov. 8.
Bogart, John C., Bay City, Mich. Traction sprayer. 1,886,369; Nov. 8.
Bogoslowsky, Boris, Ferguson, assignor to The Universal Match Corporation, St. Louis, Mo. Stacking machine. 1,887,008; Nov. 8.
Böhle, Karl, Essen, assignor to Fried. Krupp Aktiengesellschaft, Essen-on-the-Ruhr, Germany. Drawing press. 1,886,935; Nov. 8.
Bohlen, Charles, Jr., assignor to International Motor Company, New York, N. Y. Leveling mechanism for fire ladders. 1,886,783; Nov. 8.
Bohnenblust, Arnold, Riley, Kans. Pump construction. 1,887,180; Nov. 8.
Bolton, Arthur T., Pelham, N. Y. Computing device. 1,886,370; Nov. 8.
Boman, Claes W., Brooklyn, assignor to Eagle Pencil Company, New York, N. Y. Pencil. 1,886,371; Nov. 8.
Bond Electric Corporation. (See Pratt, Goodrich B., assignor.)
Boothroyd, John A. (See Burrell, P., and Boothroyd.)
Boppenhausen, Willi, assignor to Andreas Daub A.-G., Pforzheim, Germany. Chain. 1,886,784; Nov. 8.
Borden, Max, New York, N. Y. Toy. 1,886,785; Nov. 8.

Bossart, Paul N., assignor to The Union Switch & Signal Company, Swissvale, Pa. Electrical relay. 1,886,372; Nov. 8.
Bourdette, Augustus C., Altoona, Pa. Garbage pail. 1,886,630; Nov. 8.
Bowen, Herbert C., Royal Oak, assignor to Hydraulic Brake Company, Detroit, Mich. Fluid pressure operated brake mechanism. 1,886,936; Nov. 8.
Bowles, Leslie B. (See Joyner, R. T., Bowles, and Freed.)
Brabson, Frank, Newark, N. J. Furniture support. 1,887,283; Nov. 8.
Bracey, Horace E. P., Lithgow, New South Wales, Australia. Insect-proof jam jar and other food container. 1,886,373; Nov. 8.
Bradley, John C., assignor to The American Brass Company, Waterbury, Conn. Continuous electric strip annealing furnace. 1,886,631; Nov. 8.
Brady, James W., jr., assignor of one-third to Millard Reese, Brunswick, Ga. Method and apparatus for producing and maintaining rotary motion of constant speed. 1,887,284; Nov. 8.
Brandt, John W., Elyria, Ohio. Cycle saddle. 1,886,867; Nov. 8.
Branthwaite, Isaac, Passaic, N. J., assignor to The Okonite-Callender Cable Company, Incorporated, Paterson, N. J. Electric cable. 1,886,786; Nov. 8.
Braun, Georg, Prague, Czechoslovakia, assignor to the Firm Carl Zeiss, Jena, Germany. Instrument for the examination of the reaction of the eye pupils when different parts of the retina are illuminated. 1,887,115; Nov. 8.
Breton, Rene J., Fresno, Calif. Shipping package for perishable objects. 1,886,374; Nov. 8.
Brett, Roy C., Cleveland Heights, Ohio, assignor to The Eagle-Picher Lead Company, Chicago, Ill. Furnace construction. 1,886,937; Nov. 8.
Brett, Roy C., Cleveland Heights, Ohio, and J. E. Doyle, Webb City, Mo., assignors to The Eagle-Picher Lead Company, Chicago, Ill. Reclaiming lead. 1,886,938; Nov. 8.
Briggs, Arthur J., Syracuse, assignor to Magazine Repeating Razor Company, New York, N. Y. Razor. 1,886,520; Nov. 8.
Bright, Lacy L., New York, N. Y. Golf club cover. 1,886,464; Nov. 8.
Brillo Manufacturing Company. (See Field, Crosby, assignor.)
Brillo Manufacturing Company. (See Field, C., and Campbell, assignors.)
Bristow, Paul W., Wilmington, and H. E. Houseman, Edge Moor, assignors to Standard-Trump Bros. Machine Company, Wilmington, Del. Knitted fabric. 1,886,521; Nov. 8.
Britton, Edgar C., and F. Bryner, assignors to The Dow Chemical Company, Midland, Mich. Separating phenylphenols. 1,887,227; Nov. 8.
Britton, Edgar C., and H. R. Slagh, assignors to The Dow Chemical Company, Midland, Mich. Preparation of mono-alkyl aromatic amines. 1,887,228; Nov. 8.
Broberg, Elmer, assignor to Elco Tool & Screw Corporation, Rockford, Ill. Shoe last. 1,887,116; Nov. 8.
Brodie, William M., administrator. (See Kelly, Loomis L.)
Broeman, Frank C., Cincinnati, Ohio. Handling coal. 1,886,632; Nov. 8.
Broeman, Frank C., Cincinnati, Ohio. Coal and coke treated with oil. 1,886,633; Nov. 8.
Brophy, Gerald B., Schenectady, N. Y., assignor to General Electric Company. Arc welding. 1,886,776; Nov. 8.
Brown, Charles I., Queens Village, N. Y. Lamp. 1,886,634; Nov. 8.
Brown Instrument Company, The. (See Pearce, Walter H., assignor.)
Brown, Lucille, et al. (See Logan, Amason C., assignor.)
Brown, Millard K., Eagle Grove, Iowa. Hog greaser. 1,886,635; Nov. 8.
Brown, Nick, et al. (See Logan, Amason C., assignor.)
Brunl, Giuseppe, and T. G. Levi, assignors to Societa Italiana Pirelli, Milan, Italy. Vulcanization of rubber. 1,886,636; Nov. 8.
Brunner, Arnold, Frankfort-on-the-Main-Hochst, Germany, assignor to General Aniline Works, Inc., New York, N. Y. Aromatic halogen-methyl compound and preparing it. 1,887,396; Nov. 8.
Bryant, Arthur P. (See Corson, G. E., and Bryant.)
Bryner, Fred. (See Britton, E. C., and Bryner.)
Buchanan, Stephen N., assignor to The Thomas & Betts Co., Elizabeth, N. J. Grounding fitting. 1,887,193; Nov. 8.
Buchmann, Edward G., East St. Louis, Ill. Expander spring for piston rings. 1,887,257; Nov. 8.
Buck, Ronald, Manchester, England. Diving raft. 1,886,522; Nov. 8.
Buckeye Blower Company, The. (See Harnett, L. D., and O'Day, assignors.)
Buckley, Helen M., Westport, Conn. Pad for invalid cushions. 1,886,637; Nov. 8.
Budd Wheel Company. (See Eksergian, Carolus L., assignor.)
Buell Combustion Company Limited, The. (See Green, E. W., Unthank, and Dunn, assignors.)
Buettell, Marc A., assignor to Dodge Manufacturing Corporation, Mishawaka, Ind. Coupling. 1,887,081; Nov. 8.
Bull Dog Electric Products Company. (See Frank, Harrison J. L., assignor.)
Bulova, Arde, assignor to Bulova Watch Company, Inc., New York, N. Y. Illuminated clock. 1,887,479; Nov. 8.
Bulova Watch Company. (See Bulova, Arde, assignor.)
Bulpitt, Walter H., Birmingham, England. Safety appliance for electrically heated apparatus. 1,887,062; Nov. 8.
Bunting Iron Works. (See Delaney, Herbert L., assignor.)
Buraglia, Vicente, Bogota, Colombia. Carburetor for internal combustion engines. 1,886,787; Nov. 8.
Burbank, Elizabeth W., executrix. (See Burbank, Luther.)
Burbank, Luther, deceased; E. W. Burbank, Santa Rosa, Calif., executrix, assignor to Stark Bro's. Nurseries & Orchards Company, Louisiana, Mo. Cherry. Pl. Pt. 71; Nov. 8.
Burdock Corporation, The. (See Hulett, Mason, assignor.)
Burnham Chemical Company. (See Burnham, George B., assignor.)
Burnham, George B., Reno, Nev., assignor to Burnham Chemical Company, Westend, Calif. Heating brine. 1,886,868; Nov. 8.
Burns, Alfred P. (See Guild, W. J., and Burns.)
Burrell, Percy, Watford, Herts, and J. A. Boothroyd, Rickmansworth, Herts, England. Production of colored effects by lighting. 1,887,285; Nov. 8.
Burton, Hugh F., Providence, R. I., assignor to Universal Winding Company, Boston, Mass. Balloon-guard for creels or the like. 1,886,638; Nov. 8.
Buskett, Evans W., Joplin, Mo. Apparatus for treating metallic ores. 1,887,286; Nov. 8.
Button, Bland B., Chicago, Ill. Collapsible garment hanger. 1,886,869; Nov. 8.
Button, Clarence R., and M. E. Esty, assignors of one-third to Stephen L. Van Voorhis, Canandaigua, N. Y. Hydraulic power-transmission. 1,887,229; Nov. 8.
Buttress, Joseph A., South Pasadena, Calif., assignor of one-half to G. Parker, Jackson, Miss. Internal gripping device. 1,887,009; Nov. 8.
Cadden, Charles C., Akron, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y. Method and apparatus for making hose. 1,886,639; Nov. 8.
Cage, John M., Los Angeles, Calif., assignor, by mesne assignments, to Electric Separation Company, Limited, New York, N. Y. Insulator bushing for electrical petroleum dehydrators. 1,887,010; Nov. 8.
Calderwood, David H., Johnstown, N. Y. Traffic signal circuit. 1,886,523; Nov. 8.
Cameron, Alexander S., assignor to W. J. Cameron, Chicago, Ill. Optical apparatus. 1,886,939; Nov. 8.
Cameron, William J. (See Cameron, Alexander S., assignor.)
Campbell, Argyle, assignor to Enterprise Railway Equipment Company, Chicago, Ill. Car door and locking means therefor. 1,886,788; Nov. 8.
Campbell, Clinton L. (See Field, C., and Campbell.)
Campbell, Colin, Avon, N. J. Receptacle. 1,886,465; Nov. 8.
Campbell, Lorn, jr., Cleveland, Ohio. Land vehicle train. 1,886,640; Nov. 8.
Capey, John Buckley. (See Steele, George, Cowlishaw, and Capey.)
Capocci, Pompeo, Cranston, R. I. Lamp shade. 1,887,397; Nov. 8.
Carlson, Anthony E., Los Angeles, Calif. Well reamer construction. 1,886,789; Nov. 8.
Carlson, Fred N. (See Starburg, C. J., and Carlson.)
Caron, Ludger J., assignor to Leominster Tool Co., Leominster, Mass. Code cylinder key cutting and duplicating machine. 1,886,641; Nov. 8.
Carr, Richard H., Chicago, Ill., and W. C. Trout, Lufkin, Tex. Shock absorbing coupling. 1,887,011; Nov. 8.
Cartwright Automatic Gear Shift Corporation. (See Cartwright, Forest S., assignor.)
Cartwright, Forest S., assignor to Cartwright Automatic Gear Shift Corporation, Indianapolis, Ind. Gear shift. 1,887,012; Nov. 8.
Case, J. I., Company. (See Davis, Calvin R., assignor.)
Case, J. I., Company. (See Hendrickson, Robert C., assignor.)
Case, J. I., Company. (See Huddle, Edwin F., assignor.)
Case, J. I., Company. (See Kranick, Frank N. G.)
Casein Manufacturing Company of America, Inc., The. (See Shisler, George M., assignor.)
Casey, Fred E., et al. (See Casey, William B., assignor.)
Casey, William B., Lake Forest Park, assignor of one-sixth to F. E. Casey and one-sixth to H. T. Ivers, Seattle, Wash. Wheel flange lubricator. 1,887,450; Nov. 8.
Castle, Anna E., Beverly, N. J. Catamenial garment. 1,886,642; Nov. 8.
Causan, Némorin L., Suresnes, France. Nonwarping chassis for automobile vehicles and the like. 1,886,940; Nov. 8.
Centorrino, Marcello, New York, N. Y. Circuit breaker. 1,886,790; Nov. 8.
Chandler, Carl B., Havana, Ill. Ignition device for fuel burners. 1,887,230; Nov. 8.
Chapman, Verni J., Schenectady, N. Y., assignor to General Electric Company. Electric arc welding. 1,886,524; Nov. 8.
Chapman, Verni J., Schenectady, N. Y., assignor to General Electric Company. Automatic arc welding apparatus. 1,886,643; Nov. 8.

Charroin, Arthur B., San Diego, Calif. Powder puff and making the same. 1,887,194; Nov. 8.
Chase Companies, The. (See Cornell, Edward S., jr., assignor.)
Chase, Emery H., Addison, N. Y. Violin. 1,887,398; Nov. 8.
Chatham Specialty Corporation. (See Kohn, Koby, assignor.)
Chemische Fabrik Grunau Landshoff & Meyer Aktiengesellschaft. (See Sommer, F., and Nassau, assignor.)
Chicago Forging & Manufacturing Co. (See Mears, Norton A., assignor.)
Chicago Manifold Products Company. (See Tupper, Lloyd A., assignor.)
Chicopee Manufacturing Corporation. (See McCormick, Edward A., assignor.)
Churchill, Ralph H., Chicago, Ill. Shock absorbing mechanism. 1,887,287; Nov. 8.
Cincinnati Ball Crank Co., The. (See Munday, Richard B., assignor.)
Cincinnati Car Corporation, The. (See Davis, Lewis J., assignor.)
Clar, Josef, et al. (See Mitchell, Ernest R., assignor.)
Clark, William G., Vancouver, British Columbia, Canada. Smoking pipe. 1,886,375; Nov. 8.
Clarke, Clarence M., Syracuse, assignor to United States Hoffman Machinery Corporation, New York, N. Y. Garment pressing machine. 1,886,644; Nov. 8.
Clarkson, Ralph P., New Rochelle, N. Y., assignor to J. H. McCormick & Co., Williamsport, Pa. Heating device. 1,886,645; Nov. 8.
Claudel, Charles Henri, assignor to Societe Anonyme la Cooperation Agricole & Industrielle, Veuxhaulles, France. Carburetor. 1,886,646; Nov. 8.
Clausen, Carl F., Grayslake, Ill. Draftsman's table. 1,887,288; Nov. 8.
Cleveland Rock Drill Company, The. (See Rauberstrauch, George, assignor.)
Cleveland Twist Drill Company, The. (See Emmons, Joseph V., assignor.)
Cleveland Twist Drill Company, The. (See Emmons, J. V., and Kuchenbrod, assignors.)
Clinton Corn Syrup Refining Company. (See Corson, G. E., and Bryant, assignors.)
Coates, Ray G., Pasadena, Calif. Control mechanism for motor cars. 1,887,231; Nov. 8.
Coddington, Edmond D., East Cleveland, assignor to The Forestek Plating & Mfg. Company, Cleveland, Ohio. Toaster or similar article. Des. 88,221; Nov. 8.
Coffey, John B., Boston, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Edge finishing machine. 1,886,870; Nov. 8.
Coffield, James L., Dayton, Ohio. Fire extinguisher. 1,887,013; Nov. 8.
Cole, Irving V., Newark, N. J. Panel board structure. 1,886,466; Nov. 8.
Coleman, Gerald H., assignor to The Dow Chemical Company, Midland, Mich. Method of separating ortho- and para-phenylphenols. 1,887,232; Nov. 8.
Coleman, Stewart P., Houston, Tex., assignor to Standard Oil Development Company. Making naphthenic compounds. 1,886,647; Nov. 8.
Colley, William C., Berkeley, Calif. Sloper mechanism. 1,887,117; Nov. 8.
Collier Advertising Service, Inc. (See Giles, Harvey, assignor.)
Collinge, Edward B., Los Angeles, Calif. Combination trailer and semitrailer. 1,887,118; Nov. 8.
Collins, Charles B., San Francisco, Calif. Multiplying mechanism for calculating machines. 1,886,781; Nov. 8.
Colson Company, The. (See Pehrsson, Sven Johan, assignor.)
Comati, C. N., et al. (See Teaver, Joe L., assignor.)
Combier & Co. Inc. (See Megroz, Georges, assignor.)
Combier & Co. Inc. (See Schey, Robert, assignor.)
Comerford, Grace, Elmhurst, assignor to The Nestle-Lemur Company, New York, N. Y. Protective shield for hair waving. 1,886,467; Nov. 8.
Compania Swift de la Plata Sociedad Anonima. (See Morasso, Salvador, assignor.)
Condos, Gus, Chicago, Ill. Hair drying apparatus. 1,887,233; Nov. 8.
Cone, William S., Oakland, Calif. Transmission insulator. 1,887,181; Nov. 8.
Conkling, De Witt C., Long Island, N. Y. Adjustable propeller. 1,887,146; Nov. 8.
Consolidated Car-Heating Company. (See Parsons, Robert J., assignor.)
Consolidated Signal Company. (See Vincent, Orville L., assignor.)
Container Seal Company. (See Stiles, Thomas G., assignor.)
Continental Motors Corporation. (See Sampson, F. W., assignor, and Tatter.)
Consetti, Achille, assignor to the Firm J. R. Geigy S. A., Basel, Switzerland. Manuacture of strongly basic azodyestuffs. 1,887,289; Nov. 8.
Cook, Henry M., et al. (See Logan, Amazon C., assignor.)
Cook, Ruth H., et al. (See Logan, Amazon C., assignor.)
Cooper, Joseph, New York, N. Y. Side for extension tables. 1,886,648; Nov. 8.
Coors, Adolph, Golden, Colo. Malted milk container. 1,887,345; Nov. 8.
Copeland, Frank B. (See Prentice, W. G., and Copeland.)
Copenhaver, Philip A., Chicago, Ill. High chair. 1,887,234; Nov. 8.
Corcoran, Edward P., and W. B. Hadley, assignors to J. L. Kellogg, Chicago, Ill. Defiberizing machine. 1,886,871; Nov. 8.
Cornelius, Gaston. (See Flodin, N., and Cornelius.)
Cornelius, Louis A., assignor to Wolverine Brass Works, Grand Rapids, Mich. Valve mechanism. 1,887,235; Nov. 8.
Cornell, Edward S., jr., Watertown, assignor to The Chase Companies, Waterbury, Conn. Vent-caps for vent-pipes, etc. 1,887,119; Nov. 8.
Cornish, Harry S., New York, N. Y. Apparatus for cooling and carbonating portable liquids. 1,886,468; Nov. 8.
Corson, George E., and A. P. Bryant, assignors to Clinton Corn Syrup Refining Company, Clinton, Iowa. Making crystalline dextrose. 1,886,941; Nov. 8.
Costello, William F., assignor to The New Britain Machine Company, New Britain, Conn. Support for benches and the like. 1,887,399; Nov. 8.
Cottrell, C. B., & Sons Company. (See Cottrell, Calvert B., 3d, assignor.)
Cottrell, Calvert B., 3d, assignor to C. B. Cottrell & Sons Company, Westerly, R. I. Electric motor drive for web printing, longitudinal folding, and transverse cutting mechanism. 1,886,525; Nov. 8.
Cottrell, Calvert B., 3d, assignor to C. B. Cottrell & Sons Company, Westerly, R. I. Electric motor drive for web printing, cutting and folding mechanism. 1,886,526; Nov. 8.
Cottrell, Calvert B., 3d, assignor to C. B. Cottrell & Sons Company, Westerly, R. I. Electric motor drive for web printing and cutting mechanisms. 1,886,527; Nov. 8.
Cottrell, Calvert B., 3d, assignor to C. B. Cottrell & Sons Company, Westerly, R. I. Electric motor drive for web printing mechanism. 1,886,528; Nov. 8.
Cottrell, Calvert B., 3d, assignor to C. B. Cottrell & Sons Company, Westerly, R. I. Bed and cylinder printing press. 1,886,529; Nov. 8.
Cottrell, Calvert B., 3d, assignor to C. B. Cottrell & Sons Company, Westerly, R. I. Bed and cylinder printing press. 1,886,530; Nov. 8.
Couls, George R., Detroit, Mich. Cutting tool alloy. 1,886,469; Nov. 8.
Coutant, Jay G., New York, N. Y. Multiple steam drum boiler. 1,887,182; Nov. 8.
Cowan, Harrison J., Douglaston, N. Y., assignor to Kinatome Patents Corporation, New York, N. Y. Combined cabinet and screen for a motion picture projector. Des. 88,222; Nov. 8.
Cowlin, Eugene D., assignor to The Reliance Manufacturing Company, Massillon, Ohio. Multiple coil spring washer. 1,886,791; Nov. 8.
Cowlishaw, Skevington Dickinson. (See Steele, George, Cowlishaw, and Capey.)
Craigo, John M., Hartford, Conn. Dental impression device. 1,886,872; Nov. 8.
Crane Company. (See Beckwith, Clinton H., assignor.)
Crater, Willard de C., Succasunna, N. J., assignor to Hercules Powder Company, Wilmington, Del. Blasting cap. 1,887,290; Nov. 8.
Crew, William H. (See Hulburt, E. O., and Crew.)
Crist, Ray H. (See Smidth, Leonard.)
Crosby, Edwin L., and A. E. Rhoads, assignors to Detroit Electric Furnace Company, Detroit, Mich. Preparing gray cast iron of improved characteristics. 1,886,873; Nov. 8.
Crossley, Alfred, Washington, D. C., assignor, by mesne assignments, to Wired Radio, Inc., New York, N. Y. Piezo electric crystal apparatus. 1,886,792; Nov. 8.
Crowey, Norman J. (See Drake, A. M., and Crowey.)
Crown Cork & Seal Company. (See Warth, Albin H., assignor.)
Culver, Edward, Crouch End, London, and A. H. Emerson, Finchley, London, assignors to United Kingdom Optical Company, Limited, London, England. Manufacture of fused bifocal lenses. 1,886,649; Nov. 8.
Curtis Manufacturing Company. (See Ackerman, Frank, assignor.)
Cusick, Albert J. (See Kraus, C., and Cusick.)
Cutler-Hammer, Inc. (See Tregoning, William C., assignor.)
Cycletow Corporation, Ltd. (See Hess, Albert L., assignor.)
Cyphers, William D., Tulsa, Okla., assignor to The Ohio Oil Co., Findlay, Ohio. Service station building. Des. 88,223; Nov. 8.
Cypress Novelty Corporation et al. (See Krieg, Anthony W., assignor.)
Czemba, Frank, Duluth, Minn. Cutter. 1,886,942; Nov. 8.
Daddio, Pasquale, New York, N. Y. Pneumatic tire. 1,886,470; Nov. 8.
Dahners, Wilhelm. (See Rubinstein, J., Heidelberg, Uhlhorn, and Dahners.)
Daisy Manufacturing Company. (See LeFever, Charles F., assignor.)
Dalchow, Franz, Nauen, near Berlin, Germany. Method and device to direct the shoots of young trees. 1,886,531; Nov. 8.
Daly, Raymond E., Chicago, Ill., assignor to American Maize-Products Company. Car unloading tipple. 1,887,120; Nov. 8.

Dambacher, Xavier, assignor to the Firm Windmoller & Holscher, G. m. b. H., Lengerich, Westphalia, Germany. Machine for automatically opening square bottom paper bags. 1,886,376; Nov. 8.
Daniels Gerald L., et al. (See Pratt, G. D., and Guillaume, assignors.)
Daniels, Raymond, et al. (See Pratt, G. D., and Guillaume, assignors.)
Dardelet Treadlock Corporation. (See Hoke, William E., assignor.)
Davidson, Bruce J., Brooklyn, assignor to National Biscuit Company, New York, N. Y. Display stand. 1,886,532; Nov. 8.
Davidson Frederic A., Bayside, assignor to American Safety Device Co., New York, N. Y. Chute structure. 1,886,793; Nov. 8.
Davies, Willard J., and H. C. S. Schnack, Grandville, Mich. Skate. 1,886,650; Nov. 8.
Davis, Albert L. (See Wooton, F. M., and Davis.)
Davis, Calvin R., Rockford, Ill., assignor to J. I. Case Company, Racine, Wis. Chain lifter for implements. 1,887,846; Nov. 8.
Davis, George W., assignor of one-half to Norman E. Bensinger, Chicago, Ill. Pipe, cigar, or cigarette holder. 1,886,377; Nov. 8.
Davis Lewis J., assignor to The Cincinnati Car Corporation, Cincinnati, Ohio. Swinging link arrangement for railway trucks. 1,886,533; Nov. 8.
Day, David L., assignor to Bacon Banjo Company, Inc., Groton, Conn. Banjo. 1,887,291; Nov. 8.
Dayton, James M., Torrington, Conn. Meter compensating device. 1,887,400; Nov. 8.
Dayton Veneer & Lumber Mills. (See James, Oliver M., assignor.)
Dearsley, George, Deptford, London, England. Packing machinery. 1,886,378; Nov. 8.
De Baufre, William L., Orange, N. J., assignor to International Combustion Engineering Corporation, New York, N. Y. Regulating system for high capacity boilers. 1,887,147; Nov. 8.
De Bothezat, George, New York, N. Y. Pulley-driven disk fan. 1,887,370; Nov. 8.
Deere & Company. (See Johnson, Theodore W., assignor.)
Defiance Manufacturing Corporation. (See Phinney, Edgar E., assignor.)
De Ganahl, Carl, Garden City, N. Y. Aeroplane propulsion. 1,887,148; Nov. 8.
De George, Nick, Mentor, Ohio. Jar cover. 1,886,651; Nov. 8.
De Joy, Nick; Henry A. Schrants, administrator of said Nick De Joy, deceased, assignor to The Metropolitan Paving Brick Company, Canton, Ohio. Surfacing sand and the like. 1,887,196; Nov. 8.
De Koning, Jacob, assignor to Gallmeyer & Livingston Company, Grand Rapids, Mich. Grinding machine construction. 1,886,652; Nov. 8.
De Laney, Edward A., et al., executor. (See Rowland, Charles L., assignor.)
Delaney, Herbert L., Berkeley, assignor to Bunting Iron Works, San Francisco, Calif. Fuel oil burner control system. 1,886,472; Nov. 8.
De Lange, Dirk. et al. (See De Lange, Henri M., assignor.)
De Lange, Henri M., DeBilt, Netherlands, assignor to John F. Barr, Drogheda, Irish Free State, and Dirk de Lange, DeBilt, Netherlands. Preparation of a glassy drying substance from cement with or without colors. 1,886,379; Nov. 8.
Delano, Frederic A., Washington, D. C. Corrugated transparent material. 1,886,445; Nov. 8.
De Laval Separator Company, The. (See Lindgren, Hans O., assignor.)
Denton, Joe K., and J. G. Lancaster, Maryville, Tenn. Tape writer attachment for typewriting machines. 1,887,401; Nov. 8.
De Saint Hubert, Albert, Brussels, Belgium. Device for distributing the charge in an oven. 1,887,292; Nov. 8.
De Simone, Michele G., Stapleton, assignor to G. B. Agnew, New York, N. Y. Calculating machine. 1,887,258; Nov. 8.
De Simone, Michele G., Stapleton, assignor to G. B. Agnew New York, N. Y. Calculating machine. 1,887,259; Nov. 8.
Desmond, John D., Milwaukee, Wis. Water heater. 1,887,196; Nov. 8.
Detroit Electric Furnace Company. (See Crosby, E. L., and Rhoads, assignors.)
Deubner, Henry F., Detroit, Mich. Jamb bead. 1,886,653; Nov. 8.
Deutsche Gold & Silber Scheideanstalt, vormals Roessler. (See Lehrecke, Hans, assignor.)
De Vilbiss Company, The. (See Vuillemenot, Frederic A., assignor.)
D'Humy, Fernand E., Scarsdale, assignor to Ramp Buildings Corporation, New York, N. Y. Garage. 1,886,943; Nov. 8.
D'Humy, Fernand E., Scarsdale, assignor to Ramp Buildings Corporation, New York, N. Y. Building. 1,886,944; Nov. 8.
D'Humy, Fernand E., Scarsdale, assignor to Ramp Buildings Corporation, New York, N. Y. Building. 1,886,945; Nov. 8.
Diamond Match Company, The. (See Paridon, Michael, assignor.)
Dietmann, Paul W., Jonkoping, Sweden. Match box inverting means. 1,886,794; Nov. 8.
Dietzel, Paul, assignor to the Firm of Carl Zeiss, Jena, Germany. Slide guide for the fine adjustment of microscopes. 1,887,121; Nov. 8.
Dijksterhuis, Popko R., assignor to N. V. Phillips' Gloeilampenfabrieken, Eindhoven, Netherlands. Electric discharge tube. 1,886,795; Nov. 8.
Dillon, John R. (See Lundelius, O. F., and Dillon.)
Dingman, Charles F., Palmer, Mass. Display window construction. 1,886,654; Nov. 8.
Ditsmann, Siegfried J. (See Nickel, Gottfried, assignor.)
Dodge Manufacturing Corporation. (See Buettell, Marc A., assignor.)
Dombrowski, Alexander J., Neshkoro, Wis. Adjustable snow plow shoe. 1,887,451; Nov. 8.
Domm, Charles, assignor of one-fourth to L. J. Gilchrist, Detroit, Mich. Container for use with refrigerators and display counters. 1,887,402; Nov. 8.
Donaghy, James K. (See Messier, H. J., and Donaghy.)
Doody, Frederick C., St. Onge, S. Dak., assignor of one-half to T. H. Lindley, Omaha, Nebr. Tractor supported and operated hay sweep and stacker. 1,886,655; Nov. 8.
Dornhofer, Louis J., assignor of one-half to H. A. Fales, Leonia, N. J. Steam and water mixer. 1,886,534; Nov. 8.
Dow Chemical Company, The. (See Britton, E. C., and Bryner, assignors.)
Dow Chemical Company, The. (See Britton, E. C., and Slagh, assignors.)
Dow Chemical Company, The. (See Coleman, Gerald H., assignor.)
Dowlen, Tom H., assignor to Richfield Oil Company, of California, Los Angeles, Calif. Oxidizing asphaltic oils. 1,886,380; Nov. 8.
Downie, Robert R., Beaver Falls, Pa. Excavating machine. 1,886,381; Nov. 8.
Doyle, James E. (See Brett, R. C., and Doyle.)
Doyle, Philip C., assignor to The Standard Oil Company, Cleveland, Ohio. Soap sudsing apparatus. 1,887,371; Nov. 8.
Drsim. Nicholas A., Silver Spring, Md. Quick acting clamp. 1,886,874; Nov. 8.
Drake, Alden M., and N. J. Crowey, West Hartford, assignors to Pratt & Whitney Company, Hartford, Conn. Dressing attachment for screw thread grinders. 1,886,796; Nov. 8.
Dries, James A., Emaus, Pa. Pan lifter. 1,886,473; Nov. 8.
Droescher, Le Roy A., Willow Grove, assignor to C. H. Wheeler Manufacturing Company, Philadelphia, Pa. Refrigerating apparatus. 1,886,656; Nov. 8.
Drysdale and Company. (See Mawson, Hubert, assignor.)
Dubbs, Carbon P., Wilmette, assignor to Universal Oil Products Company, Chicago, Ill. Apparatus for treating petroleum. 1,886,946; Nov. 8.
Dudzeele Corporation of America. (See Mantell, Charles L., assignor.)
Duffy, Bert J., Pittsburgh, Pa., assignor to Hercules Powder Company, Wilmington, Del. Connecter for cordeau Bickford. 1,887,122; Nov. 8.
Duncan, Robert D., jr., East Orange, and A. M. Trogner, Maplewood, N. J., assignors to Wired Radio, Inc., New York, N. Y. Electron discharge tube adapter. 1,886,657; Nov. 8.
Dunham, C. A., Company. (See Schmidt, Ferdinand E., assignor.)
Dunlap, Lester G., Stockton, Calif. Digger chain. 1,886,382; Nov. 8.
Dunlop Rubber Company Limited. (See Hayes, C., Madge, and Lane, assignors.)
Dunlop Rubber Company Limited. (See Twiss, D. F., and Murphy, assignors.)
Dunn, David. (See Green, E. W., Unthank, and Dunn.)
Dunois, Charles, Champigny, France. Valve cap for pneumatic tires. 1,887,293; Nov. 8.
Du Pont Film Manufacturing Corporation. (See Zelger, Georges E., assignor.)
Du Pont Rayon Company. (See Joyner, R. T., Bowles, and Freed, assignors.)
Du Pont Viscoloid Company. (See Lach, Frederick, assignor.)
Du Pont Viscoloid Company. (See Payne, Daniel D., assignor.)
Durand & Huguenin S. A. (See Werdenberg, Heinrich, assignor.)
Durst, August, Freiburg, Germany. Sparking plug controlling device for internal combustion engines. 1,887,014; Nov. 8.
Eagle Pencil Company. (See Boman, Claes W., assignor.)
Eagle-Picher Lead Company, The. (See Brett, R. C., assignor.)
Eagle-Picher Lead Company, The. (See Brett, R. C., and Doyle, assignors.)
Eakin, Willard D., Hudson, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y. Method and apparatus for making hose. 1,886,658; Nov. 8.
Easthampton Rubber Thread Co. (See Shaw, Kenneth R., assignor.)
Eckert, Wilhelm, Frankfort-on-the-Main-Hochst, Germany, assignor to General Aniline Works, Inc., New York, N. Y. Napthalimide dyestuffs and preparing them. 1,886,797; Nov. 8.

Edwards, Frank W., Chicago, Ill., and F. B. Farnsworth, Wadsworth, Ohio. Lubricator. 1,886,659; Nov. 8.
Edwards, Henry, Caversham, Reading, O. J. Parker, Eastcheap, London, and R. Arnot, assignors to Ancoles Limited, London, England. Conversion of metallic ores. 1,887,452; Nov. 8.
Edwards, Herbert C., assignor to Packard Motor Car Company, Detroit, Mich. Diesel engine. 1,886,383; Nov. 8.
Edwards, Herbert C., assignor to Packard Motor Car Company, Detroit, Mich. Diesel engine. 1,886,384; Nov. 8.
Egler, Andrew G., Youngstown, Ohio. Production of sound ingots. 1,887,296; Nov. 8.
Egloff, Gustav, assignor to Universal Oil Products Company, Chicago, Ill. Process and apparatus for cracking oil. 1,887,083; Nov. 8.
Ehlinger, Marcel, assignor to Societe Alsacienne de Constructions Mecaniques, Mulhouse, France. Water level expansion regulator for use in connection with boilers or the like. 1,887,084; Nov. 8.
Ehrhardt, Friedrich, and C. Roeder, Nuremberg, Germany. Lead pencil and like polishing machine. 1,887,200; Nov. 8.
Ehrhart, Eugene N., New Orleans, La., and L. Wickenden, Manhasset, N. Y., assignors to J. J. Naugle, Greenwich, Conn. Preparing invert sugars. 1,886,875; Nov. 8.
Ehrlich, Louis B., Toledo, Ohio. Center punch construction. 1,887,085; Nov. 8.
Eksergian, Carolus L., Detroit, Mich., assignor to Budd Wheel Company, Philadelphia, Pa. Vehicle wheel nave construction. 1,886,535; Nov. 8.
Elco Tool & Screw Corporation. (See Broberg, Elmer, assignor.)
Electra Corporation. (See Kincannon, Leo T., assignor.)
Electric Separation Company. (See Cage, John M., assignor.)
Elite Manufacturing Company, The. (See Prentice, W. G., and Copeland, assignors.)
Elivirdy, Elisha, Chicago, Ill. Amusement device. 1,886,385; Nov. 8.
Emerson, Alfred H. (See Culver, E., and Emerson.)
Emerson Apparatus Company. (See Jansson, Bennett G., assignor.)
Emmel, Karl, Mulheim-Ruhr, Germany. Producing cast-iron of high qualities of strength in a cupola furnace. 1,887,453; Nov. 8.
Emmons, Joseph V., Shaker Heights, assignor to The Cleveland Twist Drill Company, Cleveland, Ohio. Cutting and forming tools, implements and the like. 1,887,372; Nov. 8.
Emmons, Joseph V., Shaker Heights Village, assignor to The Cleveland Twist Drill Company, Cleveland, Ohio. Drill. 1,887,374; Nov. 8
Emmons, Joseph V., Shaker Heights Village, and C. Kuchenbrod, Cleveland Heights, assignors to The Cleveland Twist Drill Company, Cleveland, Ohio. Reamer and the like. 1,887,373; Nov. 8.
Endicott Johnson Corporation. (See Blair, H. D., and West, assignors.)
Endres, Lawrence M., Waunakee, Wis. Tool rest. 1,886,536; Nov. 8.
Enterprise Railway Equipment Company. (See Campbell, Argyle, assignor.)
Epstein, Joshua. (See Mitchell, Ernest R., assignor.)
Erickson, Edward E., Portland, Oreg. Niches employed in crematoriums. 1,887,086; Nov. 8.
Erickson, John, assignor, by mesne assignments, to Associated Electric Laboratories, Inc., Chicago, Ill. Relay. 1,886,474; Nov. 8.
Erickson, John A., Jackson, Mich., assignor to Viking Manufacturing Company. Coal binder and applying the same. 1,887,183; Nov. 8.
Erie Malleable Iron Company. (See Metcalf, George R., jr., assignor.)
Esping, Gustave R., Cleveland, Ohio. Conduit holder. 1,886,660; Nov. 8.
Estey Organ Company. (See Warren, Samuel R., assignor.)
Esty, Maynard E. (See Button, C. R., and Esty.)
Evans, Graydon. (See Evans, William M. and G.)
Evans, Richard, Highland Park, Ill. Vented stamp mold. 1,887,403; Nov. 8.
Evans, Thomas A., Sombrerete, Mexico. Reagent feeder. 1,887,347; Nov. 8.
Evans, William M. and G., near East Sparta, Ohio. Selective power transmission. 1,886,537; Nov. 8.
Fabrica Italiana Magneti Marelli Societa Anonima. (See Fossati, Giuseppe, assignor.)
Failor, Charles W., Forest Hills, assignor to The Union Switch & Signal Company, Swissvale, Pa. Railway traffic controlling apparatus. 1,887,261; Nov. 8.
Fairweather, David A. W., Grangemouth, and J. Thomas, Kingarth, Polmont, Scotland, assignor to Imperial Chemical Industries Ltd. Dye and dyeing. 1,886,947; Nov. 8.
Fales, Harold A. (See Dornhofer, Louis J., assignor.)
Fanto, Emil C., Fairfield assignor to McKesson & Robbins, Inc., Bridgeport, Conn. Preparing heptaldehyde. 1,886,538; Nov. 8.
Farnsworth, Fordyce B. (See Edwards, F. W., and Farnsworth.)
Federal Merchandise Company. (See Hueglin, Herman C., assignor.)
Feldkamp, Hulda M., Elkhart, Ind. Display rack. 1,886,539; Nov. 8.
Ferguson Brothers Manufacturing Company. (See Hanley, William, assignor.)
Ferranti Inc. (See Norris, Eric D. T., assignor.)
Fidelity Machine Company. (See Larkin, Walter, assignor.)
Fidler, Harry E. (See Tenney, P. L., and Fidler.)
Field, Crosby, Brooklyn, N. Y., assignor to Brillo Manufacturing Company, Inc. Plant apparatus and making metal wool. 1,886,661; Nov. 8.
Field, Crosby, Brooklyn, N. Y., assignor to Brillo Manufacturing Company, Inc. Wire shaving machine. 1,886,662; Nov. 8.
Field, Crosby, Brooklyn, N. Y., assignor to Brillo Manufacturing Company, Inc. Wire cutting machine and tension regulator therefor. 1,886,663; Nov. 8.
Field, Crosby, Brooklyn, N. Y., assignor to Brillo Manufacturing Company, Inc. Conveyer and storage apparatus for metal wool machines. 1,886,664; Nov. 8.
Field, Crosby, Brooklyn, N. Y., assignor to Brillo Manufacturing Company, Inc. Multiple unit electric drive system. 1,886,665; Nov. 8.
Field, Crosby, Brooklyn, N. Y., assignor to Brillo Manufacturing Company, Inc. Automatically lubricated and cleaned metal wool machine. 1,886,666; Nov. 8.
Field, Crosby, Brooklyn, and C. L. Campbell, Port Richmond, N. Y., assignors to Brillo Manufacturing Company. Holder for metal wool or the like. 1,887,294; Nov. 8.
Finch, James L., Port Jefferson, N. Y., assignor to Radio Corporation of America. Keying. 1,887,236; Nov. 8.
Finch, James L., Rocky Point, N. Y., assignor to Radio Corporation of America. Signalling system. 1,887,237; Nov. 8.
Finke, Le Roy R., et al. (See Krupp, Fred H., assignor.)
Fisher, S., et al. (See Mitchell, Ernest R., assignor.)
Fitz Gerald, Arthur G., West Newton, Mass. Anti-skid device. 1,887,404; Nov. 8.
Fitzpatrick, Edward O., Seattle, Wash. Binocular. Des. 88,224; Nov. 8.
Fleming, Frank A. (See Howell, R. C., and Fleming.)
Fletcher, Maud I., Douglas, Ariz. Prestarched lining for cuffs and other apparel. 1,886,798; Nov. 8.
Flexible Steel Lacing Company. (See Olsen, John C., assignor.)
Flintermann, Gerhard, West Orange, N. J. Razor kit. 1,887,123; Nov. 8.
Flintermann, Gerhard, West Orange, N. J. Razor kit. 1,887,124; Nov. 8.
Flodin, Nils and G. Cornelius, Stockholm, Sweden. Apparatus for continuously producing briquettes. 1,887,149; Nov. 8.
Florimont, Jules J., Paris, France, assignor to The Risler Corporation of America, Kansas City, Mo. Process and apparatus for making vacuum tubes. 1,886,475; Nov. 8.
Fogle, Bennie D., Springfield, S. C. Automobile device. 1,887,405; Nov. 8.
Folsom, Robert M., Reading, Mass., assignor to New England Fuel and Transportation Company, trustees. Charging coke ovens. 1,886,948; Nov. 8
Folsom, Robert M., Reading, Mass., assignor to New England Fuel and Transportation Company, trustees. Apparatus for producing gas and coke. 1,886,949; Nov. 8.
Foreman, William B., Elizabeth City, N. C. Knock-down hogshead. 1,887,406; Nov. 8.
Forestek Plating & Mfg. Company, The. (See Coddington, Edmond D., assignor.)
Forney, Combustion Engineering Company. (See Forney, Ross H., assignor.)
Forney, Ross H., assignor to Forney Combustion Engineering Company, Dallas, Tex. Fuel burner device. 1,887,150; Nov. 8.
Forney, Ross H., assignor to Forney Combustion Engineering Company, Dallas, Tex. Combination gas and oil burner. 1,887,407; Nov. 8.
Forse, Harry D., Anderson, Ind. Pressing machine. 1,886,799; Nov. 8.
Forshey, Elmore A. (See Tillyer, E. D., Forshey, and Nott.)
Fossati, Giuseppe, Monza, assignor to Fabbrica Italiana Magneti Marelli Societa Anonima, Milan, Italy. Ignition magneto. 1,887,454; Nov. 8.
Four-way Lock Company, The. (See Main, Andrew, assignor.)
Fowler, Joseph E., Worcester, Mass. Oil burner. 1,886,667; Nov. 8.
Fraine, Samuel A. (See Stricklen, J. R., and Fraine.)
Francis, Oliver T., Quantico, Va. Radio. 1,886,386; Nov. 8.
Frank, Charles, Brooklyn, N. Y. Apparatus for and method of sterilizing. 1,887,297; Nov. 8.
Frank, Harrison J. L., assignor to Bull Dog Electric Products Company, Hamtramck, Mich. Panel board cabinet. 1,887,088; Nov. 8.
Frank, Harrison J. L., Highland Park, assignor to Bull Dog Electric Products Company, Hamtramck, Mich. Selective fuse plug shell. 1,887,089; Nov. 8.
Frank, Harrison J. L., Highland Park, assignor to Bull Dog Electric Products Company, Detroit, Mich. Connecting device. 1,887,090; Nov. 8.
Frank, Harry. (See Hunt, Alfred J., assignor.)

Franklin Development Company. (See Oberhuber, William F., assignor.)
Freed, George C. (See Joyner, R. T., Bowles, and Freed.)
Freed, Joseph, San Francisco, Calif. Silencer for water-closet tanks. 1,887,295; Nov. 8.
Freeman, Benjamin W. (See Knight, George, assignor.)
Freeman, Henry W., Valley, Nebr. Track pulveriser for tractors. 1,887,348; Nov. 8.
Freiberg, Stanley B., Cincinnati, Ohio. Tray guide for filing cabinets. 1,886,800; Nov. 8.
Freiberg, Stanley B., assignor to The International Visible Systems Corporation, Cincinnati, Ohio. Temporary index structure. 1,886,801; Nov. 8.
Freiberg, Stanley B., assignor to The International Visible Systems Corporation, Cincinnati, Ohio. Division sheet. 1,886,802; Nov. 8.
French, Jeannette, assignor to Unique Manufacturing Company, Inc., New York, N. Y. Sweeper. 1,886,950; Nov. 8.
Fried. Krupp Aktiengesellschaft. (See Bohle, Karl, assignor.)
Friedman, William, New York, N. Y. Toilet accessory. 1,887,298; Nov. 8.
Friedman, William, New York, N. Y. Toilet accessory. 1,887,299; Nov. 8.
Frigidaire Corporation. (See Geiler, Frederick C., assignor.)
Frigidaire Corporation. (See Van Deventer, Harry R., assignor.)
Frisner, John, Denville, N. J. License plate holder and signal light. 1,887,037; Nov. 8.
Froelich, Oscar E. H. (See Ward, C. A., and Froelich.)
Frosted Foods Company. (See Hall, Bicknell, assignor.)
Fuerst, Edwin W., assignor to Owens-Illinois Glass Company, Toledo, Ohio. Bottle. Des. 88,225; Nov. 8.
Fulton Sylphon Company, The. (See Giesler, Jean V., assignor.)
Fye, William A., State College, assignor to McLanahan & Stone Corporation, Hollidaysburg, Pa. Washer log. 1,887,151; Nov. 8.
Gabli, Jacob, Lincoln Park, Mich. Differential drive mechanism. 1,886,668; Nov. 8.
Gabrielson, Carl, assignor to L C Smith & Corona Typewriters Inc., Syracuse, N. Y. Typewriting machine. 1,886,476; Nov. 8.
Gagnier, George E. (See Place, Bion C., assignor.)
Gallaher, Andrew J., St. Louis, Mo. Boiler. 1,886,387; Nov. 8.
Gallmeyer & Livingston Company. (See De Koning, Jacob, assignor.)
Gamel, Harvey W. (See Holmes, C. D., and Gamel.)
Gardner-Denver Company. (See Pearson, Gustav C., assignor.)
Gardner, George D., assignor to Barron Gray Packing Company, San Jose, Calif. Artichoke trimming and coring machine. 1,886,388; Nov. 8.
Garner, Kenneth C., Hamlet, N. C. Pants rack. 1,886,389; Nov. 8.
Garner, Kenneth C., Hamlet, N. C. Pants rack. 1,886,390; Nov. 8.
Gaudit. (See Martin, Jules.)
Gauger, Frank A., Milwaukee, Wis., assignor to Milwaukee Gas Specialty Company. Safety pilot light. 1,886,876; Nov. 8.
Gauvin, Henri, Ottawa, Ontario, Canada. Pipe bowl. 1,886,391; Nov. 8.
Gear Grinding Machine Company, The. (See Hansen, Gustof L., assignor.)
Geigy, J. R., S. A. (See Conzetti Achille, assignor.)
Geiler, Frederick C., Dayton, Ohio, assignor, by mesne assignments to Frigidaire Corporation. Tray for refrigerating units. Re18,650; Nov. 8.
Geisler, Theodore J., Portland, Oreg. Fruit jar opener and holder. 1,887,152; Nov. 8.
Gendel, Meyer. (See Shreiber, Bernard, assignor.)
General Aniline Works, Inc. (See Bayer, O., Hohenemser, and Larbig, assignors.)
General Aniline Works, Inc. (See Brunner, Arnold, assignor.)
General Aniline Works, Inc. (See Eckert, Wilhelm, assignor.)
General Aniline Works, Inc. (See Hess, Fritz, assignor.)
General Cable Corporation. (See Gledhill, Edward C., assignor.)
General Cable Corporation. (See Murphy, Roger N., assignor.)
General Electric Company. (See Beekman, Royce A., assignor.)
General Electric Company. (See Brophy, Gerald R., assignor.)
General Electric Company. (See Chapman, Verni J., assignor.)
General Electric Company. (See Hubbard, Horace S., assignor.)
General Electric Company. (See Moss, Sanford A., assignor.)
General Electric Company. (See Seeley, Harold T., assignor.)
General Electric Company. (See Winne, Harry A., assignor.)
General Electric X-Ray Corporation. (See Thelen, James S., assignor.)
General Motors Corporation. (See Tenney, Perry L., assignor.)
General Motors Corporation. (See Tenney, P. L., and Fidler, assignors.)
General Motors Corporation. (See Tenney, P. L., and Le Gros, assignors.)
General Motors Corporation. (See Young, Otto W., assignor.)
General Railway Signal Company. (See Howe, Winthrop K., assignor.)
General Railway Signal Company. (See Stephenson, James E., assignor.)
General Railway Signal Company. (See Taylor, Herbert B., assignor.)
Getchell, Benjamin E., assignor to The Trumbull Electric Manufacturing Company, Plainville, Conn. Electric switch. 1,886,477; Nov. 8.
Getz, William G., Hammond, Ind. Piano. 1,886,864; Nov. 8.
Gibson Refrigerator Company. (See Smith, Russell T., assignor.)
Giesler, Jean V., assignor to The Fulton Sylphon Company, Knoxville, Tenn. Tubular vessel and method of manufacture. 1,886,803; Nov. 8.
Gifford, Albert J., assignor to Leland-Gifford Company, Worcester, Mass. Multi-spindle tapper. 1,887,091; Nov. 8.
Gilchrist, Louis J. (See Domm, Charles, assignor.)
Giles, Harvey, Brooklyn, N. Y., assignor to Collier Advertising Service, Inc., New York, N. Y. Vending machine. 1,887,197; Nov. 8.
Giles, Harvey, Brooklyn, assignor to Collier Advertising Service, Inc., New York, N. Y. Vending machine. 1,887,198; Nov. 8.
Gillam, Earnest O., Fort Worth, Tex. Lubricator for motor vehicles and the like. 1,887,199; Nov. 8.
Gillespie, Paul E., St. Louis, Mo. Folding post card. 1,886,669; Nov. 8.
Gilpin, Garth G., Riverside, assignor to Union Metal Products Company, Chicago, Ill. Car construction. 1,886,392; Nov. 8.
Gisholt Machine Company. (See Godfriaux, Louis E., assignor.)
Glase, Howard B., Danielsville, Pa. Agricultural device. 1,887,092; Nov. 8.
Gledhill, Edward C., Galion, Ohio, assignor to General Cable Corporation, New York, N. Y. Cable laying plow. 1,886,511; Nov. 8.
Godfriaux, Louis E., assignor to Gisholt Machine Company, Madison, Wis. Pumping unit for hydraulic power transmission systems. 1,886,393; Nov. 8.
Goehring, Otto C., Elmhurst, N. Y. Combined fumeless and ventilated oven and broiler. 1,887,408; Nov. 8.
Goetz, Paul F., Lockport, Ill. Water heater. 1,886,670; Nov. 8.
Gold, Leo James, Los Angeles, Calif. Freezing tray. Des. 88,226; Nov. 8.
Goldschmidt, Th., A.-G. (See Stelzer, Ernst, assignor.)
Goldstein, Irving, Brooklyn, N. Y. Display box. 1,887,300; Nov. 8.
Gonsalves, Abelino, assignor of one-half to J. G. Alvares, Newark, N. J. Aeroplane construction. 1,886,478; Nov. 8.
Good Inventions Co. (See Good, John, assignor.)
Good, John, Garden City, assignor to Good Inventions Co., New York, N. Y. Automobile control. 1,886,672; Nov. 8.
Good, John, Garden City, assignor to Automatic Motor Stop and Start, Inc., New York, N. Y. Engine starting system. 1,887,238; Nov. 8.
Good, John, Garden City, assignor to Good Inventions Co., New York, N. Y. Engine oiling system. 1,887,262; Nov. 8.
Goodrich, B. F. Company, The. (See Cadden, Charles C., assignor.)
Goodrich, B. F., Company, The. (See Eakin, Willard D., assignor.)
Goodrich B. F. Company, The. (See Taylor, Bert S., assignor.)
Gordon, William S., San Antonio, Tex., assignor of one-fourth to M. Atkins and one-fourth to B. A. Green, Mound Bayou, Miss. Berth ladder for sleeping cars. 1,887,301; Nov. 8.
Goss, Byron C., Cleveland, Ohio, assignor to the Lake Erie Chemical Company. Dense opaque smoke and irritating fume and gas producing chemicals. 1,886,894; Nov. 8.
Goth, Max. (See Suder, H., and Goth.)
Gottschalk, John W., and S. W. Grater, Philadelphia, Pa.; said Grater assignor to said Gottschalk. Metallic bunch and making it. 1,886,671; Nov. 8.
Grand Rapids Fibre Cord Company. (See Sackner, Wade E., assignor.)
Grand Rapids Hardware Co. (See Seelbach, John F., assignor.)
Grant, Royal E., Yonkers, N. Y., assignor to Radio Corporation of America. Film sound recording. 1,886,540; Nov. 8.
Grater, Sylvester. (See Gottschalk, J. W., and Grater.)
Graul, William C., assignor, by mesne assignments, to Timken Silent Automatic Company, Detroit, Mich. Shaft bearing. 1,886,895; Nov. 8.
Graves, Samuel A., and N. Muslar, Worcester, Mass. Impelling device for games. 1,887,263; Nov. 8.
Graybill, Kenneth W., Villa Park, assignor, by mesne assignments, to Associated Electric Laboratories, Inc., Chicago, Ill. Relay circuit. 1,887,302; Nov. 8.

Gray Processes Corporation, The. (See Herthel, E. C., and Pelzer, assignors.)
Gray Telephone Pay Station Company, The. (See Long, George A., assignor.)
Green, Benjamin, et al. (See Gordon, William S., assignor.)
Green, Edward W., G. R. Unthank, and D. Dunn, assignors to The Buell Combustion Company Limited, London, England. Combustion of pulverized fuel. 1,887,015; Nov. 8.
Green, Russell J., Enid, Okla. Hydrator. 1,887,125; Nov. 8.
Greenan, William T., assignor of one-half to A. G. Reinhardt, New York, N. Y. Game apparatus. 1,886,479; Nov. 8.
Greenwell, Nevil, Bethlehem, Pa., assignor to Bethlehem Steel Company. Control mechanism for engines. 1,886,877; Nov. 8.
Greist, Hubert M., and H. F. Thurber, assignors to Greist Manufacturing Company, New Haven, Conn. Lamp. 1,886,804; Nov. 8.
Greist Manufacturing Company. (See Greist, H. M., and Thurber, assignors.)
Grenagle, James B., assignor, by mesne assignments, to W. W. Varney, Baltimore, Md. Reducing ores and obtaining new products thereof, separating the products and the purification of the separated products. 1,887,264; Nov. 8.
Griscom-Russell Company, The. (See Jones, Russell C., assignor.)
Grob, William C., Toledo, Ohio. Abrading machine. 1,886,878; Nov. 8.
Grobling, John, Detroit, Mich. Aeroplane attachment. 1,886,673; Nov. 8.
Grodsky, Isaac, Brooklyn, N. Y. Shoe polishing outfit. 1,886,541; Nov. 8.
Groff, Emory L. (See Hoffman, Charles T., assignor.)
Grohn, Henry P., assignor to McClave-Brooks Company, Scranton, Pa. Furnace. 1,887,153; Nov. 8.
Gross, Ralph A., assignor, by mesne assignments, to Simplex Paper Box Corporation, Lititz, Pa. Collapsible paper box. 1,886,879; Nov. 8.
Grossman, Edward, Chicago, Ill. Reminder clock. 1,887,303; Nov. 8.
Grossmann, Max, assignor to the Firm of Jenaer Glaswerk Schott & Gen, Jena, Germany. Distributor for extraction apparatus. 1,887,126; Nov. 8.
Guaranteed Parts, Inc. (See Livermore, Homer F., assignor.)
Guild, Lurelle, New York, N. Y., assignor to The Aluminum Cooking Utensil Company, New Kensington, Pa. Pitcher. Des. 88,227; Nov. 8.
Guild, Lurelle, New York, N. Y., and J. K. Matter, New Kensington, Pa., assignors to The Aluminum Cooking Utensil Company, New Kensington, Pa. Tea kettle. Des. 88,228; Nov. 8.
Guild, Waldo J., and A. P. Burns, assignors to The Heald Machine Company, Worcester, Mass. Grinding machine. 1,887,154; Nov. 8.
Guillaume, Henry C. (See Pratt, G. D., and Guillaume.)
Guttermuth, Friedrich, assignor to the Firm Carl Neithold A.-G., Frankfurt-on-the-Main, Germany. Photographic bellows camera for roll films. 1,886,951; Nov. 8.
Gyro Process Company. (See Harnsberger, Audley E., assignor.)
Hadley, Walter B. (See Corcoran, E. P., and Hadley.)
Hagebusch, Robert, Brooklyn, N. Y. Bottle closure with means for removing the paper covers. 1,886,805; Nov. 8.
Hagstrom, Carl J. and G. E. Hagstrom, Glen Cove, N. Y. Secret locking device. 1,887,016; Nov. 8.
Hagstrom, Gotthard E. (See Hagstrom, Carl J., and G. E.)
Hainlen, Adolf, Geislingen-Steige, Germany. Reinforcing thin-walled metal articles. 1,886,396; Nov. 8.
Haire, George W., Chicago, Ill., assignor to King Luminaire Company. Lantern. 1,886,542; Nov. 8.
Hall, Bicknell, Gloucester, Mass., assignor to Frosted Foods Company, Dover, Del. Refrigerating apparatus. 1,887,127; Nov. 8.
Hall Manufacturing Co. (See Rickey, Jesse J., assignor.)
Hallberg, Ernest L., and H. J. Ryan, Palms Station, Calif. Spreader for fertilizers, seeds, and the like. 1,887,017; Nov. 8.
Hallene, Clarence W. (See Reller, O. R., and Hallene.)
Haller, Robert, Riehen, near Basel, and A. Heckendorn, assignors to Society of Chemical Industry in Basle, Basel, Switzerland. Dyestuff containing cellulose residues and making same. 1,886,480; Nov. 8.
Hallerberg, Theodore W., assignor to Lubrication Devices Incorporated, Battle Creek, Mich. Pump for lubricating systems and the like. 1,886,397; Nov. 8.
Hamilton, Mabel L. (See Shierk, Dearell D., assignor.)
Hamm, William S., Elkhart, Ind., assignor to The Adlake Company, Chicago, Ill. Curtain roller end bracket. Des. 88,229; Nov. 8.
Hammond, William A., Yellow Springs, Ohio. Drying agent and manufacturing same. 1,887,349; Nov. 8.
Hammond, William C. (See Larson, Carl B., assignor.)
Hand, Leslie T., Brooklyn, N. Y. Mat. 1,887,200; Nov. 8.
Hanley, William, East Orange, assignor to Ferguson Brothers Manufacturing Company, Hoboken, N. J. Table structure. 1,886,806; Nov. 8.
Hansen Canning Machinery Corporation. (See Hansen, Oswald H., assignor.)
Hansen, Gustof L., assignor to The Gear Grinding Machine Company, Detroit, Mich. Apparatus for testing gear teeth. 1,886,543; Nov. 8.
Hansen, Oswald H., assignor to Hansen Canning Machinery Corporation, Cedarburg, Wis. Quality grader. 1,887,239; Nov. 8.
Hansen, Soren, Berwyn, Alberta, Canada. Harrow tooth. 1,887,409; Nov. 8.
Hanson, John R., Los Angeles, Calif., assignor of one-fourth to T. T. Word, Houston, Tex. Transmission. 1,887,304; Nov. 8.
Hanson, Walter M., assignor to American Seating Company, Grand Rapids, Mich. Theater chair. 1,887,240; Nov. 8.
Hare, René G., Ardmore, Pa. Electric heating unit. 1,886,880; Nov. 8.
Harley-Davidson Motor Co. (See Thonger, John R., assignor.)
Harnett, Lewis D., and C. N. O'Day, assignor to The Buckeye Blower Company, Columbus, Ohio. Radiator. 1,887,093; Nov. 8.
Harnsberger, Audley E., assignor to The Pure Oil Company, Chicago, Ill. Treating hydrocarbon oils. 1,887,018; Nov. 8.
Harnsberger, Audley E., Chicago, Ill., assignor to Gyro Process Company, Detroit, Mich. Tubular heater. 1,887,155; Nov. 8.
Harrell, Arthur C., Pensacola, Fla. Automatic train pipe coupling. 1,886,398; Nov. 8.
Harris, Charles K., Kansas City, Mo. Saw set. 1,887,350; Nov. 8.
Hart, James D., Staten Island, N. Y. Resilient tire. 1,887,019; Nov. 8.
Hartmann, Max, H. Kaegi, and H. Isler, assignors to the Firm of Society of Chemical Industry in Basle, Basel, Switzerland. Unilaterally acylated diamines and making same. 1,886,481; Nov. 8.
Hartshorn, Stewart, Company. (See Hartshorn, Stewart, assignor.)
Hartshorn, Stewart, Short Hills, assignor to Stewart Hartshorn Company, East Newark, N. J. Shade fixture. 1,886,674; Nov. 8.
Hartt Boot and Shoe Company Limited, The. (See Reid, John A., assignor.)
Hassensall, Louis W., Toledo, Ohio. Water cooler. 1,887,020; Nov. 8.
Hause, George W., Philadelphia, Pa. Game apparatus. 1,886,399; Nov. 8.
Haviland, Daniel, Los Angeles, Calif. Adjustable lock. 1,887,094; Nov. 8.
Hayes, Cecil, Streetly, E. W. Madge and F. H. Lane, assignors to Dunlop Rubber Company Limited, Birmingham, England. Manufacture of goods of rubber or similar material. 1,887,201; Nov. 8.
Hayman, Eber J., Parkersburg, W. Va. Locking sheet metal structure. 1,886,881; Nov. 8.
Haynes Stellite Company. (See Metzger, Claude W., assignor.)
Heald Machine Company, The. (See Guild, W. J., and Burns, assignors.)
Heath, Forrest A., Upper Montclair, N. J. Oil burning furnace. 1,886,675; Nov. 8.
Heckendorn, Alphonse. (See Haller, R., and Heckendorn.)
Heidelberg, Victor. (See Rubinstein, J., Heidelberg, Uhlhorn, and Dahners.)
Heidloff, Joseph R., Detroit, Mich., assignor to Hydraulic Brake Company, Los Angeles, Calif. Hose coupling assembling machine. 1,886,807; Nov. 8.
Helberg, Edwin W., Chicago, Ill. Anchor for hangers. 1,887,455; Nov. 8.
Helmore, William, and A. Swan, South Farnborough, England. Device for use in association with gases or gas-liquid mixtures, as a flame or explosion trap, a mixer, a flow controller, a silencer, or a cooler. 1,887,305; Nov. 8.
Hemp, Paul L., Winona, Minn. Massaging device. 1,886,544; Nov. 8.
Hemscheidt, Helmut, assignor to the Firm of Carl Zeiss, Jena, Germany. Device for fine focussing of microscope tubes. 1,887,095; Nov. 8.
Henderson, William A., Nunhead, London, England. Reproducing sound from records tracked by a stylus. 1,887,021; Nov. 8.
Hendrickson, Robert O., assignor to J. I. Case Company, Racine, Wis. Tractor. 1,887,351; Nov. 8.
Hennesy, Gerald C., Washington, D. C. Electric machine. 1,887,055; Nov. 8.
Hercules Powder Company. (See Crater, Willard de C., assignor.)
Hercules Powder Company. (See Duffy, Bert J., assignor)
Hercules Powder Company. (See Humphrey, Irvin W., assignor.)
Hercules Powder Company. (See Rankin, Lanning P., assignor.)
Hercules Powder Company. (See Smith, Lee T., assignor.)
Herman, Joseph, Westfield, N. J., assignor to American Telephone and Telegraph Company. Bias control in telegraph communication. 1,886,808; Nov. 8.

Herthel, Eugene, Chicago, Ill., and H. L. Pelzer, Highland, Ind., assignors, by mesne assigments, to The Gray Processes Corporation, Newark, N. J. Cracking hydrocarbons. 1,887,128; Nov. 8.
Hess, Albert Laurance, assignor to Cyclestow Corporation, Ltd., Los Angeles, Calif. Tow-bar for cycles. 1,887,202; Nov. 8.
Hess, Fritz, Frankfort-on-the-Main-Hochst, Germany, assignor to General Aniline Works, Inc., New York, N. Y. Arylated safranines and preparing them. 1,886,809; Nov. 8.
Hessle, Eric T., Lockport, assignor to Mid-West Chemical Company, Chicago, Ill. Insecticide and making the same. 1,887,156; Nov. 8.
Heuacker, Frederick W., Miami, Fla. Fixture, trap and drain pipe, stoppage preventer. 1,886,676; Nov. 8.
Heuertz, Louis M., et al. (See Roberts, Lee R., assignor.)
Hibberd, Frank H., jr. (See Monsch, Robert, and Monsch.)
Higgins, James, and J. L. Schults, Jackson, Mich. Valve structure. 1,886,677; Nov. 8.
Hightower, Albert W., Fresno, Calif. Wire splicing machine. 1,887,375; Nov. 8.
Hirsch, Homer C., El Paso, Tex. Continuous filtering apparatus. 1,887,129; Nov. 8.
Hirsh, Fred, assignor to Adjusta Company, New York, N. Y. Buckle. 1,886,545; Nov. 8.
Hobbs, James C., Painesville, Ohio. Tube for furnaces. 1,887,130; Nov. 8.
Hocken, Barry, Fowey, England. Indicating and controlling apparatus. 1,886,482; Nov. 8.
Hodeaux, Walter L., Palm Beach, Fla. Power tool. 1,886,952; Nov. 8.
Hodge, Robert J., assignor to American Buckle Company, West Haven, Conn. Slide buckle. 1,887,096; Nov. 8.
Hoffman, Ambrose L. (See Hoffman, Malcolm E. and A. L.)
Hoffman, Charles T., assignor of one-half to E. L. Groff, Washington, D. C. Automatically defrosting refrigerating units. 1,886,953; Nov. 8.
Hoffman, John R., assignor to Madison-Knapp Corporation, Madison, Wis. Governor for fluid motors. 1,886,546; Nov. 8.
Hoffmann, Josef, Oerlinghausen, Germany. Design forming apparatus for woven fabrics and the like. 1,886,547; Nov. 8.
Hoffman, Malcolm E., Minneapolis, and A. L. Hoffman, St. Paul, Minn. Surgical device. 1,887,022; Nov. 8.
Hogg, Francis, Wesleyville, Pa., assignor to The Standard Stoker Company, Incorporated. Locomotive tender. 1,886 678; Nov. 8.
Hohenemser, Wilhelm. (See Bayer, O., Hohenemser, and Larbig.)
Hoke, Hampton W., New York, N. Y. Playing cards. 1,887,203; Nov. 8.
Hoke, William E., Baltimore, Md., assignor to Dardelet Threadlock Corporation, New York, N. Y. Screw thread gauge. 1,887,131; Nov. 8.
Holbrook, Joseph W., Buffalo, N. Y. Display cabinet. Des. 88,230; Nov. 8.
Hollingsworth, Vernard L., Indianapolis, Ind. Solution feed for boilers. 1,886,679; Nov. 8.
Holmes, Charles D., Long Beach, and H. W. Gamel, Los Angeles, Calif. Deodorizing device. 1,886,680; Nov. 8.
Holt, Albert C., Mangham, La. Kiddie propelled merry-go-round. 1,887,410; Nov. 8.
Holtzer-Cabot Electric Company, The. (See Kennedy, Carlton L., assignor.)
Hols, Robert, Cincinnati, Ohio. Construction material and construction. 1,886,810; Nov. 8.
Hooper, Henry S., Old Town, Me., assignor to Penobscot Chemical Fibre Company. Process for producing fiber or pulp. 1,887,241; Nov. 8.
Hoover Steel Ball Company. (See Pew, Thomas C., assignor.)
Hope, Earl W., assignor to The A. I. Root Company, Medina, Ohio. Honey extractor. 1,886,954; Nov. 8.
Horne, George H., Glendale, and M. A. Lissman, assignors to International Precipitation Company, Los Angeles, Calif. Treating gases. 1,886,548; Nov. 8.
Horstman, John H., Dayton, assignor, by mesne assignments, to The American Fork & Hoe Company, Cleveland, Ohio. Yard broom. 1,887,480; Nov. 8.
Horton, Erwin C. (See Hueber, H., and Horton.)
Houghton, William H., Los Angeles, Calif. Building construction. 1,887,132; Nov. 8.
Houseman, Harold E. (See Bristow, P. W., and Houseman.)
Howe, Winthrop K., assignor to General Railway Signal Company, Rochester, N. Y. Switch machine for railroads. 1,886,955; Nov. 8.
Howell, Roy C., Lakewood, and F. A. Fleming, Cleveland, Ohio. Tire display stand. 1,886,549; Nov. 8.
Huber, Georg, Langnau, Switzerland. Holder for pants. 1,886,882; Nov. 8.
Hubbard, Horace S., Pittsfield, Mass., assignor to General Electric Company. Cable testing equipment. 1,886,682; Nov. 8.
Hubbard, Oscar S., Farmland, Inc. Wrecking-truck. 1,886,681; Nov. 8.
Huck, Louis C., New York, N. Y. Brake. 1,886,811; Nov. 8.
Huddle, Edwin F., Rockford, Ill., assignor to J. I. Case Company, Racine, Wis. Mower. 1,887,352; Nov. 8.
Hueber, Henry, assignor to Trico Products Corporation, Buffalo, N. Y. Windshield cleaner. 1,886,956; Nov. 8.
Hueber, Henry, Buffalo, and E. C. Horton, Hamburg, assignors to Trico Products Corporation, Buffalo, N. Y. Combined windshield and cleaner structure. 1,886,613; Nov. 8.
Hueglin, Herman C., assignor to Federal Merchandise Company, Chicago, Ill. Ventilating means. 1,886,683; Nov. 8.
Huempfner, Ferdinand W., Oak Park, Ill., assignor to Mid-States Gummed Paper Co. Gumming paper. 1,886,550; Nov. 8.
Huff, Fred H., Louisville, Nebr. Revolving sheave fairlead. 1,887,306; Nov. 8.
Huff, Lyman C., assignor to Universal Oil Products Company, Chicago, Ill. Method and apparatus for dephlegmation. 1,886,957; Nov. 8.
Hulburt, Edward O., and W. H. Crew, Washington, D. C. Light control circuit. 1,886,818; Nov. 8.
Hulett, Mason, New York, N. Y., assignor, by mesne assignments, to Burdick Corporation, Milton, Wis. Mercury vapor lamp. 1,886,400; Nov. 8.
Humphrey, Irvin W., Wharton, N. J., assignor to Hercules Powder Company, Wilmington, Del. Refining rosin. 1,887,097; Nov. 8.
Humphrey, Irvin W., Wharton, N. J., assignor to Hercules Powder Company, Wilmington, Del. Refining rosin. 1,887,157; Nov. 8.
Hund, August, Bethesda, Md., assignor, by mesne assignments, to Wired Radio, Inc., New York, N. Y. Piezo electric crystal apparatus. 1,886,814; Nov. 8.
Hund, August, Bethesda, Md. Method and apparatus for generating electrical oscillations. 1,886,815; Nov. 8.
Hunt, Alfred J., Twyford, assignor to Harry Frank, London, England. Machine for delivering change for coins inserted therein. 1,886,684; Nov. 8.
Hunt, Charles, Washington, D. C. Launching machine. 1,887,056; Nov. 8.
Hunsiker, Paul, Hamilton Beach, assignor to Potdevin Machine Company, Brooklyn, N. Y. Bag stacking apparatus. 1,887,023; Nov. 8.
Hurst, George P., assignor of one-half to W. P. Baken, Rapid City, S. Dak. Knife sharpener. 1,886,483; Nov. 8.
Hutchison, Thomas S., Chicago, Ill. Game. 1,887,353; Nov. 8.
Hydraulic Brake Company. (See Bowen, Herbert C., assignor.)
Hydraulic Brake Company. (See Heidloff, Joseph R., assignor.)
I. G. Farbenindustrie Aktiengesellschaft. (See Kayser, Erich, assignor.)
I. G. Farbenindustrie Aktiengesellschaft. (See Vierling, Karl, assignor.)
Ideal Permanent Wave Products, Inc. (See Pfortner, Arthur, assignor.)
Ilford Limited. (See Rich, H. C., and Storr, assignors.)
Imperial Chemical Industries Ltd. (See Fairweather, D. A. W., and Thomas, assignors.)
Imperial Machine Company. (See Peffer, Alrid B., assignor.)
Industrial Development Corporation. (See Wilkins, Richard A., assignor.)
Ingersoll-Rand Company. (See Bancel, Paul A., assignor.)
International Combustion Engineering Corporation. (See De Baufre, William L., assignor.)
International Combustion Engineering Corporatio. (See Siegerist, Walter, assignor.)
International Motor Company. (See Bohlen, Charles, jr., assignor.)
International Motor Company. (See Manville, Keith B., assignor.)
International Motor Company. (See Robbins, Azor D., assignor.)
International Nickel Company. (See Peek, R. L., and Knittel, assignors.)
International Precipitation Company. (See Horne, G. H., and Lissman, assignors.)
International-Stacey Corporation. (See McEwen, John D., assignor.)
International Time Recording Company of New York. (See Thomas, Felix, assignor.)
International Visible Systems Corporation, The. (See Freiberg, Stanley B., assignor.)
Ireland, Thomas H., Rockville Center, N. Y. Heater element. 1,887,205; Nov. 8.
Irgens, Finn T., Wauwatosa, assignor to Outboard Motors Corporation, Milwaukee, Wis. Charge controlling device for internal combustion engines. 1,887,204; Nov. 8.
Isherwood, Harold, assignor to The Autokal Syndicate Limited, London, England. Calculating machine. 1,886,685; Nov. 8.
Isler, Hans. (See Hartmann, M., Kaegi, and Isler.)
Ittem, Edward, Brooklyn, N. Y. Scale scoop. 1,886,958; Nov. 8.
Ivers, Henry T., et al. (See Casey, William B., assignor.)
Ives, Clifford E., Wilmette, assignor to United States Gypsum Company, Chicago, Ill. Scoring and trimming machine. 1,887,307; Nov. 8.
Jackson, Crowill. Chicago, Ill. Apparatus for molding pipe or conduits. 1,886,401; Nov. 8.
Jackson, Lonnie M., Columbus, Ohio. Separating fluids of different specific gravities. 1 886,686; Nov. 8.

Jacobs, Charles T., Chatham, N. J., assignor to Miessner Inventions, Inc. Method and apparatus for the production of music. 1,886,687; Nov. 8.

Jacobson, Jacob, Chicago, Ill. Cleaning and polishing mop. 1,886,688; Nov. 8.

James, Francis F., Philadelphia, Pa., assignor, by mesne assignments, to Trayer Bolt Company, Inc., Elmira, N. Y. Automatically adjustable connection for shackle bolts. 1,887,133; Nov. 8.

James, Oliver M., assignor to Dayton Veneer & Lumber Mills, Dayton, Tenn. Ventilated basket. 1,887,057; Nov. 8.

Janssen, Earnest, Herrin, Ill. Indoor plant starter. 1,886,690; Nov. 8.

Jansson, Bennett G., Kittery, Me., assignor, by mesne assignments, to Emerson Apparatus Company, Melrose Highlands, Mass. Safety razor. 1,886,689; Nov. 8.

Jantzen Knitting Mills. (See Monroe, Mayer G., assignor.)

Jeerson, Glenn V., and E. G. Little, Wilkinsburg, assignors to The Union Switch & Signal Company, Swissvale, Pa. Railway switch operating apparatus. 1,887,376; Nov. 8.

Jenaer Glaswerk Schott & Gen. (See Grossmann, Max, assignor.)

Jensen, Peter L., La Grange, assignor to Jensen Radio Manufacturing Co., Chicago, Ill. Magnetic sound reproducer. 1,886,816; Nov. 8.

Jensen Radio Manufacturing Co. (See Jensen, Peter L., assignor.)

Jermář, František, Opava, Czechoslovakia. Weir shutter. 1,887,265; Nov. 8.

Jessup, George L., Woodland, Calif. Trigger guard. 1,887,308; Nov. 8.

Johancen, Thomas, Linthicum Heights, and Edward E. Kehoe, deceased; Catherine Kehoe administratrix, Baltimore, Md., assignors to the Monomelt Company. Truck for handling rolls of newsprint paper. 1,887,134; Nov. 8.

Johnson, Bert, et al. (See Zech, Edward E., assignor.)

Johnson & Nierk, Inc. (See Wierk, Frederick, assignor.)

Johnson Laboratories, Inc. (See Polydoroff, Wladimir J., assignor.)

Johnson, Richard B., Chicago, Ill. Aircraft construction. 1,887,411; Nov. 8.

Johnson, Richard J., assignor of one-half to W. Johnson, Langdon, Minn. Lock. 1,886,402; Nov. 8.

Johnson, Theodore W., assignor to Deere & Company, Moline, Ill. Cultivator. 1,886,691; Nov. 8.

Johnson, Vivion A., assignor to Supreme Instruments Corporation, Greenwood, Miss. Multiple contact plug. 1,886,959; Nov. 8.

Johnson, Wallace C., Morristown, N. J., assignor to The Plykrome Corporation, New York, N. Y. Manufacture of composite metal sheets. 1,886,615; Nov. 8.

Johnson, Walter. (See Johnson, Richard J., assignor.)

Johnson, Walter S. Calculating machine. 1,886,883; Nov. 8.

Johnston, Clarence L., Niagara Falls, N. Y., assignor to American Sales Book Company, Limited, Toronto, Ontario, Canada. Dry plate process printing. 1,886,817; Nov. 8.

Jones, John L., Weymouth, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Dust separator. 1,886,884; Nov. 8.

Jones, Ralph R., Evanston, Ill. Helmet. 1,886,551; Nov. 8.

Jones, Russell C., Bronxville, assignor to The Griscom-Russell Company, New York, N. Y. Heat exchanger. 1,886,403; Nov. 8.

Jones, William L. M., Winnipeg, Manitoba, Canada. Harvesting machine. 1,887,158; Nov. 8.

Joplin, William A., Norfolk Downs, assignor to Pneumatic Scale Corporation, Limited, Quincy, Mass. Bag closing and fastening machine. 1,886,552; Nov. 8.

Jordan, O. F., Company. (See Protzeller, Harry W., assignor.)

Joyner, Robert T., L. B. Bowles, and G. C. Freed, Hickory, Tenn., assignors, by mesne assignments, to Du Pont Rayon Company, New York, N. Y. Thread guide. 1,887,024; Nov. 8.

Judkins, Orlo W., et al. (See Zech, Edward E., assignor.)

Kaegi, Hans. (See Hartmann, M., Kaegi, and Isler.)

Kalb, Walther, Leipzig, Germany, assignor, by mesne assignments, to American Tube and Cap Corporation. Tube and like container. Re18,649; Nov. 8.

Kapitza, Pierre, and G. V. Lomonossoff, Cambridge, England. Power transmission means. 1,886,692; Nov. 8.

Kapner, Charles, Bellaire, Ohio. Drip coffee maker. 1,887,354; Nov. 8.

Karlson, August, Warren, Pa. Extensible table. 1,887,266; Nov. 8.

Karr, Francis, Holland, Mich. Spring assembly. 1,887,058; Nov. 8.

Karstrom, Charles E., Barrington, assignor to Safety Mining Company, Chicago, Ill. Blasting method and apparatus. 1,886,960; Nov. 8.

Katzman, Herbert, assignor to William Wilhelm Co., Inc., New York, N. Y. Textile fabric or similar article. Des. 88,231; Nov. 8.

Kaufmann, Antoine A., Geneva, Switzerland. Separation of alcohols and phenols from mixtures. 1,886,885; Nov. 8.

Kayser, Erich, Frankfort-on-the-Main-Griesheim, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Bleaching vegetable fibrous substances. 1,887,412; Nov. 8.

Kearney, James R., Corporation. (See Menefee, Elmer, assignor.)

Kearney & Trecker Corporation. (See Parsons, Fred A., assignor.)

Kearney & Trecker Corporation. (See Trecker, Theodore, assignor.)

Keenan, John M., Toronto, Ontario, Canada. Making color-printing plates. 1,886,556; Nov. 8.

Kegresse, Adolphe, Courbevoie, France. Coupling two vehicles. 1,886,693; Nov. 8.

Kehoe, Catherine, administratrix. (See Johancen, T., and Kehoe.)

Kehoe, Edward E. (See Johancen, T., and Kehoe.)

Keilhamer, Mary E. (See Keilhamer, Michael H. & M. E.)

Keilhamer, Michael H. and M. E., Anacortes, Wash. Hair curler. 1,886,887; Nov. 8.

Kelley, Kirkland, Houston, Tex., and S. J. Perkins, Sulphur, La. Method of and apparatus for the recovery of matter from wells. 1,886,886; Nov. 8.

Kellogg, John L. (See Corcoran, E. P., and Hadley, assignors.)

Kelly, James A., Philadelphia, Pa. Newspaper or like vending machine. 1,886,694; Nov. 8.

Kelly, Loomis L., deceased, Roanoke, Va., by W. M. Brodie administrator, Blacksburg, Va. Exhaust apparatus for locomotive roundhouses. 1,887,025; Nov. 8.

Kendrick, Noah B., Mount Holly, N. C. Burning brick. 1,887,206; Nov. 8.

Kennedy, Carlton L., Braintree, assignor to The Holtzer-Cabot Electric Company, Roxbury, Mass. Centrifugal switch for motors. 1,887,267; Nov. 8.

Kenosha Die & Stamping Works (See Schmidt, Lester C., assignor.)

Kercher, Arthur J., Berkeley, Calif. Refrigerating apparatus. 1,886,553; Nov. 8.

Kern, Walter. (See Kuhn, R., and Kern.)

Kesling, Elmer G., Bloomfield, Mo. Speed changing mechanism. 1,886,695; Nov. 8.

Keystone Adjustable Cap Corporation. (See Wagenfeld, Harry, assignor.)

Kinatome Patents Corporation. (See Cowan, Harrison J., assignor.)

Kincannon, Leo T., Shorewood, Wis., assignor to Electra Corporation, Chicago, Ill. Disk changer and reverser for automatic musical instruments. 1,887,309; Nov. 8.

King, John H., and J. A. Allison, Indianapolis, Ind. Cushion structure. 1,887,310; Nov. 8.

King Luminaire Company. (See Haire, George W., assignor.)

Kipp, Ralph P., Ossining, N. Y. Blood transfusion device. 1,886,818; Nov. 8.

Kipple, William F., Portland, Oreg. Hand grip balanced hollow tile. 1,886,404; Nov. 8.

Kirby, James B., West Richfield, Ohio. Laundry machine. 1,886,888; Nov. 8.

Klein, Frederick, College Point, N. Y., assignor to Sipp-Eastwood Corporation, Paterson, N. J. Doubling and twisting machine. 1,887,207; Nov. 8.

Klein, John, Chicago, Ill. Piston cleaning tool. 1,886,696; Nov. 8.

Kline, Virgil C., Floral Park, N. Y. Toy electrical road vehicle. 1,886,484; Nov. 8.

Klopp, Friedrich, Wald, Germany. Apparatus for hardening the flanks of spindle and worm threads. 1,887,098; Nov. 8.

Knape, Joseph J., assignor to Knape & Vogt Manufacturing Company, Grand Rapids, Mich. Shoe rack. 1,886,961; Nov. 8.

Knape & Vogt Manufacturing Company. (See Knape, Joseph J., assignor.)

Knapp Leland G., assignor to Montgomery Ward & Company, Inc., Chicago, Ill. Automatic ignition control for explosive engines. 1,887,268; Nov. 8.

Knauer, John H., assignor to R. G. Le Brosi, New York, N. Y. Glass tile. 1,887,135; Nov. 8.

Knauss, Frank B., Dillon, Kans. Dripless sirup pitcher. 1,886,405; Nov. 8.

Kniffin, Charles D., Middletown, N. Y. Sanitary garbage can liner. 1,886,406; Nov. 8.

Knight, George, Brockton, Mass., assignor to B. W. Freeman, Cincinnati, Ohio. Perforating machine. 1,886,554; Nov. 8.

Knight, Peter L., Wilmington, N. C. Article hanger. 1,887,159; Nov. 8.

Knittel, Carl A. (See Peek, R. L., and Knittel.)

Knittle, Robert H., Port Carbon, Pa. Support and display rack for roll material. 1,887,269; Nov. 8.

Kobak, Felbus, assignor to The Metro Chocolate Co. Inc., Brooklyn, N. Y. Lollypop cluster or similar article. Des. 88,232; Nov. 8.

Koeble, Albert, Irvington, N. J., assignor to The United States Printing and Lithograph Company, Brooklyn, N. Y. Illuminated display. 1,886,607; Nov. 8.

Koeppen, John F., Marion, Ind. Bottle. Des. 88,233; Nov. 8.

Kohn, Koby, assignor to Chatham Specialty Corporation, New York, N. Y. Pyrotechnic device. 1,886,407; Nov. 8.

Kohr, Elton D., York, Pa. Pump. 1,887,311; Nov. 8.

Konetsky, John R., San Francisco, Calif. Mounting vehicle frames. 1,886,557; Nov. 8.

Koppel Industrial Car and Equipment Company. (See Anderson, John P., assignor.)

Koppers Company of Delaware, The. (See Totzek, Friedrich, assignor.)

Kraft, Paul, assignor to the Firm Carl Zeiss, Jena, Germany. Device providing differently colored illumination for microscopic objects. 1,887,099; Nov. 8.

Krajac, Miloš, assignor of one-half to Soš Lapcevich, McDonald, Ohio. Electric beater. Des. 88,224; Nov. 8.

Kranick, Frank N. G., assignor to J. I. Case Company, Racine, Wis. Tractor. 1,887,355; Nov. 8.

Kraus, Charles, and A. J. Cusick, New Orleans, La. Crustacean trap. 1,887,059; Nov. 8.

Krause, Paul, assignor of one-third to H. Taylor and one-third to R. H. Posner, West Babylon, Long Island, N. Y. Liquid metering and registering mechanism. 1,886,555; Nov. 8.

Kreidler, Earl M. (See Weymouth, H. G., and Kreidler.)

Krieg, Anthony W., Brooklyn, N. Y., assignor, by direct and mesne assignments, of one-half to Cypress Novelty Corporation and one-half to N. D. Q. Specialty Corporation. Shipping and display package for birthday cake candle holders. 1,887,270; Nov. 8.

Krueger, Charles E., St. Paul, Minn. Battery water level indicator. 1,887,312; Nov. 8.

Krupp, Fred H., South Gate, assignor of three-fourths to G. A. MacDonald, Los Angeles, and one-fourth to L. R. Finke, Huntington Park, Calif. Mixing and diverting valve. 1,886,889; Nov. 8.

Kuchenbrod, Christian. (See Emmons, J. V., and Kuchenbrod.)

Kuhn, Frank, and L. H. Thomas, assignors to American Electrical Heater Company, Detroit, Mich. Toaster. 1,886,558; Nov. 8.

Kuhn, Richard, Zurich, and W. Kern, Sissach, assignors to the Firm: Society of Chemical Industry in Basle, Basel, Switzerland. Making dyestuffs of the polymethine series and new intermediate products therefor. 1,886,485; Nov. 8.

Kusell, Charles E. (See Ralston, O. C., and Kusell.)

Lach, Frederick, East Orange, N. J., assignor to Du Pont Viscoloid Company, Wilmington, Del. Polishing. 1,887 026; Nov. 8.

LaCroix, Pierre, Bauce-Flawinne, Belgium. Hydropneumatic suspension and shock-absorbing device for vehicles. 1,887,060; Nov. 8.

Lake Erie Chemical Company, The. (See Goss, Byron C., assignor.)

Lake, George B., New Brunswick, N. J. Milk bottle. 1,886,698; Nov. 8.

Lampman, Howard A. (See Leuchner, Karl, assignor.)

Lancaster, Jackson G. (See Denton, Joe K.)

Landis & Gyr, A.-G. (See Vannini, Philipp, assignor.)

Lane, Frederick H. (See Hayes, C., Magg, and Lane.)

Langbein, Jacob F., Hamden, assignor to The New Haven Clock Company, New Haven, Conn. Clock. 1,887,356; Nov. 8.

Langlands, George, et al. (See Zech, Edward E., assignor.)

Lapcevich, Soš. (See Krajac, Miloš, assignor.)

Larbig, Karl. (See Bayer, O., Hohenemser, and Larbig.)

Larkin, Lester U., Atlanta, Ga. Refrigerated show case. 1,887,313; Nov. 8.

Larkin, Walter, Norristown, Pa., assignor to Fidelity Machine Company, Wilmington, Del. Knitting machine. 1,887,418; Nov. 8.

LaRoche, Heinrich, Zollikerberg, Switzerland. Building construction. 1,886,962; Nov. 8.

Larson, Carl B., Maplewood, N. J., assignor to W. C. Hammond, Kalamazoo, Mich. Universal automatic grinder, polisher, or buffer. 1,886,699; Nov. 8.

Larsolere, Charles F., Fond du Lac, Wis. Folding landing net. 1,886,559; Nov. 8.

Lavarack, Frederick C., Montclair, N. J., and W. B. Lavarack, Pine Bush, assignors to Railroad Accessories Corporation, New York, N. Y. Trunking riser connecter. 1,887,272; Nov. 8.

Lavarack, William H. B. (See Lavarack, F. C. and W. H. B.)

Lavarack, William H. B., Pine Bush, assignor to Railroad Accessories Corporation, New York, N. Y. Trunking riser connecter. 1,887,271; Nov. 8.

Law, Otis E., Brookfield, assignor, by direct and mesne assignments, to Allen Free-Wheeling Corporation, Chicago, Ill. Differential power transmission mechanism. 1,887,208; Nov. 8.

Lawton, Glenn C., Phoenix, Ariz. Double break-double throw electrical switch and single break-double throw switch. 1,887,027; Nov. 8.

LeBrosi, Rene G. (See Knauer, John H., assignor.)

Ledbetter, Roy H., Fairfield, Ala. Fin nosed tuyère. 1,887,029; Nov. 8.

Lederer Manufacturing Company. (See Normandy, Willard D., assignor.)

Lee, John E., Dallas, assignor to Wonder Hoe Company, Fort Worth, Tex. Weeding tool. 1,886,560; Nov. 8.

Lee, Leif, Youngstown, Ohio. Pickling apparatus. 1,886,819; Nov. 8.

Lee, Robert Edward, Fort Worth, Tex. Drilling tool for lateral and angular drilling. 1,886,820; Nov. 8.

Leeds & Northrup Company. (See Schofield, William R., jr., assignor.)

Lefever, Charles F., assignor to Daisy Manufacturing Company, Plymouth, Mich. Gun. 1,886,561; Nov. 8.

Lefever, Charles F., assignor to Daisy Manufacturing Company, Plymouth, Mich. Target. 1,886,562; Nov. 8.

Le Ganger, Woodward B., Boston, Mass. Toy mold. 1,886,496; Nov. 8.

LeGette, Marvin A., Brooklyn, N. Y. Safety stop for conveyers. 1,887,456; Nov. 8.

Le Gros, Le Roy F. (See Tenney, P. L., and Le Gros.)

Lehner, Charles, Long Island City, N. Y., assignor to Bigelow Sanford Carpet Co., Inc. Carpet. Des. 88,225; Nov. 8.

Lehon Company, The. (See Moone, Albert E. F., assignor.)

Lehrecke, Hans, assignor to Deutsche Gold & Silber Scheideanstalt, vormals Roessler, Frankfort-on-the-Main, Germany. Manufacture of a mixture of hydrocyanic acid with cyanogen chloride. 1,886,487; Nov. 8.

Leland-Gifford Company. (See Gifford, Albert J., assignor.)

Lemke, Norma K., and Z. C. Plass, Chicago, Ill. Sanitary combing and make-up jacket. 1,887,025; Nov. 8.

Lempco Products, Inc. (See Blasek, John Y., assignor.)

Leominster Tool Co. (See Caron, Ludger, J., assignor.)

LeRoy, Edmond L., Bridgeton, N. J. Sheet glass drawing apparatus. 1,887,414; Nov. 8.

Leuchner, Karl, assignor to H. A. Lampman, Cleveland, Ohio. Holder for holding silverware while the same is being polished. 1,886,700; Nov. 8.

Levi, Tullio G. (See Bruni, G., and Levi.)

Levine, Abraham, Elisabeth, N. J., assignor to Presto Lock Corporation, New York, N. Y. Hanger bracket for suitcases. 1,887,314; Nov. 8.

Lewis Differential Company. (See Sampson, F. W., and Tatter, assignors.)

Lewis, Edward Z., Chicago, Ill., assignor to L C Smith & Corona Typewriters Inc., New York, N. Y. Typewriting long strips of printed forms. 1,886,821; Nov. 8.

Lewis, Lloyd V., Edgewood, assignor to The Union Switch & Signal Company, Swissvale, Pa. Circuit controller. 1,887,278; Nov. 8.

Libbey Glass Manufacturing Company, The. (See Nash, Arthur D., assignor.)

Lindemann, A. J., & Hoverson Company. (See Lindemann, Albert J., W. C., and Schmidt, assignors.)

Lindemann, Albert J., W. C. Lindemann, and A. T. Schmidt, assignors to A. J. Lindemann & Hoverson Company, Milwaukee, Wis. Thermostatic generator and control device. 1,886,701; Nov. 8.

Lindemann, Walter C. (See Lindemann, Albert J., W. C., and Schmidt.)

Lindgren, Hans O., Appelviken, Sweden, assignor to The De Laval Separator Company, New York, N. Y. Elastic bearing for separators. 1,887,315; Nov. 8.

Lindgren, Hans O., Appelviken, Sweden, assignor to The De Laval Separator Company, New York, N. Y. Centrifugal separator. 1,887,476; Nov. 8.

Lindley, Thomas H. (See Doody, Frederick C., assignor.)

Lissman, Marcel A. (See Horne, G. H., and Lissman.)

Little, Edwin G. (See Jefferson, G. V., and Little.)

Little, John Q., Whittier, Calif., assignor to Baker Oil Tools, Inc., Huntington Park, Calif. Casing shoe and valve. Re18,651; Nov. 8.

Littman, Joseph W., New York, N. Y. Display device. 1,887,100; Nov. 8.

Litty, Paul, Leipzig, Germany. Controlling device for long lengths of spinning material having an appreciable width. 1,886,702; Nov. 8.

Livermore, Homer F., Brookline, assignor to Guaranteed Parts, Inc., Allston, Mass. Leg strap for looms. 1,886,563; Nov. 8.

Lobell, Donald A., Baltimore, Md. Casement window. 1,887,415; Nov. 8.

Lobley, Fred A., assignor, by mesne assignments, to Dr. Miles Laboratories, Inc., Elkhart, Ind. Inserting machine. 1,886,890; Nov. 8.

Locke Steel Chain Company, The. (See Locke, S. D., and Stegeman, assignors.)

Locke, Sylvanus D., Bridgeport, and H. J. Stegeman, Fairfield, assignors to The Locke Steel Chain Company, Bridgeport, Conn. Power lawn mower. 1,886,403; Nov. 8.

Lockfaw, John A., Wilmington, N. C. Wave motor. 1,887,316; Nov. 8.

Lockwood, Paul M., Short Hills, and E. Samel, Denville, N. J., said Lockwood assignor to said Samel. Upholstery cover. 1,886,488; Nov. 8.

Locomotive Finished Material Company, The. (See Muchnic, Henry E., assignor.)

Loening, Grover, New York, assignor to Grover Loening Aircraft Company, Garden City, N. Y. Retractable landing gear. 1,887,357; Nov. 8.

Loening, Grover, Aircraft Company. (See Loening, Grover, assignor.)

Logan, Addison, et al. (See Logan, Amazon C., assignor.)

Logan, Amazon C., assignor of one-fourth to N. Brown and L. Brown, one-fourth to A. Logan and E. E. Logan, one-fourth to H. M. Cook and E. H. Cook, one-eighth to H. C. Logan, and one-eighth to M. P. Logan, Tampa, Fla. Safety license tag holder. 1,886,703; Nov. 8.

Logan, Hugh C., et al. (See Logan, Amazon C., assignor.)

Logan, Martha P., et al. (See Logan, Amazon C., assignor.)
Logan, Ruby R., et al. (See Logan, Amazon C., assignor.)
Lomonossoff, George V. (See Kapitza, P., and Lomonossoff.)
Long, George A., assignor to The Gray Telephone Pay Station Company, Hartford, Conn. Coin controlled actuating device. 1,886,409; Nov. 8.
Longaker, Albert A., Trenton, N. J. Guiding means for parachutes. 1,887,030; Nov. 8.
Loomis, Crawford C., Ilion, N. Y., assignor to Remington Arms Company, Inc. Firearm. 1,886,704; Nov. 8.
Lorber, Charles, Louisville, Ky. Tracing chart. 1,887,160; Nov. 8.
Lorber, Charles, Louisville, Ky. Tracing chart. 1,887,161; Nov. 8.
Lorber, Charles, Louisville, Ky. Packaging biscuit dough. 1,887,162; Nov. 8.
Lorber, Charles, Louisville, Ky. Tracing chart. 1,887,163; Nov. 8.
Louden Machinery Company, The. (See Martin, Charles C., assignor.)
Lubrication Devices Incorporated. (See Hallerberg, Theodore W., assignor.)
Lucas, William B., East Orange, N. J., assignor to Otis Elevator Company, New York, N. Y. Elevator system. 1,887,209; Nov. 8.
Lucian, Arsene N., Philadelphia, Pa. Indirect electron excitation for thermionic vacuum tubes. 1,886,705; Nov. 8.
Lucks-Osten, Eugene, Weehawken, N. J. Foldable handle. 1,887,358; Nov. 8.
Luco Products Corporation. (See Smidth, L., and Criat, assignors.)
Ludwig, Louis, Brooklyn, N. Y. Electric current tester. 1,886,489; Nov. 8.
Lukas, Julia, New York, N. Y. Textile fabric or the like. Des. 88,236; Nov. 8.
Lukas, Julia, New York, N. Y. Textile fabric or the like. Des. 88,237; Nov. 8.
Lukas, Julia, New York, N. Y. Textile fabric or the like. Des. 88,238; Nov. 8.
Lukas, Julia, New York, N. Y. Textile fabric or the like. Des. 88,239; Nov. 8.
Lukas, Julia, New York, N. Y. Textile fabric or the like. Des. 88,240; Nov. 8.
Lukas, Julia, New York, N. Y. Textile fabric or the like. Des. 88,241; Nov. 8.
Lukas, Julia, New York, N. Y. Textile fabric or the like. Des. 88,242; Nov. 8.
Lundelius & Eccleston Motors Corporation. (See Lundelius, O. F., and Dillon.)
Lundelius, Oscar F., and J. R. Dillon, Los Angeles, Calif., assignors to Lundelius & Eccleston Motors Corporation, Las Vegas, Nev. Steering gear. 1,886,963; Nov. 8.
Lunden, Gus, Colville, Wash. Lumber stamping device. 1,886,564; Nov. 8.
Lupton's, David, Sons Company. (See Walton, Howard T., assignor.)
Lux Clock Manufacturing Company. (See Lux, Frederick, assignor.)
Lux, Frederick, assignor to Lux Clock Manufacturing Company, Waterbury, Conn. Combined alarm clock and base therefor. Des. 88,243; Nov. 8.
Lykken, Henry G., Minneapolis, Minn. Treating fluidal matter. 1,887,317; Nov. 8.
Lynch, Elmer R., Vermilion County, Ind., assignor to Allith-Prouty Company, Danville, Ill. Overhead door construction. 1,886,490; Nov. 8.
Lyon, Clyde L., Everett, Wash. Radiator supporting hanger. 1,887,031; Nov. 8.
Macaulay, Walter B., Oakland, assignor to Yuba Manufacturing Company, San Francisco, Calif. Dredge. 1,887,101; Nov. 8.
MacDonald, George A., et al. (See Krupp, Fred H., assignor.)
Macdonald, William J., Watertown, assignor to H. M. Belcher, Newton, Mass. Combined plug and fuse. 1,886,706; Nov. 8.
Machin, George A., Sacramento, Calif. Humidifier for explosive engines. 1,886,565; Nov. 8.
MacMillan, Charles Wight, Cambridge, Mass. Automatic carburetor choke mechanism. 1,887,061; Nov. 8.
Madge, Evelyn W. (See Hayes, C., Madge, and Lane.)
Madison-Kipp Corporation. (See Hoffman, John R., assignor.)
Magazine Repeating Razor Company. (See Briggs, Arthur J., assignor.)
Magnavox Company, The. (See Pridham, Edwin S., assignor.)
Mahoney, Joseph N., assignor, by mesne assignments, to Sperry Gyroscope Company, Inc., Brooklyn, N. Y. Follow-up system for gyrocompasses. 1,887,318; Nov. 8.
Main, Andrew, assignor to The Four-way Lock Company, Cleveland, Ohio. Cylinder lock. 1,886,822; Nov. 8.
Malcom, Robert, Chicago, Ill. Goggles. 1,886,410; Nov. 8.
Mallory, Marion, Toledo, Ohio, assignor to The Mallory Research Company. Ignition timer. 1,886,566; Nov. 8.
Mallory Research Company, The. (See Mallory, Marion, assignor.)
Manda, Edward A., East Orange, N. J. Freesia. Pl. Pt. 43; Nov. 8.
Manion, Leo W., Canton, Ohio. Muffle kiln. 1,886,491; Nov. 8.
Mann, Theodore C., Beloit, Wis., assignor to Mattison Machine Works, Rockford, Ill. Chip breaker for molding machines and the like. 1,887,032; Nov. 8.
Manning & Co. (See Van Ranst, Cornelius W., assignor.)
Mantell, Charles L., Brooklyn, assignor to Dudseele Corporation of America, New York, N. Y. Removing lead from ferrous articles. 1,886,411; Nov. 8.
Manville, Keith R., Livingston Manor, N. J., assignor to International Motor Company, New York, N. Y. Multiple transmission shaft drive for motor vehicles. 1,886,823; Nov. 8.
Marble, George L., Rochester, N. Y. Sword. 1,886,567; Nov. 8.
Marino, John, Newburyport, Mass. Shoe. 1,887,319; Nov. 8.
Markey, Roscoe I., Nassau County, assignor to The Aviation Patent and Research Corporation, New York, N. Y. Fastening device for airplane wing covers. 1,886,708; Nov. 8.
Markham, Byron, Martines, Calif. Four wheel attachment for trucks. 1,886,964; Nov. 8.
Marshall, Charles D., Pittsburgh, assignor to McClintic-Marshall Corporation, Bethlehem, Pa. Mechanism for riveting columns, beams, etc. 1,886,892; Nov. 8.
Martens, Frederick J., and C. O. Thompson, Milwaukee, Wis. Propeller. 1,886,891; Nov. 8.
Martin, Charles C., assignor to The Louden Machinery Company, Fairfield, Iowa. Conductor support. 1,886,709; Nov. 8.
Martin, John F., assignor to American Bosch Magneto Corporation, Springfield, Mass. Magneto. 1,887,320; Nov. 8.
Martin, Jules, dit Gaudit, Paris, France. Dyeing and printing process. 1,886,412; Nov. 8.
Martinson, Marvin S., Goodhue, Minn. Air purifier for furnaces. 1,887,242; Nov. 8.
Marubio, Angelo, Chicago, Ill. Sanitary douche and internal bath. 1,887,359; Nov. 8.
Mason, Slichter & Gauld, Inc. (See Slichter, Louis B., assignor.)
Mathie, Joseph R., Bwana M'Kubwa, Northern Rhodesia, Union of South Africa. Filing cabinet. 1,887,102; Nov. 8.
Matlack, Robert K., Milltown, N. J. Spraying device. 1,887,416; Nov. 8.
Matson, Carl A., Lynnfield, Mass., assignor to The Matson Company, Concord, N. H. Reverse brake device. 1,886,710; Nov. 8.
Matson Company, The. (See Matson, Carl A., assignor.)
Matter, James K. (See Guild, L., and Matter.)
Mattison Machine Works. (See Mann, Theodore C., assignor.)
Mattson, Victor C., Loomis, Nebr. Internal combustion engine. 1,886,492; Nov. 8.
Mawson, Hubert, Liverpool, England, assignor to Drysdale and Company, Limited, Glasgow, Scotland. Rotary pump and fan. 1,887,417; Nov. 8.
Mayer, Joseph, New York, N. Y. Mechanical calendar. 1,886,568; Nov. 8.
Mayer, Walter S., Philadelphia, Pa. Combined switch and circuit breaker. 1,887,274; Nov. 8.
McClave-Brooks Company. (See Grohn, Henry P., assignor.)
McClintic-Marshall Corporation. (See Marshall, Charles D., assignor.)
McClintic-Marshall Company. (See Overholts, George D., assignor.)
McCormick, Edward A., assignor to Chicopee Manufacturing Corporation, New Brunswick, N. J. Cleaning or polishing fabric and producing it. 1,886,824; Nov. 8.
McCormick, J. H., & Co. (See Clarkson, Ralph P., assignor.)
McCreary, Thomas. (See Swanson, T., and McCreary.)
McCutcheon, Frank G., East St. Louis, Ill., assignor to Oneida Community, Limited, Oneida, N. Y. Recovering certain metals of the third periodic group. 1,886,825; Nov. 8.
McEwen, John D., Torrance, Calif., assignor to International-Stacey Corporation, Columbus, Ohio. Clutch. 1,887,377; Nov. 8.
McGee Glass Company. (See Smith, Maurice A., assignor.)
McGrew, John A., Albany, N. Y. Ball fastener. 1,887,457; Nov. 8.
McGuire, Walter S., assignor of one-third to C. W. Rodefer, Shadyside, Ohio. Automatic timing device. 1,887,418; Nov. 8.
McIntire, Forrest L. (See Wagner, F. W., and McIntire.)
McKesson & Robbins, Inc. (See Fanto, Emil C., assignor.)
McLanahan & Stone Corporation. (See Fye, William A., assignor.)
McLeod, Ida M., Hobbema, Alberta, Canada. Sanitary food protector. 1,886,711; Nov. 8.
McPherson, Harold N., Vancouver, British Columbia, Canada. Wooden stave culvert. 1,886,707; Nov. 8.
Meacham, William M., Seattle, Wash. Salt water barriers for canals. 1,886,965; Nov. 8.
Mead, Charles M., Los Angeles, Calif. Collar card for flat form laundered attached collar shirts. 1,886,826; Nov. 8.
Mears, Norton A., assignor to Chicago Forging & Manufacturing Co., Chicago, Ill. Closure latch. 1,886,827; Nov. 8.

Mears, Norton A., assignor to Chicago Forging & Manufacturing Co., Chicago, Ill. Closure latch. 1,886,828; Nov. 8.
Mears, Norton A., assignor to Chicago Forging & Manufacturing Co., Chicago, Ill. Closure latch. 1,886,829; Nov. 8.
Medlock, Virgil H., near Bloomington, Ind. Automatic clutch and brake control. 1,886,569; Nov. 8.
Megroz, Georges, Bronxville, N. Y., assignor to Combier & Co. Inc., New York, N. Y. Textile fabric or the like. Des. 88,244; Nov. 8.
Megroz, Georges, Bronxville, N. Y., assignor to Combier & Co. Inc., New York, N. Y. Textile fabric or the like Des. 88,245; Nov. 8.
Megroz, Georges, Bronxville, N. Y., assignor to The United Piece Dye Works, New York, N. Y. Textile fabric or the like. Des. 88,246; Nov. 8.
Megroz, Georges, Bronxville, N. Y., assignor to The United Piece Dye Works, New York, N. Y. Textile fabric or the like. Des. 88,247; Nov. 8.
Megroz, Georges, Bronxville, N. Y., assignor to The United Piece Dye Works, New York, N. Y. Textile fabric or the like. Des. 88,248; Nov. 8.
Mendosa, John A., Manteca, Calif. Adjustable hat. 1,886,493; Nov. 8.
Menefee, Elmer, Zanesville, Ohio, assignor to J. R. Kearney Corporation, St. Louis, Mo. Cable fastening means. 1,887,275; Nov. 8.
Merlé, Andre N., Vincennes, assignor to Pathe Cinema, Anciens Etablissements Pathe Freres, Paris, France. Attaching lenses to cameras. 1,887,103; Nov. 8.
Merriman, David W., Beaver Falls, Pa. Athletic standard. 1,887,033; Nov. 8.
Merry, Elisabeth, New York, N. Y. Textile fabric or the like. Des. 88,249; Nov. 8.
Merry, Elizabeth, New York, N. Y. Textile fabric or the like. Des. 88,250; Nov. 8.
Messier, George Louis Rene Jean, Montrouge, France. Suspension apparatus for aeroplanes and other vehicles. 1,886,712; Nov. 8.
Messier, Homer J., and J. K. Donaghy, New Bedford, Mass. Building. Des. 88,251; Nov. 8.
Metcalf, George R., jr., assignor to Erie Malleable Iron Company, Erie, Pa. Conduit fitting. 1,886,413; Nov. 8.
Metlox Corporation, Ltd. (See Prouty, Willis O., assignor.)
Metro Chocolate Co. Inc., The. (See Kobak, Feibus, assignor.)
Metropolitan Device Corporation. (See Murray, John F., assignor.)
Metropolitan Engineering Company. (See Murray, Thomas E.)
Metropolitan Engineering Company. (See Phelps, George H., assignor.)
Metropolitan Paving Brick Company, The. (See De Joy, Nick, assignor.)
Metzger, Claude W., Houston, Tex., assignor to Haynes Stellite Company. Well drilling tool. 1,886,570; Nov. 8.
Meyer, Adolf, Kusnacht, near Zurich, assignor to Aktiengesellschaft Brown, Boveri and Cie, Baden, Switzerland. Device for fixing disks to a shaft. 1,886,414; Nov. 8.
Meyer, Adolf, Kusnacht, near Zurich, assignor to Aktiengesellschaft Brown Boveri & Cie, Baden, Switzerland. Roller bearing for hot shafts. 1,886,966; Nov. 8.
Meyer, Edna L. (See Ferry, Ira D., assignor.)
Michel, Benjamin A., New Orleans, La. Refrigerator. 1,887,419; Nov. 8.
Michigan Steel Corporation. (See Pitts, Frederick W., assignor.)
Mid-States Gummed Paper Co. (See Huempfner, Ferdinand W., assignor.)
Mid-West Chemical Company. (See Hessle, Eric T., assignor.)
Mieritz, Johannes. Berlin, Germany. Cutting device. 1,887,164; Nov. 8.
Miessner Inventions, Inc. (See Jacobs, Charles T., assignor.)
Mikalsen, Randolf A., Brooklyn, N. Y. Clean-out for pipes. 1,887,321; Nov. 8.
Miles, Dr., Laboratories, Inc. (See Lobley, Fred A., assignor.)
Miller, John M., assignor to Atwater Kent Manufacturing Company, Philadelphia, Pa. Radio receiving system. 1,886,571; Nov. 8.
Miller, Joseph, Minneapolis, Minn. Refrigerator doorlock. 1,887,210; Nov. 8.
Miller, Stuart P., Englewood, N. J., assignor to The Barrett Company, New York, N. Y. Preparing creosoting compositions. 1,886,967; Nov. 8.
Milwaukee Gas Specialty Company. (See Gauger, Frank A., assignor.)
Minneapolis-Honeywell Regulator Company. (See Wells, Milton H., assignor.)
Mintner, Corban, assignor to St. Louis & O'Fallon Coal Company, St. Louis, Mo. Apparatus for charging retorts. 1,887,034; Nov. 8.
Mitchell, Ernest R., Philadelphia, assignor of two-fifths to J. Cisar, Penfield, and one-fifth to J. Epstein and S. Fisher, Philadelphia, Pa. Floating keeper for lock and latch bolts. 1,886,494; Nov. 8.
Mitchell, John E., Dallas, Tex. Cleaning cotton. 1,886,713; Nov. 8.
Mitchell, William K., Yonkers, N. Y. Teapot. 1,886,415; Nov. 8.
Model Brassiere Co. Inc. (See Rose, Harold D., assignor.)
Modine, Arthur B., assignor to Modine Manufacturing Company, Racine, Wis. Heating appliance. 1,886,894; Nov. 8.
Modine, Arthur B., assignor to Modine Manufacturing Company, Racine, Wis. Vehicle heater and heat control device. 1,887,035; Nov. 8.
Modine, Arthur B., assignor to Modine Manufacturing Company, Racine, Wis. Radiator fin. 1,887,036; Nov. 8.
Modine Manufacturing Company. (See Modine, Arthur B., assignor.)
Mohr, John, & Sons. (See Mohr, Joseph S., assignor.)
Mohr, Joseph S., assignor to John Mohr & Sons, Chicago, Ill. Strainer. 1,886,898; Nov. 8.
Moline Tool Company. (See Reller, O. R., and Hallene, assignors.)
Monomelt Company, The. (See Johancen, T., and Kehoe, assignors.)
Monroe, Mayer G., assignor to Jantzen Knitting Mills, Portland, Oreg. Swimming suit. 1,886,416; Nov. 8.
Monsch, Robert, Union City, N. J., and F. H. Hibberd, jr., Long Island City, N. Y. Duplex safety window. 1,886,568; Nov. 8.
Montgomery Ward & Company. (See Knapp, Leland G., assignor.)
Moone, Albert E. F., Chicago, Ill. Shingle mixing machine. 1,886,969; Nov. 8.
Moone, Albert E. F., Chicago, Ill., assignor to The Lehon Company. Shingle mixing machine. 1,886,970; Nov. 8.
Moore, Bart, jr. (See Biles, Edgar V., assignor.)
Moore, Charles A., Edina, Minn. Refrigerator. 1,887,243; Nov. 8.
Moore Company, The. (See Wunderlich, William E., assignor.)
Morasso, Salvador, Saladillo, Rosario de Santa Fe, assignor to Compania Swift de la Plata Sociedad Anonima, Buenos Aires, Argentina. Vacuum soldering machine. 1,887,062; Nov. 8.
Morrill, Alfred R., Beverly, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Automatic shoe machine. 1,887,136; Nov. 8.
Morse Chain Company. (See Morse, Frank L., assignor.)
Morse, Frank L., assignor to Morse Chain Company, Ithaca, N. Y. Drive chain. 1,887,137; Nov. 8.
Mortimer, Charles G., Glen Ridge, assignor to Structural Gypsum Corporation, Linden, N. J. Block handling device. 1,887,211; Nov. 8.
Mosmann, John, North Bergen, N. J. Trimming for dresses and the like. 1,886,572; Nov. 8.
Moss, Sanford A., Lynn, Mass., assignor to General Electric Company. Motor driven fluid pump. 1,886,714; Nov. 8.
Motley, Lewis, Staines, England. Liquid fuel burning apparatus. 1,887,458; Nov. 8.
Motor Devices, Inc. (See Trail, Herbert H., assignor.)
Muchnic, Henry E., Atchison, Kans. Self-centering coupler carrier. 1,886,417; Nov. 8.
Muchnic, Henry E., assignor to The Locomotive Finished Material Company, Atchison, Kans. Door latch. 1,886,418; Nov. 8.
Multigraph Company. (See Osborn, Henry C., assignor.)
Munday, Richard B., Dayton, assignor, by mesne assignments, to The Cincinnati Ball Crank Co., Cincinnati, Ohio. Fluid measure. 1,887,276; Nov. 8.
Murdock, Ashby G., Petersburg, Va. Corner bracket. 1,887,459; Nov. 8.
Murphy, Edward A. (See Twiss, D. F., and Murphy.)
Murphy, Roger N., Rome, assignor to General Cable Corporation, New York, N. Y. Cable laying plow. 1,886,510; Nov. 8.
Murray Corporation of America, The. (See Westrope, Fred J., assignor.)
Murray, John F., Brooklyn, N. Y., assignor to Metropolitan Device Corporation. Conduit forming apparatus and process. 1,887,244; Nov. 8.
Murray, John F., et al., executors. (See Murray, Thomas E., assignor.)
Murray, Joseph B., et al., executors. (See Murray, Thomas E.)
Murray, Thomas E., deceased; J. B. Murray, T. E. Murray, jr., and J. F. Murray, executors, assignors to Metropolitan Engineering Company. Storage device. 1,887,245; Nov. 8.
Murray, Thomas E., jr., Brooklyn, N. Y., assignor, by mesne assignments, to American Radiator & Standard Sanitary Corporation. Production of radiators. 1,886,715; Nov. 8.
Murray, Thomas E., jr., Brooklyn, N. Y., assignor, by mesne assignments, to American Radiator & Standard Sanitary Corporation. Manufacture of radiators. 1,886,830; Nov. 8.
Murray, Thomas E., jr., et al., executors. (See Murray, Thomas E.)
Murray, William S., Utica, assignor to Oneida Community, Limited, Oneida, N. Y. Method of and apparatus for pressing materials into molds. 1,886,831; Nov. 8.
Muslar, Nelson. (See Graves, Samuel A.)
Myers, Lewis C., Freeport, assignor to Royal Typewriter Company, Inc., New York, N. Y. Typewriter cabinet. 1,887,165; Nov. 8.

Myers, Thomas G., assignor to United States Electrical Manufacturing Company, Los Angeles, Calif. Starting condenser type motors. 1,886,895; Nov. 8.
N. D. Q. Specialty Corporation, et al. (See Krieg, Anthony W., assignor.)
N. V. Montania. (See Schaefer, Hanns, assignor.)
N. V. Philips' Gloeilampenfabrieken. (See van der Pol, Balthasar, assignor.)
Nash, Arthur Douglas, assignor to The Libbey Glass Manufacturing Company, Toledo, Ohio. Tumbler. Des. 88,252; Nov. 8.
Nash, Arthur Douglas, assignor to The Libbey Glass Manufacturing Company, Toledo, Ohio. Pitcher. Des. 88,253; Nov. 8.
Nassau, Max. (See Sommer, F., and Nassau.)
Nast, Karl, Stuttgart, Germany. Rail joint. 1,887,063; Nov. 8.
National Biscuit Company. (See Davidson, Bruce J., assignor.)
National Wood Products Company. (See Nielsen, Herman C., assignor.)
Naugle, John J. (See Ehrhart, E. N., and Wickenden, assignors.)
Neithold, Carl A.-G. (See Gutermuth, Friedrich, assignor.)
Nelson, Adolf H., San Francisco, Calif. Can positioning and feeding machine. 1,886,896; Nov. 8.
Nelson, Charles S., Sandpoint, Idaho. Motor vehicle chassis. 1,886,573; Nov. 8.
Nelson, Emil A., St. Clair Shores, Mich. Wheel and wrench therefor. 1,887,878; Nov. 8.
Nelson, John H., Madison, Wis. Adhesive tape dispensing machine. 1,887,460; Nov. 8.
Nestle-Lemur Company, The. (See Comerford, Grace, assignor.)
Nettleton, Lewis L., Edgewood, Pa. Valve for controlling fluid pressure. 1,887,322; Nov. 8.
Neuwirth, Herman, New York, N. Y. Combination sun watch dial and compass. 1,887,064; Nov. 8.
New Britain Machine Company, The. (See Costello, William F., assignor.)
New England Fuel and Transportation Company. (See Folsom, Robert M., assignor.)
New England Spun Silk Corporation. (See Wyss, Julius, assignor.)
New Haven Clock Company, The. (See Langbein, Jacob F., assignor.)
New Haven Sand Blast Company, The. (See Billings, C. E., and Sammis, assignors.)
New Haven Sand Blast Company, The. (See Sammis, Donald S., assignor.)
Newhouse, Walter F., assignor to Saranac Automatic Machine Corporation, Benton Harbor, Mich. Carton stapling machine. 1,886,971; Nov. 8.
New Idea Spreader Company, The. (See Oppenheim, Theodore H., assignor.)
Newman, Thomas J., Canton, Ohio. Electric switch. 1,887,420; Nov. 8.
Newman, Thomas J., Canton, Ohio. Testing device. 1,887,421; Nov. 8.
Nickel, Gottfried, Long Beach, assignor of one-half to S. J. Ditzmann, Los Angeles, Calif. Sanitary container. 1,887,481; Nov. 8.
Nielsen, Herman C., Memphis, Tenn., assignor to National Wood Products Company, Detroit, Mich. Process and composition for impregnating wood. 1,886,716; Nov. 8.
Nobs, Jakob, Thun, Switzerland. Machine for sharpening mowing machine cutters. 1,886,717; Nov. 8.
Noel, Philip Jordan, Bowling Green, Ky. Attachment for pistol holsters. 1,886,718; Nov. 8.
Nohl, Walter H., et al. (See Trettin, Louis F., assignor.)
Normandy, Willard D., Detroit, Mich., assignor to Lederer Manufacturing Company. Spreader and hanger for wardrobe bags. 1,886,574; Nov. 8.
Norris, Eric D. T., Hollinwood, England, assignor to Ferranti Inc., New York, N. Y. Lightning or surge absorber. 1,887,461; Nov. 8.
Norton, Clifford, South Orange, N. J., assignor, by mesne assignments, to Otis Elevator Company. Pneumatic door operating mechanism. 1,887,212; Nov. 8.
Norton Lasier Company. (See Norton, Lewis C., assignor.)
Norton, Lewis C., assignor to Norton Lasier Company, Chicago, Ill. Door closing and checking device. 1,886,897; Nov. 8.
Norton, Sir James Farmer, & Company Limited. (See Norton, William J., assignor.)
Norton, William J., Salford, Manchester, assignor to Sir James Farmer Norton & Company Limited, Manchester, England. Dye jigger. 1,887,462; Nov. 8.
Nott, Ivan S. (See Tillyer, E. D., Forshey, and Nott.)
Novick, Abraham, Flushing, assignor to F. L. Smithe Machine Co., Inc., New York, N. Y. Folding mechanism. 1,886,832; Nov. 8.
Nuber, Otto, Reutlingen, Germany. Manufacture of knit goods. 1,887,166; Nov. 8.
O. Y. Methods Ltd. (See Pyhälä, Evald, assignor.)
Oaks, Albert J., South Fork, Pa., and W. E. Oaks, Steubenville, Ohio. Gate. 1,886,719; Nov. 8.
Oaks, Wallace E. (See Oaks, Albert J., and W. E.)
Oberhuber, William F., Lansdowne, assignor to Franklin Development Company, Philadelphia, Pa. Slug for cleaning condenser tubes. 1,886,419; Nov. 8.
O'Brien, James Raymond, Chicago, Ill., assignor, by mesne assignments, to Rubber Products Corporation, Dover, Del. Road marker and placing the same in a pavement. 1,886,720; Nov. 8.
O'Brien, James Raymond, Chicago, Ill., assignor, by mesne assignments, to Rubber Products Corporation, Dover, Del. Road marker. 1,886,721; Nov. 8.
O'Connor, George E., Fairlawn, N. J., assignor to Smoot Engineering Corporation, New York, N. Y. Multiple flow regulation. 1,886,575; Nov. 8.
O'Day, Cortland N. (See Harnett, L. D., and O'Day.)
Ogura, Zenpei, Tobata-Shi, Fukuoka-Ken, Japan. Refrigerator of cold brine shower system. 1,887,468; Nov. 8.
Ohio Brass Company, The. (See Birch, Leland W., assignor.)
Ohio Oil Co., The. (See Cyphers, William D., assignor.)
Okabe, Yahei. (See Sugiyama, T., Ushiki, and Okabe.)
Okonite-Callender Cable Company, The. (See Branthwaite, Isaac, assignor.)
Olsen, John C., assignor to Flexible Steel Lacing Company, Chicago, Ill. Punch. 1,887,360; Nov. 8.
Olsen, John C., assignor to Flexible Steel Lacing Company, Chicago, Ill. Fastening for belts and the like. 1,887,361; Nov. 8.
Olsen, Walter, and S. Rasmussen, Albert Lea, Minn. Carbureting device for lighting stoves. 1,886,420; Nov. 8.
Omes Holding Company Limited. (See Benedetto, Giuseppe, assignor.)
Oneida Community, Limited. (See McCutcheon, Frank G., assignor.)
Oneida Community, Limited. (See Murray, William S., assignor.)
Oppenheim, Theodore H., assignor to The New Idea Spreader Company, Coldwater, Ohio. Farm wagon. 1,886,722; Nov. 8.
Orr, Thomas H., Okmulgee, Okla. Workholder for boring machines. 1,887,379; Nov. 8.
Osborn, George W., assignor to The Reliance Gauge Column Company, Cleveland, Ohio. Gauge cock. 1,887,213; Nov. 8.
Osborn, Henry C., Cleveland, Ohio, assignor, by mesne assignments, to Multigraph Company, Wilmington, Del. Ribbon spool for printing machines. 1,887,184; Nov. 8.
Otis Elevator Company. (See Lucas, William B., assignor.)
Otis Elevator Company. (See Norton, Clifford, assignor.)
Ott, A., the Firm. (See Ott, L., and Adler, assignors.)
Ott, Ludwig, Kempten, and H. Adler, Frankfort-on-the-Main, assignors to the Firm A. Ott, Kempton, Germany. Integrator. 1,886,576; Nov. 8.
Otto, Carl, Bochum, Germany. Regenerative coke oven. 1,887,214; Nov. 8.
Oulton, Charles B., Attleboro, Mass., assignor to Plastic-Craft Novelty Company, Inc. Pencil sharpener. 1,887,422; Nov. 8.
Ousdahl, Adolph, Seattle, Wash., assignor to Automatic Coal Burner Co. Coal burning apparatus. 1,886,577; Nov. 8.
Outboard Motors Corporation. (See Irgens, Finn T., assignor.)
Overholtz, George D., Fair Oaks, assignor to McClintic-Marshall Company, Pittsburgh, Pa. Outdoor advertising bulletin. 1,886,898; Nov. 8.
Overholtz, George D., Fair Oaks, assignor to McClintic-Marshall Company, Pittsburgh, Pa. Outdoor advertising structure. 1,886,899; Nov. 8.
Overholtz, George D., Fair Oaks, assignor to McClintic-Marshall Company, Pittsburgh, Pa. Outdoor advertising structure. 1,886,900; Nov. 8.
Overton, William H., St. Louis, Mo. Percolator top. 1,886,723; Nov. 8.
Owen Automatic Spring Machinery Company, The. (See Owen, David T., assignor.)
Owen, David T., assignor to The Owen Automatic Spring Machinery Company, Cleveland, Ohio. Spring forming and assembling machine. 1,887,215; Nov. 8.
Owens-Illinois Glass Company. (See Fuerst, Edwin W., assignor.)
Packard Motor Car Company. (See Barden, Earl M., assignor.)
Packard Motor Car Company. (See Edwards, Herbert C., assignor.)
Packard Motor Car Company. (See Woolson, Lionel M., assignor.)
Painter, Laurence O., assignor to Program Service Company, St. Paul, Minn. Intensity controlling system for receivers. 1,887,065; Nov. 8.
Palmiter, Daniel A. (See Schacht, J. H., and Palmiter.)
Pankhurst, Charles T., Ionia, Mich. Optical lens. 1,886,724; Nov. 8.
Pardee, Frank, assignor to Anthracite Separator Company, Hazleton, Pa. Flexible lowering apparatus. 1,886,901; Nov. 8.
Paridon, Michael, Barberton, Ohio, assignor to The Diamond Match Company, Baltimore, Md. Match-strip feeding mechanisms. 1,886,495; Nov. 8.
Paridon, Michael, Barberton, Ohio, assignor to The Diamond Match Company, Baltimore, Md. Pneumatic-control means for paper feeding and folding mechanisms. 1,886,496; Nov. 8.
Parker Arthur L., Cleveland, Ohio. Tank flange coupling. 1,887,423; Nov. 8.
Parker, George. (See Buttress, Joseph A., assignor.)
Parker, Orville J. (See Edwards, H., Parker, and Arnot.)

Parker-Regan Corporation. (See Regan, George P., assignor.)
Parsons, Fred A., Milwaukee, assignor to Kearney & Trecker Corporation, West Allis, Wis. Machine tool structure. 1,886,833; Nov. 8.
Parsons, Robert J., Schenectady, assignor to Consolidated Car-Heating Company, Albany, N. Y. Treadle-switch. 1,886,497; Nov. 8.
Patchen, Arthur D., assignor to Scovill Manufacturing Company, Waterbury, Conn. Tie for mattresses, cushions, etc. 1,887,066; Nov. 8.
Pate, Sophie, New York, N. Y. Textile fabric or the like. Des. 88,254; Nov. 8.
Patent and Licensing Corporation, The. (See Wettlaufer, Jules L., assignor.)
Patents & Royalties Corporation. (See Turney, Harry L., assignor.)
Pathe Cinema, Anciens Etablissements Pathe Freres. (See Merle, Andre N., assignor.)
Payne, Daniel D., Leominster, Mass., assignor to Du Pont Viscoloid Company, Wilmington, Del. Productien of plastic sheets and the product thereof. 1,886,972; Nov. 8.
Pearce, Walter H., Churchville, assignor to The Brown Instrument Company, Philadelphia, Pa. One piece metal fountain pen. 1,887,186; Nov. 8.
Pearson, Gustav C., assignor to Gardner-Denver Company, Denver, Colo. Drill sharpener. 1,887,038; Nov. 8.
Pechy, William, Elizabeth, N. J., assignor to American Can Company, New York, N. Y. Key assembling machine. 1,886,973; Nov. 8.
Pedersen, Louise, Barrington, Ill. Eye shield. 1,886,725; Nov. 8.
Pedrasso, Emil, West New York, N. J. Washing machine. 1,886,578; Nov. 8.
Peek, Robert L., Toronto, and C. A. Knittel, Port Colborne, Ontario, Canada, assignors to The International Nickel Company, New York, N. Y. Refining nickel bearing materials. 1,887,037; Nov. 8.
Peerless Novelty Co. (See Standberry, Warren H., assignor.)
Peffer, Alrid B., assignor to Imperial Machine Company, Philadelphia, Pa. Pan cleaning machine. 1,887,138; Nov. 8.
Pehrsson, Sven Johan, assignor to The Colson Company, Elyria, Ohio. Piano truck. 1,887,067; Nov. 8.
Pelser, Harry L. (See Herthel, E. C., and Pelser.)
Pennefather, Alfred A. E., Timaru, New Zealand. Sleeve lock sling hook. 1,886,726; Nov. 8.
Penobscot Chemical Fibre Company. (See Hooper, Henry S., assignor.)
Peramoll, Henry, Philadelphia, Pa. Milling machine. 1,887,424; Nov. 8.
Perkins, Albert G., Buffalo, N. Y. Pipe joint and making same. 1,886,421; Nov. 8.
Perkins, Samuel J. (See Kelley, K., and Perkins.)
Perron, Leon, Brooklyn, N. Y. Invalid chair and cabinet. 1,887,323; Nov. 8.
Perry, Clarence N., Edgewater, Colo. Electric safety clothes wringer. 1,886,727; Nov. 8.
Perry, Ira D., Chicago, assignor to E. L. Meyer, Rockford, Ill. Door pillar and the like. 1,886,974; Nov. 8.
Peters, Nicholas J., et al. (See Teaver, Joe L., assignor.)
Pew, Thomas C., assignor to Hoover Steel Ball Company, Ann Arbor, Mich. Grinding machine. 1,886,579; Nov. 8.
Pfeiffer, Fred B., Akron, assignor to Seiberling Rubber Company, Barberton, Ohio. Apparatus for building tire carcasses. 1,887,187; Nov. 8.
Pfeiffer, Fred B., Akron, assignor to Seiberling Rubber Company, Barberton, Ohio. Building tire carcasses. 1,887,862; Nov. 8.
Pfeiffer, Harry B., Denver, Colo. Device for automatically feeding and cutting off a supply of lubricating oil or other liquid. 1,886,729; Nov. 8.
Pfianze, Charles F., Webster Groves, Mo. Envelope-making machine. 1,886,728; Nov. 8.
Pflueger, Timothy L., assignor to Standard Stations, Inc., San Francisco, Calif. Building. Des. 88,255; Nov. 8.
Pfortner, Arthur, assignor to Ideal Permanent Wave Products, Inc., Rosedale, Long Island, N. Y. Hair curling apparatus. 1,887,462; Nov. 8.
Phelps, George H., Warehouse Point, Conn., assignor to Metropolitan Engineering Company, Brooklyn, N. Y. Heat interchanger. 1,886,498; Nov. 8.
Philips' Gloeilampenfabrieken, N. V. (See Dijksterhuis, Popko R., assignor.)
Phillips, Harry, Greenwich, Conn. Leveling cushion for radio cabinets. Re18,647; Nov. 8.
Phinney, Edgar E., West Orange, assignor to Defiance Manufacturing Corporation, Orange, N. J. Printing press. 1,886,730; Nov. 8.
Pick, Ernö, Budapest, Hungary, assignor to Picklin Baustoff G. m. b. H., Berlin, Germany. Production of wall protective means. 1,887,464; Nov. 8.
Pierce, James B., jr., assignor to Barium Reduction Corporation, Charleston, W. Va. Dehydrating glauber salt. 1,886,580; Nov. 8.
Pink, Clarence E., Cambridge, Md. Reenforcement for conveyer belts. 1,887,425; Nov. 8.
Pippin, Carl W. (See Pill, W. F., and Pippin.)
Pitts, Frederick W., assignor to Michigan Steel Corporation, Detroit, Mich. Treating steel. 1,886,581; Nov. 8.
Pittsburgh Equitable Meter Company. (See Weymouth, H. G., and Kreidler, assignors.)
Pittsburgh Screw and Bolt Corporation. (See Sharm, Peter J., assignor.)
Place, Blon C., assignor of one-half to G. B. Gessler, Detroit, Mich. Securing snap fastener. 1,887,426; Nov. 8.
Plass, Zelma C. (See Lemke, N. K., and Plass.)
Plastic-Craft Novelty Company. (See Oulton, Charles B., assignor.)
Plate, Robert T., Detroit, Mich. Hair curler. 1,886,731; Nov. 8.
Plykrome Corporation, The. (See Johnson, Wallace C., assignor.)
Pneumatic Scale Corporation, Limited. (See Joplin, William A., assignor.)
Pocoroba, Giuseppe, Newark, N. J. Identifying bullets. 1,887,324; Nov. 8.
Poland, Spragg, Winter Park, Fla. Bending pliers. 1,886,732; Nov. 8.
Pollock, Robert T., Boston, Mass., assignor to Universal Oil Products Company, Chicago, Ill. Apparatus for converting hydrocarbons. 1,887,039; Nov. 8.
Polydoreff, Wladimir J., assignor to Johnson Laboratories, Inc., Chicago, Ill. Process of and apparatus for standardizing magnetic cores. 1,887,330; Nov. 8.
Ponselle, Robert A., New York, N. Y. Sanding drum. 1,886,733; Nov. 8.
Ponton, Fortunat, assignor to Vaughan Company, Chicago, Ill. Tray support. 1,886,582; Nov. 8.
Popkin, Martin E., Baltimore, Md. Cloth matching and measuring machine. 1,886,902; Nov. 8.
Popper, Max, Brooklyn, N. Y. Pinking attachment for sewing machines. 1,886,422; Nov. 8.
Porcello, Raphael, Richmond Hill, N. Y. Wheeled device. 1,887,427; Nov. 8.
Posner, Rudolph H., et al. (See Krause, Paul, assignor.)
Post, Raymond W., Van Nuys, Calif. Folding boat. 1,886,499; Nov. 8.
Potdevin Machine Company. (See Hunziker, Paul, assignor.)
Potter, Albert T., assignor, by mesne assignments, to Ainsworth Manufacturing Corporation, Detroit, Mich. Windshield operator. 1,886,583; Nov. 8.
Pouchain, Adolfo, Turin, Italy. Electric accumulator. 1,887,167; Nov. 8.
Powell, George R., Rosemont, Pa. Vehicle braking system. 1,887,428; Nov. 8.
Prange, Ellen M. (See Prange, Maurice N., assignor.)
Prange, Maurice N., assignor to E. M. Prange, Detroit, Mich. Hone. 1,886,584; Nov. 8.
Pratt, George D., and H. C. Guillaume, assignors to G. L. Daniels and E. Daniels, Chicago, Ill. Trailer. 1,887,325; Nov. 8.
Pratt, Goodrich B., assignor to Bond Electric Corporation, Jersey City, N. J. Flashlight safety switch. 1,886,428; Nov. 8.
Pratt & Whitney Company. (See Drake, A. M., and Crowey, assignors.)
Prazak, Emil, Elisabeth, N. J. Machine for extracting threads from woven fabrics. 1,886,585; Nov. 8.
Prentice, Allan L., Cleveland, Ohio, assignor to The American Brake Shoe and Foundry Company, Wilmington, Del. Brake shoe key. 1,886,734; Nov. 8.
Prentice, William G., Indianapolis, Ind., and F. B. Copeland, assignors to The Elite Manufacturing Company, Ashland, Ohio. Tire spreading machine. 1,886,884; Nov. 8.
Presto Lock Corporation. (See Levine, Abraham, assignor.)
Price, Joe W., Canon, Colo. Propeller construction. 1,887,429; Nov. 8.
Pridham, Edwin S., assignor to The Magnavox Company, Oakland, Calif. Loud speaker. 1,886,735; Nov. 8.
Priestman, Sydney H., Hull, England. Grab bucket. 1,887,465; Nov. 8.
Profitlich, Wilhelm, Kiel-Gaarden, Germany. Synchronising two internal combustion engines. 1,886,975; Nov. 8.
Program Service Company. (See Painter, Laurence O., assignor.)
Protzeller, Harry W., assignor to O. F. Jordan Company, East Orange, Ind. Ball joint oiler. 1,886,736; Nov. 8.
Prouty, Willis O., Hermosa Beach, assignor to Metlox Corporation, Ltd., Manhattan Beach, Calif. Therapeutic light standard. Des. 88,256; Nov. 8.
Provost, Virgile, Cohoes, N. Y. Chain connection. 1,887,430; Nov. 8.
Puc, Vojtech, Prague, Czechoslovakia. Press fastener. 1,887,466; Nov. 8.
Pure Oil Company, The. (See Harnsberger, Audley H., assignor.)
Pure Oil Company, The. (See Smith, C. L., and Watson, assignors.)
Pure Oil Company, The. (See Wendels, Oliver B., assignor.)
Purnell, Guy, Angleton, Tex. Metal treating process. 1,886,835; Nov. 8.
Puro Co. (See Sacks, Alvin L., assignor.)
Pyhälä, Evald. Oulankyla, Uusimaa, assignor to O. Y. Methods Ltd., Viipuri, Finland. Refining and discoloring of raw sulphate soft soap. 1,887,246; Nov. 8.

Quinby, Edwin Jay, Yonkers, N. Y., assignor to Radio Corporation of America. Sound reproducer. 1,887,185; Nov. 8.

Quine, Rose B., Newton, Mass. Apparel garment. 1,887,431; Nov. 8.

Quine, Rose B., Newton, Mass. Apparel garment. 1,887,486; Nov. 8.

Radio Corporation of America. (See Finch, James L., assignor.)

Radio Corporation of America. (See Grant, Royal E., assignor.)

Radio Corporation of America. (See Quinby, Edwin J., assignor.)

Radio Corporation of America. (See Van Horne, John S., assignor.)

Ragan, Ralph, Atlanta, Ga. Heddle frame for looms. 1,887,326; Nov. 8.

Ragon, Earl, Dickinson, N. Dak. Gas burner. 1,887,040; Nov. 8.

Railroad Accessories Corporation. (See Lavarack, F. C. and W. H. B., assignors.)

Railroad Accessories Corporation. (See Lavarack, William H. B., assignor.)

Ralston, Oliver C., and C. R. Kuzell, assignors to United Verde Copper Company, Clarkdale, Ariz. Treatment of matte. 1,886,903; Nov. 8.

Ramig, Frederick A., Brooklyn, N. Y. Handkerchief or similar article. Des. 88,257; Nov. 8.

Ramp Buildings Corporation. (See d'Humy, Fernand E., assignor.)

Ramsay, William S., assignor to The Allen Filter Company, Toledo, Ohio. Water cooler. 1,886,424; Nov. 8.

Rankin, Lanning P., Dover, N. J., assignor to Hercules Powder Company, Wilmington, Del. Drying oil. 1,886,586; Nov. 8.

Rankin, Lanning P., Dover, N. J., assignor to Hercules Powder Company, Wilmington, Del. Preparing xanthates of terpene alcohols. 1,886,587; Nov. 8.

Raou, Juan, Buenos Aires, Argentina. Automatic fire extinguishing valve for oil wells. 1,886,737; Nov. 8.

Rasmussen, Sophus. (See Olsen, W., and Rasmussen.)

Rauberstrauch, George, assignor to The Cleveland Rock Drill Company, Cleveland, Ohio. Making bushing liners. 1,887,168; Nov. 8.

Rawitski, Leo, Berlin, Germany. Coin-operated vending apparatus. 1,886,425; Nov. 8.

Readey, John M., Inc. (See Readey, John M., assignor.)

Readey, John M., assignor to John M. Readey, Inc., St. Louis, Mo. Apparatus for testing pipe nipples. 1,887,327; Nov. 8.

Redfield, Charles E., Chicago, Ill. Cleaning device. 1,886,738; Nov. 8.

Reeder, Henry R., and W. Scott, Chicago, Ill. Building unit. 1,887,432; Nov. 8.

Reese, Millard. (See Brady, James W., jr., assignor.)

Regan, George P., Oakland, assignor to Parker-Regan Corporation, San Francisco, Calif. Mop holder. 1,886,739; Nov. 8.

Reichmann, Heinrich, Duisburg-Ruhrort, Germany. Automatic grab. 1,886,426; Nov. 8.

Reid, J. A., assignor to The Hartt Boot and Shoe Company Limited, Fredericton, New Brunswick, Canada. Arch support for boots and shoes. 1,886,976; Nov. 8.

Reinhard, George F., Grand Rapids, Mich. Service table. 1,886,446; Nov. 8.

Reinhardt, August G. (See Greenan, William T., assignor.)

Reliance Gauge Column Company, The. (See Osborn, George W., assignor.)

Reliance Manufacturing Company, The. (See Cowlin, Eugene D., assignor.)

Reller, Otto R., and C. W. Hallene, assignors to Moline Tool Company, Moline, Ill. Lapping machine. 1,886,836; Nov. 8.

Remington Arms Company. (See Loomis, Crawford C., assignor.)

Remy, Earl T., Crestline, Ohio. Ash carrier. 1,887,041; Nov. 8.

Renold & Coventry Chain Company Limited, The. (See Renshaw, Alfred, assignor.)

Renshaw, Alfred, Didsbury, Manchester, assignor to The Renold & Coventry Chain Company Limited, London, England. Clutch. 1,887,467; Nov. 8.

Rens, Henry K., assignor to The Superior Confection Company, Columbus, Ohio. Game device. 1,887,068; Nov. 8.

Republic Flow Meters Company. (See Spitzglass, Albert F., assignor.)

Reynolds, George D., Ann Arbor, Mich., assignor to Baush Machine Tool Company. Assembly machine. 1,887,216; Nov. 8.

Reynolds Spring Company. (See Sunley, George, assignor.)

Rhoads, Albert E. (See Crosby, E. L., and Rhoads.)

Riblet, Royal N., Spokane, Wash. Transfer truck. 1,886,588; Nov. 8.

Riccius, Harry E., Miles City, Mont. Locomotive steam pipe casing. 1,886,427; Nov. 8.

Rice, Herbert S., Saugus, Mass. Swing. 1,886,904; Nov. 8.

Rich, Herbert C., Bedford, and B. V. Storr, Ilford, assignors to Ilford Limited, Ilford, Essex, England. Film pack. 1,886,589; Nov. 8.

Richardson, Dwight D., West End, N. C. Resilient support. 1,886,740; Nov. 8.

Richardson, Dwight D., West End, N. C. Flower holder. 1,887,139; Nov. 8.

Richfield Oil Company of California. (See Dowlen, Tom H., assignor.)

Rickards, William T., Chicago, Ill. Antiaircraft sight. 1,887,363; Nov. 8.

Rickey, Jesse J., assignor to Hall Manufacturing Co., Cedar Rapids, Iowa. Stanchion. 1,886,741; Nov. 8.

Risinger, Frank V., Lakewood, Ohio. Hydrocarbon burner. 1,887,140; Nov. 8.

Risler Corporation of America, The. (See Florimont, Jules J., assignor.)

Ritter Dental Manufacturing Company. (See Russell, Percy, assignor.)

Robbins, Azor D., Highland Park, N. J., assignor to International Motor Company, New York, N. Y. Locking mechanism for power apportioning devices. 1,886,837; Nov. 8.

Roberts, Clarence B., et al. (See Roberts, Lee R., assignor.)

Roberts, Lee R., assignor of twenty per cent to C. B. Roberts, twenty per cent to A. B. Watson, and twenty per cent to L. M. Heuerts, Los Angeles, Calif. Necktie fastener. 1,887,104; Nov. 8.

Rodefer, Charles W. (See McGuire, Walter S., assignor.)

Rodgers, John B., Little Rock, Ark. Auxiliary wheel. 1,886,977; Nov. 8.

Roeder, Christian. (See Ehrhardt, Friedrich.)

Roesner, Gerhard. (See von Girsewald, C., Weidmann, and Roesner.)

Rogers, Charles A., Albion, Pa. Heavy duty high speed trailer. 1,887,042; Nov. 8.

Rollo, Walter R., assignor to American La France and Foamite Corporation, Utica, N. Y. Fire extinguisher. 1,887,217; Nov. 8.

Root, A. I. Company, The. (See Hope, Earl W., assignor.)

Rose, Harold D., Valley Stream, assignor to Model Brassiere Co. Inc., New York, N. Y. Brassière. 1,886,742; Nov. 8.

Rose, Henry, Chicago, Ill. Drinking glass. Des. 88,258; Nov. 8.

Rosenblad, Curt, Stockholm, Sweden. Utilization of excess steam and hot gases. 1,886,590; Nov. 8.

Rosenthal, August, assignor to Rosenthal Manufacturing Company, West Allis, Wis. Conveyer for corn huskers. 1,886,905; Nov. 8.

Rosenthal, August, Wauwatosa, assignor to Rosenthal Manufacturing Company, West Allis, Wis. Stacker attachment for corn huskers. 1,886,906; Nov. 8.

Rosenthal Manufacturing Company. (See Rosenthal, August, assignor.)

Ross, Clifford O., Los Angeles, Calif. Weighing scale. 1,887,169; Nov. 8.

Ross, David, Hot Springs, Ark. Rotary steam engine. 1,887,043; Nov. 8.

Ross, Herbert L., Oakland, Calif. Knife. 1,887,188; Nov. 8.

Roth, Raymond T., New York, N. Y. Terminal block. 1,886,743; Nov. 8.

Rothmund, Leopold, Stuttgart, Germany. Sluice or lock. 1,886,591; Nov. 8.

Rouse, H. B., & Company. (See Stuckeman, William F., assignor.)

Rowland, Charles L., deceased, Carbondale, by K. E. Rowland, executrix, and E. A. De Laney, executor, assignor to American Welding Company, Carbondale, Pa. Welding machine. 1,886,888; Nov. 8.

Rowland, Kathryn E., et al., executrix. (See Rowland, Charles L.)

Royal Typewriter Company. (See Myers, Lewis C., assignor.)

Royle, Vernon E., Paterson, N. J. Stock screw for extruding machines. 1,886,592; Nov. 8.

Rubber Products Corporation. (See O'Brien, James R., assignor.)

Rubinstein, Jacques, Cologne-Mulheim, V. Heidelberg, Bensberg, near Cologne, E. Uhlhorn, Cologne, and W. Dahners, Cologne-Mulheim, Germany. Internal combustion engine. 1,886,978; Nov. 8.

Rugger, Charles, Sioux City, Iowa. Wrench. 1,886,907; Nov. 8.

Ruhren, Julius, West New York, N. J. Warping machine drive and control therefor. 1,887,423; Nov. 8.

Rumpel, Harvey H., assignor to Smith Engineering Works, Milwaukee, Wis. Crushing mill concave holding means. 1,886,908; Nov. 8.

Rupprecht, Alvin V., Fayetteville, Ark. Poultry feeder. 1,886,593; Nov. 8.

Rusden, Richard E., Providence, R. I., assignor to The Textile-Finishing Machinery Company. Dye jig. 1,887,381; Nov. 8.

Russell, Percy, Swarthmore, Pa., assignor, by mesne assignments, to Ritter Dental Manufacturing Company, Inc., Rochester, N. Y. Dental chair. 1,887,328; Nov. 8.

Ruth, Joseph P., jr., Denver, Colo. Flotation method. 1,886,979; Nov. 8.

Ruths Accumulator Aktiebolag. (See Ruths, Johannes, assignor.)

Ruths, Johannes, Djursholm, assignor to Ruths Accumulator Aktiebolag, Stockholm, Sweden. Steam plant. 1,887,218; Nov. 8.

Ruths, Robert J., Baltimore, Md. Signal. 1,886,980; Nov. 8.

Ryan, Herl J. (See Hallberg, E. L., and Ryan.)

Ryan, James C., and W. W. Smith, Miami, Fla. Fuel heater and vaporiser. 1,887,044; Nov. 8.

Sackner, Wade E., assignor to Grand Rapids Fibre Cord Company, Grand Rapids, Mich. Machine for staining paper strips. 1,886,428; Nov. 8.

Sacks, Alvin L., assignor to Puro Co., Inc., St. Louis, Mo. Deodorant and moth-preventative. 1,886,429; Nov. 8.

Safety Mining Company. (See Karstrom, Charles E., assignor.)

St. Louis & O'Fallon Coal Company. (See Mintner, Corban, assignor.)

St. Pierre, Octave J., Chicago, Ill. Kitchen utensil. 1,886,917; Nov. 8.

Samel, Emanuel. (See Lockwood, P. M., and Samel.)

Sammis, Donald S. (See Billings, C. E., and Sammis.)

Sammis, Donald S., Stratford, assignor to The New Haven Sand Blast Company, New Haven, Conn. Tube actuating machine. 1,887,424; Nov. 8.

Sample, Fleck W., assignor to American Flange & Manufacturing Company, Chicago, Ill. Closing and sealing an opening in a metal container. 1,887,435; Nov. 8.

Sampson, Frederick W., Detroit, Mich., and J. W. Tatter, Chicago, Ill.; said Sampson assignor to Continental Motors Corporation, Detroit, Mich., and said Tatter assignor to Lewis Differential Company, Chicago, Ill. Brake. 1,886,594; Nov. 8.

Sandquist, Edwin G., Wilmington, Calif. Baby sanitary toilet seat. 1,886,595; Nov. 8.

Santurello, Peter, Columbus, Ohio. Hair heating equipment. 1,886,909; Nov. 8.

Saranac Automatic Machine Corporation. (See Newhouse, Walter F., assignor.)

Sargent & Company. (See Shaw, John H., assignor.)

Scaglia, Gregorio, Turin, assignor to Societa Italina Ernesto Breda per Costruzioni Meccaniche, Milan, Italy. Impact ignition device and bomb or the like. 1,887,468; Nov. 8.

Schacht, John H., and D. A. Palmiter, Sacramento, Calif. Heat exchanger. 1,886,744; Nov. 8.

Schacht, Sim E. (See Schacht, William F., and S. E.)

Schacht, William F., and S. E. Schacht, Huntington, Ind. Caster roller. 1,887,436; Nov. 8.

Schade, Otto H., assignor to Atwater Kent Manufacturing Company, Philadelphia, Pa. Amplification control system. 1,887,329; Nov. 8.

Schaeffer, Hanns, Essen-on-the-Ruhr, Germany, assignor to the Firm: N. V. Montania, The Hague, Netherlands. Lining for underground works. 1,886,745; Nov. 8.

Scheckel, Edward J., Brookfield, Ill. Padded link for endless tractor chains. 1,886,839; Nov. 8.

Schering-Kahlbaum A. G. (See Baensch, Walter, assignor.)

Schey, Robert, assignor to Combier & Co. Inc., New York, N. Y. Textile fabric or the like. Des. 88,259; Nov. 8.

Schey, Robert, assignor to Combier & Co. Inc., New York, N. Y. Textile fabric or the like. Des. 88,260; Nov. 8.

Schlömer, Michael, Cologne-Mulheim, Germany. Apparatus for treating films. 1,886,596; Nov. 8.

Schmidt, Adolph T. (See Lindemann, Albert J., W. C., and Schmidt.)

Schmidt, Ferdinand E., assignor to C. A. Dunham Company, Marshalltown, Iowa. Thermostatic trap. 1,886,500; Nov. 8.

Schmidt, Lester C., assignor of one-half to Kenosha Die & Stamping Works, Kenosha, Wis. Carburetor. 1,886,910; Nov. 8.

Schmidt, Paul, assignor to Berkshire Knitting Mills, Wyomissing, Pa. Knitted fabric. Des. 88,261; Nov. 8.

Schmidt, Paul, assignor to Berkshire Knitting Mills, Wyomissing, Pa. Knitted fabric. Des. 88,262; Nov. 8.

Schnack, Henry C. S. (See Davies, Willard J., and Schnack.)

Schneider, Peter, Oswego, N. Y. Window lock and antirattler. 1,886,746; Nov. 8.

Schoene, Kurt, Hamburg, Germany. Valve. 1,886,840; Nov. 8.

Schotthoefer, Joseph G., Peoria, Ill. Micrometer. 1,887,437; Nov. 8.

Schofield, William R., jr., assignor to Leeds & Northrup Company, Philadelphia, Pa. Method and system for controlling regenerative furnaces. 1,886,430; Nov. 8.

Schrants, Henry A., administrator. (See De Joy, Nick, assignor.)

Schreiber, David. Turned shoe. 1,886,501; Nov. 8.

Schroder, George T., New York, N. Y. Folding magnifier attachment. 1,886,747; Nov. 8.

Schull, Ben H. (See Schull, Thomas, assignor.)

Schull, Thomas, assignor to B. H. Schull, Clinton, Ind. Hitch drill. 1,886,981; Nov. 8.

Schulman, Joseph, Brooklyn, N. Y. Combined collapsible luggage carrier and bumper. 1,886,911; Nov. 8.

Schultz, John L. (See Higgins, J., and Schultz.)

Schutte, August E., Northboro, Mass. Process and machine for road-making. 1,886,748; Nov. 8.

Schwabe, Walter, Zurich, Switzerland. Printing device. 1,886,897; Nov. 8.

Schwalbe, Lester E., Wauwatosa, Wis. Building block. 1,887,170; Nov. 8.

Schwarz, August, Chicago, Ill. Propeller. 1,887,045; Nov. 8.

Schweiter, Walter, Horgen, near Zurich, Switzerland. Cop winding machine. 1,886,598; Nov. 8.

Scientific Tablet Company. (See Suppiger, Gerhart S., assignor.)

Scott, William. (See Reeder, H. R., and Scott.)

Scott & Williams, Incorporated. (See Swinglehurst, Harry, assignor.)

Scottish Dyes, Limited. (See Wilson, J. S., and Thomas, assignors.)

Scovill Manufacturing Company. (See Patchen, Arthur D., assignor.)

Searles, Alva L., Grand Rapids, Mich. Fan for furnace hot air pipes. 1,886,841; Nov. 8.

Seelbach, John F., assignor to Grand Rapids Hardware Co., Grand Rapids, Mich. Pulley wheel for sash pulleys. 1,886,431; Nov. 8.

Seeley, Harold T., Lansdowne, Pa., assignor to General Electric Company. Control apparatus. 1,886,749; Nov. 8.

Segal Safety Razor Corporation. (See Segal, Samuel, assignor.)

Segal, Samuel, New York, N. Y., assignor to Segal Safety Razor Corporation. Razor. 1,887,105; Nov. 8.

Seiberling Rubber Company. (See Pfeiffer, Fred B., assignor.)

Seitz, Oskar, Baden, Switzerland. Electric power rectifier anode. 1,887,069; Nov. 8.

Seyferth, Myrtle E., Murphysboro, Ill. Collapsible bed or crib. 1,887,438; Nov. 8.

Sharp, Albert and G., Bayonne, N. J. Cutting and block forming machine for plastic substances. 1,887,046; Nov. 8.

Sharp, George. (See Sharp, Albert and A.)

Shaw, John H., assignor to Sargent & Company, New Haven, Conn. Padlock. 1,886,912; Nov. 8.

Shaw, Kenneth R., assignor to Easthampton Rubber Thread Co., Easthampton, Mass. Rubber band package and making same. 1,886,842; Nov. 8.

Shaw, Noble C., assignor to The Union Switch & Signal Company, Swissvale, Pa. Electrical relay. 1,887,247; Nov. 8.

Shaw, William S., Boyne City, Mich. Gas burner. 1,887,330; Nov. 8.

Sherman, Fred A., Ashland, Nebr. Beet topper. 1,886,843; Nov. 8.

Shields, John W., assignor to F. O. Weber, Evansville, Ind. Hardware for revolving doors. 1,886,502; Nov. 8.

Shierk, Dearell D., assignor to M. L. Hamilton, Portland, Oreg. Universal joint. 1,887,106; Nov. 8.

Shillman, Albert H., Baltimore, Md. Art needle work. 1,887,364; Nov. 8.

Shisler, George M., Bainbridge, assignor, by mesne assignments, to The Casein Manufacturing Company of America, Inc., New York, N. Y. Adhesive material containing casein. 1,886,750; Nov. 8.

Shockey, Harry K., San Diego, Calif. Machine for reclaiming worn brake drums. 1,886,503; Nov. 8.

Shomaker, Wesley P., Richmond, Va. Perforator. 1,887,331; Nov. 8.

Shover, Barton R., Pittsburgh, Pa. Rolling strip metal. 1,887,248; Nov. 8.

Shreiber, Bernard, assignor to Meyer Gendel, New York, N. Y. Oil pump. 1,886,751; Nov. 8.

Shrum, Peter J., Monaca Heights, assignor to Pittsburgh Screw and Bolt Corporation, Pittsburgh, Pa. Pipe-end protector. 1,887,332; Nov. 8.

Siegerist, Walter, Bayside, assignor to International Combustion Engineering Corporation, New York, N. Y. Boiler installation. 1,887,141; Nov. 8.

Sigwald, Charles G., Minneapolis, Minn. Oil burner. Des. 88,263; Nov. 8.

Sill, William F., St. Louis, and C. W. Pippin, Pine Lawn, Mo. Automobile bumper. 1,886,913; Nov. 8.

Simon, Otto, Berlin, Germany. Producing cements for teeth. 1,886,982; Nov. 8.

Simonds Worden White Company. (See Allison, Albert J., assignor.)

Simplex Equipment Company. (See Blake, Eli J., assignor.)

Simplex Paper Box Corporation. (See Gross, Ralph A., assignor.)

Sipp-Eastwood Corporation. (See Klein, Frederick, assignor.)

Slade, Edward, New York, N. Y. Apparatus for making strands and covered wires. 1,886,447; Nov. 8.

Slagh, Harold R. (See Britton, E. C., and Slagh.)

Slater, Nelson, assignor to S. Slater & Sons, Inc., Webster, Mass. Pile fabric. 1,887,477; Nov. 8.

Slater, S., & Sons, Inc. (See Slater, Nelson, assignor.)

Slichter, Louis B., assignor to Mason, Slichter & Gauld, Inc., Madison, Wis. Locating leaks in reservoirs. 1,886,914; Nov. 8.

Slingerland, Henry A., Syracuse, N. Y. Brake testing device. 1,886,599; Nov. 8.

Slocum, Leslie D., Oxnard, Calif. Farm implement. 1,886,432; Nov. 8.

Smidth, Leonard, New York, N. Y., and R. H. Crist, Grantwood, N. J., assignors to Luco Products Corporation, Brooklyn, N. Y. Plasticising urea-formaldehyde condensation products. 1,886,600; Nov. 8.

Smith, Arthur L., Maplewood, N. J. Box for face powder and similar material. 1,887,333; Nov. 8.

Smith, Calvin, and E. J. Southwick, Somerville, N. J. Furnace. 1,886,448; Nov. 8.

Smith, Clara M., Brockton, Mass. Attachment for sewing machines. 1,887,142; Nov. 8.
Smith, Clyde L., and C. B. Watson, assignors to The Pure Oil Company, Chicago, Ill. Converting oil. 1,887,047; Nov. 8.
Smith Engineering Works. (See Rumpel, Harvey H., assignor.)
Smith, L. C. & Corona Typewriters Inc. (See Gabrielson, Carl, assignor.)
Smith, L. C. & Corona Typewriters Inc. (See Lewis, Edward Z., assignor.)
Smith, Lee T., Kenvil, N. J., assignor to Hercules Powder Company, Wilmington, Del. Crystallins fenchyl alcohol and separating the same from pine oil. 1,887,171; Nov. 8.
Smith, Maurice A., assignor to McKee Glass Company, Jeannette, Pa. Lamp lens. 1,887,107; Nov. 8.
Smith, Russell T. assignor to Gibson Refrigerator Company, Greenville, Mich. Refrigerator. 1,886,601; Nov. 8.
Smith, Samuel B., Rocky River, Ohio. Variable pitch propeller. 1,886,602; Nov. 8.
Smith, Temple C., Westfield, and J. B. Spowart, Newark, N. J., assignors to American Telephone and Telegraph Company. Combined earth boring machine and derrick apparatus. 1,887,172; Nov. 8.
Smith, William W. (See Ryan, J. C., and Smith.)
Smithe, F. L., Machine Co. (See Novick, Abraham, assignor.)
Smoot Engineering Corporation. (See O'Connor, George K., assignor.)
Snyder, Mills R., Savannah, Ga., assignor to The Union Switch & Signal Company, Swissvale, Pa. Railway bootleg. 1,887,249; Nov. 8.
Societa Italiana Ernesto Breda per Costruzioni Meccaniche. (See Belluzzo, Giuseppe, assignor.)
Societa Italiana Ernesto Breda per Costruzioni Meccaniche. (See Scaglia, Gregorio, assignor.)
Societa Italiana Pirelli. (See Bruni, G., and Levi, assignors.)
Societe Alsacienne de Constructions Mecaniques. (See Ehlinger, Marcel, assignor.)
Societe Anonyme la Cooperation Agricole & Industrielle. (See Claudel, Charles H., assignor.)
Society of Chemical Industry in Basle. (See Haller, R., and Heckendorn, assignors.)
Society of Chemical Industry in Basle. (See Kuhn, R., and Kern, assignors.)
Society of Chemical Industry in Basle. (See Wettstein, Walter, assignor.)
Sommer, Fritz, and M. Nassau, Charlottenburg-Berlin, assignors to Chemische Fabrik Grunau Landshoff & Meyer Aktiengesellschaft, Grunau, near Berlin, Germany. Preparation of N-methyl-p-amino phenol sulphate. 1,886,449; Nov. 8.
Soucie, Eloi, Missoula, Mont. Ironing board and closet construction. 1,886,988; Nov. 8.
Southwick, Reuben J. (See Smith, C., and Southwick.)
Spaeth, John J., assignor to The F. Wyatt Manufacturing Company, Salina, Kans. Cultivator. 1,887,334; Nov. 8.
Sparling, Eric C. (See Thompson, H. H., and Sparling.)
Spearman, Earnest S., Pelzer, assignor to Bahan Textile Machinery Company, Greenville, S. C. Shaft bearing. 1,887,336; Nov. 8.
Spencer, Wilbert A. (See Spencer, William A. N. and W. A.)
Spencer, William A. N. and W. A., Lee, Mass. Paper making apparatus. 1,887,143; Nov. 8.
Sperry Gyroscope Company. (See Mahoney, Joseph N., assignor.)
Sperry Gyroscope Company. (See Thompson, H. H., and Sparling, assignors.)
Sperry, Lawrence B., Garden City, N. Y., by W. A. Sperry and Bank of America, co-executors, New York, N. Y. Automatic pilot for aircraft. 1,887,335; Nov. 8.
Sperry, Winifred A., et al., executors. (See Sperry, Lawrence B.)
Spitzglass, Albert F., assignor to Republic Flow Meters Company, Chicago, Ill. Boiler meter recorder. 1,886,844; Nov. 8.
Spots, Chester A., Stamford, Conn. Toy glider. 1,887,337; Nov. 8.
Spowart, John B. (See Smith, T. C., and Spowart.)
Square D Company. (See Van Valkenburg, Hermon L., assignor.)
Staf, Axel H., assignor to The Alvin Corporation, Providence, R. I. Spoon or similar article. Des. 88,264; Nov. 8.
Standard Devices, Inc. (See Berman, Otto N., assignor.)
Standard Oil Company, The. (See Doyle, Philip C., assignor.)
Standard Oil Development Company. (See Coleman, Stewart P., assignor.)
Standard Stations, Inc. (See Pflueger, Timothy L., assignor.)
Standard Stoker Company, The. (See Hogg, Francis, assignor.)
Standard Stoker Company, The. (See Turner, Edwin Archer, assignor.)
Standard Stoker Company, The. (See Wenrich, Martin L., assignor.)
Standard Trump Bros. Machine Company. (See Bristow, P. W., and Houseman, assignors.)
Stansberry, Warren H., assignor to Peerless Novelty Co., Grand Haven, Mich. Stand. 1,886,752; Nov. 8.
Starburg, Charles J., and F. N. Carlson, Sacramento, Calif. Sawdust burner. 1,886,450; Nov. 8.
Stark Bro's Nurseries & Orchards Company. (See Burbank, Luther, assignor.)
Stark Bro's Nurseries & Orchards Company. (See Sutherland, William G., assignor.)
Stark Bro's Nurseries & Orchards Company. (See Wiederhahr, Herman J. B., assignor.)
Staton, Harry C., Burlington, Iowa. Insulator structure. 1,886,984; Nov. 8.
Steele, George, S. D. Cowlishaw, and J. B. Capey, Hanley, Stoke-on-Trent, England. Flexible shaft coupling. 1,887,070; Nov. 8.
Steese, Maud H., New York, N. Y. Animal shelter. 1,887,108; Nov. 8.
Stegeman, Henry J. (See Locke, S. D., and Stegeman.)
Steinberger Bros. Glove Corp. (See Steinberger, Irwin, assignor.)
Steinberger, Irwin, assignor to Steinberger Bros. Glove Corp., New York, N. Y. Armlet. 1,886,753; Nov. 8.
Stelzer, Ernst, assignor to the Firm Th. Goldschmidt A.-G., Essen-on-the-Ruhr, Germany. Production of colloidal white lead-basic lead carbonate from lead oxide. 1,886,915; Nov. 8.
Stephens, Bradford E., Needham, Mass. Pamphlet and book cover. 1,887,338; Nov. 8.
Stephenson, James E., assignor to General Railway Signal Company, Rochester, N. Y. Traffic controlling system for railroads. 1,887,048; Nov. 8.
Stern, Milton W., New York, N. Y. Gem setting for rings, pendants and ear rings. Des. 88,265; Nov. 8.
Stern, Milton W., New York, N. Y. Gem setting for rings, pendants and ear rings. Des. 88,266; Nov. 8.
Sterner, Valdemar, assignor to Allmanna Svenska Elektriska Aktiebolaget, Vasteras, Sweden. Frequency relay. 1,887,189; Nov. 8.
Stickney, Burnham C., Hillside, N. J., assignor to Underwood Elliott Fisher Company, New York, N. Y. Typewriting machine. 1,886,845; Nov. 8.
Stiel, Carl F., St. Paul, Minn. Window cleaner's pail. 1,887,071; Nov. 8.
Stiles, Thomas G., assignor to Container Seal Company, Inc., Arlington, N. J. Seal. 1,886,451; Nov. 8.
Stoeckly, Johann J., Teltow-Seehof, and E. Witte, Lichterfelde-Berlin, Germany, assignors to American Glanzstoff Corporation, New York, N. Y. Purification of cellulose solutions. 1,886,504; Nov. 8.
Stoffregan, Otto G., Chicago, Ill. Supporter for wearing apparel. 1,886,754; Nov. 8.
Storch, Julius, New York, N. Y. Hopper construction for laundries, etc. 1,886,916; Nov. 8.
Storm, Henry, New York, N. Y. Combined ashtray and signal device. 1,886,452; Nov. 8.
Storr, Bertram V. (See Rich, H. C., and Storr.)
Stow, Clarence E., Tulsa, Okla. Vehicle signal. Des. 88,267; Nov. 8.
Stramaglia, Nicola, Chicago, Ill. Drying basket. 1,887,439; Nov. 8.
Stranszky, Emil, Warren, Pa., assignor to G. Van Daam, Buffalo, N. Y. Electrical cooking apparatus. 1,887,219; Nov. 8.
Strickler, John R., and S. A. Fraine, Akron, Ohio, assignors to Taylor Instrument Companies, Rochester, N. Y. Apparatus for the vulcanization of rubber tires and tubes. 1,887,250; Nov. 8.
Strickler, John R., and S. A. Fraine, Akron, Ohio, assignors to Taylor Instrument Companies, Rochester, N. Y. Apparatus for vulcanizing rubber tires, tubes, and the like. 1,887,251; Nov. 8.
Strindlund, John, Tofte I Hurum, Norway. Screw press and the like. 1,886,755; Nov. 8.
Stroble, Carl J., Tarentum, assignor to Allegheny Steel Company, Breckenridge, Pa. Electrical steel. 1,887,339; Nov. 8.
Strothotte, Maurice A., New York, N. Y. Tubular chimes. 1,886,603; Nov. 8.
Structural Gypsum Corporation. (See Mortimer, Charles G., assignor.)
Stuckeman, William F., assignor to H. B. Rouse & Company, Chicago, Ill. Gauge. 1,887,220; Nov. 8.
Sturgis, Fredrick C., Irvington, N. J. Lapping machine. 1,886,919; Nov. 8.
Sturtevant, B. F., Company. (See Anderson, Samuel M., assignor.)
Suddeutsche Bremsen-Aktiengesellschaft. (See Suder, H., and Goth, assignors.)
Suder, Georges, Pantin, France. Switch. 1,886,756; Nov. 8.
Suder, Heina, and Max Goth, assignors to Sudeutsche Bremsen-Aktiengesellschaft, Munich, Germany. Internal combustion engine. 1,887,072; Nov. 8.
Sugiyama, Torno, J. Ushiki and Y. Okabe, Mayebashi, Japan. Replenishing a supply of cocoons automatically. 1,886,757; Nov. 8.
Sun Oil Company. (See Wait, Justin F., assignor.)
Sunairi, Shisuo, Hiroshima-Shi, Japan. Protective relay system. 1,886,985; Nov. 8.
Sunairi, Shisuo, Hiroshima-Shi, Japan. Protective relay system. 1,886,986; Nov. 8.
Sunley, George, assignor to Reynolds Spring Company, Jackson, Mich. Spring construction. 1,886,918; Nov. 8.

Superior Confection Company, The. (See Rens, Henry K., assignor.)
Suppiger, Gerhart S., assignor to Scientific Tablet Company, Belleville, Ill. Flavoring in canning, preserving, and bottling operations. 1,887,078; Nov. 8.
Supreme Instruments Corporation. (See Johnson, Vivion A., assignor.)
Sutherland, James N., Berkeley, Calif. Valve. 1,886,454; Nov. 8.
Sutherland, William G., Boulder, Colo., assignor to Stark Bro's. Nurseries & Orchards Company, Louisiana, Mo. Thornless barberry. Pl. Pt. 40; Nov. 8.
Sutton, Milus, Elko, Ga. Cotton bunching machine. 1,887,441; Nov. 8.
Svendsgaard, Sverre B., Marshfield, Oreg. Cutting device. 1,887,440; Nov. 8.
Swan, Andrew. (See Helmore, W., and Swan.)
Swanson, Theodore, and T. McCreary, San Francisco, Calif. Ice cream freezer. Des. 88,268; Nov. 8.
Sware, Paul G., Pittsburgh, Pa. Electrical contacting device. 1,886,758; Nov. 8.
Swartzbaugh Manufacturing Company, The. (See Barnes, William A., assignor.)
Swift and Company. (See Walter, Charles T., assignor.)
Swinglehurst, Harry, Orange, N. J., assignor to Scott & Williams, Incorporated, New York, N. Y. Needle dial for knitting machines. 1,887,240; Nov. 8.
Szepesi, Eugene, Scarsdale, N. Y. Production planning board. 1,886,453; Nov. 8.
Tallman, Albert E., assignor of one-half to J. W. Warner, jr., Nashville, Tenn. Direction indicator. 1,887,469; Nov. 8.
Tamarin, Bernard J., Philadelphia, Pa. Handle for vacuum cleaners. 1,887,173; Nov. 8.
Tanallas, Alexis, Los Angeles, Calif. Nail aligning device. 1,887,109; Nov. 8.
Tatter, John W. (See Sampson, Frederick W.)
Taylor, Bert S., Akron, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y. Oil-resisting rubber article and making the same. 1,886,759; Nov. 8.
Taylor, Enid, New York, N. Y. Combined tray and receptacles for toilet preparations. Des. 88,269; Nov. 8.
Taylor, Frederick C., administrator. (See Taylor, Frederick D.)
Taylor, Frederick D., deceased, Cranston, R. I.; F. C. Taylor, administrator. Producing designs and patterns. 1,886,846; Nov. 8.
Taylor, Harry, et al. (See Krause, Paul, assignor.)
Taylor, Herbert B., assignor to General Railway Signal Company, Rochester, N. Y. Hand operating means for power operated railway traffic controlling devices. 1,886,987; Nov. 8.
Taylor Instrument Companies. (See Stricklen, J. R., and Fraine, assignors.)
Teaver, Joe L., Birmingham, Ala., assignor to J. L. Teaver, N. J. Peters, and C. N. Comati, a Copartnership. Bottle opener. 1,886,604; Nov. 8.
Telehor Aktien-Gesellschaft. (See Von Okolicsanyi, F., and Wilkenhauser, assignors.)
Tenney, Perry L., Muncie, Ind., assignor to General Motors Corporation, Detroit, Mich. Gear shift mechanism. 1,886,848; Nov. 8.
Tenney, Perry L., Muncie, Ind., assignor to General Motors Corporation, Detroit, Mich. Synchronizing transmission. 1,886,850; Nov. 8.
Tenney, Perry L., and H. E. Fidler, Muncie, Ind., assignors to General Motors Corporation, Detroit, Mich. Universal joint. 1,886,847; Nov. 8.
Tenney, Perry L., and Le R. F. Le Gros, Muncie, Ind., assignors to General Motors Corporation, Detroit, Mich. Shifter lever mounting. 1,886,849; Nov. 8.
Textile-Finishing Machinery Company, The. (See Rusden, Richard E., assignor.)
Thelen, Hilarius, Maspeth, N. Y. Stone bench or settee. 1,886,988; Nov. 8.
Thelen, James S., assignor to General Electric X-Ray Corporation, Chicago, Ill. Anode. 1,886,761; Nov. 8.
Thomas & Betts Co., The. (See Betts, Hobart D., jr., assignor.)
Thomas & Betts Co., The. (See Buchanan, Stephen N., assignor.)
Thomas, Felix, New York, assignor to International Time Recording Company of New York, Endicott, N. Y. Synchronized clock system and secondary clocks therefor. 1,887,221; Nov. 8.
Thomas, Harry A., Pittsburgh, Pa. Ventilator. 1,886,605; Nov. 8.
Thomas, John. (See Fairweather, D. A. W., and Thomas.)
Thomas, John. (See Wilson, J. S., and Thomas.)
Thomas, Kurt, Berlin, Germany. Water closet douche. 1,886,920; Nov. 8.
Thomas, Laurence H. (See Kuhn, F., and Thomas.)
Thomas, Thomas S., Malad, Idaho. Railroad rail joint bridge. 1,887,252; Nov. 8.
Thompson, Clinton O. (See Martens, F. J., and Thompson.)
Thompson, Herbert H., Mountain Lakes, N. J., and E. C. Sparling, Garden City, N. Y., assignors, by mesne assignments, to Sperry Gyroscope Company, Inc. Constant period gyro compasses. 1,886,606; Nov. 8.
Thonger, John R., assignor to Harley-Davidson Motor Co., Milwaukee, Wis. Industrial motor of the internal combustion type. 1,886,455; Nov. 8.
Thropp, John E., Trenton, N. J. Roll travel testing apparatus. 1,887,442; Nov. 8.
Thropp, Joseph W., Trenton, N. J. Roll travel testing apparatus. 1,887,443; Nov. 8.
Thurber, Harry F. (See Greist, H. M., and Thurber.)
Tierney, Michael J., Rochester, N. Y. Garbage and refuse incinerator. 1,886,760; Nov. 8.
Tillyer, Edgar D., Southbridge, Mass., E. A. Forshey, New York, N. Y., and I. S. Nott, Toronto, Ontario, Canada, assignors to American Optical Company, Southbridge, Mass. Device for testing the eye. 1,887,049; Nov. 8.
Tilo Roofing Company. (See Tobin, Robert J., assignor.)
Timken Silent Automatic Company. (See Graul, William C., assignor.)
Tobin, Robert J., Hollis, assignor to Tilo Roofing Company, Inc., New York, N. Y. Scaffolding support. 1,886,921; Nov. 8.
Todd, Juanita, Yonkers, assignor to Sidney Blumenthal & Co., Inc., New York, N. Y. Pile fabric rug. Des. 88,270; Nov. 8.
Todd, Juanita, Yonkers, assignor to Sidney Blumenthal & Co., Inc., New York, N. Y. Pile fabric rug. Des. 88,271; Nov. 8.
Tornberg, Isidor, Plainfield, N. J., assignor to Wood Newspaper Machinery Corporation, New York, N. Y. Printing press structure. 1,886,762; Nov. 8.
Totsek, Friedrich, Essen-Stoppenberg, Germany, assignor, by mesne assignments, to The Koppers Company of Delaware, Pittsburgh, Pa. Coke oven. 1,887,222; Nov. 8.
Towne, Carlton G., assignor to The Aluminum Cooking Utensil Company, New Kensington, Pa. Siphon bottle. Des. 88,272; Nov. 8.
Trail, Herbert H., Vancouver, British Columbia, Canada, assignor to Motor Devices, Inc., Chicago, Ill. Automatic means for starting engines. 1,887,488; Nov. 8.
Trayer Bolt Company. (See James, Francis F., assignor.)
Trecker, Theodore, Milwaukee, assignor to Kearney & Trecker Corporation, West Allis, Wis. Telescopic screw. 1,886,851; Nov. 8.
Tregoning, William C., Wauwatosa, assignor to Cutler-Hammer, Inc., Milwaukee, Wis. Electric switch. 1,886,433; Nov. 8.
Trettin, Louis F., assignor of three-eighths to H. K. Wagner and one-eighth to W. H. Nohl, St. Louis, Mo. Confection. 1,886,763; Nov. 8.
Trico Products Corporation. (See Hueber, Henry, assignor.)
Trico Products Corporation. (See Hueber, H., and Horton, assignors.)
Tritton, Julian S., Surbiton, England. Lamp control for vehicles. 1,887,074; Nov. 8.
Trogner, Arthur M. (See Duncan, R. D., jr., and Trogner.)
Trout, Walter C. (See Carr, R. H., and Trout.)
Truda, George H., Montclair, N. J., and J. M. Wilde, New York, N. Y. Window cleaning device. 1,886,852; Nov. 8.
Trumble Gas Trap Company. (See Adams, Ernest H., assignor.)
Trumble, John T., Lansing, Mich. Supercharging apparatus. 1,886,989; Nov. 8.
Trumbull Electric Manufacturing Company, The. (See Getchell, Benjamin E., assignor.)
Tupper, Lloyd A., assignor to Chicago Manifold Products Company, Chicago, Ill. Duplicating machine. 1,887,382; Nov. 8.
Turner, Edwin A., New York, N. Y., assignor to The Standard Stoker Company. Stoker conveyer. 1,886,764; Nov. 8.
Turner, Edwin A., New York, N. Y., assignor to The Standard Stoker Company. Locomotive tender. 1,886,765; Nov. 8.
Turney, Harry L., Portland, Oreg., assignor to Patents & Royalties Corporation. Logging engine. 1,887,444; Nov. 8.
Tuttle, Leonard I., Buchanan, N. Y. Still adjustment for pattern fitting for multiple printing machines. 1,886,922; Nov. 8.
Twiss, Douglas F., and E. A. Murphy, Birmingham, England, assignors to Dunlop Rubber Company Limited. Manufacture of goods from aqueous dispersions of or containing rubber and similar resins. 1,887,190; Nov. 8.
Twort, Frederick W., Camberley, England. Electromagnetic coupling device or electrical transformer. 1,887,470; Nov. 8.
Uhlhorn, Emil. (See Rubinstein, J., Heidelberg, Uhlhorn, and Dahner.)
Ulrich, Charles B., assignor to Art Metal Construction Company, Jamestown, N. Y. Desk. 1,886,766; Nov. 8.
Underwood Elliott Fisher Company. (See Stickney, Burnham C., assignor.)
Union Metal Products Company. (See Gilpin, Garth G., assignor.)
Union Switch & Signal Company, The. (See Bossart, Paul N., assignor.)
Union Switch & Signal Company, The. (See Failor, Charles W., assignor.)
Union Switch & Signal Company, The. (See Jefferson, G. V., and Little, assignors.)
Union Switch & Signal Company, The. (See Lewis, Lloyd V., assignor.)
Union Switch & Signal Company, The. (See Shaw, Noble C., assignor.)
Union Switch & Signal Company, The. (See Snyder, Mills R., assignor.)

Unique Manufacturing Company, Inc. (See French, Jeannette, assignor.)
Unit Corporation of America. (See Bixby, Leo A., assignor.)
United Kingdom Optical Company. (See Culver, E., and Emerson, assignors.)
United Piece Dye Works, The. (See Megros, Georges, assignor.)
United Shoe Machinery Corporation. (See Coffey, John B., assignor.)
United Shoe Machinery Corporation. (See Jones, John L., assignor.)
United Shoe Machinery Corporation. (See Morrill, Alfred R., assignor.)
United States Electrical Manufacturing Company. (See Myers, Thomas G., assignor.)
United States Gypsum Company. (See Ives, Clifford E., assignor.)
United States Hoffman Machinery Corporation. (See Clarke, Clarence M., assignor.)
United States Printing and Lithograph Company, The. (See Koeble, Albert, assignor.)
United Verde Copper Company. (See Ralston, O. C., and Kusell, assignors.)
Universal Match Corporation, The. (See Bogoslowsky, Boris, assignor.)
Universal Oil Products Company. (See Dubbs, Carbon P., assignor.)
Universal Oil Products Company. (See Egloff, Gustav, assignor.)
Universal Oil Products Company. (See Huff, Lyman C., assignor.)
Universal Oil Products Company. (See Pollock, Robert T., assignor.)
Universal Oil Products Company. (See Weber, Harold C., assignor.)
Universal Winding Company. (See Burton, Hugh F., assignor.)
Unthank, George R. (See Green, E. W., Unthank, and Dunn.)
Ushiki, Jusuke. (See Sugiyama, T., Ushiki, and Okabe.)
Valentine, Lewis S., Reading, Mich. Chair seat. 1,886,434; Nov. 8.
Van Daam, Gerritt. (See Stranssky, Emil, assignor.)
Vandercook, David D. (See Vandercook, Edward O., D. D., and F. R.)
Vandercook, Edward O., D. D., and F. R., Evanston, Ill., assignors to Vandercook & Sons. Work supporting attachment for proof presses. 1,886,923; Nov. 8.
Vandercook, Frederick R. (See Vandercook, Edward O., D. D., and F. R.)
Vandercook & Sons. (See Vandercook, Edward O., D. D., and F. R., assignors.)
Van der Pol, Balthasar, assignor to N. V. Philips' Gloeilampenfabrieken, Eindhoven, Netherlands. Receiving system. 1,886,990; Nov. 8.
Van Deventer, Harry R., New York, N. Y., assignor, by mesne assignments, to Frigidaire Corporation, Dayton, Ohio. Refrigerating system. 1,886,607; Nov. 8.
Van Horne, John S., Franklin, Ohio, assignor to Radio Corporation of America. Filament support. 1,886,991; Nov. 8.
Van Ness, Willard L., Toledo, Ohio. Utensil cleansing apparatus. 1,886,853; Nov. 8.
Vannini, Philipp, Zug, Switzerland, assignor to Landis & Gyr, A.-G. Switch actuating mechanism. 1,887,223; Nov. 8.
Van Ranst, Cornelius W., Auburn, Ind., assignor, by mesne assignments, to Manning & Co., Chicago, Ill. Driving gear arrangement for automobiles. 1,886,924; Nov. 8.
Van Valkenburg, Hermon L., Wauwatosa, Wis., assignor to Square D Company, Detroit, Mich. Automatic switch. 1,886,608; Nov. 8.
Van Voorhis, Stephen L. (See Button, C. R., and Esty, assignors.)
Varney, William W. (See Grenagle, James B., assignor.)
Vasselli, Anthony J., Newark, N. J. Brake and clutch control for motor vehicles. 1,886,767; Nov. 8.
Vaughan Company. (See Ponton, Fortunat, assignor.)
Venable, William M., Pittsburgh, Pa., assignor to Blaw-Knox Company, Blawnox, Pa. Method of and machinery for forming pavements. 1,887,341; Nov. 8.
Vernay, Jean B., Villeurbanne, France. Filtering apparatus. 1,887,471; Nov. 8.
Vickerman, Robert E., Philadelphia, Pa. Tuft yarn spool and making the same. 1,887,342; Nov. 8.
Vierling, Karl, Ludwigshafen-on-the-Rhine, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Extraction of organic substances. 1,887,050; Nov. 8.
Viking Manufacturing Company. (See Erickson, John A., assignor.)
Vincent, Orville L., Chicago, Ill., assignor, by mesne assignments, to Consolidated Signal Company. Signal. 1,886,435; Nov. 8.
Visking Corporation, The. (See Voss, Julius, assignor.)
Vitamin Company of America, The. (See Alexander, Elliot R., assignor.)
Vogt, Henry C., New Brunswick, N. J. Automatic alarm and burner control. 1,886,854; Nov. 8.
Von Frommer, Rudolf, Budapest, Hungary. Breech bolt for automatic firearms. 1,886,609; Nov. 8.
Von Girsewald, Conway, Baron, H. Weidmann, and G. Roesner, Frankfort-on-the-Main, Germany, assignors to American Lurgi Corporation, New York, N. Y. Production of trialkali phosphates. 1,887,445; Nov. 8.
Von Okolicsanyi, Frans, Berlin-Wilmersdorf, and G. Wikkenhauser, Berlin-Halensee, assignors to Telebor Aktien-Gesellschaft, Berlin-Charlottenburg, Germany. Picture scanning and assembling device for television and picture transmission. 1,887,472; Nov. 8.
Voss, Julius, Wiesbaden-Biebrich, Germany, assignor, by mesne assignments, to The Visking Corporation, Chicago, Ill. Preparing tubular bodies from cellulose. 1,887,446; Nov. 8.
Vuillemenot, Frederic A., assignor to The De Vilbiss Company, Toledo, Ohio. Atomizer. Des. 88,273; Nov. 8.
Vuillemenot, Frederic A., assignor to The De Vilbiss Company, Toledo, Ohio. Atomizer. 1,887,388; Nov. 8.
Vulcan Soot Cleaner Company. (See Arey, Fred C., assignor.)
Wagenfeld, Harry, assignor to Keystone Adjustable Cap Corporation, Philadelphia, Pa. Cap. 1,886,992; Nov. 8.
Wagenhorst, James H., Jackson, Mich. Vehicle wheel. 1,886,610; Nov. 8.
Wagenhorst, James H., Jackson, Mich. Rim tool. 1,886,611; Nov. 8.
Wagner, Fred W., and F. L. McIntire, Pittsburgh, Pa. Making motor fuel from light oil. 1,886,612; Nov. 8.
Wagner, Hugh K. et al. (See Trettin, Louis F., assignor.)
Wagner, Noah E., Tulsa, Okla. Pipe cutting machine. 1,886,855; Nov. 8.
Wait, Justin R., New York, N. Y., assignor to Sun Oil Company, Philadelphia, Pa. Transferring heat. 1,886,486; Nov. 8.
Wale, Herbert E., Bremerton, Wash. Attachment to make a right-hand bolt rifle a left-hand bolt rifle, or a left-hand bolt rifle a right-hand bolt rifle. 1,886,925; Nov. 8.
Walker, Herbert S., assignor to The Allpax Company, Inc., Mamaroneck, N. Y. Packing and process of manufacture. 1,886,993; Nov. 8.
Walker, Mitchell B., Greensboro, N. C. Lubricating mechanism. 1,886,505; Nov. 8.
Walter, Charles T., assignor to Swift and Company, Chicago, Ill. Meat packing conveyer. 1,886,926; Nov. 8.
Walter, Charles V., Bronxville, N. Y. Grinding machine. 1,886,994; Nov. 8.
Walter, George A., Ithaca, N. Y. Container. 1,887,075; Nov. 8.
Walton, Howard T., Collingswood, N. J., assignor to David Lupton's Sons Company, Philadelphia, Pa. Explosion-release mechanism for windows. 1,887,484; Nov. 8.
Ward, Charles A., New Rochelle, and O. E. H. Froelich, Queens Village, assignors to Ward Motor Vehicle Company, Mount Vernon, N. Y. Electric ice cream delivery truck. 1,887,224; Nov. 8.
Ward Motor Vehicle Company. (See Ward, C. A., and Froelich, assignors.)
Warner, Glenn S., Palo Alto, Calif. Shoulder protector. 1,887,473; Nov. 8.
Warner, James W., jr. (See Tallman, Albert R., assignor.)
Warren, Samuel R., assignor to Estey Organ Company, Brattleboro, Vt. Direct electric action for pipe organs. 1,887,076; Nov. 8.
Warth, Albin H., Baltimore, Md., assignor, by mesne assignments, to Crown Cork & Seal Company, Inc., New York, N. Y. Bottle cap and producing the same. Re18,648; Nov. 8.
Wartman, George H., Eden Valley, Minn. Grave covering and setting. 1,886,437; Nov. 8.
Warwick, Harold L., Fort Worth, Tex. Mechanism for traversing a recording medium. 1,886,856; Nov. 8.
Wasliko, Frank H., Bedford, Ohio. Glazier's nail. 1,887,253; Nov. 8.
Watson, Andrew B., et al. (See Roberts, Lee R., assignor.)
Watson, Andrew C., Toronto, Ontario, Canada. Hot air furnace. 1,886,506; Nov. 8.
Watson, Cornelius B. (See Smith, C. L., and Watson.)
Watson, Stewart M., Jackson, Mich. Outlining device. 1,886,768; Nov. 8.
Wattere, John, Utica, N. Y. Dyeing. 1,886,857; Nov. 8.
Wax, Evelyn, Briarwood, Long Island, N. Y. Textile fabric or the like. Des. 88,274; Nov. 8.
Webb, Christopher F., assignor of one-half to H. D. Black, Middlesex, England. Ticket issuing machine. 1,886,769; Nov. 8.
Weber, Fred O. (See Shields, John W., assignor.)
Weber, Harold C., Milton, Mass., assignor to Universal Oil Products Company, Chicago, Ill. Treatment of hydrocarbon oils. 1,887,051; Nov. 8.
Weeks, George M., Kronau, Saskatchewan, Canada. Anti-packing attachment. 1,886,438; Nov. 8.
Wegner, Walter E., Denver, Colo. Door stop. 1,887,365; Nov. 8.
Wehr, George G., Philadelphia, Pa. Boat. 1,886,507; Nov. 8.
Wehr, Robert D., Lakeland, Fla. Internal combustion engine. 1,886,770; Nov. 8.
Weidmann, Hans. (See von Girsewald, C., Weidmann, and Roesner.)
Weits, Irene A., Brooklyn, N. Y. Textile fabric or the like. Des. 88,275; Nov. 8.

Welkes, Anthony, Rochester, N. Y. Piston attachment. 1,887,384; Nov. 8.
Wells, Milton H., Wabash, Ind., assignor to Minneapolis-Honeywell Regulator Company, Minneapolis, Minn. Control system. 1,886,439; Nov. 8.
Wells, Sterling, Schaller, Iowa. Cream separator washer. 1,887,174; Nov. 8.
Welter, Adolf, Creteld, Germany. Converting liquid soap into a rapidly soluble handy form. 1,887,474; Nov. 8.
Wendeln, Oliver B., Nederland, Tex., assignor to The Pure Oil Company, Chicago, Ill. Filter. 1,887,052; Nov. 8.
Wenrich, Martin L., Altoona, Pa., assignor to The Standard Stoker Company, Incorporated. Force feed stoker. 1,886,771; Nov. 8.
Werdenberg, Heinrich, Neu-Allschwil, near Basel, assignor to the Firm of Durand & Huguenin S. A., Basel, Switzerland. Production of dyeings and prints on mixed fabrics. 1,886,995; Nov. 8.
Werner, Charles. (See Werner, Theodore and C.)
Werner, John, & Sons, Inc. (See Werner, Theodore and C., assignors.)
Werner, Theodore and C., assignors to John Werner & Sons, Inc., Rochester, N. Y. Producing candy centers and to candy center making machine employing such method. 1,886,858; Nov. 8.
Wertz, Chance F., Oak Park, Ill. Concrete form constructions. 1,887,385; Nov. 8.
Wesseler, William J. (See Ballinger, Lee O., assignor.)
West, Howard M. (See Blair, H. D., and West.)
Westover, Claude O., Orlando, Fla. Carburetor. 1,887,386; Nov. 8.
Westrope, Fred J., Detroit, Mich., assignor to The Murray Corporation of America. Adjustable seat. 1,887,077; Nov. 8.
Wetmore, William O., Washington, D. C. Oil liberator. 1,887,343; Nov. 8.
Wettlaufer, Jules L., Belmont, assignor, by mesne assignments, to The Patent and Licensing Corporation, Boston, Mass. Making roofing. 1,886,456; Nov. 8.
Wettstein, Walter, Monthey, assignor to Society of Chemical Industry in Basle, Basel, Switzerland. Synthesis of ammonia. 1,887,475; Nov. 8.
Weymouth, Harry G., Pittsburgh, and E. M. Kreidler, Wilkinsburg, assignors to Pittsburgh Equitable Meter Company, Pittsburgh, Pa. Fluid meter. 1,886,996; Nov. 8.
Wheary, George H., assignor to Wheary Trunk Company, Racine, Wis. Hand luggage. 1,886,440; Nov. 8.
Wheary Trunk Company. (See Wheary, George H., assignor.)
Wheaton, A. W., Brass Works. (See Wheaton, Abram W., assignor.)
Wheaton, Abram W., Maplewood, assignor to A. W. Wheaton Brass Works, Newark, N. J. Valve. 1,887,078; Nov. 8.
Wheeler, C. H., Manufacturing Company. (See Droescher, Le Roy A., assignor.)
White Metals Manufacturing Company. (See Witte, Paul, assignor.)
Whitney, George E., Bridgeport, Conn., assignor, by mesne assignments, to Whitney Stoker Corporation. Mechanical stoker. 1,887,191; Nov. 8.
Whitney Stoker Corporation. (See Whitney, George E., assignor.)
Wickenden, Leonard. (See Ebrhart, E. N., and Wickenden.)
Wicks, John, Oak Park, assignor, by mesne assignments, to Associated Electric Laboratories, Inc., Chicago, Ill. Telephone system. 1,886,613; Nov. 8.
Wiederkehr, Herman J. B., Altus, Ark., assignor to Stark Bro's Nurseries & Orchards Company, Louisiana, Mo. Grape. Pl. Pt. 42; Nov. 8.
Wierk, Frederick, assignor to Johnson & Wierk, Inc., New York, N. Y. Apparatus for indicating and controlling web variations. 1,886,508; Nov. 8.
Wikkenhauser, Gustav. (See von Okolicsanyi, F., and Wikkenhauser.)
Wilczynski, John, Buffalo, N. Y. Rear view mirror for automobiles. 1,887,144; Nov. 8.
Wilde, Johanna M. (See Trnda, G. H., and Wilde.)
Wilkins, Richard A., Beverly, assignor to Industrial Development Corporation, Salem, Mass. Electric condenser. 1,886,997; Nov. 8.
Willheim, William, New York, N. Y. Textile fabric or similar article. Des. 88,276; Nov. 8.
Willheim, William, New York, N. Y. Textile fabric or similar article. Des. 88,277; Nov. 8.
Willheim, William, New York, N. Y. Textile fabric or similar article. Des. 88,278; Nov. 8.
Willheim, William, New York, N. Y. Textile fabric or similar article. Des. 88,279; Nov. 8.
Willheim, William, New York, N. Y. Textile fabric or similar article. Des. 88,280; Nov. 8.
Willheim, William, Co. (See Katsman, Herbert, assignor.)
Williams, Arthur F., assignor to Williams Patent Crusher and Pulverizer Company, St. Louis, Mo. Pulverizer. 1,887,366; Nov. 8.
Williams, Charles W., Louisville, Ky. Air filter. 1,886,927; Nov. 8.
Williams, Harry F., Olean, N. Y. Matrix assembly for typesetting machines. 1,886,772; Nov. 8.
Williams Patent Crusher and Pulverizer Company. (See Williams, Arthur F., assignor.)
Williams, Walter W., Bloomington, Ill. Fuel and air control. 1,886,998; Nov. 8.
Wilson, Amanda E., Glen Ellyn, Ill. Door control mechanism. 1,886,999; Nov. 8.
Wilson, Ernest H. (See Anthony, M. S., and Wilson.)
Wilson, James S., and J. Thomas, assignors to Scottish Dyes, Limited, Grangemouth, Scotland. Dyeing cellulose acetate. 1,886,441; Nov. 8.
Wimmer, Heinrich, Nuremberg, Germany. Mechanically operated toy figure. 1,886,442; Nov. 8.
Windmoller & Holscher G. m. b. H. (See Dambacher, Xaver, assignor.)
Wine, Mary C., New York, N. Y. Adjustable reading support for chairs. 1,886,509; Nov. 8.
Winkley, Frank D., Madison, Wis. Transplanting machine. 1,886,457; Nov. 8.
Winne, Harry A., Schenectady, N. Y., assignor to General Electric Company. Motor control system. 1,886,773; Nov. 8.
Winter, Gerhard, Vienna, Austria. Manufacturing staple-driving punches. 1,887,079; Nov. 8.
Wired Radio, Inc. (See Crossley, Alfred, assignor.)
Wired Radio, Inc. (See Duncan, R. D., jr., and Tregner, assignors.)
Wired Radio, Inc. (See Hund, August, assignor.)
Wise, Charles E., Philadelphia, Pa. Locking valve for gas burners. 1,887,344; Nov. 8.
Wise, Solomon, Cincinnati, Ohio. Spare wheel and tire lock. 1,887,367; Nov. 8.
Witham, George S., jr., Hudson Falls, N. Y. Pulping and shredding system. 1,887,225; Nov. 8.
Witte, Erhard. (See Stoeckly, J. J., and Witte.)
Witte, Paul, New Milford, assignor to White Metals Manufacturing Company, Hoboken, N. J. Unloader for forming machines. 1,886,458; Nov. 8.
Witte, Paul, New Milford, assignor to White Metals Manufacturing Company, Hoboken, N. J. Automatic machine for making tubes. 1,886,459; Nov. 8.
Wolkow, August E., Hartford, Wis. Lifting and conveying device. 1,886,614; Nov. 8.
Wolverine Brass Works. (See Cornelius, Louis A., assignor.)
Wonder Hoe Company. (See Lee, John E., assignor.)
Wood, Austin T., Paint Rock, Tex. Trailer coupler. 1,887,054; Nov. 8.
Wood Newspaper Machinery Corporation. (See Thornberg, Isidor, assignor.)
Woolson, Lionel M., assignor to Packard Motor Car Company, Detroit, Mich. Internal combustion engine. 1,886,443; Nov. 8.
Wooton, Frank M., and A. L. Davis, Baltimore, Md. Automatic high pressure boiler feed system. 1,887,000; Nov. 8.
Word, T. T. (See Hanson, John R., assignor.)
Woxvold, Einar, Chicago, Ill., assignor to American Maize Products Company. Composition for baking purposes. 1,887,175; Nov. 8.
Wright, Charlton D., Davenport, Iowa. Machine for sharpening disks and the like. 1,886,859; Nov. 8.
Wright, William D., Brockport, N. Y. Hot cap applier for plants. 1,887,387; Nov. 8.
Wright, William D., Brockport, N. Y. Fruit packer. 1,887,388; Nov. 8.
Wunderlich, William E., assignor to The Moore Company, Muncie, Ind. Ballog press. 1,887,226; Nov. 8.
Wurster, Oscar H., Chicago, Ill. Sight flow glass. 1,886,444; Nov. 8.
Wyatt, F., Manufacturing Company, The. (See Spaeth, John J., assignor.)
Wyss, Julius, Watertown, Mass., assignor to New England Spun Silk Corporation, New York, N. Y. Producing laminated sheets. 1,886,928; Nov. 8.
Yates, Robert, Passaic, N. J. Propeller and engine jointly for aeroplanes. 1,887,053; Nov. 8.
Young, Archer E., Pittsburgh, Pa. Measuring apparatus. 1,887,254; Nov. 8.
Young, Otto W., East Orange, N. J., assignor to General Motors Corporation, Detroit, Mich. Cage for antifriction bearings. 1,887,176; Nov. 8.
Yuba Manufacturing Company. (See Macaulay, Walter B., assignor.)
Yuengel, Edward, Newark, N. J. Curtain-rod threading device. 1,887,110; Nov. 8.
Zahn, George E., Freedom, Pa. Hydraulic transmission device. 1,886,774; Nov. 8.
Zech, Edward E., assignor of one-fourth to O. W. Judkins, one-fourth to B. Johnson, and one-fourth to G. Langlands, Grand Rapids, Mich. Molding asphaltic compositions and mold therefor. 1,887,368; Nov. 8.
Zeiss, Firm Carl. (See Braun, Georg, assignor.)
Zeiss, Firm Carl. (See Dietzel, Paul, assignor.)
Zeiss, Firm Carl. (See Hemscheidt, Helmut, assignor.)
Zeiss, Firm Carl. (See Kraft, Paul, assignor.)
Zelger, Georges E., Montreuil France, assignor, by mesne assignments, to Du Pont Film Manufacturing Corporation, Wilmington, Del. Plastic cellulose compound. 1,886,775; Nov. 8.
Zetterberg, Gustaf V., Or, Sweden. Combined gas and steam turbine. 1,887,001; Nov. 8.
Zickmantel, Carl, Berlin, Germany. Shaving utensil. 1,886,860; Nov. 8.
Ziedrich, William H. F., San Bruno, Calif. Spacing fastener. 1,887,002; Nov. 8.
Zu Lynar Passy-de Chimang, Rochus M., Brooklyn, N. Y. Marine vessel. 1,886,471; Nov. 8.

LIST OF INVENTIONS

FOR WHICH

PATENTS WERE ISSUED ON THE 8TH DAY OF NOVEMBER, 1932

NOTE.—Arranged in accordance with the first significant character or word of the name (in accordance with city and telephone directory practice). Includes patents, reissues, and designs.

Abrading machine. W. C. Grob. 1,886,878; Nov. 8.
Accumulator, Electric. A. Pouchain. 1,887,167; Nov. 8.
Acid with a cyanogen chloride, Manufacture of a mixture of hydrocyanic. H. Lehrecke. 1,886,487; Nov. 8.
Adapter, Electron discharge tube. R. D. Duncan, jr., and A. M. Trogner. 1,886,657; Nov. 8.
Adhesive material containing casein. G. M. Shisler. 1,886,750; Nov. 8.
Adjustable lock. D. Haviland. 1,887,094; Nov. 8.
Adjustable seat. F. J. Westrope. 1,887,077; Nov. 8.
Advertising structure, Outdoor. G. D. Overholtz. 1,886,899–900; Nov. 8.
Aeroplane attachment. J. Grobling. 1,886,673; Nov. 8.
Aeroplane construction. A. Gonsalves. 1,886,478; Nov. 8.
Aeroplane propulsion. C. DeGanahl. 1,887,148; Nov. 8.
Agricultural device. H. B. Glase. 1,887,092; Nov. 8.
Air compressor. F. Ackerman. 1,886,359; Nov. 8.
Air conditioning apparatus. S. M. Anderson. 1,886,777; Nov. 8.
Aircraft construction. R. B. Johnson. 1,887,411; Nov. 8.
Airplane. I. Anderson. 1,886,932; Nov. 8.
Air purifier for furnaces. M. S. Martinson. 1,887,242; Nov. 8.
Alarm and burner control, Automatic. H. C. Vogt. 1,886,854; Nov. 8.
Alcohol and separating the same from pine oil, Crystalline fenchyl. L. T. Smith. 1,887,171; Nov. 8.
Alcohol, Preparing xanthates of terpene. S. P. Rankin. 1,886,587; Nov. 8.
Alcohols and phenols from mixtures, Separation of. A. A. Kaufmann. 1,886,885; Nov. 8.
Alloy, Cutting tool. G. R. Coules. 1,886,469; Nov. 8.
Amines, Preparation of mono-alkyl aromatic. E. C. Britton and H. R. Slagh. 1,887,228; Nov. 8.
Ammonia, Synthesis of. W. Wettstein. 1,887,475; Nov. 8.
Amusement device. E. Ellvirdy. 1,886,385; Nov. 8.
Anchor for hangers. E. W. Helberg. 1,887,455; Nov. 8.
Animal trap. V. Bailey. 1,886,862; Nov. 8.
Anode. J. S. Thelen. 1,886,761; Nov. 8.
Antipacking attachment. G. M. Weeks. 1,886,438; Nov. 8.
Anti-skid device. A. G. Fitz Gerald. 1,887,404; Nov. 8.
Arc lamp. F. Alexander. 1,887,277; Nov. 8.
Arc welding apparatus, Automatic. V. J. Chapman. 1,886,648; Nov. 8.
Armlet. I. Steinberger. 1,886,753; Nov. 8.
Article dispensing device. E. F. Adams. 1,887,389; Nov. 8.
Article hanger. P. L. Knight. 1,887,159; Nov. 8.
Arylated safranines and preparing them. F. Hess. 1,886,809; Nov. 8.
Ash carrier. E. T. Remy. 1,887,041; Nov. 8.
Ashtray and signal device, Combined. H. Storm. 1,886,452; Nov. 8.
Assembly machine. G. D. Reynolds. 1,887,216; Nov. 8.
Atomizer. F. A. Vuillemenot. Des. 88,273; Nov. 8.
Atomizer. F. A. Vuillemenot. 1,887,383; Nov. 8.
Automatic switch. H. L. Van Valkenburg. 1,886,608; Nov. 8.
Automatic train pipe coupling. A. C. Harrell. 1,886,398; Nov. 8.
Automobile control. J. Good. 1,886,672; Nov. 8.
Automobile device. B. D. Fogle. 1,887,405; Nov. 8.
Auxiliary wheel. J. B. Rodgers. 1,886,977; Nov. 8.
Awning arm, Tensioned. J. O. Ackerman. 1,886,512; Nov. 8.
Azodyestuffs, Manufacture of strongly basic. A. Consetti. 1,887,289; Nov. 8.
Baby sanitary toilet seat. E. G. Sandquist. 1,886,595; Nov. 8.
Bag closing and fastening machine. W. A. Joplin. 1,886,552; Nov. 8.
Bag stacking apparatus. P. Hunziker. 1,887,023; Nov. 8.
Baling press. W. E. Wunderlich. 1,887,226; Nov. 8.
Banjo. D. L. Day. 1,887,291; Nov. 8.
Bank, Registering coin. L. V. Aronson. 1,886,779; Nov. 8.
Barberry, Thornless. W. G. Sutherland. Pl. Pt. 40; Nov. 8.
Barriers for canals, Salt water. W. M. Meacham. 1,886,965; Nov. 8.
Basket, Drying. N. Stramaglia. 1,887,439; Nov. 8.
Basket, Ventilated. O. M. James. 1,887,067; Nov. 8.
Battery water level indicator. C. E. Krueger. 1,887,312; Nov. 8.
Bead, Jamb. H. F. Deubner. 1,886,653; Nov. 8.
Bearing for hot shafts, Roller. A. Meyer. 1,886,966; Nov. 8.
Bearing for separators, Elastic. H. O. Lindgren. 1,887,315; Nov. 8.
Bearing, Shaft. W. C. Graul. 1,886,895; Nov. 8.
Bearing, Shaft. E. S. Spearman. 1,887,336; Nov. 8.
Bed and cylinder printing press. C. B. Cottrell, 3d. 1,886,529–30; Nov. 8.
Bed or crib, Collapsible. M. E. Seyferth. 1,887,488; Nov. 8.
Bed plate. A. J. Allison. 1,886,861; Nov. 8.
Beet topper. F. A. Sherman. 1,886,843; Nov. 8.
Bench or settee, Stone. H. Thelen. 1,886,988; Nov. 8.
Binder and applying the same, Coal. J. A. Erickson. 1,887,183; Nov. 8.
Binocular. E. O. Fitzpatrick. Des. 88,224; Nov. 8.
Blasting method and apparatus. C. E. Karstrom. 1,886,960; Nov. 8.
Block: *See*—
Building block. Terminal block.
Block handling device. C. G. Mortimer. 1,887,211; Nov. 8.
Blood transfusion device. R. P. Kipp. 1,886,818; Nov. 8.
Board: *See*—
Production planning board.
Board structure, Panel. I. V. Cole. 1,886,466; Nov. 8.
Boat. G. G. Wehr. 1,886,507; Nov. 8.
Boat, Folding. R. W. Post. 1,886,499; Nov. 8.
Boiler: *See*—
Multiple steam drum boiler.
Boiler. A. J. Gallaher. 1,886,887; Nov. 8.
Boiler feed system, Automatic high pressure. F. M. Wooton and A. L. Davis. 1,887,000; Nov. 8.
Boiler installation. W. Siegerist. 1,887,141; Nov. 8.
Boiler meter recorder. A. F. Spitzglass. 1,886,844; Nov. 8.
Boilers, Solution feed for. V. L. Hollingsworth. 1,886,679; Nov. 8.
Bolt for automatic firearms, Breech. R. von Frommer. 1,886,609; Nov. 8.
Bolts, Floating keeper for lock and latch. E. R. Mitchell. 1,886,494; Nov. 8.
Boring machine and derrick apparatus, Combined earth. T. C. Smith and J. B. Spowart. 1,887,172; Nov. 8.
Bottle. E. W. Fuerst. Des. 88,225; Nov. 8.
Bottle. J. F. Koeppen. Des. 88,233; Nov. 8.
Bottle closure with means for removing the paper covers. R. Hagebusch. 1,886,805; Nov. 8.
Bottle, Milk. G. B. Lake. 1,886,698; Nov. 8.
Bottle, Siphon. C. G. Towne. Des. 88,272; Nov. 8.
Bowl construction, Scraper. C. E. Ball. 1,886,780; Nov. 8.
Bowl, Pipe. H. Gauvin. 1,886,391; Nov. 8.
Box: *See*—
Collapsible paper box. Display box.
Conduit box.
Box for face-powder and similar material. A. L. Smith. 1,887,333; Nov. 8.
Box inverting means, Match. P. W. Dietmann. 1,886,794; Nov. 8.
Bracket: *See*—
Corner bracket.
Bracket for suitcases, Hanger. A. Levine. 1,887,314; Nov. 8.
Brake. L. C. Huck. 1,886,811; Nov. 8.
Brake. F. W. Sampson and J. W. Tatter. 1,886,594; Nov. 8.
Brake and clutch control for motor vehicles. A. J. Vaselli. 1,886,767; Nov. 8.
Brake device, Reverse. C. A. Matson. 1,886,710; Nov. 8.
Brake drum and shield assembly. J. Y. Blasek. 1,887,478; Nov. 8.
Brake mechanism, Fluid pressure operated. H. C. Bowen. 1,886,936; Nov. 8.
Brake shoe key. A. L. Prentice. 1,886,734; Nov. 8.
Brake testing device. H. A. Slingerland. 1,886,599; Nov. 8.
Braking system, Vehicle. G. R. Powell. 1,887,428; Nov. 8.
Brassière. H. D. Rose. 1,886,742; Nov. 8.
Breaker, Circuit. M. Centorrino. 1,886,790; Nov. 8.
Brick, Burning. N. B. Kendrick. 1,887,206; Nov. 8.
Bridge, Railroad rail joint. T. S. Thomas. 1,887,252; Nov. 8.
Brine, Heating. G. B. Burnham. 1,886,868; Nov. 8.
Briquettes, Apparatus for continuously producing. N. Flodin and G. Cornelius. 1,887,149; Nov. 8.
Broom, Yard. J. H. Horstman. 1,887,480; Nov. 8.
Bucket, Grab. S. H. Priestman. 1,887,465; Nov. 8.
Buckle. F. Hirsh. 1,886,545; Nov. 8.
Buckle, Slide. B. J. Hodge. 1,887,096; Nov. 8.
Building. F. E. d'Humy. 1,886,944–5; Nov. 8.

Building. H. J. Messier and J. K. Donaghy. Des. 88,251; Nov. 8.
Building. T. L. Pflueger. Des. 88,255; Nov. 8.
Building block. L. M. Schwalbe. 1,887,170; Nov. 8.
Building construction. W. H. Houghton. 1,887,182; Nov. 8.
Building construction. H. LaRoche. 1,886,962; Nov. 8.
Building, Service station. W. D. Cyphers. Des. 88,228; Nov. 8.
Building unit. H. B. Reeder and W. Scott. 1,887,482; Nov. 8.
Bulletin, Outdoor advertising. G. D. Overholtz. 1,886,898; Nov. 8.
Bullets, Identifying. G. Pocoroba. 1,887,324; Nov. 8.
Bumper, Automobile. W. F. Sill and C. W. Pippin. 1,886,913; Nov. 8.
Bumper, Door. S. B. Atwood. 1,886,934; Nov. 8.
Burner: *See*—
Gas and oil burner. Oil burner.
Gas burner. Sawdust burner.
Hydrocarbon burner.
Burner control system, Fuel oil. H. L. Delaney. 1,886,472; Nov. 8.
Bushing for electrical petroleum dehydrators, Insulator. J. M. Cage. 1,887,010; Nov. 8.
Cabinet and screen for a motion picture projector, Combined, H. J. Cowan. Des. 88,222; Nov. 8.
Cabinet, Display. J. W. Holbrook. Des. 88,230; Nov. 8.
Cabinet, Filing. J. R. Mathie. 1,887,102; Nov. 8.
Cabinet, Panel board. H. J. L. Frank. 1,887,088; Nov. 8.
Cabinet, Typewriter. L. C. Myers. 1,887,165; Nov. 8.
Cable, Electric. I. Branthwaite. 1,886,786; Nov. 8.
Cable fastening means. E. Menefee. 1,887,275; Nov. 8.
Cable testing equipment. H. S. Hubbard. 1,886,682; Nov. 8.
Cage for antifriction bearings. O. W. Young. 1,887,176; Nov. 8.
Calculating machine. M. G. de Simone. 1,887,258–9; Nov. 8.
Calculating machine. H. Isherwood. 1,886,685; Nov. 8.
Calculating machine. W. S. Johnson. 1,886,883; Nov. 8.
Calculating machines, Multiplying mechanism for. C. B. Collins. 1,886,781; Nov. 8.
Calendar, Mechanical. J. Mayer. 1,886,568; Nov. 8.
Camera for roll films, Photographic bellows. F. Guttermuth. 1,886,951; Nov. 8.
Can liner, Sanitary garbage. C. D. Knifin. 1,886,406; Nov. 8.
Can positioning and feeding machine. A. H. Nelson. 1,886,896; Nov. 8.
Candy centers and to candy center making machine employing such method, Producing. T. and C. Werner. 1,886,858; Nov. 8.
Cap. H. Wagenfeld. 1,886,992; Nov. 8.
Cap and producing the same, Bottle. A. H. Warth. Re18,648; Nov. 8.
Cap, Blasting. W. de C. Crater. 1,887,290; Nov. 8.
Cap, Collapsible tube. M. L. Angelini. 1,886,514; Nov. 8.
Car construction. J. P. Anderson. 1,886,960; Nov. 8.
Car construction. G. G. Gilpin. 1,886,892; Nov. 8.
Carbureting device for lighting stoves. W. Olsen and S. Rasmussen. 1,886,420; Nov. 8.
Carburetor. C. H. Claudel. 1,886,646; Nov. 8.
Carburetor. L. C. Schmidt. 1,886,910; Nov. 8.
Carburetor. C. O. Westover. 1,887,386; Nov. 8
Carburetor choke mechanism, Automatic. C. W. MacMillan. 1,887,061; Nov. 8.
Carburetor for internal-combustion engines. V. Buraglia. 1,886,787; Nov. 8.
Carcasses, Building tire. F. B. Pfeiffer. 1,887,362; Nov. 8.
Card, Folding post. P. E. Gillespie. 1,886,669; Nov. 8.
Card for flat form laundered attached collar shirts, Collar. C. M. Mead. 1,886,826; Nov. 8.
Cards, Playing. H. W. Hoke. 1,887,203; Nov. 8.
Carpet. C. Lehner. Des. 88,235; Nov. 8.
Carrier: *See*—
Ash carrier. Coupler carrier.
Carrier and bumper, Combined collapsible luggage. J. Schulman. 1,886,911; Nov. 8.
Carton stapling machine. W. F. Newhouse. 1,886,971; Nov. 8.
Casing, Locomotive steam pipe. H. E. Riecius. 1,886,427; Nov. 8.
Cast-iron of high qualities of strength in a cupola furnace, Producing. K. Emmel. 1,887,453; Nov. 8.
Caster roller. W. F. and S. E. Schacht. 1,887,436; Nov. 8. 1,887,436; Nov. 8.
Catenary hanger. L. Birch. 1,886,463; Nov. 8.
Cellulose compound, Plastic. G. E. Zelger. 1,886,775; Nov. 8.
Cellulose solutions, Purification of. J. J. Stoeckly and E. Witte. 1,886,504; Nov. 8.
Cements for teeth, Producing. O. Simon. 1,886,982; Nov. 8.
Centrifugal separator. H. O. Lindgren. 1,887,476; Nov. 8.
Chain. W. Boppenhausen. 1,886,784; Nov. 8.
Chain, Digger. L. G. Dunlap. 1,886,882; Nov. 8.
Chain, Drive. F. L. Morse. 1,887,127; Nov. 8.
Chair: *See*—
Dental chair. Quick acting clamp theatre chair.
High chair.
Chair and cabinet, Invalid. L. Perron. 1,887,328; Nov. 8.
Chair seat. L. S. Valentine. 1,886,434; Nov. 8.
Charge in an oven, Device for distributing the. A. De Saint Hubert. 1,887,292; Nov. 8.
Chart, Tracing. C. Lorber. 1,887,160–1; Nov. 8.
Chart, Tracing. C. Lorber. 1,887,163; Nov. 8.
Chassis, Motor vehicle. C. S. Nelson. 1,886,573; Nov. 8.
Chemicals, Dense opaque smoke and irritating fume and gas producing. B. C. Goss. 1,886,394; Nov. 8.
Cherry. L. Burbank. Pl. Pt. 41; Nov. 8.
Chimes, Tubular. M. Arnold Strothotte. 1,886,668; Nov. 8.
Chip breaker for molding machines and the like. T. C. Mann. 1,887,032; Nov. 8.
Chute structure. F. A. Davidson. 1,886,793; Nov. 8.
Circuit controller. L. V. Lewis. 1,887,273; Nov. 8.
Circuit, Light control. E. O. Hulburt and W. H. Crew. 1,886,818; Nov. 8.
Circuit, Relay. K. W. Graybill. 1,887,302; Nov. 8.
Circuit, Traffic signal. D. H. Calderwood. 1,886,523; Nov. 8.
Cleaner: *See*—
Ear cleaner. Windshield cleaner.
Cleaning device. L. O. Balinger. 1,887,447; Nov. 8.
Cleaning device. C. E. Redfield. 1,886,738; Nov. 8.
Clock. J. F. Langbein. 1,887,356; Nov. 8.
Clock and base therefor, Combined alarm. F. Lux. Des. 88,243; Nov. 8.
Clock, Illuminated. A. Bulova. 1,887,479; Nov. 8.
Clock, Reminder. E. Greesman. 1,887,302; Nov. 8.
Clock system and secondary clocks therefor, Synchronised. F. Thomas. 1,887,221; Nov. 8.
Closing and sealing an opening in a metal container. F. W. Sample. 1,887,435; Nov. 8.
Cloth matching and measuring machine. M. E. Popkin. 1,886,902; Nov. 8.
Clutch. J. D. McEwen. 1,887,377; Nov. 8.
Clutch. A. Renshaw. 1,887,467; Nov. 8.
Clutch and brake control, Automatic. V. H. Medlock. 1,886,569; Nov. 8.
Clutch, Multiple disk. L. A. Bixby. 1,886,865; Nov. 8.
Coal burning apparatus. A. Ousdahl. 1,886,577; Nov. 8.
Coal, Handling. F. C. Broeman. 1,886,632; Nov. 8.
Coal or coke treated with oil. F. C. Broeman. 1,886,633; Nov. 8.
Cock, Gauge. G. W. Osborn. 1,887,213; Nov. 8.
Cocoons automatically, Replenishing a supply of. T. Sugiyama, J. Ushiki, and Y. Okabe. 1,886,757; Nov. 8.
Coffee maker, Drip. C. Kapner. 1,887,354; Nov. 8.
Coils, Apparatus for insulating. V. G. Apple. 1,887,005; Nov. 8.
Coin controlled actuating device. G. A. Long. 1,886,409; Nov. 8.
Collapsible garment hanger. B. B. Button. 1,886,869; Nov. 8.
Collapsible paper box. R. A. Gross. 1,886,879; Nov. 8.
Color-printing plates, Making. J. M. Keenan. 1,886,556; Nov. 8.
Colored effects by lighting, Production of. P. Burrell and J. A. Boothroyd. 1,887,285; Nov. 8.
Composition for baking purposes. E. Woxvold. 1,887,175; Nov. 8.
Compositions and mold therefor, Molding asphaltic. E. E. Zech. 1,887,368; Nov. 8.
Compositions, Preparing creosoting. S. P. Miller. 1,886,967; Nov. 8.
Computing device. A. T. Bolton. 1,886,870; Nov. 8.
Concrete, Producing. P. Ashenasy. 1,886,933; Nov. 8.
Condenser. P. A. Bancel. 1,886,516; Nov. 8.
Condenser, Electric. R. A. Wilkins. 1,886,997; Nov. 8.
Conduit box. H. D. Betts, jr. 1,887,192; Nov. 8.
Conduit forming apparatus and process. J. F. Murray. 1,887,244; Nov. 8.
Confection. L. F. Trettin. 1,886,763; Nov. 8.
Connecter for cordeau bickford. B. J. Duffy. 1,887,122; Nov. 8.
Connecter, Trucking riser. W. H. B. Lavarack. 1,887,271–2; Nov. 8.
Connecting device. H. J. L. Frank. 1,887,090; Nov. 8.
Connection, Chain. V. Provost. 1,887,420; Nov. 8.
Connection for shackle bolts, Automatically adjustable. F. F. James. 1,887,133; Nov. 8.
Construction material and construction. R. Hoke. 1,886,810; Nov. 8.
Contacting device, Electrical. P. G. Swars. 1,886,758; Nov. 8.
Container. G. F. Behringer. 1,887,448–9; Nov. 8.
Container. G. F. Behringer. 1,887,485; Nov. 8.
Container. G. A. Walter. 1,887,075; Nov. 8.
Container for use with refrigerators and display counters. C. Domm. 1,887,402; Nov. 8.
Container, Malted milk. A. Coors. 1,887,345; Nov. 8.
Container, Sanitary. G. Nickel. 1,887,481; Nov. 8.
Continuous electric strip annealing furnace. J. C. Bradley. 1,886,631; Nov. 8.
Control apparatus. H. T. Seeley. 1,886,749; Nov. 8.
Control mechanism for engines. N. Greenwell. 1,886,877; Nov. 8.
Control mechanism for motor cars. R. G. Coates. 1,887,231; Nov. 8.
Control, system. M. H. Wells. 1,886,439; Nov. 8.
Control system, Amplification. O. H. Schade. 1,887,320; Nov. 8.
Controlling device for long lengths of spinning material having an appreciable width. P. Litty. 1,886,702; Nov. 8.

Controlling system for receivers, Intensity. L. O. Painter. 1,887,065; Nov. 8.
Conveyer and storage apparatus for metal wool machines. C. Field. 1,886,664; Nov. 8.
Conveyer for corn huskers. A. Rosenthal. 1,886,905; Nov. 8.
Conveyer, Meat packing. C. T. Walter. 1,886,926; Nov. 8.
Conveyer, Stoker. E. A. Turner. 1,886,764; Nov. 8.
Cooking apparatus, Electrical. E. Stransky. 1,887,219; Nov. 8.
Cooler: *See*—
Water cooler.
Cores, Process of and apparatus for standardizing magnetic. W. J. Polydoroff. 1,887,380; Nov. 8.
Corner bracket. A. G. Murdock. 1,887,459; Nov. 8.
Cotton bunching machine. M. Sutton. 1,887,441; Nov. 8.
Cotton, Cleaning. J. E. Mitchell. 1,886,713; Nov. 8.
Coupler carrier, Self-centering. H. E. Muchnic. 1,886,417; Nov. 8.
Coupler, Trailer. A. T. Wood. 1,887,054; Nov. 8.
Coupling: *See*—
Automatic train pipe coupling. Shock absorbing coupling.
Flexible shaft coupling. Tank flange coupling.
Coupling. M. A. Buettell. 1,887,081; Nov. 8.
Coupling device or electrical transformer, Electromagnetic. F. W. Twort. 1,887,470; Nov. 8.
Coupling two vehicles. A. Kegresse. 1,886,693; Nov. 8.
Cover, Golf club. L. L. Bright. 1,886,464; Nov. 8.
Cover, Jar. N. de George. 1,886,651; Nov. 8.
Cover, Pamphlet and book. B. E. Stephens. 1,887,338; Nov. 8.
Cover, Upholstery. P. M. Lockwood and E. Samel. 1,886,488; Nov. 8.
Covering and setting, Grave. G. H. Wartman. 1,886,487; Nov. 8.
Covers, Fastening device for airplane wing. R. I. Markey. 1,886,708; Nov. 8.
Cracking still and process. W. L. Bagwill. 1,886,621; Nov. 8.
Cream separator washer. S. Wells. 1,887,174; Nov. 8.
Creels or the like, Balloon guard for. H. F. Burton. 1,886,638; Nov. 8.
Crustacean trap. C. Kraus and A. J. Cusick. 1,887,059; Nov. 8.
Crystal apparatus, Piezo electric. A. Crossley. 1,886,792; Nov. 8.
Cultivator. T. W. Johnson. 1,886,691; Nov. 8.
Cultivator. J. J. Spaeth. 1,887,334; Nov. 8.
Culvert, Wooden stave. H. N. MacPherson. 1,886,707; Nov. 8.
Curtain-rod threading device. E. Ynengel. 1,887,110; Nov. 8.
Curtain roller end bracket. W. S. Hamm. Des. 88,229; Nov. 8.
Curves, Device for platting and measuring. J. Aras. 1,887,391; Nov. 8.
Cushion for radio cabinets, Leveling. H. Phillips. Re18,647; Nov. 8.
Cushion structure. J. H. King and J. A. Allison. 1,887,310; Nov. 8.
Cutter. F. Csemba. 1,886,942; Nov. 8.
Cutting and block forming machine for plastic substances. A. and G. Sharp. 1,887,046; Nov. 8.
Cutting and duplicating machine, Code cylinder key. L. J. Caron. 1,886,641; Nov. 8.
Cutting device. J. Mieritz. 1,887,164; Nov. 8.
Cutting device. S. R. Svendsgaard. 1,887,440; Nov. 8.
Cycles, Two-bar for. A. L. Hess. 1,887,202; Nov. 8.
Cylinder lock. A. Main. 1,886,822; Nov. 8.
Defiberizing machine. E. P. Corcoran and W. B. Hadley. 1,886,871; Nov. 8.
Dental chair. P. Russell. 1,887,328; Nov. 8.
Dental impression device. J. M. Craigo. 1,886,872; Nov. 8.
Deodorant and moth-preventative. A. L. Saeks. 1,886,429; Nov. 8.
Deodorizing device. C. D. Holmes and H. W. Gamel. 1,886,680; Nov. 8.
Dephlegmation, Method and apparatus for. L. C. Huff. 1,886,957; Nov. 8.
Design forming apparatus for woven fabrics and the like. J. Hoffmann. 1,886,547; Nov. 8.
Designs and patterns, Producing. F. D. Taylor. 1,886,846; Nov. 8.
Desk. C. B. Ulrich. 1,886,766; Nov. 8.
Device for use in association with gases or gas-liquid mixtures, as a flame or explosion trap, a mixer, a flow controller, a silencer or a cooler. W. Helmore and A. Swan. 1,887,305; Nov. 8.
Dextrose, Making crystalline. G. E. Corson and A. P. Bruant. 1,886,941; Nov. 8.
Dial for knitting machines, Needle. H. Swinglehurst. 1,887,340; Nov. 8.
Diamines and making same, Unilaterially acylated. M. Hartmann, H. Kaegi, and H. Isler. 1,886,481; Nov. 8.
Diesel engine. H. C. Edwards. 1,886,383–4; Nov. 8.
Direction indicator. A. R. Tallman. 1,887,469; Nov. 8.
Disk changer and reverser for automatic musical instruments. L. T. Kincannon. 1,887,309; Nov. 8.
Disks to a shaft, Device for fixing. A. Meyer. 1,886,414; Nov. 8.
Displacement meter. C. J. Bassler. 1,886,364; Nov. 8.
Display box. I. Goldstein. 1,887,300; Nov. 8.
Display device. J. W. Littman. 1,887,100; Nov. 8.
Display, Illuminated. A. Koeble. 1,886,697; Nov. 8.
Display rack. H. M. Feldkamp. 1,886,539; Nov. 8.
Display stand. B. J. Davidson. 1,886,532; Nov. 8.
Display window construction. C. F. Dingman. 1,886,654; Nov. 8.
Distributor for extraction apparatus. M. Grossmann. 1,887,126; Nov. 8.
Distributor for settling tanks, Feed. C. L. Adams. 1,887,177; Nov. 8.
Door and locking means therefor, Car. A. Campbell. 1,886,788; Nov. 8.
Door closing and checking device. L. C. Norton. 1,886,897; Nov. 8.
Door construction, Overhead. E. R. Lynch. 1,886,490; Nov. 8.
Door control mechanism. A. E. Wilson. 1,886,999; Nov. 8.
Doorlock, Refrigerator. J. Miller. 1,887,210; Nov. 8.
Door operating mechanism, Pneumatic. C. Norton. 1,887,212; Nov. 8.
Door pillar and the like. I. D. Perry. 1,886,974; Nov. 8.
Doorstop. W. E. Wegner. 1,887,365; Nov. 8.
Doubling and twisting machine. F. Klein. 1,887,207; Nov. 8.
Douche and internal bath, Sanitary. A. Marubio. 1,887,359; Nov. 8.
Douche, Water-closet. K. Thomas. 1,886,920; Nov. 8.
Dough, Packaging biscuit. C. Lorber. 1,887,162; Nov. 8.
Draftsman's table. C. F. Clausen. 1,887,288; Nov. 8.
Drawing press. K. Bohle. 1,886,935; Nov. 8.
Dredge. W. B. Macauley. 1,887,101; Nov. 8.
Drill: *See*—
Hitch drill.
Drill. J. V. Emmons. 1,887,374; Nov. 8.
Drive for motor vehicles, Multiple transmission shaft. K. R. Manville. 1,886,823; Nov. 8.
Drive for web printing and cutting mechanisms, Electric motor. C. B. Cottrell. 1,886,527; Nov. 8.
Drive for web printing, folding and cutting mechanism, Electric motor. C. B. Cottrell. 1,886,526; Nov. 8.
Drive for web printing, longitudinal folding and transverse cutting mechanism, Electric. C. B. Cottrell. 1,886,525; Nov. 8.
Drive for web printing mechanism, Electric motor. C. B. Cottrell, 3d. 1,886,528; Nov. 8.
Drive mechanism, Differential. J. Gabil. 1,886,668; Nov. 8.
Drive system, Multiple unit electric. C. Field. 1,886,665; Nov. 8.
Drum, Sanding. R. A. Ponselle. 1,886,733; Nov. 8.
Drying agent and manufacturing same. W. A. Hammond. 1,887,349; Nov. 8.
Duplicating machine. L. A. Tupper. 1,887,382; Nov. 8.
Dust separator. J. L. Jones. 1,886,884; Nov. 8.
Dye and dyeing. D. A. W. Fairweather and J. Thomas. 1,886,947; Nov. 8.
Dyeing. J. Watters. 1,886,857; Nov. 8.
Dyeing and printing process. J. Martin. 1,886,412; Nov. 8.
Dyeing cellulose acetate. J. S. Wilson and J. Thomas. 1,886,441; Nov. 8.
Dyeings and prints on mixed fabrics, Production of. H. Werdenberg. 1,886,995; Nov. 8.
Dyestuff containing cellulose residues and making same. R. Haller and A. Heckendorn. 1,886,480; Nov. 8.
Dyestuffs and preparing them, Naphthalimide. W. Eckert. 1,886,797; Nov. 8.
Dyestuffs of the polymethine series and new intermediate products therefor, Making. R. Kuhn and W. Kern. 1,886,485; Nov. 8.
Ear cleaner. G. Adams. 1,887,003; Nov. 8.
Easel, Rotary. J. M. Abbott. 1,886,929; Nov. 8.
Edge finishing machine. J. B. Coffey. 1,886,870; Nov. 8.
Electric crystal apparatus, Piezo. A. Hund. 1,886,814; Nov. 8.
Electric current tester. L. Ludwig. 1,886,489; Nov. 8.
Electric discharge tube. P. R. Dijksterhuis. 1,886,795; Nov. 8.
Electric machine. G. C. Hennesy. 1,887,055; Nov. 8.
Electric safety clothes wringer. C. N. Perry. 1,886,727; Nov. 8.
Electric switch. H. W. Batcheller. 1,886,517; Nov. 8.
Electric switch. B. E. Getchell. 1,886,477; Nov. 8.
Electric switch. T. J. Newman. 1,887,420; Nov. 8.
Electric switch. W. C. Tregoning. 1,886,433; Nov. 8.
Electric upsetting machine. G. Benedetto. 1,887,179; Nov. 8.
Electrical switch arrangement. E. J. Blake. 1,886,629; Nov. 8.
Electron excitation for thermionic vacuum tubes, Indirect. A. N. Lucian. 1,886,705; Nov. 8.
Elevator system. W. B. Lucas. 1,887,209; Nov. 8.
Engine: *See*—
Diesel engine. Logging engine.
Internal combustion engine. Rotary steam engine.
Engine starting system. J. Good. 1,887,238; Nov. 8.
Engines, Charge controlling device for internal combustion. F. T. Irgens. 1,887,204; Nov. 8.
Envelope making machine. C. F. Pflanse. 1,886,728; Nov. 8.
Excavating machine. R. R. Downie. 1,886,381; Nov. 8.

Exhaust apparatus for locomotive roundhouses. L. L. Kelly. 1,887,025; Nov. 8.
Extension table. B. Benson. 1,887,114; Nov. 8.
Extensible table. A. Karlson. 1,887,266; Nov. 8.
Extraction of organic substances. K. Vierling. 1,887,050; Nov. 8.
Extractor: *See*—
Honey extractor.
Eye, Device for testing the. E. D. Tillyer, E. A. Forshey, and I. S. Nott. 1,887,049; Nov. 8.
Fabric: *See*—
Knitted fabric. Pile fabric.
Fabric and producing it, Cleaning or polishing. E. A. McCormick. 1,886,824; Nov. 8.
Facings to walls, Attaching tile. H. Bartels. 1,887,113; Nov. 8.
Fan, Angular-flow. E. L. Anderson. 1,886,513; Nov. 8.
Fan for furnace hot air pipes. A. L. Searles. 1,886,841; Nov. 8.
Fan, Pulley driven disc. G. de Bothezat. 1,887,370; Nov. 8.
Fastener, Necktie. L. R. Roberts. 1,887,104; Nov. 8.
Fastener, Press. V. Puc. 1,887,466; Nov. 8.
Fastener, Rail. J. A. McGrew. 1,887,457; Nov. 8.
Fastener, Spacing. W. H. F. Ziedrich. 1,887,002; Nov. 8.
Fastening for belts and the like. J. C. Olsen. 1,887,361; Nov. 8.
Feeder, Poultry. A. V. Rupprecht. 1,886,593; Nov. 8.
Feeder, Reagent. T. A. Evans. 1,887,847; Nov. 8.
Feeding mechanism, Match-strip. M. Paridon. 1,886,495; Nov. 8.
Fiber or pulp, Producing. H. S. Hooper. 1,887,241; Nov. 8.
Film sound recording. R. E. Grant. 1,886,540; Nov. 8.
Films, Apparatus for treating. M. Schlömer. 1,886,596; Nov. 8.
Filter. O. B. Wendeln. 1,887,052; Nov. 8.
Filter, Air. C. W. Williams. 1,886,927; Nov. 8.
Filter screen. J. E. Anderson. 1,886,460; Nov. 8.
Filtering apparatus. J. B. Vernay. 1,887,471; Nov. 8.
Filtering apparatus, Continuous. H. C. Hirsch. 1,887,129; Nov. 8.
Firearm. C. C. Loomis. 1,886,704; Nov. 8.
Fire extinguisher. J. L. Comfeld. 1,887,013; Nov. 8.
Fire extinguisher. W. R. Rollo. 1,887,317; Nov. 8.
Fitting, Conduit. G. E. Metcalf, jr. 1,886,418; Nov. 8.
Fitting, Grounding. S. N. Buchanan. 1,887,198; Nov. 8.
Fixture, Shade. S. Hartshorn. 1,886,674; Nov. 8.
Flashlight safety switch. G. B. Pratt. 1,886,423; Nov. 8.
Flavoring in canning, preserving, and bottling operations. G. S. Suppiger. 1,887,073; Nov. 8.
Flexible shaft coupling. G. Steele, S. D. Cowlishaw, and J. B. Capey. 1,887,070; Nov. 8.
Flotation method. J. P. Ruth, jr. 1,886,979; Nov. 8.
Fluid measure. R. R. Munday. 1,887,276; Nov. 8.
Fluid meter. H. G. Weymouth and E. M. Kreidler. 1,886,996; Nov. 8.
Fluids of different specific gravities, Separating. L. M. Jackson. 1,886,698; Nov. 8.
Focusing of microscope tubes, Device for fine. H. Hemscheidt. 1,887,096; Nov. 8.
Folding mechanism. A. Novick. 1,886,832; Nov. 8.
Form construction, Concrete. C. F. Werts. 1,887,285; Nov. 8.
Frame for looms, Heddle. R. Ragan. 1,887,826; Nov. 8.
Frames, Mounting vehicle. J. R. Konetsky. 1,886,557; Nov. 8.
Freesia. E. A. Manda. Pl. Pt. 43; Nov. 8.
Freezer, Ice cream. T. Swanson and T. McCreary. Des. 88,268; Nov. 8.
Fruit composition, Vitamin. E. R. Alexander. 1,886,931; Nov. 8.
Fuel and air control. W. W. Williams. 1,886,998; Nov. 8.
Fuel burner device. R. H. Forney. 1,887,150; Nov. 8.
Fuel burning apparatus, Liquid. L. Motley. 1,887,458; Nov. 8.
Fuel, Combustion of pulverised. E. W. Green, G. R. Unthank, and D. Dunn. 1,887,015; Nov. 8.
Fuel from light oil, Making motor. F. W. Wagner and F. L. McIntire. 1,886,612; Nov. 8.
Furnace: *See*—
Hot air furnace. Open hearth furnace.
Oil burning furnace.
Furnace. H. P. Grohn. 1,887,153; Nov. 8.
Furnace. C. Smith and R. J. Southwick. 1,886,448; Nov. 8.
Furnace construction. R. C. Brett. 1,886,937; Nov. 8.
Furnaces, Method and system for controlling regenerative. W. R. Schofield, jr. 1,886,430; Nov. 8.
Fuse. E. Blomquist. 1,887,281; Nov. 8.
Fuse. E. Blomquist. 1,887,369; Nov. 8.
Game. T. S. Hutchison. 1,887,353; Nov. 8.
Game apparatus. W. T. Greenan. 1,886,479; Nov. 8.
Game apparatus. G. W. Hause. 1,886,999; Nov. 8.
Game device. H. K. Renz. 1,887,068; Nov. 8.
Garage. F. B. d'Humy. 1,886,943; Nov. 8.
Garment, Apparel. R. B. Quine. 1,887,431; Nov. 8.
Garment, Apparel. R. B. Quine. 1,887,436; Nov. 8.
Garment, Catamenial. A. E. Castle. 1,886,642; Nov. 8.
Garment, pressing machine. C. M. Clarke. 1,886,644; Nov. 8.
Gas and coke, Producing. R. M. Folsom. 1,886,949; Nov. 8.
Gas and oil burner, Combination. R. H. Forney. 1,887,407; Nov. 8.
Gas burner. G. W. Blakesley. 1,886,866; Nov. 8.
Gas burner. E. Ragon. 1,887,040; Nov. 8.
Gas burner. W. S. Shaw. 1,887,230; Nov. 8.
Gas trap. E. H. Adams. 1,887,111; Nov. 8.
Gases, Treating. G. H. Horne and M. A. Lissman. 1,886,548; Nov. 8.
Gases, Utilization of excess steam and hot. C. Rosenblad. 1,886,590; Nov. 8.
Gate. A. J. and W. B. Oaks. 1,886,719; Nov. 8.
Gauge: *See*—
Screw thread gauge.
Gauge. W. F. Stuckeman. 1,887,220; Nov. 8.
Gauge for shoe nailing machines. H. D. Blair and H. M. West. 1,886,628; Nov. 8.
Gear arrangement for automobiles, Driving. C. W. Van Ranst. 1,886,924; Nov. 8.
Gear, Retractable landing. G. Loening. 1,887,357; Nov. 8.
Gear shift mechanism. P. L. Tenney. 1,886,648; Nov. 8.
Gear, Steering. O. F. Lundelius and J. R. Dillon. 1,886,963; Nov. 8.
Gear teeth, Apparatus for testing. G. L. Hansen. 1,886,543; Nov. 8.
Gem setting for rings, pendants, and ear rings. M. W. Stern. Des. 88,265–6; Nov. 8.
Generator and control device, Thermostatic. A. J. and W. C. Lindemann and A. T. Schmidt. 1,886,701; Nov. 8.
Glass: *See*—
Sight flow glass.
Glass drawing apparatus, Sheet. E. L. Le Roy. 1,887,414; Nov. 8.
Glass, Drinking. H. Rose. Des. 88,258; Nov. 8.
Goggles. R. Malcom. 1,886,410; Nov. 8.
Goods from aqueous dispersions of or containing rubber and similar resins, Manufacture of. D. F. Twiss and E. A. Murphy. 1,887,190; Nov. 8.
Goods, Manufacture of knit. O. Nuber. 1,887,166; Nov. 8.
Goods of rubber or similar material, Manufacture of. C. Hayes, E. W. Madge, and F. H. Lane. 1,887,201; Nov. 8.
Governor for fluid motors. J. R. Hoffman. 1,886,546; Nov. 8.
Grab, Automatic. H. Reichmann. 1,886,426; Nov. 8.
Grader, Quality. O. H. Hansen. 1,887,239; Nov. 8.
Grape. H. J. B. Wiederkehr. Pl. Pt. 42; Nov. 8.
Greaser, Hog. M. K. Brown. 1,886,635; Nov. 8.
Grinder, polisher, or buffer, Universal automatic. C. B. Larson. 1,886,699; Nov. 8.
Grinders, Dressing attachment for screw thread. A. M. Drake and N. J. Crowey. 1,886,796; Nov. 8.
Grinding machine. W. J. Guild and A. P. Burns. 1,887,154; Nov. 8.
Grinding machine. T. C. Pew. 1,886,579; Nov. 8.
Grinding machine. C. V. Walter. 1,886,994; Nov. 8.
Grinding machine construction. J. De Koning. 1,886,652; Nov. 8.
Gripping device, Internal. J. A. Buttress. 1,887,009; Nov. 8.
Guide for filing cabinets, Tray. S. B. Freiberg. 1,886,800; Nov. 8.
Guide for the fine adjustment of microscopes, Slide. P. Dietzel. 1,887,121; Nov. 8.
Guide, Thread. R. T. Joyner, L. B. Bowles, and G. C. Freed. 1,887,024; Nov. 8.
Gun. C. F. LeFever. 1,886,561; Nov. 8.
Gyrocompass, Constant period. H. H. Thompson and E. C. Sparling. 1,886,606; Nov. 8.
Gyrocompasses, Follow-up system for. J. N. Mahoney. 1,887,318; Nov. 8.
Hair curler. M. H. and M. E. Keilhamer. 1,886,887; Nov. 8.
Hair curler. R. T. Plate. 1,886,781; Nov. 8.
Hair curling apparatus. A. Pfortner. 1,887,482; Nov. 8.
Hair drying apparatus. G. Condos. 1,887,233; Nov. 8.
Hair heating equipment. P. Santurello. 1,886,909; Nov. 8.
Halogen-methyl compound and preparing it, Aromatic. A. Brunner. 1,887,896; Nov. 8.
Handkerchief or similar article. F. A. Ramig. Des. 88,257; Nov. 8.
Handle, Foldable. E. Lucks-Osten. 1,887,358; Nov. 8.
Handle for vacuum cleaners. B. J. Tamarin. 1,887,178; Nov. 8.
Hanger: *See*—
Article hanger. Radiator supporting hanger.
Catenary hanger.
Collapsible garment hanger.
Hardware for revolving doors. J. W. Shields. 1,886,502; Nov. 8.
Harrow tooth. S. Hansen. 1,887,409; Nov. 8.
Harvesting machine. W. L. M. Jones. 1,887,158; Nov. 8.
Hat, Adjustable. J. A. Mendoza. 1,886,493; Nov. 8.
Hay sweep and stacker, Tractor supported and operated. F. C. Doody. 1,886,655; Nov. 8.
Heat exchanger. R. C. Jones. 1,886,403; Nov. 8.
Heat exchanger. J. H. Schacht and D. A. Palmiter. 1,886,744; Nov. 8.
Heat interchanger. G. H. Phelps. 1,886,498; Nov. 8.
Heat, Transferring. J. R. Wait. 1,886,436; Nov. 8.
Heater: *See*—
Tubular heater. Water heater.
Heater and heat control device, Vehicle. A. B. Modine. 1,887,085; Nov. 8.
Heater and vaporizer, Fuel. J. C. Ryan and W. W. Smith. 1,887,044; Nov. 8.

Heater, Electric. M. Krajac. 88,234; Nov. 8.
Heater element. T. H. Ireland. 1,887,205; Nov. 8.
Heating appliance. A. B. Modine. 1,886,894; Nov. 8.
Heating attachment, Bottle. E. Biancalana. 1,887,280; Nov. 8.
Heating device. R. P. Clarkson. 1,886,645; Nov. 8.
Heating systems, Control apparatus for vacuum. C. M. Bailey. 1,886,366; Nov. 8.
Heating unit, Electric. R. G. Hare. 1,886,880; Nov. 8.
Helmet. R. R. Jones. 1,886,551; Nov. 8.
Heptaldehyde, Preparing. E. C. Fanto. 1,886,538; Nov. 8.
High chair. P. A. Copenhaver. 1,887,284; Nov. 8.
Hitch drill. T. Schull. 1,886,931; Nov. 8.
Hogshead, Knock-down. W. B. Foreman. 1,887,406; Nov. 8.
Holder and signal light, License plate. J. Frisner. 1,887,087; Nov. 8.
Holder, Conduit. G. R. Esping. 1,886,660; Nov. 8.
Holder, Flower. D. D. Richardson. 1,887,189; Nov. 8.
Holder for babies, Bottle. A. Arnone. 1,886,619; Nov. 8.
Holder for holding silverware while the same is being polished. K. Leuchner. 1,886,700; Nov. 8.
Holder for metal wool or the like. C. Field and C. L. Campbell. 1,887,294; Nov. 8.
Holder for pants. G. Huber. 1,886,882; Nov. 8.
Holder, Mop. G. P. Regan. 1,886,739; Nov. 8.
Holder, Pipe, cigar or cigarette. G. W. Davis. 1,886,277; Nov. 8.
Holder, Safety license tag. A. C. Logan. 1,886,708; Nov. 8.
Holding device. H. A. Allendorf. 1,887,145; Nov. 8.
Holding means, Crushing mill concave. H. H. Rumpel. 1,886,908; Nov. 8.
Holster, Attachment for pistol. P. J. Noel. 1,886,718; Nov. 8.
Hone. M. N. Prange. 1,886,584; Nov. 8.
Honey extractor. E. W. Hope. 1,886,954; Nov. 8.
Hook: *See*—
Sleeve lock sling hook.
Hopper construction for laundries, etc. J. Storch. 1,886,916; Nov. 8.
Hose coupling assembling machine. J. R. Heidloff. 1,886,807; Nov. 8.
Hose, Method and apparatus for making. C. C. Cadden. 1,886,639; Nov. 8.
Hose, Method and apparatus for making. W. D. Eakin. 1,886,658; Nov. 8.
Hot air furnace. A. C. Watson. 1,886,506; Nov. 8.
Hot cap applier for plants. W. D. Wright. 1,887,387; Nov. 8.
Humidifiers for explosive engines. G. A. Machin. 1,886,565; Nov. 8.
Hydrator. R. J. Green. 1,887,125; Nov. 8.
Hydrocarbon burner. F. V. Risinger. 1,887,140; Nov. 8.
Hydrocarbons, Apparatus for converting. R. T. Pollock. 1,887,039; Nov. 8.
Hydrocarbons, Cracking. E. Herthel and H. L. Pelser. 1,887,128; Nov. 8.
Hydrocarbons, Cracking and gasifying. J. H. Anderson. 1,887,112; Nov. 8.
Ignition control for explosive engines, Automatic. L. G. Knapp. 1,887,268; Nov. 8.
Ignition device and bomb or the like, Impact. G. Scaglia. 1,887,468; Nov. 8.
Ignition device for fuel burners. C. B. Chandler. 1,887,230; Nov. 8.
Illumination for microscopic objects, Device for providing differently colored. P. Kraft. 1,887,099; Nov. 8.
Impelling device for games. S. A. Graves and N. Muslar. 1,887,263; Nov. 8.
Implement, Farm. L. D. Slocum. 1,886,432; Nov. 8.
Implements, Chain lifter for. C. R. Davis. 1,887,346; Nov. 8.
Incinerator, Garbage and refuse. M. J. Tierney. 1,886,760; Nov. 8.
Index structure, Temporary. S. B. Freiberg. 1,886,801; Nov. 8.
Indicating and controlling apparatus. B. Hocken. 1,886,482; Nov. 8.
Indicator: *See*—
Battery water level indicator.
Direction indicator.
Ingots, Production of sound. A. G. Egler. 1,887,296; Nov. 8.
Insecticide and making the same. E. T. Hessle. 1,887,156; Nov. 8.
Inserting machine. F. A. Lobley. 1,886,890; Nov. 8.
Instrument for the examination of the reaction of the eye pupils when different parts of the retina are illuminated. G. Braun. 1,887,115; Nov. 8.
Insulator structure. H. C. Staton. 1,886,984; Nov. 8.
Insulator, Transmission. W. S. Cone. 1,887,181; Nov. 8.
Integrator. L. Ott and H. Adler. 1,886,576; Nov. 8.
Internal combustion engine. V. C. Mattson. 1,886,492; Nov. 8.
Internal combustion engine. J. Rubinstein, V. Heidelberg, E. Uhlhorn, and W. Dahners. 1,886,978; Nov. 8.
Internal combustion engine. H. Suder and M. Goth. 1,887,072; Nov. 8.
Internal combustion engine. R. D. Wehr. 1,886,770; Nov. 8.
Internal combustion engine. L. M. Woolson. 1,886,443; Nov. 8.
Iron of improved characteristics, Preparing gray cast. E. L. Crosby and A. E. Rhoads. 1,886,675; Nov. 8.
Ironing board and closet construction. E. Soucie. 1,886,983; Nov. 8.
Jacket, Sanitary combing and make-up. N. K. Lemke and Z. C. Plass. 1,887,028; Nov. 8.
Jar and other food container, Insect proof jam. H. E. P. Bracey. 1,886,373; Nov. 8.
Jig, Dye. E. E. Rusden. 1,887,331; Nov. 8.
Jigger, Dye. W. J. Norton. 1,887,462; Nov. 8.
Joint: *See*—
Rail joint.
Universal joint.
Joint and making same, Pipe. A. G. Perkins. 1,886,421; Nov. 8.
Key assembling machine. W. Pechy. 1,886,973; Nov. 8.
Keying. J. L. Finch. 1,887,236; Nov. 8.
Kiln, Muffle. L. W. Manion. 1,886,491; Nov. 8.
Kit, Razor. G. Flintermann. 1,887,123–4; Nov. 8.
Knife. H. L. Ross. 1,887,188; Nov. 8.
Knitted fabric. P. W. Bristow and H. E. Houseman. 1,886,521; Nov. 8.
Knitted fabric. P. Schmidt. Des. 88,261–2; Nov. 8.
Knitting machine. W. Larkin. 1,887,413; Nov. 8.
Ladder for sleeping cars, Berth. W. S. Gordon. 1,887,301; Nov. 8.
Lamp. C. I. Brown. 1,886,634; Nov. 8.
Lamp. H. M. Greist and H. F. Thurber. 1,886,804; Nov. 8.
Lamp control for vehicles. J. S. Tritton. 1,887,074; Nov. 8.
Lamp lens. M. A. Smith. 1,887,107; Nov. 8.
Lamp, Mercury vapor. M. Hulett. 1,886,400; Nov. 8.
Lantern. G. W. Haire. 1,886,542; Nov. 8.
Lapping machine. O. R. Reller and C. W. Hallene. 1,886,836; Nov. 8.
Lapping machine. F. C. Sturgis. 1,886,919; Nov. 8.
Latch, Closure. N. A. Mears. 1,886,827–9; Nov. 8.
Latch, Door H. E. Muchnic. 1,886,418; Nov. 8.
Launching machine. C. Hunt. 1,887,056; Nov. 8.
Laundry machine. J. B. Kirby. 1,886,883; Nov. 8.
Lead—basic lead carbonate—from lead oxide, Production of colloidal white. E. Stelser. 1,886,915; Nov. 8.
Lead from ferrous articles, Removing. C. L. Mantell. 1,886,411; Nov. 8.
Lead, Reclaiming. R. C. Brett and J. E. Doyle. 1,886,938; Nov. 8.
Leaks in reservoirs, Locating. L. B. Slichter. 1,886,914; Nov. 8.
Lens, Optical. C. T. Pankhurst. 1,886,724; Nov. 8.
Lenses, Manufacture of fused bifocal. E. Culver and A. H. Emerson. 1,886,649; Nov. 8.
Lenses to cameras, Attaching. A. N. Merle. 1,887,103; Nov. 8.
Leveling mechanism for fire ladders. C. Boheln, jr. 1,886,783; Nov. 8.
Liberator, Oil. W. O. Wetmore. 1,887,343; Nov. 8.
Lifter: *See*—
Pan lifter.
Valve lifter.
Lifting and conveying device. A. E. Wolkow. 1,886,614; Nov. 8.
Light: *See*—
Safety pilot light.
Light standard, Therapeutic. W. O. Prouty. Des. 88,256; Nov. 8.
Lightning or surge absorber. H. D. T. Norris. 1,887,461; Nov. 8.
Liners, Making bushing. G. Rauberstrauch. 1,887,168; Nov. 8.
Lining for cuffs and other apparel, Prestarched. M. I. Fletcher. 1,886,798; Nov. 8.
Lining for underground works. H. Schaeffer. 1,886,745; Nov. 8.
Link for endless tractor chains, Padded. E. J. Scheckel. 1,886,839; Nov. 8.
Liquid dispensing apparatus. W. A. Barnes. 1,886,623; Nov. 8.
Liquid metering and registering mechanism. P. Krause. 1,886,555; Nov. 8.
Liquids, Apparatus for cooling and carbonating portable. H. S. Cornish. 1,886,468; Nov. 8.
Lock: *See*—
Adjustable lock.
Cylinder lock.
Lock and anti-rattler, Window. P. Schneider. 1,886,746; Nov. 8.
Locking device, Secret. C. J. Hagstrom and G. E. Hagstrom. 1,887,016; Nov. 8.
Locking mechanism for power apportioning devices. A. D. Robbins. 1,886,837; Nov. 8.
Locking sheet metal structure. E. J. Hayman. 1,886,831; Nov. 8.
Locomotive lubricator. A. R. Bailey. 1,886,622; Nov. 8.
Locomotive tender. E. A. Turner. 1,886,765; Nov. 8.
Locomotive, Turbine. G. Bellusso. 1,887,178; Nov. 8.
Lock. R. J. Johnson. 1,886,402; Nov. 8.
Logging engine. H. L. Turney. 1,887,444; Nov. 8.
Lollypop cluster or similar article. F. Kobak. Des. 88,232; Nov. 8.
Loom reed. I. Andrews. 1,886,778; Nov. 8.
Looms, Lug strap for. H. F. Livermore. 1,886,563; Nov. 8.
Loud speaker. E. S. Pridham. 1,886,785; Nov. 8.
Lowering apparatus, Flexible. F. Pardee. 1,886,901; Nov. 8.

Lubricating mechanism. M. B. Walker. 1,886,505; Nov. 8.
Lubricator: *See*—
Wheel flange lubricator.
Lubricator. F. W. Edwards and F. B. Farnsworth. 1,886,659; Nov. 8.
Lubricator for motor vehicles and the like. E. O. Gillam. 1,887,199; Nov. 8.
Luggage, Hand. G. H. Wheary. 1,886,440; Nov. 8.
Lumber stamping device. G. Lunden. 1,886,564; Nov. 8.
Machine for automatically opening square-bottom paper bags. X. Dambacher. 1,886,376; Nov. 8.
Machine for delivering change for coins inserted therein. A. J. Hunt. 1,886,684; Nov. 8.
Machine for extracting threads from woven fabrics. E. Prasak. 1,886,585; Nov. 8.
Machine for making tubes, Automatic. P. Witte. 1,886,450; Nov. 8.
Machine for reclaiming worn brake drums. H. K. Shockey. 1,886,503; Nov. 8.
Machine for road-making, Process and. A. E. Schutte. 1,886,748; Nov. 8.
Machine for sharpening disks and the like. C. D. Wright. 1,886,859; Nov. 8.
Machine for sharpening mowing machine cutters. J. Nobs. 1,886,717; Nov. 8.
Machine for staining paper strips. W. E. Sackner. 1,886,428; Nov. 8.
Magneto. J. F. Martin. 1,887,320; Nov. 8.
Magneto, Ignition. G. Fossati. 1,887,454; Nov. 8.
Magnifier attachment, Folding. G. T. Schroder. 1,886,747; Nov. 8.
Marker and placing the same in a pavement, Road. J. R. O'Brien. 1,886,720; Nov. 8.
Marker, Road. J. R. O'Brien. 1,886,721; Nov. 8.
Massaging device. P. L. Hemp. 1,886,544; Nov. 8.
Mat. L. T. Hand. 1,887,200; Nov. 8.
Materials into molds, Method of and apparatus for pressing. W. S. Murray. 1,886,831; Nov. 8.
Matrix assembly for typesetting machines. H. E. Williams. 1,886,772; Nov. 6.
Matte, Treatment of. O. C. Ralston and C. R. Kusell. 1,886,903; Nov. 8.
Matter from wells, Method of and apparatus for the recovery of. K. Kelley and S. J. Perkins. 1,886,886; Nov. 8.
Matter, Treating fluidal. H. C. Lykken. 1,887,317; Nov. 8.
Measuring apparatus. A. E. Young. 1,887,254; Nov. 8.
Mechanism for riveting columns, beams, etc. C. D. Marshall. 1,886,892; Nov. 8.
Mechanism for traversing a recording medium. H. L. Warwick. 1,886,856; Nov. 8.
Merry-go-round, Kiddie propelled. A. C. Holt. 1,887,410; Nov. 8.
Metal articles, Reinforcing thin-walled. A. Hainlen. 1,886,896; Nov. 8.
Metal, Rolling strip. B. R. Shover. 1,887,248; Nov. 8.
Metal treating process. G. Purnell. 1,886,835; Nov. 8.
Metallic bunch and making it. J. W. Gottscalk and S. W. Grater. 1,886,671; Nov. 8.
Metals of the third periodic group, Recovering certain. F. G. McCutcheon. 1,886,825; Nov. 8.
Meter: *See*—
Displacement meter.
Fluid meter.
Meter compensating device. J. M. Dayton. 1,887,400; Nov. 8.
Micrometer. J. G. Schotthoefer. 1,887,437; Nov. 8.
Milling machine. H. Perazzoli. 1,887,424; Nov. 8.
Mine timbering machine. R. R. Atkinson. 1,886,620; Nov. 8.
Mirror for automobiles, Rear view. J. Wilczynski. 1,887,144; Nov. 8.
Mixer: *See*—
Steam and water mixer.
Mixing machine, Shingle. A. E. F. Moone. 1,886,969–70; Nov. 8.
Mold: *See*—
Stamp mold.
Toy mold.
Mop, Cleaning and polishing. J. Jacobsen. 1,886,668; Nov. 8.
Motion of constant speed, Method and apparatus for producing and maintaining rotary. J. W. Brady, jr. 1,887,284; Nov. 8.
Motor: *See*—
Wave motor.
Motor control system. H. A. Winne. 1,886,773; Nov. 8.
Motor of the internal combustion type, Industrial. J. R. Thonger. 1,886,455; Nov. 8.
Motors, Starting condenser type. T. G. Myers. 1,886,805; Nov. 8.
Mounting, Shift lever. P. L. Tenney and L. F. Le Gros. 1,886,649; Nov. 8.
Mower. E. F. Huddle. 1,887,352; Nov. 8.
Mower, Power lawn. S. D. Locke and H. J. Stegeman. 1,886,408; Nov. 8.
Multiple coil spring washer. E. D. Cowlin. 1,886,791; Nov. 8.
Multiple steam drum boiler. J. G. Coutant. 1,887,182; Nov. 8.
Music, Method and apparatus for the production of. C. T. Jacobs. 1,886,667; Nov. 8.
Nail aligning device. A. Tanatlas. 1,887,109; Nov. 8.
Nail, Glazier's. F. H. Washko. 1,887,268; Nov. 8.
Naphthenic compounds, Making. S. P. Coleman. 1,886,647; Nov. 8.
Needle work. A. H. Shillman. 1,887,364; Nov. 8.
Net, Folding landing. C. F. Larselere. 1,886,550; Nov. 8.
Niches employed in crematoriums. E. B. Brickson. 1,887,066; Nov. 8.
Nickel bearing materials, Refining. R. L. Peek and C. A. Knittel. 1,887,037; Nov. 8.
N-methyl-P-amino phenol sulphate, Preparation of. P. Sommer and M. Nassau. 1,886,449; Nov. 8.
Nuts, Treating edible. C. K. and J. B. Bissell. 1,887,256; Nov. 8.
Oil burner. A. Behrsin. 1,887,007; Nov. 8.
Oil burner. J. E. Fowler. 1,886,667; Nov. 8.
Oil burner. C. G. Sigwald. Des. 88,263; Nov. 8.
Oil burning furnace. F. A. Heath. 1,886,675; Nov. 8.
Oil, Converting. C. I. Smith and C. B. Watson. 1,887,047; Nov. 8.
Oil, Drying. L. P. Rankin. 1,886,586; Nov. 8.
Oil or other liquid, Device for automatically feeding and cutting off a supply of lubricating. H. P. Pfeifer. 1,886,729; Nov. 8.
Oil, Process and apparatus for cracking. G. Egloff. 1,887,083; Nov. 8.
Oiler, Rail joint. H. W. Protseller. 1,886,736; Nov. 8.
Oiling system, Engine. J. Good. 1,887,262; Nov. 8.
Oils, Oxidising asphaltic. T. H. Dowlen. 1,886,330; Nov. 8.
Oils, Treating hydrocarbon. A. E. Harnsberger. 1,887,018; Nov. 8.
Oils, Treatment of hydrocarbon. H. C. Weber. 1,887,051; Nov. 8.
Opener and holder, Fruit jar. T. J. Geisler. 1,887,152; Nov. 8.
Opener, Bottle. J. L. Teaver. 1,886,604; Nov. 8.
Optical apparatus. A. S. Cameron. 1,886,939; Nov. 8.
Ore, Conversion of metallic. H. Edwards, O. J. Parker and R. Arnot. 1,887,452; Nov. 8.
Ores and obtaining new products thereof, separating the products and the purification of the separated products, Reducing. J. B. Grenagle. 1,887,264; Nov. 8.
Ores, Apparatus for treating metallic. E. W. Buskett. 1,887,286; Nov. 8.
Organs, Direct electric action for pipe. S. B. Warren. 1,887,076; Nov. 8.
Oscillations, Method and apparatus for generating electrical. A. Hund. 1,886,815; Nov. 8.
Outlining device. S. M. Watson. 1,886,768; Nov. 6.
Oven and broiler, Combined fumeless and ventilated. O. C. Goehring. 1,887,408; Nov. 8.
Oven, Coke. F. Totsek. 1,887,222; Nov. 8.
Oven, Regenerative coke. C. Otto. 1,887,214; Nov. 8.
Ovens, Charging coke. R. M. Felsom. 1,886,948; Nov. 8.
Pack, Film. H. C. Rich and B. V. Stöhr. 1,886,589; Nov. 8.
Package for birthday cake candle holders, Shipping and display. A. Krieg. 1,887,270; Nov. 8.
Package for perishable objects, Shipping. R. J. Breton. 1,886,374; Nov. 8.
Packer, Fruit. W. D. Wright. 1,887,388; Nov. 8.
Packing and process of manufacture. H. S. Walker. 1,886,993; Nov. 8.
Packing for the stuffing-boxes and covers or lids of apparatus and machines subjected to a high gas-pressure. W. Baensch. 1,887,006; Nov. 8.
Packing machinery. G. Dearsley. 1,886,878; Nov. 8.
Pad for invalid cushions. H. M. Buckley. 1,886,637; Nov. 8.
Padlock. J. H. Shaw. 1,886,912; Nov. 8.
Pail, Garbage. A. C. Bourdette. 1,886,630; Nov. 8.
Pail, Window cleaner's. C. F. Stiel. 1,887,071; Nov. 8.
Painting instrument. E. M. Barden. 1,886,863; Nov. 8.
Pan cleaning machine. A. B. Peffer. 1,887,138; Nov. 8.
Pan lifter. J. A. Dries. 1,886,478; Nov. 8.
Pants rack. E. C. Garner. 1,886,389; Nov. 8.
Paper feeding and folding mechanism, Pneumatic control for. M. Parkdon. 1,886,496; Nov. 8.
Paper, Gumming. F. W. Huempfner. 1,886,550; Nov. 8.
Paper making apparatus. W. A. N. and W. A. Spencer. 1,887,143; Nov. 8.
Parachutes, Guiding means for. A. A. Longaker. 1,887,080; Nov. 8.
Pavements, Method of and machinery for forming. W. M. Venable. 1,887,341; Nov. 8.
Pen, One-piece metal fountain. W. H. Pearce. 1,887,186; Nov. 8.
Pencil. C. W. Boman. 1,886,371; Nov. 8.
Percolator top. W. H. Overton. 1,886,723; Nov. 8.
Perforating machine G. Knight. 1,886,554; Nov. 8.
Perforator. W. P. Shomaker. 1,887,331; Nov. 8.
Petroleum, Apparatus for treating. C. P. Dubbs. 1,886,946; Nov. 8.
Phenylphenols, Separating. E. C. Britton and F. Bryner. 1,887,227; Nov. 8.
Piano. W. G. Gets. 1,886,864; Nov. 8.
Pickling apparatus. L. Lee. 1,886,619; Nov. 8.
Picture scanning and assembling device for television and picture transmission. F. Von Okolicsany and G. Wikkenhauser. 1,887,472; Nov. 8.
Pile fabric. N. Slater. 1,887,477; Nov. 8.
Pilot for aircraft, Automatic. L. B. Sperry. 1,887,335; Nov. 8.
Pipe: *See*—
Smoking pipe.
Pipe cutting machine. N. E. Wagner. 1,886,855; Nov. 8.

Pipe nipples, Apparatus for testing. J. M. Readey. 1,887,327; Nov. 8.
Pipe or conduits, Apparatus for molding. C. Jackson. 1,886,401; Nov. 8.
Pipes, Clean-out for. R. A. Mikalsen. 1,887,321; Nov. 8.
Piston attachment. A. Welikes. 1,887,284; Nov. 8.
Pitch propeller, Variable. S. B. Smith. 1,886,602; Nov. 8.
Pitcher. L. Guild. Des. 88,227; Nov. 8.
Pitcher. A. D. Nash. Des. 88,253; Nov. 8.
Pitcher, Dripless sirup. F. B. Knauss. 1,886,405; Nov. 8.
Plant apparatus and making metal wool. C. Field. 1,886,661; Nov. 8.
Plant, Power. R. A. Beekman. 1,886,625; Nov. 8.
Plant starter, Indoor. E. Janssen. 1,886,690; Nov. 8.
Plant, Steam. J. Ruths. 1,887,218; Nov. 8.
Plate process printing, Dry. C. L. Johnston. 1,886,817; Nov. 8.
Pliers, Bending. S. Poland. 1,886,782; Nov. 8.
Plow, Cable laying. E. C. Gledhill. 1,886,511; Nov. 8.
Plow, Cable laying. B. N. Murphy. 1,886,510; Nov. 8.
Plug and fuse, Combined. W. J. Macdonald. 1,886,706; Nov. 8.
Plug controlling device for internal combustion engines, Sparking. A. Durst. 1,887,014; Nov. 8.
Plug, Multiple contact. V. A. Johnson. 1,886,959; Nov. 8.
Pocket cigar lighter. O. N. Berman. 1,886,461; Nov. 8.
Polishing. F. Lach. 1,887,026; Nov. 8.
Polishing machine, Lead pencil and like. F. Ehrhardt and C. Roeder. 1,887,260; Nov. 8.
Power head for soot cleaners. F. C. Arey. 1,886,515; Nov. 8.
Power rectifier anode, Electric. O. Seitz. 1,887,069; Nov. 8.
Power transmission means. P. Kapitza and G. V. Lomonossoff. 1,886,692; Nov. 8.
Power transmission, Selective. W. M. and G. Evans. 1,886,537; Nov. 8.
Press: *See*—
Baling press. Drawing press.
Bed and cylinder printing press. Printing press.
Press and the like, Screw. J. Strindlund. 1,886,755; Nov. 8.
Press structure, Printing. I. Tornberg. 1,886,762; Nov. 8.
Pressing machine. H. D. Forse. 1,886,799; Nov. 8.
Preventer, Fixture, trap, and drain pipe stoppage. F. W. Heuacker. 1,886,676; Nov. 8.
Printing device. W. Schwabe. 1,886,597; Nov. 8.
Printing machines, Still adjustment for pattern fitting for multiple. L. I. Tuttle. 1,886,922; Nov. 8.
Printing press. E. H. Phinney. 1,886,730; Nov. 8.
Production planning board. E. Szepesi. 1,886,453; Nov. 8.
Propeller. F. J. Martens and C. O. Thompson. 1,886,891; Nov. 8.
Propeller. A. Schwarz. 1,887,045; Nov. 8.
Propeller, Adjustable. D. C. Conkling. 1,887,146; Nov. 8.
Propeller and engine jointly for aeroplanes. R. Yates. 1,887,053; Nov. 8.
Propeller construction. J. W. Price. 1,887,429; Nov. 8.
Propeller for aircraft. A. Altieri. 1,887,004; Nov. 8.
Protector for golfers, Hand. L. Auster. 1,887,278; Nov. 8.
Protector, Pipe-end. P. J. Shrum. 1,887,332; Nov. 8.
Protector, Sanitary food. I. M. McLeod. 1,886,711; Nov. 8.
Protector, Shoulder. G. S. Warner. 1,887,478; Nov. 8.
Puff and making the same, Powder. A. B. Charroin. 1,887,194; Nov. 8.
Pulley. L. C. Bendit. 1,887,279; Nov. 8.
Pulping and shredding system. G. S. Witham, jr. 1,887,225; Nov. 8.
Pulverizer. A. F. Williams. 1,887,366; Nov. 8.
Pulverizer for tractors, Track. H. W. Freeman. 1,887,348; Nov. 8.
Pump and fan, Rotary. H. Mawson. 1,887,417; Nov. 8.
Pump construction. A. Bohnenblust. 1,887,180; Nov. 8.
Pump for Diesel engines, Injection. S. Alder. 1,886,930; Nov. 8.
Pump for lubricating systems and the like. T. W. Hallerberg. 1,886,397; Nov. 8.
Pump, Motor driven fluid. S. A. Moss. 1,886,714; Nov. 8.
Pump, Oil. B. Shreiber. 1,886,751; Nov. 8.
Pumping unit for hydraulic power transmission systems. L. E. Godfriaux. 1,886,393; Nov. 8.
Pumps. E. D. Kohr. 1,887,311; Nov. 8.
Punch. J. C. Olsen. 1,887,360; Nov. 8.
Punch construction, Center. L. B. Ehrlich. 1,887,085; Nov. 8.
Punches, Manufacturing staple-driving. G. Winter. 1,887,079; Nov. 8.
Pyrotechnic device. K. Kohn. 1,886,407; Nov. 8.
Quick acting clamp. N. A. Draim. 1,886,874; Nov. 8.
Rack: *See*—
Display rack. Shoe rack.
Pants rack.
Radiator. L. D. Harnett and C. N. O'Day. 1,887,093; Nov. 8.
Radiator fin. A. B. Modine. 1,887,036; Nov. 8.
Radiator supporting hanger. C. L. Lyon. 1,887,031; Nov. 8.
Radiators, Manufacture of. T. E. Murray, jr. 1,886,830; Nov. 8.
Radiators, Production of. T. E. Murray, jr. 1,886,715; Nov. 8.
Radio. O. T. Francis. 1,886,386; Nov. 8.
Radio receiving system. J. M. Miller. 1,886,571; Nov. 8.
Raft, Diving. R. Buck. 1,886,522; Nov. 8.
Rail joint. K. Nast. 1,887,068; Nov. 8.
Railway bootleg. R. Snyder. 1,887,249; Nov. 8.
Rake: *See*—
Rolling and loading hay rake.
Razor. A. J. Briggs. 1,886,520; Nov. 8.
Razor. S. Segal. 1,887,105; Nov. 8.
Razor, Safety. B. G. Jansson. 1,886,689; Nov. 8.
Reamer and the like. J. V. Emmons and C. Kuchenbrod. 1,887,373; Nov. 8.
Reamer construction, Well. A. E. Carlson. 1,886,789; Nov. 8.
Receiving system. B. Van Der Pol. 1,886,990; Nov. 8.
Receptacle. C. Campbell. 1,886,465; Nov. 8.
Recording system, Magnetic sound. J. G. Alverson. 1,886,616; Nov. 8.
Reenforcement for conveyer belts. C. E. Pink. 1,887,425; Nov. 8.
Refrigerating apparatus. Le R. A. Droescher. 1,886,656; Nov. 8.
Refrigerating apparatus. B. Hall. 1,887,127; Nov. 8.
Refrigerating apparatus. A. J. Kercher. 1,886,553; Nov. 8.
Refrigerating system. H. R. Van Deventer. 1,886,607; Nov. 8.
Refrigerating units, Automatically defrosting. C. T. Hoffman. 1,886,953; Nov. 8.
Refrigerator. B. A. Michel. 1,887,419; Nov. 8.
Refrigerator. C. A. Moore. 1,887,243; Nov. 8.
Refrigerator. R. T. Smith. 1,886,601; Nov. 8.
Refrigerator of cold brine shower system. Z. Ogura. 1,887,463; Nov. 8.
Reglet and flashing on roofings. M. E. Bever. 1,886,462; Nov. 8.
Regulating system for high capacity boilers. W. L. DeBaufre. 1,887,147; Nov. 8.
Regulation, Multiple flow. G. K. O'Connor. 1,886,575; Nov. 8.
Regulator: *See*—
Multiple flow regulator.
Regulator for use in connection with boilers or the like, Water level expansion. M. Ehlinger. 1,887,084; Nov. 8.
Relay. J. Erickson. 1,886,474; Nov. 8.
Relay, Electrical. P. N. Bossart. 1,886,872; Nov. 8.
Relay, Electrical. N. C. Shaw. 1,887,247; Nov. 8.
Relay, Frequency. V. Sterner. 1,887,189; Nov. 8.
Relay system, Protective. S. Sunairi. 1,886,985-6; Nov. 8.
Release mechanism for windows, Explosion. H. T. Walton. 1,887,484; Nov. 8.
Reproducer, Sound. E. J. Quinby. 1,887,185; Nov. 8.
Reforts, Apparatus for charging. C. Mintner. 1,887,034; Nov. 8.
Rifle, Attachment to make a right-hand bolt rifle a left-hand bolt rifle, or a left-hand bolt rifle a right-hand bolt. H. E. Wale. 1,886,925; Nov. 8.
Roll travel testing apparatus. J. E. Thropp. 1,887,442-3; Nov. 8.
Roller: *See*—
Caster roller.
Rollers, Transporting means for road. E. V. Biles. 1,886,367; Nov. 8.
Rolling and loading hayrake. J. Baggiolini. 1,887,080; Nov. 8.
Roofing, Making. J. L. Wettlaufer. 1,886,456; Nov. 8.
Rosin, Refining. I. W. Humphrey. 1,887,097; Nov. 8.
Rosin, Refining. I. W. Humphrey. 1,887,157; Nov. 8.
Rotary steam engine. D. Ross. 1,887,043; Nov. 8.
Rubber article and making the same, Oil-resisting. B. S. Taylor. 1,886,759; Nov. 8.
Rubber band package and making same. K. R. Shaw. 1,886,642; Nov. 8.
Rubber, Vulcanization of. G. Bruni and T. G. Levi. 1,886,636; Nov. 8.
Rug, Pile fabric. J. Todd. Des. 88,270-1; Nov. 8.
Saddle, Cycle. J. W. Brandt. 1,886,867; Nov. 8.
Safety appliance for electrically heated apparatus. W. H. Bulpitt. 1,887,082; Nov. 8.
Safety pilot light. F. A. Gauger. 1,886,876; Nov. 8.
Salt, Dehydrating glauber. J. B. Pierce, jr. 1,886,580; Nov. 8.
Sand and the like, Surfacing. N. DeJoy. 1,887,195; Nov. 8.
Sand blast apparatus. C. E. Billings and D. S. Sammis. 1,887,395; Nov. 8.
Sawdust burner. C. J. Starburg and F. N. Carlson. 1,886,450; Nov. 8.
Saw set. C. K. Harris. 1,887,350; Nov. 8.
Scale, Weighing. C. O. Ross. 1,887,169; Nov. 8.
Scoop, Scale. E. Ittem. 1,886,958; Nov. 8.

Scoring and trimming machine. C. E. Ives. 1,887,307; Nov. 8.
Screen: *See*—
Filler screen.
Screw for extruding machines, Stock. V. E. Royle. 1,886,592; Nov. 8.
Screw, Telescopic. T. Trecker. 1,886,851; Nov. 8.
Screw thread gauge. W. E. Hoke. 1,887,131; Nov. 8.
Seal. T. G. Stiles. 1,886,451; Nov. 8.
Seat: *See*—
Adjustable seat. Chair seat.
Baby sanitary toilet seat.
Separating ortho- and para-phenylphenols. G. H. Coleman. 1,887,252; Nov. 8.
Separator: *See*—
Centrifugal separator. Dust separator.
Service table. G. F. Reinhard. 1,886,446; Nov. 8.
Sewing machines, Attachment for. C. M. Smith. 1,887,142; Nov. 8.
Sewing machines, Pinking attachment for. M. Popper. 1,886,422; Nov. 8.
Shade, Lamp. P. Capocci. 1,887,297; Nov. 8.
Sharpener, Drill. G. C. Pearson. 1,887,038; Nov. 8.
Sharpener, Knife. G. P. Hurst. 1,886,483; Nov. 8.
Sharpener, Lawn mower. C. Bailey. 1,887,394; Nov. 8.
Sharpener, Pencil. C. B. Oulton. 1,887,422; Nov. 8.
Sheave fairlead, Revolving. F. H. Huff. 1,887,206; Nov. 8.
Sheet, Division. S. B. Freiberg. 1,886,602; Nov. 8.
Sheets and the products thereof, Production of plastic. D. D. Payne. 1,886,972; Nov. 8.
Sheets, Apparatus for producing laminated. J. Wyss. 1,886,928; Nov. 8.
Sheets, Manufacture of composite metal. W. C. Johnson. 1,886,615; Nov. 8.
Shell, Selective fuse plug. H. J. L. Frank. 1,887,089; Nov. 8.
Shelter, Animal. M. H. Steese. 1,887,108; Nov. 8.
Shield, Eye. L. Pedersen. 1,886,725; Nov. 8.
Shield for hair waving, Protective. G. Comerford. 1,886,467; Nov. 8.
Shift, Gear. F. S. Cartwright. 1,887,012; Nov. 8.
Shock absorbing coupling. R. H. Carr and W. C. Trout. 1,887,011; Nov. 8.
Shock absorbing mechanism. R. H. Churchill. 1,887,287; Nov. 8.
Shoe. J. Marino. 1,887,319; Nov. 8.
Shoe, Adjustable snowplow. A. J. Dombrowski. 1,887,451; Nov. 8.
Shoe and valve, Casing. J. O. Little. Re18,651; Nov. 8.
Shoe last. E. Broberg. 1,887,116; Nov. 8.
Shoe machine, Automatic. A. E. Morrill. 1,887,136; Nov. 8.
Shoe polishing outfit. I. Grodsky. 1,886,541; Nov. 8.
Shoe rack. J. J. Knape. 1,886,961; Nov. 8.
Shoe, Turned. D. Schreiber. 1,886,501; Nov. 8.
Shoots of young trees, Method and device to direct the. F. Dalchow. 1,886,531; Nov. 8.
Show case, Refrigerated. L. U. Larkin. 1,887,313; Nov. 8.
Shutter, Weir. F. Jermar. 1,887,265; Nov. 8.
Sight, Anti-aircraft. W. T. Rickards. 1,887,363; Nov. 8.
Sight feed device. F. L. Badgett. 1,887,393; Nov. 8.
Sight flow glass. O. H. Wurster. 1,886,444; Nov. 8.
Signal. R. J. Ruths. 1,886,930; Nov. 8.
Signal. O. L. Vincent. 1,886,435; Nov. 8.
Signalling system. J. L. Finch. 1,887,237; Nov. 8.
Silencer for water-closet tanks. J. Freed. 1,887,295; Nov. 8.
Skate. W. J. Davies and H. C. S. Schnack. 1,886,650; Nov. 8.
Sleeve lock sling hook. A. A. E. Pennefather. 1,886,726; Nov. 8.
Slide for extension tables. J. Cooper. 1,886,648; Nov. 8.
Slinger for drive units. M. E. Anstice. 1,886,618; Nov. 8.
Sloper mechanism. W. C. Colley. 1,887,117; Nov. 8.
Slug for cleaning condenser tubes. W. F. Oberhuber. 1,886,419; Nov. 8.
Sluice or lock. L. Rothmund. 1,886,591; Nov. 8.
Smoking pipe. W. G. Clark. 1,886,375; Nov. 8.
Snap fastener, Securing. B. C. Place. 1,887,426; Nov. 8.
Soap into a rapidly soluble handy form, Converting liquid. A. Welter. 1,887,474; Nov. 8.
Soap, Refining and discoloring of raw sulphate soft. E. Pyhälä. 1,887,246; Nov. 8.
Soap sudsing apparatus. P. C. Doyle. 1,887,371; Nov. 8.
Sound from records tracked by a stylus, Reproducing. W. A. Henderson. 1,887,021; Nov. 8.
Sound reproducer, Magnetic. P. L. Jensen. 1,886,816; Nov. 8.
Spare wheel and tire lock. S. Wise. 1,887,367; Nov. 8.
Speed change mechanism. E. G. Keeling. 1,886,695; Nov. 8.
Spindle tapper, Multi. A. J. Gifford. 1,887,091; Nov. 8.
Spool and making the same, Tuft yarn. R. E. Vickerman. 1,887,242; Nov. 8.
Spool for printing machines, Ribbon. H. C. Osborn. 1,887,184; Nov. 8.
Spoon or similar article. A. H. Staf. Des. 88,264; Nov. 8.
Sprayer, Traction. J. C. Bogart. 1,886,869; Nov. 8.
Spraying device. R. K. Matlack. 1,887,416; Nov. 8.
Spreader and hanger for wardrobe bags. W. D. Normandy. 1,886,574; Nov. 8.
Spreader for fertilisers, seeds, and the like. E. L. Hallberg and H. J. Ryan. 1,887,017; Nov. 8.
Spring assembly. F. Karr. 1,887,058; Nov. 8.
Spring construction. G. Sunley. 1,886,918; Nov. 8.
Spring for piston rings, Expander. E. G. Buchmann. 1,887,257; Nov. 8.
Spring forming and assembling machine. D. T. Owen. 1,887,215; Nov. 8.
Stacker attachment for corn huskers. A. Rosenthal. 1,886,906; Nov. 8.
Stacking machine. B. Bogoslowsky. 1,887,006; Nov. 8.
Stamp mold, Vented. E. Evans. 1,887,402; Nov. 8.
Stanchion. J. J. Rickey. 1,886,741; Nov. 8.
Stand: *See*—
Display stand. Tire display stand.
Stand. W. H. Stansberry. 1,886,752; Nov. 8.
Standard, Athletic. D. W. Merriman. 1,887,033; Nov. 8.
Starting engines, Automatic means for. H. H. Trail. 1,887,483; Nov. 8.
Steam and water mixer. L. J. Dornhofer. 1,886,534; Nov. 8.
Steel, Electrical. C. J. Stroble. 1,887,339; Nov. 8.
Steel, Treating. F. W. Pitts. 1,886,581; Nov. 8.
Sterilising, Apparatus for and method of. C. Frank. 1,887,297; Nov. 8.
Stockings, Apparatus for drying and stretching. F. A. Batchelder. 1,887,255; Nov. 8.
Stoker, Force feed. M. L. Wenrich. 1,886,771; Nov. 8.
Stoker, Mechanical. G. E. Whitney. 1,887,191; Nov. 8.
Stop for conveyers, Safety. M. A. Le Gette. 1,887,456; Nov. 8.
Storage device. T. E. Murray. 1,887,245; Nov. 8.
Strainer. J. S. Mohr. 1,886,893; Nov. 8.
Strands and covered wires, Apparatus for making. E. Slade. 1,886,447; Nov. 8.
Substance from cement with or without colors, Preparation of a glassy drying. H. M. De Lange. 1,886,379; Nov. 8.
Sugars, Preparing invert. E. N. Ehrhart and L. Wickenden. 1,886,875; Nov. 8.
Suit, Swimming. M. G. Monroe. 1,886,416; Nov. 8.
Sulphur-dyestuffs and preparing them, New. O. Bayer, W. Hohenemser, and K. Larbig. 1,886,365; Nov. 8.
Supercharging apparatus. J. T. Trumble. 1,886,989; Nov. 8.
Support and display rack for roll material. R. H. Knittle. 1,887,269; Nov. 8.
Support, Conductor. C. C. Martin. 1,886,709; Nov. 8.
Support, Filament. J. S. Van Horne. 1,886,991; Nov. 8.
Support for benches and the like. W. F. Costello. 1,887,399; Nov. 8.
Support for boots and shoes, Arch. J. A. Reid. 1,886,976; Nov. 8.
Support for chairs, Adjustable reading. M. C. Wine. 1,886,509; Nov. 8.
Support, Furniture. F. Brabson. 1,887,283; Nov. 8.
Support, Resilient. D. D. Richardson. 1,886,740; Nov. 8.
Support, Scaffolding. R. J. Tobin. 1,886,921; Nov. 8.
Support, Tray. F. Ponton. 1,886,582; Nov. 8.
Support, Trousers. A. L. Andrews. 1,886,617; Nov. 8.
Supporter for wearing apparel. O. G. Stoffregen. 1,886,754; Nov. 8.
Surgical apparatus. J. B. Bacon. 1,887,392; Nov. 8.
Surgical device. M. E. and A. L. Hoffman. 1,887,022; Nov. 8.
Suspension apparatus for aeroplanes and other vehicles. G. L. R. Messier. 1,886,712; Nov. 8.
Sweeper. J. French. 1,886,950; Nov. 8.
Swing. H. S. Rice. 1,886,904; Nov. 8.
Switch: *See*—
Automatic switch. Flashlight safety switch.
Electric switch. Treadle switch.
Switch. G. Suder. 1,886,756; Nov. 8.
Switch actuating mechanism. P. Vannini. 1,887,223; Nov. 8.
Switch and circuit breaker, Combined. W. S. Mayer. 1,887,274; Nov. 8.
Switch and single break-double throw switch, Double break-double throw electrical. G. C. Lawton. 1,887,027; Nov. 8.
Switch for motors, Centrifugal. C. L. Kennedy. 1,887,267; Nov. 8.
Switch for signaling systems for automotive vehicles. B. L. Bobroff. 1,886,519; Nov. 8.
Switch machine for railroads. W. K. Howe. 1,886,955; Nov. 8.
Switch operating apparatus, Railway. G. V. Jefferson and E. G. Little. 1,887,376; Nov. 8.
Sword. G. L. Marble. 1,886,567; Nov. 8.
Synchronizing two internal combustion engines. W. Profitlich. 1,886,975; Nov. 8.
Table: *See*—
Draftsman's table. Extension table.
Extensible table. Service table.
Table structure. W. Hanley. 1,886,806; Nov. 8.
Tank flange coupling. A. L. Parker. 1,887,423; Nov. 8.
Tape dispensing machine, Adhesive. J. H. Nelson. 1,887,460; Nov. 8.
Tape writer attachment for typewriting machines. J. K. Denton and J. G. Lancaster. 1,887,401; Nov. 8.
Target. C. F. LeFever. 1,886,563; Nov. 8.
Teakettle. L. Guild and J. K. Matter. Des. 88,228; Nov. 8.
Teapot. W. K. Mitchell. 1,886,415; Nov. 8.
Telegraph communication, Bias control in. J. Herman. 1,886,808; Nov. 8.

Telephone system. J. Wicks. 1,886,613; Nov. 8.
Tender, Locomotive. R. W. Anderson. 1,886,361; Nov. 8.
Tender, Locomotive. F. Hogg. 1,886,678; Nov. 8.
Terminal block. R. T. Roth. 1,886,743; Nov. 8.
Testing device. T. J. Newman. 1,887,421; Nov. 8.
Textile fabric or similar article. H. Katzman. Des. 88,231; Nov. 8.
Textile fabric or similar article. W. Willheim. Des. 88,276–80; Nov. 8.
Textile fabric or the like. J. Lukas. Des. 88,236–42; Nov. 8.
Textile fabric or the like. G. Megroz. Des. 88,244–8; Nov. 8.
Textile fabric or the like. E. Merry. Des. 88,249–50; Nov. 8.
Textile fabric or the like. S. Pate. Des. 88,254; Nov. 8.
Textile fabric or the like. R. Schey. Des. 88,259–60; Nov. 8.
Textile fabric or the like. E. Wax. Des. 88,274; Nov. 8.
Textile fabric or the like. I. A. Welts. Des. 88,275; Nov. 8.
Theater chair. W. M. Hanson. 1,887,240; Nov. 8.
Thermostatic trap. F. B. Schmidt. 1,886,500; Nov. 8.
Threads, Apparatus for hardening the flanks of spindle and worm. F. Klopp. 1,887,008; Nov. 8.
Ticket issuing machine. H. D. Black. 1,886,626–7; Nov. 8.
Ticket issuing machine. C. F. Webb. 1,886,769; Nov. 8.
Tie for mattresses, cushions, etc. A. D. Patchen. 1,887,006; Nov. 8.
Tile, Glass. J. H. Knauer. 1,887,135; Nov. 8.
Tile, Hand grip balanced hollow. W. F. Kipple. 1,886,404; Nov. 8.
Timer, Ignition. M. Mallory. 1,886,566; Nov. 8.
Timing device, Automatic. W. S. McGuire. 1,887,418; Nov. 8.
Tipple, Car unloading. R. E. Daly. 1,887,120; Nov. 8.
Tire carcasses, Apparatus for building. F. B. Pfeiffer. 1,887,187; Nov. 8.
Tire display stand. R. C. Howell and F. A. Fleming. 1,886,649; Nov. 8.
Tire, Pneumatic. P. Daddio. 1,886,470; Nov. 8.
Tire, Resilient. J. D. Hart. 1,887,019; Nov. 8.
Tire spreading machine. W. G. Prentice and F. B. Copeland. 1,886,824; Nov. 8.
Tires and tubes, Apparatus for the vulcanization of rubber. J. R. Stricklen and S. A. Fraine. 1,887,250; Nov. 8.
Tires, tubes, and the like, Apparatus for vulcanizing rubber. J. R. Stricklen and S. A. Fraine. 1,887,251; Nov. 8.
Toaster. F. Kuhn and L. H. Thomas. 1,886,558; Nov. 8.
Toaster or similar article. E. D. Coddington. Des. 88,221; Nov. 8.
Toilet accessory. W. Friedman. 1,887,298–9; Nov. 8.
Tool for lateral and angular drilling, Drilling. R. E. Lee. 1,886,820; Nov. 8.
Tool, Piston cleaning. J. Klein. 1,886,696; Nov. 8.
Tool, Power. W. L. Hodeaux. 1,886,952; Nov. 8.
Tool rest. L. M. Endres. 1,886,586; Nov. 8.
Tool, Rim. J. H. Wagenhorst. 1,886,611; Nov. 8.
Tool structure, Machine. F. A. Parsons. 1,886,833; Nov. 8.
Tool, Weeding. J. R. Lee. 1,886,560; Nov. 8.
Tool, Well drilling. C. W. Metager. 1,886,570; Nov. 8.
Tools, implements and the like, Cutting and forming. J. V. Emmons. 1,887,372; Nov. 8.
Toy. M. Borden. 1,886,785; Nov. 8.
Toy electrical road vehicle. V. C. Kline. 1,886,484; Nov. 8.
Toy figure, Mechanically operated. H. Wimmer. 1,886,442; Nov. 8.
Toy glider. C. A. Spotz. 1,887,337; Nov. 8.
Toy mold. W. B. Le Ganger. 1,886,486; Nov. 8.
Tractor. R. O. Hendrickson. 1,887,351; Nov. 8.
Tractor. F. N. G. Kranick. 1,887,355; Nov. 8.
Traffic controlling apparatus, Railway. C. W. Failor. 1,887,261; Nov. 8.
Traffic controlling devices, Hand operating means for power operated railway. H. B. Taylor. 1,886,987; Nov. 8.
Traffic controlling system for railroads. J. E. Stephenson. 1,887,048; Nov. 8.
Trailer. G. D. Pratt and H. C. Guillaume. 1,887,325; Nov. 8.
Trailer and semi-trailer, Combination. E. B. Collinge. 1,887,118; Nov. 8.
Trailer, Heavy duty high speed. C. A. Rogers. 1,887,042; Nov. 8.
Train, Land vehicle. L. Campbell, jr. 1,886,640; Nov. 8.
Transmission. J. R. Hanson. 1,887,304; Nov. 8.
Transmission device, Hydraulic. G. E. Zahn. 1,886,774; Nov. 8.
Transmission, Hydraulic power. C. R. Button and M. E. Esty. 1,887,229; Nov. 8.
Transmission mechanism, Differential power. O. E. Law. 1,887,208; Nov. 8.
Transmission or brake, Rotary. S. Barton. 1,886,624; Nov. 8.
Transmission, Synchronizing. P. L. Tenney. 1,886,850; Nov. 8.
Transparent material, Corrugated. F. A. Delano. 1,886,445; Nov. 8.
Transplanting machine. F. D. Winkley. 1,886,457; Nov. 8.
Trap: *See*—
Animal trap. Gas trap.
Crustacean trap. Thermostatic trap.
Tray and receptacles for toilet preparations, Combined. E. Taylor. Des. 88,269; Nov. 8.
Tray for refrigerating units. F. C. Geiler. Re18,650; Nov. 8.
Tray, Freezing. L. J. Gold. Des. 88,226; Nov. 8.
Treadle-switch. R. J. Parsons. 1,886,497; Nov. 8.
Trialkali phosphates, Production of. C. Von Girsewald, H. Weidmann, and G. Roesner. 1,887,445; Nov. 8.
Trigger guard. G. L. Jessup. 1,887,208; Nov. 8.
Trimming and coring machine, Artichoke. G. D. Gardner. 1,886,388; Nov. 8.
Trimming for dresses and the like. J. Mesmana. 1,886,572; Nov. 8.
Truck. F. J. Bentz. 1,886,782; Nov. 8.
Truck, Electric ice cream delivery. C. A. Ward and O. H. H. Froelich. 1,887,224; Nov. 8.
Truck for handling rolls of the newsprint paper. T. Johancen and E. L. Kehoe. 1,887,124; Nov. 8.
Truck, Piano. S. J. Pehrsson. 1,887,067; Nov. 8.
Truck, Transfer. E. N. Riblet. 1,886,588; Nov. 8.
Truck, Wrecking. O. S. Hubbard. 1,886,681; Nov. 8.
Trucks, Four wheel attachment for. B. Markham. 1,886,964; Nov. 8.
Trucks, Swinging link arrangement for railway. L. J. Davis. 1,886,533; Nov. 8.
Tube: *See*—
Electric discharge tube.
Tube actuating machine. D. S. Sammis. 1,887,434; Nov. 8.
Tube and like container. W. Kalb. Re18,649; Nov. 8.
Tube for furnaces. J. C. Hobbs. 1,887,180; Nov. 8.
Tubes, Process and apparatus for making vacuum. J. J. Florimont. 1,886,475; Nov. 8.
Tubular bodies from cellulose, Preparing. J. Voss. 1,887,446; Nov. 8.
Tubular heater. A. E. Harnsberger. 1,887,155; Nov. 8.
Tumbler. A. D. Nash. Des. 88,252; Nov. 8.
Turbine, Combined gas and steam. G. V. Zetterberg. 1,887,001; Nov. 8.
Tuyère, Fin nosed. R. H. Ledbetter. 1,997,029; Nov. 8.
Typewriting long strips of painted forms. E. Z. Lewis. 1,886,821; Nov. 8.
Typewriting machine. C. Gabrielson. 1,886,476; Nov. 8.
Typewriting machine. B. C. Stickney. 1,886,845; Nov. 8.
Universal joint. D. D. Shierk. 1,887,106; Nov. 8.
Universal joint. P. L. Tenney and H. E. Fidler. 1,886,847; Nov. 8.
Unloader for forming machines. P. Witte. 1,886,458; Nov. 8.
Urea-formaldehyde condensation products, Plasticising. L. Smidth and R. H. Crist. 1,886,600; Nov. 8.
Utensil cleansing apparatus. W. L. Van Ness. 1,886,853; Nov. 8.
Utensil, Kitchen. O. J. St. Pierre. 1,886,917; Nov. 8.
Utensil, Shaving. C. Zickmantel. 1,886,860; Nov. 8.
Vacuum soldering machine. S. Morasso. 1,887,062; Nov. 8.
Valve. K. Schoene. 1,886,840; Nov. 8.
Valve. J. N. Sutherland. 1,886,454; Nov. 8.
Valve. A. W. Wheaton. 1,887,078; Nov. 8.
Valve, Air motor. C. H. Beckwith. 1,886,518; Nov. 8.
Valve cap for pneumatic tires. C. Dunois. 1,887,293; Nov. 8.
Valve for controlling fluid pressure. L. L. Nettleton. 1,887,322; Nov. 8.
Valve for gas burners, Locking. C. B. Wise. 1,887,344; Nov. 8.
Valve for internal combustion engines, Air inlet. A. C. Blancke. 1,886,368; Nov. 8.
Valve for oil wells, Automatic fire extinguishing. J. Raou. 1,886,737; Nov. 8.
Valve lifter, Hydraulic. M. S. Anthony and E. H. Wilson. 1,887,390; Nov. 8.
Valve mechanism. L. A. Cornelius. 1,887,235; Nov. 8.
Valve, Mixing and diverting. F. H. Krupp. 1,886,889; Nov. 8.
Valve structure. J. Higgins and J. L. Schultz. 1,886,677; Nov. 8.
Vegetable fibrous substances, Bleaching. E. Kayser. 1,887,412; Nov. 8.
Vehicle signal. C. E. Stow. Des. 88,267; Nov. 8.
Vehicle wheel. J. H. Wagenhorst. 1,886,610; Nov. 8.
Vehicles, and the like, Non-warping chassis for automobile. N. L. Causan. 1,886,940; Nov. 8.
Vehicles, Hydropneumatic suspension and shock-absorbing device for. B. LaCroix. 1,887,060; Nov. 8.
Vending apparatus, Coin-operated. L. Rawituki. 1,886,425; Nov. 8.
Vending machine. H. Giles. 1,887,197–8; Nov. 8.
Vending machine, Newspaper or like. J. A. Kelly. 1,886,694; Nov. 8.
Veneer, Wall. F. G. Aufderheide. 1,886,263; Nov. 8.
Vent-caps for vent-pipes, etc. E. S. Cornell. 1,887,119; Nov. 8.
Ventilating means. H. C. Hueglin. 1,886,683; Nov. 8.
Ventilator. H. A. Thomas. 1,886,605; Nov. 8.
Vessel and manufacture, Tubular. J. V. Giesler. 1,886,803; Nov. 8.
Vessel, Marine. R. M. Zu Lynar Passy-de Chimang. 1,886,471; Nov. 8.

Violin. E. H. Chase. 1,887,398; Nov. 8.
Wagon, Farm. T. H. Oppenheim. 1,886,722; Nov. 8.
Wall protective means, Production of. E. Pick. 1,887,464; Nov. 8.
Warping machine drive and control therefor. J. Ruhren. 1,887,432; Nov. 8.
Washer: *See*—
Cream separator washer.
Washer log. W. A. Fye. 1,887,151; Nov. 8.
Washing machine. E. Pedrazza. 1,886,878; Nov. 8.
Watch dial and compass, Combination sun. H. Neuwirth. 1,887,064; Nov. 8.
Water cooler. L. W. Hamensall. 1,887,020; Nov. 8.
Water cooler. W. S. Ramsay. 1,886,424; Nov. 8.
Water heater. J. D. Desmond. 1,887,198; Nov. 8.
Water heater. P. F. Goetz. 1,886,970; Nov. 8.
Wave motor. J. A. Lockhaw. 1,887,216; Nov. 8.
Web variations, Apparatus for indicating and controlling. F. Wierk. 1,886,506; Nov. 8.
Welding, Arc. G. R. Brophy. 1,886,776; Nov. 8.
Welding, Electric arc. V. J. Chapman. 1,886,524; Nov. 8.
Welding machine. C. L. Rowland. 1,886,888; Nov. 8.
Wheel: *See*—
Auxiliary wheel. Vehicle wheel.
Wheel and wrench therefor. H. A. Nelson. 1,887,378; Nov. 8.
Wheel flange lubricator. W. B. Casey. 1,887,450; Nov. 8.
Wheel for sash pulleys, Pulley. J. F. Seelbach. 1,886,431; Nov. 8.
Wheel nave construction, Vehicle. C. L. Eksergian. 1,886,535; Nov. 8.
Wheeled device. R. Porsello. 1,887,427; Nov. 8.
Winding machine, Cop. W. Schweiter. 1,886,598; Nov. 8.
Window, Casement. D. A. Lobell. 1,887,415; Nov. 8.
Window cleaning device. G. H. Truda and J. M. Wilde. 1,886,852; Nov. 8.
Window, Duplex safety. R. Monsch and F. H. Hibberd, jr. 1,886,968; Nov. 8.
Windshield and cleaner structure, Combined. H. Hueber and E. C. Horton. 1,886,812; Nov. 8.
Windshield cleaner. H. Hueber. 1,886,956; Nov. 8.
Windshield operater. A. T. Fetter. 1,886,583; Nov. 8.
Wings having a variable profile, Construction of flexible aeroplane. U. Antoni. 1,886,362; Nov. 8.
Wire cutting machine and tension regulator therefor. C. Field. 1,886,663; Nov. 8.
Wire shaving machine. C. Field. 1,886,662; Nov. 8.
Wire splicing machine. A. W. Hightower. 1,887,375; Nov. 8.
Wood, Composition for impregnating process and. H. C. Nielsen. 1,886,716; Nov. 8.
Wool machine, Automatically lubricated and cleaned metal. C. Field. 1,886,666; Nov. 8.
Work holder for boring machines. T. H. Orr. 1,887,379; Nov. 8.
Work supporting attachment for proof presses. E. O. D. D., and F. R. Vandercook. 1,886,923; Nov. 8.
Wrench. C. Rugger. 1,886,907; Nov. 8.
Wringer: *See*—
Electric safety clothes wringer.

CLASSIFICATION OF PATENTS

ISSUED NOVEMBER 8, 1932

NOTE.—First number—class, second number—subclass, third number—patent number

1— 11: 1,886,971
19: 1,886,628
49.7: 1,887,109
2— 2: 1,887,473
3: 1,886,551
14: 1,886,410
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26: 1,887,486
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42: 1,886,742
50: 1,887,028
67: 1,886,416
123: 1,886,798
150: 1,887,104
170: 1,886,753
197: 1,886,493
1,886,902
4— 7: 1,886,920
56: 1,887,396
221: 1,886,680
239: 1,886,806
392: 1,886,676
5— 99: 1,887,438
248: 1,886,918
269: 1,887,058
327: 1,886,687
8— 2: 1,887,412
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19: 1,887,381
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228: 1,886,688
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151: 1,886,702
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20— 1.13: 1,886,944
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202: 1,887,126
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138: 1,886,488
139: R. 18,647
46— 14: 1,886,385
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47— 1: Pl. Pt. 40
Pl. Pt. 41
Pl. Pt. 42
Pl. Pt. 43
7: 1,886,831
37: 1,886,600
41: 1,887,139
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62—108.5: R. 18,650
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102— 5: 1,886,303
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103— 5: 1,886,752
41: 1,886,930
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89: 1,887,417
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105— 38: 1,887,178
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107— 3: 1,886,858
108— 26: 1,886,462
110— 18: 1,886,700
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101: 1,886,771
111— 5: 1,886,510
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112— 47: 1,887,136
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113— 1: 1,886,973
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114— 66.5: 1,886,471
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116— 2: 1,886,452
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117— 23: 1,887,207
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119— 19: 1,887,108
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U. S. GOVERNMENT PRINTING OFFICE: 1932

LIST OF TRADE-MARK APPLICANTS

PUBLISHED FOR OPPOSITION

[Act of Feb. 20, 1905, Sec. 6, as amended Mar. 2, 1907]

Abrasive Products Company, Lansdowne, Pa. Granulated abrasive materials. Serial No. 327,330; Nov. 15. Class 4.

Alexander, R. F. & J., and Company, Limited, Neilston, Scotland. Sewing cotton thread in balls. Serial Nos. 329,843–4; Nov. 15. Class 43.

All Nations Bakers, Inc., New York, N. Y. Sweet biscuits. Serial No. 329,734; Nov. 15. Class 46.

Animal Foods Company, San Jose, Calif. Dog food. Serial No. 331,185; Nov. 15. Class 46.

Associated Motion Picture Make-Up Artists, Inc., Ltd., Los Angeles, Calif. Cosmetics. Serial No. 325,085; Nov. 15. Class 6.

Associated Seed Growers, Incorporated, New Haven, Conn. Garden and field seeds, bulbs, and plants. Serial No. 328,211; Nov. 15. Class 1.

Aurora Cotton Mills, Aurora, Ill. Textile sheetings, pillow tubings, sheets, and pillow cases. Serial No. 330,617; Nov. 15. Class 42.

Barker Bros. Incorporated, Los Angeles, Calif. Refrigerators. Serial No. 326,925; Nov. 15. Class 31.

Bean Ideal Food Co., Boston and East Boston, Mass. Chicken a la King, chicken Mexican, potato salad, etc. Serial No. 304,907; Nov. 15. Class 46.

Beautybath, Inc., Newark, N. J. Electric blankets and heating pads. Serial No. 324,869; Nov. 15. Class 44.

Beck, Koller & Company, Inc., Detroit, Mich. Synthetic resins, plastic synthetic resins, and ester gums. Serial No. 329,921; Nov. 15. Class 6.

Beck, Koller & Company, Inc., Detroit, Mich. Synthetic resins. Serial No. 329,922; Nov. 15. Class 6.

Beck, Koller & Company, Inc., Detroit, Mich. Resins and ester gums. Serial No. 329,926; Nov. 15. Class 6.

Beck, Koller & Company, Inc., Detroit, Mich. Ester gums. Serial No. 329,929; Nov. 15. Class 6.

Belvedere Coffee & Tea Co. (See Caplan, H. L., & Co. Inc.)

Bendel, Henri, Inc., New York, N. Y. Cosmetics. Serial No. 330,360; Nov. 15. Class 6.

Berth, Levi & Co. Inc., New York, N. Y. Sausage casings. Serial No. 330,774; Nov. 15. Class 50.

Boggs, Samuel W., Chevy Chase, Md. Printed horological charts. Serial No. 328,236; Nov. 15. Class 38.

Brown Shoe Company, Inc., St. Louis, Mo. Shoes. Serial No. 321,269; Nov. 15. Class 39.

Brown, William S., doing business as Louisiana Yeast-Bran Products Company, New Orleans, La. Cereal breakfast food. Serial No. 328,000; Nov. 15. Class 46.

California Consumers Company, Los Angeles, Calif. Ice vending machines. Serial No. 329,735; Nov. 15. Class 23.

California Fruit Exchange, Sacramento, Calif. Fresh fruits. Serial No. 330,009; Nov. 15. Class 46.

Cambridge Cement Stone Company, Brighton, Mass. Cast stone. Serial No. 330,394; Nov. 15. Class 12.

Cameron Machine Company, Brooklyn, N. Y. Machines and parts thereof and therefor for slitting, rewinding, etc., flexible materials. Serial No. 330,035; Nov. 15. Class 23.

Campana Corporation, Batavia, Ill. Lotion for the skin. Serial No. 330,395; Nov. 15. Class 6.

Capital Chemical Drug Company, Inc., Montgomery, Ala. Preparation for improving and beautifying the hair and for relieving itching and dandruff. Serial No. 330,291; Nov. 15. Class 6.

Caplan, H. L., & Co. Inc., doing business as Belvedere Coffee & Tea Co., Baltimore, Md. Coffee. Serial No. 330,569; Nov. 15. Class 46.

Carder & Carter, New Orleans, La. Moisture and odor absorbent chemical compound to be placed in refrigerators and the like. Serial No. 330,119; Nov. 15. Class 6.

Central Import Company, Chicago, Ill. Gelatine sheets. Serial No. 329,829; Nov. 15. Class 50.

Chicago Mail Order Company, Chicago, Ill. Hats and caps. Serial No. 330,337; Nov. 15. Class 39.

Clark's Dollar Stores, Inc., Los Angeles, Calif. Women's wearing apparel. Serial No. 324,842; Nov. 15. Class 39.

Clinkenbeard, Laforest D., doing business as Lee's Beauty Shop, Sioux City, Iowa. Hair waving pads. Serial No. 328,753; Nov. 15. Class 44.

Code Electric Products Corporation, The, Philadelphia, Pa. Electrical service fittings. Serial No. 328,933; Nov. 15. Class 21.

Columbia Protektosite Co., Inc., Carlstadt, N. J. Sun glasses, snow glasses, leather goggles, and eye protectors. Serial No. 330,619; Nov. 15. Class 36.

Conadwel Laboratories, Inc., New York, N. Y. Reconstructive tonic. Serial No. 330,742; Nov. 15. Class 6.

Corrugated Container Company, Philadelphia, Pa. Corrugated boxes. Serial No. 311,906; Nov. 15. Class 2.

Dacotah Cotton Mills, Inc., Lexington, N. C. Cotton piece goods. Serial No. 331,219; Nov. 15. Class 42.

Deutsche Gold- & Silber-Scheideanstalt, Frankfort-on-the-Main, Germany. Soaps, steel wool, washing compounds, etc. Serial No. 318,197; Nov. 15. Class 4.

Deutsche Gold- & Silber-Scheideanstalt, Frankfort-on-the-Main, Germany. Nails for horse shoes, chains, etc. Serial No. 318,205; Nov. 15. Class 13.

Deutsche Gold- & Silber-Scheideanstalt, Frankfort-on-the-Main, Germany. Surgical plasters, adhesive tape, bandages, etc. Serial No. 318,213; Nov. 15. Class 44.

Deutsche Gold- & Silber-Scheideanstalt, Frankfort-on-the-Main, Germany. Apparatus for extinguishing fire, printing machines, crushers, etc. Serial No. 318,218; Nov. 15. Class 23.

Deutsche Gold- & Silber-Scheideanstalt, Frankfort-on-the-Main, Germany. Drawing instruments, laboratory fittings, etc. Serial No. 318,220; Nov. 15. Class 26.

Deutsche Gold- & Silber-Scheideanstalt, Frankfort-on-the-Main, Germany. Dampers, fans, blowers, etc. Serial No. 318,227; Nov. 15. Class 34.

Doyle, B. W., doing business as Doyle Packing Company, Los Angeles, Calif. Dog and cat food. Serial No. 331,147; Nov. 15. Class 46.

Drackett Chemical Company, The, Cincinnati, Ohio. Liquid cleaner for glass and vitreous surfaces. Serial No. 329,258; Nov. 15. Class 4.

Dry-Zero Corporation, Chicago, Ill. Ceiba fiber quilted bed comforters. Serial No. 320,187; Nov. 15. Class 42.

Dumas, Maxwell G., Pittsburgh, Pa. Electrical broiler. Serial No. 330,294; Nov. 15. Class 21.

Duncan, Donald F. Inc., Chicago, Ill. Bandelore toy spinning tops. Serial No. 327,626; Nov. 15. Class 22.

Duncan, Donald F. Inc., Chicago, Ill. Bandelore toy spinning tops. Serial No. 330,924; Nov. 15. Class 22.

Eaton, Orrin O., Watsonville, Calif. Fresh lettuce. Serial No. 325,091; Nov. 15. Class 46.

Electrofoam Corporation, Ltd., Pasadena, Calif. Lather, foam, and emulsion forming machines. Serial No. 310,915; Nov. 15. Class 23.

Escalante, Jose, & Co., Chicago, Ill. Cigars. Serial No. 330,998; Nov. 15. Class 17.

F. & M. Importing Co. Inc., doing business as Famico Company, Los Angeles, Calif. Canned fish, fruits, vegetables, etc. Serial No. 330,983; Nov. 15. Class 46.

Fairbanks, Morse & Co., Chicago, Ill. Generators, motors, domestic lighting plants, and magnetos. Serial No. 329,630; Nov. 15. Class 21.

Famico Company. (See F. & M. Importing Co. Inc.)

Fanning Bread and Butter Pickle Company, Inc., New York, N. Y. Pickles. Serial No. 330,542; Nov. 15. Class 46.

Federal Research Corporation, Woodland, Ill. Finishes for floor and other surfaces. Serial No. 329,706; Nov. 15. Class 16.

Felters Company, The, Boston, Mass. Felt. Serial No. 331,045; Nov. 15. Class 50.

Felton Chemical Company, Inc., Brooklyn, N. Y. Food flavoring extracts. Serial No. 331,151; Nov. 15. Class 46.

Fieg, Bernard, Brooklyn, N. Y. Food product. Serial No. 324,509; Nov. 15. Class 46.

Fitzgerald Manufacturing Co., The, Torrington, Conn. Electric sadirons. Serial No. 330,473; Nov. 15. Class 21.

Foot-King Co., The. (See King, Robert M.)

Gamewell Company, The, Newton, and Newton Upper Falls, Mass. Electrical fire alarm systems, electrical police signaling systems, etc., and parts therefor. Serial No. 330,475; Nov. 15. Class 21.

General Dyestuff Corporation, New York, N. Y. Oil for finishing leather. Serial No. 330,511; Nov. 15. Class 4.

General Electric X-Ray Corporation, Chicago, Ill. Cassettes holding photographic films for X-ray pictures. Serial No. 330,403; Nov. 15. Class 26.

Gleam Products Corporation, New York, N. Y. Polishing powder. Serial No. 329,307; Nov. 15. Class 4.

Glissenite Corporation, Duluth, Minn. Polish for cleaning, waxing and polishing automobiles. Serial No. 330,226; Nov. 15. Class 16.

Gold Dust Corporation, New York, N. Y. Towels and toweling. Serial No. 330,904; Nov. 15. Class 42.

Goodyear Tire & Rubber Company, The, Akron, Ohio. Brake lining. Serial No. 331,080; Nov. 15. Class 85.

Gordon Brassiere Co. Inc., New York, N. Y. Brassières. Serial No. 330,597; Nov. 15. Class 39.

Gordon-East Coast Company, Moundsville, W. Va. Shirts. Serial No. 330,624; Nov. 15. Class 39.

Greenhill & Daniel, Inc., Brooklyn, N. Y. Knitted bathing suits, sweaters, etc. Serial No. 328,580; Nov. 15. Class 39.

Greilich, William, & Sons, Inc., Brooklyn, N. Y. Sock linings for the insides of shoes. Serial No. 328,554; Nov. 15. Class 39.

Grimmer, Otto, doing business as Charles Grimmer & Son, New York, N. Y. Wall paper. Serial No. 309,643; Nov. 15. Class 37.

LIST OF TRADE-MARK APPLICANTS

PUBLISHED FOR OPPOSITION

[Act of Feb. 20, 1905, Sec. 6, as amended Mar. 2, 1907]

Harper, Martha Matilda, Inc., Rochester, N. Y. Creams, astringents, face powder, etc. Serial No. 327,821; Nov. 15. Class 6.

Hawaiian Pineapple Company, Ltd., Honolulu, Hawaii, and San Francisco, Calif. Canned pineapple. Serial No. 331,152; Nov. 15. Class 46.

Heinz, H. J., Company, Pittsburgh, Pa. Sauces or relishes. Serial No. 329,286; Nov. 15. Class 46.

Hollander, A., & Son, Inc., Newark, N. J. Fur skins. Serial No. 330,953; Nov. 15. Class 1.

Indian Lake Medicine Co., Fort Wayne, Ind. General tonic. Serial No. 330,425; Nov. 15. Class 6.

Jockey Razor Blade Co. (See Kaplan, Alexander.)

Kahn's, E., Sons Company, The, Cincinnati, Ohio. Meat and meat products. Serial No. 330,659; Nov. 15. Class 46.

Kaplan, Alexander, doing business as Jockey Razor Blade Co., New York, N. Y. Safety razor blades. Serial No. 330,599; Nov. 15. Class 28.

Kessler Foods, Brooklyn, N. Y. Chocolate malt syrup. Serial No. 329,350; Nov. 15. Class 46.

Kimbell Milling Company, Inc., doing business as Texas Milling Co., Fort Worth, Tex. Flour. Serial No. 330,790; Nov. 15. Class 46.

King, Robert M., doing business as The Foot-King Co., Minneapolis, Minn. Medicinal ointment. Serial No. 329,697; Nov. 15. Class 6.

Klein, Samuel S., doing business as Villon and Villon, Perfumer, Brooklyn, N. Y. Perfumes, toilet waters, bath salts, etc. Serial No. 323,807; Nov. 15. Class 6.

Knothe Brothers Company, Inc., New York, N. Y. Paper board boxes. Serial No. 326,260; Nov. 15. Class 2.

Knox Chemical Company. (See Ware, Macon.)

Lederle Laboratories, Inc., New York, N. Y. Pharmaceutical preparation. Serial No. 330,821; Nov. 15. Class 6.

Leef, Sommer & Co., New York, N. Y. Fresh vegetables. Serial No. 330,229; Nov. 15. Class 46.

Lee's Beauty Shop. (See Clinkenbeard, Laforest D.)

Lewis-Liedersdorf Co., Milwaukee, Wis. Cigars. Serial No. 330,515; Nov. 15. Class 17.

Long Island Macaroni Co. Inc., Long Island City, N. Y. Macaroni and spaghetti. Serial No. 329,569; Nov. 15. Class 46.

Louisiana Yeast-Bran Products Company. (See Brown, William S.)

Martin, Herbert F., Great Neck, N. Y. Comic newspaper strips. Serial No. 330,428; Nov. 15. Class 38.

Mathieson Alkali Works, Inc., The, New York, N. Y. Technical grade calcium hypochlorite. Serial No. 330,854; Nov. 15. Class 6.

McClaren Rubber Company, Charlotte, N. C. Tires and tubes. Serial No. 330,601; Nov. 15. Class 35.

McClintock-Field Co., Inc., Ashland, Ky. Dresses, pyjamas, smocks, and wash frocks. Serial No. 330,046; Nov. 15. Class 39.

McKay Company, The, Pittsburgh, Pa. Chairs, stools, tables, etc. Serial No. 329,967; Nov. 15. Class 32.

Mendelsohn, Mendel B., doing business as The Mendum Laboratories, Newark, N. J. Internal medicine. Serial No. 330,928; Nov. 15. Class 6.

Mendum Laboratories, The. (See Mendelsohn, Mendel B.)

Meyer, H. H., Packing Company, The, Cincinnati, Ohio. Shoulders, dried beef, sausage, etc. Serial No. 316,605; Nov. 15. Class 46.

Meyers, Louis, & Son, Incorporated, New York, N. Y. Leather gloves. Serial No. 328,817; Nov. 15. Class 39.

Mitchell Bakery, Independence, Kans. Cookies and cakes. Serial No. 330,407; Nov. 15. Class 46.

Municipal Service Corp., Ltd., Los Angeles, Calif. Football game. Serial No. 330,548; Nov. 15. Class 22.

Niles, Frank A., Lumber Co. Inc., New York, N. Y. Lumber. Serial No. 325,481; Nov. 15. Class 12.

Nordmark-Werke G. m. b. H., Hamburg, Germany. Medicinal preparations. Serial No. 320,202; Nov. 15. Class 6.

Norton Pike Company, Pike, N. H. Scythe stones, whetstones, and abrasive stones, etc. Serial No. 331,003; Nov. 15. Class 4.

Oelerich & Berry Company, doing business as Oelerich & Berry Co., Chicago, Ill. Syrup. Serial No. 330,207; Nov. 15. Class 46.

Olympia Canning Company, Olympia, Wash. Canned fruits. Serial No. 330,378; Nov. 15. Class 46.

Oneidacraft, Inc., Oneida, N. Y. Combination telephone stands and book holders. Serial No. 330,827; Nov. 15. Class 32.

Pacific Lumber Company, The, San Francisco, Calif. Poultry litter. Serial No. 330,863; Nov. 15. Class 1.

Paraffine Companies, Inc., The, San Francisco, Calif. Building paper, lining paper, waterproofing paper, etc. Serial No. 316,567; Nov. 15. Class 12.

Paraffine Companies, Inc., The, San Francisco, Calif. Prepared roofing and shingles. Serial No. 330,491; Nov. 15. Class 12.

Pharis Tire and Rubber Company, The, Newark, Ohio. Tires. Serial No. 330,668; Nov. 15. Class 35.

Pillsbury Flour Mills Company, Minneapolis, Minn. Flour. Serial No. 330,829; Nov. 15. Class 46.

Plough, Inc., Memphis, Tenn. Razor blades. Serial No. 330,898; Nov. 15. Class 28.

Plymouth Products Company, Syracuse, N. Y. Soap. Serial No. 328,073; Nov. 15. Class 4.

Prima Company, Chicago, Ill. Maltless beverages and syrups, concentrates, and extracts for making the same. Serial No. 330,410; Nov. 15. Class 45.

Rice-Stix Dry Goods Co., St. Louis, Mo. Infants' wear. Serial No. 331,091; Nov. 15. Class 39.

Richards, Elmer, Company, Chicago, Ill. Dry cleaning apparatus. Serial No. 329,618; Nov. 15. Class 24.

Richards, Elmer, Company, Chicago, Ill. Dry cleaning solvent. Serial No. 329,615; Nov. 15. Class 4.

Rider, John F., Publications, New York, N. Y. Digest of radio and allied maintenance. Serial No. 326,692; Nov. 15. Class 38.

Ritter Chemical Company, Inc., Amsterdam, N. Y. Sulphonated fats and oils for treating leather. Serial No. 330,308; Nov. 15. Class 6.

Roessel, Louis & Co., Inc., Hazleton, Pa., and New York, N. Y. Silk goods in the piece. Serial No. 330,759; Nov. 15. Class 42.

Rose, William M., doing business as University Distributing Company, Boston, Mass. Puzzles. Serial No. 331,200; Nov. 15. Class 22.

Russell Playing Card Company, Jersey City, N. J. Playing cards. Serial Nos. 330,968-9; Nov. 15. Class 22.

Saltser & Weinsier, Inc., Brooklyn, N. Y. Radiator valves. Serial No. 330,970; Nov. 15. Class 13.

Semmes Corporation, Detroit, Mich. Medicinal water. Serial No. 325,499; Nov. 15. Class 6.

Shell Chemical Company, San Francisco, Calif. Salts of ammonia for fertilizer. Serial No. 326,000; Nov. 15. Class 10.

Sloane-Blabon Corporation, Trenton, N. J., and Nicetown, Philadelphia, Pa. Linoleum wall covering. Serial No. 328,877; Nov. 15. Class 20.

Sloane-Blabon Corporation, Trenton, N. J., and Nicetown, Philadelphia, Pa. Linoleum, felt base floor coverings, and linoleum lining felt. Serial No. 328,878; Nov. 15. Class 20.

Sloane-Blabon Corporation, Trenton, N. J., and Nicetown, Philadelphia, Pa. Felt base floor covering. Serial No. 328,879; Nov. 15. Class 20.

Société Anonyme des Bas Occulta, Lyon, France. Underwear, corsets, stockings, etc. Serial No. 318,465; Nov. 15. Class 39.

Spartan Saw Works, Springfield, Mass. Metal cutting saws and particularly hack-saw blades. Serial No. 330,902; Nov. 15. Class 28.

Stern & Stern Textile Importers, Inc., New York, N. Y. Alencon lace in the piece. Serial No. 330,555; Nov. 15. Class 42.

Sun, Chin Y., New York, N. Y. Salve. Serial No. 322,866; Nov. 15. Class 6.

Sun Oil Company, Philadelphia, Pa. Gasoline, motor oil, transmission lubricant, etc. Serial No. 319,376; Nov. 15. Class 15.

Swann Chemical Company, Birmingham, Ala. Fertiliser. Serial No. 318,326; Nov. 15. Class 10.

Swift and Company, Chicago, Ill. Ice cream and sherbet. Serial No. 330,108; Nov. 15. Class 46.

Texas Milling Co. (See Kimbell Milling Company, Inc.)

Thompson Products, Incorporated, Detroit, Mich. Joints for vehicle drag links, tie rods, and shock absorber links. Serial No. 325,698; Nov. 15. Class 19.

Trix Perfumers, New York, N. Y. Astringents, astringent cerates, bleach, and beauty creams, etc. Serial No. 329,775; Nov. 15. Class 6.

University Distributing Company. (See Rose, William M.)

Valentine's Meat-Juice Company, Richmond, Va. Dog food. Serial No. 330,110; Nov. 15. Class 46.

Val-Ray Food Products Company, Spokane, Wash. Catsup, pickles, peanut butter, etc. Serial No. 328,758; Nov. 15. Class 46.

Villon and Villon, Perfumer. (See Klein, Samuel S.)

Vimco Products Company, Carnegie, Pa. Spaghetti, noodles, and macaroni. Serial No. 330,216; Nov. 15. Class 46.

Wanamaker, John, Philadelphia, Philadelphia, Pa. Handbags, suit cases, wallets, etc. Serial No. 329,911; Nov. 15. Class 3.

Wauskuck Company, Providence, R. I., and New York, N. Y. Woolen and worsted fabrics in the piece. Serial No. 329,005; Nov. 15. Class 42.

Ware, Macon, doing business as Knox Chemical Company, East Falls Church, Va. Rubbing liniment. Serial No. 329,812; Nov. 15. Class 6.

Webster, William A., Co., The, Memphis, Tenn. Tooth paste. Serial No. 330,389; Nov. 15. Class 6.

Wells-Lamont-Smith Corporation, Minneapolis, Minn. Work gloves. Serial No. 330,498; Nov. 15. Class 39.

Wells-Lamont-Smith Corporation, Minneapolis, Minn. Work gloves. Serial No. 330,673; Nov. 15. Class 39.

Wesco Foods Company, Canned salmon. Serial No. 330,717; Nov. 15. Class 46.

White Sewing Machine Corporation, Cleveland, Ohio. Sewing machines. Serial No. 330,588; Nov. 15. Class 23.

White Star Refining Company, Detroit, Mich. Motor lubricating oil. Serial No. 329,694; Nov. 15. Class 15.

Windsor Coal Company, Kansas City, Mo. Coal. Serial No. 319,558; Nov. 15. Class 1.

Winthrop Chemical Company, Inc., New York, N. Y. Thyroid extract preparation. Serial No. 329,486; Nov. 15. Class 6.

Wittenberg Shimberg Corp., New York, N. Y. Coats. Serial No. 329,663; Nov. 15. Class 39.

Wood Conversion Company, Cloquet, Minn. Building paper. Serial No. 330,112; Nov. 15. Class 12.

Wyeth, John, & Brother Incorporated, Wilmington, Del., and Philadelphia, Pa. Tonic, stimulant reconstructive. Serial No. 330,436; Nov. 15. Class 6.

X-Otic Incorporated, New York, N. Y. Fillers for diaper holding garments. Serial No. 328,898; Nov. 15. Class 42.

LIST OF REGISTRANTS OF TRADE-MARKS

A. & J. Manufacturing Co., The, Binghamton, N. Y., assignor to A. & J. Kitchen Tool Co., Chicago, Ill. Spoons, cake turners, can openers, etc. 298,929; Nov. 15; Serial No. 303,080; published Sept. 6, 1932. Class 23.

Abrams, Samuel M. (See Maillett, A. A., Company, assignor.)

Acme Printing Ink Company, Chicago, Ill. Printing ink. 298,910; Nov. 15; Serial No. 328,806; published Sept. 6, 1932. Class 11.

Albany Door Co. (See Crossley Co., The.)

American Agricultural Chemical Company, The. (See Lister Agricultural Chemical Works.)

American Manufacturing Company, Boston, Mass., to American Manufacturing Company, Brooklyn, N. Y. Cordage. 89,798-4; renewed Jan. 14, 1933.

American Manufacturing Company, Boston, Mass., to American Manufacturing Company, Brooklyn, N. Y. Lath-yarn. 89,978; renewed Jan. 28, 1933.

American-National Company, The, doing business as The Gendron Wheel Company, and The Toledo Metal Wheel Company, Toledo, Ohio. Toy vehicles. 298,931; Nov. 15; Serial No. 326,319; published Sept. 6, 1932. Class 22.

American Safety Razor Corporation, Brooklyn, N. Y. Razor blades. 298,912; Nov. 15; Serial No. 328,749; published Sept. 6, 1932. Class 28.

American Varnish Company, The, Chicago, Ill. Varnishes. 89,044; renewed Oct. 14, 1933.

American Woolen Company, Boston, Mass., and New York, N. Y. Woolen fabrics in the piece. 298,984; Nov. 15; Serial No. 326,173; published May 24, 1932. Class 42.

American Writing Paper Company, assignor to American Writing Paper Company, Inc., Holyoke, Mass. Paper. 90,952; renewed Apr. 8, 1933.

American Writing Paper Company, Inc. (See Greenebaum, Max, assignor.)

Armstrong Cork Company, Lancaster, Pa. Polishing preparation for hard surface floor covering. 298,945; Nov. 15; Serial No. 328,572; published Aug. 23, 1932. Class 16.

Arrow Packing Company, Exeter, Calif. Fresh grapes. 298,930; Nov. 15; Serial No. 295,501; published Aug. 30, 1932. Class 46.

Barbour Flax Spinning Company. (See Hart, A. H., Co., The.)

Birk Bros. Brewing Co., by change of name to Birk Bros. Inc., Chicago, Ill. Malt preparation. 86,777; renewed June 4, 1932.

Birk Bros. Malt Products, Inc., Chicago, Ill. Malt syrup. 299,003; Nov. 15; Serial No. 327,971; published Aug. 30, 1932. Class 46.

Bissell Carpet Sweeper Co., assignor to Bissell Carpet Sweeper Company, Grand Rapids, Mich. Carpet sweepers. 89,262; renewed Nov. 11, 1932.

Bissell Carpet Sweeper Co., assignor to Bissell Carpet Sweeper Company, Grand Rapids, Mich. Toy carpet sweepers. 89,416; renewed Dec. 9, 1932.

Bissell Carpet Sweeper Co., Grand Rapids, Mich. Carpet sweepers. 298,908; Nov. 15; Serial No. 328,863; published Sept. 6, 1932. Class 23.

Blum, Fannie, doing business as Fanna Polishine Co., Brooklyn, N. Y. Cleanser and polish. 298,968; Nov. 15; Serial No. 325,776; published Aug. 23, 1932. Class 4.

Blumenthal, Sidney, & Co. Inc., New York, N. Y. Pile fabrics in the piece. 299,062; Nov. 15. Class 42.

Bruckmann Co., The, Cincinnati, Ohio. Malt beverage. 299,017; Nov. 15; Serial No. 326,933; published Aug. 2, 1932. Class 48.

Bucher, Samuel, Milwaukee, Wis. Frozen confection. 298,961; Nov. 15; Serial No. 328,476; published Aug. 30, 1932. Class 46.

Buetiner, T., & Co., assignor to T. Buettner & Co. Inc., Chicago, Ill. Embroidery threads. 89,899; renewed Mar. 10, 1933.

Bunte Brothers, Chicago, Ill. Candy. 298,999; Nov. 15; Serial No. 328,575; published Sept. 6, 1932. Class 46.

Burroughs Wellcome & Co. (U. S. A.) Inc. (See Wellcome, Henry S., assignor.)

Burton, W., & Co., Inc., Brooklyn, N. Y. Maltless extracts, flavors, and syrups. 298,926; Nov. 15; Serial No. 316,764; published Sept. 6, 1932. Class 45.

California Packing Corporation, San Francisco, Calif. Fruit juices. 299,015; Nov. 15; Serial No. 307,256; published June 28, 1932. Class 45.

Candler, Walter H., doing business as The Candler System Co., Chicago, Ill. Printed lessons, work sheets, etc. 298,947; Nov. 15; Serial No. 325,319; published June 7, 1932. Class 38.

Canfield Oil Company, The, Cleveland, Ohio. Lubricating oils and greases. 299,026; Nov. 15. Class 15.

Carman River Duck Farm, Brookhaven, N. Y. Ducks. 298,990; Nov. 15; Serial No. 326,787; published July 12, 1932. Class 46.

Cash, Laurence E., New York, N. Y., and Chicago, Ill., assignor to Abraham Parodney, doing business as New York Drug Concern, New York, N. Y. Antiseptics and germicides. 88,664; renewed Oct. 15, 1932.

Caulk, L. D., Company, The, Milford, Del. Preparation used by dentists in removing strains from and in cleaning and polishing teeth. 298,940; Nov. 15; Serial No. 328,056; published Aug. 30, 1932. Class 4.

Caulk, L. D., Company, The, Milford, Del. Dentists' articulating paper. 298,954; Nov. 15; Serial No. 329,042; published Aug. 30, 1932. Class 44.

Central Scientific Company, Chicago, Ill. Vacuum pumps. 298,907; Nov. 15; Serial No. 329,041; published Sept. 6, 1932. Class 23.

Chicago Belting Co., assignor to Chicago Belting Company, Chicago, Ill. Leather belting. 90,968; renewed Apr. 8, 1933.

Chrysler Corporation, Highland Park, Mich. Cylinder blocks, cylinder heads, pistons, etc. 298,920; Nov. 15; Serial No. 315,631; published Sept. 6, 1932. Class 23.

City Machine and Tool Works. (See Poock, Oscar M.)

Classroom Teacher, Inc., The, Chicago, Ill. Rubber stamps and hectographs. 298,963-4; Nov. 15; Serial Nos. 327,130-1; published Sept. 6, 1932. Class 37.

Classroom Teacher, Inc., The, Chicago, Ill. Rubber stamps and hectographs. 298,965; Nov. 15; Serial No. 327,005; published Sept. 6, 1932. Class 37.

Cluett, Peabody & Co., assignor to Cluett, Peabody & Co., Inc., Troy, N. Y. Collars and cuffs. 90,793; renewed Mar. 28, 1933.

Cohen, Joseph S., and Sons, Co. Inc., New York, N. Y. Dresses, suits, pajamas, etc. 299,025; Nov. 15; Serial No. 316,767; published Sept. 15, 1931. Class 39.

Cohen, Morris, New York, N. Y. Preserved foods. 299,019; Nov. 15; Serial No. 324,458; published Aug. 30, 1932. Class 46.

Columbia Pictures Corporation, New York, N. Y. Motion picture photoplays. 298,905; Nov. 15; Serial No. 328,682; published Sept. 6, 1932. Class 26.

Conlon Corporation, Cicero, Ill. Pumps and parts thereof. 298,974; Nov. 15; Serial No. 329,188; published Sept. 6, 1932. Class 23.

Continental Turpentine & Rosin Corporation, Inc., Laurel, Miss. Rosin. 298,982; Nov. 15; Serial No. 328,117; published Sept. 6, 1932. Class 1.

Cooper, Frank, Limited, Oxford, England. Marmalade. 298,923; Nov. 15; Serial No. 315,136; published Aug. 30, 1932. Class 46.

Cooper Products Corporation, New York, N. Y. Safety razors. 298,913; Nov. 15; Serial No. 328,728; published Sept. 6, 1932. Class 28.

Crawford & Bowdle, assignor to Crawford Shoe Co., Lima, Ohio. Shoes. 88,852; renewed Oct. 29, 1932.

Cresca Company, Incorporated, New York, N. Y. Snails, frankfurter sausages, goose liver, etc. 298,927; Nov. 15; Serial No. 315,528; published Aug. 30, 1932. Class 46.

Crossley Co., The, doing business as Albany Door Co., Portland, Oreg. Doors. 299,031; Nov. 15. Class 12.

Crown Cork & Seal Company, Inc., Baltimore, Md. Container closures. 298,911; Nov. 15; Serial No. 328,780; published Sept. 6, 1932. Class 50.

Cuneo, Rose, doing business as Lily Mineral Water Works, Union City, N. J. Mineral spring water. 298,933; Nov. 15; Serial No. 327,581; published Sept. 6, 1932. Class 45.

Curran, Alton F., doing business as A. F. Curran Co., assignor to The Curran Corporation, Malden, Mass. Liquid soaps and cleaners. 298,969; Nov. 15; Serial No. 325,322; published Aug. 23, 1932. Class 4.

Darwin & Milner, Inc., Cleveland, Ohio. Razor blades. 298,949; Nov. 15; Serial No. 329,139; published Sept. 6, 1932. Class 28.

Dewitt & Herz, Inc., New York, N. Y. Surgical instruments. 298,941; Nov. 15; Serial No. 328,089; published Aug. 30, 1932. Class 44.

Dewitt & Herz, Inc., New York, N. Y. Surgical instruments. 298,944; Nov. 15; Serial No. 328,392; published Aug. 23, 1932. Class 44.

Diana Manufacturing Company, Green Bay, Wis. Sanitary pads. 298,951; Nov. 15; Serial No. 328,265; published Aug. 9, 1932. Class 44.

Dickinson, E. M., Limited, Sheffield, England. Knives, weapons, shears, etc. 88,617; renewed Oct. 8, 1932.

Dilling & Company, Indianapolis, Ind. Candles of all kinds. 299,007; Nov. 15; Serial No. 327,390.; published Aug. 30, 1932. Class 46.

Dirigo Ltd. A/S, Oslo, Norway. Paints and varnishes and waxes. 298,970; Nov. 15; Serial No. 325,163; published Aug. 30, 1932. Class 16.

Dowd, J. C., & Co., assignor to J. C. Dowd & Co., Inc., New York, N. Y. Hat brushes and clothes brushes. 88,668; renewed Oct. 15, 1932.

Dowd, J. C., & Co., assignor to J. C. Dowd & Co., Inc., New York, N. Y. Frames for mirrors and pictures. 88,859; renewed Oct. 29, 1932.

Draper Corporation, Portland, Me., and Hopedale, Mass. Loom-temples and parts thereof and for parts of looms. 298,948; Nov. 15; Serial No. 329,180; published Sept. 6, 1932. Class 23.

Duro Metal Products Company, Chicago, Ill. Screw drivers. 298,973; Nov. 15; Serial No. 328,782; published Sept. 6, 1932. Class 23.

Empire State Flour Mills, Buffalo and New York, N. Y. Wheat flour. 298,934; Nov. 15; Serial No. 327,308; published Sept. 6, 1932. Class 46.

Enterprise Aluminum Company, The, Massillon, Ohio. Metal canisters. 298,972; Nov. 15; Serial No. 326,138; published Sept. 6, 1932. Class 2.

Ernecke & Salmstein Co., Chicago, Ill. Label-pastes. 89,179; renewed Nov. 19, 1932.

Evans Publishing Corporation, Dover, Del. Publication. 298,952; Nov. 15; Serial No. 329,141; published Sept. 6, 1932. Class 38.

Evansville Basket and Crate Company, Evansville, Ind. Stave baskets. 298,959; Nov. 15; Serial No. 328,634; published Sept. 6, 1932. Class 2.

Fanna Polishine Co. (See Blum, Fannie.)

Fisher Flouring Mills Company, Seattle, Wash., to Fisher Flouring Mills Co., Harbor Island, Seattle, Wash. Wheat flour. 90,977; renewed Apr. 8, 1932.

Flannery, Burt V., Darlington, Md. Fresh corn. 298,989; Nov. 15; Serial No. 326,811; published Aug. 30, 1932; Class 46.

Food Display Machine Corporation, Chicago, Ill. Potato chips. 291,005; Nov. 15; Serial No. 327,907; published Aug. 30, 1932. Class 46.

Gardner, Wilbur A., doing business as J. R. Neff Co. and also The Wilbur Gardner Company, Glendale, Calif. Coffee substitute. 299,009; Nov. 15; Serial No. 317,081; published Aug. 30, 1932. Class 46.

Gendron Wheel Company, The. (See American-National Company, The.)

General Electric Company, Schenectady, N. Y. Clothes wringers and parts thereof. 298,955; Nov. 15; Serial No. 328,986; published Aug. 30, 1932. Class 24.

Gevaert Photo-Producten, Naamloose Vennootschap (Société Anonyme Photo-Produits Gevaert), Oude-God, near Antwerp, Belgium. Sensitised photographic papers, plates, films, etc. 298,975; Nov. 15; Serial No. 329,115; published Sept. 6, 1932. Class 26.

Gillette, Lewis W., doing business as Gillette Shaving Cream Co., Pittsburgh, Pa. Shaving cream. 299,008; Nov. 15; Serial No. 317,082; published Aug. 23, 1932. Class 4.

Golderer, Jacques G., New York, N. Y. Fly paper. 298,914; Nov. 15; Serial No. 328,604; published Sept. 6, 1932. Class 50.

Good Distributors, Inc., Philadelphia, Pa. Horse-radish. 299,029; Nov. 15. Class 46.

Goodrich, B. F., Company, The, doing business as Miller Rubber Company Inc., New York, N. Y., and Akron, Ohio. Surgeons' gloves. 298,987; Nov. 15; Serial No. 317,553; published Aug. 23, 1932. Class 44.

Gotham Silk Mfg. Co., assignor by mesne assignments to Gotham Silk Hosiery Company, Inc., New York, N. Y. Hosiery. 90,324; renewed Feb. 18, 1933.

Gradias, Annis & Co., Inc. (See Sanches & Haya Co., assignor.)

Greenebaum, Max, New York, N. Y., assignor by mesne assignments, to American Writing Paper Company, Inc., Holyoke, Mass. Paper. 90,804; renewed Mar. 25, 1933.

Harbor Coal Co. Inc., New York, N. Y. Coal. 298,981; Nov. 15; Serial No. 328,123; published Aug. 30, 1932. Class 1.

Hart, A. H., Co., The, to Barbour Flax Spinning Company, Paterson, N. J., successor. Twine and cord. 90,435; renewed Feb. 25, 1933.

Hautman, J. W., Minneapolis, Minn. Preparations for use in a mild laxative and treatment for sour stomach. 298,983; Nov. 15; Serial No. 326,541; published July 12, 1932. Class 6.

Haws, George A., assignor, by mesne assignments, to Panbard Oil Corporation, New York, N. Y. Lubricating oils and greases. 90,329; renewed Feb. 18, 1933.

Health Developing Apparatus Co., Inc., New York, N. Y. Table board game. 298,997; Nov. 15; Serial No. 328,690; published Sept. 6, 1932. Class 22.

Hilker Wiechers Manf. Co., Racine, Wis., assignor to John Rissman & Son, Inc., Chicago, Ill. Shirts, coats, and overalls. 90,331; renewed Feb. 18, 1933.

Hiteman Leather Company, Inc., West Winfield, N. Y. Leathers. 298,979; Nov. 15; Serial No. 328,789; published Sept. 6, 1932. Class 1.

Hoffman Specialty Company, Waterbury, Conn. Valves. 298,921; Nov. 15; Serial No. 316,841; published Sept. 6, 1932. Class 18.

Hudnut, Richard, assignor to Richard Hudnut, New York, N. Y. Cold cream. 39,743; renewed Feb. 3, 1933.

Hudnut, Richard, assignor to Richard Hudnut, New York, N. Y. Perfumes. 39,744–5; renewed Feb. 3, 1933.

Hudnut, Richard, assignor to Richard Hudnut, New York, N. Y. Perfumes. 39,748; renewed Feb. 3, 1933.

Hudnut, Richard, New York, N. Y. Perfumes and sachet-powders. 90,116; renewed Feb. 4, 1933.

Hurd, George B., & Co., assignor to George B. Hurd & Co., Inc., New York, N. Y. Writing paper and envelopes. 90,384; renewed Feb. 18, 1933.

Ironsides Company, The, Columbus, Ohio. Lubricants. 39,046; renewed Oct. 14, 1932.

Irving Packing Company, Seattle, Wash., and Karheen, Alaska, assignor, by mesne assignments, to R. C. Williams & Company, Inc., New York, N. Y. Canned salmon. 90,440; renewed Feb. 25, 1933.

Johnson, S. C., & Son, Racine, Wis. Paint enamels and undercoats. 298,966; Nov. 15; Serial No. 326,683; published Aug. 23, 1932. Class 16.

Johnson, S. C., & Son, Racine, Wis. Paint enamels. 298,967; Nov. 15; Serial No. 326,682; published Aug. 23, 1932. Class 16.

Kaufmann Bros. & Bondy, Inc., West New York, N. J. Cigar and cigarette holders, and pipes. 298,978; Nov. 15; Serial No. 328,907; published Sept. 6, 1932. Class 8.

King Dobbs & Company, Chattanooga, Tenn. Canned fruits, vegetables, fish, etc. 299,020; Nov. 15; Serial No. 321,384; published Aug. 30, 1932. Class 46.

Knapp & Cooke, Euclid, Ohio. Varnishes, lacquers, paint enamels, etc. 298,942; Nov. 15; Serial No. 328,175; published Aug. 30, 1932. Class 16.

Kroger Grocery & Baking Co., Louisville, Ky., and Cincinnati, Ohio. Flour. 299,018; Nov. 15; Serial No. 326,482; published Sept. 8, 1932. Class 46.

Lege-on-Aire Beverage Company, Minneapolis, Minn. Malt beverages. 299,021; Nov. 15; Serial No. 321,349; published Sept. 6, 1932. Class 48.

Les Compagnies Reunies des Glaces & Verres Speciaux du Nord de la France, Boussois-sur-Sambre (Nord), France. Plate glass and glass for mirrors. 298,936; Nov. 15; Serial No. 327,824; published Aug. 25, 1932. Class 33.

Lily Mineral Water Works. (See Cuneo, Rose.)

Lister Agricultural Chemical Works, Newark, N. J., and New York, N. Y., to The American Agricultural Chemical Company, New York, N. Y., successor. Fertilisers. 89,477; renewed Dec. 17, 1932.

Little, Charles E., Melrose, Mass. Wrenches and sockets and parts thereof. 298,918; Nov. 15; Serial No. 327,781; published Sept. 6, 1932. Class 23.

Maillett, A. A., Company, assignor, by mesne assignments, to Samuel M. Abrams, New York, N. Y. Liquid preparation for cleaning white buckskin and canvas shoes. 90,033; renewed Jan. 28, 1933.

Mallinson, H. R., & Co., Inc. (See Migel, M. C., & Co., assignor.)

Manufacture Dijonnaise Des Biscuits Pernot, Societe Anonyme, Dijon, France. Cakes, biscuits, crackers, etc. 298,962; Nov. 15; Serial No. 328,443; published Aug. 30, 1932. Class 46.

Mars, Incorporated, Chicago, Ill. Candy. 298,995; Nov. 15; Serial No. 328,714; published Sept. 6, 1932. Class 46.

Matsushita Shoten Ltd., Osaka-City, Japan. Pickles. 298,924; Nov. 15; Serial No. 309,648; published Aug. 30, 1932. Class 46.

Meadows Manufacturing Co., The, Bloomington, Ill. Clothes washing machines. 299,036; Nov. 15. Class 24.

Meyer Both Company, Chicago, Ill., and New York, N. Y. Periodical publication. 298,922; Nov. 15; Serial No. 316,865; published Sept. 6, 1932. Class 38.

Migel, M. C., & Co., assignor, by mesne assignments, to H. R. Mallinson & Co., Inc., New York, N. Y. Silk piece goods. 90,560; renewed Mar. 4, 1933.

Miller Rubber Company Inc. (See Goodrich, B. F., Company, The.)

Millett Corporation, New York, N. Y. Net bags, reinforced with paper. 299,028; Nov. 15. Class 2.

Missouri Belting Company, St. Louis, Mo. Rawhide belting. 90,825; renewed Mar. 25, 1933.

National Adhesives Corporation, New York, N. Y. Adhesive products, glues, sizings, etc. 298,957; Nov. 15; Serial No. 328,758; published Sept. 6, 1932. Class 6.

Naugatuck Chemical Company, The, New York, N. Y. Rubber ink. 298,917; Nov. 15; Serial No. 327,882; published Sept. 6, 1932. Class 11.

Nebbia, Felice, doing business as Nebbia Pastry Co., San Francisco, Calif. Cakes. 298,998; Nov. 15; Serial No. 328,643; published Sept. 6, 1932. Class 46.

Neff, J. R., Co. (See Gardner, Wilbur A.)

New York Baking Co. (See Rosen, S.)

New York Drug Concern. (See Cash, Laurence E.)

New York State Society of Professional Engineers, Inc., The, New York, N. Y. Publication. 298,971; Nov. 15; Serial No. 327,521; published Sept. 6, 1932. Class 38.

Nicholson File Company, Providence, R. I. Files and rasps. 298,976–7; Nov. 15; Serial Nos. 329,150–1; published Sept. 6, 1932. Class 23.

Norge Corporation, Detroit, Mich. Freezing trays for electric refrigerators. 298,992; Nov. 15; Serial No. 329,336; published Sept. 6, 1932. Class 31.

Northrup, King & Co., Minneapolis, Minn. Fodder-corn seeds. 90,234; renewed Feb. 11, 1933.

Northrup, King & Co., Minneapolis, Minn. Oat-seeds. 90,367; renewed Feb. 18, 1933.

Northrup, King & Co., Minneapolis, Minn. Fodder-corn seeds. 90,728; renewed Mar. 18, 1933.

Nutt Bros., Los Angeles, Calif. Cookies, small cakes, and crackers. 299,012; Nov. 15; Serial No. 317,866; published Sept. 22, 1931. Class 46.

Oat Snaps Company. (See Purity Oats Company.)

Ohio Farm Bureau Service Company, The, Columbus, Ohio. Poultry feeds. 299,022–3; Nov. 15; Serial Nos. 319,734–5; published Sept. 6, 1932. Class 46.

Ohio Farm Bureau Service Company, The, Columbus, Ohio. Poultry feeds. 299,024; Nov. 15; Serial No. 319,732; published Sept. 6, 1932. Class 46.

Oil-Elec-Tric Engineering Corp., Bethlehem, Pa. Oil burners. 298,909; Nov. 15; Serial No. 327,833; published Sept. 6, 1932. Class 34.

Ollendorff, Julian, Brooklyn, N. Y. Motion picture films showing sketches, drawings, and photographs. 298,906; Nov. 15; Serial No. 329,072; published Sept. 6, 1932. Class 26.

Oregon-Washington, Plywood Co., Portland, Oreg. Plywood. 299,030; Nov. 15. Class 12.

Palmer Brothers, assignor to Palmer Bros., Engines Inc., Coscob, Conn. Gasoline engines. 89,694; renewed Dec. 31, 1932.

Panhard Oil Corporation. (See Haws, George A., assignor.)

Parodney, Abraham. (See Cash, Laurence E., assignor.)

Phillips, Charles E., Chicago, Ill. Card games. 299,016; Nov. 15; Serial No. 327,067; published Sept. 6, 1932. Class 22.

Pineapple Refreshments Bottling Corporation, Miami, Fla. Maltless beverages and syrups for making the same. 298,993; Nov. 15; Serial No. 329,095; published Sept. 6, 1932. Class 45.

Poock, Oscar M., doing business as City Machine and Tool Works, Dayton, Ohio. Metal working machinery, chucks, jigs, etc. 298,915; Nov. 15; Serial No. 327,919; published Sept. 6, 1932. Class 23.

Principal Distributing Corp., New York, N. Y. Series of different motion picture films. 298,950; Nov. 15; Serial No. 328,703; published Sept. 6, 1932. Class 26.

Prints-Biederman Company, The, Cleveland, Ohio. Woolen textile fabrics. 299,006; Nov. 15; Serial No. 327,771; published Aug. 9, 1932. Class 42.

Productos Selectos Del Cerdo, S. A., Manlleu, Barcelona, Spain. Foods derived from pork. 299,014; Nov. 15; Serial No. 311,486; published Sept. 1, 1931. Class 46.

Purity Oats Company, doing business as Oat Snaps Company, Keokuk, Iowa. Breakfast foods in flake form. 299,000; Nov. 15; Serial No. 328,566; published Sept. 6, 1932. Class 46.

Radbill Oil Co. Inc., Philadelphia, Pa. Dry cleaning fluid. 298,956; Nov. 15; Serial No. 328,847; published Aug. 30, 1932. Class 4.

Riegel Paper Corporation, Riegelsville, N. J., and New York, N. Y. Waxed glassine wrapping and lining paper. 298,953; Nov. 15; Serial No. 329,265; Sept. 6, 1932. Class 37.

Rissman, John, & Son, Inc. (See Hilker Wiechers Manf. Co., assignor.)

Roman Stripe Mills, Inc., Easton, Pa. Hosiery. 299,034–5; Nov. 15. Class 39.

Rosen, S., doing business as New York Baking Co., Chicago, Ill. Rye bread. 299,010; Nov. 15; Serial No. 322,654; published Apr. 26, 1932. Class 46.

S. S. S. Co. (See Swift Specific Co., The.)

Sanches & Haya Co., assignor, by mesne assignments, to Gradias, Annis & Co., Inc., Tampa, Fla. Cigars. 88,959; renewed Oct. 29, 1932.

Schreiber Brothers, Incorporated, Baltimore, Md. Butter. 298,996; Nov. 15; Serial No. 328,761; published Sept. 6, 1932. Class 46.

Scott, O. M., and Sons Company, Marysville, Ohio. Fertilizer. 298,980; Nov. 15; Serial No. 328,508; published Sept. 6, 1932. Class 10.

"Semperit" Oesterreichisch-Amerikanische Gummiwerke Aktiengesellschaft, Vienna, Austria. Toy animals, birds, dolls, etc. 298,985; Nov. 15; Serial No. 318,722; published Sept. 6, 1932. Class 22.

Service Glass Company, Evansville, Ind. Glass. 298,989; Nov. 15; Serial No. 328,040; published Aug. 23, 1932. Class 33.

Sichel, Ferdinand, Kommanditgesellschaft, Hanover-Limmer, Germany. Colours and paints. 298,928; Nov. 15; Serial No. 306,375; published Aug. 23, 1932. Class 16.

Sisal Products Corporation, New York, N. Y. Cord, twine, and rope. 299,011; Nov. 15; Serial No. 321,971; published Mar. 29, 1932. Class 7.

Smith, Ada L., New York, N. Y., to Ada Flint Smith, Albany, N. Y. Tonic and blood purifier. 40,048; renewed Apr. 7, 1933.

Staedtler, J. S., Inc., New York, N. Y. Pencils, pencil leads, penholders, etc. 298,943; Nov. 15; Serial No. 328,191; published Sept. 6, 1932. Class 37.

Standard Brands Incorporated, New York, N. Y. Mixture of egg material and other substances. 299,001–2; Nov. 15; Serial Nos. 328,314–15; published Aug. 30, 1932. Class 46.

Standard-Coosa-Thatcher Company, Chattanooga, Tenn. Thread. 298,988; Nov. 15; Serial No. 327,122; published Sept. 6, 1932. Class 43.

Streeton, James W., New York, N. Y. Table board game. 298,986; Nov. 15; Serial No. 318,605; published Sept. 6, 1932. Class 22.

Swift Specific Co., The, by change of name to S. S. S. Co., Atlanta, Ga. Medicine. 39,578; renewed Dec. 30, 1932.

Swift Specific Co., The, by change of name to S. S. S. Co., Atlanta, Ga. Medicine. 40,050; renewed Apr. 7, 1933.

Tetley, Joshua, & Son, Limited, Leeds, England. Bituminous enamel. 298,938; Nov. 15; Serial No. 327,339; published Aug. 30, 1932. Class 16.

Toledo Metal Wheel Company, The. (See American-National Company, The.)

Tropic-Arium, Inc., Cleveland, Ohio. Aquariums and portable conservatories. 298,937; Nov. 15; Serial No. 326,837; published Sept. 6, 1932. Class 2.

United Drug Company, Jersey City, N. J., and Boston, Mass., assignor, by mesne assignments, to United Drug Company, Boston, Mass. Dyspepsia tablets. 40,019; renewed Mar. 31, 1933.

United States Rubber Company, New York, N. Y. Crib sheets made of rubber. 298,916; Nov. 15; Serial No. 327,894; published Sept. 6, 1932. Class 50.

United Textile Company, New York, N. Y. Cotton piece goods and curtains. 299,013; Nov. 15; Serial No. 321,552; published Mar. 22, 1932. Class 42.

Velasco & Calzada, San Antonio, Tex. Toasted tortillas. 298,932; Nov. 15; Serial No. 328,147; published Sept. 6, 1932. Class 46.

Victor Manufacturing & Gasket Company, Chicago, Ill. Gaskets. 299,027; Nov. 15. Class 35.

Viscose Company, The, Marcus Hook, Pa. Rayon yarn. 298,960; Nov. 15; Serial No. 328,854; published Aug. 23, 1932. Class 43.

Viuda De Fernandes, Rosaura L. Jalapa, Vera Cruz, Mexico. Coffee. 298,925; Nov. 15; Serial No. 316,769; published Aug. 16, 1932. Class 46.

Wagner, H., & Adler Co., New York, N. Y. Billiard cloth. 299,004; Nov. 15; Serial No. 327,925; published Aug. 2, 1932. Class 42.

Wellcome, Henry S., London, England, assignor, by mesne assignments, to Burroughs Wellcome & Co., (U. S. A.) Inc., New York, N. Y. Medicinal substances in hermetically sealed containers. 90,861; renewed Mar. 25, 1933.

Wellcome, Henry S., London, England, assignor, by mesne assignments, to Burroughs Wellcome & Co. (U. S. A.) Inc., New York, N. Y. Ammonium valerianate, formates compound, mucin, etc. 91,053; renewed Apr. 8, 1933.

Whitney, W. F., Company, South Ashburnham, Mass. Table tops and chair seats. 298,991; Nov. 15; Serial No. 326,066; published Sept. 6, 1932. Class 32.

Williams, R. C., & Company, Inc. (See Irving Packing Company, assignor.)

Williams, Stacy, Co. Inc., The, Birmingham, Ala. Corn meal. 299,033; Nov. 15. Class 46.

Wood, T. W., & Sons, Richmond, Va. Field, garden, and lawn seed. 298,919; Nov. 15; Serial No. 325,496; published Sept. 6, 1932. Class 1.

Wood, T. W., & Sons, Richmond, Va. Seed corn. 298,946; Nov. 15; Serial No. 325,495; published Sept. 6, 1932. Class 1.

Yacht Club Bottling Works, Inc., Centredale, R. I. Maltless beverages and syrups and extracts for making the same. 298,994; Nov. 15; Serial No. 328,858; published Sept. 6, 1932. Class 45.

Zbinden, H. & H., Brooklyn, N. Y. Metal polish. 298,958; Nov. 15; Serial No. 328,653; published Aug. 23, 1932. Class 4.

Zeller, Louis W., doing business as Zeller Products Company, New York, N. Y. Cleaning and scouring powders, soaps, etc. 298,935; Nov. 15; Serial No. 327,668; published Aug. 23, 1932. Class 4.

LIST OF REGISTRANTS OF LABELS

Acme Metal Goods Mfg. Co., Newark, N. J. The Acme Tastefully Served Food Tastes Better. For Utensils for Paring, Slicing, Mincing, or Shredding Vegetables, Etc. 41,404; Nov. 15.

Blue Earth Canning Company, Blue Earth, Minn. Country Kist. For Canned Peas. 41,405; Nov. 15.

Campana Corporation, Batavia, Ill. Campana's Italian Balm. For Face and Hand Lotion. 41,406; Nov. 15.

Eskimo Pie Corporation, New York, N. Y. King Cole. For Ice Cream. 41,407; Nov. 15.
Fairchild, E. E., Corporation, Rochester, N. Y. Lady Slipper Shoe Lotion. For Shoe Lotion. 41,408; Nov. 15.
Grey Iron Casting Company, Mount Joy, Pa. Grey Craft Models. For Models. 41,409 Nov. 15.
Hachmeister-Lind Company, McKees Rocks, Pa. Jermène. For Antiseptic and Germicide. 41,410; Nov. 15.
Johnson, Calvin E., New York, N. Y. Old English Brand. For Malted Milk. 41,411; Nov. 15.
Morath, Theodore O., St. Louis, Mo. Taste-Tested Mustard. For Mustard. 41,412; Nov. 15.
Nachman-Springfilled Corporation, Chicago, Ill. The Mattress of 1000 Springs. For Spring-Filled Mattresses. 41,413; Nov. 15.
National Biscuit Company, New York, Niagara Falls, N. Y.; Oakland, Calif. Shredded Wheat. For Shredded Wheat. 41,414; Nov. 15.
Pet Physician, Baltimore, Md. Pet Physician Bird Food. For Bird Foods. 41,415; Nov. 15.
Phillips-Jones Corporation, New York, N. Y. The Van Heusen Collarite Shirt The New Horton. For Shirts. 41,416; Nov. 15.
Reefer's No-Moth, Inc., New York, N. Y. Reefer's Inject-O Prevents and Kills Moths Inside Upholstered Furniture. For Liquid Insecticide for the Prevention and Killing of Moths, Etc. 41,417; Nov. 15.
Sterling Products Company, Evansville, Ind. Sterling. For Malt Extract. 41,418; Nov. 15.
Winkler, Helen, Saginaw, Mich. Wink. For Hand Lotion. 41,419; Nov. 15.

LIST OF REGISTRANTS OF PRINTS

Clarke, Adonis B., Chicago, Ill. Radio Log of Fifty Favorite Features. For Radios. 13,960; Nov. 15.
Cream of Wheat Corporation, The, Minneapolis, Minn. Keep Them Gaining Through These Years of Strain. For Wheat Breakfast Food. 13,961; Nov. 15.
General Mills, Inc., Minneapolis, Minn. Biscuits Now Earliest Thing a Bride Can Make! For Breakfast Flour. 13,962; Nov. 15.
General Mills, Inc., Minneapolis, Minn. A Marvelous New Food Invention! For Biscuit Flour. 13,963; Nov. 15.
Kolynos Company, The, New Haven, Conn. No. 1122 B. For Dental Cream. 13,964; Nov. 15.
Minnesota Valley Canning Company, Lesueur, Minn. Corn on the Cob Without the Cob. For Canned Corn. 13,965; Nov. 15.

CLASSIFIED LIST OF TRADE-MARKS REGISTERED

CLASS 1.

Coal. Harbor Coal Co. Inc. 298,981; Nov. 15; Serial No. 328,128; published Aug. 30, 1932.
Leathers. Hiteman Leather Company. 298,979; Nov. 15; Serial No. 328,789; published Sept. 6, 1932.
Oat-seeds. Northrup, King & Co. 90,367; renewed Feb. 18, 1933.
Rosin. Continental Turpentine & Rosin Corporation. 298,982; Nov. 15; Serial No. 328,117; published Sept. 6, 1932.
Seed corn. T. W. Wood & Sons. 298,946; Nov. 15; Serial No. 325,495; published Sept. 6, 1932.
Seed, Field, garden, and lawn. T. W. Wood & Sons. 298,919; Nov. 15; Serial No. 325,496; published Sept. 6, 1932.
Seeds, Fodder-corn. Northrup, King & Co. 90,284; renewed Feb. 11, 1933.
Seeds, Fodder-corn. Northrup, King & Co. 90,728; renewed Mar. 18, 1933.

CLASS 2

Aquariums and portable conservatories. Tropic-Arium, Inc. 298,937; Nov. 15; Serial No. 326,887; published Sept. 6, 1932.
Bags, Net. Millett Corporation. 299,028; Nov. 15.
Baskets, Stave. Evansville Basket and Crate Company. 298,959; Nov. 15; Serial No. 328,634; published Sept. 6, 1932.
Canisters, Metal. Enterprise Aluminum Company. 298,972; Nov. 15; Serial No. 326,138; published Sept. 6. 1932.

CLASS 4.

Cleaning and scouring powders, soaps, etc. L. W. Zeller. 298,935; Nov. 15; Serial No. 327,668; published Aug. 23, 1932.
Cleaning fluid, Dry. Radbill Oil Co. 298,956; Nov. 15; Serial No. 328,847; published Aug. 30, 1932.
Cleanser and polish. F. Blum. 298,968; Nov. 15; Serial No. 325,778; published Aug. 23, 1932.
Liquid preparation for cleaning white buckskin and canvas shoes. A. A. Maillett Company. 90,033; renewed Jan. 28, 1933.
Metal polish. H. & H. Zbinden. 298,958; Nov. 15; Serial No. 328,653; published Aug. 23, 1932.
Preparation used by dentists in removing strains from and in cleaning and polishing teeth. L. D. Caulk Company. 298,940; Nov. 15; Serial No. 328,056; published Aug. 30, 1932.
Shaving cream. L. W. Gillette. 299,008; Nov. 15; Serial No. 317,032; published Aug. 23, 1932.
Soaps and cleaners, Liquid. A. F. Curran. 298,969; Nov. 15; Serial No. 325,322; published Aug. 23, 1932.

CLASS 5

Pastes, Label. Ernecke & Salmstein Co. 89,179; renewed Nov. 19, 1932.
Adhesive products, glues, sizings, etc. National Adhesive Corporation. 298,957; Nov. 15; Serial No. 328,758; published Sept. 6, 1932.

CLASS 6

Ammonium valerianate, formates, mucin, etc. H. S. Wellcome. 91,053; renewed Apr. 8, 1933.
Antiseptics and germicides. L. E. Cash. 88,664; renewed Oct. 15, 1932.
Cream, Cold. R. Hudnut. 39,743; renewed Feb. 8, 1933.
Dyspepsia tablets. United Drug Company. 40,019; renewed Mar. 31, 1933.
Malt preparation. Birk Bros. Brewing Co. 86,777; renewed June 4, 1932.
Medicinal substances in hermetically sealed containers. H. S. Wellcome. 90,861; renewed Mar. 25, 1933.
Medicine. Swift Specific Co. 39,578; renewed Dec. 30, 1932.
Medicine. Swift Specific Co. 40,050; renewed Apr. 7, 1933.
Perfumes. R. Hudnut. 39,744–5; renewed Feb. 8, 1933.
Perfumes. R. Hudnut. 39,748; renewed Feb. 8, 1933.
Perfumes and sachet-powders. R. Hudnut. 90,116; renewed Feb. 4, 1933.
Preparations for Use as a Mild Laxative and Treatment for sour stomach. J. W. Hautman. 298,983; Nov. 15; Serial No. 326,541; published July 12, 1932.
Tonic and blood purifier. A. L. Smith. 40,048; renewed Apr. 7, 1933.

CLASS 7

Cord, twine, and rope. Sisal Products Corporation. 299,011; Nov. 15; Serial No. 321,971; published Mar. 29, 1932.
Cordage. American Manufacturing Company. 89,793–4; renewed Jan. 14, 1933.
Twine and cord. A. H. Hart Co. 90,435; renewed Feb. 25, 1933.
Yarn, Lath. American Manufacturing Company. 89,973; renewed Jan. 28, 1933.

CLASS 8

Cigar and cigarette holders, and pipes. Kaufmann Bros. & Bondy, Inc. 298,978; Nov. 15; Serial No. 328,907; published Sept. 6, 1932.

CLASS 10

Fertilizer. O. M. Scott and Sons Company. 298,980; Nov. 15; Serial No. 328,508; published Sept. 6, 1932.
Fertilizers. Lister Agricultural Chemical Works. 89,477; renewed Dec. 17, 1932.

CLASS 11

Ink, Printing. Acme Printing Ink Company. 298,910; Nov. 15; Serial No. 328,806; published Sept. 6, 1932.
Ink, Rubber. Naugatuck Chemical Company. 298,917; Nov. 15; Serial No. 327,882; published Sept. 6. 1932.

CLASS 12

Plywood. Oregon-Washington Plywood Co. 299,030; Nov. 15.

CLASS 13

Valves. Hoffman Specialty Company. 298,921; Nov. 15; Serial No. 316,841; published Sept. 6, 1932.

CLASS 15

Doors. Crossley Co. 299,031; Nov. 15.
Lubricants. Ironsides Company. 39,046; renewed Oct. 14, 1932.
Oils and greases, Lubricating. Canfield Oil Company. 299,026; Nov. 15.
Oils and greases, Lubricating. G. A. Haws. 90,329; renewed Feb. 18, 1933.

CLASS 16

Colours and paints. Ferdinand Sichel, Commanditgesellschaft. 298,928; Nov. 15; Serial No. 306,375; published Aug. 23, 1932.
Enamel, Bituminous. Joshua Tet'ey & Son, Limited. 298,938; Nov. 15; Serial No. 327,889; published Aug. 30, 1932.
Enamels and undercoats, Paint. S. C. Johnson & Son. 298,966; Nov. 15; Serial No. 326,683; published Aug. 23, 1932.
Enamels, Paint. S. C. Johnson & Son. 298,967; Nov. 15; Serial No. 326,682; published Aug. 23, 1932.
Paints, varnishes, and waxes. Dirigo Ltd. A/S. 298,970; Nov. 15; Serial No. 325,163; published Aug. 30, 1932.
Preparation for hard surface floor covering, Polishing. Armstrong Cork Company. 298,945; Nov. 15; Serial No. 328,572; published Aug. 23, 1932.
Varnishes. American Varnish Company. 89,044; renewed Oct. 14, 1932.
Varnishes, lacquers, paint enamels, etc. Knapp & Cooke. 298,942; Nov. 15; Serial No. 328,175; published Aug. 30, 1932.

CLASS 17

Cigars. Sanchez & Haya Co. 88,959; renewed Oct. 29, 1932.

CLASS 22

Game, Table board. Health Developing Apparatus Co. 298,997; Nov. 15; Serial No. 328,690; published Sept. 6, 1932.
Game, Table board. J. W. Streeton. 298,986; Nov. 15; Serial No. 318,605; published Sept. 6, 1932.
Games, Card. C. E. Phillips. 299,016; Nov. 15; Serial No. 327,067; published Sept. 6, 1932.
Toy animals, birds, dolls, etc. "Semperit" Oesterreichisch-Amerikanische Gummiwerke Aktiengesellschaft. 298,985; Nov. 15; Serial No. 318,722; published Sept. 6, 1932.
Toy carpet sweepers. Bissell Carpet Sweeper Company. 39,416; renewed Dec. 9, 1932.
Toy vehicles. American-National Company. 298,931; Nov. 15; Serial No. 328,319; published Sept. 6, 1932.

CLASS 23

Cylinder blocks, cylinder heads, pistons, etc. Chrysler Corporation. 298,920; Nov. 15; Serial No. 315,631; published Sept. 6, 1932.
Engines, Gasoline. Palmer Brothers. 89,694; renewed Dec. 31, 1932.
Files and rasps. Nicholson File Company. 298,976–7; Nov. 15; Serial Nos. 329,150–1; published Sept. 6, 1932.
Knives, weapons, shears, etc. E. M. Dickinson Limited. 88,617; renewed Oct. 8, 1932.
Loom-temples and parts thereof and for parts of looms. Draper Corporation. 298,948; Nov. 15; Serial No. 329,180; published Sept. 6. 1932.
Metal working machinery, chucks, jigs, etc. O. M. Poock. 298,915; Nov. 15; Serial No. 327,919; published Sept. 6, 1932.
Pumps and parts thereof. Conlon Corporation. 298,974; Nov. 15; Serial No. 329,138; published Sept. 6, 1932.
Pumps, Vacuum. Central Scientific Company. 298,907; Nov. 15; Serial No. 329,041; published Sept. 6, 1932.
Razor blades. American Safety Razor Corporation. 298,912; Nov. 15; Serial No. 328,749; published Sept. 6, 1932.
Razor blades. Darwin & Milner, Inc. 298,949; Nov. 15; Serial No. 329,139; published Sept. 6, 1932.
Razors, Safety. Cooper Products Corporation. 298,913; Nov. 15; Serial No. 328,723; published Sept. 6, 1932.
Screw drivers. Duro Metal Products Company. 298,973; Nov. 15; Serial No. 328,782; published Sept. 6, 1932.
Spoons, cake turners, can openers, etc. A. & J. Manufacturing Co. 298,929; Nov. 15; Serial No. 308,060; published Sept. 6, 1932.
Sweepers, Carpet. Bissell Carpet Sweeper Co. 89,262; renewed Nov. 11, 1932.
Sweepers, Carpet. Bissell Carpet Sweeper Co. 298,908; Nov. 15; Serial No. 328,863; published Sept. 6. 1932.
Wrenches and sockets and parts thereof. C. E. Little. 298,918; Nov. 15; Serial No. 327,731; published Sept. 6, 1932.

CLASS 24

Washing machines, Clothes. Meadows Manufacturing Co. 299,036; Nov. 15.
Wringers and parts thereof, Clothes. General Electric Company. 298,955; Nov. 15; Serial No. 328,986; published Aug. 30, 1932.

CLASS 26

Films, Series of different motion picture. Principal Distributing Corp. 298,950; Nov. 15; Serial No. 328,703; published Sept. 6, 1932.
Films showing sketches, drawings, and photographs. Motion picture. J. Ollendorff. 298,906; Nov. 15; Serial No. 329,072; published Sept. 6, 1932.
Photoplays, Motion picture. Columbia Pictures Corporation. 298,905; Nov. 15; Serial No. 328,632; published Sept. 6, 1932.
Sensitized photographic papers, plates, films, etc. Gevaert Photo-Producten, Naamlooze Vennootschap (Société Anonyme Photo-Produits Gevaert). 298,975; Nov. 15; Serial No. 329,115; published Sept. 6, 1932.

CLASS 29

Brushes and clothes brushes, Hat. J. C. Dowd & Co. 88,668; renewed Oct. 15, 1932.

CLASS 31

Freezing trays for electric refrigerators. Norge Corporation. 298,992; Nov. 15; Serial No. 329,336; published Sept. 6, 1932.

CLASS 32

Frames for mirrors and pictures. J. C. Dowd & Co. 88,859; renewed Oct. 29, 1932.
Table tops and chair seats. W. F. Whitney Company. 298,991; Nov. 15; Serial No. 326,066; published Sept. 6, 1932.

CLASS 33

Glass. Service Glass Company. 298,939; Nov. 15; Serial No. 328,040; published Aug. 23, 1932.
Glass and glass for mirrors, Plate. Les Compagnies Reunies des Glaces & Verres Speciaux du Nord de la France. 298,936; Nov. 15; Serial No. 327,824; published Aug. 23, 1932.

CLASS 34

Burners, Oil. Oil-Elec-Tric Engineering Corp. 298,909; Nov. 15; Serial No. 327,838; published Sept. 6, 1932.

CLASS 35

Belting, Leather. Chicago Belting Co. 90,968; renewed Apr. 8, 1933.
Belting, Rawhide. Missouri Belting Company. 90,825; renewed Mar. 25, 1933.
Gaskets. Victor Manufacturing & Gasket Company. 299,027; Nov. 15.

CLASS 37

Paper. American Writing Paper Company. 90,952; renewed Apr. 8, 1933.
Paper. M. Greenebaum. 90,804; renewed Mar. 25, 1933.
Paper and envelopes, Writing. George B. Hurd & Co. 90,334; renewed Feb. 18, 1933.
Paper, Waxed glassine wrapping and lining. Riegel Paper Corporation. 298,953; Nov. 15; Serial No. 329,265; published Sept. 6, 1932.
Pencils, pencil leads, penholders, etc. J. S. Staedtler, Inc. 298,943; Nov. 15; Serial No. 328,191; published Sept. 6, 1932.
Stamps and hectographs, Rubber. Classroom Teacher, Inc. 298,963–4; Nov. 15; Serial Nos. 327,130–1; published Sept. 6, 1932.
Stamps and hectographs, Rubber. Classroom Teacher, Inc. 298,965; Nov. 15; Serial No. 327,005; published Sept. 6, 1932.

CLASS 38

Lessons, work sheets, etc., Printed. W. H. Candler. 298,947; Nov. 15; Serial No. 325,319; published June 7, 1932.
Publication. Evans Publishing Corporation. 298,952; Nov. 15; Serial No. 329,141; published Sept. 6, 1932.
Publication. Meyer Both Company. 298,922; Nov. 15; Serial No. 316,865; published Sept. 6, 1932.
Publication. New York State Society of Professional Engineers, Inc. 298,971; Nov. 15; Serial No. 327,521; published Sept. 6, 1932.

CLASS 39

Collars and cuffs. Cluett, Peabody & Co. 90,793; renewed Mar. 25, 1933.
Dresses, suits, pajamas, etc. Joseph S. Cohen and Sons Co. Inc. 299,025; Nov. 15; Serial No. 316,767; published Sept. 15, 1931.
Hosiery. Gotham Silk Mfg. Co. 90,324; renewed Feb. 18, 1933.
Hosiery. Roman Stripe Mills, Inc. 299,034–5; Nov. 15.
Shirts, coats, and overalls. Hilker Wiechers Manf. Co. 90,331; renewed Feb. 18, 1933.
Shoes. Crawford & Bowdle. 88,852; renewed Oct. 29, 1932.

CLASS 42

Cloth, Billiard. H. Wagner & Adler Co. 299,004; Nov. 15; Serial No. 327,925; published Aug. 2, 1932.
Cotton piece goods and curtains. United Textile Company. 299,013; Nov. 15; Serial No. 321,552; published Mar. 22, 1932.
Pile fabrics in the piece. Sidney Blumenthal & Co. Inc. 299,032; Nov. 15.
Silk piece goods. M. C. Migel & Co. 90,560; renewed Mar. 4, 1933.
Woolen fabrics in the piece. American Woolen Company. 298,964; Nov. 15; Serial No. 326,173; published May 24, 1932.
Woolen textile fabrics. Printz-Biederman Company. 299,006; Nov. 15; Serial No. 327,771; published Aug. 9, 1932.

CLASS 43

Thread. Standard-Coosa-Thatcher Company. 298,988; Nov. 15; Serial No. 327,122; published Sept. 6, 1932.
Threads, Embroidery. T. Buettner & Co. 39,899; renewed Mar. 10, 1933.
Yarn, Rayon. Viscose Company. 298,960; Nov. 15; Serial No. 328,854; published Aug. 23, 1932.

CLASS 44

Dentists' articulating paper. L. D. Caulk Company. 298,954; Nov. 15; Serial No. 329,042; published Aug. 30, 1932.
Gloves, Rubber. B. F. Goodrich Company. 298,987; Nov. 15; Serial No. 317,553; published Aug. 23, 1932.
Sanitary pads. Diana Manufacturing Company. 298,951; Nov. 15; Serial No. 328,265; published Aug. 9, 1932.
Surgical instruments. Dewitt & Hers, Inc. 298,941; Nov. 15; Serial No. 328,089; published Aug. 30, 1932.
Surgical instruments. Dewitt & Hers, Inc. 298,944; Nov. 15; Serial No. 328,892; published Aug. 23, 1932.

CLASS 45

Beverages and sirups and extracts for making the same, Maltless. Yacht Club Bottling Works, Inc. 298,994; Nov. 15; Serial No. 328,858; published Sept. 6, 1932.
Beverages and syrups for making the same, Maltless. Pineapple Refreshments Bottling Corporation. 298,998; Nov. 15; Serial No. 329,095; published Sept. 6, 1932.
Extracts, flavors and syrups, Maltless. W. Burton & Co. 298,926; Nov. 15; Serial No. 316,764; published Sept. 6, 1932.
Fruit juices. California Packing Corporation. 299,015; Nov. 15; Serial No. 307,256; published June 28, 1932.
Water, Mineral spring. B. Cuneo. 298,933; Nov. 15; Serial No. 327,581; published Sept. 6, 1932.

CLASS 46

Bread, Rye. S. Rosen. 299,010; Nov. 15; Serial No. 322,654; published Apr. 26, 1932.
Butter. Schreiber Brothers, Incorporated. 298,996; Nov. 15; Serial No. 328,761; published Sept. 6, 1932.
Cakes. F. Nebbia. 298,998; Nov. 15; Serial No. 328,643; published Sept. 6, 1932.
Cakes, biscuits, crackers, etc. Manufacture Dijonnaise des Biscuits Pernot, Societe Anonyme. 298,962; Nov. 15; Serial No. 328,443; published Aug. 30, 1932.
Candies. Dilling & Company. 299,007; Nov. 15; Serial No. 327,390; published Aug. 30, 1932.
Candy. Bunte Brothers. 298,999; Nov. 15; Serial No. 328,575; published Sept. 6, 1932.
Candy. Mars, Incorporated. 298,995; Nov. 15; Serial No. 328,714; published Sept. 6, 1932.
Canned fruits, vegetables, fish, etc. King Dobbs & Company. 299,020; Nov. 15; Serial No. 321,884; published Aug. 30, 1932.
Canned salmon. Irving Packing Company. 90,440; renewed Feb. 25, 1933.
Coffee. R. L. Viuda de Fernandez. 298,925; Nov. 15; Serial No. 316,769; published Aug. 16, 1932.
Coffee substitute. W. A. Gardner. 299,009; Nov. 15; Serial No. 317,081; published Aug. 30, 1932.
Confection, Frozen. S. Bucher. 298,961; Nov. 15; Serial No. 328,476; published Aug. 30, 1932.
Cookies, small cakes and crackers. Nutt Bros. 299,012; Nov. 15; Serial No. 317,866; published Sept. 22, 1931.
Corn, Fresh. B. V. Flannery. 298,989; Nov. 15; Serial No. 326,811; published Aug. 30, 1932.
Corn meal. Stacy Williams Co. Inc. 299,033; Nov. 15.
Ducks. Carman River Duck Farm. 298,990; Nov. 15; Serial No. 326,737; published July 12, 1932.
Feeds, Poultry. Ohio Farm Bureau Service Company. 299,022–3; Nov. 15; Serial Nos. 319,734–5; published Sept. 6, 1932.
Feeds, Poultry. Ohio Farm Bureau Service Company. 299,024; Nov. 15; Serial No. 319,732; published Sept. 6, 1932.
Flour. Kroger Grocery & Baking Co. 299,018; Nov. 15; Serial No. 326,482; published Sept. 6, 1932.
Flour, Wheat. Empire State Flour Mills. 298,934; Nov. 15; Serial No. 327,808; published Sept. 6, 1932.
Flour, Wheat. Fisher Flouring Mills Company. 90,977; renewed Apr. 8, 1933.
Foods derived from pork. Productos Selectos Del Cerdo, S. A. 299,014; Nov. 15; Serial No. 311,486; published Sept. 1, 1932.
Foods in flake form, Breakfast. Purity Oats Company. 299,000; Nov. 15; Serial No. 328,566; published Sept. 6, 1932.
Foods, Preserved. M. Cohen. 299,019; Nov. 15; Serial No. 324,458; published Aug. 30, 1932.
Grapes, Fresh. Arrow Packing Company. 298,930; Nov. 15; Serial No. 295,501; published Aug. 30, 1932.
Horse-radish. Good Distributors, Inc. 299,029; Nov. 15.
Marmalade. Frank Cooper Limited. 298,923; Nov. 15; Serial No. 315,136; published Aug. 30, 1932.
Mixture of egg material and other substances. Standard Brands Incorporated. 299,001–2; Nov. 15; Serial Nos. 328,314–15; published Aug. 30, 1932.
Pickles. Matsushita Shoten Ltd. 298,924; Nov. 15; Serial No. 309,648; published Aug. 30, 1932.
Potato chips. Food Display Machine Corporation. 299,005; Nov. 15; Serial No. 327,907; published Aug. 30, 1932.
Snails, frankfurter sausages, goose liver, etc. Cresca Company. 298,927; Nov. 15; Serial No. 315,528; published Aug. 30, 1932.
Syrup, Malt. Birk Bros. Malt Products, Inc. 299,003; Nov. 15; Serial No. 327,971; published Aug. 30, 1932.
Tortillas, Toasted. Velasco & Calzada. 298,932; Nov. 15; Serial No. 328,147; published Sept. 6, 1932.

CLASS 48

Malt beverage. Bruckmann Co. 299,017; Nov. 15; Serial No. 326,933; published Aug. 2, 1932.
Malt beverages. Lege-on-Aire Beverage Company. 299,021; Nov. 15; Serial No. 321,349; published Sept. 6, 1932.

CLASS 50

Container closures. Crown Cork & Seal Company. 298,911; Nov. 15; Serial No. 328,780; published Sept. 6, 1932.
Fly paper. J. G. Golderer. 298,914; Nov. 15; Serial No. 328,604; published Sept. 6, 1932.
Sheets made of rubber, Crib. United States Rubber Company. 298,916; Nov. 15; Serial No. 327,894; published Sept. 6, 1932.

LIST OF LABELS

Campana's Italian Balm. For Face and Hand Lotion. Campana Corporation. 41,406; Nov. 15.
Country Kist. For Canned Peas. Blue Earth Canning Company. 41,405; Nov. 15.
Grey Craft Models. For Models. Grey Iron Casting Company. 41,409; Nov. 15.
Jermene. For Antiseptic and Germicide. Hachmeister-Lind Company. 41,410; Nov. 15.
King Cole. For Ice Cream. Eskimo Pie Corporation. 41,407; Nov. 15.
Lady Slipper Shoe Lotion. For Shoe Lotion. E. E. Fairchild Corporation. 41,408; Nov. 15.
Old English Brand. For Malted Milk. C. R. Johnson. 41,411; Nov. 15.
Pet Physician Bird Food. For Bird Foods. Pet Physician. 41,415; Nov. 15.
Reefer's Inject-O Prevents and Kills Moths Inside Upholstered Furniture. For Liquid Insecticide for the Prevention and Killing of Moths, Etc. Reefer's No-Moth, Inc. 41,417; Nov. 15.
Shredded Wheat. For Shredded Wheat. National Biscuit Company. 41,414; Nov. 15.
Sterling. For Malt Extract. Sterling Products Company. 41,413; Nov. 15.
Taste-Tested Mustard. For Mustard. T. O. Morath. 41,412; Nov. 15.
The Acme Tastefully Served Food Tastes Better. For Utensils for Paring, Slicing, Mincing, or Shredding Vegetables, Etc. Acme Metal Goods Mfg. Co. 41,404; Nov. 15.
The Mattress of 1000 Springs. For Spring-Filled Mattresses. Nachman-Springfilled Corporation. 41,418; Nov. 15.
The Van Heusen Collarite Shirt The New Horton. For Shirts. Phillips-Jones Corporation. 41,416; Nov. 15.
Wink. For Hand Lotion. H. Winkler. 41,419; Nov. 15.

LIST OF PRINTS

A Marvelous, New Food Invention! For Biscuit Flour. General Mills, Inc. 13,963; Nov. 15.
Biscuits now Easiest Thing a Bride can Make! For Biscuit Flour. General Mill, Inc. 13,962; Nov. 15.
Corn on the Cob Without the Cob. For Canned Corn. Minnesota Valley Canning Company. 13,965; Nov. 15.
Keep them Gaining Through these Years of Strain. For Wheat Breakfast Foods. Cream of Wheat Corporation. 13,961; Nov. 15.
No. 1122 E. For Dental Cream. Kolynos Company. 13,964; Nov. 15.
Radio Log of Fifty Favorite Features. For Radios. A. B. Clarke. 13,960; Nov. 15.

LIST OF PATENTEES

TO WHOM

PATENTS WERE ISSUED ON THE 15TH DAY OF NOVEMBER, 1932

NOTE.—Arranged in accordance with the first significant character or word of the name (in accordance with city and telephone directory practice). Includes patents, reissues, and designs.

Adams, Chester E., Hammond, assignor to Standard Oil Company, Whiting, Ind. Color stabilization of lubricating oils. 1,885,023; Nov. 15.
Adams, Dennis T., Chicago, Ill. Automobile license holder. 1,887,727; Nov. 15.
Adartcraft, Inc. (See Sanders, Rudolph M., assignor.)
Adartcraft, Incorporated. (See Shaw, Louis E., assignor.)
Addretok Co. (See Johnson, John E., assignor.)
Adjusto Equipment Company. (See Buchet, Conrad R., assignor.)
Aeromarine Plane & Motor Company. (See Chilton, Roland, assignor.)
Aktiebolaget Friberg's Hogvacuumpump. (See Wrange, Georg V., assignor.)
Aktiengesellschaft Brown Boveri & Cie. (See Widmer, Stefan, assignor.)
Alberti, Angelo L., Beaver Falls, Pa. Tire rim. 1,887,984; Nov. 15.
Aldrich, Ralph N., assignor to Standard Stations, Inc., San Francisco, Calif. Service station. Des. 88,281; Nov. 15.
Aldrich, Ralph N., assignor to Standard Stations, Inc., San Francisco, Calif. Service station. Des. 88,282; Nov. 15.
Aldrich, Ralph N., assignor to Standard Stations, Inc., San Francisco, Calif. Service station. Des. 88,283; Nov. 15.
Aldrich, Ralph N., assignor to Standard Stations, Inc., San Francisco, Calif. Service station. Des. 88,284; Nov. 15.
Alexander, John L. (See Honeycutt, C. E., and Alexander.)
Allen, Ernest E., San Francisco, Calif. Fountain mop. 1,888,061; Nov. 15.
Allen, George R., St. Louis, Mo., assignor to United Shoe Machinery Corporation, Paterson, N. J. Skiving machine. 1,887,613; Nov. 15.
Allen, Leonard, Burslem, and E. C. Deering, New Barnet, Barnet, England. Manufacture and production of transfers. 1,888,154; Nov. 15.
Allis-Chalmers Manufacturing Company. (See Hagmaier, W. G., and Shaw, assignors.)
Altenkirch, Edmund, Neuenhagen, near Berlin, assignor to Siemens-Schuckertwerke Aktiengesellschaft, Berlin-Siemensstadt, Germany. Absorption machine. 1,887,909; Nov. 15.
Altenkirch, Edmund, Neuenhagen, near Berlin, assignor to Siemens-Schuckertwerke Aktiengesellschaft, Berlin-Siemensstadt, Germany. Absorption refrigerating machine. 1,887,957; Nov. 15.
Alterson, Louis, New York, N. Y. Buckle. 1,887,614; Nov. 15.
Altvater, Arthur W., St. Louis County, Mo. Ornamenting die. 1,888,024; Nov. 15.
Aluminum Company of America. (See Collins, John W., assignor.)
American Aquaplane Co., The. (See Batt, Jacob G., assignor.)
American Bosch Magneto Corporation. (See Schwarzman, Wolfgang E., assignor.)
American Brass Company, The. (See Coe, James B., assignor.)
American Cable Company. (See Frank, Peter, assignor.)
American Cotton Picker Corporation. (See Willett, W. R., and Brown, assignors.)
American Flyer Mfg. Co. (See Boisselier, Earl D., assignor.)
American Glanzstoff Corporation. (See Elsner, H., and Carter, assignors.)
American Laundry Machinery Company, The. (See Reese, L. V., and Johnson, assignors.)
American Merri-Lei Corporation. (See Hoeflich, Victor T., assignor.)
American Safety Device Co. (See Geer, Hobart S., assignor.)
American Sales Book Company. (See Bottle, Edward K., assignor.)
American Telephone and Telegraph Company. (See Bollinger, Howard M., assignor.)
American Telephone and Telegraph Company. (See Nyquist, Harry, assignor.)
Amiesite Asphalt Company of America. (See Sadtler, Samuel S., assignor.)
Anderson, Ward P. (See Shiffler, W. H., and Anderson.)
Angeli, Guglielmo, Rome, Italy. Luminous sign. 1,887,973; Nov. 15.
Antoine, Aloise, Brooklyn, N. Y. Machine for printing labels. 1,887,910; Nov. 15.
Apple, Vincent G., Dayton, Ohio, assignor to Bendix Brake Company, South Bend, Ind. Combined starting and reversing switch. 1,888,062; Nov. 15.
Apple, Vincent G., Dayton, Ohio, assignor to Bendix Brake Company, South Bend, Ind. Vehicle control mechanism. 1,888,063; Nov. 15.
Applied Sugar Laboratories, Incorporated. (See Jordan, Stroud, assignor.)
Archer, Merton T., Pittsburgh, Pa. Casing head. 1,887,865; Nov. 15.
Armstrong, Charles B., Cleveland, Ohio. Extinguisher for cigarettes and the like. 1,888,105; Nov. 15.
Aronson, Louis V., assignor to Art Metal Works, Inc., Newark, N. J. Combined safety razor and sharpening device. 1,887,911; Nov. 15.
Arrow-Hart & Hegeman Electric Company, The. (See Bentley, Robert H., assignor.)
Art Metal Works, Inc. (See Aronson, Louis V., assignor.)
Associated Electric Laboratories, Inc. (See Wicks, John, assignor.)
Atlas Bolt & Screw Company. (See Schellentrager, Eugene W., assignor.)
Atwood, Winfield A., Yeadon, Pa., assignor to General Electric Company. Electric switch. 1,887,535; Nov. 15.
Auker, Hubert H., Ashtabula, and C. W. Stevens, Jefferson, assignors of one-third to H. A. Gleason, Conneaut, Ohio. Radiator and engine jacket clean-out device. 1,887,985; Nov. 15.
Automatic Products Company. (See Taylor, Frank C., assignor.)
Automotive Accessories Company. (See Parr, Harry L., assignor.)
Automotive Maintenance Machinery Company. (See Strand, H., and Jackson, assignors.)
Avery, William L., assignor to The India Rubber Gutta Percha and Telegraph Works Company Limited, London, England. Producing fluid pressure. 1,887,880; Nov. 15.
Babb, Polk C. (See Wingo, W. W., Smedley, and Babb.)
Bakelite Corporation. (See Byck, Lawrence, assignor.)
Bakelite Corporation. (See Nash, Clarence A., assignor.)
Baker, Charles W. (See Peebles, F. W. L., and Baker.)
Baldwin, Elmer E., Chicago, Ill. Scale. 1,887,986; Nov. 15.
Ballew, Elmer L., Chicago, Ill. Racing apparatus. 1,888,106; Nov. 15.
Baltsley, Louis E., Glen Ridge, N. J. Cap wrench. 1,887,615; Nov. 15.
Barjquand, Georges, Paris, France. Carburetor. 1,887,795; Nov. 15.
Barks, Frank S., St. Louis, Mo. Lubricator. 1,888,064; Nov. 15.
Barrow, Charles J., Albany, N. Y. Cutting glass. 1,887,974; Nov. 15.
Bartell, Ernest J., Canastota, assignor to General Cable Corporation, New York, N. Y. Capstan. 1,888,193; Nov. 15.
Bassick Company, The. (See Herold, Walter F., assignor.)
Bataille, Gerald S. (See McCord, D. C., and Bataille.)
Bates, Albert H., Shaker Heights, and R. H. McBean, Berea, Ohio, assignors to Motor Terminals Company, Wilmington, Del. Controller for locks of demountable containers. 1,887,707; Nov. 15.
Batt, Jacob G., New York, N. Y., assignor to The American Aquaplane Co., Melrose, Conn. Water craft. 1,888,107; Nov. 15.
Baumann, Karl, Barnfield, Urmston, and J. E. Jolley, Stretford, Manchester, England, assignors to Westinghouse Electric and Manufacturing Company. Fluid pressure governing mechanism. 1,887,586; Nov. 15.
Bead Chain Manufacturing Company, The. (See Gagnon, William J., assignor.)
Beardsley, Alfred S., Montevideo, Uruguay. Padlock. 1,888,108; Nov. 15.
Beckerman, Florence, Atlantic City, N. J. High-chair tray attachment. 1,887,987; Nov. 15.
Begle, Ned G. Greenwich, Conn., assignor to Berat-Forster-Dixfield Company, Dixfield, Me. Dispensing container for paper rolls. 1,887,912; Nov. 15.
Belknap, Samuel L., Los Angeles, Calif. Double door floor safe. 1,887,866; Nov. 15.
Bell, Harry D., New York, N. Y. Tooth brush. 1,887,918; Nov. 15.
Bell & Howell Company, The. (See Stechbart, Bruno, assignor.)

Bell, Thomas P., Yonkers, N. Y., assignor to Thermophor Mfg. Company, Inc. Thermophoric mixture. 1,887,618; Nov. 15.
Benbow, James D., and J. B. Green, assignors to Western Wheeled Scraper Company, Aurora, Ill. Dump wagon. 1,887,914; Nov. 15.
Bendix Brake Company. (See Apple, Vincent G., assignor.)
Bendix Brake Company. (See Rosner, Adolph, assignor.)
Benner, Harry P. (See Egloff, G., and Benner.)
Bennett, George W., Cincinnati, Ohio. Composition and process for rubber blanket printing. 1,888,109; Nov. 15.
Bennis, Alfred W., Bolton, England. Furnace grate. 1,888,110; Nov. 15.
Benoit, Leo H., Revere, Mass., assignor to General Electric Company. Welding and cutting machine. 1,887,670; Nov. 15.
Bent, Leavitt N., Holly Oak, assignor to Hercules Powder Company, Wilmington, Del. Extracting resinous material from plant tissue. 1,888,025; Nov. 15.
Bentley, Robert H., assignor to The Arrow-Hart & Hegeman Electric Company, Hartford, Conn. Radio toggle switch. 1,887,578; Nov. 15.
Berg, Ditlev, Hellerup, near Copenhagen, Denmark. Non-dazzling headlight for automobiles and the like. 1,887,574; Nov. 15.
Berge, Joseph, Montclair, N. J. Fastener. 1,887,616; Nov. 15.
Berlin, David W., Rasunda, Sweden. Peat fuels and the like. 1,887,671; Nov. 15.
Bernhard, Heinrich. (See Straub, F., Schneider, and Bernhard.)
Berry, Frank C., Downey, Calif. Hay press. 1,887,537; Nov. 15.
Berst-Forester-Dixfield Company. (See Begle, Ned G., assignor.)
Berthold, Erich. (See Kunz, M. A., Kraenslein, Koeberle, Corell, Berthold, and Vollmann.)
Bessom, Earl A., Marblehead, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Heel-seat forming machine for off-the-last work. 1,887,617; Nov. 15.
Betcher, Anna A. (See Betcher, Chester E., assignor.)
Betcher, Chester E., assignor to A. A. Betcher, Minneapolis, Minn. Charging device for furnaces. 1,887,975; Nov. 15.
Bettman, Henry L., Portland, Oreg. Nonglaring reversible mirror. 1,887,706; Nov. 15.
Beverage, Harold H., Riverhead, N. Y., assignor to Radio Corporation of America. Differential volume control for diversity reception. 1,888,065; Nov. 15.
Biedinger, John R., Cincinnati, assignor to Carthage Mills, Incorporated, Carthage, Ohio. Rack. 1,888,155; Nov. 15.
Bielicke, Willy F., Berlin-Halensee, Germany. Objective lens system. 1,888,156; Nov. 15.
Bigelow Sanford Carpet Co. (See Vetter, Ignatius J., assignor.)
Bills, Claud H., and G. G. Griswold, Los Angeles, Calif. Distributor head. 1,887,747; Nov. 15.
Blake-Smith, L. (See Meinzer, Gotthold H., assignor.)
Blattner, Carl F., Los Angeles, Calif. Dispensing attachment for bottles, jugs, or the like. 1,887,881; Nov. 15.
Blenker, John, Neenah, Wis. Combination service tray and plate. 88,285; Nov. 15.
Block, Joseph, Brooklyn, N. Y. Electric illuminating device. 1,887,748; Nov. 15.
Boere, Kornelis, Capelle, Netherlands. Clod cutter. 1,887,796; Nov. 15.
Bohlin, Olof G., assignor to Helsingborgs Gummifabriks Aktiebolag, Helsingborg, Sweden. Regeneration of vulcanized rubber. 1,887,898; Nov. 15.
Bohn, Karl, Maspeth, N. Y. Draft hood. 1,887,575; Nov. 15.
Boisselier, Earl D., assignor to American Flyer Mfg. Co., Chicago, Ill. Bell ringing device for toy locomotives. 1,887,988; Nov. 15.
Bollinger, Howard M., Washington, D. C., assignor to American Telephone and Telegraph Company. Telephone pay station apparatus. 1,887,576; Nov. 15.
Bond Electric Corporation. (See Stimson, Frank G., assignor.)
Bond, Harlan A., Metuchen, N. J., assignor, by mesne assignments, to The Roessler & Hasslacher Chemical Company, New York, N. Y. Temperature control of exothermic reactions. 1,888,066; Nov. 15.
Bond, William L., Schenectady, N. Y., assignor to General Electric Company. Coupling. 1,887,538; Nov. 15.
Bonney, Victor B., and P. A. Clifford, Washington, D. C., dedicated to the Government and the people of the United States of America. Apparatus for testing and measuring the hardness and toughness of fruits and vegetables. 1,887,850; Nov. 15.
Bontempi, Giuseppe. (See Guidetti, F., and Bontempi.)
Borchers, Alwin, assignor to The Brown-Brockmeyer Company, Dayton, Ohio. Short circuiter for electric motors. 1,887,672; Nov. 15.
Borcholt, Albert, and O. Meyer, Bergedorf, near Hamburg, Germany, assignors to Firm: Oscar Gossler, Hamburg, Germany. Arrangement for teasing and layering spun glass. 1,887,673; Nov. 15.
Borden, Stephen W., Summit, N. J. Earth ohmmeter. 1,887,915; Nov. 15.
Borland, Joseph H. T., Kilmarnock, Scotland. Emergency sluice gate. 1,887,674; Nov. 15.
Borzin, Milon H., Chicago, Ill. Permutation lock. 1,887,797; Nov. 15.
Bottle, Edward K., Elmira, N. Y., assignor to American Sales Book Company, Limited, Toronto, Canada. Manifolding device. 1,887,619; Nov. 15.
Bowers, Frederick U., San Francisco, and A. T. Lockwood, Fresno, Calif. Rebasing artificial dentures. 1,887,749; Nov. 15.
Bowlby, Sherry V., Wichita, Kans. Sander. 1,887,620; Nov. 15.
Bradley, Linn, Montclair, N. J., and E. P. McKeefe, Plattsburg, assignors to Bradley-McKeefe Corporation, New York, N. Y. Production of pulp. 1,887,899; Nov. 15.
Bradley-McKeefe Corporation. (See Bradley, L., and McKeefe, assignors.)
Bragg, Caleb S., Palm Beach, Fla., and V. W. Kliesrath, Port Washington, assignors to Bragg-Kliesrath Corporation, Long Island City, N. Y. Brake system for automotive vehicles. 1,887,750; Nov. 15.
Bragg-Kliesrath Corporation. (See Bragg, C. S., and Kliesrath, assignors.)
Brand, Andrew J., New Hyde Park, N. Y. Game apparatus. 1,887,900; Nov. 15.
Bredsvold, Paul A., assignor of one-half to W. P. Hoy, Chicago, Ill. Cabinet filing drawer. 1,887,882; Nov. 15.
Breitenstein, Albert F., assignor to The Geometric Tool Company, New Haven, Conn. Self-opening die-head. 1,888,067; Nov. 15.
Brewster, William H., jr., Verona, N. J. Toy pistol. 1,887,916; Nov. 15.
Bridger, Theo E., Auckland, New Zealand. Method of and apparatus for creating metallic spray. 1,887,577; Nov. 15.
Brill, J. G., Company, The. (See Latshaw, Elmer, assignor.)
Broadmeyer, Albert, assignor to W. O. Hickok Manufacturing Company, Harrisburg, Pa. Valve mechanism for suction feeders. 1,888,194; Nov. 15.
Brockel, Ernst, assignor to Maschinenfabrik Augsburg-Nurnberg A. G., Augsburg, Germany. Stereotype plate casting machine. 1,887,917; Nov. 15.
Brockmeyer, Edgar W. (See Brown, S. A., and Brockmeyer.)
Brouse, William H. D., assignor to Service Station Equipment Co. Limited, Toronto, Ontario, Canada. Air eliminator for liquid pump equipment. 1,887,918; Nov. 15.
Browall, Bert H. (See Djurson, A. E. K., and Browall.)
Brown-Brockmeyer Company, The. (See Borchers, Alwin, assignor.)
Brown-Brockmeyer Company, The. (See Brown, S. A., and Brockmeyer, assignors.)
Brown Company. (See Sherman, John C., assignor.)
Brown, Gouvernour G. (See Hickman, George F., assignor.)
Brown, Harold W., Schenectady, N. Y., assignor to General Electric Company. Electrical discharge device. 1,888,068; Nov. 15.
Brown, Harvey E. (See Willett, W. R., and Brown.)
Brown, James B., Detroit, Mich. Filing device. 1,887,539; Nov. 15.
Brown, Lee R., East Orange, assignor to Monroe Calculating Machine Company, Orange, N. J. Calculating machine. 1,888,157; Nov. 15.
Brown, Oscie E., Delmar, Iowa. Mail-box and parcel bracket. 1,888,111; Nov. 15.
Brown, Robert S., assignor, by mesne assignments, to The New Britain-Gridley Machine Company, New Britain, Conn. Chucking mechanism. 1,887,621; Nov. 15.
Brown, Samuel B., Los Angeles, Calif. Auxiliary power device. 1,887,832; Nov. 15.
Brown and Sharpe Manufacturing Company. (See Tompkins, F. N., and Miner, assignor.)
Brown, Steffen A., and E. W. Brockmeyer, assignors to The Brown-Brockmeyer Company, Dayton, Ohio. Variable speed motor. 1,887,675; Nov. 15.
Browne, Lyle W., assignor to The Fisher Governor Company, Marshalltown, Iowa. Flexible valve stem joint. 1,888,158; Nov. 15.
Brownsdon, Henry W., Birmingham, W. R. Nimmo, Bushey Heath, and G. P. Pollitt, London, England, assignors to Imperial Chemical Industries Limited. Shot gun cartridge. 1,887,989; Nov. 15.
Brownsdon, Henry W., Moseley, Birmingham, and W. R. Nimmo, Sparrows Herne Hall, Bushey Heath, England, assignors to Imperial Chemical Industries Ltd. Shot gun cartridges. 1,887,990; Nov. 15.
Bruer, Wilhelm. (See Kleinow, W., Morgenroth, Reinhardt, and Bruer.)
Brün, Willi, Krefeld, Germany, assignor to Remington Arms Company, Inc. Priming mixture. 1,887,919; Nov. 15.
Bryant, George R., Lawrenceville, Ill., assignor to Henry Vogt Machine Company, Louisville, Ky. Rotary filter press. 1,887,798; Nov. 15.
Brylka, Joseph S., Du Bois, Pa. Aeroplane construction. 1,887,676; Nov. 15.
Buchet, Conrad R., Long Beach, assignor to Adjusto Equipment Company, Los Angeles, Calif. Sealing means for submersible motors. 1,887,540; Nov. 15.
Buchina, Joseph. (See Koch, L. B., and Buchina.)
Buck, Fred, assignor to Lufkin Rule Co., Saginaw, Mich. Feeler gauge. 1,888,069; Nov. 15.

Buechner, Guenther, Scotia, N. Y., assignor to General Electric Company. Gas tight seal. 1,888,070; Nov. 15.
Buma, Yukio, assignor to Morimura Bros. Inc., New York, N. Y. Plate or similar article. Des. 88,286; Nov. 15.
Bumpus, Glyde W. (Dr. and Mrs.). (See Graham, Duncan E., assignor.)
Burghoff, Henry L. (See Crampton, D. K., and Burghoff.)
Burns, James E., and W. H. Woodford, Bridgeport, Conn., assignors to Remington Arms Company, Inc. Refining apparatus and process. 1,887,920; Nov. 15.
Bush, Rankin J., Jeannette, assignor to Westinghouse Air Brake Company, Wilmerding, Pa. Fluid pressure regulating valve device. 1,887,578; Nov. 15.
Byck, Lawrence, Tottenville, assignor to Bakelite Corporation, New York, N. Y. Phenolic condensation products and making same. 1,887,833; Nov. 15.
Byford, Horace. (See Martin, Robert P., assignor.)
Cain, John, Chicago, Ill. Camera. 1,887,991; Nov. 15.
Cameron, Alexander S., assignor to W. J. Cameron, Chicago, Ill. Instrument and method for examining, testing and exercising the eyes. 1,887,708; Nov. 15.
Cameron, William J. (See Cameron, Alexander S., assignor.)
Campbell, Alfred G., Sherbrooke, Quebec, Canada. Razor. 1,888,159; Nov. 15.
Campbell, Edward H., Eccles, W. Va. Sand drier. 1,887,799; Nov. 15.
Carborundum Company, The. (See Johnson, Boyd M., assignor.)
Carlson, Theodore R., and V. A. Gronberg, assignors to Postindex Company, Inc., Jamestown, N. Y. Filing leaf and label-holder therefor. 1,887,800; Nov. 15.
Carlson, Wendell L., and D. Wilson, Schenectady, N. Y., assignors to General Electric Company. Electrical signal amplifying apparatus. 1,887,541; Nov. 15.
Carossi, Augusto, Rome, Italy. Elastic vehicle suspension with shock compensation. 1,887,579; Nov. 15.
Carr, Janet, Los Angeles, Calif. Dress. 1,887,867; Nov. 15.
Carr, Uhel U., assignor of one-half to Major R. McKinley, Monongahela, Pa. Pipe line stopper. 1,887,542; Nov. 15.
Carter, H. W., & Sons. (See Jackson, Harry B., assignor.)
Carter, Ralph H. (See Elssner, R., and Carter.)
Carter, William J., jr., Akron, Ohio. Adjustable ladder. 1,887,495; Nov. 15.
Carthage Mills, Incorporated. (See Biedinger, John R., assignor.)
Case, James W., Schenectady, N. Y., assignor to General Electric Company. Seal for electric discharge devices. 1,888,071; Nov. 15.
Casler, Herman, Canastota, N. Y. Brake testing device. 1,887,992; Nov. 15.
Cederstrom, Harold A., assignor, by mesne assignments, to The Rosco Manufacturing Company, Minneapolis, Minn. Spray bar for road spraying vehicles. 1,888,072; Nov. 15.
Chabot, Armand, Anderlues, Belgium. Apparatus for carbonizing solid fuel. 1,887,834; Nov. 15.
Chapin, Charles H., Chicago, Ill. Hydraulic shock absorber. 1,887,709; Nov. 15.
Chapman, Everett, assignor to Lukenweld, Inc., Coatesville, Pa. Welded blank for machine elements and the like and making the same. 1,888,027; Nov. 15.
Chapman, Ralph E., Brooklyn, N. Y. Balanced joint. 1,888,026; Nov. 15.
Chase Companies, The. (See Crampton, D. K., and Burghoff, assignors.)
Chase, George C., South Orange, assignor to Monroe Calculating Machine Company, Orange, N. J. Automatic control for calculating machines. 1,888,161; Nov. 15.
Chemical Works formerly Sandoz. (See Stoll, A., and Hofmann, assignors.)
Cheney, Thorndike F., Danvers, Mass., assignor, by mesne assignments, to Old Colony Trust Company. Rectifier. 1,887,868; Nov. 15.
Chicago Railway Equipment Company. (See Nelson, Roy A., assignor.)
Chicago Telephone Supply Company. (See Havlish, Charles, assignor.)
Chicago Telephone Supply Company. (See Heintz, Ralph M., assignor.)
Chilton, Roland, assignor, by mesne assignments, to Aeromarine Plane & Motor Company, Inc., Keyport, N. J. Variable pitch propeller. 1,887,543; Nov. 15.
Christie, James. (See Howard, A. L., and Christie.)
Churcher, William B., Cleveland, Ohio, assignor to The White Motor Company. Electrical switch. 1,887,883; Nov. 15.
Churchward, Alexander, New York, N. Y., assignor to Wilson Welder & Metals Company, Inc., Hoboken, N. J. Welding apparatus. 1,887,496; Nov. 15.
Clampitt, Charles F., North Hollywood, Calif. Bird cage. 1,887,869; Nov. 15.
Clifford, Paul A. (See Bonney, V. B., and Clifford.)
Clinical Development Laboratories, Inc. (See Nichols, Horace E., assignor.)
Cluss, Bernhard, Nutley, N. J. Bean cutting device. 1,887,921; Nov. 15.
Codd, Ambrose, Spokane, Wash. Wheel. 1,887,544; Nov. 15.
Coe, James R., assignor to The American Brass Company, Waterbury, Conn. Rolling mill. 1,887,870; Nov. 15.
Cohn, Alfred, Charlottenburg, and W. Herden, Hermsdorf, Germany, assignor to General Electric Company. Electrical switching apparatus. 1,887,545; Nov. 15.
Cole, Paul F., Springfield, Mo. X-ray apparatus. 1,887,801; Nov. 15.
Coleman, George E., Walsenburg, Colo. Gun sight. 1,888,112; Nov. 15.
Coles, Henry L. (See Lynn, H. H., and Coles.)
Collins, Jeremiah J., Orange, N. J., assignor to Raymond Concrete Pile Company, New York, N. Y. Protecting piles from erosion. 1,888,073; Nov. 15.
Collins, John W., Detroit, Mich., assignor to Aluminum Company of America, Pittsburgh, Pa. Mold. 1,887,497; Nov. 15.
Collins, Victor L. (See Dodson, Sidney V., assignor.)
Colt's Patent Fire Arms Manufacturing Co. (See Conner, B. F., and Schmalz, assignor.)
Columbia Phonograph Company. (See Forse, W. T., and Mitchell, assignors.)
Columbia Phonograph Company. (See Massey, Augustine, H., assignor.)
Colver, Charles C., Oak Park, assignor to Triangle Packaging Company, Chicago, Ill. Carton filling machine. 1,887,751; Nov. 15.
Combier & Co. Inc. (See Megros, Georges, assignor.)
Combier & Co. Inc. (See Merry, Elizabeth, assignor.)
Combier & Co. Inc. (See Wax, Evelyn, assignor.)
Combier & Co, Inc. (See Welts, Irene A., assignor.)
Commerce Guardian Trust & Savings Bank, The, trustee. (See Replogle, Daniel B., assignor.)
Commercial Furniture Company. (See Fankel, Isadore, assignor.)
Compagnie Internationale des Pieux Armes Frankignoul, Societe Anonyme. (See Frankignoul, Edgard, assignor.)
Connelly, A. L., Co. (See Humbel, Alexander, assignor.)
Conner, Benjamin F., Hartford, and W. F. Schmalz, Rockville, assignors to Colt's Patent Fire Arms Manufacturing Co., Hartford, Conn. Molding apparatus and method of molding for interiorly threaded articles. 1,887,993; Nov. 15.
Conner, Benjamin F., Hartford, and W. F. Schmalz, Rockville, assignors to Colt's Patent Fire Arms Manufacturing Co., Hartford, Conn. Tool for removing threaded articles from a mold. 1,887,994; Nov. 15.
Connolly, Henry, Company. (See Warner, William F., jr., assignor.)
Connors, William J., San Jose, Calif., assignor to Sani-Toil Trust Association, Washoe County, Nevada. Toilet ventilator. 1,887,498; Nov. 15.
Consolidated Gas Company of New York, The. (See Walker, Wood S., assignor.)
Constantin, Louis, Paris, and P. Fortier-Beaulieu, Roanne, France. Wind motor. 1,887,802; Nov. 15.
Continental Can Company. (See Kronquest, Alfred L., assignor.)
Conzetti, Achille, assignor to the Firm: J. R. Geigy S. A., Basel, Switzerland. Manufacture of strongly basic azodyestuffs. 1,887,995; Nov. 15.
Conzetti, Achille, assignor to J. R. Geigy S. A., Basel, Switzerland. Manufacture of strongly basic azo-dyestuffs. 1,887,996; Nov. 15.
Cooper-Bessemer Corporation. (See Gehres, H. A., and Shepherd, assignors.)
Copeman Laboratories Company. (See Copeman, Lloyd G., assignor.)
Copeman, Lloyd G., assignor to Copeman Laboratories Company, Flint, Mich. Method and apparatus for refrigeration. 1,887,580; Nov. 15.
Corell, Martin. (See Kunz, M. A., Kraenslein, Koeberle, Corell, Berthold, and Vollmann.)
Correll, George H., Brooklyn, and D. R. Schnaars, New Hyde Park, N. Y. Calendar. 1,887,499; Nov. 15.
Coty, Inc. (See Tourtois, Fernand R., assignor.)
Cowan, Henry W., Toronto, Ontario, Canada. Apparatus and method of processing and drying lumber and similar material. 1,887,581; Nov. 15.
Cowell, Robert F., Teaneck, N. J., assignor to International Motor Company, New York, N. Y. Metallic trussed aerial ladder. 1,887,546; Nov. 15.
Craig, David, Los Angeles, Calif. Full vision visor. 1,887,871; Nov. 15.
Crain, Darrell C., Washington, D. C. Badge. Des. 88,335; Nov. 15.
Crampton, Donald K., Marion, and H. L. Burghoff, Yalesville, assignors to The Chase Companies, Incorporated, Waterbury, Conn. Welding-rod, etc. 1,887,500; Nov. 15.
Crane Co. (See Hauser, George D., assignor.)
Craven, George P., Franklinville, N. C. Foldable head slat. 1,888,160; Nov. 15.
Crosby, Richard M., Tacoma, Wash. Spark arrester. 1,887,922; Nov. 15.
Cross, Roland C., Bath, England. Valve for internal combustion engines and pumps. 1,887,997; Nov. 15.
Crum, Maurice L., Chicago, Ill. Key fastener. 1,887,951; Nov. 15.
Cushman, Abe L., Concord, N. H. Motor drive unit. 1,887,547; Nov. 15.
Cutler-Hammer, Inc. (See Le Van, James D., assignor.)
Darsey, Van M. (See Tanner, R. R., and Darsey.)
Dartsap, Frederick, New Orleans, La. Hoist. 1,887,548; Nov. 15.

Davis, Ernest, assignor to The Prosperity Company, Inc., Syracuse, N. Y. Combined foot and power operated pressing machine. 1,887,953; Nov. 15.

Davis, Jesse H., Baltimore, Md., assignor to B. F. Sturtevant Company, Hyde Park, Boston, Mass. Air conditioning method and apparatus for passenger cars. 1,887,582; Nov. 15.

Davis, Joseph S. (See Pulkinghorn, William B., assignor.)

Davison, Goliat, St. Louis, Mo. Fur scarf hanger. 1,887,710; Nov. 15.

Deering, Ernest C. (See Allen, L., and Deering.)

De Laval Separator Company, The. (See Hulbert, John L., assignor.)

Denslow, Henry C., Brooklyn, N. Y. Moving curtain machine for educational and advertising purposes. 1,887,803; Nov. 15.

Detroit Trust Company. (See Fehr, Roy B., assignor.)

DeVilbiss Company, The. (See Schmitt, Joy B., assignor.)

DeVilbiss Company, The. (See Tracy, Robert W., assignor.)

Dictaphone Corporation. (See Worden, Robert E., assignor.)

Di Frasso, Carlo D. (See Ranieri, Luigi, assignor.)

Djurson, Axel R. K., and B. H. Browall, assignors to Svenska Aktiebolaget Bromsregulator, Malmo, Sweden. Automatic slack adjuster for brakes. 1,887,586; Nov. 15.

Dodgem Corporation. (See Markey, F. L., and Stanton, assignors.)

Dodson, Sidney V., assignor of one-half to Victor L. Collins, Friendship, N. Y. Pipe stacking appliance for oil wells. 1,887,901; Nov. 15.

Dominion Truck Equipment Co. Limited. (See Gurton, W. S., Flint, and Nyberg, assignors.)

Dongovito, Joseph M., Cedar River, Mich. Measuring rule. 1,888,113; Nov. 15.

Dow Chemical Company, The. (See Grebe, John J., assignor.)

Dow Chemical Company, The. (See Grether, Ernest F., assignor.)

Dow Chemical Company, The. (See Heath, Sheldon B., assignor.)

Dow Chemical Company, The. (See Martin, L. F., and MacQueen, assignors.)

Dow Chemical Company, The. (See Nutting, H. S., and Rowley, assignors.)

Dow Chemical Company, The. (See Smith, William W., assignor.)

Down, Sidney G., Edgewood, assignor to The Westinghouse Air Brake Company, Wilmerding, Pa. Airplane brake. 1,887,583; Nov. 15.

Down, Sidney G., Edgewood, assignor to The Westinghouse Air Brake Company, Wilmerding, Pa. Brake cylinder device. 1,887,584; Nov. 15.

Down, Sidney G., Edgewood, Pa., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa. Airplane brake. 1,887,585; Nov. 15.

Driver, Charles H., Racine, Wis. Surfacing roll. 1,887,623; Nov. 15.

Dryice Corporation of America. (See Martin, James W., jr., assignor.)

Dryice Equipment Corporation. (See Killeffer, David H., assignor.)

Dryice Equipment Corporation. (See Martin, James W., jr., assignor.)

Drypolcher, William. (See Obstfeld, L., and Drypolcher.)

Dubbs, Carbon P., Wilmette, Ill., assignor to Universal Oil Products Company, Chicago, Ill. Hydrocarbon oil conversion. 1,888,028; Nov. 15.

Duncan, T. H. P. (See Grant, Robert U., assignor.)

Dunham, LeRoy S., East Orange, and A. F. Robertson, Belleville, assignors to Splitdorf Electrical Company, Newark, N. J. Magneto electric generator. 1,887,624; Nov. 15.

Dunkin, Winfield R., Huntington, Ind. Ironing board mounting. 1,888,114; Nov. 15.

Duplate Corporation. (See Fix, E. L., and Macht, assignors.)

Duplate Corporation. (See Sherts, James H., assignor.)

Durchholz, Artur, Berlin-Spandau, assignor to Siemens-Rauunion G. m. b. H., Kommanditgesellschaft, Siemensstadt, near Berlin, Germany. Erecting building structures. 1,887,835; Nov. 15.

Du Vernet, Frederick H., Hamilton, Ontario, Canada. Pump for refrigerating systems. 1,887,752; Nov. 15.

Dyer, Horace T., Greenwich, Conn. Gas carburetor. 1,888,074; Nov. 15.

Easy Washing Machine Corporation. (See Nelson, Jabez C., assignor.)

Easy Washing Machine Corporation. (See Scheele, Charles C., assignor.)

Eberlein, George H., Concord, assignor to Stowe & Woodward Company, Newton Upper Falls, Mass. Roller for line slug machines. 1,887,625; Nov. 15.

Eby, Eugene D., Pittsfield, Mass., assignor to General Electric Company. Terminal for oil filled cables and evacuating the same. 1,888,075; Nov. 15.

Eckert, John A. (See Leety, H. E., Eckert, and Page.)

Egloff, Gustav, and H. P. Benner, assignors to Universal Oil Products Company Chicago, Ill. Treating petroleum oil. 1,888,029; Nov. 15.

Ekeberg, Emil, Konga, Sweden. Continuous bleaching of fibrous materials. 1,887,587; Nov. 15.

Eklund, Herbert R., Rockford, Ill. Overhead door. 1,888,162; Nov. 15.

Elasto Ribbon Co. (See Lyons, Grace J., assignor.)

Electric Progress Company. (See Sporn, P., and Freitag, assignors.)

Electro Metallurgical Company. (See Kinzel, Augustus B., assignor.)

Electrolux Servel Corporation. (See Lenning, Alvar, assignor.)

Elevator Supplies Company. (See Miles, William C., assignor.)

Elkins, Arthur B., assignor of one-half to James M. Newman, Houston, Tex. Telephone system. 1,887,588; Nov. 15.

Elmiger, Hans, St. Louis, Mo. Manufacturing corrugated plastic board. 1,887,923; Nov. 15.

Elssner, Richard, and R. H. Carter, Johnson City, Tenn., assignors to American Glasstoff Corporation, New York, N. Y. Hermetic container. 1,887,626; Nov. 15.

Ely, William N., jr., Gwynedd Valley, Pa. Fence guard. 1,888,030; Nov. 15.

Enrich, Henry A., New York, N. Y. Dress hanger. 1,887,501; Nov. 15.

Epstein, Barnett, New York, N. Y. Receptacle. 1,887,502; Nov. 15.

Ericson, Franklin R. (See Grube, L. E., Warner, and Ericson.)

Ernst, Victor C., Lakewood, assignor to Full-Tone Process Company, Cleveland, Ohio. Lensic screen. 1,887,872; Nov. 15.

Ervin, William A., Oakland, Calif. Hinge. 1,887,549; Nov. 15.

Evans, Albert E., Pittsburgh, Pa., assignor to Pittsburgh Plate Glass Company. Car coupling device. 1,887,753; Nov. 15.

Evans, Frank, California, Pa. Automatic weather-strip. 1,888,115; Nov. 15.

Evans, Martin E., Pittsburgh, Pa. Wire rope and method of manufacture. 1,888,076; Nov. 15.

Evans, Rollo E., Emporia, Kans. Jack track. 1,887,924; Nov. 15.

Exact Weight Scale Company, The. (See Flanagan, Thomas B., assignor.)

Eyston, George E. T., assignor to Powerplus (1927) Limited, London, England. Rotary pump machine. 1,887,884; Nov. 15.

Faber Engineering Company. (See Faber, Leon, assignor.)

Faber, Guy S., assignor, by mesne assignments, to Jas. P. Marsh Corporation, Chicago, Ill. Differential indicating gauge. 1,887,804; Nov. 15.

Faber, Leon, assignor to Faber Engineering Company, Philadelphia, Pa. Soap-sudsing apparatus. 1,887,836; Nov. 15.

Fageol, William B., assignor to Twin Coach Company, Kent, Ohio. Internal combustion engine. 1,887,998; Nov. 15.

Farman, Henri et Maurice. (See Waseige, Charles B., assignor.)

Farmer, Clyde C., Pittsburgh, assignor to The Westinghouse Air Brake Company, Wilmerding, Pa. Air purifying apparatus. 1,887,589; Nov. 15.

Farmer, Clyde C., Pittsburgh, assignor to The Westinghouse Air Brake Company, Wilmerding, Pa. Fluid pressure brake. 1,887,590; Nov. 15.

Farrow, Charles E., et al. (See Rhoades, Dewey V., assignor.)

Farrow, Harlan W., et al. (See Rhoades, Dewey V., assignor.)

Fehr, Roy B., assignor, by mesne assignments, to Detroit Trust Company, Detroit, Mich. Lap. 1,888,195; Nov. 15.

Fehr, Roy B., assignor, by mesne assignments, to Detroit Trust Company, Detroit, Mich. Lap. 1,888,196; Nov. 15.

Field, Fletcher H., assignor to Rhodes Metallic Packing Company, Detroit, Mich. Forming packing. 1,888,116; Nov. 15.

Filbin, Patrick H., Liberal, Kans. Harvester. 1,887,805; Nov. 15.

Finger, Salo C., Far Rockaway, N. Y. Fabricating structures of metal and nonmetallic materials. 1,887,627; Nov. 15.

Fink, Harry L., New York, N. Y. Terrazzo strip. 1,888,031; Nov. 15.

Fischer, Johann G., Hamburg, Germany. Emptying barrels. 1,888,032; Nov. 15.

Fisher Governor Company, The. (See Browne, Lyle W., assignor.)

Fitch, Benjamin F., Greenwich, Conn., assignor to Motor Terminals Company, Wilmington, Del. Controller for locks of demountable containers. 1,887,711; Nov. 15.

Fix, Earl L., and M. L. Macht, New Kensington, Pa., assignors to Duplate Corporation. Making composite glass. 1,887,550; Nov. 15.

Flanagan, Thomas B., assignor to The Exact Weight Scale Company, Columbus, Ohio. Weighing scale. Des. 88,287; Nov. 15.

Fleischer, Charles. (See Rabkin, W., and Fleischer.)

Fleischer, Max, Brooklyn, N. Y. Tempo indicating motion picture film. 1,887,925; Nov. 15.

Flintkote Corporation, The. (See Levin, Harold L., assignor.)

Folman, Paris R., Rahway, N. J., assignor to National Pneumatic Company, New York, N. Y. Switch and operating mechanism. 1,887,628; Nov. 15.

Forse, Harry D., Anderson, Ind. Method of and apparatus for pressing. 1,888,163; Nov. 15.

Forse, William T., and F. A. Mitchell, London, England, assignors to Columbia Phonograph Company, Inc., Bridgeport, Conn. Sound reproducing apparatus. 1,887,629; Nov. 15.

Förster, Bernhard, Pforzheim, Germany. Device for the production and insertion of the wire spirals into the ring sleeves of snap rings. 1,887,885; Nov. 15.

Fortier-Beaulieu, Paul. (See Constantin, Louis, assignor.)

Fow, Ambrose F., assignor to Kitson Company, Philadelphia, Pa. Brace or tie-in bar for gas meters. 1,887,999; Nov. 15.

Fox, Martin, assignor to The Seng Company, Chicago, Ill. Leg brace for folding tables. 1,888,117; Nov. 15.

Fox, Samuel, New York, N. Y. Combination garment. 1,887,926; Nov. 15.

Fox, William J., assignor to J. R. Kendrick Co., Inc., Philadelphia, Pa. Elastic fabric. 1,887,927; Nov. 15.

Frank Associates, Inc. (See Frank, Morris J., assignor.)

Frank, Morris J., assignor to Frank Associates, Inc., New York, N. Y. Ornamental yarn and making the same. 1,888,033; Nov. 15.

Frank, Peter, Wilkes-Barre, Pa., assignor to American Cable Company, Inc. Closing die for rope making machine. 1,887,837; Nov. 15.

Frankel, Isadore, assignor to Commercial Furniture Company, Chicago, Ill. Typewriter desk attachment. 1,888,034; Nov. 15.

Frankignoul, Edgard, Brussels, assignor to Compagnie Internationale des Pieux Armes Frankignoul, Societe Anonyme, Liege, Belgium. Method and device for the production of piles of concrete and the like. 1,887,620; Nov. 15.

Fredenhagen, Karl, Greifswald, Germany. Production of fluorine. 1,888,118; Nov. 15.

Freedman, Benjamin H., assignor to Hudson Holding Corporation, New York, N. Y. Match package. 1,887,503; Nov. 15.

Freeman, Horace, Shawinigan Falls, Quebec, assignor to The Sulphide Research Corporation, Limited, Montreal, Canada. Smelting finely divided sulphide ores. 1,888,164; Nov. 15.

Freisels, Karl. (See Schoener, E., and Freisels.)

Freitag, Henry D. (See Sporn, P., and Freitag.)

Frigidaire Corporation. (See King, Jesse G., assignor.)

Frigidaire Corporation. (See Neal, Duane R., assignor.)

Frigidaire Corporation. (See Scherer, Charles W., assignor.)

Frost, Frederick W., Amityville, N. Y. Standpipe system. 1,887,631; Nov. 15.

Frost, Thomas H., Cambridge, Mass. Manufacture of fine edged blades. 1,887,504; Nov. 15.

Fugita, Frank, El Reno, Okla. Sign. 1,887,591; Nov. 15.

Fuller, Charles H., Mason, Mich. Mail-box support. 1,888,119; Nov. 15.

Full-Tone Process Company. (See Ernst, Victor C., assignor.)

Furlong, Roland A., assignor to The Yawman & Erbe Manufacturing Company, Rochester, N. Y. Visible index card. 1,887,632; Nov. 15.

Gagnon, William J., assignor to The Bead Chain Manufacturing Company, Bridgeport, Conn. Contact of the pin type. 1,888,165; Nov. 15.

Gall, Stanley, Cincinnati, Ohio. Sausage casing. 1,887,806; Nov. 15.

Gamble, John, Waukegan, Ill. Faucet and the like. 1,887,677; Nov. 15.

Garbutt, Frank A. (See Hatherell, George A., assignor.)

Gardiner, Paul C., Scotia, N. Y., assignor to General Electric Company. Transmitting system. 1,888,077; Nov. 15.

Gardner, Henry A., Washington, D. C. Resin composition suitable for the production of films. 1,887,678; Nov. 15.

Garelli, Adalberto, Milan, Italy. Starting device for internal combustion engines. 1,887,902; Nov. 15.

Gastrich, Gustav, assignor to Textile Machine Works, Wyomissing, Pa. Yarn carrier. 1,887,928; Nov. 15.

Geck Laboratories, Inc. (See Themak, Edward, assignor.)

Geer, Hobart S., Corona, assignor to American Safety Device Co., New York, N. Y. Hoisting device. 1,887,487; Nov. 15.

Gebres, Hewitt A., and H. F. Shepherd, assignors to Cooper-Bessemer Corporation, Mount Vernon, Ohio. Friction clutch. 1,887,635; Nov. 15.

Geiger, Josef, assignor to Maschinenfabrik Augsburg-Nurnberg A. G., Augsburg, Germany. Internal combustion locomotive. 1,887,633; Nov. 15.

Geiger, Josef, assignor to the Firm Maschinenfabrik Augsburg-Nuernberg, Aktiengesellschaft, Augsburg, Germany. Internal combustion locomotive. 1,887,634; Nov. 15.

Geigy, J. R., S. A. (See Consetti, Achille, assignor.)

Geigy, J. R., S. A. (See Kreboer, Adolf.)

Geipel, Stanley S., assignor to Metallo Gasket Company, New Brunswick, N. J. Gasket. 1,888,166; Nov. 15.

General Aniline Works Inc. (See Kuns, M. A., Kraemslein, Koeberle, Corell, Berthold and Vollmann, assignors.)

General Cable Corporation. (See Bartell, Ernest J., assignor.)

General Chemical Company. (See Joseph, Henry, assignor.)

General Electric Company. (See Atwood, Winfield A., assignor.)

General Electric Company. (See Benoit, Leo H., assigner.)

General Electric Company. (See Bond, William L., assignor.)

General Electric Company. (See Brown, Harold W., assignor.)

General Electric Company. (See Buechner, Gueather, assignor.)

General Electric Company. (See Carlson, W. L., and Wilson, assignors.)

General Electric Company. (See Case, James W., assignor.)

General Electric Company. (See Cohn, A., and Herden, assignors.)

General Electric Company. (See Eby, Eugene D., assignor.)

General Electric Company. (See Gardiner, Paul C., assignor.)

General Electric Company. (See Grube, L. E., Warner, and Ericson, assignors.)

General Electric Company. (See Marcellus, Fredrick S., assignor.)

General Electric Company. (See St. Palley, Zoltan O., assignor.)

General Electric Company. (See Standerwick, Reginald G., assignor.)

General Electric Company. (See Willard, Waldo W., assignor.)

Geoghegan, Edward A., assignor to Superateam Generator Company, New York, N. Y. Superheater for marine boilers. 1,887,754; Nov. 15.

Geometric Tool Company, The. (See Breitenstein, Albert F., assignor.)

Gerold, Catlin, Los Angeles, Calif. Housing for universal joints. 1,887,755; Nov. 15.

Gibson, Edward, jr., assignor of one-half to H. S. Mahaffy, Wilmington, Del. Ash receiver. 1,887,903; Nov. 15.

Gibson, George H., Upper Montclair, N. J. Variable speed transmission. 1,887,505; Nov. 15.

Ginsburg, Leo, Chicago, Ill. Hydrotherapeutic apparatus. 1,888,120; Nov. 15.

Gleason, H. A. (See Auker, H. H., and Stevens, assignors.)

Glenn, Irene, Port Washington, N. Y. Teething device. 1,888,167; Nov. 15.

Globe Automatic Sprinkler Company. (See Rowley, Arthur C., assignor.)

Goble, Bert G., Tulsa, Okla., assignor to W. A. Quigley. Clamp for angles and the like. 1,887,551; Nov. 15.

Goddu, George, Winchester, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Reel. 1,887,712; Nov. 15.

Goodfellow, Earl B., Arlington, N. J. Receptacle perforator and closure. 1,887,592; Nov. 15.

Goodstein, Abraham. (See Spielberg, Joseph M.)

Gossler, Oscar, Firm. (See Borcholt, A., and Meyer, assignors.)

Government and the people of the United States of America. (See Bonney, V. B., and Clifford, assigners.)

Graham, Arthur K., Sea Girt, assignor to Hanson-Van Winkle-Munning Company, Matawan, N. J. Zinc aluminum anode for electrodeposition of zinc. 1,888,202; Nov. 15.

Graham, Duncan E., assignor of one-fourth to Dr. and Mrs. C. W. Bumpus, Denver, Colo. Automobile top. 1,888,121; Nov. 15.

Grandy, Jessie P., et al. (See Read, David Y., assignor.)

Grant, Robert U., Breckenridge, assignor of one-half to T. H. P. Duncan, Fort Worth, Tex. Deep well pump. 1,887,886; Nov. 15.

Grebe, John J., assignor to The Dow Chemical Company, Midland, Mich. Mercury vaporising apparatus. 1,887,807; Nov. 15.

Green, Earl F., York, Pa. Hitch. 1,888,122; Nov. 15.

Green, Elmer G. (See Peterson, John H., assignor.)

Green, James B. (See Benbow, J. D., and Green.)

Grether, Ernest F., assignor to The Dow Chemical Company, Midland, Mich. Alkyl ether of halogenated parahydroxy-diphenyls. 1,887,757; Nov. 15.

Griswold, Glenn G. (See Bills, C. H., and Griswold.)

Grönberg, Gösta, administrator. (See Laberbick, Per G.)

Grönberg, Victor A. (See Carlson, T. R., and Grönberg.)

Grube, Lester E., and D. F. Warner, Lynn, and F. R. Ericson, Beverly, Mass., assignors to General Electric Company. Turbine installation. 1,888,078; Nov. 15.

Guardian Metals Company. (See Lynn, H. H., and Celen, assignors.)

Guidetti, Ferruccio, Elmhurst, and G. Bontempi, New York, assignors to The Watairway Manufacturing Corporation, New York, N. Y. Sanitary bowl with hydraulic drier. 1,887,679; Nov. 15.

Guman, Eugene, Mediae, Rumania. Mechanical integrating instrument. 1,887,593; Nov. 15.

Gunn, Charles H., Burlingame, Calif. Spotting rack for pool balls. 1,887,552; Nov. 15.

Gunn, Ross, Washington, D. C. Electromechanical coupling device. 1,887,713; Nov. 15.

Gunnison, Stanley E., New York, N. Y. Collapsible tube support. Des. 88,288; Nov. 15.

Gunther, William H., San Francisco, Calif. Golf bag support. 1,887,838; Nov. 15.

Gurton, William S., J. Plint, and H. Nyberg, assignors to Dominion Truck Equipment Co., Limited, Kitchener, Ontario, Canada. Recess light for motor vehicles and trailers. 1,887,756; Nov. 15.
Guth, Edwin F., Webster Groves, Mo. Lighting unit for reflected illumination. 1,888,103; Nov. 15.
H. H. Gas Plant Syndicate, The. (See Hansford, John, assignor.)
Hafner Manufacturing Company. (See Hafner, William F., assignor.)
Hafner, William F., assignor to Hafner Manufacturing Company, Chicago, Ill. Toy vehicle. 1,887,506; Nov. 15.
Hagen, Harold, F., Dedham, assignor to B. F. Sturtevant Company, Hyde Park, Mass. Centrifugal fan. 1,887,873; Nov. 15.
Hagmaier, William G., West Allis, and E. C. Shaw, assignors to Allias-Chalmers Manufacturing Company, Milwaukee, Wis. Defiberizing machine. 1,887,728; Nov. 15.
Hailiday, Alonzo L., assignor of one-half to A. L. Williams, Ventura, Calif. Motor vehicle control device. 1,887,839; Nov. 15.
Hallman, Harold E., Forest Hills, assignor to International Paper Company, New York, N. Y. Bag making machinery. 1,887,680; Nov. 15.
Hamby, William D., Morton, Pa. Boxing mask. 1,887,636; Nov. 15.
Hames, Wade H., Gadsden, Ala., assignor to Whitin Machine Works, Whitinsville, Mass. Split lap preventer. 1,887,507; Nov. 15.
Hamilton-Wade Company. (See Howard, A. L., and Christie, assignors.)
Hamre, Osmund C., Springfield, Mass. Hoisting device. 1,887,553; Nov. 15.
Hancock Manufacturing Co. (See Marple, Rollo, assignor.)
Hansen, Edmund H., Hollywood, Calif. Collecting sound. 1,887,637; Nov. 15.
Hansford, John, Enfield, assignor to The H. H. Gas Plant Syndicate, Limited, London, England. Manufacture of gas. 1,888,123; Nov. 15.
Hanson-Van Winkle-Munning Company. (See Graham, Arthur K., assignor.)
Hanson-Van Winkle-Munning Company. (See Hogaboom, George B., assignor.)
Harney, Francis W., assignor to The Upson Company, Lockport, N. Y. Shearing mechanism. 1,887,952; Nov. 15.
Harney, Francis W., assignor to The Upson Company, Lockport, N. Y. Apparatus for making products from plastic material. 1,887,758; Nov. 15.
Harney, Francis W., assignor to The Upson Company, Lockport, N. Y. Making products from plastic material. 1,887,759; Nov. 15.
Harris, Walter A., Washington, Pa. Watering trough. 1,887,681; Nov. 15.
Hart Brothers and Company. (See Hart, William J., assignor.)
Hart, George T., jr., West Lynn, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Sewing machine. 1,887,638; Nov. 15.
Hart, William J., Springdale, Ark. assignor to Hart-Brothers and Company. Paraffin liquefying device. 1,888,125; Nov. 15.
Hartford-Empire Company. (See Lorenz, Edward H., assignor.)
Hartsell Industries, Inc. (See Hartsell, Robert N., assignor.)
Hartsell, Robert N., assignor to Hartsell Industries, Inc., Piqua, Ohio. Veneer machine. 1,887,682; Nov. 15.
Harwood, H., & Sons, Inc. (See Hawes, Edward H., assignor.)
Hatherell, George A., Burbank, assignor to F. A. Garbutt, Los Angeles, Calif. Chewing gum base. 1,887,930; Nov. 15.
Haupt, Charles H., Elizabeth, N. J., assignor to Standard Oil Development Company. Stabilized floating deck. 1,888,079; Nov. 15.
Hauser, George D., Utica, N. Y., assignor to Crane Co., Chicago, Ill. Furnace jacket. 1,887,760; Nov. 15.
Hauser, George D., assignor to Crane Co., Chicago, Ill. Furnace jacket. 1,887,761; Nov. 15.
Havlish, Charles, assignor to Chicago Telephone Supply Company, Elkhart, Ind. Rheostat winding machine. 1,887,808; Nov. 15.
Hawes, Edward H., assignor to H. Harwood & Sons, Inc., Natick, Mass. Ball. Des. 88,289; Nov. 15.
Hazen, Lysle L., Joplin, Mo. Jar for drilling tools. 1,888,126; Nov. 15.
Healion, Hugh J., New York, N. Y. Costumer. 1,887,840; Nov. 15.
Hearne, Sunya D., Memphis, Tenn. Waste paper container. 1,888,127; Nov. 15.
Heath, Sheldon B., assignor to The Dow Chemical Company, Midland, Mich. Manufacture of calcium chlorate. 1,887,809; Nov. 15.
Hedberg, Carl W. J. (See Wintermute, H. A., and Hedberg.)
Heggem, Alfred G., Tulsa, Okla. Valve. 1,888,000; Nov. 15.
Hell Co., The. (See Hell, J. P., and Landry, assignors.)
Hell, Julius P., Milwaukee, and G. L. Landry, West Allis, assignors to The Hell Co., Milwaukee, Wis. Telescopic hoist. 1,887,508; Nov. 15.
Heinkel, Ernst. (See Stein, Wilhelm, assignor.)
Heinkel, Ernst, Warnemunde, Germany. Appliance for airplane launching tracks. 1,887,509; Nov. 15.
Heints, Ralph M., San Francisco, Calif., assignor, by mesne assignments, to Chicago Telephone Supply Company, Elkhart, Ind. Winding machine. 1,887,683; Nov. 15.
Helmond, William F., West Hartford, Conn., assignor to Underwood Elliott Fisher Company, New York, N. Y. Typewriting machine. 1,888,035; Nov. 15.
Helsingborgs Gummifabriks Aktiebolag. (See Bohlin, Olof G., assignor.)
Hemp, Omri G., Staunton, Va. Vegetable grater. 1,887,714; Nov. 15.
Henderson, Don A. (See Marsh, John D., assignor.)
Henderson, Roe P., assignor to The Springfield Metallic Casket Company, Springfield, Ohio. Corner plate for a burial casket. Des. 88,290; Nov. 15.
Henderson, Roe P., assignor to The Springfield Metallic Casket Company, Springfield, Ohio. Corner plate for a burial casket. Des. 88,291; Nov. 15.
Henderson, Roe P., assignor to The Springfield Metallic Casket Company, Springfield, Ohio. Corner plate for a burial casket. Des. 88,292; Nov. 15.
Henderson, Roe P., assignor to The Springfield Metallic Casket Company, Springfield, Ohio. Burial casket. Des. 88,293; Nov. 15.
Henderson, Roe P., assignor to The Springfield Metallic Casket Company, Springfield, Ohio. Handle plate for a burial casket. Des. 88,294; Nov. 15.
Henderson, Roe P., assignor to The Springfield Metallic Casket Company, Springfield, Ohio. Handle plate for a burial casket. Des. 88,295; Nov. 15.
Henderson, Roe P., assignor to The Springfield Metallic Casket Company, Springfield, Ohio. Handle plate for a burial casket. Des. 88,296; Nov. 15.
Hennessy, James J., New York, N. Y. Journal lubricator. 1,888,080; Nov. 15.
Henrichs, Martha M. (See Olson, Anton, assignor.)
Henry, Roy P., Battle Creek, Mich. Screw driver. 1,888,081; Nov. 15.
Hentrich, Winfrid. (See Ossenbeck, A., Hentrich, and Tietze.)
Hercules Powder Company. (See Bent, Leavitt N., assignor.)
Herden, Wilhelm. (See Cohn, A., and Herden.)
Herold, Walter F., Upper Montclair, N. J., assignor to The Bassick Company, Bridgeport, Conn. Caster. 1,888,036; Nov. 15.
Herold, Walter F., assignor to The Bassick Company, Bridgeport, Conn. Cushion slide for furniture. 1,888,037; Nov. 15.
Hertzberg, Annie L., Oakland, Calif. Shirt. 1,887,639; Nov. 15.
Hesselman, Knut J. E., Saltsjo-Storangen, near Stockholm, Sweden. Apparatus for introducing liquid fuel into internal combustion engines. 1,888,082; Nov. 15.
Hester, Edgar A., Pittsburgh, Pa. Automobile tire pump. 1,887,715; Nov. 15.
Hester, Levi C., Jacksonville, Fla. Forester's fire-line plow. 1,888,128; Nov. 15.
Hickman, George F., Newark, N. J., assignor to G. G. Brown. Drill. 1,887,640; Nov. 15.
Hickok, W. O., Manufacturing Company. (See Broadmeyer, Albert, assignor.)
Hicks, Earl M., Lebanon, Ind. Air cleaner and humidifier. 1,888,001; Nov. 15.
Hinsky, Anthony P., assignor to E. T. Trotter & Co., Brooklyn, N. Y. Insulated conductor and applying colored surfaces thereto. 1,887,851; Nov. 15.
Hirschfeld, Harry, Sea Cliff, N. Y. Rubber heel. 1,887,852; Nov. 15.
Hitchcock, Halbert K., Pittsburgh, Pa., assignor to Pittsburgh Plate Glass Company. Plate glass polishing apparatus. 1,887,554; Nov. 15.
Hoeflich, Victor T., assignor to American-Merri-Lei Corporation, New York, N. Y. Machine for making convoluted structures of flexible material. 1,888,197; Nov. 15.
Hoeflich, Victor T., assignor to American Merri-Lei Corporation, New York, N. Y. Making convoluted ornaments of flexible material. 1,888,198; Nov. 15.
Hoegger, Joseph A., Jersey City, N. J. Wall fixture support. 1,887,641; Nov. 15.
Hoffer, Le Roy H., assignor to Metropolitan Engineering Company, Brooklyn, N. Y. Welding apparatus and method. 1,887,488; Nov. 15.
Hoffer, Le Roy H., assignor to Metropolitan Device Corporation, Brooklyn, N. Y. Electric fuse switch. 1,887,489; Nov. 15.
Hoffman, Pauline. (See Hoffman, Rose and P.)
Hoffman, Rose, assignor to P. Hoffman, Hartford, Conn. Hanger. 1,888,168; Nov. 15.
Hofmann, Albert. (See Stoll, A., and Hofmann.)
Hogaboom, George B., New Britain, Conn., assignor to Hanson-Van Winkle-Munning Company, Matawan, N. J. Zinc aluminum mercury anode for electrodeposition of zinc. 1,887,841; Nov. 15.
Holland, Albert, and P. V. Moher, Fargo, N. Dak. Windshield screen. 1,888,038; Nov. 15.
Holden, William C., Ossining, N. Y. Antirattle device for vehicle doors. 1,887,842; Nov. 15.
Hollerer, Karl, and A. Kadlets, Vienna, Austria. Press button. 1,888,169; Nov. 15.

Holts, Harold F., Lincoln, Nebr. Curb jack. 1,888,083; Nov. 15.
Honeycutt, Curtis E., and J. L. Alexander, Gastonia, N. C. Refluting textile rolls. 1,887,510; Nov. 15.
Hookless Fastener Company. (See Trotter, Arthur H., assignor.)
Hooper, Ward W., Hollister, Calif. Motor vehicle axle. 1,888,129; Nov. 15.
Hopkins, William W. (See McMurtrie, John F., assignor.)
Hornbaker, Joseph N., St. Petersburg, Fla. Digging implement. 1,888,170; Nov. 15.
Horton, Benjamin W., assignor to Archibald M. McNeil, Modesto, Calif. Pavement breaker. 1,887,762; Nov. 15.
Howard, Albert L., Brockton, and J. Christie, Hanover, assignors to Hamilton-Wade Company, Brockton, Mass. Finishing welt. 1,888,084; Nov. 15.
Howard, Pearl B., Biloxi, Miss. Bed quilt or similar article. Des. 88,297; Nov. 15.
Howe, Wm. A., Company. (See Reutener, Edgar W., assignor.)
Howland, Charles A., Schenectady, N. Y. Game. 1,887,642; Nov. 15.
Hoy, William P. (See Bredsvold, Paul A., assignor.)
Huber, Otto E., Reading, assignor to Narrow Fabric Company, West Reading, Pa. Lace braid and manufacturing same. 1,887,643; Nov. 15.
Hudson Holding Corporation. (See Freedman, Benjamin H., assignor.)
Huff, Lyman C., assignor to Universal Oil Products Company, Chicago, Ill. Interlocking lining for vessels or receptacles. 1,888,039; Nov. 15.
Huffman, Louis, Toronto, Ontario, assignor to Toronto Type Foundry Company, Limited, Toronto, Canada. Manifolding sales book. 1,887,594; Nov. 15.
Huffman, Ross L., Longton, Kans. Nonfreezing valve. 1,888,130; Nov. 15.
Hughes, William C., Harrold, assignor of one-half to C. M. Rice, Medbourne, Leicestershire, England. Combined cot and play-chair particularly adapted for use in motor cars and other vehicles. 1,887,810; Nov. 15.
Huisinga, Marten J., Haarlem, Netherlands. Bidding apparatus. 1,887,684; Nov. 15.
Hulbert, John L., Poughkeepsie, assignor to The De Laval Separator Company, New York, N. Y. Connecter for milking machines. 1,888,040; Nov. 15.
Humbel, Alexander, assignor to The A. L. Connelly Co., Cleveland, Ohio. Mining machine. 1,888,083; Nov. 15.
Humphrey, Effingham P., Drifton, Pa. Gyroseparator. 1,888,131; Nov. 15.
Hussmann-Ligonier Company. (See McCord, D. C., and Bataille, assignors.)
Hydrometer A. G. (See Rezsny, Koloman, assignor.)
Hyser, George W., Minneapolis, Minn. Control panel. 1,887,644; Nov. 15.
I. G. Farbenindustrie Aktiengesellschaft. (See Ossenbeck, A., Hentrich, and Tietze, assignors.)
I. G. Farbenindustrie Aktiengesellschaft. (See Schwen, G., and Krsikalla, assignors.)
Ikin, William G., Bororen, Queensland, Australia. Battery. 1,887,811; Nov. 15.
Imhoff, Karl, Essen, Germany. Method of and apparatus for the treatment of sludge, sewage, and the like. 1,887,490; Nov. 15.
Imperial Chemical Industries Ltd. (See Brownsdon, H. W., and Nimmo, assignors.)
Imperial Chemical Industries Limited. (See Brownsdon, H. W., Nimmo, and Pollitt, assignors.)
India Rubber Gutta Percha and Telegraph Works Company Limited, The. (See Avery, William L., assignor.)
Industrial Brownhoist Corporation. (See Wilms, Henry F., assignor.)
Industrial Patents Corporation. (See Regensburger, Richard W., assignor.)
International Banding Machine Co. (See Malocsay, Francis X., assignor.)
International Motor Company. (See Cowell, Robert F., assignor.)
International Motor Company. (See Matthews, Joseph L., assignor.)
International Paper Company. (See Hallman, Harold E., assignor.)
International Seal and Knot Protector Co., The. (See Keidel, Frank, assignor.)
Ismard, Georges V., Toulon, France. Pressure regulating device. 1,887,596; Nov. 15.
Itcsak, Joseph J., Hartford, Conn. Automatic cigarette lighter and ash receiver. 1,888,171; Nov. 15.
Jackson, Byron D. (See Strand, H., and Jackson.)
Jackson, Harry B., assignor to H. W. Carter & Sons, Lebanon, N. H. Overalls. 1,888,086; Nov. 15.
Jacob, Heinrich, Friedenau, near Berlin, Germany, assignor to the Firm Zeiss Ikon Aktiengesellschaft Goerswerk Zehlendorf near Berlin, Germany. Table barometer. Des. 88,298; Nov. 15.
Jacobsen, Arthur, San Francisco, Calif. Automatic casting antibacklash fishing-reel. 1,888,087; Nov. 15.
Jensen, Bertel M., Huntington Beach, assignor to W. D. Shaffer, Brea, Calif. Blow-out preventer. Re18,655; Nov. 15.
Jensen, Walter E., Chicago, Ill., assignor to Partition Machinery, Inc. Adjustable partition machine. 1,887,976; Nov. 15.
Jensen, Walter E., Chicago, Ill., assignor to Partition Machinery, Inc. Partition machine. 1,887,977; Nov. 15.
Jinnett, Francis E., Ventura, Calif. Pipe cleaner. 1,887,853; Nov. 15.
Joerissen, Carl A., Westfield, N. J. Typewriter. 1,887,887; Nov. 15.
Joha, Elmer N., Wauwatosa, assignor to Reliable Knitting Works, Milwaukee, Wis. Knitted footwear and making the same. 1,888,172; Nov. 15.
Johnson, Boyd M., Metuchen, N. J., assignor to The Carborundum Company, Niagara Falls, N. Y. Continuous conveyer furnace. 1,887,904; Nov. 15.
Johnson, David L., Ocean City, Md. Decoy bobble. 1,887,491; Nov. 15.
Johnson, George W. (See Reese, L. V., and Johnson.)
Johnson, Glen A., assignor to Stant Manufacturing Co., Connersville, Ind. Radiator cap. Des. 88,301; Nov. 15.
Johnson, John E., assignor to Addretok Co., Chicago, Ill. Device for recording sales transactions. 1,887,556; Nov. 15.
Johnson, William H., Arlington, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Machine for feeding sheet material. 1,887,645; Nov. 15.
Johnston, Leslie C., Sydney, New South Wales, Australia. Insectproof screen means for windows or doors. 1,887,646; Nov. 15.
Jolley, John E. (See Baumann, K., and Jolley.)
Jordan, Stroud, Brooklyn, assignor to Applied Sugar Laboratories, Incorporated, New York, N. Y. Treating tobacco leaves, process of producing a composition for use in the practice of the method, and resultant composition. 1,888,173; Nov. 15.
Joseph, Henry, St. Albans, assignor to General Chemical Company, New York, N. Y. Catalyst. 1,887,978; Nov. 15.
Juvet, Obel, Ferndale, Wash. Cabinet ironing board. 1,887,763; Nov. 15.
Kadlets, Adolf. (See Hollerer, K., and Kadlets.)
Kaegebein, Erich L., Hammond, Ind. Flange oiler. 1,887,685; Nov. 15.
Kahn, David, Woodcliff, assignor to David Kahn, Inc., North Bergen, N. J. Fountain pen. Des. 88,299; Nov. 15.
Kahn, David, Woodcliff, assignor to David Kahn, Inc., North Bergen, N. J. Pencil. Des. 88,300; Nov. 15.
Kahn, David, Inc. (See Kahn, David, assignor.)
Kahn, Lewis I., Brooklyn, N. Y. Table pad. 1,888,104; Nov. 15.
Katz, George J., St. Paul, Minn. Automatic stop. 1,887,596; Nov. 15.
Keele, Ralph M., assignor to United States Appliance Corporation, San Francisco, Calif. Hair waving apparatus and method. 1,887,556; Nov. 15.
Keidel, Frank, Elmhurst, assignor to The International Seal and Knot Protector Co., New York, N. Y. Seal. 1,887,557; Nov. 15.
Kendall, William G., Maplewood, N. J. Dispensing device for collapsible tubes. 1,888,174; Nov. 15.
Kendrick, James R., Co. Inc. (See Fox, William J., assignor.)
Kennedy, Daniel J., Vancouver, British Columbia, Canada. Treatment of coffee. 1,887,686; Nov. 15.
Kennedy, Joseph M., St. Louis, Mo. Bottle. 1,887,931; Nov. 15.
Ketonen, John E., White Plains, N. Y. Tank. 1,887,932; Nov. 15.
Kiefer, Paul W., New York, assignor of one-half to E. P. Moses, White Plains, N. Y. Cast metal hopper for railway cars. Des. 18,656; Nov. 15.
Killeffer, David H., Yonkers, assignor to Dryice Equipment Corporation, New York, N. Y. Refrigerating method and apparatus. 1,887,687; Nov. 15.
Kimes, Thomas M., Merna, Nebr. Cleat fastening means. 1,888,175; Nov. 15.
King, Jesse G., assignor to Frigidaire Corporation, Dayton, Ohio. Refrigerating apparatus. 1,887,556; Nov. 15.
King, Jesse G., assignor to Frigidaire Corporation, Dayton, Ohio. Refrigerating apparatus. 1,887,933; Nov. 15.
Kinsel, Augustus B., Beechhurst, N. Y., assignor to Electro Metallurgical Company. Casting steel ingots. 1,888,132; Nov. 15.
Kitson Company. (See Fow, Ambrose F., assignor.)
Kleinow, Walter, Hennigsdorf, near Berlin, A. Morgenroth, Niedernevendorf, near Berlin, F. Reinhardt, Hennigsdorf, near Berlin, and W. Bruer, Teltow, Germany. Cooling system for nozzle burners. 1,888,088; Nov. 15.
Kliesrath, Victor W. (See Bragg, C. S., and Kliesrath.)
Knapp, Andrew S., St. Louis, Mo., assignor to Knapp Monarch Company, Inc. Grapefruit juice extractor. 1,887,764; Nov. 15.
Knapp Monarch Company. (See Knapp, Andrew S., assignor.)
Knight, Claude M., Cleveland, Ohio, Controller construction. 1,888,089; Nov. 15.
Koch, Charles N., Kane, Pa. Method of and apparatus for fuel charging and igniting. 1,887,716; Nov. 15.
Koch, Charles N., Kane, Pa. Combustion turbine. 1,887,717; Nov. 15.
Koch, Lydia B., and J. Buchina, New York, N. Y., assignors to said L. B. Koch. Paper container. 1,887,688; Nov. 15.

Kochs, Robert E., and A. R. Schwarzkopf, assignors to Theo. A. Kochs Company, Chicago, Ill. Chair. 1,887,647; Nov. 15.
Kochs, Theo. A., Company. (See Kochs, R. E., and Schwarzkopf, assignors.)
Koeberle, Karl. (See Kunz, M. A., Kraenzlein, Koeberle, Corell, Berthold, and Vollmann.)
Kohler, John H., and A. Schneider, Pittsburgh, Pa. Flue cleaner. 1,887,765; Nov. 15.
Koppers, August, Bochum, Germany. Recording mechanism for coke-oven pushers and the like. 1,888,205; Nov. 15.
Kraenzlein, Georg. (See Kunz, M. A., Kraenzlein, Koeberle, Corell, Berthold, and Vollman.)
Krebser, Adolf, assignor to the Firm J. R. Geigy S. A., Basel, Switzerland. Manufacture of azophthalein dyestuffs. 1,888,002; Nov. 15.
Kress, Otto, Appleton, Wis. Marking and producing designs on paper. 1,887,934; Nov. 15.
Kronquest, Alfred L., Syracuse, assignor to Continental Can Company, Inc., New York, N. Y. Vacuumizing containers. 1,888,133; Nov. 15.
Krueger, Frank A. C., Milwaukee, Wis. Laundry breaking table. 1,887,648; Nov. 15.
Krzikalla, Hans. (See Schwen, G., and Krzikalla.)
Kumpmann, Karl, sr., Ludenscheid, Germany. Nut tapping machine. 1,887,649; Nov. 15.
Kunkler, Clarence A., Mount Clemens, Mich. Camera lock and number indicating device. 1,888,134; Nov. 15.
Kunz, Max A., Mannheim, G. Kraenzlein, Frankfort-Hochst-on-the-Main, K. Koeberle, Ludwigshafen-on-the-Rhine, M. Corell, Frankfort-Hochst-on-the-Main, E. Berthold, Ludwigshafen-on-the-Rhine, and H. Vollmann, Frankfort-Hochst-on-the-Main, Germany, assignors to General Aniline Works Inc., New York, N. Y. 1,887,812; Nov. 15.
L. G. S. Devices Corporation. (See Starkey, William C., assignor.)
La Garde, Joseph A., Seekonk, Mass. Automobile jack. 1,887,689; Nov. 15.
Lagarrigue, Jean. (See Nitesco, Marcel, assignor.)
Lagerbäck, Per G., deceased, Stockholm, Sweden, by Gösta Grönberg, administrator, Stockholm, Sweden. Washing machine. 1,887,813; Nov. 15.
Lahti, Aimo J., Jyvaskyla, Finland. Trigger device for firearms. 1,887,690; Nov. 15.
Lake, John W., St. Louis, Mo. Shoe counter. 1,887,935; Nov. 15.
Lamb, Frank C., Los Angeles, Calif. Motor vehicle brake. 1,887,936; Nov. 15.
Landis, Leonidas L., and E. G. Sauer, Lima, Ohio. Christmas tree holder. Des. 88,302; Nov. 15.
Landry, George L. (See Heil, J. P., and Landry.)
Lang, Joseph, Philadelphia, Pa. Corn harvester. 1,887,937; Nov. 15.
Lange, Henry, assignor to Quincy Stove Manufacturing Co., Quincy, Ill. Range. Des. 88,336; Nov. 15.
Larner, Chester W., and S. J. Sanford, Philadelphia, Pa. Light controlling apparatus. 1,887,650; Nov. 15.
Lasker, George, Chicago, Ill. Drumless boiler. 1,887,854; Nov. 15.
Latshaw, Elmer, assignor to The J. G. Brill Company, Philadelphia, Pa. Railway truck. 1,888,176; Nov. 15.
Lawn, Gordon W. (See Soyster, C. J., assignor, and Gordon.)
Leety, Harry E., J. A. Eckert, Pittsburgh, and A. W. Page, Penn Township, Allegheny County, assignors to P. Wall Manufacturing Company, Pittsburgh, Pa. Furnace. 1,887,855; Nov. 15.
Le Gall, Jean, Nanterre, France. Hollow panel. 1,887,814; Nov. 15.
Lenning, Alvar, assignor to Electrolux Servel Corporation, New York, N. Y. Absorber for air cooled refrigerators. 1,887,651; Nov. 15.
Le Van, James D., assignor to Cutler-Hammer, Inc., Milwaukee, Wis. Control for electron tube. 1,887,766; Nov. 15.
Levin, Harold L., Nutley, N. J., assignor, by mesne assignments, to The Flintkote Corporation, Boston, Mass. Fibrous covering and making same. 1,887,979; Nov. 15.
Lewis Air Conditioners, Inc. (See Lewis, Carroll E., assignor.)
Lewis, Carroll E., assignor to Lewis Air Conditioners, Inc., Minneapolis, Minn. Air conditioning apparatus (gravity actuated). 1,887,767; Nov. 15.
Lewis, George C., Philadelphia, Pa. Nozzle heating, cooling and ventilating system. 1,887,938; Nov. 15.
Lindberg, Nils C., Crete, Ill., assignor to Victor Chemical Works. Method for the conversion of ferrophosphorus. 1,888,003; Nov. 15.
Linden, Paul P., Yonkers, N. Y. Identification means. 1,888,090; Nov. 15.
Little, Arthur D., Industrial Corporation. (See Stevenson, Errl P., assignor.)
Littlepage, Thomas P., jr., Washington, D. C. Radio system. 1,888,177; Nov. 15.
Locklin, John L., Lawrence, N. Y. Bill frame. Des. 88,303; Nov. 15.
Lockwood, Alfred T. (See Bowers, F. U., and Lockwood.)
Loetscher, Emil C., Dubuque, Iowa. Veneering. 1,887,691; Nov. 15.
Loney, John W., Brockton, Mass., assignor to O. A. Miller Treeing Machine Company, Portland, Me. Garment display device. 1,887,652; Nov. 15.
Long, Charles E., assignor of one-half to Puffer-Hubbard Mfg. Co., Minneapolis, Minn. Storage drawer for refrigerating apparatus. 1,888,041; Nov. 15.
Lonschein, Harry, New York, N. Y. Running board luggage holder. 1,887,653; Nov. 15.
Lorens, Edward H., West Hartford, assignor to Hartford-Empire Company, Hartford, Conn. Apparatus for aligning molds of glassware forming machines. 1,888,199; Nov. 15.
Ludwig, Fritz, Berlin-Charlottenburg, assignor to Siemens-Schuckertwerke, Aktiengesellschaft, Berlin-Siemensstadt, Germany. Machine for sharpening pencils. 1,887,843; Nov. 15.
Lufkin Rule Co. (See Buck, Fred, assignor.)
Lukas, Julia, New York, N. Y. Textile fabric or the like. Des. 88,304; Nov. 15.
Lukenweld, Inc. (See Chapman, Everett, assignor.)
Lüling, Friedrich W., Volmarstein-on-the-Ruhr, Germany. Padlock. Des. 88,305; Nov. 15.
Lundstrom, Gustaf, St. Paul, Minn. Combination chair and stepladder. 1,887,492; Nov. 15.
Lynn, Harry H., Wyoming, and H. L. Coles, assignors to Guardian Metals Company, Hamilton, Ohio. Compound alloy plate. 1,888,042; Nov. 15.
Lyons, Grace J., Bronx, assignor, by mesne assignments, to Elasto Ribbon Co., Inc., New York, N. Y. Garment supporter. 1,887,939; Nov. 15.
MacElhone, Harry, assignor to MacElhone Methods Inc., Binghamton, N. Y. Preparing ice cream servings. 1,888,178; Nov. 15.
MacElhone Methods Inc. (See MacElhone, Harry, assignor.)
Mach, Ludwig. (See Tipecska, G., and Mach.)
Macht, Maurice L. (See Fix, E. L., and Macht.)
Macleod, Allan A., Victoria, British Columbia, Canada. Logging road. 1,888,004; Nov. 15.
MacQueen, Donald E. (See Martin, L. F., and MacQueen.)
Macrae, James N., and C. P. Packard, Stamford, Conn., assignors to Petroleum Heat and Power Company, New York, N. Y. Ignition mechanism for oil burners. 1,887,730; Nov. 15.
Mahaffy, Rodmond S. (See Gibson, Edward, jr., assignor.)
Mahon, Herbert G. B., Gosforth, Newcastle-upon-Tyne, England. Furnace observation window. 1,887,654; Nov. 15.
Maksik, Samuel, Brooklyn, assignor to Michel, Maksik & Feldman, Inc., New York, N. Y. Hand bag. 1,887,511; Nov. 15.
Malatesta, John B., New York, N. Y. Mouth mirror. 1,887,888; Nov. 15.
Malocsay, Francis X., Saddle River, N. J., assignor to International Banding Machine Co., Inc. Sealing device for cigar wrapping machines. 1,887,844; Nov. 15.
Maloney, Andrew J., Merion, assignor to The Philadelphia & Reading Coal & Iron Company, Philadelphia, Pa. Ash removing appliance for furnaces. 1,887,768; Nov. 15.
Manning & Co. (See Van Raust, Cornelius W., assignor.)
Marcellus, Fredrick S., Scotia, N. Y., assignor to General Electric Company. Brush for electrical apparatus. 1,887,559; Nov. 15.
Marien, Charles A., assignor to Ramsey Accessories Manufacturing Corporation, St. Louis, Mo. Piston skirt expanding springs. 1,887,769; Nov. 15.
Marinsky, Davis, New York, N. Y. Closure device. 1,887,940; Nov. 15.
Mariott, Roscoe B., Bingham, Utah. Automatic chicken feeder and light control mechanism. 1,887,770; Nov. 15.
Markey, Fred L., Lawrence, and J. R. Stanton, Newburyport, assignors to Dodgen Corporation, Lawrence, Mass. Amusement apparatus. 1,888,006; Nov. 15.
Marple, Rollo, assignor to Hancock Manufacturing Co., Jackson, Mich. Doorlock operator. 1,887,655; Nov. 15.
Marryatt, Ainsley D., and G. H. Metzler, Quarry Heights, Northcastle, N. Y. Automobile sanding device. 1,888,006; Nov. 15.
Marsh, Jas. P., Corporation. (See Faber, Guy S., assignor.)
Marsh, John D., assignor of one-half to D. A. Henderson, Los Angeles, Calif. Ant jar. 1,887,771; Nov. 15.
Marshall, Fred, Burley-in-Wharfedale, England. Garden frame. 1,887,815; Nov. 15.
Martin, James W., jr., Yonkers, assignor to Dryice Corporation of America, New York, N. Y. Carbon dioxide ice apparatus and process. 1,887,692; Nov. 15.
Martin, James W., jr., Yonkers, assignor to Dryice Equipment Corporation, New York, N. Y. Refrigerating apparatus and method. 1,887,693; Nov. 15.
Martin, Lawrence F., and D. E. MacQueen, assignors to The Dow Chemical Company, Midland, Mich. Preparation of benzyl-alkyl aniline. 1,887,772; Nov. 15.
Martin, Robert P., assignor of one-fourth to H. Byford, Seattle, Wash. Power hammer. 1,887,980; Nov. 15.
Marvin, Orrin F., assignor to Mills Alloys, Inc., Los Angeles, Calif. Manufacturing tungsten carbide. 1,887,729; Nov. 15.
Maschinenfabrik Augsburg-Nurnberg A. G. (See Brockel, Ernst, assignor.)
Maschinenfabrik Augsburg-Nurnberg A. G. (See Geiger, Josef, assignor.)

Maschinenfabrik Augsburg-Nurmberg A. G. (See Pielestick, Gustav, assignor.)
Masker, Frederick M., Plainfield, N. J. Valve. 1,887,694; Nov. 15.
Massey, Augustine H., Stratford, assignor to Columbia Phonograph Company, Inc., Bridgeport, Conn. Handle for an electric plug. Des. 88,337; Nov. 15.
Matthews, Joseph L., New Brunswick, N. J., assignor to International Motor Company, New York, N. Y. Bearing support for transmissions. 1,887,560; Nov. 15.
Maudsley, Richard T., Quinton, Birmingham, England. Sulphuric acid chamber. 1,887,816; Nov. 15.
McBean, Robert H. (See Bates, A. H., and McBean.)
McCallen, Perry S., assignor to H. W. Sanford, Knoxville, Tenn. Mine car. 1,888,135; Nov. 15.
McCord, Don C., St. Louis, Mo., and G. S. Bataille, Royal Oak, Mich., assignors to Hussmann-Ligonier Company, St. Louis, Mo. Refrigerator. 1,888,043; Nov. 15.
McCune, Joseph C., Edgewood, assignor to The Westinghouse Air Brake Company, Wilmerding, Pa. Fluid pressure brake. 1,887,597; Nov. 15.
McDermott, Peter J., Salt Lake City, Utah. Seat raiser and vacancy indicator. 1,888,136; Nov. 15.
McKeefe, Edward P. (See Bradley, L., and McKeefe.)
McKinley, Major R. (See Carr, Uhel U., assignor.)
McLaughlin, Roy P., South Pasadena, Calif. Clinograph. 1,887,773; Nov. 15.
McMurtrie, John F., Bethlehem, Pa., assignor of one-half to W. W. Hopkins, Springfield, Mass. Chassis of a motor vehicle. 1,887,598; Nov. 15.
McNeil, Archibald M. (See Horton, Benjamin W., assignor.)
McVey, Samuel L., San Jose, Calif. Sleeve steamer. 1,887,561; Nov. 15.
Meaney, Philip E., assignor to David E. Sherin, Worcester, Mass. Flush tank. 1,887,512; Nov. 15.
Mechanical Transfer Car Corporation. (See Wheeler, Holman K., assignor.)
Medlin, John P., Great Falls, Mont., assignor to Railway & Industrial Engineering Company, Greensburg, Pa. Electrical distributing system. 1,887,695; Nov. 15.
Megros, Georges, Bronxville, assignor to Combier & Co. Inc., New York, N. Y. Textile fabric or the like. Des. 88,306; Nov. 15.
Megros, Georges, Bronxville, assignor to Combier & Co. Inc., New York, N. Y. Textile fabric or the like. Des. 88,307; Nov. 15.
Megros, Georges, Bronxville, N. Y., assignor to The United Piece Dye Works, Lodi, N. J. Textile fabric. Des. 88,308; Nov. 15.
Megros, Georges, Bronxville, N. Y., assignor to The United Piece Dye Works, Lodi, N. J. Textile fabric. Des. 88,309; Nov. 15.
Meinzer, Gotthold H., assignor to L. Blake-Smith, San Francisco, Calif. Treating emulsions. 1,887,774; Nov. 15.
Meinzer, Gotthold H., assignor to L. Blake-Smith, San Francisco, Calif. Mechanically treating emulsions. 1,887,775; Nov. 15.
Merry, Elizabeth, assignor to Combier & Co. Inc., New York, N. Y. Textile fabric or the like. Des. 88,310; Nov. 15.
Merry, Elizabeth, assignor to Combier & Co. Inc., New York, N. Y. Textile fabric or the like. Des. 88,311; Nov. 15.
Merwin, Burton P., assignor of one-half to The Weston Toy Company, Incorporated, Weston, Conn. Mechanical movement for toys. 1,887,656; Nov. 15.
Messinger, George S., Tatamy, Pa. Centrifugal threshing machine. 1,887,817; Nov. 15.
Metallo Gasket Company. (See Geipel, Stanley S., assignor.)
Metropolitan Device Corporation. (See Hoffer, LeRoy H.)
Metropolitan Device Corporation. (See Rypinski, Albert B., assignor.)
Metropolitan Engineering Company. (See Hoffer, LeRoy H., assignor.)
Metropolitan Engineering Company. (See Murray, Thomas E., jr., assignor.)
Metzler, George H. (See Marryatt, A. D. B., and Metzler.)
Meyer, Karl, New York, N. Y. Combination ash tray and cigarette extinguisher. 1,887,696; Nov. 15.
Meyer, Otto. (See Borcholt, A., and Meyer.)
Michalka, William J., Cameron, Tex. Stalk cutter. 1,887,818; Nov. 15.
Michel, Maksik & Feldman, Inc. (See Maksik, Samuel, assignor.)
Miessner, William O., Deerfield, Ill. Method and apparatus for sounding selective rhythms and beats. 1,887,857; Nov. 15.
Miles, Donald H. (See Paxson, Willard M., assignor.)
Miles, William C., New York, N. Y., assignor to Elevator Supplies Company, Inc., Hoboken, N. J. Automatic elevator and gate control system. 1,887,498; Nov. 15.
Miller, Charles, New York, N. Y. Shoe. Des. 88,312; Nov. 15.
Miller, Charles, New York, N. Y. Shoe. Des. 88,313; Nov. 15.
Miller, O. A., Treeing Machine Company. (See Loney, John W., assignor.)
Millis, Charles T., jr., and H. A. Parker, Dallas, Tex. Sanitary self-closing cap. 1,888,007; Nov. 15.
Mills Alloys, Inc. (See Marvin, Orrin F.)
Miner, Irving O. (See Tompkins, F. N., and Miner.)
Miracle Table Corporation. (See Pulaski, Jacob L., assignor.)
Mitchell, Frank A. (See Forse, W. T., and Mitchell.)
Mitchell, John E., Dallas, Tex. Cotton threshing cylinder. 1,887,562; Nov. 15.
Mitchell, Walter H., Long Beach, Calif. Brake linkage. 1,887,845; Nov. 15.
Mitsuda, Ryotaro, Tokyo, Japan. High voltage mercury arrester. 1,887,874; Nov. 15.
Mober, Patrick V. (See Holland, A., and Mober.)
Molner, Harry C., Pitcairn, Pa. Garment hanger. 1,888,137; Nov. 15.
Monroe Calculating Machine Company. (See Brown, Lee R., assignor.)
Monroe Calculating Machine Company. (See Chase, George C., assignor.)
Moore, Norman H., Westfield, N. J., assignor to The Texas Company, New York, N. Y. Treating hydrocarbons. 1,887,941; Nov. 15.
Morgenroth, Albert. (See Kleinow, W., Morgenroth, Reinhardt and Bruer.)
Morimura Bros. Inc. (See Buma, Yukio, assignor.)
Morral, Samuel E., Morral, Ohio. Clutch. 1,887,776; Nov. 15.
Morrell, Jacque C., assignor to Universal Oil Products Company, Chicago, Ill. Obtaining resins or resin like bodies from cracked hydrocarbon products. 1,888,044; Nov. 15.
Morris, John P., Laredo, Tex. Wall construction unit and wall formed therefrom. 1,887,777; Nov. 15.
Mortensen, Cornelius, Louisville, Ky. Pasteuriser mixer. 1,888,008; Nov. 15.
Moses, Edwin P. (See Kiefer, Paul W., assignor.)
Moss, Thomas R., Dyersburg, Tenn. Ash tray. 1,888,009; Nov. 15.
Mosteller, Karl L., Mount Airy, Pa. Tube cap. 1,888,010; Nov. 15.
Motor Terminals Company. (See Bates, A. H., and McBean, assignors.)
Motor Terminals Company. (See Fitch, Benjamin F., assignor.)
Motor Wheel Corporation. (See Nelson, Emil A., assignor.)
Motor Wheel Corporation. (See Platt, Howard I., assignor.)
Mott-Smith, Lewis M., Houston, Tex. Electrokinetometer. 1,887,739; Nov. 15.
Mueller, Arthur B., Kansas City, Mo. Reducing apparatus. 1,887,942; Nov. 15.
Murray, Herman S., Woodmere, assignor to William Willheim Co., Inc., New York, N. Y. Textile fabric or similar article. Des. 88,314; Nov. 15.
Murray, Herman S., Woodmere, assignor to William Willheim Co., Inc., New York, N. Y. Textile fabric or similar article. Des. 88,315; Nov. 15.
Murray, Herman S., Woodmere, assignor to William Willheim Co., Inc., New York, N. Y. Textile fabric or similar article. Des. 88,316; Nov. 15.
Murray, Herman S., Woodmere, assignor to William Willheim Co., Inc., New York, N. Y. Textile fabric or similar article. Des. 88,317; Nov. 15.
Murray, Herman S., Woodmere, assignor to William Willheim Co., Inc., New York, N. Y. Textile fabric or similar article. Des. 88,318; Nov. 15.
Murray, Roy S., et al. (See Shontz, Harry W., assignor.)
Murray, Thomas E., jr., Brooklyn, N. Y., assignor to Metropolitan Engineering Company. Making axle housings. 1,887,494; Nov. 15.
Myers, Charles F., and W. H. Reimer, assignors to The W. H. Reisner Manufacturing Company, Hagerstown, Md. Live bait trap net. 1,888,138; Nov. 15.
Myers, Lawrence, Chicago, Ill. Battery testing instrument. 1,887,656; Nov. 15.
Naamloose Vennootschap de Bataafsche Petroleum Maatschappij. (See Straatman, Alphons G. H., assignor.)
Narrow Fabric Company. (See Huber, Otto R., assignor.)
Nash, Clarence A., Newark, N. J., assignor to Bakelite Corporation, New York, N. Y. Valve disk composition. 1,888,179; Nov. 15.
Nathan, Ellis, assignor to Pennsylvania Pump and Compressor Company, Easton, Pa. Unloader valve for compressors. 1,887,858; Nov. 15.
National aluminate Corporation. (See Wayne, Truman E., assignor.)
National Enameling & Stamping Company. (See Sladky, Joseph and A. C., assignors.)
National Fireproofing Corporation. (See Nelson, Elmer A., assignor.)
National Pneumatic Company. (See Forman, Paris R., assignor.)
Neal, Duane E., assignor to Frigidaire Corporation, Dayton, Ohio. Refrigerating apparatus. 1,887,543; Nov. 15.
Neidich, Samuel A., Edgewater Park, N. J. Making tubes of celluloid and the like. 1,888,045; Nov. 15.
Neidich, Samuel A., Edgewater Park, N. J. Tray. 1,888,046; Nov. 15.
Neklutin, Constantine N., Ferguson, assignor to The Universal Match Corporation, St. Louis, Mo. Dispensing machine. 1,888,047; Nov. 15.
Nelson, Edwin F., assignor to Universal Oil Products Company, Chicago, Ill. Treatment of hydrocarbon oils. 1,888,048; Nov. 15.

Nelson, Elmer A., Dormont, assignor, by mesne assignments, to National Fireproofing Corporation, Pittsburgh, Pa. Floor construction. 1,887,875; Nov. 15.
Nelson, Emil A., Detroit, Mich., assignor to Motor Wheel Corporation. Wire wheel. 1,887,513; Nov. 15.
Nelson, Herman, Corporation, The. (See Shurtleff, Wilfred, assignor.)
Nelson, Jabez C., assignor to Easy Washing Machine Corporation, Syracuse, N. Y. Extractor basket for washing machines. 1,887,778; Nov. 15.
Nelson, Roy A., assignor to Chicago Railway Equipment Company, Chicago, Ill. Steel door construction. 1,887,819; Nov. 15.
Nelson, William W., Brookline, Mass. Valve for wind musical instruments. 1,887,657; Nov. 15.
New Britain-Gridley Machine Company, The. (See Brown, Robert S., assignor.)
Newman, James M. (See Elkins, Arthur B., assignor.)
Nichols, Horace E., assignor to Clinical Development Laboratories, Inc., Detroit, Mich. Interference eliminator for electrocardiographs. 1,888,139; Nov. 15.
Nielsen, Jens P. (See Richer, Joseph R., assignor.)
Nimmo, Walter R. (See Brownsdon, H. W., and Nimmo.)
Nimmo, Walter R. (See Brownsdon, H. W., Nimmo, and Pollitt.)
Nitesco, Marcel, Vienna, Austria, assignor to J. Lagarrigue, Paris, France. Heating apparatus with heat-storage body. 1,887,779; Nov. 15.
Noble, Warren, Detroit, Mich. Coupling. 1,887,876; Nov. 15.
Noel, Philip J., Bowling Green, Ky. Pistol holster. 1,887,780; Nov. 15.
Northern Engraving Company. (See Wittenberg, Edward H., assignor.)
Novotny, John N., East Grand Forks, Minn. Vibrato stringed musical instrument. 1,888,140; Nov. 15.
Nutting, Howard S., and H. H. Rowley, assignors to The Dow Chemical Company, Midland, Mich. Decomposition of liquid hydrocarbons. 1,887,658; Nov. 15.
Nyberg, Herman. (See Gurton, W. S., Plint, and Nyberg.)
Nyquist, Harry, Millburn, N. J., assignor to American Telephone and Telegraph Company. Constant current regulation. 1,887,599; Nov. 15.
Oberhoffken, Alexander, assignor to Production Engineering Company, Detroit, Mich. Hydraulic feed mechanism. 1,888,091; Nov. 15.
Obstfeld, Abraham I., et al. (See Obstfeld, L., and Drypolcher, assignors.)
Obstfeld, Lou, et al. (See Obstfeld, L., and Drypolcher, assignors.)
Obstfeld, Lou, Brooklyn, and W. Drypolcher, Valley Stream, assignors, by mesne assignments, to said L. Obstfeld and A. L. Obstfeld, New York, N. Y. Stapling machine. 1,887,731; Nov. 15.
Ohio Truss Company, The. (See Pease, Isaac M., assignor.)
Old Colony Trust Company. (See Cheney, Thorndike F., assignor.)
Olson, Anton, assignor of one-half to M. M. Henrichs, Evanston, Ill. Trap setter's tool. 1,888,200; Nov. 15.
Oriental Compressol Co. Ltd., The. (See Tada, Rengo, assignor.)
Orsett, Coy, Boston, Mass. Vehicle suspension. 1,887,718; Nov. 15.
Orth, Andrew J., assignor to Zoia Banquetier Company, Inc., Cleveland, Ohio. Plate rack. 1,888,141; Nov. 15.
Ossenbeck, Anton, Cologne-Mulheim-on-the-Rhine, W. Hentrich, Wiesdorf-on-the-Rhine, and E. Tietse, Cologne-on-the-Rhine, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Sulphonated isatoic acid anhydride and making same. 1,887,820; Nov. 15.
Owens, John H., Elgin, Ill. Pipe-handling tool. 1,887,889; Nov. 15.
Packard, Calvin P. (See Macrae, J. N., and Packard.)
Padgett, Joseph E., and C. D. Peterson, assignors to Spicer Manufacturing Corporation, Toledo, Ohio. Transmission gearing. 1,887,943; Nov. 15.
Page, Austin W. (See Leety, H. E., Eckert, and Page.)
Page, Herbert E., Syracuse, N. Y. Garment or ironing press. 1,887,719; Nov. 15.
Pagel, Ernest C., Chicago, and H. C. Porter, La Grange Park, assignors to Signode Steel Strapping Company, Chicago, Ill. Cutting and forming device. 1,887,782; Nov. 15.
Pappert, Emanuel, New York, N. Y. Optical mounting. 1,887,846; Nov. 15.
Parker, Elbert A. (See Millis, C. T., jr., and Parker.)
Parker Rust Proof Company. (See Tanner, R. R., and Darsey, assignors.)
Parr, Harry L., Yonkers, N. Y., assignor, by mesne assignments, to Automotive Accessories Company, Detroit, Mich. Method and apparatus for removing sediment from automobile cooling systems. 1,887,781; Nov. 15.
Partition Machinery, Inc. (See Jensen, Walter E., assignor.)
Paxson, Willard M., Dowagiac, assignor of one-half to D. H. Miles, Cassopolis, Mich. Rake cleaner. 1,887,659; Nov. 15.
Pearce, Oscar W., Los Angeles, Calif. Oil thief. 1,887,859; Nov. 15.
Pearson, Joseph C., Media, Pa. Headlight glare shield. 1,888,142; Nov. 15.
Pease, Isaac M., Cincinnati, Ohio, assignor to The Ohio Truss Company. Truss pad. 1,887,660; Nov. 15.
Peebles, Frank W. L., St. Louis, and C. W. Baker, Lake Charles Park, Mo. Jack-and-parking mechanism for automotive vehicles. 1,888,049; Nov. 15.
Peiper, Abram S., Philadelphia, Pa. Permanently securing linoleum to normally damp concrete surfaces. 1,887,847; Nov. 15.
Peirce, John R., New York, N. Y. Coffee brewing device. 1,887,848; Nov. 15.
Peirce, John R., New York, N. Y. Coffee making device. 1,887,849; Nov. 15.
Pennsylvania Pump and Compressor Company. (See Nathan, Ellis, assignor.)
Perony, Jean A., assignor to Societe d'Outillage Mecanique et d'Usinage d'Artillerie, Saint-Ouen, France. Arrangement of auxiliary brushes for road sweeping machines. 1,887,697; Nov. 15.
Perusick, John A., Butte, Mont. Drill. 1,887,698; Nov. 15.
Peterson, Axel M., Onamia, Minn. Portable heater. 1,887,782; Nov. 15.
Peterson, Carl D. (See Padgett, J. E., and Peterson.)
Peterson, John H., assignor of thirty-five per cent to E. G. Green, Silver City, Iowa. Brake mechanism. 1,888,092; Nov. 15.
Peterson, John H., Silver City, Iowa. Hydraulic brake. 1,888,093; Nov. 15.
Petroleum Heat and Power Company. (See Macrae, J. N., and Packard, assignors.)
Phelan, Louis A. M. (See Taylor, Charles, assignor.)
Philadelphia & Reading Coal & Iron Company, The. (See Maloney, Andrew J., assignor.)
Phillips, Harold F., Belmont, Mass. Piston and skirt expanding ring therefor. Re18,653; Nov. 15.
Platt, Howard I., assignor to Motor Wheel Corporation, Lansing, Mich. Emergency control for oil burners. 1,887,514; Nov. 15.
Pickens, Joseph C. (See Simmons, Orvall G., assignor.)
Pielstick, Gustav, assignor to Maschinenfabrik Augsburg-Nürnberg A. G., Augsburg, Germany. Internal combustion engine. 1,887,661; Nov. 15.
Pierson, Moses E., Charlotte, N. C. Pneumatic means for operating inspecting forms. 1,887,783; Nov. 15.
Pikul, Joseph, Troy, N. Y., assignor to The Reece Button Hole Machine Company, Boston, Mass. Stitched buttonhole. 1,887,954; Nov. 15.
Pilkington, William, Beckley, W. Va. Surveying instrument. 1,888,011; Nov. 15.
Pinckard, Paul M., Birmingham, Ala. By-product coke oven. 1,888,012; Nov. 15.
Pittsburgh Equitable Meter Company. (See Weymouth, Harry G., assignor.)
Pittsburgh Plate Glass Company. (See Evans, Albert E., assignor.)
Pittsburgh Plate Glass Company. (See Hitchcock, Halbert K., assignor.)
Platt Brothers and Company Limited. (See Wilkinson, Henry, assignor.)
Platt, Harry E., Ottumwa, Iowa. Automatic pressure gauge. 1,887,821; Nov. 15.
Plint, Joseph. (See Gurton, W. S., Plint, and Nyberg.)
Pogue, Charles N., St. Boniface, Manitoba, Canada. Route indicator. 1,888,013; Nov. 15.
Poll, Louis, Hamilton, Mich. Planting machine. 1,888,143; Nov. 15.
Pollitt, George P. (See Brownsdon, H. W., Nimmo, and Pollitt.)
Porcello, Raphael, Richmond Hill, N. Y. Baby carriage quilt holding device. 1,888,180; Nov. 15.
Porter, Howard C. (See Pagel, E. C., and Porter.)
Postindex Company. (See Carlson, T. R., and Gronberg, assignors.)
Powelson, Wilfrid V. N., New York, N. Y., and W. Travell, San Bernardino, Calif. Launching aircraft. 1,887,860; Nov. 15.
Powerplus (1927) Limited. (See Eyston, George E. T., assignor.)
Powers & Company. (See Powers, Frank M., assignor.)
Powers, Frank M., assignor to Powers & Company, Chicago, Ill. Tent window. 1,888,014; Nov. 15.
Procter & Gamble Company, The. (See Reid, Forestus, assignor.)
Production Engineering Company. (See Oberhoffken, Alexander, assignor.)
Propp, Louis, assignor to The M. Propp Co. Inc., New York, N. Y. Electric outlet socket. 1,887,784; Nov. 15.
Propp, Louis, assignor to M. Propp Co., Inc., New York, N. Y. Electrical illuminating device. 1,887,785; Nov. 15.
Propp, M. Co. Inc., The. (See Propp, Louis, assignor.)
Prosperity Company, The. (See Davis, Ernest, assignor.)
Pryor, Benjamin F., River Rouge, Mich. Air cooled hair waving device. 1,887,786; Nov. 15.
Puffer-Hubbard Mfg. Co. (See Long, Charles E., assignor.)
Pulaski, Jacob L., West Roxbury, assignor to Miracle Table Corporation, Boston, Mass. Extension table. 1,888,124; Nov. 15.
Pulkinghorn, William R., assignor of one-half to Joseph S. Davis, Los Angeles, Calif. Electrically operated air admission valve for internal combustion engines. 1,887,515; Nov. 15.

Pullen, Rodney S., assignor to Pullenlite Company, Philadelphia, Pa. Machine for making match packages. 1,887,944; Nov. 15.
Pullenlite Company. (See Pullen, Rodney S., assignor.)
Quigley, W. A. (See Goble, Bert G., assignor.)
Quincy Stove Manufacturing Co. (See Lange, Henry, assignor.)
Quinlivan, Donald P., Fresno, Calif. Framing jack. 1,887,822; Nov. 15.
Rabkin, William, New York, and C. Fleishcer, Brooklyn, N. Y., said Fleischer assignor to said Rabkin. Amusement and dispensing device. 1,888,050; Nov. 15.
Radio Corporation of America. (See Beverage, Harold H., assignor.)
Radiovision Corporation. (See Wein, Samuel, assignor.)
Railway & Industrial Engineering Company. (See Medlin, John P., assignor.)
Ramsey Accessories Manufacturing Corporation. (See Marien, Charles A., assignor.)
Ranieri, Luigi, Rome, Italy, assignor of one-half to C. D. Di Frasso. Cinematographic projector, camera, and the like. 1,888,094; Nov. 15.
Rayfield, Charles L., assignor to Rayfield Mfg. Co., Chicago, Ill. Oil burner supply system. 1,888,015; Nov. 15.
Rayfield Mfg. Co. (See Rayfield, Charles L., assignor.)
Raymond Concrete Pile Company. (See Collins, Jeremiah J., assignor.)
Read, David Y., assignor of one-fourth to J. P. Grandy and one-fourth to H. H. Snelling, Washington, D. C. Visible writing calculating machine. 1,888,144; Nov. 15.
Read, Roland R., assignor to Sharp & Dohme, Inc., Baltimore, Md. Butyl phenol composition. 1,887,662; Nov. 15.
Reece Button Hole Machine Company, The. (See Pikul, Joseph, assignor.)
Reed, Henry M., jr., Louisville, Ky., assignor to Standard Sanitary Manufacturing Company. Plumbing fixture clip. 1,887,663; Nov. 15.
Reese, Lemuel V., and G. W. Johnson, assignors to The American Laundry Machinery Company, Cincinnati, Ohio. Paper pulp extractor. 1,887,955; Nov. 15.
Regensburger, Richard W., assignor, by mesne assignments, to Industrial Patents Corporation, Chicago, Ill. Separating and packing eggs. 1,887,516; Nov. 15.
Reid, Forestus, assignor to The Procter & Gamble Company, Cincinnati, Ohio. Container sealing machine. 1,887,699; Nov. 15.
Reiman, Paul, assignor to William Wilbeim Co., Inc., New York, N. Y. Textile fabric or similar article. Des. 88,319; Nov. 15.
Reinhardt, Friedrich. (See Kleinow, W., Morgenroth, Reinhardt, and Bruer.)
Reisner, W. H., Manufacturing Company, The. (See Myers, C. F., and Reisner, assignors.)
Reisner, William H. (See Myers, C. F., and Reisner.)
Reliable Knitting Works. (See Joha, Elmer N., assignor.)
Remington Arms Company. (See Brün, Willi, assignor.)
Remington Arms Company. (See Burns, J. E., and Woodford, assignors.)
Replogle, Daniel B., Berkeley, Calif., assignor to The Commerce Guardian Trust & Savings Bank, trustee, Toledo, Ohio. Airway suction cleaner. 1,887,600; Nov. 15.
Replogle, Daniel B., Berkeley, Calif., assignor to The Commerce Guardian Trust & Savings Bank, trustee, Toledo, Ohio. Dust collecting apparatus for suction cleaners. 1,887,601; Nov. 15.
Research Corporation. (See Wintermute, H. A., and Hedberg, assignors.)
Reutener, Edgar W., assignor to Wm. A. Howe Company, Cleveland, Ohio. Door oscillating device. 1,887,517; Nov. 15.
Ressny, Koloman, Budapest, Hungary, assignor to Hydrometer A. G., Breslau. Boiler feeding device. 1,888,016; Nov. 15.
Rhoades, Dewey V., assignor to C. E. Farrow, and H. W. Farrow, Wichita, Kans. Light control switch. 1,888,145; Nov. 15.
Rhodes Metallic Packing Company. (See Field, Fletcher H., assignor.)
Rice, Charles M. (See Hughes, William C., assignor.)
Richer, Joseph R., Oak Park, Ill., assignor to J. P. Nielsen. Package holder. 1,887,945; Nov. 15.
Riesbol, Henry C., New York, N. Y. Concrete building form. 1,888,181; Nov. 15.
Robertson, Arthur F. (See Dunham, L., and Robertson.)
Robertson, Lennox, Cardiff, Wales. Holding stair carpets and runners in position. 1,888,146; Nov. 15.
Robertson, Robert R., Chicago Heights, Ill. Bar support. 1,887,890; Nov. 15.
Robinson, Irving G., Norwalk, Conn. Tooth paste and shaving cream tube holder. 1,887,720; Nov. 15.
Rockwell, Hugh M., Freeport, N. Y. Internal combustion engine. 1,887,787; Nov. 15.
Rodless Pump Company. (See Scott, Bernard H., assignor.)
Roesaler & Hasslacher Chemical Company, The. (See Bond, Harlan A., assignor.)
Roosen, Richard, assignor, to Stug Kohlenstaubfeuirung Patentverwertung G. m. b. H., Kassel, Germany. Pulverized fuel furnace. 1,887,891; Nov. 15.
Rosander, Axel E., and Oscar D. Schvartz, Cincinnati, Ohio. Meat tenderer. 1,887,892; Nov. 15.
Rosco Manufacturing Company, The. (See Cederstrom, Harold A., assignor.)
Rosenberg, Frederick, Kew Gardens, N. Y., assignor to William Wilbeim Co., Inc., New York, N. Y. Textile fabric or similar article. Des. 88,320; Nov. 15.
Rosenberg, Frederick, Kew Gardens, N. Y., assignor to William Wilbeim Co., Inc., New York, N. Y. Textile fabric or similar article. Des. 88,321; Nov. 15.
Rosenberg, Frederick, Kew Gardens, N. Y., assignor to William Wilbeim Co., Inc., New York, N. Y. Textile fabric or similar article. Des. 88,322; Nov. 15.
Rosner, Adolph, assignor to Bendix Brake Company, South Bend, Ind. Brake lining. 1,887,961; Nov. 15.
Rousso, Jacques, Los Angeles, Calif. Counting device. 1,887,788; Nov. 15.
Rowley, Arthur C., assignor to Globe Automatic Sprinkler Company, Philadelphia, Pa. Release device. 1,888,182; Nov. 15.
Rowley, Howard H. (See Nutting, H. S., and Rowley.)
Rund, Ingvald, Hayti, S. Dak. Elevator lifting mechanism for graders. 1,888,147; Nov. 15.
Rush, Clarence E., Grand Island, Nebr. Power transmission for mowers. 1,887,789; Nov. 15.
Rutenbeck, Charles J., et al. (See Shoats, Harry W., assignor.)
Rypinski, Albert B., Laurelton, N. Y., assignor, by mesne assignments, to Metropolitan Device Corporation. Meter connection box. 1,887,956; Nov. 15.
S. H. G. Incorporated. (See Wannack, Carl O., assignor.)
Sablik, Ignaz, Stramberg, Czechoslovakia. Powdery material feed apparatus. 1,887,733; Nov. 15.
Sadtler, Samuel S., Springfield township, assignor to Amiesite Asphalt Company of America, Philadelphia, Pa. Bitumen road composition and forming the same. 1,887,518; Nov. 15.
St. Pailey, Zoltan O., Pittsfield, Mass., assignor to General Electric Company. Casing for electrical apparatus. 1,887,569; Nov. 15.
Sanborn, Augustus M., Porterville, Calif. Spray pump. Des. 88,323; Nov. 15.
Sanders, Rudolph M., assignor to Adartcraft, Inc., New York, N. Y. Display device. 1,887,946; Nov. 15.
Sanford, Hugh W. (See McCallen, Perry S., assignor.)
Sanford, Sydney J. (See Larner, C. W., and Sanford.)
Sangaland, Samuel A., St. Paul, Minn. Safety device for laundry extractors. 1,887,519; Nov. 15.
Sani-Toil Trust Association. (See Connors, William J., assignor.)
Sargent & Company. (See Shaw, John H., assignor.)
Sauer, Earl G. (See Landis, L. L., and Sauer.)
Saunders, Gordon, Whittier, Calif. Brake testing machine. 1,887,721; Nov. 15.
Savale, Louis C., West Orange, assignor of one-half to Howell Topping, Orange, N. J. Vehicle seat. 1,887,947; Nov. 15.
Saxton, Frank S., Blissfield, Mich. Toy gun. 1,887,520; Nov. 15.
Scheele, Charles C., assignor to Easy Washing Machine Corporation, Syracuse, N. Y. Ironing machine. 1,887,734; Nov. 15.
Schellentrager, Eugene W., Shaker Heights, assignor to Atlas Bolt & Screw Company, Cleveland, Ohio. Pusher for retort ovens. 1,888,201; Nov. 15.
Schenck, LeRoy C., Moline, Ill., assignor to Troy Laundry Machinery Company, New York, N. Y. Valve mechanism. 1,887,521; Nov. 15.
Schenkel, Emil S., New York, N. Y. Sign illumination. 1,887,523; Nov. 15.
Scherer, Charles W., Dayton, Ohio, assignor, by mesne assignments, to Frigidaire Corporation. Refrigerating apparatus. 1,887,948; Nov. 15.
Schireson Bros. (See Schireson, Nathan W., assignor.)
Schireson, Nathan W., assignor to Schireson Bros., Los Angeles, Calif. Stringed musical instrument. 1,887,861; Nov. 15.
Schlemm, Robert, Chicago, Ill. Time switch. 1,887,735; Nov. 15.
Schlyfestone, Max H., Pontiac, Mich. Auto brush. 1,887,598; Nov. 15.
Schmals, William F. (See Conner, B. F., and Schmals.)
Schmitt, Joy B., assignor to The De Vilbiss Company, Toledo, Ohio. Medicinal spray. 1,887,949; Nov. 15.
Schnaars, David R. (See Correll, G. H., and Schnaars.)
Schneider, August. (See Kohler, J. H., and Schneider.)
Schneider, Hermann. (See Straub, F., Schneider, and Bernhard.)
Schoener, Erwin, and K. Freiseis, Brooklyn, N. Y. Pipe cleaning apparatus. 1,887,722; Nov. 15.
Schuckman, Edwin W., Wichita, Kans. Garage door operating and locking means. 1,888,017; Nov. 15.
Schvartz, Oscar D. (See Rosander, A. E., and Schvartz.)
Schwab, Robert W., assignor to Southern Spring Bed Company, Atlanta, Ga. Sign holder. 1,887,894; Nov. 15.
Schwarzkopf, Arthur R. (See Kochs, R. E., and Schwarzkopf.)
Schwarzman, Wolfgang E., Longmeadow, assignor to American Bosch Magneto Corporation, Springfield, Mass. Magneto interrupter. 1,887,522; Nov. 15.
Schweigart, Hans-Adalbert, Kedlitz, near Saalfeld-Saale, Germany. Making a feed substance from cocoa, sugar, and water. 1,887,905; Nov. 15.
Schwen, Gustav, Ludwigshafen-on-the-Rhine, and Hans Krnikalla, Mannheim, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Weighting animal hairs. 1,887,958; Nov. 15.

Sciaky, David, Paris, France. Electric welding machine. 1,888,148; Nov. 15.
Scott, Bernard H., Glendale, assignor to Rodless Pump Company, Los Angeles, Calif. Deep well pump. 1,887,736; Nov. 15.
Seguy, Jean D., assignor to Universal Oil Products Company, Chicago, Ill. Process and apparatus for treating hydrocarbons. 1,888,051; Nov. 15.
Seng Company, The. (See Fox, Martin, assignor.)
Service Station Equipment Co. Limited. (See Brouse, William H. D., assignor.)
Shaffer, Ernest J., Oklahoma City, assignor to George W. Shaffer, Tulsa, Okla. Hose coupling. 1,887,877; Nov. 15.
Shaffer, George W. (See Shaffer, Ernest J., assignor.)
Shaffer, George W., Tulsa, Okla. Deck of playing cards. Des. 88,324; Nov. 15.
Shaffer, W. D. (See Jensen, Bertel M., assignor.)
Shanafelt, Clark, Akron, Ohio. Elevator shaft construction. 1,888,018; Nov. 15.
Shannon, Ellwood M., Bala, Pa. Locomotive trailer truck. 1,888,183; Nov. 15.
Sharar, Chester R., Los Angeles, Calif. Hydraulic brake. 1,887,723; Nov. 15.
Sharp & Dohme, Inc. (See Read, Roland R., assignor.)
Shaw, Ernest C. (See Hagmaier, W. G., and Shaw.)
Shaw, John H., assignor to Sargent & Company, New Haven, Conn. Lock. 1,888,095; Nov. 15.
Shaw, Louis E., East Orange, N. J., assignor to Adartcraft, Incorporated, New York, N. Y. Display device. 1,888,096; Nov. 15.
Shepherd, Harold F. (See Gehres, H. A., and Shepherd.)
Sherin, David E. (See Meeaney, Philip E., assignor.)
Sherman, John C., Gorham, Me., assignor to Brown Company, Berlin, N. H. Manufacture of pulp rovings. 1,887,959; Nov. 15.
Sherts, James H., Brackenridge, Pa., assignor to Duplate Corporation. Severing composite glass. 1,887,564; Nov. 15.
Sherts, James H., Brackenridge, Pa., assignor to Duplate Corporation. Making composite glass. 1,887,565; Nov. 15.
Shiffler, William H., and W. P. Anderson, Berkeley, assignors to Standard Oil Company of California, San Francisco, Calif. Producing aluminum chloride. 1,887,566; Nov. 15.
Shontz, Harry W., Maquoketa, assignor of one-third to R. S. Murray and one-third to C. J. Rutenbeck, Lost Nation, Iowa. Door locking device. 1,888,184; Nov. 15.
Shurtleff, Wilfred, assignor to The Herman Nelson Corporation, Moline, Ill. Air filter for heating and ventilating units. 1,887,737; Nov. 15.
Siegel, Milton H., assignor to Siegele, Rothschild-Gans Bros. Inc., Baltimore, Md. Interchangeable umbrella handle. 1,887,950; Nov. 15.
Siegel, Rothschild-Gans Bros. Inc. (See Siegel, Milton H., assignor.)
Siemens-Bauunion G. m. b. H. Kommanditgesellschaft. (See Durchholz, Artur, assignor.)
Siemens-Schuckertwerke Aktiengesellschaft. (See Altenkirch, Edmund, assignor.)
Siemens-Schuckertwerke Aktiengesellschaft. (See Ludwig, Fritz, assignor.)
Sieweck, Charles A., New York, N. Y. Automobile dashboard heat shield. 1,887,724; Nov. 15.
Signode Steel Strapping Company. (See Pagel, E. C., and Porter, assignors.)
Simmen, Oscar, Erlach, assignor to the Firm of Sulzer Freres Societe Anonyme, Winterthur, Switzerland. Mounting of internal combustion power units in vehicles. 1,887,862; Nov. 15.
Simmons, Orvall G., Guernsey, Ohio, assignor of one-half to J. C. Pickens, Elm Grove, W. Va. Speed regulator. 1,888,185; Nov. 15.
Sipe, George B., Shreveport, La. Combined drill and underreamer. 1,887,895; Nov. 15.
Sladky, Alexander C. (See Sladky, Joseph and A. C.)
Sladky, Joseph and A. C., Milwaukee, assignors to National Enameling & Stamping Company, Inc., Milwaukee County, Wis. Constant level safety device for liquid fuel lighters. 1,887,960; Nov. 15.
Smedley, Samuel R. (See Wingo, W. W., Smedley and Babb.)
Smith, Harry G., Dearborn, Mich. Airplane. 1,887,738; Nov. 15.
Smith, Jesse A. B., Stamford, Conn., assignor to Underwood Elliott Fisher Company, New York, N. Y. Combined typewriting and card perforating machine. Re18,657; Nov. 15.
Smith, Jesse A. B., Stamford, Conn., assignor to Underwood Elliott Fisher Company, New York, N. Y. Typewriting machine. 1,888,052; Nov. 15.
Smith, Paul D., Minneapolis, Minn. Dispenser for materials in their original containers. 1,887,961; Nov. 15.
Smith, Ronald G., Fairfield, Conn. Toy. 1,887,823; Nov. 15.
Smith, William E., Pittsburgh, assignor to The Union Switch & Signal Company, Swissvale, Pa. Shaft operating and locking apparatus. 1,887,878; Nov. 15.
Smith, William W., Buffalo, N. Y., assignor to The Dow Chemical Company, Midland, Mich. Casting readily oxidizable metals. Re18,652; Nov. 15.
Snelling, Henry H., et al. (See Read, David Y., assignor.)
Societe d'Outillage Mecanique et d'Usinage d'Artillerie. (See Perony, Jean A., assignor.)
Society of Chemical Industry in Basle. (See Straub F., Schneider, and Bernhard, assignors.)
Society of Chemical Industry in Basle. (See Wettstein, Walter, assignor.)
Sorensen, Henry, San Francisco, Calif. Cooling of the interior of a seamless block of setting concrete. 1,888,097; Nov. 15.
Southern Spring Bed Company. (See Schwab, Robert W., assignor.)
Soyster, Charles J., and G. W. Lawn, Long Beach, Calif.; said Lawn assignor to said Soyster. Apparatus for regulating pressure in tanks. 1,887,824; Nov. 15.
Sperry, William E., San Diego, Calif. Toy. 1,887,791; Nov. 15.
Spicer Manufacturing Corporation. (See Padgett, J. E., and Peterson, assignors.)
Spiegelhalter, Joseph, jr., St. Louis, Mo. Guard for paint brushes. 1,887,525; Nov. 15.
Spielberg, Joseph M., and Abraham Goodstein, Brooklyn, N. Y. Medical tampon. 1,887,526; Nov. 15.
Spindel, Moses, Innsbruck, Austria. Testing machine. 1,887,527; Nov. 15.
Splitdorf Electrical Company. (See Dunham, L. S., and Robertson, assignors.)
Sporn, Philip, Brooklyn, and H. D. Freitag, Lynbrook, assignors to Electric Progress Company, Inc., New York, N. Y. Testing arrangement for power circuits. 1,887,962; Nov. 15.
Springfield Metallic Casket Company, The. (See Henderson, Roe P., assignor.)
Sprulll, Moye W., Plymouth, N. C. Shoe shining machine. 1,887,906; Nov. 15.
Squyer, Albert R., assignor to Weaver Manufacturing Company, Springfield, Ill. Headlight-tester. 1,887,524; Nov. 15.
Stafford, David G., Vancouver Island, British Columbia, Canada. Nut for valve stems. 1,887,963; Nov. 15.
Standard Oil Company. (See Adams, Chester E., assignor.)
Standard Oil Company of California. (See Shiffler, W. H., and Anderson, assignors.)
Standard Oil Development Company. (See Haupt, Charles H., assignor.)
Standard Sanitary Manufacturing Company. (See Reed, Henry M., jr., assignor.)
Standard Stations, Inc. (See Aldrich, Ralph N., assignor.)
Standerwick, Reginald G., Marblehead, Mass., assignor to General Electric Company. Brush rigging mechanism for scherbius sets and like cascades for connecting two power systems. 1,887,567; Nov. 15.
Stanford, George G., Oakland, Calif. Nut lock. 1,887,568; Nov. 15.
Stant Manufacturing Co. (See Johnson, Glen A., assignor.)
Stanton, Joseph R. (See Markey, F. L., and Stanton.)
Starkey, William C., assignor to L. G. S. Devices Corporation, Indianapolis, Ind. Starter. 1,887,982; Nov. 15.
Statham, Noel, Irvington-upon-Hudson, N. Y. Adjustable fastening means. 1,887,825; Nov. 15.
Statham, Noel, Irvington-upon-Hudson, N. Y. Adjustable fastening device. 1,887,826; Nov. 15.
Stechbart, Bruno, assignor to The Bell & Howell Company, Chicago, Ill. Motion picture projecting machine and continuous film feed reel therefor. 1,887,664; Nov. 15.
Steel, Ray N. Cedar Rapids, Iowa. Wrist pin. 1,887,964; Nov. 15.
Steele, Ray N., Cedar Rapids, Iowa. Engine piston. 1,888,203; Nov. 15.
Stein, Wilhelm, Karlsruhe, assignor to Ernst Heinkel, Warnemunde, Germany. Airplane launching tract. 1,887,528; Nov. 15.
Stephens Pump Company. (See Tennant, Joseph A., assignor.)
Stevens, Charles W. (See Auker, H. H., and Stevens.)
Stevens, Dorothy A. (See Stevens, Henry B., assignor.)
Stevens, Henry E., Jacksonville, Fla., assignor to D. A. Stevens, New York, N. Y. Building tile. 1,887,701; Nov. 15.
Stevens, Thomas A., Wolverhampton, England. Stopper or closure. 1,887,700; Nov. 15.
Stevenson, Earl P., Newton, Mass., assignor to Arthur D. Little Industrial Corporation. Making pulp. 1,887,963; Nov. 15.
Stimson, Frank G., Belleville, assignor to Bond Electric Corporation, Jersey City, N. J. Flash light switch. 1,888,204; Nov. 15.
Stogner, Lawrence B., Hartsville, S. C. Tube or cone holding mandrel. 1,887,790; Nov. 15.
Stokes, John S., Huntingdon Valley, assignor to Stokes and Smith Company, Summerdale, Pa. Wrapped box. 1,887,864; Nov. 15.
Stokes and Smith Company. (See Stokes, John S., assignor.)
Stoll, Arthur, and A. Hofmann, assignors to the Firm Chemical Works formerly Sandoz, Basel, Switzerland. Complex glucosaminic acid salts of the metals of the iron group. 1,888,186; Nov. 15.
Stoll, Arthur, and A. Hofmann, assignors to Chemical Works formerly Sandoz, Basel, Switzerland. Glucosaminic salts of antimony. 1,888,187; Nov. 15.

Stoner, Frank H., Monroe, Mich. Hoist derrick. 1,887,965; Nov. 15.
Stowe & Woodward Company. (See Eberlein, George H., assignor.)
Straatman, Alphons G. H., The Hague, Netherlands, assignor to Naamloose Vennootschap de Bataafsche Petroleum Maatschappij. Apparatus for surveying wells. 1,887,907; Nov. 15.
Strand, Henry, and B. De K. Jackson, Cleveland, Ohio, assignors, by mesne assignments, to Automotive Maintenance Machinery Company, Chicago, Ill. Tool. Re18,659; Nov. 15.
Straub, Fritz, Basel, and H. Schneider and H. Bernhard, Riehen, near Basel, assignors to Society of Chemical Industry in Basle, Basel, Switzerland. Metal compounds of azo-dyestuffs and making same. 1,887,602; Nov. 15.
Straub, Fritz, Basel, and H. Schneider and H. Bernhard, Rieben, near Basel, assignors to the Firm Society of Chemical Industry in Basle, Basel, Switzerland. Production of metal compounds of azo dyestuffs on animal fibers. 1,887,603; Nov. 15.
Strite, Lloyd C., Minneapolis, Minn. Electric waffle iron. 1,887,966; Nov. 15.
Stug Kohlenstaubfeuerung Patentverwertung G. m. b. H. (See Roosen, Richard, assignor.)
Sturtevant, B. F., Company. (See Davis, Jesse H., assignor.)
Sturtevant, B. F., Company. (See Hagen, Harold F., assignor.)
Sulphide Research Corporation, The. (See Freeman, Horace, assignor.)
Sulzer Freres Society Anonyme. (See Simmen, Oscar, assignor.)
Supersteam Generator Company. (See Geoghegan, Edward A., assignor.)
Svenska Aktiebolaget Bromsregulator. (See Djurson, A. R. K., and Brownall, assignors.)
Swaney, Frank S., Massillon, Ohio. Thermostatic control for rolling mills. 1,888,098; Nov. 15.
Tada, Renzo, Tokyo-Fu, assignor to Toyo Kompuresoru Kabushiki Kaisha, (The Oriental Compressol Co. Ltd.), Tokyo, Japan. Apparatus for forming concrete piles. 1,887,604; Nov. 15.
Tanabe, Tadashi, Torigai, Fukuoka, Japan. Stainless silver alloy. 1,888,188; Nov. 15.
Tanner, Robert R., Detroit, and V. M. Darsey, Morenci, assignor to Parker Rust Proof Company, Detroit, Mich. Composition for coating metals and making the same. 1,887,967; Nov. 15.
Tanner, Robert R., Highland Park, and V. M. Darsey, Morenci, assignors to Parker Rust Proof Company, Detroit, Mich. Coated metal article and method of and composition for producing said article. 1,888,189; Nov. 15.
Tatum, John J., Baltimore, Md. Antifriction roller side bearing for railroad cars. 1,887,605; Nov. 15.
Taylor, Charles, Beloit, Wis., assignor, by mesne assignments, to L. A. M. Phelan, Chicago, Ill. Ice cream freezing system. Re18,660; Nov. 15.
Taylor, Frank C., Rochester, N. Y., assignor to Automatic Products Company, Milwaukee, Wis. Safety control for fluid fuel valves. Re18,658; Nov. 15.
Tennant, Joseph A., Houston, assignor, by mesne assignments, to Stephens Pump Company, Round Rock, Tex. Pump. 1,888,053; Nov. 15.
Texas Company, The. (See Moore, Norman H., assignor.)
Textile Machine Works. (See Gastrich, Gustav, assignor.)
Themak, Edward, assignor to Geck Laboratories, Inc., New York, N. Y. Ligature package. 1,887,529; Nov. 15.
Thermophor Mfg. Company. (See Bell, Thomas P., assignor.)
Thibert, Napoleon R., Worcester, Mass. Liquid fuel burner. 1,888,019; Nov. 15.
Thomas, Mable M., executrix. (See Thomas, Thomas H.)
Thomas, Thomas H., deceased, by M. M. Thomas, executrix. Edgewood, assignor to The Westinghouse Air Brake Company, Wilmerding, Pa. Air purifier. 1,887,606; Nov. 15.
Thomas, Thomas H., deceased, by M. M. Thomas, executrix, Edgewood, assignor to The Westinghouse Air Brake Company, Wilmerding, Pa. Maintaining valve device. 1,887,702; Nov. 15.
Thurwanger, Aloys, Norwood, Ohio. Door or window screen. 1,887,740; Nov. 15.
Tidblad, Anders T., Soderhamn, Sweden. Barking machine. 1,887,908; Nov. 15.
Tietse, Ernst. (See Ossenbeck, A., Hentrich, and Tietse.)
Tipeska, Géza, and L. Mach, Munich, Germany. Apparatus for reproducing literary and pictorial matter. 1,888,054; Nov. 15.
Tobin, George A. (See Tobin, Robert J. and G. A.)
Tobin, Robert J., Hollis, and G. A. Tobin, Forest Hills, N. Y. Shingle. 1,888,055; Nov. 15.
Tompkins, Frederick N., Pawtucket, and I. O. Miner, East Greenwich, R. I., assignors to Brown and Sharpe Manufacturing Company. Hair clipper. 1,877,968; Nov. 15.
Topping, Howell. (See Savale, Louis C., assignor.)
Toronto Type Foundry Company. (See Huffman, Louis, assignor.)
Tourtois, Fernand B., assignor to Coty, Inc., New York, N. Y. Bottle. Des. 88,825; Nov. 15.
Toyo Kompuresoru Kabushiki Kaisha. (See Tada, Renzo, assignor.)
Tracy, Robert W., assignor to The De Vilbiss Company, Toledo, Ohio. Spray gun. 1,887,969; Nov. 15.
Travell, Warren. (See Powelson, Wilfrid V. N., assignor.)
Triangle Packaging Company. (See Colver, Charles C., assignor.)
Tritton, Julian S., Calcutta, India. Lamp control for vehicles. 1,887,828; Nov. 15.
Trotter, Arthur H., Syracuse, N. Y., assignor to Heedless Fastener Company, Meadville, Pa. Fastening device. 1,887,741; Nov. 15.
Trotter, E. T., & Co. (See Hinsky, Anthony P., assignor.)
Troy Laundry Machinery Company. (See Schenck, Le Roy C., assignor.)
Truman, Charles H. J., Oakland, Calif. Refrigerating casket. 1,887,985; Nov. 15.
Truran, Clifford P., Brewster, N. Y. Motion transmission for motor vehicles. 1,888,149; Nov. 15.
Trussell, Clarence D., assignor to Trussell Manufacturing Company, Poughkeepsie, N. Y. Book or binder cover and making the same. 1,887,590; Nov. 15.
Trussell Manufacturing Company. (See Trussell, Clarence D., assignor.)
Twin Coach Company. (See Fageol, William B., assignor.)
Uehling, Fritz F., Passaic, N. J. Thermocouple and its electrical connection. 1,887,827; Nov. 15.
Underwood Elliott Fisher Company. (See Helmond, William F., assignor.)
Underwood Elliott Fisher Company. (See Smith, Jesse A. B.)
Union Switch & Signal Company, The. (See Smith, William E., assignor.)
Union Switch & Signal Company, The. (See Wells, Wesley B., assignor.)
United Piece Dye Works, The. (See Megres, Georges, assignor.)
United Shoe Machinery Corporation. (See Allen, George R., assignor.)
United Shoe Machinery Corporation. (See Benson, Earl A., assignor.)
United Shoe Machinery Corporation. (See Goddu, George, assignor.)
United Shoe Machinery Corporation. (See Hart, George T., jr., assignor.)
United Shoe Machinery Corporation. (See Johnson, William H., assignor.)
United States Appliance Corporation. (See Keele, Ralph M., assignor.)
Universal Match Corporation, The. (See Neklutin, Constantine N., assignor.)
Universal Oil Products Company. (See Dubbs, Carbon P., assignor.)
Universal Oil Products Company. (See Egloff, G., and Benner, assignors.)
Universal Oil Products Company. (See Huff, Lyman C., assignor.)
Universal Oil Products Company. (See Morrell, Jacque C., assignor.)
Universal Oil Products Company. (See Nelson, Edwin F., assignor.)
Universal Oil Products Company. (See Seguy, Jean D., assignor.)
Upson Company, The. (See Harney, Francis W., assignor.)
Valbuena, Luis M., New York, N. Y. Dental plate. 1,887,970; Nov. 15.
Van Den Driessche, Joseph V. G., Uccle-Brussels, Belgium. Manufacture of amorphous carbon. 1,887,792; Nov. 15.
Van Ranst, Cornelius W., Auburn, Ind., assignor, by mesne assignments, to Manning & Co., Chicago, Ill. Front drive automobile. 1,887,666; Nov. 15.
Van Splunter, John M., Grand Rapids, Mich. Electric power switch. 1,887,742; Nov. 15.
Vaughn, Sidney P., United States Navy, Ackerman, Miss. Helicopter. 1,887,703; Nov. 15.
Versillo, Jack, and A. Yodice, New York, N. Y. Four blade propeller. 1,888,056; Nov. 15.
Vetter, Ignatius J., New York, N. Y., assignor to Bigelow Sanford Carpet Co., Inc. Carpet. Des. 88,826; Nov. 15.
Viber Company Limited. (See Wilson, Thomas H., assignor.)
Victor Chemical Works. (See Lindberg, Nils C., assignor.)
Villain, Paul, Dulwich, London, England. Manufacture of transparent or opaque toilet and medicated soaps. 1,887,743; Nov. 15.
Vincent, Orville L., Chicago, Ill. Automatic gate. 1,888,057; Nov. 15.
Vincent, Orville L., Chicago, Ill. Electrically operated automatic crossing gate. 1,888,058; Nov. 15.
Vogt, Hugo, Prague, Czechoslovakia. Screw vise. 1,887,629; Nov. 15.
Vogt, Henry, Machine Company. (See Bryant, George R., assignor.)
Vollmann, Heinrich. (See Kunz, M. A., Kraenzlein, Koeberle, Corell, Berthold, and Vollmann.)
Walker, Woods S., assignor to The Consolidated Gas Company of New York, New York, N. Y. Gas strainer. 1,888,150; Nov. 15.
Wall, P., Manufacturing Company. (See Leety, H. B., Bickert, and Page, assignors.)
Wallace, Allen, Moorestown, N. J. Oil-electric locomotive. 1,888,190; Nov. 15.

Wallace, Edwin C., West Newton, assignor to Warren Brothers Company, Cambridge, Mass. Penetration method of road construction. Re18,654; Nov. 15.

Wallace, R., & Sons Manufacturing Company. (See Warren, William S., assignor.)

Walper, Curry O., Huntington Woods, Mich. Manufacturing wall board channels. 1,888,151; Nov. 15.

Walsh, George F., Los Angeles County, Calif. Shoe. 1,887,725; Nov. 15.

Wannack, Carl O., assignor, by mesne assignments, to S. H. G. Incorporated, Chicago, Ill. Making carburetted air gas. 1,888,059; Nov. 15.

Warner, Donald F. (See Grubre, L. E., Warner, and Ericson.)

Warner Electric Brake Corporation. (See Whyte, John, assignor.)

Warner, William F., jr., assignor to Henry Connolly Company, Inc., Rochester, N. Y. Loose leaf binder. 1,888,020; Nov. 15.

Warren Brothers Company. (See Wallace, Edwin C., assignor.)

Warren, William S., Meriden, assignor to R. Wallace & Sons Manufacturing Company, Wallingford, Conn. Spoon or similar article. Des. 88,327; Nov. 15.

Waseige, Charles E., Rueil, assignor to Henri et Maurice Farman, Billancourt, France. Speed reducing or increasing device for internal combustion engines. 1,887,607; Nov. 15.

Watairway Manufacturing Corporation, The. (See Guidetti, F., and Bontempi, assignors.)

Watson, Harold S., Brooklyn, N. Y. Ash tray. 1,887,896; Nov. 15.

Wax, Evelyn, Briarwood, Long Island, assignor to Combier & Co. Inc., New York, N. Y. Textile fabric or the like. Des. 88,328; Nov. 15.

Wayland, Frank, Salem, Mass. Leather shaving machine. 1,887,570; Nov. 15.

Wayne, Truman B., Houston, Tex., assignor to National Aluminate Corporation, Chicago, Ill. Defecating cane juice. 1,887,879; Nov. 15.

Weaver Manufacturing Company. (See Squyer, Albert R., assignor.)

Weber, Louis, Chicago, Ill. Insulating paper. 1,887,726; Nov. 15.

Wein, Samuel, assignor to Radiovision Corporation, New York, N. Y. Photovoltaic cell. 1,887,531; Nov. 15.

Weitz, Irene A., Brooklyn, assignor to Combier & Co. Inc., New York, N. Y. Textile fabric or the like. Des. 88,329; Nov. 15.

Weitz, Irene A., Brooklyn, assignor to Combier & Co. Inc., New York, N. Y. Textile fabric or the like. Des. 88,338; Nov. 15.

Weitz, Irene A., Brooklyn, assignor to Combier & Co. Inc., New York, N. Y. Textile fabric or the like. Des. 88,339; Nov. 15.

Wells, Wesley B., Wilkinsburg, assignor to The Union Switch & Signal Company, Swissvale, Pa. Light signal. 1,887,983; Nov. 15.

Wenger, David M., Leola, Pa. Washing machine. 1,887,971; Nov. 15.

Western Wheeled Scraper Company. (See Benbow, J. D., and Green, assignors.)

Westinghouse Air Brake Company, The. (See Bush, Rankin J., assignor.)

Westinghouse Air Brake Company, The. (See Down, Sidney G., assignor.)

Westinghouse Air Brake Company, The. (See Farmer, Clyde C., assignor.)

Westinghouse Air Brake Company, The. (See McCune, Joseph, assignor.)

Westinghouse Air Brake Company, The. (See Thomas, Thomas H., assignor.)

Westinghouse Air Brake Company. (See Winter, Harry J., assignor.)

Westinghouse Electric Air Brake Company. (See Farmer, Clyde C., assignor.)

Westinghouse Electric and Manufacturing Company. (See Baumann, K., and Jolley, assignors.)

Weston Toy Company, The. (See Merwin, Burton P., assignor.)

Wettstein, Walter, Monthey, assignor to Society of Chemical Industry in Basle, Basel, Switzerland. Obtaining hydrocyanic acid from gases containing the same. 1,887,608; Nov. 15.

Weymouth, Harry G., assignor to Pittsburgh Equitable Meter Company, Pittsburgh, Pa. Liquid dispensing system. 1,887,609; Nov. 15.

Whatmough, Wilfred A., New Barnet, England. Combustion chamber of internal combustion engines. 1,887,897; Nov. 15.

Wheeler, Holman K., Newton Center, Mass., assignor to Chemical Transfer Car Corporation, St. Johnsbury, Vt. Parking cars in garages. 1,887,667; Nov. 15.

Wheeler, Melville M., Nashville, Tenn. Corner vanity dresser. Des. 88,330; Nov. 15.

Wheeler, Melville M., Nashville, Tenn. Corner dresser. Des. 88,331; Nov. 15.

White Motor Company, The. (See Churcher, William B., assignor.)

Whitin Machine Works. (See Hames, Wade H., assignor.)

Whyte, John, Beloit, Wis., assignor to Warner Electric Brake Corporation, South Beloit, Ill. Vehicle braking system. 1,887,532; Nov. 15.

Wicks, John, assignor, by mesne assignments, to Associated Electric Laboratories, Inc., Chicago, Ill. Automatic telephone system. 1,887,744; Nov. 15.

Widegren, Emil H. (See Widegren, Klas A. and E. H.)

Widegren, Klas A. and E. H., Herserud, Sweden. Centrifugal friction clutch. 1,887,610; Nov. 15.

Widmer, Stefan, assignor to Aktiengesellschaft Brown Boveri & Cie, Baden, Switzerland. Protection and control of rectifiers. 1,887,880; Nov. 15.

Willisch, Hugo, Konigswinter-on-the-Rhine, Germany. Filling block for heat exchange, reaction, and absorption apparatus. 1,887,704; Nov. 15.

Wilkinson, Henry, Barrowshow, Oldham, assignor to Platt Brothers and Company Limited, Oldham, England. Machine for opening or breaking up cop-bottoms, cotton, or other waste, or like fibrous materials. 1,887,745; Nov. 15.

Willard, Waldo W., Schenectady, N. Y., assignor to General Electric Company, Circuit controlling apparatus. 1,888,099; Nov. 15.

Willett, Wallace R., New York, N. Y., and H. E. Brown, assignors to American Cotton Picker Corporation, St. Louis, Mo. Cotton picker machine. 1,887,831; Nov. 15.

Willheim, William, New York, N. Y. Textile fabric or similar article. Des. 88,332; Nov. 15.

Willheim, William, New York, N. Y. Textile fabric or similar article. Des. 88,333; Nov. 15.

Willheim, William, New York, N. Y. Textile fabric or similar article. Des. 88,334; Nov. 15.

Willheim, William, Co. (See Murray, Herman S., assignor.)

Willheim, William, Co. (See Reiman, Paul, assignor.)

Willheim, William, Co. (See Rosenberg, Frederick, assignor.)

Williams, Arthur L. (See Halliday, Alonso L., assignor.)

Williams, Arthur S., Ithaca, N. Y. Apparatus for developing heat by electricity. 1,887,533; Nov. 15.

Williams Estelle P. (See Williams, Villor P., assignor.)

Williams, George W., Burlingame, Calif. Building form. 1,887,668; Nov. 15.

Williams, Mark B., Plainview, Tex. Tractor or automotive vehicle automatic guide. 1,888,021; Nov. 15.

Williams Oil-O-Matic Heating Corporation. (See Williams, Walter W., assignor.)

Williams, Villor P., assignor, by mesne assignments, to E. P. Williams, Baltimore, Md. Preventing leakage of oil. 1,887 793; Nov. 15.

Williams, Walter W., assignor to W. Oil-O-Matic Heating Corporation, Bloomington, Ill. Electrically operated and controlled oil burning mechanism. 1,888,060; Nov. 15.

Wilms, Henry F., Cleveland, Ohio, assignor to Industrial Brownhoist Corporation, Bay City, Mich. Concrete mixer. 1,888,100; Nov. 15.

Wilson, Andrew G., Westminster, London, England. Change speed gear box. 1,888,191; Nov. 15.

Wilson, Donald. (See Carlson, W. L., and Wilson.)

Wilson, Ellsworth M., Montclair, assignor to Wilson-Imperial Company, Newark, N. J. Brushing device for car cushion cleaning machines. 1,886,571; Nov. 15.

Wilson-Imperial Company. (See Wilson, Ellsworth M., assignor.)

Wilson, Thomas H., assignor, by mesne assignments, to Viber Company, Limited, Los Angeles, Calif. Method and apparatus for coating pipe with plastic composition. 1,888,101; Nov. 15.

Wilson Welder & Metals Company. (See Churchward, Alexander, assignor.)

Wingo, William W., S. R. Smedley, and P. C. Babb, Poteau, Okla. Safety gas lighter. 1,887,794; Nov. 15.

Winter, Harry J., London, England, assignor to The Westinghouse Air Brake Company, Wilmerding, Pa. Fluid pressure braking apparatus for vehicles. 1,887,572; Nov. 15.

Winter, Joseph W., Penfield, assignor to John Wood Manufacturing Company, Conshohocken, Pa. Liquid dispensing apparatus. 1,888,192; Nov. 15.

Wintermute, Harry A., Plainfield, and C. W. J. Hedberg, Middlesex, N. J., assignors to Research Corporation, New York, N. Y. Apparatus for electrical precipitation. 1,888,022; Nov. 15.

Wittenberg, Edward H., assignor to Northern Engraving Company, La Crosse, Wis. Closure securing means. 1,887,611; Nov. 15.

Wittwer, Adolph, Harrisburg, Pa. Fruit jar glass tightener. 1,887,669; Nov. 15.

Wold, Edward S., Chicago, Ill. Luminous sign. 1,887,534; Nov. 15.

Wood, John, Manufacturing Company. (See Winter, Joseph W., assignor.)

Woodford, Watson H. (See Burns, J. E., and Woodford.)

Worden, Robert E., Fairfield, assignor to Dictaphone Corporation, Bridgeport, Conn. Carton. 1,888,152; Nov. 15.

Worrall, Robert H., Washington, D. C. Variable speed device. 1,887,705; Nov. 15.

Wrange, Georg V., assignor of one-half to Aktiebolaget Friberg's Hogvacuumpump, Stockholm, Sweden. Tanning hides. 1,887,972; Nov. 15.

Yanis y Diaz, Jose A., Habana, Cuba. Ventilating device for vehicles. 1,887,612; Nov. 15.

Yarrow, Harold E., Glasgow, Scotland. Water tube boiler. 1,888,153; Nov. 15.

Yawman & Erbe Manufacturing Company, The. (See Furlong, Roland A., assignor.)

Yodice, Augustine. (See Verzillo, J., and Yodice.)

Zahler, George A., Cleveland, Ohio. Knife sharpening device. 1,888,102; Nov. 15.

Zeiss Jkon Aktiengesellschaft Goerzwerk. (See Jacob, Heinrich, assignor.)

Zois, Banquetier Company. (See Orth, Andrew J., assignor.)

Zublin, John A., Los Angeles, Calif. Fluid control for pneumatic oil lifts. 1,887,746; Nov. 15.

LIST OF INVENTIONS

FOR WHICH

PATENTS WERE ISSUED ON THE 15TH DAY OF NOVEMBER, 1932

NOTE.—Arranged in accordance with the first significant character or word of the name (in accordance with city and telephone directory practice). Includes patents, reissues, and designs.

Absorber for air cooled refrigerators. A. Leuniug. 1,887,651; Nov. 15.
Absorption machine. E. Altenkirch. 1,887,909; Nov. 15.
Absorption refrigerating machine. E. Altenkirch. 1,887,957; Nov. 15.
Acid anhydride and making same, Sulphonated isatoic. A. Ossenbeck, W. Hentrich, and E. Tietze. 1,887,820; Nov. 15.
Acid from gases containing the same, Obtaining hydrocyanic. W. Wettstein. 1,887,608; Nov. 15.
Aeroplane construction. J. S. Brylka. 1,887,676; Nov. 15.
Air conditioning apparatus (gravity actuated). C. E. Lewis. 1,887,767; Nov. 15.
Air conditioning method and apparatus for passenger cars. J. H. Davis. 1,887,582; Nov. 15.
Aircraft, Launching. W. V. N. Powelson and W. Travell. 1,887,860; Nov. 15.
Air eliminator for liquid pump equipment. W. H. D. Brouse. 1,887,918; Nov. 15.
Airplane. H. G. Smith. 1,887,738; Nov. 15.
Airplane brake. S. G. Down. 1,887,583; Nov. 15.
Airplane brake. S. G. Down. 1,887,585; Nov. 15.
Airplane launching track. W. Stein. 1,887,528; Nov. 15.
Air purifier. T. H. Thomas. 1,887,606; Nov. 15.
Air purifying apparatus. C. C. Farmer. 1,887,589; Nov. 15.
Airway suction cleaner. D. B. Replogle. 1,887,600; Nov. 15.
Aluminum chloride, Producing. W. H. Shiffler and W. P. Anderson. 1,887,566; Nov. 15.
Amusement and dispensing device. W. Rabkin and C. Fleischer. 1,888,050; Nov. 15.
Amusement apparatus. F. L. Markey. 1,888,005; Nov. 15.
Animal hairs, Weighing. G. Schwen and H. Krzikalla. 1,887,958; Nov. 15.
Ant jar. J. D. Marsh. 1,887,771; Nov. 15.
Antirattle device for vehicle doors. W. C. Holden. 1,887,842; Nov. 15.
Artificial dentures, Rebasing. F. U. Bowers and A. T. Lockwood. 1,887,749; Nov. 15.
Ash receiver. E. Gibson, jr. 1,887,903; Nov. 15.
Ash removing appliance for furnaces. A. J. Maloney. 1,887,768; Nov. 15.
Automatic crossing gate. Electrically operated. O. L. Vincent. 1,888,058; Nov. 15.
Automatic gate. O. L. Vincent. 1,888,057; Nov. 15.
Automobile, Front drive. C. W. Van Ranst. 1,887,666; Nov. 15.
Automobile jack. J. A. La Garde. 1,887,689; Nov. 15.
Axle housings, Making. T. E. Murray, jr. 1,887,494; Nov. 15.
Axles, Motor vehicle. W. W. Hooper. 1,888,129; Nov. 15.
Azo-dyestuffs, Manufacture of strongly basic. A. Conzetti. 1,887,995–6; Nov. 15.
Badge. D. C. Crain. Des. 88,335; Nov. 15.
Bag: *See*—
Hand bag.
Bag making machinery. H. E. Hallman. 1,887,680; Nov. 15.
Balanced joint. R. E. Chapman. 1,888,026; Nov. 15.
Ball. E. H. Hawes. Des. 88,289; Nov. 15.
Barking machine A. T. Tidblad. 1,887,908; Nov. 15.
Barometer, Table. H. Jacob. Des. 88,298; Nov. 15.
Barrels, Means for emptying. J. G. Fischer. 1,888,032; Nov. 15.
Basket for washing machines, Extractor. J. C. Nelson. 1,887,778; Nov. 15.
Battery. W. G. Ikin. 1,887,811; Nov. 15.
Battery testing instrument. L. Myers. 1,887,656; Nov. 15.
Bean cutting device. B. Cluss. 1,887,921; Nov. 15.
Bearing for railroad cars, Antifriction roller side. J. J. Tatum. 1,887,605; Nov. 15.
Bearing support for transmissions. J. L. Matthews. 1,887,560; Nov. 15.
Benzyl-alkyl aniline, Preparation of. L. F. Martin and D. E. MacQueen. 1,887,772; Nov. 15.
Bidding apparatus. M. J. Huizinga. 1,887,684; Nov. 15.
Bill frame. J. L. Locklin. Des. 88,303; Nov. 15.
Binder, Loose leaf. W. F. Warner, jr. 1,888,020; Nov. 15.
Bitumen, Road composition and forming the same. S. S. Sadtler. 1,887,518; Nov. 15.
Blades, Manufacture of fine edged. T. H. Frost. 1,887,504; Nov. 15.
Blank for machine elements and the like and making the same, Welded. E. Chapman. 1,888,027; Nov. 15.

Block for heat exchange reaction, and absorption apparatus, Filling. H. Willisch. 1,887,704; Nov. 15.
Blow-out preventer. B. M. Jensen. Re18,655; Nov. 15.
Board: *See*—
Ironing board.
Board, Manufacturing corrugated plastic. H. Elmiger. 1,887,923; Nov. 15.
Boiler: *See*—
Drumless boiler. Water tube boiler.
Boiler feeding device. K. Rezsny. 1,888,016; Nov. 15.
Book, Manifold sales. L. Huffman. 1,887,594; Nov. 15.
Bottle. J. M. Kennedy. 1,887,931; Nov. 15.
Bottle. F. R. Tourtois. Des. 88,325; Nov. 15.
Bowl with hydraulic drier, Sanitary. F. Guidetti and G. Bontempi. 1,887,679; Nov. 15.
Box: *See*—
Gear box. Wrapped box.
Meter connection box.
Box and parcel bracket, Mail. O. E. Brown. 1,888,111; Nov. 15.
Brace for folding table Leg. M. Fox. 1,888,117; Nov. 15.
Brace or tie-in bar for gas meters. A. F. Fow. 1,887,999; Nov. 15.
Braid and manufacturing same, Lace. O. E. Huber. 1,887,643; Nov. 15.
Brake: *See*—
Airplane brake. Hydraulic brake.
Fluid pressure brake. Motor vehicle brake.
Brake cylinder device. S. G. Down. 1,887,584; Nov. 15.
Brake lining. A. Rosner. 1,887,981; Nov. 15.
Brake linkage. W. H. Mitchell. 1,887,845; Nov. 15.
Brake mechanism. J. H. Peterson. 1,888,092; Nov. 15.
Brake system for automotive vehicles. C. S. Bragg and V. W. Kliesrath. 1,887,750; Nov. 15.
Brake testing device. H. Casler. 1,887,992; Nov. 15.
Brake testing machine. G. Saunders. 1,887,721; Nov. 15.
Brakes, Automatic slack adjuster for. A. R. K. Djurson and B. H. Browall. 1,887,586; Nov. 15.
Braking apparatus for vehicles, Fluid pressure. H. J. Winter. 1,887,572; Nov. 15.
Brush, Auto. M. H. Schlyfestone. 1,887,893; Nov. 15.
Brush for electrical apparatus. F. S. Marcellus. 1,887,559; Nov. 15.
Brush rigging mechanism for scherbius sets and like cascades for connecting two power systems. R. G. Standerwick. 1,887,567; Nov. 15.
Brushes for road sweeping machines, Arrangement of auxiliary. J. A. Perony. 1,887,697; Nov. 15.
Brushing device for car cushion cleaning machines. E. M. Wilson. 1,886,571; Nov. 15.
Buckle. L. Alterson. 1,887,614; Nov. 15.
Building structures, Erecting. A. Durchholz. 1,887,835; Nov. 15.
Burner: *See*—
Fuel burner.
Burner supply system, Oil. C. L. Rayfield. 1,888,015; Nov. 15.
Burners, Emergency control for oil. H. I. Platt. 1,887,514; Nov. 15.
Button, Press. K. Hollerer and A. Kadletz. 1,888,169; Nov. 15.
Buttonhole, Stitched. J. Pikul. 1,887,954; Nov. 15.
Butyl phenol composition. R. R. Read. 1,887,662; Nov. 15.
Cage, Bird. C. F. Clampitt. 1,887,869; Nov. 15.
Calcium chlorate, Manufacture of. S. B. Heath. 1,887,809; Nov. 15.
Calculating machine. L. R. Brown. 1,888,157; Nov. 15.
Calculating machine, Visible writing. D. Y. Read. 1,888,144; Nov. 15.
Calendar. G. H. Correll and D. R. Schnaars. 1,887,499; Nov. 15.
Camera. J. Cain. 1,887,991; Nov. 15.
Cane juice, Defecating. T. B. Wayne. 1,887,879; Nov. 15.
Cap, Radiator. G. A. Johnson. Des. 88,301; Nov. 15.
Cap, Sanitary self-closing. C. T. Mills, jr., and E. A. Parker. 1,888,007; Nov. 15.
Cap, Tube. K. L. Mosteller. 1,888,010; Nov. 15.
Cap wrench. L. E. Baltzley. 1,887,615; Nov. 15.
Capstan. E. J. Bartell. 1,888,193; Nov. 15.
Car coupling device. A. E. Evans. 1,887,753; Nov. 15.
Car, Mine. P. S. McCallen. 1,888,135; Nov. 15.
Carbon, Manufacture of amorphous. J. V. G. Van den Driessche. 1,887,792; Nov. 15.
Carburetor. G. Bariquand. 1,887,795; Nov. 15.
Carburetor, Gas. H. T. Dyer. 1,888,074; Nov. 15.
Card, Visible index. R. A. Furlong. 1,887,632; Nov. 15.
Cards, Deck of playing. G. W. Shaffer. Des. 88,324; Nov. 15.
Carpet. I. J. Vetter. Des. 88,326; Nov. 15.

Carpets and runners in position, Holding stair. L. Robertson. 1,888,146; Nov. 15.
Carriage quilt holding device, Baby. R. Porcello. 1,888,160; Nov. 15.
Carrier: *See*—
Yarn carrier.
Cars in garages, Parking. H. K. Wheeler. 1,887,667; Nov. 15.
Carton. R. E. Worden. 1,888,152; Nov. 15.
Carton filling machine. C. C. Colver. 1,887,751; Nov. 15.
Cartridge, Shot gun. H. W. Brownsdon, W. R. Nimmo, and G. P. Pollitt. 1,887,989; Nov. 15.
Cartridge, Shot gun. H. W. Brownsdon and W. R. Nimmo. 1,887,990; Nov. 15.
Casing for electrical apparatus. Z. O. St. Palley. 1,887,569; Nov. 15.
Casing head. M. T. Archer. 1,887,865; Nov. 15.
Casing, Sausage. S. Gail. 1,887,806; Nov. 15.
Casket, Burial. R. P. Henderson. Des. 88,293; Nov. 15.
Casket, Refrigerating. C. H. J. Truman. 1,887,665; Nov. 15.
Caster. W. F. Herold. 1,888,036; Nov. 15.
Catalyst. H. Joseph. 1,887,978; Nov. 15.
Chair. R. E. Kochs and A. R. Schwarzkopf. 1,887,647; Nov. 15.
Chair and stepladder, Combination. G. Lundstrom. 1,887,492; Nov. 15.
Chair tray attachment, High. F. Beckerman. 1,887,987; Nov. 15.
Charging device for furnaces. C. E. Betcher. 1,887,975; Nov. 15.
Chassis of a motor vehicle. J. F. McMurtrie. 1,887,598; Nov. 15.
Chucking mechanism. R. S. Brown. 1,887,621; Nov. 15.
Circuit controlling apparatus. W. W. Willard. 1,888,099; Nov. 15.
Circuits, Testing arrangement for power. P. Sporn and H. D. Freitag. 1,887,962; Nov. 15.
Clamp for angles and the like. B. G. Goble. 1,887,551; Nov. 15.
Cleaner: *See*—
Air-way suction cleaner. Pipe cleaner.
Flue cleaner. Rake cleaner.
Cleaner and humidifier, Air. E. M. Hicks. 1,888,001; Nov. 15.
Cleat fastening means. T. M. Kimes. 1,888,175; Nov. 15.
Clinograph. R. P. McLaughlin. 1,887,773; Nov. 15.
Clip: *See*—
Plumbing fixture clip.
Clod cutter. K. Boere. 1,887,796; Nov. 15.
Closure device. D. Marinsky. 1,887,940; Nov. 15.
Closure securing means. E. H. Wittenberg. 1,887,611; Nov. 15.
Clutch. S. E. Morral. 1,887,776; Nov. 15.
Clutch, Centrifugal friction. K. A. and E. H. Widegren. 1,887,610; Nov. 15.
Clutch, Friction. H. A. Gehres and H. F. Shepherd. 1,887,685; Nov. 15.
Coating pipe with plastic composition, Method and apparatus for. T. H. Wilson. 1,888,101; Nov. 15.
Coffee brewing device. J. R. Peirce. 1,887,848; Nov. 15.
Coffee making device. J. R. Peirce. 1,887,849; Nov. 15.
Coffee, Treatment for. D. J. Kennedy. 1,887,686; Nov. 15.
Color stabilization of lubricating oils. C. E. Adams. 1,888,023; Nov. 15.
Combustion chamber of internal combustion engines. W. A. Whatmough. 1,887,897; Nov. 15.
Composition and rubber blanket printing. G. W. Bennett. 1,888,109; Nov. 15.
Composition for coating metals and making the same. R. B. Tanner and V. M. Darsey. 1,887,967; Nov. 15.
Compound alloy plate. H. H. Lynn and H. L. Coles. 1,888,042; Nov. 15.
Concrete mixer. H. F. Wilms. 1,888,100; Nov. 15.
Condensation products and making same, Phenolic. L. Byck. 1,887,833; Nov. 15.
Conductor and applying colored surfaces thereto, Insulated. A. P. Hinsky. 1,887,851; Nov. 15.
Connecter for milking machines. J. L. Hulbert. 1,888,040; Nov. 15.
Contact of the pin type. W. J. Gagnon. 1,888,165; Nov. 15.
Container for paper rolls, Dispensing. N. G. Begle. 1,887,912; Nov. 15.
Container, Hermetic. R. Elsner and R. H. Carter. 1,887,626; Nov. 15.
Container, Paper. L. B. Koch and J. Buchina. 1,887,688; Nov. 15.
Container sealing machine. F. Reid. 1,887,699; Nov. 15.
Container, Waste paper. S. D. Hearne. 1,888,127; Nov. 15.
Containers, Vacuumising. A. L. Kronquest. 1,888,133; Nov. 15.
Continuous conveyer furnace. B. M. Johnson. 1,887,904; Nov. 15.
Control for calculating machines, Automatic. G. C. Chase. 1,888,101; Nov. 15.
Control for electric tubes. J. D. Le Van. 1,887,766; Nov. 15.
Controller construction. C. M. Knight. 1,888,089; Nov. 15.
Controller for locks of demountable containers. A. H. Bates and R. H. McBean. 1,887,707; Nov. 15.
Controller for locks of demountable containers. B. F. Fitch. 1,887,711; Nov. 15.
Cooling of the interior of a seamless block of setting concrete. H. Sorensen. 1,888,097; Nov. 15.
Cooling system for noozle burners. W. Kleinow, A. Morgenroth, F. Reinhardt, and W. Bruer. 1,888,088; Nov. 15.
Costumer. H. J. Healion. 1,887,840; Nov. 15.
Cot and play-chair, particularly adapted for use in motor cars and other vehicles, Combined. W. C. Hughes. 1,887,810; Nov. 15.
Cotton picker machine. W. R. Willett and H. E. Brown. 1,887,881; Nov. 15.
Counting device. J. Rousso. 1,887,788; Nov. 15.
Coupling: *See*—
Hose coupling.
Coupling. W. L. Bond. 1,887,538; Nov. 15.
Coupling. W. Noble. 1,887,876; Nov. 15.
Coupling device, Electromechanical. R. Gunn. 1,887,713; Nov. 15.
Cover and making the same, Book or binder. C. D. Trussell. 1,887,530; Nov. 15.
Covering and making same, Fibrous. H. L. Levin. 1,887,979; Nov. 15.
Curb jack. H. F. Holtz. 1,888,063; Nov. 15.
Current regulation, Constant. H. Nyquist. 1,887,590; Nov. 15.
Cushion slide for furniture. W. F. Herold. 1,888,037; Nov. 15.
Cutter: *See*—
Clod cutter. Stalk cutter.
Cutting and forming device. E. C. Pagel and H. C. Porter. 1,887,732; Nov. 15.
Cylinder, Cotton threshing. J. E. Mitchell. 1,887,562; Nov. 15.
Deck, Stabilised floating. C. H. Haupt. 1,888,079; Nov. 15.
Defiberising machine. W. G. Hagmaier and E. C. Shaw. 1,887,728; Nov. 15.
Dental plate. L. Valbuena. 1,887,970; Nov. 15.
Derrick, Hoist. F. H. Stoner. 1,887,965; Nov. 15.
Designs on paper, Marking and producing. O. Kress. 1,887,934; Nov. 15.
Die: *See*—
Ornamenting die.
Die for rope making machines, Closing. P. Frank. 1,887,837; Nov. 15.
Die-head, Self-opening. A. F. Breitenstein. 1,888,067; Nov. 15.
Differential indicating gauge. G. S. Faber. 1,887,804; Nov. 15.
Digging implement. J. N. Hornbaker. 1,888,170; Nov. 15.
Dispensers for materials in their original containers. P. D. Smith. 1,887,961; Nov. 15.
Dispensing attachment for bottles, jugs, or the like. C. F. Blattner. 1,887,881; Nov. 15.
Dispensing device for collapsible tubes. W. G. Kendall. 1,888,174; Nov. 15.
Dispensing machine. C. N. Neklutin. 1,888,047; Nov. 15.
Display device. R. M. Sanders. 1,887,946; Nov. 15.
Display device. L. E. Shaw. 1,888,096; Nov. 15.
Distributor head. C. H. Bills and G. G. Griswold. 1,887,747; Nov. 15.
Door construction, Steel. R. A. Nelson. 1,887,819; Nov. 15.
Doorlock, Operator. R. Marple. 1,887,655; Nov. 15.
Door locking device. H. W. Shontz. 1,888,184; Nov. 15.
Door operating and locking means, Garage. E. W. Schuckman. 1,888,017; Nov. 15.
Door or window screen. A. Thurwanger. 1,887,740; Nov. 15.
Door oscillating device. E. W. Reutener. 1,887,517; Nov. 15.
Door, Overhead. H. R. Eklund. 1,888,162; Nov. 15.
Draft hood. K. Bohn. 1,887,575; Nov. 15.
Drawer. Cabinet filing. P. A. Bredsvold. 1,887,882; Nov. 15.
Drawer for refrigerating apparatus, Storage. C. E. Long. 1,888,041; Nov. 15.
Dress. J. Carr. 1,887,867; Nov. 15.
Dress hanger. H. A. Enrich. 1,887,501; Nov. 15.
Dresser, Corner. M. M. Wheeler. Des. 88,331; Nov. 15.
Dresser, Corner vanity. M. M. Wheeler. Des. 88,330; Nov. 15.
Drier: *See*—
Sand drier.
Drill. G. F. Hickman. 1,887,640; Nov. 15.
Drill. J. A. Perusick. 1,887,698; Nov. 15.
Drill and underreamer, Combined. G. B. Sipe. 1,887,895; Nov. 15.
Drumless boiler. G. Lasker. 1,887,854; Nov. 15.
Dust collecting apparatus for suction cleaners. D. B. Replogle. 1,887,601; Nov. 15.
Dyestuff on animal fibers, Production of metal compounds of azo. F. Straub, H. Schneider, and H. Bernhard. 1,887,603; Nov. 15.
Dyestuff, Vat. M. A. Kuns, K. Kraenslein, K. Koeberle, M. Corell, E. Berthold, and H. Vollmann. 1,887,812; Nov. 15.
Dyestuffs, Manufacture of azophthalein. A. Krebser. 1,888,002; Nov. 15.
Eggs, Separating and packing. R. W. Regensburger. 1,887,916; Nov. 15.

Elastic fabric. W. J. Fox. 1,887,927; Nov. 15.
Electric discharge device. H. W. Brown. 1,888,068; Nov. 15.
Electric fuse switch. L. H. Hoffer. 1,887,489; Nov. 15.
Electric illuminating device. J. Block. 1,887,748; Nov. 15.
Electric power switch. J. M. Van Splunter. 1,887,742; Nov. 15.
Electric switch. W. A. Atwood. 1,887,535; Nov. 15.
Electric waffle iron. L. C. Strite. 1,887,966; Nov. 15.
Electric welding machine. D. Sciaky. 1,888,148; Nov. 15.
Electrical distributing system. J. P. Medlin. 1,887,695; Nov. 15.
Electrical illuminating device. L. Propp. 1,887,785; Nov. 15.
Electrical precipitation, Apparatus for. H. A. Wintermute and C. W. J. Hedberg. 1,888,022; Nov. 15.
Electrical signal amplifying apparatus. W. L. Carlson and D. Wilson. 1,887,541; Nov. 15.
Electrical switch. W. B. Churcher. 1,887,883; Nov. 15.
Electrical switching apparatus. A. Cohn and W. Herden. 1,887,545; Nov. 15.
Electro-kinetometer. L. M. Mott-Smith. 1,887,739; Nov. 15
Elevator and gate control syatem, Automatic. W. C. Miles. 1,887,493; Nov. 15.
Elevator. Lifting mechanism for graders. I. Rund. 1,888,147; Nov. 15.
Elevator shaft construction. C. Shanafelt. 1,888,018; Nov. 15.
Emulsion, Treating. G. H. Meinzer. 1,887,774; Nov. 15.
Emulsions, Mechanically treating. G. H. Meinzer. 1,887,775; Nov. 15.
Engine: *See*—
Internal combustion engine.
Engines, Speed reducing or increasing device for internal combustion. C. R. Waselge. 1,887,607; Nov. 15.
Ether of halogenated para-hydroxy-diphenyls, Alkyl. E. F. Grether. 1,887,757; Nov. 15.
Extension table. J. L. Pulaski. 1,888,124; Nov. 15.
Extinguisher for cigarettes and the like. C. B. Armstrong. 1,888,105; Nov. 15.
Extractor: *See*—
Grapefruit juice extractor. Paper pulp extractor.
Fabric: *See*—
Elastic fabric.
Fan, Centrifugal. H. F. Hagen. 1,887,873; Nov. 15.
Fastener. J. Berge. 1,887,616; Nov. 15.
Fastening device. A. H. Trotter. 1,887,741; Nov. 15.
Fastening device, Adjustable. N. Statham. 1,887,826; Nov. 15.
Fastening means, Adjustable. N. Statham. 1,887,825; Nov. 15.
Faucet and the like. J. Gamble. 1,887,677; Nov. 15.
Feed apparatus, Powdery material. I. Sablik. 1,887,738; Nov. 15.
Feeder and light control mechanism, Automatic chicken. R. R. Mariott. 1,887,770; Nov. 15.
Feeler gauge. F. Buck. 1,888,069; Nov. 15.
Ferrophosphorus, Conversion of. N. C. Lindberg. 1,888,003; Nov. 13.
Fibrous materials, Continuous bleaching of. E. Ekeberg. 1,887,587; Nov. 15.
Filing device. J. B. Brown. 1,887,539; Nov. 15.
Filing leaf and label-holder therefor. T. R. Carlson and V. A. Gronberg. 1,887,800; Nov. 15.
Filter for heating and ventilating units, Air. W. Shurtleff. 1,887,737; Nov. 15.
Fishing-reel, Automatic casting antibacklash. A. Jacobsen. 1,850,087; Nov. 15.
Flashlight switch. F. G. Stimson. 1,888,204; Nov. 15.
Floor construction. E. A. Nelson. 1,887,875; Nov. 15.
Flue cleaner. J. H. Kohler and A. Schneider. 1,887,765; Nov. 15.
Fluid control for pneumatic oil lifts. J. A. Zublin. 1,887,746; Nov. 15.
Fluid pressure brake. C. C. Farmer. 1,887,590; Nov. 15.
Fluid pressure brake. J. C. McCune. 1,887,597; Nov. 15.
Fluid pressure governing mechanism. K. Baumann and J. E. Jolley. 1,887,536; Nov. 15.
Fluid pressure, Producing. W. L. Avery. 1,887,880; Nov. 15.
Fluorine, Production of. K. Fredenhagen. 1,888,118; Nov. 15.
Flush tank. P. E. Meaney. 1,887,512; Nov. 15.
Food substance from cocoa, sugar, and water, Making a. H.-A. Schweigart. 1,887,905; Nov. 15.
Footwear and making the same, Knitted. E. N. Joha. 1,888,172; Nov. 15.
Form, Building. G. W. Williams. 1,887,668; Nov. 15.
Form, Concrete building. H. C. Riesbol. 1,888,181; Nov. 15.
Frame: *See*—
Garden frame.
Framing jack. D. P. Quinlivan. 1,887,822; Nov. 15.
Fruits and vegetables, Apparatus for testing and measuring the hardness and toughness of. V. B. Bonney and P. A. Clifford. 1,887,850; Nov. 15.
Fuel, Apparatus for carbonizing solid. A. Chabot. 1,887,884; Nov. 15.
Fuel burner, Liquid. N. R. Thibert. 1,888,019; Nov. 15.
Fuel charging and igniting, Method of and apparatus for. C. N. Koch. 1,887,716; Nov. 15.
Fuel into internal combustion engines, Apparatus for introducing. K. J. E. Hesselman. 1,888,082; Nov. 15.
Fuels and the like. D. W. Berlin. 1,887,671; Nov. 15.
Fur scarf hanger. G. Davison. 1,887,710; Nov. 15.
Furnace: *See*—
Continuous conveyer furnace. Pulverized fuel furnace.
Furnace. H. E. Leety, J. A. Eckert, and A. W. Page. 1,887,855; Nov. 15.
Furnace jacket. G. D. Hauser. 1,887,760–1; Nov. 15.
Game. C. A. Howland. 1,887,642; Nov. 15.
Game apparatus. A. J. Brand. 1,887,900; Nov. 15.
Garden frame. F. Marshall. 1,887,815; Nov. 15.
Garment, Combination. S. Fox. 1,887,926; Nov. 15.
Garment display device. J. W. Loney. 1,887,652; Nov. 15.
Garment hanger. H. C. Molner. 1,888,137; Nov. 15.
Garment or ironing press. H. E. Page. 1,887,719; Nov. 15.
Gas, Making carburetted air. C. O. Wannack. 1,888,059; Nov. 15.
Gas, Manufacture of. J. Hansford. 1,888,123; Nov. 15.
Gasket. S. S. Geipel. 1,888,166; Nov. 15.
Gate: *See*—
Automatic crossing gate. Sluice gate.
Automatic gate.
Gauge: *See*—
Differential indicating gauge. Feeler gauge.
Pressure gauge.
Gear box, Change speed. A. G. Wilson. 1,888,191; Nov. 15.
Gearing, Transmission. J. E. Padgett and C. D. Peterson. 1,887,943; Nov. 15.
Generator: *See*—
Magneto electric generator.
Glass, Arrangement for teasing and layering spun. A. Borcholt and O. Meyer. 1,887,673; Nov. 15.
Glass, Cutting. C. J. Barrow. 1,887,974; Nov. 15.
Glass, Making composite. E. L. Fix and M. L. Macht. 1,887,550; Nov. 15.
Glass, Making composite. J. H. Sherts. 1,887,565; Nov. 15.
Glass polishing apparatus, Plate. H. K. Hitchcock. 1,887,554; Nov. 15.
Glass, Severing composite. J. H. Sherts. 1,887,564; Nov. 15.
Grapefruit juice extractor. A. S. Knapp. 1,887,764; Nov. 15.
Grate, Furnace. A. W. Bennis. 1,888,110; Nov. 15.
Grater, Vegetable. O. C. Hemp. 1,887,714; Nov. 15.
Guard, Fence. W. N. Ely, jr. 1,888,030; Nov. 15.
Guard for paint brushes. J. Spiegelhalter, jr. 1,887,525; Nov. 15.
Gum base, Chewing. G. A. Hatherell. 1,887,930; Nov. 15.
Gun, Spray. R. W. Tracy. 1,887,969; Nov. 15.
Gyroseparator. E. P. Humphrey. 1,888,131; Nov. 15.
Hair clipper. F. N. Tompkins and I. O. Miner. 1,887,968; Nov. 15.
Hair waving apparatus and method. R. M. Keele. 1,887,556; Nov. 15.
Hair waving device, Air cooled. B. F. Psyor. 1,887,786; Nov. 15.
Hammer, Power. R. P. Martin. 1,887,980; Nov. 15.
Hand bag. S. Maksik. 1,887,511; Nov. 15.
Handle: *See*—
Interchangeable umbrella handle.
Handle for an electric plug. A. H. Massey. Des. 88,387; Nov. 15.
Handle plate for a burial casket. R. P. Henderson. Des. 88,294–6; Nov. 15.
Hanger: *See*—
Dress hanger. Garment hanger.
Fur scarf hanger.
Hanger. R. Hoffman. 1,888,168; Nov. 15.
Harvester. P. H. Filbin. 1,887,805; Nov. 15.
Harvester, Corn. J. Lang. 1,887,937; Nov. 15.
Hay press. F. C. Berry. 1,887,537; Nov. 15.
Headlight for automobiles and the like, Nondazzling. D. Berg. 1,887,574; Nov. 15.
Headlight-tester. A. R. Squyer. 1,887,524; Nov. 15.
Heat by electricity, Apparatus for developing. A. S. Williams. 1,887,533; Nov. 15.
Heater: *See*—
Portable heater.
Heating apparatus with heat-storage body. M. Nitesco. 1,887,779; Nov. 15.
Heel-seat forming machine for off-the-last work. E. A. Bessom. 1,887,617; Nov. 15.
Helicopter. S. P. Vaughn. 1,887,703; Nov. 15.
Hides, Tanning. G. V. Wrange. 1,887,972; Nov. 15.
Hinge. W. A. Ervin. 1,887,549; Nov. 15.
Hitch. E. F. Green. 1,888,122; Nov. 15.
Hobble, Decoy. D. L. Johnson. 1,887,491; Nov. 15.
Hoist. F. Dartsup. 1,887,548; Nov. 15.
Hoist, Telescopic. J. P. Heil and G. L. Landry. 1,887,508; Nov. 15.
Hoisting device. H. S. Geer. 1,887,487; Nov. 15.
Hoisting device. O. C. Hamre. 1,887,553; Nov. 15.
Holder, Automobile license. D. T. Adams. 1,887,727; Nov. 15.
Holder, Christmas tree. L. L. Landis and E. G. Sauer. Des. 88,302; Nov. 15.
Holder, Package. J. R. Richer. 1,887,945; Nov. 15.
Holder, Running board luggage. H. Lonschein. 1,887,663; Nov. 15.

Holder, Sign. R. W. Schwab. 1,887,894; Nov. 15.
Holder, Toothpaste and shaving cream tube. I. G. Robinson. 1,887,720; Nov. 15.
Holster, Pistol. P. J. Noel. 1,887,780; Nov. 15.
Hopper for railway cars, Cast metal. P. W. Kiefer. Re18,656; Nov. 15.
Hose coupling. E. J. Shaffer. 1,887,877; Nov. 15.
Housing for universal joints. C. Gerold. 1,887,755; Nov. 15.
Hydraulic brake. J. H. Peterson. 1,888,093; Nov. 15.
Hydraulic brake. C. B. Sharar. 1,887,723; Nov. 15.
Hydraulic feed mechanism. A. Oberhoffken. 1,888,091; Nov. 15.
Hydrocarbons, Decomposition of liquid. H. S. Nutting and H. H. Rowley. 1,887,658; Nov. 15.
Hydrocarbons, Process and apparatus for treating. Universal Oil Products Company. J. D. Seguy. 1,888,051; Nov. 15.
Hydrocarbons, Treating. N. H. Moore. 1,887,941; Nov. 15.
Hydrotherapeutic apparatus. D. Ginsburg. 1,888,120; Nov. 15.
Ice apparatus and process, Carbon dioxide. J. W. Martin, jr. 1,887,692; Nov. 15.
Ice cream freezing system. C. Taylor. Re18,660; Nov. 15.
Ice cream servings, Preparing. H. MacElhone. 1,888,178; Nov. 15.
Identification means. P. P. Linden. 1,888,090; Nov. 15.
Ignition mechanism for oil burners. J. N. Macrae and C. P. Packard. 1,887,730; Nov. 15.
Indicator: *See*—
Route indicator.
Seat raiser and vacancy indicator.
Ingots, Casting steel. A. B. Kinzel. 1,888,132; Nov. 15.
Instrument and method for examining, testing, and exercising the eyes. A. S. Cameron. 1,887,708; Nov. 15.
Interchangeable umbrella handle. M. H. Siegel. 1,887,950; Nov. 15.
Interference eliminator for electrocardiographs. H. E. Nichols. 1,888,139; Nov. 15.
Internal combustion engine. W. B. Fageol. 1,887,998; Nov. 15.
Internal combustion engine. G. Pielstick. 1,887,661; Nov. 15.
Internal combustion engine. H. M. Rockwell. 1,887,787; Nov. 15.
Iron: *See*—
Electric waffle iron.
Ironing board, Cabinet. O. Juvet. 1,887,763; Nov. 15.
Ironing machine. C. C. Scheele. 1,887,734; Nov. 15.
Jack: *See*—
Automobile jack. Framing jack.
Curb jack.
Jack and parking mechanism and automotive vehicles. F. L. Peebles and C. W. Baker. 1,888,049; Nov. 15.
Jack track. R. E. Evans. 1,887,924; Nov. 15.
Jar: *See*—
Ant jar.
Jar for drilling tools. L. L. Hasen. 1,888,126; Nov. 15.
Jar glass tightener, Fruit. A. Wittwer. 1,887,669; Nov. 15.
Joint: *See*—
Balanced joint. Valve stem joint.
Journal lubricator. J. J. Hennessy. 1,888,080; Nov. 15.
Key fastener. M. L. Crum. 1,887,951; Nov. 15.
Knife sharpening devices. G. A. Zahler. 1,888,102; Nov. 15.
Ladder, Adjustable. W. J. Carter, jr. 1,887,495; Nov. 15.
Ladder, Metallic trussed aerial. R. F. Cowell. 1,887,546; Nov. 15.
Lamp control for vehicles. J. S. Tritton. 1,887,828; Nov. 15.
Lap. R. B. Fehr. 1,888,195–6; Nov. 15.
Laundry breaking table. F. A. C. Krueger. 1,887,648; Nov. 15.
Leather shaving machine. F. Wayland. 1,887,570; Nov. 15.
Lens system, Objective. W. F. Bielicke. 1,888,156; Nov. 15.
Lensic screen. V. C. Ernst. 1,888,872; Nov. 15.
Ligature package. E. Themak. 1,887,529; Nov. 15.
Light control switch. D. V. Rhoades. 1,888,145; Nov. 15.
Light controlling apparatus. C. W. Larner and S. J. Sanford. 1,887,650; Nov. 15.
Light for motor vehicles and trailers, Recess. W. S. Gurton, J. Plint and H. Nyberg. 1,887,756; Nov. 15.
Light signal. W. B. Wells. 1,887,983; Nov. 15.
Lighter and ash receiver, Automatic cigarette. J. J. Itzsak. 1,888,171; Nov. 15.
Lighter, Safety gas. W. W. Wingo, S. R. Smedley, and P. C. Babb. 1,887,794; Nov. 15.
Lighters, Constant level safety device for liquid fuel. J. and A. C. Sladky. 1,887,960; Nov. 15.
Lighting unit for reflected illumination. E. F. Guth. 1,888,103; Nov. 15.
Lining for vessels or containers, Interlocking. L. C. Huff. 1,888,039; Nov. 15.
Linoleum to normally damp concrete surfaces, Permanently securing. A. S. Pelper. 1,887,847; Nov. 15.
Liquid dispensing apparatus. J. W. Winter. 1,888,192; Nov. 15.
Liquid dispensing system. H. G. Weymouth. 1,887,609; Nov. 15.
Literary and fictional matter, Apparatus for reproducing. G. Tipecska and L. Mach. 1,888,054; Nov. 15.
Lock: *See*—
Nut lock. Permutation lock.
Lock. J. H. Shaw. 1,888,095; Nov. 15.
Lock and number indicating device, Camera. C. A. Kunkler. 1,888,134; Nov. 15.
Locomotive, Internal combustion. J. Geiger. 1,887,633-4; Nov. 15.
Locomotive, Oil-electric. A. Wallace. 1,888,190; Nov. 15.
Lubricator: *See*—
Journal lubricator.
Lubricator. F. S. Barks. 1,888,064; Nov. 15.
Lumber and similar material, Apparatus and method of processing and drying. H. W. Cowan. 1,887,581; Nov. 15.
Machine for feeding sheet material. W. H. Johnson. 1,887,645; Nov. 15.
Machine for making convoluted structures of flexible material. V. T. Hoeflich. 1,888,197; Nov. 15.
Machine for making match packages. R. S. Pullen. 1,887,944; Nov. 15.
Machine for opening or breaking up cop-bottoms cotton or other waste or like fibrous materials. H. Wilkinson. 1,887,745; Nov. 15.
Machine for printing labels. A. Antoine. 1,887,910; Nov. 15.
Machine for sharpening pencils. F. Ludwig. 1,887,843; Nov. 15.
Magneto electric generator. L. S. Dunham and A. F. Robertson. 1,887,624; Nov. 15.
Magneto interrupter. W. E. Schwarzman. 1,887,522; Nov. 15.
Mandrel, Tube or cone holding. L. B. Stogner. 1,887,790; Nov. 15.
Manifolding device. E. K. Bottle. 1,887,619; Nov. 15.
Mask, Boxing. W. D. Hamby. 1,887,636; Nov. 15.
Match package. B. H. Freedman. 1,887,503; Nov. 15.
Meat tenderer. A. E. Rosander and O. D. Schvartz. 1,887,892; Nov. 15.
Mechanical integrating instrument. E. Guman. 1,887,593; Nov. 15.
Medicinal spray. J. B. Schmitt. 1,887,949; Nov. 15.
Mercury arrester, High voltage. R. Mitsuda. 1,887,874; Nov. 15.
Mercury vaporizing apparatus. J. J. Grebe. 1,887,807; Nov. 15.
Metal article and method of and composition for producing said article, Coated. R. R. Tanner and V. M. Darsey. 1,888,189; Nov. 15.
Metal compounds of azo-dyestuffs and making same. F. Straub, H. Schneider, and H. Barnhard. 1,887,602; Nov. 15.
Metallic spray, Method and apparatus for creating. T. E. Bridger. 1,887,577; Nov. 15.
Metals, Casting readily oxidizable. W. W. Smith. Re18,652; Nov. 15.
Meter connection box. A. B. Rypinski. 1,887,956; Nov. 15.
Mill: *See*—
Rolling mill.
Mining machine. A. Humbel. 1,888,085; Nov. 15.
Mirror, Mouth. J. B. Malatesta. 1,887,888; Nov. 15.
Mirror, Nonglaring reversible. H. L. Bettman. 1,887,706; Nov. 15.
Mixer: *See*—
Concrete mixer. Pasteuriser mixer.
Mold. J. W. Collins. 1,887,497; Nov. 15.
Molding apparatus and molding for interiorly threaded articles. B. F. Conner and W. F. Schmalz. 1,887,993; Nov. 15.
Molds of glassware forming machines, Apparatus for aligning. E. H. Lorenz. 1,888,199; Nov. 15.
Mop, Fountain. E. E. Allen. 1,888,061; Nov. 15.
Motor: *See*—
Speed motor. Wind motor.
Motor drive unit. A. L. Cushman. 1,887,547; Nov. 15.
Motor vehicle brake. F. C. Lamb. 1,887,936; Nov. 15.
Mounting, Ironing board. W. R. Dunkin. 1,888,114; Nov. 15.
Mounting of internal combustion power units in vehicles. O. Simmen. 1,887,862; Nov. 15.
Mounting, Optical. E. Pappert. 1,887,846; Nov. 15.
Moving curtain machine for educational and advertising purposes. H. C. Denslow. 1,887,803; Nov. 15.
Musical instrument, Vibrato stringed. J. N. Novotny. 1,888,140; Nov. 15.
Net, Live bait trap. C. F. Myers and W. H. Reisner. 1,888,138; Nov. 15.
Nozzle heating, cooling, and ventilating system. G. C. Lewis. 1,887,938; Nov. 15.
Nut for valve stems. D. G. Stafford. 1,887,963; Nov. 15.
Nut lock. G. G. Stanford. 1,887,568; Nov. 15.
Nut tapping machine. K. Kumpmann, sr. 1,887,649; Nov. 15.
Ohmmeter, Earth. S. W. Borden. 1,887,915; Nov. 15.
Oil burning mechanism, Electrically operated and controlled. W. W. Williams. 1,888,060; Nov. 15.
Oil conversion, Hydrocarbon. C. P. Dubbs. 1,888,028; Nov. 15.
Oil, Preventing leakage of. V. P. Williams. 1,887,798; Nov. 15.

Oil thief. O. W. Pearce. 1,887,859; Nov. 15.
Oiler, Flange. R. L. Kaegebein. 1,887,685; Nov. 15.
Oils, Treatment of hydrocarbon. E. F. Nelson. 1,888,048; Nov. 15.
Ores, Smelting finely divided sulphide. H. Freeman. 1,888,164; Nov. 15.
Ornamenting die. A. W. Altvater. 1,888,024; Nov. 15.
Ornaments of flexible material, Making convoluted. V. T. Hoefich. 1,888,198; Nov. 15.
Oven, By-product coke. P. M. Pinckard. 1,888,012; Nov. 15.
Overalls. H. B. Jackson. 1,888,086; Nov. 15.
Packing, Forming. F. H. Field. 1,888,116; Nov. 15.
Pad: *See*—
Table pad. Truss pad.
Padlock. A. S. Beardsley. 1,888,109; Nov. 15.
Padlock. F. W. Lilling. Des. 88,305; Nov. 15.
Panel, Control. G. W. Hyser. 1,887,644; Nov. 15.
Panel, Hollow. J. LeGall. 1,887,814; Nov. 15.
Paper, Insulating. L. Weber. 1,887,726; Nov. 15.
Paper pulp extractor. L. V. Reese and G. W. Johnson. 1,887,955; Nov. 15.
Paraffin liquefying device. W. J. Hart. 1,888,125; Nov. 15.
Partition machine. W. E. Jensen. 1,887,977; Nov. 15.
Partition machine, Adjustable. W. E. Jensen. 1,887,976; Nov. 15.
Pasteuriser mixer. C. Mortensen. 1,888,008; Nov. 15.
Pavement breaker. B. W. Horton. 1,887,762; Nov. 15.
Pen, Fountain. D. Kahn. Des. 88,299; Nov. 15.
Pencil. D. Kahn. Des. 88,300; Nov. 15.
Permutation lock. M. H. Borsin. 1,887,797; Nov. 15.
Petroleum oil, Treating. G. Egloff and H. P. Benner. 1,888,029; Nov. 15.
Photovoltaic cell. S. Wein. 1,887,531; Nov. 15.
Picture film, Tempo indicating motion. M. Fleischer. 1,887,925; Nov. 15.
Picture projecting machine and continuous film feed reel therefor, Motion. B. Stechbart. 1,887,664; Nov. 15.
Piles, Apparatus for forming concrete. R. Tada. 1,887,604; Nov. 15.
Piles from erosion, Protecting. J. J. Collins. 1,888,073; Nov. 15.
Piles of concrete and the like, Method and device for the production of. E. Frankignoul. 1,887,630; Nov. 15.
Pin: *See*—
Wrist pin.
Pipe cleaner. F. E. Jinnett. 1,887,853; Nov. 15.
Pipe cleaning apparatus. E. Schoener and K. Freiseis. 1,887,722; Nov. 15.
Pipe line stopper. U. U. Carr. 1,887,542; Nov. 15.
Pipe stacking appliance for oil wells. S. V. Dodson. 1,887,901; Nov. 15.
Piston and skirt expanding ring therefor. H. F. Phillips. Des. 18,653; Nov. 15.
Piston, Engine. R. N. Steele. 1,888,203; Nov. 15.
Piston skirt expanding means. C. A. Marien. 1,887,769; Nov. 15.
Pitch propeller, Variable. R. Chilton. 1,887,548; Nov. 15.
Planting machine. L. Poll. 1,888,143; Nov. 15.
Plate for burial casket, Corner. R. P. Henderson. Des. 88,290–2; Nov. 15.
Plate or similar article. Y. Buma. 88,286; Nov. 15.
Plate rack. A. J. Orth. 1,888,141; Nov. 15.
Plow, Forester's fire-line. L. C. Hester. 1,888,128; Nov. 15.
Plumbing fixture clip. H. M. Reed, jr. 1,887,663; Nov. 15.
Pneumatic means for operating inspecting forms. M. E. Pierson. 1,887,783; Nov. 15.
Portable heater. A. M. Peterson. 1,887,782; Nov. 15.
Power device, Auxiliary. S. B. Brown. 1,887,832; Nov. 15.
Power transmission for mowers. C. E. Rush. 1,887,789; Nov. 15.
Press: *See*—
Garment or ironing press. Rotary filter press.
Hay press.
Pressing machine, Combined foot and power operated. E. Davis. 1,887,953; Nov. 15.
Pressing, Method of and apparatus for. H. D. Forse. 1,888,163; Nov. 15.
Pressure gauge, Automatic. H. E. Platt. 1,887,821; Nov. 15.
Pressure in tanks, Apparatus for regulating. C. J. Soyster and G. W. Lawn. 1,887,824; Nov. 15.
Pressure regulating device. G. V. Isnard. 1,887,595; Nov. 15.
Priming mixture. W. Brün. 1,887,919; Nov. 15.
Products from plastic material, Apparatus for making. F. W. Harney. 1,887,758; Nov. 15.
Products from plastic material, Making. F. W. Harney. 1,887,759; Nov. 15.
Projector, camera and the like, Cinematographic. L. Ranieri. 1,888,094; Nov. 15.
Propeller, Four blade. J. Versillo and A. Yodice. 1,888,056; Nov. 15.
Protection and control of rectifiers. S. Widmer. 1,887,830; Nov. 15.
Pulp, Making. E. P. Stevenson. 1,887,863; Nov. 15.
Pulp, Production of. L. Bradley and E. P. McKeefe. 1,887,898; Nov. 15.
Pulp rovings, Manufacture of. J. C. Sherman. 1,887,959; Nov. 15.
Pulverised fuel furnace. R. Roosen. 1,887,891; Nov. 15.
Pump. J. A. Tennant. 1,888,053; Nov. 15.
Pump, Automobile tire. E. A. Hester. 1,887,715; Nov. 15.
Pump, Deep well. R. U. Grant. 1,887,886; Nov. 15.
Pump, Deep well. B. H. Scott. 1,887,736; Nov. 15.
Pump for refrigerating systems. F. H. Du Vernet. 1,887,752; Nov. 15.
Pump machine, Rotary. G. E. T. Eyston. 1,887,884; Nov. 15.
Pump, Spray. A. M. Sanborn. Des. 88,323; Nov. 15.
Pusher for retort ovens. E. W. Schellentrager. 1,888,201; Nov. 15.
Quilt or similar article, Bed. P. B. Howard. Des. 88,297; Nov. 15.
Racing apparatus. E. L. Ballew. 1,888,106; Nov. 15.
Rack: *See*—
Plate rack.
Rack. J. R. Biddinger. 1,888,155; Nov. 15.
Rack for pool balls, Spotting. C. H. Gunn. 1,887,552; Nov. 15.
Radiator and engine jacket clean-out device. H. H. Auker and C. W. Stevens. 1,887,985; Nov. 15.
Radio system. T. P. Littlepage, jr. 1,888,177; Nov. 15.
Radio toggle switch. R. H. Bentley. 1,887,573; Nov. 15.
Rake cleaner. W. M. Paxson. 1,887,659; Nov. 15.
Range. H. Lange. Des. 88,336; Nov. 15.
Razor. A. G. Campbell. 1,888,159; Nov. 15.
Razor and sharpening device, Combined safety. L. V. Aronson. 1,887,911; Nov. 15.
Receptacle. B. Epstein. 1,887,502; Nov. 15.
Receptacle perforator and closure. E. B. Goodfellow. 1,887,592; Nov. 15.
Recording mechanism for coke-oven pushers and the like. A. Koppers. 1,888,205; Nov. 15.
Rectifier. T. F. Cheney. 1,887,868; Nov. 15.
Reducing apparatus. A. B. Mueller. 1,887,942; Nov. 15.
Reel: *See*—
Fishing reel.
Reel. G. Goddu. 1,887,712; Nov. 15.
Refining apparatus and process. J. E. Burns and W. H. Woodford. 1,887,920; Nov. 15.
Refrigerating apparatus. J. G. King. 1,887,558; Nov. 15.
Refrigerating apparatus. J. G. King. 1,887,933; Nov. 15.
Refrigerating apparatus. D. R. Neal. 1,887,563; Nov. 15.
Refrigerating apparatus. C. W. Scherer. 1,887,948; Nov. 15.
Refrigerating apparatus and method. J. W. Martin, jr. 1,887,693; Nov. 15.
Refrigerating method and apparatus. D. H. Killeffer. 1,887,687; Nov. 15.
Refrigeration, Method and apparatus for. L. G. Copeman. 1,887,580; Nov. 15.
Refrigerator. D. C. McCord and G. S. Bataille. 1,888,043; Nov. 15.
Regulator: *See*—
Speed regulator.
Release device. A. C. Rowley. 1,888,182; Nov. 15.
Resin composition suitable for the production of films. H. A. Gardner. 1,887,678; Nov. 15.
Resinous material from plant tissue, Extracting. L. N. Bent. 1,888,025; Nov. 15.
Resins or resin like bodies from cracked hydrocarbon products, Obtaining. J. C. Morrell. 1,888,044; Nov. 15.
Rheostat winding machine. C. Havlish. 1,887,808; Nov. 15.
Rhythms and beats, Method and apparatus for sounding selective. W. O. Miesaner. 1,887,857; Nov. 15.
Rim, Tire. A. L. Alberti. 1,887,984; Nov. 15.
Road construction, Penetration method of. E. C. Wallace. Re18,654; Nov. 15.
Road, Logging. A. A. Macleod. 1,888,004; Nov. 15.
Roll, Surfacing. C. H. Driver. 1,887,623; Nov. 15.
Roller for line slug machines. G. H. Eberlein. 1,887,625; Nov. 15.
Rolling mill. J. R. Coe. 1,887,870; Nov. 15.
Rolls, Refluting textile. C. E. Honeycutt and J. L. Alexander. 1,887,510; Nov. 15.
Rope and method of manufacture, Wire. M. E. Evans. 1,888,076; Nov. 15.
Rotary filter press. G. R. Bryant. 1,887,798; Nov. 15.
Route indicator. C. N. Pogue. 1,888,013; Nov. 15.
Rubber heel. H. Hirschfeld. 1,887,852; Nov. 15.
Rubber, Regeneration of vulcanised. O. G. Bohlin. 1,887,898; Nov. 15.
Rule, Measuring. J. M. Dougovito. 1,888,113; Nov. 15.
Safe, Double door floor. S. L. Belknap. 1,887,866; Nov. 15.
Safety device for laundry extractors. S. A. Sangaland. 1,887,519; Nov. 15.
Sales transactions, Device for recording. J. E. Johnson. 1,887,555; Nov. 15.
Salts of antimony, Glucosaminic. A. Stoll and A. Hofmann. 1,888,187; Nov. 15.
Salts of the metals of the iron group, Complex glucosaminic acid. A. Stoll and A. Hofmann. 1,888,186; Nov. 15.
Sand drier. E. H. Campbell. 1,887,799; Nov. 15.
Sander. S. V. Bowlby. 1,887,620; Nov. 15.
Sanding device, Automobile. A. De B. Marryatt and G. H. Metsler. 1,888,006; Nov. 15.
Scale. M. E. Baldwin. 1,887,986; Nov. 15.

Scale, Weighing. T. B. Flanagan. Des. 88,287; Nov. 15.
Screen: *See*—
Door or window screen. Windshield screen.
Lensic screen.
Screen means for windows or doors, Insect proof. L. C. Johnston. 1,887,646; Nov. 15.
Screw driver. R. P. Henry. 1,888,061; Nov. 15.
Screw vise. H. Vogl. 1,887,829; Nov. 15.
Seal. F. Keidel. 1,887,557; Nov. 15.
Seal for electric discharge devices. J. W. Case. 1,888,071; Nov. 15.
Seal, Gas tight. G. Buechner. 1,888,070; Nov. 15.
Sealing device for cigar wrapping machines. F. X. Malocsay. 1,887,844; Nov. 15.
Sealing means for submersible motors. C. R. Buchet. 1,887,540; Nov. 15.
Seat: *See*—
Vehicle seat.
Seat raiser and vacancy indicator. P. J. McDermott. 1,888,136; Nov. 15.
Sediment from automobile cooling systems, Method and apparatus for removing. H. L. Parr. 1,887,781; Nov. 15.
Separator: *See*—
Gyro separator.
Service station. R. N. Aldrich. Des. 88,281–4; Nov. 15.
Sewing machine. G. T. Hart, jr. 1,887,638; Nov. 15.
Shaft operating and locking apparatus. W. E. Smith. 1,887,878; Nov. 15.
Shearing mechanism. F. W. Harney. 1,887,952; Nov. 15.
Shield, Automobile dashboard heat. C. A. Sieweck. 1,887,724; Nov. 15.
Shield, Head light glare. J. C. Pearson. 1,888,142; Nov. 15.
Shingle. R. J. Tobin and G. A. Tobin. 1,888,055; Nov. 15.
Shirt. A. L. Hertsberg. 1,887,639; Nov. 15.
Shock absorber, Hydraulic. C. H. Chapin. 1,887,709, Nov. 15.
Shoe. C. Miller. Des. 88,312–13; Nov. 15.
Shoe. G. F. Walsh. 1,887,725; Nov. 15.
Shoe, Counter. J. W. Lake. 1,887,935; Nov. 15.
Shoe shining machine. M. W. Spruill. 1,887,906; Nov. 15.
Short circuiter for electric motors. A. Borchers. 1,887,672; Nov. 15.
Sight, Gun. G. E. Coleman. 1,888,112; Nov. 15.
Sign. F. Fugita. 1,887,591; Nov. 15.
Sign illumination. E. S. Schenkel. 1,887,523; Nov. 15
Sign, Luminous. G. Angeli. 1,887,973; Nov. 15.
Sign, Luminous. E. S. Wold. 1,887,534; Nov. 15.
Signal: *See*—
Light signal.
Silver alloy, Stainless. T. Tanabe. 1,888,188; Nov. 15.
Skiving machine. G. R. Allen. 1,887,613; Nov. 15.
Slat, Foldable head. G. P. Craven. 1,888,160; Nov. 15.
Sludge, sewage and the like, Method of and apparatus for the treatment of. K. Imhoff. 1,887,490; Nov. 15.
Sluice gate, Emergency. J. H. T. Borland. 1,887,674; Nov. 15.
Soap-sudsing apparatus. L. Faber. 1,887,836; Nov. 15.
Soaps, Manufacture of transparent or opaque toilet and medicated. P. Villain. 1,887,743; Nov. 15.
Socket, Electric outlet. L. Propp. 1,887,784; Nov. 15.
Sound, Collecting. E. H. Hansen. 1,887,637; Nov. 15.
Sound reproducing apparatus. W. T. Forse and F. A. Mitchell. 1,887,629; Nov. 15.
Spark arrester. R. M. Crosby. 1,887,922; Nov. 15.
Speed device, Variable. R. H. Worrall. 1,887,705; Nov. 15.
Speed motor, Variable. S. A. Brown and E. W. Brockmeyer. 1,887,675; Nov. 15.
Speed regulator. O. G. Simmons. 1,888,185; Nov. 15.
Speed transmission, Variable. G. H. Gibson. 1,887,505; Nov. 15.
Split lap preventer. W. H. Hames. 1,887,507; Nov. 15.
Spoon or similar article. W. S. Warren. Des. 88,327; Nov. 15.
Spray bar for road spraying vehicles. H. A. Cederstrom. 1,888,072; Nov. 15.
Stalk cutter. W. J. Michalka. 1,887,818; Nov. 15.
Standpipe system. F. W. Frost. 1,887,631; Nov. 15.
Stapling machine. L. Obstfeld and W. Drypolcher. 1,887,781; Nov. 15.
Starter. W. C. Starkey. 1,887,982; Nov. 15.
Starting and reversing switch, Combined. V. G. Apple. 1,888,062; Nov. 15.
Starting device for internal combustion engines. A. Carelli. 1,887,902; Nov. 15.
Steamer, Sleeve. S. L. McVey. 1,887,561; Nov. 15.
Stereotype plate casting machine. E. Brockel. 1,887,917; Nov. 15.
Stop, Automatic. G. J. Kats. 1,887,596; Nov. 15.
Stopper: *See*—
Pipe line stopper.
Stopper or closure. T. A. Stevens. 1,887,700; Nov. 15.
Strainer, Gas. W. S. Walker. 1,888,150; Nov. 15.
Stringed musical instrument. N. W. Schireson. 1,887,861; Nov. 15.
Structures of metal and nonmetallic materials, Fabricating. S. C. Finger. 1,887,627; Nov. 15.
Sulphuric acid chamber. R. T. Maudsley. 1,887,816; Nov. 15.
Superheater for marine boilers. E. A. Geoghegan. 1,887,754; Nov. 15.
Support, Bar. R. R. Robertson. 1,887,890; Nov. 15.
Support, Collapsible tube. S. E. Gunnison. Des. 88,288; Nov. 15.
Support, Golf bag. W. H. Gunther. 1,887,838; Nov. 15.
Support, Mail box. C. H. Fuller. 1,888,119; Nov. 15.
Support, Wall fixture. J. A. Hoegger. 1,887,641; Nov. 15.
Supporter, Garment. G. J. Lyons. 1,887,939; Nov. 15.
Surveying instrument. W. Pilkington. 1,888,011; Nov. 15.
Switch: *See*—
Electric fuse switch. Flash light switch.
Electric power switch. Light control switch.
Electric switch. Radio toggle switch.
Electrical switch. Time switch.
Switch and operating mechanism. P. R. Forman. 1,887,628; Nov. 15.
Table: *See*—
Laundry breaking table.
Table pad. L. I. Kahn. 1,888,104; Nov. 15.
Tampon, Medical. J. M. Spielberg and A. Goodstein. 1,887,526; Nov. 15.
Tank: *See*—
Flush tank.
Tank. J. E. Ketonen. 1,887,932; Nov. 15.
Teething device. I. Glenn. 1,888,167; Nov. 15.
Telephone pay station apparatus. H. M. Bollinger. 1,887,576; Nov. 15.
Telephone system. A. B. Elkins. 1,887,588; Nov. 15.
Telephone system, Automatic. J. Wicks. 1,887,744; Nov. 15.
Temperature control of exothermic reactions. H. A. Bond. 1,888,066; Nov. 15.
Terminal for oil filled cables and evacuating the same. E. D. Eby. 1,888,075; Nov. 15.
Terrazo strip. H. L. Fink. 1,888,031; Nov. 15.
Testing machine. M. Spindel. 1,887,527; Nov. 15.
Textile fabric. G. Megros. Des. 88,308–9; Nov. 15.
Textile fabric or similar article. H. S. Murray. Des. 1,888,314–18; Nov. 15.
Textile fabric or similar article. P. Reiman. Des. 88,319; Nov. 15.
Textile fabric or similar article. F. Rosenberg. Des. 88,320–2; Nov. 15.
Textile fabric or similar article. W. Willheim. Des. 88,332–4; Nov. 15.
Textile fabric or the like. J. Lukas. Des. 88,304; Nov. 15.
Textile fabric or the like. G. Megros. Des. 88,306–7; Nov. 15.
Textile fabric or the like. E. Merry. Des. 88,310–11; Nov. 15.
Textile fabric or the like. E. Wax. Des. 88,328; Nov. 15.
Textile fabric or the like. I. A. Weitz. Des. 88,329; Nov. 15.
Textile fabric or the like. I. A. Weitz. Des. 88,338–9; Nov. 15.
Thermocouple and its electrical connection. F. F. Uehling. 1,887,827; Nov. 15.
Thermophoric mixture. T. P. Bell. 1,887,618; Nov. 15.
Thermostatic control for rolling mills. F. S. Swaney. 1,888,098; Nov. 15.
Threshing machine, Centrifugal. G. S. Messinger. 1,887,817; Nov. 15.
Tile, Building. H. E. Stevens. 1,887,701; Nov. 15.
Time switch. R. Schlemm. 1,887,735; Nov. 15.
Tobacco leaves, process of producing a composition for use in the practice of the method and resultant composition, Treating. S. Jordan. 1,888,173; Nov. 15.
Toilet ventilator. W. J. Connors. 1,887,498; Nov. 15.
Tool. H. Strand and B. D. Jackson. Re18,659; Nov. 15.
Tool for removing threaded articles from a mold. B. F. Conner and W. F. Schmals. 1,887,994; Nov. 15.
Tool, Pipe handling. J. H. Owens. 1,887,889; Nov. 15.
Tool, Trap setter. A. Olson. 1,888,200; Nov. 15.
Toothbrush. H. D. Bell. 1,887,913; Nov. 15.
Top, Automobile. D. E. Graham. 1,888,121; Nov. 15.
Toy. R. G. Smith. 1,887,823; Nov. 15.
Toy. W. E. Sperry. 1,887,791; Nov. 15.
Toy gun. F. S. Saxton. 1,887,520; Nov. 15.
Toy locomotives, Bell ringing device for. E. D. Boisselier. 1,887,988; Nov. 15.
Toy pistol. W. H. Brewster, jr. 1,887,916; Nov. 15.
Toy vehicle. W. F. Hafner. 1,887,506; Nov. 15.
Toys, Mechanical movement for. B. P. Merwin. 1,887,856; Nov. 15.
Tracks. Appliance for airplane launching. E. Heinkel. 1,887,509; Nov. 15.
Transfers, Manufacture and production of. L. Allen and E. C. Deering. 1,888,154; Nov. 15.
Transmission for motor vehicles, Motion. C. P. Truran. 1,888,149; Nov. 15.
Transmitting system. P. C. Gardiner. 1,888,077; Nov. 15.
Tray. S. A. Neidich. 1,888,045; Nov. 15.
Tray and cigarette extinguisher, Combination ash. K. Meyer. 1,887,696; Nov. 15.
Tray and plate, Combination service. J. Blenker. Des. 88,285; Nov. 15.
Tray, Ash. T. R. Moss. 1,888,009; Nov. 15.
Tray, Ash. H. S. Watson. 1,887,896; Nov. 15.

Trigger device for firearms. A. J. Lahti. 1,887,690; Nov. 15.
Trough, Watering. W. A. Harris. 1,887,681; Nov. 15.
Truck, Locomotive trailer. E. M. Shannon. 1,888,183; Nov. 15.
Truck, Railway. E. Latshaw. 1,888,176; Nov. 15.
Truss pad. I. M. Pease. 1,887,660; Nov. 15.
Tubes of celluloid and the like, Making. S. A. Neidich. 1,888,045; Nov. 15.
Tungsten carbide, Manufacturing. O. F. Marvin. 1,887,729; Nov. 15.
Turbine, Combustion. C. Koch. 1,887,717; Nov. 15.
Turbine installation. L. E. Grube, D. F. Warner, and F. R. Ericson. 1,888,078; Nov. 15.
Typewriter. C. A. Joerissen. 1,887,887; Nov. 15.
Typewriter desk attachment. I. Frankel. 1,888,034; Nov. 15.
Typewriting and card perforating machine, Combined. J. A. B. Smith. Re18,657; Nov. 15.
Typewriting machine. W. F. Helmond. 1,888,035; Nov. 15.
Typewriting machine. J. A. B. Smith. 1,888,052; Nov. 15.
Valve. A. G. Heggem. 1,888,000; Nov. 15.
Valve. F. M. Masker. 1,887,694; Nov. 15.
Valve device, Fluid pressure regulating. R. J. Bush. 1,887,578; Nov. 15.
Valve device, Maintaining. T. H. Thomas. 1,887,702; Nov. 15.
Valve disk composition. C. A. Nash. 1,888,179; Nov. 15.
Valve for compressors, Unloader. E. Nathan. 1,887,858; Nov. 15.
Valve for internal combustion engines and pumps. R. C. Cross. 1,887,997; Nov. 15.
Valve for internal combustion engines, Electrically operated air admission. W. R. Fulkinghorn. 1,887,515; Nov. 15.
Valve for wind musical instruments. W. W. Nelson. 1,887,657; Nov. 15.
Valve mechanism. L. C. Schenck. 1,887,521; Nov. 15.
Valve mechanism for suction feeders. A. Broadmeyer. 1,888,194; Nov. 15.
Valve, Non-freezing. R. L. Huffman. 1,888,130; Nov. 15.
Valve stem joint, Flexible. L. W. Browne. 1,888,158; Nov. 15.
Valves, Safety control for fluid fuel. F. C. Taylor. Re18,658; Nov. 15.
Vehicle automatic guide, Tractor or automotive. M. B. Williams. 1,888,021; Nov. 15.
Vehicle braking system. J. Whyte. 1,887,532; Nov. 15.
Vehicle control device, Motor. A. L. Halliday. 1,887,839; Nov. 15.
Vehicle control mechanism. V. G. Apple. 1,888,063; Nov. 15.
Vehicle seat. L. C. Savale. 1,887,947; Nov. 15.
Vehicle suspension. C. Orsett. 1,887,718; Nov. 15.
Vehicle suspension with shock compensation, Elastic. A. Carozzi. 1,887,579; Nov. 15.
Veneer machine. B. N. Hartzell. 1,887,682; Nov. 15.
Veneering. E. C. Loetscher. 1,887,691; Nov. 15.
Ventilating device for vehicles. J. A. Yaniz y Diaz. 1,887,612; Nov. 15.
Ventilator: *See*—
Toilet ventilator.
Visor, Full vision. D. Craig. 1,887,871; Nov. 15.
Volume control for diversity reception, Differential. H. H. Beverage. 1,888,065; Nov. 15.
Wagon, Dump. J. D. Benbow and J. B. Green. 1,887,914; Nov. 15.
Wall board channels, Manufacturing. C. O. Walpur. 1,888,151; Nov. 15.
Wall construction unit and wall formed therefrom. J. P. Morris. 1,887,777; Nov. 15.
Washing machine. P. G. Lägerback. 1,887,813; Nov. 15.
Washing machine. D. M. Wenger. 1,887,971; Nov. 15.
Water craft. J. G. Batt. 1,888,107; Nov. 15.
Water tube boiler. H. E. Yarrow. 1,888,153; Nov. 15.
Weather strip, Automatic. F. Evans. 1,888,115; Nov. 15.
Welding and cutting machine. L. H. Benoit. 1,887,670; Nov. 15.
Welding apparatus. A. Churchward. 1,887,496; Nov. 15.
Welding apparatus and method. L. H. Hoffer. 1,887,488; Nov. 15.
Welding-rod, etc. D. K. Crampton and H. L. Burghoff. 1,887,500; Nov. 15.
Wells, Apparatus for surveying. A. G. H. Straatman. 1,887,907; Nov. 15.
Welt, Finishing. A. L. Howard and J. Christie. 1,888,084; Nov. 15.
Wheel: *See*—
Wire wheel.
Wheel. A. Codd. 1,887,544; Nov. 15.
Wind motor. L. Constantin and P. Fortier-Beaulieu. 1,887,802; Nov. 15.
Winding machine. R. M. Heintz. 1,887,683; Nov. 15.
Window, Furnace observation. H. G. B. Mahon. 1,887,654; Nov. 15.
Window, Tent. F. M. Powers. 1,888,014; Nov. 15.
Windshield screen. A. Hoiland and P. V. Moher. 1,888,038; Nov. 15.
Wire spirals into the ring sleeves of snap rings, Device for the production and insertion of the. B. Förster. 1,887,885; Nov. 15.
Wire wheel. E. A. Nelson. 1,887,513; Nov. 15.
Wrapped box. J. S. Stokes. 1,887,864; Nov. 15.
Wrench: *See*—
Cap wrench.
Wrist pin. R. N. Steele. 1,887,964; Nov. 15.
X-ray apparatus. P. F. Cole. 1,887,801; Nov. 15.
Yarn and making the same, Ornamental. M. J. Frank. 1,888,033; Nov. 15.
Yarn carrier. G. Gastrich. 1,887,928; Nov. 15.
Zinc aluminum anode for electrodeposition of zinc. A. K. Graham. 1,888,202; Nov. 15.
Zinc aluminum mercury anode for electrodeposition. G. B. Hogaboom. 1,887,841; Nov. 15.

CLASSIFICATION OF PATENTS

ISSUED NOVEMBER 15, 1932

NOTE.—First number—class, second number—subclass, third number—patent number

1— 3: 1,887,731
2— 3: 1,887,636
13: 1,887,871
74: 1,887,867
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213: 1,887,496
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10— 95: 1,888,067
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104.04: 1,887,853
128: 1,887,903
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15— 15: 1,888,146
30: 1,888,036
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86: 1,887,942
163: 1,887,549
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34: 1,887,908
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19— 88: 1,887,745
97: 1,887,562
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68: 1,888,115
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126: 1,887,497
188: R. 18,652
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23— 85: 1,887,809
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106: 1,888,003
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198: 1,887,614
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131.5: 1,888,181
142: 1,887,904
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12: 1,887,911
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32— 4: 1,887,749
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27: 1,887,888
33— 47: 1,888,112
66: 1,888,011
161: 1,888,113
168: 1,888,060
34— 24: 1,887,581
34: 1,887,709
36— 2.5: 1,887,725
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36— 75: 1,887,852
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10: 1,888,198
25.5: 1,888,109
33: 1,888,154
42— 3: 1,887,800
57: 1,887,916
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97: 1,888,200
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44— 33: 1,887,671
45— 11: 1,888,117
68.4: 1,888,104
75: 1,888,009
77: 1,888,041
97: 1,887,706
112: 1,888,124
46— 40: 1,888,005
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49— 14: 1,888,199
48: 1,887,564
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51— 110: 1,887,554
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184.3: R 18,660
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19: 1,887,634
41: 1,887,717
44: 1,887,716
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61— 28: 1,887,674
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53: 1,887,797
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60: 1,888,164
76— 84: 1,888,102
77— 32.7: 1,888,091
78— 34: 1,887,990
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81— 3.1: 1,887,615
33: 1,887,529
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83— 6: 1,888,052
73: 1,888,100
75: 1,887,729
91: 1,887,877
84— 294: 1,887,861
313: 1,888,140
392: 1,887,657
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85— 33: 1,887,963
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42: 1,887,846
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91— 45: 1,887,969
68: 1,887,851
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92— 3: 1,887,726
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94— 8: 1,887,890
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18: R. 18,654
95— 31: 1,888,134
53: 1,887,901
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123— 65: 1,887,661
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153: 1,887,858
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144— 208: 1,887,908
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145— 52: 1,888,061
146— 2: 1,887,516
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32: 1,887,616
153— 2: 1,887,732
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154— 1: 1,887,758
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194— 4: 1,888,108
196— 3: 1,887,774
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181: 1,888,062
198— 127: 1,888,004
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148: 1,887,845
202— 13: 1,887,894
257: 1,888,013
171— 229: 1,887,599
324: 1,887,675
325: 1,887,559
172— 279: 1,887,672
281: 1,887,567
173— 326: 1,888,040
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353: 1,888,075
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175— 30: 1,887,874
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177— 329: 1,887,963
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178— 44: 1,888,139
179— 5.5: 1,887,588
6.3: 1,887,576
27: 1,887,744
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171: 1,887,541
180— 1: 1,888,049
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18: 1,888,001
37: 1,887,601
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51: 1,888,150
184— 3: 1,887,685
7: 1,888,004
187— 11: 1,887,648
39: 1,887,498
95: 1,888,018
186— 3: 1,887,750
89: 1,887,709
90: 1,887,723
158: 1,887,532
202: 1,887,586
189— 46: 1,887,819
192— 4: 1,887,986
21: 1,887,635
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99: 1,887,776
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194— 4: 1,888,108
196— 3: 1,887,774
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49: 1,888,061
66: 1,888,039
67: 1,888,036
96: 1,887,941
197— 27: 1,887,867
114: 1,888,035
181: 1,888,062
198— 127: 1,888,004
199: 1,888,178
228: 1,887,975
199— 26: 1,887,835
200— 4: 1,887,853
5: 1,887,838
1,888,039
15: 1,887,742
16: 1,888,002
30: 1,887,832
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67: 1,887,573
107: 1,887,535
122: 1,888,145
127: 1,887,489
148: 1,887,845
202— 13: 1,887,894
257: 1,888,013

204—	4:	1,887,341
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212—	8:	1,888,060
	89:	1,887,553
213—	78:	1,887,753
214—	16.1:	1,887,667
	23:	1,888,201
215—	57:	1,887,931
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219—	4:	1,887,488
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219—	40:	1,887,533
220—	4:	1,887,761
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221—	14:	1,887,881
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	60:	1,887,720
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	95:	1,887,699
	214:	1,888,132
222—	17:	1,887,561
	18.3:	1,887,652
	19:	1,887,783
	61:	1,887,710
	64:	1,887,501
	67:	1,888,187
	68:	1,888,168
224—	2:	1,887,780
225—	12:	1,887,722
226—	95:	1,887,751
228—	18:	1,887,546
	63:	1,887,495
229—	5.6:	1,887,688
230—	34:	1,887,715
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232—	40:	1,888,111
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233—	2:	1,887,955
234—	1:	1,887,773

234—	1:	1,887,907
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235—	60:	1,888,144
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241—	12:	1,887,939
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247—	2:	1,887,956
248—	14.2:	1,887,862
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257—	104:	1,888,008
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	138:	1,887,767
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265—	15:	1,887,850
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266—	23:	1,887,670
267—	20:	1,887,579
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272—	4:	1,888,106
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282—	8:	1,887,619
	22:	1,887,594
285—	22:	1,887,865
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292—	307:	1,887,557
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298—	11:	1,887,508
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299—	34:	1,888,072
	84:	1,887,536
	86.5:	1,887,940
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	38:	1,887,544
302—	55:	1,887,733
308—	6:	1,887,585
	19:	1,887,572
	30:	1,887,597
	35:	1,887,590
	40:	1,887,702
	88:	1,887,584
306—	1:	1,887,918
308—	83:	1,888,060
	226:	1,887,606
312—	26:	1,887,734
	28:	1,888,084
	86:	1,888,171
	97.1:	1,888,047

U. S. GOVERNMENT PRINTING OFFICE: 1932

LIST OF TRADE-MARK APPLICANTS

PUBLISHED FOR OPPOSITION

[Act of Feb. 20, 1905, Sec. 6, as amended Mar. 2, 1907]

Abelman, Max, doing business as M. Abelman Co. and Hartwell-Paint Co., Boston, Mass. Ready mixed paint, paste colors in oil, shellac and varnishes. Serial No. 330,683; Nov. 22. Class 16.

Acme Chemical Company, Milwaukee, Wis. Floor dressing. Serial No. 327,930; Nov. 22. Class 16.

Adams, Lewis M., Clinton, Mass. Blankbooks. Serial No. 331,287; Nov. 22. Class 37.

Airite Mfg. Corp., Toledo, Ohio. Fans, housings, and pumping means units, etc., and parts thereof. Serial No. 330,240; Nov. 22. Class 34.

Aktiebolaget Imoindustri, Stockholm, Sweden. Liquid pumps and motors. Serial No. 328,929; Nov. 22. Class 23.

Aktiebolaget Sveriges Forenade Konservfabriker Goteborg, Sweden. Canned fish. Serial No. 329,126; Nov. 22. Class 46.

Alexander, Samuel, New York, N. Y. Collars for dogs and other animals. Serial No. 330,946; Nov. 22. Class 3.

All-Metal Bottle Cooler Corporation, Atlanta, Ga. Toy of the bandalore type. Serial No. 330,881; Nov. 22. Class 22.

Alto Mfg. Co. (See Brandstetter, Josef.)

American Steel and Wire Company of New Jersey, The, Cleveland, Ohio. Barb wire. Serial No. 330,220; Nov. 22. Class 18.

Apex Hosiery Company, Philadelphia, Pa. Hosiery. Serial No. 331,202; Nov. 22. Class 39.

Astrasan Manufacturing Co. (See Kummer, Frank.)

Autorist S. A.-Autorist Ltd., Fribourg, Switzerland. Watches and chronometers. Serial No. 319,799; Nov. 22. Class 27.

Barnard Company. (See Peoples Drug Stores, Inc.)

Basche, Victor, doing business as Squeeles & Piggee Sandwich Co., San Francisco, Calif. Sandwiches. Serial No. 329,089; Nov. 22. Class 46.

Baur, Mary A., Edmonston, Md. Eczema lotion. Serial No. 330,689; Nov. 22. Class 6.

Bayliss, Louis J., doing business as Nature's Food Laboratory, Keene, Tex. Medicinal tonic. Serial No. 328,542; Nov. 22. Class 6.

Beck, Koller & Company, Inc., Detroit, Mich. Paints, varnishes, and lacquers. Serial No. 329,923; Nov. 22. Class 16.

Beck, Koller & Company, Inc., Detroit, Mich. Plastic synthetic resins. Serial No. 329,925; Nov. 22. Class 6.

Behlen, H., & Bro., New York, N. Y. Dry cleaner preparation. Serial No. 330,416; Nov. 22. Class 4.

Ben-Burk, Incorporated, Boston, Mass. Maltless beverages, syrups, extracts for making the same. Serial No. 331,297; Nov. 22. Class 45.

Big Frosty Company. (See "Dry-Kold" Refrigerator Co., The.)

Bills, Charles B., Sacramento, Calif. Machines for the manufacture of artificial snow from ice. Serial No. 330,244; Nov. 22. Class 28.

Bischoff, Ernst, Company, Incorporated, New York, N. Y. Preparations for fulling and finishing textile fabrics. Serial No. 330,690; Nov. 22. Class 6.

Blankenship, Aurelia P., doing business as The Qu-I-Hi Sauce Co., Atlanta, Ga. Flavoring sauce. Serial No. 330,330; Nov. 22. Class 46.

Bloomingdale Bros. Inc., New York, N. Y. Dolls and dolls' house. Serial No. 330,776; Nov. 22. Class 22.

Boone County Coal Corporation, Sharples, W. Va., and Philadelphia, Pa. Bituminous coal. Serial No. 330,691; Nov. 22. Class 1.

Brandstetter, Josef, doing business as Alto Mfg. Co., Chicago, Ill. Scouring pad. Serial No. 326,604; Nov. 22. Class 4.

Brewer & Clark, Millerton, N. Y. Bedspreads, table covers, scarfs, etc. Serial No. 327,725; Nov. 22. Class 42.

Brown-Mayer Publishing Co. Inc., assignor to Colonel L. Brown, New York, N. Y. Periodical. Serial No. 330,393; Nov. 22. Class 38.

Burke, Edward & John, Limited, Long Island City, N. Y. Maltless beverage. Serial No. 330,693; Nov. 22. Class 45.

Butler Brothers, Chicago, Ill. Paper goods. Serial No. 331,037; Nov. 22. Class 37.

Celanese Corporation of America, New York, N. Y. Fabrics made wholly or partially of cellulose derivatives. Serial No. 319,764; Nov. 22. Class 42.

Century Lighting Equipment, Inc., New York, N. Y. Electric lighting equipment, fixtures therefor, lamps, etc. Serial No. 327,903; Nov. 22. Class 21.

Champion Hardware Company, The, Geneva, Ohio. Water filters. Serial No. 330,451; Nov. 22. Class 31.

Cheesman, Eugene M., Des Moines, Iowa. Cleansing cream, astringent, hand lotion, etc. Serial No. 321,066; Nov. 22. Class 6.

Chicago Rotoprint Company, Chicago, Ill. Publication in magazine form. Serial No. 331,246; Nov. 22. Class 38.

Chilean Products Mfg. Company. (See Sigren, Manuel S.)

Chilton Paint Company, College Point, N. Y. Paints, varnishes, lacquers, etc. Serial No. 330,920; Nov. 22. Class 16.

Clago Radio Corporation, Chicago, Ill. Radio receiving sets. Serial No. 330,845; Nov. 22. Class 21.

Coleman Lamp and Stove Company, The, Wichita, Kans. Gasoline fuel burning lamps and lanterns. Serial No. 325,845; Nov. 22. Class 34.

Combustioneer, Inc., Springfield, Ohio. Fuel stokers. Serial No. 331,100; Nov. 23. Class 34.

Cooper, William, & Nephews, Incorporated, Chicago, Ill. Dog soap. Serial No. 330,650; Nov. 22. Class 4.

Coryell, L. L., & Son, Lincoln, Nebr. Wheat flour. Serial No. 329,741; Nov. 22. Class 46.

Crescent Shoe Company, New York, N. Y. Leather shoes. Serial No. 330,199; Nov. 22. Class 39.

Curtiss-Candy Company, The, Chicago, Ill. Candy. Serial No. 331,248; Nov. 22. Class 46.

De Guevara, Moises L., doing business as Laboratorios Ionine, Mexico, Mexico. Preparations for the treatment of diseases of the pulmonary and respiratory tracts. Serial No. 330,654; Nov. 22. Class 6.

Delatone Company, The, Chicago, Ill. Depilatory. Serial No. 326,894; Nov. 22. Class 6.

DeMott, Armand H., doing business as Safebreath Products Co., Brooklyn, N. Y. Candy. Serial No. 331,231; Nov. 22. Class 46.

Deutsche Gold- & Silber-Scheideanstalt, Frankfort-on-the-Main, Germany. Combs, hooks and eyes, trimmings, etc. Serial No. 318,209; Nov. 22. Class 40.

Deutsche Gold- & Silber-Scheideanstalt, Frankfort-on-the-Main, Germany. Driving belts, leather and rubber hose and packing materials, driving belts, etc. Serial No. 318,223; Nov. 22. Class 35.

Deutsche Gold- und Silber-Scheideanstalt, Frankfort-on-the-Main, Germany. Astringents, bleach creams, cold creams, rouges, etc. Serial No. 329,161; Nov. 22. Class 6.

Dick, James E., Somerville, Mass. Refractory cements, mortars, and concrete. Serial No. 330,696; Nov. 22. Class 12.

Dolge, C. B., Company, The, Westport, Conn. Preparation for exterminating rodents. Serial No. 330,622; Nov. 22. Class 6.

Doubleday, Doran & Company, Inc., Garden City, N. Y. Magazine. Serial No. 329,732; Nov. 22. Class 38.

Dow Chemical Company, The, Midland, Mich. Monochloro-diphenyls, para-para-dichloro-diphenyl, etc. Serial Nos. 329,937–8; Nov. 22. Class 6.

Dow Chemical Company, The, Midland, Mich. Monobromo-diphenyls, para-para-dibromo-diphenyl, etc. Serial No. 329,939; Nov. 22. Class 6.

Dow Chemical Company, The, Midland, Mich. Phenylsalicylic acid. Serial No. 330,940; Nov. 22. Class 6.

Dow Chemical Company, The, Midland, Mich. Aminodiphenyls. Serial No. 329,941; Nov. 22. Class 6.

"Dry-Kold" Refrigerator Co., The, doing business as Big Frosty Company, Niles, Mich. Ice cream. Serial No. 330,247; Nov. 22. Class 46.

Duncan, Donald F., Inc., Chicago, Ill. Hot-water bottle and syringe. Serial No. 330,923; Nov. 22. Class 44.

Du Pont Cellophane Company, Inc., New York, N. Y. Caps and bands of non-fibrous cellulose. Serial No. 330,500; Nov. 22. Class 50.

Eastern Chemical and Research Company, The, New Haven, Conn. Plant and flower preservatives. Serial No. 330,809; Nov. 22. Class 6.

Elizarm Co., Los Angeles, Calif. Eyelash dye and permanent wave solutions. Serial No. 325,092; Nov. 22. Class 6.

Etablissements Aera, Paris, France. Meteorological covers, accelerometers, altimeters, etc. Serial No. 313,079; Nov. 22. Class 26.

Foley & Co., Chicago, Ill. Medicinal salve. Serial No. 329,798; Nov. 22. Class 6.

Ford Hopkins Co., doing business as Vin-Cola Co., Chicago, Ill. Tonic. Serial No. 325,976; Nov. 22. Class 6.

Fort Howard Paper Company, Green Bay, Wis. Paper napkins. Serial No. 331,164; Nov. 22. Class 37.

Futter, C. A., Chicago, Ill. Eye-lash curlers. Serial No. 329,017; Nov. 23. Class 40.

Georgia-Carolina Dairies, Augusta, Ga. Sherbets. Serial No. 327,976; Nov. 23. Class 46.

Goodyear Tire & Rubber Company, The, Akron, Ohio. Tires, tubes, and hose and tubing. Serial No. 331,253; Nov. 22. Class 26.

Gotham Laboratories, Inc., New York, N. Y. Antiseptic vaginal jellies for feminine hygiene. Serial No. 330,044; Nov. 22. Class 6.

Goulds Pumps, Incorporated, Seneca Falls, N. Y. Piston pumps. Serial No. 326,711; Nov. 22. Class 23.

Graitmore Company, New York, N. Y. Hair dye and hair rinse. Serial No. 330,845; Nov. 22. Class 6.

Green Bonnet Stores. (See Tlapek, Raymond.)
Hartwell-Paint Co. (See Abelman, Max.)
Hitchins, Harry M., Minneapolis, Minn. Paper box liners and sheets. Serial No. 330,574; Nov. 22. Class 37.
Hiteman Leather Company, Inc., West Winfield, N. Y. Leathers. Serial No. 328,788; Nov. 22. Class 1.
Hoberg Paper & Fibre Company, Green Bay, Wis. Paper towels, toilet tissues, and napkins. Serial No. 325,579; Nov. 22. Class 37.
Hopper Paper Company, Taylorville, Ill. Papers. Serial No. 331,109; Nov. 22. Class 37.
Hudnut, Richard, New York, N. Y. After shaving lotion, face cream (cleansing), tooth paste, etc. Serial No. 330,625; Nov. 22. Class 6.
Hunt, John F., & Co. Inc., New York, N. Y. Malt syrups. Serial No. 329,114; Nov. 22. Class 46.
I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Sensitised photographic plates, and films, and cinematographic films. Serial No. 327,440; Nov. 22. Class 26.
Jonas, Joseph A., doing business as J. A. Jonas Shoe Co., Haverhill, Mass., and Manchester, N. H. Leather shoes. Serial No. 330,300; Nov. 22. Class 39.
Kaufman Department Stores, Inc., Pittsburgh, Pa. Brushless shaving cream. Serial No. 329,993; Nov. 22. Class 4.
Keating, Thomas E., New York, N. Y. Hair grower and tonic. Serial No. 330,630; Nov. 22. Class 6.
Knoll, H. G., & Co., Inc., New York, N. Y. Medicinal preparation. Serial No. 328,733; Nov. 22. Class 6.
Kohn, Morris, doing business as J. T. Thorn Company, Philadelphia, Pa. Felt pieces to form designs used for educational purposes. Serial No. 330,355; Nov. 22. Class 22.
Kress, S. H., & Co., New York, N. Y. Gauze sanitary neckbands, absorbent cotton, eye bandages, etc. Serial No. 330,263; Nov. 22. Class 44.
Kummer, Frank, doing business as Astrasan Manufacturing Co., Hackensack, N. J. Cookies. Serial No. 327,879; Nov. 22. Class 46.
Laboratorios Ionine. (See de Guevara, Moisés L.)
Lacy Products Corporation, Chicago, Ill. Golf teaching and practicing device. Serial No. 330,426; Nov. 22. Class 22.
Layton Pure Food Company, Providence, R. I., and East St. Louis, Ill. Baking powder. Serial No. 330,660; Nov. 22. Class 46.
Lincoln Laboratories, Incorporated, Brooklyn, N. Y. Antifreeze solution. Serial No. 330,302; Nov. 22. Class 6.
Lister Bros. Inc., New York, N. Y. Foods and ingredients of food for special diets. Serial No. 318,154; Nov. 22. Class 46.
Livermore, Kenneth C., Honeoye Falls, N. Y. Seed potatoes, oats, barley, etc. Serial No. 310,707; Nov. 22. Class 1.
Martin Bros., New Orleans, La. Mayonnaise. Serial No. 331,159; Nov. 22. Class 46.
Matragos, Nicholas J., doing business as Nicholas C. Vallos, New York, N. Y. Medicinal preparation. Serial No. 330,269; Nov. 22. Class 6.
McCoy's Laboratories, Inc., New York, N. Y. Anti-ferment and cholagogue. Serial No. 329,314; Nov. 22. Class 6.
Mikesell, Harold S., Chicago, Ill. Brake lining and clutch facings. Serial No. 330,857; Nov. 22. Class 35.
Misrach Wine Company, New York, N. Y. Sacramental kosher wine. Serial No. 329,104; Nov. 22. Class 47.
Mo-Jo Products Co. (See Neumann, Morton G.)
Monex Corporation, New York, N. Y. Coin dispensing change making machines. Serial No. 326,331; Nov. 22. Class 26.
Monroe Sander Corporation, The, Long Island City, N. Y. Liquid nail polish. Serial No. 330,707; Nov. 22. Class 6.
Munsingwear Corporation, The, Minneapolis, Minn. Knitted outerwear. Serial No. 319,403; Nov. 22. Class 39.
National Biscuit Company, New York, N. Y. Publication. Serial No. 330,965; Nov. 22. Class 38
National Carbide Corporation, Wytheville and Ivanhoe, Va., and New York, N. Y. Calcium carbide. Serial No. 326,335; Nov. 22. Class 6.
National Chemical & Manufacturing Company, Chicago, Ill. Paste paints. Serial No. 327,255; Nov. 22. Class 16.
National Industrial Products Corporation, Wilkinsburg, Pa. Lubricating devices. Serial No. 330,490; Nov. 22. Class 23.
Nature's Food Laboratory. (See Bayliss, Louis J.)
Neumann, Morton G., doing business as Mo-Jo Products Co., Chicago, Ill. Perfume and incense. Serial No. 330,048; Nov. 22. Class 6.
New Britain Bird & Feed Company, Incorporated, New Britain, Conn. Feed, supplies, and the like. Serial No. 328,136; Nov. 22. Class 46.
Nordmark-Werke G. m. b. H., Hamburg, Germany. Medicinal preparations for the treatment of bronchial asthma, hay fever, etc. Serial No. 325,234; Nov. 22. Class 6.
Nordmark-Werke G. m. b. H., Hamburg, Germany. Medicinal preparations for the causative treatment of melancholia and depression. Serial No. 325,236; Nov. 22. Class 6.
Oil Jobbers Refining Company, Chicago, Ill. Insecticides. Serial No. 330,666; Nov. 22. Class 6.
Old King Kold Corporation, Nashville, Tenn. Frozen fruit bars. Serial No. 331,212; Nov. 22. Class 46.
Oppleman, L., Inc., New York, N. Y. Adults' target air pistols. Serial No. 331,089; Nov. 22. Class 9.
Ostermoor & Company, Inc., New York, N. Y. Mattresses, pillows, bolsters, etc. Serial No. 329,454; Nov. 22. Class 32.
Paducah Cooperage Co., Inc., Paducah, Ky. Kegs and barrels of wood. Serial No. 328,072; Nov. 22. Class 2.
Parade, Inc., Cleveland, Ohio. Weekly magazine. Serial No. 331,193; Nov. 22. Class 38.
Parker Brothers, Inc., Portland, Me., and Salem, Mass. Game played with movable pieces. Serial No. 330,604; Nov. 22. Class 22.
Parker Brothers, Inc., Portland, Me., and Salem, Mass. Picture puzzles. Serial Nos. 331,339–40; Nov. 22. Class 22.
Patch, E. L., Company, The, Stoneham, Mass. Tablets, ointments, and pills, etc. Serial No. 330,380; Nov. 22. Class 6.
Penn-Jersey Auto Stores, Inc., Easton, Pa. Brake lining restorative preparation. Serial No. 327,285; Nov. 22. Class 4.
Penney, J. C., Company, Wilmington, Del., and New York, N. Y. Shoes. Serial No. 330,409; Nov. 22. Class 39.
Peoples Drug Stores, Inc., doing business as Barnard Company, Washington, D. C. Cold cream, vanishing cream, cocoanut oil shampoo, etc. Serial No. 330,754; Nov. 22. Class 6.
Plen-T-Hot Products, Inc., New Rochelle, N. Y. Stand boiler. Serial No. 328,800; Nov. 22. Class 34.
Popsicle Corporation of the United States, The, New York, N. Y. Frozen confections. Serial Nos. 330,882–4; Nov. 22. Class 46.
Prest-O-Lite Storage Battery Corporation, Speedway, Ind. Storage batteries. Serial No. 305,869; Nov. 22. Class 21.
Pro-Phy-Lac-Tic Brush Company, Northampton, Mass. Tooth brushes. Serial No. 330,709; Nov. 22. Class 29.
Qu-I-Hi Sauce Co., The. (See Blankenship, Aurelia P.)
Reliance Manufacturing Company, Chicago, Ill. Jackets. Serial No. 331,063; Nov. 22. Class 39.
Riegel Paper Corporation, Riegelsville, N. J., and New York, N. Y. Glassine paper. Serial No. 331,119; Nov. 22. Class 37.
Rising Paper Company, Housatonic, Mass. Writing and printing paper. Serial No. 331,121; Nov. 22. Class 37.
Rodrigues, Salvador, Inc., Tampa, Fla., and Habana, Cuba. Cigars. Serial No. 330,758; Nov. 22. Class 17.
Rubin, Bluma, Brooklyn, N. Y. Chocolate malt syrup. Serial No. 330,669; Nov. 22. Class 46.
Safebreath Products, Co. (See De Mott, Armand H.)
Safety Nut Corporation, Philadelphia, Pa. Nuts. Serial No. 311,979; Nov. 22. Class 13.
Schering Corporation, New York, N. Y. Medicinal preparation. Serial No. 330,432; Nov. 22. Class 6.
Schnitzer, Isadore, South Norwalk, Conn. Facial creams. Serial No. 329,721; Nov. 22. Class 6.
Seagram, Joseph E., & Sons Limited, Waterloo, Ontario, Canada. Whiskey and potable spirits. Serial No. 330,492; Nov. 22. Class 49.
Segal Safety Razor Corporation, New York, N. Y. Razors and razor blades. Serial Nos. 326,557–8; Nov. 22. Class 28.
Seminole Manufacturing Company, McAlester, Okla. Pants and suits. Serial No. 331,385; Nov. 22. Class 39.
Shaner, Edgar M., Lynchburg, Va. Tires and casings. Serial No. 329,274; Nov. 22. Class 35.
Sherwin-William Company, The, Cleveland, Ohio. Paints, varnishes, lacquers, etc. Serial No. 329,564; Nov. 22. Class 16.
Sherwin-Williams Company, The, Cleveland, Ohio. Thinners, stains, varnishes, etc. Serial No. 330,073; Nov. 22. Class 16.
Sigren, Manuel S., doing business as Chilean Products Mfg. Company, Boston, Mass. Washing fluids or compounds, preparation for removing stains. Serial No. 330,383; Nov. 22. Class 4.
Singer Manufacturing Company, The, Elizabeth, N. J., and New York, N. Y. Loop forming implements. Serial No. 329,482; Nov. 22. Class 23.
Slamey, Joseph S., Boston, Mass. Cigarettes. Serial No. 330,732; Nov. 22. Class 17.
Sleeper Products, Inc., Wilmington, Del., and Philadelphia, Pa. Box-springs and mattresses. Serial No. 330,679; Nov. 22. Class 32.
Smokador Manufacturing Co., Inc., Bloomfield, N. J. Ash receivers. Serial No. 331,066; Nov. 22. Class 8.
"Société Française Hispano-Suiza", The, Bois-Colombes, France. Internal combustion engines and their parts. Serial No. 325,448; Nov. 22. Class 23.
Sponge Rubber Products Co., The, Derby, Conn. Sponge rubber, medical sponge rubber, and rubber sponges. Serial No. 328,190; Nov. 22. Class 1.
Squeelee & Piggee Sandwich Co. (See Basche, Victor.)

Squibb, E. R., & Sons, New York, N. Y. Laxatives and intestinal lubricants. Serial No. 329,906; Nov. 22. Class 6.
Stanco Incorporated, Wilmington, Del., and New York, N. Y. Automobile radiator anti-freeze solution or compound. Serial No. 330,238; Nov. 22. Class 6.
Standard Brands Incorporated, New York, N. Y. Malt syrup. Serial No. 330,714; Nov. 22. Class 46.
Statton Furniture Mfg. Company, The, Hagerstown, Md. Furniture. Serial No. 327,665; Nov. 22. Class 32.
Stewart & Co., Baltimore, Md. Shirts, pajamas, dressing robes, etc. Serial No. 330,387; Nov. 22. Class 39.
Stonelite Corporation, Cleveland, Ohio. Floor tile, stone, brick, etc. Serial No. 330,715; Nov. 22. Class 12.
Sullivan, Henry J., Providence, R. I. Bowling hand moisteners. Serial No. 331,347; Nov. 22. Class 22.
Superior Laboratories, Inc., Cleveland, Ohio. Powdered peparation for holding dental plates in position. Serial No. 330,316; Nov. 22. Class 6.
Thorn, J. T., Company. (See Kohn, Morris.)
Tlapek, Raymond, doing business as Green Bonnet Stores, Elvins, Mo. Canned tomatoes and peas. Serial No. 330,418; Nov. 22. Class 46.
Tumbler, J. A., Laboratories, Baltimore, Md. Anti-freeze solution. Serial No. 330,356; Nov. 22. Class 6.
Turner, Ross M., New York, N. Y. Portable self contained machines for dispensing drinks. Serial No. 329,169; Nov. 22. Class 26.
United States Rubber Company, New York, N. Y. Rubber flooring, vulcanising and curing ingredients, and pigments. Serial No. 306,628; Nov. 22. Class 12.
Uservo, Inc., South Bend, Ind. Glass milk bottles. Serial No. 330,876; Nov. 22. Class 33.
Vadsco Sales Corporation, New York and Long Island City, N. Y. Laundry soaps, metal polishes, shoe polishes, etc. Serial No. 319,528; Nov. 22. Class 4.
Vallos, Nicholas C. (See Matragos, Nicholas J.)
Vin-Cola Co. (See Ford Hopkins Co.)
Wakefield, F. W., Brass Co., The, Vermilion, Ohio. Lighting fixtures. Serial No. 331,018; Nov. 22. Class 21.
Wampole, Henry K., and Company, Incorporated, Philadelphia, Pa. Preparation for the treatmeat of diarrhoea and irritated conditions of the gastro-intestinal tract. Serial No. 331,069; Nov. 22. Class 6.
Wanamaker, John, Philadelphia, Philadelphia, Pa. Smoking pipes, cigarette cases, cigar and pipe cases, and tobacco pouches. Serial No. 331,206; Nov. 22. Class 8.
Wanamaker, John, Philadelphia, Philadelphia, Pa. Golf score pads and bridge score pads. Serial No. 331,209; Nov. 22. Class 37.
Wanamaker, John, Philadelphia, Philadelphia, Pa. Fitted manicure cases. Serial No. 331,210; Nov. 22. Class 44.
Watkins, David R., Dormont Branch, Pittsburgh, Pa. Shampoo preparation. Serial No. 326,565; Nov. 22. Class 6.
Wauregan-Quinebaug Lining & Fabrics, Inc., New York, N. Y. Textile fabrics in the piece. Serial No. 330,643; Nov. 22, Class 42.
Wells-Lamont-Smith Corporation, Minneapolis, Minn. Work gloves. Serial Nos. 330,182–4; Nov. 22. Class 39.
Whitall Tatum Company, Millville, N. J. Hot water bottles, syringes, ice bags, etc. Serial No. 329,876; Nov. 22. Class 44.
Willoughby Camera Stores, Inc., New York, N. Y. Cameras, sensitised photographic plates and films, etc. Serial No. 330,440; Nov. 22. Class 26.
Witte Engine Works, Kansas City, Mo. Electric light plants. Serial No. 331,073; Nov. 22. Class 21.
World Wide Pictures Inc., New York, N. Y. Motion picture films. Serial No. 330,719; Nov. 22. Class 26.
Young, E. F., jr., doing business as E. F. Young, Jr. Mfg. Co., Meridian, Miss. Bay rum, tooth powder, shaving powder, etc. Serial No. 330,189; Nov. 22. Class 6.
Youngs Rubber Corporation, Inc., New York, N. Y. Prophylactic rubber articles. Serial Nos. 328,824–5; Nov. 22. Class 44.
Zangenberg, Theodor E., Tottenville, Staten Island, N. Y. Medicinal fluid or compound. Serial No. 330,562; Nov. 22. Class 6.

LIST OF REGISTRANTS OF TRADE-MARKS

Acidacure Company, Warrenton, Va. Medicine. 299,110; Nov. 22; Serial No. 328,257; published Sept. 20, 1932. Class 6.
Adam, Stephen, Trenton, N. J. Palliative for sore eyes, rash, burns, etc. 299,046; Nov. 22; Serial No. 328,862; published Aug. 30, 1932. Class 6.
Albino, Frank L., doing business as Albino Drug Company, West Haven, Conn. Medicinal compound. 299,252; Nov. 22. Class 6.
American Safety Razor Corporation. (See Kampfe Bro's., assignor.)
Arkansas Company Inc., New York, N. Y. Preparation used in conjunction with chromate dyestuffs. 299,246; Nov. 22. Class 6.
Armstrong Cork Company, Lancaster, Pa. Linoleum and felt base wall coverings. 299,122; Nov. 22; Serial No. 329,590; published Sept. 20, 1932. Class 20.
Baby-Touch Hair Remover Company. (See Davies, James O.)
Baker & Company, Inc., Newark, N. J. Precious metal salts and electroplating preparations containing gold. 299,142; Nov. 22; Serial No. 328,474; published Sept. 6, 1932. Class 6.
Barker Bros. Incorporated, Los Angeles, Calif. Bookcases, tables, desks, etc. 299,257; Nov. 22. Class 32.
Best Malt Products Company, Chicago, Ill. Malt syrup. 299,144; Nov. 22; Serial No. 329,012; published Sept. 13, 1932. Class 46.
Black Eagle Oil Company, West Allis, Wis. Gasoline and lubricating oils. 299,061; Nov. 22; Serial No. 305,692; published Sept. 6, 1932. Class 15.
Black, Joseph, & Sons Company, New York, N. Y., to Joseph Black & Sons Company, York, Pa. Stockings. 88,729; renewed Oct. 22, 1932.
Blacktop Equipment Corporation, Johnstown, Pa. Aggregate for road building. 299,078; Nov. 22; Serial No. 328,155; published Aug. 23, 1932. Class 12.
Blumenthal, Sidney, & Co. Inc., New York, N. Y. Pile fabrics in the piece. 299,256; Nov. 22. Class 42.
Bokmeyer, Carl F., doing business as Carl F. Bokmeyer Co., Sheffield, Iowa. Medicine. 299,242; Nov. 22. Class 6.
Bon Ami Company, The, New York, N. Y. Polishing and cleaning powder. 299,120; Nov. 22; Serial No. 326,803; published Sept. 13, 1932. Class 4.
Bourjois, Inc., New York, N. Y. Perfume, toilet water, powders, vanity cases, etc. 299,190; Nov. 22; Serial No. 320,226; published Dec. 22, 1931. Class 6.
Boyd-Martin Boat Company, Delphi, Ind. Outboard motor boats. 299,062; Nov. 22; Serial No. 303,154; published Sept. 6, 1932. Class 19.
Brown, I. Edward, Inc., New York, N. Y. Metal polishes and marble cleaning powder. 299,216; Nov. 22; Serial No. 323,768; published Sept. 13, 1932. Class 4.
Brows & Jacobson, Inc., New York, N. Y. Tweed riding apparel. 299,037; Nov. 22; Serial No. 328,046; published Aug. 30, 1932. Class 39.
Brunswick-Balke-Collender Company, The, Wilmington, Del., and Chicago, Ill. Game played on a billiard table. 299,125; Nov. 22; Serial No. 329,550; published Sept. 20, 1932. Class 22.
Calavo Growers of California, Los Angeles, Calif. Fresh avocados. 299,064; Nov. 22; Serial No. 324,590; published Sept. 6, 1932. Class 46.
Calavo Growers of California, Los Angeles, Calif. Fresh avocados. 299,088; Nov. 22; Serial No. 324,340; published Sept. 6, 1932. Class 46.
Calavo Growers of California, Los Angeles, Calif. Fresh avocados. 299,215; Nov. 22; Serial No. 324,589; published Sept. 13, 1932. Class 46.
California Spray-Chemical Corporation, Wilmington, Del., and Berkeley, Calif. Insecticides, germicides, and fungicides. 299,042; Nov. 22; Serial No. 328,547; published Aug. 30, 1932. Class 6.
Cannova, Antonino, Freeport, Ill. Canned tomato sauce with meat balls. 299,085; Nov. 22; Serial No. 325,629; published Sept. 6, 1932. Class 46.
Canter, Marvin, doing business as Continental Asbestos & Refining Co., New York, N. Y. Composition flooring material. 299,073; Nov. 22; Serial No. 328,659; published Aug. 23, 1932. Class 12.
Carney, D. D., doing business as D. D. Carney Candy Co., Huntington, W. Va. Candy. 299,095; Nov. 22; Serial No. 319,099; published Sept. 6, 1932. Class 46.
Carnrick, G. W., Co., Newark, N. J. Laxative tablet. 299,148; Nov. 22; Serial No. 326,048; published Sept. 6, 1932. Class 6.
Carter, Joseph A., San Antonio, Tex. Chemical solution to prevent scale and corrosion. 299,219; Nov. 22; Serial No. 327,044; published Aug. 30, 1932. Class 6.
Carthage Mills Incorporated, Cincinnati, Ohio. Printed felt base floorings in piece goods form. 299,192; Nov. 22; Serial No. 318,040; published Sept. 13, 1932. Class 20.
Chase-Williams Corporation, New York, N. Y. Tonic health food. 299,199; Nov. 22; Serial No. 328,912; published Sept. 20, 1932. Class 46.
Chelucci, Giacomo, Plains, Pa. Hair lotion. 299,106; Nov. 22; Serial No. 328,116; published Sept. 20, 1932. Class 6.
Cincinnati Soap Company, The, Cincinnati, Ohio. Soaps. 299,200; Nov. 22; Serial No. 328,685; published Sept. 13, 1932. Class 4.
Cipolla, Vincenzo, Philadelphia, Pa. Medicinal preparation. 299,112; Nov. 22; Serial No. 328,350; published Sept. 6, 1932. Class 6.

Cole Chemical Company, Wilmington, Del., and St. Louis, Mo. Endocrine compounds. 299,223; Nov. 22; Serial No. 327,342; published Sept. 20, 1932. Class 6.

Columbus Auto Parts Company, The, Columbus, Ohio. Drag links, tie rods, radius rods, etc. 299,053; Nov. 22; Serial No. 312,903; published Sept. 6, 1932. Class 19.

Compagnie Re-Naitre, Inc., New York, N. Y. Cosmetic and dermatological preparations, and eye lotions. 299,068; Nov. 22; Serial No. 325,460; published Aug. 30, 1932. Class 6.

Compania de Cafe Esperanza, Paterson, N. J. and New York, N. Y., to Compania de Cafe Esperanza, New York, N. Y. Coffee. 89,989; renewed Jan. 28, 1933.

Conrad & Co., assignor to Conrad & Co., Inc., Boston, Mass. Clothing. 90,870; renewed Apr. 1, 1933.

Conroy, Edward C., doing business as E. C. Conroy Coffee Co., Kansas City, Mo. Coffee. 299,147; Nov. 22; Serial No. 329,043; published Sept. 13, 1932. Class 46.

Consolidated Lobster Co., Inc., Gloucester, Mass. Live and cooked lobsters. 299,104; Nov. 22; Serial No. 325,136; published Sept. 20, 1932. Class 46.

Conston, Harry, Camden, N. J. Ladies hosiery. 299,047; Nov. 22; Serial No. 328,978; published Aug. 30, 1932. Class 39.

Continental Asbestos & Refining Co. (See Canter, Marvin.)

Continental Paper Bag Company, Rumford, Me., and New York, N. Y., assignor, by mesne assignments, to Continental Paper and Bag Corporation, New York, N. Y. Wrapping-papers. 90,514; renewed Mar. 4, 1932.

Coons Pure Mineral Company, Portland, Oreg. Dry mineral preparation for the treatment of burns, bruises, sunburn, etc. 299,206; Nov. 22; Serial No. 328,085; published Aug. 30, 1932. Class 6.

Crossett, Lewis A., North Abington, Mass., assignor, by mesne assignments, to Crosset Shoe Co., Augusta, Me. Boots and shoes. 89,060; renewed Oct. 21, 1932.

Davidge, F. C., & Co., as assignee of Frank C. Davidge, assignor, by mesne assignments, to F. C. Davidge & Company, Limited, Toronto, Ontario, Canada. Wallpapers. 86,285; renewed Apr. 30, 1932.

Davies, James O., doing business as Baby-Touch Hair Remover Company, St. Louis, Mo. Article for removing superfluous or unsightly hair. 299,137; Nov. 22; Serial No. 328,914; published Sept. 13, 1932. Class 44.

Davies, Theo. H., & Co., Ltd., Honolulu, Hawaii. Paper. 299,250–1; Nov. 22. Class 37.

De Fauson, Arturo G., Cleveland, Ohio, assignor to The Pam-Pa Company of America, Inc., Wilmington, Del. Maltless beverages. 299,195; Nov. 22; Serial No. 317,164; published Sept. 20, 1932. Class 45.

Degra Laboratories, Burlington, Iowa. Color restorer for gray hair. 299,188; Nov. 22; Serial No. 321,592; published Aug. 30, 1932. Class 6.

Demeester Laboratories, Detroit, Mich. Salve. 299,039; Nov. 22; Serial No. 328,214; published Aug. 30, 1932. Class 6.

Divine Brothers Company, Utica, N. Y. Buffing, polishing and flexible grinding wheels and belts. 299,157; Nov. 22; Serial No. 329,326; published Sept. 20, 1932. Class 4.

Dodge, M. Hartley, Passaic, N. J. and New York, N. Y., assignor, by mesne assignments, to Remington Arms Company, Inc., Bridgeport, Conn., Ilion and New York, N. Y. Fire-arms and supplies therefor. 90,304; renewed Feb. 18, 1933.

Dorman, N., & Co., New York, N. Y. Cheese. 299,253; Nov. 22. Class 46.

DuBois Laboratories. (See Viviny Perfumers, Inc.)

E. E. Medicine Co. (See Gerrald, Alonzo M.)

Electric Storage Battery Company, The, Philadelphia, Pa. Storage batteries, their parts and accessories. 299,074; Nov. 22; Serial No. 328,633; published Sept. 6, 1932. Class 21.

Empire State Flour Mills, Syracuse and New York, to Empire State Flour Mills, New York, N. Y. Wheat-flour. 90,876; renewed Apr. 1, 1933.

Exhibit Supply Company, The. (See Meyer, John F.)

Fair, The, Chicago, Ill. Vanity. 299,254; Nov. 22. Class 6.

Fantasn Laboratories. (See Gerro, Ossip A.)

Fieg, Bernard, Brooklyn, N. Y. Food product. 299,065; Nov. 22; Serial No. 324,508; published Sept. 6, 1932. Class 46.

Finlayson, Bousfield & Co., Ltd., Johnstone, Scotland. Fishing lines. 299,103; Nov. 22; Serial No. 325,217; published Sept. 20, 1932. Class 22.

Firestone Tire & Rubber Company, The, Akron, Ohio. Matches. 299,154; Nov. 22; Serial No. 329,279; published Sept. 13, 1932. Class 9.

Firestone Tire & Rubber Company, The, Akron, Ohio. Matches. 299,155; Nov. 22; Serial No. 329,281; published Sept. 13, 1932. Class 9.

Firestone Tire & Rubber Company, The, Akron, Ohio. Matches. 299,156; Nov. 22; Serial No. 329,283; published Sept. 13, 1932. Class 9.

Fisher & Matson Company, Park Ridge, Ill. Board games. 299,189; Nov. 22; Serial No. 320,406; published Dec. 15, 1931. Class 22.

Fishive, Blanche Gordon M., doing business as Gordon Gum Company, Los Angeles, Calif. Chewing gum. 299,244; Nov. 22. Class 46.

Floriorange Canneries, Inc., Mount Dora, Fla. Canned orange juice. 299,191; Nov. 22; Serial No. 319,175; published Nov. 10, 1931. Class 46.

Food Confections Company. (See Overland Candy Corporation.)

Foot Form Shoe Shops, Inc., New York, N. Y. Slippers, moccasins, shoes, and parts thereof, etc. 299,004; Nov. 22; Serial No. 319,857; published Jan. 5, 1932. Class 39.

Francisco, Harry, doing business as Francisco Company, Atlanta, Ga. Ice cream. 299,193; Nov. 22; Serial No. 317,761; published Sept. 20, 1932. Class 46.

Frank and Company, Milwaukee, Wis. Frankfurters. 299,097; Nov. 22; Serial No. 325,944; published Sept. 13, 1932. Class 46.

Fritzsche Brothers, Inc., New York, N. Y. Aromatic bodies for neutralising odor. 299,176; Nov. 22; Serial No. 328,637; published Sept. 6, 1932. Class 6.

Frost Lumber Industries, Inc., Shreveport, La. Lumber. 299,075; Nov. 22; Serial No. 328,601; published Aug. 23, 1932. Class 12.

Fulton, John J., Company, San Francisco, Calif. Pharmaceutical preparations. 299,099; Nov. 22; Serial No. 325,836; published Aug. 30, 1932. Class 6.

Furst-Greenman Co., Inc., New York, N. Y. Dance frocks. 299,052; Nov. 22; Serial No. 310,991; published Sept. 6, 1932. Class 39.

Gaby, Inc., Philadelphia, Pa. Face powder, hand lotion, almond cream, etc. 299,164; Nov. 22; Serial No. 311,030; published Sept. 15, 1931. Class 6.

Gal'an Laboratories. (See Galligan, James P.)

Galligan, James P., doing business as Gal'an Laboratories, South Chicago, Ill. Bath tonic. 299,184; Nov. 22; Serial No. 328,304; published Aug. 30, 1932. Class 6.

Gerrald, Alonzo M., doing business as E. E. Medicine Co., Greenville, S. C. Headache powder. 299,218; Nov. 22; Serial No. 328,240; published Aug. 30, 1932. Class 6.

Gerro, Ossip A., doing business as Fantasn Laboratories, Los Angeles, Calif. Anaesthetic. 299,071; Nov. 22; Serial No. 328,805; published Aug. 30, 1932. Class 6.

Glaser, Max., doing business as Real Juice Company, Dallas, Tex. Root beer. 299,124; Nov. 22; Serial No. 329,556; published Sept. 20, 1932. Class 45.

Goodrich, B. F., Co., The, Akron, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y. Rubber goods. 89,228; renewed Nov. 11, 1932.

Gordon Gum Company. (See Fiahive, Blanche G. M.)

Gosnell, John, & Co., Limited, London, England. Toothpaste. 89,108; renewed Nov. 12, 1932.

Granjon, Pascal J., Paris, assignor to R. Granjon Fils & Cie., Saint-Marcel, France. Compound for purifying acetylene. 90,880; renewed Apr. 1, 1933.

Hall, Lyman D., New York, N. Y. Magazine. 88,675; renewed Oct. 15, 1932.

Hamilton, Mamie, doing business as Raymond-Hamilton Co., New Orleans, La. Hair restorers. 299,234; Nov. 22; Serial No. 327,848; published Sept. 6, 1932. Class 6.

Harrison Wholesale Company, Chicago, Ill. Golf clubs and parts thereof, balls, tees, etc. 299,151; Nov. 22; Serial No. 329,185; published Sept. 20, 1932. Class 22.

Hart Products Company, Toledo, Ohio. Preparation to be used for dysmenorrhea. 299,111; Nov. 22; Serial No. 328,329; published Sept. 20, 1932. Class 6.

Hennings, Raymond A., New Orleans, La. Table board games. 299,203; Nov. 22; Serial No. 328,988; published Sept. 20, 1932. Class 22.

Hilger, Adam, Limited, London, England. Spectroscopically standardized chemical substances. 299,140; Nov. 22; Serial No. 328,667; published Sept. 20, 1932. Class 6.

Holmes, Katherine A. MacDonald, doing business as Katherine A. MacDonald, Hollywood, Calif. Colored dressing for darkening eyelashes and eyebrows. 299,207–8; Nov. 22; Serial Nos. 328,171–2; published Sept. 6, 1932. Class 6.

Horn, A. C., Company, Long Island City, N. Y. Plastic roof coating. 299,090; Nov. 22; Serial No. 321,563; published Aug. 23, 1932. Class 12.

Hudnut, Richard, New York, N. Y. Toilet water. 90,641; renewed Mar. 11, 1933.

Hughes, E. Griffiths (Krüschen) Limited, by change of name to E. Griffiths Hughes, Limited, Manchester, England. Medicinal salts. 90,115; renewed Feb. 4, 1933.

Hunt, John F., & Co., Inc., New York, N. Y. Dry yeast. 299,109; Nov. 22; Serial No. 328,219; published Sept. 20, 1932. Class 46.

Illinois Paper Company, Chicago, Ill. Stencils and stencil correction varnish. 299,060; Nov. 22; Serial No. 304,375; published Aug. 23, 1932. Class 37.

Imperial Crown Perfumery Co. (See Meyer Brothers Drug Company.)

Indian Mineral Wells, Inc., St. Matthews, Ky. Mineral waters. 299,198; Nov. 22; Serial No. 311,060; published Mar. 24, 1931. Class 45.

Integrity Hosiery Co., Philadelphia, Pa. Hosiery. 299,051; Nov. 22; Serial No. 309,432; published Feb. 24, 1931. Class 39.

International Printing Ink Corporation. (See Ruxton, Philip, Inc.)

Jean Patou, Inc., New York, N. Y. Perfumes. 299,239; Nov. 22; Serial No. 327,984; published Sept. 6, 1932. Class 6.

Joubert Cie., Inc., New York, N. Y. Brilliantine, toilet water, cold cream, etc. 299,182; Nov. 22; Serial No. 328,530; published Sept. 20, 1932. Class 6.

K K Importing Corporation, The, New York, N. Y. Watch and clock springs. 299,061; Nov. 22; Serial No. 327,877; published Sept. 6, 1932. Class 27.

Kam Drug Manufacturing Co., Inc., doing business as Kam Remedy Company, Durham, N. C. Preparation for use in treatment of headaches, pains, etc. 299,216; Nov. 22; Serial No. 326,326; published Sept. 20, 1932. Class 6.

Kampfe Bro's., New York, assignor, by mesne assignments, to American Safety Razor Corporation, Brooklyn, N. Y. Safety razors and razor blades. 89,983; renewed Mar. 24, 1933.

Karras, John, doing business as Minera Beverage Co., Chicago, Ill. Maltless beverages. 299,166; Nov. 22; Serial No. 328,841; published Sept. 13, 1932. Class 45.

Keeling, Mary M., Bristol, Va. Preparation for the treatment of catarrh, asthma, and hay fever. 299,091; Nov. 22; Serial No. 323,471; published Aug. 23, 1932. Class 6.

Keystone Laboratories, Memphis, Tenn. Hair dressing. 299,052; Nov. 22; Serial No. 326,599; published June 21, 1932. Class 6.

Krank, A. J., Company, St. Paul, Minn. Face cream. 299,107; Nov. 22; Serial No. 328,128; published Sept. 20, 1932. Class 6.

La Compagnie Fermiere de l'Etablissement Thermal de Vichy, Societe Anonyme, Paris, France. Mineral water salts. 299,185; Nov. 22; Serial No. 328,497; published Sept. 20, 1932. Class 6.

La Compagnie Fermiere de l'Etablissement Thermal de Vichy, Societe Anonyme, Paris, France. Pastilles made from mineral waters. 299,186; Nov. 22; Serial No. 328,436; published Sept. 20, 1932. Class 6.

Ladycraft Dresses, Inc., New York, N. Y. Dresses, coats, skirts, shirt waists, etc. 299,088; Nov. 22; Serial No. 328,101; published Aug. 30, 1932. Class 39.

Laraja, Salvatore A., Brooklyn, N. Y. Canned olive oil. 299,168; Nov. 22; Serial No. 328,814; published Sept. 13, 1932. Class 46.

Lederle Laboratories, Inc., New York, N. Y. Pharmaceutical preparation for removal of bookworms, etc. 299,177; Nov. 22; Serial No. 328,618; published Sept. 6, 1932. Class 6.

Leggett, Francis H., & Company, New York, N. Y. Sauce. 299,170; Nov. 22; Serial No. 328,735; published Sept. 20, 1932. Class 46.

L'Onglex Limited, New York, N. Y. Nail polish, nail polish remover, cuticle remover, nail white. 299,228; Nov. 22; Serial No. 327,697; published Sept. 6, 1932. Class 6.

Lowe, Joe, Corporation, Brooklyn, N. Y. Vegetable pure food ice and sherbet stabiliser standardiser. 299,169; Nov. 22; Serial No. 328,757; published Sept. 13, 1932. Class 46.

Lowe, Joe, Corporation, Brooklyn, N. Y. Powdered dehydrated whole egg, albumen, and yolk. 299,222; Nov. 22; Serial No. 327,317; published Sept. 20, 1932. Class 46.

Lundberg, Mrs. Lillian M., Hannibal, Mo. Medicinal preparation. 299,180; Nov. 22; Serial No. 328,558; published Sept. 6, 1932. Class 6.

Lyman, Samuel, Brooklyn, N. Y. Incandescent electric lamp bulbs and lamps. 299,082; Nov. 22; Serial No. 327,470; published Sept. 6, 1932. Class 21.

M and M Plywood Corporation, Longview, Wash., and Portland, Oreg. Laminated structural wood. 299,072; Nov. 22; Serial No. 328,795; published Aug. 30, 1932. Class 12.

MacDonald, Katherine A. (See Holmes, Katherine A. MacDonald.)

Manatee Fruit Co., Palmetto and Tampa, to Manatee Fruit Co., Tampa, Fla. Oranges and grape-fruit. 90,454; renewed Feb. 25, 1933.

Manfield & Sons, to Manfield & Sons, Ltd., Northampton, England, successor. Boots, shoes, and slippers. 88,767; renewed Oct. 22, 1932.

Marin, Manuel, & Co., Mayagues, P. R. Medicinal preparations. 299,118; Nov. 22; Serial No. 326,866; published Sept. 6, 1932. Class 6.

Marin, Manuel, & Co., Mayagues, P. R. Medicinal preparations. 299,119; Nov. 22; Serial No. 326,865; published Aug. 30, 1932. Class 6.

Martini & Rossi S. A., Turin, Italy. Vermouth, cocktails, liquors, bitters. 299,161; Nov. 22; Serial No. 329,425; published Sept. 13, 1932. Class 49.

Matsuyama, Prof. F. A., San Francisco, Calif. Foot liniment, ointment, powder, etc. 299,223; Nov. 22; Serial No. 327,541; published Aug. 30, 1932. Class 6.

McCarty Anline & Extract Co. Inc., New York, N. Y. Preparation for coating, sizing, and stiffening rugs. 299,066; Nov. 22; Serial No. 315,972; published Aug. 23, 1932. Class 6.

McComb, James B., New York, N. Y. Carpet and rug cleaning compound. 299,158; Nov. 22; Serial No. 329,351; published Sept. 20, 1932. Class 4.

McCreadie, James, & Company, Limited, Glasgow, Scotland. Whisky. 299,128; Nov. 22; Serial No. 329,585; published Sept. 20, 1932. Class 49.

McLellan, Wm. L., Company, The, Norwalk, Conn. Boiler compounds for removing scale and preventing corrosion. 299,087; Nov. 22; Serial No. 323,900; published Aug. 23, 1932. Class 6.

Medical Accessories, Inc., Chicago, Ill. Preparation for the treatment of gonorrhea. 299,229; Nov. 22; Serial No. 327,723; published Aug. 30, 1932. Class 6.

Mento, James, Philadelphia, Pa. Hair restorer and skin antiseptic. 299,237; Nov. 22; Serial No. 327,912; published Aug. 30, 1932. Class 6.

Meriano, Philip, Philadelphia, Pa. Olive oil. 299,093; Nov. 22; Serial No. 329,655; published Sept. 6, 1932. Class 46.

Merkin, M. J., Paint Co. Inc., New York, N. Y. Liquid for fireproofing various materials, and also to be incorporated in paint. 299,232; Nov. 22; Serial No. 327,902; published Sept. 6, 1932. Class 6.

Meyer Brothers Drug Company, doing business as Imperial Crown Perfumery Co., St. Louis, Mo. Preparation which encourages and holds a natural wave to the hair. 299,040; Nov. 22; Serial No. 329,065; published Aug. 30, 1932. Class 6.

Meyer, John F., doing business as The Exhibit Supply Company, Chicago, Ill. Coin controlled amusement machines. 299,159; Nov. 22; Serial No. 329,403; published Sept. 13, 1932. Class 22.

Meyer & Trudeau, Alexandria, Va. Soap cleaner. 299,214; Nov. 22; Serial No. 324,796; published Sept. 20, 1932. Class 4.

Michel, Dr. G. H., and Company, Cleveland, Ohio. Preparations for preparing and preserving dead bodies for burial. 299,089; Nov. 22; Serial No. 328,583; published Aug. 23, 1932. Class 6.

Michelfelder, Carl F., New Rochelle, N. Y. Portable golf game apparatus. 299,196; Nov. 22; Serial No. 304,904; published Sept. 20, 1932. Class 22.

Midwest Hardware Company, Chicago, Ill. Liquid shampoos. 299,226; Nov. 22; Serial No. 327,915; published Aug. 30, 1932. Class 6.

Miller, A. D., Soap Co., Pittsburgh, Pa. Dry cleaning fluid. 299,126; Nov. 22; Serial No. 328,993; published Sept. 13, 1932. Class 4.

Milwaukee Lubricants Co., Milwaukee, Wis. Cleaning and detergent materials. 299,152; Nov. 22; Serial No. 329,197; published Sept. 13, 1932. Class 4.

Minerva Beverage Co. (See Karras, John.)

Mirror, The, New York, N. Y. Candy. 88,914; renewed Oct. 29, 1932.

Mittineague Paper Co., assignor to Strathmore Paper Company, West Springfield, Mass. Writing paper. 40,043–4; renewed Apr. 14, 1933.

Mit-Zee Products Co. (See Schmitt, Mary L.)

Moller Brothers, Chicago, Ill. Pharmaceutical preparations. 299,220; Nov. 22; Serial No. 327,116; published Sept. 6, 1932. Class 6.

Multigraph Company, Wilmington, Del., and Cleveland, Ohio. Materials and solutions for renewing used writing plates. 299,128; Nov. 22; Serial No. 328,304; published Aug. 30, 1932. Class 6.

Multigraph Company, Wilmington, Del., and Cleveland, Ohio. Materials and solutions for developing photographically applied images on printing plates. 299,129; Nov. 22; Serial No. 328,363; published Aug. 30, 1932. Class 6.

Multigraph Company, Wilmington, Del., and Cleveland, Ohio. Materials for drawing and writing on planographic printing plates. 299,130; Nov. 22; Serial No. 328,362; published Aug. 30, 1932. Class 6.

Multigraph Company, Wilmington, Del., and Cleveland, Ohio. Materials for preserving the blankets of printing machines. 299,131; Nov. 22; Serial No. 328,361; published Aug. 30, 1932. Class 6.

Multistamp Company, Inc., The, Norfolk, Va. Illuminated box for use as a desk in making tracings. 299,179; Nov. 22; Serial No. 328,561; published Sept. 13, 1932. Class 26.

Munes Wurth Laboratories. (See Peoples Drug Stores, Inc.)

Nathan, Jean, New York, N. Y. Skin lotion. 299,041; Nov. 22; Serial No. 328,446; published Aug. 23, 1932. Class 6.

National Biscuit Company, Jersey City, N. J., and New York, N. Y., to National Biscuit Company, New York, N. Y. Biscuit. 88,922–32; renewed Oct. 29, 1932.

Nelson, Baker & Company, Detroit, Mich. Shaving cream. 299,206; Nov. 22; Serial No. 328,185; published Sept. 20, 1932. Class 4.

Nusbaum, Knitters, Inc., Ocean Park, N. Y. Scarfs and jackets. 299,044; Nov. 22; Serial No. 328,671; published Sept. 6, 1932. Class 39.

Odor Away Company, The. (See Ryan, Willing W.)

Odora Company, Inc., New York, N. Y. Storage chests. 299,101; Nov. 22; Serial No. 325,438; published Sept. 20, 1932. Class 2.

Olive Stove Works, Rochester, Pa. Heating and cooking stoves. 88,595; renewed Oct. 1, 1932.

Opper, Morris, New York, N. Y. Ties. 299,241; Nov. 22. Class 39.

Orlandella, Felice, Boston, Mass. Laxative salt. 299,040; Nov. 22; Serial No. 328,368; published Aug. 23, 1932. Class 6.

Overland Candy Corporation, doing business as Food Confections Company, Chicago, Ill. Cakes and peanuts. 299,117; Nov. 22; Serial No. 326,769; published July 12, 1932. Class 46.

Packet Tea Corporation of America, New York, N. Y. Tea. 299,167; Nov. 22; Serial No. 328,815; published Sept. 20, 1932. Class 46.

Pam-Pa Company of America, Inc., The. (See de Fauzon, Arturo G., assignor.)
Paris Beauty Parlor Supply Co. Ltd., Los Angeles and San Francisco, Calif., and Salt Lake City, Utah. Hydrogen peroxide. 299,080; Nov. 22; Serial No. 327,983; published Aug. 30, 1932. Class 6.
Parke, Davis & Co., Detroit, Mich. Preparation for use in the treatment of conditions involving deficient utilization in the body of calcium and phosphorus. 299,100; Nov. 22; Serial No. 325,796; published Aug. 30, 1932. Class 6.
Parke, Davis & Company, Detroit, Mich. Preparation used for the treatment of syphilitic and similar types of infection. 299,173–4; Nov. 22; Serial Nos. 328,699–700; published Sept. 20, 1932. Class 6.
Parnes, Paul, Incorporated, New York, N. Y. Frocks, dresses and suits. 299,050; Nov. 22; Serial No. 329,120; published Aug. 30, 1932. Class 39.
People's Drug Stores, Inc., doing business as Munez Wurth Laboratories, Washington, D. C. Epsom salt, sodium bicarbonate, bay rum, etc. 299,067; Nov. 22; Serial No. 326,615; published Aug. 30, 1932. Class 6.
Pfeiffer, S., Manufacturing Company, St. Louis, Mo. Medicinal preparation. 299,202; Nov. 22; Serial No. 328,014; published Sept. 6, 1932. Class 6.
Phillfuels Company, Bartlesville, Okla. Liquefied Natural gas. 299,260–1; Nov. 22. Class 6.
Photochrom Inc., New York, N. Y. Photographic chemicals. 299,181; Nov. 22; Serial No. 328,534; published Sept. 6, 1932. Class 6.
Pilling, George P., & Son Co., doing business as Pilling, Philadelphia, Pa. Instruments for surgical, dental, etc., use, and for hospital furniture. 299,162; Nov. 22; Serial No. 329,492; published Sept. 13, 1932. Class 44.
Polyphase Corporation, The, New York, N. Y. Beauty cream and perfume. 299,058; Nov. 22; Serial No. 327,768; published Aug. 30, 1932. Class 6.
Pond's Extract Company, New York, N. Y. Face powder. 299,178; Nov. 22; Serial No. 328,584; published Sept. 6, 1932. Class 6.
Poston, Wm., Manufacturing Co., Davenport, Iowa. Combined polishing and cleaning preparation. 299,259; Nov. 22. Class 16.
Pray, John H., & Sons Co., Boston, Mass. Wax floor dressing. 299,245; Nov. 22. Class 16.
Premier Shoe Co. Inc., New York, and Brooklyn, N. Y. Shoes. 299,063; Nov. 22; Serial No. 296,921; published July 12, 1932. Class 39.
Price Battery Corporation, Philadelphia, Pa. Storage batteries. 299,070; Nov. 22; Serial No. 328,827; published Sept. 6, 1932. Class 21.
Puritan Cosmetics, Inc., St. Louis, Mo. Deodorant. 299,209; Nov. 22; Serial No. 328,226; published Sept. 6, 1932. Class 6.
Pyo-Nox Company, Los Angeles, Calif. Medicine. 299,133; Nov. 22; Serial No. 328,308; published Aug. 30, 1932. Class 6.
Quickslip Co., Inc., Brooklyn, N. Y. Bath and beach robes. 299,240; Nov. 22. Class 39.
Raymond-Hamilton Co. (See Hamilton, Mamie.)
Real Juice Company. (See Glaser, Max.)
Red Boy, Inc., Chicago, Ill. Base metal service trays, and holding and displaying attachments for such trays. 299,238; Nov. 22; Serial No. 327,946; published Sept. 13, 1932. Class 13.
Remington Arms Company. (See Dodge M. Hartley, assignor.)
Rhodes, James H., & Company, Chicago, Ill. Steel wool and pumice stone. 299,231; Nov. 22; Serial No. 327,781; published Sept. 20, 1932. Class 4.
Rockola, David C., Chicago, Ill. Table board game. 299,153; Nov. 22; Serial No. 329,203; published Sept. 20, 1932. Class 22.
Rocky Mountain Chemical and Manufacturing Co., Phoenix, Ariz. Preparations of chemical carbon removers for internal combustion engines. 299,235; Nov. 22; Serial No. 327,889; published Aug. 30, 1932. Class 6.
Rorer, William H., Inc., Philadelphia, Pa. Medicine. 299,197; Nov. 22; Serial No. 315,928; published Sept. 15, 1931. Class 6.
Royal Canadian Company, Chicago, Ill. Maltless beverages. 299,165; Nov. 22; Serial No. 328,848; published Sept. 13, 1932. Class 45.
Royal Laboratories, Inc., Newark, N. J. Skin ointment, salves, antiseptic liniment, etc. 299,115; Nov. 22; Serial No. 326,913; published Aug. 30, 1932. Class 6.
Russia Cement Company, Gloucester, Mass. Lubricating-oils. 91,128; renewed Apr. 15, 1933.
Ruxton, Philip, Inc., assignor to The International Printing Ink Corporation, New York, N. Y. Printing-inks. 88,704; renewed Oct. 15, 1932.
Ryan, Willing W., doing business as The Odor Away Company, Fort Worth, Tex. Preparation containing chemical properties for the elimination of body odors. 299,225; Nov. 22; Serial No. 327,567; published Aug. 30, 1932. Class 6.
Saul Pharmacal Co. Inc., New York, N. Y. Ointment. 299,108; Nov. 22; Serial No. 328,185; published Sept. 20, 1932. Class 6.
Scheuerman-Geistlinger Mfg. Co. Inc., Peekskill, N. Y. Nursing bottles. 299,224; Nov. 22; Serial No. 327,530; published Sept. 20, 1932. Class 44.
Schieren, H. V., New York, N. Y. Photographic developing powder. 299,255; Nov. 22. Class 6.
Schmit, Eugene, Astoria, N. Y. Finger wave preparation. 299,172; Nov. 22; Serial No. 328,706; published Sept. 20, 1932. Class 6.
Schmitt, Mary L., doing business as Mit-Zee Products Co., Lakewood, Ohio. Washing and cleaning powder. 299,139; Nov. 22; Serial No. 328,762; published Sept. 13, 1932. Class 4.
Schmutzer, Bernardo, Valparaiso, Chile. Medicine for the stomach. 299,204; Nov. 22; Serial No. 328,077; published Sept. 20, 1932. Class 6.
Schnefel Brothers, Inc., Newark, N. J. Spring cuticle scissors, knives, nail files, etc. 299,141; Nov. 22; Serial No. 328,623; published Sept. 13, 1932. Class 44.
Scott-Borden, Anaheim, Calif. Fresh citrus fruit. 299,086; Nov. 22; Serial No. 323,753; published Sept. 6, 1932. Class 46.
Scram Company, The, New York, N. Y. Deodorant cream. 299,098; Nov. 22; Serial No. 325,883; published Sept. 6, 1932. Class 6.
Service Products, Inc., doing business as West Point Laboratories, New York, N. Y. Preparation for the treatment of the hair and scalp. 299,249; Nov. 22. Class 6.
Severy, Charles L., Detroit, Mich. Ointment. 299,105; Nov. 22; Serial No. 328,020; published Sept. 20, 1932. Class 6.
Sheboygan Cheese Co., Sheboygan, Wis. Edible product made from ham and cheese. 299,243; Nov. 22. Class 46.
Silverstein, Nellie, doing business as Vi-Vu Products, New York, N. Y. Liquid hair and scalp cleanser and shampoo. 299,211; Nov. 22; Serial No. 328,254; published Sept. 6, 1932. Class 6.
Sloane Products, New York, N. Y. Preparation for the treatment of corns, callouses, etc. 299,102; Nov. 22; Serial No. 325,270; published Sept. 6, 1932. Class 6.
Smith, Goldwin, doing business as Smith Mfg. Co., Tampa, Fla. Table board game played with marbles. 299,227; Nov. 22; Serial No. 327,637; published Sept. 13, 1932. Class 22.
Smith, Herbert G., Jackson, Mich., and Rochester, N. Y. Apparatus for use in making finger prints and foot prints. 299,247; Nov. 22. Class 26.
Smith, William D., Parkersburg, W. Va. Lumber. 299,076; Nov. 22; Serial No. 328,514; published Aug. 30, 1932. Class 12.
Smooth-On Manufacturing Company, Jersey City, N. J. Iron compound. 299,149; Nov. 22; Serial No. 329,063; published Sept. 6, 1932. Class 12.
Spartan Refining Company, Inc., Shreveport, La. Petroleum products. 299,092; Nov. 22; Serial No. 319,592; published Nov. 17, 1931. Class 15.
Speare's, Alden Sons Co., The, Cambridge, Mass. Laundry bluing. 299,183; Nov. 22; Serial No. 328,509; published Sept. 6, 1932. Class 6.
Speed Boy Soap Products Co., Moline, Ill. Automobile top dressing and hand soaps. 299,194; Nov. 22; Serial No. 317,538; published Sept. 13, 1932. Class 4.
Stadium Underwear Company, Incorporated, Baltimore, Md. Pajamas. 299,057; Nov. 22; Serial No. 327,375; published Sept. 6, 1932. Class 39.
Sta-Drest Products Co., Des Moines, Iowa. Automobile top dressing. 299,258; Nov. 22. Class 4.
Standard Brands Incorporated, New York, N. Y. Mixture of egg material and other substances. 299,078; Nov. 22; Serial No. 328,313; published Sept. 6, 1932. Class 46.
Standard Oil Company of California, Wilmington, Del., and San Francisco, Calif. Denaturants. 299,132; Nov. 22; Serial No. 328,340; published Aug. 30, 1932. Class 6.
Star Bottling & Supply Co., Inc., New Haven, Conn. Maltless beverages, and extracts, syrups, and concentrates in making the same. 299,150; Nov. 22; Serial No. 329,066; published Sept. 13, 1932. Class 45.
Stearns, Frederick, & Company, Detroit, Mich. Almond cream, skin freshener, hand lotion, etc. 299,212; Nov. 22; Serial No. 328,281; published Sept. 6, 1932. Class 6.
Steffan and Rohrer, San Francisco, Calif. Blowtorch used as a dental appliance. 299,138; Nov. 22; Serial No. 328,881; published Sept. 20, 1932. Class 44.
Stein, Cherrie B., Pittsburgh, Pa. Maltless beverages and syrups therefor. 299,168; Nov. 22; Serial No. 329,481; published Sept. 20, 1932. Class 45.
Stephens, Solomon H., Denver, Colo. Insecticide and fly exterminator. 299,148; Nov. 22; Serial No. 328,451; published Sept. 6, 1932. Class 6.
Stockton Soap Works, Stockton, Calif. Granulated soap. 299,201; Nov. 22; Serial No. 328,896; published Sept. 13, 1932. Class 4.
Strathmore Paper Company. (See Mittineague Paper Co., assignor.)
Strutwear Knitting Company, Minneapolis, Minn. Hosiery and underwear. 299,048; Nov. 22; Serial No. 329,029; published Aug. 30, 1932. Class 39.
Swartz, P. M., & Sons to Swartz Bros., Waukesha, Wis., successor. Hay and field seeds. 88,134; renewed Aug. 27, 1932.
Tennessee Eastman Corporation, Kingsport, Tenn. Denaturant for alcohol. 299,077; Nov. 22; Serial No. 328,376; published Aug. 23, 1932. Class 6.
Tennessee Enamel Manufacturing Company, Nashville, Tenn. Iced and automatic refrigerators, casings, etc. 299,126; Nov. 22; Serial No. 329,514; published Sept. 20, 1932. Class 31.

Terri Cosmetics Corporation, New York, N. Y. Hair preparations. 299,171; Nov. 22; Serial No. 328,708; published Sept. 20, 1932. Class 6.
Texas Company, The, New York, N. Y. Compounded mineral oil. 299,210; Nov. 22; Serial No. 328,280; published Sept. 6, 1932. Class 6.
Texas Quarries Inc., Austin, Tex. Quarried natural stone. 299,175; Nov. 22; Serial No. 328,650; published Sept. 6, 1932. Class 12.
Thomas Asphalt Products Co., Newark, N. J. Oils and greases. 299,127; Nov. 22; Serial No. 328,877; published Sept. 6, 1932. Class 6.
Thornton & Minor Sanitarium Company, The, doing business as Thornton & Minor Clinic, Kansas City, Mo. Pile ointment, blood tonic, laxative preparations and stomach medicine. 299,116; Nov. 22; Serial No. 326,650; published Aug. 30, 1932. Class 6.
Trojan Hosiery Mills, Inc., Indianapolis, Ind. Hosiery. 299,059; Nov. 22; Serial No. 327,994; published Aug. 30, 1932. Class 39.
Tru-Fit Dress Co. Inc., New York, N. Y. Piece goods in the nature of cut-out dresses. 299,054; Nov. 22; Serial No. 315,612; published Aug. 30, 1932. Class 39.
Tuthill, Emmor G., Los Angeles, Calif. Toilet cream. 299,226; Nov. 22; Serial No. 327,610; published Aug. 30, 1932. Class 6.
Udell, Max, Sons & Co., New York, N. Y. Suits and overcoats. 299,043; Nov. 22; Serial No. 328,558; published Sept. 6, 1932. Class 39.
United American Bosch Corporation, Springfield, Mass. Radio apparatus. 299,069; Nov. 22; Serial No. 328,853; published Sept. 6, 1932. Class 21.
Upham, Samuel R., doing business as Upham Company, Boston, Mass. Skin lotion. 299,114; Nov. 22; Serial No. 326,956; published Aug. 30, 1932. Class 6.
Upjohn Company, The, Kalamazoo, Mich. Extract of liver preparation. 299,230; Nov. 22; Serial No. 327,777; published Aug. 30, 1932. Class 6.
Venice Maid Company, Vineland, N. J. Spaghetti sauce. 299,084; Nov. 22; Serial No. 327,174; published Aug. 2, 1932. Class 46.
Viviny Perfumers, Inc., doing business as DuBois Laboratories, West Haven, Conn. Astringents, bleaching creams, rouge, etc. 299,118; Nov. 22; Serial No. 328,456; published Sept. 20, 1932. Class 6.
Vi-Vu Products. (See Silverstein, Nellie.)
Vollrath, Jacob J., Mfg. Co., The, assignor to The Vollrath Company, Sheboygan, Wis. Cuspidors. 89,210; renewed Nov. 19, 1932.
Wapler, Nicholas, Company, New York, N. Y. Feed for fish. 299,896; Nov. 22; Serial No. 329,269; published Sept. 20, 1932. Class 46.
Weinberg, Alexander, New York, N. Y. Board game. 299,154; Nov. 22; Serial No. 328,458; published Sept. 20, 1932. Class 22.
Wellcome, Henry S., London, England, assignor, by mesne assignments, to Burroughs Wellcome & Co. (U. S. A.), Inc., New York, N. Y. Chemical and pharmaceutical preparations. 91,280; renewed Apr. 22, 1933.
West Point Laboratories. (See Service Products, Inc.)
Western Lime & Cement Co., The, Milwaukee, Wis. Lime. 299,145; Nov. 22; Serial No. 329,061; published Sept. 6, 1932. Class 12.
Western Lime & Cement Co., The, Milwaukee, Wis. Masonry cement. 299,146; Nov. 22; Serial No. 329,062; published Sept. 6, 1932. Class 12.
Westinghouse Electric and Manufacturing Company, East Pittsburgh, Pa. Electric arc and incandescent lamps, electric controllers, electric fuses and fuse holders, etc. 299,063; Nov. 22; Serial No. 327,236; published Sept. 6, 1932. Class 21.
White, R. H., Company, Boston, Mass. Suits and shirts. 299,248; Nov. 22. Class 39.
White's, S. E., Sons, assignor to S. E. White's Sons, Inc., Norfolk, Va. Plows and parts thereof. 88,817; renewed Oct. 22, 1932.
Wiseboldt Stores, Inc., Chicago, Ill. Skin tonic, astringent. 299,217; Nov. 22; Serial No. 322,666; published Sept. 20, 1932. Class 6.
Wilbur, Herbert A., Southville, Mass. Honey. 299,055; Nov. 22; Serial No. 315,657; published Sept. 6, 1932. Class 46.
Winthrop Chemical Company, Inc., New York, N. Y. Preparation for use as a vasodilator and cardiotonic. 299,045; Nov. 22; Serial No. 326,907; published Aug. 30, 1932. Class 6.
Winthrop Chemical Company, Inc., New York, N. Y. Seasoning agent for salt free diet. 299,136; Nov. 22; Serial No. 328,250; published Aug. 30, 1932. Class 6.
Wróblewski, David, doing business as D. Wróblewski, Brooklyn, N. Y. Preparation for building up the system, enriching the blood, etc.; and hair tonic. 299,221; Nov. 22; Serial No. 327,265; published Aug. 30, 1932. Class 6.
Yardley & Co., Limited, London, England. Lavender water, powder, cold cream, etc. 299,187; Nov. 22; Serial No. 328,379; published Sept. 6, 1932. Class 6.
Youngs Rubber Corporation, Inc., New York, N. Y. Prophylactic rubber articles. 299,006; Nov. 22; Serial No. 326,879; published Aug. 23, 1932. Class 44.
Zinzani, Pietro, Piacenza, Italy. Magnesia. 299,160; Nov. 22; Serial No. 326,410; published Sept. 20, 1932. Class 6.

LIST OF REGISTRANTS OF LABELS

Anestex Laboratories (De-Ce Products Co. of New York). (See Curtis, David.)
Blue Ridge Mountain Orchards, The, Ella Gap, Ga. Blue Ridge Mountain Apples. For Apples. 41,421; Nov. 22.
Boccia Spumoni Co., New York, N. Y. Melonice. For Frozen Fruit Ices. 41,422; Nov. 22.
Brenner, Jeanne M., Pittsburgh, Pa. Jeanne's French Dressing. For French Dressing. 41,423; Nov. 22.
Brooke, Smith & French, Inc., Detroit, Mich. Radio Miniatures. For Electrical Transcription Discs for Radio Broadcasting Use. 41,424; Nov. 22.
Brooke, Smith & French, Inc., Detroit, Mich. Radio Tabloids. For Electrical Transcription Discs for Radio Broadcasting Use. 41,425; Nov. 22.
California Date Growers Association, Los Angeles, Calif. Desert Gold Fresh California Dates. For Dates. 41,426; Nov. 22.
California Date Growers Association, Los Angeles, Calif. Desert Gold Grown In California Hydrated Dates. For Dates. 41,427; Nov. 22.
Canada's Pride Products Co., Inc., New York, N. Y. Everready Pure Cocoa. For Cocoa. 41,428; Nov. 22.
Curtis, David, doing business as Anestex Laboratories (De-Ce Products Co. of N. Y.), New York, N. Y. Anestex Injectubes. For Local Anesthetic. 41,430; Nov. 22.
Dickinson, Albert, Company, The, Chicago, Ill. Dickinson's Buster Brands Popcorn. For Popped Corn. 41,420; Nov. 22.
Hirsch, Bertram J., doing business as Sta-Shine Laboratories, Terre Haute, Ind. Sta-Shine. For Shoe Polish and Dressing. 41,431; Nov. 22.
Hovden Food Products Corporation, Monterey, Calif. Tuna Maid. For Canned Food Incorporating Tuna Fish Together with Vegetables, Etc. 41,432; Nov. 22.
Imperial Candy Company, Seattle, Wash. Jane Adare. For Chocolates. 41,433; Nov. 22.
Krank, A. J., Company, St. Paul, Minn. Harrari Egyptian Henna. For Henna. 41,434; Nov. 22.
Krank, A. J., Company, St. Paul, Minn. Bronsine. For Henna. 41,435; Nov. 22.
Peper, Christian, Tobacco Company, St. Louis, Mo. Peper's Petite. For Tobacco. 41,429; Nov. 22.
Sta-Shine Laboratories. (See Hirsch, Bertram J.)
Sutherland Paper Company, Kalamazoo, Mich. Selected Brussel Sprouts. For Brussel Sprouts. 41,436; Nov. 22.
Sutherland Paper Company, Kalamazoo, Mich. Select Strawberries. For Strawberries. 41,437; Nov. 22.
Sutherland Paper Company, Kalamazoo, Mich. Found O'Gold. For Butter. 41,438; Nov. 22.
Sutherland Paper Company, Kalamazoo, Mich. Dandelion. For Butter. 41,439; Nov. 22.
White & Wyckoff Mfg. Co., Holyoke, Mass. Pascher Bond. For Fillers for Loose Leaf Note Books. 41,440; Nov. 22.

LIST OF REGISTRANTS OF PRINTS

Collins, Dr. Henry H., Los Angeles, Calif. "Maid for Your Teeth." For a Non-Medicinal Dental Cleansing Cream. 13,906; Nov. 22.
Nordhem, B. D., New York, N. Y. "That Happy Circle Bread." For Bread. 13,907; Nov. 22.

CLASSIFIED LIST OF TRADE-MARKS REGISTERED

CLASS 1

Rubber goods. B. F. Goodrich Co. 89,228; renewed Nov. 11, 1932.
Seeds, Hay and field. P. M. Swarts & Sons. 88,184; renewed Aug. 27, 1932.

CLASS 2

Chests, Storage. Odora Company. 299,101; Nov. 22; Serial No. 325,488; published Sept. 20, 1932.

CLASS 4

Buffing, polishing and flexible grinding wheels and belts. Divine Brothers Company. 299,157; Nov. 22; Serial No. 329,326; published Sept. 20, 1932.
Cleaning and detergent materials. Milwaukee Lubricants Co. 299,152; Nov. 22; Serial No. 329,197; published Sept. 13, 1932.
Cleaning compound, Carpet and rug. J. B. McComb. 299,158; Nov. 15; Serial No. 329,351; published Sept. 20, 1932.
Cleaning fluid, Dry. A. D. Miller Sons' Co. 299,136; Nov. 22; Serial No. 328,993; published Sept. 13, 1932.
Dressing and hand soaps, Automobile top. Speed Boy Soap Products Co. 299,194; Nov. 22; Serial No. 317,538; published Sept. 13, 1932.
Dressing, Automobile top. Sta-Drest Products Co. 299,259; Nov. 22.
Metal polishes and marble cleaning powder. I. Edward Brown. 299,216; Nov. 22; Serial No. 323,768; published Sept. 13, 1932.
Polishing and cleaning powder. Bon Ami Company. 299,120; Nov. 22; Serial No. 326,803; published Sept. 13, 1932.
Shaving cream. Nelson, Baker & Company. 299,206; Nov. 22; Serial No. 328,135; published Sept. 20, 1932.
Soap cleaner. Meyer & Trudeau. 299,214; Nov. 22; Serial No. 324,795; published Sept. 20, 1932.
Soap, Granulated. Stockton Soap Works. 299,201; Nov. 22; Serial No. 328,896; published Sept. 13, 1932.
Soaps. Cincinnati Soap Company. 299,200; Nov. 22; Serial No. 328,685; published Sept. 13, 1932.
Steel wool and pumice stone. James H. Rhodes & Company. 299,231; Nov. 22; Serial No. 327,781; published Sept. 20, 1932.
Washing and cleaning powder. M. L. Schmitt. 299,139; Nov. 22; Serial No. 328,762; published Sept. 13, 1932.

CLASS 6

Anæsthetic. O. A. Gerro. 299,071; Nov. 22; Serial No. 328,805; published Aug. 30, 1932.
Aromatic bodies for neutralizing odor. Fritzsche Brothers, Inc. 299,176; Nov. 22; Serial No. 328,637; published Sept. 6, 1932.
Astringents, bleaching creams, rouge, etc. Viviny Perfumers, Inc. 299,113; Nov. 22; Serial No. 328,456; published Sept. 20, 1932.
Bluing, Laundry. Alden Speare's Sons Co. 299,183; Nov. 22; Serial No. 328,509; published Sept. 6, 1932.
Brilliantine, toilet water, cold cream, etc. Loubert Cie. 299,182; Nov. 22; Serial No. 328,580; published Sept. 20, 1932.
Chemical and pharmaceutical preparations. H. S. Wellcome. 91,280; renewed Apr. 22, 1933.
Chemical solution to prevent scale and corrosion. J. A. Carter. 299,219; Nov. 22; Serial No. 327,044; published Aug. 30, 1932.
Chemical substances. Adam Hilger, Limited. 299,140; Nov. 22; Serial No. 328,667; published Sept. 20, 1932.
Chemicals, Photographic. Photochrom Inc. 299,181; Nov. 22; Serial No. 328,534; published Sept. 6, 1932.
Color restorer for gray hair. Degra Laboratories. 299,188; Nov. 22; Serial No. 321,592; published Aug. 30, 1932.
Compound for purifying acetylene. P. J. Granjon. 90,880; renewed Apr. 1, 1933.
Compounds for removing scale and preventing corrosion, Boiler. Wm. L. McLellan Company. 299,087; Nov. 22; Serial No. 323,900; published Aug. 23, 1932.
Cosmetic and dermatological preparations and eye lotions. Compagnie Re-Naitre, Inc. 299,068; Nov. 22; Serial No. 325,460; published Aug. 30, 1932.
Cream and perfume, Beauty. Polyphase Corporation. 299,058; Nov. 22; Serial No. 327,768; published Aug. 30, 1932.
Cream, skin freshener, hand lotion, etc., Almond. Frederick Stearns & Company. 299,212; Nov. 22; Serial No. 328,281; published Sept. 6, 1932.
Creams, Face. A. J. Krank Company. 299,107; Nov. 22; Serial No. 328,128; published Sept. 20, 1932.
Denaturant for alcohol. Tennessee Eastman Corporation. 299,077; Nov. 22; Serial No. 328,576; published Aug. 23, 1932.
Denaturants. Standard Oil Company of California. 299,132; Nov. 22; Serial No. 328,340; published Aug. 30, 1932.
Deodorant. Puritan Cosmetics, Inc. 299,209; Nov. 22; Serial No. 328,226; published Sept. 6, 1932.

Deodorant cream. Scram Company. 299,098; Nov. 22; Serial No. 325,883; published Sept. 6, 1932.
Dressing for use in darkening eyelashes and eyebrows, Colored. K. A. M. Holmes. 299,207–8; Nov. 22; Serial Nos. 328,171–2; published Sept. 6, 1932.
Endocrine compounds. Cole Chemical Company. 299,228; Nov. 22; Serial No. 327,842; published Sept. 20, 1932.
Epsom salt, sodium bicarbonate, bay rum, etc. Peoples Drug Stores, Inc. 299,067; Nov. 22; Serial No. 326,615; published Aug. 30, 1932.
Extract of liver preparation. Upjohn Company. 299,230; Nov. 22; Serial No. 327,777; published Aug. 30, 1932.
Finger wave preparation. E. Schmitt. 299,172; Nov. 22; Serial No. 328,706; published Sept. 20, 1932.
Gas, Liquefied natural. Philfuels Company. 299,260–1; Nov. 22.
Hair dressing. Keystone Laboratories. 299,121; Nov. 22; Serial No. 326,599; published June 21, 1932.
Hair lotion. G. Chelucci. 299,106; Nov. 22; Serial No. 328,116; published Sept. 20, 1932.
Hair preparations. Terri Cosmetics Corporation. 299,171; Nov. 22; Serial No. 328,708; published Sept. 20, 1932.
Hair restorer and skin antiseptic. J. Mento. 299,237; Nov. 22; Serial No. 327,912; published Aug. 30, 1932.
Hair restorers. M. Hamilton. 299,234; Nov. 22; Serial No. 327,848; published Sept. 6, 1932.
Headache powder. A. M. Gerrald. 299,218; Nov. 22; Serial No. 328,240; published Aug. 30, 1932.
Hydrogen peroxide. Paris Beauty Parlor Supply Co. Ltd. 299,080; Nov. 22; Serial No. 327,983; published Aug. 30, 1932.
Insecticide and fly exterminator. S. H. Stephens. 299,143; Nov. 22; Serial No. 328,451; published Sept. 6, 1932.
Insecticides, germicides, and fungicides. California Spray-Chemical Corporation. 299,042; Nov. 22; Serial No. 328,547; published Aug. 30, 1932.
Lavender water, powder, cold cream, etc. Yardley & Co. 299,187; Nov. 22; Serial No. 328,379; published Sept. 6, 1932.
Laxative tablet. G. W. Carnrick Co. 299,148; Nov. 22; Serial No. 326,048; published Sept. 6, 1932.
Liniment, ointment, powder, etc., Foot. Prof. F. A. Matsuyama. 299,223; Nov. 22; Serial No. 327,841; published Aug. 30, 1932.
Liquid for fireproofing various materials, and also to be incorporated in paint. M. J. Merkin Paint Co. Inc. 299,232; Nov. 22; Serial No. 327,802; published Sept. 6, 1932.
Liquid hair and scalp cleanser and shampoo. N. Silverstein. 299,211; Nov. 22; Serial No. 328,254; published Sept. 6, 1932.
Lotion, Skin. J. Nathan. 299,041; Nov. 22; Serial No. 328,446; published Aug. 23, 1932.
Lotion, Skin. S. R. Upham. 299,114; Nov. 22; Serial No. 326,956; published Aug. 30, 1932.
Magnesia. P. Zinsani. 299,160; Nov. 22; Serial No. 326,410; published Sept. 20, 1932.
Materials and solutions for developing photographically applied images on printing plates. Multigraph Company. 299,129; Nov. 22; Serial No. 328,863; published Aug. 30, 1932.
Materials and solutions for renewing used printing plates. Multigraph Company. 299,128; Nov. 22; Serial No. 328,864; published Aug. 30, 1932.
Materials for drawing and writing on planographic printing plates. Multigraph Company. 299,130; Nov. 22; Serial No. 328,862; published Aug. 30, 1932.
Materials for preserving the blankets of printing machines. Multigraph Company. 299,131; Nov. 22; Serial No. 328,861; published Aug. 30, 1932.
Medicinal compound. F. L. Albino. 299,252; Nov. 22.
Medicinal preparation. V. Cipolla. 299,112; Nov. 22; Serial No. 328,850; published Sept. 6, 1932.
Medicinal preparation. Mrs. L. M. Lundberg. 299,180; Nov. 22; Serial No. 328,558; published Sept. 6, 1932.
Medicinal preparation. Manuel Marin & Co. 299,119; Nov. 22; Serial No. 326,865; published Aug. 30, 1932.
Medicinal preparation. S. Pfeiffer Manufacturing Company. 299,202; Nov. 22; Serial No. 328,014; published Sept. 6, 1932.
Medicinal preparations. Manuel Marin & Co. 299,118; Nov. 22; Serial No. 326,866; published Sept. 6, 1932.
Medicinal salts. E. Griffiths Hughes (Kruschen) Limited. 90,115; renewed Feb. 4, 1933.
Medicine. Acidacure Company. 299,110; Nov. 22; Serial No. 328,257; published Sept. 20, 1932.
Medicine. C. F. Bokmeyer. 299,242; Nov. 22.
Medicine. Pyo-Nox Company. 299,133; Nov. 22; Serial No. 328,308; published Aug. 30, 1932.
Medicine. William H. Rorer Inc. 299,197; Nov. 22; Serial No. 315,928; published Sept. 15, 1931.
Medicine. B. Schmutzer. 299,204; Nov. 22; Serial No. 328,077; published Sept. 20, 1932.

Metal salts and electroplating preparations containing gold, Precious. Baker & Company. 299,142; Nov. 22; Serial No. 328,474; published Sept. 6, 1932.
Mineral oil, Compounded. Texas Company. 299,210; Nov. 22; Serial No. 328,230; published Sept. 6, 1932.
Nail polish and remover, cuticle remover, nail white. L'Onglex Limited. 299,225; Nov. 22; Serial No. 327,607; published Sept. 6, 1932.
Oils and greases. Thomas Asphalt Products Co. 299,127; Nov. 22; Serial No. 328,377; published Sept. 6, 1932.
Ointment. Saul Pharmacal Co. Inc. 299,108; Nov. 22; Serial No. 328,185; published Sept. 20, 1932.
Ointment. C. L. Severy. 299,105; Nov. 22; Serial No. 328,020; published Sept. 20, 1932.
Ointment, blood tonic, laxative preparations, and stomach medicine, Pile. Thornton & Minor Sanitarium Company. 299,116; Nov. 22; Serial No. 326,650; published Aug. 30, 1932.
Ointment, salves, antiseptic liniment, etc., Skin. Royal Laboratories, Inc. 299,115; Nov. 22; Serial No. 326,913; published Aug. 30, 1932.
Palliative for sore eyes, rash, burns, etc. S. Adam. 299,046; Nov. 22; Serial No. 328,862; published Aug. 30, 1932.
Pastilles made from mineral waters. La Compagnie Fermiere de l'Etablissement Thermal de Vichy, Societe Anonyme. 299,186; Nov. 22; Serial No. 328,436; published Sept. 20, 1932.
Perfume, toilet water, powders, vanity cases, etc. Bourjois, Inc. 299,190; Nov. 22; Serial No. 320,226; published Dec. 22, 1931.
Perfumes. Jean Patou, Inc. 299,239; Nov. 22; Serial No. 327,984; published Sept. 6, 1932.
Pharmaceutical preparation for the removal of hookworms, etc. Lederle Laboratories, Inc. 299,177; Nov. 22; Serial No. 328,618; published Sept. 6, 1932.
Pharmaceutical preparations. John J. Fulton Company. 299,099; Nov. 22; Serial No. 325,856; published Aug. 30, 1932.
Pharmaceutical preparations. Moller Brothers. 299,220; Nov. 22; Serial No. 327,116; published Sept. 6, 1932.
Photographic developing powder. H. V. Schieren. 299,255; Nov. 22.
Powder, Face. Pond's Extract Company. 299,178; Nov. 22; Serial No. 328,584; published Sept. 6, 1932.
Powder, hand lotion, almond cream, Face. Gaby, Inc. 299,164; Nov. 22; Serial No. 311,030; published Sept. 15, 1931.
Preparation containing chemical properties for the elimination of body odors. W. W. Ryan. 299,225; Nov. 22; Serial No. 327,567; published Aug. 30, 1932.
Preparation for building up the system, enriching the blood, etc.; and hair tonic. D. Wroblewski. 299,221; Nov. 22; Serial No. 327,265; published Aug. 30, 1932.
Preparation for coating, sising, and stiffening rugs. McCarty Aniline & Extract Co. Inc. 299,066; Nov. 22; Serial No. 315,972; published Aug. 23, 1932.
Preparation for the treatment of burns, bruises, sunburn, etc., Dry mineral. Coons Pure Mineral Company. 299,206; Nov. 22; Serial No. 328,085; published Aug. 30, 1932.
Preparation for the treatment of catarrh, asthma, and hay fever. M. M. Keeling. 299,091; Nov. 22; Serial No. 323,471; published Aug. 23, 1932.
Preparation for the treatment of corns, callouses, etc. Sloane Products. 299,102; Nov. 22; Serial No. 325,270; published Sept. 6, 1932.
Preparation for the treatment of gonorrhea. Medical Accessories, Inc. 299,229; Nov. 22; Serial No. 327,733; published Aug. 30, 1932.
Preparation for the treatment of syphilitic and similar types of infection. Parke, Davis & Company. 299,173–4; Nov. 22; Serial Nos. 328,699–700; published Sept. 20, 1932.
Preparation for the treatment of the hair and scalp. Service Products, Inc. 299,249; Nov. 22.
Preparation for use as a vasodilator and cardiotonic. Winthrop Chemical Company. 299,045; Nov. 22; Serial No. 328,907; published Aug. 30, 1932.
Preparation for use in the treatment of conditions involving deficient utilization in the body of calcium and phosphorus. Parke, Davis & Co. 299,100; Nov. 22; Serial No. 325,796; published Aug. 30, 1932.
Preparation for use in treatment of headaches, pains, etc. Kam Drug Manufacturing Co. 299,218; Nov. 22; Serial No. 326,326; published Sept. 20, 1932.
Preparation to be used for dysmenorrhea. Hart Products Company. 299,111; Nov. 22; Serial No. 328,329; published Sept. 20, 1932.
Preparation used in conjunction with chromate dyestuffs. Arkansas Company Inc. 299,240; Nov. 22.
Preparation which encourages and holds a natural wave to the hair. Meyer Brothers Drug Company. 299,049; Nov. 22; Serial No. 329,055; published Aug. 30, 1932.
Preparations for preparing and preserving dead bodies for burial. Dr. H. G. Michel and Company. 299,069; Nov. 22; Serial No. 323,583; published Aug. 23, 1932.
Preparations of chemical carbon removers. Rocky Mountain Chemical and Manufacturing Co. 299,235; Nov. 22; Serial No. 327,869; published Aug. 30, 1932.
Salt, Laxative. F. Orlandella. 299,040; Nov. 22; Serial No. 328,368; published Aug. 23, 1932.
Salts, Mineral water. La Compagnie Fermiere de l'Etablissement Thermal de Vichy, Societe Anonyme. 299,185; Nov. 22; Serial No. 328,437; published Sept. 20, 1932.
Salve. Demester Laboratories. 299,089; Nov. 22; Serial No. 328,214; published Aug. 30, 1932.
Seasoning agent for salt free diet. Winthrop Chemical Company. 299,135; Nov. 22; Serial No. 328,256; published Aug. 30, 1932.
Shampoos, Liquid. Midwest Hardware Company. 299,236; Nov. 22; Serial No. 327,915; published Aug. 30, 1932.
Toilet cream. R. G. Tathill. 299,226; Nov. 22; Serial No. 327,610; published Aug. 30, 1932.
Toilet water. R. Hudnut. 90,641; renewed Mar. 11, 1933.
Tonic, astringent, Skin. Wiebold Stores, Inc. 299,217; Nov. 22; Serial No. 323,066; published Sept. 20, 1932.
Tonic, Bath. J. P. Galligan. 299,134; Nov. 22; Serial No. 328,304; published Aug. 30, 1932.
Tooth-paste. John Gosnell & Co., Limited. 89,166; renewed Nov. 12, 1932.
Vanity. The Fair. 299,254; Nov. 22.

CLASS 9

Fire-arms and supplies therefor. M. H. Dodge. 90,294; renewed Feb. 18, 1933.
Matches. Firestone Tire & Rubber Company. 299,154; Nov. 22; Serial No. 328,379; published Sept. 13, 1932.
Matches. Firestone Tire & Rubber Company. 299,155; Nov. 22; Serial No. 329,231; published Sept. 13, 1932.
Matches. Firestone Tire & Rubber Company. 299,156; Nov. 22; Serial No. 329,233; published Sept. 13, 1932.

CLASS 11

Inks, Printing. Philip Ruxton, Inc. 88,704; renewed Oct. 15, 1932.

CLASS 12

Aggregate for road building. Blacktop Equipment Corporation. 299,079; Nov. 22; Serial No. 328,155; published Aug. 23, 1932.
Cement, Masonary. Western Lime & Cement Co. 299,146; Nov. 22; Serial No. 329,032; published Sept. 6, 1932.
Coating, Plastic roof. A. C. Hora Company. 299,090; Nov. 22; Serial No. 321,563; published Aug. 23, 1932.
Composition flooring material. M. Canter. 299,078; Nov. 22; Serial No. 328,650; published Aug. 23, 1932.
Iron compound. Smooth-On Manufacturing Company. 299,149; Nov. 22; Serial No. 329,063; published Sept. 6, 1932.
Lime. Western Lime & Cement Co. 299,145; Nov. 22; Serial No. 329,031; published Sept. 6, 1932.
Lumber. Frost Lumber Industries, Inc. 299,075; Nov. 22; Serial No. 328,001; published Aug. 23, 1932.
Lumber. W. D. Smith. 299,076; Nov. 22; Serial No. 328,514; published Aug. 30, 1932.
Stone, Quarried natural. Texas Quarries Inc. 299,175; Nov. 22; Serial No. 328,650; published Sept. 6, 1932.
Wood, Laminated structural. M and M Plywood Corporation. 299,072; Nov. 22; Serial No. 328,795; published Aug. 30, 1932.

CLASS 13

Cuspidors. Jacob J. Vollrath Mfg. Co. 89,210; renewed Nov. 19, 1932.
Trays, and holding and displaying attachments for such trays, Base metal service. Red Boy, Inc. 299,238; Nov. 22; Serial No. 327,946; published Sept. 13, 1932.

CLASS 15

Gasoline and lubricating oils. Black Eagle Oil Company. 299,061; Nov. 22; Serial No. 305,692; published Sept. 6, 1932.
Oils, Lubricating. Russia Cement Company. 91,128; renewed Apr. 15, 1933.
Petroleum products. Spartan Refining Company. 299,092; Nov. 22; Serial No. 319,592; published Nov. 17, 1931.

CLASS 16

Dressing, Wax floor. John H. Pray & Sons Co. 299,245; Nov. 22.
Polishing and cleaning preparation, Combined. Wm. Poston Manufacturing Co. 299,259; Nov. 22.

CLASS 19

Boats, Outboard motor. Boyd-Martin Boat Company. 299,062; Nov. 22; Serial No. 303,154; published Sept. 6, 1932.
Drag links, tie rods, radius rods, etc. Columbus Auto Parts Company. 299,063; Nov. 22; Serial No. 312,908; published Sept. 6, 1932.

CLASS 20

Floorings, Printed felt base. Carthage Mills Incorporated. 299,152; Nov. 22; Serial No. 318,040; published Sept. 13, 1932.
Linoleum and felt base wall coverings. Armstrong Cork Company. 299,122; Nov. 22; Serial No. 329,590; published Sept. 20, 1932.

CLASS 21

Batteries, Storage. Price Battery Corporation. 299,070; Nov. 22; Serial No. 328,827; published Sept. 6, 1932.

Batteries, their parts and accessories, Storage. Electric Storage Battery Company. 299,074; Nov. 22; Serial No. 328,683; published Sept. 6, 1932.
Electric arc and incandescent lamps, electric controllers, electric fuses and fuse holders, etc. Westinghouse Electric and Manufacturing Company. 299,083; Nov. 22; Serial No. 327,236; published Sept. 6, 1932.
Electric lamp bulbs and lamps, Incandescent. S. Lyman. 299,082; Nov. 22; Serial No. 327,470; published Sept. 6, 1932.
Radio apparatus. United American Bosch Corporation. 299,069; Nov. 22; Serial No. 328,853; published Sept. 6, 1932.

CLASS 22

Amusement machines, Coin controlled. J. F. Meyer. 299,159; Nov. 22; Serial No. 329,403; published Sept. 13, 1932.
Fishing lines. Finlayson, Bousfield & Co. 299,103; Nov. 22; Serial No. 325,217; published Sept. 20, 1932.
Game, Board. A. Weinberg. 299,184; Nov. 22; Serial No. 328,458; published Sept. 20, 1932.
Game played on a billiard table. Brunswick-Balke-Collender Company. 299,125; Nov. 22; Serial No. 329,550; published Sept. 20, 1932.
Game, Table board. D. C. Rockola. 299,153; Nov. 22; Serial No. 329,203; published Sept. 20, 1932.
Game, Table board. G. Smith. 299,227; Nov. 22; Serial No. 327,637; published Sept. 13, 1932.
Games, Board. Fisher & Matson Company. 299,189; Nov. 22; Serial No. 320,406; published Dec. 15, 1931.
Games, Table board. R. A. Hennings. 299,203; Nov. 22; Serial No. 328,988; published Sept. 20, 1932.
Golf clubs and parts thereof, balls, tees, etc. Harrison Wholesale Company. 299,151; Nov. 22; Serial No. 329,185; published Sept. 20, 1932.
Golf game apparatus, Portable. C. F. Michelfelder. 299,196; Nov. 22; Serial No. 304,964; published Sept. 20, 1932.

CLASS 23

Plows and parts thereof. S. R. White's Sons. 88,817; renewed Oct. 22, 1932.
Razors and razor blades, Safety. Kampfe Bro's. 39,983; renewed Mar. 24, 1933.

CLASS 26

Apparatus for use in making finger prints and foot prints. H. G. Smith. 299,247; Nov. 22.
Illuminated box for use as a desk in making tracings. Multistamp Company. 299,179; Nov. 22; Serial No. 328,561; published Sept. 13, 1932.

CLASS 27

Watch and clock springs. K K Importing Corporation. 299,081; Nov. 22; Serial No. 327,877; published Sept. 6, 1932.

CLASS 31

Refrigerators, casings, etc., Iced and automatic. Tennessee Enamel Manufacturing Company. 299,126; Nov. 22; Serial No. 329,514; published Sept. 20, 1932.

CLASS 32

Bookcases, tables, desks, etc. Barker Bros. Incorporated. 299,257; Nov. 22.

CLASS 34

Stoves, Heating and cooking. Olive Stove Works. 88,585; renewed Oct. 1, 1932.

CLASS 37

Paper. Rheo. H. Davies & Co. 299,250–1; Nov. 22.
Paper, Writing. Mittineague Paper Co. 40,093–4; renewed Apr. 14, 1933.
Papers, Wall. F. C. Davidge & Co. 86,285; renewed Apr. 30, 1932.
Papers, Wrapping. Continental Paper Bag Company. 90,514; renewed Mar. 4, 1932.
Stencils and stencil correction varnish. Illinois Paper Company. 299,060; Nov. 22; Serial No. 304,375; published Aug. 23, 1932.

CLASS 38

Magazine. L. D. Hall. 88,675; renewed Oct. 15, 1932.

CLASS 39

Apparel, Tweed riding. Brows & Jacobson, Inc. 299,037; Nov. 22; Serial No. 328,046; published Aug. 30, 1932.
Boots and shoes. L. A. Crossett. 39,060; renewed Oct. 21, 1932.
Boots, shoes, and slippers. Manfield & Sons. 88,767; renewed Oct. 22, 1932.
Clothing. Conrad & Co. 90,870; renewed Apr. 1, 1933.
Dresses, coats, skirts, shirt waists, etc. Ladycraft Dresses, Inc. 299,038; Nov. 22; Serial No. 328,101; published Aug. 30, 1932.
Frocks, Dance. Fürst-Greenman Co. 299,052; Nov. 22; Serial No. 310,991; published Sept. 6, 1932.
Frocks, dresses, and suits. Paul Parnes, Incorporated. 299,050; Nov. 22; Serial No. 329,120; published Aug. 30, 1932.
Goods in the nature of cut-out dresses, Piece. Tru-Fit Dress Co. Inc. 299,054; Nov. 22; Serial No. 315,612; published Aug. 30, 1932.
Hosiery. H. Conston. 299,047; Nov. 22; Serial No. 328,978; published Aug. 30, 1932.
Hosiery. Integrity Hosiery Co. 299,051; Nov. 22; Serial No. 309,432; published Feb. 24, 1931.
Hosiery. Trojan Hosiery Mills, Inc. 299,059; Nov. 22; Serial No. 327,994; published Aug. 30, 1932.
Hosiery and underwear. Strutwear Knitting Company. 299,048; Nov. 22; Serial No. 329,029; published Aug. 30, 1932.
Pajamas. Stadium Underwear Company. 299,057; Nov. 22; Serial No. 327,375; published Sept. 6, 1932.
Robes, Bath and beach. Quickslip Co. 299,240; Nov. 22.
Scarfs and jackets. Nusbaum, Knitters, Inc. 299,044; Nov. 22; Serial No. 328,671; published Sept. 6, 1932.
Shoes. Premier Shoe Co. Inc. 299,063; Nov. 22; Serial No. 296,921; published July 12, 1932.
Slippers, moccasins, shoes, and parts thereof, etc. Foot Form Shoe Shops, Inc. 299,094; Nov. 22; Serial No. 319,357; published Jan. 5, 1932.
Stockings. Joseph Black & Sons Company. 88,729; renewed Oct. 22, 1932.
Suits and overcoats. Max Udell Sons & Co. 299,043; Nov. 22; Serial No. 328,588; published Sept. 6, 1932.
Suits and shirts. R. H. White Company. 299,248; Nov. 22.
Ties. M. Opper. 299,241; Nov. 22.

CLASS 42

Pile fabrics. Sidney Blumenthal & Co. Inc. 299,256; Nov. 22.

CLASS 44

Article for removing superfluous or unsightly hair. J. O. Davies. 299,137; Nov. 22; Serial No. 328,914; published Sept. 13, 1932.
Blowtorch used as a dental appliance. Steffan and Rohrer. 299,138; Nov. 22; Serial No. 328,881; published Sept. 20, 1932.
Bottles, Nursing. Scheuerman-Geistlinger Mfg. Co. Inc. 299,224; Nov. 22; Serial No. 327,530; published Sept. 20, 1932.
Instruments for surgical, dental, etc., use. G. P. Pilling & Son Co. 299,162; Nov. 22; Serial No. 329,492; published Sept. 13, 1932.
Prophylactic rubber articles. Youngs Rubber Corporation, Inc. 299,066; Nov. 22; Serial No. 326,879; published Aug. 23, 1932.
Scissors, knives, nail files, etc., Spring cuticle. Schnefel Brothers, Inc. 299,141; Nov. 22; Serial No. 328,623; published Sept. 13, 1932.

CLASS 45

Beer, Root. M. Glazer. 299,124; Nov. 22; Serial No. 329,556; published Sept. 20, 1932.
Beverage, Maltless. A. G. de Fanzon. 299,195; Nov. 22; Serial No. 317,164; published Sept. 20, 1932.
Beverages and extracts, syrups, and concentrates, Maltless. Star Bottling & Supply Co. 299,150; Nov. 22; Serial No. 329,066; published Sept. 13, 1932.
Beverages and syrups therefor, Maltless. C. B. Stein. 299,163; Nov. 22; Serial No. 329,431; published Sept. 20, 1932.
Beverages, Maltless. J. Karras. 299,166; Nov. 22; Serial No. 328,841; published Sept. 13, 1932.
Beverages, Maltless. Royal Canadian Company. 299,165; Nov. 22; Serial No. 328,848; published Sept. 13, 1932.
Waters, Mineral. Indian Mineral Wells, Inc. 299,198; Nov. 22; Serial No. 311,060; published Mar. 24, 1931.

CLASS 46

Avocados, Fresh. Calavo Growers of California. 299,064; Nov. 22; Serial No. 324,590; published Sept. 6, 1932.
Avocados, Fresh. Calavo Growers of California. 299,088; Nov. 22; Serial No. 324,840; published Sept. 6, 1932.
Avocados, Fresh. Calavo Growers of California. 299,215; Nov. 22; Serial No. 324,589; published Sept. 13, 1932.
Biscuit. National Biscuit Company. 88,922–32; renewed Oct. 29, 1932.
Cakes and peanuts. Overland Candy Corporation. 299,117; Nov. 22; Serial No. 326,789; published July 12, 1932.
Candy. D. D. Carney. 299,095; Nov. 22; Serial No. 319,099; published Sept. 6, 1932.
Candy. Mirror. 88,914; renewed Oct. 29, 1932.
Canned orange juice. Floriorange Canneries, Inc. 299,191; Nov. 22; Serial No. 319,175; published Nov. 10, 1931.
Canned tomato sauce with meat balls. A. Cannova. 299,085; Nov. 22; Serial No. 325,629; published Sept. 6, 1932.
Cheese. N. Dorman & Co. 299,253; Nov. 22.
Coffee. Compania de Cafe Esperanza. 89,989; renewed Jan. 28, 1933.
Coffee. E. C. Conroy. 299,147; Nov. 22; Serial No. 329,043; published Sept. 13, 1932.
Edible product made from ham and cheese. Sheboygan Cheese Co. 299,243; Nov. 22.
Egg, albumen, and yolk, Powdered whole. Joe Lowe Corporation. 299,222; Nov. 22; Serial No. 327,317; published Sept. 20, 1932.

Feed for fish. Nicholas Wapler Company. 299,096; Nov. 22; Serial No. 329,269; published Sept. 20, 1932.
Flour, wheat. Empire State Flour Mills. 90,870; renewed Apr. 1, 1933.
Food product. B. Fieg. 299,065; Nov. 22; Serial No. 324,508; published Sept. 6, 1932.
Food Tonic health. Chase-Williams Corporation. 299,199; Nov. 22; Serial No. 328,912; published Sept. 20, 1932.
Frankfurters. Frank and Company. 299,097; Nov. 22; Serial No. 325,944; published Sept. 13, 1932.
Fruit, Fresh citrus. Scott-Borden. 299,086; Nov. 22; Serial No. 323,753; published Sept. 6, 1932.
Gum, Chewing. B. G. M. Flahive. 299,244; Nov. 22.
Honey. H. A. Wilbur. 299,055; Nov. 22; Serial No. 315,657; published Sept. 6, 1932.
Ice cream. H. Francisco. 299,193; Nov. 22; Serial No. 317,761; published Sept. 20, 1932.
Lobsters. Consolidated Lobster Co. 299,104; Nov. 22; Serial No. 325,136; published Sept. 20, 1932.
Mixture of an egg material and other substances. Standard Brands Incorporated. 299,078; Nov. 22; Serial No. 328,313; published Sept. 6, 1932.
Olive oil. S. A. Laraja. 299,168; Nov. 22; Serial No. 328,814; published Sept. 13, 1932.
Olive oil. P. Meriano. 299,093; Nov. 22; Serial No. 330,655; published Sept. 6, 1932.
Oranges and grape-fruit. Manatee Fruit Co. 90,464; renewed Feb. 28, 1933.
Sauce. Francis H. Leggett & Company. 299,170; Nov. 22; Serial No. 328,735; published Sept. 20, 1932.
Spaghetti sauce. Venice Maid Company. 299,064; Nov. 22; Serial No. 327,174; published Aug. 2, 1932.
Syrup, Malt. Best Malt Products Company. 299,144; Nov. 22; Serial No. 329,012; published Sept. 13, 1932.
Tea. Packet Tea Corporation of America. 299,167; Nov. 22; Serial No. 328,518; published Sept. 20, 1932.
Vegetable pure food ice and sherbet stabilizer standardized. Joe Lowe Corporation. 299,169; Nov. 22; Serial No. 328,757; published Sept. 13, 1932.
Yeast, Dry. John F. Hunt & Co. 299,109; Nov. 22; Serial No. 328,219; published Sept. 20, 1932.

CLASS 49

Whisky. James McCreadie & Company. 299,123; Nov. 22; Serial No. 329,585; published Sept. 20, 1932.
Vermouth, cocktails, liquors, bitters. Martini & Rossi S. A. 299,161; Nov. 22; Serial No. 329,425; published Sept. 13, 1932.

LIST OF LABELS

Anestex Injectubes. For Local Anesthetic. D. Curtis. 41,430; Nov. 22.
Blue Ridge Mountain Apples. For Apples. Blue Ridge Mountain Orchards. 41,421; Nov. 22.
Bronsine. For Henna. A. J. Krank Company. 41,435; Nov. 22.
Dandelion. For Butter. Sutherland Paper Company. 41,439; Nov. 22.
Desert Gold Fresh California Dates. For Dates. California Date Growers Association. 41,426; Nov. 22.
Desert Gold Grown in California. Hydrated Dates. For Dates. California Date Growers Association. 41,427; Nov. 22.
Dickinson's Buster Brands Popcorn. For Popped Corn. Albert Dickinson Company. 41,420; Nov. 22.
Eveready Pure Cocoa. For Cocoa. Canada's Pride Products Co. 41,428; Nov. 22.
Harrari Egyptian Henna. For Henna. A. J. Krank Company. 41,434; Nov. 22.
Jane Adare. For Chocolates. Imperial Candy Company. 41,433; Nov. 22.
Jeanne's French Dressing. For French Dressing. J. M. Brenner. 41,423; Nov. 22.
Melonice. For Frozen Fruit Ices. Boccia Spumoni Co. 41,422; Nov. 22.
Pascher Bond. For Fillers for Loose Leaf Note Books. White & Wyckoff Mfg. Co. 41,440; Nov. 22.
Peper's Petite. For Tobacco. Christian Peper Tobacco Company. 41,429; Nov. 22.
Pound O'Gold. For Butter. Sutherland Paper Company. 41,438; Nov. 22.
Radio Miniatures. For Electrical Transcription Discs for Radio Broadcasting Use. Brooks, Smith & French, Inc. 41,424; Nov. 22.
Radio Tabloids. For Electrical Transcription Discs for Radio Broadcasting Use. Brooks, Smith & French, Inc. 41,425; Nov. 22.
Select Strawberries. For Strawberries. Sutherland Paper Company. 41,437; Nov. 22.
Selected Brussel Sprouts. For Brussel Sprouts. Sutherland Paper Company. 41,436; Nov. 22.
Sta-Shine. For Shoe Polish and Dressing. B. J. Hirsch. 41,431; Nov. 22.
Tuna Maid. For Canned Food Incorporating Tuna Fish Together with Vegetables, Etc. Hovden Food Products Corporation. 41,432; Nov. 22.

LIST OF PRINTS

"Maid for Your Teeth." For a Non-Medicinal Dental Cleansing Cream. Dr. H. H. Collins. 13,966; Nov. 22.
"That Happy Circle Bread." For Bread. B. D. Nordhem. 13,967; Nov. 22.

LIST OF PATENTEES

TO WHOM

PATENTS WERE ISSUED ON THE 22d DAY OF NOVEMBER, 1932

NOTE.—Arranged in accordance with the first significant character or word of the name (in accordance with city and telephone directory practice). Includes patents, reissues, and designs.

A C Spark Plug Company. (See Berdon, Albert E., assignor.)

Abercrombie, James S., Houston, Tex. Drilling wells. 1,888,814; Nov. 22.

Aberfoyle Manufacturing Company. (See Holt, Joseph P., assignor.)

Aberson, Nathaniel L., Detroit, Mich. Multiple slab unit. 1,888,417; Nov. 22.

Abrahams, Alexander I., New York, N. Y. Loud speaker unit. 1,888,442; Nov. 22.

Acme Steel Company. (See MacChesney, Chester M., assignor.)

Acme Steel Company. (See MacChesney, C. M., and Wilson, assignors.)

Adams, Herbert L., Somerville, Mass. Flying machine. 1,888,418; Nov. 22.

Adler, Herman, Berkeley, Calif. Combined shelf and robe rail. 1,888,253; Nov. 22.

Ainsworth, Chester D., Wollaston, Mass. Treating cellulosic material. 1,888,419; Nov. 22.

Aktiebolaget Gerh. Arehns Mekaniska Verkstad. (See Johnson, Bror A. E., and Örström, assignors.)

Aktiebolaget Ljungström Angturbin. (See Lysholm, Alf., assignor.)

Alcorn Combustion Company. (See Nash, A. E., and Alcorn, assignors.)

Alcorn, James S. (See Nash, A. E., and Alcorn.)

Alexander, Gustaf, Chicago, Ill. Water craft. 1,888,443; Nov. 22.

Alexander, Harry S., F. B. Pfeiffer, Akron, and J. W. White, Barberton, Ohio, assignors to Selberling Rubber Company. Bias cutting machine. 1,888,754; Nov. 22.

Allan, Percy, Montclair, N. J., assignor to A. B. Sands & Son Company, New York, N. Y. Marine toilet. 1,888,842; Nov. 22.

Allen, Howard D., Los Angeles, Calif. Airplane course corrector. 1,888,206; Nov. 22.

Allen, Martin W., Los Angeles, Calif. Dairy flag. 1,888,868; Nov. 22.

American Chain Company. (See Reyburn, John R., assignor.)

American Coal Cleaning Corporation. (See Oppy, Alwyn G., assignor.)

American Flyer Mfg. Co. (See Cuff, James E., assignor.)

American Fork & Hoe Company, The. (See Morgan, Robert, assignor.)

American Lace Manufacturing Company, The. (See Hucknall, Hage W., assignor.)

American-LaFrance and Foamite Corporation. (See Gilbert, Victor G. W., assignor.)

American Lurgi Corporation. (See von Forster, Hermann, assignor.)

American Machine & Foundry Company. (See Bronander, Wilhelm B., assignor.)

American Machine & Foundry Company. (See Gladeck, F. C., and Warren, assignors.)

American Machine & Foundry Company. (See Rundell, Rupert R., assignor.)

American Meter Company. (See Diehl, John C., assignor.)

American Sales Book Company. (See Pringle, William A., assignor.)

American Telephone and Telegraph Company. (See Herman, Joseph, assignor.)

American Telephone and Telegraph Company. (See McCann, Thomas A., assignor.)

American Tractor Equipment Co. (See Kroyer, C. H., and Farish, assignors.)

Ames, B. C., Co. (See Edson, William R., assignor.)

Amiet, Oskar, La-Chaux-de-Fonds, Switzerland. Machine and method for automatically fixing the hooks on the bands for zip fasteners. 1,888,254; Nov. 22.

Anderau, Walter. (See Straub, F., Anderau, and Mayer.)

Anderson, David P., Pittsburgh, Pa. Lifting mechanism. 1,888,612; Nov. 22.

Anderson, Ernst G. K., Evanston, Ill., assignor to Appleton Electric Company. Hanger. 1,888,342; Nov. 22.

Anderson, Ernst G. K., Chicago, Ill., assignor to Appleton Electric Company. Box connection or elbow. 1,888,546; Nov. 22.

Anderson, Harrison. (See Callaway, R. W., and Anderson.)

Anderson, John W., Gary, Ind. Apparatus and method for manufacturing windshield wiper blades. 1,888,843; Nov. 22.

Anderson, Louis S., assignor to Reid, Murdoch & Co., Chicago, Ill. Merchandising and display table. 1,888,649; Nov. 22.

Anderson, Samuel M., Sharon, assignor to B. F. Sturtevant Company, Hyde Park, Mass. Air conditioning apparatus. 1,888,844; Nov. 22.

Anderson, William A., Huntington Park, Calif. Automatic molding mechanism for plastic material. 1,888,255; Nov. 22.

Andreae, Fritz, Cologne, Germany. Warp pile fabric. 1,888,944; Nov. 22.

Apperman, Walter R., Fort Worth, Tex. Airplane. 1,888,871; Nov. 22.

Apple, Vincent G., Dayton, Ohio. Mold for insulating an armature. 1,888,211; Nov. 22.

Apple, Vincent G., Dayton, Ohio. Apparatus for impregnating and molding a porous structure. 1,888,613; Nov. 22.

Appleton Electric Company. (See Anderson, Ernst G. K., assignor.)

Appleton Electric Company. (See Bohlman, R. A., and Brachtl, assignors.)

Arnold, Ross H. (See Jauch, R. J., Farnham, and Arnold.)

Arrow-Hart & Hegeman Electric Company. (See Nero, Arvid H., assignor.)

Arter Grinding Machine Company. (See Arter, W., and Fraser, assignors.)

Arter, William, Worcester, and W. F. Fraser, Westboro; said Fraser assignor to Arter Grinding Machine Company, Worcester, Mass. Grinding machine. 1,888,710; Nov. 22.

Ashe, William O. (See Kell, C. W., and Ash.)

Associated Electric Laboratories, Inc. (See Hershey, Harry R., assignor.)

Associated Electric Laboratories, Inc. (See Just, John, assignor.)

Associated Electric Laboratories, Inc. (See Nelson, Martin L., assignor.)

Associated Electric Laboratories, Inc. (See Sengebusch, Hans, assignor.)

Associated Electric Laboratories, Inc. (See Voss, John H., assignor.)

Associated Telephone & Telegraph Company. (See Caswell, Arthur H., assignor.)

Associated Telephone and Telegraph Company. (See Pearce, O. A., and Simpson, assignors.)

Associated Telephone and Telegraph Company. (See Smith, J., and Turton, assignors.)

Atwater Kent Manufacturing Company. (See Miller, John M., assignor.)

Austen, Frederick H., Leicester, England. Radiator. 1,888,900; Nov. 22.

Auto Research Corporation. (See Bijur, Joseph, assignor.)

Autocall Company, The. (See Richmond, Louis R., assignor.)

Autographic Register Company. (See Brenn, Carl W., assignor.)

Automatic Electric Heater Company. (See Clark, Warren F., assignor.)

Avakian, Arsen H., Long Beach, Calif. Precipitating silica from solution in alkali brines. 1,888,484; Nov. 22.

Aviation Patent and Research Corporation, The. (See Rivers, Elmer J., assignor.)

Ayars, Charles H., assignor to Ayars Machine Company, Salem, N. J. Liquid supply mechanism. 1,888,212; Nov. 22.

Ayars Machine Company. (See Ayars, Charles H., assignor.)

Babcock, Justin K., Cleveland, Ohio. Coupling. 1,888,906; Nov. 22.

Badum, Ernst. (See Goes, K., and Badum.)

Baker, Arthur B. H., Portage La Prairie, Manitoba, Canada. Grain car door. 1,888,213; Nov. 22.

Baker, Webster N., and R. A. Masten, Glens Falls, N. Y., assignors to International Paper Company. Dressing grindstones. 1,888,614; Nov. 22.

Barber Asphalt Company, The. (See Smith, Preston R., assignor.)

Barber, Howard M., Pawcatuck, Conn., assignor to C. B. Cottrell & Sons Company, Westerly, R. I. Flat sheet delivery for printing presses. 1,888,753; Nov. 22.

Bard, Francis N., Highland Park, Ill., assignor to Walworth Patents Inc., Boston, Mass. Lubricated plug valve. 1,888,207; Nov. 22.

Bardgett, William H. (See Barr, W., and Bardgett.)

Barnes, Gladeon M., U. S. Army, Hastings, Mich. Vehicle. 1,888,420; Nov. 22.

Barr, William, Hamilton, and W. E. Bardgett, Glasgow, assignors to Colvilles Limited, Glasgow, Scotland. Determining the safe working stress of metals at elevated temperatures. 1,888,755; Nov. 22.

Barrett Company, The. (See Miller, Stuart P., assignor.)

Bassett, Robert S., Buffalo, N. Y. Liquid meter. 1,888,869; Nov. 22.

Bassick Company, The. (See Duffy, Tom I., assignor.)

Bassick Company, The. (See Herold, Walter F., assignor.)

Bassick Company, The. (See Moore, Raymond G., assignor.)

Bassick Company, The. (See Wiley, William R., assignor.)

Batcheller, Hugh W., Worcester, Mass. Toggle switch. 1,888,444; Nov. 22.

Batcheller, Hugh W., Worcester, Mass. Toggle switch. 1,888,445; Nov. 22.

Bauer, Fred C., Irvington, N. J. Fountain. 1,888,784; Nov. 22.

Baughman, George W., Pittsburgh, Pa., assignor to The Union Switch & Signal Company, Swissvale, Pa. Railway traffic controlling apparatus. 1,888,845; Nov. 22.

Baumgartner, Floyd D., Cedar Rapids, Iowa. Mechanical teeing device. 1,888,256; Nov. 22.

Bechert, Fred J., Stamford, Conn., assignor to The Fafnir Bearing Company, New Britain, Conn. Spring end connection. Re18,664; Nov. 22.

Beck, Leo L., Jackson Heights, assignor to Claude Neon Lights, Inc., New York, N. Y. Vacuum tube. 1,888,421; Nov. 22.

Begtrup, Edward F., Jersey City, N. J. Method and apparatus for pressure butt-welding tubes and the like. 1,888,815; Nov. 22.

Behr-Manning Corporation. (See Schacht, Elmer C., assignor.)

Bekeart, Philip B., San Francisco, Calif. Container for fly hooks and plain hooks. 1,888,804; Nov. 22.

Belin, Henry, 3d., assignor to The Scranton Lace Company, Scranton, Pa. Lace. 1,888,650; Nov. 22.

Bell & Howell Company, The. (See Howell, Albert S., assignor.)

Bell Telephone Laboratories, Incorporated. (See Horton, Arthur W., jr., assignor.)

Bell, William F. (See Hind, B. S., and Bell.)

Bellanca, Giuseppe M., New Castle, Del. Airplane construction. 1,888,902; Nov. 22.

Bellinghausen, Walter, and M. Vanderkloot, assignors, by mesne assignments, to Industrial Patents Corporation, Chicago, Ill. Meat press. 1,888,446; Nov. 22.

Bennett, Charles W. (See Mack, E. L., and Bennett.)

Bennett, Henry E., Chicago, Ill. Support for books and the like. 1,888,257; Nov. 22.

Bennett-Mack Corporation. (See Mack, E. L., and Bennett, assignors.)

Bent, Franklin A., Berkeley, Calif., assignor to Shell Development Company, San Francisco, Calif. Removal of nitric oxide from gases. 1,888,547; Nov. 22.

Bent, Leavitt N., Holly Oak, assignor to Hercules Powder Company, Wilmington, Del. Recovering rosin from rosin-containing soap produced in the manufacture of paper pulp from rosin-containing wood. 1,888,581; Nov. 22.

Bentley, Oliver D. H., Norfolk, assignor to B. F. Sturtevant Company, Hyde Park, Mass. Elastic fluid turbine. 1,888,485; Nov. 22.

Berdan, Jacob A., Port Huron, Mich. Windshield wiper attachment. 1,888,370; Nov. 22.

Berdon, Albert E., East Orange, N. J., assignor to A C Spark Plug Company, Flint, Mich. Liquid fuel feeding system. 1,888,615; Nov. 22.

Berger, Emerick, Bridgeport, Conn. Vernier scale guard measuring device. 1,888,305; Nov. 22.

Bergstresser. Edwin L. (See Torok, J., and Bergstresser.)

Berlin, Henry, New York, N. Y., assignor to International Patents Development Company, Wilmington, Del. Treatment of corn gluten. 1,888,785; Nov. 22.

Bernstein, Samuel S., Beverly Hills, Calif. Connection for webbed bottom seats. 1,888,582; Nov. 22.

Berssenbrugge. William H., Milwaukee, Wis. Folding table. 1,888,651; Nov. 22.

Bettinger, Ina L., National City, Calif. Electrical cord take-up device. 1,888,258; Nov. 22.

Bigelow Sanford Carpet Co. (See Smidlein, Anthony E., assignor.)

Bijur, Joseph, New York, N. Y., assignor, by mesne assignments, to Auto Research Corporation. Central lubrication. 1,888,422; Nov. 22.

Birtley Iron Company Limited, The. (See Bramwell, Ivor L., assignor.)

Bishop, Joseph W., Muskegon Heights, Mich., assignor to United Research Corporation. Phonograph. 1,888,652; Nov. 22.

Blaw-Knox Company. (See Jenner, R. L., and Chester, assignors.)

Boatwright, John T., Los Angeles, assignor of one-half to G. E. Heinze, Huntington Park, Calif. Collapsible traffic signal. 1,888,447; Nov. 22.

Bocchino, Ernest, Newark, N. J. Roasting pan attachment. 1,888,616; Nov. 22.

Bodmer, Ernst, and F. Neitzel, assignors to the Firm of Durand & Huguenin S. A., Basel, Switzerland. Manufacture of mordant azo dyestuffs. 1,888,903; Nov. 22.

Boedtcher, Franz A., Bergenfield, assignor to Otis Elevator Company, Jersey City, N. J. Service indicating system for elevators. 1,888,486; Nov. 22.

Bogstrand, Ole K., Brooklyn, N. Y. Boiler tube blower. 1,888,214; Nov. 22.

Bohlman, Ernest A., and H. Brachtl, assignors, by mesne assignments, to Appleton Electric Company, Chicago, Ill. Outlet box. 1,888,843; Nov. 22.

Bon, Piero, Venice, Italy. Production of reliefs and of colored pictures. 1,888,344; Nov. 22.

Bone, Herbert L., Swissvale, and J. W. Livingston, Wilkinsburg, assignors to The Union Switch & Signal Company, Swissvale, Pa. Railway braking apparatus. 1,888,548; Nov. 22.

Bonsall, Charles D., Pittsburgh, assignor to P. H. Murphy Company, New Kensington, Pa. Removable gondola car roof. 1,888,653; Nov. 22.

Bonsall, Charles D., Pittsburgh, assignor to P. H. Murphy Company, New Kensington, Pa. Car roof. 1,888,654; Nov. 22.

Bonsall, Charles D., Pittsburgh, assignor to P. H. Murphy Company, New Kensington, Pa. Car roof. 1,888,655; Nov. 22.

Bonsall, Charles D., Pittsburgh, assignor to P. H. Murphy Company, New Kensington, Pa. Car roof. 1,888,901; Nov. 22.

Bott, George B., assignor to Norma-Hoffmann Bearings Corporation, Stamford, Conn. Antifriction bearing. 1,888,215; Nov. 22.

Bottrill, David H., assignor to Thermweld Limited, Montreal, Quebec, Canada. Wire connecting device. 1,888,945; Nov. 22.

Bourne, Roland B., assignor to The Maxim Silencer Company, Hartford, Conn. Window ventilator and silencer. 1,888,711; Nov. 22.

Bouton, Edgar M., Park Ridge, Ill., assignor to Westinghouse Electric Elevator Company. Gate and door sequence. 1,888,712; Nov. 22.

Boyle, Blanchard, Indianapolis, Ind. Burglar alarm. 1,888,371; Nov. 22.

Boynton, Frederick L., Sycamore, Ill. Differential gear. 1,888,656; Nov. 22.

Brachtl, Henry. (See Bohlman, E. A., and Brachtl.)

Bramwell, Ivor L., assignor of one-half to The Birtley Iron Company, Limited, Birtley, England. Separation of dry materials. 1,888,372; Nov. 22.

Brant, David O., Owensmouth, Calif. Crank mechanism for reciprocating engines. 1,888,448; Nov. 22.

Bräuer, Ernst, Voigtsdorf in Riesengebirge, Germany. Station calling device. 1,888,904; Nov. 22.

Brauning, Karl A., assignor to The Yale & Towne Manufacturing Company, Stamford, Conn. Master-keyed lock. 1,888,946; Nov. 22.

Braunsdorf, Otto. (See Eckert, W., and Braunsdorf.)

Breitenstein, Albert F., assignor to The Geometric Tool Company, New Haven, Conn. Movable-chaser tap. 1,888,816; Nov. 22.

Brenn, Carl W., Montclair, assignor to Autographic Register Company, Hoboken, N. J. Manifolding machine. 1,888,487; Nov. 22.

Bridgeport-City Trust Company, The. (See Carlson, Philip, assignor.)

Bridgeport Hardware Manufacturing Corporation, The. (See Curtis, H. B., and Keating, assignors.)

Bridi, Basilio, Zurich, Switzerland. Heel for boots. 1,888,617; Nov. 22.

Briquet Engineering Company. (See Herrly, Peter F., assignor.)

Britton, Edgar C., and H. R. Slagh, assignors to The Dow Chemical Company, Midland, Mich. Preparation of phosphorus compounds. 1,888,713; Nov. 22.

Bronander, Wilhelm B., Montclair, N. J., assignor to American Machine & Foundry Company. Pouch making attachment for packaging machines. 1,888,786; Nov. 22.

Brown Company. (See Richter, G. A., and Chase, assignors.)

Brown, Robert E., Olean, N. Y. Knife. 1,888,488; Nov. 22.

Brown, Robert E., Olean, N. Y. Knife. 1,888,489; Nov. 22.

Brownstein, Morris, Los Angeles, Calif. Curtain display rack. 1,888,756; Nov. 22.

Buck, Arthur W., assignor to Buck X-Ograph Company, St. Louis, Mo. Photographic film drier. 1,888,947; Nov. 22.

Buck X-Ograph Company. (See Buck, Arthur W., assignor.)

Buckwalter, Tracy V., assignor to The Timken Roller Bearing Company, Canton, Ohio. Nut locking device. 1,888,557; Nov. 22.

Buffalo Forge Company. (See Madison, Richard D., assignor.)

Bull, Clinton H. M., assignor to Reed Roller Bit Company, Houston, Tex. Antifriction device. 1,888,216; Nov. 22.

Bullock, Henry E. (See Tursicky, Francis, assignor.)

Bunten, William G., Detroit, Mich., assignor of one-fifth to L. L. Reece, Elizabethton, Tenn. Life and property protector. 1,888,905; Nov. 22.

Burch, Alvan V., Evansville, Ind. Disk barring-off attachment for cultivators. 1,888,618; Nov. 22.

Burns, Gordon E., assignor to The Columbia Burner Co., Toledo, Ohio. High and low flame control for gas burners. 1,888,449; Nov. 22.

Burpee, John H., assignor to Eugene B. Foster and Cecil A. Folsom, Bellingham, Wash. Hand can seamer. 1,888,583; Nov. 22.

Burston, Richard, Toronto, Ontario, Canada. Apparatus for renewing valve seats. 1,888,259; Nov. 22.

Butler, Frank G., Fargo, N. Dak. Door operating and locking mechanism. 1,888,217; Nov. 22.

Byerlein, Arthur A., Detroit, Mich., assignor to General Machinery Corporation, Hamilton, Ohio. Drawing press. 1,888,450; Nov. 22.

Bynum, Hugh R., Memphis, Tenn. Manicure tool. 1,888,218; Nov. 22.

Cadieux, Joseph O., assignor to Connecticut Telephone & Electric Corporation, Meriden, Conn. Annunciator panel. 1,888,584; Nov. 22.

Callaway, Rolla W., and H. Anderson, Los Angeles, Calif.; said Anderson assignor to said Callaway. Bookholder. 1,888,525; Nov. 22.

Cannon, Hugh H., assignor to Cannon-Prutzman Treating Processes, Ltd., Los Angeles, Calif. Forming sweetening reagent. 1,888,219; Nov. 22.

Cannon-Prutzman Treating Processes, Ltd. (See Cannon, Hugh H., assignor.)

Card Display, Inc. (See O'Rourke, Tex, assignor.)

Carlson, George, Ansonia, Conn., assignor to General Electric Company. Cable terminal holder and receptacle for house wiring systems. 1,888,846; Nov. 22.

Carlson, George, Ansonia, and H. G. Knoderer, Fairfield, Conn., assignors to General Electric Company. House wiring structure. 1,888,847; Nov. 22.

Carlson, George, Ansonia, and H. G. Knoderer, Fairfield, Conn., assignors to General Electric Company. Receptacle for house wiring systems. 1,888,848; Nov. 22.

Carlson, Oscar A., Aberdeen, Wash. Safety locking device. 1,888,306; Nov. 22.

Carlson, Philip, Long Hill, assignor, by mesne assignments, to The Bridgeport-City Trust Company, Bridgeport, Conn. Adjustable seat and back. 1,888,787; Nov. 22.

Caswell, Arthur E., Liverpool, England, assignor to Associated Telephone & Telegraph Company, Chicago, Ill. Telephone system. 1,888,307; Nov. 22.

Cataract Fruit Equipment Company. (See Whisnand, C. E., and Kuboske, assignors.)

Catron, John J., Bonham, Tex. Agitation means and method for ice making. 1,888,526; Nov. 22.

Central Trust Company of Illinois, et al., executors. (See Friendly, Herbert M.)

Chain Belt Company. (See Longenecker, Charles I., assignor.)

Chain Belt Company. (See Merwin, John C., assignor.)

Challenge Machinery Company. (See Lee, James E., assignor.)

Champion Spring Company, The. (See Kieseler, Otto H., assignor.)

Chance, James L., Ranger, Tex. Rim tool. 1,888,619; Nov. 22.

Chapman, Shelby C., assignor to Electrical Research Products Inc., New York, N. Y. Sound picture system. 1,888,220; Nov. 22.

Chapman, William B., Jackson Heights, N. Y. Furnace construction. 1,888,585; Nov. 22.

Chapman, William B., Jackson Heights, N. Y. Firebed agitating mechanism. 1,888,586; Nov. 22.

Chappell, Eugene L., Pittsburgh, Pa. Reclaiming pipe. 1,888,961; Nov. 22.

Chase Foundry and Mfg. Co., The. (See Chase, Sherwood, M., assignor.)

Chase, Henry A. (See Richter, G. A., and Chase.)

Chase, Sherwood M., assignor to The Chase Foundry and Mfg. Co., Columbus, Ohio. Trailer truck. 1,888,451; Nov. 22.

Chester, Fred E (See Jenner, R. L., and Chester.)

Chicago Mill and Lumber Corporation. (See Mizener, Logan A., assignor.)

Chicago Pneumatic Tool Company. (See Coates, Charles B., assignor.)

Church, Walter L., assignor of one-half to W. L. Pearce, Houston, Tex. Control head. 1,888,550; Nov. 22.

Clark, George, St. Boniface, Manitoba, Canada. Aircraft. 1,888,452; Nov. 22.

Clark, James, assignor to S. R. Dresser Manufacturing Company, Bradford, Pa. Pipe coupling for plain end pipes. 1,888,260; Nov. 22.

Clark, Warren F., Philadelphia, assignor to Automatic Electric Heater Company, Pottstown, Pa. Solar heater. 1,888,620; Nov. 22.

Claude Neon, Electrical Products Corporation. (See Hyde, Ralph C., assignor.)

Claude, Neon Lights, Inc. (See Beck, Leo L., assignor.)

Clausen, Sigurd, Brooklyn, N. Y., assignor to International Cigar Machinery Company. Cigar wrapper cutting mechanism. 1,888,788; Nov. 22.

Clausen, Sigurd, Brooklyn, N. Y., assignor to International Cigar Machinery Company. Rerolling bunch former. 1,888,789; Nov. 22.

Clayton, Harry F., Strathmore, Quebec, Canada. Apparatus for burning liquid fuel. 1,888,373; Nov. 22.

Cleveland Pneumatic Tool Company. (See Wallace, John F., assignor.)

Clipper Belt Lacer Company. (See Diamond, James K., assignor.)

Coates, Charles B., Cleveland, Ohio, assignor to Chicago Pneumatic Tool Company, New York, N. Y. Power hammer. 1,888,790; Nov. 22.

Coffaro, John S., Brooklyn, N. Y., assignor, by mesne assignments, to Consolidated Macaroni Machine Corporation. Conveyer for preliminary drying of short macaroni. 1,888,308; Nov. 22.

Coffin, George M., Hinsdale, Ill. Fish lure. 1,888,221; Nov. 22.

Cohen, Harry H., et al. (See Greenlee, Eli M., assignor.)

Cohen, Joseph H., Bridgeport, Conn. Combined ash receiver and cigar lighter. Des. 88,340; Nov. 22.

Cole, Harry C., Philadelphia, Pa. Spraying method and machine. 1,888,791; Nov. 22.

Collins, Joseph P., Bakersfield, Calif. Flow control apparatus for wells. 1,888,621; Nov. 22.

Colosoff, Anatoly E., Berkeley, Calif. Testing apparatus. 1,888,906; Nov. 22.

Columbia Burner Co., The. (See Burns, Gordon E., assignor.)

Colvilles Limited. (See Barr, W., and Bardgett, assignors.)

Combier & Co. (See Megros, Georges, assignor.)

Cometh, Sven, New York, N. Y. Floor control device for elevators. 1,888,907; Nov. 22.

Comper, Adrian, London, England, assignor to Hospital Appliances, Inc., Pittsfield, Mass. Bedpan. 1,888,423; Nov. 22.

Concrete-Wood Floor Clip Company. (See Wolfson, Samuel J., assignor.)

Conkey, W. B., Company. (See Sieb, Henry, assignor.)

Connecticut Telephone & Electric Corporation. (See Cadieux, Joseph O., assignor.)

Connell, Lewis W., Joliet, Ill. Loom. 1,888,908; Nov. 22.

Consolidated Macaroni Machine Corporation. (See Coffaro, John S., assignor.)

Consolidated Patentees Corporation. (See Epstein, Albert A., assignor.)

Constable, Nelson J., Manilla, Iowa. Gate. 1,888,967; Nov. 22.

Construction Machinery Company. (See Mosby, Alfred D., assignor.)

Consetti, Achille, assignor to the Firm J. R. Geigy S. A., Basel, Switzerland. Black trisazo dyestuffs and their production. 1,888,757; Nov. 22.

Cookson, Clarence F., Lyndhurst, N. J., assignor to Counter Cooking Machine Corporation, New York, N. Y. Cooker. 1,888,490; Nov. 22.

Coronet Phosphate Company. (See Gooch, Stapleton D., assignor.)

Coronet Phosphate Company. (See Waggaman, W. H., and Gooch, assignors.)

Costello, Charles J., assignor to G. H. Meiser, Chicago, Ill. Attachment for an internal combustion engine. 1,888,758; Nov. 22.

Cottrell, C. B., & Sons Company. (See Barber, Howard M., assignor.)

Cottrell, C. B., & Sons Company. (See Cottrell, Calvert B., 3d, assignor.)

Cottrell, Calvert B., 3d, assignor to C. B. Cottrell & Sons Company, Westerly, R. I. Lathe. 1,888,792; Nov. 22.

Counter Cooking Machine Corporation. (See Cookson, Clarence F., assignor.)

Cowan, Roysel J., assignor to Surface Combustion Corporation, Toledo, Ohio. Case hardening metals. 1,888,491; Nov. 22.

Crafts, Curtis S., Oak Park, Ill., assignor to Goss Printing Press Company. Web tension controlling mechanism. 1,888,549; Nov. 22.

Cramer, Albert N., assignor to Owens-Illinois Glass Company, Toledo, Ohio. Conveyer. 1,888,309; Nov. 22.

Crawford, John, assignor to Mohawk Carpet Mills, Inc., Amsterdam, N. Y. Shuttle filling guide. 1,888,817; Nov. 22.

Crites, Bert O. (See Textor, O., and Crites.)

Cromwell, John C., assignor to The Steel Sanitary Company, Alliance, Ohio. Making articles of manufacture. 1,888,374; Nov. 22.

Crosthwait, Asa B., San Antonio, Tex. Canopy. 1,888,909; Nov. 22.

Crowley, Joseph P. (See Gipe, J. C., and Crowley.)

Crunden-Martin Manufacturing Company. (See Schwarz, M., and Goetz, assignors.)

Cuff, James E., Hinsdale, assignor to American Flyer Mfg. Co., Chicago, Ill. Locomotive for toy railways. Des. 88,371; Nov. 22.

Culbertson, E. C. (See Edwards, Albert B., assignor.)

Cummings, Earle W., Los Angeles, assignor to Watertite Casement Hardware Co., Santa Barbara, Calif. Friction sash fixture. 1,888,845; Nov. 22.

Cupp, Oliver L., and J. C. Atterbury, Madison, Mo. Clamp or holder for egg case tops. 1,888,622; Nov. 22.

Curtis, Harry B., Huntington, and A. E. Keating, assignors to The Bridgeport Hardware Manufacturing Corporation, Bridgeport, Conn. Screw driver. 1,888,222; Nov. 22.

Cutler-Hammer, Inc. (See Harwood, Paisley B., assignor.)

Cutler-Hammer, Inc. (See Kuhn, Clarence W., assignor.)

Daimler-Benz Aktiengesellschaft. (See Wagner, Max, assignor.)

Dalne, Robert L., New York, N. Y. Tape pulling device. 1,888,623; Nov. 22.

Daller, Adrian O., Mount Vernon, N. Y., assignor to Daller Carton Co. Inc. Carton. 1,888,818; Nov. 22.

Daller Carton Co. Inc. (See Daller, Adrian O., assignor.)
Dalrymple, Gerald H., Bartley, near Southampton, England, assignor to C. J. Van Bourgondien, Babylon, N. Y. Freesia. Pl. Pt. 44; Nov. 22.
Darlington, Homer T., West Chester, Pa., assignor, by mesne assignments, to Oil Corporation of America. Apparatus for the production of lubricating oil. 1,888,346; Nov. 22.
Dauphin Deposit Trust Company. (See Frantz, Grover C., assignor.)
Davidson, Clinton, San Francisco, Calif. Carburetor for internal combustion engines. 1,888,658; Nov. 22.
Davis, Ernest, assignor to The Prosperity Company Inc., Syracuse, N. Y. Pressing machine with storage tanks. 1,888,810; Nov. 22.
Davis, Ernest F., assignor to Warner Gear Company, Muncie, Ind. Making splined gears. Re18,661; Nov. 22.
Dawson, Edward S., jr., Schenectady, N. Y., assignor to General Electric Company. Making resinous compositions. 1,888,849; Nov. 22.
Dearden, Edward C., Merion, Pa., assignor, by mesne assignments, to Sloane-Blabon Corporation, New York, N. Y. Manufacture of mosaic fabrics. 1,888,492; Nov. 22.
Deere & Company. (See Holstein, John V., assignor.)
De Forest, Lee, New York, N. Y., assignor, by mesne assignments, to General Talking Pictures Corporation. Securing synchronization in talking motion picture photography. 1,888,910; Nov. 22.
De Graffenreid, Charlie D., Seminole, Okla. Fire escape. 1,888,911; Nov. 22.
Dell, Samuel M., & Co. (See McMillan, Hugh P., assignor.)
Della-Riccia, Angelo, Brussels, Belgium. System for automatically controlling the speed of electric motors. 1,888,569; Nov. 22.
Dennis, William J., Iowa City, Iowa. Vermifuge and insecticide. Re18,667; Nov. 22.
De Pape, Ferdinand, Uccle, assignor to La Soudure Electrique Autogène S. A., Brussels, Belgium. Saline coatings and making the same. 1,888,453; Nov. 22.
De Penning, John C., Portland, Oreg. Swing. 1,888,587; Nov. 22.
De Reamer, Frank C., Bridgeport, Conn., assignor to General Electric Company. Wire connection and making same. 1,888,850; Nov. 22.
Detroit Lubricator Company. (See Russel, Philip S., assignor.)
De Walt Products Corporation. (See Knapp, Walter, assignor.)
Diamond, James K., assignor to Clipper Belt Lacer Company, Grand Rapids, Mich. Punch. 1,888,347; Nov. 22.
Dicks, Thomas A., Pittsburgh, Pa., assignor to Pittsburgh Screw and Bolt Corporation. Propeller hub. 1,888,493; Nov. 22.
Diehl, Charles. (See Sherrick, Samuel T., assignor.)
Diehl, John C., Erie, Pa., assignor to American Meter Company, New York, N. Y. U tube structure. 1,888,424; Nov. 22.
Diener, Hyman, Washington, D. C. Hat steaming and blocking attachment. 1,888,375; Nov. 22.
Dixon, John W., River Forest, assignor to U. S. Finishing & Mfg. Co., Chicago, Ill. Poster-supporting device. 1,888,494; Nov. 22.
Dodge, Henry A., Newton, Mass., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J. Shoe polishing machine. 1,888,261; Nov. 22.
Dognin, Jean, Paris, France, assignor to The Lace Net Importing Co. Inc., New York, N. Y. Lace. Des. 88,341; Nov. 22.
Dognin, Jean, Paris, France, assignor to The Lace Net Importing Co. Inc., New York, N. Y. Lace. Des. 88,342; Nov. 22.
Donovan, John F., and G. Illingworth, East Cleveland, Ohio, assignors to General Electric Company. Device for feeding glass articles. 1,888,851; Nov. 22.
Doose, Gabriel H. W., New Orleans, La. Lowering apparatus. 1,888,912; Nov. 22.
Dorr Company, The. (See Scott, Charles H., assignor.)
Dow Chemical Company, The. (See Britton, E. C., and Slagh, assignors.)
Dow Chemical Company, The. (See Dow, Herbert H., assignor.)
Dow Chemical Company, The. (See Gann, J. A., and Gross, assignors.)
Dow Chemical Company, The. (See Weidemann, George H., assignor.)
Dow, Herbert H., assignor to The Dow Chemical Company, Midland, Mich. Bifluid boiler control. 1,888,811; Nov. 22.
Dowd, John L., assignor to International Silver Company, Meriden, Conn. Child's plate or other similar article. Des. 88,343; Nov. 22.
Dowling, Edward J., Pawhuska, Okla. Door fastener. 1,888,425; Nov. 22.
Dresser, S. R., Manufacturing Company. (See Clark, James, assignor.)
Duart Manufacturing Co. (See Moseley, Tomlinson I., assignor.)
Duby, John F., Boston, Mass. Holder for rolls of paper. 1,888,426; Nov. 22.
Dudley, Colon J., Hamburg, N. Y. Liner for baskets. 1,888,496; Nov. 22.
Dudley, James G., and J. G. Kreer, Brooklyn, assignor, by mesne assignments, to H. Osborne, New York, N. Y. Metallurgical process for the making of ferrous metals. 1,888,812; Nov. 22.
Dudley Lock Corporation, The. (See Winning, Robert K., assignor.)
Duffy, Tom I., Detroit, Mich., assignor, by mesne assignments, to The Bassick Company, Bridgeport, Conn. Hood latch. 1,888,819; Nov. 22.
Dufour, George H., Oak Park, assignor to Marshall Field & Company, Chicago, Ill. Counter mirror. Des. 88,344; Nov. 22.
Dunbar, Thomas L., and A. D. Merrill, Watertown, N. Y. Digesting process and apparatus. 1,888,632; Nov. 22.
Dun Deer Sandals, Inc. (See Mathews, Edward F., assignor.)
Durand & Huguemin S. A. (See Bodmer, E., and Neitzel, assignors.)
Durbin, Votaw S., St. Louis, Mo. Operating a cupola furnace. 1,888,759; Nov. 22.
Durkee, James D., Washington, D. C. Polarized relay. 1,888,427; Nov. 22.
Duty, Spencer C., Cleveland Heights, Ohio. Process of and apparatus for forming face brick. 1,888,876; Nov. 22.
Dwyer, William C. (See Johnson, A. E. W., and Dwyer.)
D'Yarmett, Edward C., assignor to The Fractionator Company, Kansas City, Mo. Fractionating tower. 1,888,872; Nov. 22.
Ebeling, Hermann. (See Stein, Fritz, assignor.)
Eckert, Wilhelm, H. Greune, Frankfort-on-the-Main-Hochst, and Willy Eichhols, Mannheim, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Preparation of vat dyestuff isomers of the 1.4.5.8 naphthoylene dibenzimidazol series and the product. 1,888,624; Nov. 22.
Eckert, Wilhelm, and O. Braunsdorf, Frankfort-on-the-Main-Hochst, Germany, assignors to General Aniline Works, Inc., New York, N. Y. New vat dyestuff isomers. 1,888,625; Nov. 22.
Eckert, Wilhelm, and O. Braunsdorf, Frankfort-on-the-Main-Hochst, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Separation of new vat dyestuff isomers. 1,888,626; Nov. 22.
Eckhard, William K., Dunellen, N. J., assignor to R. Hoe & Co., Inc., New York, N. Y. Sheet feeding mechanism. 1,888,659; Nov. 22.
Eddy, Donald A., Cincinnati, Ohio. Mirror. Des. 88,345; Nov. 22.
Edgar Brothers Company. (See Simcoe, George, assignor.)
Edouart, Alexander F., assignor to Paramount Publix Corporation, Los Angeles, Calif. Shuttle pressure plate. 1,888,527; Nov. 22.
Edson, William R., Southbridge, assignor to B. C. Ames Co., Waltham, Mass. Loose play indicator. 1,888,454; Nov. 22.
Edwards, Albert B., Long Beach, assignor of one-half to E. C. Culbertson, Inglewood, Calif. Pump tubing protector. 1,888,588; Nov. 22.
Eggert, Joseph, assignor to The Jaeger Machine Company, Columbus, Ohio. Water tank for concrete mixers. 1,888,551; Nov. 22.
Egnor, Theodore L., Hillside, N. J. Rubber roller polishing machine. 1,888,589; Nov. 22.
Eichholz, Willy. (See Eckert, W., Greune, and Eichholz.)
Eisele, Albert, Berlin-Westend, Germany. Lock. 1,888,873; Nov. 22.
Electrical Research Products Inc. (See Chapman, Shelby, C., assignor.)
Electrolux Servel Corporation. (See Munters, Carl G., assignor.)
Emerson Electric Mfg. Co. (See Persons, Lawrence M., assignor.)
Epstein, Albert A., assignor to Consolidated Patentees Corporation, New York, N. Y. Combustible paste. 1,888,820; Nov. 22.
Ercanbrack, Hal E. (See Hegeler, J. W., and Ercanbrack.)
Erichsen, Abraham M., Teltow, near Berlin, Germany. Mold for casting metals and metal alloys. 1,888,918; Nov. 22.
Erickson, John, Detroit, Mich. Wrench. 1,888,798; Nov. 22.
Erikren, Emil M., Besserud, near Oslo, Norway. Ski. 1,888,455; Nov. 22.
Erikson Electric Company. (See Erikson, Leonard, assignor.)
Erikson Electric Company. (See McCabe, Anthony L., assignor.)
Erikson, Leonard, Malden, assignor to Erikson Electric Company, Boston, Mass. Two-part electric-lamp socket. 1,888,714; Nov. 22.
Ernst, Otto, and O. Nicodemus, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Preparing salts of the chloroethane sulphonic acid. 1,888,794; Nov. 22.
Eschenbach, Gustavus W., Los Angeles, Calif. Multiform prism advertising apparatus. 1,888,377; Nov. 22.
Esnard, Miguel, Matanzas, Cuba. Faucet. 1,888,878; Nov. 22.

Expello Corporation, The. (See Mathes, John R., assignor.)
Faber, Paul, Baden, Switzerland. Turbine blade lashing. 1,888,795; Nov. 22.
Fafnir Bearing Company, The. (See Bechert, Fred J., assignor.)
Farish, Robert A. (See Kroyer, C. H., and Farish.)
Farnham, Ivan R. (See Jauch, R. J., Farnham, and Arnold.)
Fate-Root-Heath Company, The. (See Root, Percy H., assignor.)
Faulds, Norval M., Clearwater, Fla. Apparatus for extracting and collecting fruit juice. 1,888,528; Nov. 22.
Faulds, Norval M., Clearwater, Fla. Fruit juice extractor. 1,888,529; Nov. 22.
Fearn, Guy V., Fredericktown, Ohio. Fertiliser-sowing machine. 1,888,821; Nov. 22.
Felten & Guilleaume Carlswerk Actien-Gesellschaft. (See Goes, K., and Badum, assignors.)
Felten & Guilleaume Carlswerk Actien-Gesellschaft. (See Zapf, Georg, assignor.)
Ferguson, Carl L., Indianapolis, Ind. Repeating phonograph. 1,888,660; Nov. 22.
Ferguson, Frank C., assignor to David Lupton's Sons Company, Philadelphia, Pa. Metallic furniture. 1,888,205; Nov. 22.
Fernandes y Fernandes, Manuel, New Orleans, La. Liquid dispensing system. 1,888,262; Nov. 22.
Ferngren, Enoch T., assignor to Libby-Owens-Ford Glass Company, Toledo, Ohio. Continuous tank furnace. 1,888,498; Nov. 22.
Ferris, William D., assignor to Frantz Manufacturing Co., Sterling, Ill. Garage door. 1,888,456; Nov. 22.
Fiorenza, Lucien C., New York, N. Y. Advertising envelope. 1,888,813; Nov. 22.
Fleischer, Dave, Brooklyn, N. Y. Marking films for producing sound effects. 1,888,914; Nov. 22.
Fleisig, Harry, New York, N. Y. Doll's trunk. Des. 88,346; Nov. 22.
Fleming, John J., Vineland, N. J. Furnace grate. 1,888,661; Nov. 22.
Fleming, Theodore B., Latrobe, Pa., assignor to Westinghouse Electric & Manufacturing Company. Transmission-line device. 1,888,715; Nov. 22.
Flower, Harry B., Bayville, N. Y. Self-railing trackway. 1,888,760; Nov. 22.
Foben, Jacob, Jamesburg, N. J. Turfing machine. 1,888,879; Nov. 22.
Folsom, Cecil A., et al. (See Burpee, John H., assignor.)
Ford, Henry, assignor to Ford Motor Company, Dearborn, Mich. Hydraulic shock absorber. 1,888,716; Nov. 22.
Ford, Henry, assignor to Ford Motor Company, Dearborn, Mich. Starting gear. 1,888,717; Nov. 22.
Ford Motor Company. (See Ford, Henry, assignor.)
Ford Motor Company. (See Galamb, Joseph, assignor.)
Ford Motor Company. (See Johnson, Frank, assignor.)
Ford Motor Company. (See LeFevre, Emil B. G., assignor.)
Ford Motor Company. (See McKinney, D. A., and McLean, assignors.)
Ford Motor Company. (See Wharam, John J., assignor.)
Ford, William H., assignor to Liquid Veneer Corporation, Buffalo, N. Y. Insulations for third rails. 1,888,552; Nov. 22.
Forsyth, James D., Tonawanda, N. Y. Spark plug. 1,888,852; Nov. 22.
Fort Pitt Bedding Company. (See Wolf, Harry E., assignor.)
Foster, Eugene B., et al. (See Burpee, John H., assignor.)
Fox Company. (See Payne, William L., assignor.)
Foyer, Charles A., Cleveland Heights, Ohio. Lifting jack. 1,888,761; Nov. 22.
Fractionator Company, The. (See D'Yarmett, Edward C., assignor.)
Framhein, Herbert J. (See Stephenson, L. J., and Framhein.)
Framke, Arthur M., Chicago, Ill. Make-up applicator. 1,888,814; Nov. 22.
France, Ernest A., Bridgeport, and H. G. Knoderer, Fairfield, Conn., assignors to General Electric Company. Electric switch. 1,888,853; Nov. 22.
France, Ernest A., Bridgeport, and H. G. Knoderer, Fairfield, Conn., assignors to General Electric Company. Fuse block and fuse therefor. 1,888,854; Nov. 22.
Franklin Railway Supply Company. (See Titus, Hubert J., assignor.)
Frantz, Grover C., assignor to Dauphin Deposit Trust Company, Harrisburg, Pa. Valve. 1,888,228; Nov. 22.
Frantz Manufacturing Co. (See Ferris, William D., assignor.)
Fraser, Warren F. (See Arter, W., and Fraser.)
Frede, Charles F., and K. S. Howard, St. Louis, Mo., assignors, by mesne assignments, to General Steel Castings Corporation, Granite City, Ill. Articulated locomotive. 1,888,822; Nov. 22.
Free, John W., Aliquippa, assignor to Jones & Laughlin Steel Corporation, Pittsburgh, Pa. Skelp forming machine. 1,888,380; Nov. 22.
Freelander, Julius, Kansas City, Mo. Golf score register. 1,888,662; Nov. 22.
French & Hecht, Incorporated. (See Hecht, Joseph L., assignor.)
Freudenberg, Ernest W., Larchmont, N. Y. Embroidered textile fabric or a similar article. Des. 88,347; Nov. 22.
Freudenberg, Ernest W., Larchmont, N. Y. Embroidered textile fabric or a similar article. Des. 88,348; Nov. 22.
Freudenberg, Ernest W., Larchmont, N. Y. Embroidered textile fabric or a similar article. Des. 88,349; Nov. 22.
Freudenberg, Ernest W., Larchmont, N. Y. Embroidered textile fabric or a similar article. Des. 88,372; Nov. 22.
Fried. Krupp, Aktiengesellschaft. (See Wolf, Peter, assignor.)
Friedländer, Enrich. Spandau, near Berlin, Germany, assignor to Westinghouse Electric and Manufacturing Company. Relaying system. 1,888,718; Nov. 22.
Friendly, Herbert M., deceased, Chicago, Ill.; M. S. Friendly and Central Trust Company of Illinois, executors. Carburetor. 1,888,706; Nov. 22.
Friendly, Milton S., et al., executor. (See Friendly, Herbert M.)
Frigidaire Corporation. (See Summers, Otto M., assignor.)
Frigidaire Corporation. (See Van Deventer, H. R., and Grier, assignors.)
Fromm, Herbert, Hamburg, Wis. Juice extractor. 1,888,915; Nov. 22.
Fuller, Carl T., Cleveland Heights, Ohio, assignor to General Electric Company. Package for incandescent lamps and similar articles. 1,888,855; Nov. 22.
Fuller, Roger A., Philadelphia, Pa., assignor to General Electric Company. Automatic switching system. 1,888,856; Nov. 22.
G. & W. Electric Specialty Company. (See Rah, Joseph, assignor.)
Galamb, Joseph, Detroit, assignor to Ford Motor Company, Dearborn, Mich. Radiator shield construction. 1,888,719; Nov. 22.
Galassi, Pasquale, N. Y. Divider strip. 1,888,916; Nov. 22.
Galbraith, Joseph B., Kaysville, Utah. Cutting tool. 1,888,881; Nov. 22.
Gambee, Martin H., Pawling, N. Y. Furniture. 1,888,663; Nov. 22.
Gann, John A., and W. H. Gross, assignors to The Dow Chemical Company, Midland, Mich. Treating magnesium and product obtained thereby. 1,888,457; Nov. 22.
Gasch, Fred G., Seattle, Wash. Electric heater. 1,888,497; Nov. 22.
Gatyas, Louis W. (See Klarmann, E., and Gatyas.)
Gault, Frank C., Lake Charles, La. Testing and cleaning wells. 1,888,315; Nov. 22.
Gebruder Brehmer. (See Klemm, Rudolf, assignor.)
Geddes, Leslie H., and J. H. Mansfield, assignors to Greenlee Bros. & Co., Rockford, Ill. Pole gaining and boring machine. 1,888,664; Nov. 22.
Geer, William C., Akron, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y. Electrical element and producing the same. 1,888,762; Nov. 22.
Geiger, Washington, T. P., Fort Myers, Fla. School desk. 1,888,263; Nov. 22.
Geigy, J. R., S. A. (See Consetti, Achille, assignor.)
General Aniline Works, Inc. (See Eckert, W., and Braunsdorf, assignors.)
General Aniline Works, Inc. (See Eckert, W., Greune, and Eichhols, assignors.)
General Aniline Works, Inc. (See Kunz, M. A., and Koeberle, assignors.)
General Electric Company. (See Carlson, George, assignor.)
General Electric Company. (See Carlson, G., and Knoderer, assignors.)
General Electric Company. (See Dawson, Edward S., jr., assignor.)
General Electric Company. (See De Reamer, Frank C., assignor.)
General Electric Company. (See Donovan, J. F., and Illingworth, assignors.)
General Electric Company. (See France, E. A., and Knoderer, assignors.)
General Electric Company. (See Fuller, Carl T., assignor.)
General Electric Company. (See Fuller, Roger A., assignor.)
General Electric Company. (See Nolte, Henry J., assignor.)
General Electric Company. (See Rowe, William H., assignor.)
General Electric Company. (See Winckler, Gunnar A. F., assignor.)
General Machinery Corporation. (See Byerlein, Arthur A., assignor.)
General Motors Corporation. (See Thompson, Earl A., assignor.)
General Steel Castings Corporation. (See Frede, C. F., and Howard, assignors.)
General Steel Castings Corporation. (See Howard, Karl S., assignor.)
General Steel Castings Corporation. (See Kell, C. W., and Asbe, assignors.)
General Steel Castings Corporation. (See Travilla, James C., jr., assignor.)
General Talking Pictures Corporation. (See de Forest, Lee, assignor.)
Geometric Tool Company, The. (See Breitenstein, Albert F., assignor.)
George, Jerome R., assignor to Morgan Construction Company, Worcester, Mass. Recuperative furnace construction. 1,888,720; Nov. 22.

Gibbes, Albert E., Sydney, New South Wales, Australia. Darning mechanism. 1,888,917; Nov. 22.
Giersbach, Julius. (See von Reiche, L., and Giersbach.)
Gilbert, Victor G. W., London, England, assignor to American-LaFrance and Foamite Corporation, New York, N. Y. Fire extinguisher. 1,888,316; Nov. 22.
Gillette Safety Razor Company. (See Smith, Theodore L., assignor.)
Gipe, John C., and J. P. Crowley, assignors to Libbey Owens Ford Glass Company, Toledo, Ohio. Apparatus for washing sheet glass. 1,888,498; Nov. 22.
Gladeck Frederick C., and J. W. Warren, Brooklyn, N. Y., assignors to American Machine & Foundry Company. Loaf-slicing and wrapping attachment for bread wrapping machines. 1,888,797; Nov. 22.
Globe Machine & Stamping Company, The. (See Green, Lee B., assignor.)
Goble, Bert G., assignor to W. A. Quigley, Tulsa, Okla. Well pumping jack. 1,888,530; Nov. 22.
Godden, Robert W., Seattle, Wash. Lock. 1,888,918; Nov. 22.
Goes, Konrad, Rosrath, near Cologne, and E. Badum, Cologne-Mulheim, assignors to Felten & Guilleaume Carlswerk Actien-Gesellschaft, Cologne-Mulheim, Germany. Loaded submarine cable. 1,888,264; Nov. 22.
Goetz, Fred J. (See Schwarz, M., and Goetz.)
Goetze, William C. (See Long, E. E., and Goetze.)
Goldsborough, Thaddeus R., Forest Hills, Pa., assignor to Westinghouse Electric & Manufacturing Company. Control system. 1,888,721; Nov. 22.
Gooch, Stapleton D. (See Waggaman, W. H., and Gooch.)
Gooch, Stapleton D., Lake Wales, Fla., assignor to Coronet Phosphate Company, New York, N. Y. Treatment of phosphatic material. 1,888,919; Nov. 22.
Goodman Manufacturing Company. (See Schroder, Robert E., assignor.)
Goodrich, B. F., Company, The. (See Geer, William C., assignor.)
Goodrich, B. F., Company, The. (See Mayne, Robert, assignor.)
Goodyear Tire & Rubber Company, The. (See Snyder, Robert W., assignor.)
Goodyear Tire & Rubber Company, The. (See Teppema, Jan, assignor.)
Gordon, Hiram, Columbus, Ohio. Heel-seat trimming machine. 1,888,722; Nov. 22.
Goss Printing Press Company. (See Crafts, Curtis S., assignor.)
Gould & Eberhardt. (See Zimmermann, William F., assignor.)
Gould, George D., Chicopee, Mass. Lamp supporting device. 1,888,728; Nov. 22.
Graeber, Jacob F. (See Laencher, F. W., and Graeber.)
Graetz, George W. (See Stroud, Francis H., assignor.)
Gral Prisma Gesellschaft m. b. H. (See Kral, Ludwig, assignor.)
Grauman, Leon, Denver, Colo. Beverage mixer support. 1,888,798; Nov. 22.
Gray Telephone Pay Station Company, The. (See Long, George A., assignor.)
Green, Lee B., Lakewood, assignor to The Globe Machine & Stamping Company, Cleveland, Ohio. Coffee urn or the like. Des. 88,850; Nov. 22.
Greenawalt, John E., New York, N. Y. Constituting a charge for sintering. 1,888,458; Nov. 22.
Greene, Carroll E., South Ryegate, Vt. Combination sled and toboggan. 1,888,857; Nov. 22.
Greenlee Bros. & Co. (See Geddes, L. H., and Mansfield, assignors.)
Greenlee, Eli M., Newport, Ky., assignor of one-fourth to O. W. House, Williamsport, and one-fourth to H. H. Cohen, Cincinnati, Ohio, and one-half to H. H. Martin, Covington, Ky., and George W. Shuey, Cincinnati, Ohio. Traffic control device. 1,888,590; Nov. 22.
Greune, Heinrich. (See Eckert, W., Greune, and Eicholz.)
Greve, Edgar E., Bellevue, assignor, by mesne assignments, to Oil Well Supply Company, Pittsburgh, Pa. Closure means for cylinders and the like. 1,888,459; Nov. 22.
Gribbin, John H., jr. (See Stephens, W. H., and Gribbin.)
Grieb, Alfred, Elizabeth, and N. Knaus, Newark, assignors to The Singer Manufacturing Company, Elizabeth, N. J. Lubricating system for sewing machines. 1,888,799; Nov. 22.
Grier, J. Alfred. (See Van Deventer, H. R., and Grier.)
Griffin, Roger L., assignor to A. C. Lawrence Leather Company, Peabody, Mass. Fastening device. 1,888,591; Nov. 22.
Griswold, Donald. (See Harwood, S. G., and Griswold.)
Griswold, Walter R., assignor to Packard Motor Car Company, Detroit, Mich. Shock absorber. 1,888,920; Nov. 22.
Groene, William F., and H. J. Siekmann, assignors to The R. K. Le Blond Machine Tool Company, Cincinnati, Ohio. Machine tool. Re18,662; Nov. 22.
Groove Lock Co. Inc. (See Leberman, Harry, assignor.)
Gross, William H. (See Gann, J. A., and Gross.)
Grothe, Ernest F. H., Philadelphia, Pa. Connecter puller for storage batteries. 1,888,800; Nov. 22.
Gulotta, Charles. (See Heribauer, J. J., and Gulotta.)
Gunn, Charles H., Burlingame, Calif. Resilient rail car wheel. 1,888,499; Nov. 22.
Guthrie, Robert M., Chicago, Ill. Nonspreading staple. 1,888,265; Nov. 22.
Hagan, George J., Company. (See Talley, Randal E., assignor.)
Hahs, James O., Sikeston, Mo. Mechanical hobbyhorse. 1,888,763; Nov. 22.
Hall, Clarence A., Philadelphia, Pa. Lead oxide powder and making the same. 1,888,823; Nov. 22.
Hamm, Martin S. (See Jansen, Einar, assignor.)
Hammer, Gustaf, Chicago, Ill., assignor to International Harvester Company. Reel support for harvester binders. 1,888,500; Nov. 22.
Hanna, Clinton E., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Sound recording and reproducing system. 1,888,724; Nov. 22.
Harbison, Clarence B., assignor to The Ohio Steel Foundry Company, Lima, Ohio. Side frame. 1,888,224; Nov. 22.
Harris, Henry K., Westminster, London, England. Advertising and signaling device. 1,888,599; Nov. 22.
Harrison, Jesse E., Wakefield, Mass. Support for invalids. 1,888,592; Nov. 22.
Harrison, John, and G. W. Matheny, Caldwell, Ohio. Brake testing mechanism. 1,888,858; Nov. 22.
Hartenstein, Herman L., Chicago, Ill. Manufacturing fertilizer. 1,888,921; Nov. 22.
Hartenstein, Herman L., Chicago, Ill. Manufacture of fertilizer. 1,888,922; Nov. 22.
Hartford-Empire Company. (See Peiler, Karl E., assignor.)
Hartford-Empire Company. (See Smith, Algy J., assignor.)
Hartford-Empire Company. (See Waugh, Thomas, jr., assignor.)
Harvey, Herbert, Los Angeles, Calif. Wire and band dispensing machine. 1,888,593; Nov. 22.
Harwood, Paisley B., assignor to Cutler-Hammer, Inc., Milwaukee, Wis. Control system for blast furnace charging equipment. 1,888,501; Nov. 22.
Harwood, Stanley G., Minneapolis, Minn., and D. Griswold, Los Angeles, Calif., assignors, by mesne assignments, to The Permutit Company, Wilmington, Del. Water softener brine apparatus. 1,888,531; Nov. 22.
Hazard, George E., assignor to Kellogg Manufacturing Company, Rochester, N. Y. Valve. 1,888,948; Nov. 22.
Hazeltine Corporation. (See MacDonald, William A., assignor.)
Heath, Frank W., Pittsburg, assignor to Shell Development Company, San Francisco, Calif. Refining petroleum oils. 1,888,382; Nov. 22.
Hecht, Joseph L., Davenport, Iowa, assignor to French & Hecht, Incorporated. Traction wheel. 1,888,627; Nov. 22.
Hegeler, Julius W., and H. E. Ercanbrack, assignors to The Hegeler Zinc Company, Danville, Ill. Grate. 1,888,348; Nov. 22.
Hegeler Zinc Company. (See Hegeler, J. W., and Ercanbrack, assignors.)
Heinze, Gus E. (See Boatwright, John T., assignor.)
Henares, Hilarion G., Isabela, P. I. Bag making machine. 1,888,949; Nov. 22.
Hercules Powder Company. (See Bent, Leavitt N., assignor.)
Herlauer, Joseph J., Hollis, and C. Gulotta, New York, N. Y. Windshield wiper. 1,888,665; Nov. 22.
Herman, Joseph, Westfield, N. J., assignor to American Telephone and Telegraph Company. Measurement of cross-talk. 1,888,266; Nov. 22.
Herold, Walter F., Upper Montclair, N. J., assignor to The Bassick Company, Bridgeport, Conn. Caster. 1,888,801; Nov. 22.
Herrly, Peter F., assignor, by mesne assignments, to Briquet Engineering Company, Minneapolis, Minn. Fuel briquette. Des. 88,851; Nov. 22.
Hershey, Harry E., Oak Park, assignor, by mesne assignments, to Associated Electric Laboratories, Inc., Chicago, Ill. Remote control system. 1,888,267; Nov. 22.
Hershey, Harry E., Oak Park, assignor, by mesne assignments, to Associated Electric Laboratories, Inc., Chicago, Ill. Remote control system. 1,888,268; Nov. 22.
Herst, Ward F., assignor to Wolverine Brass Works, Grand Rapids, Mich. Sewer-cleaning implement. 1,888,269; Nov. 22.
Hetherington, Oliver, assignor to Peerless Springs, Incorporated, West Chester, Pa. Spring construction and making same. 1,888,666; Nov. 22.
Hetherington, Robert, Sharon Hill, Pa. Automatic thermostatic control valve. 1,888,225; Nov. 22.
Hill, Earl V., Chicago, Ill. Refrigerating unit. 1,888,950; Nov. 22.
Hind, Bert S., and W. F. Bell, Potrerillos, Chile. Automatic converter operating device. 1,888,317; Nov. 22.
Hipple, John S., Temple, Pa. Producing expansion joint filling material. 1,888,270; Nov. 22.
Hochstetter, Frederick W., Pittsburgh, Pa. Vacuum device. 1,888,594; Nov. 22.
Hoe, R., & Co. (See Eckhard, William K., assignor.)
Hofmann, Victor E., Toledo, Ohio, assignor to Owens-Illinois Glass Company. Mechanism for forming hollow glass articles. 1,888,318; Nov. 22.
Hoge, William F., Great Falls, Mont. Cleaning attachment for duck foot cultivators. 1,888,764; Nov. 22.
Hogeland, Bessie S., Glen Ridge, N. J. Teat cup. 1,888,226; Nov. 22.
Holland, Edgar W., Waco, Tex. Power take-off. 1,888,951; Nov. 22.

Holst, Gilles, and E. Oosterhuis, Eindhoven, Netherlands, assignors to Radio Corporation of America. Circuit arrangement for smoothing rectified alternating voltages. 1,888,628; Nov. 22.
Holstein, John V., assignor to Deere & Company, Moline, Ill. Marker for corn planters. 1,888,502; Nov. 22.
Holt, Joseph P., Merion, Pa. Automobile. 1,888,553; Nov. 22.
Holt, Joseph P., Merion, assignor to Aberfoyle Manufacturing Company, Chester, Pa. Treating yarn. 1,888,554; Nov. 22.
Holton, Edward C., Olmsted Falls, assignor to The Sherwin-Williams Company, Cleveland, Ohio. Base for paints, varnishes, and lacquers and making the same. 1,888,595; Nov. 22.
Holton, Ralph L., Dayton, Ohio. Lock. 1,888,383; Nov. 22.
Holzwarth, Charles, Parlin, N. J. Cellulosic material and its manufacture. 1,888,952; Nov. 22.
Holzwarth Gas Turbine Co. (See Schüle, Wilhelm, assignor.)
Hooper, Charles W. (See Pitkin, G. P., and Hooper.)
Hoover Company, The. (See White, Harry B., assignor.)
Hopkins, Arthur G., Maspeth, assignor to Metal Package Corporation, New York, N. Y. Metal can and closure therefor. 1,888,319; Nov. 22.
Hopkins, George W., Cleveland, Ohio. Film drier. 1,888,596; Nov. 22.
Hoppe, Emil C., Elisabeth, N. J. Device for aerating liquids. 1,888,503; Nov. 22.
Hori, Shoichiro, Yoyohatacho, Toyotamagun, Tokyo Fu, Japan. Manufacturing ammonium sulphate or salts containing it. 1,888,623; Nov. 22.
Hort, Hermann, Berlin-Westend, assignor to Siemens & Halske, Aktiengesellschaft, Siemensstadt, near Berlin, Germany. Stabilising device for ships. 1,888,667; Nov. 22.
Horton, Arthur W., jr., East Orange, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Volume control system. 1,888,227; Nov. 22.
Hospital Appliances, Inc. (See Comper, Adrian, assignor.)
Hossfeld, Albert, Winona, Minn. Drilling machine. 1,888,668; Nov. 22.
Hossfeld, Albert, Winona, Minn. Friction grip for drilling machines. 1,888,669; Nov. 22.
Hotchner, Fred, Los Angeles, Calif. Self-insulated discharge tube terminal. 1,888,670; Nov. 22.
Hotchner, Fred, Los Angeles, Calif. Insulated discharge tube terminal. 1,888,671; Nov. 22.
House, Orville W., et al. (See Greenlee, Eli M., assignor.)
Howard, Karl S. (See Frede, C. F., and Howard.)
Howard, Karl S., St. Louis, Mo., assignor to General Steel Castings Corporation, Granite City, Ill. Locomotive structure. 1,888,824; Nov. 22.
Howard, Marshall R., Kenosha, Wis. Composite sheet. 1,888,672; Nov. 22.
Howell, Albert S., assignor to The Bell & Howell Company, Chicago, Ill. Film reel. 1,888,725; Nov. 22.
Huber, Otto E., Reading, assignor to Narrow Fabric Company, West Reading, Pa. Elastic lace braid. Des. 88,352; Nov. 22.
Hucknall, Hage W., assignor to The American Lace Manufacturing Company, Elyria, Ohio. Lace scarf or similar article. Des. 88,353; Nov. 22.
Hudiakoff, Andrei, New York, N. Y. Apparatus for multiple visual effects. 1,888,320; Nov. 22.
Huffman, Frederick B., Spokane, Wash. Slide scale. 1,888,597; Nov. 22.
Hughes, Frederick G., and C. B. Simmons, assignors to The New Departure Manufacturing Company, Bristol, Conn. Retainer or separator for antifriction bearings. 1,888,634; Nov. 22.
Hulström, David C. A., Berlin, Germany. Diaphragm for loud speakers. 1,888,532; Nov. 22.
Humphrey, Herbert A., Billingham, Stockton-on-Tees, assignor to Imperial Chemical Industries Limited, London, England. Introducing liquids or mixtures thereof with solids into high pressure apparatus. 1,888,953; Nov. 22.
Humphrey, Walter E., Jeannette, Pa., assignor to Pennsylvania Rubber Company. Sorting apparatus. 1,888,673; Nov. 22.
Hund, August, West Orange, N. J., assignor to Wired Radio, Inc., New York, N. Y. System of electrical distribution. 1,888,555; Nov. 22.
Hund, August, West Orange, N. J., assignor to Wired Radio, Inc., New York, N. Y. Space discharge tube. 1,888,556; Nov. 22.
Hunt, Emma F., New York, N. Y. Combined coat hanger and hat stand. 1,888,228; Nov. 22.
Huthsing, Charles K., St. Louis County, Mo. Fire extinguisher. 1,888,674; Nov. 22.
Hyde, Ralph C., Los Angeles, Calif., assignor to Claude Neon Electrical Products Corporation, Ltd., Wilmington, Del. Electrical terminal. 1,888,384; Nov. 22.
Hyman, Robert W. (See Weaver, C. F., Hyman, and Wheatley.)
I. G. Farbenindustrie Aktiengesellschaft. (See Ernst, O., and Nicodemus, assignors.)
Illingworth, George. (See Donovan, J. F., and Illingworth.)
Imperial Chemical Industries Limited. (See Humphrey, Herbert A., assignor.)
Imperial Chemical Industries Limited. (See Paterson, John H., assignor.)
Independent Pneumatic Tool Co. (See Norling, Reinhold A., assignor.)
Industrial Patents Corporation. (See Bellinghausen, W., and Vanderkloot, assignors.)
Ingersoll-Rand Company. (See Terry, Edward F., assignor.)
Ingram Richardson Corporation. (See Jalkut, Lee D., assignor.)
International Cigar Machinery Company. (See Clausen, Sigurd, assignor.)
International Cigar Machinery Company. (See Peterson, Pontus, assignor.)
International Harvester Company. (See Hammer, Gustaf, assignor.)
International Harvester Company. (See Johnson, A. E. W., and Dwyer, assignors.)
International Harvester Company. (See Johnston, Edward A., assignor.)
International Harvester Company. (See Johnston, E. A., and Mitchell, assignors.)
International Harvester Company. (See Pearson, Charles, assignor.)
International Motor Company. (See Leeffler, Bruno, assignor.)
International Paper Company. (See Baker, W. N., and Masten, assignors.)
International Patents Development Company. (See Berlin, Henry, assignor.)
International Silver Company. (See Dowd, John L., assignor.)
Isawa, Riichiro. Kyoto, Japan. Device for pointing bristles of brushes. 1,888,675; Nov. 22.
Jacoby, Charles M., Kansas City, Mo. Catheter. 1,888,349; Nov. 22.
Jaeger Machine Company, The. (See Eggert, Joseph, assignor.)
Jalkut, Lee D., Lawrence, N. Y., assignor to Ingram Richardson Corporation, Bayonne, N. J. Table top or the like. Des. 88,354; Nov. 22.
Jalkut, Lee D., Lawrence, N. Y., assignor to Ingram Richardson Corporation, Bayonne, N. J. Table top or the like. Des. 88,355; Nov. 22.
Janisch, Miximillian P. (See Wensel, E. H., and Janisch.)
Jansen, Einar, assignor of one-half to M. S. Hamm, Chicago, Ill. Toy telephone. 1,888,802; Nov. 22.
Jarvis, Frank J. and N. L., assignors to Jarvis and Jarvis, Inc., Palmer, Mass. Guard wheel. 1,888,726; Nov. 22.
Jarvis and Jarvis, Inc. (See Jarvis, Frank J. and N. L.)
Jarvis, Nelson L. (See Jarvis, Frank J. and N. L.)
Jassen, Bern, and F. I. Nussbaum, Brooklyn, N. Y. Replaceable heel. 1,888,765; Nov. 22.
Jauch, Robert J., I. R. Farabaugh, and R. H. Arnold, assignors to Wayne Company, Fort Wayne, Ind. Liquid dispensing apparatus. 1,888,533; Nov. 22.
Jenkins, Alexander F., Baltimore, Md. Tip for oxy-acetylene torches. 1,888,385; Nov. 22.
Jenner, Ralph L., East Orange, and F. E. Chester, Woodbury, N. J., assignors to Blaw-Knox Company, Pittsburgh, Pa. Transmission line support. 1,888,534; Nov. 22.
Jennings, Amy S., New York, N. Y. Protective outer garment. 1,888,676; Nov. 22.
Jennison, Elizabeth, Detroit, Mich. Circle waving comb. 1,888,923; Nov. 22.
Jewett, Joseph E., Buffalo, assignor to National Aniline and Chemical Company, Inc., New York, N. Y. Electrolytic cell. 1,888,677; Nov. 22.
Johnson, Arnold E. W., Chicago, Ill., and W. C. Dwyer, Auburn, N. Y., assignors to International Harvester Company. Power driven potato digger. 1,888,504; Nov. 22.
Johnson, Bror A. E., and G. Örström, Alsten, assignors to Aktiebolaget Gerh. Arehns Mekaniska Verkstad, Stockholm, Sweden. Arranging oval cigarettes. 1,888,866; Nov. 22.
Johnson, Charles D., assignor to Johnson Steel & Wire Company, Inc., Worcester, Mass. Stripper for removing coils of wire from a drawing head. 1,888,727; Nov. 22.
Johnson, Edward, Montclair, N. J., assignor to Meinecke & Company, New York, N. Y. Toilet brush. Des. 88,356; Nov. 22.
Johnson, Frank, Detroit, assignor to Ford Motor Company, Dearborn, Mich. Transmission. 1,888,728; Nov. 22.
Johnson Steel & Wire Company. (See Johnson, Charles D., assignor.)
Johnston, Edward A., Chicago, Ill., assignor to International Harvester Company. Cotton picker. 1,888,505; Nov. 22.
Johnston, Edward A., Chicago, Ill., assignor to International Harvester Company., Cotton picker. 1,888,506; Nov. 22.
Johnston, Edward A., and M. J. Mitchell, Chicago, Ill., assignors to International Harvester Company. Harvester-thresher. 1,888,507; Nov. 22.
Jones & Laughlin Steel Corporation. (See Free, John W., assignor.)
Jones & Laughlin Steel Corporation. (See Kurkowski, Joseph S., assignor.)

Just, John, assignor, by mesne assignments, to Associated Electric Laboratories, Inc., Chicago, Ill. Signaling box lock. 1,888,859; Nov. 22.
Kalla, Alexander, Linden, N. J. Window. 1,888,766; Nov. 22.
Kane Manufacturing Company. (See Ward, Lawrence T., assignor.)
Kass, Harry, Brooklyn, N. Y. Self-fitting apron. 1,888,629; Nov. 22.
Kastert, Wilhelm, Mulheim-Ruhr, assignor to Siemens-Schuckertwerke Aktiengesellschaft, Berlin-Siemensstadt, Germany. Manufacture of blade disks for radial admission turbines. 1,888,506; Nov. 22.
Keating, Arthur E. (See Curtis, H. B., and Keating.)
Keil, Francis, & Son, Inc. (See Keil, Henry F., assignor.)
Keil, Henry F., Scarsdale, N. Y., assignor to Francis Keil & Son, Inc. Lock mechanism. 1,888,954; Nov. 22.
Keil, Henry F., Scarsdale, N. Y., assignor to Francis Keil & Son, Inc. Lock mechanism. 1,888,955; Nov. 22.
Keim, Elisha B., Philadelphia, Pa. Track-rail lubricating device. 1,888,678; Nov. 22.
Kell, Clement W., Ridley Park, Pa., and W. O. Ashe, St. Louis, Mo., assignors to General Steel Castings Corporation, Granite City, Ill. Locomotive structure. 1,888,825; Nov. 22.
Kellett, William P., New York, N. Y. Truck. 1,888,767; Nov. 22.
Kellogg Manufacturing Company. (See Hazard, George E., assignor.)
Kemp, William, St. Louis, Mo. Gas analyzer. 1,888,229; Nov. 22.
Kercher, Arthur J., Berkeley, Calif. Compressor. 1,888,860; Nov. 22.
Kerr, George W., Springfield, Mass. Antirattle dovetail for doors. 1,888,826; Nov. 22.
Kerr, John L., Albany, Ga. Spike attachment for shoes. 1,888,924; Nov. 22.
Kieseler, Otto H., assignor to The Champion Spring Company, Cleveland, Ohio. Back-rest for beds. 1,888,509; Nov. 22.
Killefer Manufacturing Corporation. (See Mitchell, R. H., and Vaughn, assignors.)
Killefer Manufacturing Corporation. (See Vaughn, Jesse A., assignor.)
Killing, Arthur, Dortmund-Horde, assignor to Vereinigte Stahlwerke Aktiengesellschaft, Dusseldorf, Germany. Vessel for holding a liquid for humidifying the air. 1,888,887; Nov. 22.
Klarmann, Emil, Jersey City, and L. W. Gatyas, assignors to Lehn & Fink, Inc., Bloomfield, N. J. Monoethers of resorcinol. 1,888,827; Nov. 22.
Klemm, Rudolf, assignor to Gebruder Brehmer, Leipsig-Plagwitz, Germany. Method of and mechanism for automatically feeding individual signatures into a signature-handling machine. 1,888,271; Nov. 22.
Knapp, Walter, assignor to De Walt Products Corporation, Lancaster, Pa. Safety device for cutting machines. 1,888,679; Nov. 22.
Knaus, Nicholaus. (See Grieb, A., and Knaus.)
Knight, Herbert M., Upper Montclair, N. J. Sheet piling. 1,888,630; Nov. 22.
Knight, Ralph F., Beverly, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Block sawing machine. 1,888,272; Nov. 22.
Knoderer, Homer G. (See Carlson, G., and Knoderer.)
Knoderer, Homer G. (See France, E. A., and Knoderer.)
Koeberle, Karl. (See Kuns, M. A., and Koeberle.)
Koenig, Robert H., Haddon Heights, N. J. Forming glass tubes for eye-droppers. 1,888,635; Nov. 22.
Kosian, Arthur, Chicago, Ill. Universally mounted spotlight. 1,888,273; Nov. 22.
Kosken, Wilho A., Inc. (See Kosken, Wilho A., assignor.)
Kosken, Wilho A., Richmond Hill, N. Y., assignor to Wilho A. Kosken, Inc. Automatic film feed mechanism. 1,888,680; Nov. 22.
Kral, Ludwig, assignor to Oral Prisma Gesellschaft m. b. H., Vienna, Austria. Reflector. 1,888,388; Nov. 22.
Krebs, Herman, Sunbury, Iowa. Clamp. 1,888,209; Nov. 22.
Kreer, John G. (See Dudley, J. G., and Kreer.)
Kremko, Daniel, Detroit, Mich., assignor of one-third to J. H. Mitchell, Northampton, Pa. Pulling device. 1,888,389; Nov. 22.
Kreüger, Claës G. U., and S. Lewerentz, Stockholm, Sweden. Plate glass setting. 1,888,535; Nov. 22.
Kroyer, Clifton H., and R. A. Farish, San Francisco, assignors to American Tractor Equipment Co., Oakland, Calif. Land leveling device. 1,888,925; Nov. 22.
Kuboske, Leo. (See Whisnand, C. E., and Kuboske.)
Kuehne, Martin, Floral Park, Long Island, N. Y. Knitting machine. 1,888,321; Nov. 22.
Kuhn, Clarence W., assignor, by mesne assignments, to Cutler-Hammer Inc., Milwaukee, Wis. Driving mechanism for valves and other devices. 1,888,274; Nov. 22.
Kuns, Max A., Mannheim, and K. Koeberle, Ludwigshafen-on-the-Rhine, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Production of nitrogenous vat dyestuffs of the asine series and the products. 1,888,631; Nov. 22.
Kurkowski, Joseph S., assignor to Jones & Laughlin Steel Corporation, Pittsburgh, Pa. Rail securing means. 1,888,557; Nov. 22.
Lace Net Importing Co. Inc., The. (See Dognin, Jean, assignor.)
Lach, Joseph, Englewood, N. J. Lather generating device. 1,888,768; Nov. 22.
Laemcher, Frederick W., Elmhurst, N. Y., and J. F. Graeber, Norristown, Pa., assignors to National Tag Mfg. Company. Price tag. 1,888,598; Nov. 22.
Lamar, R. F., and Company. (See Lamar, Ralph F., assignor.)
Lamar, Ralph F., assignor to R. F. Lamar and Company, Pueblo, Colo. All-metal slide. 1,888,350; Nov. 22.
Lamberts, Gustav, assignor to C. Still, Recklinghausen, Germany. Coke oven. 1,888,926; Nov. 22.
Lamotot, Adolph, Des Plaines, and E. Sperisen, Chicago, Ill. Magnetic pump. 1,888,822; Nov. 22.
Landis & Gyr, A.-G. (See Ogurkowski, Georg, assignor.)
Lang, Albion S., Roslindale, Mass. Combined carrying case and holder for musical instruments. 1,888,927; Nov. 22.
Langston, Samuel M., Co. (See Sieg, Karl, assignor.)
Lapointe, Francis J., Ann Arbor, Mich. Motor counter reactant device. 1,888,460; Nov. 22.
Larkwood Silk Hosiery Mills, Inc. (See Sachsenmaier, Elwood W., assignor.)
Larsen, Leonard O., Downers Grove, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y. Electrical apparatus and manufacturing it. 1,888,275; Nov. 22.
Larsen, Mary L., Oakland, Calif. Loose-leaf binder. 1,888,461; Nov. 22.
La Soudure Electrique Antogène S. A. (See De Pape, Ferdinand, assignor.)
Latchford Glass Company. (See Marble, William B., assignor.)
Latimer, Kenneth E., Aldwych, London, England, assignor to Western Electric Company, Incorporated, New York, N. Y. Reducing crosstalk in cable systems. 1,888,558; Nov. 22.
Lauszat, Gustav, Milwaukee, Wis. Propeller. 1,888,681; Nov. 22.
Lavietes, David P., Brooklyn, N. Y. Tobacco pipe. 1,888,462; Nov. 22.
Lawrence, A. C., Leather Company. (See Griffin, Roger L., assignor.)
Lazer, Harry M., assignor to Marvelite Products Corporation, New York, N. Y. Apparatus for producing moving picture effects. 1,888,861; Nov. 22.
Leberman, Harry, assignor to Groove Lock Co. Inc., New York, N. Y. Fastening device for bags. 1,888,230; Nov. 22.
Le Blond, R. K., Machine Tool Company, The. (See Groene, W. F., and Siekmann, assignors.)
Lee, James E., assignor to Challenge Machinery Company, Grand Haven, Mich. Printing press cylinder support. 1,888,463; Nov. 22.
Lefevre, Emil B. G., Detroit, assignor to Ford Motor Company, Dearborn, Mich. Device for upholstering vehicle doors. 1,888,729; Nov. 22.
Lehn & Fink, Inc. (See Klarmann, E., and Gatyas, assignors.)
Levy, Lucien, Paris, France. Radio receiving system. 1,888,536; Nov. 22.
Lewerentz, Sigurd. (See Kreüger, C. G. U., and Lewerentz.)
Lewis, Arthur B., Claremont, N. H. Doughnut cooking device. 1,888,928; Nov. 22.
Lewis, Morgan J., Massillon, Ohio. Electric switch. 1,888,559; Nov. 22.
Libby-Owens-Ford Glass Company. (See Ferngren, Enoch T., assignor.)
Libby-Owens-Ford Glass Company. (See Gipe, J. C., and Crowley, assignors.)
Light-Sensitive Apparatus Corporation. (See Schoenberg, Virgil A., assignor.)
Lipps, William D., Frederick, Md., assignor to Ox Fibre Brush Company, Inc., New York, N. Y. Machine for making brushes. 1,888,351; Nov. 22.
Lipps, William D., Frederick, Md., assignor to Ox Fibre Brush Company, Inc., New York, N. Y. Machine for making brushes. 1,888,352; Nov. 22.
Lipps, William D., Frederick, Md., assignor to Ox Fibre Brush Company, Inc., New York, N. Y. Brush making machine. 1,888,353; Nov. 22.
Liquid Veneer Corporation. (See Ford, William H., assignor.)
Livingston, John W. (See Bone, H. L., and Livingston.)
Locke Insulator Corporation. (See Robertson, John C., assignor.)
Loeffler, Bruno, Plainfield, N. J., assignor to International Motor Company, New York, N. Y. Positive lubricating device for clutch throw-out bearings. 1,888,231; Nov. 22.
Loehr, Adolph. (See Loehr, A., jr., and Schwab, assignors.)
Loehr, Adolph, jr., Bronx, N. Y., and E. S. Schwab, Jersey City, N. J., assignors to A. Loehr, New York, N. Y. Cinematographic apparatus. 1,888,276; Nov. 22.
Loland, Emil M., Chicago, Ill. Manufacture of pigments. 1,888,464; Nov. 22.
Long, Eldridge E., and W. C. Goetze, Troutdale, Oreg. Fastening device. 1,888,875; Nov. 22.
Long, George A., assignor to The Gray Telephone Pay Station Company, Hartford, Conn. Forming telephone pay station boxes. 1,888,956; Nov. 22.

Longenecker, Charles I., assignor to Chain Belt Company, Milwaukee, Wis. Sealing gland. 1,888,957; Nov. 22.
Luder, Charles R., Washington, Ind. Reflector support. 1,888,600; Nov. 22.
Lukas, Julia, New York, N. Y. Textile fabric or the like. Des. 88,357; Nov. 22.
Lukas, Julia, New York, N. Y. Textile fabric or the like. Des. 88,358; Nov. 22.
Lukas, Julia, New York, N. Y. Textile fabric or the like. Des. 88,373; Nov. 22.
Lukas, Julia, New York, N. Y. Textile fabric or the like. Des. 88,374; Nov. 22.
Lukas, Julia, New York, N. Y. Textile fabric or the like. Des. 88,375; Nov. 22.
Lukas, Julia, New York, N. Y. Textile fabric or the like. Des. 88,376; Nov. 22.
Lukas, Julia, New York, N. Y. Textile fabric or the like. Des. 88,377; Nov. 22.
Lukas, Julia, New York, N. Y. Textile fabric or the like. Des. 88,378; Nov. 22.
Lukas, Julia, New York, N. Y. Textile fabric or the like. Des. 88,379; Nov. 22.
Lupton's, David, Sons Company. (See Ferguson, Frank C., assignor.)
Lynds, Fred H., North Attleboro, assignor to Whiting & Davis Company, Plainville, Mass. Mesh machine. 1,888,277; Nov. 22.
Lyon, George A., Allenhurst, N. J. Automotive tire cover. Des. 88,359; Nov. 22.
Lysholm, Alf., assignor to Aktiebolaget Ljungströms Angturbin, Stockholm, Sweden. Elastic fluid turbine plant. 1,888,874; Nov. 22.
MacChesney, Chester M., assignor to Acme Steel Company, Chicago, Ill. Butter tub and forming the same. 1,888,355; Nov. 22.
MacChesney, Chester M., and A. B. Wilson, assignors to Acme Steel Company, Chicago, Ill. Butter tub cover. 1,888,354; Nov. 22.
MacDonald, William A., Little Neck, N. Y., assignor to Haseltine Corporation, Jersey City, N. J. Electrical coupling circuit. 1,888,278; Nov. 22.
Mack, Edward L., North Tarrytown, and C. W. Bennett, assignors to Bennett-Mack Corporation, Douglaston, N. Y. Emulsion. 1,888,601; Nov. 22.
Macrae, James N., and C. P. Packard, Stamford, Conn., assignors to Petroleum Heat and Power Company, New York, N. Y. Controlling apparatus for oil burners. 1,888,602; Nov. 22.
Madison, Richard D., assignor to Buffalo Forge Company, Buffalo, N. Y. Heating device. 1,888,730; Nov. 22.
Magazine Repeating Razor Company. (See McGirr, Theodore G., assignor.)
Maggio, Salvator, Pittsburgh, Pa. Trolley harp and wheel structure. Re18,663; Nov. 22.
Mahan, Alton, Rydal, Ga. Tractor plow. 1,888,876; Nov. 22.
Mahr, Emmy, Dallas, Tex. Device for turning music. 1,888,890; Nov. 22.
Maksik, Samuel, Brooklyn, assignor to Michel, Maksik & Feldman, Inc., New York, N. Y. Hand bag. Des. 88,380; Nov. 22.
Manning, Edward and R. A., assignors to Manning Manufacturing Company, Incorporated, Rutland, Vt. Bottle capper. 1,888,279; Nov. 22.
Manning Manufacturing Company, Incorporated. (See Manning, Edward and R. A., assignors.)
Manning, Roy A. (See Manning, Edward and R. A.)
Manning, Sanford E., Houston, Tex. Method and apparatus for setting screens. 1,888,406; Nov. 22.
Mansfield, Judson H. (See Geddes, L. H., and Mansfield.)
Marble, William B., assignor to Latchford Glass Company, Los Angeles, Calif. Bottle. Des. 88,360; Nov. 22.
Marshall Field & Company. (See Dufour, George H., assignor.)
Martin, Harry H., et al. (See Greenlee, Eli M., assignor.)
Martin, Paul N., assignor to The Union Switch & Signal Company, Swissvale, Pa. Electromagnetic device. 1,888,731; Nov. 22.
Martin, Perry S., Harrisonburg, Va. Ventilating device. 1,888,428; Nov. 22.
Martinoff, Nadine, New York, N. Y., assignor to Wullschleger & Co., New York, N. Y. Textile fabric or the like. Des. 88,381; Nov. 22.
Martinoff, Nadine, New York, N. Y., assignor to Wullschleger & Co., New York, N. Y. Textile fabric or the like. Des. 88,381; Nov. 22.
Martinoff, Nadine, New York, N. Y., assignor to Wullschleger & Co., New York, N. Y. Textile fabric or the like. Des. 88,382; Nov. 22.
Martinoff, Nadine, New York, N. Y., assignor to Wullschleger & Co., New York, N. Y. Textile fabric or the like. Des. 88,383; Nov. 22.
Martinoff, Nadine, New York, N. Y., assignor to Wullschleger & Co., New York, N. Y. Textile fabric or the like. Des. 88,384; Nov. 22.
Marvelite Products Corporation. (See Lazer, Harry M., assignor.)
Mashek, Joseph A., Kewaunee, Wis. Massage device. 1,888,510; Nov. 22.
Maskus, Carl F., Ripon, Calif. Mowing machine. 1,888,328; Nov. 22.
Masten, Ralph A. (See Baker, W. N., and Masten.)
Matheny, George W. (See Harrison, J., and Matheny.)
Mathes, John R., assignor to The Expello Corporation, Dover, N. H. Apparatus for insecticide dusting rugs, upholstery, and clothing. 1,888,732; Nov. 22.
Mathews, Edward F., Ypsilanti, Mich., assignor, by mesne assignments, to Dan Deer Sandals, Inc., Auburn, N. Y. Shoe. 1,888,802; Nov. 22.
Matson, Carl A., Danvers, assignor, by mesne assignments, to Shoe Lace Company, Boston, Mass. Lace tipping machine. 1,888,429; Nov. 22.
Matthai, William H., Garrison, Md. Bottle rack. 1,888,324; Nov. 22.
Mauer, Charles F., San Francisco, Calif. Water and moisture proof coating material and making same. 1,888,590; Nov. 22.
Maurer, Clarence D., assignor to Narrow Fabric Company, West Reading, Pa. Elastic lace braid. Des. 88,362; Nov. 22.
Mauser, Karl W., Waldeck, Germany. Reenforcing means for the rims of openings in metal containers. 1,888,877; Nov. 22.
Mauterer, Arthur. (See Sacha, Maximilian, assignor.)
Mauterer, Arthur, Dortmund, Germany. Interlocking sheet piling. 1,888,968; Nov. 22.
Mauthe, James L., Elyria, Ohio. Gas cleaner. 1,888,608; Nov. 22.
Maxim Silencer Company, The. (See Bourne, Roland B., assignor.)
Mayer, Hans. (See Straub, F., Anderau, and Mayer.)
Mayne, Robert, Akron, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y. Apparatus for shaping sheet material. 1,888,356; Nov. 22.
Mayorga, Robert I., Dallas, Tex. Game. 1,888,537; Nov. 22.
Masarek, Maripan I., West Allis, Wis. Vaporiser. 1,888,682; Nov. 22.
McCabe, Anthony L., Newtonville, assignor to Brikson Electric Company, Boston, Mass. Lighting unit. 1,888,733; Nov. 22.
McCabe, Anthony L., Newtonville, assignor to Brikson Electric Company, Boston, Mass. Lighting unit. 1,888,734; Nov. 22.
McCann, Ronald A., assignor to The Union Switch & Signal Co., Swissvale, Pa. Railway traffic controlling apparatus. 1,888,863; Nov. 22.
McCann, Thomas A., East Orange, N. J., assignor to American Telephone and Telegraph Company. Reduction of interference. 1,888,290; Nov. 22.
McCarroll, Edward W., Chicago, Ill. Vanity bench. 1,888,825; Nov. 22.
McDonald, Louis N., Youngstown, Ohio. Casting ingots. 1,888,604; Nov. 22.
McDonough, Lawrence E., Chicago, Ill. Plaiting machine. 1,888,283; Nov. 22.
McDowell, Daniel L., assignor of one-half to J. A. Thompson, Taylor, Tex. Posthole digger. 1,888,929; Nov. 22.
McGirr, Theodore G., Brooklyn, assignor to Magazine Repeating Razor Company, New York, N. Y. Blade holder for razor sharpening machines. 1,888,683; Nov. 22.
McKinney, Dennis A., Detroit, and L. A. McLean, Highland Park, assignors to Ford Motor Company, Dearborn, Mich. Paint grinding machine. 1,888,735; Nov. 22.
McKinstry, Bruce L., Rutlat, Wash. Fruit press. 1,888,281; Nov. 22.
McLean, Leslie A. (See McKinney, D. A., and McLean.)
McMillan, Hugh P., assignor to S. M. Dell & Co., Inc., Baltimore, Md. Brush handle. 1,888,930; Nov. 22.
McSkimming, James, Santa Barbara, Calif. Furring and spacing device. 1,888,878; Nov. 22.
Meadows, Mayhugh M., Lawton, Okla. Clothes rack. 1,888,538; Nov. 22.
Mecklenborg, Fred W., Springfield, assignor to The Thomas & Armstrong Company, London, Ohio. Door frame and door for sheet metal structures. 1,888,561; Nov. 22.
Megros, Georges, Bronxville, N. Y., assignor to Combier & Co. Inc., New York, N. Y. Textile fabric or the like. Des. 88,363; Nov. 22.
Megros, Georges, Bronxville, N. Y., assignor to Combier & Co. Inc., New York, N. Y. Textile fabric or the like. Des. 88,364; Nov. 22.
Meinecke & Company. (See Johnson, Edward, assignor.)
Meiser, George H. (See Costello, Charles J., assignor.)
Meiser, Otto. (See Wahl, J., and Meiser.)
Mennicken, Karl, Essen, Germany. Roof and wall structure. 1,888,238; Nov. 22.
Merrill, Albert D. (See Dunbar, T. L., and Merrill.)
Merwin, John C., assignor to Chain Belt Company, Milwaukee, Wis. Drum roller mounting for concrete mixers. 1,888,958; Nov. 22.
Mesa, Maria L., New York, N. Y. Frosting process. 1,888,069; Nov. 22.
Metal Package Corporation. (See Hopkins, Arthur G., assignor.)
Metz, H. A., Laboratories Inc. (See Pitkin, G. P., and Hooper, assignors.)
Meyer, Henry C. A., Baltimore, Md., assignor, by mesne assignments, to United States Hoffman Machinery Corporation, New York, N. Y. Garment pressing machine. 1,888,879; Nov. 22.
Michel, Maksik & Feldman, Inc. (See Maksik, Samuel, assignor.)
Middleton, Leslie H., assignor to Schwarze Electric Company, Adrian, Mich. Signaling. 1,888,684; Nov. 22.

Miller, Anthony P., Pleasantville, N. J. Installing piling. 1,888,282; Nov. 22.
Miller, Charles, New York, N. Y. Shoe. Des. 88,365; Nov. 22.
Miller, Edward J., Milwaukee, Wis. Method of and apparatus for applying wall finishes. 1,888,224; Nov. 22.
Miller, John M., assignor to Atwater Kent Manufacturing Company, Philadelphia, Pa. Radio receiving system. 1,888,430; Nov. 22.
Miller, Stuart P., Tenafly, N. J., assignor to The Barrett Company, New York, N. Y. Distillation of tar. 1,888,235; Nov. 22.
Miller, Stuart P., Tenafly, N. J., assignor to The Barrett Company, New York, N. Y. Distillation of tar. 1,888,236; Nov. 22.
Miller, Stuart P., Englewood, N. J., assignor to The Barrett Company, New York, N. Y. Operation of by-product coke oven plants. 1,888,465; Nov. 22.
Minton, John W., assignor of five per cent to G. S. Ray, Mebane, N. C. Bank counter protective device and door or gate latch. 1,888,880; Nov. 22.
Mitchell, John H. (See Kremko, Daniel, assignor.)
Mitchell, Melville J. (See Johnston, E. A., and Mitchell.)
Mitchell, Orville, Dallas, Tex. Mechanical cotton distributor. 1,888,287; Nov. 22.
Mitchell, Rollie H., South Gate, and J. A. Vaughn, assignors to Killefer Manufacturing Corporation, Ltd., Los Angeles, Calif. Power lift. 1,888,511; Nov. 22.
Mix, Edwin S., Rochester, N. Y. Shirt holddown attachment for suspenders. 1,888,931; Nov. 22.
Mix, Edwin S., Rochester, N. Y. Shirt holddown attachments for suspenders. 1,888,932; Nov. 22.
Mizener, Logan A., Wilmette, assignor to Chicago Mill and Lumber Corporation, Chicago, Ill. Printing or graining. 1,888,864; Nov. 22.
Mohawk Carpet Mills, Inc. (See Crawford, John, assignor.)
Moir, Alexander S., Stirling, Scotland. Agricultural reaping machine. 1,888,210; Nov. 22.
Moler, Abraham L., assignor of one-half to J. W. Small, Richmond, Va. Grease cellar. 1,888,512; Nov. 22.
Moore, Alexander, Okain's Bay, Banks Peninsula, New Zealand. Life belt. 1,888,283; Nov. 22.
Moore, Harry W., Dayton, Ohio. Golf ball embosser. Des. 88,366; Nov. 22.
Moore, John, Detroit, Mich., assignor, by mesne assignments, to Andrew Ruen Hanger Co. Inc. Forming machine. 1,888,803; Nov. 22.
Moore, Raymond G., assignor to The Bassick Company, Bridgeport, Conn. Latch. 1,888,238; Nov. 22.
Moore, Raymond G., assignor to The Bassick Company, Bridgeport, Conn. Latch. 1,888,828; Nov. 22.
Moore, Raymond G., assignor to The Bassick Company, Bridgeport, Conn. Self-adjusting antirattle dovetail for doors. 1,888,829; Nov. 22.
Moore, Raymond G., assignor to The Bassick Company, Bridgeport, Conn. Antirattle dovetail for doors. 1,888,830; Nov. 22.
Morgan Construction Company. (See George, Jerome R., assignor.)
Morgan, Robert. West Hartford, Conn., assignor to The American Fork & Hoe Company, Cleveland, Ohio. Golf club shaft. Des. 18,666; Nov. 22.
Morral, Samuel E. (See Morral, William W. and S. E.)
Morral, William W. and S. E., Morral, Ohio. Corn husking machine. 1,888,466; Nov. 22.
Mosby, Alfred D., assignor to Construction Machinery Company, Waterloo, Iowa. Measuring apparatus. 1,888,239; Nov. 22.
Moseley, Tomlinson I., assignor to Duart Manufacturing Co., Ltd., San Francisco, Calif. Hair waving device. 1,888,284; Nov. 22.
Mueller, William A., Hollywood, Calif., assignor to United Research Corporation. Sound recording. 1,888,467; Nov. 22.
Muench, Walter, Brooklyn, N. Y. Loud-speaker. 1,888,769; Nov. 22.
Muir, Robert J., Mosman, near Sydney, New South Wales, Australia. Lawn mower sharpener. 1,888,285; Nov. 22.
Mullen, James H., Jersey City, N. J. Windshield wiper. 1,888,326; Nov. 22.
Munson, Arthur J., Plainfield, N. J., assignor to The Wood Newspaper Machinery Corporation, New York, N. Y. Fountain construction for printing presses. 1,888,240; Nov. 22.
Munters, Carl G., Stockholm, Sweden, assignor to Electrolux Servel Corporation, New York, N. Y. Refrigeration. Re18,665; Nov. 22.
Murphy, A. B. (See Smith, Bennie H., assignor.)
Murphy, Edwin L., Chicago, Ill. Hydraulic transmission. 1,888,881; Nov. 22.
Murphy, P. H., Company. (See Bonsall, Charles D., assignor.)
Murphy, Walter P., assignor to Union Metal Products Company, Chicago, Ill. Hopper car construction. 1,888,327; Nov. 22.
Murray, Herman S., Woodmere, assignor to W. Willheim Co., Inc., New York, N. Y. Textile fabric or similar article. Des. 88,385; Nov. 22.
Murray, Herman S., Woodmere, assignor to W. Willheim Co., Inc., New York, N. Y. Textile fabric or similar article. Des. 88,386; Nov. 22.
Murray, Herman S., Woodmere, assignor to W. Willheim Co., Inc., New York, N. Y. Textile fabric or similar article. Des. 88,387; Nov. 22.
Nagole, Inc. (See Snell, Samuel A., assignor.)
Nakken Patents Corporation. (See Nakken, Theodorus H., assignor.)
Nakken, Theodorus H., Forest Hills, N. Y., assignor to Nakken Patents Corporation. Recording glow lamp. 1,888,328; Nov. 22.
Narrow Fabric Company. (See Huber, Otto E., assignor.)
Narrow Fabric Company. (See Maurer, Clarence D., assignor.)
Nash, Arthur E., Philadelphia, and J. S. Alcorn, Cynwyd, assignors to Alcorn Combustion Company, Philadelphia, Pa. Heating apparatus and method. 1,888,804; Nov. 22.
Nastrom, Bror, Holdrege, Nebr. Power take-off device. 1,888,513; Nov. 22.
National Aniline and Chemical Company. (See Jewett, Joseph E., assignor.)
National Radiator Corporation. (See Wentworth, Robert S., assignor.)
National Tag Manufacturing Corporation. (See Laencher, F. W., and Graeber, assignors.)
National Tube Company. (See Offutt, John W., assignor.)
Natures Rival Co. (See Roth, Isidor, assignor.)
Neely, Eugene M., Swissvale, Pa. Blast furnace test rod. 1,888,606; Nov. 22.
Neff, Johannes, assignor to the Firm "Universelle" Cigarettenmaschinen-Fabrik J. C. Müller & Co., Dresden, Germany. Apparatus for distributing cigarettes from a container. 1,888,831; Nov. 22.
Neff, Johannes, assignor to the Firm Universelle Cigaretten-Machinen-Fabrik J. C. Muller & Co., Dresden, Germany Apparatus for packeting goods. 1,888,832; Nov. 22.
Neitzel, Franz. (See Bodmer, E., and Neitzel.)
Nelson, Martin L., Park Ridge, assignor, by mesne assignments, to Associated Electric Laboratories, Inc., Chicago, Ill. Remote control system. 1,888,529; Nov. 22.
Nero, Arvid H., West Hartford, assignor to The Arrow-Hart & Hegeman Electric Company, Hartford, Coun. Combined yoke and terminal. 1,888,882; Nov. 22.
Nesbit, Arthur F., Wilkinsburg, Pa. Method of and apparatus for cleaning gases. 1,888,606; Nov. 22.
New Departure Manufacturing Company, The. (See Hughes, F. G., and Simmons, assignors.)
New Jersey Zinc Company, The. (See Peirce, Willis M., assignor.)
Newman, Alfred, Tompkinsville, assignor to Pacific Coast Borax Company, New York, N. Y. Preparing boric acid. 1,888,391; Nov. 22.
Nicodemus, Otto. (See Ernst, O., and Nicodemus.)
Nixon, Charles H., Detroit, Mich. Insect trap. 1,888,563; Nov. 22.
Nolte, Henry J., Schenectady, N. Y., assignor to General Electric Company. Combined fluid and electrical coupling for electric discharge devices. 1,888,833; Nov. 22.
Norling, Reinhold A., Aurora, assignor to Independent Pneumatic Tool Co., Chicago, Ill. Drill steel retainer. 1,888,685; Nov. 22.
Norman-Hoffman Bearings Corporation. (See Bott, George R., assignor.)
Norris, Louise, Kansas City, Mo. Dyeing eyebrows and eyelashes. 1,888,883; Nov. 22.
Nussbaum, Frank I. (See Jassen, B., and Nussbaum.)
O'Donnell, John R., Brooklyn, N. Y. Stair construction. 1,888,686; Nov. 22.
O'Donnell, Philip L., Norwood, Ohio, assignor to Parco Specialty Co., Lynn, Mass. Binding tape. 1,888,432; Nov. 22.
O'Donnell, Philip L., Cincinnati, Ohio, assignor to Parco Specialty Co., Lynn, Mass. Adhesive binding tape. 1,888,433; Nov. 22.
Offutt, John W., Elwood City, Pa., assignor to National Tube Company. Making seamless tubes. 1,888,607; Nov. 22.
Ogurkowski, Georg, Zug, Switzerland, assignor to Landis & Gyr, A.-G. Time switch. 1,888,687; Nov. 22.
Ohio Steel Foundry Company, The. (See Harbisom, Clarence B., assignor.)
Oil Corporation of America. (See Darlington, Homer T., assignor.)
Oil Well Supply Company. (See Greve, Edgar E., assignor.)
Oldham, John M., assignor to L. A. Young Spring & Wire Corporation, Detroit, Mich. Mattress filler or cushion unit. 1,888,357; Nov. 22.
Omer, Harry F., Kansas City, Kans., and M. R. Williams, Kansas City, Mo. Drive axle gearing. 1,888,884; Nov. 22.
Oosterhuis, Ekko. (See Holst, G., and Oosterhuis.)
Oppy, Alwyn G., assignor to American Coal Cleaning Corporation, Welch, W. Va. Antigravity middling chute attachment for pneumatic coal cleaning tables. 1,888,933; Nov. 22.
O'Rourke, Tex, assignor, by mesne assignments, to Card Display, Inc., New York, N. Y. Display device. 1,888,564; Nov. 22.
O'Rourke, Tex, assignor, by mesne assignments, to Card Display, Inc., New York, N. Y. Card display stand. 1,888,565; Nov. 22.
Örström, Gustaf. (See Johnson, B. A. E., and Örström.)

CARNEGIE LIBRARY OF ATLANTA

Osborne, Harrison. (See Dudley, J. G., and Kreer, assignors.)
Osbourne, Alan, San Francisco, Calif. Method and apparatus for indicating and regulating the viscosity of materials. 1,888,431; Nov. 22.
Oster, John, assignor to John Oster Mfg., Company, Racine, Wis. Unitary cutting assembly for hair clippers. 1,888,688; Nov. 22.
Oster, John, Mfg. Company. (See Oster, John, assignor.)
Otis Elevator Company. (See Boedtcher, Frans A., assignor.)
O'Toole, Edward, Gary, W. Va. Screening and concentrating apparatus. 1,888,636; Nov. 22.
Ottawa River Paper Company, The. (See Richards, Ralph N., assignor.)
Otterson, Oscar, Butler, Pa. Pipe coupling. 1,888,539; Nov. 22.
Owens-Illinois Glass Company. (See Cramer, Albert N., assignor.)
Owens-Illinois Glass Company. (See Hofmann, Victor E., assignor.)
Ox Fibre Brush Company. (See Lippa, William D., assignor.)
Pacific Coast Borax Company. (See Newman, Alfred, assignor.)
Packard, Calvin P. (See Macrae, J. N., and Packard.)
Packard Motor Car Company. (See Griswold, Walter R., assignor.)
Palenske, Frederick C., St. Joseph, Mich. Rubber cushion and insulating strip for refrigerator doors. 1,888,358; Nov. 22.
Paramount Publix Corporation. (See Edouart, Alexander F., assignor.)
Parco Specialty Co. (See O'Donnell, Philip L., assignor.)
Parel, James I., Cherokee, Iowa. Nozzle tip and spreader for locomotives. 1,888,690; Nov. 22.
Park, Carl P., Manchester, N. H., assignor to U. S. Bobbin & Shuttle Company 1929, Providence, R. I. Multiple bit boring machine. 1,888,566; Nov. 22.
Park, Phocian S., Houston, Tex. Refreshment tray. 1,888,736; Nov. 22.
Parker, Arthur H. (See Sebell, Harry, assignor.)
Parker, Clara B., executrix. (See Twomley, Herbert E., assignor.)
Parker, George. (See Twomley, Herbert E.)
Patents Incorporated. (See Swan, Harry, assignor.)
Paterson, John H., Westminster, London, assignor to Imperial Chemical Industries Limited, Westminster, England. Electrode for use in arc welding. 1,888,286; Nov. 22.
Pawsat, Ewald F., Maysville, Ky., assignor to Wald Manufacturing Company. Twine holder. 1,888,865; Nov. 22.
Payberg, Andrew, Belmont, assignor to Viking Manufacturing Company, Inc., Cambridge, Mass. Display card. 1,888,406; Nov. 22.
Payne, William L., Columbus, Ohio, assignor to Fox Company, Philadelphia, Pa. Toy gun. 1,888,689; Nov. 22.
Pearce, Owen A., Liverpool, and L. M. Simpson, Stanks, near Leeds, England, assignors to Associated Telephone and Telegraph Company, Chicago, Ill. Telephone system. 1,888,964; Nov. 22.
Pearce, W. L. (See Church, Walter L., assignor.)
Pearson, Charles, Cicero, Ill., assignor to International Harvester Company. Self-dump rake. 1,888,468; Nov. 22.
Pearson, Howard B., San Francisco, Calif. Brake. 1,888,691; Nov. 22.
Peerless Springs, Incorporated. (See Hetherington, Oliver, assignor.)
Peet, Gerald D., Montclair, assignor to Wallace & Tiernan Company, Inc., Belleville, N. J. Sterilising apparatus. 1,888,959; Nov. 22.
Peiler, Karl E., West Hartford, assignor, by mesne assignments, to Hartford-Empire Company, Hartford, Conn. Glass feeding method and apparatus. 1,888,963; Nov. 22.
Peirce, Willis M., Palmerton, Pa., assignor to The New Jersey Zinc Company, New York, N. Y. Wrought zinc product. 1,888,567; Nov. 22.
Penick, Arthur J. and K. T., Houston, Tex. Safety valve. 1,888,392; Nov. 22.
Penick, Kirby T. (See Penick, Arthur J. and K. T.)
Pennsylvania Rubber Company. (See Humphrey, Walter E., assignor.)
Pennsylvania Salt Manufacturing Company, The. (See Pritchard, David A., assignor.)
Pennsylvania Wire Glass Company. (See Shuman, Arno, assignor.)
Pepperdine, Ben, Chicago, Ill. Making tool handles. 1,888,885; Nov. 22.
Permutit Company, The. (See Harwood, S. G., and Griswold, assignors.)
Persons, Lawrence M., assignor to The Emerson Electric Mfg. Co., St. Louis, Mo. Humidifier. 1,888,434; Nov. 22.
Peterson, Pontus, Richmond Hill, N. Y., assignor to International Cigar Machinery Company. Bunch concentrator atomizing cleaner. 1,888,805; Nov. 22.
Petroleum Heat and Power Company. (See Macrae, J. N., and Packard, assignors.)
Pfeiffer, Fred B. (See Alexander, H. S., Pfeiffer, and White.)
Pitkin, George P., Bergenfield, N. J., and C. W. Hooper, Jamaica, assignors to H. A. Metz Laboratories Inc., New York, N. Y. Spinal anaesthetic solution. 1,888,934; Nov. 22.
Pittsburgh Screw and Bolt Corporation. (See Dicks, Thomas A., assignor.)
Plaček, Adolph, New Orleans, La. Producing ethyl alcohol from wood or other cellulose containing materials. 1,888,935; Nov. 22.
Pneumatic Tire Inflating Devices Corporation. (See White, Ellis E., assignor.)
Posey, Alfred W., Ventura, Calif. Drill pipe tong assembly. 1,888,770; Nov. 22.
Powers, Milton A., assignor to The Timken Silent Automatic Company, Detroit, Mich. Liquid fuel burner ignition. 1,888,692; Nov. 22.
Powers, Milton A., assignor to The Timken Silent Automatic Company, Detroit, Mich. Rotary oil burner. 1,888,693; Nov. 22.
Powers, Milton A., assignor to The Timken Silent Automatic Company, Detroit, Mich. Electric ignition for fluid fuel burners. 1,888,694; Nov. 22.
Powers, Milton A., assignor to The Timken Silent Automatic Company, Detroit, Mich. Oil burner ignition device. 1,888,695; Nov. 22.
Pringle, William A., Niagara Falls, N. Y., assignor to American Sales Book Company, Limited, Toronto, Ontario, Canada. Manifolding device. 1,888,407; Nov. 22.
Pritchard, David A., Sandwich, Ontario, Canada, assignor to The Pennsylvania Salt Manufacturing Company, Philadelphia, Pa. Treatment of caustic solutions for the production of solutions and of solid caustic soda of a high degree of purity. 1,888,886; Nov. 22.
Probanski, Maximillian T., Yonkers, N. Y. Sound resonator. 1,888,540; Nov. 22.
Prosperity Company Inc., The. (See Davis, Ernest, assignor.)
Prot, Etienne M., assignor to Société à Responsabilité Limitée Dite: La Voie Ferrée Moderne, Paris, France. Ferro-concrete railway sleeper. 1,888,287; Nov. 22.
Puleo, Anthony, Brooklyn, N. Y. Tire spreader. 1,888,834; Nov. 22.
Purdy, Chester A., Oak Park, Ill., and S. J. Stockfleth, Brooklyn, assignors to Western Electric Company, Incorporated, New York, N. Y. Container and its method of manufacture. 1,888,288; Nov. 22.
Quackenbush, Hiram L., Monroe, Mich. Washing machine. 1,888,435; Nov. 22.
Quigley, W. A. (See Goble, Bert G., assignor.)
Radio Corporation of America. (See Holst, G., and Oosterhuis, assignors.)
Radio Corporation of America. (See Roberts, Walter van B., assignor.)
Raets, Stephen J., Lowell, Mass. Locomotive ash hopper mechanism. 1,888,806; Nov. 22.
Raffles, Frank, assignor to H. Raffles, Chicago, Ill. Tool holder. 1,888,289; Nov. 22.
Raffles, Harry. (See Raffles, Frank, assignor.)
Ragan, Frederick H., Shaker Heights, Ohio. Making axle housings. 1,888,535; Nov. 22.
Rah, Joseph, assignor to G. & W. Electric Specialty Company, Chicago, Ill. Insulating joint. 1,888,241; Nov. 22.
Ramsdell, Henry P., trustee. (See Strickland, David J., assignor.)
Rand, James H., jr., Buffalo, assignor to Remington Typewriter Company, Ilion, N. Y. Typewriting machine. 1,888,696; Nov. 22.
Rasmussen, Christian A., Cleveland, Ohio. Spring. 1,888,469; Nov. 22.
Rassmann, F., Manufacturing Company. (See Rassmann, Hugo C., assignor.)
Rassmann, Hugo C., Beaver Dam, Wis., assignor to F. Rassmann Manufacturing Company. Stall or stanchion. 1,888,608; Nov. 22.
Rathgeb, Joseph J., jr., New York, N. Y. Automatic feeding device for grates. 1,888,697; Nov. 22.
Rawls, Paul C., assignor to Technical Equipment Company, Des Moines, Iowa. High frequency oscillatory circuit for therapeutic purposes. 1,888,408; Nov. 22.
Ray, George S. (See Minton, John W., assignor.)
Readman, Bernard W., Lilac, North Battleford, Saskatchewan, Canada. Pocket knife. 1,888,887; Nov. 22.
Reece Lem L. (See Bunten, William G., assignor.)
Reed Roller Bit Company. (See Bull, Clinton H. M., assignor.)
Reed, William T., et al. (See Seawell, Joseph M., assignor.)
Reid, Murdoch & Co. (See Anderson, Louis S., assignor.)
Remington Typewriter Company. (See Rand, James H., jr., assignor.)
Renault, Louis. (See Saives, Leon, assignor.)
Reyburn, John R., Fairfield, Conn., assignor to American Chain Company, Inc. Tire chain. 1,888,568; Nov. 22.
Rhinow, Paul, Merrill, Wis. Chimney hood. 1,888,290; Nov. 22.
Rice, Lloyd S., Oakfield, N. Y. Fountain comb. 1,888,570; Nov. 22.
Richards, Ralph N., assignor to The Ottawa River Paper Company, Toledo, Ohio. Sheet trimming and scoring mechanism. 1,888,436; Nov. 22.
Richardson, Ingram, Corporation. (See Jalkut, Lee D., assignor.)

Richmond, Louis E., assignor to The Autocall Company, Shelby, Ohio. Fluid flow indicator. 1,888,737; Nov. 22.
Richter, George A., and H. A. Chase, assignors to Brown Company, Berlin, N. H. Manufacture of felted fibrous sheet material of high absorptivity. 1,888,771; Nov. 22.
Richter, George A., and H. A. Chase, assignors to Brown Company, Berlin, N. H. Manufacture of bituminised fibrous webs. 1,888,772; Nov. 22.
Rigante, Giuseppe, Westerleigh, Staten Island, N. Y. Coil structure. 1,888,541; Nov. 22.
Risser, Arthur I., Chicago, Ill. Screw cap applying machine. 1,888,470; Nov. 22.
Ritchie Manufacturing Company. (See Ritchie, Thomas, assignor.)
Ritchie, Thomas, assignor to Ritchie Manufacturing Company, Marshalltown, Iowa. Wall hydrant. 1,888,359; Nov. 22.
Rivers, Elmer J., Farmingdale, N. Y., assignor to The Aviation Patent and Research Corporation. Machine for shaping metal tubes. 1,888,807; Nov. 22.
Robbins, Elmer, Portland, Oreg. Adjustable arm chair. 1,888,471; Nov. 22.
Roberts, Walter van B., Princeton, N. J., assignor to Radio Corporation of America. Heating cathodes of space discharge devices. 1,888,360; Nov. 22.
Roberts, Walter van B., Princeton, N. Y., assignor to Radio Corporation of America. Tuned radio frequency receiver. 1,888,514; Nov. 22.
Robertson, John C., Annapolis, assignor to Locke Insulator Corporation, Baltimore, Md. Pin centering device and cushion retainer. 1,888,571; Nov. 22.
Robinson, Eugene, Level Land, S. C. Sirup pitcher. 1,888,330; Nov. 22.
Robinson, Thomas L., Valparaiso, Ind. Self-aligning ball bearing. 1,888,361; Nov. 22.
Rockwell, Wallace A., Long Beach, and L. M. Stanfield, Whittier, Calif. Head for well casings and tubings. 1,888,637; Nov. 22.
Rohde, Hugo W., Shorewood, assignor to Jos. Schlitz Beverage Company, Milwaukee, Wis. Apparatus for sterilising food substances. 1,888,472; Nov. 22.
Roirant, Emile, assignor to Societe Anonyme d'Etudes et de Constructions d'Appareils Mécaniques pour la Verrerie, Paris, France. Pushing glass bottles. 1,888,393; Nov. 22.
Roos, Henry W., Cincinnati, Ohio. Adjustable shore. 1,888,738; Nov. 22.
Root, Percy H., assignor to The Fate-Root-Heath Company, Plymouth, Ohio. Lawn mower sharpening machine. 1,888,572; Nov. 22.
Rosberg, John E., San Francisco, Calif. Apparatus for treating meats. 1,888,542; Nov. 22.
Roth, Isidor, assignor to Natures Rival Co., Chicago, Ill. Hose supporter. 1,888,291; Nov. 22.
Rotophot Aktiengesellschaft fuer Graphische Industrie. (See Wolfsohn, Kurt, assignor.)
Rowe, William H., Cliftondale, Mass., assignor to General Electric Company. Globe holder and the like. 1,888,836; Nov. 22.
Rudoy, Jacob, Haifa, Palestine. Oil stove. 1,888,888; Nov. 22.
Ruelland, Albertine, New York, N. Y. Combined book holder and marker. 1,888,773; Nov. 22.
Ruen, Andrew, Hanger Co. Inc. (See Moore, John, assignor.)
Rundell, Rupert E., Rockville Center, N. Y., assignor to American Machine & Foundry Company. Oblique cut-off. 1,888,774; Nov. 22.
Russell Manufacturing Company. (See Tower, Elmer V. J., assignor.)
Russel, Philip S., assignor to Detroit Lubricator Company, Detroit, Mich. Control means. 1,888,866; Nov. 22.
Russell, William H., New Haven, Conn. Coin vending mechanism. 1,888,473; Nov. 22.
Sachs, Maximilian, Vienna, Austria, assignor to A. Mauterer, Dortmund, Germany. Joint for iron pilings. 1,888,936; Nov. 22.
Sachsenmaier, Elwood W., assignor to Larkwood Silk Hosiery Mills, Inc., Charlotte, N. C. Hosiery. 1,888,889; Nov. 22.
Sadwith, Ryan, Newark, N. J. Drier. 1,888,573; Nov. 22.
Salves, Leon, assignor to L. Renault, Billancourt, France. Metallic flooring and laying the same. 1,888,937; Nov. 22.
Salisbury, Charles K., Mount Vernon, Ohio. Dandelion and buckhorn header. 1,886,638; Nov. 22.
Sanders, Crawford B., Wyandotte, Mich. Pump. 1,888,474; Nov. 22.
Sanders, Leo J., Estherville, Iowa. Ice cream disher. 1,888,739; Nov. 22.
Sandman, William J., Louisville, Ky. Battery container. 1,888,890; Nov. 22.
Sands, A. B., & Son Company. (See Allan, Percy, assignor.)
Sankey, Clinton E., Elwood City, Pa. Foot protector. 1,888,609; Nov. 22.
Schabet, Leopold, Stuttgart, Germany. Two-part case for cinematographs. 1,888,574; Nov. 22.
Schacht, Elmer C., assignor to Behr-Manning Corporation, Troy, N. Y. Paper. 1,888,409; Nov. 22.
Schacht, Elmer C., assignor to Behr-Manning Corporation, Troy, N. Y. Laminated article. 1,888,410; Nov. 22.
Schaetzel, François J., Staten Island, assignor to William Willheim Co., Inc., New York, N. Y. Textile fabric or similar article. Des. 88,388; Nov. 22.
Schauman, Karl O., Hampton Wick, England. Automatically extensible and collapsible tray. 1,888,740; Nov. 22.
Schellin, John C., Wooster, Ohio. Hose coupling. 1,888,741; Nov. 22.
Schilling, Carl G., Oakland, Calif. Evaporated milk server and preserver. 1,888,411; Nov. 22.
Schlitz, Jos., Beverage Company. (See Rohde, Hugo W., assignor.)
Schmalsgruber, Sebastian, Bloomfield, Conn. Key case. 1,888,292; Nov. 22.
Schmidt, Alfred, Dusseldorf, Germany. Manufacturing bent pipes. 1,888,891; Nov. 22.
Schmiedel, Johannes, assignor to the Firm Universelle Cigarettenmaschinen-Fabrik J. C. Muller & Co., Dresden, Germany. Machine for producing two-part boxes. 1,888,808; Nov. 22.
Schmitt, Georg G. E., Berlin-Wilmersdorf, Germany. Swimming appliance. 1,888,867; Nov. 22.
Schmitz, Carl, Oelde, Germany. Liquid excluder for the bearings of centrifugal separators. 1,888,475; Nov. 22.
Schoenberg, Virgil A., Morton Grove, assignor to Light-Sensitive Apparatus Corporation, Niles Center, Ill. Sound picture attachment for moving picture machines. 1,888,293; Nov. 22.
Schol, Carl H., Allendorf, Germany. Apparatus for obtaining a highly porous, cellular, light material from blast furnace slag. 1,888,394; Nov. 22.
Schrader's, A., Son, Inc. (See Wahl, J., and Melser, assignors.)
Schroder, Robert E., assignor to Goodman Manufacturing Company, Chicago, Ill. Loading machine. 1,888,868; Nov. 22.
Schüle, Wilhelm, Gorlitz, Germany, assignor to Holzwarth Gas Turbine Co., San Francisco, Calif. Process and apparatus for operating turbines. 1,888,698; Nov. 22.
Schultte and Koerting Company. (See von Brockdorf, Rudolf, assignor.)
Schumm, Louis, 3d, assignor to Superior Wood Products Corporation, La Porte, Ind. Store counter. 1,888,742; Nov. 22.
Schutt, Duny A., New Kensington, Pa. Die mechanism for forming tubular bodies. 1,888,887; Nov. 22.
Schwab, Edward S. (See Loehr, A., jr., and Schwab.)
Schwarz, Michael, and F. J. Goetz, assignors to Crunden-Martin Manufacturing Company, St. Louis, Mo. Receptacle. 1,888,699; Nov. 22.
Schwarze Electric Company. (See Middleton, Leslie H., assignor.)
Schweiter, Walter, Horgan, near Zurich, Switzerland. Cop winding machine. 1,888,395; Nov. 22.
Scofield, Gilbert J., Albany, N. Y. Cleansing apparatus. 1,888,575; Nov. 22.
Scott, Charles H., Edgewater, Colo., assignor to The Dorr Company, Inc., New York, N. Y. Sedimentation apparatus. 1,888,743; Nov. 22.
Scott, Lewis L., St. Louis, Mo. Rotary oil burner. 1,888,476; Nov. 22.
Scranton Lace Company, The. (See Belin, Henry, 3d, assignor.)
Seawell, Joseph M., assignor to C. Wortham and W. T. Reed, Richmond, Va. Transfer printing and issuing machine. 1,888,412; Nov. 22.
Sebell, Harry, Boston, assignor of one-half to A. H. Parker, Lexington, Mass. Making a can. 1,888,413; Nov. 22.
Seiberling Rubber Company. (See Alexander, H. S., Pfeiffer, and White, assignors.)
Seiberling Rubber Company. (See Shook, Florian J., assignor.)
Sengebusch, Hans, Villa Park, assignor, by mesne assignments, to Associated Electric Laboratories, Inc., Chicago, Ill. Circuit closing device. 1,888,700; Nov. 22.
Shaw, Wesley J., Haverhill, Mass., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J. Wood-heel machine. 1,888,294; Nov. 22.
Shell Development Company. (See Bent, Franklin A., assignor.)
Shell Development Company. (See Heath, Frank W., assignor.)
Shellman, Charles B., Washington, D. C. Ice cutting machine. 1,888,938; Nov. 22.
Shelton, William G., St. Louis, Mo. Timing device. 1,888,809; Nov. 22.
Sherrick, Samuel T., assignor of forty-nine one hundredths to C. Diehl, Denver, Colo. Insulating composition. 1,888,437; Nov. 22.
Sherwin-Williams Company, The. (See Holton, Edward C., assignor.)
Shoe Lace Company. (See Matson, Carl A., assignor.)
Sholtes, Stephen, Chicago, Ill. Refrigerating and ventilating system. 1,888,242; Nov. 22.
Shook, Florian J., Akron, Ohio, assignor to Seiberling Rubber Company. Bias cutting and fabric stripping machine. 1,888,744; Nov. 22.
Shore, William E., West New Brighton, N. Y. Method and apparatus for nebulising and burning fuel oil. 1,888,939; Nov. 22.
Shuey, George W., et al. (See Greenlee, Eli M., assignor.)
Shuman, Arno, assignor to Pennsylvania Wire Glass Company, Philadelphia, Pa. Manufacture of corrugated wire glass. 1,888,965; Nov. 22.

Sieb, Henry, assignor to W. B. Conkey Company, Hammond, Ind. Book feeding device. 1,888,775; Nov. 22.
Sieg, Karl, Philadelphia, Pa., assignor to Samuel M. Langston Co., Camden, N. J. Drum winder. 1,888,810; Nov. 22.
Siekmann, Harold J. (See Groene, W. F., and Siekmann.)
Siemens & Halske, Aktiengesellschaft. (See Hort, Hermann, assignor.)
Siemens-Schuckertwerke Aktiengesellschaft. (See Kastert, Wilhelm, assignor.)
Siers, John A. H., Jersey City, N. J. Doorcheck. 1,888,543; Nov. 22.
Simcoe, George, Trenton, assignor to Edgar Brothers Company, Metuchen, N. J. Refined clay and producing same. 1,888,701; Nov. 22.
Simmen, Oscar, Erlach, assignor to Firm of Sulzer Freres Societe Anonyme, Winterthur, Switzerland. Pump or compressor. 1,888,544; Nov. 22.
Simmons, Charles B. (See Hughes, F. G., and Simmons.)
Simpson, Lancelot M. (See Pearce, O. A., and Simpson.)
Sinclair, John R., Holyoke, Mass. Dandy roll. 1,888,892; Nov. 22.
Singer Manufacturing Company, The. (See Grieb, A., and Knaus, assignors.)
Slagh, Harold R. (See Britton, E. C., and Slagh.)
Slick, Edwin E., Pittsburgh, Pa. Glass working machine. 1,888,396; Nov. 22.
Slick, Edwin E., Pittsburgh, Pa. Apparatus for shaping materials. 1,888,397; Nov. 22.
Sloane-Blabon Corporation. (See Dearden, Edward C., assignor.)
Small, John W. (See Moler, Abraham L., assignor.)
Smidlein, Anthony E., Yonkers, N. Y., assignor to Bigelow Sanford Carpet Co., Inc. Carpet. Des. 88,367; Nov. 22.
Smith, Algy J., Bloomfield, assignor to Hartford-Empire Company, Hartford, Conn. Continuous two-table glassware forming machine. 1,888,438; Nov. 22.
Smith, Bennie H., assignor of one-half to A. B. Murphy, Manatee, Fla. Turpentine tool. 1,888,243; Nov. 22.
Smith, Cato, assignor to Towle Manufacturing Company, Newburyport, Mass. Monogram adapter. 1,888,838; Nov. 22.
Smith, Cato, assignor to Towle Manufacturing Company, Newburyport, Mass. Display device. 1,888,839; Nov. 22.
Smith, Joseph, Liverpool, and G. D. Turton, Ripley, near Derby, England, assignors to Associated Telephone and Telegraph Company, Chicago, Ill. Electrical signaling system. 1,888,414; Nov. 22.
Smith, Preston R., Rahway, N. J., assignor to The Barber Asphalt Company, Philadelphia, Pa. Bituminous emulsion and producing. 1,888,295; Nov. 22.
Smith, Russell W., Union, N. J. Mechanism for making match books. 1,888,244; Nov. 22.
Smith, Theodore L., Concord, assignor to Gillette Safety Razor Company, Boston, Mass. Safety razor. 1,888,576; Nov. 22.
Snell, Samuel A., assignor to Nagole, Inc., Toledo, Ohio. Lifting jack. 1,888,776; Nov. 22.
Snyder, Robert W., assignor to The Goodyear Tire & Rubber Company, Akron, Ohio. Mold. 1,888,702; Nov. 22.
Societe Anonyme d'Etudes et de Constructions d'Appareils Mecaniques pour la Verrerie. (See Roirant, Emile, assignor.)
Société à Responsabilité limitée dite: La Voie Ferrée Moderne. (See Prot, Etienne M., assignor.)
Society of Chemical Industry in Basle. (See Straub, F., Anderau, and Mayer, assignors.)
Sonntag, Robert, Jersey City, N. J. Clothesline protecting device. 1,888,745; Nov. 22.
Spangenberg, Henry, Longbranch, Wash. Automatic check-hook. 1,888,869; Nov. 22.
Specht, Hattie B., Norfolk, Va. Machine for perforating transfer slips. 1,888,746; Nov. 22.
Sperisen, Ernest. (See Lanctot, A., and Sperisen.)
Sperling, Joseph, New York, N. Y. Strainer. 1,888,245; Nov. 22.
Sprung, Abraham, Brooklyn, N. Y. Street sign. 1,888,246; Nov. 22.
Stahl, John H., El Paso, Tex. Ball rack. 1,888,247; Nov. 22.
Stahl, John H., El Paso, Tex. Ball rack and receptacle support. 1,888,862; Nov. 22.
Standish, Edward K., Stoughton, Mass. Braiding machine. 1,888,477; Nov. 22.
Stanfield, Laurence M. (See Rockwell, W. A., and Stanfield.)
Steel Sanitary Company, The. (See Cromwell, John C., assignor.)
Stehli, Henry J., Cedar Grove, N. J. Sintering machine pallet. 1,888,296; Nov. 22.
Steidl, Joseph, Bronx, N. Y. Combination table. 1,888,478; Nov. 22.
Stein, Frederick W., Atchison, Kans. Spare-tire cover and radio aerial. 1,888,777; Nov. 22.
Stein, Fritz, Berlin, assignor of one-half to H. Ebeling, Wilhelminenhofstrasse, Berlin Oberschoneweide, Germany. Circular shears. 1,888,870; Nov. 22.
Steinhardt, Irving, New York, N. Y. Carburetor. 1,888,248; Nov. 22.
Stephens, William H., and J. H. Gribben, jr., Crockett, Calif. Density measuring apparatus. 1,888,577; Nov. 22.
Stephenson, Leigh J., and H. J. Frambein, assignors to Walker Vehicle Company, Chicago, Ill. Control system for electrical vehicles and the like. 1,888,297; Nov. 22.
Stewart-Warner Corporation. (See Tice, Percival S., assignor.)
Still, Carl. (See Lamberts, Gustav, assignor.)
Stockfleth, Sigurd J. (See Purdy, C. A., and Stockfleth.)
Stockholder, John H., New Orleans, La. Boiler cleaner. 1,888,515; Nov. 22.
Stolp, Frank H., Geneva, N. Y. Accelerating transmission mechanism. 1,888,479; Nov. 22.
Stolte, Frederick A., assignor to Stolte Stoker Corporation, Indianapolis, Ind. Automatic feeder for coal burning furnaces. 1,888,439; Nov. 22.
Stolte Stoker Corporation. (See Stolte, Frederick A., assignor.)
Stoner, Abraham D., New Windsor, Md. Rabbit hutch. Des. 88,368; Nov. 22.
Storm, Adolph, and T. Thorsen, assignors to Storm Manufacturing Co., Inc., Minneapolis, Minn. Universal drive for grinding machines and the like. 1,888,480; Nov. 22.
Storm Manufacturing Co. (See Storm, A., and Thorsen, assignors.)
Straub, Fritz, W. Anderau, and H. Mayer, assignors to Society of Chemical Industry in Basle, Basel, Switzerland. Azo-dyestuffs containing chromium and making same. 1,888,516; Nov. 22.
Strickland, David J., Beacon, assignor to H. P. Ramsdell, trustee, Newburgh, N. Y. Brick molding. 1,888,398; Nov. 22.
Stroud, Francis H., assignor to George W. Graetz, Seattle, Wash. Brake tester for motor vehicle wheels. 1,888,639; Nov. 22.
Sturtevant, B. F., Company. (See Anderson, Samuel M., assignor.)
Sturtevant, B. F., Company. (See Bentley, Oliver D. H., assignor.)
Sulzer Frères Society Anonyme. (See Simmen, Oscar, assignor.)
Summerbell, William J., Los Angeles, Calif. Glare shield. 1,888,703; Nov. 22.
Summers, Otto M., assignor to Frigidaire Corporation, Dayton, Ohio. Refrigerating apparatus. 1,888,331; Nov. 22.
Summey, David L., Waterbury, Conn. Pressure control system. 1,888,332; Nov. 22.
Superior Wood Products Corporation. (See Schumm, Louis 3d, assignor.)
Surface Combustion Corporation. (See Cowan, Roysel J., assignor.)
Surprenant, George, Rotterdam, N. Y. Combined fluid heater and baking oven. 1,888,249; Nov. 22.
Swan, Harry, New York, N. Y. Razor. 1,887,747; Nov. 22.
Swan, Harry, New York, N. Y., assignor to Patents Incorporated, Wilmington, Del. Razor. 1,888,963; Nov. 22.
Swenson, Theodore L., Bethesda, Md., dedicated to the free use of the public. Preservation of eggs. 1,888,415; Nov. 22.
Swett, Arthur H., Chicago, Ill. Tag. 1,888,704; Nov. 22.
Symington, T. H., and Son, Inc. (See Symington, Thomas H., assignor.)
Symington, Thomas H., assignor, by mesne assignments, to T. H. Symington and Son, Inc., Baltimore, Md. Equalizing bolster. 1,888,940; Nov. 22.
Talley, Charlotte, New York, N. Y. Hospital chart and identification card holders. 1,888,811; Nov. 22.
Talley, Randal E., Irwin, assignor to George J. Hagan Company, Pittsburgh, Pa. Continuous hardening, quenching, and drawing furnace. 1,888,960; Nov. 22.
Tannewitz, Carl E., Grand Rapids, Mich. Inkwell. 1,888,363; Nov. 22.
Tatum, John J., Baltimore, Md. Slack adjuster for railway brakes. 1,888,942; Nov. 22.
Technical Equipment Company. (See Rawls, Paul C., assignor.)
Teesdale, John B., assignor to Teesdale Manufacturing Company, Grand Rapids, Mich. Gauge. 1,888,298; Nov. 22.
Teesdale Manufacturing Company. (See Teesdale, John B., assignor.)
Teppema, Jan, assignor to The Goodyear Tire & Rubber Company, Akron, Ohio. Antioxidant. 1,888,705; Nov. 22.
Terry, Edward F., Phillipsburg, assignor to Ingersoll-Rand Company, Jersey City, N. J. Handle for rock drills. 1,888,333; Nov. 22.
Textor, Oscar, Shaker Heights, and B. O. Crites, Cleveland, Ohio. Composition for cleaning. 1,888,334; Nov. 22.
Thayer, Irving W., North Haverhill, N. H. Reversible tractor plow. 1,888,899; Nov. 22.
Thermweld Limited. (See Bottrill, David H., assignor.)
Thomas & Armstrong Company, The. (See Mecklenborg, Fred W., assignor.)
Thomas, Daniel D., Township of Moon, Allegheny County, Pa. Grease cup. 1,888,481; Nov. 22.
Thompson, Earl A., Portland, Oreg., assignor to General Motors Corporation, Detroit, Mich. Transmission. 1,888,640; Nov. 22.
Thompson, Howard A., Edgewood, assignor to The Union Switch & Signal Company, Swissvale, Pa. Train signaling system. 1,888,706; Nov. 22.
Thompson, John A. (See McDowell, Daniel L., assignor.)
Thornton, Joseph H., Spokane, Wash. Combination book hanger and advertising holder. 1,888,748; Nov. 22.

Thorsen, Thor. (See Storm, A., and Thorsen.)
Threadgill, Eugene H., Raleigh, N. C. Device for controlling the flow of refrigerant in a refrigerating apparatus. 1,888,517; Nov. 22.
Tice, Percival S., assignor to Stewart-Warner Corporation, Chicago, Ill. Electromagnetic fuel pump. 1,888,250; Nov. 22.
Timken Roller Bearing Company, The. (See Buckwalter, Tracy V., assignor.)
Timken Silent Automatic Company, The. (See Powers, Milton A., assignor.)
Titus, Hubert J., Paterson, N. J., assignor to Franklin Railway Supply Company, New York, N. Y. Controlling mechanism for locomotive boosters. 1,888,778; Nov. 22.
Todd, Francis C., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Circuit interrupter. 1,888,707; Nov. 22.
Toepper, Henry C., Des Plaines, Ill. Artificial fish bait. 1,888,641; Nov. 22.
Torok, Julius, and E. L. Bergstresser, Renovo, Pa. Discharge chute. 1,888,518; Nov. 22.
Tower, Elmer V. J., North Syracuse, N. Y., assignor to Russell Manufacturing Company, Middletown, Conn. Friction transmitting element. 1,888,779; Nov. 22.
Towle Aircraft Company. (See Towle, Tom, assignor.)
Towle Manufacturing Company. (See Smith, Cato, assignor.)
Towle, Tom, assignor to Towle Aircraft Company, Detroit, Mich. Amphibian airplane. 1,888,335; Nov. 22.
Traverso, Francesco, Genoa, Italy. Elastic suspension. 1,888,519; Nov. 22.
Travilla, James C., jr., Philadelphia, Pa., assignor to General Steel Castings Corporation, Granite City, Ill. Tank vehicle underframe. 1,888,812; Nov. 22.
Tremblay, Gregory E. (See Tremblay, Joseph A., and G. E.)
Tremblay, Joseph A. and G. E., Dolbeau, Quebec, Canada. Weather strip. 1,888,299; Nov. 22.
Trigg, Walton W., Cincinnati, Ohio. Smoker's device. Des. 88,389; Nov. 22.
Tri Pie Corporation. (See Trompeter, David, assignor.)
Trompeter, David, Baldwin, assignor to Tri Pie Corporation, Brooklyn, N. Y. Method and apparatus for manufacturing pies. 1,888,562; Nov. 22.
Trott, Harvey B., McKeesport, Pa. Nail machine. 1,888,610; Nov. 22.
Tryon, William A., Elmira, N. Y. Assembling yieldable bushings on supporting pins. 1,888,642; Nov. 22.
Tschörner, Ludwig, Vienna, Austria. Picture reproducing device for television. 1,888,898; Nov. 22.
Turton, George D. (See Smith, J., and Turton.)
Tursicky, Francis, assignor to H. E. Bullock, Chicago, Ill. Braking mechanism. 1,888,643; Nov. 22.
Tursicky, Francis, assignor to H. E. Bullock, Chicago, Ill. Automotive vehicle. 1,888,644; Nov. 22.
Twomley, Herbert E., assignor to C. B. Parker, Riverside, Calif., executrix of G. D. Parker, deceased. Nail gate for nailing machines. 1,888,520; Nov. 22.
Union Metal Products Company. (See Murphy, Walter P., assignor.)
Union Switch & Signal Company, The. (See Baughman, George W., assignor.)
Union Switch & Signal Company, The. (See Bone, H. L., and Livingston, assignors.)
Union Switch & Signal Company, The. (See Martin, Paul N., assignor.)
Union Switch & Signal Company, The. (See McCann, Ronald A., assignor.)
Union Switch & Signal Company, The. (See Thompson, Howard A., assignor.)
United Research Corporation. (See Bishop, Joseph W., assignor.)
United Research Corporation. (See Mueller, William A., assignor.)
United Shoe Machinery Corporation. (See Dodge, Henry A., assignor.)
United Shoe Machinery Corporation. (See Knight, Ralph F., assignor.)
United Shoe Machinery Corporation. (See Shaw, Wesley J., assignor.)
U. S. Bobbin & Shuttle Company 1929. (See Park, Carl P., assignor.)
U. S. Finishing & Mfg. Co. (See Dixon, John W., assignor.)
United States Hoffman Machine Corporation. (See Meyer, Henry C. A., assignor.)
Universaw, Walter H., Kokomo, Ind. Pin. Des. 88,369; Nov. 22.
Universelle Cigaretten-Maschinen-Fabrik J. C. Müller & Co. (See Neff, Johannes, assignor.)
Universelle Cigarettenmaschinen-Fabrik J. C. Müller & Co. (See Schmiedel, Johannes, assignor.)
Urquhart, Kenneth M., Norfolk, Va. Reactive combustion engine. 1,888,749; Nov. 22.
Van Bourgondien, C. J. (See Dalrymple, Gerald H., assignor.)
Vanderkloot, Marinus. (See Bellinghausen, W., and Vanderkloot.)
Van Deventer, Harry R., and J. A. Grier, New York, N. Y., assignors, by mesne assignments, to Frigidaire Corporation, Dayton, Ohio. Evaporator. 1,888,336; Nov. 22.
Van Dyke Textigraph Corp. (See Van Dyke, William D., assignor.)
Van Dyke, William D., assignor to Van Dyke Textigraph Corp., Chattanooga, Tenn. Apparatus for tufting fabrics. 1,888,941; Nov. 22.
Van Orman, Clare B., Topeka, Kans. Jetty construction. 1,888,864; Nov. 22.
Van Valkenburg, Harold A., Van Nuys, Calif. Tool for pneumatic tires. 1,888,894; Nov. 22.
Vastano, Frederick A., Paterson, N. J. Engine starter. 1,888,300; Nov. 22.
Vaughn, Jesse A. (See Mitchell, R. H., and Vaughn.)
Vaughn, Jesse A., assignor to Killefer Manufacturing Corporation, Ltd., Los Angeles, Calif. Locking and tripping device for a power lift implement. 1,888,482; Nov. 22.
Vaughn, Jesse A., assignor to Killefer Manufacturing Corporation, Ltd., Los Angeles, Calif. Locking and tripping device for power lift implements. 1,888,521; Nov. 22.
Vereinigte Stahlwerke Aktiengesellschaft. (See Killing, Arthur, assignor.)
Verkuil, Leendert, Staten Island, N. Y. Stone cutting machinery. 1,888,895; Nov. 22.
Vernet, John H., Oak Park, Ill. Heating device. 1,888,400; Nov. 22.
Vibber, Wheeler H., New London, Conn. Conduit cap. 1,888,645; Nov. 22.
Viking Manufacturing Company. (See Rayberg, Andrew, assignor.)
Von Brockdorff, Rudolf, Munich, Germany, assignor to Schutte and Koerting Company, Philadelphia, Pa. Electric heater. 1,888,780; Nov. 22.
Von Forster, Hermann, Niederursel, near Frankfort-on-the-Main, Germany, assignor to American Lurgi Corporation, New York, N. Y. Tube drawing process. 1,888,401; Nov. 22.
Von Reiche, Ludwig, and J. Giersbach, Oberscheld (Dillkreis), Germany. Proceeding and arrangement for making of foamy dry dross. 1,888,948; Nov. 22.
Voss, John H., Berwyn, assignor, by mesne assignments, to Associated Electric Laboratories, Inc., Chicago, Ill. Telephone system. 1,888,337; Nov. 22.
Waggaman, William H., Lakeland, and S. D. Gooch, Lake Wales, Fla., assignors to Coronet Phosphate Company, New York, N. Y. Production of phosphorus and phosphoric acid. 1,888,896; Nov. 22.
Wagner, Max, Stuttgart, assignor to Daimler-Benz Aktiengesellschaft, Stuttgart-Unterturkheim, Germany. Underframe for automobile vehicles. 1,888,897; Nov. 22.
Wahl, John, Rosedale, and O. Meiser, Hollis, assignors to A. Schrader's Son, Inc., New York, N. Y. Pressure gauge. 1,883,365; Nov. 22.
Wald Manufacturing Company. (See Pawsat, Ewald F., assignor.)
Walker Vehicle Company. (See Stephenson, L. J., and Framhein, assignors.)
Wallace & Tiernan Company. (See Peet, Gerald D., assignor.)
Wallace, John F., Shaker Heights, assignor to The Cleveland Pneumatic Tool Company, Cleveland, Ohio. Shock absorbing strut for aeroplanes. 1,888,578; Nov. 22.
Wallenbeck, William G., Chicago, Ill. Holder for safety razor blades. 1,888,579; Nov. 22.
Waller, Ovando W., Los Angeles, Calif. Tie holder. 1,888,301; Nov. 22.
Walworth Patents Inc. (See Bard, Francis N., assignor.)
Wangen, Elmer M., Duluth, Minn. Line reading device. 1,888,750; Nov. 22.
Wanner, George D., Dayton, Ohio. Miniature airplane. 1,888,840; Nov. 22.
Ward, Lawrence T., assignor to Kane Manufacturing Company, Kane, Pa. Skylight blind. 1,888,522; Nov. 22.
Warner Gear Company. (See Davis, Ernest F., assignor.)
Warren, James W. (See Gladeck, F. C., and Warren.)
Watertite Casement Hardware Co. (See Cummings, Earle W., assignor.)
Waugh, Thomas, jr., West Hartford, assignor to Hartford-Empire Company, Hartford, Conn. Oscillating glassware transfer. 1,888,440; Nov. 22.
Wayne Company. (See Jauch, R. J., Farnham, and Arnold, assignors.)
Weatherhead, Albert J., jr., Cleveland, Ohio. Coupling. 1,888,338; Nov. 22.
Weaver, Charles F., R. W. Hyman, and G. H. Wheatley, Ashland, Ky. Roll truing apparatus. 1,888,302; Nov. 22.
Weidemann, George H., assignor to The Dow Chemical Company, Midland, Mich. Mold part. 1,888,441; Nov. 22.
Weingaud, Richard, Bomlitz, near Walsrode, Germany. Uniting lacquered cellulose foils. 1,888,402; Nov. 22.
Weitz, Irene A., Brooklyn, N. Y. Textile fabric or the like. Des. 88,390; Nov. 22.
Wemlinger, Julius E., New York, N. Y. Corrugated sheet piling. 1,888,751; Nov. 22.
Wemlinger, Julius E., New York, N. Y. Sheet piling. 1,888,752; Nov. 22.
Wentworth, Robert S., assignor to National Radiator Corporation, Johnstown, Pa. Heating convector. 1,888,545; Nov. 22.

Wennel, Edwin H., and M. P. Janisch, Milwaukee, Wis.; said Janisch assignor to said Wennel. Heat insulation. 1,888,841; Nov. 22.
Wester, Daniel V., Stockholm, Sweden. Device for applying sealing wax. 1,888,408; Nov. 22.
Western Electric Company. (See Larsen, Leonard O., assignor.)
Western Electric Company. (See Latimer, Kenneth E., assignor.)
Western Electric Company. (See Purdy, C. A., and Stockfleth, assignors.)
Westinghouse Electric Elevator Company. (See Bouton, Edgar M., assignor.)
Westinghouse Electric & Manufacturing Company. (See Fleming, Theodore B., assignor.)
Westinghouse Electric & Manufacturing Company. (See Friedländer, Erich, assignor.)
Westinghouse Electric & Manufacturing Company. (See Goldsborough, Thaddeus B., assignor.)
Westinghouse Electric & Manufacturing Company. (See Hanna, Clinton R., assignor.)
Westinghouse Electric & Manufacturing Company. (See Todd, Francis C., assignor.)
Weston, Burt H., Wood River, Ill. Refrigerating apparatus. 1,888,646; Nov. 22.
Wharam, John J., Detroit, assignor to Ford Motor Company, Dearborn, Mich. Brake. 1,888,708; Nov. 22.
Wheatley, George H. (See Weaver, C. F., Hyman, and Wheatley.)
Whisnand, Charley E. and L. Kuboske, Wenatchee, assignors to Cataract Fruit Equipment Company, Yakima, Wash. Fruit sizing machine. 1,888,709; Nov. 22.
White, Ellis E., Hollywood, assignor to Pneumatic Tire Inflating Devices Corporation, Los Angeles, Calif. Coupling for tire inflating machines. 1,888,590; Nov. 22.
White, Harry B., Canton, assignor to The Hoover Company, North Canton, Ohio. Suction cleaner. 1,888,339; Nov. 22.
White, John W. (See Alexander, H. S., Pfeiffer, and White.)
White, Morris, New York, N. Y., assignor to Morris White Mfg. Co. Inc. Hand bag. Des. 88,393; Nov. 22.
White, Morris, Mfg. Co. Inc. (See White, Morris, assignor.)
White, William N., Spokane, Wash. Cigarette holder. 1,888,340; Nov. 22.
Whiting & Davis Company. (See Lynds, Fred H., assignor.)
Wickel, Friedrich K., Dresden, Germany. Quill-like structure in the form of a rigid, waterproof, and if desired, transparent tube. 1,888,898; Nov. 22.
Wieland, Howard A., San Francisco, Calif. Ash receiver. 1,888,251; Nov. 22.
Wiley, William R., Detroit, Mich., assignor to the Bassick Company, Bridgeport, Conn. Hood catch. 1,888,252; Nov. 22.
Willens, George, Chicago, Ill. Advertising clock. 1,888,366; Nov. 22.
Willhelm, William, New York, N. Y. Textile fabric or similar article. Des. 88,370; Nov. 22.
Willhelm, William, New York, N. Y. Textile fabric or similar article. Des. 88,391; Nov. 22.
Willhelm, William, New York, N. Y. Textile fabric or similar article. Des. 88,392; Nov. 22.
Willhelm, William, Co. (See Murray, Herman S., assignor.)
Willheim, William, Co. (See Schaetzel, François J., assignor.)
Williams, John W., U. S. Army, Tampa, Fla. Gauge. 1,888,416; Nov. 22.
Williams, Marion R. (See Omer, H. F., and Williams.)
Williamson, Edward B., Petersburg, Va. Structural joint. 1,888,523; Nov. 22.
Wilson, Allen B. (See MacChesney, C. M., and Wilson.)
Winckler, Gunnar A. F., Worcester, Mass., assignor to General Electric Company. Composite silica article. 1,888,341; Nov. 22.
Winning, Robert K., Wauwatosa, Wis., assignor, by mesne assignments, to The Dudley Lock Corporation, Chicago, Ill. Permutation lock. 1,888,647; Nov. 22.
Winslow, Charles A., Oakland, Calif. Air cleaner and the like. 1,888,813; Nov. 22.
Wired Radio, Inc. (See Hund, August, assignor.)
Witthoft, Charles H., St. Louis, Mo. Roller bearing. 1,888,483; Nov. 22.
Wolf, Harry E., assignor to Fort Pitt Bedding Company, Pittsburgh, Pa. Cushion seat and the like. 1,888,781; Nov. 22.
Wolf, Peter, Essen, assignor to Fried. Krupp Aktiengesellschaft, Essen-on-the-Ruhr, Germany. Metal drum. 1,888,899; Nov. 22.
Wolfsohn, Kurt, Schoeneberg, near Berlin, assignor to Rotophot Aktiengesellschaft fuer Graphische Industrie, Berlin, Germany. Producing intaglio printing forms. 1,888,303; Nov. 22.
Wolfson, Samuel J., Everett, assignor, by direct and mesne assignments, to Concrete-Wood Floor Clip Company, Inc., Charlestown, Mass. Flooring and the like. 1,888,611; Nov. 22.
Wolverine Brass Works. (See Herst, Ward F., assignor.)
Wood Newspaper Machinery Corporation, The. (See Munson, Arthur J., assignor.)
Woodings, Emanuel, Oakmont, assignor to Woodings Verona Tool Works, Verona, Pa. Electrical connection for rail joints. 1,888,648; Nov. 22.
Woodings-Verona Tool Works. (See Woodings, Emanuel, assignor.)
Wortham, Coleman, et al. (See Seawell, Joseph M., assignor.)
Wright, Robert L., Tulsa, Okla. By-pass connection for meters. 1,888,524; Nov. 22.
Wulischleger & Co. (See Martinoff, Nadine, assignor.)
Yahnke, Otto P., East Dearborn, Mich. Burner tip for igniting devices. 1,888,404; Nov. 22.
Yale & Towne Manufacturing Company, The. (See Braunling, Karl A., assignor.)
Young, L. A., Spring & Wire Corporation. (See Oldham, John M., assignor.)
Zapf, Georg, Cologne, assignor to Felten & Guilleaume Carlswerk Actiengesellschaft, Cologne-Mulheim, Germany. Anchoring the cable ends of suspension bridges. 1,888,753; Nov. 22.
Zimmermann, William F., Maplewood, assignor to Gould & Eberhardt, Newark, N. J. Worm making process. 1,888,782; Nov. 22.
Zorn, Carl, Munich, Germany. Automatically filled fountain pen. 1,888,367; Nov. 22.

LIST OF INVENTIONS

FOR WHICH

PATENTS WERE ISSUED ON THE 22D DAY OF NOVEMBER, 1932

NOTE.—Arranged in accordance with the first significant character or word of the name (in accordance with city and telephone directory practice). Includes patents, reissues, and designs.

Acid, Preparing boric. A. Newman. 1,888,391; Nov. 22.
Adjustable arm chair. E. Robbins. 1,888,471; Nov. 22.
Advertising and signaling device. H. K. Harris. 1,888,599; Nov. 22.
Advertising apparatus, Multiform prism. G. W. Eschenbach. 1,888,377; Nov. 22.
Agricultural reaping machine. A. S. Moir. 1,888,210; Nov. 22.
Air cleaner and the like. C. A. Winslow. 1,888,813; Nov. 22.
Air conditioning apparatus. S. M. Anderson. 1,888,844; Nov. 22.
Aircraft. G. Clark. 1,888,452; Nov. 22.
Airplane. W. R. Apperman. 1,888,871; Nov. 22.
Airplane, Amphibian. T. Towle. 1,888,335; Nov. 22.
Airplane construction. G. M. Bellanca. 1,888,902; Nov. 22.
Airplane course corrector. H. D. Allen. 1,888,206; Nov. 22.
Airplane, Miniature. G. D. Wanner. 1,888,840; Nov. 22.
Alarm: *See*—
  Burglar alarm.
Alcohol from wood or other cellulose containing materials, Producing ethyl. A. Plaček. 1,888,935; Nov. 22.
Amonium sulphate or salts containing it, Manufacturing. S. Hori. 1,888,633; Nov. 22.
Anæsthetic solution, Spinal. G. P. Pitkin and C. W. Hooper. 1,888,934; Nov. 22.
Antifriction device. C. H. M. Bull. 1,888,216; Nov. 22.
Antioxidant. J. Teppema. 1,888,705; Nov. 22.
Apron, Self-fitting. H. Kass. 1,888,629; Nov. 22.
Articles of manufacture, Making. J. C. Cromwell. 1,888,374; Nov. 22.
Ash receiver. H. A. Wieland. 1,888,251; Nov. 22.
Ash receiver and cigar lighter, Combined. J. H. Cohen. Des. 88,340; Nov. 22.
Atomizing cleaner, Bunch concentrating. P. Peterson. 1,888,805; Nov. 22.
Automatic check-hook. H. Spangenberg. 1,888,869; Nov. 22.
Automobile. J. P. Holt. 1,888,553; Nov. 22.
Axle housings, Making. F. H. Ragan. 1,888,835; Nov. 22.
Azo-dyestuffs containing chromium and making same. F. Straub W. Anderau, and H. Mayer. 1,888,516; Nov. 22.
Back-rest for beds. O. H. Kieseler. 1,888,509; Nov. 22.
Bag, Hand. S. Maksik. Des. 88,880; Nov. 22.
Bag making machine. H. G. Henares. 1,888,949; Nov. 22.
Bait, Artificial fish. H. C. Toepper. 1,888,641; Nov. 22.
Bail rack. J. H. Stahl. 1,888,247; Nov. 22.
Bearing, Anti-friction. G. R. Bott. 1,888,215; Nov. 22.
Bearing, Roller. C. H. Witthoff. 1,888,483; Nov. 22.
Bearing, Self-aligning ball. T. L. Robinson. 1,888,361; Nov. 22.
Bedpan. A. Comper. 1,888,423; Nov. 22.
Belt, Life. A. Moore. 1,888,283; Nov. 22.
Bench: *See*—
  Vanity bench.
Bias cutting and fabric stripping machine. F. J. Shook. 1,888,744; Nov. 22.
Bias cutting machine. H. S. Alexander, F. B. Pfeiffer, and J. W. White. 1,888,754; Nov. 22.
Binder, Loose leaf. M. L. Larsen. 1,888,461; Nov. 22.
Bit boring machine, Multiple. C. P. Park. 1,888,566; Nov. 22.
Bituminous emulsion and producing. P. R. Smith. 1,888,295; Nov. 22.
Blade disks for radial admission turbines, Manufacture of. W. Kastert. 1,888,508; Nov. 22.
Blast furnace test rod. E. M. Neely. 1,888,605; Nov. 22.
Blind, Skylight. L. T. Ward. 1,888,522; Nov. 22.
Block sawing machine. R. F. Knight. 1,888,272; Nov. 22.
Blower, Boiler tube. O. K. Bogstrand. 1,888,214; Nov. 22.
Boiler cleaner. J. H. Stockholder. 1,888,515; Nov. 22.
Boiler control, Bifluid. H. H. Dow. 1,888,311; Nov. 22.
Bolster, Equalizing. T. H. Symington. 1,888,940; Nov. 22.
Book feeding device. H. Sieb. 1,888,775; Nov. 22.
Bottle. W. B. Marble. Des. 88,360; Nov. 22.
Bottle capper. E. and R. A. Manning. 1,888,279; Nov. 22.
Bottle rack. W. H. Matthai. 1,888,324; Nov. 22.
Bottles, Pushing glass. E. Roirant. 1,888,393; Nov. 22.
Box: *See*—
  Outlet box.
Braid, Elastic lace. O. E. Huber. Des. 88,352; Nov. 22.
Braid, Elastic lace. C. D. Maurer. Des. 88,362; Nov. 22.
Braiding machine. E. K. Standish. 1,888,477; Nov. 22.
Brake. H. B. Pearson. 1,888,691; Nov. 22.
Brake. J. J. Wharam. 1,888,708; Nov. 22.

Brake tester for motor vehicles. F. H. Stroud. 1,888,689; Nov. 22.
Brake testing mechanism. J. Harrison and G. W. Matheny. 1,888,858; Nov. 22.
Braking apparatus, Railway. H. L. Bone and J. W. Livingston. 1,888,548; Nov. 22.
Braking mechanism. F. Turnicky. 1,888,643; Nov. 22.
Brick molding. D. J. Strickland. 1,888,398; Nov. 22.
Brick, Process of and apparatus for forming face. S. C. Duty. 1,888,376; Nov. 22.
Bristles of brushes, Device for pointing. R. Isawa. 1,888,675; Nov. 22.
Brush handle. H. P. McMillan. 1,888,930; Nov. 22.
Brush making machine. W. D. Lipps. 1,888,353; Nov. 22.
Brush, Toilet. E. Johnson. Des. 88,356; Nov. 22.
Bunch former, Rerolling. S. Clausen. 1,888,789; Nov. 22.
Burglar alarm. B. Boyle. 1,888,371; Nov. 22.
Burner: *See*—
  Oil burner.
  Rotary oil burner.
Burner tip for igniting devices. O. P. Yahnke. 1,888,404; Nov. 22.
Burners, High and low flame control for gas. G. E. Burns. 1,888,449; Nov. 22.
Bushings on supporting pins, Assembling yieldable. W. A. Tryon. 1,888,642; Nov. 22.
Cable ends of suspension bridges. Anchoring the. G. Zapf. 1,888,753; Nov. 22.
Cable, Loaded Submarine. K. Goes and E. Badum. 1,888,264; Nov. 22.
Cable terminal holder and receptacle for house wiring systems. G. Carlson. 1,888,846; Nov. 22.
Can and closure therefor, Metal. A. G. Hopkins. 1,888,319; Nov. 22.
Can, Making a. H. Sebell. 1,888,413; Nov. 22.
Can seamer, Hand. J. H. Burpee. 1,888,583; Nov. 22.
Canopy. A. B. Crosthwait. 1,888,909; Nov. 22.
Cap, Conduit. W. H. Vibber. 1,888,645; Nov. 22.
Car construction, Hopper. W. P. Murphy. 1,888,327; Nov. 22.
Carburetor. H. M. Friendly. 1,888,796; Nov. 22.
Carburetor. I. Steinhardt. 1,888,248; Nov. 22.
Carburetor for internal combustion engines. C. Davidson. 1,888,658; Nov. 22.
Card, Display. A. Payberg. 1,888,406; Nov. 22.
Card display stand. T. O'Rourke. 1,888,565; Nov. 22.
Carpet. A. E. Smidlein. Des. 88,367; Nov. 22.
Carton. A. O. Daller. 1,888,818; Nov. 22.
Case: *See*—
  Key case.
Case and holder for musical instruments, Combined carrying. A. S. Lang. 1,888,927; Nov. 22.
Case for cinematograph, Two-part. L. Schabet. 1,888,574; Nov. 22.
Caster. W. F. Herold. 1,888,801; Nov. 22.
Catch, Hood. W. R. Wiley. 1,888,252; Nov. 22.
Catheter. C. M. Jacoby. 1,888,349; Nov. 22.
Cathodes of space discharge devices, Heating. W. van B. Roberts. 1,888,360; Nov. 22.
Cellar, Grease. A. L. Moler. 1,888,512; Nov. 22.
Cellulose foils, Uniting lacquered. R. Weingaud. 1,888,402; Nov. 22.
Cellulosic material and its manufacture. C. Holzwarth. 1,888,952; Nov. 22.
Cellulosic material, Treating. C. D. Ainsworth. 1,888,419; Nov. 22.
Chain, Tire. J. R. Reyburn. 1,888,568; Nov. 22.
Chair: *See*—
  Adjustable arm chair.
Chaser tap, Movable. A. F. Breitenstein. 1,888,816; Nov. 22.
Chimney hood. P. Rhinow. 1,888,290; Nov. 22.
Chute attachment for coal cleaning tables, Antigravity middling. A. G. Oppy. 1,888,933; Nov. 22.
Chute, Discharge. J. Torok and E. L. Bergstresser. 1,888,518; Nov. 22.
Cigar wrapper cutting mechanism. S. Clausen. 1,888,788; Nov. 22.
Cigarettes, Arranging oval. B. A. E. Johnson and G. Örström. 1,888,386; Nov. 22.
Cigarettes from a container, Apparatus for distributing. J. Neff. 1,888,831; Nov. 22.
Cinematographic apparatus. A. Loehr, jr., and E. S. Schwab. 1,888,276; Nov. 22.
Circle waving comb. E. Jennison. 1,888,923; Nov. 22.
Circuit arrangement for smoothing rectified alternating voltages. G. Holst and E. Oosterbuis. 1,888,628; Nov. 22.
Circuit closing device. H. Sengebusch. 1,888,700; Nov. 22.

Circuit, Electrical coupling. W. A. MacDonald. 1,888,278; Nov. 22.
Circuit for therapeutic purposes, High frequency oscillatory. P. C. Rawls. 1,888,408; Nov. 22.
Circuit interrupter. F. C. Todd. 1,888,707; Nov. 22.
Circular shears. F. Stein. 1,888,870; Nov. 22.
Clamp. H. Krebs. 1,888,209; Nov. 22.
Clamp or holder for egg case tops. O. L. Cupp and J. C. Atterbury. 1,888,622; Nov. 22.
Clay and producing same, Refined. G. Simcoe. 1,888,701; Nov. 22.
Cleaner: *See*—
  Atomizing cleaner.
  Gas cleaner.
  Boiler cleaner.
  Suction cleaner.
Cleaning attachment for duck foot cultivators. W. F. Hoge. 1,888,764; Nov. 22.
Cleansing apparatus. G. J. Scofield. 1,888,575; Nov. 22.
Clock, Advertising. G. Willens. 1,888,366; Nov. 22.
Closure means for cylinders and the like. E. E. Greve. 1,888,459; Nov. 22.
Clothes rack. M. M. Meadows. 1,888,538; Nov. 22.
Clothesline protecting device. R. Sonntag. 1,888,745; Nov. 22.
Coatings and making the same, Saline. F. de Pape. 1,888,453; Nov. 22.
Coil structure. G. Rigante. 1,888,541; Nov. 22.
Coin vending mechanism. W. H. Russell. 1,888,473; Nov. 22.
Coke oven plants, Operation of by-product. S. P. Miller. 1,888,465; Nov. 22.
Comb: *See*—
  Circle waving comb.
  Fountain comb.
Combination table. J. Steidl. 1,888,478; Nov. 22.
Composition for cleaning. O. Textor and B. O. Crites. 1,888,884; Nov. 22.
Compressor. A. J. Kercher. 1,888,860; Nov. 22.
Connecter puller for storage batteries. E. F. H. Grothe. 1,888,800; Nov. 22.
Connection for meters, By-pass. R. L. Wright. 1,888,524; Nov. 22.
Connection for rail joints, Electrical. E. Woodings. 1,888,648; Nov. 22.
Connection for web bottom seats. S. S. Bernstein. 1,888,582; Nov. 22.
Connection or elbow, Box. E. G. K. Anderson. 1,888,546; Nov. 22.
Container and its manufacture. C. A. Purdy and S. J. Stockfleth. 1,888,288; Nov. 22.
Container, Battery. W. J. Sandman. 1,888,890; Nov. 22.
Container for fly hooks and plain hooks. P. B. Bekeart. 1,888,304; Nov. 22.
Control device for elevators, Floor. S. Cometh. 1,888,907; Nov. 22.
Control head. W. L. Church. 1,888,550; Nov. 22.
Control means. P. S. Russel. 1,888,866; Nov. 22.
Control system. T. R. Goldsborough. 1,888,721; Nov. 22.
Control system for blast furnace charging equipment. P. B. Harwood. 1,888,501; Nov. 22.
Control system for electrical vehicles and the like. L. J. Stephenson and H. J. Framhein. 1,888,297; Nov. 22.
Controlling apparatus for oil burners. J. N. Macrae and C. P. Packard. 1,888,602; Nov. 22.
Controlling mechanism for locomotive boosters. H. J. Titus. 1,888,778; Nov. 22.
Controlling the flow of refrigerant in a refrigerating apparatus, Device for. E. H. Threadgill. 1,888,517; Nov. 22.
Converter operating device, Automatic. B. S. Hind and W. F. Bell. 1,888,317; Nov. 22.
Conveyer. A. N. Cramer. 1,888,309; Nov. 22.
Conveyer for preliminary drying of short macaroni. J. S. Coffaro. 1,888,908; Nov. 22.
Cooker. C. F. Cookson. 1,888,490; Nov. 22.
Cop winding machine. W. Schweiter. 1,888,895; Nov. 22.
Corn husking machine. W. W. and S. E. Morral. 1,888,406; Nov. 22.
Cotton distributor, Mechanical. O. Mitchell. 1,888,237; Nov. 22.
Cotton picker. E. A. Johnston. 1,888,505–6; Nov. 22.
Counter protective device and door or gate latch, Bank. J. W. Minton. 1,888,880; Nov. 22.
Counter, Store. L. Schumm, 3d. 1,888,742; Nov. 22.
Coupling: *See*—
  Hose coupling.
  Pipe coupling.
Coupling. J. K. Babcock. 1,888,966; Nov. 22.
Coupling. A. J. Weatherhead, jr. 1,888,888; Nov. 22.
Coupling for plain end pipes, Pipe. J. Clark. 1,888,260; Nov. 22.
Coupling for tire inflating machines. E. E. White. 1,888,580; Nov. 22.
Couplings for electric discharge devices, Combined fluid and electrical. H. J. Nolte. 1,888,833; Nov. 22.
Cover and radio aerial, Spare-tire. F. W. Stein. 1,888,777; Nov. 22.
Cover, Automotive tire. G. A. Lyon. Des. 88,359; Nov. 22.
Cover, Butter tub. C. M. MacChesney and A. B. Wilson. 1,888,354; Nov. 22.
Crank mechanism for reciprocating engine. D. O. Brant. 1,888,448; Nov. 22.
Crosstalk in cable systems, Reducing. K. E. Latimer. 1,888,558; Nov. 22.
Cup: *See*—
  Grease cup.
  Teat cup.
Curtain display rack. M. Brownstein. 1,888,756; Nov. 22.
Cushion and insulating strip for refrigerator doors, Rubber. F. C. Palenske. 1,888,858; Nov. 22.
Cut-off, Oblique. R. E. Rundell. 1,888,774; Nov. 22.
Cutting assembly for hair clippers, Unitary. J. Oster. 1,888,688; Nov. 22.
Dandelion and buckhorn headers. C. K. Salisbury. 1,888,638; Nov. 22.
Darning mechanism. A. E. Gibbes. 1,888,917; Nov. 22.
Density measuring apparatus. W. H. Stephens and J. H. Gribbin, jr. 1,888,577; Nov. 22.
Desk, School. T. P. Geiger. 1,888,263; Nov. 22.
Diaphragm for loud speakers. D. C. A. Hülstrom. 1,888,532; Nov. 22.
Die mechanism for forming tubular bodies. D. A. Schutt. 1,888,837; Nov. 22.
Digger: *See*—
  Posthole digger.
  Potato digger.
Digesting process and apparatus. T. L. Dunbar and A. D. Merrill. 1,888,632; Nov. 22.
Disk barring-off attachment for cultivators. A. V. Burch. 1,888,618; Nov. 22.
Display device. T. O'Rourke. 1,888,564; Nov. 22.
Display device. C. Smith. 1,888,839; Nov. 22.
Doorcheck. J. A. H. Siera. 1,888,543; Nov. 22.
Door frame and door for sheet metal structure. F. W. Mecklenborg. 1,888,561; Nov. 22.
Door, Garage. W. D. Ferris. 1,888,456; Nov. 22.
Door, Grain car. A. B. H. Baker. 1,888,213; Nov. 22.
Door operating and locking mechanism. F. G. Butler. 1,888,217; Nov. 22.
Doughnut cooking device. A. B. Lewis. 1,888,928; Nov. 22.
Dovetail for doors, Antirattle. G. W. Kerr. 1,888,826; Nov. 22.
Dovetail for doors, Antirattle. R. G. Moore. 1,888,830; Nov. 22.
Dovetail for doors, Self-adjusting anti-rattle. R. G. Moore. 1,888,829; Nov. 22.
Drawing press. A. A. Byerlein. 1,888,450; Nov. 22.
Drier: *See*—
  Film drier.
Drier. R. Sadwith. 1,888,573; Nov. 22.
Drilling machine. A. Hossfeld. 1,888,668; Nov. 22.
Drive for grinding machines and the like, Universal. A. Storm and T. Thorsen. 1,888,480; Nov. 22.
Driving mechanism for valves and other devices. C. W. Kuhn. 1,888,274; Nov. 22.
Dross, Proceeding and arrangement for making of foamy dry. L. von Reiche and J. Giersbach. 1,888,943; Nov. 22.
Drum, Metal. P. Wolf. 1,888,899; Nov. 22.
Drum roller mounting for concrete mixers. J. C. Merwin. 1,888,958; Nov. 22.
Drum winder. K. Sieg. 1,888,810; Nov. 22.
Dyestuff isomers, New vat. W. Eckert and O. Braunsdorf. 1,888,625; Nov. 22.
Dyestuff isomers of the 1.4.5.8. naphthoylene dibenzimidazol series and the product, Preparation of vat. W. Eckert, H. Greune, and W. Eichhols. 1,888,624; Nov. 22.
Dyestuff isomers, Separation of new vat. W. Eckert and O. Braunsdorf. 1,888,626; Nov. 22.
Dyestuffs and their production, Black trisazo. A. Conzetti. 1,888,757; Nov. 22.
Dyestuffs, Manufacture of mordant azo. E. Bodmer and F. Neitzel. 1,888,908; Nov. 22.
Dyestuffs of the azine series and the products, Production of nitrogenous vat. M. A. Kuns and K. Koeberle. 1,888,631; Nov. 22.
Eggs, Preservation of. T. L. Swenson. 1,888,415; Nov. 22.
Elastic suspension. F. Traverso. 1,888,519; Nov. 22.
Electric heater. F. G. Gasch. 1,888,497; Nov. 22.
Electric heater. R. von Brockdorff. 1,888,780; Nov. 22.
Electric switch. E. A. France and H. G. Knorderer. 1,888,853; Nov. 22.
Electric switch. M. J. Lewis. 1,888,559; Nov. 22.
Electrical apparatus and manufacturing it. L. O. Larsen. 1,888,275; Nov. 22.
Electrical cord take-up device. I. L. Bettinger. 1,888,258; Nov. 22.
Electrical distribution, System of. A. Hund. 1,888,555; Nov. 22.
Electrical element and producing the same. W. C. Geer. 1,888,762; Nov. 22.
Electrodes for use in arc welding. J. H. Paterson. 1,888,286; Nov. 22.
Electrolytic cell. J. E. Jewett. 1,888,677; Nov. 22.
Electromagnetic device. P. N. Martin. 1,888,731; Nov. 22.
Elevators, Service indicating system for. F. A. Boedtcher. 1,888,486; Nov. 22.
Emulsion. E. L. Mack and C. W. Bennett. 1,888,601; Nov. 22.
Engine: *See*—
  Reactive combustion engine.
Engine, Attachment for an internal combustion. C. J. Costello. 1,888,758; Nov. 22.
Envelope, Advertising. L. C. Florenza. 1,888,313; Nov. 22.

Evaporator. H. R. Van Deventer and J. A. Grier. 1,888,336; Nov. 22.
Extractor: *See*—
Fruit juice extractor. Juice extractor.
Eyebrows and eyelashes, Dyeing. L. Norris. 1,888,883; Nov. 22.
Fabric: *See*—
Warp pile fabric.
Fabrics, Apparatus for tufting. W. D. Van Dyke. 1,888,941; Nov. 22.
Fabrics, Manufacture of mosaic. E. C. Dearden. 1,888,492; Nov. 22.
Fastener, Door. E. J. Dowling. 1,888,425; Nov. 22.
Fastening. E. E. Long and W. C. Goetze. 1,888,875; Nov. 22.
Fastening device. R. L. Griffin. 1,888,591; Nov. 22.
Fastening device for bags. H. Leberman. 1,888,230; Nov. 22.
Faucet. M. Esnard. 1,888,378; Nov. 22.
Fertilizer, Manufacturing. H. L. Hartenstein. 1,888,891–2; Nov. 22.
Fertiliser-sowing machine. G. V. Fearn. 1,888,821; Nov. 22.
Film drier. G. W. Hopkins. 1,888,596; Nov. 22.
Film drier, Photographic. A. W. Buck. 1,888 947; Nov. 22.
Film feed mechanism, Automatic. W. A. Kosken. 1,888,680; Nov. 22.
Film reel. A. S. Howell. 1,888,725; Nov. 22.
Films for producing sound effects, Marking. D. Fleischer. 1,888,914; Nov. 22.
Finishes, Method of and apparatus for applying wall. E. J. Miller. 1,888,284; Nov. 22.
Firebed agitating mechanism. W. B. Chapman. 1,888,586; Nov. 22.
Fire escape. C. D. De Graffenreid. 1,888,911; Nov. 22.
Fire extinguisher. V. G. W. Gilbert. 1,888,316; Nov. 22.
Fire extinguisher. C. K. Huthsing. 1,888,674; Nov. 22.
Fish lure. G. M. Coffin. 1,888,221; Nov. 22.
Flag, Dairy. M. W. Allen. 1,888,368; Nov. 22.
Flooring and laying the same, Metallic. L. Saives. 1,888,937; Nov. 22.
Flooring and the like. S. J. Wolfson. 1,888,611; Nov. 22.
Flow control apparatus for wells. J. P. Collins. 1,888,621; Nov. 22.
Fluid flow indicator. L. B. Richmond. 1,888,737; Nov. 22.
Flying machine. H. L. Adams. 1,888,418; Nov. 22.
Folding table. W. H. Berssenbrugge. 1,888,651; Nov. 22.
Food substances, Apparatus for sterilising. H. W. Rohde. 1,888,472; Nov. 22.
Forming machine. J. Moore. 1,888,808; Nov. 22.
Fountain. F. C. Bauer. 1,888,784; Nov. 22.
Fountain comb. L. S. Rice. 1,888,570; Nov. 22.
Fountain construction for printing presses. A. J. Munson. 1,888,240; Nov. 22.
Frame: *See*—
Side frame.
Freesia. G. H. Dalrymple. Pl. Pt. 44; Nov. 22.
Friction, Grip for drilling machines. A. Hossfeld. 1,888,669; Nov. 22.
Friction, Transmitting element. E. V. J. Tower. 1,888,779; Nov. 22.
Frosting process. M. L. Mesa. 1,888,969; Nov. 22.
Fruit juice extractor. N. M. Faulds. 1,888,529; Nov. 22.
Fruit press. B. L. McKinstry. 1,888,281; Nov. 22.
Fruit sizing machine. C. E Whisnand and L. Kuboske. 1,888,709; Nov. 22.
Fuel, Apparatus for burning liquid. H. F. Clayton. 1,888,373; Nov. 22.
Fuel briquette. P. F. Herrly. Des. 88,351; Nov. 22.
Fuel feeding system, Liquid. A. E. Berdon. 1,888,615; Nov. 22.
Fuel oil, Method and apparatus for nebulising and burning. W. E. Shore. 1,888,939; Nov. 22.
Furnace: *See*—
Hardening, quenching and drawing furnace. Tank furnace.
Furnace construction. W. B. Chapman. 1,888,585; Nov. 22.
Furnace construction, Recuperative. J. R. George. 1,888,720; Nov. 22.
Furnace, Operating a cupola. V. S. Durbin. 1,888,759; Nov. 22.
Furnaces, Automatic feeder for coal burning. F. A. Stolte. 1,888,439; Nov. 22.
Furniture. M. H. Gambee. 1,888,668; Nov. 22.
Furniture, Metallic. F. C. Ferguson. 1,888,208; Nov. 22.
Furring and spacing device. J. McSkimming. 1,888,878; Nov. 22.
Fuse block and fuse therefor. E. A. France and H. G. Knoderer. 1,888,854; Nov. 22.
Game. R. I. Mayorga. 1,888,537; Nov. 22.
Garment pressing machine. H. C. A. Meyer. 1,888,879; Nov. 22.
Garment, Protective outer. A. S. Jennings. 1,888,676; Nov. 22.
Gas analyzer. W. Kemp. 1,888,229; Nov. 22.
Gas cleaner. J. L. Mauthe. 1,888,603; Nov. 22.
Gases, Method of and apparatus for cleaning. A. F. Nesbit. 1,888,606; Nov. 22.
Gate. N. J. Constable. 1,888,967; Nov. 22.
Gate and door sequence. E. M. Bouton. 1,888,712; Nov. 22.
Gate for nailing machines, Nail. H. B. Twomley. 1,888,520; Nov. 22.
Gauge: *See*—
Pressure gauge.
Gauge. J. B. Teesdale. 1,888,298; Nov. 22.
Gauge. J. W. Williams. 1,888,416; Nov. 22.
Gear, Differential. F. L. Boynton. 1,888,656; Nov. 22.
Gear, Starting. H. Ford. 1,888,717; Nov. 22.
Gearing, Drive axle. H. F. Omer and M. R. Williams. 1,888,884; Nov. 22.
Gears, Making splined. E. F. Davis. Re18,661; Nov. 22.
Glass, Apparatus for washing sheet. J. C. Gipe and J. P. Crowley. 1,888,498; Nov. 22.
Glass articles, Apparatus for feeding. J. F. Donovan and G. Illingworth. 1,888,851; Nov. 22.
Glass articles, Mechanism for forming hollow. V. E. Hofmann. 1,888,318; Nov. 22.
Glass feeding method and apparatus. K. E. Peiler. 1,888,968; Nov. 22.
Glass, Manufacture of corrugated wire. A. Shuman. 1,888,965; Nov. 22.
Glass setting, Plate. C. G. U. Kreuger and S. Lewerentz. 1,888,535; Nov. 22.
Glassware forming machine, Continuous two-table. A. J. Smith. 1,888,438; Nov. 22.
Glassware transfer, Oscillating. T. Waugh, jr. 1,888,440; Nov. 22.
Glass working machine. E. E. Slick. 1,888,396; Nov. 22.
Gluten, Treatment of corn. H. Berlin. 1,888,785; Nov. 22.
Golf ball embosser. H. W. Moore. Des. 88,366; Nov. 22.
Golf club shaft. R. Morgan. Re18,666; Nov. 22.
Golf score register. J. Freelander. 1,888,662; Nov. 22.
Goods, Apparatus for packeting. J. Neff. 1,888,832; Nov. 22.
Grate. J. W. Hegeler and H. E. Ercaubrack. 1,888,348; Nov. 22.
Grate, Furnace. J. J. Fleming. 1,888,661; Nov. 22.
Grates, Automatic feeding device for. J. J. Rathgeb. 1,888,697; Nov. 22.
Grease cup. D. D. Thomas. 1,888,481; Nov. 22.
Grinding machine. W. Arter and W. F. Fraser. 1,888,710; Nov. 22.
Grindstones, Dressing. W. N. Baker and R. A. Masten. 1,888,614; Nov. 22.
Guard wheel. F. J. and N. L. Jarvis. 1,888,726; Nov. 22.
Guide, Shuttle filling. J. Crawford. 1,888,817; Nov. 22.
Hair waving device. T. I. Moseley. 1,888,284; Nov. 22.
Hammer, Power. C. B. Coates. 1,888,790; Nov. 22.
Handbag. M. White. Des. 88,393; Nov. 22.
Handle: *See*—
Brush handle.
Handle for rock drills. E. F. Terry. 1,888,333; Nov. 22.
Handles, Making tool. B. Pepperdine. 1,888,885; Nov. 22.
Hanger. E. G. K. Anderson. 1,888,342; Nov. 22.
Hanger and advertising holder, Combination book. J. H. Thornton. 1,888,748; Nov. 22.
Hanger and hat stand, Combined coat. E. F. Hunt. 1,888,228; Nov. 22.
Hardening, quenching and drawing furnace, Continuous. R. E. Talley. 1,888,960; Nov. 22.
Harvester thresher. E. A. Johnston and M. J. Mitchell. 1,888,507; Nov. 22.
Hat steaming and blocking attachment. H. Diener. 1,888,375; Nov. 22.
Head for well casings and tubings. W. A. Rockwell and L. M. Stanfield. 1,888,637; Nov. 22.
Heat convector. R. S. Wentworth. 1,888,545; Nov. 22.
Heat insulation. E. H. Wenzel and M. P. Janisch. 1,888,841; Nov. 22.
Heater: *See*—
Electric heater. Solar heater.
Heater and baking oven, Combined fluid. G. Surprenant. 1,888,249; Nov. 22.
Heating apparatus and method. A. E. Nash and J. S. Alcorn. 1,888,804; Nov. 22.
Heating device. R. D. Madison. 1,888,730; Nov. 22.
Heating device. J. H. Vernet. 1,888,400; Nov. 22.
Heel for boots. B. Bridi. 1,888,617; Nov. 22.
Heel, Replaceable. B. Jassen and F. I. Nussbaum. 1,888,765; Nov. 22.
Heel-seat trimming machine. H. Gordon. 1,888,722; Nov. 22.
Hobbyhorse, Mechanical. J. O. Hahs. 1,888,763; Nov. 22.
Holder and marker, Combined book. A. Rueland. 1,888,773; Nov. 22.
Holder and the like, Globe. W. H. Rowe. 1,888,836; Nov. 22.
Holder, Book. R. W. Callaway and H. Anderson. 1,888,525; Nov. 22.
Holder, Cigarette. W. N. White. 1,888,340; Nov. 22.
Holder for razor sharpening machines, Blade. T. G. McGirr. 1,888,683; Nov. 22.
Holder for rolls of paper. J. F. Duby. 1,888,426; Nov. 22.
Holder for safety razor blades. W. G. Wallenbeck. 1,888,579; Nov. 22.
Holder, Hospital chart and identification card. C. Talley. 1,888,811; Nov. 22.
Holder, Tie. O. W. Waller. 1,888,801; Nov. 22.
Holder, Tool. F. Raffen. 1,888,289; Nov. 22.
Holder, Twine. E. F. Pawsat. 1,888,866; Nov. 22.
Hook: *See*—
Automatic check hook.
Hopper mechanism. Locomotive ash. S. J. Raets. 1,888,806; Nov. 22.

Hose coupling. J. C. Schellin. 1,888,741; Nov. 22.
Hosiery. E. W. Sachsenmaier. 1,888,880; Nov. 22.
House wiring structure. G. Carlson and H. G. Knoderer. 1,888,847; Nov. 22.
Humidifier. L. M. Persons. 1,888,494; Nov. 22.
Hutch, Rabbit. A. D. Stoner. Des. 88,368; Nov. 22.
Hydrant, Well. T. Ritchie. 1,888,850; Nov. 22.
Ice cream disher. L. I. Sanders. 1,888,739; Nov. 22.
Ice cutting machine. C. B. Shellman. 1,888,926; Nov. 22.
Ice making, Agitation means and method for. J. J. Catron. 1,888,526; Nov. 22.
Ignition device, Oil burner. M. A. Powers. 1,888,695; Nov. 22.
Ignition for fluid fuel burners, Electric. M. A. Powers. 1,888,694; Nov. 22.
Ignition, Liquid fuel burner. M. A. Powers. 1,888,692; Nov. 22.
Indicator: *See*—
Fluid flow indicator. Loose play indicator.
Ingots, Casting. L. N. McDonald. 1,888,604; Nov. 22.
Inkwell. C. E. Tannewitz. 1,888,963; Nov. 22.
Insect trap. C. H. Nixon. 1,888,563; Nov. 22.
Insecticide dusting rugs, upholstery, and clothing, Apparatus for. J. R. Mathes. 1,888,782; Nov. 22.
Insulating composition. S. T. Sherrick. 1,888,437; Nov. 22.
Insulating joint. J. Rah. 1,888,241; Nov. 22.
Insulations for third rails. W. H. Ford. 1,888,552; Nov. 22.
Interference, Reduction of. T. A. McCann. 1,888,280; Nov. 22.
Jack: *See*—
Lifting jack. Well pumping jack.
Jetty construction. C. R. Van Orman. 1,888,364; Nov. 22.
Joint: *See*—
Insulating joint. Structural joint.
Joint filling material, Producing expansion. J. S. Hipple. 1,888,270; Nov. 22.
Joint for iron pilings. M. Sachs. 1,888,936; Nov. 22.
Juice, Apparatus for extracting and collecting fruit. N. M. Faulds. 1,888,528; Nov. 22.
Juice extractor. H. Fromm. 1,888,915; Nov. 22.
Key case. S. Schmalsgruber. 1,888,292; Nov. 22.
Knife. R. E. Brown. 1,888,488–9; Nov. 22.
Knife, Pocket. B. W. Readman. 1,888,887; Nov. 22.
Knitting machine. M. Kuehne. 1,888,821; Nov. 22.
Lace. H. Bellin. 1,888,650; Nov. 22.
Lace. J. Dognin. Des. 88,341–2; Nov. 22.
Lace tipping machine. C. A. Matson. 1,888,429; Nov. 22.
Laminated article. E. C. Schacht. 1,888,410; Nov. 22.
Lamp, Recording glow. T. H. Nakken. 1,888,328; Nov. 22.
Land leveling device. C. H. Kroyer and R. A. Farish. 1,888,925; Nov. 22.
Latch. R. G. Moore. 1,888,238; Nov. 22.
Latch. R. G. Moore. 1,888,828; Nov. 22.
Latch, Hood. T. I. Duffy. 1,888,619; Nov. 22.
Lathe. C. B. Cottrell. 1,888,792; Nov. 22.
Lather generating device. J. Lach. 1,888,768; Nov. 22.
Life and property protector. W. G. Bunten. 1,888,905; Nov. 22.
Lifting jack. C. A. Foyer. 1,888,761; Nov. 22.
Lifting jack. S. A. Snell. 1,888,776; Nov. 22.
Lifting mechanism. D. P. Anderson. 1,888,612; Nov. 22.
Light material from blast furnace slag, Apparatus for obtaining a highly porous, cellular. C. H. Schol. 1,888,394; Nov. 22.
Lighting unit. A. L. McCabe. 1,888,733–4; Nov. 22.
Line reading device. E. M. Wangen. 1,888,750; Nov. 22.
Liner for baskets. C. J. Dudley. 1,888,495; Nov. 22.
Liquid dispensing apparatus. R. J. Jauch, I. R. Farnham, and R. H. Arnold. 1,888,533; Nov. 22.
Liquid dispensing system. M. Fernandez y Fernandez. 1,888,262; Nov. 22.
Liquid excluder for the bearings of centrifugal separators. C. Schmitz. 1,888,475; Nov. 22.
Liquid meter. R. S. Bassett. 1,888,369; Nov. 22.
Liquid supply mechanism. C. H. Ayars. 1,888,212; Nov. 22.
Liquids, Device for aerating. E. C. Hoppe. 1,888,503; Nov. 22.
Liquids or mixtures thereof with solids into high pressure apparatus, Introducing. H. A. Humphrey. 1,888,953; Nov. 22.
Loading machine. R. H. Schroder. 1,888,868; Nov. 22.
Loaf-slicing and wrapping attachment for bread slicing machines. F. C. Gladeck and J. W. Warren. 1,888,797; Nov. 22.
Lock: *See*—
Master keyed lock. Signaling box lock.
Permutation lock.
Lock. A. Eisele. 1,888,873; Nov. 22.
Lock R. W. Godden. 1,888,916; Nov. 22.
Lock. R. L. Holton. 1,888,333; Nov. 22.
Lock mechanism. H. F. Keil. 1,888,954–5; Nov. 22.
Locking and tripping device for a power lift implement. J. A. Vaughn. 1,888,482; Nov. 22.
Locking and tripping device for power lift implements. J. A. Vaughn. 1,888,521; Nov. 22.
Locking device, Safety. O. A. Carlson. 1,888,306; Nov. 22.
Locomotive, Articulated. C. F. Frede and K. S. Howard. 1,888,822; Nov. 22.
Locomotive for toy railways. J. B. Cuff. Des. 88,371; Nov. 22.
Locomotive structure. K. S. Howard. 1,888,824; Nov. 22.
Locomotive structure. C. W. Kell and W. O. Asha. 1,888,825; Nov. 22.
Loom. L. W. Connell. 1,888,906; Nov. 22.
Loose play indicator. W. R. Edson. 1,888,454; Nov. 22.
Loud-speaker. W. Muench. 1,888,769; Nov. 22.
Loud speaker unit. A. I. Abrahams. 1,888,442; Nov. 22.
Lowering apparatus. G. H. W. Doose. 1,888,912; Nov. 22.
Lubricating device for clutch throw-out bearings, Positive. R. Leffler. 1,888,281; Nov. 22.
Lubricating system for sewing machines. A. Grieb and N. Kraus. 1,888,709; Nov. 22.
Lubrication, Central. J. Bijur. 1,888,422; Nov. 22.
Machine and method for automatically fixing the hooks on the bands for zip fasteners. O. Amiet. 1,888,254; Nov. 22.
Machine for making brushes. W. D. Lipps. 1,888,351; Nov. 22.
Machine for making brushes. W. D. Lipps. 1,888,352; Nov. 22.
Machine for perforating transfer slips. H. B. Specht. 1,888,746; Nov. 22.
Machine for producing two-part boxes. J. Schmiedel. 1,888,808; Nov. 22.
Machine for shaping metal tubes. E. J. Rivers. 1,888,807; Nov. 22.
Magnesium and product obtained thereby, Treating. J. A. Gann and W. H. Gross. 1,888,457; Nov. 22.
Make-up applicator. A. M. Framke. 1,888,214; Nov. 22.
Manifolding device. W. A. Pringle. 1,888,407; Nov. 22.
Manifolding machine. C. W. Brean. 1,888,437; Nov. 22.
Marine toilet. P. Allan. 1,888,942; Nov. 22.
Marker for corn planters. J. V. Holstein. 1,888,502; Nov. 22.
Massage device. J. A. Masbek. 1,888,510; Nov. 22.
Master-keyed lock. K. A. Brauning. 1,888,946; Nov. 22
Match books, Mechanism for making. E. W. Smith. 1,888,244; Nov. 22.
Material and making same, Water and moisture proof coating. C. F. Mauer. 1,888,560; Nov. 22.
Material of high absorptivity, Manufacture of felted fibrous sheet. G. A. Richter and H. A. Chase. 1,888,771; Nov. 22.
Materials, Apparatus for shaping. E. E. Slick. 1,888,397; Nov. 22.
Materials, Separation of dry. I. L. Bramwell. 1,888,372; Nov. 22.
Mattress filler or cushion unit. J. M. Oldham. 1,888,357; Nov. 22.
Measurement of cross talk. J. Herman. 1,888,266; Nov. 22.
Measuring apparatus. A. D. Mosby. 1,888,289; Nov. 22.
Meat press. W. Bellinghausen and M. Vanderkloot. 1,888,446; Nov. 22.
Meats, Apparatus for treating. J. E. Rosberg. 1,888,542; Nov. 22.
Merchandising and display table. L. S. Anderson. 1,888,649; Nov. 22.
Mesh machine. F. H. Lynds. 1,888,277; Nov. 22.
Metallurgical process for the making of ferrous metals. J. G. Dudley and J. G. Kreer. 1,888,512; Nov. 22.
Metals at elevated temperatures, Determining the safe working stress of. W. Barr and W. E. Bardgett. 1,888,755; Nov. 22.
Metals, Case hardening. R. J. Cowan. 1,888,491; Nov 22.
Meter: *See*—
Liquid meter.
Milk server and preserver, Evaporated. C. G. Schilling. 1,888,411; Nov. 22.
Mirror. D. A. Eddy. Des. 88,345; Nov. 22.
Mirror, Counter. G. H. Dufour. Des. 88,344; Nov. 22.
Mold. R. W. Snyder. 1,888,702; Nov. 22.
Mold for casting metals and metal alloys. A. M. Brichsen. 1,888,913; Nov. 22.
Mold for insulating an armature. V. G. Apple. 1,888,211; Nov. 22.
Mold part. G. H. Weidemann. 1,888,441; Nov. 22.
Molding mechanism for plastic material, Automatic. W. A. Anderson. 1,888,255; Nov. 22.
Monoethers of resorcinol. E. Klarmann and L. W. Gatyas. 1,888,827; Nov. 22.
Monogram adapter. C. Smith. 1,888,838; Nov. 22.
Motor counter reactant device. F. J. Lapointe. 1,888,460; Nov. 22.
Mowing machine. C. F. Maskus. 1,888,823; Nov. 22.
Music, Device for turning. E. Mahr. 1,888,890; Nov. 22.
Nail machine. H. B. Trott. 1,888,610; Nov. 22.
Nitric oxide from gases, Removal of. F. A. Bent. 1,888,547; Nov. 22.
Nozzle tip and spreader for locomotives. J. I. Parel. 1,888,690; Nov. 22.
Nut locking device. T. V. Buckwalter. 1,888,657; Nov. 22.
Oil, Apparatus for the production of lubricating. H. T. Darlington. 1,888,246; Nov. 22.
Oil burner, Rotary. L. L. Scott. 1,888,476; Nov. 22.

Oils, Refining petroleum. F. W. Heath. 1 888,382; Nov. 22.
Outlet box. E. A. Bohlman and H. Brachtl. 1,888,343; Nov. 22.
Oven, Coke. G. Lamberts. 1,888,926; Nov. 22.
Package for incandescent lamps and similar articles. C. T. Fuller. 1,888,855; Nov. 22.
Paint grinding machine. D. A. McKinney and L. A. McLean. 1,888,735; Nov. 22.
Paints, varnishes and lacquers and making the same, Base for. E. C. Holton. 1,888,595; Nov. 22.
Pan attachment, Roasting. E. Bocchino. 1,888,616; Nov. 22.
Panel, Annunciator. J. O. Cadieux. 1,888,584; Nov. 22.
Paper. E. C. Schacht. 1,888,409; Nov. 22.
Paste, Combustible. A. A. Epstein. 1,888,820; Nov. 22.
Pen, Automatically filled fountain. C. Zorn. 1,888,367; Nov. 22.
Permutation lock. R. K. Winning. 1,888,647; Nov. 22.
Phonograph. J. W. Bishop. 1,888,652; Nov. 22.
Phonograph, Repeating. C. L. Ferguson. 1,888,660; Nov. 22.
Phosphatic material, Treatment of. S. D. Gooch. 1,888,919; Nov. 22.
Phosphorus and phosphoric acid, Production of. W. H. Waggaman and S. D. Gooch. 1,888,896; Nov. 22.
Phosphorus compounds, Preparation of. E. C. Britton and H. R. Slagh. 1,888,718; Nov. 22.
Picture attachment for moving picture machines, Sound. V. A. Schoenberg. 1,888,298; Nov. 22.
Picture effects, Apparatus for producing moving. H. M. Laxer. 1,888,861; Nov. 22.
Picture photography, Securing synchronization in talking motion. L. de Forest. 1,888,910; Nov. 22.
Picture reproducing device for television. L. Tschörner. 1,888,893; Nov. 22.
Picture system, Sound. S. C. Chapman. 1,888,220; Nov. 22.
Pies, Method of and apparatus for manufacturing. D. Trompeter. 1,888,562; Nov. 22.
Pigments, Manufacture of. E. M. Lofland. 1,888,464; Nov. 22.
Piling, Installing. A. P. Miller. 1,888,282; Nov. 22.
Pilings, Interlocking sheet. A. Mauterer. 1,888,968; Nov. 22.
Pin. W. H. Unversaw. Des. 88,369; Nov. 22.
Pin centering device and cushion retainer. J. C. Robertson. 1,888,571; Nov. 22.
Pipe: *See*—
Tobacco pipe.
Pipe coupling. O. Otterson. 1,888,539; Nov. 22.
Pipe, Reclaiming. E. L. Chappell. 1,888,961; Nov. 22.
Pipe tong assembly, Drill. A. W. Posey. 1,888,770; Nov. 22.
Pipes, Manufacturing bent. A. Schmidt. 1,888,891; Nov. 22.
Pitcher, Sirup. E. Robinson. 1,888,830; Nov. 22.
Plaiting machine. L. E. McDonough. 1,888,232; Nov. 22.
Plate or other similar article, Child's. J. L. Dowd. Des. 88,343; Nov. 22.
Plow, Reversible tractor. I. W. Thayer. 1,888,399; Nov. 22.
Plow, Tractor. A. Mahan. 1,888,876; Nov. 22.
Plug, Spark. J. D. Forsyth. 1,888,852; Nov. 22.
Pole gaining and boring machine. L. H. Geddes and J. H. Mansfield. 1,888,664; Nov. 22.
Polishing machine, Rubber roller. T. L. Egnor. 1,888,589; Nov. 22.
Porous structure, Apparatus for impregnating and molding a. V. G. Apple. 1,888,618; Nov. 22.
Poster-supporting device. J. W. Dixon. 1,888,494; Nov. 22.
Posthole digger. D. L. McDowell. 1,888,929; Nov. 22.
Potato digger, Power driven. A. E. W. Johnson and W. C. Dwyer. 1,888,504; Nov. 22.
Pouch making attachment for packaging machines. W. B. Bronander. 1,888,786; Nov. 22.
Powder and making the same, Lead oxide. C. A. Hall. 1,888,823; Nov. 22.
Power lift. R. H. Mitchell and J. A. Vaughn. 1,888,511; Nov. 22.
Power take-off. E. W. Holland. 1,888,951; Nov. 22.
Power take-off device. B. Nastrom. 1,888,513; Nov. 22.
Press: *See*—
Drawing press.
Fruit press.
Meat press.
Pressing machine with storage tanks. E. Davis. 1,888,310; Nov. 22.
Pressure control system. D. L. Summey. 1,888,332; Nov. 22.
Pressure gauge. J. Wahl and O. Melser. 1,888,365; Nov. 22.
Printing forms, Producing intaglio. K. Wolfsohn. 1,888,308; Nov. 22.
Printing or graining. L. A. Misener. 1,888,864; Nov. 22.
Propeller. G. Laussat. 1,888,681; Nov. 22.
Propeller hub. T. A. Dicks. 1,888,493; Nov. 22.
Protector, Foot. C. E. Sankey. 1,888,609; Nov. 22.
Pulling device. D. Kremko. 1,888,389; Nov. 22.
Pump. C. B. Sanders. 1,888,474; Nov. 22.
Pump, Electromagnetic fuel. P. S. Tice. 1,888,250; Nov. 22.
Pump, Magnetic. A. Lanctot and E. Sperisen. 1,888,322; Nov. 22.
Pump or compressor. O. Simmen. 1,888,544; Nov. 22.
Pump tubing protector. A. B. Edwards. 1,888,588; Nov. 22.
Punch. J. K. Diamond. 1,888,347; Nov. 22.
Quill-like structure in the form of a rigid, waterproof, and if desired, transparent tube. F. K. Wickel. 1,888,898; Nov. 22.
Rack: *See*—
Ball rack.
Bottle rack.
Clothes rack.
Curtain display rack.
Rack and receptacle support, Ball. J. H. Stahl. 1,888,362; Nov. 22.
Radiator. F. H. Austen. 1,888,900; Nov. 22.
Radio frequency receiver, Tuned. W. Van B. Roberts. 1,888,514; Nov. 22.
Radio receiving system. L. Levy. 1,888,536; Nov. 22.
Radio receiving system. J. M. Miller. 1,888,430; Nov. 22.
Rail car wheel, Resilient. C. H. Gunn. 1,888,499; Nov. 22.
Rail securing means. J. S. Kurkowski. 1,888,557; Nov. 22.
Railway sleeper, Ferro-concrete. E. M. Prot. 1,888,287; Nov. 22.
Rake: *See*—
Self-dumping rake.
Razor. H. Swan. 1,888,747; Nov. 22.
Razor. H. Swan. 1,888,962; Nov. 22.
Razor, Safety. T. L. Smith. 1,888,576; Nov. 22.
Reactive combustion engine. K. M. Urquhart. 1,888,749; Nov. 22.
Receptacle. M. Schwarz and F. J. Goetz. 1,888,699; Nov. 22.
Receptacle for house wiring systems. G. Carlson and H. G. Knoderer. 1,888,848; Nov. 22.
Reel: *See*—
Film reel.
Reel support for harvester binders. G. Hammer. 1,888,500; Nov. 22.
Reflector. L. Kral. 1,888,888; Nov. 22.
Refrigerating and ventilating system. S. Sholtes. 1,888,242; Nov. 22.
Refrigerating apparatus. O. M. Summers. 1,888,331; Nov. 22.
Refrigerating apparatus. B. H. Weston. 1,888,646; Nov. 22.
Refrigerating unit. E. V. Hill. 1,888,950; Nov. 22.
Refrigeration. C. G. Munters. Re18,665; Nov. 22.
Register: *See*—
Golf score register.
Reinforcing means for the rims of openings in metal containers. K. W. Mauser. 1,888,877; Nov. 22.
Relay, Polarised. J. D. Durkee. 1,888,427; Nov. 22.
Relaying system. E. Friedländer. 1,888,718; Nov. 22.
Reliefs and of colored pictures, Production of. P. Bon. 1,888,344; Nov. 22.
Remote control system. H. E. Hershey. 1,888,267–8; Nov. 22.
Remote control system. M. L. Nelson. 1,888,329; Nov. 22.
Resinous compositions, Making. E. S. Dawson, jr. 1,888,849; Nov. 22.
Retainer or separator for antifriction bearings. F. G. Hughes and C. B. Simmons. 1,888,634; Nov. 22.
Rod: *See*—
Blast furnace test rod.
Roll, Dandy. J. R. Sinclair. 1,888,892; Nov. 22.
Roll truing apparatus. C. F. Weaver, E. W. Hyman, and G. H. Wheatley. 1,888,302; Nov. 22.
Roof and wall structure. K. Mennicken. 1,888,233; Nov. 22.
Roof, Car. C. D. Bonsall. 1,888,654–5; Nov. 22.
Roof, Car. C. D. Bonsall. 1,888,901; Nov. 22.
Roof, Removable gondola car. C. D. Bonsall. 1,888,653; Nov. 22.
Rosin from rosin-containing soap produced in the manufacture of paper pulp from rosin-containing wood, Recovering. L. N. Bent. 1,888,581; Nov. 22.
Rotary oil burner. M. A. Powers. 1,888,693; Nov. 22.
Safety device for cutting machines. W. Knapp. 1,888,679; Nov. 22.
Salts of the chloroethane sulphonic acid, Preparing. O. Ernst and O. Nicodemus. 1,888,794; Nov. 22.
Sash fixture, Friction. E. W. Cummings. 1,888,845; Nov. 22.
Scale guard measuring device, Vernier. B. Berger. 1,888,305; Nov. 22.
Scale, Slide. F. B. Huffman. 1,888,597; Nov. 22.
Scarf or similar article, Lace. H. W. Hucknall. Des. 88,353; Nov. 22.
Screening and concentrating apparatus. E. O'Toole 1,888,636; Nov. 22.
Screens, Method and apparatus for setting. S. E. Manning. 1,888,405; Nov. 22.
Screw can applying machine. A. I. Risser. 1,888,470; Nov. 22.
Screw driver. H. B. Curtis and A. E. Keating. 1,888,222; Nov. 22.
Sealing gland. C. I. Longenecker. 1,888,957; Nov. 22.
Sealing wax, Device for applying. D. V. Wester. 1,888,403; Nov. 22.
Seat and back, Adjustable. P. Carlson. 1,888,787; Nov. 22.
Seat and the like, Cushion. H. E. Wolf. 1,888,781; Nov. 22.

Sedimentation apparatus. C. H. Scott. 1,888,748; Nov. 22.
Self-dump rake. C. Pearson. 1,888,468; Nov. 22.
Sewer-cleaning implement. W. F. Herst. 1,888,360; Nov. 22.
Sharpener, Lawn mower. R. J. Muir. 1,888,285; Nov. 22.
Sharpening machine, Lawn mower. P. H. Root. 1,888,572; Nov. 22.
Shears: *See*—
Circular shears.
Sheet, Composite. M. R. Howard. 1,888,672; Nov. 22.
Sheet delivery for printing presses, Flat. H. M. Barber. 1,888,783; Nov. 22.
Sheet, Feeding mechanism. W. K. Eckhard. 1,888,659; Nov. 22.
Sheet material, Apparatus for shaping. R. Mayne. 1,888,356; Nov. 22.
Sheet piling. H. M. Knight. 1,888,630; Nov. 22.
Sheet piling. J. R. Wemlinger. 1,888,752; Nov. 22.
Sheet piling, Corrugated. J. R. Wemlinger. 1,888,751; Nov. 22.
Sheet trimming and scoring mechanism. R. N. Richards. 1,888,436; Nov. 22.
Shelf and robe rail, Combined. H. Adler. 1,888,253; Nov. 22.
Shield construction, Radiator. J. Galamb. 1,888,719; Nov. 22.
Shield, Glare. W. J. Summerbell. 1,888,703; Nov. 22.
Shock absorber. W. R. Griswold. 1,888,920; Nov. 22.
Shock absorber, Hydraulic. H. Ford. 1,888,716; Nov. 22.
Shoe. E. F. Mathews. 1,888,862; Nov. 22.
Shoe. C. Miller. Des. 88,365; Nov. 22.
Shoe polishing machine. H. A. Dodge. 1,888,261; Nov. 22.
Shore, Adjustable. H. W. Roos. 1,888,738; Nov. 22.
Shuttle pressure plate. A. F. Edouart. 1,888,527; Nov. 22.
Side frame. C. B. Harbison. 1,888,224; Nov. 22.
Sign, Street. A. Sprung. 1,888,246; Nov. 22.
Signal: *See*—
Traffic signal.
Signaling. L. H. Middleton. 1,888,684; Nov. 22.
Signaling box lock. J. Just. 1,888,859; Nov. 22.
Signaling system, Electrical. J. Smith and G. D. Turton. 1,888,414; Nov. 22.
Signatures into a signature-handling machine, Method of and mechanism for automatically feeding individual. R. Klemm. 1,888,271; Nov. 22.
Silica article, Composite. G. A. F. Winckler. 1,888,341; Nov. 22.
Silica from solution in alkali brines, Precipitating. A. H. Avakian. 1,888,484; Nov. 22.
Sintering machine pallet. H. J. Stehli. 1,888,296; Nov. 22.
Sintering, Method of constituting a change for. J. E. Greenawalt. 1,888,458; Nov. 22.
Skelp forming machine. J. W. Free. 1,888,380; Nov. 22.
Ski. E. M. Eriksen. 1,888,455; Nov. 22.
Slab unit, Multiple. N. L. Aberson. 1,888,417; Nov. 22.
Slack adjuster for railway brakes. J. J. Tatum. 1,888,942; Nov. 22.
Sled and toboggan, Combination. C. E. Greene. 1,888,857; Nov. 22.
Slide, All-metal. R. F. Lamar. 1,888,350; Nov. 22.
Smoker's device. W. W. Trigg. Des. 88,389; Nov. 22.
Socket, Two-part electric lamp. L. Erikson. 1,888,714; Nov. 22.
Soda of a high degree of purity, Treatment of caustic solutions for the production of solutions, and of a solid caustic. D. A. Pritchard. 1,888,886; Nov. 22.
Solar heater. W. F. Clark. 1,888,620; Nov. 22.
Sorting apparatus. W. E. Humphrey. 1,888,673; Nov. 22.
Sound recording. W. A. Mueller. 1,888,467; Nov. 22.
Sound recording and reproducing system. C. R. Hanna. 1,888,724; Nov. 22.
Sound resonator. M. T. Probanski. 1,888,540; Nov. 22.
Space discharge tube. A. Hund. 1,888,556; Nov. 22.
Speed of electric motors, System for automatically controlling the. A. Della-Riccia. 1,888,569; Nov. 22.
Spike attachment for shoes. J. L. Kerr. 1,888,924; Nov. 22.
Spotlight, Universally mounted. A. Kosian. 1,888,273; Nov. 22.
Spraying method and machine. H. C. Cole. 1,888,791; Nov. 22.
Spring. C. A. Rasmussen. 1,888,469; Nov. 22.
Spring construction and making same. O. Hetherington. 1,888,066; Nov. 22.
Spring end connection. F. J. Bechert. Re18,664; Nov. 22.
Stabilising device for ships. H. Hort. 1,888,667; Nov. 22.
Stair construction. J. R. O'Donnell. 1,888,686; Nov. 22.
Stall or stanchion. H. C. Rassmann. 1,888,608; Nov. 22.
Stand: *See*—
Card display stand.
Staple, Nonspreading. R. M. Guthrie. 1,888,265; Nov. 22.
Starter, Engine. F. A. Vastano. 1,888,300; Nov. 22.
Station calling device. E. Brüuer. 1,888,904; Nov. 22.
Steel retainer, Drill. E. A. Norling. 1,888,685; Nov. 22.
Sterilising apparatus. G. D. Peet. 1,888,959; Nov. 22.
Stone cutting machinery. L. Verkuil. 1,888,895; Nov. 22.
Stove, Oil. J. Ruddy. 1,888,888; Nov. 22.
Strainer. J. Sperling. 1,888,245; Nov. 22.
Strip, Divider. P. Galassi. 1,888,916; Nov. 22.
Stripper for removing coils of wire from a drawing head. C. D. Johnson. 1,888,727; Nov. 22.
Structural joint. E. B. Williamson. 1,888,523; Nov. 22.
Strut for aeroplanes, Shock absorbing. J. F. Wallace. 1,888,578; Nov. 22.
Suction cleaner. H. B. White. 1,888,339; Nov. 22.
Support, Beverage mixer. L. Grauman. 1,888,798; Nov. 22.
Support for books and the like. H. E. Bennett. 1,888,257; Nov. 22.
Support for invalids. J. E. Harrison. 1,888,592; Nov. 22.
Support, Printing press cylinder. J. E. Lee. 1,888,463; Nov. 22.
Support, Reflector. C. R. Luder. 1,888,600; Nov. 22.
Support, Transmission line. R. L. Jenner and F. E. Chester. 1,888,534; Nov. 22.
Supporter, Hose. I. Roth. 1,888,291; Nov. 22.
Supporting device, Lamp. G. D. Gould. 1,888,723; Nov. 22.
Suspenders, Shirt holddown attachment for. E. S. Mix. 1,888,931–2; Nov. 22.
Sweetening reagent, Forming. H. H. Cannon. 1,888,219; Nov. 22.
Swimming appliance. G. G. E. Schmitt. 1,888,867; Nov. 22.
Swing. J. C. De Penning. 1,888,587; Nov. 22.
Switch: *See*—
Electric switch.
Time switch.
Toggle switch.
Switching system, Automatic. R. A. Fuller. 1,888,856; Nov. 22.
Table: *See*—
Combination table.
Folding table.
Merchandising and display table.
Table top or the like. L. D. Jalkut. Des. 88,354–5; Nov. 22.
Tag. A. H. Swett. 1,888,704; Nov. 22.
Tag, Price. F. W. Laescher and J. F. Graeber. 1,888,598; Nov. 22.
Tank for concrete mixers, Water. J. Eggert. 1,888,551; Nov. 22.
Tank furnace, Continuous. E. T. Ferngren. 1,888,496; Nov. 22.
Tape, Adhesive binding. P. L. O'Donnell. 1,888,433; Nov. 22.
Tape, Binding. P. L. O'Donnell. 1,888,432; Nov. 22.
Tape pulling device. R. L. Daine. 1,888,628; Nov. 22.
Tar distillation. S. P. Miller. 1,888,285–6; Nov. 22.
Teat cup. B. S. Hogeland. 1,888,226; Nov. 22.
Teeing device, Mechanical. F. D. Baumgartner. 1,888,256; Nov. 22.
Telephone pay station boxes, Forming. G. A. Long. 1,888,956; Nov. 22.
Telephone system. A. E. Caswell. 1,888,307; Nov. 22.
Telephone system. O. A. Pearce and L. M. Simpson. 1,888,964; Nov. 22.
Telephone system. J. H. Voss. 1,888,337; Nov. 22.
Tension controlling mechanism, Web. C. S. Crafts. 1,888,549; Nov. 22.
Terminal, Electrical. R. C. Hyde. 1,888,884; Nov. 22.
Testing apparatus. A. E. Colosoff. 1,888,906; Nov. 22.
Textile fabric or a similar article, Embroidered. E. W. Freudenberg. Des. 88,347–9; Nov. 22.
Textile fabric or a similar article, Embroidered. E. W. Freudenberg. Des. 88,372; Nov. 22.
Textile fabric or similar article. H. S. Murray. Des. 88,385–7; Nov. 22.
Textile fabric or similar article. F. J. Schaetzel. Des. 88,388; Nov. 22.
Textile fabric or similar article. W. Willheim. Des. 88,370; Nov. 22.
Textile fabric or similar article. W. Willheim. Des. 88,391–2; Nov. 22.
Textile fabric or the like. J. Lukas. Des. 88,357–9; Nov. 22.
Textile fabric or the like. J. Lukas. Des. 88,373–9; Nov. 22.
Textile fabric or the like. N. Martinoff. Des. 88,361; Nov. 22.
Textile fabric or the like. N. Martinoff. Des. 88,381–4; Nov. 22.
Textile fabric or the like. G. Megroz. Des. 88,363–4; Nov. 22.
Textile fabric or the like. I. A. Weitz. Des. 88,390; Nov. 22.
Time switch. G. Ogurkowski. 1,888,687; Nov. 22.
Timing device. W. G. Shelton. 1,888,809; Nov. 22.
Tip for oxy-acetylene torches. A. F. Jenkins. 1,888,885; Nov. 22.
Tire spreader. A. Puleo. 1,888,824; Nov. 22.
Tobacco pipe. D. P. Lavietes. 1,888,462; Nov. 22.
Toggle switch. H. W. Batcheller. 1,888,444; Nov. 22.
Toggle switch. H. W. Batcheller. 1,888,445; Nov. 22.
Toilet: *See*—
Marine toilet.
Tool, Cutting. J. B. Galbraith. 1,888,381; Nov. 22.
Tool for pneumatic tires. H. A. Van Valkenburg. 1,888,894; Nov. 22.
Tool, Machine. W. F. Groene and H. J. Siekmann. Re18,662; Nov. 22.
Tool, Manicure. H. R. Bynum. 1,888,218; Nov. 22.
Tool, Rim. J. L. Chance. 1,888,619; Nov. 22.
Tool, Turpentine. B. H. Smith. 1,888,243; Nov. 22.

Tower, Fractionating. E. C. D'Yarmett. 1,888,872; Nov. 22.
Toy gun. W. L. Payne. 1,888,689; Nov. 22.
Toy telephone. H. Jansen. 1,888,802; Nov. 22.
Track-rail lubricating device. E. B. Keim. 1,888,678; Nov. 22.
Trackway, Self-railing. H. B. Flower. 1,888,760; Nov. 22.
Traction wheel. J. L. Hecht. 1,888,627; Nov. 22.
Traffic control device. E. M. Greenlee. 1,888,590; Nov. 22.
Traffic controlling apparatus, Railway. G. W. Baughman. 1,888,845; Nov. 22.
Traffic controlling apparatus, Railway. R. A. McCann. 1,888,868; Nov. 22.
Traffic signal, Collapsible. J. T. Boatwright. 1,888,447; Nov. 22.
Trailer truck. S. M. Chase. 1,888,451; Nov. 22.
Train signaling system. H. A. Thompson. 1,888,706; Nov. 22.
Transfer printing and issuing machine. J. M. Seaweil. 1,888,412; Nov. 22.
Transmission. F. Johnson. 1,888,728; Nov. 22.
Transmission. E. A. Thompson. 1,888,640; Nov. 22.
Transmission, Hydraulic. E. L. Murphy. 1,888,881; Nov. 22.
Transmission-line device. T. B. Fleming. 1,888,715; Nov. 22.
Transmission mechanism, Accelerating. F. H. Stolp. 1,888,479; Nov. 22.
Trap: *See*—
Insect trap.
Tray, Automatically extensible and collapsible. K. O. Schauman. 1,888,740; Nov. 22.
Tray, Refreshment. P. S. Park. 1,888,736; Nov. 22.
Trolley harp and wheel structure. S. Maggio. Re18,663; Nov. 22.
Truck. W. P. Kellett. 1,888,767; Nov. 22.
Trunk, Doll's. H. Fleisig. Des. 88,846; Nov. 22.
Tub and forming the same, Butter. C. M. MacChesney. 1,888,855; Nov. 22.
Tube: *See*—
Space discharge tube. Vacuum tube.
Tube drawing process. H. von Forster. 1,888,401; Nov. 22.
Tube terminal, Insulated discharge. F. Hotchner. 1,888,671; Nov. 22.
Tube terminal, Self insulated discharge. F. Hotchner. 1,888,670; Nov. 22.
Tubes and the like, Method and apparatus for pressure butt-welding. E. F. Begtrup. 1,888,815; Nov. 22.
Tubes for eye-droppers, Forming glass. R. H. Koenig. 1,888,635; Nov. 22.
Tubes, Making seamless. J. W. Offutt. 1,888,607; Nov. 22.
Turbine blade lashing. P. Faber. 1,888,795; Nov. 22.
Turbine, Elastic fluid. O. D. H. Bentley. 1,888,485; Nov. 22.
Turbine plant, Elastic fluid. A. Lysholm. 1,888,874; Nov. 22.
Turbines, Process and apparatus for operating. W. Schüle. 1,888,698; Nov. 22.
Turfing machine. J. Foben. 1,888,379; Nov. 22.
Typewriting machine. J. H. Rand, jr. 1,888,696; Nov. 22.
U tube structure. J. C. Diehl. 1,888,424; Nov. 22.
Underframe for automobile vehicles. M. Wagner. 1,888,897; Nov. 22.
Underframe, Tank vehicle. J. C. Travilla, jr. 1,888,812; Nov. 22.
Upholstering vehicle doors, Device for. E. B. G. Lefevre. 1,888,729; Nov. 22.
Urn or the like, Coffee. L. B. Green. Des. 88,850; Nov. 22.
Vacuum device. F. W. Hochstetter. 1,888,594; Nov. 22.
Vacuum tube. L. L. Beck. 1,888,421; Nov. 22.
Valve. G. C. Frants. 1,888,223; Nov. 22.
Valve. G. E. Hazard. 1,888,948; Nov. 22.
Valve, Automatic thermostatic control. R. Hetherington. 1,888,225; Nov. 22.
Valve, Lubricated plug. F. N. Bard. 1,888,207; Nov. 22.
Valve, Safety. A. J. and K. T. Penick. 1,888,892; Nov. 22.
Valve seats, Apparatus for renewing. R. Burston. 1,888,259; Nov. 22.
Vanity bench. E. W. McCarroll. 1,888,325; Nov. 22.
Vaporizer. M. I. Mazarek. 1,888,682; Nov. 22.
Vehicle. G. M. Barnes. 1,888,420; Nov. 22.
Vehicle, Automotive. F. Turnicky. 1,888,644; Nov. 22.
Ventilating device. P. S. Martin. 1,888,428; Nov. 22.
Ventilator and silencer, Window. R. B. Bourne. 1,888,711; Nov. 22.
Vermifuge and insecticide. W. J. Dennis. Re18,667; Nov. 22.
Vessel for holding a liquid for humidifying the air. A. Killing. 1,888,387; Nov. 22.
Viscosity of materials, Method and apparatus for indicating and regulating the. A. Osbourne. 1,888,431; Nov. 22.
Visual effects, Apparatus for multiple. A. Hudiakoff. 1,888,820; Nov. 22.
Volume control system. A. W. Horton, jr. 1,888,227; Nov. 22.
Warp pile fabric. F. Andreae. 1,888,944; Nov. 22.
Washing machine. H. L. Quackenbush. 1,888,435; Nov. 22.
Water craft. G. Alexander. 1,888,443; Nov. 22.
Water softener brine apparatus. S. G. Harwood and D. Griswold. 1,888,531; Nov. 22.
Weatherstrip. J. A. and G. E. Tremblay. 1,888,299; Nov. 22.
Webs, Manufacture of bituminised fibrous. G. A. Richter and H. A. Chase. 1,888,772; Nov. 22.
Well pumping jack. B. G. Goble. 1,888,530; Nov. 22.
Wells, Drilling. J. S. Abercrombie. 1,888,814; Nov. 22.
Wells, Testing and cleaning. F. C. Gault. 1,888,315; Nov. 22.
Wheel: *See*—
Guard wheel. Traction wheel.
Rail car wheel.
Window. A. Kalla. 1,888,766; Nov. 22.
Wiper attachment, Windshield. J. A. Berdan. 1,888,370; Nov. 22.
Wiper blades, Apparatus and method for manufacturing windshield. J. W. Anderson. 1,888,843; Nov. 22.
Wiper, Windshield. J. J. Herlbauer and C. Gulotta. 1,888,665; Nov. 22.
Wiper, Windshield. J. H. Mullen. 1,888,826; Nov. 22.
Wire and band dispensing machines. H. Harvey. 1,888,593; Nov. 22.
Wire connecting device. D. H. Bottrill. 1,888,945; Nov. 22.
Wire connection and making same. F. C. De Reamer. 1,888,850; Nov. 22.
Wood-heel machine. W. J. Shaw. 1,888,294; Nov. 22.
Worm making process. W. F. Zimmermann. 1,888,782; Nov. 22.
Wrench. J. Erickson. 1,888,793; Nov. 22.
Yarn, Treating. J. P. Holt. 1,888,554; Nov. 22.
Yoke and terminal, Combination. A. H. Nero. 1,888,882; Nov. 22.
Zinc products, Wrought. W. M. Peirce. 1,888,567; Nov. 22.

CLASSIFICATION OF PATENTS

ISSUED NOVEMBER 22, 1932

NOTE.—First number—class, second number—subclass, third number—patent number

1— 16: 1,888,320
2— 43: 1,888,689
257: 1,888,676
274: 1,888,432
1,888,433
4— 77: 1,888,942
112: 1,888,488
5— 73: 1,888,889
246: 1,888,267
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337: 1,888,888
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10— 42: 1,888,610
141: 1,888,289
145: 1,888,516
13— 31.6: 1,888,722
67.1: 1,888,284
14— 21: 1,888,783
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154.8: 1,888,888
159.2: R. 18,661
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33— 107: 1,888,897
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156— 5: 1,888,888
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167— 34: R. 18,667
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171— 97: 1,888,887
172— 182: 1,888,887
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173— 1: 1,888,888
9.1: 1,888,888
174— 177: 1,888,888
175— 21: 1,888,875
118: 1,888,888
1,888,894
1,888,784
287: 1,888,888
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176— 122: 1,888,888
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177— 311: 1,888,888
314: 1,888,871
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178— 6: 1,888,888
44: 1,888,887
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179— 25: 1,888,888
45: 1,888,888
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180— 169: 1,888,888
169.1: 1,888,887
169.8: 1,888,888
1,888,787
1,888,784
171: 1,888,884
175.2: 1,888,887
175.8: 1,888,888
175.21: 1,888,884
180— 1: 1,888,888
9.1: 1,888,888
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181— 37: 1,888,888
1,888,709
51: 1,888,888
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182— 7: 1,888,888
21: 1,888,888
184— 2: 1,888,888
7: 1,888,888

184— 38: 1,888,481
185— 41: 1,888,300
187— 52: 1,888,712
188— 77: 1,888,643
78: 1,888,601
80: 1,888,716
1,888,920
197: 1,888,942
189— 46: 1,888,561
78: 1,888,535
191— 30: 1,888,552
62: R. 18,663
192— 107: 1,888,779
193— 3: 1,888,518
194— 90: 1,888,473
195— 20: 1,888,935
196— 42: 1,888,382
79: 1,888,346
197— 180: 1,888,606
199— 8: 1,888,988
26: 1,888,851
34: 1,888,908
208: 1,888,909
200— 5: 1,888,853
81: 1,888,787
98: 1,888,560
133: 1,888,854
142: 1,888,906
144: 1,888,707
154: 1,888,444
1,888,445
166: 1,888,882
201— 75: 1,888,762
202— 80: 1,888,465
64: 1,888,235
66: 1,888,236
135: 1,888,926
204— 5: 1,888,677
31: 1,888,419
205— 8: 1,888,401
206— 12: 1,888,227
16: 1,888,269
19.5: 1,888,251

206— 50: 1,888,201
208— 184: 1,888,455
209— 44: 1,888,636
102: 1,888,709
121: 1,888,673
130: 1,888,572
467: 1,888,983
210— 24: 1,888,531
28: 1,888,989
55: 1,888,743
94: 1,888,245
211— 15: 1,888,247
1,888,362
74: 1,888,324
93: 1,888,253
161: 1,888,756
171: 1,888,636
214— 19: 1,888,501
217— 3: 1,888,496
81: 1,888,354
1,888,355
219— 8: 1,888,288
1,888,453
24: 1,888,780
26: 1,888,497
41: 1,888,400
220— 10: 1,888,899
42: 1,888,319
46: 1,888,459
50: 1,888,900
221— 95: 1,888,220
1,888,551
101: 1,888,533
225— 21: 1,888,576
61: 1,888,228
226— 5: 1,888,886
1,888,831
69: 1,888,503
85: 1,888,397
88: 1,888,470
92: 1,888,279
100: 1,888,212
125: 1,888,953

227— 12: 1,888,911
229— 15: 1,888,855
51: 1,888,818
85: 1,888,313
230— 100: 1,888,690
137: 1,888,544
177: 1,888,980
232— 44: 1,888,232
235— 112: 1,888,662
236— 1: 1,888,449
14: 1,888,485
92: 1,888,517
93: 1,888,225
238— 80: 1,888,267
304: 1,888,557
240— 1: 1,888,734
52.1: 1,888,723
61.13: 1,888,273
73: 1,888,733
81: 1,888,900
103: 1,888,898
135: 1,888,836
241— 1: 1,888,291
12: 1,888,931
1,888,932
242— 18: 1,888,305
55.2: 1,888,426
66: 1,888,810
74: 1,888,729
75: 1,888,549
129: 1,888,593
141: 1,888,865
244— 2: 1,888,335
1,888,902
12: 1,888,418
1,888,482
1,888,871
18: 1,888,749
246— 24: 1,888,863
53: 1,888,706
183: 1,888,845
247— 6: 1,888,645
15: 1,888,846

247— 15: 1,888,848
21: 1,888,847
25: 1,888,243
31: 1,888,546
248— 20: 1,888,796
32: 1,888,342
250— 2: 1,888,721
1,888,904
20: 1,888,430
1,888,536
27.5: 1,888,556
1,888,594
33: 1,888,777
251— 27: 1,888,376
43: 1,888,223
91: 1,888,207
189: 1,888,389
252— 1: 1,888,219
8: 1,888,701
253— 77: 1,888,796
254— 9: 1,888,767
83: 1,888,209
103: 1,888,776
109: 1,888,389
126: 1,888,761
160: 1,888,912
178: 1,888,612
255— 28: 1,888,814
40: 1,888,668
257— 136: 1,888,900
150: 1,888,545
260— 8: 1,888,595
1,888,849
12: 1,888,516
27: 1,888,631
44: 1,888,624
1,888,625
1,888,626
72: 1,888,908
74: 1,888,757
150: 1,888,827
159: 1,888,794
261— 26: 1,888,844

261— 28: 1,888,434
47: 1,888,796
50: 1,888,658
89: 1,888,872
263— 20: 1,888,720
265— 1: 1,888,658
12: 1,888,755
44: 1,888,577
266— 4: 1,888,980
21: 1,888,206
1,888,343
1,888,458
30: 1,888,789
36: 1,888,317
267— 1: 1,888,490
29: 1,888,997
54: R. 18,644
60: 1,888,519
64: 1,888,578
268— 62: 1,888,217
270— 58: 1,888,271
271— 54: 1,888,650
64: 1,888,783
272— 23: 1,888,220
52: 1,888,763
56.5: 1,888,350
273— 33: 1,888,266
80: R. 18,666
98: 1,888,897
274— 9: 1,888,902
10: 1,888,632
1,888,660
46: 1,888,914
275— 2: 1,888,821
277— 21: 1,888,948
61: 1,888,788
280— 21: 1,888,857
49: 1,888,451
282— 16: 1,888,487
19: 1,888,407
285— 22: 1,888,637
20: 1,888,338
49: 1,888,877

285— 84: 1,888,741
122: 1,888,260
171: 1,888,822
196: 1,888,899
286— 5: 1,888,475
11: 1,888,987
287— 113: 1,888,966
292— 99: 1,888,999
114: 1,888,819
145: 1,888,220
162: 1,888,282
222: 1,888,306
255: 1,888,987
288: 1,888,622
291: 1,888,425
348: 1,888,226
1,888,826
293— 54: 1,888,719
294— 106: 1,888,727
295— 11: 1,888,490
296— 97: 1,888,703
299— 7: 1,888,784
24: 1,888,557
83: 1,888,768
86: 1,888,791
300— 2: 1,888,352
5: 1,888,353
7: 1,888,351
301— 43: 1,888,637
303— 20: 1,888,548
308— 4: 1,888,866
6: 1,888,216
89: 1,888,512
122: 1,888,231
186: 1,888,361
187: 1,888,215
201: 1,888,634
208: 1,888,966
207: 1,888,483
226: 1,888,940

U. S. GOVERNMENT PRINTING OFFICE: 1932

LIST OF TRADE-MARK APPLICANTS

PUBLISHED FOR OPPOSITION

[Act of Feb. 20, 1905, Sec. 6, as amended Mar. 2, 1907]

Alger, Edwin, Publishing Company, The, Washington, D. C. Heading for a newspaper. Serial No. 330,947; Nov. 29. Class 38.

Altman, B., & Co., New York, N. Y. Woolen suits. Serial No. 331,097; Nov. 29. Class 39.

American Diamalt Company, The, Cincinnati, Ohio. Malt syrup. Serial No. 330,647; Nov. 29. Class 46.

American Porcelain Co., Chicago, Ill. Porcelain. Serial No. 330,391; Nov. 29. Class 44.

Associated Apparel Industries, Inc., Chicago, Ill. Girdles, corsets, combinations of corset and brassière. Serial No. 329,517; Nov. 29. Class 39.

Atkins & Durbrow, Inc., New York, N. Y. Peat moss. Serial No. 330,917; Nov. 29. Class 1.

Atlanta Casket Company, Atlanta, Ga. Innerspring mattresses for burial caskets. Serial No. 331,173; Nov. 29. Class 32.

Austenal Laboratories, Inc., New York, N. Y., and Chicago, Ill. Dentures. Serial No. 330,648; Nov. 29. Class 44.

Bachmann Bros. Inc., Philadelphia, Pa. Sun glasses and goggles. Serial No. 330,442; Nov. 29. Class 26.

Balsac Bros. & Company, Inc., New York, N. Y. Coffee. Serial No. 330,918; Nov. 29. Class 46.

Barbasol Company, The, Indianapolis, Ind. Skin cleansing cream. Serial No. 331,365; Nov. 29. Class 6.

Baron, S. J., Corporation, New York, N. Y. Flavorings. Serial No. 330,415; Nov. 29. Class 46.

Barta, Emil F., doing business as The "Butcher Boy" Meat Market, Phoenix, Ariz. Sausage meat, bacon, ham, etc. Serial No. 326,657; Nov. 29. Class 46.

Bastian-Blessing Company, The, Chicago, Ill. Welding metals. Serial No. 328,680. Nov. 29. Class 14.

Bear Brand Hosiery Co., Kankakee and Chicago, Ill. Hosiery. Serial No. 319,131; Nov. 29. Class 39.

Best & Co., Inc., New York, N. Y. Undershirts, under drawers, etc. Serial No. 330,534; Nov. 29. Class 39.

Biedermann Brothers, Inc., Chicago, Ill. Coffee. Serial No. 331,453; Nov. 29, 1932. Class 46.

Black, Walter J., Inc., New York, N. Y. Book or series of books. Serial No. 328,751; Nov. 29. Class 38.

Blaisdell Pencil Company, Philadelphia, Pa. Rubber erasers. Serial No. 331,279; Nov. 29. Class 37.

Blue Line Chemical Co., The, St. Louis, Mo. Medicinal and pharmaceutical preparations and proprietary medicines. Serial No. 322,875; Nov. 29. Class 6.

Blumenthal, Sidney, & Co. Inc., New York, N. Y. Pile fabrics. Serial Nos. 330,886–7; Nov. 29. Class 42.

Bonkura Products Co., Inc., assignor to Ben Sontag Co., Battle Creek, Mich. Toilet cream. Serial No. 324,337; Nov. 29. Class 6.

Bourneuf, Augustin D., Haverhill, Mass. Boots, shoes, and slippers. Serial No. 321,326; Nov. 29. Class 39.

Box Golf Company. (See Knopf, Emil, jr.)

Burchard, C. D., Inc., New York, N. Y. Antiseptics. Serial No. 330,738; Nov. 29. Class 6.

"Butcher Boy" Meat Market, The. (See Barta, Emil F.)

Calco Chemical Company, Inc., The, Bound Brook, N. J. Sulphate. Serial No. 330,808; Nov. 29. Class 6.

Camarillo Citrus Association, Camarillo, Calif. Fresh citrus fruits. Serial Nos. 331,138–41; Nov. 29. Class 46.

Canfield Oil Company, The, Cleveland, Ohio. Lubricating oils and greases. Serial No. 330,333; Nov. 29. Class 15.

Charlamb, Leon, doing business as Lamb's Laboratory, New York, N. Y. Antiseptic, deodorant, and prophylactic preparation. Serial No. 329,852; Nov. 29. Class 6.

Chichester Chemical Company, Philadelphia, Pa. Powdered deodorant. Serial Nos. 330,323–4; Nov. 29. Class 6.

Christy Cosmetics, Inc., New York, N. Y. Lipsticks, face powders, rouges, etc. Serial No. 323,608; Nov. 29. Class 6.

Ciccarelli, Mary, doing business as East Boston Sugar Cone Co., East Boston, Mass. Ice cream cones. Serial No. 330,781; Nov. 29. Class 46.

Columbia Phonograph Company, Inc., Bridgeport, Conn. Laundry cabinet dryers, dry cleaning machines, ironing boards, etc. Serial No. 320,711; Nov. 29. Class 24.

Columbia Phonograph Company, Inc., Bridgeport, Conn. Dry cleaning and spot removing fluid. Serial No. 322,421; Nov. 29. Class 4.

Combier & Co. Inc., New York, N. Y. Piece goods. Serial No. 330,695; Nov. 29. Class 42.

Container Corporation of America, Chicago, Ill. Thermal insulating board. Serial No. 330,120; Nov. 29. Class 12.

Copy Papers, Inc., Chicago, Ill. Paper. Serial No. 317,029; Nov. 29. Class 37.

Cramer Chemical Co., The, Gardner, Kans. Germicide. Serial No. 330,889; Nov. 29. Class 6.

Crescent Box Corporation, Philadelphia, Pa. Boxes. Serial No. 330,364; Nov. 29. Class 2.

Dacotah Cotton Mills, Inc., Lexington, N. C. Cotton piece goods. Serial No. 331,216; Nov. 29. Class 42.

Dan-Dee Pretzel & Potato Chip Company, The, Cleveland, Ohio. Pretzels. Serial No. 325,643; Nov. 29. Class 46.

Dan-Dee Pretzel & Potato Chip Company, The, Cleveland, Ohio. Noodles. Serial No. 325,644; Nov. 29. Class 46.

Davidson, Glee D., doing business as Etel-Ga Laboratories, Rifle, Colo. Skin lotions. Serial No. 330,122; Nov. 29. Class 6.

De Jesús, José, doing business as Laboratorios Farmaceuticos De Puerto Rico, New York, N. Y. Preparation used as a liniment. Serial No. 330,621; Nov. 29. Class 6.

Dennis, Martin, Company, Newark, N. J. Leather dressing. Serial No. 330,516; Nov. 29. Class 4.

Dent-O-Fras Tooth Paste Co. (See Murray, Malcolm J.)

Deutsche Gold- & Silber-Scheideanstalt, Frankfort-on-the-Main, Germany. Absorbents, alteratives, antacids, etc. Serial No. 318,199; Nov. 29. Class 6.

Deutsche Gold- & Silber-Scheideanstalt, Frankfort-on-the-Main, Germany. Armatures, outfits and apparatus for domestic and industrial purposes, electric cooking apparatus, etc. Serial No. 318,224; Nov. 29. Class 21.

Dewar, John, & Sons Limited, Perth, Scotland, and London, England. Whisky. Serial No. 329,629; Nov. 29. Class 49.

Durex Products Inc., New York, N. Y. Base for antiseptic jelly. Serial No. 330,840; Nov. 29. Class 6.

E. & A. R., Binghamton, N. Y. Hair restorative. Serial No. 330,472; Nov. 29. Class 6.

Eagle Knitting Mills, Inc., Philadelphia, Pa. Sport suits, dresses, skirts, blouses. Serial No. 319,885; Nov. 29. Class 39.

East Boston Sugar Cone Co. (See Ciccarelli, Mary.)

Etel-Ga Laboratories. (See Davidson, Glee D.)

Ettor, Joseph J., Modesto, Calif. Fresh grapes. Serial No. 331,427; Nov. 29. Class 46.

Every Month Publishing Co., Inc., New York, N. Y. Magazine. Serial No. 331,303; Nov. 29. Class 38.

Fahlberg-List Aktiengesellschaft, Chemische Fabriken, Magdeburg Sudost, Germany. Preparation for preserving victuals. Serial No. 330,816; Nov. 29. Class 6.

Florsheim Shoe Company, The, Chicago, Ill. Shoes. Serial No. 330,177; Nov. 29. Class 39.

Fortune Tobacco Company, The, New York, N. Y. Cigarettes. Serial Nos. 331,281–3; Nov. 29. Class 17.

Frankl, Julia, New York, N. Y. Chocolates, caramels, peppermints, etc. Serial No. 324,052; Nov. 29. Class 46.

Fuger and Baker, Lincoln, Nebr. Cleaner for cleaning floors, carpets, etc. Serial No. 327,870; Nov. 29. Class 4.

Fuhr, Robert W., New Orleans, La. Nut paste. Serial No. 327,975; Nov. 29. Class 46.

General Dyestuff Corporation, New York, N. Y. Auxiliary agent for dyeing. Serial No. 330,847; Nov. 29. Class 6.

Germanow-Simon Machine Co., Rochester, N. Y. Watch crystals. Serial No. 329,634; Nov. 20. Class 33.

Genting, A. H., Company, Philadelphia, Pa. Boots and shoes. Serial No. 328,656; Nov. 29. Class 39.

Glaramita & Nugnes, Brooklyn, N. Y. Preparation for scalp treatment. Serial No. 324,314; Nov. 29. Class 6.

Globe Knitting Mills. (See Rambo & Regar, Incorporated.)

Goldberg, Bowen & Co., San Francisco, Calif. Coffee. Serial No. 330,512; Nov. 29. Class 46.

Good Humor Corporation of America, Cleveland, Ohio. Periodicals. Serial No. 328,307; Nov. 29. Class 38.

Goodyear Tire & Rubber Company, The, Akron, Ohio. Ready mixed paint, varnish, and paint enamel. Serial No. 331,081; Nov. 29. Class 16.

Hanna, Leonard B., Caldwell, Kans. Preparations for use in the treatment of mange. Serial No. 330,746; Nov. 29. Class 6.

Harvey, John, & Sons, Limited, Bristol, England. Sherry wine. Serial No. 331,551; Nov. 29. Class 47.

Harwood Bros., Inc., Richmond, Va. Lubricating oils and greases. Serial No. 329,945; Nov. 29. Class 15.

Heddon's, James, Sons, Dowagiac, Mich. Artificial baits. Serial No. 331,461; Nov. 29. Class 22.

Hemafil Company, The. (See Van Sant, Robert H.)

Hoffmann-Hayman Coffee Co., San Antonio, Tex. Coffee. Serial No. 327,979; Nov. 29. Class 46.

Holland Pharmacal Company, Philadelphia, Pa. Hemorrhoidal ointment. Serial No. 330,747; Nov. 29. Class 6.

Homor Bilt Products, Inc., Philadelphia, Pa. Mattresses and box-springs. Serial No. 331,364; Nov. 29. Class 32.

Horder's Inc., Chicago, Ill. Pencils. Serial No. 331,374; Nov. 29. Class 37.

Horn, A. C., Company, Long Island City, N. Y. Varnish compound. Serial No. 331,464; Nov. 29. Class 16.

Houbigant, Inc., New York, N. Y. Perfumes, toilet water, face powder, etc. Serial No. 328,813; Nov. 29. Class 6.

Hunt, Daniel, Bremerton, Wash. Facial cleanser and cream. Serial No. 330,190; Nov. 29. Class 6.

LIST OF TRADE-MARK APPLICANTS

PUBLISHED FOR OPPOSITION

[Act of Feb. 20, 1905, Sec. 6, as amended Mar. 2, 1907]

Huston, Tom, Peanut Company, Columbus, Ga. Cigarettes. Serial No. 331,255; Nov. 29. Class 17.
Industrial Medicine, Inc., Chicago, Ill. Publication. Serial No. 331,465; Nov. 29. Class 38.
Institut De Beaute, Inc., New York, N. Y. Face and, body creams, hand lotions, etc. Serial No. 325,173; Nov. 29. Class 6.
International Printing Ink Corporation, The, New York, N. Y. Printing ink. Serial No. 331,256; Nov. 29. Class 11.
Jarman Shoe Company, Nashville, Tenn. Boots, shoes, and slippers. Serial No. 330,705; Nov. 29. Class 39.
Jell Sert Co., The, Chicago, Ill. Maltless powder. Serial No. 331,050; Nov. 29. Class 45.
Jenkins Bros., New York, N. Y. Jar rings. Serial No. 331,286; Nov. 29. Class 35.
Jones, Estella L., San Diego, Calif. Skin lotion and toilet preparation. Serial No. 330,301; Nov. 29. Class 6.
Katakura Seishi Boseki Kabushiki Kwaisha, Tokyo, Japan. Raw silk, rayon (artificial silk), tussah silk, etc. Serial No. 329,289; Nov. 29. Class 1.
Kerfoot, Thomas, & Co., Limited, Bardsley, England. Medicinal preparation. Serial No. 330,852; Nov. 29. Class 6.
Kiss-O-Love Perfumers. (See Plough, Inc.)
Kitgen Laboratories. (See Sullivan, James F.)
Kluger, M. J., Inc., New York, N. Y. Seed laxatives. Serial No. 329,899; Nov. 29. Class 6.
Knopf, Emil, jr., doing business as Box Golf Company, West Brighton, Staten Island, N. Y. Miniature golf game. Serial No. 320,682; Nov. 29. Class 22.
Koenig, Joseph, Philadelphia, Pa. Sticky fly paper. Serial No. 321,707; Nov. 29. Class 50.
Laboratories Farmaceuticos De Puerto Rico. (See de Jesus, José.)
Lamb's Laboratory. (See Charlamb, Leon.)
Lamm, Jacob C., Baltimore, Md. Trench coats, knickers, jackets, etc. Serial No. 329,975; Nov. 29. Class 39.
La Verne Orange Association, La Verne, Calif. Fresh citrus fruits. Serial No. 331,155; Nov. 29. Class 46.
Lido Luggage Co., Inc., New York, N. Y. Luggage. Serial No. 331,262; Nov. 29. Class 3.
Los Angeles Knitting Company, Hollydale, Calif. Knitted skirts. Serial No. 315,886; Nov. 29. Class 39.
Ludford Fruit Products, Inc., Hollywood, Calif. Maltless beverages. Serial No. 331,157; Nov. 29. Class 45.
Mantle Lamp Company of America, The, Chicago, Ill. Electric illuminating lamps. Serial No. 328,693; Nov. 29. Class 21.
Martin Cantine Company, The, Saugerties, N. Y. Clay coated paper. Serial No. 330,304; Nov. 29. Class 37.
McAlister, Charles B., doing business as O-Ren-Da Medicine Co., Cincinnati, Ohio. Reducing tea. Serial No. 325,524; Nov. 29. Class 6.
McCrory Stores Corporation, New York, N. Y. Nail polish and nail polish remover. Serial No. 328,066; Nov. 29. Class 6.
McCrory Stores Corporation, New York, N. Y. Nail polish and nail polish remover. Serial No. 328,067; Nov. 29. Class 6.
Merrell, Wm. S., Company, The, Cincinnati, Ohio. Medicinal preparation. Serial No. 330,855; Nov. 29. Class 6.
Meyer, Wm., Co., The, Chicago, Ill. Massage machines. Serial No. 330,856; Nov. 29. Class 44.
Modern Tissues Corporation, New York, N. Y. Toilet and facial tissue. Serial No. 330,794; Nov. 29. Class 37.
Monnier, Ernest, Inc., Boston, Mass. Rubber nursing nipples. Serial No. 330,897; Nov. 29. Class 44.
Morey Mercantile Company, The, Denver, Colo. Coffee. Serial No. 325,990; Nov. 29. Class 46.
Mor-Pak Preserving Corporation, Stockton, Calif. Canned fruits. Serial No. 331,161; Nov. 29. Class 46.
Mosso, Camillo E., Newark, N. J., and New York, N. Y. Iron arsenate sterules and drops. Serial No. 329,382; Nov. 29. Class 6.
Murphy, Howard J., Novelty Co., Reading, Mass. Jig-saw cut out puzzles. Serial No. 330,205; Nov. 29. Class 22.
Murray, Malcolm J., doing business as Dent-O-Fras Tooth Paste Co., San Bernardino, Calif. Tooth paste and an antiseptic preparation. Serial No. 330,488; Nov. 29. Class 6.
Nachod & United States Signal Co., Inc., Louisville, Ky. Electric block signal light systems for railways, electric light signal systems for street traffic, etc. Serial No. 328,049; Nov. 29. Class 21.
Nelson Knitting Company, Rockford, Ill. Hosiery. Serial Nos. 329,404–5; Nov. 29. Class 39.
Neurex Drug Co. (See Nikiel, Ann C.)
New York American, Inc., New York, N. Y. Newspaper section. Serial No. 319,624; Nov. 29. Class 38.
Nikiel, Ann C., doing business as Neurex Drug Co., Lynn, Mass. Medicine. Serial No. 329,249; Nov. 29. Class 6.
Obermeyer & Co. A. G., Hanau-on-the-Main, Germany. Medicinal ointment. Serial No. 329,264; Nov. 29. Class 6.
Olixir Corporation, Buffalo, N. Y. Gasoline and other motor fuel oils. Serial No. 330,049; Nov. 29. Class 15.
O-Ren-Da Medicine Co. (See McAlister, Charles B.)
Parfumerie St. Denis, New York, N. Y. Astringents, bleach creams, beauty creams, etc. Serial No. 327,409; Nov. 29. Class 6.
Parr, George T., Minneapolis, Minn. Confections. Serial No. 330,966; Nov. 29. Class 46.
Petrolagar Laboratories, Inc., Chicago, Ill. Preparation for the treatment of constipation. Serial No. 328,337; Nov. 29. Class 6.
Pingsten, August F., Rock Rapids, Iowa. Bread and cake boxes. Serial No. 331,090; Nov. 29. Class 2.
Phelps Dodge Copper Products Corporation, Dover, Del., and New York, N. Y. Copper wire and cable. Serial No. 330,564; Nov. 29. Class 21.
Pinnacle Packing Company, Inc., Medford, Oreg. Fresh deciduous fruits. Serial No. 331,439; Nov. 29. Class 46.
Plough, Inc., doing business as Kiss-O-Love Perfumers, Memphis, Tenn. Toilet and medicinal preparations. Serial No. 331,007; Nov. 29. Class 6.
Pollak, Henry, Inc., New York, N. Y. Caps and hats. Serial No. 330,430; Nov. 29. Class 39.
Pollak, Henry, Inc., New York, N. Y. Hats. Serial No. 331,194; Nov. 29. Class 39.
Polo Produce Company, Chicago, Ill. Dressed poultry. Serial No. 331,391; Nov. 29. Class 46.
Popular Fiction Publishing Company, Indianapolis, Ind. Periodical. Serial No. 331,062; Nov. 29. Class 38.
Premier Malt Products Co., Peoria Heights, Ill. Malt beverage. Serial No. 331,592; Nov. 29. Class 48.
Para-Smoke Company, Inc., The, Burlington, N. C. Pipes, cigar and cigarette molders, and filter cartridges therefor. Serial No. 330,930; Nov. 29. Class 6.
Rambo & Regar, Incorporated, doing business as Globe Knitting Mills, Norristown, Pa. Anklets. Serial No. 330,931; Nov. 29. Class 39.
Ransom & Randolph Company, The, Toledo, Ohio. Denture materials. Serial No. 323,310; Nov. 29. Class 44.
Ransom & Randolph Company, The, Toledo, Ohio. Dental burs, molds, alloys, etc. Serial No. 323,311; Nov. 29. Class 44.
Raybestos-Manhattan, Incorporated, Passaic, N. J., and Bridgeport, Conn. Automobile brakes. Serial No. 328,655; Nov. 29. Class 19.
Riegel Textile Corporation, New York, N. Y. Cotton piece goods, diapers, sheets, and pillow cases. Serial No. 325,599; Nov. 29. Class 42.
Robinson-Bynon Shoe Company, Incorporated, Auburn, N. Y. Shoes. Serial No. 314,074; Nov. 29. Class 39.
Roessel, Louis, & Co., Inc., Hazleton, Pa., and New York, N. Y. Silk goods in the piece. Serial No. 331,383; Nov. 29. Class 42.
Romano, Jacques, New York, N. Y. Iodine. Serial No. 330,799; Nov. 29. Class 6.
Ryff & Co. Ltd., doing business as Ryff & Co. Ltd., A. G. Strickwarenfabrik Bern and as Ryff & Co. S. A. Fabrique de Tricotages, Berne, Bern, Switzerland. Underwear and bathing suits. Serial No. 330,933; Nov. 29. Class 39.
S-P Laboratories. (See Superior Products Company.)
S. S. White Dental Manufacturing Company, The, Philadelphia, Pa. Dental supplies. Serial No. 330,942; Nov. 29. Class 44.
Sadwin Manufacturing Company, Inc., Woonsocket, R. I. Crib sheets, pillow cases, blankets, etc. Serial No. 330,105; Nov. 29. Class 42.
Selby Shoe Company, The, Portsmouth, Ohio. Shoes. Serial No. 331,166; Nov. 29. Class 39.
Semmes Corporation, Detroit, Mich. Medicinal water. Serial No. 325,500; Nov. 29. Class 6.
"Semperit" Oesterreichisch-Amerikanische Gummiwerke Aktiengesellschaft, Vienna, Austria. Soap dishes, tooth brush stands, egg cups, etc. Serial No. 331,125; Nov. 29. Class 2.
Service Station Equipment Company, Conshohocken, Pa. Cabinets and parts thereof. Serial No. 330,433; Nov. 29. Class 32.
Sherman, G. H., M. D., Inc., Detroit, Mich. Creams, salves, or skin ointments. Serial No. 330,023; Nov. 29. Class 6.
Simmons Tours, Inc., New York, N. Y. Publication. Serial No. 330,901; Nov. 29. Class 38.
Slade, Charles F., Co., Inc., Buffalo, N. Y. Bleaching solution. Serial No. 330,936; Nov. 29. Class 6.
Sociedade dos Vanhos do Porto Constantino, Ltd. A. Villa Nova, de Gaya, Portugal. Wines. Serial No. 331,566; Nov. 29. Class 47.
Sontag, Ben, Co. (See Bonkura Products Co., Inc.)
Sovereign Mineral Spring Co. (See Teller, John L.)
Soya Products, Inc., Chicago, Ill. Feeds for livestock. Serial No. 325,020; Nov. 29. Class 46.
Soya Products, Inc., Chicago, Ill. Feeds for livestock. Serial No. 327,112; Nov. 29. Class 46.
Standard Oil Company of New Jersey, Wilmington, Del. Oils and greases. Serial No. 298,725; Nov. 29. Class 15.
Stone Mill Fabrics Corp., New York, N. Y. Cotton piece goods. Serial No. 331,093; Nov. 29. Class 42.
Stowell and Co., San Francisco, Calif. Membranous articles. Serial No. 309,318; Nov. 29. Class 44.
Strong Hewat & Co., Inc., New York, N. Y. Woolen piece goods. Serial No. 331,094; Nov. 29. Class 42.

LIST OF TRADE-MARK APPLICANTS

PUBLISHED FOR OPPOSITION

[Act of Feb. 20, 1905, Sec. 6, as amended Mar. 2, 1907]

Sullivan, James F., doing business as Kitgen Laboratories, Camden, N. J. Cosmetic. Serial No. 331,204; Nov. 29. Class 6.
Superior Products Company, doing business as S-P Laboratories, Dallas, Tex. Hair dressing and straightener, hair oil, cold cream, etc. Serial No. 330,001; Nov. 29. Class 6.
Talens & Son, Inc., Irvington, N. J. Drawing ink. Serial No. 331,130; Nov. 29. Class 11.
Teller, John L., doing business as Sovereign Mineral Spring Co., Utica, N. Y. Ginger ale and spring water. Serial No. 331,348; Nov. 29. Class 45.
United Distillers Limited, Vancouver, British Columbia, Canada. Maltless beverages. Serial Nos. 322,900–2; Nov. 29. Class 45.
United Grocers, Ltd., San Francisco, Calif. Dog and cat food. Serial No. 331,168; Nov. 29. Class 46.
Vadasco Sales Corporation, New York and Long Island City, N. Y. Astringents, astringent cerates, bleach and beauty creams, etc. Serial Nos. 319,839–40; Nov. 29. Class 6.
Van Sant Robert H., doing business as Hemafil Company, The, Chicago, Ill. Blood invigorator and tonic. Serial No. 330,916; Nov. 29. Class 6.
Vogue Brassiere Mfg. Co., Newark, N. J. Corsets and brassières and combinations. Serial No. 330,587; Nov. 29. Class 39.
Wanamaker, John, Philadelphia, Pa. Bottle cases, cases for field glasses, opera glasses, etc. Serial No. 331,205; Nov. 29. Class 2.
Wanamaker, John, Philadelphia, Pa. Playing card cases. Serial No. 331,207; Nov. 29. Class 2.
Wanamaker, John, Philadelphia, Pa. Photograph frames. Serial No. 331,208; Nov. 29. Class 32.
Weill & Hartmann, New York, N. Y. Gloves, corsets, brassières, etc. Serial No. 330,559; Nov. 29. Class 39.
Weisbaum Bros. Brower Co., The, Cincinnati, Ohio. Neckties. Serial No. 330,961; Nov. 29. Class 39.
Wells-Lamont-Smith Corporation, Minneapolis, Minn. Gloves. Serial No. 330,674; Nov. 29. Class 39.
Wells-Lamont-Smith Corporation, Minneapolis, Minn. Gloves. Serial Nos. 330,722–4; Nov. 29. Class 39.
Wells-Lamont-Smith Corporation, Minneapolis, Minn. Gloves. Serial No. 330,965; Nov. 29. Class 39.
Wells-Lamont-Smith Corporation, Minneapolis, Minn. Gloves. Serial No. 331,070; Nov. 29. Class 39.
West Virginia Pulp & Paper Company, New York, N. Y. Coated papers. Serial No. 330,322; Nov. 29. Class 37.
Western States Mfg. Co., Sioux City, Iowa. Sheet rubber tire patching material and tire repair kits. Serial No. 331,095; Nov. 29. Class 35.
Westinghouse Electric and Manufacturing Company, East Pittsburgh, Pa. Trays and dishes. Serial No. 330,839; Nov. 29. Class 2.
Will & Baumer Candle Co., Inc., Syracuse, N. Y. Candles. Serial No. 323,152; Nov. 29. Class 15.
Woman's Wear Service, Inc., Huntington, Ind. Foundation garments, girdles, and abdominal uplift belts. Serial No. 326,756; Nov. 29. Class 39.
Woodmen of the World, Denver, Colo. Magazine. Serial No. 330,590; Nov. 29. Class 38.
Younger, Frederick, Papillion, Nebr. Lotion for sores and skin irritations. Serial No. 330,676; Nov. 29. Class 6.

LIST OF REGISTRANTS OF TRADE-MARKS

Acme White Lead & Color Works, Detroit, Mich. Prepared paints, semi-paste paints, paint reducers, varnish removers, etc. 299,372; Nov. 29; Serial No. 328,772; published Sept. 13, 1932. Class 16.
Aircraft Plywood Corporation, Seattle, Wash. Plywood. 299,334; Nov. 29; Serial No. 329,036; published Sept. 6, 1932. Class 12.
Albers Bros., Milling Company. (See Pacific Cereal Association.)
All-American Mohawk Corporation, Chicago, Ill. Radio receiving sets and parts thereof. 299,387; Nov. 29. Class 21.
Allen Manufacturing Company, The, Hartford, Conn. Machine screws and metal plugs. 299,295; Nov. 29; Serial No. 328,971; published Sept. 13, 1932. Class 13.
American Crayon Company, The, Sandusky, Ohio. Paste and mucilage brushes. 299,317; Nov. 29; Serial No. 327,862; published Sept. 13, 1932. Class 29.
Anchor Sales Company, Los Angeles, Calif. Rubber bases. 299,310; Nov. 29; Serial No. 328,390; published Sept. 20, 1932. Class 50.
Ansonia O & C Company, The, Ansonia, Conn. Elastic fabrics. 299,370; Nov. 29; Serial No. 323,184; published Aug. 23, 1932. Class 42.
Arens, Joseph C., doing business as Stypticones (Not Incorporated), Chicago, Ill. Rectal suppositories. 299,386; Nov. 29. Class 6.
Atwater & Eddy. (See Stanton Milling & Sales Company, Ltd.)
Ayer, N. W., & Son, Philadelphia, Pa.; New York, N. Y.; Boston, Mass.; Chicago, Ill.; and Cleveland, Ohio, to N. W. Ayer & Son, Incorporated, Philadelphia, Pa. Newspaper-directories. 89,809; renewed Jan. 14, 1933.
Baker, Walter D., to Ida S. Baker, Indianapolis, Ind., successor. Dyes. 86,371; renewed May 7, 1932.
Baxter, John A., Cambridge, Ohio. Printed cards and cardboard signs. 299,362; Nov. 29; Serial No. 295,326; published Sept. 13, 1932. Class 38.
Beacon Manufacturing Company, New Bedford, Mass. Blankets. 299,265; Nov. 29; Serial No. 323,220; published Sept. 6, 1932. Class 42.
Belanger, John T., doing business as Belanger Fan & Blower Company, Detroit, Mich. Ventilating and exhaust fans and blowers. 299,269; Nov. 29; Serial No. 324,208; published Sept. 13, 1932. Class 34.
Be Te U Corporation, Salt Lake City, Utah. Heat generators of the gravity-feed type. 299,263; Nov. 29; Serial No. 322,205; published Sept. 13, 1932. Class 34.
Bianchini Férier, Lyon, France. Piece goods. 299,344; Nov. 29; Serial No. 328,658; published Aug. 23, 1932. Class 42.
Bird Haven, Reseda, Calif. Live birds. 299,316; Nov. 29; Serial No. 327,909; published Sept. 13, 1932. Class 1.
Blumenthal, Sidney, & Co. Inc., New York, N. Y. Pile fabrics. 299,328; Nov. 29; Serial No. 328,884; published Aug. 30, 1932. Class 42.
Boston Varnish Company, Everett, Mass. Varnishes, paint enamels, stains, etc. 299,371; Nov. 29; Serial No. 328,574; published Sept. 13, 1932. Class 16.
Bourjois, Inc., New York, N. Y. Face powder. 299,339; Nov. 29; Serial No. 328,836; published Sept. 27, 1932. Class 6.
Brandler-Roth, Inc., New York, N. Y. Silk, cotton, rayon, linen, etc., piece goods. 299,252; Nov. 29. Class 42.
Brigstock, Robert E., Battle Creek, Mich. Milk bottle caps. 299,269; Nov. 29; Serial No. 316,545; published Oct. 13, 1931. Class 50.
Brown, William, Company, Philadelphia, Pa. Hosiery. 89,910; renewed Jan. 31, 1933.
Burns, Samuel R., Newark, N. J. Automatic taping machines. 299,293; Nov. 29; Serial No. 329,220; published Sept. 13, 1932. Class 23.
Camden Tanning Co., Limited, The, Runcorn, England. Sole leather. 299,306; Nov. 29; Serial No. 329,176; published Sept. 13, 1932. Class 1.
Canton Culvert Company, The, Canton, Ohio. Culverts. 88,240; renewed Sept. 10, 1932.
Carnation Company, Wilmington, Del., and Milwaukee, Wis. Tomato juice. 299,279; Nov. 29; Serial No. 319,566; published Apr. 19, 1932. Class 46.
Celanese Corporation of America, New York, N. Y. Fabrics of cellulose derivatives. 299,340–1; Nov. 29; Serial Nos. 328,776–7; published Aug. 23, 1932. Class 42.
Chemical Paper Manufacturing Company, Holyoke, Mass. Writing and printing papers. 299,333; Nov. 29; Serial No. 329,303; published Sept. 13, 1932. Class 37.
Chipman Chemical Company, Inc., Bound Brook, N. J. Ready-mixed paint. 299,324; Nov. 29; Serial No. 329,256; published Sept. 20, 1932. Class 16.
Cluff Cover Company, Inc., New York, N. Y. Table board game. 299,252; Nov. 29; Serial No. 321,536; published Feb. 2, 1932. Class 22.
Coast Fishing Co., Wilmington, Calif. Canned tuna. 299,367; Nov. 29; Serial No. 316,150; published Sept. 20, 1932. Class 46.
Consolidated Mining and Smelting Company of Canada, Limited, The, Trail, British Columbia, Canada. Chemical fertilizer. 299,311; Nov. 29; Serial No. 328,238; published Sept. 13, 1932. Class 10.
Corbin, Elbert A., jr., Bradyville, Pa. Fertilizer. 299,307; Nov. 29; Serial No. 329,222; published Sept. 20, 1932. Class 10.
Courtaulds, Limited, London, England. Piece goods. 299,342–3; Nov. 29; Serial Nos. 328,725–6; published Aug. 23, 1932. Class 42.
Crescent Tool Company, Jamestown, N. Y. Wrenches and parts, pliers, snips, screw drivers, etc. 299,305; Nov. 29; Serial No. 325,284; published Sept. 13, 1932. Class 23.
Dairymen's League Co-Operative Association, Inc., Utica and New York, N. Y. Sour cream, dried skim milk, chocolate milk, etc. 299,336; Nov. 29; Serial No. 328,969; published Sept. 13, 1932. Class 46.
Davis Milling Company, The, St. Joseph, Mo., assignee, by mesne assignments, to The Quaker Oats Company, Chicago, Ill. Pancake-flour. 90,516; renewed Mar. 4, 1933.
Delco-Remy Corporation. (See Liberty Starter Company.)
Detroit Steel Barrel Company, The, Toledo, Ohio. Metallic receptacles. 299,338; Nov. 29. Class 2.

Dewar, John, & Sons Limited, Perth, Scotland, and London, England. Scotch whisky. 299,381; Nov. 29. Class 49.

Dewey Portland Cement Company, Kansas City, Mo. Portland cement. 299,338; Nov. 29; Serial No. 328,866; published Sept. 6, 1932. Class 12.

Diesel Filter Co., Inc., Astoria, Oreg. Oil filters. 299,296; Nov. 29; Serial No. 328,915; published Sept. 13, 1932. Class 23.

Ducharne, F., Silk Co. Inc., New York, N. Y. Silk, etc., piece goods. 299,326; Nov. 29; Serial No. 328,810; published Sept. 6, 1932. Class 42.

Dudley Lock Corporation, Chicago, Ill. Locks. 299,335; Nov. 29; Serial No. 328,980; published Sept. 13, 1932. Class 25.

Equitation Specialty Co. (See Weiskotten, William O.)

Federal Star Dyers Corp., Brooklyn, N. Y. Dyed furs. 299,380; Nov. 29. Class 1.

Fischer, Frank, Whiting, Ind. Envelopes. 299,349; Nov. 29; Serial No. 327,083; published Sept. 20, 1932. Class 37.

Foil Products Corporation, New York, N. Y. Wrapping paper. 299,337; Nov. 29; Serial No. 328,888; published Sept. 20, 1932. Class 37.

Forstmann & Huffmann Company, Passaic, N. J. Woolen piece goods. 299,278; Nov. 29; Serial No. 317,928; published Aug. 23, 1932. Class 42.

Forstmann Woolen Co., Passaic, N. J. Woolen piece goods. 299,272; Nov. 29; Serial No. 328,953; published Sept. 6, 1932. Class 42.

Forstmann Woolen Co., Passaic, N. J. Woolen piece goods. 299,352; Nov. 29; Serial No. 328,935; published Sept. 6, 1932. Class 42.

Forstmann Woolen Co., Passaic, N. J. Woolen piece goods. 299,353; Nov. 29; Serial No. 328,937; published Sept. 6, 1932. Class 42.

Forstmann Woolen Co., Passaic, N. J. Woolen piece goods. 299,354–5; Nov. 29; Serial Nos. 328 939–40; published Aug. 30, 1932. Class 42.

Forstmann Woolen Co., Passaic, N. J. Woolen piece goods. 299,356; Nov. 29; Serial No. 328,948; published Sept. 6, 1932. Class 42.

Forstmann Woolen Co., Passaic, N. J. Woolen piece goods. 299,357; Nov. 29; Serial No. 328,942; published Aug. 30, 1932. Class 42.

Forstmann Woolen Co., Passaic, N. J. Woolen piece goods. 299,358–9; Nov. 29; Serial Nos. 328,949–50; published Sept. 6, 1932. Class 42.

Forstmann Woolen Co., Passaic, N. J. Woolen piece goods. 299,360; Nov. 22; Serial No. 328,952; published Sept. 6, 1932. Class 42.

Franke, Peter, West Haven, Conn. Honey flavored popcorn. 299,276; Nov. 29; Serial No. 317,166; published Sept. 13, 1932. Class 46.

General Desserts Corporation, New York, N. Y. Chocolate malt powder preparations. 299,346; Nov. 29; Serial No. 328,289; published Sept. 13, 1932. Class 46.

General Talking Pictures Corporation, New York, N. Y. Sound picture apparatus. 299,368; Nov. 29; Serial No. 316,426; published Sept. 13, 1932. Class 26.

Golden, Asher, New York, N. Y. Ball and roller bearings. 299,294; Nov. 29; Serial No. 329,215; published Sept. 13, 1932. Class 23.

Graham, William, & Company, Baltimore, Md. Turpentine and linseed oil. 299,273; Nov. 29; Serial No. 328,887; published Sept. 13, 1932. Class 16.

Grand Rapids Furniture Polish Co., Grand Rapids, Mich. Furniture polish. 299,285; Nov. 29; Serial No. 328,916; published Sept. 13, 1932. Class 16.

Gum Tragasol Supply Company Limited, The, by change of name to Tragasol Products Limited, Hooton, England. Starch sizing. 91,204; renewed Apr. 22, 1933.

Gusman, Fannie, doing business as Mary Ann Tissue Mills Company, Brooklyn, N. Y. Paper napkins, facial towels, tissues, and toilet paper. 299,347; Nov. 29; Serial No. 327,435; published Sept. 20, 1932. Class 37.

Hecker-Jones-Jewell Milling Company, to Standard Milling Company, New York, N. Y. Wheat-flour. 90,203; renewed Feb. 11, 1933.

Hemp, Paul L., doing business as Paul L. Hemp Company, Rochester, Minn. Massaging devices. 299,379; Nov. 29. Class 44.

Heppenstall Company, Pittsburgh, Pa. Razor blades. 299,291–2; Nov. 29; Serial Nos. 329,308–9; published Sept. 20, 1932. Class 23.

Hillyard Chemical Company, St. Joseph, Mo. Liquid floor polish. 299,270; Nov. 29; Serial No. 324,517; published Sept. 13, 1932. Class 16.

Hillyard Chemical Company, St. Joseph, Mo. Liquid floor wax. 299,325; Nov. 29; Serial No. 329,143; published Sept. 13, 1932. Class 16.

Hood Rubber Company, Boston, Mass., assignor to Hood Rubber Company, Inc., Wilmington, Del. Rubber boots, shoes, overshoes, etc. 88,752; renewed Oct. 22, 1932.

Hormats, Robert, doing business as Universal Chemical Company, Baltimore, Md. Floor polish. 299,288; Nov. 29; Serial No. 326,346; published Sept. 13, 1932. Class 16.

Hough Shade Corporation, Janesville, Wis. Porch shades. 299,323; Nov. 29; Serial No. 329,447; published Sept. 13, 1932. Class 32.

Isbell Seed Company, Jackson, Mich. Seeds. 299,308; Nov. 29; Serial No. 328,591; published Sept. 20, 1932. Class 1.

Jelke, John F., Company, Chicago, Ill. Oleomargarine, evaporated milk, mayonnaise, etc. 299,345; Nov. 29; Serial No. 328,831; published Sept. 20, 1932. Class 46.

Johnson & Johnson, New Brunswick, N. J. Toothbrushes. 299,318; Nov. 29; Serial No. 328,732; published Sept. 13, 1932. Class 29.

Johnson, S. C., & Son, Racine, Wis. Paints and undercoats. 299,289; Nov. 29; Serial No. 325,659; published Sept. 20, 1932. Class 16.

King Features Syndicate, Inc., New York, N. Y. Newspaper section. 299,331; Nov. 29; Serial No. 329,312; published Sept. 20, 1932. Class 38.

King & Hamilton Co., Ottawa, Ill. Corn-shellers. 89,469–71; renewed Dec. 17, 1932.

Klauber, Eleanor F., doing business as Klauber Novelty Co., Chicago, Ill. Game. 299,280; Nov. 29; Serial No. 320,546; published Dec. 15, 1931. Class 22.

Knapp, Fred G., Lakewood, Ohio. Touring maps. 299,364; Nov. 29; Serial No. 307,840; published June 23, 1931. Class 38.

Koppers-Rheolaveur Company, Pittsburgh, Pa. Coal or ore cleaning or concentrating apparatus. 299,266–7; Nov. 29; Serial Nos. 323,819–20; published Sept. 13, 1932. Class 23.

Liberty Starter Company, Detroit, Mich., assignors to Delco-Remy Corporation, Anderson, Ind. Electric coil making and assembling machinery. 299,271; Nov. 29; Serial No. 324,715; published Sept. 20, 1932. Class 23.

Liggett & Myers Tobacco Company, New York, N. Y. Cigarette paper. 299,361; Nov. 29; Serial No. 324,844; published Sept. 13, 1932. Class 8.

Lincoln Scale Corporation, Latrobe, Pa. Scales. 299,366; Nov. 29; Serial No. 312,484; published Sept. 13, 1932. Class 26.

Lowe Brothers Company, The, Dayton, Ohio. Primer and sealer. 299,378; Nov. 29. Class 16.

Marsh, M., & Son, Inc., Wheeling, W. Va. Cigars. 299,313; Nov. 29; Serial No. 328,178; published Sept. 13, 1932. Class 17.

Marvin, W. H., Company, The, Urbana, Ohio. Mince-meat. 91,103; renewed Apr. 15, 1933.

Mary Ann Tissue Mills Company. (See Gusman, Fannie.)

Mayer China Company, Beaver Falls, Pa. Chinaware. 299,365; Nov. 29; Serial No. 311,617; published Sept. 13, 1932. Class 30.

Michie, Andrew Y., & Sons, Inc., Philadelphia, Pa. Hair cloth interlining in the piece. 299,268; Nov. 29; Serial No. 324,182; published Sept. 6, 1932. Class 42.

Middle Atlantic Carnation Growers Association, The, Lancaster, Pa. Cut flowers. 299,309; Nov. 29; Serial No. 328,615; published Sept. 13, 1932. Class 1.

Miller Brothers, New York, N. Y. Drapery and upholstery fabrics. 299,286; Nov. 29; Serial No. 327,105; published Sept. 6, 1932. Class 42.

Miller, Daniel, Company, Baltimore, Md. Ready-to-wear garments. 91,325; renewed Apr. 29, 1933.

Montauk Paint & Wall Paper Co., Brooklyn, N. Y. Ready mixed paints, paint oils, prepared shellac, etc. 299,287; Nov. 29; Serial No. 326,626; published Sept. 13, 1932. Class 16.

Moore Grocery Co., Tyler, Tex. Food products. 299,376; Nov. 29. Class 46.

Motor Wheel Corporation, Lansing, Mich. Oil burners. 299,301; Nov. 29; Serial No. 327,827; published Sept. 13, 1932. Class 34.

Myron Bag Co., Inc., New York, N. Y. Handbags. 299,348; Nov. 29; Serial No. 327,254; published Sept. 20, 1932. Class 3.

National Enameling & Stamping Company, Milwaukee, Wis. Woven wicks. 299,377; Nov. 29. Class 34.

Newco Co. (See Schiebel, Henry.)

Newco Manufacturing Corporation. (See Schiebel, Henry, assignor.)

Northwestern Barb Wire Company, Sterling, Ill. Nails. 299,385; Nov. 29. Class 13.

Oberg, C. O., & Co: s Aktiebolag Eskilstuna, Sweden. Files and rasps. 299,277; Nov. 29; Serial No. 317,368; published Sept. 13, 1932. Class 23.

Ocean Bathing Suit Co., The, New York, N. Y. Bathing-suits. 90,650; renewed Mar. 11, 1933.

Ocean Bathing Suit Co., The, New York, N. Y. Bathing-suits. 90,909; renewed Apr. 1, 1933.

Pacific Cereal Association, San Francisco, Calif., to Albers Bros., Milling Company, Portland, Oreg. Rolled oats, flaked wheat, and granulated wheat. 88,939; renewed Oct. 29, 1932.

Peller-Baxelon, Chicago, Ill. Razors. 299,264; Nov. 29; Serial No. 323,094; published Sept. 13, 1932. Class 23.

Pendleton Woolen Mills, Portland, Oreg. Wool blankets. 299,374; Nov. 29; Serial No. 328,799; published Sept. 13, 1932. Class 42.

Pepperell Manufacturing Company, Boston, Mass. Sheets. 299,351, Nov. 29; Serial No. 328,925; published Sept. 6, 1932. Class 42.

Photo Marketing Corporation, New York, N. Y. Cameras and parts. 299,300; Nov. 29; Serial No. 327,918; published Sept. 13, 1932. Class 26.

Pittsburgh Piping and Equipment Co., Pittsburgh, Pa. Tubular metal bands. 299,312; Nov. 29; Serial No. 328,183; published Sept. 20, 1932. Class 14.

Powdrell & Alexander, Inc., Danielson, Conn. Cotton piece goods and curtains. 299,389; Nov. 29. Class 42.

Priddy, Chas. W., & Company, Inc., Norfolk, Va. Nova Scotia land-plaster. 91,247; renewed Apr. 22, 1933.

Princess Fabrics Co. Inc., New York, N. Y. Textile fabrics of silk only and piece goods made of silk. 299,373; Nov. 29; Serial No. 328,585; published Sept. 13, 1932. Class 42.

Pyramid Drug Co., Marshall, Mich. Pile remedy. 90,739; renewed Mar. 18, 1933.

Quaker Oats Company. (See Davis Milling Company, The, assignor.)

Rapid Roller Company, Chicago, Ill. Printers' rollers, composition coated rollers, etc. 299,303; Nov. 29; Serial No. 327,026; published Sept. 13, 1932. Class 23.

Renaud Optical Company, Inc., Petersburg, Va. Ophthalmic lenses. 299,290; Nov. 29; Serial No. 329,429; published Sept. 20, 1932. Class 26.

Rhodes-Perry-Martin, Inc., St. Louis, Mo. Machinery for dry cleaning. 299,333; Nov. 29; Serial No. 329,201; published Sept. 20, 1932. Class 24.

Rockola, David C., Chicago, Ill. Scales. 299,281; Nov. 29; Serial No. 321,258; published Sept. 13, 1932. Class 26.

Ross, Fred'k N., Inc., Detroit, Mich. Ventilators. 299,302; Nov. 29; Serial No. 327,479; published Sept. 20, 1932. Class 34.

Sager, Howard W., Topeka, Kans. Chamois skins. 299,319; Nov. 29; Serial No. 327,822; published Sept. 13, 1932. Class 1.

St. Louis Coffee & Spice Mills, St. Louis, Mo. Blended coffee. 88,970; renewed Oct. 29, 1932.

Sandel Manufacturing Co., Chicago, Ill. Make-up lamp-stands. 299,274; Nov. 29; Serial No. 328,997; published Sept. 13, 1932. Class 32.

Sargent, Edwin, doing business as Sargent Building Specialties Co., New York, N. Y. Incinerators, parts, and bopper doors for incinerator flues. 299,262; Nov. 29; Serial No. 322,189; published Sept. 13, 1932. Class 34.

Schiebel, Henry, doing business as Newco Co., assignor to Newco Manufacturing Corporation, Mount Vernon, N. Y. Liquid wax. 299,283; Nov. 29; Serial No. 321,782; published Sept. 20, 1932. Class 16.

Schlitz, Jos., Brewing Company, to Jos. Schlitz Beverage Company, Milwaukee, Wis. Lager-beer. 90,587; renewed Mar. 4, 1933.

Scott, J. E., Cup Co., The, Marietta, Ohio, to The J. E. Scott Cup Company, Columbus, Ohio. Leather valve-cups. 89,510; renewed Dec. 17, 1932.

Sharpless, P. E., Company, Concordville and Philadelphia, Pa., to P. E. Sharpless Company, Philadelphia, Pa. Evaporated milk. 88,791; renewed Oct. 22, 1932.

Shore, Albert F., Jamaica, N. Y. Graph calculating devices. 299,297; Nov. 29; Serial No. 328,895; published Sept. 13, 1932. Class 26.

Simmons Manufacturing Co., The, Cleveland, Ohio. Monthly publication. 299,330; Nov. 29; Serial No. 329,387; published Sept. 13, 1932. Class 38.

Snider Packing Corporation, Rochester, N. Y., now by change of name Snider Liquidating Company, Inc., assignor to Snider Packing Corporation. Canned vegetables, fruits, berries, etc. 299,350; Nov. 22; Serial No. 326,343; published Sept. 13, 1932. Class 46.

Sonnenschein, J., Hop Co. Inc., New York, N. Y. Hops. 299,363; Nov. 29; Serial No. 299,022; published Sept. 13, 1932. Class 1.

Stanco Incorporated, Wilmington, Del., and New York, N. Y. Lacquer solvent. 299,275; Nov. 29; Serial No. 329,064; published Sept. 13, 1932. Class 16.

Standard Electric Stove Company, The, Toledo, Ohio. Electric cook stoves and ranges. 299,383; Nov. 29. Class 21.

Standard Milling Company. (See Hecker-Jones-Jewell Milling Company.)

Standard Scientific Supply Corporation, New York, N. Y. Collectors' kits. 299,321; Nov. 29; Serial No. 325,931; published Sept. 13, 1932. Class 50.

Stanford Products, Ltd., San Francisco, Calif. Electric clocks. 299,375; Nov. 29. Class 27.

Stanton Milling & Sales Company, Ltd., Los Angeles, Calif., assignor to Atwater & Eddy, Wilmar, Calif. Leg bands. 299,384; Nov. 29. Class 50.

Strathmore Paper Company, West Springfield, Mass. Writing and printing paper. 299,329; Nov. 29; Serial No. 329,433; published Sept. 20, 1932. Class 37.

Stypticones (Not Incorporated). (See Arens, Joseph C.)

Tennessee Enamel Manufacturing Company, Nashville, Tenn. Porcelain enameled tables and table tops, cabinets, etc. 299,322; Nov. 29; Serial No. 329,513; published Sept. 20, 1932. Class 32.

Tragasol Products Limited. (See Gum Tragasol Supply Company Limited, The.)

United States Gauge Company, New York, N. Y. Gauges. 299,298–9; Nov. 29; Serial Nos. 328,454–5; published Sept. 20, 1932. Class 26.

Universal Chemical Company. (See Hormats, Robert.)

Wadhams Oil Company, Milwaukee, Wis. Gasolene. 91,143; renewed Apr. 15, 1933.

Wedler-Shuford Co., The, St. Louis, Mo. Vehicle seat covers and pads. 291,304; Nov. 29; Serial No. 325,358; published Sept. 20, 1932. Class 32.

Weiskotten, William O., doing business as Equitation Specialty Co., San Diego, Calif. Boot trees. 299,314–15; Nov. 29; Serial Nos. 328,149–50; published Sept. 20, 1932. Class 50.

Wheelwright, Geo. W., Paper Company, Boston, Mass., to Geo. W. Wheelwright Paper Company, Leominster, Mass. Writing and printing paper and bristol-board. 89,315; renewed Dec. 3, 1932.

Winter Haven Citrus Growers Association, Winterhaven, Fla. Oranges, lemons, grape-fruit, etc. 91,147; renewed Apr. 15, 1933.

Wooding & Teasdale, Leicester, England. Clothing. 88,819; renewed Oct. 22, 1932.

Wooster Brush Company, The, Wooster, Ohio. Paint and varnish brushes. 299,320; Nov. 29; Serial No. 327,178; published Sept. 20, 1932. Class 29.

York and Company, Grand Rapids, Mich. Coal. 299,284; Nov. 29; Serial No. 322,035; published Sept. 13, 1932. Class 1.

Zapon Company, The, Wilmington, Del. Lacquers, paint thinners, and/or lacquer thinners. 299,327; Nov. 29; Serial No. 328,861; published Sept. 13, 1932. Class 16.

LIST OF REGISTRANTS OF LABELS

All-Fair, Inc., Churchville, N. Y. Play Awhile, Series No. 1. For Puzzles. 41,441; Nov. 29.

All-Fair, Inc., Churchville, N. Y. 4 In-A-Ro. For Games. 41,442; Nov. 29.

All-Fair, Inc., Churchville, N. Y. Race to the Moon. For Games. 41,443; Nov. 29.

All-Fair, Inc., Churchville, N. Y. Play Boy Tiddledy Winks. For Games. 41,444; Nov. 29.

All-Fair, Inc., Churchville, N. Y. Dim Those Lights. For Games. 41,445; Nov. 29.

All-Fair, Inc., Churchville, N. Y. Play Awhile, Series No. 2. For Puzzles. 41,446; Nov. 29.

All-Fair, Inc., Churchville, N. Y. Play Boy Lotto. For Games. 41,447; Nov. 29.

All-Fair, Inc., Churchville, N. Y. Cities. For Games. 41,448; Nov. 29.

All-Fair, Inc., Churchville, N. Y. Old Maid. For Games. 41,449; Nov. 29.

Bird & Son, Inc., East Walpole, Mass. Styleader. For Shoes. 41,450; Nov. 29.

Blumberg, Abraham, doing business as Miller Soap Products, Los Angeles, Calif. Gold Medal Soap Powder. For Soap Powder. 41,451; Nov. 29.

Blumberg, Abraham, doing business as Miller Soap Products, Los Angeles, Calif. Atlas Washing Powder. For Washing Powder. 41,452; Nov. 29.

Blumberg, Abraham, doing business as Miller Soap Products, Los Angeles, Calif. Lavar Blanco Soap. For Soap. 41,453; Nov. 29.

Chief Oats Co. (See Purity Oats Company.)

Circle X, Incorporated, Joplin, Mo. Sa-So. For Tooth Powder. 41,454; Nov. 29.

Circle X, Incorporated, Joplin, Mo. Sa-So. For Tooth Brushes. 41,455; Nov. 29.

Claff, M. B., & Sons, Inc., Randolph, Mass. Style Knight. For Shoes. 41,456; Nov. 29.

Collins-Lee Company, Chelsea, Mass. Coleeco. For Codfish. 41,457; Nov. 29.

Fidalgo Island Packing Co., Seattle, Wash. Tulip Brand. For Canned Salmon. 41,458; Nov. 29.

Flora, Forrest C., Tacoma, Wash. Flora's Concentrated Rose Water and Glycerin Cream. For Concentrated Rose Water and Glycerine Cream. 41,459; Nov. 29.

Fort Lupton Canning Company, The, Fort Lupton, Colo. Lone Pine. For Tomatoes. 41,460; Nov. 29.

Fritsch, Lewis A., Cincinnati, Ohio. Relief Belt. For Rupture Belts. 41,461; Nov. 29.

General Products Co., Philadelphia, Pa. Nu-Ma Salve. For Antiseptic and Penetrating Salve. 41,462; Nov. 29.

La Choy Food Products, Inc., Detroit, Mich. La Choy Bean Sprouts. For Canned Bean Sprouts. 41,463; Nov. 29.

La Choy Food Products, Inc., Detroit, Mich. La Choy Chow Mein Noodles. For Canned Chow Mein Noodles. 41,464; Nov. 29.

La Choy Food Products, Inc., Detroit, Mich. La Choy Vegetables. For Canned Mixture of Bean Sprouts, Sweet Peppers, Sliced Mushrooms, Bamboo Shoots, Etc. 41,465; Nov. 29.

Lunts, Joseph, doing business as Vigovite Tonic Company, Brooklyn, N. Y. Vigovite Tonic. For Stomachic and Tonic. 41,466; Nov. 29.

Miller Soap Products. (See Blumberg, Abraham.)

Paint-Point Products Co., Brooklyn, N. Y. La France Exterior Paint. For Exterior Paint. 41,467; Nov. 29.

Perfect Burner Co., Lynn, Mass. Perfect Hi-Speed Oil Burner. For Oil Burners. 41,468; Nov. 29.

Purity Oats Company, doing business as Chief Oats Co., Keokuk, Iowa. 5¢ Nu-Style Oats. For Rolled Oats. 41,469; Nov. 29.

Sturman, Henry C., Chicago, Ill. Veteran Help a Vet. For Wax Paper. 41,470; Nov. 29.

Union Oil Company of California, Los Angeles, Calif. Union Lacquer-Tone. For Liquid for Cleaning and Polishing Lacquer and Enamel Surfaces. 41,471; Nov. 29.
Vigovite Tonic Company. (See Lunts, Joseph.)
Wortendyke Manufacturing Co., Richmond, Va. Patronize Independent Home Owned Stores. For Paper Bags. 41,472; Nov. 29.

LIST OF REGISTRANTS OF PRINTS

Carcot, Francis B., Oakland, Calif. Lonesome. For Cigarettes. 13,968; Nov. 29.
Durham, L. M., Mount Lebanon, Pittsburgh, Pa. Sunset Lemon Freeze. For a Healthful Drink. 13,969; Nov. 29.
General Mills, Inc., Minneapolis, Minn. Don't Command Your Child to Eat a Hot Cereal! For Cereal Food. 13,970; Nov. 29.
General Mills, Inc., Minneapolis, Minn. Cranberry Roly Poly. For Flour. 13,971; Nov. 29.
Hain, Albert J., Cleveland, Ohio. Spin 'Round The World. For Automobile Tires. 13,972; Nov. 29.
Rex Manufacturing Company, Lawrence, Mass. Rex De Luxe Range Oil Pump. For Fuel-Oil Supply Systems for Range Oil Burners. 13,973; Nov. 29.
Sun Oil Company, Philadelphia, Pa. Gives Wings. For Motor Fuel for Internal Combustion Engines. 13,974; Nov. 29.

CLASSIFIED LIST OF TRADE-MARKS REGISTERED

CLASS 1

Birds, Live. Bird Haven. 299,316; Nov. 29; Serial No. 327,999; published Sept. 13, 1932.
Chamois skins. H. W. Sager. 299,319; Nov. 29; Serial No. 327,322; published Sept. 13, 1932.
Coal. York and Company. 299,284; Nov. 29; Serial No. 322,035; published Sept. 13, 1932.
Flowers, Cut. Middle Atlantic Carnation Growers Association. 299,309; Nov. 29; Serial No. 328,615; published Sept. 13, 1932.
Furs, Dyed. Federal Star Dyers Corp. 299,380; Nov. 29.
Hops. J. Sonnenschein Hop Co. Inc. 299,363; Nov. 29; Serial No. 299,022; published Sept. 13, 1932.
Leather, Sole. Camden Tanning Co. Limited. 299,306; Nov. 29; Serial No. 329,176; published Sept. 13, 1932.
Seeds. Isbell Seed Company. 299,308; Nov. 29; Serial No. 328,591; published Sept. 20, 1932.

CLASS 2

Receptacles, Metallic. Detroit Steel Barrel Company. 299,388; Nov. 29.

CLASS 3

Handbags. Myron Bag Co. 299,348; Nov. 29; Serial No. 327,254; published Sept. 20, 1932.

CLASS 6

Dyes. W. D. Baker. 86,371; renewed May 7, 1932.
Powder, Face. Bourjois, Inc. 299,339; Nov. 29; Serial No. 328,836; published Sept. 27, 1932.
Remedy, Pile. Pyramid Drug Co. 90,739; renewed Mar. 18, 1933.
Starch sizing. Gum Tragasol Supply Company Limited. 91,204; renewed Apr. 22, 1933.
Suppositories, Rectal. J. C. Arena. 299,386; Nov. 29.

CLASS 8

Cigarette paper. Liggett & Myers Tobacco Company. 299,361; Nov. 29; Serial No. 324,844; published Sept. 13, 1932.

CLASS 10

Fertilizer. E. A. Corbin, jr. 299,307; Nov. 29; Serial No. 329,222; published Sept. 20, 1932.
Fertilizer, Chemical. Consolidated Mining and Smelting Company of Canada, Limited. 299,311; Nov. 29; Serial No. 328,238; published Sept. 13, 1932.
Land plaster, Nova Scotia. Chas. W. Priddy & Company, Inc. 91,247; renewed Apr. 22, 1933.

CLASS 12

Cement, Portland. Dewey Portland Cement Company. 299,338; Nov. 29; Serial No. 328,866; published Sept. 6, 1932.
Plywood. Aircraft Plywood Corporation. 299,334; Nov. 29; Serial No. 329,036; published Sept. 6, 1932.

CLASS 13

Culverts. Canton Culvert Company. 88,240; renewed Sept. 10, 1932.
Nails. Northwestern Barb Wire Company. 299,385; Nov. 29.
Screws and metal pings, Machine. Allen Manufacturing Company. 299,295; Nov. 29; Serial No. 328,971; published Sept. 13, 1932.

CLASS 14

Metal bends, Tubular. Pittsburgh Piping and Equipment Co. 299,312; Nov. 29; Serial No. 328,183; published Sept. 20, 1932.

CLASS 15

Gasolene. Wadhams Oil Company. 91,143; renewed Apr. 15, 1932.

CLASS 16

Lacquer solvent. Stanco Incorporated. 299,275; Nov. 29; Serial No. 329,064; published Sept. 13, 1932.
Lacquers, paint thinners. Zapon Company. 299,327; Nov. 29; Serial No. 328,861; published Sept. 13, 1932.
Paint. Chipman Chemical Company. 299,324; Nov. 29; Serial No. 329,256; published Sept. 20, 1932.
Paints and undercoats. S. C. Johnson & Son. 299,289; Nov. 29; Serial No. 325,659; published Sept. 20, 1932.
Paints, paint oils, prepared shellac, etc. Montauk Paint & Wall Paper Co. 299,287; Nov. 29; Serial No. 326,626; published Sept. 13, 1932.
Paints, semi-paste paints, paint reducers, paint removers, etc. Acme White Lead & Color Works. 299,372; Nov. 29; Serial No. 328,772; published Sept. 13, 1932.
Polish, Floor. R. Hormats. 299,288; Nov. 29; Serial No. 326,346; published Sept. 13, 1932.
Polish, Furniture. Grand Rapids Furniture Polish Co. 299,285; Nov. 29; Serial No. 328,916; published Sept. 13, 1932.
Polish, Liquid floor. Hillyard Chemical Company. 299,270; Nov. 29; Serial No. 324,517; published Sept. 13, 1932.
Primer and sealer. Lowe Brothers Company. 299 378; Nov. 29.
Turpentine and linseed oil. William Graham & Company. 299,273; Nov. 29; Serial No. 328,987; published Sept. 13, 1932.
Varnishes, paint enamels, stains, etc. Boston Varnish Company. 299,371; Nov. 29; Serial No. 328,574; published Sept. 13, 1932.
Wax, Liquid. H. Schiebel. 299,283; Nov. 29; Serial No. 321,782; published Sept. 20, 1932.
Wax, Liquid floor. Hillyard Chemical Company. 299,325; Nov. 25; Serial No. 329,143; published Sept. 13, 1932.

CLASS 17

Cigars. M. Marsh & Co. Inc. 299,313; Nov. 29; Serial No. 328,178; published Sept. 13, 1932.

CLASS 21

Electric Cook Stoves and Ranges. Standard Electric Stove Company. 299,383; Nov. 29.
Radio receiving sets and parts thereof. All-American Mohawk Corporation. 299,287; Nov. 29.

CLASS 22

Game. E. F. Klauber. 299,280; Nov. 29; Serial No. 320,546; published Dec. 15, 1931.
Game, Table board. Cluff Cover Company. 299,282; Nov. 29; Serial No. 321,526; published Feb. 2, 1932.

CLASS 23

Bearings, Ball and roller. A. Golden. 299,294; Nov. 29; Serial No. 329,215; published Sept. 13, 1932.
Cleaning or concentrating apparatus, Coal or ore. Koppers-Rheolaveur Company. 299,266–7; Nov. 29; Serial Nos. 323,819–29; published Sept. 13, 1932.
Coil making and assembling machinery, Electric. Liberty Starter Company. 299,271; Nov. 29; Serial No. 324,715; published Sept. 20, 1932.
Files and rasps. C. O. Öberg & Co:s Aktiebolag. 299,277; Nov. 29; Serial No. 317,368; published Sept. 13, 1932.
Filters, Oil. Diesel Filter Co. 299,296; Nov. 29; Serial No. 328,915; published Sept. 13, 1932.
Kits, Tool. Crescent Tool Company. 299,305; Nov. 29; Serial No. 325,284; published Sept. 13, 1932.
Razor blades. Heppenstall Company. 299,291–2; Nov. 29; Serial Nos. 329,308–9; published Sept. 20, 1932.
Razors. Pelier-Bazelon. 299,264; Nov. 29; Serial No. 323,094; published Sept. 13, 1932.
Rollers, Printers'. Rapid Roller Company. 299,303; Nov. 29; Serial No. 327,026; published Sept. 13, 1932.

Shellers, Corn. King & Hamilton Co. 89,469–71; renewed Dec. 17, 1932.
Taping machines, Automatic. S. R. Burns. 299,293; Nov. 29; Serial No. 329,220; published Sept. 13, 1932.

CLASS 24

Machinery for dry cleaning. Rhodes-Perry-Martin, Inc. 299,333; Nov. 29; Serial No. 329,201; published Sept. 20, 1932.

CLASS 25

Locks. Dudley Lock Corporation. 299,335; Nov. 29; Serial No. 328,980; published Sept. 13, 1932.

CLASS 26

Cameras and parts. Photo Marketing Corporation. 299,300; Nov. 29; Serial No. 327,918; published Sept. 13, 1932.
Gauges. United States Gauge Company. 299,298–9; Nov. 29; Serial Nos. 328,454–5; published Sept. 20, 1932.
Graph calculating devices. A. F. Shore. 299,297; Nov. 29; Serial No. 328,895; published Sept. 13, 1932.
Lenses, Ophthalmic. Renaud Optical Company. 299,290; Nov. 29; Serial No. 329,429; published Sept. 20, 1932.
Picture apparatus, Sound. General Talking Pictures Corporation. 299,368; Nov. 29; Serial No. 316,426; published Sept. 13, 1932.
Scales. Lincoln Scale Corporation. 299,306; Nov. 29; Serial No. 312,484; published Sept. 13, 1932.
Scales. D. C. Rockola. 299,281; Nov. 29; Serial No. 321,258; published Sept. 13, 1932.

CLASS 27

Clocks, Electric. Stanford Products, Ltd. 299,375; Nov. 29.

CLASS 29

Brushes, Paint and varnish. Wooster Brush Company. 299,320; Nov. 29; Serial No. 327,178; published Sept. 20, 1932.
Brushes, Paste and mucilage. American Crayon Company. 299,317; Nov. 29; Serial No. 327,862; published Sept. 13, 1932.
Toothbrushes. Johnson & Johnson. 299,318; Nov. 29; Serial No. 328,732; published Sept. 13, 1932.

CLASS 30

Chinaware. Mayer China Company. 299,365; Nov. 29; Serial No. 311,617; published Sept. 13, 1932.

CLASS 32

Covers and pads, Vehicle seat. Wedler-Shuford Co. 299,304; Nov. 29; Serial No. 325,358; published Sept. 20, 1932.
Shades, Porch. Hough Shade Corporation. 299,328; Nov. 29; Serial No. 329,447; published Sept. 13, 1932.
Stands, Make-up lamp. Sandel Manufacturing Co. 299,274; Nov. 29; Serial No. 328,997; published Sept. 13, 1932.
Tables and table tops, cabinets, etc., Porcelain enameled. Tennessee Enamel Manufacturing Company. 299,322; Nov. 29; Serial No. 329,518; published Sept. 20, 1932.

CLASS 34

Burners, Oil. Motor Wheel Corporation. 299,301; Nov. 29; Serial No. 327,827; published Sept. 13, 1932.
Fans and blowers, Ventilating and exhaust. J. T. Belanger. 299,269; Nov. 29; Serial No. 324,208; published Sept. 13, 1932.
Generators, Heat. Be Te U Corporation. 299,283; Nov. 29; Serial No. 322,305; published Sept. 13, 1932.
Incinerators, parts and doors. E. Sargent. 299,262; Nov. 29; Serial No. 322,139; published Sept. 13, 1932.
Ventilators. Fred'k N. Ross Inc. 299,302; Nov. 29; Serial No. 327,479; published Sept. 20, 1932.
Wicks, Woven. National Enameling & Stamping Company. 299,377; Nov. 29.

CLASS 35

Valve-cups, Leather. J. E. Scott Cup Co. 89,510; renewed Dec. 17, 1932.

CLASS 37

Envelopes. F. Fischer. 299,349; Nov. 29; Serial No. 327,083; published Sept. 20, 1932.
Paper and Bristol-board. Geo. W. Wheelwright Paper Company. 89,315; renewed Dec. 3, 1932.
Paper napkins, facial towels, tissues, and toilet paper. F. Gusman. 299,347; Nov. 29; Serial No. 327,435; published Sept. 20, 1932.
Paper, Wrapping. Foil Products Corporation. 299,337; Nov. 29; Serial No. 328,888; published Sept. 20, 1932.
Paper, Writing and printing. Strathmore Paper Company. 299,329; Nov. 29; Serial No. 329,433; published Sept. 20, 1932.
Papers, Writing and printing. Chemical Paper Manufacturing Company. 299,332; Nov. 29; Serial No. 329,303; published Sept. 13, 1932.

CLASS 38

Cards and cardboard signs, Printed. J. A. Baxter. 299,362; Nov. 29; Serial No. 295,826; published Sept. 13, 1932.
Directories, Newspaper. N. W. Ayer & Son. 89,809; renewed Jan. 14, 1933.
Maps, Touring. F. G. Knapp. 299,364; Nov. 29; Serial No. 307,240; published June 28, 1932.
Newspaper section. King Features Syndicate, Inc. 299,341; Nov. 29; Serial No. 329,812; published Sept. 20, 1932.
Publication. Simmons Manufacturing Co. 299,330; Nov. 29; Serial No. 329,287; published Sept. 13, 1932.

CLASS 39

Boots, shoes, overshoes, etc., Rubber. Hood Rubber Company. 88,752; renewed Oct. 22, 1932.
Clothing. Wooding & Truesdale. 88,819; renewed Oct. 22, 1932.
Garments, Ready-to-wear. Daniel Miller Company. 91,825; renewed Apr. 29, 1933.
Hosiery. William Brown Company. 89,910; renewed Jan. 21, 1933.
Suits, Bathing. Ocean Bathing Suit Co. 90,650; renewed Mar. 11, 1933.
Suits, Bathing. Ocean Bathing Suit Co. 90,909; renewed Apr. 1, 1933.

CLASS 42

Blankets. Beacon Manufacturing Company. 299,265; Nov. 29; Serial No. 323,230; published Sept. 6, 1932.
Blankets, Wool. Pendleton Woolen Mills. 299,274; Nov. 29; Serial No. 328,798; published Sept. 13, 1932.
Cloth interlining in the piece, Hair. Andrew K. Mickle & Sons, Inc. 299,268; Nov. 29; Serial No. 324,182; published Sept. 6, 1932.
Cotton piece goods and curtains. Powdrell & Alexander, Inc. 299,339; Nov. 29.
Elastic fabrics. Ansonia O & C Company. 299,370; Nov. 29; Serial No. 323,184; published Aug. 23, 1932.
Fabrics. Celanese Corporation of America. 299,340–41; Nov. 29; Serial Nos. 328,776–7; published Aug. 23, 1932.
Fabrics, Drapery and upholstery. Miller Brothers. 299,286; Nov. 29; Serial No. 327,105; published Sept. 6, 1932.
Piece goods. Bianchini, Férier. 299,344; Nov. 29; Serial No. 322,053; published Aug. 23, 1932.
Piece goods. Courtaulds, Limited. 299,342–3; Nov. 29; Serial Nos. 328,735–6; published Aug. 23, 1932.
Piece goods. F. Ducharne Silk Co. Inc. 299,326; Nov. 29; Serial No. 328,810; published Sept. 6, 1932.
Pile fabrics. Sidney Blumenthal & Co. Inc. 299,328; Nov. 29; Serial No. 328,894; published Aug. 30, 1932.
Sheets. Pepperell Manufacturing Company. 299,361; Nov. 29; Serial No. 328,925; published Sept. 6, 1932.
Silk, cotton, rayon, etc., piece goods. Brandler-Roth, Inc. 299,382; Nov. 29.
Silk fabrics. Princess Fabrics Co. Inc. 299,378; Nov. 29; Serial No. 328,585; published Sept. 13, 1932.
Woolen piece goods. Forstmann & Huffmann Company. 299,278; Nov. 29; Serial No. 317,928; published Aug. 23, 1932.
Woolen piece goods. Forstmann Woolen Co. 299,272; Nov. 29; Serial No. 328,953; published Sept. 6, 1932.
Woolen piece goods. Forstmann Woolen Co. 299,352; Nov. 29; Serial No. 328,885; published Sept. 6, 1932.
Woolen piece goods. Forstmann Woolen Co. 299,353; Nov. 29; Serial No. 328,937; published Sept. 6, 1932.
Woolen piece goods. Forstmann Woolen Co. 299,354–5; Nov. 29; Serial Nos. 328,939–40; published Aug. 30, 1932.
Woolen piece goods. Forstmann Woolen Co. 299,358; Nov. 29; Serial No. 328,948; published Sept. 6, 1932.
Woolen piece goods. Forstmann Woolen Co. 299,357; Nov. 29; Serial No. 328,942; published Aug. 30, 1932.
Woolen piece goods. Forstmann Woolen Co. 299,358–9; Nov. 29; Serial Nos. 328,949–50; published Sept. 6, 1932.
Woolen piece goods. Forstmann Woolen Co. 299,360; Nov. 22; Serial No. 328,952; published Sept. 6, 1932.

CLASS 44

Massaging devices. P. L. Hemp. 299,379; Nov. 29.

CLASS 46

Canned tuna. Coast Fishing Co. 299,367; Nov. 29; Serial No. 316,150; published Sept. 20, 1932.
Canned vegetables, fruits, berries, etc. Snider Packing Corporation. 299,350; Nov. 29; Serial No. 326,843; published Sept. 13, 1932.
Chocolate malt powder preparations. General Desserts Corporation. 299,346; Nov. 29; Serial No. 328,289; published Sept. 13, 1932.
Coffee, Blended. St. Louis Coffee & Spice Mills. 88,970; renewed Oct. 29, 1932.
Cream, dried skim milk, chocolate milk, etc., Sour. Dairymen's League Co-Operative Association, Inc. 299,336; Nov. 29; Serial No. 328,969; published Sept. 13, 1932.
Flour, Pancake. Davis Milling Company. 90,516; renewed Mar. 4, 1933.
Flour, Wheat. Hecker-Jones-Jewell Milling Company. 90,203; renewed Feb. 11, 1933.
Food products. Moore Grocery Co. 299,376; Nov. 29.
Milk, Evaporated. P. E. Sharpless Company. 88,791; renewed Oct. 22, 1932.

Mince-meat. W. H. Marvin Company. 91,103; renewed Apr. 15, 1933.
Oats, flaked wheat, and granulated wheat, Rolled. Pacific Cereal Association. 88,939; renewed Oct. 29, 1932.
Oleomargarine, evaporated milk, mayonnaise, etc. John F. Jelke Company. 299,345; Nov. 29; Serial No. 328,331; published Sept. 20, 1932.
Oranges, lemons, grape-fruit, etc. Winter Haven Citrus Growers Association. 91,147; renewed Apr. 15, 1933.
Popcorn, Honey flavored. P. Franke. 299,276; Nov. 29; Serial No. 317,166; published Sept. 13, 1932.
Tomato juice. Carnation Company. 299,279; Nov. 29; Serial No. 319,566; published Apr. 19, 1932.

CLASS 48

Beer, Lager. Jos. Schlitz Brewing Company. 90,587; renewed Mar. 4, 1933.

CLASS 49

Whisky, Scotch. John Dewar & Sons Limited. 299,381; Nov. 29.

CLASS 50

Bands, Leg. Stanton Milling & Sales Company. 299,384; Nov. 29.
Bases, Rubber. Anchor Sales Company. 299,310; Nov. 29; Serial No. 328,390; published Sept. 20, 1932.
Boot trees. W. O. Weiskotten. 299,314–15; Nov. 29; Serial Nos. 328,149–50; published Sept. 20, 1932.
Caps, Milk bottle. R. E. Brigstock. 299,369; Nov. 29; Serial No. 316,545; published Oct. 13, 1931.
Collectors' kits. Standard Scientific Supply Corporation. 299,321; Nov. 29; Serial No. 325,931; published Sept. 13, 1932.

LIST OF LABELS

Atlas Washing Powder. For Washing Powder. A. Blumberg. 41,452; Nov. 29.
Cities. For Games. All-Fair, Inc. 41,448; Nov. 29.
Coleeco. For Codfish. Collins-Lee Company. 41,457; Nov. 29.
Dim Those Lights. For Games. All-Fair, Inc. 41,445; Nov. 29.
5¢ Nu-Style Oats. For Rolled Oats. Purity Oats Company. 41,469; Nov. 29.
Flora's Concentrated Rose Water and Glycerin Cream. For Concentrated Rose Water and Glycerine Cream. F. C. Flora. 41,459; Nov. 29.
4 In-A-Ro. For Games. All-Fair, Inc. 41,442; Nov. 29.
Gold Medal Soap Powder. For Soap Powder. A. Blumberg. 41,451; Nov. 29.
La Choy Bean Sprouts. For Canned Bean Sprouts. La Choy Food Products, Inc. 41,463; Nov. 29.
La Choy Chow Mein Noodles. For Canned Chow Mein Noodles. La Choy Food Products, Inc. 41,464; Nov. 29.
La Choy Vegetables. For Canned Mixture of Bean Sprouts, Sweet Peppers, Sliced Mushrooms, Bamboo Shoots, Etc. La Choy Food Products, Inc. 41,465; Nov. 29.
La France Exterior Paint. For Exterior Paint. Paint-Point Products Co. 41,467; Nov. 29.
Lavar Blanco Soap. For Soap. A. Blumberg. 41,453; Nov. 29.
Lone Pine. For Tomatoes. Fort Lupton Canning Company. 41,460; Nov. 29.
Nu-Ma Salve. For Antiseptic and Penetrating Salve. General Products Co. 41,462; Nov. 29.
Old Maid. For Games. All-Fair, Inc. 41,449; Nov. 29.
Patronize Independent Home Owned Stores. For Paper Bags. Wortendyke Manufacturing Co. 41,472; Nov. 29.
Perfect Hi-Speed Oil Burner. For Oil Burners. Perfect Burner Co. 41,468; Nov. 29.
Play Awhile, Series No. 1. For Puzzles. All-Fair, Inc. 41,441; Nov. 29.
Play Awhile, Series No. 2. For Puzzles. All-Fair, Inc. 41,446; Nov. 29.
Play Boy Lotto. For Games. All-Fair, Inc. 41,447; Nov. 29.
Play Boy Tiddledy Winks. For Games. All-Fair, Inc. 41,444; Nov. 29.
Race to the Moon. For Games. All-Fair, Inc. 41,443; Nov. 29.
Relief Belt. For Rupture Belts. L. A. Fritsch. 41,461; Nov. 29.
Sa-So. For Tooth Powder. Circle X, Incorporated. 41,454–5; Nov. 29.
Styleader. For Shoes. Bird & Son, Inc. 41,450; Nov. 29.
Style Knight. For Shoes. M. B. Claff & Sons. 41,456; Nov. 29.
Tulip Brand. For Canned Salmon. Fidalgo Island Packing Co. 41,458; Nov. 29.
Union Lacquer-Tone. For Liquid for Cleaning and Polishing Lacquer and Enamel Surfaces. Union Oil Company of California. 41,471; Nov. 29.
Veteran Help A Vet. For Wax Paper. H. C. Sturman. 41,470; Nov. 29.
Vigovite Tonic. For Stomachic and Tonic. J. Luntz. 41,466; Nov. 29.

LIST OF PRINTS

Cranberry Roly Poly. For Flour. General Mills. 13,971; Nov. 29.
Don't Command Your Child To Eat a Hot Cereal! For Cereal Food. General Mills. 13,970; Nov. 29.
Gives Wings. For Motor Fuel for Internal-Combustion Engines. Sun Oil Company. 13,974; Nov. 29.
Lonesome. For Cigarettes. F. B. Carcot. 13,968; Nov. 29.
Rex De Luxe Range Oil Pump. For Fuel-Oil Supply Systems for Range Oil Burners. Rex Manufacturing Company. 13,973; Nov. 29.
Spin 'Round The World. For Automobile Tires. A. J. Hain. 13,972; Nov. 29.
Sunset Lemon Freeze. For a Healthful Drink. L. M. Durham. 13,969; Nov. 29.

LIST OF PATENTEES

TO WHOM

PATENTS WERE ISSUED ON THE 29TH DAY OF NOVEMBER, 1932

NOTE.—Arranged in accordance with the first significant character or word of the name (in accordance with city and telephone directory practice). Includes patents, reissues, and designs.

A-B Stove Company. (See Reedy, Alfred J., assignor.)
A C Spark Plug Company. (See Babitch, Abraham M., assignor.)
Aarestad, Casper R., Cooperstown, N. Dak. Cow-tail holder. 1,889,010; Nov. 29.
Actiengesellschaft C. P. Goerz Optische Anstalt Actiova Spolecnost K. P. Goerz Opticky Ustav. (See Pechan, I., and Schier, assignors.)
Adamcikas, Mykas, also known as Michael Adamtchik, and G. Massera, Aldwych, London, England. Ventilating device. 1,889,117; Nov. 29.
Adams Company, The. (See Meyer, John B., assignor.)
Adamtchik, Michael. (See Adamcikas, M., and Massera.)
Adatte, Albert L., North Plainfield, assignor to Pathe Exchange, Inc., Boundbrook, N. J. Light control for photographic printing machines. 1,889,306; Nov. 29.
Adler, Charles, jr., Baltimore, Md. Electric signal lamp. 1,889,725; Nov. 29.
Advance Machine Company. (See Richardson, Myron H., assignor.)
Aktiebolaget Nordiska Armaturfabrikerna. (See Samson, Torsten, assignor.)
Aktiengesellschaft Brown, Boveri, and Cie. (See Keller, Robert, assignor.)
Alexanderson, Ernst F. W., Schenectady, N. Y., assignor to General Electric Company. Television receiver. 1,889,587; Nov. 29.
Allen, S. L., & Co., Inc. (See Warren, William C., assignor.)
Allis-Chalmers Manufacturing Company. (See Cook, Percy E., assignor.)
Allmanna Svenska Elektriska Aktiebolaget. (See Högel, Leunart, assignor.)
Allpax Company, The. (See Walker, Herbert S., assignor.)
American Bicheroux Company, The. (See Gentil, Eugene, assignor.)
American Bicheroux Company, The. (See von Reis, Lambert, assignor.)
American Blower Corporation. (See Anderson, Edward L., assignor.)
American Chain Company, Inc. (See Hall, Preston M., assignor.)
American Circular Loom Company, Inc. (See Lutz, George A., assignor.)
American Cotton Picker Corporation. (See Willett, W. R., and Brown, assignors.)
American Electrical Heater Company. (See Kuhn, F., and Thomas, assignors.)
American Engineering Company. (See Weingartner, Anthony E., assignor.)
American Foundry Equipment Company, The. (See Peik, Louis D., assignor.)
American Lace Manufacturing Company, The. (See Hucknall, Hage W., assignor.)
American Lurgi Corporation. (See Schiechel, Maximilian, assignor.)
American Optical Company. (See Tillyer, Edgar D., assignor.)
American Slicing Machine Company. (See Campbell, William J., assignor.)
American Telephone and Telegraph Company. (See Nelson, Stanley F., assignor.)
American Telephone and Telegraph Company. (See Wintringham, William T., assignor.)
Amersil Company, Inc. (See Johnson, Clyde R., assignor.)
Amsler, Walter O., Toledo, Ohio, assignor to Hartford-Empire Company, Hartford, Conn. Rotary tank. 1,889,509; Nov. 29.
Amsler, Walter O., assignor to Hartford-Empire Company, Hartford, Conn. Apparatus for melting glass. 1,889,510; Nov. 29.
Amsler, Walter O., assignor to Hartford-Empire Company, Hartford, Conn. Rotary glass melting furnace. 1,889,511; Nov. 29.
Anderegg, Edward W., Algoma, Wis. Folding combination bathtub and dressing table. 1,889,340; Nov. 29.
Anderson, August P., assignor to Anderson-Rees Refrigerating Machine Co., Chicago, Ill. Refrigerating machine. 1,889,341; Nov. 29.
Anderson, Carlton, Chicago, Ill., assignor, by mesne assignments, to G. Reinke, trustee for the estate of W. T. Kirk, deceased, O. E. Barber, Carlton Anderson, and Williams, Bradbury, McCaleb & Hinkle. Spring installation tool. 1,889,167; Nov. 29.
Anderson, Edward L., Grosse Ile, assignor to American Blower Corporation, Detroit, Mich. Unit heater and ventilator. 1,889,588; Nov. 29.
Anderson, Jesse I., assignor to J. I. Holcomb Mfg. Company, Indianapolis, Ind. Reversible resilient brush. 1,889,029; Nov. 29.
Anderson-Rees Refrigerating Machine Co. (See Anderson, August P., assignor.)
Anderson, William M. (See Lofgren, E. G. C., and Anderson.)
Andrews, John S., Los Angeles, assignor to P. Laux, Santa Ana, Calif. Gear shift lever knob. 1,889,118; Nov. 29.
Andrikidis, Alexandre, Athens, Greece. Fluid pressure brake. 1,889,326; Nov. 29.
Angyal, Louis, San Francisco, Calif. Shoe shining apparatus. 1,889,620; Nov. 29.
Ankarlo, George S., Milwaukee, Wis. Gas main stopper. 1,889,621; Nov. 29.
Anthony Company. (See Anthony, William C., assignor.)
Anthony Development Company. (See Anthony, W. C., and Wachter, assignors.)
Anthony, William C., assignor to Anthony Company, Streator, Ill. Dumping body. 1,889,520; Nov. 29.
Anthony, William C., and L. Wachter, assignors to Anthony Development Company, Streator, Ill. Material handling means. 1,889,521; Nov. 29.
Antonucci, Angelo C., Philadelphia, Pa. Dental impression wax composition. 1,889,622; Nov. 29.
Anzell, Anna S., New York, N. Y. Combination mirror and illuminating device. 1,889,085; Nov. 29.
Arbuckle, S. F., Corp. (See Arbuckle, Samuel F., assignor.)
Arbuckle, Samuel F., assignor to S. F. Arbuckle Corp., Detroit, Mich. Combined light and signal. 1,889,623; Nov. 29.
Arenco Machine Company. (See Ilyus, Edmund B., assignor.)
Arkell Safety Bag Company. (See Robinson, Francis T., assignor.)
Armour Fertilizer Works. (See MacDowell, Charles H., assignor.)
Aronson, Louis V., Newark, N. J., assignor to Art Metal Works, Inc. Pocket lighter. 1,889,342; Nov. 29.
Art Metal Works, Inc. (See Aronson, Louis V., assignor.)
Ashbrook, Roy B., San Gabriel, M. Macferran, Alhambra, R. E. Quanstrom, Inglewood, and B. F. Dengler, Los Angeles, Calif. Protective gap for electrical equipment. 1,889,086; Nov. 29.
Associated Electric Laboratories, Inc. (See Erickson, John, assignor.)
Associated Electric Laboratories, Inc. (See Hershey, Harry E., assignor.)
Associated Electric Laboratories, Inc. (See Peterson, Edward S., assignor.)
Associated Electric Laboratories, Inc. (See Smith, Howard H., assignor.)
Associated Electric Laboratories, Inc. (See Tharp, Victor S., assignor.)
Associated Telephone and Telegraph Company. (See Ostline, J. E., Taylor, and Beale, assignors.)
Atkinson, Samuel C., Columbus, N. J. Cutter. 1,889,624; Nov. 29.
Atlas Ago Chemische Fabrik, Aktiengesellschaft. (See Scholz, Victor, assignor.)
Atwater Kent Manufacturing Company. (See Gilbert, Walter E., assignor.)
Auld, D. L., Company, The. (See Hyatt, Raymond D., assignor.)
Auten, Claude L., assignor to Truscon Steel Company, Youngstown, Ohio. Building structure. 1,889,512; Nov. 29.
Auto Research Corporation. (See Bijur, Joseph, assignor.)
Automatic Electric Heater Company. (See Clark, Warren F., assignor.)
Automatic Machine Products Corp. (See Smith, Arthur C., assignor.)
Avery, Harold T., Oakland, Calif. Automatic banking control. 1,889,273; Nov. 29.
Ayres, Seymour A., assignor to Reo Motor Car Company, Lansing, Mich. Article handling device. 1,889,234; Nov. 29.
B R B Corporation. (See Baumbeckel, William M., assignor.)
Babcock & Wilcox Company, The. (See Kerr, Howard J., assignor.)
Babcock & Wilcox Company, The. (See Kölling, Johann, assignor.)
Babitch, Abraham M., assignor to A C Spark Plug Company, Flint, Mich. Pump combination. 1,889,396; Nov. 29.
Badger Equipment Company. (See Rosenfeld, Joseph E., assignor.)
Bahnyak, Charles L., Chicago, Ill. Ignition switch protector. 1,889,348; Nov. 29.

Bailey, William M., Lynn, Mass., assignor, by mesne assignments, to General Electric Company. Electrical capacitor. 1,889,522; Nov. 29.
Bail, Joseph A., Los Angeles, Calif., assignor, by mesne assignments, to Technicolor, Inc., New York, N. Y. Multicolor photography with bi-packs. 1,889,080; Nov. 29.
Balshiser, E. C., et al. (See Fabbro, Louis M., assignor.)
Barber, Howard M., Pawcatuck, Conn., assignor to C. B. Cottrell & Sons Company, Westerly, R. I. Self-adjusting feed roll. 1,889,523; Nov. 29.
Barber, Howard M., Pawcatuck, Conn., assignor to C. B. Cottrell & Sons Company, Westerly, R. I. Self-adjusting feed roll. 1,889,524; Nov. 29.
Barber, Howard M., Pawcatuck, Conn., assignor to C. B. Cottrell & Sons Company, Westerly, R. I. Self-adjusting feed roll. 1,889,525; Nov. 29.
Barber, Howard M., Pawcatuck, Conn., assignor to C. B. Cottrell & Sons Company, Westerly, R. I. Self-adjusting feed roll. 1,889,526; Nov. 29.
Barber, Howard M., Pawcatuck, Conn., assignor to C. B. Cottrell & Sons Company, Westerly, R. I. Self-adjusting feed roll. 1,889,527; Nov. 29.
Barber, Howard M., Pawcatuck, Conn., assignor to C. B. Cottrell & Sons Company, Westerly, R. I. Self-adjusting feed roll. 1,889,528; Nov. 29.
Barber, Orren E., et al. (See Anderson, Carlton.)
Baresch, William F., College Point, N. Y. Igniter for gas burners. 1,889,589; Nov. 29.
Barnum, Marvin C. (See Fonseca, E. L., Hunt, and Barnum.)
Barr, Archibald, Anniesland, Glasgow, assignor to Barr and Stroud, Limited, Glasgow, Scotland. Apparatus for plotting maps from air photographs. 1,889,042; Nov. 29.
Barr and Stroud, Limited. (See Barr, Archibald, assignor.)
Barroll, Henry E., assignor to Henry Barroll & Co., Inc., Chicago, Ill. Pouring nozzle. 1,889,529; Nov. 29.
Barroll, Henry, & Co., Inc. (See Barroll, Henry E., assignor.)
Barter, Franklin D., assignor to Purity Bakeries Service Corp., Chicago, Ill. Display stand. 1,889,625; Nov. 29.
Bates, Arthur, Leicester, England, assignor to United Shoe Machinery Corporation, Paterson, N. J. Method of and machine for forming heel seats of shoes. 1,889,234; Nov. 29.
Baumann, Adolf, Wettingen, Switzerland. Refrigerating system. 1,889,191; Nov. 29.
Baumann, Karl, Urmston, England, assignor to Westinghouse Electric & Manufacturing Company. System of reheating in a power plant. 1,889,307; Nov. 29.
Baumheckel, William M., Connersville, Ind., assignor to B B B Corporation, Detroit, Mich. Water pump packing. 1,889,397; Nov. 29.
Baumhüter, Peter, Batenhorst, near Wiedenbruck, Germany. Protecting envelope for balls of string for binding sheaves. 1,889,011; Nov. 29.
Baxter, Harold G., Baldwin, N. Y., assignor to Westinghouse Electric & Manufacturing Company. Oil-immersed distributing panel. 1,889,308; Nov. 29.
Bazylewicz-Kniazykowski, Eugeniusz, and K. Partyka, Sochaczew, Poland. Producing smokeless gunpowder. 1,889,462; Nov. 29.
Bead Chain Manufacturing Company, The. (See Nelson, Ole G., assignor.)
Beale, Charles E. (See Ostline, J. E., Taylor, and Beale.)
Bean, Louis A., Denver, Colo. Reflector. 1,889,188; Nov. 29.
Bear Manufacturing Company. (See Wochner, Henry, assignor.)
Bebie, Edwin W., Hawthorne, N. J. Cap for tubular bodies or cores. 1,889,139; Nov. 29.
Becker, Arman E., Elizabeth, N. J., assignor to Standard Oil Development Company. Lubricating composition containing sulphonates. 1,888,974; Nov. 29.
Beckert, Richard E., Revere, Mass. Fountain brush. 1,889,309; Nov. 29.
Beckwith, Henry C., assignor to The Byers Machine Company, Ravenna, Ohio. Excavating machine. 1,889,590; Nov. 29.
Beckley, John S., Charleston, W. Va., assignor, by mesne assignments, to E. I. du Pont de Nemours & Company, Wilmington, Del. Manufacture of hydrogen. 1,889,530; Nov. 29.
Bel Geddes, Norman, New York, N. Y. Race game. 1,889,531; Nov. 29.
Bell, Benjamin W., St. Louis County, Mo. Safety switch. 1,889,344; Nov. 29.
Bell, John E., deceased, Brooklyn; L. R. Bell, executrix, assignor to Foster Wheeler Corporation, New York, N. Y. Steam generating and superheating apparatus. 1,888,975; Nov. 29.
Bell, John E., deceased, Brooklyn; L. R. Bell, executrix, Jackson Heights, assignor to Foster Wheeler Corporation, New York, N. Y. Steam generation and superheating. 1,889,031; Nov. 29.
Bell, Lola R., executrix. (See Bell, John E.)
Bell Telephone Laboratories, Incorporated. (See Snook, Homer C., assignor.)
Bell, William E., assignor of one-half to L. L. McCandless, Honolulu, Hawaii. Toilet flush valve. 1,889,626; Nov. 29.
Benn, Edward H., assignor to Rumbletop Corporation, Boston, Mass. Top for rumble seats of automobiles. 1,889,430; Nov. 29.
Benn, Edward H., assignor to Rumbletop Corporation, Boston, Mass. Top for rumble seats of automobiles. 1,889,532; Nov. 29.
Benn, Edward H., assignor to Rumbletop Corporation, Boston, Mass. Top for rumble seats for automobiles. 1,889,533; Nov. 29.
Bennett, Charles H. (See Lyndon, Alford S., assignor.)
Bennett, Harry T., Tulsa, Okla. Lubricant. 1,889,168; Nov. 29.
Benoit, Leon, and E. J. Kanabay, Chicago, Ill.; said Kanabay assignor to said Benoit. Wrapping packages. 1,889,534; Nov. 29.
Benthall, Edward C. (See Spencer, Edmondson, assignor.)
Berg, Frederick A., and W. W. Harper, Chicago, Ill. Photo-electric tube. 1,889,431; Nov. 29.
Berger, Sol, Brooklyn, N. Y. Combination tissue container. 1,889,012; Nov. 29.
Berglund, Sven A.; son, Berlin-Lankwitz, Germany, assignor to N. V. Kuchenmeisters Internationale Maatschappij Voor Sprekende Films, Amsterdam, Netherlands. Method of and apparatus for making photophonograms. 1,889,627; Nov. 29.
Berkshire Knitting Mills. (See Zwicky, Melchior, assignor.)
Berner, Otto, New York, N. Y. Composite thread restoring tool. 1,889,013; Nov. 29.
Bernier, Henri, Oakland, assignor to California Packing Corporation, San Francisco, Calif. Method of and apparatus for scrubbing vegetables. 1,889,189; Nov. 29.
Bertsch, Johann A., St. Louis, Mo., assignor to The Rubber Service Laboratories Company, Akron, Ohio. Treatment of rubber. 1,889,327; Nov. 29.
Best Foods, Inc., The. (See Jones, John H., assignor.)
Best, Harry S., assignor to J. H. Best & Sons, Galva, Ill. Display stand. Des. 88,394; Nov. 29.
Best, John H., & Sons. (See Best, Harry S., assignor.)
Biddle, William C., et al. (See Corbin, Elbert A., jr., assignor.)
Bigelow Sanford Carpet Co. (See Smidlein, Anthony E., assignor.)
Bigelow Sanford Carpet Co. (See Travis, John S., assignor.)
Bijur, Joseph, New York, N. Y., assignor to Auto Research Corporation. Chassis lubrication. 1,888,970; Nov. 29.
Binghampton Foundry & Machine Co. Inc. (See Holford, Harry E., assignor.)
Bishop, John S., Cranford, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y. Electrical coil and manufacturing it. 1,889,898; Nov. 29.
Blake, Ralph A. (See King, R. J., and Blake.)
Blanchard, Edward C., Washington, D. C. Closure cap for gasoline tanks. 1,889,056; Nov. 29.
Blanchard, Frederick C., Detroit, Mich. Feeding lubricant. 1,889,235; Nov. 29.
Blau, Ludwig W., Houston, Tex., assignor to Standard Oil Development Company. Apparatus for measuring relative values of gravity. 1,888,976; Nov. 29.
Bledsoe, Calvin H., assignor of twenty-five per cent to G. Williams and twenty-four per cent to F. Williams, Hazard, Ky. Automatic air-hand brake. 1,889,014; Nov. 29.
Blondin, Michel C., Meudon, France. Massaging device. 1,889,345; Nov. 29.
Boening, Joseph, Macklin, Saskatchewan, Canada. Combined washing machine and wringer. 1,889,628; Nov. 29.
Boerlage, Johann, Wiesbaden, Germany. Reciprocating piston lubrication for pumps. 1,889,591; Nov. 29.
Böhmer, Adam, and G. Gebhardt, assignors to Seitz-Werke G. m. b. H., Bad Kreuznach, Germany. Filling and sealing bottles, vessels, and the like. 1,889,629; Nov. 29.
Bollman, Roland R., assignor to The Munny Manufacturing Company, Cincinnati, Ohio. Creasing apparatus. 1,889,432; Nov. 29.
Borg & Beck Company, The. (See Reed, Harold V., assignor.)
Boudrot, Augustus H. (See Fausse, J., and Boudrot.)
Bowden, Harry C., Los Angeles, Calif. Blade sharpener. 1,889,630; Nov. 29.
Bowen, John C., Hunters, Wash. Milk draining tube. 1,888,977; Nov. 29.
Bradley-Fitch Company. (See Kobe, Kenneth A., assignor.)
Brake, William H., Rocky Mount, N. C. Pecan. Pl. Pt. 47; Nov. 29.
Brander, David. (See Whitfield, J., and Brander.)
Brandl, Hans, and C. Marischka, Vienna, Austria, assignors to B. M. Gammesser Aktiengesellschaft, Luxemburg, Luxemburg. Wet gas meter. 1,889,190; Nov. 29.
Brandt, Fokko, Kansas City, Mo. Rod or pipe clamp. 1,889,592; Nov. 29.
Braun, Philip N., assignor to The Prosperity Company, Inc., Syracuse, N. Y. Air current creating means for pressing machines. 1,889,140; Nov. 29.
Braunsdorf, Otto. (See Eckert, W., and Braunsdorf.)
Brevetti, S. A., Italiani Esteri S. A. R. I. E. (See Ricchiardi, Pier C., assignor.)
Briggs & Stratton Corporation. (See Fitz Gerald, John W., assignor.)

Brill, Harry C., Newark, N. J. Frame for display containers. 1,889,846; Nov. 29.
Brill, J. G., Company, The. (See Latshaw, Elmer, assignor.)
British Cotton Industry Research Association, The. (See Shorter, Sydney A., assignor.)
British Radiostat Corporation. (See Robinson, James, assignor.)
Broadmeyer, Albert, assignor to The W. O. Hickok Manufacturing Company, Harrisburg, Pa. Sheet directing means. 1,889,513; Nov. 29.
Broadmeyer, Albert, assignor to W. O. Hickok Manufacturing Company, Harrisburg, Pa. Operating mechanism for ruling pen gates. 1,889,726; Nov. 29.
Brocksmith, John H., Mehlville, Mo. Can opener. 1,889,119; Nov. 29.
Brogger, Ivar W., assignor to Connecticut Telephone & Electric Corporation, Meriden, Conn. Electrical measuring instrument. 1,889,310; Nov. 29.
Bromley, Thomas C., and A. Shortland, assignors to Mellor Bromley & Company Limited, Leicester England. Patterning mechanism for knitting machines. 1,889,631; Nov. 29.
Brosius, Edgar E., Pittsburgh, Pa. Mud gun. 1,889,433; Nov. 29.
Brosius, Edgar E., Pittsburgh, Pa. Cinder notch stopper. 1,889,434; Nov. 29.
Brown, Emma L., assignor to William Wilhelm Co., Inc., New York, N. Y. Textile fabric or similar article. Des. 88,395; Nov. 29.
Brown, Emma L., assignor to William Wilhelm Co., Inc., New York, N. Y. Textile fabric or similar article. Des. 88,396; Nov. 29.
Brown, Harvey E. (See Willett, W. R., and Brown.)
Brown, William A., et al. (See Corbin, Elbert A., jr., assignor.)
Browne, Alfred L., South Orange, N. J. Automatic valve. 1,889,311; Nov. 29.
Bruce, Emmett T., et al. (See Thomas, Jack L., assignor.)
Bruce, John E., Des Moines, Iowa. Meat trencher. 1,889,192; Nov. 29.
Bruson, Herman A., Philadelphia, Pa., assignor to The Resinous Products & Chemical Company. Preparing organic acids and products. 1,889,847; Nov. 29.
Bruson, Herman A., Germantown, Pa., and J. D. Robinson, Audobon, N. J., assignors to The Resinous Products & Chemical Co. Inc., Philadelphia, Pa. Making heptaldehyde and undecylenic acid. 1,889,848; Nov. 29.
Bryant, Osro N., Moores, Pa., assignor to Westinghouse Electric & Manufacturing Company. Regulating mechanism. 1,889,535; Nov. 29.
Buchanan, Hugh G., Philadelphia, Pa. Binder and making the same. 1,889,536; Nov. 29.
Burmeister, Hans, Berlin-Schmargendorf, Germany. Producing foam products. 1,889,236; Nov. 29.
Burt, F. N., Company. (See Darrin, Marc, assignor.)
Bushong, Ivan C., Lawrence, Kans., assignor of three-fifths to H. H. Kuhn and one-fifth to H. Howery, Kansas City, Mo. Multiple rate meter. 1,889,682; Nov. 29.
Butterworth, Samuel D., assignor to Evans Products Company, Detroit, Mich. Automobile tie-down. 1,889,633; Nov. 29.
Buttron, Willard C., Albany, N. Y., assignor to General Electric Company. Magnetic separator. 1,889,349; Nov. 29.
Byers Machine Company, The. (See Beckwith, Henry C., assignor.)
Cadwell-Baird Iron Works. (See Cadwell, Ralph K., assignor.)
Cadwell, Ralph K., Glendale, assignor to Cadwell-Baird Iron Works, Los Angeles, Calif. Auto brake testing machine. 1,889,735; Nov. 29.
Cairns, Edward, Montclair, N. J. Helmet. 1,889,537; Nov. 29.
Calcott, Walter C. (See Schleicher, P. E., and Calcott.)
California Packing Corporation. (See Bernier, Henri, assignor.)
Campbell, Argyle, assignor to Enterprise Railway Equipment Company, Chicago, Ill. Dump car construction. 1,889,169; Nov. 29.
Campbell, Argyle, assignor to Enterprise Railway Equipment Company, Chicago, Ill. Car construction. 1,889,170; Nov. 29.
Campbell, Argyle, assignor to Enterprise Railway Equipment Company, Chicago, Ill. Load discharging car. 1,889,171; Nov. 29.
Campbell, Patrick J., Newark, N. J. Baker's oven. 1,889,141; Nov. 29.
Campbell, William J., Indianapolis, Ind., assignor to American Slicing Machine Company, Chicago, Ill. Slicing machine. 1,889,538; Nov. 29.
Campbell, William J., Indianapolis, Ind., assignor to American Slicing Machine Company, Chicago, Ill. Slicing machine. 1,889,539; Nov. 29.
Campbell, William J., Indianapolis, Ind., assignor to American Slicing Machine Company, Chicago, Ill. Slicing machine. 1,889,540; Nov. 29.
Campbell, William J., Indianapolis, Ind., assignor to American Slicing Machine Company, Chicago, Ill. Slicing machine. 1,889,541; Nov. 29.
Campbell, William J., Indianapolis, Ind., assignor to American Slicing Machine Company, Chicago, Ill. Slicing machine. 1,889,542; Nov. 29.
Carlstrom, C. K., et al. (See Lofgren, E. G. C., and Anderson, assignors.)
Carroll, Clarence E., Ged, La. Pelt or fur stretcher. 1,889,634; Nov. 29.
Case, J. I., Company. (See Hansen, Charles W., assignor.)
Casey, Dennis A., New Orleans, La. Card index system. 1,889,635; Nov. 29.
Cederberg, Ivar W., Dahlem, near Berlin, Germany, assignor to Oxyammon Aktiengesellschaft, Zurich, Switzerland. Catalyzer for the oxidation of ammonia with oxygen or with gases containing oxygen. 1,889,468; Nov. 29.
Celanese Corporation of America. (See Dickie, W. A., and Halkyard, assignors.)
Celastic Corporation, The. (See Fausse, J., and Boudrot, assignors.)
Chambers Brothers Company. (See King, Howard K., assignor.)
Chase, Sherwood M., assignor to The Chase Foundry and Manufacturing Company, Columbus, Ohio. Coupler. 1,889,227; Nov. 29.
Chase Foundry and Manufacturing Company, The. (See Chase, Sherwood M., assignor.)
Chemical Construction Corporation. (See Hechenbleikner, I., and Titlestad, assignors.)
Cheney Brothers. (See Mouton, Paul, assignor.)
Chenoweth, C. E., et al., trustees. (See Martin, Edward T., assignor.)
Chicago Pneumatic Tool Company. (See Reed, Clarence E., assignor.)
Chittim, Carl C., Springfield, Mo. Tent frame. 1,889,972; Nov. 29.
Christen, Marcel, Woodside, assignor to William Wilhelm Co., Inc., New York, N. Y. Textile fabric or similar article. Des. 88,397; Nov. 29.
Church, Harold D., assignor to The White Motor Company, Cleveland, Ohio. Spring connection for vehicles.
Cincinnati Advertising Products Company, The. (See 1,889,399; Nov. 29. Willman, George J., assignor.)
Circle F Mfg. Co. (See Petersen, Carl M., assignor.)
Clark, Charles V., jr., Louisville, Ga. Road guard. 1,889,636; Nov. 29.
Clark, Warren F., Philadelphia, assignor to Automatic Electric Heater Company, Pottstown, Pa. Solar heater. 1,889,238; Nov. 29.
Clarke, Ira M., assignor to New Martinsville Glass Mfg. Co., New Martinsville, W. Va. Tumbler or similar article. Des. 88,398; Nov. 29.
Clary, Jan P. (See Courtois, Arthur J., assignor.)
Clay Reduction Corporation. (See Svendsen, Svend S., assignor.)
Clayton and Lambert Manufacturing Company. (See Groehn, Otto J., assignor.)
Clementson, Firm C. & S. (See Gullander, Nils H., assignor.)
Cleveland Metal Hose Company. (See Phillips, Walter E., assignor.)
Coble, Roy L., Shelton, Wash. Saw guide. 1,889,464; Nov. 29.
Cohen-Venezian, Carlo, Turin, Italy. Aerofoil-carrying rack. 1,889,350; Nov. 29.
Cole, Arthur B., Caldwell, N. J. Radio receiving system. 1,889,172; Nov. 29.
Collins, Ashton B., Birmingham, Ala. Doll. Des. 88,399; Nov. 29.
Colt's Patent Fire Arms Manufacturing Co. (See Conner, Benjamin F., assignor.)
Columbia Phonograph Company, Inc. (See Mitchell, Frank A., assignor.)
Combier & Co, Inc. (See Merry, Elizabeth, assignor.)
Combier & Co. Inc. (See Schey, Robert, assignor.)
Combier & Co. Inc. (See Wax, Evelyn, assignor.)
Concord Chenille Company, Inc. (See Unger, Abraham, assignor.)
Concrete-Wood Floor Clip Co., Inc. (See Wolfson, Samuel J., assignor.)
Connecticut Telephone & Electric Corporation. (See Brogger, Ivar W., assignor.)
Conner, Benjamin F., Wethersfield, assignor to Colt's Patent Fire Arms Manufacturing Co., Hartford, Conn. Bottle cap. Des. 88,400; Nov. 29.
Conner, Benjamin F., Wethersfield, assignor to Colt's Patent Fire Arms Manufacturing Co., Hartford, Conn. Bottle cap. Des. 88,401; Nov. 29.
Conner, Benjamin F., Wethersfield, assignor to Colt's Patent Fire Arms Manufacturing Co., Hartford, Conn. Bottle cap. Des. 88,402; Nov. 29.
Conner, Benjamin F., Wethersfield, assignor to Colt's Patent Fire Arms Manufacturing Co., Hartford, Conn. Bottle cap. Des. 88,403; Nov. 29.
Conner, Benjamin F., Wethersfield, assignor to Colt's Patent Fire Arms Manufacturing Co., Hartford, Conn. Bottle cap. Des. 88,404; Nov. 29.
Conner, Benjamin F., Wethersfield, assignor to Colt's Patent Fire Arms Manufacturing Co., Hartford, Conn. Bottle cap. Des. 88,453; Nov. 29.
Conner, Benjamin F., Wethersfield, assignor to Colt's Patent Fire Arms Manufacturing Co., Hartford, Conn. Bottle cap. Des. 88,452; Nov. 29.
Cook Electric Company. (See Persons, Lawrence M., assignor.)
Cook, Frederick L., South Melbourne, Victoria, Australia. Electric switch mechanism. 1,889,637; Nov. 29.

Cook, Percy E., Haddonfield, N. J., assignor, by mesne assignments, to Allis-Chalmers Manufacturing Company, Milwaukee, Wis. Switch. 1,889,514; Nov. 29.
Cook, Percy E., Bellevue, Pa., assignor, by mesne assignments, to Allis-Chalmers Manufacturing Company, Milwaukee, Wis. Electrical protective system. Re18,677; Nov. 29.
Copper Deoxidation Corporation. (See Stout, Harry H., assignor.)
Cooper, Fred V., Cadillac, Mich. Door. 1,889,638; Nov. 29.
Cooper, Harry, Carrollton, Mo. Animal trap. 1,889,351; Nov. 29.
Cooper, Thomas L., Cloquet, Minn. Log retaining and unloading device. 1,888,973; Nov. 29.
Coors, Adolph, assignor to Coors Porcelain Company, Golden, Colo. Coffee maker. 1,889,543; Nov. 29.
Coors Porcelain Company. (See Coors, Adolph, assignor.)
Cope, Frank T., assignor to The Electric Furnace Company, Salem, Ohio. Heat treating furnace. Re18,668; Nov. 29.
Corbin, Elbert A., jr., Swarthmore, assignor of one-third to W. C. Biddle, Lansdowne, and one-third to W. A. Brown, Philadelphia, Pa. Transmission for vehicle wheels. 1,889,352; Nov. 29.
Cordrey, Hannah E., et al., administrators. (See Cordrey, Oliver C.)
Cordrey, Oliver C., deceased, by H. E. Cordrey and Eastern Shore Trust Company, administrators, and E. W. Townsend, assignors to said Ernest W. Townsend, Salisbury, Md. Strawberry. Pl. Pt. 46; Nov. 29.
Corning Glass Works. (See Hood, Harrison P., assignor.)
Cotton, Robert E., Chattanooga, Tenn. Window shade control. 1,889,639; Nov. 29.
Cottrell, C. B., & Sons Company. (See Barber, Howard M., assignor.)
Conade, Maurice, Paris, France. Device for the automatic stop of the film in a cinematograph. 1,889,465; Nov. 29.
Courtois, Arthur J., Montague City, Mass., assignor of one-fourth to J. P. Clary, Hartford, Conn. Compressor apparatus. 1,889,640; Nov. 29.
Cover, Ralph, Baltimore, Md. Machine for cutting grain kernels from an ear of corn and the cutting blades therefor. 1,889,057; Nov. 29.
Cowan, Edward J., Dedham, Mass., assignor, by mesne assignments, to General Electric Company. Insulating casing condenser assembly. 1,889,644; Nov. 29.
Cowan, Francis L., et al. (See Masterson, W. E., and Price, assignors.)
Cox, William F., New York, N. Y. Combined clock and radio case. Des. 88,406; Nov. 29.
Craig, Edward, St. Joseph, assignor, by mesne assignments, to Saranac Bag Sealers, Inc., Benton Harbor, Mich. Machine for closing containers. 1,889,193; Nov. 29.
Craig, Robert F. (See Hornbuckle, W. P., and Craig.)
Crawford, David F. (See Lower, N. M., Crawford, and Turner.)
Crockett, Frank L., East Douglas, assignor to Whitin Machine Works, Whitinsville, Mass. Top comb motion. 1,889,435; Nov. 29.
Cronenweth, Earl E., and C. G. Hamer, San Fernando, Calif. Spring oiler. 1,889,043; Nov. 29.
Cross, Frank L., Port Washington, N. Y., assignor to Cross Paper Feeder Company, Boston, Mass. Sheet straightening conveying mechanism. 1,889,353; Nov. 29.
Cross Paper Feeder Company. (See Cross, Frank L., assignor.)
Crowe, Douglas C., assignor to Telefonaktiebolaget L. M. Ericsson, Stockholm, Sweden. Telephone plant. 1,889,466; Nov. 29.
Crowley, Henry L., East Orange, and R. M. Crowley, Jersey City, assignors to Henry L. Crowley & Co. Inc., East Orange, N. J. Electron discharge device and manufacture. 1,889,087; Nov. 29.
Crowley, Henry L., & Co. Inc. (See Crowley, Henry L. and R. M., assignors.)
Crowley, John C., Cleveland Heights, assignor to The Dill Manufacturing Company, Cleveland, Ohio. Valve stem bending tool. 1,889,239; Nov. 29.
Crowley, Robert M. (See Crowley, Henry L. and R. M.)
Cutler-Hammer, Inc. (See Evans, Clarence T., assignor.)
Cutler-Hammer, Inc. (See Lightfoot, Edwin N., assignor.)
Cutler-Hammer, Inc. (See Meuer, George J., assignor.)
Dahms, George L., Columbiana, Ohio. Furniture conveyer. 1,889,274; Nov. 29.
Daimler Benz Aktiengesellschaft. (See Wagner, Max, assignor.)
Dainton, Francis M., assignor of one-half to A. St. James, Brooklyn, N. Y. Internal combustion engine. 1,889,641; Nov. 29.
Dalton, Daniel F., assignor to The Shoe Hardware Company, Waterbury, Conn. Separable fastener. 1,889,647; Nov. 29.
Darrin, Marc, Pittsburgh, Pa., assignor to F. N. Burt Company, Limited, Toronto, Ontario, Canada. Composition of matter. 1,889,088; Nov. 29.
Daste, Marius J., Courbevoie, France. Flexible body construction. 1,889,058; Nov. 29.
Davis, Garland H. B., Baton Rouge, La., assignor to Standard-I. G. Company. Preparing catalytic materials. 1,888,978; Nov. 29.
Davis, George F., Waltham, Mass. Sized fibrous product and method of and apparatus for producing the same. 1,889,642; Nov. 29.
Davis, George F., Waltham, Mass. Fibrous sheet material, composition therefor, and process of making. 1,889,643; Nov. 29.
Davis, Harry S., San Antonio, Tex. Condiment shaker. 1,889,593; Nov. 29.
Davis, Robert H., London, England. Purifying canister for breathing apparatus. 1,889,015; Nov. 29.
Davis, William H. H. (See Peterson, Gust W., assignor.)
Dawson, L. J., et al. (See Lofgren, E. G. C., and Anderson, assignors.)
Decker, Byron, et al. (See McFarland, Francis W., assignor.)
De Coursey, William, St. Louis, Mo. Method and apparatus for pulverizing materials. 1,889,436; Nov. 29.
Deere & Company. (See Paradise, Louis A., assignor.)
De Giers, Clarence A., Forest Hills, assignor to The Liquidometer Corporation, Long Island City, N. Y. Expansion indicator. 1,889,089; Nov. 29.
De Iongh, Johan H., Wassenaar, assignor to Naamloose Vennootschap Maatschappij tot Vervaardiging van Snijmachines Volgens van Berkel's Patent en van Andere Werktuigen, Rotterdam, Netherlands. Weighing apparatus. 1,888,979; Nov. 29.
De Jaco, Francis J., Nicholasville, Ky. Ecclesiastic ritual case. 1,889,044; Nov. 29.
De Lange, Albert J., Amsterdam, Netherlands, assignor, by mesne assignments, to The Flintkote Corporation, Boston, Mass. Manufacture of a bituminous cement mortar, cement concrete, and the like. 1,889,487; Nov. 29.
De La Roche, Hans R. S., Bremen, Germany. Refractory covering iron and metal structures. 1,889,644; Nov. 29.
De Laval Steam Turbine Company. (See Kennedy, Frank W., assignor.)
Delco-Light Company. (See Lee, Ralph L., assignor.)
Delco Products Corporation. (See Hunt, John H., assignor.)
Demag Aktiengesellschaft. (See Heetkamp, Heinrich, assignor.)
Demag Aktiengesellschaft. (See Peters, Mathias, assignor.)
Dengler, Benjamin F. (See Ashbrook, R. B., Macferran, Quanstrom, and Dengler.)
Dennie, Harry E., Chicago, Ill. Well casing protector. 1,889,059; Nov. 29.
Dennie, Harry E., Chicago, Ill. Well casing protector. 1,889,060; Nov. 29.
Dettenborn, Paul, Berlin-Friedenau, Germany, assignor to General Electric Company. Elastic fluid power plant. 1,889,060; Nov. 29.
De Walt, Kenneth C., Schenectady, N. Y., assignor to General Electric Company. Electron discharge apparatus. 1,889,595; Nov. 29.
Dickie, William A., and H. Halkyard, Spondon, near Derby, England, assignors to Celanese Corporation of America. Manufacture of new or improved fabrics. 1,889,061; Nov. 29.
Dill Manufacturing Company, The. (See Crowley, John C., assignor.)
Di Lorenzio, Charles, et al. (See Fabbro, Louis M., assignor.)
Dingledine, William K., Brooklyn, N. Y. Game. 1,888,980; Nov. 29.
Dinsmore, Samuel, Chicago, Ill. Agricultural implement. 1,889,016; Nov. 29.
Domahoski, Joseph J., La Crosse, Wis. Ballet slipper. 1,889,275; Nov. 29.
Donovan, Patrick H., Chicago, Ill., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa. Fluid pressure water system. 1,889,120; Nov. 29.
Dorfman, Albert, Hackensack, N. J. Tool head retainer. 1,889,400; Nov. 29.
Dorrien, Liebert W. v., Mexico, Mexico. Domestic rodent exterminator. 1,889,276; Nov. 29.
Douglass, Arthur H. (See Douglass, Howard H. and A. H.)
Douglass, Howard H. and A. H., assignors to Superior Regulator Co. Inc., Los Angeles, Calif. Regulating valve. 1,889,142; Nov. 29.
Dow Chemical Company, The. (See Grebe, John J., assignor.)
Draper, Raymond J., Los Angeles, Calif. Core catcher. 1,889,277; Nov. 29.
Dresser, S. R., Manufacturing Company. (See Pfefferle, George H., assignor.)
Drexler, Ernest, assignor to Schloemann Engineering Company, Pittsburgh, Pa. Conveyer roller. 1,889,173; Nov. 29.
Drexler, Ernest, Pittsburgh, Pa., assignor to Schloemann Aktiengesellschaft, Dusseldorf, Germany. Conveyer roller. 1,889,174; Nov. 29.
Dreyfus, Camille, New York, N. Y. Embossing fabrics and articles containing organic derivatives of cellulose. 1,889,045; Nov. 29.
Dreyfus, Camille, New York, N. Y. Embossing circular knit fabrics. 1,889,062; Nov. 29.
Duby, John F., Boston, Mass. Vehicle construction. 1,889,596; Nov. 29.
Du Chrome Film System Ltd. (See Kelley, William Van D., assignor.)

Duff-Norton Manufacturing Company, The. (See Schwerin, Frank H., assignor.)
Duffy, James U., Cleveland, and J. H. Richards, Carrollton, Ohio. Bottle cap and stopper. Re18,669; Nov. 29.
Dugelay, Paul, assignor to Societe d'Exploitation de Brevets pour l'Industries, l'Aviation et l'Automobile (S. E. B. I. A.), Paris, France. Compressor for internal combustion engines. 1,888,981; Nov. 29.
Dunham, John R., New Brunswick, N. J. Locking antifriction bearings to shafts. 1,889,063; Nov. 29.
Dunham, John R., New Brunswick, N. J. Locking antifriction bearings to shafts. 1,889,064; Nov. 29.
Dunlap, Charles K., assignor to Sonoco Products Company, Hartsville, S. C. Winding spool. 1,889,278; Nov. 29.
Dunlop Rubber Company Limited. (See Murphy, E. A., and Twiss, assignors.)
Du Pont, E. I., de Nemours & Company. (See Beekley, John S., assignor.)
Du Pont, E. I., de Nemours & Company. (See Larson, Alfred T., assignor.)
Du Pont, E. I., de Nemours & Company. (See Patterson, Gordon D., assignor.)
Durable Mat Company. (See Lyons, Charles T., assignor.)
Dwyer, William L. (See Grisbaum, L. D., Dwyer, and Pearce.)
Eastern Shore Trust Company et al, administrator. (See Cordrey, Oliver C.)
Eastman, Fred C., Beverly, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Machine for inserting fastenings. 1,889,194; Nov. 29.
Eckert, Wilhelm, and O. Braunsdorf, Frankfort-on-the-Main-Hochst, Germany, assignor to General Aniline Works, Inc., New York, N. Y. Vat dyestuffs and preparing them. 1,889,279; Nov. 29.
Eclipse Lawn Mower Company. (See Rothe, Lester B., assignor.)
Economy Fuse and Mfg. Co. (See Kurath, Frans, assignor.)
Edgren, Ernst D., Los Angeles, Calif. Device for automatically supplying washing solutions to washing machines. 1,889,280; Nov. 29.
Edison General Electric Appliance Company. (See Olds, Ambrose D., assignor.)
Edison General Electric Appliance Company. (See Patten, Raymond E., assignor.)
Edmonds, George P., assignor to G. & W. Electric Specialty Company, Chicago, Ill. Pothead and conductor protecting means. 1,889,545; Nov. 29.
Eisleb, Otto, Hofheim-on-Taunus, Germany, assignor to Winthrop Chemical Company, Inc., New York, N. Y. Beta-dimethylaminoethyl-ester of para-butyl-amino-benzoic acid. 1,889,645; Nov. 29.
Elder, David, Waverly, Mass. Cultivating tool. 1,888,982; Nov. 29.
Electric Furnace Company, The. (See Cope, Frank T., assignor.)
Electrodor Company, The. (See Hill, Glenn G., assignor.)
Elliott-Fisher Company. (See Foothorap, Harry A., assignor.)
Emerson Electric Manufacturing Co. (See Persons, Laurence M., assignor.)
Engels, William H., assignor, by mesne assignments, to Merck & Co., Inc., Rahway, N. J. Iodine preparation. 1,889,195; Nov. 29.
Ensler, Milton. (See Naftal, W., and Ensler.)
Enterprise Railway Equipment Company. (See Campbell, Argyle, assignor.)
Erickson, John, assignor, by mesne assignments, to Associated Electric Laboratories, Inc., Chicago, Ill. Switch mechanism. 1,889,240; Nov. 29.
Ericsson, Eric W., Brooklyn, N. Y. Safey razor. 1,889,401; Nov. 29.
Ernst, Charles, New Orleans, La. Lawn chair. 1,889,646; Nov. 29.
Errett, David F., Weston, Ohio. Vehicle wheel. 1,889,723; Nov. 29.
Evans, Clarence T., Wauwatosa, assignor to Cutler-Hammer, Inc., Milwaukee, Wis. Control device. 1,889,175; Nov. 29.
Evans Products Company. (See Butterworth, Samuel D., assignor.)
Evans Products Company. (See Hice, Sherman, assignor.)
Fabbro, Anna M., et al. (See Fabbro, Louis M., assignor.)
Fabbro, Louis M., assignor of forty-five per cent to A. M. Fabbro, forty per cent to E. C. Balshiser, and fifteen per cent to C. Di Lorenzio, Cleveland, Ohio. Vaporiser and supercharger for internal combustion engines. 1,889,647; Nov. 29.
Fabbro, Louis M., assignor of one-half to E. C. Balshiser, Cleveland, Ohio. Fuel vaporiser. 1,889,648; Nov. 29.
Fabrik Explosionssicherer Gefasse Salskotten G. m. b. H. (See Hurlbrink, Ernst, assignor.)
Fahrney, Callo D., Cambridge, Mass. Television receiver. 1,889,727; Nov. 29.
Farrar, Cecil W. (See Hagopian, Vahan, assignor.)
Fausse, Joseph, Melrose, and A. H. Boudret, Boston, Mass., assignors, by mesne assignments, to The Celastic Corporation, Wilmington, Del. Stiffening parts of boots and shoes. 1,889,196; Nov. 29.
Fawcett, William D., et al. (See Thomas, Jack L., assignor.)
Fessenden, Robert G., Townsend, Mass. Cover fastening for wooden containers and making the same. 1,889,328; Nov. 29.
Fiat Societa Anonima. (See Pirinoli, Guglielmo, assignor.)
Fiat Societa Anonima. (See Rosatelli, Celestino, assignor.)
Fiat Societa Anonima. (See Zerbi, Tranquillo, assignor.)
Fieldman, Michael, Philadelphia, Pa. Shock absorber. 1,889,354; Nov. 29.
Fischesser, Alfred. (See Reddelien, G., Lange, Fischesser, and Freund.)
Fisher, Walter S., assignor to The Willys-Overland Company, Toledo, Ohio. Lubrication system for sleeve valve engines. 1,888,971; Nov. 29.
Fitz Gerald, Alan S., Schenectady, N. Y., assignor to General Electric Company. Telemetering method and apparatus. 1,889,597; Nov. 29.
Fitzgerald, Francis H., Duluth, Minn. Card displaying or plant marking device. 1,889,281; Nov. 29.
Fitz Gerald, John W., assignor to Briggs & Stratton Corporation, Milwaukee, Wis. Writing instrument holder. 1,889,402; Nov. 29.
Flannery, John L., Greenwich, Conn. Toy edifice. 1,889,468; Nov. 29.
Fletcher, John T., Plainview, Tex. Commodity handling apparatus. 1,889,176; Nov. 29.
Flettner, Anton, Berlin, Germany. Steering gear for vehicles. 1,889,728; Nov. 29.
Flintkote Corporation, The. (See De Lange, Albert J., assignor.)
Flintkote Corporation, The. (See Groskopf, Edwin O., assignor.)
Fonseca, Edward L., Newark, and E. McK. Hunt, Montclair, N. J., and M. C. Barnum, Minneapolis, Minn., assignors to The Wilcolator Company, Newark, N. J. Humidifying apparatus. 1,889,017; Nov. 29.
Foothorap, Harry A., Harrisburg, Pa., assignor to Elliott-Fisher Company. (Register. Re15,674; Nov. 29.
Forbes, Howard W., and E. Mitchell, Swanton, Ohio. Adjustable spur plate for shoes. 1,889,649; Nov. 29.
Forbes, William G., New York, N. Y. High speed cigarette cutter. 1,889,403; Nov. 29.
Forbes, William G., New York, N. Y. High speed cigarette cutter. 1,889,404; Nov. 29.
Force, Jonathan, Cleveland Heights, Ohio, assignor to General Electric Company. Incandescent electric lamp. 1,889,598; Nov. 29.
Forrest, Thomas W. W., Fresno, and T. O. L. Smith, Oakland, Calif., assignors to Sun-Maid Raisin Growers of California, Fresno, Calif. Method of and apparatus for removing pits from prunes. Re18,675; Nov. 29.
Foss, Per, Velsen-Noord, Netherlands. Apparatus for decorticating timber. 1,889,046; Nov. 29.
Foster Wheeler Corporation. (See Bell, John E., assignor.)
Franchini, Alfred, and P. Girod, Cannes, France; said Franchini assignor to said Girod. Device for mounting and operating electrodes. 1,889,282; Nov. 29.
Francis, John A., Grass Creek, Wyo. Rotary jar. 1,889,283; Nov. 29.
Franklin Equipment Co. (See Langer, Rudolph J., assignor.)
Fredrickseen, John C., Gary, Ind. Internal combustion engine. 1,889,650; Nov. 29.
French, Edward H., Columbus, Ohio. Producing water-soluble resinates. 1,889,405; Nov. 29.
Freudenberg, Ernest W., Larchmont, N. Y. Embroidered textile fabric or a similar article. Des. 88,407; Nov. 29.
Freund, Erich, Werder, assignor to the Firm Heyl & Co., Chemische-pharmaseutische Fabrik, Aktiengesellschaft, Berlin, Germany. Compound of hexamethylenetetramine and diphosphoric acid and making same. 1,889,090; Nov. 29.
Freund, Hermann. (See Reddelien, G., Lange, Fischesser, and Freund.)
Fried, William B., Dormont, assignor to New Brick Corporation, Pittsburgh, Pa. Wall covering. 1,889,091; Nov. 29.
Friedmann, Sebastian, assignor to Rheinische Metallwaaren-und Maschinenfabrik Sommerda Aktiengesellschaft, Sommerda, Thuringia, Germany. Coupling for typewriter line spacing wheels. 1,889,047; Nov. 29.
Fromm, Herbert, Hamburg, Wis. Shock absorber for cars. 1,889,197; Nov. 29.
G. & W. Electric Specialty Company. (See Edmonds, George P., assignor.)
G. and W. Electric Specialty Company. (See Rah, Joseph, assignor.)
Galassi, Pasquale, New York, N. Y. Expansion strip. 1,889,651; Nov. 29.
Gale, Ernest L., Yonkers, assignor to Gurney Elevator Company, Inc., New York, N. Y. Elevator control system. 1,889,212; Nov. 29.
Galloway, Leslie W., Indianapolis, Ind. Stocking drier attachment. 1,889,198; Nov. 29.
Games, Archibald H., assignor to McCrady, Rodgers Company, Pittsburgh, Pa. Display card. 1,889,488; Nov. 29.
Gardiner, Robert E., Golden Stream, Manitoba, assignor of one-fourth to B. C. Mills, Winnipeg, Manitoba, Canada. Calf feeder. 1,889,469; Nov. 29.
Garfinkl, Nathaniel, New York, N. Y. Textile fabric or the like. Des. 88,454; Nov. 29.
Garlock Packing Company, The. (See Hubbard, C. R., and Waples, assignors.)

Garrett, Francis A., assignor to Ransomes, Sims & Jefferies, Limited, Orwell Works, Ipswich, England. Universal joint. 1,889,470; Nov. 29.
Gasmesser, B. M., Aktiengesellschaft. (See Brandl, H., and Marischka, assignors.)
Gates, Charles C., Denver, Colo. Material rack. 1,889,546; Nov. 29.
Gaylord, Robert, Incorporated. (See Williams, Benjamin M., assignor.)
Gebhardt, Georg. (See Böhmer, A., and Gebhardt.)
Gebruder Brehmer. (See Kleinschmidt, O., and Klemm.)
General Aniline Works, Inc. (See Eckert, W., and Braunsdorf, assignors.)
General Aniline Works, Inc. (See Neelmeier, W., and Van Hulle, assignors.)
General Aniline Works, Inc. (See Reddelien, G., Iange, Fischesser, and Freund, assignors.)
General Aniline Works, Inc. (See Schnitzspahn, Karl, assignor.)
General Aniline Works, Inc. (See Stusser, R., and Wiedemann, assignors.)
General Electric Company. (See Alexanderson, Ernst F. W., assignor.)
General Electric Company. (See Bailey, William M., assignor.)
General Electric Company. (See Buttron, Willard C., assignor.)
General Electric Company. (See Cowan, Edward J., assignor.)
General Electric Company. (See Dettenborn, Paul, assignor.)
General Electric Company. (See De Walt, Kenneth C., assignor.)
General Electric Company. (See Fitz Gerald, Alan S., assignor.)
General Electric Company. (See Force, Jonathan, assignor.)
General Electric Company. (See Jones, Norman B., assignor.)
General Electric Company. (See Leonard, Vincent W., assignor.)
General Electric Company. (See Lord, Harold W., assignor.)
General Electric Company. (See Morse, Charles, assignor.)
General Electric Company. (See Perrott, Laurence F., assignor.)
General Electric Company. (See Pickard, Greenleaf W., assignor.)
General Electric Company. (See Priess, William H., assignor.)
General Electric Company. (See Prince, David C., assignor.)
General Electric Company. (See Rice, Chester W., assignor.)
General Electric Company. (See Thompson, L. W., and Horstkotte, assignors.)
General Electric Company. (See Whelan, Don W., assignor.)
General Railway Signal Company. (See Mersereau, Donald W., assignor.)
General Railway Signal Company. (See Stephenson, James E., assignor.)
General Railway Signal Company. (See Wight, Sedgwick N., assignor.)
Genssecke, Wilhelm, Gonzenheim near Frankfort-on-the-Main, Germany. Distillation of mixed substances of which soap is a constituent. 1,889,652; Nov. 29.
Gentil, Eugene, Paris, France, assignor to The American Bicheroux Company. Take-off and conveyer mechanism for intermittent sheet glass forming machines. 1,889,065; Nov. 29.
George, Jay L., Riverside, Calif. Compression stay for citrus fruit boxes. 1,889,092; Nov. 29.
Gibson, Harry S., and J. R. McLean, Newton Lower Falls, Mass. Auto traction and antiskid device. 1,889,241; Nov. 29.
Gilbert, Walter E., assignor to Atwater Kent Manufacturing Company, Philadelphia, Pa. Volume control. 1,889,018; Nov. 29.
Gilpin, Garth G., Riverside, Ill., assignor to P. H. Murphy Company, New Kensington, Pa. Roof structure for railway cars. 1,888,983; Nov. 29.
Girod, Paul. (See Franchini, A., and Girod.)
Glaenser, Jules, New York, N. Y. Compact. 1,889,471; Nov. 29.
Glass, Perley R., Salem, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Folding machine. 1,889,242; Nov. 29.
Glaze, Herbert L. (See McInerny, R. J., Williams, and Glaze.)
Goble, Bert G., Tulsa, Okla., assignor to W. A. Quigley. Self lubricating vertical bearing with settling basin. 1,889,243; Nov. 29.
Godefroid, Armand, Berlin, Germany. Cash till with a coin assorter. 1,889,472; Nov. 29.
Goldsborough, John B., Brooklyn, N. Y. Filling voids in soil. 1,889,590; Nov. 29.
Goldschmidt, Sven H., Copenhagen, Denmark. Automatic vending machine. 1,889,406; Nov. 29.
Goode, Gilbert C., Detroit, Mich., assignor to The White Motor Company, Cleveland, Ohio. Supercharger. Re18,671; Nov. 29.
Goodyear's India Rubber Glove Mfg. Company, The. (See King, R. J., and Blake, assignors.)
Gorman, Sydney, Edgewater, Colo. Battery terminal clamp. 1,889,019; Nov. 29.
Gorton, George, Racine, Wis. Cutter head assembly for routing and other machine tools. 1,889,653; Nov. 29.
Gorton, George, Machine Company. (See Horner, George, assignor.)
Graham, Frederick M., Hollidaysburg, Pa. Rail joint lubricating device. 1,889,313; Nov. 29.
Gray Telephone Pay Station Company, The. (See Long, George A., assignor.)
Grebe, John J., assignor to The Dow Chemical Company, Midland, Mich. Heat-energy system. 1,889,586; Nov. 29.
Green, Frederick L., Irvington-on-Hudson, N. Y. Building structure. 1,889,547; Nov. 29.
Greenhill, Charles W., New York, N. Y. Table top. 1,889,355; Nov. 29.
Greenwald, Harold A., Detroit, Mich. Refrigerator door gasket. 1,889,439; Nov. 29.
Gregg Dyeing Company, The. (See Woodhead, H. A., and Kelly, assignors.)
Griessbach, Robert, Ludwigshafen-on-the-Rhine, and H. Weiss, Mannheim, Germany, assignors, by mesne assignments, to The Ohio Sanitary Engineering Corporation, Columbus, Ohio. Fertilizer. 1,889,654; Nov. 29.
Griffith, Charles A., Knoxville, Tenn. Drop bottom car. 1,889,066; Nov. 29.
Grimm, George E., assignor to The Willys-Overland Company, Toledo, Ohio. Auxiliary seat top. 1,889,356; Nov. 29.
Grisbaum, Leonard D., W. L. Dwyer, and E. S. Pearce, assignors to Railway Service & Supply Corporation, Indianapolis, Ind. Journal box sealing device. 1,889,407; Nov. 29.
Groehn, Otto J., Grosse Pointe Park, assignor to Clayton and Lambert Manufacturing Company, Detroit, Mich. Ornamental grille for automobile radiators. 1,889,440; Nov. 29.
Grogan, William H., and F. C. Ladd, assignors to Keith Paper Company, Turners Falls, Mass. Coloring paper. 1,889,020; Nov. 29.
Groskopf, Edwin O., Rutherford, N. J., assignor, by mesne assignments, to The Flintkote Corporation, Boston, Mass. Method of and apparatus for fibrating emulsions. 1,889,473; Nov. 29.
Gross, Charles O., Wilkes-Barre, Pa. Apparatus for generating fuel fumes. 1,889,619; Nov. 29.
Grüss, Heinz, Berlin-Staaken, and B. Thiede, Berlin-Charlottenburg, assignors to Siemens & Halske, Aktiengesellschaft, Siemensstadt, near Berlin, Germany. Apparatus for the determination of the contents of combustible gases in gas mixtures. 1,888,984; Nov. 29.
Guay, Joseph V., assignor to Superior Coal Combustion Company, Haverhill, Mass. Grate. 1,889,548; Nov. 29.
Guiffre, Gaetano, Washington, D. C. Shoe stretcher. 1,889,357; Nov. 29.
Guinsburg, Edwin A. (See Henry, Beulah L., assignor.)
Gullander, Nils H., assignor to the Firm C. & S. Clementson, Malmo, Sweden. Engine fuel. 1,889,474; Nov. 29.
Gunn, Earl G., Racine, assignor to The Nash Motor Company, Kenosha, Wis. Brake. 1,889,093; Nov. 29.
Gurney Elevator Company. (See Gale, Ernest L., assignor.)
Gyro Process Company. (See Harnsberger, A. E., and Smith, assignors.)
Haabestad, Erling H., assignor to Hydrol Chemical Company, Inc., Philadelphia, Pa. Tissue filler. 1,889,655; Nov. 29.
Haas, Joseph F., Forest Park, assignor to Wodack Electric Tool Corporation, Chicago, Ill. Combined rotary and reciprocatory drill. 1,889,441; Nov. 29.
Haggenmacher, August, Winterthur, Switzerland. Device for the wet treatment of textile poducts. 1,889,048; Nov. 29.
Hagoplan, Vahan, New York, assignor to C. W. Farrar, Buffalo, N. Y. Dressing table or similar article. Des. 88,405; Nov. 29.
Hala, Charles, Toronto, Ontario, Canada. Portable dressing cabinet. 1,889,033; Nov. 29.
Haley, Kenneth W. (See Smith, W. M., and Haley.)
Halkyard, Harold. (See Dickie, W. A., and Halkyard.)
Hall, Preston M., Worcester, Mass., assignor to American Chain Company, Inc. Tread structure for antiskid chains. 1,889,094; Nov. 29.
Hambleton, Maurice W., Goffstown, and B. F. Morrill, Nashua, N. H.; said Morrill assignor to said Hambleton. Bobbin boring machine. 1,889,034; Nov. 29.
Hamer, Charles G. (See Cronenweth, E. E., and Hamer.)
Hammerly, Herman J., Wallingford, assignor to The Trumbull Electric Manufacturing Company, Plainville, Conn. Double throw switch. 1,889,358; Nov. 29.
Hammerly, Herman J., New Britain, assignor to The Trumbull Electric Manufacturing Company, Plainville, Conn. Electric switch. 1,889,515; Nov. 29.
Hammond, Laurens, Chicago, Ill. Card table with automatic dealing mechanism. 1,889,729; Nov. 29.
Hanrott, Harcourt C., Westminster, London, England. Perpetual calendar. 1,889,859; Nov. 29.
Hansel, Carl W., Bedford, England. Optical apparatus. 1,889,600; Nov. 29.
Hansen, Charles W., assignor to J. I. Case Company, Racine, Wis. Power transmission mechanism. 1,889,600; Nov. 29.

Hansen, Herman, New York, N. Y., assignor to Francis Keil & Son, Inc. Key cutting apparatus. 1,889,461; Nov. 29.
Harnsberger, Audley E. and C. L. Smith, Chicago, Ill., assignors to Gyro Process Company, Detroit, Mich. Apparatus for cracking hydrocarbon oils. 1,889,190; Nov. 29.
Harper, William W. (See Berg, F. A., and Harper.)
Harshberger, Norman P., Chicago, Ill. Composition shingle. 1,889,121; Nov. 29.
Hart, Emogene, Santa Cruz, Calif. Corselet. 1,889,285; Nov. 29.
Hartford-Empire Company. (See Amsler, Walter O., assignor.)
Hartford-Empire Company. (See McIntosh, Harold W., assignor.)
"Hartsteinwerk Niedersachsen, Gesellschaft mit beschränkter Haftung". (See Lange, Hermann, assignor.)
Hass, Lewis V., Charlton, Iowa. Control device for motor vehicles. 1,889,656; Nov. 29.
Hawley, Kent A., assignor to Locke Insulator Corporation, Baltimore, Md. Noninterfering insulator. 1,889,244; Nov. 29.
Hechenbleikner, Ingenuin and N. Titlestad, assignors to Chemical Construction Corporation, Charlotte, N. C. Converter. 1,889,549; Nov. 29.
Heetkamp, Heinrich, assignor to Demag Aktiengesellschaft, Duisburg, Germany. Tube drawing bench. 1,889,314; Nov. 29.
Heiberger, Eugene S., et al. (See McPherson, Clarence D., assignor.)
Heinke, Alfred J., Towaco, N. J. Textile fabric or similar article of manufacture. Des. 88,455; Nov. 29.
Heinke, Alfred J., Towaco, N. J. Textile fabric or similar article of manufacture. Des. 88,456; Nov. 29.
Heinke, Alfred J., Towaco, N. J. Textile fabric or similar article of manufacture. Des. 88,457; Nov. 29.
Heinke, Alfred J., Towaco, N. J. Textile fabric or similar article of manufacture. Des. 88,458; Nov. 29.
Heinke, Alfred J., Towaco, N. J. Textile fabric or similar article of manufacture. Des. 88,459; Nov. 29.
Heinke, Alfred J., Towaco, N. J. Textile fabric or similar article of manufacture. Des. 88,460; Nov. 29.
Heinke, Alfred J., Towaco, N. J. Textile fabric or similar article of manufacture. Des. 88,461; Nov. 29.
Heinke, Alfred J., Towaco, N. J. Textile fabric or similar article of manufacture. Des. 88,462; Nov. 29.
Heinke, Alfred J., Towaco, N. J. Textile fabric or similar article of manufacture. Des. 88,463; Nov. 29.
Heinkel, John, Rock Island, Ill. Grease interceptor. 1,889,601; Nov. 29.
Hellman, Carl R., assignor to William Willheim Co., Inc., New York, N. Y. Textile fabric or similar article. Des. 88,408; Nov. 29.
Hellman, Carl R., assignor to William Willheim Co., Inc., New York, N. Y. Textile fabric or similar article. Des. 88,409; Nov. 29.
Hellman, Carl R., assignor to William Willheim Co., Inc., New York, N. Y. Textile fabric or similar article. Des. 88,410; Nov. 29.
Hellman, Carl R., assignor to William Willheim Co., Inc., New York, N. Y. Textile fabric or similar article. Des. 88,411; Nov. 29.
Hellman, Carl R., assignor to William Willheim Co., Inc., New York, N. Y. Textile fabric or similar article. Des. 88,412; Nov. 29.
Hellman, Carl R., assignor to William Willheim Co., Inc., New York, N. Y. Textile fabric or similar article. Des. 88,413; Nov. 29.
Hellman, Carl R., assignor to William Willheim Co., Inc., New York, N. Y. Textile fabric or similar article. Des. 88,414; Nov. 29.
Hellman, Carl R., assignor to William Willheim Co., Inc., New York, N. Y. Textile fabric or similar article. Des. 88,415; Nov. 29.
Hellman, Carl R., assignor to William Willheim Co., Inc., New York, N. Y. Textile fabric or similar article. Des. 88,416; Nov. 29.
Hellman, Carl R., assignor to William Willheim Co., Inc., New York, N. Y. Textile fabric or similar article. Des. 88,417; Nov. 29.
Hellman, Carl R., assignor to William Willheim Co. Inc., New York, N. Y. Textile fabric or similar article. Des. 88,418; Nov. 29.
Hellman, Carl R., assignor to William Willheim Co., Inc., New York, N. Y. Textile fabric or similar article. Des. 88,419; Nov. 29.
Hellman, Carl R., assignor to William Willheim Co., Inc., New York, N. Y. Textile fabric or similar article. Des. 88,464; Nov. 29.
Hellman, Carl R., assignor to William Willheim Co., Inc., New York, N. Y. Textile fabric or similar article. Des. 88,465; Nov. 29.
Hellman, Carl R., assignor to William Willheim Co., Inc., New York, N. Y. Textile fabric or similar article. Des. 88,466; Nov. 29.
Hellman, Carl R., assignor to William Willheim Co., Inc., New York, N. Y. Textile fabric or similar article. Des. 88,467; Nov. 29.
Henderson, Elias H., Chicago, Ill. Electrical typewriting machine. 1,889,315; Nov. 29.
Henkel, August, Keene, N. H. Tweezers. 1,889,475; Nov. 29.
Henry, Beulah L., assignor of one-half to E. A. Guinsburg, New York, N. Y. Duplicating device for typewriting machines. 1,889,657; Nov. 29.
Herber, Pierre, Middlesex, N. J., assignor to Research Corporation, New York, N. Y. Liquid seal. 1,889,360; Nov. 29.
Hersey, Ralph, et al. (See McFarland, Francis W., assignor.)
Hershey, Harry B., Oak Park, assignor, by mesne assignments, to Associated Electric Laboratories, Inc., Chicago, Ill. Selective signaling system. 1,889,085; Nov. 29.
Hertzberg, Harry, Brooklyn, assignor to Hertzberg Patents Inc., New York, N. Y. Mop head. 1,888,986; Nov. 29.
Hertzberg Patents Inc. (See Hertzberg, Harry, assignor.)
Hewitt, Ellis E., Edgewood, assignor to The Westinghouse Air Brake Company, Wilmerding, Pa. Check valve device. 1,889,122; Nov. 29.
Heyl & Co., Chemischpharmaceutische Fabrik, Aktiengesellschaft. (See Freund, Erich, assignor.)
Heys George H., Swampscott, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Heel and heel covering and making the same. 1,889,245; Nov. 29.
Hice, Sherman, Detroit, Mich., assignor, by mesne assignments, to Evans Products Company. Loading deck for automobiles. 1,889,786; Nov. 29.
Hickman y Emperan, Edward, Santao, Spain. Air alternator applicable to blast furnaces producing cast iron, smelting furnaces and the like. 1,889,476; Nov. 29.
Hickok, Robert D., Cleveland, assignor to The Magnetic Gauge Company, Akron, Ohio. Electrical measuring instrument. 1,889,361; Nov. 29.
Hickok, W. O., Manufacturing Company, The. (See Broadmeyer, Albert, assignor.)
Hicks, Norman W., Sacramento, Calif. Binder. 1,889,095; Nov. 29.
Hill, Glenn G., assignor to The Electrodor Company, Detroit, Mich. Tread switch. 1,889,602; Nov. 29.
Hinchman, Charles R., Haverford Township, Delaware County, Pa. Detergent. 1,889,658; Nov. 29.
Hirsh, Jennie, assignor to M. F. Keller, Brooklyn, N. Y. Electric vanity case. 1,889,143; Nov. 29.
Hirth, Albert, Heiden, Rosenberg, Switzerland. Magazine pencil. 1,889,550; Nov. 29.
Hitt, Samuel E., Elyria, Ohio. Safety surface for aerofoils. 1,889,477; Nov. 29.
Hochschwender, Karl. (See Krauch, C., Hochschwender, and Schunck.)
Hofammann, Karl E., and L. H. Schlatter, Altoona, Pa. Rail anchor. 1,889,316; Nov. 29.
Hoffman, Albert F., assignor to Hoffman Beverage Company, Newark, N. J. Label marker. 1,889,246; Nov. 29.
Hoffman Beverage Company. (See Hoffman, Albert F., assignor.)
Hoffman, Nora, New York, N. Y. Dress form. 1,889,659; Nov. 29.
Högel, Lennart, assignor to Allmanna Svenska Elektriska Aktiebolaget, Vasteras, Sweden. Electric resistance furnace. 1,889,363; Nov. 29.
Holcomb, J. L., Mfg. Company. (See Anderson, Jesse I., assignor.)
Holford, Harry E., assignor to Binghamton Foundry & Machine Co. Inc., Binghamton, N. Y. Stake locking device for road forms or rails. 1,889,329; Nov. 29.
Hollins, Abraham. (See Hollins, Jesse and A.)
Hollins, Jesse and A., Brooklyn, N. Y. Signal light control. 1,889,551; Nov. 29.
Hollman, Frank, Toledo, Ohio. Pipe device. 1,889,200; Nov. 29.
Holveck, Joseph E., Pittsburgh, Pa. Spray nozzle. 1,889,201; Nov. 29.
Hood, Harrison P., assignor to Corning Glass Works, Corning, N. Y. Producing revivified ultraviolet transmitting glasses. 1,889,067; Nov. 29.
Hoover Company, The. (See Smellie, Donald G., assignor.)
Hornbuckle, William P., and R. F. Craig, Stanley, N. C. Bleaching apparatus. 1,889,442; Nov. 29.
Horner, George, assignor to George Gorton Machine Company, Racine, Wis. Engraving and other machine. 1,889,660; Nov. 29.
Horstkotte, Edward H. (See Thompson, L. W., and Horstkotte.)
Hoss, Leroy K., Delray Beach, Fla. Lubricator. 1,889,068; Nov. 29.
Hough Shade Corporation. (See Steffen, Le Roy J., assignor.)
House, Frank B., Baldwin Harbor, assignor to Sperry Gyroscope Company, Inc., Brooklyn, N. Y. Sound locator. 1,889,363; Nov. 29.
Howery, Harold, et al. (See Bushong, Ivan C., assignee.)
Howland, Harry E., assignor to Ithaca Gun Company, Ithaca, N. Y. Single-trigger mechanism for double-barrelled firearms. 1,889,049; Nov. 29.
Hubbard, Cecil R., and R. M. Waples, assignor to The Garlock Packing Company, Palmyra, N. Y. Gasket. 1,889,144; Nov. 29.
Hucknall, Hawe W., assignor to The American Lace Manufacturing Company, Elyria, Ohio. Lace scarf or similar article. Des. 88,468; Nov. 29.

Hultgren, Charles R., assignor to S. Karpen & Bros., Chicago, Ill. Adjustable-back-chair. 1,889,478; Nov. 29.

Humes, Homer C., and G. L. Robinson, Los Angeles, Calif. Screw holding attachment for screw drivers. 1,889,330; Nov. 29.

Hunt, Edward M. (See Fonseca, E. L., Hunt, and Barnum.)

Hunt, John H., Detroit, Mich., assignor, by mesne assignments, to Delco Products Corporation, Dayton, Ohio. Charge forming device. 1,889,069; Nov. 29.

Hurlbrink, Ernst, Berlin-Westend, assignor to the Firm Fabrik Explosionssicherer Gefasse Salskotten G. m. b. H., Salskotten, Germany. Device for measuring liquids. 1,889,096; Nov. 29.

Huston, Robert E., Trinity, Tex. Basket handle. 1,889,661; Nov. 29.

Huston, Tom, Peanut Company. (Set Osteen, Belmont D., assignor.)

Hyatt, Raymond D., assignor to The D. L. Auld Company, Columbus, Ohio. Hub cap fastener. 1,889,070; Nov. 29.

Hydrol Chemical Company. (See Haabestad, Erling H., assignor.)

Hyman, S. E., Company, The. (See Hyman, Solomon E., assignor.)

Hyman, Solomon E., assignor to The S. E. Hyman Company, Fremont, Ohio. Seat cover. 1,889,662; Nov. 29.

I. G. Farbenindustrie Aktiengesellschaft. (See Krauch, C., Hochschwender, and Schunck, assignors.)

I. G. Farbenindustrie Aktiengesellschaft. (See Söll, J., and Runkel, assignors.)

I. G. Farbenindustrie Aktiengesellschaft. (See Wulff, Otto, assignor.)

Ilyus, Edmund B., Newark, N. J., assignor to Arenco Machine Company, Inc., New York, N. Y. Electrical weighing and measuring device. 1,889,663; Nov. 29.

Imperial Brass Manufacturing Company, The. (See Kern, Josephine, assignor.)

Industrial Patents Corporation. (See McKee, Harry H., assignor.)

Industrial Patents Corporation. (See Middleton, Thomas P., assignor.)

Ingersoll-Rand Company. (See Lear, Earl B., assignor.)

Ingersoll-Rand Company. (See Shook, James F., assignor.)

Ingersoll-Rand Company. (See Smith, William S., sr., assignor.)

Ingram, Joseph R., Nitro, W. Va., assignor to The Rubber Service Laboratories Company, Akron, Ohio. Age resisting vulcanised rubber product and manufacturing same. 1,889,331; Nov. 29.

Innes, George, Davenport, assignor to Innes Manufacturing Company, Bettendorf, Iowa. Grain Saver. 1,889,443; Nov. 29.

Innes Manufacturing Company. (See Innes, George, assignor.)

Instant Ice Corporation. (See Kenyon, Oades J., assignor.)

International Motor Company. (See Masury, Alfred F., assignor.)

Ithaca Gun Company. (See Howland, Harry E., assignor.)

Jack, William, assignor of nine-tenths to D. & J. Tullis, Limited, Clydebank, Scotland. Resilient padding for laundry machinery. 1,889,060; Nov. 29.

Jacobs, Henry S., assignor to The Marion Steam Shovel Company, Marion, Ohio. Hoist and crowd combined control system for electric shovels. 1,889,035; Nov. 29.

Jennings, O. D., & Company. (See Mihalek, Emery, assignor.)

Jeschke, Frank J., assignor to Micromatic Hone Corporation, Detroit, Mich. Grinding mechanism. 1,889,664; Nov. 29.

Johnson, Arthur W., Litchfield, Nebr. Combined protractor and spirit level. 1,889,145; Nov. 29.

Johnson, Clyde R., Princeton, N. J., assignor to Amerail Company, Inc., New York, N. Y. Electric furnace. 1,889,665; Nov. 29.

Johnson, Frances, Brooklyn, N. Y. Textile fabric or similar article of manufacture. Des. 88,469; Nov. 29.

Johnston, Jordie J., Abilene, Tex. Device and apparatus for cleaning tanks and the like. 1,889,603; Nov. 29.

Jones, Harry W., Webster Groves, Mo., assignor to Sanford Investment Company, Wilmington, Del. Railway car end structure. 1,889,051; Nov. 29.

Jones, J R., Spring House, Pa., assignor to Alan Wood Steel Company. Running board for railway cars. 1,889,605; Nov. 29.

Jones, John H., Bound Brook, N. J., assignor to The Best Foods, Inc., New York, N. Y. Treatment of pimientos. 1,889,123; Nov. 29.

Jones, Norman B., Scotia, N. Y., assignor to General Electric Company. Protective apparatus for furnaces. 1,889,604; Nov. 29.

Jones, Willis C., and J. C. Pimm, Syracuse, assignors of one-third to L. S. Pierce, Auburn, N. Y. Golf practising apparatus. 1,889,332; Nov. 29.

Kahn, Siegfried, Albuquerque, N. Mex. Memorandum pad for desk telephones. 1,889,666; Nov. 29.

Kaipust, Leo T., Platte Center, Nebr. Hoe. 1,889,286; Nov. 29.

Kalenoff, Godel, Brooklyn, N. Y. Dish drainer. 1,889,146; Nov. 29.

Kanabay, E. Joseph. (See Benoit, L., and Kanabay.)

Karnes, James C., Buffalo, N. Y. Aim registering target. 1,889,202; Nov. 29.

Karpen, S. & Bros. (See Hultgren, Charles R., assignor.)

Keil, Francis, & Son, Inc. (See Hansen, Herman, assignor.)

Keinath, Georg, Berlin-Charlottenburg, and J. Schwemmer, Falkensee, assignors to Siemens & Halske, Aktiengesellschaft, Siemensstadt, near Berlin, Germany. High-tension current transformer. 1,889,552; Nov. 29.

Keinath, Georg, Berlin-Charlottenburg, and H. Pfannenmüller, assignors to Siemens & Halske Aktiengesellschaft, Berlin-Siemensstadt, Germany. Arrangement for obtaining instantaneous values. 1,889,553; Nov. 29.

Keith Paper Company. (See Grogan, W. H., and Ladd, assignors.)

Keller, Charles L., Cincinnati, assignor to The Richardson Company, Lockland, Ohio. Making paper board. 1,889,177; Nov. 29.

Keller, Marc F. (See Hirsh, Jennie, assignor.)

Keller, Robert, Ennetbaden, assignor to Aktiengesellschaft Brown, Boveri and Cie, Baden, Switzerland. Electric switch. 1,889,479; Nov. 29.

Kelley, Charles F., Jackson Heights, N. Y. Continuous feed gun for concrete or plastic materials. 1,889,480; Nov. 29.

Kelley, William Van D., assignor, by mesne assignments, to Du Chrome Film System Ltd., Hollywood, Calif. Color photography. 1,889,124; Nov. 29.

Kelly, Madison R. (See Woodhead, H. A., and Kelly.)

Kennedy, Frank W., assignor to De Laval Steam Turbine Company, Trenton, N. J. Steam chest construction for steam turbines. 1,889,554; Nov. 29.

Kennedy, George H., jr., Worcester, Mass. Ice tray for mechanical refrigerators. 1,889,481; Nov. 29.

Kennedy, Julian, jr., Sewickley, Pa. Brake. 1,889,444; Nov. 29.

Kenyon, Oades J., Santa Barbara, Calif., assignor, by mesne assignments, to Instant Ice Corporation. Compressor valve assembly. 1,889,247; Nov. 29.

Kern, Josephine, assignor to The Imperial Brass Manufacturing Company, Chicago, Ill. Spoon or similar article. Des. 88,420; Nov. 29.

Kerr, Howard J., Westfield, assignor to The Babcock & Wilcox Company, Bayonne, N. J. Steam generating system. 1,889,071; Nov. 29.

Kerr, Howard J., Westfield, assignor to The Babcock & Wilcox Company, Bayonne, N. J. Steam generator. 1,889,072; Nov. 29.

Keystone Mfg. Co. (See Marks, Isidore, assignor.)

Kilmer, Austin J., Roseville, Mich., assignor to Michigan Tool Company. Adjustable tool support. 1,889,248; Nov. 29.

Kimball, Andrew L. (See Thomas, H. T., and Kimball.)

King, Frances R., Nyack, assignor to Safety King Corporation, New York, N. Y. Bandit-proof window protector. 1,889,317; Nov. 29.

King, Howard K., Philadelphia, Pa., assignor to Chambers Brothers Company. Air pressure dry pan. 1,889,555; Nov. 29.

King, Robert J., and R. A. Blake, New Haven, assignors to The Goodyear's India Rubber Glove Mfg. Company, Naugatuck, Conn. Sole pressing machine. 1,888,987; Nov. 29.

Kingston Products Corporation. (See Zimmerer, Mark E., assignor.)

Kirby, John F., Somerville, N. J. Pipe joint. 1,888,988; Nov. 29.

Kirk, William T. (See Anderson, Carlton.)

Klaier, Walter E., Dubuque, Iowa. Steering means for snowplows. 1,889,667; Nov. 29.

Kleinschmidt, Oscar, and R. Klemm, assignors to Gebruder Brehmer, Leipsig-Plagwitz, Germany. Method of and mechanism for opening sheets in sheet-handling machines. 1,889,364; Nov. 29.

Klemm, Rudolf. (See Kleinschmidt, O., and Klemm.)

Kling, Ferdinand R., New York, N. Y. Apparatus for cleaning hats. 1,889,668; Nov. 29.

Klingenstierna, Axel, Karlstad, Sweden. Tobacco-pipe. 1,889,078; Nov. 29.

Klinkenberg, Adolf, Wittbraucke, near Herdecke, assignor to the Firm Vereinigte Stahlwerke Aktiengesellschaft, Dusseldorf, Germany. Steel having a high yield point and a good notch toughness. 1,889,482; Nov. 29.

Klipstein, Philip A., Bakersfield, Calif. Cord severing implement. 1,889,333; Nov. 29.

Knipe, Thomas L., Kokomo, Ind. Floral display stand. 1,889,669; Nov. 29.

Knipe, Thomas L., Kokomo, Ind. Floral display stand. 1,889,670; Nov. 29.

Knoll Aktiengesellschaft, Chemische Fabriken. (See Schmidt, K. F., and Zutavern, assignors.)

Knowlton, Norwood H., Rockport, assignor to United Shoe Machinery Corporation, Paterson, N. J. Heel-breast-flap-trimming machine. 1,889,249; Nov. 29.

Kobd, Kenneth A., Minneapolis, assignor to Bradley-Fitch Company, Duluth, Minn. Recovery of manganous compounds. 1,889,021; Nov. 29.

Koehn, Wilhelm, Gelsenkirchen, Germany. Cooling centrifugally cast hollow metal blooms. 1,889,671; Nov. 29.

Kohnle, Frederick, assignor to The Monarch Marking System Company, Dayton, Ohio. Marking machine. 1,889,250; Nov. 29.

Kohut, Alexander W., assignor to William Willheim Co., Inc., New York, N. Y. Textile fabric or similar article. Des. 88,421; Nov. 29.

Kohut, Alexander W., assignor to William Willheim Co., Inc., New York, N. Y. Textile fabric or similar article. Des. 88,470; Nov. 29.

Kölling, Johann, Duisburg, Germany, assignor to The Babcock & Wilcox Company, Bayonne, N. J. Steam generator. 1,889,074; Nov. 29.

Kramer, Frederick W. (See Seger, Lavern A., assignor.)

Kratky, Hans, Vienna, Austria. Springing system for power driven vehicles. 1,888,989; Nov. 29.

Krauch, Carl, and K. Hochschwender, Ludwigshafen-on-the-Rhine, and W. Schunck, Neu-Roesen, near Merseburg, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Manufacturing organic compounds. 1,889,251; Nov. 29.

Kress, Willard C. Kenmore, assignor to J. H. Williams & Co., Buffalo, N. Y. Wrench and wrench holder. 1,889,203; Nov. 29.

Krüger, Hermann, Karlsruhe, Germany. Method and mold for the local strengthening of the silver coating of galvanically silvered spoons and forks. 1,889,147; Nov. 29.

Kuhn, Frank, and L. H. Thomas, assignors to American Electrical Heater Company, Detroit, Mich. Thermostat. 1,889,252; Nov. 29.

Kuhn, Frank O., South Bend, Ind. Electric switch. 1,889,334; Nov. 29.

Kuhn, Henry H., et al. (See Bushong, Ivan C., assignor.)

Kunsman, Edward J. (See Lipscomb, R. U., and Kunsman.)

Kurath, Franz, assignor to Economy Fuse and Mfg. Co., Chicago, Ill. Automatically controlled hydraulic press intensifier. 1,888,990; Nov. 29.

Kurkebee, David, Schenectady, N. Y. Bed. 1,889,148; Nov. 29.

Kurz, Guenther P. V., Seattle, Wash. Roundsbout. 1,889,253; Nov. 29.

Ladd, Frank C. (See Grogan, W. H., and Ladd.)

La Fontaine, Samuel H., Union, N. J. Combination of cigarette and vanity case. Des. 88,422; Nov. 29.

Lake, Francis W., Whittier, Calif. Computing and recording dynamometer and stroke meter. 1,889,780; Nov. 29.

Lamb, Charles, Los Angeles, Calif. Pump piston. 1,889,178; Nov. 29.

Landis & Gyr, A.-G. (See Pudelko, Riccard, assignor.)

Lane, George W., Boulder, assignor of one-fourth to D. V. Tribby, Denver, Colo. Tool. 1,889,556; Nov. 29.

Lange, Hans. (See Reddelien, G., Lange, Fischesser, and Freund.)

Lange, Hellmuth, Dusseldorf, Germany. Delivery device. 1,889,557; Nov. 29.

Lange, Hermann, Garbsen, assignor to the Firm "Hartsteinwerk Niedersachsen, Gesellschaft mit beschränkter Haftung", Hanover, Germany. Cover closing for steam barrels, heating boilers and the like. 1,889,606; Nov. 29.

Langer, Rudolph J., assignor to Franklin Equipment Co., Monticello, Iowa. Clevis. 1,889,204; Nov. 29.

Lanier Cone Company. (See Lanier, Lewis H., assignor.)

Lanier, Lewis H., Newport, Ky., assignor to Lanier Cone Company, Cincinnati, Ohio. Filling device. 1,889,036; Nov. 29.

Larsen, Louis H., Union City, N. J., and C. W. Nixon, New York, N. Y. Delivery mechanism for article dispensing machines. 1,889,318; Nov. 29.

Larson, Alfred T., assignor, by mesne assignments, to E. I. du Pont de Nemours & Company, Wilmington, Del. Manufacture of hydrogen. 1,889,672; Nov. 29.

Larson, August, Chicago, Ill. Fretted stringed musical instrument. 1,889,408; Nov. 29.

Larson, Joseph E., Seattle, Wash. Rake. 1,888,991; Nov. 29.

Latshaw, Elmer, assignor to The J. G. Brill Company, Philadelphia, Pa. Truck brake rigging. 1,889,673; Nov. 29.

Laux, Philip. (See Andrews, John S., assignor.)

Lea, Henry I., Santa Monica, Calif. Still. 1,889,254; Nov. 29.

Lear, Earl B., Phillipsburg, assignor to Ingersoll-Rand Company, Jersey City, N. J. Safety device for rock drills. 1,889,400; Nov. 29.

Lederer, Erwin E., assignor to Texas Pacific Coal & Oil Co., Fort Worth, Tex. Lubricating oil and producing the same. Re18,676; Nov. 29.

Ledoux, Philip I., Claremont, N. H. Plow. 1,889,097; Nov. 29.

Le Duc, Emile J., Danville, Pa. Variety of rose. Pl. Pt. 45; Nov. 29.

Lee, Ralph L., assignor to Delco-Light Company, Dayton, Ohio. Domestic appliance. 1,889,032; Nov. 29.

Lee, Roscoe F., Indianapolis, Ind. Mixer. 1,889,558; Nov. 29.

Legat, Robert C., assignor to G. E. Prentice Manufacturing Company, New Britain, Conn. Slider. 1,889,335; Nov. 29.

Legat, Robert C., assignor to G. E. Prentice Manufacturing Company, New Britain, Conn. Separable fastener. 1,889,336; Nov. 29.

Legat, Robert C., assignor to G. E. Prentice Manufacturing Company, New Britain, Conn. Locking end stop for fasteners. 1,889,337; Nov. 29.

Le Gous de Saint Seine, Benigne P. M., Paris, France. Extinguishing chimney fires. 1,889,483; Nov. 29.

Lemarinier, Georges, Paris, France. Truss. 1,889,674; Nov. 29.

Leonard, Vincent W., Saugus, Mass., assignor to General Electric Company. Automatic pressure regulator. 1,889,607; Nov. 29.

Leray, Joseph J., West Warwick, R. I. Roteplane. 1,889,255; Nov. 29.

Lewis, Charles H. (See Urbain, Oliver M., assignor.)

Libby, Edward P., Auburn, Me., assignor to United Shoe Machinery Corporation, Paterson, N. J. Making shoes. 1,889,205; Nov. 29.

Lightfoot, Edwin N., Wauwatosa, assignor to Cutler-Hammer, Inc., Milwaukee, Wis. Electrical resistance device. 1,889,445; Nov. 29.

Lind, Leroy C. (See Wahlbom, E. T., Lind, and Wahlbom.)

Lindahl, Anders. (See Luttropp, Conrad, assignor.)

Lindewall, Arthur P., Brooklyn, N. Y. Toilet article and manufacturing the same. 1,889,675; Nov. 29.

Lipschultz, Louis E., St. Paul, Minn. Cover. 1,889,206; Nov. 29.

Lipscomb, Robert U., and E. J. Kunsman, El Paso, Tex. Check valve. 1,889,256; Nov. 29.

Liquidometer Corporation, The. (See de Giers, Clarence A., assignor.)

Little, Earl W., Indianapolis, Ind. Paint applying machine. 1,889,676; Nov. 29.

Little, Earl W., Indianapolis, Ind. Welding means. 1,889,677; Nov. 29.

Little, Edwin G., Wilkinsburg, assignor to The Union Switch & Signal Company, Swissvale, Pa. Railway switch operating apparatus. 1,889,022; Nov. 29.

Löbl, Arnold, Vienna, Austria. Casing for light-signs and signaling apparatus. 1,889,179; Nov. 29.

Locke Insulator Corporation. (See Hawley, Kent A., assignor.)

Loebel, Albert, Amsterdam, assignor to Naamlooze Vennootschap de Bataafsche Petroleum Maatschappij, The Hague, Netherlands. Manufacture of asphalt. 1,889,365; Nov. 29.

Lofgren, Einar G. C., and W. M. Anderson, assignors of six-tenths to W. A. Wright, C. K. Carlstrom, and L. J. Dawson, Minneapolis, Minn. Electric toaster. 1,888,992; Nov. 29.

Lonergan, Simon J., La Porte, Ind. Water heater casing or like article. Des. 88,423; Nov. 29.

Long, George A., assignor to The Gray Telephone Pay Station Company, Hartford, Conn. Telephone direction plate. 1,889,787; Nov. 29.

Long Manufacturing Company. (See Valpey, Henry H., assignor.)

Loomis, Crawford C., Ilion, N. Y., assignor to Remington Arms Company, Inc. Firearm. 1,889,099; Nov. 29.

Lord, Harold W., Schenectady, N. Y., assignor to General Electric Company. Stroboscopic apparatus. 1,889,608; Nov. 29.

Louden Machinery Company, The. (See Neller, Albert H., assignor.)

Lower, Nathan M., Baltimore, Md., assignor to The Standard Stoker Company, Incorporated. Locomotive stoker. 1,889,410; Nov. 29.

Lower, Nathan M., and D. F. Crawford, Pittsburgh, Pa., and E. A. Turner, assignors to The Standard Stoker Company, Incorporated, New York, N. Y. Inside feed stoker. 1,889,411; Nov. 29.

Lübecker Maschinenbau-Gesellschaft. (See Runte, Hermann, assignor.)

Lubowsky, Simon J., Jersey City, assignor to Metal & Thermit Corporation, Carteret, N. J. Making titanium white. 1,888,993; Nov. 29.

Lukomske, Paul M., Fairfield, Conn. Sectional boiler. 1,889,412; Nov. 29.

Luttropp, Conrad, assignor of one-half to A. Lindahl, Stockholm, Sweden. Calculating machine. 1,889,023; Nov. 29.

Lutz, George A., Cranford, N. J., assignor to American Circular Loom Company, Inc., Dover, Del. Electric welding machine. 1,889,413; Nov. 29.

Lutz, George A., Cranford, N. J., assignor to American Circular Loom Company, Inc., Dover, Del. Welding apparatus. 1,889,414; Nov. 29.

Lyndon, Alford S., Ann Arbor, assignor of one-half to C. H. Bennett, Plymouth, Mich. Sprinkler. 1,889,257; Nov. 29.

Lyons, Charles T., Medina, Wash., assignor to Durable Mat Company, Seattle, Wash. Ship's fender. Re18,672; Nov. 29.

Lysons, Jay W., New York, N. Y. Fountain brush. 1,889,446; Nov. 29.

Macdonald, Murdock, Cleveland, Ohio. Ticket dispenser. 1,889,258; Nov. 29.

MacDowell, Charles H., assignor to Armour Fertilizer Works, Chicago, Ill. Preparation of a fertilizer ingredient. 1,889,125; Nov. 29.

Macferran, Mabel. (See Ashbrook, R. B., Macferran, Quarnstrom, and Dengler.)

Magnetic Gauge Company, The. (See Hickok, Robert D., assignor.)

Magnetic Gauge Company, The. (See Schuster, Paul B., assignor.)

Maine Steel Products Company. (See Woodbury, J. B., and Soule, assignors.)

Maisch, Jacques, New York, N. Y. Textile fabric or similar article of manufacture. Des. 88,424; Nov. 29.
Malin, Richard, Chemnitz, Germany. Carburetor. 1,889,126; Nov. 29.
Mann, Russell I., Coopersburg, assignor to M. L. Sofransey, Allentown, Pa. Wall paper pasting machine. 1,889,127; Nov. 29.
Mannich, Charles, Berlin-Steglitz, Germany. Aromatic esters of amino alcohols and process of manufacture. 1,889,678; Nov. 29.
Mantlbar Corporation. (See Naftal, W., and Ensler, assignors.)
Manville, E. J., Machine Company, The. (See Pracny, John E., assignor.)
Marien, Charles A., assignor to Ramsey Accessories Manufacturing Corporation, St. Louis, Mo. Piston ring. 1,888,994; Nov. 29.
Marin, John B., Douglas, Alaska. Automobile body. 1,889,679; Nov. 29.
Marion Steam Shovel Company, The. (See Jacobs, Henry S., assignor.)
Marischka, Carl. (See Brandl, H., and Marischka.)
Marks, Isidore, assignor to Keystone Mfg. Co., Boston, Mass. Projection light intensity control mechanism. 1,889,149; Nov. 29.
Marmito, Thomas A., New York, N. Y. Spinning top. 1,889,680; Nov. 29.
Marsh, William H., Providence, R. I. Roll holder. 1,889,024; Nov. 29.
Marshall, William C., and J. H. Turner, Niceville, Fla. Door or window casement catch. 1,889,681; Nov. 29.
Marshburn, Preston W., assignor to Northam Warren Corporation, New York, N. Y. Decalcomania. 1,889,484; Nov. 29.
Martin, E. T., et al., trustees. (See Martin, Edward T., assignor.)
Martin, Edward T., Long Beach, assignor to C. E. Chenoweth, Glendale, E. T. Martin, Long Beach, and G. J. Wiggenhorn, Pasadena, Calif., trustees. Water purifier and softener. 1,889,485; Nov. 29.
Martinoff, Nadine, assignor to Wullschleger & Co., New York, N. Y. Textile fabric or the like. Des. 88,425; Nov. 29.
Martinoff, Nadine, assignor to Wullschleger & Co., New York, N. Y. Textile fabric or the like. Des. 88,426; Nov. 29.
Martinoff, Nadine, assignor to Wullschleger & Co., New York, N. Y. Textile fabric or the like. Des. 88,427; Nov. 29.
Martinoff, Nadine, assignor to Wullschleger & Co., New York, N. Y. Textile fabric or the like. Des. 88,471; Nov. 29.
Martinoff, Nadine, assignor to Wullschleger & Co., New York, N. Y. Textile fabric or the like. Des. 88,472; Nov. 29.
Martinoff, Nadine, assignor to Wullschleger & Co., New York, N. Y. Textile fabric or the like. Des. 88,473; Nov. 29.
Martinoff, Nadine, assignor to Wullschleger & Co., New York, N. Y. Textile fabric or the like. Des. 88,474; Nov. 29.
Martinoff, Nadine, assignor to Wullschleger & Co., New York, N. Y. Textile fabric or the like. Des. 88,475; Nov. 29.
Marx, Frank A., assignor to The Richardson Taylor-Globe Corporation, Cincinnati, Ohio. Display device. 1,889,207; Nov. 29.
Maschinenfabrik Augsburg-Nürnberg A. G. (See Pielstick, Gustav, assignor.)
Massera, Giuseppe. (See Adamcikas, M., and Massera.)
Masterson, William E., and H. Price, assignors of one-fifth to H. R. Rogers, one-fifth to J. F. Roberts and one-fifth to F. L. Cowan, Borger, Tex. Motor generator. 1,889,208; Nov. 29.
Masury, Alfred F., assignor to International Motor Company, New York, N. Y. Closed vehicle for collecting refuse. 1,889,559; Nov. 29.
Mathiasen, Ragner E., Philadelphia, Pa. Combination lamp and stand. 1,889,682; Nov. 29.
Matter, Albert J., Park Ridge, Ill. Headlight. 1,888,995; Nov. 29.
Mattison, Frederick W. (See Turner, Henry J., assignor.)
Mattison, Sigurd O., Colfax, Wis. Pipe cleaning device. 1,889,098; Nov. 29.
Maxwell, Earl C., Co. Inc. (See McKiernan, James D., assignor.)
Mays Manufacturing Co., The. (See Mays, William C. S., assignor.)
Mays, William C. S., Edgewood, R. I., assignor to The Mays Manufacturing Co., Inc. Clip for writing instruments and making same. 1,889,037; Nov. 29.
Mazoyer, Leon J., Baldwin, assignor to Whitall Tatum Company, New York, N. Y. Combination screw cap, bottle stopper and dropper. 1,889,209; Nov. 29.
McCabe, Ira E., Chicago, Ill. Control system for fluid fuel burners of the hot wire ignition type. 1,889,447; Nov. 29.
McCabe, Ira E., Chicago, Ill. Safety control system for hot wire ignition in fluid fuel burners. 1,889,448; Nov. 29.
McCandless, L. L. (See Bell, William E., assignor.)
McChesney, David, Kirkland Lake, Timiskaming, Ontario, Canada. Wall-board joint. 1,889,150; Nov. 29.
McCleary, Henry R., Oak Park, Ill., assignor to Wilson Jones Company. Ring book. 1,889,560; Nov. 29.
McClintock, William S., jr., Chicago, Ill. Frequency meter. 1,889,128; Nov. 29.
McCrady, Rodgers Company. (See Games, Archibald H., assignor.)
McCullough, Frederick S., Edgewood, Pa. Thermionic tube. 1,889,449; Nov. 29.
McElhoim, James F., Lowell, Mass. Telephone system. 1,889,683; Nov. 29.
McFarland, Francis W., assignor of two-thirty-seconds to B. Decker and fifteen-thirty-seconds to R. Hersey, Martines, Calif. Lock. 1,889,210; Nov. 29.
McGill Manufacturing Company. (See Popp, Rudolf, assignor.)
McGlade, Wayne H., Wellington, Kans. Rotary valve for internal combustion engines. 1,889,684; Nov. 29.
McGowan, William C., Cincinnati, Ohio, assignor, by mesne assignments, to Milnesia Laboratories, Inc., New York, N. Y. Magnesium hydrate tablets and making the same. 1,889,366; Nov. 29.
McGregor, Eugene L., Montrose, Colo. Agricultural machine. 1,889,486; Nov. 29.
McInerny, Ralph J., and E. F. Williams, Los Angeles, and H. L. Glaze, South Pasadena, Calif., assignors, by mesne assignments, to Minerals Increment Company, Wilmington, Del. Apparatus for manufacturing volatile chlorides. 1,888,996; Nov. 29.
McIntosh, Harold W., Windsor, assignor to Hartford-Empire Company, Hartford, Conn. Electrode for use in melting furnaces and forming the same. 1,889,516; Nov. 29.
McIntyre, Harry, L'Anse, Mich. Double foot feed. 1,889,685; Nov. 29.
McKee, Harry H., assignor, by mesne assignments, to Industrial Patents Corporation, Chicago, Ill. Refrigerator. 1,889,686; Nov. 29.
McKiernan, James D., Brooklyn, N. Y., assignor to Earl C. Maxwell Co., Inc. Welding machine. 1,889,319; Nov. 29.
McLane, Forrest B., Rivera, Calif. Insecticide. 1,888,997; Nov. 29.
McLean, John R. (See Gibson, H. S., and McLean.)
McNulty, John, Cincinnati, Ohio, assignor to The Ohio Truss Company. Truss. 1,889,367; Nov. 29.
McPherson, Clarence D., et al. (See McPherson, Clarence D., assignor.)
McPherson, Clarence D., assignor to C. D. McPherson and E. S. Heiberger, trading as The Tar-Rid Chemical Company, Philadelphia, Pa. Packing and forming the same. 1,889,287; Nov. 29.
Mednick, Philip, Brooklyn, N. Y. Brush. 1,889,211; Nov. 29.
Mellor Bromley & Company, Limited. (See Bromley, T. C., and Shortland, assignors.)
Mennesson, Marcel, assignor to "Societe Anonyme Solex," Neuilly-sur-Seine, France. Carburetor. 1,889,687; Nov. 29.
Mercier, Jean, Paris, France. Synthesis of hydrocarbon fuels, and for the cracking and hydrogenation of heavy hydrocarbons. 1,888,998; Nov. 29.
Merck & Co. (See Engels, William H., assignor.)
Merry, Elizabeth, assignor to Combier & Co., New York, N. Y. Textile fabric or the like. Des. 88,476; Nov. 29.
Merry, Elizabeth, assignor to Combier & Co., New York, N. Y. Textile fabric or the like. Des. 88,477; Nov. 29.
Mersereau, Donald W., assignor to General Railway Signal Company, Rochester, N. Y. Trap circuit for railway signaling systems. 1,889,450; Nov. 29.
Mershon, Ralph D., New York, N. Y. Excited electrolytic condenser. 1,889,415; Nov. 29.
Mershon, Ralph D., New York, N. Y. Electrolytic condenser. 1,889,416; Nov. 29.
Mershon, Ralph D., New York, N. Y. Electrolytic rectifier. 1,889,417; Nov. 29.
Messenger, Lewis P., assignor of one-half to L. Montgomery, Santa Barbara, Calif. Boat. 1,889,368; Nov. 29.
Metal & Thermit Corporation. (See Lubowsky, Simon J., assignor.)
Meuer, George J., assignor to Cutler-Hammer, Inc., Milwaukee, Wis. Electric switch. 1,889,259; Nov. 29.
Meyer, John B., assignor to The Adams Company, Dubuque, Iowa. Dome damper. 1,888,999; Nov. 29.
Mezquita, Agustin T., Valencia, Spain. Bottle. Des. 88,428; Nov. 29.
Michigan Tool Company. (See Killmer, Austin J., assignor.)
Micromatic Hone Corporation. (See Jeschke, Frank J., assignor.)
Middleton, Thomas P., East St. Louis, assignor, by mesne assignments, to Industrial Patents Corporation, Chicago, Ill. Meat hasher. 1,889,688; Nov. 29.
Midgley, Herbert, deceased, Worcester, Mass.; Worcester Bank & Trust Company, executor. Hand card. 1,889,369; Nov. 29.
Mietzsch, Fritz. (See Schulemann, W., Mietzsch, and Wingler.)
Mihalek, Emery, assignor to O. D. Jennings & Company, Chicago, Ill. Coin controlled apparatus. 1,889,212; Nov. 29.
Millis, Loren G., Santa Ana, Calif. Dispensing device. 1,889,689; Nov. 29.
Mills, Beryl C. (See Gardiner, Robert E., assignor.)

Mills, David S., Brooklyn, N. Y. Safety razor. 1,889,100; Nov. 29.
Mills, John S., Kossuth, Miss. Cologne holder. 1,889,075; Nov. 29.
Milnesia Laboratories, Inc. (See McGowan, William C., assignor.)
Minerals Increment Company. (See McInerny, R. J., Williams, and Glaze, assignors.)
Minett, Wilfrid T. (See Ricks, F., and Minett.)
Mitchell Camera Corporation. (See Mitchell, George A., assignor.)
Mitchell, Eures. (See Forbes, H. W., and Mitchell.)
Mitchell, Frank A., London, England, assignor to Columbia Phonograph Company, Inc., Bridgeport, Conn. Electromagnetic device. 1,889,000; Nov. 29.
Mitchell, George A., assignor to Mitchell Camera Corporation, West Hollywood, Calif. Handle mounting for camera tilting heads. 1,889,260; Nov. 29.
Mitterer, Albert R. (See Rorrer, C. E., and Mitterer.)
Modine, Arthur B., assignor to Modine Manufacturing Company, Racine, Wis. Combined radiator cover and seat. 1,889,370; Nov. 29.
Modine Manufacturing Company. (See Modine, Arthur B., assignor.)
Moeller, Benjamin A., Palos Verdes Estates, Calif. Foam distributing means. 1,889,101; Nov. 29.
Monarch Door Controller Company Limited, The. (See Russell, Frederick V., assignor.)
Monarch Marking System Company, The. (See Kohnle, Frederick, assignor.)
Montgomery, Lester. (See Messenger, Lewis P., assignor.)
Moore, John W., Jacksonville, Fla. Bottle. Des. 88,429; Nov. 29.
Morgan Construction Company. (See Quinn, Edward J., assignor.)
Morrill, Byron F. (See Hambleton, M. W., and Morrill.)
Morris, Clarence V., Neptune City, N. J. Return damp work conveyer. 1,889,690; Nov. 29.
Morse, Charles, Boston, Mass., assignor, by mesne assignments, to General Electric Company. Building stand. 1,889,561; Nov. 29.
Monithrop, Willey H., San Francisco, Calif. Method of and apparatus for transporting pulverized substances. 1,889,562; Nov. 29.
Mouton, Paul, Paris, France, assignor to Cheney Brothers, New York, N. Y. Textile fabric. Des. 88,430; Nov. 29.
Mouton, Paul, Paris, France, assignor to Cheney Brothers, New York, N. Y. Textile fabric. Des. 88,431; Nov. 29.
Multiwheel Road Machine Company. (See Wright, Thomas P., assignor.)
Munny Manufacturing Company, The. (See Bollman, Roland R., assignor.)
Murphy, Edward A., and D. F. Twiss, Sutton Coldfield, England, assignors to Dunlop Rubber Company Limited. Process and device for the direct production of filaments and threads. 1,889,102; Nov. 29.
Murphy, P. H., Company. (See Gilpin, Garth G., assignor.)
Murray, Herman S., Woodmere, assignor to William Willheim Co., Inc., New York, N. Y. Textile fabric or similar article. Des. 88,432; Nov. 29.
Murray, Herman S., Woodmere, assignor to William Willheim Co., Inc., New York, N. Y. Textile fabric or similar article. Des. 88,433; Nov. 29.
Murray, Herman S., Woodmere, assignor to William Willheim Co., Inc., New York, N. Y. Textile fabric or similar article. Des. 88,434; Nov. 29.
Mutscheller, Arthur, New York, N. Y., assignor to Wappler Electric Company, Inc. Electric system for energizing cutting electrodes. 1,889,609; Nov. 29.
Mutter, Karl, Triptis, Germany. Loom. 1,889,076; Nov. 29.
N. V. Kuchenmeisters, Internationale Maatschappij Voor Sprekende Films. (See Berglund, Sven A:Son, assignor.)
Naamlooze Vennootschap de Bataafsche Petroleum Maatschappij. (See Loebel, Albert, assignor.)
Naamlooze Vennootschap Maatschappij tot Vervaardiging van Snijmachines Volgens van Berkel's Patent en van Andere Werktuigen. (See De Iongh, Johan H., assignor.)
Nachies, Harry, Canton, Ohio. Fountain vibrator. 1,889,487; Nov. 29.
Naftal, Wesley, and M. Ensler, assignors to Mantlbar Corporation, New York, N. Y. Convertible fireplace structure. 1,889,103; Nov. 29.
Najarian, Herand K. (See Weaton, G. F., and Najarian.)
Najarian, Herand K., Beaver, Pa., assignor to St. Joseph Lead Company, New York, N. Y. Sintering machine pallet and grate bar. 1,889,052; Nov. 29.
Nash Motor Company, The. (See Gunn, Earl G., assignor.)
National Governor Corporation. (See Singer, Frederick O., assignor.)
Navarre de Requesens, Alphonse J., New York, N. Y. Hair straightening device. 1,889,691; Nov. 29.
Neelmeier, Wilhelm, Leverkusen-on-the-Rhine, and E. van Hulle, Cologne-Deutz, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Producing aniline-2:5-disulphonic acid. 1,889,371; Nov. 29.
Neller, Albert H., assignor to The Louden Machinery Company, Fairfield, Iowa. Overhead carrier. 1,889,610; Nov. 29.
Nelson, Emil A., Detroit, Mich. Manual brake control. 1,889,692; Nov. 29.
Nelson, Ole G., assignor to The Bead Chain Manufacturing Company, Bridgeport, Conn. Attaching device. 1,889,738; Nov. 29.
Nelson, Stanley F., Brooklyn, N. Y., assignor to American Telephone and Telegraph Company. Annunciator system. 1,889,053; Nov. 29.
Ne Page, Justus F., assignor to Ne Page McKenny Company, Seattle, Wash. Air compressor plant. 1,889,451; Nov. 29.
Ne Page McKenny Company. (See Ne Page, Justus F., assignor.)
New Brick Corporation. (See Fried, William B., assignor.)
New Martinsville Glass Mfg. Co. (See Clarke, Ira M., assignor.)
Nielsen, Christian, Copenhagen, Denmark, assignor to F. L. Smidth & Co., New York, N. Y. Hammer mill. 1,889,129; Nov. 29.
Nixon, Clifton W. (See Larsen, L. H., and Nixon.)
Nolan, Rudolph Z., Godfrey, Ill. Bale-tying mechanism. 1,889,372; Nov. 29.
Nordhem, Eric N., Chicago, Ill. High tension cut-out and the like. 1,889,213; Nov. 29.
Northam Warren Corporation. (See Marshburn, Preston W., assignor.)
Nousiakis, Milton J., Bingham Canyon, Utah. Safety parachute for aeroplanes. 1,889,038; Nov. 29.
Oberfell, George G. (See Thomas, R. W., and Oberfell.)
O'Brien, Joseph, Baltimore, Md. Renewable thermounit. 1,889,488; Nov. 29.
Ohio Sanitary Engineering Corporation, The. (See Griesbach, R., and Weiss, assignors.)
Ohio Sanitary Engineering Corporation, The. (See Travers, J. T., and Urbain, assignors.)
Ohio Truss Company, The. (See McNulty, John, assignor.)
Oildraulic Lift Company. (See Stukenborg, Louis C., assignor.)
Oki, Shin-ichi, Senju Machi, Minami Adachi Gun, Tokyo Fu, assignor to Shinsaburo Shibuya, Tokyo, Japan. Manila hemp beater. 1,889,104; Nov. 29.
Olds, Ambrose E., Wichita, Kans., assignor to Edison General Electric Appliance Company, Inc., Chicago, Ill. Water cooler. 1,889,611; Nov. 29.
O'Leary, William C., Washington, D. C. Refrigerator. 1,889,214; Nov. 29.
O'Rourke, John F., New York, N. Y. Tunnel or conduit lining. 1,889,563; Nov. 29.
Ortell, Frank, New York, N. Y. Scarf. Des. 88,478; Nov. 29.
Osteen, Belmont D., Columbus, Ga., assignor to Tom Huston Peanut Company. Bag seal. 1,889,001; Nov. 29.
Ostline, John E., Chicago, Ill., R. Taylor, Liverpool, and C. E. Beale, London, England, assignors to Associated Telephone and Telegraph Company, Chicago, Ill. Telephone system. 1,889,564; Nov. 29.
Otten Brothers Company. (See Otten, Elmer G., assignor.)
Otten, Elmer G., Detroit, Mich., assignor to Otten Brothers Company. Die cut card. 1,889,261; Nov. 29.
Outlaw, Alonso C., Tonkawa, Okla. Fluid equalizer for boilers. 1,889,693; Nov. 29.
Overmeyer, John, assignor to William Willheim Co., Inc., New York, N. Y. Textile fabric or similar article. Des. 88,435; Nov. 29.
Overmeyer, John, assignor to William Willheim Co., Inc., New York, N. Y. Textile fabric or similar article. Des. 88,479; Nov. 29.
Oxyammon Aktiengesellschaft. (See Cederberg, Ivar W., assignor.)
Package Improvement Co. (See Ware, Richard P., assignor.)
Packard Motor Car Company. (See Tibbetts, Milton, assignor.)
Packard Motor Car Company. (See Woolson, Lionel M., assignor.)
Palicki, Robert C., Toledo, Ohio. Display device. 1,889,002; Nov. 29.
Paradise, Louis A., assignor to Deere & Company, Moline, Ill. Combine. 1,889,565; Nov. 29.
Parker, Henry W., assignor to Rogers Radio Tubes Limited, Toronto, Ontario, Canada. Thermionic tube. 1,889,105; Nov. 29.
Parker, Henry W., assignor to Rogers Radio Tubes, Limited, Toronto, Ontario, Canada. Thermionic tube. 1,889,106; Nov. 29.
Parker, Herschel C., Los Angeles, Calif. Extracting gold from solutions. 1,889,480; Nov. 29.
Partyka, Kazimiera. (See Barylewicz-Kniazykowski, E., and Partyka.)
Pasman Ab-am N., assignor to Scovill Manufacturing Company, Waterbury, Conn. Ball cock. 1,889,566; Nov. 29.
Passanante, Charles G., Jersey City, N. J. Folding table. 1,889,694; Nov. 29.
Pate, Sophie, New York, N. Y. Textile fabric or the like. Des. 88,436; Nov. 29.
Pathe Exchange, Inc. (See Adatte, Albert L., assignor.)

Patten, Raymond E., Oak Park, Ill., assignor to Edison General Electric Appliance Company, Inc. Creamer or similar article. Des. 88,437; Nov. 29.
Patten, Raymond E., Oak Park, Ill., assignor to Edison General Electric Appliance Company, Inc. Sugar bowl or similar article. Des. 88,438; Nov. 29.
Patterson, Gordon D., assignor to E. I. du Pont de Nemours & Company, Wilmington, Del. Stabilized composition. 1,889,130; Nov. 29.
Patterson, John H., Corry, Pa. Lighting fixture. 1,889,288; Nov. 29.
Pavlecka, Jan, Wyandotte, Mich. Induction system for internal combustion engines. 1,889,262; Nov. 29.
Pearce, Edwin S. (See Grisbaum, L. D., Dwyer, and Pearce.)
Pechan, Ignatz, and J. Schier, Vienna, Austria, assignors to Actiengesellschaft C. P. Goers Optische Anstalt Actiova Spolecnost K. P. Goers opticky ustav, Bratislava Czechoslovakia. Aiming telescope. 1,889,151; Nov. 29.
Peik, Louis D., Mishawaka, Ind., assignor to The American Foundry Equipment Company, New York, N. Y. Abrasive blasting system. 1,889,131; Nov. 29.
Peik, Louis D., Mishawaka, Ind., assignor to The American Foundry Equipment Company, New York, N. Y. Multiple blast nozzle. 1,889,132; Nov. 29.
Penteado, Armando A., Paris, France. Stretching device particularly applicable to thin phonographic disks. 1,889,289; Nov. 29.
Pereira, Leonard, New York, N. Y. Combination writing pad and flash light. 1,889,373; Nov. 29.
Perrott, Laurence F., Revere, Mass., assignor to General Electric Company. Rectifying apparatus. 1,889,612; Nov. 29.
Persons, Laurence M., assignor to Emerson Electric Manufacturing Co., St. Louis, Mo. Fan. 1,889,567; Nov. 29.
Persons, Lawrence M., assignor to Cook Electric Company, Chicago, Ill. Electric draft controller. 1,889,618; Nov. 29.
Peters, Mathias, Dusseldorf, assignor to Demag Aktiengesellschaft, Duisburg, Germany. Push bench mandrel guide. 1,889,320; Nov. 29.
Petersen, Carl M., assignor to Circle F Mfg. Co., Trenton N. J. Table tap. 1,889,695; Nov. 29.
Peterson, Edward S., assignor, by mesne assignments, to Associated Electric Laboratories, Inc., Chicago, Ill. Telephone system. 1,889,107; Nov. 29.
Peterson, Gust W., Long Beach, assignor to W. H. H. Davis, San Francisco, Calif. Hair drying apparatus. 1,889,338; Nov. 29.
Petroleum Heat and Power Company. (See Whaley, Ralph S., assignor.)
Pfannenmüller, Hans. (See Keinath, G., and Pfannenmüller.)
Pfefferle, George H., assignor to S. R. Dresser Manufacturing Company, Bradford, Pa. Locking plain end pipe sections with respect to the couplings therefor. 1,889,133; Nov. 29.
Phelps, Clyde H., Binghamton, N. Y., assignor, by mesne assignments, to The Reiss Manufacturing Company, Kokomo, Ind. Tool for measuring camber of wheels and caster and king-pin tilt. 1,889,490; Nov. 29.
Philippe, Louis, New York, N. Y. Dye composition. 1,889,491; Nov. 29.
Phillips Petroleum Company. (See Thomas, Rosswell W., assignor.)
Phillips Petroleum Company. (See Thomas, R. W., and Oberfell, assignors.)
Phillips, Walter E., Cleveland Heights, Ohio, assignor to Cleveland Metal Hose Company, Roseville, N. J. Tool. 1,889,152; Nov. 29.
Pickard, Greenleaf W., Newton Center, Mass., assignor, by mesne assignments, to General Electric Company. Universally adjustable radio apparatus for aircraft. 1,889,568; Nov. 29.
Pickin, Rowland O., Los Angeles, Calif. Pipe cutting tool. 1,889,321; Nov. 29.
Pielstick, Gustav, assignor to Maschinenfabrik Augsburg Nürnberg A. G., Augsburg, Germany. Piston cooling for combustion power engines. 1,889,492; Nov. 29.
Pieper, Alphonse F., Rochester, N. Y. Lamp body. Des. 88,439; Nov. 29.
Pierce, George W., Cambridge, Mass. Acoustic electric energy converter. 1,889,153; Nov. 29.
Pierce, Glen O., Detroit, Mich. Piano instruction device. 1,889,418; Nov. 29.
Pierce, Loyd S. (See Jones, W. C., and Pimm, assignors.)
Pierron, Jacques, Vaux-sur-Seine, France. Projector. 1,889,696; Nov. 29.
Pimm, John C. (See Jones, W. C., and Pimm.)
Pirinoli, Guglielmo, assignor to Fiat Società Anonima, Turin, Italy. Lubricating device for internal combustion engines with inverted cylinders. 1,889,290; Nov. 29.
Pirinoli, Guglielmo, assignor to Fiat Società Anonima, Turin, Italy. Friction clutch. 1,889,291; Nov. 29.
Pockrandt, Ernest, Minden, Nebr. Incubator tray. 1,889,493; Nov. 29.
Popp, Rudolf, Valparaiso, Ind., assignor to McGill Manufacturing Company. Switch operating mechanism. 1,889,215; Nov. 29.
Porter, Wilfred L., Reading, Mass. Bracket. 1,889,452; Nov. 29.
Potter, Frederick D., Linden, N. J. Electrical control system. 1,889,003; Nov. 29.
Pracny, John E., assignor to The E. J. Manville Machine Company, Waterbury, Conn. Metal heading machine. 1,889,004; Nov. 29.
Prentice, G. E., Manufacturing Company. (See Legat, Robert C., assignor.)
Price, Henry. (See Masterson, W. E., and Price.)
Priess, William H., Upper Montclair, N. J., assignor, by mesne assignments, to General Electric Company. Electrical condenser. 1,889,569; Nov. 29.
Priest, Harry R., Loudonville, Ohio. Dental polisher. 1,889,494; Nov. 29.
Priest, Harry R., Loudonville, Ohio. Tooth cleaning and polishing element. 1,889,495; Nov. 29.
Priest, Harry R., Loudonville, Ohio. Shaving brush kit. 1,889,496; Nov. 29.
Prince, David C., Schenectady, N. Y., assignor to General Electric Company. Vacuum fuse system. 1,889,497; Nov. 29.
Pritchett, Charles L. (See Talley, R. H., and Pritchett.)
Prosperity Company Inc., The. (See Braun, Philip N., assignor.)
Pudelko, Riccard, Zug, Switzerland, assignor to Landis & Gyr, A-G. Electricity meter. 1,889,419; Nov. 29.
Pullar, Harold B., Chicago, Ill. Producing asphalt. 1,889,697; Nov. 29.
Pullen, Rodney S., Akron, Ohio, assignor to Pullenlite Company, Philadelphia, Pa. Match packet. 1,889,180; Nov. 29.
Pullenlite Company. (See Pullen, Rodney S., assignor.)
Purity Bakeries Service Corp. (See Barter, Franklin D., assignor.)
Quanstrom, Roy E. (See Ashbrook, R. B., Macferran, Quanstrom, and Dengler.)
Quigley, W. A. (See Goble, Bert G., assignor.)
Quinn, Edward J., assignor to Morgan Construction Company, Worcester, Mass. Mechanical handling of billets and the like. 1,889,039; Nov. 29.
Rah, Joseph, assignor to G. and W. Electric Specialty Company, Chicago, Ill. Pothead. 1,889,570; Nov. 29.
Railway Service & Supply Corporation. (See Grisbaum, L. D., Dwyer, and Pearce, assignors.)
Ramsey Accessories Manufacturing Corporation. (See Marlen, Charles A., assignor.)
Ranck, Esta W., Central Aguirre, P. R. Masonry wall and wall unit. 1,889,699; Nov. 29.
Ransomes, Sims, & Jefferies, Limited. (See Garrett, Francis A., assignor.)
Rathsburg, Hans. (See von Herz, E., and Rathsburg.)
Rättig, Gerhard, Nuremberg, Germany, assignor to Western Electric Company, Incorporated. New York, N. Y. Time announcing system. 1,889,108; Nov. 29.
Raworth, Albert S., Bearsden, Scotland. Underframe for a treadle sewing machine. Des. 88,440; Nov. 29.
Reddelien, Gustav, Leipsig, H. Lange, Dessau in Anhalt, A. Fischesser, Frankfort-on-the-Main-Fechenheim and H. Freund, Frankfort-on-the-Main, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Discharging preparation. 1,889,154; Nov. 29.
Redinger, Joseph M., Johnston, R. I. Mill chuck 1,889,571; Nov. 29.
Reed, Clair S., assignor to Reynolds Spring Company Jackson, Mich. Cushion spring structure. 1,889,263; Nov. 29.
Reed, Clair S., assignor to Reynolds Spring Company, Jackson, Mich. Spring structure. 1,889,264; Nov. 29.
Reed, Clarence E., Wichita, Kans., assignor to Chicago Pneumatic Tool Company, New York, N. Y. Earth boring tool. 1,889,216; Nov. 29.
Reed, Clarence E., Wichita, Kans., assignor to Chicago Pneumatic Tool Company, New York, N. Y. Earth boring chuck. 1,889,217; Nov. 29.
Reed, Harold V., assignor to The Borg & Beck Company, Chicago, Ill. Friction clutch. 1,889,698; Nov. 29.
Reed, Kenneth W., Boonton, N. J., assignor to Stapling Machines Co. Machine for use in making boxes. 1,889,181; Nov. 29.
Reedy, Alfred J., assignor to A-B Stove Company, Battle Creek, Mich. Combination rack and pan. 1,889,218; Nov. 29.
Reiman, Paul, New York, N. Y. Textile fabric or the like. Des. 88,480; Nov. 29.
Reinke, Gertrude, trustee. (See Anderson, Carlton, assignor.)
Reiss Manufacturing Company, The. (See Phelps, Clyde H., assignor.)
Reiter, Daniel I., New York, N. Y. Pronged fastener slide. 1,889,822; Nov. 29.
Remington Arms Company, Inc. (See Loomis, Crawford C., assignor.)
Remington Arms Company, Incorporated. (See von Herz, E., and Rathsburg, assignors.)
Renck, Heinrich, Hamburg, Germany. Renewing ink-repellent surfaces on mercury printing plates. 1,889,374; Nov. 29.
Renck, Heinrich, Hamburg, Germany. Renewing ink-repellent surfaces on mercury printing plates. 1,889,375; Nov. 29.
Renck, Heinrich, Hamburg, Germany. Procedure for freshening up amalgamated printing spots. 1,889,376; Nov. 29.
Reo Motor Car Company. (See Ayres, Seymour A., assignor.)
Research Corporation. (See Herber, Pierre, assignor.)

Resinous Products & Chemical Co. Inc., The. (See Bruson, Herman A., assignor.)
Resinous Products & Chemical Co. Inc., The. (See Bruson, H. A., and Robinson, assignors.)
Reynolds Spring Company. (See Reed, Clair S., assignor.)
Rheinische Metallwaaren-und Maschinenfabrik Sommerda Aktiengesellschaft. (See Friedmann, Sebastian, assignor.)
Ricchiardi, Pier C., assignor to S. A. Brevetti Italiani Esteri S. A. B. I. E., Turin, Italy. Radio signaling system. 1,889,292; Nov. 29.
Rice, Chester W., Schenectady, N. Y., assignor to General Electric Company. Sound wave apparatus. 1,889,614; Nov. 29.
Richards, James H. (See Duffy, J. U., and Richards.)
Richardson, Arthur A., Meriden, Conn. Vernier feed setting mechanism. 1,889,453; Nov. 29.
Richardson Company, The. (See Keller, Charles L., assignor.)
Richardson, Myron H., assignors to Advance Machine Company, Chicago, Ill. Vending machine. 1,889,109; Nov. 29.
Richardson Taylor-Globe Corporation, The. (See Marx, Frank A., assignor.)
Ricks, Fred, and W. T. Minett, Leicester, England, assignors to United Shoe Machinery Corporation, Paterson, N. J. Sewing machine. 1,889,025; Nov. 29.
Riley, Harold E., Virden, Ill. Iron holder. 1,889,110; Nov. 29.
Riley, Percy, Coventry, England. Change-speed gear mechanism. 1,889,700; Nov. 29.
Rindgen, Charles. (See Soltis, J., and Rindgen.)
Roberts, Joseph F., et al. (See Masterson, W. E., and Price, assignors.)
Roberts, William T. B., Leicester, England, assignor to United Shoe Machinery Corporation, Paterson, N. J. Machine for shaping uppers over lasts. 1,889,265; Nov. 29.
Robertson, Robert R., Chicago, Ill. Expansion joint. 1,889,498; Nov. 29.
Robin, Nathan, Chicago, Ill. Top for a game table or similar article. Des. 88,441; Nov. 29.
Robinson, Charles A., Salem, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Staple forming and inserting machine. 1,889,219; Nov. 29.
Robinson, Francis T., Rockville Center, assignor to Arkell Safety Bag Company, New York, N. Y. Lining bag and producing the same. 1,889,572; Nov. 29.
Robinson, George L. (See Humes, H. C., and Robinson.)
Robinson, Jack D. (See Bruson, H. A., and Robinson.)
Robinson, James, Mill Hill, England, assignor, by mesne assignments, to British Radiostat Corporation, Limited. Wave signaling system. 1,889,293; Nov. 29.
Roessler, Amandus C., Lakewood, Ohio, assignor to The Rotary Machine & Engineering Company. Fuel pump. 1,889,517; Nov. 29.
Rogers, Harry R., Denver, Colo. Lawn mower. 1,889,573; Nov. 29.
Rogers, Harry R., et al. (See Masterson, W. E., and Price, assignors.)
Rogers Radio Tubes Limited. (See Parker, Henry W., assignor.)
Rorrer, Charles E., and A. R. Mitterer, Denver, Colo. Apparatus and method for refrigeration. 1,889,499; Nov. 29.
Rosatelli, Celestino, assignor to Fiat Società Anonima, Turin, Italy. Triangular plane girder for aeroplanes. 1,889,294; Nov. 29.
Rosatelli, Celestino, assignor to Fiat Società Anonima, Turin, Italy. Differential and simultaneous control for the engines of multiple engine machines. 1,889,295; Nov. 29.
Rosenberg, Edwin C., Milwaukee, Wis. Brush. 1,889,182; Nov. 29.
Rosenberg, Maurice J., Baltimore, Md. Combination gymnasium suit for female wear. 1,889,701; Nov. 29.
Rosenfeld, Joseph E., assignor to Badger Equipment Company, Omaha, Nebr. Combined grain and roughage mill. 1,889,183; Nov. 29.
Ross, Elmer F., et al. (See Thomas, Jack L., assignor.)
Rossati, Gino M., New York, N. Y. Artificial wool and making same. 1,889,877; Nov. 29.
Rotary Machine & Engineering Company, The. (See Roessler, Amandus C., assignor.)
Roth, Lester B., assignor to Eclipse Lawn Mower Company, Prophetstown, Ill. Display stand for lawn mowers. 1,889,578; Nov. 29.
Rubber Service Laboratories Company, The. (See Bertsch, Johann A., assignor.)
Rubber Service Laboratories Company, The. (See Ingram, Joseph R., assignor.)
Ruben Condenser Company. (See Ruben, Samuel, assignor.)
Ruben, Samuel, New Rochelle, N. Y. Making an electrical resistance element. 1,889,879; Nov. 29.
Ruben, Samuel, New Rochelle, N. Y. Device and method for recording sound waves. 1,889,880; Nov. 29.
Ruben, Samuel, assignor, by mesne assignments, to Ruben Condenser Company, New Rochelle, N. Y. Electrostatic condenser. Re18,673; Nov. 29.
Rubican, Charles E., jr., St. Louis, Mo. Notebook cover and support. 1,889,420; Nov. 29.
Rubinger, Louis, New York, N. Y. Textile fabric or the like. Des. 88,481; Nov. 29.
Rubinger, Louis, New York, N. Y. Textile fabric or the like. Des. 88,482; Nov. 29.
Rubinger, Louis, New York, N. Y. Textile fabric or the like. Des. 88,483; Nov. 29.
Rubinger, Louis, New York, N. Y. Textile fabric or the like. Des. 88,484; Nov. 29.
Rubinger, Louis, New York, N. Y. Textile fabric or the like. Des. 88,485; Nov. 29.
Rubinger, Louis, New York, N. Y. Textile fabric or the like. Des. 88,486; Nov. 29.
Rumbletop Corporation. (See Bean, Edward H., assignor.)
Runkel, Curt. (See Söll, J., and Runkel.)
Runte, Hermann, assignor to Lübecker Maschinenbau-Gesellschaft, Lubeck, Germany. Supporting means for conveying and transporting vehicles. 1,889,296; Nov. 29.
Rush, William R., Mulberry, Kans. Food chopper. 1,889,381; Nov. 29.
Russell, Frederick V., Leytonstone, England, assignor to The Monarch Door Controller Company Limited, and F. V. Russell. Drawbar for vehicles. 1,889,297; Nov. 29.
Russell, Homer T., Miami, Okla. Support. 1,889,077; Nov. 29.
Safety King Corporation. (See King, Frances R., assignor.)
St. James, Alfred. (See Dainton, Francis M., assignor.)
St. Joseph Lead Company. (See Najarian, Herand K., assignor.)
St. Joseph Lead Company. (See Weaton, G. F., and Najarian, assignors.)
Samson, Torsten, assignor to Aktiebolaget Nordiska Armaturfabrikerna, Stockholm, Sweden. Arrangement in sieves for cellulose digesters and the like. 1,889,731; Nov. 29.
Sanford Investment Company. (See Jones, Harry W., assignor.)
Saranac Bag Sealers, Inc. (See Craig, Edward, assignor.)
Sargent & Company. (See Shaw, John H., assignor.)
Sass, Ernest, Aurora, Ill. Punch press. 1,889,382; Nov. 29.
Schey, Robert, assignor to Combier & Co., Inc., New York, N. Y. Textile fabric or the like. Des. 88,487; Nov. 29.
Schiechel, Maximilian, Frankfort-on-the-Main, Germany, assignor to American Lurgi Corporation, New York, N. Y. Flotation process. 1,889,078; Nov. 29.
Schier, Johann. (See Pechan, I., and Schier.)
Schlatter, Louis H. (See Hofammann, K. E., and Schlatter.)
Schleicher, Frank J., St. Louis, Mo. Paper box. 1,889,134; Nov. 29.
Schleicher, Inc. (See Schleicher, P. E., and Calcott, assignors.)
Schleicher, Paul E., and W. C. Calcott, Gary, Ind., assignors to Schleicher, Inc. Radiator hood. 1,889,220; Nov. 29.
Schleicher, Paul E., and W. C. Calcott, assignors to Schleicher, Inc., Gary, Ind. Access structure. 1,889,221; Nov. 29.
Schloemann Aktiengesellschaft. (See Drexler, Ernest, assignor.)
Schloemann Engineering Company. (See Drexler, Ernest, assignor.)
Schmidt, Hans, Wuppertal/Vohwinkel, Germany, assignor to Winthrop Chemical Company, Inc., New York, N. Y. Metal complex compound. 1,889,383; Nov. 29.
Schmidt, Karl F., and P. Zutavern, assignors to Knoll Aktiengesellschaft, Chemische Fabriken, Ludwighafen-on-the-Rhine, Germany. Manufacturing imino-ethers. 1,889,323; Nov. 29.
Schmidt, Paul, Sorau, Germany. Loom. 1,889,500; Nov. 29.
Schmiedel, Johannes, assignor to Universelle Cigarettenmaschinen-Fabrik J. C. Muller & Co., Dresden, Germany. Folding machine. 1,889,574; Nov. 29.
Schnake, August C., Centralia, Ill. Soap holder. 1,889,501; Nov. 29.
Schneider, Eugene H., Denver, Colo. Control valve equipment for oil and gas wells. 1,889,384; Nov. 29.
Schnitzspahn, Karl, Offenbach-on-the-Main, Germany, assignor to General Aniline Works, Inc., New York, N. Y. Solid diazoaminetal halide double salt. 1,889,298; Nov. 29.
Schols, Victor, Leipsig-Molkau, assignor of one-half to the Firm Atlas Ago Chemische Fabrik, Aktiengesellschaft, Leipzig, Germany. Plastic compound. 1,889,702; Nov. 29.
Schon, David, Red Oak, Iowa. Radiator shutter operator. 1,889,703; Nov. 29.
Schorsch, Ludwig, Goerkau, Czechoslovakia. Waste combing machine, express-card. 1,889,615; Nov. 29.
Schrank, Erwin. (See Zodrow, F., and Schrank.)
Schreiber, John H., St. Louis, Mo. Ice scoring machine. 1,889,222; Nov. 29.
Schubert, Rudolf, Easton, Pa. Window sash lock. 1,889,223; Nov. 29.
Schulemann, Werner, Vohwinkel, near Elberfeld, F. Mietzsch, Elberfeld, Germany, and A. Wingler, Westfield, N. J., assignors to Winthrop Chemical Company, Inc., New York, N. Y. Compounds of the acridine series and making them. 1,889,704; Nov. 29.

Schunck, Walter. (See Krauch, C., Hochschwender, and Schunck.)
Schuster, Paul B., assignor to The Magnetic Gauge Company, Akron, Ohio. Method of and apparatus for indicating temperatures of moving bodies. 1,889,385; Nov. 29.
Schwartzmann, Harry, Westfield, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y. Electrical coil and manufacturing it. 1,889,421; Nov. 29.
Schweiser, Jack, Rye, N. Y. Textile fabric or the like. Des. 88,488; Nov. 29.
Schwemmer, Joseph. (See Keinath, G., and Schwemmer.)
Schwerin, Frank H., Bellevue, assignor to The Duff-Norton Manufacturing Company, Pittsburgh, Pa. Ratchet jack. 1,889,386; Nov. 29.
Scovill Manufacturing Company. (See Pasman, Abram N., assignor.)
Sebille, Georges, Paris, France. Method and apparatus for reading books and the like. 1,889,575; Nov. 29.
Seger, Lavern A., assignor of one-half to F. W. Kramer, Grand Rapids, Mich. Piston for internal combustion engines. 1,889,387; Nov. 29.
Seitz-Werke G. m. b. H. (See Böhmer, A., and Gebhardt, assignors.)
Sellentin, Fred J., Newark, N. J. Ironing board. 1,889,155; Nov. 29.
Sergeant, David E. (See Shepherd, A. T., and Sergeant.)
Serr, William, New York, N. Y. Flavor dispenser cup. 1,889,111; Nov. 29.
Shaffer, Charles A., Chicago, Ill., assignor to The Watson-Stillman Co., New York, N. Y. Crosshead pin ejector. 1,889,135; Nov. 29.
Shaw, John H., assignor to Sargent & Company, New Haven, Conn. Lock. 1,889,454; Nov. 29.
Shepherd, Allan T., and D. E. Sergeant, Richmond, Va. Apparatus for recovering heat from waste water. 1,889,156; Nov. 29.
Sherwood, Carroll P., Camden, N. J. Flow meter. 1,889,705; Nov. 29.
Shibuya, Shinzaburo. (See Oki, Shin-Ichi, assignor.)
Shoe Hardware Company, The. (See Dalton, Daniel F., assignor.)
Shoemaker, Raymond B., New York, N. Y. Hanger. 1,889,112; Nov. 29.
Shook, James F., Phillipsburg, assignor to Ingersoll-Rand Company, Jersey City, N. J. Dustless rock drill. 1,889,422; Nov. 29.
Shope, James W., South Gate, Calif. Drop wire hanger. 1,889,113; Nov. 29.
Shorter, Sydney A., assignor to The British Cotton Industry Research Association, Didsbury, Manchester, England. Insuring a constant or desired let-off tension for the warp in looms for weaving. 1,889,266; Nov. 29.
Shortland, Arthur. (See Bromley, T. C., and Shortland.)
Siemens & Halske, Aktiengesellschaft. (See Grüss, H., and Thiede, assignors.)
Siemens & Halske Aktiengesellschaft. (See Keinath, G., and Pfannenmüller, assignors.)
Siemens & Halske, Aktiengesellschaft. (See Keinath, G., and Schwemmer, assignors.)
Siemers, Emil J., Eau Claire, Wis. Bee hive insulator. 1,889,184; Nov. 29.
Simplex Piston Ring Co., of America, Inc., The. (See Solenberger, Dean M., assignor.)
Singer, Frederick O., assignor, by mesne assignments, to National Governor Corporation, Chicago, Ill. Governor. 1,889,706; Nov. 29.
Singer, Margaret B., assignor to Wullschleger & Co., New York, N. Y. Textile fabric or the like. Des. 88,489; Nov. 29.
Singer, Margaret B., assignor to Wullschleger & Co., New York, N. Y. Textile fabric or the like. Des. 88,490; Nov. 29.
Smellie, Donald G., Canton, assignor to The Hoover Company, North Canton, Ohio. Suction cleaner. 1,889,224; Nov. 29.
Smidlein, Anthony E., New York, N. Y., assignor to Bigelow Sanford Carpet Co., Inc. Carpet. 88,442; Nov. 29.
Smidth, F. L., & Co. (See Neilsen, Christian, assignor.)
Smidth, F. L., & Co. (See Vogel-Jorgensen, Mikael, assignor.)
Smith, Arthur C., Pasadena, assignor, by mesne assignments, to Automatic Machine Products Corp., Ltd., South Pasadena, Calif. Dispensing pump for gasoline and the like. 1,889,455; Nov. 29.
Smith, Clyde L. (See Harnsberger, A. E., and Smith.)
Smith, Howard H., assignor, by mesne assignments, to Associated Electric Laboratories, Inc., Chicago, Ill. Voice current repeater. 1,889,005; Nov. 29.
Smith, John H., Detroit, Mich. Center. 1,889,502; Nov. 29.
Smith, Marvin, assignor to Universal Oil Products Company, Chicago, Ill. Treatment of hydrocarbon oils. 1,889,388; Nov. 29.
Smith, Thomas O. L. (See Forrest, T. W. W., and Smith.)
Smith, Wayne M., and K. W. Haley, Santa Barbara, Calif. Oil well surveying instrument. 1,889,114; Nov. 29.
Smith, William A., sr., Easton, Pa., assignor to Ingersoll-Rand Company, Jersey City, N. J. Valve for rock drills. 1,889,428; Nov. 29.
Smith, William W., Newton, Iowa. Window frame. 1,889,424; Nov. 29.
Snook, Homer C., South Orange, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Apparatus to enable the blind to read. 1,889,576; Nov. 29.
Societe Anonyme des Appareils de Manutention et Fours Stein. (See Stein, Charles M., assignor.)
"Societe Anonyme Solex." (See Mennesson, Marcel, assignor.)
Societe d'Etude des Distributeurs Automatiques (S. E. D. A.) (See Tribout, Adrien M. L., assignor.)
Societe d'Exploitation de Brevets Four l'Industries, l'Aviation et l'Automobile (S. E. B. I. A.) (See Dugelay, Paul, assignor.)
Sofransey, Morris L. (See Mann, Russell I., assignor.)
Solem, Peter A., Rockford, Ill. Polishing wheel. 1,889,040; Nov. 29.
Solenberger, Dean M., assignor to The Simplex Piston Ring Co. of America, Inc., Cleveland, Ohio. Apparatus for slotting piston rings. 1,889,267; Nov. 29.
Söll, Julius, Frankfort-on-the-Main-Schwanheim, and C. Runkel, Sandersdorf, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Chlorinating hydrocarbons. 1,889,157; Nov. 29.
Soltis, Joseph, Plains, and C. Rindgen, Wilkes-Barre, Pa. Trolling device. 1,889,707; Nov. 29.
Sonoco Products Company. (See Dunlap, Charles K., assignor.)
Sorensen, C. M., Co. Inc. (See Sorensen, George L., assignor.)
Sorensen, George L., assignor to C. M. Sorensen Co. Inc., Long Island City, N. Y. Medical douche. 1,889,425; Nov. 29.
Sorensen, Henry, San Francisco, Calif. Method to cool the interior of a seamless block of setting concrete. 1,889,268; Nov. 29.
Soule, George C. (See Woodbury, J. B., and Soule.)
Soulé, Gilbert R., San Francisco, Calif. Necktie presser. 1,889,041; Nov. 29.
Spencer, Edmondson, assignor of one-half to E. C. Benthall, Calcutta, British India. Controlling the treatment of vegetable matter to obtain cellulose therefrom by manipulation of the vomit pipes. 1,889,158; Nov. 29.
Sperry, D. R., & Co. (See Sperry, David R., assignor.)
Sperry, David R., assignor to D. R. Sperry & Co., Batavia, Ill. Filter press. 1,889,225; Nov. 29.
Sperry Gyroscope Company. (See House, Frank R., assignor.)
Sperti, George, Covington, Ky., assignor to Sperti Lamp Corporation, New York, N. Y. Vapor arc apparatus. 1,889,079; Nov. 29.
Sperti Lamp Corporation. (See Sperti, George, assignor.)
Sprague, Frank J., Sharon, Conn., assignor to Sprague Safety Control and Signal Corporation, New York, N. Y. Method of and apparatus for control of train movements. 1,889,724; Nov. 29.
Sprague Safety Control and Signal Corporation. (See Sprague, Frank J., assignor.)
Sprague Safety Control and Signal Corporation. (See Work, Leonard, assignor.)
Standard-I. G. Company. (See Davis, Garland H. B., assignor.)
Standard Oil Development Company. (See Becker, Arman E., assignor.)
Standard Oil Development Company. (See Blau, Ludwig, W., assignor.)
Standard Stoker Company, The. (See Lower, Nathan M., assignor.)
Standard Stoker Company, The. (See Lower, N. M., Crawford, and Turner, assignors.)
Standard Stoker Company, The. (See Turner, Edwin A., assignor.)
Stanley, Fred, Webster County, Iowa. Hog controller. 1,889,115; Nov. 29.
Stanley, William T., London, England. Tie for personal wear. 1,889,054; Nov. 29.
Stapling Machines Co. (See Reed, Kenneth W., assignor.)
Steffen, Le Roy J., Evanston, Ill., assignor to Hough Shade Corporation. Venetian blind. 1,889,226; Nov. 29.
Stein, Charles M., assignor to Societe Anonyme des Appareils de Manutention et Fours Stein, Paris, France. Pulverized fuel distributing system. 1,889,299; Nov. 29.
Stephenson, James E., assignor to General Railway Signal Company, Rochester, N. Y. Interlocking system for railroads. 1,889,708; Nov. 29.
Sterling, Bernard A., Chicago, Ill. Hair waver. 1,889,227; Nov. 29.
Steudel, George E. (See Strain, H. A., and Steudel.)
Stevenson, Margaret C., Dunkirk, N. Y. Sport shoe. 1,889,734; Nov. 29.
Stoddard, John G., East Falls Church, Va. Device for operating and controlling folding doors. 1,889,159; Nov. 29.
Stotler, Oliver H., Uniontown, Pa. Swing hanger. 1,889,709; Nov. 29.
Stout, Harry H., Ardsley-on-Hudson, assignor to Copper Deoxidation Corporation, New York, N. Y. Vessel for fire refining. 1,889,426; Nov. 29.
Strain, Harry A., and G. E. Steudel, Chicago, Ill. Blast furnace. 1,889,160; Nov. 29.
Stukenborg, Louis C., assignor to Oildraulic Lift Company, Memphis, Tenn. Automobile lift. 1,889,185; Nov. 29.

Stüsser, Richard, Cologne-Deutz, and K. Wiedemann, Cologne-Mulheim, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Copper containing disazodyestuffs. 1,889,732; Nov. 29.
Sun-Maid Raisin Growers of California. (See Forrest, Thomas W. W., assignor.)
Superior Coal Combustion Company. (See Guay, Joseph V., assignor.)
Superior Regulator Co. Inc. (See Douglass, Howard H. and A. H., assignors.)
Sure, Barnett, Fayetteville, Ark. Concentration of vitamins. 1,889,427; Nov. 29.
Svendsen, Svend S., Chicago, Ill., assignor to Clay Reduction Corporation. Production of aluminum hydroxide. 1,889,080; Nov. 29.
Svendsen, Svend S., Chicago, Ill., assignor to Clay Reduction Company. Making metallic sulphates. 1,889,710; Nov. 29.
Swan Carburetor Company, The. (See Swan, John W., assignor.)
Swan, John W., assignor to The Swan Carburetor Company, Cleveland, Ohio. Manifold eight-cylinder engine. 1,889,081; Nov. 29.
Swanson, Oscar W., Ottumwa, Iowa. Fowl feather picking apparatus and process. 1,889,228; Nov. 29.
Synchrome Corporation. (See Wright, Walter L., assignor.)
Szepesi, Eugene, Scarsdale, N. Y. Instrument for graphic control. 1,889,006; Nov. 29.
Talley, Robert H., and C. L. Pritchett, Burnside, Miss. Extension joint for stove pipes. 1,889,711; Nov. 29.
Tar-Rid Chemical Company. (See McPherson, Clarence D.)
Taylor, Reginald. (See Ostline, J. E., Taylor, and Beale.)
Technicolor, Inc. (See Ball, Joseph A., assignor.)
Telefonaktiebolaget L. M. Ericsson. (See Crowe, Douglas C., assignor.)
Texas Pacific Coal & Oil Co. (See Lederer, Erwin R., assignor.)
Tharp, Victor S., Elmhurst, assignor, by mesne assignments, to Associated Electric Laboratories, Inc., Chicago, Ill. Telephone system. 1,889,229; Nov. 29.
Thiede, Bruno. (See Gruss, H., and Thiede.)
Thimmes, George E., Mechanicsville, Iowa. Anti-skid tire chain. 1,889,300; Nov. 29.
Thomas, Horace T., Lansing, and A. L. Kimball, Detroit, Mich. Manifold construction. 1,889,270; Nov. 29.
Thomas, Jack L., assignor of one-fourth to T. Bruce, one-fourth to W. D. Fawcett, and one-fourth to E. F. Ross, Oklahoma City, Okla. Rotary type float valve. 1,889,503; Nov. 29.
Thomas, Laurence H. (See Kuhn, F., and Thomas.)
Thomas, Rosswell W., assignor to Phillips Petroleum Company, Bartlesville, Okla. Dehydration of cooling of air or other gases. 1,889,161; Nov. 29.
Thomas, Rosswell W., and G. G. Oberfell, assignors to Phillips Petroleum Company, Bartlesville, Okla. Dehydration of air or the like and gaseous mixtures. 1,889,162; Nov. 29.
Thompson, Louis W., Schenectady, N. Y., and E. H. Horstkotte, Erie, Pa., assignors to General Electric Company. Control system. 1,889,616; Nov. 29.
Thornhill, Bertie R., Lynchburg, Va. Hand bag. 1,889,889; Nov. 29.
Throm, Albert J., Grapeville, Pa. Method to produce a crystal article. 1,889,390; Nov. 29.
Tibbetts, Milton, assignor to Packard Motor Car Company, Detroit, Mich. Motor vehicle. 1,889,577; Nov. 29.
Tillyer, Edgar D., assignor to American Optical Company, Southbridge, Mass. Diagnostic instrument. 1,889,456; Nov. 29.
Titanium Pigment Company, Inc. (See Washburn, Willis F., assignor.)
Titlestad, Nicolay. (See Hechenbleikner, I., and Titlestad.)
Todd, James H., Marion, Ohio. Mower. 1,889,391; Nov. 29.
Townsend, Albert J., Lima, Ohio. Locomotive. 1,889,392; Nov. 29.
Townsend, Ernest W. (See Cordrey, Oliver C., assignor.)
Travers, John T. and O. M. Urbain, assignors to the Ohio Sanitary Engineering Corporation, Columbus, Ohio. Fertilizer. 1,889,712; Nov. 29.
Travis, John S., Long Island City, N. Y., assignor to Bigelow Sanforfd Carpet Co., Inc. Carpet. Des. 88,443; Nov. 29.
Tribby, D. V. (See Lane, George W., assignor.)
Tribout, Adrien M. L., assignor to Societe d'Etude des Distributeurs Automatiques (S. E. D. A.), Paris, France. Gasoline distributing apparatus. 1,889,504; Nov. 29.
Truog, Emil, Madison, Wis. Vapor purification process. 1,889,617; Nov. 29.
Trumbull Electric Manufacturing Company, The. (See Hammerly, Herman J., assignor.)
Truscon Steel Company. (See Auten, Claude I., assignor.)
Trusler, Frank S., Vernon, Tex. Artificial tooth. 1,889,301; Nov. 29.
Tryon, Willian A., Elmira, N. Y. Forming grooves in the ends of tubular articles. 1,889,324; Nov. 29.
Tullis, D. & J., Limited. (See Jack, William, assignor.)
Turner, Edwin A. (See Lower, N. M., Crawford, and Turner.)
Turner, Edwin A., New York, N. Y., assignor to The Standard Stoker Company, Incorporated. Locomotive stoker. 1,889,518; Nov. 29.
Turner, Edwin A., New York, N. Y., assignor to The Standard Stoker Company, Incorporated. Locomotive stoker. 1,889,519; Nov. 29.
Turner, Henry J., Forest Gate, assignor of one-half to F. W. Mattieson, Seven Kings, Essex, England. Flying machine. 1,889,712; Nov. 29.
Turner, John H. (See Marshall, W. C., and Turner.)
Twiss, Douglas F. (See Murphy, E. A., and Twiss.)
Unger, Abraham, assignor to Concord Chenille Company, Inc., New York, N. Y. Making fabrics. 1,889,733; Nov. 29.
Unger, Paul O., Glen Ellyn, assignor to Wilson-Jones Company, Chicago, Ill. Loose leaf binder. 1,889,280; Nov. 29.
Union Switch & Signal Company, The. (See Little, Edwin G., assignor.)
United Shoe Machinery Corporation. (See Bates, Arthur, assignor.)
United Shoe Machinery Corporation. (See Eastman, Fred C., assignor.)
United Shoe Machinery Corporation. (See Glass, Perley E., assignor.)
United Shoe Machinery Corporation. (See Heys, George H., assignor.)
United Shoe Machinery Corporation. (See Knowlton, Norwood H., assignor.)
United Shoe Machinery Corporation. (See Libby, Edward P., assignor.)
United Shoe Machinery Corporation. (See Ricks, F., and Minett, assignors.)
United Shoe Machinery Corporation. (See Roberts, William T. B., assignor.)
United Shoe Machinery Corporation. (See Robinson, Charles A., assignor.)
Universal Oil Products Company. (See Smith, Marvin, assignor.)
Universelle Cigarettenmaschinen-Fabrik J. C. Muller & Co. (See Schmiedel, Johannes, assignor.)
Urbain, Oliver M. (See Travers, J. T., and Urbain.)
Urbain, Oliver M., Columbus, assignor to C. H. Lewis, Harpster, Ohio. Releasing nascent hydrogen. 1,889,714; Nov. 29.
Valpey, Henry H., Dearborn, assignor to Long Manufacturing Company, Detroit, Mich. Clutch control. 1,889,186; Nov. 29.
Van Hulle, Edmund. (See Neelmeier, W., and van Hulle.)
Venuto, Louis J. (See Wiegand, W. B., and Venuto.)
Vereinigte Stahlwerke Aktiengesellschaft. (See Klinkenberg, Adolf, assignor.)
Vogel-Jorgensen, Mikael, Copenhagen, Denmark, assignor to F. L. Smidth & Co., New York, N. Y. Conveying fine-grained materials. 1,889,163; Nov. 29.
Vogelman, Philip A., New York, N. Y. Textile fabric. Des. 88,491; Nov. 29.
Voigt, Charles G., Hicksville, N. Y. Trimming joint. 1,889,715; Nov. 29.
Von Hers, Edmund, Cologne-Dellbruck, and H. Rathsburg, Furth, Germany, assignors, by mesne assignments, to Remington Arms Company, Incorporated, New York, N. Y. Priming composition. 1,889,116; Nov. 29.
Von Reis, Lambert, Hersogenrath, Germany, assignor, by mesne assignments, to The American Bicheroux Company. Roller conveyer for glass plates. 1,889,082; Nov. 29.
Wachter, Lester. (See Anthony, W. V., and Wachter.)
Wackman, Louis B., St. Louis, Mo. Unitary chime for metallic containers. 1,889,505; Nov. 29.
Wager, Robert H., Jersey City, N. J. Lather-forming means. 1,889,164; Nov. 29.
Wagner, Max, Stuttgart, assignor to Daimler Benz Aktiengesellschaft, Stuttgart-Unterkheim. Springing for vehicles. 1,889,506; Nov. 29.
Wagner, Stefan, Los Angeles, Calif. Boring machine. 1,889,136; Nov. 29.
Wahlbom, Ernest T., L. C. Lind, and P. C. Wahlbom, Rockford, Ill. Water softener. 1,889,231; Nov. 29.
Wahlbom, Philip C. (See Wahlbom, E. T., Lind, and Wahlbom.)
Walker, Herbert S., Larchmont, assignor to The Allpax Company, Inc., Mamaroneck, N. Y. Packing and process. 1,889,165; Nov. 29.
Walker, Samuel H., Joplin, Mo. Hosiery protector. 1,889,716; Nov. 29.
Wallace, Benjamin F., Brooklyn, N. Y. Sand core for casting metal and making same. 1,889,007; Nov. 29.
Walter, Georges, Perroy, Switzerland. Mold for manufacturing hollow bodies of cement by the centrifugal method. 1,889,428; Nov. 29.
Waples, Robert M. (See Hubbard, C. R., and Waples.)
Wappler Electric Company. (See Mutscheller, Arthur, assignor.)
Ware, Richard P., assignor to Package Improvement Co., Inc., Detroit, Mich. Cigarette package. 1,889,232; Nov. 29.
Warfel, William F., Wendling, Oreg. Aircraft propeller. 1,889,717; Nov. 29.
Warren, William C., assignor to S. L. Allen & Co., Inc., Philadelphia, Pa. Sled. 1,889,578; Nov. 29.
Warrick, Oliver C., Indianapolis, Ind. Apparatus for assisting air and sea navigation. 1,889,026; Nov. 29.

Washburn, Willis F., St. Louis, Mo., assignor to Titanium Pigment Company, Inc., New York, N. Y. Recovery of titanium compounds. 1,889,027; Nov. 29.
Watson-Stillman Co., The. (See Shaffer, Charles A., assignor.)
Watson, Thomas, London, England. Apparatus for spraying paraffin wax and the like. 1,889,507; Nov. 29.
Wax, Evelyn, Briarwood, Long Island, N. Y. Textile fabric or the like. Des. 88,444; Nov. 29.
Wax, Evelyn, Briarwood, Long Island, assignor to Combier & Co. Inc., New York, N. Y. Textile fabric or the like. Des. 88,492; Nov. 29.
Wayland, Frank, Salem, Mass. Leather shaving machine. 1,889,028; Nov. 29.
Weaton, George F., and H. K. Najarian, Beaver, Pa., assignor to St. Joseph Lead Company, New York, N. Y. Sintering of metalliferous materials. 1,889,055; Nov. 29.
Weingartner, Anthony E., assignor to American Engineering Company, Philadelphia, Pa. Gearing for stokers. 1,889,718; Nov. 29.
Weiss, Ernst, Dusseldorf, Germany. Collar stud and necktie retainer. 1,889,339; Nov. 29.
Weiss, Hans. (See Griessbach, R., and Weiss.)
Weitz, Irene A., Brooklyn, N. Y. Textile fabric or the like. Des. 88,445; Nov. 29.
Weitz, Irene A., Brooklyn, N. Y. Textile fabric or the like. Des. 88,446; Nov. 29.
Wende, Franz, Berlin, assignor to Fritz Werner Aktiengesellschaft, Berlin-Marienfelde, Germany. Measuring apparatus. 1,889,719; Nov. 29.
Werner, Fritz, Aktiengesellschaft. (See Wende, Franz, assignor.)
Werner, Johannes F., Hartford, Wis. Antivibration device. 1,889,579; Nov. 29.
Werner, Oscar, Cleveland, Ohio. Headlight. Des. 88,447; Nov. 29.
Western Electric Company. (See Bishop, John S., assignor.)
Western Electric Company. (See Rättig, Gerhard, assignor.)
Western Electric Company. (See Schwartsmann, Harry, assignor.)
Westinghouse Air Brake Company The. (See, Donovan, Patrick H., assignor.)
Westinghouse Air Brake Company, The. (See Hewitt, Ellis E., assignor.)
Westinghouse Electric & Manufacturing Company. (See Baumann, Karl, assignor.)
Westinghouse Electric & Manufacturing Company. (See Baxter, Harold G., assignor.)
Westinghouse Electric & Manufacturing Company. (See Bryant, Osro N., assignor.)
Westinghouse Electric and Manufacturing Company. (See Zodrow, F., and Schrank, assignors.)
Whaley, Ralph S., Seattle, Wash., assignor to Petroleum Heat and Power Company, New York, N. Y. Strainer. 1,889,325; Nov. 29.
Wheary, George H., assignor to Wheary Trunk Company, Racine, Wis. Baggage carrier. Re18,670; Nov. 29.
Wheary Trunk Company. (See Wheary, George H., assignor.)
Wheaton Oil Clarifier Corporation. (See White, Phillip A., assignor.)
Whelan, Dow O., Scotia, N. Y., assignor to General Electric Company. Resistance unit. 1,889,618; Nov. 29.
Whitall Tatum Company. (See Mazoyer, Leon J., assignor.)
White, James N., Denver, Colo. Cylinder laundry machine. 1,889,008; Nov. 29.
White Motor Company, The. (See Church, Harold D., assignor.)
White Motor Company, The. (See Goode, Gilbert C., assignor.)
White, Phillip A., St. Albans, assignor to Wheaton Oil Clarifier Corporation, New York, N. Y. Method and apparatus for lubricating and operating internal combustion engines. 1,889,137; Nov. 29.
Whitfield, John, and D. Brander, Glasgow, Scotland. Moving or changing advertising and display apparatus or sign. 1,889,302; Nov. 29.
Whitin Machine Works. (See Crockett, Frank L., assignor.)
Widerman, Morris, New York, N. Y. Hair waving device. 1,889,166; Nov. 29.
Wiedemann, Karl. (See Stüsser, R., and Widemann.)
Wiegand, William B., Sound Beach, Conn., and L. J. Venuto, New York, N. Y. Carbon black and making same. 1,889,429; Nov. 29.
Wiggenhorn, Guido J., et al, trustees. (See Martin, Edward T., assignor.)
Wight, Sedgwick N., assignor to General Railway Signal Company, Rochester, N. Y. Train dispatching system for railroads. 1,889,457; Nov. 29.
Wight, Sedgwick N., assignor to General Railway Signal Company, Rochester, N. Y. Railway traffic controlling system. 1,889,458; Nov. 29.
Wilcolator Company, The. (See Fonseca, E. L., Hunt, and Barnum, assignors.)
Willett, Wallace B., New York, N. Y., and H. E. Brown, St. Louis, Mo., assignors to American Cotton Picker Corporation, St. Louis, Mo. Guide mechanism for cotton pickers. 1,889,580; Nov. 29.
Willheim, William, New York, N. Y. Textile fabric or similar article. Des. 88,448; Nov. 29.
Willheim, William, New York, N. Y. Textile fabric or similar article. Des. 88,449; Nov. 29.
Willheim, William, New York, N. Y. Textile fabric or similar article. Des. 88,450; Nov. 29.
Willheim, William, Co., Inc. (See Brown, Emma L., assignor.)
Willheim, William, Co., Inc. (See Christen, Marcel, assignor.)
Willheim, William, Co., Inc. (See Hellmann, Carl R., assignor.)
Wilheim, William, Co., Inc. (See Kohut, Alexander W., assignor.)
Willheim, William, Co., Inc. (See Murray, Herman S., assignor.)
Willheim, William, Co., Inc. (See Overmeyer, John, assignor.)
Williams, Benjamin M., New Orleans, La., assignor to Robert Gaylord Incorporated, St. Louis, Mo. Carton. 1,889,581; Nov. 29.
Williams, Bradbury, McCalbe & Hinkle, et al. (See Anderson, Carlton.)
Williams, Eugene F. (See McInerny, R. J., Williams, and Glaze.)
Williams, Grace, et al. (See Bledsoe, Calvin H., assignor.)
Williams, J. H., & Co. (See Kress, Willard C., assignor.)
Willman, George J., assignor to The Cincinnati Advertising Products Company, Cincinnati, Ohio. Holding means for glass globes. 1,889,720; Nov. 29.
Willys-Overland Company, The. (See Fisher, Walter S., assignor.)
Willys-Overland Company, The. (See Grimm, George E., assignor.)
Wilson, Jacob E., Yoncalla, Oreg. Dialing appliance. 1,889,393; Nov. 29.
Wilson Jones Company. (See McCleary, Henry R., assignor.)
Wilson-Jones Company. (See Unger, Paul O., assignor.)
Wilt, Elmer E., Chicago, Ill. Bracket for clothes hangers. 1,889,582; Nov. 29.
Wingler, August. (See Schulemann, W., Mietzsch, and Wingler.)
Winthrop Chemical Company, Inc. (See Eisleb, Otto, assignor.)
Winthrop Chemical Company, Inc. (See Schmidt, Hans, assignor.)
Winthrop Chemical Company, Inc. (See Schulemann, W., Mietzsch, and Wingler, assignors.)
Wintringham, William T., Brooklyn, N. Y., assignor to American Telephone and Telegraph Company. Frequency stabilizing system. 1,889,083; Nov. 29.
Wochner, Henry, assignor to Beaf Manufacturing Company, Rock Island, Ill. Automobile frame straightening machine. 1,889,187; Nov. 29.
Wodack Electric Tool Corporation. (See Haas, Joseph F., assignor.)
Wolfson, Samuel J., Everett, Mass., assignor to Concrete-Wood Floor Clip Co., Inc. Flooring. 1,889,138; Nov. 29.
Wood, Alan, Steel Company. (See Jones, J. R., assignor.)
Wood, Henry A. W., assignor to Wood Newspaper Machinery Corporation, New York, N. Y. Folding machine. 1,889,459; Nov. 29.
Wood, Henry A. W., assignor to Wood Newspaper Machinery Corporation, New York, N. Y. Stereotype printing plate. 1,889,460; Nov. 29.
Wood Newspaper Machinery Corporation. (See Wood, Henry A. W., assignor.)
Woodbury, John B., and G. C. Soule, South Portland, assignors to Maine Steel Products Company, Portland, Me. Power snowplow. 1,889,269; Nov. 29.
Woodhead, Henry A., and M. R. Kelly, assignors to The Gregg Dyeing Company, Graniteville, S. C. Apparatus for the treating of sheet material. 1,889,009; Nov. 29.
Woolson, Lionel M., assignor to Packard Motor Car Company, Detroit, Mich. Internal combustion engine. 1,889,583; Nov. 29.
Worcester Bank & Trust Company, executor. (See Midgley, Herbert.)
Work, Leonard, Philadelphia, Pa., assignor to Sprague Safety Control and Signal Corporation, New York, N. Y. Automatic train control system. 1,889,721; Nov. 29.
Wright, Thomas P., assignor to Multiwheel Road Machine Company, Inc., Atlanta, Ga. Road grader. 1,889,722; Nov. 29.
Wright, W. A., et al. (See Lofgren, E. G. C., and Anderson, assignors.)
Wright, Walter L., Santa Monica, assignor to Synchrome Corporation, Los Angeles County, Calif. Film guiding mechanism. 1,889,084; Nov. 29.
Wulff, Otto, Hofheim-in-Taunus, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Nitro- -hydroxypyridine and nitro- -hydroxyalkylpyridine and preparing them. 1,889,303; Nov. 29.
Wulischleger & Co. (See Martinoff, Nadine, assignor.)
Wulischleger & Co. (See Singer, Margaret B., assignor.)
Zens, Pierre, Paris, France. Pump or compressor. 1,889,508; Nov. 29.
Zerbi, Tranquillo, assignor to Fiat Società Anonima, Turin, Italy. Carburetor of aircraft engines for insuring the regular engine working in inverted load conditions. 1,889,304; Nov. 29.

Zerbi, Tranquillo, assignor to Fiat Società Anonima, Turin, Italy. Engine drive for aircraft propellers. 1,889,305; Nov. 29.
Zerk, Oscar U., Cleveland, Ohio. Brush. 1,889,394; Nov. 29.
Zerk, Oscar U., Cleveland, Ohio. Brush. 1,889,395; Nov. 29.
Zerne, Gustav A., Brooklyn, N. Y. Electrical contact pad. 1,889,271; Nov. 29.
Zerne, Gustav A., Brooklyn, N. Y. Diathermic electrode and applicator. 1,889,272; Nov. 29.
Zimmerer, Mark E., assignor to Kingston Products Corporation, Kokomo, Ind. Internal combustion engine humidifier. 1,889,584; Nov. 29.
Zodrow, Franz, Reinickendorf-Ost and E. Schrank, Kalkberge, Germany, assignors to Westinghouse Electric and Manufacturing Company. Multiple conductor fuse. 1,889,585; Nov. 29.
Zutavern, Philipp. (See Schmidt, K. F., and Zutavern.)
Zwicky, Melchior, Berkshire Heights, assignor to Berkshire Knitting Mills, Wyomissing, Pa. Knitted fabric. Des. 88,451; Nov. 29.

LIST OF INVENTIONS

FOR WHICH

PATENTS WERE ISSUED ON THE 29TH DAY OF NOVEMBER, 1932

NOTE.—Arranged in accordance with the first significant character or word of the name (in accordance with city and telephone directory practice). Includes patents, reissues, and designs.

Abrasive blasting system. L. D. Peik. 1,889,181; Nov. 29.
Access structure. P. E. Schleicher and W. C. Calcott. 1,889,221; Nov. 29.
Acid, Making heptaldehyde and undecylenic. H. A. Bruson and J. D. Robinson. 1,889,348; Nov. 29.
Acids and products, Preparing organic. H. A. Bruson. 1,889,347; Nov. 29.
Acoustic electric energy converter. G. W. Pierce. 1,889,153; Nov. 29.
Adjustable back chair. C. R. Hultgren. 1,889,478; Nov. 29.
Advertising and display apparatus, Moving or changing. J. Whitfield and D. Brander. 1,889,302; Nov. 29.
Aerofoil-carrying rack. C. Cohen-Venezian. 1,889,350; Nov. 29.
Agricultural implement. S. Dinsmore. 1,889,016; Nov. 29.
Agricultural machine. E. L. McGregor. 1,889,486; Nov. 29.
Air alternator applicable to blast furnaces producing cast iron, smelting furnaces and the like. E. Hickman Y Emperan. 1,889,476; Nov. 29.
Air compressor plant. J. F. Ne Page. 1,889,451; Nov. 29.
Air current creating means for pressing machines. P. N. Braun. 1,889,140; Nov. 29.
Air hand brake, Automatic. C. H. Bledsoe. 1,889,014; Nov. 29.
Air or other gases. Dehydration or cooling of. R. W. Thomas. 1,889,161; Nov. 29.
Air or the like and gaseous mixtures, Dehydration of. R. W. Thomas and G. G. Oberfell. 1,889,162; Nov. 29.
Air pressure dry pan. H. K. King. 1,889,555; Nov. 29.
Aluminum hydroxide, Production of. S. S. Svendsen. 1,889,080; Nov. 29.
Anchor, Rail. K. E. Hofammann and L. H. Schlatter. 1,889,316; Nov. 29.
Aniline 2:5-disulfonic acid, Producing. W. Neelmeier and E. van Hulle. 1,889,371; Nov. 29.
Animal trap. H. Cooper. 1,889,351; Nov. 29.
Annunciator system. S. F. Nelson. 1,889,053; Nov. 29.
Antivibration device. J. F. Werner. 1,889,579; Nov. 29.
Apparatus for assisting air and sea navigation. O. C. Warrick. 1,889,026; Nov. 29.
Apparatus to enable the blind to read. H. C. Snook. 1,889,576; Nov. 29.
Article handling device. S. A. Ayres. 1,889,233; Nov. 29.
Asphalt, Manufacture of. A. Loebel. 1,889,365; Nov. 29.
Asphalt, Producing. H. B. Pullar. 1,889,697; Nov. 29.
Attaching device. O. G. Nelson. 1,889,738; Nov. 29.
Automobile body. J. B. Marin. 1,889,679; Nov. 29.
Automobile frame straightening machine. H. Wochner. 1,889,187; Nov. 29.
Automobile lift. L. C. Stukenborg. 1,889,185; Nov. 29.
Automobile tie-down. S. D. Butterworth. 1,889,733; Nov. 29.
Bag: *See*—
Hand bag.
Baggage carrier. G. H. Wheary. Re18,670; Nov. 29.
Bags and Producing the same, Lining. F. T. Robinson. 1,889,572; Nov. 29.
Bale tying mechanism. R. Z. Nolan. 1,889,372; Nov. 29.
Banking control, Automatic. H. T. Avery. 1,889,273; Nov. 29.
Basket handle. R. E. Huston. 1,889,661; Nov. 29.
Bathtub and dressing table, Folding combination. E. W. Anderegg. 1,889,340; Nov. 29.
Battery terminal clamp. S. Gorman. 1,889,019; Nov. 29.
Bearing with settling basin, Self lubricating vertical. B. G. Goble. 1,889,243; Nov. 29.
Bearings to shafts, Locking antifriction. J. R. Dunham. 1,889,063–4; Nov. 29.
Beater, Manila hemp. S. Okl. 1,889,104; Nov. 29.
Bed. D. Kurkchee. 1,889,148; Nov. 29.
Bench: *See*—
Tube drawing bench.
Beta-dimethylaminoethyl ester of para-butyl-amino-benzoic acid. O. Eisleb. 1,889,645; Nov. 29.
Billets and the like, Mechanical handling of. E. J. Quinn. 1,889,039; Nov. 29.
Binder. N. W. Hicks. 1,889,095; Nov. 29.
Binder and making the same. H. G. Buchan. 1,889,536; Nov. 29.
Binder, Loose leaf. P. O. Unger. 1,889,230; Nov. 29.
Blast furnace. H. A. Strain and G. E. Steudel. 1,889,160; Nov. 29.

Bleaching apparatus. W. P. Hornbuckle and R. F. Craig. 1,889,442; Nov. 29.
Blind, Venetian. L. J. Steffen. 1,889,226; Nov. 29.
Block of setting concrete, Method to cool the interior of a seamless. H. Sorensen. 1,889,268; Nov. 29.
Board: *See*—
Ironing board.
Board, Making paper. C. L. Keller. 1,889,177; Nov. 29.
Boat. L. P. Messenger. 1,889,368; Nov. 29.
Bobbin boring machine. M. W. Hambleton and B. F. Morrill. 1,889,034; Nov. 29.
Body construction, Flexible. M. J. Daste. 1,889,058; Nov. 29.
Boiler: *See*—
Sectional boiler.
Book, Ring. H. R. McCleary. 1,889,560; Nov. 29.
Books and the like, Method of and apparatus for reading. G. Sebille. 1,889,575; Nov. 29.
Boots and shoes, Stiffening part of. J. Fausse and A. H. Boudrot. 1,889,196; Nov. 29.
Boring machine. S. Wagner. 1,889,136; Nov. 29.
Bottle. A. T. Mezquita. Des. 88,428; Nov. 29.
Bottle. J. W. Moore. Des. 88,429; Nov. 29.
Bottle cap. B. F. Conner. Des. 88,400–4; Nov. 29.
Bottle cap. B. F. Conner. Des. 88,452–3; Nov. 29.
Bottle cap and stopper. J. U. Duffy and J. H. Richards. Re18,669; Nov. 29.
Bottles, vessels, and the like, Filling and sealing. A. Böhmer and G. Gebhardt. 1,889,629; Nov. 29.
Bowl or similar article, Sugar. R. E. Patten. Des. 88,438; Nov. 29.
Box: *See*—
Paper box.
Bracket. W. L. Porter. 1,889,452; Nov. 29.
Bracket for clothes hangers. E. E. Wilt. 1,889,582; Nov. 29.
Brake: *See*—
Air hand brake. Fluid pressure brake.
Brake. E. G. Gunn. 1,889,093; Nov. 29.
Brake. J. Kennedy, jr. 1,889,444; Nov. 29.
Brake control, Manual. E. A. Nelson. 1,889,692; Nov. 29.
Brake rigging, Truck. E. Latshaw. 1,889,673; Nov. 29.
Brake testing machine, Auto. R. K. Cadwell. 1,889,735; Nov. 29.
Brush. P. Mednick. 1,889,211; Nov. 29.
Brush. E. C. Rosenberg. 1,889,182; Nov. 29.
Brush. O. U. Zerk. 1,889,394–5; Nov. 29.
Brush, Fountain. R. E. Beckert. 1,889,309; Nov. 29.
Brush, Fountain. J. W. Lysons. 1,889,446; Nov. 29.
Brush, Reversible resilient. J. I. Anderson. 1,889,029; Nov. 29.
Building stand. C. Morse. 1,889,561; Nov. 29.
Building structure. C. I. Auten. 1,889,512; Nov. 29.
Building structure. F. L. Green. 1,889,547; Nov. 29.
Cabinet, Portable dressing. C. Hala. 1,889,033; Nov. 29.
Calculating machine. C. Luttropp. 1,889,023; Nov. 29.
Calendar, Perpetual. H. C. Hanrott. 1,889,359; Nov. 29.
Canister for breathing apparatus, Purifying. R. H. Davis. 1,889,015; Nov. 29.
Cap for tubular bodies or cores. E. W. Bebie. 1,889,139; Nov. 29.
Caps for gasoline tanks, Closure. E. C. Blanchard. 1,889,056; Nov. 29.
Car end structure, Railway. H. W. Jones. 1,889,051; Nov. 29.
Car construction. A. Campbell. 1,889,170; Nov. 29.
Car construction, Dump. A. Campbell. 1,889,169; Nov. 29.
Car, Drop bottom. C. A. Griffith. 1,889,066; Nov. 29.
Car, Load discharging. A. Campbell. 1,889,171; Nov. 29.
Carbon black and making same. W. B. Wiegand and L. J. Venuto. 1,889,429; Nov. 29.
Carburetor. R. Malin. 1,889,126; Nov. 29.
Carburetor. M. Mennesson. 1,889,687; Nov. 29.
Carburetor of aircraft engines for insuring the regular engine working in inverted load condition. T. Zerbi. 1,889,304; Nov. 29.
Card, Die cut. E. G. Otten. 1,899,261; Nov. 29.
Card, Display. A. H. Games. 1,889,438; Nov. 29.
Card displaying or plant marking device. F. H. Fitzgerald. 1,889,281; Nov. 29.
Card, Hand. H. Midgley. 1,889,369; Nov. 29.
Card index system. D. A. Casey. 1,889,635; Nov. 29.
Card table with automatic dealing mechanism. L. Hammond. 1,889,729; Nov. 29.
Carpet. A. E. Smidlein. Des. 88,442; Nov. 29.

Carpet. J. S. Travis. Des. 88,443; Nov. 29.
Carrier: *See*—
Baggage carrier. Overhead carrier.
Carton. B. M. Williams. 1,889,581; Nov. 29.
Case: *See*—
Ecclesiastic ritual case. Electric vanity case.
Cash till with coin assorter. A. Godefroid. 1,889,472; Nov. 29.
Casing for light-signs and signaling apparatus. A. Löbl. 1,889,179; Nov. 29.
Casing or like article, Water heater. S. J. Lonergan. Des. 88,423; Nov. 29.
Catalytic materials, Preparing. G. H. B. Davis. 1,888,978; Nov. 29.
Catalyzer for the oxidation of ammonia with oxygen or with gases containing oxygen. I. W. Cederberg. 1,889,463; Nov. 29.
Catch, Door or window casement. W. C. Marshall and J. H. Turner. 1,889,681; Nov. 29.
Cement mortar, cement concrete and the like, Manufacture of a bituminous. A. J. De Lange. 1,889,437; Nov. 29.
Center. J. H. Smith. 1,889,502; Nov. 29.
Chain, Antiskid tire. G. E. Thimmes. 1,889,300; Nov. 29.
Chair: *See*—
Adjustable back chair. Lawn chair.
Charge forming device. J. H. Hunt. 1,889,069; Nov. 29.
Chime for metallic containers, Unitary. L. B. Wackman. 1,889,505; Nov. 29.
Chlorides, Apparatus for manufacturing volatile. R. J. McInerny, E. F. Williams, and H. L. Glase. 1,888,996; Nov. 29.
Chopper: *See*—
Food chopper.
Chuck, Earth boring. C. E. Reed. 1,889,217; Nov. 29.
Chuck, Mill. J. M. Redinger. 1,889,571; Nov. 29.
Cigarette and vanity case, Combination of. S. H. La Fontaine. Des. 88,422; Nov. 29.
Cigarette cutter, High speed. W. G. Forbes. 1,889,403–4; Nov. 29.
Cigarette package. R. P. Ware. 1,889,232; Nov. 29.
Cinder notch stopper. E. E. Brosius. 1,889,434; Nov. 29.
Circuit for railway signaling system, Trap. D. W. Mersereau. 1,889,450; Nov. 29.
Clamp: *See*—
Battery terminal clamp. Rod or pipe clamp.
Cleaner: *See*—
Suction cleaner.
Clevis. R. J. Langer. 1,889,204; Nov. 29.
Clip for writing instruments and making same. W. C. S. Mays. 1,889,037; Nov. 29.
Clock and radio case, Combined. W. F. Cox. Des. 88,406; Nov. 29.
Clutch control. H. H. Valpey. 1,889,186; Nov. 29.
Clutch, Friction. G. Pirinoli. 1,889,291; Nov. 29.
Clutch, Friction. H. V. Reed. 1,889,698; Nov. 29.
Cock, Ball. A. N. Pasman. 1,889,566; Nov. 29.
Coffee maker. A. Coors. 1,889,543; Nov. 29.
Coin controlled apparatus. E. Mihalek. 1,889,212; Nov. 29.
Collar stud and neck-tie retainer. E. Weiss. 1,889,839; Nov. 29.
Color photography. W. V. Kelley. 1,889,124; Nov. 29.
Combine. L. A. Paradise. 1,889,565; Nov. 29.
Commodity handling apparatus. J. T. Fletcher. 1,889,176; Nov. 29.
Compact. J. Glaenser. 1,889,471; Nov. 29.
Composition of matter. M. Darrin. 1,889,088; Nov. 29.
Compound of hexamethylenetetramine and diphosphoric acid and making same. E. Freund. 1,889,090; Nov. 29.
Compounds of the acridine series and making the same. W. Schulemann, F. M. Mietzsch, and A. Wingler. 1,889,704; Nov. 29.
Compressor apparatus. A. J. Courtois. 1,889,640; Nov. 29.
Compressor for internal combustion engines. P. Dugelay. 1,888,981; Nov. 29.
Condenser, Electrical. W. H. Priess. 1,889,569; Nov. 29.
Condenser, Electrolytic. R. D. Mershon. 1,889,416; Nov. 29.
Condenser, Electrostatic. S. Ruben. Re18,673; Nov. 29.
Condenser, Excited electrolytic. R. D. Mershon. 1,889,415; Nov. 29.
Container, Combination tissue. S. Berger. 1,889,012; Nov. 29.
Control device. C. T. Evans. 1,889,175; Nov. 29.
Control device for motor vehicles. L. V. Hass. 1,889,656; Nov. 29.
Control for the engines of multiple engine machines, Differential and simultaneous. C. Rosatelli. 1,889,295; Nov. 29.
Control of train movements, Method of and apparatus for. F. J. Sprague. 1,889,724; Nov. 29.
Control system. L. W. Thompson and E. H. Horstkotte. 1,889,616; Nov. 29.
Control system for fluid fuel burners of the hot wire ignition type. I. E. McCabe. 1,889,447; Nov. 29.
Control valve equipment for oil and gas wells. E. H. Schneider. 1,889,384; Nov. 29.
Converter. I. Hechenbleikner and N. Titlestad. 1,889,549; Nov. 29.
Conveyer, Furniture. G. L. Dahms. 1,889,274; Nov. 29.
Conveyer, Return damp work. C. V. Morris. 1,889,690; Nov. 29.
Conveyer roller. E. Drexler. 1,889,173–4; Nov. 29.
Cooler: *See*—
Water cooler.
Copper, containing disazodyestuffs. R. Stüsser and K. Wiedemann. 1,889,732; Nov. 29.
Cord severing implement. P. A. Klipstein. 1,889,333; Nov. 29.
Core catcher. R. J. Draper. 1,889,277; Nov. 29.
Corselet. E. Hart. 1,889,285; Nov. 29.
Coupler. S. M. Chase. 1,889,237; Nov. 29.
Coupling for typewriter line spacing wheels. S. Friedmann. 1,889,047; Nov. 29.
Cover. L. E. Lipschultz. 1,889,206; Nov. 29.
Cover and seat, Combined radiator. A. B. Modine. 1,889,370; Nov. 29.
Cover and support, Notebook. C. E. Rubicam, jr. 1,889,420; Nov. 29.
Cover closing for steam barrels, heating boilers and the like. H. Lange. 1,889,606; Nov. 29.
Cover, Seat. S. E. Hyman. 1,889,662; Nov. 29.
Creamer or similar article. R. E. Patten. Des. 88,437; Nov. 29.
Creasing apparatus. R. R. Bollman. 1,889,432; Nov. 29.
Crystal article, Method to produce. A. J. Throm. 1,889,390; Nov. 29.
Cup: *See*—
Flavor dispenser cup.
Current transformer, High-tension. G. Keinath and J. Schwemmer. 1,889,552; Nov. 29.
Cut-out and the like, High-tension. E. N. Nordhem. 1,889,213; Nov. 29.
Cutter: *See*—
Cigarette cutter.
Cutter. S. C. Atkinson. 1,889,624; Nov. 29.
Cutter head assembly for routing and other machine tools. G. Gorton. 1,889,653; Nov. 29.
Cylinder laundry machine. J. N. White. 1,889,008; Nov. 29.
Damper, Dome. J. B. Meyer. 1,888,999; Nov. 29.
Decalcomania. P. W. Marshburn. 1,889,484; Nov. 29.
Deck for automobiles, Loading. S. Hice. 1,889,736; Nov. 29.
Delivery device. H. Lange. 1,889,557; Nov. 29.
Delivery mechanism for article dispensing machines. L. H. Larsen and C. W. Nixon. 1,889,318; Nov. 29.
Dental impression wax composition. A. C. Antonucci. 1,889,622; Nov. 29.
Dental polisher. H. R. Priest. 1,889,494; Nov. 29.
Detergent. C. R. Hinchman. 1,889,658; Nov. 29.
Diagnostic instrument. E. D. Tillyer. 1,889,456; Nov. 29.
Dialing appliance. J. E. Wilson. 1,889,393; Nov. 29.
Discharging preparation. G. Reddelien, L. H. Lange, A. Fischesser, and H. Freund. 1,889,154; Nov. 29.
Dispensing device. L. G. Millis. 1,889,689; Nov. 29.
Display device. F. A. Marx. 1,889,207; Nov. 29.
Display device. R. C. Palicki. 1,889,002; Nov. 29.
Display stand. F. D. Barter. 1,889,625; Nov. 29.
Display stand. H. S. Best. Des. 88,394; Nov. 29.
Doll. A. B. Collins. Des. 88,399; Nov. 29.
Domestic appliance. R. L. Lee. 1,889,032; Nov. 29.
Door. F. V. Cooper. 1,889,638; Nov. 29.
Doors, Device for operating and controlling folding. J. G. Stoddard. 1,889,159; Nov. 29.
Double throw switch. H. J. Hammerly. 1,889,358; Nov. 29.
Draft controller, Electric. L. M. Persons. 1,889,613; Nov. 29.
Drainer, Dish. G. Kalenoff. 1,889,146; Nov. 29.
Drawbar for vehicles. F. V. Russell. 1,889,297; Nov. 29.
Drier attachment, Stocking. L. W. Galloway. 1,889,198; Nov. 29.
Drill: *See*—
Rock drill. Rotary and reciprocatory drill.
Drop wire hanger. J. H. Shope. 1,889,113; Nov. 29.
Dumping body. W. C. Anthony. 1,889,520; Nov. 29.
Duplicating device for typewriting machines. B. L. Henry. 1,889,657; Nov. 29.
Dye composition. L. Philippe. 1,889,491; Nov. 29.
Dyestuffs, and preparing them, Vat. W. Eckert and O. Braunsdorf. 1,889,279; Nov. 29.
Dynamometer and stroke meter, Computing and recording. F. W. Lake. 1,889,730; Nov. 29.
Ecclesiastic ritual case. F. J. de Jaco. 1,889,044; Nov. 29.
Eight cylinder engine, Manifolding. J. W. Swan 1,889,081; Nov. 29.
Electric furnace. C. R. Johnson. 1,889,665; Nov. 29.
Electric resistance furnace. L. Högel. 1,889,362; Nov. 29.
Electric switch. H. J. Hammerly. 1,889,515; Nov. 29.
Electric switch. R. Keller. 1,889,479; Nov. 29.
Electric switch. F. O. Kuhn. 1,889,334; Nov. 29.
Electric switch. G. J. Meuer. 1,889,259; Nov. 29.
Electric system for energising cutting electrodes. A. Mutscheller. 1,889,609; Nov. 29.
Electric vanity case. J. Hirsh. 1,889,143; Nov. 29.
Electric welding machine. G. A. Lutz. 1,889,413; Nov. 29.
Electrical capacitor. W. M. Bailey. 1,889,522; Nov. 29.
Electrical coil and manufacturing it. J. S. Bishop. 1,889,398; Nov. 29.

Electrical coil and manufacturing it. H. Schwartzmann. 1,889,421; Nov. 29.
Electrical contact pad. G. A. Zerne. 1,889,271; Nov. 29.
Electrical control system. F. D. Potter. 1,889,003; Nov. 29.
Electrical measuring instrument. I. W. Brogger. 1,889,310; Nov. 29.
Electrical measuring instrument. R. D. Hickok. 1,889,361; Nov. 29.
Electrical protective system. P. E. Cook. Re18,677; Nov. 29.
Electrical resistance device. E. N. Lightfoot. 1,889,445; Nov. 29.
Electrical resistance element, Making an. S. Ruben. 1,889,379; Nov. 29.
Electricity meter. R. Pudelko. 1,889,419; Nov. 29.
Electrode and applicator, Diathermic. G. A. Zerne. 1,889,272; Nov. 29.
Electrode for use in melting furnaces and forming the same. H. W. McIntosh. 1,889,516; Nov. 29.
Electrodes, Device for mounting and operating. A. Franchini and P. Girod. 1,889,282; Nov. 29.
Electrolytic rectifier. R. D. Mershon. 1,889,417; Nov. 29.
Electromagnetic device. F. A. Mitchell. 1,889,000; Nov. 29.
Electron discharge apparatus. K. C. De Walt. 1,889,595; Nov. 29.
Electron discharge device and manufacture. H. L. and R. M. Crowley. 1,889,087; Nov. 29.
Elevator control system. E. L. Gale. 1,889,312; Nov. 29.
Emulsions, Method of and apparatus for fibrating. E. O. Groskopf. 1,889,473; Nov. 29.
Engine: *See*—
Eight cylinder engine. Internal combustion engine.
Engine drive for aircraft propellers. T. Zerbi. 1,889,305; Nov. 29.
Engines, Method and apparatus for lubricating and operating internal combustion. P. A. White. 1,889,137; Nov. 29.
Engraving and other machine. G. Horner. 1,889,660; Nov. 29.
Envelope for balls of string for binding sheaves, Protecting. P. Baumhüter. 1,889,011; Nov. 29.
Esters of amino alcohols and process of manufacture, Aromatic. C. Mannich. 1,889,678; Nov. 29.
Excavating machine. H. C. Beckwith. 1,889,590; Nov. 29.
Expansion indicator. C. A. de Giers. 1,889,089; Nov. 29.
Expansion joint. R. R. Robertson. 1,889,498; Nov. 29.
Fabrics and articles containing organic derivatives of cellulose, Embossing. C. Dreyfus. 1,889,045; Nov. 29.
Fabrics, Embossing circular knit. C. Dreyfus. 1,889,062; Nov. 29.
Fabrics, Making. A. Unger. 1,889,783; Nov. 29.
Fabrics, Manufacture of new or improved. W. A. Dickie and H. Halkyard. 1,889,061; Nov. 29.
Fan. L. M. Persons. 1,889,567; Nov. 29.
Fastener, Hub cap. R. D. Hyatt. 1,889,070; Nov. 29.
Fastener, Separable. D. F. Dalton. 1,889,467; Nov. 29.
Fastener, Separable. R. C. Legat. 1,889,386; Nov. 29.
Fastener slide, Pronged. D. I. Reiter. 1,889,322; Nov. 29.
Fastening for wooden containers and making the same, Cover. R. G. Fessenden. 1,889,328; Nov. 29.
Feeder, Calf. R. E. Gardiner. 1,889,469; Nov. 29.
Fender, Ship's. C. T. Lyons. Re18,672; Nov. 29.
Fertiliser. R. Griessbach and H. Weiss. 1,889,654; Nov. 29.
Fertilizer. J. T. Travers and O. M. Urbain. 1,889,712; Nov. 29.
Fertilizer ingredient, Preparation of a. C. H. MacDowell. 1,889,125; Nov. 29.
Fibrous product and method of and apparatus for producing the same, Sized. G. F. Davis. 1,889,642; Nov. 29.
Fibrous sheet material, composition therefor and process of making. G. F. Davis. 1,889,643; Nov. 29.
Filaments and threads, Process and device for the direct production of. E. A. Murphy and D. F. Twiss. 1,889,102; Nov. 29.
Filling device. L. H. Lanier. 1,889,036; Nov. 29.
Film guiding mechanism. W. L. Wright. 1,889,084; Nov. 29.
Film in cinematograph, Device for the automatic stop of the. M. Couade. 1,889,465; Nov. 29.
Filter press. D. R. Sperry. 1,889,225; Nov. 29.
Firearm. C. C. Loomis. 1,889,099; Nov. 29.
Fireplace structure, Convertible. W. Naftal and M. Ensler. 1,889,103; Nov. 29.
Fires, Extinguishing chimney. B. P. M. Le Gouz de Saint Seine. 1,889,483; Nov. 29.
Flavor dispenser cup. W. Serr. 1,889,111; Nov. 29.
Flooring. S. J. Wolfson. 1,889,138; Nov. 29.
Floral display stand. T. L. Knipe. 1,889,669–70; Nov. 29.
Flotation process. M. Schiechel. 1,889,078; Nov. 29.
Flow meter. C. P. Sherwood. 1,889,705; Nov. 29.
Fluid equaliser for boilers. A. C. Outlaw. 1,889,698; Nov. 29.
Fluid pressure brake. A. Andrikidis. 1,889,326; Nov. 29.
Fluid pressure water system. P. H. Donovan. 1,889,120; Nov. 29.
Flying machine. H. J. Turner. 1,889,713; Nov. 29.
Foam distributing means. B. A. Moeller. 1,889,101; Nov. 29.
Foam products, Producing. H. Burmeister. 1,889,286; Nov. 29.
Folding machine. P. R. Glass. 1,889,242; Nov. 29.
Folding machine. J. Schmiedel. 1,889,574; Nov. 29.
Folding machine. H. A. W. Wood. 1,889,459; Nov. 29.
Folding table. C. G. Passanante. 1,889,694; Nov. 29.
Food chopper. W. R. Rush. 1,889,381; Nov. 29.
Foot feed, Double. H. McIntyre. 1,889,685; Nov. 29.
Form, Dress. N. Hoffman. 1,889,659; Nov. 29.
Fowl feather picking apparatus and process. O. W. Swanson. 1,889,228; Nov. 29.
Frame: *See*—
Tent frame. Window frame.
Frame for display containers. H. C. Brill. 1,889,346; Nov. 29.
Frequency meter. W. S. McClintock, jr. 1,889,128; Nov. 29.
Frequency stabilizing system. W. T. Wintringham. 1,889,083; Nov. 29.
Fuel distributing system, Pulverized. C. M. Stein. 1,889,299; Nov. 29.
Fuel, Engine. N. H. Gullander. 1,889,474; Nov. 29.
Fuel fumes, Apparatus for generating. C. O. Gross. 1,889,619; Nov. 29.
Fuel vaporizer. L. M. Fabbro. 1,889,648; Nov. 29.
Fuels, and for the cracking and hydrogenation of heavy hydrocarbons, Synthesis of hydrocarbon. J. Mercier. 1,888,998; Nov. 29.
Furnace: *See*—
Blast furnace. Glass melting furnace.
Electric furnace. Heat treating furnace.
Electric resistance furnace.
Fuse device, Vacuum. D. C. Prince. 1,889,497; Nov. 29.
Fuse, Multiple conductor. F. Zodrow and E. Schrank. 1,889,585; Nov. 29.
Game. W. K. Dingledine. 1,888,980; Nov. 29.
Game, Race. N. Bel Geddes. 1,889,531; Nov. 29.
Gas main stopper. G. S. Ankarlo. 1,889,621; Nov. 29.
Gases in gas mixtures, Apparatus for the determination of the contents of combustible. H. Grüss and B. Thiede. 1,888,984; Nov. 29.
Gasket. C. R. Hubbard and R. M. Waples. 1,889,144; Nov. 29.
Gasket, Refrigerator door. H. A. Greenwald. 1,889,489; Nov. 29.
Gasoline distributing apparatus. A. M. L. Tribout. 1,889,504; Nov. 29.
Gear for vehicles, Steering. A. Flettner. 1,889,728; Nov. 29.
Gear mechanism, Change speed. P. Riley. 1,889,700; Nov. 29.
Gear shift lever knob. J. S. Andrews. 1,889,118; Nov. 29.
Gearing for stokers. A. E. Weingartner. 1,889,718; Nov. 29.
Generator: *See*—
Motor generator. Steam generator.
Glass, Apparatus for melting. W. O. Amsler. 1,889,510; Nov. 29.
Glass melting furnace, Rotary. W. O. Amsler. 1,889,511; Nov. 29.
Glasses, Producing revivified ultraviolet transmitting. H. P. Hood. 1,889,067; Nov. 29.
Gold from solutions, Extracting. H. C. Parker. 1,889,489; Nov. 29.
Golf practicing apparatus. W. C. Jones and J. C. Pimm. 1,889,332; Nov. 29.
Governor. F. O. Singer. 1,889,706; Nov. 29.
Grader, Road. T. P. Wright. 1,889,722; Nov. 29.
Grain and roughage mill, Combined. J. E. Rosenfeld 1,889,183; Nov. 29.
Grain saver. G. Innes. 1,889,443; Nov. 29.
Grate. J. V. Guay. 1,889,548; Nov. 29.
Gravity, Apparatus for measuring relative values of. L. W. Blau. 1,888,976; Nov. 29.
Grease interceptor. J. Heinkel. 1,889,601; Nov. 29.
Grille for automobile radiators, Ornamental. O. J. Groehn. 1,889,440; Nov. 29.
Grinding mechanism. F. J. Jeschke. 1,889,664; Nov. 29.
Grooves in the ends of tubular articles, Forming. W. A. Tryon. 1,889,324; Nov. 29.
Guard, Road. C. V. Clark, jr. 1,889,636; Nov. 29.
Guide mechanism for cotton pickers. W. R. Willett and H. E. Brown. 1,889,580; Nov. 29.
Guide, Saw. R. L. Coble. 1,889,464; Nov. 29.
Gun for concrete or plastic materials, Continuous feed. C. F. Kelley. 1,889,480; Nov. 29.
Gun, Mud. E. E. Brosius. 1,889,433; Nov. 29.
Gunpowder, Producing smokeless. E. Baszlewicz-Kniaszykowski and K. Partyka. 1,889,462; Nov. 29.
Hair drying apparatus. G. W. Peterson. 1,889,838; Nov. 29.
Hair straightening device. A. J. Navarre de Requesens. 1,889,691; Nov. 29.
Hair waver. B. A. Sterling. 1,889,227; Nov. 29.
Hair waving device. M. Widerman. 1,889,166; Nov. 29.
Hammer mill. C. Nielsen. 1,889,129; Nov. 29.
Hand bag. B. R. Thornhill. 1,889,389; Nov. 29.
Handle: *See*—
Basket handle.
Hanger: *See*—
Drop wire hanger. Swing hanger.
Hanger. R. B. Shoemaker. 1,889,112; Nov. 29.

Hats, Apparatus for cleaning. F. R. Kling. 1,889,668; Nov. 29.
Headlight. A. J. Matter. 1,888,995; Nov. 29.
Headlight. O. Werner. Des. 88,447; Nov. 29.
Heat-energy system. J. J. Grebe. 1,889,586; Nov. 29.
Heat from waste water, Apparatus for recovering. A. T. Shepherd and D. E. Sergeant. 1,889,156; Nov. 29.
Heat treating furnace. F. T. Cope. Re18,668; Nov. 29.
Heater: *See*—
Manila hemp heater. Solar heater.
Heater and ventilator, Unit. E. L. Anderson. 1,889,588; Nov. 29.
Heel and heel covering and making the same. G. H. Heys. 1,889,245; Nov. 29.
Heel-breast-flap-trimming machine. N. H. Knowlton. 1,889,249; Nov. 29.
Heel seats of shoes, Method of and machine for forming. A. Bates. 1,889,234; Nov. 29.
Helmet. E. Cairns. 1,889,537; Nov. 29.
Hoe. L. T. Kaipust. 1,889,286; Nov. 29.
Hog controller. F. Stanley. 1,889,115; Nov. 29.
Hoist and crowd combined control system for electric shovels. H. S. Jacobs. 1,889,035; Nov. 29.
Holder, Cologne. J. S. Mills. 1,889,075; Nov. 29.
Holder, Cow-tail. C. R. Aarestad. 1,889,010; Nov. 29.
Holder, Iron. H. E. Riffey. 1,889,110; Nov. 29.
Holder, Roll. W. H. Marsh. 1,889,024; Nov. 29.
Holder, Soap. A. C. Schnake. 1,889,501; Nov. 29.
Holder, Writing instrument. J. W. Fitz Gerald. 1,889,402; Nov. 29.
Holding means for glass globes. G. J. Willman. 1,889,720; Nov. 29.
Humidifier, Internal combustion engine. M. E. Zimmerer. 1,889,584; Nov. 29.
Humidifying apparatus. E. L. Fonseca, E. M. Hunt, and M. C. Barnum. 1,889,017; Nov. 29.
Hydrocarbons, Chlorinating. J. Söll and C. Runkel. 1,889,157; Nov. 29.
Hydrogen, Manufacture of. J. S. Beekley. 1,889,530; Nov. 29.
Hydrogen manufacture. A. T. Larson. 1,889,672; Nov. 29.
Hydrogen, Releasing nascent. O. M. Urbain. 1,889,714; Nov. 29.
Ice scoring machine. J. H. Schreiber. 1,889,222; Nov. 29.
Igniter for gas burners. W. F. Baresch. 1,889,589; Nov. 29.
Imino-ethers, Manufacturing. G. F. Schmidt, and P. Zutavern. 1,889,323; Nov. 29.
Indicator: *See*—
Expansion indicator.
Induction system for internal combustion engines. J. Pavlecka. 1,889,262; Nov. 29.
Ink-repellent surfaces on mercury printing plates, Renewing. H. Renck. 1,889,374–5; Nov. 29.
Insecticide. F. B. McLane. 1,888,997; Nov. 29.
Instrument for graphic control. E. Ssepesi. 1,889,006; Nov. 29.
Insulating casing condenser assembly. E. J. Cowan. 1,889,544; Nov. 29.
Insulator, Bee hive. E. J. Siemers. 1,889,184; Nov. 29.
Insulator, Noninterfering. K. A. Hawley. 1,889,244; Nov. 29.
Interlocking system for railroads. J. E. Stephenson. 1,889,708; Nov. 29.
Internal combustion engine. F. M. Dainton. 1,889,641; Nov. 29.
Internal combustion engine. J. C. Fredricksen 1,889,650; Nov. 29.
Internal combustion engine. L. M. Woolson. 1,889,583; Nov. 29.
Iodine preparation. W. H. Engels. 1,889,195; Nov. 29.
Iron and metal structures, Refractory covering. H. B. S. de La Roche. 1,889,644; Nov. 29.
Ironing board. F. J. Sellentin. 1,889,155; Nov. 29.
Jack: *See*—
Ratchet jack.
Jar: *See*—
Rotary jar.
Joint: *See*—
Expansion joint. Universal joint.
Pipe joint. Wall board joint.
Trimming joint.
Joint for stove pipes, Extension. R. H. Talley, and C. L. Pritchett. 1,889,711; Nov. 29.
Journal box sealing device. L. D. Grisbaum, W. L. Dwyer, and E. S. Pearce. 1,889,407; Nov. 29.
Key cutting apparatus. H. Hansen. 1,889,461; Nov. 29.
Kit, Shaving brush. H. R. Priest. 1,889,496; Nov. 29.
Knitted fabric. M. Zwicky. Des. 88,451; Nov. 29.
Lamp and stand, Combination. R. E. Mathiasen. 1,889,682; Nov. 29.
Lamp body. A. F. Pieper. Des. 88,439; Nov. 29.
Lamp, Electric signal. C. Adler, jr. 1,889,725; Nov. 29.
Lamp, Incandescent electric. J. Force. 1,889,598; Nov. 29.
Lather forming means. R. H. Wager. 1,889,164; Nov. 29.
Lawn chair. C. Ernst. 1,889,646; Nov. 29.
Leather shaving machine. F. Wayland. 1,889,028; Nov. 29.
Light and signal, Combined. S. F. Arbuckle. 1,889,623; Nov. 29.
Light control for photographic printing machines. A. L. Adatte. 1,889,306; Nov. 29.
Light control, Signal. J. and A. Hollins. 1,889,551; Nov. 29.
Light intensity control mechanism, Projection. I. Marks. 1,880,149; Nov. 29.
Lighter, Pocket. L. V. Aronson. 1,889,342; Nov. 29.
Lighting fixture. J. H. Patterson. 1,889,288; Nov. 29.
Lining, Tunnel or conduit. J. F. O'Rourke. 1,889,563; Nov. 29.
Liquids, Device for measuring. E. Hurlbrink. 1,889,096; Nov. 29.
Lock: *See*—
Window sash lock.
Lock. F. W. McFarland. 1,889,210; Nov. 29.
Lock. J. H. Shaw. 1,889,454; Nov. 29.
Locking device for road forms or rails, Stake. H. E. Holford. 1,889,329; Nov. 29.
Locking end stop for fasteners. R. C. Legat. 1,889,337; Nov. 29.
Locomotive. A. J. Townsend. 1,889,392; Nov. 29.
Log retaining and unloading device. T. L. R. Cooper. 1,888,973; Nov. 29.
Loom. K. Mutter. 1,889,076; Nov. 29.
Loom. P. Schmidt. 1,889,500; Nov. 29.
Lubricant. H. T. Bennett. 1,889,168; Nov. 29.
Lubricant, Feeding. F. C. Blanchard. 1,889,235; Nov. 29.
Lubricating composition containing sulphonates. A. E. Becker. 1,888,974; Nov. 29.
Lubricating device for internal combustion engines with inverted cylinders. G. Pirinoli. 1,889,290; Nov. 29.
Lubrication, Chassis. J. Bijur. 1,888,970; Nov. 29.
Lubrication system for sleeve valve engines. W. S. Fisher. 1,888,971; Nov. 29.
Lubricator. L. K. Hoss. 1,889,068; Nov. 29.
Machine for closing containers. E. Craig. 1,889,193; Nov. 29.
Machine for cutting grain kernels from an ear of corn and cutting blades therefor. R. Cover. 1,889,057; Nov. 29.
Machine for inserting fastenings. F. C. Eastman. 1,889,194; Nov. 29.
Machine for shaping uppers over lasts. W. T. B. Roberts. 1,889,265; Nov. 29.
Machine for use in making boxes. K. W. Reed. 1,889,181; Nov. 29.
Magnesium hydrate tablets and making the same. W. C. McGowan. 1,889,366; Nov. 29.
Magnetic separator. W. C. Buttron. 1,889,349; Nov. 29.
Mandrel guide, Push bench. M. Peters. 1,889,320; Nov. 29.
Manganous compounds, Recovery of. K. A. Kobe. 1,889,021; Nov. 29.
Manifold construction. H. T. Thomas and A. L. Kimball. 1,889,270; Nov. 29.
Maps from air photographs, Apparatus for plotting. A. Barr. 1,889,042; Nov. 29.
Marker, Label. A. F. Hoffman. 1,889,246; Nov. 29.
Marking machine. F. Kohnle. 1,889,250; Nov. 29.
Masonry wall and wall unit. E. W. Ranck. 1,889,690; Nov. 29.
Massaging device. M. C. Blondin. 1,889,345; Nov. 29.
Match packet. R. S. Pullen. 1,889,180; Nov. 29.
Material handling means. W. C. Anthony and L. Wachter. 1,889,521; Nov. 29.
Material rack. C. C. Gates. 1,889,546; Nov. 29.
Materials, Conveying fine-grained. M. Vogel-Jorgensen. 1,889,163; Nov. 29.
Materials, Method and apparatus for pulverising. W. De Coursey. 1,889,436; Nov. 29.
Measuring apparatus. F. Wende. 1,889,719; Nov. 29.
Meat frencher. J. E. Bruce. 1,889,192; Nov. 29.
Meat hasher. T. P. Middleton. 1,889,688; Nov. 29.
Medical douche. G. L. Sorensen. 1,889,425; Nov. 29.
Metal blooms, Cooling centrifugally cast hollow. W. Koehn. 1,889,671; Nov. 29.
Metal complex compound. H. Schmidt. 1,889,383; Nov. 29.
Metal heading machine. J. E. Pracny. 1,889,004; Nov. 29.
Meter: *See*—
Electricity meter. Multiple rate meter.
Flow meter. Wet gas meter.
Frequency meter.
Milk draining tube. J. C. Bowen. 1,889,977; Nov. 29.
Mill: *See*—
Grain and roughage mill. Hammer mill.
Mirror and illuminating device, Combination. A. S. Ansell. 1,889,085; Nov. 29.
Mixer. B. F. Lee. 1,889,558; Nov. 29.
Mold for manufacturing hollow bodies of cement by the centrifugal method. G. Walter. 1,889,428; Nov. 29.
Mop head. H. Hertzberg. 1,888,956; Nov. 29.
Motor generator. W. E. Masterson and H. Price. 1,889,208; Nov. 29.
Mounting for camera tilting heads, Handle. G. A. Mitchell. 1,889,260; Nov. 29.
Mower. J. H. Todd. 1,889,391; Nov. 29.
Mower, Lawn. H. R. Rogers. 1,889,573; Nov. 29.
Multiple rate meter. I. C. Bushong. 1,889,682; Nov. 29.

Musical instrument, Fretted stringed. A. Larson. 1,889,408; Nov. 29.
Nitro-β-hydroxypyridine and nitro-β-hydroxyalkylpyridine and preparing them. O. Wulff. 1,889,303; Nov. 29.
Nozzle, Multiple blast. L. D. Peik. 1,889,132; Nov. 29.
Nozzle, Pouring. H. E. Barroll. 1,889,529; Nov. 29.
Nozzle, Spray. J. E. Holveck. 1,889,201; Nov. 29.
Oil and producing the same, Lubricating. E. R. Lederer. Re18,676; Nov. 29.
Oil well surveying instrument. W. M. Smith and K. W. Haley. 1,889,114; Nov. 29.
Oils, Apparatus for cracking hydrocarbon. A. E. Harnsberger and C. L. Smith. 1,889,199; Nov. 29.
Oils, Treatment of hydrocarbon. M. Smith. 1,889,388; Nov. 29.
Oiler, Spring. E. E. Cronenweth and C. G. Hamer. 1,889,048; Nov. 29.
Opener, Can. J. H. Brocksmith. 1,889,119; Nov. 29.
Operating mechanism for ruling pen gates. A. Broadmeyer. 1,889,726; Nov. 29.
Optical apparatus. C. W. Hansell. 1,889,284; Nov. 29.
Organic compounds, Manufacturing. C. Krauch and K. Hochschwender, and W. Schunck. 1,889,251; Nov. 29.
Oven, Baker's. P. J. Campbell. 1,889,141; Nov. 29.
Overhead carrier. A. H. Neller. 1,889,610; Nov. 29.
Packages, Wrapping. L. Benoit and E. J. Kanabay. 1,889,534; Nov. 29.
Packing and forming the same. C. D. McPherson. 1,889,287; Nov. 29.
Packing and process. H. S. Walker. 1,889,165; Nov. 29.
Packing, Water pump W. M. Baumheckel. 1,889,397; Nov. 29.
Pad: *See*—
Electrical contact pad.
Pad and flash light, Combination writing. L. Pereira. 1,889,373; Nov. 29.
Pad for desk telephones, Memorandum. S. Kahn. 1,889,666; Nov. 29.
Padding for laundry machinery, Resilient. W. Jack. 1,889,050; Nov. 29.
Paint applying machine. E. W. Little. 1,889,676; Nov. 29.
Pan: *See*—
Air pressure dry pan.
Panel, Oil-immersed distributing. H. G. Baxter. 1,889,308; Nov. 29.
Paper box. F. J. Schleicher. 1,889,134; Nov. 29.
Paper, Coloring. W. H. Grogan and F. C. Ladd. 1,889,020; Nov. 29.
Paper pasting machine, Wall. R. I. Mann. 1,889,127; Nov. 29.
Parachutes for aeroplanes, Safety. M. J. Nouslakis. 1,889,038; Nov. 29.
Paraffin wax and the like, Apparatus for spraying. T. Watson. 1,889,507; Nov. 29.
Patterning mechanism for knitting machines. T. C. Bromley and A. Shortland. 1,889,631; Nov. 29.
Pecan. W. H. Brake. Pl. Pt. 47; Nov. 29.
Pencil, Magazine. A. Hirth. 1,889,550; Nov. 29.
Photo-electric tube. F. A. Berg and W. W. Harper. 1,889,431; Nov. 29.
Photography with bi-packs, Multicolor. J. A. Ball. 1,889,030; Nov. 29.
Photophonograms, Method of and apparatus for making. S. A:son Berglund. 1,889,627; Nov. 29.
Piano instruction device. G. O. Pierce. 1,889,418; Nov. 29.
Pimientos, Treatment of. J. H. Jones. 1,889,123; Nov. 29.
Pin ejector, Crosshead. C. A. Shaffer. 1,889,135; Nov. 29.
Pipe: *See*—
Tobacco pipe.
Pipe cleaning device. S. O. Mattison. 1,889,098; Nov. 29.
Pipe device. F. Hollman. 1,889,200; Nov. 29.
Pipe joint. J. F. Kirby. 1,888,988 Nov. 29.
Pipe sections with respect to the couplings therefor, Locking plain end. G. H. Pfefferle. 1,889,133; Nov. 29.
Piston cooling for combustion power engines. G. Pielstick. 1,889,492; Nov. 29.
Piston for internal combustion engines. L. A. Seger. 1,889,387; Nov. 29.
Piston lubrication for pumps, Reciprocating. J. Boerlage. 1,889,591; Nov. 29.
Piston, Pump. C. Lamb. 1,889,178; Nov. 29.
Piston ring. C. A. Marien. 1,888,994; Nov. 29.
Piston rings, Apparatus for slotting. D. M. Solenberger. 1,889,267; Nov. 29.
Pits from prunes, Method of and apparatus for removing. T. W. W. Forrest and T. O. L. Smith. Re18,675; Nov. 29.
Plane girder for aeroplanes, Triangular. C. Rosatelilk. 1,889,294; Nov. 29.
Plastic compound. V. Scholz. 1,889,702; Nov. 29.
Plow. P. I. Ledoux. 1,889,097; Nov. 29.
Polishing wheel. P. A. Solem. 1,889,040; Nov. 29.
Pothead. J. Rah. 1,889,570; Nov. 29.
Power plant, Elastic fluid. P. Dettenborn. 1,889,594; Nov. 29.
Power transmission mechanism. C. W. Hansen. 1,889,600; Nov. 29.
Press: *See*—
Filter press. Punch press.
Press intensifier, Automatically controlled hydraulic. F. Kurath. 1,888,990; Nov. 29.
Presser, Necktie. G. R. Soulé. 1,889,041; Nov. 29.
Pressure regulator, Automatic. V. W. Leonard. 1,889,607; Nov. 29.
Priming composition. E. von Herz and H. Rathsburg. 1,889,116; Nov. 29.
Printing spots, Procedure for freshening up amalgamated. H. Renck. 1,889,376; Nov. 29.
Projector. J. Pierron. 1,889,696; Nov. 29.
Propeller, Aircraft. W. F. Warfel. 1,889,717; Nov. 29.
Protecting means, Pothead and conductor. G. P. Edmonds. 1,889,545; Nov. 29.
Protective apparatus for furnaces. N. B. Jones. 1,889,604; Nov. 29.
Protective gap for electrical equipment. R. B. Ashbrook, M. Macferran, R. E. Quanstrom, and B. F. Dengler. 1,889,086; Nov. 29.
Protector, Bandit-proof window. F. R. King. 1,889,317; Nov. 29.
Protector, Hosiery. S. H. Walker. 1,889,716; Nov. 29.
Protector, Ignition switch. C. L. Bahnyak. 1,889,343; Nov. 29.
Protractor and spirit level, Combined. A. W. Johnson. 1,889,145; Nov. 29.
Pulverized substances, Method of and apparatus for transporting. W. H. Moulthrop. 1,889,562; Nov. 29.
Pump combination. A. M. Babitch. 1,889,396; Nov. 29.
Pump for gasoline and the like, Dispensing. A. C. Smith. 1,889,455; Nov. 29.
Pump, Fuel. A. C. Roessler. 1,889,517; Nov. 29.
Pump or compressor. P. Zens. 1,889,508; Nov. 29.
Punch press. E. Sass. 1,889,382; Nov. 29.
Rack: *See*—
Aerofoil-carrying rack. Material rack.
Rack and pan, Combination. A. J. Reedy. 1,889,218; Nov. 29.
Radiator hood. P. E. Schleicher and W. C. Calcott. 1,889,220; Nov. 29.
Radiator shutter operator. D. Schon. 1,889,703; Nov. 29.
Radio apparatus for aircraft, Universally adjustable. G. W. Eckard. 1,889,568; Nov. 29.
Radio receiving system. A. B. Cole. 1,889,172; Nov. 29.
Radio signaling system. P. C. Ricchiardi. 1,889,292; Nov. 29.
Rail joint lubricating device. F. M. Graham. 1,889,313; Nov. 29.
Rake. J. E. Larson. 1,888,991; Nov. 29.
Ratchet jack. F. H. Schwerin. 1,889,386; Nov. 29.
Razor, Safety. E. W. Ericsson. 1,889,401; Nov. 29.
Razor, Safety. D. S. Mills. 1,889,100; Nov. 29.
Rectifying apparatus. L. F. Perrott. 1,889,612; Nov. 29.
Reflector. L. A. Bean. 1,889,188; Nov. 29.
Refrigerating machine. A. P. Anderson. 1,889,341; Nov. 29.
Refrigerating system. A. Baumann. 1,889,191; Nov. 29.
Refrigeration, Apparatus and method for. C. E. Rorrer and A. R. Mitterer. 1,889,499; Nov. 29.
Refrigerator. H. H. McKee. 1,889,686; Nov. 29.
Refrigerator. W. C. O'Leary. 1,889,214; Nov. 29.
Register. H. A. Foothorap. Re18,674; Nov. 29.
Regulating mechanism. O. N. Bryant. 1,889,535; Nov. 29.
Regulator: *See*—
Pressure regulator.
Reheating in a power plant, System of. K. Baumann. 1,889,307; Nov. 29.
Resinates, Producing water-soluble. E. H. French. 1,889,405; Nov. 29.
Resistance unit. D. O. Whelan. 1,889,618; Nov. 29.
Ring: *See*—
Piston ring.
Rock drill, Dustless. J. F. Shook. 1,889,422; Nov. 29.
Rod or pipe clamp. F. Brandt. 1,889,592; Nov. 29.
Rodent exterminator, Domestic. L. W. V. Dorrien. 1,889,276; Nov. 29.
Roll, Self-adjusting feed. H. M. Barber. 1,889,523–8; Nov. 29.
Roller: *See*—
Conveyer roller.
Roller conveyer for glass plates. L. von Reis. 1,889,082; Nov. 29.
Roof structure for railway cars. G. G. Gilpin. 1,888,983; Nov. 29.
Rose, Variety of. E. J. Le Duc. Pl. Pt. 45; Nov. 29.
Rotary and reciprocatory drill, Combined. J. F. Haas. 1,889,441; Nov. 29.
Rotary jar. J. A. Francis. 1,889,283; Nov. 29.
Rotary tank. W. O. Amsler. 1,889,509; Nov. 29.
Rotoplane. J. J. Leray. 1,889,255; Nov. 29.
Roundabout. G. P. V. Kurz. 1,889,253; Nov. 29.
Rubber product and manufacturing same, Age resisting vulcanized. J. R. Ingram. 1,889,331; Nov. 29.
Rubber treatment. J. A. Bertsch. 1,889,327; Nov. 29.
Running board for railway cars. J. R. Jones. 1,889,605; Nov. 29.
Safety control system for hot wire ignition in fluid fuel burners. I. E. McCabe. 1,889,448; Nov. 29.
Safety device for rock drills. E. B. Lear. 1,889,409; Nov. 29.
Safety surface for aerofoils. S. E. Hitt. 1,889,477; Nov. 29.
Safety switch. B. W. Bell. 1,889,344; Nov. 29.
Salt, Solid diazoazometal halide double. K. Schnitzspahn. 1,889,298; Nov. 29.
Sand core for casting metal and making same. B. F. Wallace. 1,889,007; Nov. 29.

Scarf. F. Ortell. Des. 88,478; Nov. 29.
Scarf or similar article, Lace. H. W. Hucknall. Des. 88,468; Nov. 29.
Screw holding attachment for screw drivers. H. C. Humes and G. L. Robinson. 1,889,330; Nov. 29.
Seal, Bag. R. D. Osteen. 1,889,001; Nov. 29.
Seal, Liquid. P. Herber. 1,889,360; Nov. 29.
Seat top, Auxiliary. G. E. Grimm. 1,889,356; Nov. 29.
Sectional boiler. P. M. Lukomske. 1,889,412; Nov. 29.
Separator: *See*—
Magnetic separator.
Sewing machine. F. Ricks and W. T. Minett. 1,889,025; Nov. 29.
Shade control, Window. R. E. Cotton. 1,889,689; Nov. 29.
Shaker, Condiment. H. S. Davis. 1,889,593; Nov. 29.
Sharpener, Blade. H. C. Bowden. 1,889,630; Nov. 29.
Sheet directing means. A. Broadmeyer. 1,889,513; Nov. 29.
Sheet material, Apparatus for the treating of. H. A. Woodhead and M. R. Kelly. 1,889,009; Nov. 29.
Sheet straightening conveying mechanism. F. L. Cross. 1,889,358; Nov. 29.
Sheets in sheet-handling machines, Method and mechanism for opening. O. Kleinschmidt and E. Klemm. 1,889,364; Nov. 29.
Shingles, Composition. N. P. Harshberger. 1,889,121; Nov. 29.
Shock absorber. M. Fieldman. 1,889,354; Nov. 29.
Shock absorber for cars. H. Fromm. 1,889,197; Nov. 29.
Shoe shining apparatus. L. Angyal. 1,889,620; Nov. 29.
Shoe, Sport. M. C. Stevenson. 1,889,734; Nov. 29.
Shoes, Adjustable spur plate for. H. W. Forbes and E. Mitchell. 1,889,649; Nov. 29.
Shoes, Making. E. P. Libby. 1,889,205; Nov. 29.
Sieves for cellulose digesters and the like, Arrangement in. T. Samson. 1,889,731; Nov. 29.
Signaling system, Selective. H. E. Hershey. 1,889,985; Nov. 29.
Silver coating of galvanically silvered spoons and forks, Method and mold for the local strengthening of the. H. Krüger. 1,889,147; Nov. 29.
Sintering machine pallet and grate bar. H. K. Najarian. 1,889,052; Nov. 29.
Sintering of metalliferous materials. G. F. Weaton and H. K. Najarian. 1,889,055; Nov. 29.
Sled. W. C. Warren. 1,889,578; Nov. 29.
Slicing machine. W. J. Campbell. 1,889,538–42; Nov. 29.
Slider. R. C. Legat. 1,889,385; Nov. 29.
Slipper, Ballet. J. J. Domahoski. 1,889,275; Nov. 29.
Snow plow, Power. J. B. Woodbury and G. C. Soule. 1,889,269; Nov. 29.
Soil, Filling voids in. J. B. Goldsborough. 1,889,599; Nov. 29.
Solar heater. W. F. Clark. 1,889,238; Nov. 29.
Sole pressing machine. R. J. King and R. A. Blake. 1,888,987; Nov. 29.
Sound locator. F. R. House. 1,889,863; Nov. 29.
Sound wave apparatus. C. W. Rice. 1,889,614; Nov. 29.
Sound waves, Device and method for recording. S. Ruben. 1,889,380; Nov. 29.
Spool, Winding. C. K. Dunlap. 1,889,278; Nov. 29.
Spoon or similar article. J. Kern. Des. 88,420; Nov. 29.
Spring connection for vehicles. H. D. Church. 1,889,399; Nov. 29.
Spring structure. C. S. Reed. 1,889,264; Nov. 29.
Spring structure, Cushion. C. S. Reed. 1,889,263; Nov. 29.
Springing for vehicles. M. Wagner. 1,889,506; Nov. 29.
Springing system for power driven vehicles. H. Kratky. 1,888,989; Nov. 29.
Sprinkler. A. S. Lyndon. 1,889,257; Nov. 29.
Stabilized composition. G. D. Patterson. 1,889,130; Nov. 29.
Stand: *See*—
Building stand. Floral display stand.
Display stand.
Stands for lawn mowers, Display. L. B. Roth. 1,889,878; Nov. 29.
Staple forming and inserting machine. C. A. Robinson. 1,889,219; Nov. 29.
Stay for citrus fruit boxes, Compression. J. L. George. 1,889,092; Nov. 29.
Steam chest construction for steam turbines. F. W. Kennedy. 1,889,554; Nov. 29.
Steam generating and superheating. J. E. Bell. 1,889,031; Nov. 29.
Steam generating and superheating apparatus. J. E. Bell. 1,889,975; Nov. 29.
Steam generating system. H. J. Kerr. 1,889,071; Nov. 29.
Steam generator. H. J. Kerr. 1,889,072; Nov. 29.
Steam generator. J. Kölling. 1,889,074; Nov. 29.
Steel having a high yield point and a good notch toughness. A. Klinkenberg. 1,889,482; Nov. 29.
Steering means for snowplows. W. E. Klauer. 1,889,667; Nov. 29.
Stereotype printing plate. H. A. W. Wood. 1,889,460; Nov. 29.
Still. H. I. Lea. 1,889,254; Nov. 29.
Stoker, Inside feeder. N. M. Lower, D. F. Crawford and E. A. Turner. 1,889,411; Nov. 29.
Stoker, Locomotive. N. M. Lower. 1,889,410; Nov. 29.
Stoker, Locomotive. E. A. Turner. 1,889,518–19; Nov. 29.
Stopper: *See*—
Cinder notch stopper. Gas main stopper.
Stopper and dropper, Combination screw cap bottle. L. J. Mazoyer. 1,889,209; Nov. 29.
Strainer. R. S. Whaley. 1,889,325; Nov. 29.
Strawberry. O. C. Cordrey. Pl. Pt. 46; Nov. 29.
Stretcher, Pelt or fur. C. E. Carroll. 1,889,634; Nov. 29.
Stretcher, Shoe. G. Guiffre. 1,889,357; Nov. 29.
Stretching device particularly applicable to thin phonographic disks. A. A. Penteado. 1,889,289; Nov. 29.
Strip, Expansion. P. Galassi. 1,889,651; Nov. 29.
Stroboscopic apparatus. H. W. Lord. 1,889,608; Nov. 29.
Substances of which soap is a constituent, Distillation of mixed. W. Gensecke. 1,889,652; Nov. 29.
Suction cleaner. D. G. Smellie. 1,889,224; Nov. 29.
Suit for female wear, Combination gymnasium. M. J. Rosenberg. 1,889,701; Nov. 29.
Sulphates, Making metallic. S. S. Svendsen. 1,889,710; Nov. 29.
Supercharger. G. C. Goode. Re18,671; Nov. 29.
Support. H. T. Russell. 1,889,077; Nov. 29.
Support, Adjustable tool. A. J. Kilmer. 1,889,248; Nov. 29.
Supporting means for conveying and transporting vehicles. H. Runte. 1,889,296; Nov. 29.
Swing hanger. O. H. Stotler. 1,889,709; Nov. 29.
Switch: *See*—
Double throw switch. Safety switch.
Electric switch. Tread switch.
Switch. P. E. Cook. 1,889,514; Nov. 29.
Switch mechanism. J. Erickson. 1,889,240; Nov. 29.
Switch mechanism, Electric. F. L. Cook. 1,889,637; Nov. 29.
Switch operating apparatus, Railway. E. G. Little. 1,889,022; Nov. 29.
Switch operating mechanism. R. Popp. 1,889,215; Nov. 29.
Table: *See*—
Folding table.
Table or similar article, Dressing. V. Hagopian. Des. 88,405; Nov. 29.
Table tap. C. M. Petersen. 1,889,695; Nov. 29.
Table top. C. W. Greenhill. 1,889,355; Nov. 29.
Take-off and conveyer mechanism for intermittent sheet glass forming machines. E. Gentil. 1,889,065; Nov. 29.
Tank: *See*—
Rotary tank.
Tanks and the like, Device and apparatus for cleaning. J. J. Johnston. 1,889,603; Nov. 29.
Target, Aim registering. J. C. Karnes. 1,889,202; Nov. 29.
Telemetering method and apparatus. A. S. Fitz Gerald. 1,889,597; Nov. 29.
Telephone. V. S. Tharp. 1,889,229; Nov. 29.
Telephone direction plate. G. A. Long. 1,889,737; Nov. 29.
Telephone plant. D. C. Crowe. 1,889,466; Nov. 29.
Telephone system. J. F. McElholm. 1,889,683; Nov. 29.
Telephone system. J. E. Ostline, R. Taylor, and C. E. Beale. 1,889,564; Nov. 29.
Telephone system. E. S. Peterson. 1,889,107; Nov. 29.
Telescope, Aiming. I. Pechan and J. Schier. 1,889,151; Nov. 29.
Television receiver. E. F. W. Alexanderson. 1,889,587; Nov. 29.
Television receiver. C. D. Fahrney. 1,889,727; Nov. 29.
Temperatures of moving bodies, Method of and apparatus for indicating. P. B. Schuster. 1,889,385; Nov. 29.
Tension for the warp in looms for weaving, Insuring a constant or desired let-off. S. A. Shorter. 1,889,266; Nov. 29.
Tent frame. C. C. Chittim. 1,888,972; Nov. 29.
Textile fabric. P. Mouton. Des. 88,490–1; Nov. 29.
Textile fabric. P. A. Vogelman. Des. 88,491; Nov. 29.
Textile fabric or a similar article, Embroidered. E. W. Freudenberg. Des. 88,407; Nov. 29.
Textile fabric or similar article. E. L. Brown. Des. 88,395–6; Nov. 29.
Textile fabric or similar article. M. Christen. Des. 88,397; Nov. 29.
Textile fabric or similar article. C. R. Hellman. Des. 88,408–19; Nov. 29.
Textile fabric or similar article. C. R. Hellman. Des. 88,464–7; Nov. 29.
Textile fabric or similar article. A. W. Kohut. Des. 88,421; Nov. 29.
Textile fabric or similar article. A. W. Kohut. Des. 88,470; Nov. 29.
Textile fabric or similar article. H. S. Murray. Des. 88,432–4; Nov. 29.
Textile fabric or similar article. J. Overmeyer. Des. 88,435; Nov. 29.
Textile fabric or similar article. J. Overmeyer. Des. 88,479; Nov. 29.
Textile fabric or similar article. W. Willhelm. Des. 88,448–50; Nov. 29.
Textile fabric or similar article of manufacture. A. J. Heinke. Des. 88,455–63; Nov. 29.
Textile fabric or similar article of manufacture. F. Johnson. Des. 88,469; Nov. 29.
Textile fabric or similar article of manufacture. J. Maisch. Des. 88,424; Nov. 29.

Textile fabric or the like. N. Garfinkl. Des. 88,454; Nov. 29.
Textile fabric or the like. N. Martinoff. Des. 88,425–7; Nov. 29.
Textile fabric or the like. N. Martinoff. Des. 88,471–5; Nov. 29.
Textile fabric or the like. E. Merry. Des. 88,476–7; Nov. 29.
Textile fabric or the like. S. Pate. Des. 88,436; Nov. 29.
Textile fabric or the like. P. Reiman. Des. 88,480; Nov. 29.
Textile fabric or the like. L. Rubinger. Des. 88,481–6; Nov. 29.
Textile fabric or the like. R. Schey. Des. 88,487; Nov. 29.
Textile fabric or the like. J. Schweizer. Des. 88,488; Nov. 29.
Textile fabric or the like. M. B. Singer. Des. 88,489–90; Nov. 29.
Textile fabric or the like. E. Wax. Des. 88,444; Nov. 29.
Textile fabric or the like. E. Wax. Des. 88,492; Nov. 29.
Textile fabric or the like. I. A. Welts. Des. 88,445–6; Nov. 29.
Textile products, Device for the wet treatment of. A. Haggenmacher. 1,889,048; Nov. 29.
Thermionic tube. F. S. McCullough. 1,889,449; Nov. 29.
Thermionic tube. H. W. Parker. 1,889,105–6; Nov. 29.
Thermostat. F. Kuhn and L. H. Thomas. 1,889,252; Nov. 29.
Thermounit, Renewable. J. O'Brien. 1,889,488; Nov. 29.
Ticket dispenser. M. Macdonald. 1,889,258; Nov. 29.
Tie for personal wear. W. T. Stanley. 1,889,054; Nov. 29.
Timber, Apparatus for decorticating. P. Foss. 1,889,046; Nov. 29.
Time announcing system. G. Rättig. 1,889,108; Nov. 29.
Tissue filler. E. H. Haabestad. 1,889,655; Nov. 29.
Titanium compounds, Recovery of. W. F. Washburn. 1,889,027; Nov. 29.
Titanium white, Making. S. J. Lubowsky. 1,888,993; Nov. 29.
Toaster, Electric. E. G. C. Lofgren and W. M. Anderson. 1,888,992; Nov. 29.
Tobacco-pipe. A. Klingenstierna. 1,889,073; Nov. 29.
Toilet article and manufacturing the same. A. F. Lindewall. 1,889,675; Nov. 29.
Tool. G. W. Lane. 1,889,556; Nov. 29.
Tool. W. E. Phillips. 1,889,152; Nov. 29.
Tool, Composite thread restoring. O. Berner. 1,889,013; Nov. 29.
Tool, Cultivating. D. Elder. 1,888,982; Nov. 29.
Tool for measuring camber of wheels and caster and king-pin tilt. C. H. Phelps. 1,889,490; Nov. 29.
Tool head retainer. A. Dorfman. 1,889,400; Nov. 29.
Tool, Pipe cutting. R. O. Pickin. 1,889,321; Nov. 29.
Tool, Spring installation. C. Anderson. 1,889,167; Nov. 29.
Tool, Valve stem bending. J. C. Crowley. 1,889,239; Nov. 29.

Tools, Earth boring. C. E. Reed. 1,889,216; Nov. 29.
Tooth, Artificial. F. S. Trusler. 1,889,801; Nov. 29.
Tooth cleaning and polishing element. H. R. Priest. 1,889,495; Nov. 29.
Top comb motion. F. L. Crockett. 1,889,435; Nov. 29.
Top for a game table or similar article. N. Robin. Des. 88,441; Nov. 29.
Top for rumble seats of automobiles. E. H. Benn. 1,889,430; Nov. 29.
Top for rumble seats of automobiles. E. H. Benn. 1,889,532–3; Nov. 29.
Top, Spinning. T. A. Marmito. 1,889,680; Nov. 29.
Toy edifice. J. L. Flannery. 1,889,468; Nov. 29.
Traction and antiskid device, Auto. H. S. Gibson and J. R. McLean. 1,889,241; Nov. 29.
Traffic controlling system, Railway. S. N. Wight. 1,889,458; Nov. 29.
Train control system, Automatic. L. Work. 1,889,721; Nov. 29.
Train dispatching system for railroads. S. N. Wight. 1,889,457; Nov. 29.
Transmission for vehicle wheels. E. A. Corbin, jr. 1,889,852; Nov. 29.
Trap: *See*—
Animal trap.
Tray for mechanical refrigerators, Ice. G. H. Kennedy, jr. 1,889,481; Nov. 29.
Tray, Incubator. E. Pockrandt. 1,889,493; Nov. 29.
Tread structure for antiskid chains. P. M. Hall. 1,889,094; Nov. 29.
Tread switch. G. G. Hill. 1,889,602; Nov. 29.
Trigger mechanism for double barrelled firearms, Single. H. B. Howland. 1,889,049; Nov. 29.
Trimming joint. C. G. Voigt. 1,889,715; Nov. 29.
Trolling device. J. Soltis and C. Rindgen. 1,889,707; Nov. 29.
Truss. G. Lemarinier. 1,889,674; Nov. 29.
Truss. J. McNulty. 1,889,367; Nov. 29.
Tube: *See*—
Milk draining tube. Thermionic tube.
Photo-electric tube.
Tube drawing bench. H. Heetkamp. 1,889,314; Nov. 29.
Tumbler or similar article. I. M. Clarke. Des. 88,398; Nov. 29.
Tweezers. A. Henkel. 1,889,475; Nov. 29.
Typewriting machine, Electrical. E. H. Henderson. 1,889,315; Nov. 29.
Underframe for a treadle sewing machine. A. S. Raworth. Des. 88,440; Nov. 29.
Universal joint. F. A. Garrett. 1,889,470; Nov. 29.
Values, Arrangement for obtaining instantaneous. G. Keinath and H. Pfannenmüller. 1,889,553; Nov. 29.
Valve assembly, Compressor. O. J. Kenyon. 1,889,247; Nov. 29.
Valve, Automatic. A. L. Browne. 1,889,311; Nov. 29.
Valve, Check. R. Y. Lipscomb and E. J. Kunsman. 1,889,256; Nov. 29.
Valve device, Check. E. E. Hewitt. 1,889,122; Nov. 29.
Valve for internal combustion engines, Rotary. W. H. McGlade. 1,889,684; Nov. 29.
Valve for rock drills. W. A. Smith, sr. 1,889,423; Nov. 29.
Valve, Regulating. H. H. and A. H. Douglass. 1,889,142; Nov. 29.
Valve, Rotary type float. J. L. Thomas. 1,889,503; Nov. 29.
Valve, Toilet flush. W. E. Bell. 1,889,626; Nov. 29.
Vapor arc apparatus. G. Sperti. 1,889,079; Nov. 29.
Vapor purification process. E. Truog. 1,889,617; Nov. 29.
Vaporizer and supercharger for internal combustion engines. L. M. Fabbro. 1,889,647; Nov. 29.
Vegetable matter to obtain cellulose therefrom by manipulation of the vomit pipes, Controlling the treatment of. E. Spencer. 1,889,158; Nov. 29.
Vegetables, Method of and apparatus for scrubbing. H. Bernier. 1,889,189; Nov. 29.
Vehicle construction. J. F. Duby. 1,889,596; Nov. 29.
Vehicle for collecting refuse, Closed. A. F. Masury. 1,889,559; Nov. 29.
Vehicle, Motor. M. Tibbetts. 1,889,577; Nov. 29.
Vehicle wheel. D. F. Errett. 1,889,723; Nov. 29.
Vending machine. M. H. Richardson. 1,889,109; Nov. 29.
Vending machine, Automatic. S. H. Goldschmidt. 1,889,406; Nov. 29.
Ventilating device. M. Adamcikas and G. Massera. 1,889,117; Nov. 29.
Vernier feed setting mechanism. A. A. Richardson. 1,889,453; Nov. 29.
Vessel for fire refining. H. H. Stout. 1,889,426; Nov. 29.
Vibrator, Fountain. H. Nachles. 1,889,487; Nov. 29.
Vitamins, Concentration of. B. Sure. 1,889,427; Nov. 29.
Voice current repeater. H. H. Smith. 1,889,005; Nov. 29.
Volume control. W. E. Gilbert. 1,889,018; Nov. 29.
Wall board joint. D. McChesney. 1,889,150; Nov. 29.
Wall covering. W. B. Fried. 1,889,091; Nov. 29.
Washing machine and wringer, Combined. J. Boening. 1,889,628; Nov. 29.
Washing solutions to washing machines, Device for automatically supplying. E. D. Edgren. 1,889,280; Nov. 29.
Waste combing machine, Express-card. L. Schorsch. 1,889,615; Nov. 29.
Water cooler. A. D. Olds. 1,889,611; Nov. 29.
Water purifier and softener. E. T. Martin. 1,889,485; Nov. 29.
Water softener. E. T. Wahlbom, L. C. Lind, and P. C. Wahlbom. 1,889,231; Nov. 29.
Wave signaling system. J. Robinson. 1,889,293; Nov. 29.
Weighing and measuring device, Electrical. E. B. Ilyus. 1,889,663; Nov. 29.
Weighing apparatus. J. H. De Iongh. 1,888,979; Nov. 29.
Welding apparatus. G. A. Lutz. 1,889,414; Nov. 29.
Welding machine. J. D. McKiernan. 1,889,319; Nov. 29.
Welding means. E. W. Little. 1,889,677; Nov. 29.
Well casing protector. H. E. Dennie. 1,889,059–60; Nov. 29.
Wet gas meter. H. Brandl and C. Marischka. 1,889,190; Nov. 29.
Wheel: *See*—
Polishing wheel. Vehicle wheel.
Window frame. W. W. Smith. 1,889,424; Nov. 29.
Window sash lock. R. Schubert. 1,889,228; Nov. 29.
Wool and making the same, Artificial. G. M. Rossati. 1,889,377; Nov. 29.
Wrench and wrench holder. W. C. Kress. 1,889,203; Nov. 29.

CLASSIFICATION OF PATENTS

ISSUED NOVEMBER 29, 1932

NOTE.—First number—class, second number—subclass, third number—patent number

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20: 1,889,219
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U. S. GOVERNMENT PRINTING OFFICE, 1932

Patents Nos. 1,885,101 to 1,886,358

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THE

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Designs	23—No.	88,139 to No.	88,220, inclusive.
Patents	1258—No.	1,885,101 to No.	1,886,358, inclusive.
Total	1,666		

Adverse Decisions in Interference

In interferences involving the indicated claims of the following patents final decisions have been rendered that the respective patentees were not the first inventors with respect to the claims listed:

Pat. 1,682,842, J. H. Hamer, Rotary pumps and the like, decided September 30, 1932, claims 1, 2, 3, and 4.

Pat. 1,733,758, P. T. Sealey, Construction for breaking flow of heat through metal, decided October 5, 1932, claims 1, 2, 3, and 4.

Pat. 1,749,635, Erwin Gerlach, Diaphragm for electro-acoustic apparatus, decided October 3, 1932, claims 1, 2, 3, 4, 5, and 7.

Pat. 1,783,510, Alfred Lanser, Liquid measuring apparatus, decided October 5, 1932, claim 4.

Pat. 1,794,591, O. H. Dicke and N. D. Preston, Train dispatching system for railroads, decided September 17, 1932, claims 1, 2, 3, 12, 13, and 18.

Pat. 1,812,432, P. d'Huc Dressler, Method of preparing fuel, decided October 10, 1932, claims 1 and 2.

Pat. 1,824,451. Joseph Soss, Hinge, decided October 5, 1932, claims 2, 3, and 5.

Pat. 1,824,725, R. F. Kohr, Brake operating mechanism, decided October 8, 1932, claim 9.

Pat. 1,839,402, Rudolf Lorant, Apparatus for transferring data from perforated records, decided October 3, 1932, claims 1, 2, 4, and 5.

Disclaimers

1,824,988.—*Rudolph E. Rosenbaum*, Chicago, Ill. Process and Apparatus for Treating Hydrocarbons. Patent dated December 16, 1919. Disclaimer filed October 8, 1932, by the assignee, *Gasoline Products Company, Inc.*

Hereby enters this disclaimer to the subject matter of the claims thereof except as they apply to a process and apparatus in which the condensates are heated separately from the cruder hydrocarbon charge undergoing distillation and are then brought into contact therewith.

1,821,193.—*William J. Vincent*, Rochester, N. Y. Telephone System. Patent dated September 1, 1931. Disclaimer filed October 5, 1932, by the assignee, *Rochester Telephone Corporation.*

Hereby enters this disclaimer to so much of claims 1 and 2 wherein the term "telephone lines" is not limited to "subscribers' or substation telephone lines."

Notice of Cancellation

U. S. Patent Office, *Washington, October 15, 1932.*

National Eggoscope Corpor., its assigns or legal representatives, take notice:

A cancellation proceeding having been instituted by this Office upon the application of Cecil Starke Hassell, of 2028 S. W. 24th Terrace, Miami, Fla., to effect the cancellation of the trade-mark registration of the National Eggoscope Corpor., of 12–19 Hudson Street, New York, N. Y., No. 198,600, dated January 6, 1925, and the notice of such proceeding sent by registered mail to the said National Eggoscope Corpor. at the said address having been returned by the post-office as undeliverable, notice is hereby given that unless said National Eggoscope Corpor., its assigns or legal representatives, shall enter an appearance therein within 30 days from the first publication of this order the cancellation will be proceeded with as in case of default. This notice will be published in the Official Gazette for three consecutive weeks.

WM. A. KINNAN,
First Assistant Commissioner.

Condition of Applications Under Examination at Close of Business October 15, 1932

(Total number of applications awaiting action, excluding Trade-Mark Division, 67,026; Trade-Mark Division, 987. Oldest new case, Apr. 15, 1932; oldest amended, Apr. 15, 1932)

Room No.	Divisions, Examiners, and Subjects of Inventions	Oldest new application and oldest action by applicant awaiting office action: New	Amended	No. of applications awaiting action
6624	1. LOEFFLER, F. A., Closure Operators; Fences; Gates; Tillage; Handling Implements	July 23	Aug. 5	298
6708	2. HERMAN, D. (Act.), Fishing and Trapping; Dairy; Animal Husbandry; Presses; Tobacco; Velocipedes.	June 20	June 20	821
4096	3. LINDSEY, A., Heating; Metal Founding; Metallurgy; Metal Treatment; Electric Furnaces	June 27	July 13	720
7083	4. MERRITT, A. D., Conveyers; Hoists; Handling Apparatus; Excavating	July 1	Aug. 13	346
3628	5. MACNAB, J. F., Harvesters; Music; Acoustics; Sound Recording; Knotters	June 21	June 22	311
4986C	6. LEWERS, A. M., Carbon Chemistry	Apr. 19	Apr. 26	2,006
5725	7. JARBOE, C. G., Optics; Photography	May 26	May 27	1,350
7514	8. ADAMS, F. L., Beds; Chairs; Kitchen and Table Articles; Racks and Cabinets	June 17	June 20	806
4624	9. ADAMS, B. E., Pumps; Fluid and Fluid-Current Motors	July 18	Aug. 4	662
6612	10. HUNTER, O. F., Land Vehicles—Animal Draft Appliances, Bodies and Tops	May 19	May 19	784
5067B	11. BENHAM, E. V., Boots, Shoes, and Leggins; Button, Eyelet, and Rivet Setting; Harness; Leather Manufactures; Nailing and Stapling; Whip Apparatus.	June 16	June 17	617
7701	12. HENRY, C. C., Machine Elements	June 29	July 12	473
8096	13. BORLIK, F. J., Gear Cutting, Milling, and Planing; Metal Drawing; Metal Forging and Welding; Metal Rolling; Metal Working; Needle and Pin Making; Turning; Boring and Drilling.	June 7	June 7	1,026
5097	14. BRUMBAUGH, N. J., Farriery; Metal Bending; Metal Tools and Implements, Making; Sheet-Metal Ware, Making; Wire Fabrics; Wire Working; Metal Working, Blanks and Processes.	July 1	July 8	719
4807	15. WORRELL, L. W., Glass; Plastic Block and Earthenware Apparatus; Plastics	May 18	May 16	1,089
5612	16. SPENCER, C. J., Telegraphy; Telephony	June 24	June 27	779
5701	17. ARMSTRONG, H. (Act.), Label Pasting and Paper Hanging; Ornamentation; Paper Manufactures; Printing; Type Casting; Sheet-Material Associating or Folding; Sheet or Web Feeding; Type Setting.	Apr. 29	Apr. 29	1,375
4612	18. PORTER, M. E., Motors, Expansible-Chamber Type; Power Plants; Speed-Responsive Devices	June 22	June 15	606
4006	19. KENNEDY, A. R., Furnaces and Stoves; Heating Systems; Fuel Burners	Apr. 16	Apr. 19	1,797
6613	20. GROVE, S. D., Miscellaneous Hardware; Closure Fasteners; Locks and Latches; Safes; Undertaking	June 28	June 28	514
7733	21. THOMPSON, T. J., Textiles: Cloth Finishing	June 6	June 6	836
5724	22. RINGLE, D. (Act.), Aeronautics; Firearms, Ordnance, and Explosive Devices; Air Guns, Catapults, and Targets; Boats and Buoys; Ships; Marine Propulsion	July 15	Aug. 4	466
7802	23. GROESBECK, W. D., Coin Handling; Recorders; Registers	Apr. 28	Apr. 28	882
5063	24. DURAS, C. O., Apparel; Apparel Apparatus; Garment Supporters; Sewing Machines	July 15	July 23	567
5709	25. BLAKELY, C. F., Agitating; Butchering; Classifying Solids; Centrifugal-Bowl Separators; Mills; Threshing; Vegetable and Meat Cutters and Comminutors.	May 6	May 6	1,331
5803	26. ADAMS, W. M. (Act.), Electricity, Generation; Motive Power	Apr. 29	Apr. 29	929
5708	27. CLARK, W. N. (Act.), Brushing, Scrubbing, and Cleaning; Washing Apparatus	June 20	June 22	833
4628	28. BENSON, A. R., Internal-Combustion Engines	Apr. 16	Apr. 23	1,327
5062	29. MORRIS, B. N., Woodworking; Tools; Compound Tools; Furniture; Metal Working, Assembling	Apr. 18	Apr. 25	808
4074	30. SHIPMAN, J. L., Automatic Temperature and Humidity Regulation, Illuminating Burners; Illumination; Thermostats and Humidostats.	June 4	June 16	776
4716	31. HOLMES, W. N., Gas, Heating and Illuminating; Mineral Oils	May 7	May 6	1,518
4086	32. BARTHOLOMEW, J. A., Gas and Liquid Contact Apparatus; Heat Exchange; Gas Separation	June 27	July 7	676
6006	33. WYMAN, W. I., Bridges; Masonry and Concrete Structures; Metallic Building Structures; Roads and Pavements; Roofs; Wooden Buildings.	Apr. 15	Apr. 15	2,226
6625	34. SAPERSTEIN, S. (Act.), Electricity, Transmission to Vehicles; Pneumatic Dispatch; Railways, Rolling Stock, Switches, and Signals; Store Service; Vehicle Fenders; Track Sanders.	May 16	May 18	832
3600	35. REYNOLDS, E. C., Buckles, Buttons, Clasps, Etc.; Card and Sign Exhibiting; Signals; Toilet	Aug. 20	Aug. 18	328
7624	36. McFAYDEN, A. D. (Act.), Automatic Weighers; Geometrical and Measuring Instruments; Force Measuring.	Apr. 18	Apr. 22	1,513
5889	37. WEAVER, M. E., Electricity, Circuit Makers and Breakers	May 23	May 25	1,000
7510	38. KRAFFT, C. F., Earth Boring; Hydraulic and Earth Engineering; Mining, Quarrying, and Ice Harvesting; Stoneworking; Wells.	Sept. 1	Aug. 29	110
4874	39. WHITNEY, F. J. (Act.), Fluid-Pressure Regulators; Multiple Valves; Valves; Water Distribution	Apr. 20	Apr. 20	1,357
7880	40. OBERLIN, J. J., Receptacles	May 19	May 23	2,170
6062	41. WHITNEY, M. L., Land Vehicles, Wheels, and Axles: Resilient Tires and Wheels; Wheel Substitutes; Railway Draft Appliances; Spring Devices.	July 18	Aug. 12	455
5882	42. CUTTING, H. O., Electric Signaling	Apr. 19	Apr. 15	1,231
4896B	43. KLINGE, E. F., Baths, Closets, Sinks, and Spittoons; Sewerage; Electricity, Medical and Surgical; Medicines; Surgery; Dentistry; Artificial Body Members.	May 18	May 19	1,499
4067B	44. SHAFFER, C. H., Dispensing; Filling and Closing Portable Receptacles; Refrigeration	Apr. 16	Apr. 18	1,723
7097	45. HILL, H. D., Pulleys and Shafting; Lubrication; Bearings and Guides	July 1	July 1	882
4613	46. TAYLOR, M., Evaporators; Fluid Sprinkling; Fire Extinguishers; Boilers	June 18	June 22	513
7000	47. BARKER, H., Clutches and Power Stops; Brakes; Motors	May 20	May 20	1,912
5731	48. ROEPKE, O. B., Electricity, General Applications	May 26	May 25	666
7725	49. SHEFFIELD, E. L., Check-Controlled Apparatus; Domestic Cooking Vessels; Ventilation; Driers; Liquid Separation or Purification.	Apr. 27	Apr. 18	1,424
4701	50. BLAKE, C. L., Plastic and Liquid Coating Compositions; Coating	Apr. 18	Apr. 18	2,106
5628	51. BACKUS, C. D., Radiant Energy	June 3	June 3	1,110
7709	52. KNOTTS, M. K., Supports; Chucks; Joint Packing; Pipe and Rod Joints or Couplings; Tool-Handle Fastenings.	July 18	July 19	668
6807	53. PECK, M. K., Books; Manifolding; Printed Matter; Stationery, Educational Appliances; Paper Files and Binders; Tents, Canopies, Umbrellas, and Canes; Curtains, Shades, and Screens.	July 28	Aug. 9	431
5874	54. WAITE, W. E., Electric Lamps; Vapor Electric Devices; Space Discharge Tubes; Light Sensitive Circuits.	Apr. 28	Apr. 28	1,058
6887	55. BOWEN, S. T.—Bread, Pastry, and Confection Making; Cutlery	July 23	July 23	359
	Designs	Sept. 19	Sept. 29	184
4725	56. PORTER, F. J., Electrochemistry; Laminated Fabrics; Paper Making; Substance Preparation	Apr. 28	Apr. 30	1,373
3623	57. NICHOLSON, G. D. G., Cutting and Punching; Bolt, Nut, Rivet, Nail, Screw, Chain, and Horse-Shoe Making; Driven and Screw Fastenings; Jewelry; Nut and Bolt Locks.	June 15	June 15	641
5606	58. DOWELL, E. F., Abrading; Typewriting	Apr. 16	Apr. 16	1,277
4709	59. RICHARD, V. I., Chemistry; Alcohol; Fertilizers; Cement and Lime; Hides, Skins, and Leather; Fuel.	Apr. 15	Apr. 15	1,692
5806	60. GLASS, R. L., Electricity, Heating, and Welding; Batteries; Resistances and Rheostats; Prime Mover Dynamo Plants.	Apr. 28	Apr. 28	1,403
6724	61. PARKS, G. E., Elevators; Winding and Reeling; Pushing and Pulling; Fire Escapes; Ladders; Scaffolds; Horology; Time-Controlling Apparatus.	May 10	May 12	1,229
7825	62. COCHRAN, W. W., Toys; Amusement Devices; Baggage; Package and Article Carriers; Bottles and Jars; Deposit and Collection Receptacles.	May 19	May 19	1,505
4868	63. WINKELSTEIN, A. H., Bleaching and Dyeing; Explosive, Pyrotechnic, and Match Compositions; Preserving; Sugar, Starch, and Carbohydrates.	Apr. 29	Apr. 29	1,392
4708	64. NASH, P. N., Acetylene; Distillation; Gas Mixers; Oils, Fats, and Glue	July 1	July 6	462
5624	65. McDERMOTT, F. P., Electricity, Conductors; Conduits and Housings; Repeaters; Relays; Wave Transmission.	Apr. 22	Apr. 23	1,544
2099B	Trade-Marks, Labels, and Prints: F. A. RICHMOND.—Trade-Marks	Sept. 19	Oct. 4	995
	Labels and Prints	Oct. 1	Oct. 1	92

DECISIONS IN PATENT AND TRADE-MARK CASES

U. S. Court of Customs and Patent Appeals

United States Ozone Co. v. United States Ozone Co. of America

Nos. 2,910 and 2,911. Decided June 6, 1932.

1. Trade-Marks—Function of.

The function of a trade-mark is to identify the origin or ownership of the goods to which it is attached.

2. Same—Transfer of.

A trade-mark can not be legally assigned apart from the business or property in connection with which it has been used.

3. Same—Ownership.

Evidence reviewed and *Held* that the party from whom appellee obtained an assignment of a trade-mark had never used that mark, was not the owner of it, was not entitled to register it, and that the attempted assignment to appellee did not confer upon it ownership of the mark.

4. Same—Same.

Evidence reviewed and *Held* to establish that appellant, at the time it made application for registration of a trade-mark including the word "Ozone" with the pictorial representation of a shield, was the owner of that mark, and that the petition for cancellation of the registration thereof should have been dismissed.

Appeal from the Patent Office. Reversed.

Mr. Fred Gerlach for United States Ozone Co.

Mr. David P. Wolhaupter for United States Ozone Co. of America. *Mr. Emory L. Groff* of counsel.

Hatfield, *J.*:

These are appeals in trade-mark cancellation proceedings from the decisions of the Commissioner of Patents affirming the decisions of the Examiner of Interferences sustaining appellee's petition for the cancellation of appellant's registration No. 239,833, for the composite trade-mark hereinafter described, and dismissing appellant's petition for the cancellation of registration No. 162,145, for substantially the same trade-mark.

In cancellation proceeding No. 1884, appeal No. 2,910, appellee, United States Ozone Company of America, filed its petition in the United States Patent Office for the cancellation of appellant's registration No. 239,833, issued February 28, 1928 on an application filed June 27, 1927, of a composite trade-mark consisting of a pictorial representation of a shield. There are various symbols on the face of the shield and a dark band running diagonally across the center with the word "Ozone" printed thereon.

In cancellation proceeding No. 1,958, appeal No. 2,911, appellant, United States Ozone Company, filed its petition for the cancellation of trade-mark registration No. 162,145, issued December 5, 1922, to the United States Ozone Company of Scottdale, Pennsylvania, on an application filed April 4, 1921, of the composite mark hereinbefore described, and claimed to be owned by appellee, United States Ozone Company of America, by virtue of an assignment in writing executed and delivered to it on or about March 7, 1928, by the United States Ozone Company of Scottdale.

It is conceded by counsel for the parties that the involved marks are substantially identical, and are used by the parties on goods possessing the same descriptive properties.

It is obvious that the continuation of such joint use would cause confusion in the mind of the public and result in damage to the owner of the trade-mark.

It appears from the record that in December, 1920, the United States Ozone Company of Scottdale was organized and received its certificate of incorporation; that the amount of its capital stock was $5,000.00, which was divided into 50 shares of the par value of $100.00; that its incorporators, H. B. Hartman, John M. Stauffer, and F. L. Brown, each of Scottdale, were the directors and the only subscribers to its capital stock; that per centum of its capital stock, the amount required by the laws of the State of Pennsylvania to be paid before a certificate of incorporation could be granted, to wit, $500.00, was paid by F. L. Brown to himself as treasurer of the corporation; that, according to the certificate of incorporation, the company was formed for the purpose of—

manufacturing, selling and dealing in electrical and mechanical water purifying appliances, and the accessories thereto;

that H.B. Hartman acted as president of the corporation; that the total amount of stock subscribed for was: H. B. Hartman, John M. Stauffer, and F. L. Brown, 1, 2, and 2 shares, respectively; and that, as Hartman and Stauffer never paid for the shares of stock for which they subscribed, no stock of the corporation was ever issued.

The witness Hartman, who testified for appellee, said that the company was organized—

to sell the output of the Electric Water Steriliser & Ozone Company and later to acquire that company.

The witness Brown, who also testified for appellee, said that—

it was organized with the sole intention of eventually taking over all of the assets of the Electric Water Steriliser & Ozone Company.

On April 4, 1921, the United States Ozone Company of Scottdale, by its president H. B. Hartman, applied for the registration of the involved trade-mark. In its application, it was stated that the applicant had adopted and used the trade-mark in the business of that corporation since December 1, 1920, and that the trade-mark was applied to its goods.

In June, 1922, the United States Ozone Company of Scottdale entered into a written agreement with Montgomery Brothers, a co-partnership of San Francisco, California. In that agreement it appears that the officials of the United States Ozone Company of Scottdale, by its president H. B. Hartman, represented that that corporation

manufactures and controls patents for the manufacture of certain apparatus and equipment for the purification of water using the process of Ozone and electrolytic sterilization,

and proceeded to attempt to grant unto Montgomery Brothers—

the exclusive right, license and privilege, subject to the term hereof, to sell said equipment and any and all improvements thereof for a period of five years with the option of an additional five years,

in the following territory:

Washington, Oregon, Utah, Nevada, California, Arizona, and the Hawaiian Island with the exception of one account, the Coca-Cola Company in the Territory of Hawaii. (Italics ours.)

On the 25th day of October, 1928, an additional agreement was entered into by the same parties. It was therein represented by the officers of the United States Ozone Company of Scottdale that it controlled patents for, and manufactured, certain apparatus and equipment—

for the ventilation, reconditioning and purification of *air*, using the process and application of ozone,

and attempted to grant unto Montgomery Brothers the exclusive right and privilege to sell such apparatus and equipment in the United States and its Provinces. (Italics ours.)

On the 1st day of May, 1924, the same parties entered into another agreement. The United States Ozone Company again represented that it controlled patents for, and manufactured, certain apparatus and equipment—

for the purification and sterilization of *water*, using the process of Ozone and Electrolytic Sterilization,

and attempted to grant unto Montgomery Brothers the exclusive right and privilege to sell such apparatus and equipment in the United States and its Provinces, exclusive of the territory covered by the contract dated June, 1922. (Italics ours.)

In each of those contracts it was agreed that the United States Ozone Company should place its name "*as manufacturer*," and the name of Montgomery Brothers "as exclusive sales agents" of such manufacturer, on such apparatus and equipment. (Italics ours.)

In the agreements dated October 25, 1928, and May 1, 1924, Montgomery Brothers agreed, among other things, that they would report promptly and fully any information received by them of the infringement of patents, trade-names, and trade-marks of the United States Ozone Company of Scottdale.

Prior to and at the time of the incorporation of the United States Ozone Company of Scottdale, and continuously thereafter, until it went into bankruptcy in October, 1926, the Electric Water Sterilizer & Ozone Company of Scottdale owned and controlled the patents, manufactured the Ozone appartus and equipment, referred to in those contracts, and carried out all of the obligations assumed therein by the United States Ozone Company of Scottdale.

In November, 1925, the Electric Water Sterilizer & Ozone Company of Scottdale entered into a written agreement, dated May 1, 1925, with the Montgomery Brothers. In that agreement the Electric Water Sterilizer & Ozone Company represented that it was the owner of, and controlled, certain patents—

covering Ozone Generating Equipment for water sterilization, commercial and industrial purposes, ventilation, etc., and Electrolytic Water Sterilizers,

and granted unto Montgomery Brothers the exclusive right and privilege to sell all—

"Ozone and Electrolytic Apparatus and Equipment, and any and all improvements, that may be made thereto, or any part thereof,

for a period of 25 years. That contract, among other things, provided that the Electric Water Sterilizer & Ozone Company of Scottdale should place its name "as manufacturer," and the name of Montgomery Brothers "as general sales agents," on such apparatus and equipment. Montgomery Brothers agreed that they would report promptly and fully any information received by them of any infringement of the patents, trade-names, and *trade-marks* of the *Electric Water Sterilizer & Ozone Company*. The contract was signed on behalf of the Electric Water Sterilizer & Ozone Company by John M. Stauffer, vice-president, and F. L. Brown, treasurer.

Although the United States Ozone Company of Scottdale entered into the three written agreements hereinbefore referred to, and represented therein that it controlled the patents for, and was the manufacturer of, Ozone apparatus and equipment, it never, as a matter of fact, had any interest, legal or equitable, in the patents, nor did it, at any time, engage in the manufacture of such apparatus and equipment. The only credible explanation for the 1925 agreement between Montgomery Brothers and the Electric Water Sterilizer & Ozone Company is that given by appellant's witness Fred H. Montgomery, which to some extent, was corroborated by the testimony of Frank E. Hartman, another of appellant's witnesses, and also by the surrounding circumstances.

It appears from the testimony of the witness Montgomery that both he and his associates believed, when the three agreements were entered into with the United States Ozone Company of Scottdale, that the latter company was doing business and had authority to enter into those contracts; that, due to the fact that an "invoice came through from the Electric Water Sterilizer & Ozone Company," an explanation was requested by Montgomery Brothers; that the officers of the United States Ozone Company of Scottdale, who were also officers of the Electric Water Sterilizer & Ozone Company, stated that those contracts were entered into by the United States Ozone Company of Scottdale because that company had intended taking over all of the assets of the Electric Water Sterilizer & Ozone Company. In this connection, the witness Montgomery said:

* * * However, we learned that this was not the true status just prior to the signing of the last agreement, with the Electric Water Sterilizer & Ozone Company, and that we had been tricked into entering into negotiations with a company that was not doing business, was never doing any business, that owned no property, had no bank accounts, and were not in a position to therefore invoice us; and we then demanded that we have a contract made out between the responsible Electric Water Sterilizer & Ozone Company and ourselves, whereby we were to purchase equipment outright from this company and sell same to our customers.

In January, 1926, Montgomery Brothers commenced to transact business in the name of the United States Ozone Company of Chicago with the knowledge and consent of the officers of both the United States Ozone Company of Scottdale and the Electric Water Sterilizer & Ozone Company. Furthermore, although there is no written agreement of record to that effect, it clearly appears that at that time it was understood and agreed that the United States Ozone Company of Chicago might and should use the involved trade-mark.

Two witnesses for appellee stated that permission was granted to Montgomery Brothers to use the name "United States Ozone Company," and also the trade-mark in their business only until a re-organization which would involve the three companies, should be perfected.

The witnesses for appellant, on the contrary, testified that the use of the name "United States Ozone Company," and the use of the involved trade-mark was not intended as a temporary arrangement; that it was fully understood and agreed that the use of the name and the trade-mark should be permanent; that this agreement was entered into for the purpose of aiding in the sale of the products of the Electric Water Sterilizer & Ozone Company; and that, by virtue of such agreement, large sums of money had been expended by appellant in advertising both the name and the involved trade-mark.

It is contended by counsel for appellee that, by the various agreements hereinbefore referred to, Montgomery Brothers and the United States Ozone Company of Chicago were to be considered as sales agents only.

Although there are some expressions in those agreements to that effect, it was expressly provided therein that Montgomery Brothers should not be considered as the agent of either of the other contracting parties. Considering the written agreements in connection with the oral testimony given by all of the witnesses who testified in regard thereto, it appears that, until January, 1926, Montgomery Brothers, and thereafter, until the contract was terminated, the United States Ozone Company of Chicago, purchased outright from the Electric Water Sterilizer & Ozone Company the equipment and apparatus manufactured by it.

It further appears that the United States Ozone Company of Scottdale never issued any stock, and never received any money, except $500.00, an amount equal to 10 per centum of its capital stock, and the sum of $1 paid to it by appellee for the assignment of trade-mark registration No. 162,145; that no part of the $501.00 was ever paid out by the company; that it never paid any salaries, nor employed anyone in any capacity; that it never had a bank account, nor owned, nor had any interest in, any property of any description except the $501.00, and a claimed interest in trade-mark registration No. 162,145; that it had no contracts, written or otherwise, with the Electric Water Sterilizer & Ozone Company for the sale of any of the latter's machinery or equipment; that no directors' meetings were ever held; that it never manufactured nor sold any machinery or equipment; and that, as stated by its treasurer, F. L. Brown, in a letter dated November 6, 1925, addressed to Montgomery Brothers, Chicago, Illinois, appellant's exhibit No. 104, it never had an organized form;

it owns no property; has no debts; has no stock issued, and costs only a nominal sum per year to hold it in it's present shape, in the hands of our attorneys, where it always has been, it is the opinion of the attorneys, that it is for the best interests of all concerned, to hold it in it's present shape; under an agreement on our part, that it shall so remain until the proposed re-organization is completed, at which time it will be disposed of as may appear best, either by turning it over as a part of the papers of the Electric Water Sterilizer & Ozone Company, or by cancellation. We are advised that it is not possible to have taxes or other claims assessed against a charter in connection with which no stock is issued, and in as much as the reports to the departments, State and Federal, would show, under oath, that the United States Ozone Company of Pennsylvania, owns no property, etc., the complications you have in mind could not possibly arise. The only tax assessed against this U. S. Ozone Charter is five dollars annually for holding the charter. Our attorneys agree that the idea of a United States Ozone Company, of Delaware, to act only as a selling organization until the proposed re-organization is complete, is practical. And they think, also, that with fairly high capitalization and with the issuing of only sufficient stock to make the organization legal will be satisfactory; it being understood that the complete re-organization will take place on the basis of the investment each interest has at the time of re-organization.

In view of these facts, how can it be argued that the United States Ozone Company of Scottdale, was at any time owner of the involved trade-mark, or that it ever had any right to register the same?

Appellee claims title by an assignment from the United States Ozone Company of Scottdale. No claim is made in the pleadings that appellee received title to the mark, or any interest therein, from or through any other corporation, officers, or persons. Furthermore, two of the witnesses for appellee testified, in substance, that the involved mark was not owned by the Electric Water Sterilizer & Ozone Company, and that that company neither had nor claimed any interest, legal or equitable, in it. There is no evidence to the contrary.

It appears from the testimony that, prior to entering into the contract dated May 1, 1925, with Montgomery Brothers, the Electric Water Sterilizer & Ozone Company actually attached plates to some of its goods bearing the trade-mark and the name of the United States Ozone Company of Scottdale. Obviously, this was done for the purpose of indicating origin or ownership of the goods in the United States Ozone Company of Scottdale. In view of the fact that the latter company had no interest, legal or equitable, in such goods, the placing of such plates thereon amounted to a misrepresentation of the facts.

From January, 1926, until the Electric Water Sterilizer & Ozone Company went into bankruptcy, and thereafter, until the bankrupt estate was sold to E. Ralph Loucks, the involved trade-mark, then admittedly used by appellant, was placed upon the apparatus and equipment by the manufacturers thereof for the express purpose of indicating origin and ownership in the United States Ozone Company of Chicago.

The tribunals of the Patent Office each held that, prior to the execution of the agreement dated May 1, 1925, the United States Ozone Company of Scottdale was acting as sales agent for the Electric Water Sterilizer & Ozone Company. The witnesses for appellee made some general statements to that effect.

However, those statements were wholly disproved by the established, if not admitted, fact that the United States Ozone Company of Scottdale never actually engaged in any business.

[1, 2] The function of a trade-mark is to identify the origin or ownership of the goods to which it is attached, and a mark can not be legally assigned apart from the "business or property in connection with which it has been used." *Macmahan Pharmacal Co.* v. *Denver Chemical Mfg. Co.*, 51 C. C. A. 302, 113 Fed. 468; *Mayer Fertilizer & Junk Company* v. *Virginia-Carolina Chemical Company*, 35 App. D. C. 425.

[3] Accordingly, we must hold that the United States Ozone Company of Scottdale was not entitled to the use of the involved mark at the date of its application for registration thereof; that it was not entitled to register it; that it never did use the mark and never was the owner of it; and that its attempted assignment and transfer of registration No. 162,145 did not confer upon appellee ownership of the involved mark.

The next question presented for our consideration is whether appellant, at the time it applied for registration thereof and continuously thereafter, was the owner of the involved mark.

[4] That appellant used the mark on its goods in January, 1926, and continuously thereafter, is not denied. Furthermore, any alleged conditional agreement on the part of the Electric Water Sterilizer & Ozone Company attempting to permit appellant to use the involved mark was without any force and effect, because the Electric Water Sterilizer & Ozone Company never owned the mark and never used it on its goods for the purpose of indicating origin and ownership in it. In view of the fact that, at the time appellant adopted the involved mark, neither the United States Ozone Company of Scottdale nor the Electric Water Sterilizer & Ozone Company owned it, appellant legally adopted it, and, as appellant used the involved mark in interstate commerce continuously thereafter to indicate origin and ownership of its goods, we must hold that it was the owner of the mark at the time it filed its application for registration; that registration No. 289,333 is valid; that appellant is now the owner of the mark; and that registration No. 162,145 should be canceled.

For the reasons stated, the decisions of the commissioner are reversed.

Reversed.

U. S. Court of Customs and Patent Appeals

IN RE WATTS

No. 2,976. Decided June 6, 1932

PATENTABILITY — ANTICIPATION — ELECTRICAL TERMINAL CORDS.

Claims for an electrical terminal cord which include the limitation "a loop in the conductor adjacent the contact" *Held* not anticipated by the disclosure in the drawing of the patent to F., but a claim for that cord which merely specified "the end portions of said conductors being turned back from the end of the cord and electrically connected to said contact members" *Held* anticipated by that disclosure.

GRAHAM, *P. J.*, and BLAND, *J.*, dissenting.

APPEAL from the Patent Office. Modified.

Mr. Charles E. Tullar for Watts. *Mr. Fairfax Bayard* of counsel.

Mr. T. A. Hostetler and *Mr. Howard S. Miller* for the Commissioner of Patents.

GARRETT, *J.*:

Several claims of appellant's application relating to alleged improvements in electrical terminal cords were allowed by the Examiner of the United States Patent Office, but claims 9, 34 and 35 were rejected upon the sole ground that they were anticipated by disclosure in the drawings of a patent to Walter A. Frantz, No. 1,611,014, issued December 14, 1926. The decision of the Examiner being affirmed by the Board of Appeals, the pending appeal to this court was taken.

The appealed claims read as follows:

9. In a device of the class described, an electrical cord, a contact secured to a conductor of the cord, a loop in the conductor adjacent the contact, and a body of insulating material embedding the contact and looped portion of the conductor.

34. A cord terminal of the bayonet type comprising an electrical cord, a pair of strip contact members electrically connected to conductors of said cord, and a body of resilient insulating material embedding corresponding portions of said members and the adjacent end port ons of the cord, said body permitting relative movement between said contacts and deformation of the body, and loops formed in the conductors adjacent their connection to each contact member whereby the connection between the conductor and contact members will not be injured by such relative movement or deformation.

35. In a cord terminal, plurality of metallic contact members, a cord having a plurality of electrical conductors, the end portions of said conductors being turned back from the end of the cord and electrically connected to said contact members, and a body of resilient insulating material embedding said contact members and the adjacent end portions of said cord.

It will be noted that in both claims 9 and 34 an element, as expressed in claim 9, is—

a loop in the conductor adjacent the contact.

In claim 35 an element is—

the end portions of said conductors being turned back from the end of the cord and electrically connected to said contact members.

It seems to have been the view of the tribunals of the Patent Office that the language quoted, supra, from claim 35 defines the loop element specifically mentioned as such in the other two claims, and the brief of the Solicitor for the Patent Office agrees with the statement of appellant's brief, saying:

"These loops in the conductors of the cord adjacent the points of connection between the conductors and the contacts constitute the principal distinguishing feature of the invention defined in the three appealed claims."

It seems to us, however, that there is a distinction between claims 9 and 34 on the one hand and claim 35 on the other, as will be later pointed out. Nos. 9 and 34 will be first considered.

There was no suggestion in either the decision of the Examiner or that of the Board of Appeals that the loop element was not patentable per se and the rejection, as stated, was based solely upon the alleged anticipation in the Frantz drawings.

In appellant's structure there is shown an electrical cord containing two wires, or conductors, each individually insulated, the two being bound together by an additional insulating coating to form the electrical cord of which they are parts. The ends of these wires, or conductors, are bent back upon themselves so as to form complete loops. The loops in the conducting wires are adjacent to the contact points, but do not themselves touch these points, or form any part of the contact.

In one figure of the Frantz drawings there is shown an arrangement wherein the bared ends of conducting wires are bent through holes in the contact members at the very point of connection. As bent they are somewhat looped and at the looped point themselves form part of the connection. Back of the bared ends so bent into holes, the insulated portions of the wires are slightly curved. As we understand the case, it is this slightly curved portion of the insulated part of the wire (and not the bent bared end) which the tribunals of the Patent Office held to be anticipatory of "a loop in the conductor *adjacent* the contact." (Italics ours.)

There is no reference in either the specification or claims of Frantz to either the bent, or looped, bared ends which actually contact in looping, or to the slight curve in the insulated portion of the wire. No function was ascribed to either of these features disclosed in the drawings.

It is argued by the Solicitor for the Patent Office that it is immaterial that the patent—

ascribes no function to the curves,

and that—

description for the purposes of anticipation can be by drawings alone as well as by words.

This rule of law is so well known as to require no citation of authority to support it, but like all rules it must be applied with proper limitations.

In the case at bar the drawings of Frantz do disclose non-insulated wire ends bent in a manner which probably causes the form resulting to meet the common meaning of loop, but there is no claim that these appear in such a relation to the device as to lead to the conclusion that their purpose in Frantz was the same as the purpose of the loops in the insulated portions of appellant's conductors. As stated, these particular formations were not the formations held to be anticipatory of claims 9 and 34 by the Patent Office tribunals. They relied upon the slight curves heretofore discussed for anticipation.

We are unable to agree with those tribunals that these slight curves should be taken as anticipatory of appellant's loops. Basing our deductions alone upon the drawings in Frantz, as we must, since the specifications shed no light upon the matter, we do not feel that the slight curves of Frantz can perform the same function in all respects as the loops of appellant.

Since the claims at issue were rejected solely upon the ground of anticipation, as heretofore stated, and since we do not think the Frantz drawings do, in fact, anticipate claims 9 and 34, we are of opinion said claims should be allowed.

As to claim 35, however, the element quoted, supra, has no limitation of a loop *adjacent* the contact. As worded, it is a broader claim than the others, calling for turned ends electrically connected to the contact members. We are unable to distinguish in the language itself anything not readable upon the bent or looped wire ends of the Frantz drawings. Accordingly, we agree that this claim should not be allowed over the reference.

The decision of the Board of Appeals is modified, being reversed as to claims 9 and 34 and affirmed as to claim 35.

Modified.

GRAHAM, *P. J.* (dissenting).

I am in agreement with the majority opinion as to claim 35. I cannot, however, concur as to claims 9 and 34, which I think were properly rejected by the Board of Appeals upon the Frantz reference, No. 1,611,014.

Frantz shows three forms of his device. The underlying idea in the three forms of the Frantz terminal and in the application of appellant here, is to provide a flexible terminal in which the connection between the electric conductors and the contacting terminal elements will be protected against strain and breakage when the terminal is flexed. This is done, both by the patentee Frantz, and by the appellant, by means of providing a loop in each conductor adjacent to the point of contact between it and the contacting element.

It is not claimed there is anything else in claims 9 and 34 which is patentable except this one feature.

The opinion of the majority is to the effect that Frantz shows no such loop. Let us disregard two alternative forms of Frantz's figures, and take but one for example, illustrated by Frantz's Figures 1 and 2. Here the contacting terminals of the bayonet type are bent inward at the end enclosed in the rubber envelope. The conductor wire is curved outward and then inward through a hole in this end of the contacting element. Then this conductor wire is looped to the extent of perhaps two-thirds of the circumference of a circle and the end of this loop and conductor then makes contact with the contact terminal by means of the pinching of a tongue in said terminal down upon and against the end of the conductor. The holes in the contacting terminals through which the conductors pass are, as stated in the specification, for—

increasing the security of contact and holding the parts in line.

In Figure 6 of the drawings, these guide holes are entirely omitted.

It will thus be seen that Frantz shows not only one, but two loops in his conductor, and thus fully satisfies the language in claim 9:

A loop in the conductor adjacent the contact,

and in claim 34:

Loops formed in the conductors adjacent their connection to each contact member,

Claim 34 further recites, as to these loops:

Whereby the connection between the conductor and contact members will not be injured by such relative movement or deformation.

There can be no doubt that this feature is present in Frantz, and it is equally certain that the loop shown by Frantz will perform exactly the same functions as those of applicant.

It is argued that Frantz's disclosure does not show a loop, but merely a curve. A loop is thus described by Webster's New International Dictionary, 1932:

1. A fold or doubling of a thread, cord, rope, etc., through which another thread, cord, etc., can be passed, or into which a hook can be hooked; sometimes; a fold of cord or ribbon serving as an ornament, as on a uniform. Hence, a ring or fold forming a catch, often one of metal or wood; an eye, staple, noose, bight, or the like.
2. A loop-shaped figure, course, bend, or the like.

The curved conductors shown by Frantz clearly come within this definition of a "loop."

In my opinion the decision of the Board of Appeals should be affirmed.

BLAND, *J.* (dissenting).

If I understand the position of the majority, it is that the curves in the Frantz reference, which necessarily serve the purpose of relieving the tension, do not anticipate the loops of the applicant which serve the same purpose. A curve might not respond to the term "loop" if this were an interference proceeding and Frantz was trying to make one of the applicant's "loop" claims. But this is not an interference proceeding and the only question is, having seen Frantz, is it invention for one skilled in the art to make a loop to take care of the tension, rather than the curve. It seems to be the view of the majority that the Patent Office should have stated that there was no invention in modifying Frantz in the manner in which the applicant did. The board did enough to satisfy me by showing the state of the art by citing the Frantz and other references.

I am not willing to further extend the doctrine laid down in *In re Tucker et al.*, 19 C. C. P. A. (Patents)——, 54 F.(2d) 815, 416 O. G. 286. To do so is to circumscribe the duties of this court to such an extent as to render appeals to its purposeless in ex parte cases of this character.

Patent Suits

[Notices under sec. 4921, R. S., as amended Feb. 18, 1922.]

1,186,171, 1,351,838, 1,439,229, Cohon & Moskowitz, Lock; 1,339,320, B. J. Cohon, Latching device, filed Sept. 19, 1932, D. C., S. D. N. Y., Doc. E 71/122, *B. J. Cohon* v. *Chantrell Hardware & Tool Co. et al.*

1,204,211, F. J. Tone, Silicon carbide refractory article, D. C., W. D. N. Y., Doc. 399, *The Carborundum Co.* v. *McLeod & Henry Co.* Patent held valid Sept. 16, 1932.

1,258,634, E. E. Neal, Taper roller bearing, D. C., E. D. Mich., S. Div., Doc. 4965, *The Timken Roller Bearing Co.* v. *Bower Roller Bearing Co.* Dismissed Sept. 20, 1932.

1,262,860, S. B. Smith, Incubator, D. C., W. S. Wis. (Madison), Doc. E. 2109, *S. B. Smith* v. *R. Clark et al.* Patent held infringed Sept. 21, 1932.

1,292,030, A. J. Parissi, Circuit closure for alarm clock; 1,508,611, same, Burglar alarm, D. C., S. D. N. Y., Doc. E 52/2, *Padua Hold Up Alarm Corp.* v. *Duplex Electric Co.* Dismissed (Sept. 20, 1932).

1,339,320. (See 1,186,171.) 1,351,838. (See 1,186,171.)

1,402,309, L. P. Mooers, Piston for internal combustion motor; 1,763,523, F. Jardine, Piston; 1,815,733, E. J. Gulick, same, filed Sept. 19, 1932, D. C., E. D. Mich. (Detroit), Doc. 5564, *The Cleveland Trust Co.* v. *Ray Day Piston Corp.*

1,439,229. (See 1,186,171.) 1,508,611. (See 1,292,030.)

1,509,076, L. Berczeller, Treatment of soya beans, filed Sept. 20, 1932, D. C. Ill. (Springfield), Doc. E 1777, *L. Berczeller et al.* v. *Shellaberger Grain Products Co.*

1,602,713, F. Shanley, Manhole, filed Sept. 21, 1932, D. C., E. D. Wis. (Milwaukee), Doc. 3757, *F. Shanley* v. *Neenah Foundry Co.*

1,614,988, J. J. Lowe, Method and means for visually determining the fit of footwear, filed Sept. 20, 1932, D. C. Wis. (Milwaukee), Doc. 3755, *X-Ray Shoe Fitter, Inc.*, v. *F. Schmidt et al.*

1,703,130. (See 1,638,396.) 1,756,025. (See 1,638,396.)

1,760,801, C. H. Wetzel, Grandstand, D. C., E. D. Pa., Doc. 6295, *Wayne Iron Works* v. *The School District of Borough of Collingdale, Pa.* Injunction granted, bill dismissed Sept. 16, 1932.

1,763,523. (See 1,402,309.)

1,815,733. (See 1,402,309.)

1,821,501, A. H. Du Grenier, Vending machine, D. C., E. D. Wis. (Milwaukee), Doc. 3508, *A. H. Du Grenier* v. *U. S. Veterans Commissary, Inc., et al.* Consent decree for plaintiff Sept. 20, 1932.

1,868,458, L. Blumenstock, Shirt envelope, filed Sept. 19, 1932, D. C., S. D. N. Y., Doc. E 71/107, *Spear Box Co., Inc.*, v. *Interboro Container Corp.*

Adjudicated Patents

(D. C. Pa.) Siama and Wolf patent, No. 1,871,004, for oxidation of sulfur dioxid and catalyst therefor, *Held* valid, except claim 7, but not infringed. *General Chemical Co.* v. *Selden Co.*, 60 F.(2d) 144.

(C. C. A. N. Y.) Calkins patent, No. 1,451,491, for pattern and guide strip, *Held* not infringed. *Trattel Marble Co.* v. *Manhattan Terrazzo Brass Strip Co.*, 60 F.(2d) 61.

(D. C. Ky.) Langston patent, No. 1,489,135, for cut-off mechanism, claim 7, *Held* valid and infringed. *Samuel M. Langston Co.* v. *Mengel Co.*, 60 F.(2d) 151.

(D. C. Ky.) Langston patent, No. 1,660,844, for cut-off-operating mechanism, claims 7, 21, 26, 27, 28, *Held* valid and infringed. *Id.*

(D. C. N. J.) Byfield design patent, No. 83,427, for bottle, *Held* invalid but, if valid, not infringed. *College Inn Food Products Co.* v. *Hurff*, 60 F.(2d) 128.

TRADE-MARKS

OFFICIAL GAZETTE, NOVEMBER 1, 1932

[VOL. 424. No. 1]

The following trade-marks are published in compliance with section 6 of the act of February 20, 1905, as amended March 2, 1907. Notice of opposition must be filed within thirty days of this publication.

Marks applied for "under the ten-year proviso" are registrable under the provision in clause (b) of section 5 of said act as amended February 18, 1911.

As provided by section 1 of said act, a fee of ten dollars must accompany each notice of opposition.

CLASS 1

Raw or Partly-Prepared Materials

Ser. No. 327,852. MAJESTIC COAL MINING COMPANY, Kansas City, Mo. Filed June 9, 1932.



The exclusive use of the words "Coal", "Smokeless" and "Arkansas" is disclaimed.

For Coal.

Claims use since Apr. 23, 1932.

Ser. No. 328,208. ASSOCIATED SEED GROWERS, INCORPORATED, New Haven, Conn. Filed June 22, 1932. Under 10-year proviso.

CLARK'S

For Garden and Field Seeds, Bulbs, and Plants.

Claims use since 1858.

Ser. No. 329,106. ASSOCIATED SEED GROWERS, INCORPORATED, New Haven, Conn. Filed July 27, 1932. Under 10-year proviso.

KEENEY'S

For Garden and Field Seeds, Bulbs, and Plants.

Claims use since 1861.

Ser. No. 330,030. BENJAMIN S. GOLDBERG, doing business as Cover Lawn Seed Company, Baltimore, Md. Filed Sept. 1, 1932.

ANTOWEED

For Lawn and Field Grass Seeds.

Claims use since Aug. 25, 1932.

Ser. No. 330,031. BENJAMIN S. GOLDBERG, doing business as Cover Lawn Seed Company, Baltimore, Md. Filed Sept. 1, 1932.

POPGRASS

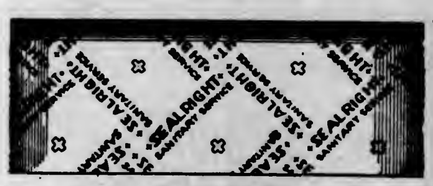
For Lawn Seeds and Field, and Grass Seeds.

Claims use since Aug. 25, 1932.

CLASS 2

Receptacles

Ser. No. 325,073. OSWEGO FALLS CORPORATION, Fulton, N. Y. Filed Mar. 12, 1932.



No claim is made to the notation "Sanitary Service" apart from the mark shown under the act of Feb. 20, 1905. No trade-mark claim is hereby made to the partial representation of the goods apart from the mark shown by the drawings.

For Paper Cans and Covers Therefor.

Claims use since Jan. 15, 1932.

Ser. No. 329,772. WEBSTER J. OLIVER, New York, N. Y. Filed Aug. 23, 1932.

GARB-O

For Paper, Metal, and Fiber Waste and Garbage Receptacles.
Claims use since Aug. 18, 1932.

Ser. No. 330,638. SANI-FIL, INC., Newton Centre, Mass. Filed Sept. 24, 1932.

SANI-FIL

For Paper Bags.
Claims use since June 18, 1932.

CLASS 3

Baggage, Animal Equipments, Portfolios, and Pocketbooks

Ser. No. 329,858. THE KENNEDY COMPANY, doing business as Kennedy's, Boston, Mass. Filed Aug. 26, 1932.

WARDROBOX

For Men's Dress-Suit Cases.
Claims use since Aug. 3, 1932.

CLASS 4

Abrasive, Detergent, and Polishing Materials

Ser. No. 325,027. METRO CHEMICAL PRODUCTS CO., Brooklyn, N. Y. Filed Mar. 8, 1932.



For Soap and Metal Polish Preparations.
Claims use since May 15, 1929.

Ser. No. 330,501. WISCONSIN ABRASIVE CO., Milwaukee, Wis. Filed Sept. 19, 1932.

MASTER

For Razor Hones.
Claims use since May, 1928.

Ser. No. 330,502. WISCONSIN ABRASIVE CO., Milwaukee, Wis. Filed Sept. 19, 1932.

NU EDGE

For Razor Hones.
Claims use since May, 1931.

CLASS 6

Chemicals, Medicines, and Pharmaceutical Preparations

Ser. No. 313,396, JESSE C. STEWART CO., Pittsburgh, Pa. Filed Apr. 15, 1931.



The letter "S" being shown in red.
For Laundry Blue Powder.
Claims use since Feb. 5, 1931.

Ser. No. 322,264. THE ODORONO COMPANY, INC., New York, N. Y. Filed Dec. 18, 1931.



The bottle, per se, forms no part of applicant's mark.
For Deodorants and Preparations for Preventing Excessive Perspiration.
Claims use since August, 1931.

Ser. No. 323,870. PARAGON DISTRIBUTING CORP., New York, N. Y. Filed Feb. 5, 1932.



All the wording appearing on the drawing with the exception of the words "Paroil" and "Paragon Distributing Corpn." are disclaimed apart from the mark as shown.
For Antiseptic Oil for the Treatment of the Hair and Scalp.
Claims use since Jan. 4, 1932.

Ser. No. 323,871. PARAGON DISTRIBUTING CORP., New York, N. Y. Filed Feb. 5, 1932.



All the wording appearing on the drawing with the exception of the words "Removol" and "Paragon Distributing Corpn." are disclaimed apart from the mark as shown.
For Hair Coloring Remover.
Claims use since Dec. 10, 1931.

Ser. No. 324,215. GLADYS V. MCCUNE, New York, N. Y. Filed Feb. 15, 1932.

MOTHER O' PEARL

For Beauty Creams.
Claims use since Jan. 18, 1932.

Ser. No. 324,278. JAMES J. AMICK, doing business as James J. Amick & Son, Detroit, Mich. Filed Feb. 18, 1932.



The filled in vertical lines in the drawing are for shading purposes only. The words "Grows Hair" are hereby disclaimed apart from the mark.
For Medicinal Compound in the Form of a Tonic for Growing Hair.
Claims use since Jan. 20, 1931.

Ser. No. 324,569. S. PFEIFFER MFG. CO., St. Louis, Mo. Filed Feb. 27, 1932.

COCOLAX

For Medicinal Preparation for the Relief of Indigestion and Constipation.
Claims use since June 7, 1923.

Ser. No. 325,920. SANDOZ CHEMICAL WORKS, INC., New York, N. Y. Filed Apr. 8, 1932. Under 10-year proviso.



For Medicinal Garlic Preparations, Ergot Preparations, Hypnotics, Analgesics, Cardiodiuretic Preparations of Squills and of Digitalis, Local Anesthetics for External Application and for Injection, Medicinal Calcium Preparations for Oral, Intramuscular, and Intravenous Use, for Medicinal Belladonna Preparations, for Medicinal Preparations Adapted for the Treatment of Flatulence, Diarrhea, Symptoms of Distress in Arteriosclerosis, Convulsions, Spasms, Pain, Tetany, Dermatoses, Hemorrhage, Acute and Chronic Infections, Hepatobiliary Disturbances, Postpartum Atony and Hemorrhage in Childbirth, Milk Fever in Cattle, Pregnancy Toxemias in Cows, Sheep, Dogs, for Aniline Dyes and Chemicals Adapted for Dyeing, Bleaching, Finishing, Textile Printing, and Treatment of Textile Fabrics and Fibers.
Claims use since 1890.

Ser. No. 326,276. BURNOL PETROLEUM CO., Los Angeles, Calif. Filed Apr. 18, 1932.



We disclaim as operative parts of our trade-mark as shown, the words "Motor Fuel" where this legend appears in white letters in a black background in the lower arc of the circular design, all as printed on the specimens.

For Chemical Compounds to be Added to Gasolene to Improve Combustion.

Claims use since Jan. 28, 1932.

Ser. No. 326,304. IRVING SCHUMAN, doing business as Vitadent Laboratories, Jersey City, N. J. Filed Apr. 20, 1932.

VITADENT

For Dentifrice.

Claims use since Apr. 16, 1932.

Ser. No. 327,086. THE BONTTOO CORN SALVE COMPANY, Toledo, Ohio. Filed May 12, 1932.

BONTTOO

For Salve for the Treatment of Horny Indurations and/or Thickened Epidermic Growths.

Claims use since Apr. 30, 1932.

Ser. No. 328,063. CHARLES EDWIN JACKSON, doing business as The Charlain Co., Philadelphia, Pa. Filed June 17, 1932.

DRYSIT



No claim is made to the word "Drysit" apart from the mark as shown.

For Preparation for the Treatment of Skin Diseases, Sumac, Oak, and Ivy Poisons, Windburn, Sunburn, Heat Rash, Eczema, and Pimples.

Claims use since June 13, 1932.

Ser. No. 328,351. ROBERTA GORDON, San Francisco, Calif. Filed June 28, 1932.

GORD-O-LENE



The portrait is that of applicant.

For Hair Pressing Oil and Hair Restorer.

Claims use since Apr. 15, 1932.

Ser. No. 328,719. CLYDE S. SMITH, doing business as O-Do-Co., Dallas, Tex. Filed July 11, 1932.



O-DO

The portraits appearing on the drawing are fanciful.

For Preparation for Use as a Deodorant and Perspiration Corrective.

Claims use since Jan. 15, 1932.

Ser. No. 329,046. HELEN G. FLATEN, Los Angeles and Huntington Park, Calif. Filed July 25, 1932.

DU VERNET



The portrait appearing in the drawing is fanciful.

For Hair Dressing Preparations and Brilliantine.

Claims use since Feb. 1, 1932.

Ser. No. 329,119. FRED. MÜLHENS, INC., New York, N. Y. Filed July 27, 1932.

BLAUGOLD-KÖLNISCH WASSER

No claim is made to the words "Kölnisch Wasser" apart from the mark shown in the drawing.

For Eau de Cologne.

Claims use since September, 1930.

Ser. No. 329,206. JULIUS H. TUVIN, doing business as The Dentay Company, New York, N. Y. Filed July 29, 1932.

Dentay

For Preparation for Holding Artificial Teeth in Place, Said Preparation Being Incidentally a Food Powder.

Claims use since June 1, 1932.

Ser. No. 329,260. ELWOOD J. GOODIER, doing business as The Goodier Company, Dallas, Tex. Filed Aug. 1, 1932.

PERSONAL CHARM



For Astringents, Astringent Cerates, Bleach Creams, Beauty Creams, Cold Creams, Cleansing Creams, Obesity Creams, Refreshing Creams, Obesity Astringents, Dry Rouges, Liquid Rouges, Face Bleaches, Skin Whiteners in Liquid, Cream, and Solid Form, Face Packs, Eyebrow and Eyelash Grower, Eye Drops, Eyebrow Pencils, Hand Lotions, Skin Lotions, After Shaving Lotions, Pomades, Face Powders, Talcum Powders, Body Powders, Chemical Preparations Suitable for the Darkening of Eyelashes and Eyebrows, Sachets, Hair Salves, Hair Elixirs, Dandruff Preparations, Hair Tonics, Hair Oils, Shampoos, Hair Dyes, Bath Salts, Smelling Salts, Lip Sticks, Incense, Tooth Powders, Mouth Washes, Dentifrices, Tooth Pastes, Nail Powders, Depilatories, Nail Bleaches, Nail Polishes, Witch Hazel, Peroxide, Petroleum Jellies, Witch Hazel Salves, Camphor Creams, Foot Powders, Corn Salves, Deodorants, Disinfectants, Bay Rum, Perfumes, and Toilet Waters.

Claims use since Mar. 15, 1932.

Ser. No. 329,867. BAUMHEIER CHEMICAL COMPANY, INC., New York, N. Y. Filed Aug. 6, 1932.



For Water Proofing Agent for Textile Fabrics.

Claims use since Mar. 2, 1932.

Ser. No. 329,414. GLY-SER-DINE CHEMICAL COMPANY, Milwaukee, Wis. Filed Aug. 8, 1932.

Gly-Ser-Dine

For Tooth Paste Containing the Following Natural Elements: Aluminum, Silica, Iodine, Oxygen, Hydrogen, Carbon, and Sodium, for External Application in the Treatment of Infected Gums and Pus Pockets Around the Teeth.

Claims use since June 1, 1932.

Ser. No. 329,443. CHARLES B. FRETWELL, doing business as Spartan Grain & Mill Co. and Sparco Laboratories, Spartanburg, S. C. Filed Aug. 10, 1932.

SPARCO

For Worm Tablets for Poultry; Ointment for Treating Poultry, Rabbits, Pigeons, Dogs, and Cattle; Preparation for Treating Acute Bronchitis of Poultry, Medicine for Treating Chronic Bowel Troubles in Poultry and Rabbits, Salve for Treating Cannibalism in Poultry; a Spray for Incubators, Poultry Houses, Hutches, Kennels, Lofts, Barns, and Milk Houses; Insecticide; Spray for Poultry, Pigeons, Rabbits, Dogs, and Stock; Chick Tablets, and Chick Powder.

Claims use since Aug. 15, 1931.

Ser. No. 329,664. GEORGE M. FERGUSON, doing business as Ferguson Manufacturing Company, Portland, Oreg. Filed Aug. 17, 1932.

JEAST
"Stops" What?

For Compound for Protecting Automobile Radiators from Leakage.

Claims use since July 28, 1932.

Ser. No. 329,691. SYLPH LABORATORIES, INC., New York, N. Y. Filed Aug. 19, 1932.



No claim is made to the words "Tea—A Natural Herb Tea Blended from Choicest Herbs—Delicious in Taste—Beneficial to Health."

For Medicinal Herb Teas Used as Blood Purifiers and Laxatives.

Claims use since November, 1930.

Ser. No. 329,764. BOON MANUFACTURING CO., INC., New York, N. Y. Filed Aug. 23, 1932.

BOONAC

For Cream and Ointment to Protect the Hands Against Acid Burns and Anticorrosion on Battery Terminals, Cables, and Lugs.

Claims use since Jan. 8, 1929.

Ser. No. 329,765. BOON MANUFACTURING CO., INC., New York, N. Y. Filed Aug. 23, 1932.

BOONAL

For Ointment and Cream to Protect the Hands Against Caustic Burns.

Claims use since Jan. 8, 1929.

Ser. No. 329,806. MICHIGAN ALKALI COMPANY, Wyandotte, Mich. Filed Aug. 24, 1932.

Wyandotte

Applicant is owner of Reg. Nos. 32,438, 53,849, 82,452, 224,848, 228,155, 231,535, 250,303.

For Calcium Chloride and Carbon Dioxide.

Claims use since January, 1928, for calcium chloride; and since February, 1931, for carbon dioxide.

Ser. No. 329,807. MICHIGAN ALKALI COMPANY, Wyandotte, Mich. Filed Aug. 24, 1932.



For Carbon Dioxide.

Claims use since February, 1931.

Ser. No. 329,886. CARBIDE AND CARBON CHEMICALS CORPORATION, New York, N. Y. Filed Aug. 27, 1932.

SYNASOL

For Denatured Alcohol and Alcohol Other Than Pure Ethyl Alcohol for Various Uses in the Industrial Arts.

Claims use since Apr. 4, 1932.

Ser. No. 329,887. CONTOUR LABORATORIES, INC., New York, N. Y. Filed Aug. 27, 1932.

MODERN EVE

For Cleansing Cream for the Skin, Tissue Cream, Foundation Cream, Astringent Skin Lotion, Face Powder, Mascara, Lipstick, Dry Rouge, and Cream Rouge.

Claims use since July, 1932.

Ser. No. 329,997. CHARLES W. MATTISON, doing business as Citrovite Tooth Paste Co., Los Angeles, Calif. Filed Aug. 30, 1932.

CITROVITE

For Tooth Paste.

Claims use since Aug. 10, 1932.

Ser. No. 330,002. SIDNEY B. WOLF, doing business as Ice-It Products, New York, N. Y. Filed Aug. 30, 1932.

ICE-IT

For Antiseptic, Astringent, and Styptic Preparations.

Claims use since Aug. 25, 1932.

Ser. No. 330,011. FRANCES GLATZER, doing business as Dure, New York, N. Y. Filed Aug. 31, 1932.

AiR DE JEUNESSE

For Toilet Articles— Namely, Face Creams, Beautifying Creams, Tissue Creams, Cleansing Creams, Cold Creams, Massage Creams, Vanishing Creams, Face Powders (in Powder or Compact Form), Toilet Powders, Toilet Creams, Foot Powders, Talcums, Face Packs, Face Pastes, Face Bleach Beauty Clays, Face Lotions, Hand Lotions, Lip Sticks, Rouges, Perfumes, Mascara, Bath Salts, Preparations for Scenting the Breath, Preparations for Scenting the Bath, Body Salts, Smelling Salts, Incenses, Toilet Waters, Sachets, Bay Rum, Hair Tonics, Hair Shampoos, Scalps Massage Salves, Hair Oils, Pomades (in Sticks and Cakes), Cuticle Remover (in Liquid Form), Nail Pastes, Nail Polishes, Eyebrow Pencils, Tooth Powders, Tooth Pastes, Tooth Washes, and Deodorising Creams, Liquids, and Pastes; Mouth, Nose, and Throat Washes; Astringents, Rubbing Alcohol, Hair Remover (Liquid or Paste Form), Hair Restoratives, and Cuticle Ice.

Claims use since May, 1925.

Ser. No. 330,064. EMILY A. HORTON, doing business as The Swedish Laboratories, Cambridge, Mass. Filed Sept. 2, 1932.

FOMOS



For Shampoo.

Claims use since Dec. 21, 1931.

Ser. No. 330,080. BIO MEDICO, INC., New York, N. Y. Filed Sept. 3, 1932.

Vannay

For Medicinal Preparation for Reducing the Weight.

Claims use since Aug. 29, 1932.

Ser. No. 330,135. EDWIN WHITTEMORE, doing business as The Wit-Mor Laboratories, Baltimore, Md. Filed Sept. 6, 1932.

COPHEN

For Rheumatic Preparation.

Claims use since Aug. 10, 1932.

Ser. No. 330,392. JOHN H. BEECK, INC., Springfield, Mass. Filed Sept. 16, 1932.

LATHEROL
Ph 8

For Shampoo Preparations.

Claims use since Aug. 2, 1932.

Ser. No. 330,530. VAPOR PHASE OILS, INC., New York, N. Y. Filed Sept. 20, 1932.

OCTANOL

For a Preparation to be Added to a Motor Fuel to Increase the Antiknock Characteristics of Said Fuel and the Efficiency Thereof.
Claims use since Feb. 26, 1932.

Ser. No. 330,552. SCHERING & GLATZ, INC., New York, N. Y. Filed Sept. 21, 1932.

PROLIXAL

For Medicinal Preparation Having Laxative Qualities and Being Recommended for the Treatment of Coryza and Coughs and Colds Generally.
Claims use since Sept. 2, 1932.

Ser. No. 330,671. ELIZABETH J. TATE, Washington, D. C. Filed Sept. 26, 1932.

SEMIS

For Hair Tonic.
Claims use since July 1, 1932.

CLASS 8

Smokers' Articles, Not Including Tobacco Products

Ser. No. 315,973. NIKOSTOP IPARI ÉS KERESKEDELMI RÉSZVÉNY TÁRSASÁG, Budapest, Hungary. Filed June 17, 1931.

NIKOSTOP

For Cigar and Cigarette Holders and Pipes, Smoke Filtering Devices in the Form of Fittings for Cigar and Cigarette Holders and Pipes, and Chemically Treated Smoke Filters for Denicotinizing Purposes.
Claims use since Aug. 7, 1930.

Ser. No. 328,872. MARDEN MFG. CO., Minneapolis, Minn. Filed July 18, 1932.

ROLL-O-MATIC

For Machine Used by the Individual Smoker to Form Cigarettes.
Claims use since Jan. 1, 1932.

CLASS 10

Fertilizers

Ser. No. 318,331. SWANN CHEMICAL COMPANY, Birmingham, Ala. Filed Aug. 22, 1931.



No claim is made to the words "Muscle Shoals" and "Fertilizer" apart from the distinctive display of the mark as shown.
For Fertilizer in the Form of Uniform Diameter Irregular Length Extrudes.
Claims use since July 28, 1931.

Ser. No. 318,332. SWANN CHEMICAL COMPANY, Birmingham, Ala. Filed Aug. 22, 1931.



No claim is made to the words "Muscle Shoals" and "Fertilizer" apart from the distinctive display of the mark as shown.
For Highest Analysis Accurately Sized Extruded Nitrogen and Diammonium Phosphate Fertilizer.
Claims use since July 28, 1931.

CLASS 12

Construction Materials

Ser. No. 320,493. JOHN DEAN, San Francisco, Calif. Filed Oct. 27, 1931.

DEAN-SCRATCH-BOARD

The words "Scratch" and "Board" appearing upon the drawing are disclaimed apart from the mark shown.
For Wall Board.
Claims use since Aug. 1, 1930.

Ser. No. 329,424. KRAESSY & MATTISON COMPANY, Ambler, Pa. Filed Aug. 9, 1932.

INDUSTAL

For Asbestos-Cement Product Made in Corrugated Sheet Form Especially Adapted for Roofings, Sidings, and Partitions.
Claims use since April, 1932.

CLASS 13

Hardware and Plumbing and Steam-Fitting Supplies

Ser. No. 292,012. THE SAFETY CAR HEATING & LIGHTING COMPANY, New Haven, Conn., and New York, N. Y. Filed Nov. 4, 1929.



For Plumbing, Steam-fitting, Gas Fitting and Air and Gas Valves, and Regulator Valves.
Claims use since Aug. 1, 1920.

Ser. No. 328,734. WALFIX SPECIALTIES, INC., New York, N. Y. Filed Feb. 1, 1932.

WALFIX

For Wall Bathroom Fixtures—Namely, Soap Dishes, Soap Niches, Drinking Glass Holders, Drinking Glass Niches, Tooth Brush Holders, Towel Rods, Toilet Paper Niches and Toilet Paper Supports.
Claims use since Aug. 15, 1931.

Ser. No. 330,015. THE INTERNATIONAL NICKEL COMPANY, INC., New York, N. Y. Filed Aug. 31, 1932.

STRAITLINE

For Sinks, Especially Those Made of Nickel and/or Copper and/or Alloys Thereof.
Claims use since June 18, 1932.

Ser. No. 330,016. THE INTERNATIONAL NICKEL COMPANY, INC., New York, N. Y. Filed Aug. 31, 1932.

Streamline

For Sinks, Especially Those Made of Nickel and/or Copper and/or Alloys Thereof.
Claims use since June 18, 1932.

Ser. No. 330,342. THE ENTERPRISE ALUMINUM COMPANY, Massillon, Ohio. Filed Sept. 14, 1932.

"Peggy Perk"

For Percolators.
Claims use since Sept. 7, 1932.

Ser. No. 330,350. PACIFIC WIRE PRODUCTS COMPANY, Los Angeles, Calif. Filed Sept. 14, 1932.



The rule in the drawing indicates the color red.
For Tinned Bronze Wire Insect Screening.
Claims use since Apr. 8, 1932.

CLASS 14

Metals and Metal Castings and Forgings

Ser. No. 329,983. EASTERN BRASS & COPPER CO. INC., New York, N. Y. Filed Aug. 30, 1932.



No registration rights are claimed herein to the word "Brand", or to the word "Bar" as a descriptive designation of a bar of metal, apart from the mark shown.

For Strips, Sheets, Rods, and Similar Members of Non-Ferrous Metals, and Alloys Thereof—Namely, Brass, Copper, Nickel, Silver, Aluminum, Bronze, and Zinc.

Claims use since Aug. 1, 1931.

CLASS 15

Oils and Greases

Ser. No. 302,329. PANTHER OIL & GREASE MFG. CO., Fort Worth, Tex. Filed June 11, 1930.

Micro-Phytic Processed

For Lubricating Oils.
Claims use since Apr. 10, 1930.

Ser. No. 326,731. THE PEROLIN COMPANY OF AMERICA, Chicago, Ill. Filed Apr. 30, 1932.

EAGLEINE

For Lubricating Oils and Lubricating Greases.
Claims use since Apr. 1, 1895.

Ser. No. 330,091. FRANK A. HOPPE, INCORPORATED, Philadelphia, Pa. Filed Sept. 8, 1932.

HOPPE'S

For Gun Greases and Lubricating Oils.
Claims use since Apr. 24, 1924.

CLASS 16

Paints and Painters' Materials

Ser. No. 325,823. GLASURIT-WERKE M. WINKELMANN AKTIEN-GESELLSCHAFT, Hamburg, Germany. Filed Apr. 5, 1932.

GLASSO

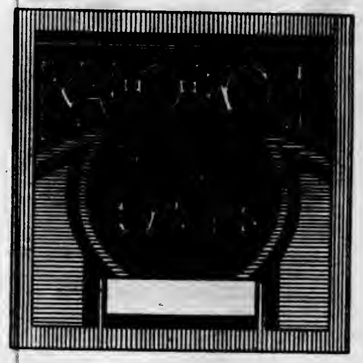
For Paints, Paint Enamels, Varnishes, Lacquers, Japans, Automobile and Furniture Polishes, and Putty.
Claims use since Apr. 1, 1925.

Ser. No. 326,622. CONTINENTAL CAR-NA-VAR CORPORATION, Brazil, Ind. Filed Apr. 27, 1932.

TRI-C

For Liquid Floor Waxes and Floor Polishes for All Kinds of Floors.
Claims use since July 2, 1919.

Ser. No. 328,378. WEST COAST KALSOMINE CO., Berkeley, Calif. Filed June 28, 1932.



The shading on the drawing indicates the colors orange, blue, and black. The representation of a label is disclaimed per se. The descriptive words "Wall Coating" are disclaimed apart from the mark as shown on the drawing.

For Cold Water Paint, Kalsomine, Deep Kalsomine Colors, and Painters' Wall Size, All in Dry Powder Form.
Claims use since June 15, 1932.

Ser. No. 330,041. EVER-NU ENAMEL CO., INC., Chicago, Ill. Filed Sept. 1, 1932.

Ever-NU

For Paint Enamel.
Claims use since June 29, 1932.

CLASS 17

Tobacco Products

Ser. No. 330,583. STEPHANO BROTHERS, Philadelphia, Pa. Filed Sept. 22, 1932.

GEMS

For Cigarettes.
Claims use since Sept. 8, 1932.

CLASS 19

Vehicles, Not Including Engines

Ser. No. 318,918. MOTOR WHEEL CORPORATION, Lansing, Mich. Filed Sept. 10, 1931.



The drawing is lined to indicate that the letter "M" is in red. No claim is made, however, to such color.

For Wheels for Automotive Vehicles.
Claims use since September, 1928.

Ser. No. 329,057. PARAMOUNT TAXICAB CORPORATION, New York, N. Y. Filed July 25, 1932.



For Automobiles.
Claims use since May 22, 1932.

CLASS 21

Electrical Apparatus, Machines, and Supplies

Ser. No. 315,257. GENERAL KONTROLLER COMPANY, INC., Dayton, Ohio. Filed June 1, 1931.

Telechime

For Electrically Operated Chimes in the Nature of Door or Call Chimes.
Claims use since Nov. 9, 1930.

Ser. No. 319,095. ALMON E. JONES, Philadelphia, Pa. Filed Sept. 12, 1931.

STREAMLINE

For Electrically Driven Fans.
Claims use since February, 1931.

Ser. No. 323,348. METEOR ELECTRIC CORPORATION, New York and Brooklyn, N. Y. Filed Jan. 23, 1932.

METEORITE

For Heater Plugs, Wall Plates, Canopy Switches, Lamp Sockets, Attachment Plugs, Pulley Switches, Cube Taps, Current Taps, Surface Tumbler Switches, Flush Receptacles, and Pendant Switches.
Claims use since Jan. 1, 1928.

Ser. No. 330,248. THE FITZGERALD MFG. COMPANY, Torrington, Conn. Filed Sept. 12, 1932.

Crescent

For Electric Mixer Juice Extractor.
Claims use since Aug. 31, 1932.

CLASS 22

Games, Toys, and Sporting Goods

Ser. No. 328,860. SEIBERLING LATEX PRODUCTS COMPANY, Barberton, Ohio. Filed July 15, 1932.

ENSIGN

For Golf Balls.
Claims use since May 18, 1932.

Ser. No. 329,601. ILLINOIS LUMBER AND TILE CO., St. Louis, Mo. Filed Aug. 17, 1932.

TUMBLE TOP

For Toy of the Bandalore Type.
Claims use since May 2, 1932.

Ser. No. 330,280. CONSTANTY MAJEWICZ, doing business as Peg-O-Loop Mfg. Co., Dearborn, Mich. Filed Sept. 10, 1932.

PEG-O-LOOP

For Outdoor Game of Skill, Particularly for Juvenile Use, Played with Pegs and Rings After the Manner of the Horse-Shoe Game.
Claims use since Aug. 16, 1932.

Ser. No. 330,379. PAPER NOVELTY MANUFACTURING COMPANY, New York, N. Y. Filed Sept. 15, 1932.

DOUBL-GLO

For Shredded Foil for Christmas-Tree and Other Decorations.
Claims use since Aug. 18, 1932.

Ser. No. 330,561. THE L. A. YOUNG COMPANY, Detroit, Mich. Filed Sept. 21, 1932.

BIFLECTOR

For Wood and Metal Golf Clubs.
Claims use since Aug. 20, 1932.

Ser. No. 330,612. ADVANCE MANUFACTURING COMPANY, Milwaukee, Wis. Filed Sept. 24, 1932.

SPEEDEE

For Roller Skates.
Claims use since Mar. 12, 1931.

CLASS 23

Cutlery, Machinery, and Tools, and Parts Thereof

Ser. No. 304,888. RAMAPO AJAX CORPORATION, New York, N. Y. Filed Aug. 21, 1930.

THREE IN ONE

For Switch Stands Used for Operating Railroad Track Switches and Usually Comprising a Complete Unit of Housing and Mechanical Leverage for Operating the Switch.
Claims use since June 8, 1930.

Ser. No. 322,691. GELLMAN MANUFACTURING CO., Rock Island, Ill. Filed Jan. 4, 1932.

THE SPEED GIANT

For Bread Slicing Machines.
Claims use since May 29, 1931.

Ser. No. 328,835. E. A. BERGS FABRIKS AKTIEBOLAG, Eskilstuna, Sweden. Filed July 16, 1932.

SHARK

For Plane Irons, Chisels, Shoemakers' Knives, and Tongs.
Claims use since 1929.

Ser. No. 329,732. WALTER A. ADAMS, doing business as Adams Machine Company, Rochester, N. Y. Filed Aug. 22, 1932.

SHOPKRAFTEER

For Industrial Furniture—Namely, Work Tables and Work Benches.
Claims use since July 18, 1932.

Ser. No. 329,931. THE BORG & BECK COMPANY, Chicago, Ill. Filed Aug. 29, 1932.

BORG & BECK CLUTCH · THE STANDARD ·

No exclusive claim is made to the words "Clutch" and "The Standard" and the representation of a clutch apart from the mark shown.
For Mechanical Clutches, Clutch Plates, and Parts Thereof.
Claims use since Aug. 1, 1928.

Ser. No. 329,935. THE BRYANT MANUFACTURING COMPANY, Wapakoneta, Ohio. Filed Aug. 29, 1932.

"Artwood"

For Handles for Hoes, Hay Forks, Manure Forks, Header Forks, Spading Forks, Rakes, Drain Cleaners, Shovels, Spades, Scoops, Potato Hooks; D Chisholm Pattern Handles, D Maynard Shovel Handles, D Ditching Spade Handles, and D Tilling Spade Handles.
Claims use since June 28, 1932.

Ser. No. 330,137. ZIGZAG SHARPENER CO., Tulsa, Okla. Filed Sept. 6, 1932.

ZIG ZAG

For Formed Razor Sharpeners, Including Sharpeners Made of Formed Glass.
Claims use since May 20, 1932.

Ser. No. 330,265. S. H. KRESS & CO., New York, N. Y. Filed Sept. 12, 1932.

DORIC

For Razors, Safety Razors, Safety Razor Blades, Pocketknives, Scissors, Table Knives and Forks of Base Metal, and Hair Clippers.
Claims use since July 1, 1932.

Ser. No. 330,419. COOPER PRODUCTS CORPORATION, New York, N. Y. Filed Sept. 17, 1932.

EARL

For Razor Blades.
Claims use since Sept. 1, 1932.

CLASS 25

Locks and Safes

Ser. No. 330,448. THE CHAMPION HARDWARE COMPANY, Geneva, Ohio. Filed Sept. 19, 1932.

CHAMPION

For Barn Door Catches, Chain Bolts, Foot Bolts, Surface Bolts, Elbow Catches, Transom Catches, Thumb Latches, Sash Fasteners, Chain Fasteners, Barrel Bolts, Door Bolts, Cupboard Turns and Catches, Friction Catches, Door Catches, Door Latches, Screen Door Catches.
Claims use since 1883.

CLASS 26

Measuring and Scientific Appliances

Ser. No. 288,980. PINCHOT-NEUMANN HOLDING CORP., New York, N. Y. Filed Aug. 24, 1929.

NEUMACOLOR

For Sensitised Gelatine Coated Paper Sheets for Use in Photographic and Colo-Type Printing.
Claims use since Aug. 1, 1929.

Ser. No. 327,034. UNIVERSAL LUBRICATING SYSTEMS, INC., Pittsburgh, Pa. Filed May 12, 1932.

U LUBRICATOR M

The lining on the drawing is intended to represent shading. The applicants hereby disclaim the word "Lubricator" apart from the mark shown.
For Metered Dispensing Pumps.
Claims use since Aug. 18, 1931.

Ser. No. 327,344. CUTLER-HAMMER, INC., Milwaukee, Wis. Filed May 23, 1932.

CALORIMIXER

The representation of goods is disclaimed apart from the mark shown in the drawing.

For Automatic Thermo-Electric Gas Mixing Control Apparatus.

Claims use since Aug. 21, 1931.

Ser. No. 328,747. UTILITY MANUFACTURING COMPANY, INC., New York, N. Y. Filed July 12, 1932.

Falcon

For Photographic Cameras and Parts Thereof.

Claims use since May 28, 1932.

Ser. No. 330,287. BAUSCH & LOMB OPTICAL COMPANY, Rochester, N. Y. Filed Sept. 13, 1932.



For Ophthalmic Lenses.

Claims use since July 25, 1932.

Ser. No. 330,288. BAUSCH & LOMB OPTICAL COMPANY, Rochester, N. Y. Filed Sept. 13, 1932.

BALSIN

For Ophthalmic Lenses.

Claims use since Aug. 31, 1932.

CLASS 31

Filters and Refrigerators

Ser. No. 328,932. ANTHRACITE EQUIPMENT CORPORATION, New York, N. Y. Filed July 21, 1932.

ANTHRAFILTER

No claim is made to the exclusive use of the word "Filter" except in association with the other features of the mark.

For Filtering Media Composed of Freshly Mined and/or Reclaimed Anthracite in Any Size.

Claims use since July 8, 1932.

CLASS 34

Heating, Lighting, and Ventilating Apparatus, Not Including Electrical Apparatus

Ser. No. 328,560. THE MANTLE LAMP COMPANY OF AMERICA, Chicago, Ill. Filed July 5, 1932.

Aladdin

For Heating and Lighting Apparatus, Parts of and Accessories Therefor—Namely, Hydrocarbon Lamps, Burners, Lanterns, Heaters, and Parts of and Accessories Therefor, Mica Lamp Chimneys, Incandescent Mantles, Wicks, and Metal, Paper, Fabric, Parchment, and Metal-Frame Glass Lamp Shades.

Claims use since Sept. 25, 1908.

CLASS 35

Belting, Hose, Machinery Packing, and Non-metallic Tires

Ser. No. 325,862. WESTERN AUTO SUPPLY AGENCY OF LOS ANGELES, Los Angeles, Calif. Filed Apr. 6, 1932.



Applicant hereby disclaims the words "Oil Control Piston Rings."

For Piston Rings.

Claims use since Jan. 6, 1932.

Ser. No. 329,740. L. L. CORYELL & SON, Lincoln, Nebr. Filed Aug. 22, 1932.

CORYELL-70-

For Automobile Tires, Tubes, and Portable Tire Patch Outfits.

Claims use since Sept. 1, 1931.

CLASS 36

Musical Instruments and Supplies

Ser. No. 327,651. FAIRCHILD-WOOD VISAPHONE CORPORATION, New York, N. Y. Filed June 2, 1932.

VISAPHONE

For Phonographs Provided with Signals Indicating the Progress of the Records in Relation to the Display of Projected Illustrations Operated Separately from the Phonograph.

Claims use since Jan. 19, 1932.

CLASS 37

Paper and Stationery

Ser. No. 329,969. S. E. & M. VERNON INC., New York, N. Y. Filed Aug. 29, 1932.

Fellowship

For Loose Leaf Note Books and Blank Books.

Claims use since Aug. 19, 1932.

Ser. No. 330,225. CAPITAL PAPER COMPANY, Indianapolis, Ind. Filed Sept. 10, 1932.



The color lining is to indicate shading only.

For Toilet Paper.

Claims use since Sept. 1, 1927.

Ser. No. 330,274. PEOPLES DRUG STORES, INC., doing business as Barnard Company, Washington, D. C. Filed Sept. 12, 1932.

JA-PAL-MO

For Cleansing Tissues (Rolls).

Claims use since June 1, 1932.

CLASS 38

Prints and Publications

Ser. No. 312,747. ATLAS PUBLISHING COMPANY, INC., New York, N. Y. Filed Mar. 31, 1931.

MINIATURE GOLF COURSE MAGAZINE

For Monthly Magazine.

Claims use since Nov. 1, 1930.

Ser. No. 328,874. PORTLAND MAINE PUBLISHING COMPANY Portland, Me. Filed July 18, 1932.



For Newspaper Column.

Claims use since June 30, 1930.

Ser. No. 330,187. JOSEPH D. WILLIAMS, Bellflower, Calif. Filed Sept. 8, 1932.

Bellflower Herald Enterprise

The words "Accuracy Reliability" are disclaimed apart from the other features of the mark shown in the drawing

For Newspaper.

Claims use since May 15, 1927.

Ser. No. 330,235. WILLIAM TOMKINS, Point Loma, Calif. Filed Sept. 10, 1932.

INDIANS THEIR HISTORY and SIGN-TALK By William Tomkins
FOR BOYS AND GIRLS from EIGHT to EIGHTY

The words "For Boys and Girls from Eight to Eighty" appearing on the drawing, being descriptive of the goods, are hereby disclaimed.
For Title for Newspaper Feature Articles Published from Time to Time.
Claims use since Sept. 4, 1932.

CLASS 39

Clothing

Ser. No. 326,145. IPSWICH MILLS, INC., Gloucester, Mass. Filed Apr. 15, 1932.

IPSWICH PRINTS

Applicant is the owner of the mark "Ipswich," registration Number 297,282, September 6, 1932, effected under the 10-year proviso. No claim is made to the word "Prints" apart from the mark shown on the drawing.
For Hosiery.
Claims use since Apr. 12, 1932.

Ser. No. 328,103. OSGOOD & SONS INC., Decatur, Ill. Filed June 18, 1932.

TRIXIE FROX

Applicant hereby disclaims the right to the exclusive use of the word "Frox."
For Children's Dresses, Pajamas, Play Suits, Creepers, Rompers, Smocks, Sun-Suits, Beach-Togs, Beach Robes, Bathrobes, Combined Overall Playsuits, Bloomers, Panties, Caps, Bonnets, and Berets.
Claims use since June 1, 1932.

Ser. No. 328,746. THE UNIQUE GLOVE COMPANY, INC., Gloversville, N. Y. Filed July 12, 1932.

U-ZIP-ON

For Women's, Children's, and Men's Leather and Fabric Gloves.
Claims use since June 1, 1932.

Ser. No. 328,983. WALTER A. FANKHAUSER, doing business as Walters Shoe Company, New York, N. Y. Filed July 22, 1932.

N·E·H·A

For Leather Shoes.
Claims use since June 15, 1932.

Ser. No. 329,019. HOOK, LTD., Los Angeles, Calif. Filed July 23, 1932.

"IT'S THE CUT"

For Men's and Women's Clothing—Namely, Leather Coats, Jackets, Skirts, Trousers, Breeches, Caps, and Overalls; Silk-Cotton Coats, Skirts, Dresses, Capes, or Wraps, and Dress, Negligee, Work or Under Shirts; Woolen Coats (Including Overcoats), Skirts or Dresses, Capes, Wraps, Shirts, Trousers (Silk and Wool), Knickers, Breeches, Overalls, and Combination Caps.
Claims use since July 3, 1931.

Ser. No. 329,315. PEARCE-DUFFY COMPANY, Mount Pleasant, Mich. Filed Aug. 3, 1932.

DYNAMIC DIME

No claim is made for the exclusive right to the use of the word "Dime" apart from the mark shown on the drawing.
For Hosiery for Men, Women, and Children; Underwear, Bloomers, Panties, Combinations (Consisting of a Shirt and Panties), Brassières, Pajamas, Shorts (for Underwear), Shirts (Both Dress and Negligee), and Athletic Shirts for Men, Women, and Children.
Claims use since July 22, 1932.

Ser. No. 329,483. STRAUS, ROYER & STRASS, INC., Baltimore, Md. Filed Aug. 11, 1932.

THE AMERICAN GOLFER

For Women's, Misses', and Children's Dresses, Shirts, Shorts, Blouses, Skirts, Slacks, Long Pants, Middies, Playsuits, and Suits.
Claims use since July 29, 1932.

Ser. No. 329,593. H. D. BOB COMPANY, INC., New York, N. Y. Filed Aug. 17, 1932.

LEATHERNECK

For Men's and Boys' Dress Shirts, Work Shirts, Flannel Shirts, Windbreakers, Blouses, Pajamas, Night Shirts, Undershirts, Shorts, Unionsuits, Made of Cotton, Linen, Rayon, Worsted, Flannel, Woolen, Silk, or Any Combination of These and Other Textiles.
Claims use since 1918.

Ser. No. 329,833. MORRIS & COMPANY, INCORPORATED, Baltimore, Md. Filed Aug. 25, 1932.

MAGICOAT

For Uniforms for Nurses, Maids, and Waitresses; Aprons and House Garments of the Wrap Around Style.
Claims use since May 22, 1932.

Ser. No. 330,010. GEIST & GEIST, INC., New York, N. Y. Filed Aug. 31, 1932.

FROSST-NITT

The word "Nitt" is hereby disclaimed apart from the mark as shown in the drawing.
For Knitted Outer Garments for Women and Children, such as Sweaters, Knitted Blouses, Knitted Skirts, Knitted Dresses, Knitted Suits, Knitted Caps, and Knitted Scarves.
Claims use since Jan. 1, 1932.

Ser. No. 330,149. WELLS-LAMONT-SMITH CORPORATION, Minneapolis, Minn. Filed Sept. 6, 1932.

L & N

For Work Gloves of Fabric and Combined Fabric and Leather.
Claims use since Aug. 15, 1932.

Ser. No. 330,150. WELLS-LAMONT-SMITH CORPORATION, Minneapolis, Minn. Filed Sept. 6, 1932.

Rock Island

For Work Gloves of Fabric and Combined Fabric and Leather.
Claims use since Aug. 15, 1932.

Ser. No. 330,157. BRADSTONE RUBBER COMPANY, Woodbine, N. J. Filed Sept. 7, 1932.

ADVANCE

For Rubber Heels, Rubber Soles and Half Soles.
Claims use since Aug. 11, 1932.

Ser. No. 330,164. KIVIETTE POMERANZ, doing business as Kiviette, New York, N. Y. Filed Sept. 7, 1932.

"After Six" FASHIONS

The word "Fashions" is disclaimed.
For Gowns, Dresses, and Coats for Women and Misses.
Claims use since Aug. 18, 1932.

Ser. No. 330,354. WINNIE-MAE DRESSES, INC., New York, N. Y. Filed Sept. 14, 1932.

Winnie-Mae Dresses

For Ladies' and Misses' Frocks and Dresses.
Claims use since July 8, 1932.

CLASS 42

Knitted, Netted, and Textile Fabrics

Ser. No. 317,618. WM. SIMPSON, SONS & CO., Philadelphia, Pa. Filed Aug. 8, 1931.

LIN-NOT

For Cotton Goods in the Piece.
Claims use since July 6, 1931.

Ser. No. 329,605. LORRAINE MANUFACTURING CO., Pawtucket, R. I. Filed Aug. 17, 1932.

SHIR-O-SHAKKAR

For Textile Fabrics in the Piece, of Cotton, Rayon, Silk, Wool, and/or Combinations Thereof.
Claims use since Nov. 19, 1931.

Ser. No. 330,061. CROMPTON-RICHMOND CO., INC., Crompton, R. I. Filed Sept. 2, 1932.

CORDURELLA

For Pile Fabrics, Including Corduroys and Plushes.
Claims use since July 30, 1932.

Ser. No. 330,606. ROSSIR VELVET COMPANY, Mystic, Conn. Filed Sept. 23, 1932.

KRINKLVEL

For Velvets in the Piece.
Claims use since Aug. 27, 1932.

CLASS 44

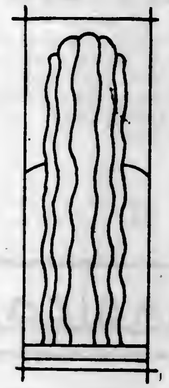
Dental, Medical, and Surgical Appliances

Ser. No. 325,099. THE KENDALL COMPANY, Chicago, Ill., and Boston, Mass. Filed Mar. 14, 1932.

BAUER : BLACK

The mark consists of a dark blue bar across one end of the container or label, carrying the name "Bauer & Black" in parenthetical brackets.
For Bandage Compress, Dental Floss, Crepe Bandages, Triangular Bandages, Gauze Bandages, Plaster of Paris Bandages, Woven Elastic Bandages, Surgical Gauze (Plain), Gauze Packer Strips, Eye Pads (Pieces of Cotton between Gauze), Handy-Tape Dressing (to Protect Cuts and Wounds), Sanitary Gauze Pouches, Sanitary Belts, Surgical Sponges, Sputum Cups, Tongue Depressors (Wood), Tourniquets, Suspensories, Supporters (Athletic), Applicator Sticks, Non-Medicated Corn Pads (Felt with Gummed Backing), Absorbent Cotton, Lambs' Wool (for Medical Use), Cotton Package (Device for Dispensing Absorbent Cotton in Rope or Strip Form), Chemical Heating Pads for Therapeutic Purposes, Waterproofed Protective Dressing, Towels (for Surgical Use), Umbilical Tape, Ligatures, and Sutures.
Claims use since Jan. 1, 1930.

Ser. No. 328,112. ZOTOS CORPORATION, New York, N. Y. Filed June 18, 1932.



The trade-mark is a fanciful design representing diagrammatically a back view of a woman's head in a rectangular frame.
For Hair Waving Pads.
Claims use since Mar. 8, 1932.

CLASS 45

Beverages, Nonalcoholic

Ser. No. 327,214. JOHN MORGAN COBLE, Junior, doing business as Red Cee Bottling Company, Burlington, N. C. Filed May 18, 1932.

Red Cee

For Nonalcoholic, Maltless Beverages Sold as Soft Drinks, Made from Essential Oils.
Claims use since Mar. 1, 1932.

Ser. No. 328,727. DREWRY & SONS CO., St. Paul, Minn. Filed July 12, 1932.

DAISY-CREME

Applicant makes no claim to exclusive use of the word "Creme" except in association with the other features of the mark.
For Carbonated Non-Alcoholic, Noncereal, Maltless Beverages Sold as Soft Drinks.
Claims use since May 15, 1929.

Ser. No. 330,279. VOLUNTEER STORES, INC., Chattanooga, Tenn. Filed Sept. 12, 1932.

VOLUNTEER FOOD STORES

No claim is made to the words "Food Stores" apart from the mark shown on the drawing.
For Grape Juice, Ginger Ale.
Claims use since July 1, 1932.

Ser. No. 330,332. WORTH A. BROWN, Capitola, Calif. Filed Sept. 14, 1932.

Moo Cow



For Nonalcoholic, Noncereal, Maltless Beverages, Sold as Soft Drinks and Sirups and Extracts for Making the Same.
Claims use since 1930.

CLASS 46

Foods and Ingredients of Foods

Ser. No. 311,822. CORN & WARE, Calipatria, Calif. Filed Feb. 21, 1931.

DESERT EDGE

For Fresh Vegetables, Fresh Citrus Fruits, Fresh Peaches, and Fresh Melons—Namely, Cantaloupes and Honeydews.
Claims use since Jan. 21, 1931.

Ser. No. 315,907. GEORGIA FOODS, INC., Atlanta, Ga. Filed June 16, 1931.

BRO-LO

For Canned Combination of Vegetables and Meat.
Claims use since May 15, 1931.

Ser. No. 324,236. UNION MALT PRODUCTS COMPANY, Detroit, Mich. Filed Feb. 16, 1932.

Creamee
DELIVERED TO YOUR HOME

The words "Delivered to Your Home" are disclaimed apart from the mark shown.
For Malt Syrup.
Claims use since July 1, 1931.

Ser. No. 325,237. NORDMARK-WERKE G. M. B. H., Hamburg, Germany. Filed Mar. 17, 1932.

NORDMARK

For Liver Food Preparations and Tonic Food Preparations, Malt and Fodder.
Claims use since Dec. 13, 1927.

Ser. No. 326,392. J. T. MELTON, doing business as Melton Farms Inc., Fort Lauderdale, Fla. Filed Apr. 22, 1932.

TRIPLE M
MELTONS MIDDLE RIVER MARVEL

The geographical term "Middle River" is disclaimed apart from the mark shown on the drawing.
For Fresh Citrus Fruits, Fresh Deciduous Fruits, Fresh Vegetables.
Claims use since Dec. 15, 1931.

Ser. No. 327,147. ANNA B. HEINE, Geneva, Ill. Filed May 16, 1932.

HI-NE

For Pastry Cones Filled with Ice Cream.
Claims use since Dec. 15, 1930.

Ser. No. 328,661. CHAUTAUQUA MALTED MILK, INC., Mayville, N. Y. Filed July 9, 1932.



For Powdered Skim Milk, Powdered Whole Milk, Ice Cream Mix, Malted Milk.
Claims use since Jan. 1, 1932.

Ser. No. 329,040. CARMEL OIL CO., New York, N. Y. Filed July 25, 1932.

CARMEL BRAND

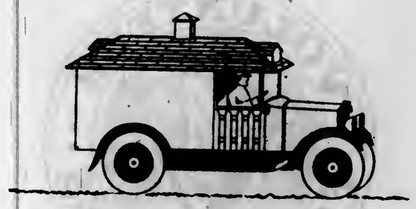
No rights are asserted to the exclusive use of the word "Brand" apart from the mark as shown in the drawing.
For Edible White Oil.
Claims use since Jan. 1, 1926.

Ser. No. 329,420. THE CITRA PACKING CO., Citra, Fla. Filed Aug. 9, 1932.



Applicant makes no claim to the representation of fruit shown apart from the drawing.
For Oranges, Lemons, Grape-Fruit, Tangerines, and Limes.
Claims use since November, 1885.

Ser. No. 329,666. ALPINE ICE CREAM CO. INC., Corona, Long Island, N. Y. Filed Aug. 19, 1932.



For Ice Cream.
Claims use since Apr. 14, 1932.

Ser. No. 329,892. (MAS.) ANNE PRESTON EMERSON, doing business as Brooklandwood Farms, Brooklandville and Baltimore, Md. Filed Aug. 27, 1932.

CHOC-O-LAC

For Composition of Milk, Chocolate Syrup, and Marshmallow.
Claims use since Mar. 15, 1919.

Ser. No. 329,950. THE KANSAS CITY MACARONI & IMPORTING COMPANY, doing business as The American Beauty Macaroni Company, Kansas City, Mo. Filed Aug. 29, 1932.

BEAN-RONI

No claim is made for the word "Bean" apart from the mark shown in the drawing.
For Combination of Macaroni and Beans.
Claims use since Feb. 1, 1932.

Ser. No. 329,951. THE KANSAS CITY MACARONI & IMPORTING COMPANY, doing business as The American Beauty Macaroni Company, Kansas City, Mo. Filed Aug. 29, 1932.

SOUP-RONI

No claim is made for the word "Soup" apart from the mark shown in the drawing.
For Cut Macaroni for Use in Soups.
Claims use since Feb. 1, 1932.

Ser. No. 330,026. WASHINGTON MAID, INCORPORATED, Washington, D. C. Filed Aug. 31, 1932.



For Ice Creams and Ices.
Claims use since June 22, 1932.

Ser. No. 330,039. DE LEON PEANUT COMPANY, De Leon, Tex. Filed Sept. 1, 1932.

COMANCHE CHIEF



For Shelled Peanuts.
Claims use since October, 1917.

Ser. No. 330,098. THE KANSAS MILLING COMPANY, Wichita, Kans. Filed Sept. 3, 1932.

FAIRLAWN



The lining indicates shading only.
For Wheat Flour.
Claims use since June 30, 1932.

Ser. No. 330,212. HENRY P. TAYLOR, doing business as King & Queen Canneries, Walkerton, Va. Filed Sept. 9, 1932.

Vite 'Em In

For Canned Vegetables and Canned Sweet Potato Dessert Preparation.
Claims use since June, 1931.

CLASS 48

Malt Beverages and Liquors

Ser. No. 318,741. THE KOCH BEVERAGE & ICE COMPANY, Wapakoneta, Ohio. Filed Sept. 4, 1931.



The word "Dutch" is disclaimed except in association with the other features of the mark.
For Malt Cereal Beverages Containing Less Than One-Half or One Percent of Alcohol by Volume.
Claims use since 1928.

Ser. No. 330,421. ESSLINGER'S INC., Philadelphia, Pa. Filed Sept. 17, 1932.

KING PIN

For Malt Beverages Having Not More Than the Legal Alcoholic Content.
Claims use since Sept. 2, 1932.

CLASS 49

Distilled Alcoholic Liquors

Ser. No. 330,456. DISTILLERS CORPORATION LIMITED, Montreal, Quebec, Canada. Filed Sept. 19, 1932.

Chickencock

For Potable Spirits, Whiskey, and Liquors.
Claims use since November, 1929.

Ser. No. 330,457. DISTILLERS CORPORATION LIMITED, Montreal, Quebec, Canada. Filed Sept. 19, 1932.

DOUBLE EAGLE

For Potable Spirits, Whiskey, and Liquors.
Claims use since Feb. 4, 1930.

Ser. No. 330,458. DISTILLERS CORPORATION LIMITED, Montreal, Quebec, Canada. Filed Sept. 19, 1932.

Golden Wedding

For Potable Spirits, Whiskey, and Liquors.
Claims use since Dec. 10, 1926.

Ser. No. 330,461. DISTILLERS CORPORATION LIMITED, Montreal, Quebec, Canada. Filed Sept. 19, 1932.

Knickerbocker

For Potable Spirits, Whiskey, and Liquors.
Claims use since Nov. 23, 1929.

Ser. No. 330,462. DISTILLERS CORPORATION LIMITED, Montreal, Quebec, Canada. Filed Sept. 19, 1932.

"LINCOLN INN"

For Potable Spirits, Whiskey, and Liquors.
Claims use since November, 1928.

Ser. No. 330,465. DISTILLERS CORPORATION LIMITED, Montreal, Quebec, Canada. Filed Sept. 19, 1932.

Old Glory

For Potable Spirits, Whiskey, and Liquors.
Claims use since October, 1929.

Ser. No. 330,466. DISTILLERS CORPORATION LIMITED, Montreal, Quebec, Canada. Filed Sept. 19, 1932.

OLD HOMESTEAD

For Potable Spirits, Whiskey, and Liquors.
Claims use since September, 1928.

Ser. No. 330,467. DISTILLERS CORPORATION LIMITED, Montreal, Quebec, Canada. Filed Sept. 19, 1932.

OLD LOG CABIN

For Potable Spirits, Whiskey, and Liquors.
Claims use since October, 1926.

Ser. No. 330,468. DISTILLERS CORPORATION LIMITED, Montreal, Quebec, Canada. Filed Sept. 19, 1932.

Old Man River

For Potable Spirits, Whiskey, and Liquors.
Claims use since April, 1930.

Ser. No. 330,469. DISTILLERS CORPORATION LIMITED, Montreal, Quebec, Canada. Filed Sept. 19, 1932.

Old Moss

For Potable Spirits, Whiskey, and Liquors.
Claims use since January, 1930.

Ser. No. 330,470. DISTILLERS CORPORATION LIMITED, Montreal, Quebec, Canada. Filed Sept. 19, 1932.

Pedigree

For Potable Spirits, Whiskey, and Liquors.
Claims use since November, 1929.

Ser. No. 330,471. DISTILLERS CORPORATION LIMITED, Montreal, Quebec, Canada. Filed Sept. 19, 1932.

SILVER DOLLAR

For Potable Spirits, Whiskey, and Liquors.
Claims use since October, 1929.

CLASS 50

Merchandise Not Otherwise Classified

Ser. No. 321,560. MAX GOLDBERG, doing business as Dormont Company, New York, N. Y. Filed Nov. 28, 1931.

RODELLE

For Coated Fabrics, Coated Appliqué Materials, and Coated Backed Fabrics in the Form of Various Shaped Strips, Lengths, or Pieces of Material.
Claims use since Oct. 5, 1931.

Ser. No. 330,058. BEHR-MANNING CORPORATION, Troy, N. Y. Filed Sept. 2, 1932.

MANTAN

For Composition Sheet Material—Namely, Fibrous Sheets.
Claims use since Aug. 22, 1932.

Ser. No. 330,059. BEHR-MANNING CORPORATION, Troy, N. Y. Filed Sept. 2, 1932.

KORK-O-TAN

No claim is made to the word "Kork" per se.
For Composition Sheet Material—Namely, Fibrous Sheets Composed of Cork and Fibers.
Claims use since Aug. 9, 1932.

Ser. No. 330,060. BEHR-MANNING CORPORATION, Troy, N. Y. Filed Sept. 2, 1932.

KORK-O-TOL

No claim is made to the word "Kork" per se.
For Composition Sheet Material—Namely, Fibrous Sheets and Sheets Composed of Cork and Fibers.
Claims use since Aug. 22, 1932.

TRADE-MARK REGISTRATIONS GRANTED

[ACT OF FEBRUARY 20, 1905]

NOVEMBER 1, 1932

298,522. BABY HAMMOCKS, BABY HAMMOCK STANDS, SUSPENDED BABY SEATS, FURNITURE PADS, NURSERY SEATS, HIGH CHAIR PADS, AND NURSERY RINGS. Boston Leather Specialties, Inc., Everett, Mass.
Filed July 7, 1932. Serial No. 328,593. PUBLISHED AUGUST 16, 1932. Class 32.

298,523. CLOTHING—TO-WIT, WOMEN'S DRESSES. Berger, Robins & Freyman, Inc., New York, N. Y.
Filed July 1, 1932. Serial No. 328,568. PUBLISHED AUGUST 23, 1932. Class 39.

298,524. LEATHER BELTING. Graton & Knight Company, Worcester, Mass.
Filed July 2, 1932. Serial No. 328,527. PUBLISHED AUGUST 16, 1932. Class 35.

298,525. WRENCHES, BORING BITS, AND PUNCHES. Flexible Steel Lacing Company, Chicago, Ill.
Filed July 2, 1932. Serial No. 328,524. PUBLISHED AUGUST 16, 1932. Class 28.

298,526. PILLOWS. Burton-Dixie Corporation, Chicago, Ill.
Filed July 2, 1932. Serial No. 328,520. PUBLISHED AUGUST 16, 1932. Class 32.

298,527. TESTING APPARATUS, GAUGES, AND EQUIPMENT USED IN TESTING AND CORRECTING AUTOMOBILE STEERING APPARATUS. Ribss Manufacturing Company, Dayton, Ohio.
Filed July 1, 1932. Serial No. 328,507. PUBLISHED AUGUST 16, 1932. Class 26.

298,528. FURNITURE CASTERS. Thomas P. Duncan, Jr., doing business as Cast-R-Ette Mfg. Co., Newport News, Va.
Filed June 30, 1932. Serial No. 328,418. PUBLISHED AUGUST 16, 1932. Class 18.

298,529. ALUMINUM AND ALUMINUM ALLOY COOKING HOLLOW WARE. The Aluminum Cooking Utensil Company, New Kensington, Pa.
Filed June 29, 1932. Serial No. 328,388. PUBLISHED AUGUST 23, 1932. Class 13.

298,530. DRESS, NEGLIGEE, AND WORK SHIRTS. Floyd Gibbons, New York, N. Y.
Filed June 27, 1932. Serial No. 328,328. PUBLISHED AUGUST 23, 1932. Class 39.

298,531. SMALL PARTS FOR SPINNING AND TWISTING MACHINES FORMED FROM A PHENOLIC CONDENSATION PRODUCT. Associated Attleboro Mfrs., Inc., Attleboro, Mass.
Filed June 20, 1932. Serial No. 328,113. PUBLISHED AUGUST 16, 1932. Class 28.

298,532. CHILDREN'S DRESSES, SUITS, AND ROMPERS. Rosenau Bros. Inc., Philadelphia, Pa.
Filed June 11, 1932. Serial No. 327,921. PUBLISHED AUGUST 23, 1932. Class 39.

298,533. OIL FILTERS FOR ATTACHMENT TO INTERNAL COMBUSTION ENGINES AND FILTERING PADS FOR USE THEREIN. C. Schnackel's Son, Inc., Rochester, N. Y.
Filed June 8, 1932. Serial No. 327,836. PUBLISHED AUGUST 23, 1932. Class 23.

298,534. MEN'S, WOMEN'S, AND CHILDREN'S SWIMMING SUITS, SWIMMING TRUNKS, SWEATERS, AND UNDERWEAR. Gantner & Mattern Company, San Francisco, Calif.
Filed May 6, 1932. Serial No. 326,815. PUBLISHED AUGUST 23, 1932. Class 39.

298,535. CABINETS FOR RADIO RECEIVING SETS. Earnest J. Krause, doing business as Radiobar Company of America, Beverly Hills, Calif.
Filed April 22, 1932. Serial No. 326,374. PUBLISHED AUGUST 23, 1932. Class 32.

298,536. LAXATIVES. E. R. Squibb & Sons, New York, N. Y.
Filed July 12, 1932. Serial No. 328,741. PUBLISHED AUGUST 16, 1932. Class 6.

298,537. INSECTICIDES AND FUNGICIDES. H. A. Du Bois & Sons, Inc., Cobden, Ill.
Filed July 12, 1932. Serial No. 328,728. PUBLISHED AUGUST 16, 1932. Class 6.

298,538. SYNTHETIC RESINS. Varnol Chemical Corporation, Long Island City, N. Y.
Filed July 9, 1932. Serial No. 328,674. PUBLISHED AUGUST 16, 1932. Class 6.

298,539. COSMETICS, DISINFECTANTS, ETC. Nobirca Beauty Preparations, Inc., New York, N. Y.
Filed July 8, 1932. Serial No. 328,644. PUBLISHED AUGUST 16, 1932. Class 6.

298,540. PREPARATION FOR CONSTIPATION, BILIOUSNESS, ETC. Abe J. Bander, doing business as Rednab Co., Dallas, Tex.
Filed July 6, 1932. Serial No. 328,578. PUBLISHED AUGUST 16, 1932. Class 6.

298,541. FUNGICIDES. Andrew Wilson, Inc., Springfield, N. J.
Filed July 1, 1932. Serial No. 328,513. PUBLISHED AUGUST 16, 1932. Class 6.

298,542. NON-ALCOHOLIC MALTLESS BEVERAGE SOLD AS A SOFT DRINK. Beniamino Leo, Chicago, Ill.
Filed July 2, 1932. Serial No. 328,533. PUBLISHED AUGUST 23, 1932. Class 45.

298,543. HOSE OF ALL KINDS MADE WHOLLY OR IN PART OF RUBBER. The Goodyear Tire & Rubber Company, Akron, Ohio.
Filed July 1, 1932. Serial No. 328,485. PUBLISHED AUGUST 16, 1932. Class 35.

298,544. PORTABLE SHOULDER SHOWER. Belmet Products, Inc., Brooklyn, N. Y.
Filed June 30, 1932. Serial No. 328,465. PUBLISHED AUGUST 23, 1932. Class 13.

298,545. ALUMINUM AND ALUMINUM ALLOY COOKING HOLLOW WARE. The Aluminum Cooking Utensil Company, New Kensington, Pa.
Filed June 29, 1932. Serial No. 328,389. PUBLISHED AUGUST 23, 1932. Class 13.

298,546. AUTOMOBILE TIRES OF RUBBER OR RUBBER AND FABRIC. Kelly-Springfield Tire Company, New York, N. Y.
Filed June 27, 1932. Serial No. 328,332. PUBLISHED AUGUST 9, 1932. Class 35.

298,547. SINKS. The Bossert Corporation, Utica, N. Y.
Filed June 18, 1932. Serial No. 328,084. PUBLISHED AUGUST 23, 1932. Class 13.

298,548. VEGETABLE SHORTENING. Lever Brothers Company, Cambridge, Mass.
Filed June 17, 1932. Serial No. 328,064. PUBLISHED AUGUST 16, 1932. Class 46.

298,549. BURNERS FOR SOLID CARBONACEOUS FUEL, INCLUDING BITUMINOUS COAL, ANTHRACITE COAL, AND COKE. FlamekING Company, Inc., New York, N. Y.
Filed June 11, 1932. Serial No. 327,929. PUBLISHED AUGUST 23, 1932. Class 34.

298,550. GELATINE PREPARATION FOR MAKING SALADS AND DESSERTS COMPOSED OF GELATINE, CANE SUGAR, FRUIT ACID, VEGETABLE COLORING, AND TRUE FRUIT FLAVOR. F. C. Brown & Company, Chicago, Ill.
Filed June 10, 1932. Serial No. 327,866. PUBLISHED AUGUST 16, 1932. Class 46.

298,551. STEREOPTICON SLIDE. Frank C. Brady, Seattle, Wash.
Filed June 9, 1932. Serial No. 327,843. PUBLISHED AUGUST 23, 1932. Class 26.

298,552. SPARK PLUG TESTERS. Champion Spark Plug Company, Toledo, Ohio.
Filed June 3, 1932. Serial No. 327,678. PUBLISHED AUGUST 23, 1932. Class 26.

298,553. WHEAT FLOUR, CANNED SOUP, CANNED EVAPORATED MILK, POPCORN IN ITS NATURAL STATE, TAPIOCA, JELLY POWDER, AND CORN STARCH. Wag Foods, Inc., Syracuse, N. Y.
Filed May 27, 1932. Serial No. 327,535. PUBLISHED AUGUST 16, 1932. Class 46.

298,554. FRESH VEGETABLES. L. M. McLaren, Yuma, Ariz.
Filed May 16, 1932. Serial No. 327,159. PUBLISHED AUGUST 16, 1932. Class 46.

298,555. HIGH PRESSURE RUBBER HOSE. Goodyear Rubber Company, San Francisco, Calif.
Filed April 29, 1932. Serial No. 326,610. PUBLISHED AUGUST 16, 1932. Class 35.

298,556. COFFEE. G. Washington Coffee Refining Company, Morris Plains, N. J.
Filed April 14, 1932. Serial No. 326,120. PUBLISHED AUGUST 16, 1932. Class 46.

298,557. PATTERNS FOR FROCKS, DRESSES, AND OTHER WEARING APPAREL. Advance Pattern Co., Inc., New York, N. Y.
Filed March 17, 1932. Serial No. 325,205. PUBLISHED AUGUST 23, 1932. Class 26.

298,558. FILES. Simonds Saw and Steel Company, Fitchburg, Mass.
Filed June 16, 1932. Serial No. 328,041. PUBLISHED AUGUST 23, 1932. Class 23.

298,559. METAL PIPE-JOINTS. Frank Kay, Bolton, England.
Filed July 14, 1932. Serial No. 328,792. PUBLISHED AUGUST 23, 1932. Class 13.

298,560. WOMEN'S HOSIERY. Artcraft Silk Hosiery Mills, Inc., Philadelphia, Pa.
Filed July 14, 1932. Serial No. 328,774. PUBLISHED AUGUST 23, 1932. Class 39.

298,561. HOSIERY AND UNDERWEAR FOR MEN, WOMEN, AND CHILDREN. Strutwear Knitting Company, Minneapolis, Minn.
Filed July 11, 1932. Serial No. 328,707. PUBLISHED AUGUST 23, 1932. Class 39.

298,562. DIAPERS MADE OF COTTON, PAPER, AND GAUZE. Johnson & Johnson, New Brunswick, N. J.
Filed June 11, 1932. Serial No. 327,909. PUBLISHED AUGUST 9, 1932. Class 42.

298,563. RUBBER THREAD. Para Thread Company, Inc., Woonsocket, R. I.
Filed June 6, 1932. Serial No. 327,773. PUBLISHED AUGUST 9, 1932. Class 43.

298,564. COTTON THREAD AND YARNS. Groves Thread Company, Inc., Gastonia, N. C.
Filed May 24, 1932. Serial No. 327,669. PUBLISHED JULY 12, 1932. Class 43.

298,565. PIECE GOODS COMPOSED WHOLLY OR IN PART OF WOOL, HAIR, SILK, RAYON, COTTON, HEMP, FLAX, JUTE, ALPHA FIBRE, ALOE FIBRE, VEGETABLE FIBRE, OR MIXTURES THEREOF. Bianchini, Ferier, Lyon, France.
Filed July 9, 1932. Serial No. 328,656. PUBLISHED AUGUST 16, 1932. Class 42.

298,566. FIBERBOARD BOXES. Robert Gaylord Incorporated, St. Louis, Mo.
Filed June 13, 1932. Serial No. 327,988. PUBLISHED AUGUST 9, 1932. Class 2.

298,567. BURIAL VAULTS. The Sozonian Vault Company, Bucyrus, Ohio.
Filed June 18, 1932. Serial No. 328,107. PUBLISHED AUGUST 9, 1932. Class 2.

298,568. BURIAL VAULTS. The Sozonian Vault Company, Bucyrus, Ohio.
Filed June 18, 1932. Serial No. 328,106. PUBLISHED AUGUST 9, 1932. Class 2.

298,569. BURIAL CASKETS AND VAULTS. Missouri Casket Company, Kansas City, Mo.
Filed June 11, 1932. Serial No. 327,916. PUBLISHED AUGUST 9, 1932. Class 2.

298,570. FIBERBOARD BOXES. St. Louis Basket & Box Corporation, St. Louis, Mo.
Filed June 6, 1932. Serial No. 327,775. PUBLISHED AUGUST 2, 1932. Class 2.

298,571. UTILITY CHESTS. Master Metal Products, Inc., Buffalo, N. Y.
Filed May 31, 1932. Serial No. 327,593. PUBLISHED JULY 12, 1932. Class 2.

298,572. COTTON PIECE GOODS AND FOR FILLED AND FINISHED COTTON PIECE GOODS SUITABLE FOR USE AS BOOK CLOTH, WINDOW SHADE CLOTH, DRAPERIES, FURNITURE COVERING, WALL COVERING, LUGGAGE LINING AND COVERING, BOX COVERING, SHOWER BATH CURTAINS, LABELS, TAGS, AND SIGNS. The Hollston Mills, Inc., Norwood, Mass.
Filed May 25, 1932. Serial No. 327,439. PUBLISHED AUGUST 2, 1932. Class 42.

298,573. ARTIFICIAL SILK THREAD AND YARN. Eastman Kodak Company, Rochester, N. Y.
Filed May 25, 1932. Serial No. 327,428. PUBLISHED JULY 5, 1932. Class 43.

298,574. COMPACTS AND EMPTY BASE METAL VANITY CASES. Superior Products Corporation, Elizabeth, N. J.
Filed May 23, 1932. Serial No. 327,878. PUBLISHED JULY 12, 1932. Class 2.

298,575. EMPTY BASE METAL VANITY CASES, COMPACTS, AND LIP STICK CASES. Superior Products Corporation, Elizabeth, N. J.
Filed May 23, 1932. Serial No. 327,877. PUBLISHED JULY 12, 1932. Class 2.

298,576. SPOOLS OF THREAD. Assembled Products Company, Inc., New York, N. Y.
Filed May 17, 1932. Serial No. 327,181. PUBLISHED JUNE 28, 1932. Class 48.

298,577. COTTON PIECE GOODS. Lonsdale Company, Providence, R. I.
Filed May 18, 1932. Serial No. 327,226. PUBLISHED AUGUST 9, 1932. Class 42.

298,578. CERTAIN NAMED HOUSEHOLD AND LITURGICAL LINEN PIECES. Regina Art Embroidery Company, Lynn, Mass.
Filed April 23, 1932. Serial No. 326,508. PUBLISHED AUGUST 16, 1932. Class 42.

298,579. PAPER CARTONS. George E. Damrow, Brooklyn, N. Y.
Filed April 16, 1932. Serial No. 326,178. PUBLISHED AUGUST 2, 1932. Class 2.

298,580. PAPER BAKING CUPS, BAKING DISHES, CANDY CUPS, FINGER-BOWL LINERS, SHAVING CUPS, BUTTER CHIPS, DRINKING CUPS, PAPER DISHES, PAPER PLATES, PAPER BOXES, PAPER CARTONS, PAPER MERCHANDISE ENVELOPES, AND PAPER BAGS. OLDMILL PAPER PRODUCTS CORP., Brooklyn, N. Y.
Filed April 20, 1932. Serial No. 326,299. PUBLISHED JULY 5, 1932. Class 2.

298,581. GARBAGE CANS AND VEGETABLE BINS. JOSEF BRANDSTETTER, doing business as Alto Mfg. Co., Chicago, Ill.
Filed March 30, 1932. Serial No. 325,638. PUBLISHED JULY 19, 1932. Class 2.

298,582. LUMBER AND WOOD SHINGLES. THE DUTY LUMBER CO., Wheeling, W. Va.
Filed June 24, 1932. Serial No. 328,269. PUBLISHED AUGUST 9, 1932. Class 12.

298,583. FIRE PROOF INSULATING AND SOUND DEADENING MATERIALS. SAMUEL CABOT INCORPORATED, Boston, Mass.
Filed June 21, 1932. Serial No. 328,158. PUBLISHED AUGUST 16, 1932. Class 12.

298,584. SPONGE RUBBER. THE SPONGE RUBBER PRODUCTS CO., Derby, Conn.
Filed June 17, 1932. Serial No. 328,079. PUBLISHED AUGUST 23, 1932. Class 1.

298,585. CIGARS. MARCELINO PEREZ & COMPANY, Tampa, Fla.
Filed June 16, 1932. Serial No. 328,029. PUBLISHED AUGUST 23, 1932. Class 17.

298,586. CEMENT AND PLASTER MIXTURES. JOSEPH E. DI FIORE, doing business as Jedco Products Co., Brooklyn, N. Y.
Filed May 17, 1932. Serial No. 327,186. PUBLISHED AUGUST 16, 1932. Class 12.

298,587. CLAY, USED AS A FILLER IN THE MANUFACTURE OF PAPER, PAINTS, AND OTHER PRODUCTS. R. T. VANDERBILT COMPANY, INC., New York, N. Y.
Filed May 16, 1932. Serial No. 327,177. PUBLISHED AUGUST 23, 1932. Class 1.

298,588. CLAY, USED AS A FILLER IN THE MANUFACTURE OF PAPER, PAINTS, AND OTHER PRODUCTS R. T. VANDERBILT COMPANY, INC., New York, N. Y.
Filed May 16, 1932. Serial No. 327,176. PUBLISHED AUGUST 23, 1932. Class 1.

298,589. STEPS, FLOORING SECTIONS, STAIR TREADS, AGGREGATE STAIR TREADS, NON-SLIP STAIR TREADS, AND STAIR TREADS HAVING ABRASIVE ELEMENTS SECURED THEREIN AND/OR THERETO. L. DEL TURCO & BROS., INC., Harrison, N. J.
Filed May 14, 1932. Serial No. 327,091. PUBLISHED AUGUST 9, 1932. Class 12.

298,590. SOIL CONDITIONER. LYONS FERTILIZER COMPANY, Tampa, Fla.
Filed May 2, 1932. Serial No. 326,687. PUBLISHED AUGUST 23, 1932. Class 10.

298,591. WOOD AND METAL GOLF CLUBS. THE L. A. YOUNG COMPANY, Detroit, Mich.
Filed July 18, 1932. Serial No. 328,901. PUBLISHED AUGUST 23, 1932. Class 22.

298,592. GOLF BALLS. SUN RADIO, INC., Akron, Ohio.
Filed July 15, 1932. Serial No. 328,821. PUBLISHED AUGUST 23, 1932. Class 22.

298,593. FISHING REELS. THE ENTERPRISE MANUFACTURING COMPANY, Akron, Ohio.
Filed July 14, 1932. Serial No. 328,783. PUBLISHED AUGUST 23, 1932. Class 22.

298,594. GAMES COMPRISING FELT PIECES ASSEMBLABLE TO FORM PUZZLE PICTURES, WORDS, AND OBJECTS. POSTER PRODUCTS, INC., Chicago, Ill.
Filed July 2, 1932. Serial No. 328,536. PUBLISHED AUGUST 23, 1932. Class 22.

298,595. NONALCOHOLIC MALTLESS POWDER USED FOR THE PREPARATION OF SOFT DRINKS. ARCADIA FOOD CO., New York, N. Y.
Filed July 1, 1932. Serial No. 328,470. PUBLISHED AUGUST 23, 1932. Class 45.

298,596. TOP OF THE BANDALORE TYPE AND PARTS THEREFOR. LITTLE BEAR SPECIALTIES CO., INC., Kansas City, Mo.
Filed June 30, 1932. Serial No. 328,438. PUBLISHED AUGUST 23, 1932. Class 22.

298,597. TABLE BILLIARDS-GOLF GAME, TABLE BASE BALL GAME, ETC. CHESTER-POLLARD AMUSEMENT CO. INC., New York, N. Y.
Filed June 23, 1932. Serial No. 328,237. PUBLISHED AUGUST 23, 1932. Class 22.

298,598. CAROM BALLS FOR BILLIARDS. THE BRUNSWICK-BALKE-COLLENDER COMPANY, Wilmington, Del., and Chicago, Ill.
Filed June 11, 1932. Serial No. 327,901. PUBLISHED AUGUST 23, 1932. Class 22.

298,599. ANTISEPTIC MEDICINAL PREPARATION FOR EXTERNAL USE. FRANCIS C. NICHOLAS, Gambrills, Md.
Filed May 27, 1932. Serial No. 327,613. PUBLISHED JULY 26, 1932. Class 6.

298,600. IRON CITRATE AND COPPER NUCLEATE. PARKE, DAVIS & CO., Detroit, Mich.
Filed May 31, 1932. Serial No. 327,602. PUBLISHED JULY 26, 1932. Class 6.

298,601. DIGITALIS. PARKE, DAVIS & CO., Detroit, Mich.
Filed May 31, 1932. Serial No. 327,601. PUBLISHED JULY 26, 1932. Class 6.

298,602. MEDICINAL PREPARATION FOR THE TREATMENT OF ASTHMA AND LUNG DISEASES. R. B. BURNETT, Beckley, W. Va.
Filed May 28, 1932. Serial No. 327,550. PUBLISHED JULY 26, 1932. Class 6.

298,603. EYE WASH. EYGLO COMPANY, INC., New York, N. Y.
Filed May 27, 1932. Serial No. 327,504. PUBLISHED JULY 26, 1932. Class 6.

298,604. PHARMACEUTICAL PREPARATION USED AS A TONIC, DIGESTIVE, ELIMINANT, AND SEDATIVE. LEOPOLD VACCARO, doing business as The Visnova Company, Philadelphia, Pa.
Filed May 26, 1932. Serial No. 327,488. PUBLISHED JULY 26, 1932. Class 6.

298,605. PHOSPHORIC ACID AND PHOSPHATE COMPOUNDS FOR DISSOLVING RUST FROM THE SURFACE OF METAL. PARKER RUST-PROOF COMPANY, Detroit, Mich.
Filed May 25, 1932. Serial No. 327,448. PUBLISHED JULY 26, 1932. Class 6.

298,606. INSECTICIDES. MECHLING BROTHERS CHEMICAL COMPANY, Camden, N. J.
Filed May 25, 1932. Serial No. 327,445. PUBLISHED JULY 26, 1932. Class 6.

298,607. LAXATIVE. CALIFORNIA CONCENTRATING COMPANY, San Jose, Calif.
Filed May 25, 1932. Serial No. 327,425. PUBLISHED JULY 26, 1932. Class 6.

298,608. PREPARATION FOR THE TREATMENT AND RELIEF OF RHEUMATISM, ARTHRITIS, ACIDOSIS, ETC. CHARLES R. BOWERS, doing business as The Ru-Win-Zo Co., Findlay, Ohio.
Filed May 23, 1932. Serial No. 327,337. PUBLISHED JULY 26, 1932. Class 6.

298,609. PREPARATION HAVING BOWEL LUBRICATING, LAXATIVE, AND BOWEL REGULATION PROPERTIES. AMERICAN HEALTH PRODUCTS CO., Washington, D. C.
Filed May 23, 1932. Serial No. 327,331. PUBLISHED JULY 26, 1932. Class 6.

298,610. PREPARATION FOR USE WITH AN ENDOCRINE FORMULA FOR THE TREATMENT OF MENORRHAGIA AND METRORRHAGIA. THE HARROWER LABORATORY, INC., Glendale, Calif.
Filed May 21, 1932. Serial No. 327,312. PUBLISHED JULY 26, 1932. Class 6.

298,611. STERILIZING MATERIAL. THE J. B. FORD COMPANY, Wyandotte, Mich.
Filed May 21, 1932. Serial No. 327,310. PUBLISHED JULY 26, 1932. Class 6.

298,612. CHEMICAL PRODUCTS—NAMELY, ACETONE, METHYL ALCOHOL, DENATURED ALCOHOL, AND MIXTURES THEREOF. WILLIAM S. GRAY & CO., New York, N. Y.
Filed May 20, 1932. Serial No. 327,276. PUBLISHED JULY 26, 1932. Class 6.

298,613. MEDICINAL PREPARATION USED AS A STOMACHIC, LAXATIVE, STIMULANT, AND DIURETIC. ISRAEL PAUL, doing business as Russ Pharmaco Products, Philadelphia, Pa.
Filed May 19, 1932. Serial No. 327,258. PUBLISHED JULY 26, 1932. Class 6.

298,614. FOOT POWDER PREPARED FOR RELIEF OF BURNING, SWEATING FEET AND MINOR SKIN IRRITATIONS. WILLIAM BROMBERG, doing business as W. Bromberg Company, Bronx, N. Y.
Filed May 19, 1932. Serial No. 327,243. PUBLISHED JULY 26, 1932. Class 6.

298,615. COIN CONTROLLED BALL-PROJECTING AMUSEMENT DEVICE. BECHTOL AND TRATSCH, Chicago, Ill.
Filed May 19, 1932. Serial No. 327,241. PUBLISHED AUGUST 23, 1932. Class 22.

298,616. OILS USED FOR STEAMER TREATMENTS, OILS FOR USE IN HAIR WAVING, HAIR RINSE PREPARATIONS, FINGER WAVE LOTIONS, AND SHAMPOO PREPARATIONS. DUART MANUFACTURING CO., LTD., San Francisco, Calif.
Filed May 18, 1932. Serial No. 327,216. PUBLISHED JULY 26, 1932. Class 6.

298,617. DRIED SEA PLANT PRODUCTS FOR USE AS A DIETARY SUPPLEMENT FOR IODINE DEFICIENCY. MICHAEL JOSEPH WALSH, doing business as Kelp Laboratories, San Diego, Calif.
Filed May 16, 1932. Serial No. 327,156. PUBLISHED JULY 26, 1932. Class 6.

298,618. MINERAL WATERS. SOCIETE ANONYME DES EAUX MINERALS D'EVIAN-LES-BAINS, Paris, France.
Filed May 14, 1932. Serial No. 327,111. PUBLISHED AUGUST 23, 1932. Class 45.

298,619. BILLIARD TABLES AND PARTS OF BILLIARD TABLES COMPOSED OF SLATE. THE BRUNSWICK-BALKE-COLLENDER COMPANY, doing business as Phoenix Slate Company, Wilmington, Del., and Chicago, Ill.
Filed May 13, 1932. Serial No. 327,042. PUBLISHED AUGUST 23, 1932. Class 22.

298,620. ANTISEPTIC DRESSING. G. C. HANFORD MFG. CO., Syracuse, N. Y.
Filed May 12, 1932. Serial No. 327,012. PUBLISHED JULY 26, 1932. Class 6.

298,621. MEDICINAL PREPARATION FOR A TREATMENT OF COLDS. C. EMMETT MATTHEWS, doing business as Matthews Chemical Co., Roanoke Rapids, N. C.
Filed May 10, 1932. Serial No. 326,999. PUBLISHED JULY 26, 1932. Class 6.

298,622. CHEMICAL RUST PREVENTIVE PREPARATION. WEST DISINFECTING COMPANY, Long Island City, N. Y.
Filed June 22, 1932. Serial No. 328,232. PUBLISHED AUGUST 16, 1932. Class 6.

298,623. NOSE AND THROAT MEDICATION. MORGAN SABALOL PRODUCTS, INC., New York, N. Y.
Filed June 22, 1932. Serial No. 328,228. PUBLISHED AUGUST 16, 1932. Class 6.

298,624. THREAD AND YARN. AMERICAN BEMBERG CORPORATION, New York, N. Y.
Filed June 22, 1932. Serial No. 328,207. PUBLISHED AUGUST 2, 1932. Class 43.

298,625. THREAD AND YARN. AMERICAN BEMBERG CORPORATION, New York, N. Y.
Filed June 22, 1932. Serial No. 328,205. PUBLISHED AUGUST 2, 1932. Class 43.

298,626. COTTON THREAD. STANDARD-COOSA-THATCHER COMPANY, Chattanooga, Tenn.
Filed June 20, 1932. Serial No. 328,139. PUBLISHED AUGUST 2, 1932. Class 43.

298,627. COTTON THREAD. STANDARD-COOSA-THATCHER COMPANY, Chattanooga, Tenn.
Filed June 20, 1932. Serial No. 328,138. PUBLISHED AUGUST 2, 1932. Class 43.

298,628. COTTON YARNS. SELLERS MANUFACTURING CO., Saxapahaw, N. C.
Filed June 13, 1932. Serial No. 327,949. PUBLISHED JULY 26, 1932. Class 43.

298,629. MEDICINAL PREPARATION TO BE EMPLOYED INTRAVENOUSLY IN THE TREATMENT OF GASTRIC AND DUODENAL ULCER AND OTHER CONDITIONS AFFECTING THE GASTRO-INTESTINAL TRACT. BERNHARD KOHN, doing business as The Medicinal Products Co., Long Island City, N. Y.
Filed June 9, 1932. Serial No. 327,850. PUBLISHED AUGUST 9, 1932. Class 6.

298,630. LAXATIVE PREPARATION. GEORGE H. HYLAND, doing business as Standard Homeopathic Company, Los Angeles, Calif.
Filed June 7, 1932. Serial No. 327,794. PUBLISHED AUGUST 9, 1932. Class 6.

298,631. FACE CREAM AND FACE POWDER. D C A DRUG STORES, INC., Portland Oreg.
Filed June 1, 1932. Serial No. 327,625. PUBLISHED AUGUST 9, 1932. Class 6.

298,632. CREAM FOR REDUCING THE BODY. NEIMAN-MARCUS CO., Dallas, Tex.
Filed May 31, 1932. Serial No. 327,596. PUBLISHED AUGUST 16, 1932. Class 6.

298,633. RADIATOR STOP LEAK COMPOUND. PENN-JERSEY AUTO STORES, INC., Easton, Pa.
Filed May 20, 1932. Serial No. 327,286. PUBLISHED AUGUST 9, 1932. Class 6.

298,634. EMPTY GLASS JARS. HOFFMANN-HAYMAN COFFEE CO., San Antonio, Tex.
Filed May 17, 1932. Serial No. 327,191. PUBLISHED AUGUST 9, 1932. Class 33.

298,635. MINERAL SALTS IN CONCENTRATED FORM. AMERICAN BIOCHEMICAL CORPORATION, Cleveland, Ohio.
Filed May 7, 1932. Serial No. 326,997. PUBLISHED AUGUST 9, 1932. Class 6.

298,636. MEDICINAL PREPARATIONS. TOWNS & JAMES, INC., doing business as Plymouth Laboratories, Brooklyn, N. Y.
Filed May 6, 1932. Serial No. 326,835. PUBLISHED AUGUST 9, 1932. Class 6.

298,637. NUTRITIOUS HERBAL PREPARATION USED FOR A TISSUE BUILDING STIMULANT. ROSA K. TRATTNER, Los Angeles, Calif.
Filed May 2, 1932. Serial No. 326,696. PUBLISHED AUGUST 9, 1932. Class 6.

298,638. THREAD AND YARN. I. P. BEMBERG AKTIENGESELLSCHAFT, Wuppertal-Oberbarmen and Wuppertal-Elberfeld, Germany, assignor to American Bemberg Corporation, New York, N. Y.
Filed May 2, 1932. Serial No. 326,664. PUBLISHED JULY 26, 1932. Class 43.

298,639. THREAD AND YARN. I. P. BEMBERG AKTIENGESELLSCHAFT, Wuppertal-Oberbarmen and Wuppertal-Elberfeld, Germany, assignor to American Bemberg Corporation, New York, N. Y.
Filed May 2, 1932. Serial No. 326,663. PUBLISHED JULY 26, 1932. Class 43.

298,640. THREAD AND YARN. I. P. BEMBERG AKTIENGESELLSCHAFT, Wuppertal-Oberbarmen and Wuppertal-Elberfeld, Germany, assignor to American Bemberg Corporation, New York, N. Y.
Filed May 2, 1932. Serial No. 326,659. PUBLISHED JULY 26, 1932. Class 43.

298,641. PREPARATION FOR PREVENTION AND AND ELIMINATION OF RUST. THE FRANKLIN OIL & GAS COMPANY, Bedford, Ohio.
Filed April 9, 1932. Serial No. 325,945. PUBLISHED AUGUST 9, 1932. Class 6.

298,642. LIQUID DANDELION KILLER. PETER F. KLOEPPINGER, doing business as The Dan-Gon Manufacturers, Denver, Colo.
Filed May 23, 1932. Serial No. 327,362. PUBLISHED AUGUST 9, 1932. Class 6.

298,643. SKIN SALVE AND OINTMENT. FRANK E. BOGA, doing business as Du-Best Family Remedy Co., Brooklyn, N. Y.
Filed May 21, 1932. Serial No. 327,384. PUBLISHED AUGUST 9, 1932. Class 6.

298,644. ASTRINGENTS, BLEACH CREAMS, BEAUTY CREAMS, ETC. PARFUMERIE ST. DENIS, New York, N. Y.
Filed May 24, 1932. Serial No. 327,407. PUBLISHED AUGUST 9, 1932. Class 6.

298,645. DIURETIC LIQUID MEDICINE. BU-CU-MINT COMPANY, Binghamton, N. Y.
Filed May 31, 1932. Serial No. 327,577. PUBLISHED AUGUST 9, 1932. Class 6.

298,646. EXTRACTS OF BIOLOGICAL GLANDS FOR THE TREATMENT OF MALIGNANT TISSUE GROWTHS. COFFEY-HUMBER, San Francisco, Calif.
Filed May 31, 1932. Serial No. 327,619. PUBLISHED JULY 26, 1932. Class 6.

298,647. SOLUTION CONTAINING IODINE FOR EXTERNAL APPLICATION IN THE TREATMENT OF WOUNDS, BRUISES, INJURIES, AND DISEASES OF THE SKIN. GLY-SER-DINE CHEMICAL COMPANY, Milwaukee, Wis.
Filed June 2, 1932. Serial No. 327,654. PUBLISHED JULY 26, 1932. Class 6.

298,648. PREPARATION FOR THE RELIEF OF CONTAGIOUS ABORTION IN CATTLE. THE ESSAN-KAY COMPANY, Carlisle, Pa.
Filed June 3, 1932. Serial No. 327,681. PUBLISHED JULY 26, 1932. Class 6.

298,649. LIQUID TREATMENT FOR DISEASES AND AFFECTIONS OF THE EYES. SYLVAIN ROSENGART, Paris, France.
Filed June 4, 1932. Serial No. 327,738. PUBLISHED JULY 26, 1932. Class 6.

298,650. CLEANING POWDER FOR AUTOMOBILE RADIATORS. THE HYGIENIC PRODUCTS COMPANY, Canton, Ohio.
Filed June 6, 1932. Serial No. 327,755. PUBLISHED AUGUST 9, 1932. Class 6.

298,651. CLEANING POWDER FOR AUTOMOBILE RADIATORS. THE HYGIENIC PRODUCTS COMPANY, Canton, Ohio.
Filed June 6, 1932. Serial No. 327,756. PUBLISHED AUGUST 9, 1932. Class 6.

298,652. FACE POWDER. POND'S EXTRACT COMPANY, New York, N. Y.
Filed June 6, 1932. Serial No. 327,770. PUBLISHED AUGUST 9, 1932. Class 6.

298,653. GERMICIDAL PREPARATION FOR THE TREATMENT OF PYORRHEA, ALVEOLARIS, TRENCH MOUTH, INFECTED CANALS, ABSCESSES, SYPHILLIS MANIFESTATIONS IN ORAL CAVITY. ROYAL LABORATORIES, INC., Newark, N. J., and New York, N. Y.
Filed June 7, 1932. Serial No. 327,806. PUBLISHED AUGUST 9, 1932. Class 6.

298,654. PREPARATION FOR THE TREATMENT OF INFLAMED, SPONGY, AND RECEDED GUMS. ROYAL LABORATORIES, INC., Newark, N. J., and New York, N. Y.
Filed June 7, 1932. Serial No. 327,807. PUBLISHED AUGUST 9, 1932. Class 6.

298,655. INSECTICIDE, VERMICIDE AND ANIMAL DIP. AMTORG TRADING CORPORATION, New York, N. Y.
Filed June 8, 1932. Serial No. 327,816. PUBLISHED AUGUST 9, 1932. Class 6.

298,656. PREPARATION FOR THE TREATMENT OF ATHLETE'S FOOT AND IMPETIGO. ROYAL LABORATORIES, INC., Newark, N. J.
Filed June 8, 1932. Serial No. 327,885. PUBLISHED AUGUST 9, 1932. Class 6.

298,657. INSECTICIDE. JESSE M. TIPPEY, doing business as Southland Chemical Co., St. Petersburg, Fla.
Filed June 23, 1932. Serial No. 328,255. PUBLISHED AUGUST 16, 1932. Class 6.

298,658. WORSTED YARNS FOR KNITTING, CROCHETING, EMBROIDERING AND SIMILAR PURPOSES. BERNHARD ULMANN CO. INC., New York, N. Y.
Filed June 29, 1932. Serial No. 328,407. PUBLISHED AUGUST 9, 1932. Class 43.

298,659. COTTON YARNS. KING COTTON MILLS CORPORATION, Richmond, Va.
Filed June 30, 1932. Serial No. 328,431. PUBLISHED AUGUST 9, 1932. Class 43.

298,660. COTTON YARNS. KING COTTON MILLS CORPORATION, Richmond, Va.
Filed June 30, 1932. Serial No. 328,432. PUBLISHED AUGUST 9, 1932. Class 43.

298,661. THREADS AND YARNS. S. H. KRESS & CO., New York, N. Y.
Filed June 30, 1932. Serial No. 328,435. PUBLISHED AUGUST 9, 1932. Class 43.

298,662. PIECE GOODS COMPOSED WHOLLY OR IN PART OF WOOL, HAIR, RAYON, COTTON, SILK, HEMP, FLAX, JUTE, ALPHA FIBRE, ALOE FIBRE, VEGETABLE FIBRE, OR MIXTURES THEREOF. BIANCHINI, FÉRIER, Lyon, France.
Filed July 9, 1932. Serial No. 328,657. PUBLISHED AUGUST 16, 1932. Class 42.

298,663. TEXTILE DIAPERS. KIRBY, BLOCK & FISCHER, INC., New York, N. Y.
Filed June 11, 1932. Serial No. 327,910. PUBLISHED AUGUST 2, 1932. Class 42.

298,664. SPIRITS OF CAMPHOR, SPIRITS OF NITRE, TINCTURE OF IODINE, ETC. BLOOMINGDALE BROS., INC., New York, N. Y.
Filed May 23, 1932. Serial No. 327,336. PUBLISHED AUGUST 9, 1932. Class 6.

298,665. MIXTURES OF HERBS FOR PURIFYING THE BLOOD, LIVER AND KIDNEY AILMENTS, ARTERIOSCLEROSIS, RHEUMATISM, NERVOUS AILMENTS, STOMACH AILMENTS, DIABETES, GALLSTONES, PILES AND HEMORRHOIDS, COUGH, ASTHMA AND CATARRH, CHECKED MENSTRUATION, AND REDUCING. HERBARIA HERB CO., Chicago, Ill.
Filed May 18, 1932. Serial No. 327,297. PUBLISHED AUGUST 9, 1932. Class 6.

298,666. SALT. YORK AND COMPANY, Grand Rapids, Mich.
Filed May 18, 1932. Serial No. 327,268. PUBLISHED AUGUST 9, 1932. Class 6.

298,667. WATER-PROOFING CHEMICALS. HAMPDEN PAINT & CHEMICAL COMPANY, Springfield, Mass.
Filed May 18, 1932. Serial No. 327,221. PUBLISHED AUGUST 9, 1932. Class 6.

298,668. PERFUMES, FACIAL CREAMS, FACE AND BODY POWDERS, ROUGES, BATH SALTS, LIPSTICK. ETHEL G. ANDERSON, Chicago, Ill.
Filed May 16, 1932. Serial No. 327,124. PUBLISHED AUGUST 9, 1932. Class 6.

298,669. HAND LOTION. ELWOOD J. GOODIER, doing business as The Goodier Company, Dallas, Tex.
Filed May 18, 1932. Serial No. 327,054. PUBLISHED AUGUST 9, 1932. Class 6.

298,670. MEDICAL PREPARATION FOR THE RELIEF OF NEURASTHENIA AND COGNATE DISEASES FOR INTRAMUSCULAR INJECTION. EDWARD E. RUTHERFORD, Toronto, Ontario, Canada.
Filed May 9, 1932. Serial No. 326,966. PUBLISHED AUGUST 9, 1932. Class 6.

298,671. REPELLENT OF MOTHS, PEACH TREE BORERS, AND OTHER INSECTS. E. I. DU PONT DE NEMOURS AND COMPANY, Wilmington, Del.
Filed May 10, 1932. Serial No. 326,936. PUBLISHED AUGUST 9, 1932. Class 6.

298,672. LAXATIVE TONIC. JOSEPH LUNTZ, Brooklyn, N. Y.
Filed May 6, 1932. Serial No. 326,826. PUBLISHED AUGUST 9, 1932. Class 6.

298,673. SILVER AND MERCURY IN A COLLOIDAL STATE. S. M. LABORATORIES, INC., Seattle, Wash.
Filed April 18, 1932. Serial No. 326,233. PUBLISHED JULY 26, 1932. Class 6.

298,674. HAIR TONIC, HAIR GROWER, HAIR STRAIGHTENING OIL, AND HAIR RESTORER. ALICE C. SMITH, Madison, N. J.
Filed April 15, 1932. Serial No. 326,166. PUBLISHED AUGUST 9, 1932. Class 6.

298,675. TALCUM POWDER, HAIR DRESSING, SKIN LIGHTENER CREAM, VANISHING CREAM, AND OINTMENT FOR SKIN DISORDERS, TETTER, BLOTCHES, AND PIMPLES; COLD CREAM, FACE POWDER, ROUGE, LIPSTICK, EYE-BROW PENCILS, SKIN LOTIONS, AND DEODORANTS. MRS. Z. B. HINKLE, doing business as Pep Laboratories, Atlanta, Ga.
Filed April 13, 1932. Serial No. 326,052. PUBLISHED AUGUST 16, 1932. Class 6.

298,676. SHAMPOO. UNIVERSAL CHEMICAL CORPORATION, Akron, Ohio.
Filed April 11, 1932. Serial No. 326,005. PUBLISHED JULY 26, 1932. Class 6.

298,677. INSECTICIDE AND DEODORIZER IN LIQUID FORM. J. HARVEY RAYMOND, San Francisco, Calif.
Filed March 14, 1932. Serial No. 325,112. PUBLISHED AUGUST 16, 1932. Class 6.

298,678. LIVER POWDER. LA COMPAGNIE PHARMACEUTIQUE DEBBERGERS, Montreal, Quebec, Canada.
Filed March 10, 1932. Serial No. 325,004. PUBLISHED AUGUST 16, 1932. Class 6.

298,679. WOOL, WORSTEDS, CHEVIOT, AND CASHMERE SUITINGS AND COATINGS. FRANK J. MCGOWAN, New York, N. Y.
Filed June 11, 1932. Serial No. 327,959. PUBLISHED AUGUST 16, 1932. Class 42.

298,680. BILLIARD CLOTH IN THE PIECE. H. WAGNER & ADLER CO., New York, N. Y.
Filed June 11, 1932. Serial No. 327,927. PUBLISHED AUGUST 2, 1932. Class 42.

298,681. BILLIARD CLOTH IN THE PIECE. H. WAGNER & ADLER CO., New York, N. Y.
Filed June 11, 1932. Serial No. 327,926. PUBLISHED AUGUST 2, 1932. Class 42.

298,682. BOWL AND MECHANICAL MIXER FOR SALADS AND THE LIKE. A. & J. MANUFACTURING COMPANY, Binghamton, N. Y., assignor to A. & J. Kitchen Tool Co., Chicago, Ill., a Corporation of Illinois.
Filed July 3, 1930. Serial No. 303,078. PUBLISHED AUGUST 23, 1932. Class 23.

298,683. COFFEE. STANDARD BRANDS INCORPORATED, New York, N. Y.
Filed June 7, 1930. Serial No. 302,261. PUBLISHED AUGUST 16, 1932. Class 46.

298,684. AIR COMPRESSION STARTERS FOR INTERNAL COMBUSTION ENGINES AND PARTS THEREOF. SKY SPECIALTIES CORPORATION, Detroit, Mich.
Filed April 26, 1930. Serial No. 299,523. PUBLISHED AUGUST 16, 1932. Class 28.

298,685. RUBBER VIBRATION ELIMINATING SUPPORTS FOR MACHINERY. THE RUBBER SHOCK INSULATOR CORPORATION, Bridgeport, Conn.
Filed May 28, 1929. Serial No. 284,746. PUBLISHED AUGUST 23, 1932. Class 28.

298,686. BELTS OF RUBBER AND FABRIC. UNITED STATES RUBBER COMPANY, New York, N. Y.
Filed June 29, 1931. Serial No. 316,458. PUBLISHED AUGUST 16, 1932. Class 35.

298,687. SKIN LOTION. HENRY A. PAUL, doing business as Paul's Pharmacy Inc., Daytona Beach, Fla.
Filed June 4, 1931. Serial No. 315,412. PUBLISHED AUGUST 9, 1932. Class 6.

298,688. CANNED ASPARAGUS, BEANS, CHILE, SOUP, ETC. INDEPENDENT GROCERS' ALLIANCE DISTRIBUTING CO., Chicago, Ill.
Filed June 15, 1931. Serial No. 315,838. PUBLISHED AUGUST 16, 1932. Class 46.

298,689. PILE FABRICS IN THE PIECE. SIDNEY BLUMENTHAL & CO. INC., New York, N. Y.
Filed June 13, 1931. Serial No. 315,781. PUBLISHED AUGUST 2, 1932. Class 42.

298,690. THREAD. I. FLEISCHER & SONS, Cincinnati, Ohio.
Filed May 29, 1931. Serial No. 315,197. PUBLISHED AUGUST 2, 1932. Class 43.

298,691. BOTTLES OF WRITING INK. S. S. STAFFORD, INC., New York, N. Y.
Filed May 16, 1931. Serial No. 314,661. PUBLISHED AUGUST 23, 1932. Class 11.

298,692. PIECE GOODS AND BLANKETS OF COTTON, WOOL, OR COMBINATIONS THEREOF. TROY BLANKET MILLS, Troy, N. H.
Filed June 27, 1932. Serial No. 328,341. PUBLISHED AUGUST 16, 1932. Class 42.

298,693. TEXTILE CARPETS. HARDWICK & MAGEE COMPANY, Philadelphia, Pa.
Filed June 25, 1932. Serial No. 328,305. PUBLISHED AUGUST 2, 1932. Class 42.

298,694. COTTON PIECE GOODS. BURTON BROTHERS & Co. INC., New York, N. Y.
Filed June 25, 1932. Serial No. 328,300. PUBLISHED AUGUST 2, 1932. Class 42.

298,695. HANDKERCHIEFS. WESTERN BOTTLE MFG. CO., doing business as The Western Company, Chicago, Ill.
Filed June 16, 1932. Serial No. 328,044. PUBLISHED AUGUST 9, 1932. Class 42.

298,696. PIECE GOODS COMPOSED WHOLLY OR IN PART OF WOOL, HAIR, SILK, RAYON, COTTON, HEMP, FLAX, JUTE, ALPHA FIBRE, ALOE FIBRE, VEGETABLE FIBRE, OR MIXTURES THEREOF. BIANCHINI, FÉRIER, Lyon, France.
Filed June 14, 1932. Serial No. 327,969. PUBLISHED AUGUST 9, 1932. Class 42.

298,697. BANDELORE TOY SPINNING TOPS. DONALD F. DUNCAN, Chicago, Ill., assignor to Donald F. Duncan, Inc., Chicago, Ill.
Filed November 28, 1930. Serial No. 308,361. PUBLISHED MARCH 8, 1932. Class 22.

298,698. ELASTIC FABRICS. UNITED ELASTIC CORPORATION, Easthampton, Mass.
Filed November 20, 1930. Serial No. 308,143. PUBLISHED AUGUST 2, 1932. Class 42.

298,699. SILK FABRICS IN THE PIECE. ONONDAGA SILK COMPANY, INC., Syracuse and New York, N. Y.
Filed July 1, 1932. Serial No. 328,501. PUBLISHED AUGUST 9, 1932. Class 42.

298,700. SILK FABRICS IN THE PIECE. ONONDAGA SILK COMPANY, INC., Syracuse and New York, N. Y.
Filed July 1, 1932. Serial No. 328,500. PUBLISHED AUGUST 9, 1932. Class 42.

298,701. SILK FABRICS IN THE PIECE. ONONDAGA SILK COMPANY, INC., Syracuse and New York, N. Y.
Filed July 1, 1932. Serial No. 328,499. PUBLISHED AUGUST 9, 1932. Class 42.

298,702. SILENCERS FOR QUIETING GAS FLOW NOISES AT EXHAUSTS AND INLETS FOR ENGINES, PUMPS, COMPRESSORS, BLOWERS, REDUCING VALVES, AND SAFETY VALVES. THE MAXIM SILENCER COMPANY, Hartford, Conn.
Filed December 4, 1931. Serial No. 321,774. PUBLISHED AUGUST 16, 1932. Class 23.

298,703. HAIR DRESSING POMADE. WINNIE AVERY, doing business as Madam W. Avery Company, Dallas, Tex.
Filed December 7, 1931. Serial No. 321,931. PUBLISHED AUGUST 16, 1932. Class 6.

298,704. GLASS JARS. SAMUEL MALLINCKRODT COMPANY, Pittsburgh, Pa.
Filed December 5, 1931. Serial No. 321,809. PUBLISHED JULY 19, 1932. Class 33.

298,705. DECORATIVE BASE METAL BOXES, CANS, BASKETS, AND BINS, AND LIDS AND COVERS THEREFOR. GIFT SHOP NECESSITIES CO., Kansas City, Mo.
Filed December 1, 1931. Serial No. 321,711. PUBLISHED AUGUST 9, 1932. Class 2.

298,706. RECEPTACLES, PARTICULARLY INTENDED FOR RECEIVING GARBAGE OR THE LIKE, SUCH RECEPTACLES COMPRISING METAL CANS ADAPTED TO HOLD REMOVABLE PAPER BAGS. JOSEF BRANDSTETTER, doing business as Alto Mfg. Co. (Not Incorporated), Chicago, Ill.
Filed October 31, 1931. Serial No. 320,661. PUBLISHED JULY 19, 1932. Class 2.

298,707. PERFUMERY, EAU-DE-COLOGNE, TOILET CREAMS, TOILET POWDERS, TOOTH PASTES, TOOTH POWDERS, SHAMPOOS, BRILLIANTINE, HAIR WASH, MOUTH WASH AND HAIR TONICS. NAAMLOOZE VENNOOTSCHAP EAU DE COLOGNE FABRIEK J. C. BOLDOOT, Amsterdam, Netherlands.
Filed October 28, 1931. Serial No. 320,866. PUBLISHED AUGUST 9, 1932. Class 6.

298,708. AUTOMATIC CLUTCH OPERATORS FOR AUTOMOBILES AND PARTS THEREOF. BRAGG-KLIESRATH CORPORATION, South Bend, Ind.
Filed October 1, 1931. Serial No. 319,606. PUBLISHED AUGUST 16, 1932. Class 23.

298,709. COSMETIC CREAMS TO INDUCE PERSPIRATION. MONA LEEA, LTD., New York, N. Y.
Filed August 25, 1931. Serial No. 318,406. PUBLISHED AUGUST 9, 1932. Class 6.

298,710. DIFFERENTIAL GEARING. THE TIMKEN-DETROIT AXLE COMPANY, Detroit, Mich.
Filed August 10, 1931. Serial No. 317,861. PUBLISHED AUGUST 23, 1932. Class 23.

298,711. HAIR GROWER, HAIR DRESSING, AND PRESSING OIL. CASSIUS M. SCOTT, doing business as Scott's Scalp Preparation Company, Chicago, Ill.
Filed July 28, 1931. Serial No. 317,407. PUBLISHED JUNE 21, 1932. Class 6.

298,712. SPOONS, SPATULAS, KNIVES, ETC. THE A. & J. MANUFACTURING CO., Binghamton, N. Y., assignor to A. & J. Kitchen Tool Co., Chicago, Ill., a Corporation of Illinois.
Filed July 25, 1931. Serial No. 317,294. PUBLISHED AUGUST 23, 1932. Class 23.

298,713. CHOCOLATE SYRUP FOR FLAVORING, INGREDIENTS FOR MILK SHAKES OR MILK SHIVERS CONSISTING OF COCOA, POWDERED MILK, SUGAR AND COFFEE FLAVOR, ICE CREAM AND INGREDIENTS FOR NUT SUNDAES AND SUNDAES, CONSISTING OF COCOA, POWDERED MILK, SUGAR, COFFEE FLAVOR, AND PECAN NUTS, INGREDIENTS FOR FRAPPES, CONSISTING OF CRUSHED FRUIT, INGREDIENTS FOR PUDDING, CONSISTING OF CHOPPED FRUIT, NUTS AND JAM, AND INGREDIENTS FOR CHARLOTTE RUSSE CONSISTING OF WHIPPED CREAM AND EGG WHITE. SAMUEL ZIMETBAUM, doing business as Trees Candy Company, Newark, N. J.
Filed March 2, 1932. Serial No. 324,729. PUBLISHED AUGUST 16, 1932. Class 46.

298,714. CANNED FISH. ETABLISSEMENTS RENÉ BÉZIERS, Douarnenez, France.
Filed February 16, 1932. Serial No. 324,272. PUBLISHED AUGUST 16, 1932. Class 46.

298,715. FRESH GRAPES. JOS. LA ROSA & SONS, Modesto, Calif.
Filed December 21, 1931. Serial No. 322,320. PUBLISHED AUGUST 16, 1932. Class 46.

298,716. WATERPROOFING COMPOUND FOR INSIDE CONCRETE AND BRICK WALLS. A. C. HORN COMPANY, Long Island City, N. Y.
Filed November 28, 1931. Serial No. 321,567. PUBLISHED AUGUST 16, 1932. Class 12.

298,717. INTEGRAL WATERPROOFING FOR CONCRETE, CEMENT, AND LIME MORTARS. A. C. HORN COMPANY, Long Island City, N. Y.
Filed November 28, 1931. Serial No. 321,565. PUBLISHED AUGUST 9, 1932. Class 12.

298,718. DRESSED POULTRY AND EGGS. BORDEN QUALITY, INC., New York, N. Y.
Filed August 14, 1931. Serial No .317,969. PUBLISHED AUGUST 16, 1932. Class 46.

298,719. MALT SYRUP FOR BEVERAGE-MAKING AND FOOD PURPOSES. THE BLOOM-ROSENBLUM-KLEIN COMPANY, doing business as The Golden Treat Malt Extract Company, Youngstown, Ohio.
Filed August 6, 1931. Serial No. 317,702. PUBLISHED AUGUST 16, 1932. Class 46.

298,720. MANURE. NAAMLOOZE VENNOOTSCHAP VERENIGDE CHEMISCHE FABRIEKEN, Utrecht, Netherlands.
Filed July 31, 1931. Serial No. 317,525. PUBLISHED AUGUST 23, 1932. Class 10.

298,721. CHEESE, BUTTER, DRESSED POULTRY, AND EGGS. BORDEN QUALITY, INC., New York, N. Y.
Filed July 31, 1931. Serial No. 317,500. PUBLISHED AUGUST 16, 1932. Class 46.

298,722. PNEUMONIA SALVE. R. H. BRIGMAN COMPANY, Olin, N. C.
Filed February 13, 1932. Serial No. 324,128. PUBLISHED AUGUST 9, 1932. Class 6.

298,723. FACIAL CREAMS. PHOFA ROUSSOS, doing business as Madam Roussos, Richmond Hill, N. Y.
Filed January 29, 1932. Serial No. 317,969. PUBLISHED JULY 26, 1932. Class 6.

298,724. PREPARATION FOR THE SCALP. THE VIENNESE SCALP REMEDIES, INC., Baltimore, Md.
Filed February 9, 1932. Serial No. 324,022. PUBLISHED JULY 26, 1932. Class 6.

298,725. MEDICINAL TEAS FOR THE RELIEF AND AS A PALLIATIVE FOR COLDS, COSTIVENESS, INDIGESTION, DIZZINESS, LIVER AND KIDNEY COMPLAINTS, AND RHEUMATISM. OTTO GENSH, New York, N. Y.
Filed February 12, 1932. Serial No. 324,102. PUBLISHED AUGUST 9, 1932. Class 6.

298,726. COATS AND LEATHER COATS, LEATHER JACKETS, LEATHER VESTS, LEATHER BREECHES, LEATHER GLOVES FOR MEN, WOMEN, AND CHILDREN. H. & L. BLOCK, LTD., San Francisco, Calif.
Filed May 27, 1932. Serial No. 327,496. PUBLISHED AUGUST 23, 1932. Class 39.

298,727. GASKETS. VICTOR MANUFACTURING & GASKET COMPANY, Chicago, Ill.
Filed April 15, 1931. Serial No. 313,397. PUBLISHED AUGUST 9, 1932. Class 35.

298,728. DUST FILTERING AND COLLECTING BAGS FORMED OF FIBROUS MATERIAL FOR SUCTION CLEANERS. THE HOOVER COMPANY, North Canton, Ohio.
Filed April 16, 1931. Serial No. 313,361. PUBLISHED JUNE 28, 1931. Class 2.

298,729. PILE FABRICS IN THE PIECE. SIDNEY BLUMENTHAL & CO. INC., New York, N. Y.
Filed January 7, 1931. Serial No. 309,671. PUBLISHED AUGUST 16, 1932. Class 42.

298,730. MOUTH-WASH. VINCE LABORATORIES, INC., New York, N. Y.
Filed May 20, 1931. Serial No. 314,828. PUBLISHED AUGUST 9, 1932. Class 6.

298,731. SUPPOSITORIES, MEDICINES, ETC. DR. RUDOLF REISS RHEUMASAN- UND LENICET-FABRIK, Berlin-Charlottenburg, Germany.
Filed December 18, 1930. Serial No. 309,150. PUBLISHED AUGUST 9, 1932. Class 6.

298,732. MEDICINE. DR. RUDOLF REISS RHEUMASAN- UND LENICET-FABRIK, Berlin-Charlottenburg, Germany.
Filed December 18, 1930. Serial No. 309,144. PUBLISHED AUGUST 9, 1932. Class 6.

298,733. CREAM USED AS A TISSUE BUILDER. MARY GALLAGHER, New York, N. Y.
Filed July 27, 1931. Serial No. 317,880. PUBLISHED AUGUST 9, 1932. Class 6.

298,734. INSECTICIDES AND DEODORANTS. DAVENPORT'S SANITARY SERVICE, Ridgewood, N. Y.
Filed October 12, 1931. Serial No. 319,977. PUBLISHED APRIL 19, 1932. Class 6.

298,735. ROTARY DRILLS, CUTTERS, FILES, RASPS, AND BURRS OF CARBON AND HIGH SPEED STEEL. AMERICAN ROTARY TOOLS COMPANY, INC., New York, N. Y.
Filed March 10, 1932. Serial No. 324,979. PUBLISHED AUGUST 16, 1932. Class 23.

298,736. VETERINARY OR SANITARY PREPARATION FOR THE EXTERNAL TREATMENT OF ANIMALS WHILE IN SEASON. KEEPAWAY LABORATORY, London, England.
Filed March 2, 1932. Serial No. 324,712. PUBLISHED AUGUST 9, 1932. Class 6.

298,737. PHARMACEUTICAL PREPARATION CONTAINING MAGNESIUM HYDROXIDE AND THE SALTS OF OTHER ELEMENTS PRESENT IN OCEAN WATER AND USED AS AN ANTIACID, A LAXATIVE OR A MOUTH WASH. MARINE CHEMICALS COMPANY, LTD., South San Francisco and San Francisco, Calif.
Filed February 29, 1932. Serial No. 324,688. PUBLISHED AUGUST 9, 1932. Class 6.

298,738. SHEET FEEDING AND IMPRESSION ROLLERS FOR ROTARY DUPLICATING AND LIKE MACHINES. A. B. DICK COMPANY, Chicago, Ill.
Filed February 27, 1932. Serial No. 324,550. PUBLISHED AUGUST 23, 1932. Class 23.

298,739. BARRELS AND KEGS. H. LEVINE, doing business as H. Levine Cooperage, Los Angeles, Calif.
Filed February 18, 1932. Serial No. 324,292. PUBLISHED AUGUST 2, 1932. Class 2.

298,740. PREPARATION FOR THE TREATMENT OF SCALP DISEASES SUCH AS ECZEMA, DANDRUFF, FALLING HAIR, ITCHING SCALP, AND HAS THE EFFICACY TO GROW NEW HAIR ON BALD HEADS. JAMES ZUPANSKI, Philadelphia, Pa.
Filed February 15, 1932. Serial No. 324,206. PUBLISHED AUGUST 9, 1932. Class 6.

298,741. LADIES' UNDERGARMENTS—NAMELY, SLIPS, PETTICOATS, AND PAJAMAS. MAYERS & SCHILLER, INC., New York, N. Y.
Filed February 13, 1932. Serial No. 324,145. PUBLISHED AUGUST 23, 1932. Class 39.

298,742. SYRUP FOR COUGHS, COUGH DROPS, COLD CAPSULES, LIQUID INHALANT FOR HEAD COLDS AND MEDICINAL SALVE FOR CHEST COLDS AND SORE THROAT. LOREN M. HASSELER, doing business as Clay Cough Drop Co., Chicago, Ill.
Filed December 26, 1931. Serial No. 322,463. PUBLISHED AUGUST 9, 1932. Class 6.

298,743. HAMMERS, HOUSE AXES, SCREW DRIVERS, AUGER BITS AND BRACES, TROWELS, AND PLIERS. S. H. KRESS & CO., New York, N. Y.
Filed January 14, 1932. Serial No. 323,011. PUBLISHED APRIL 12, 1932. Class 23.

298,744. ARCH SUPPORTS AND FOOT PADS AND CUSHIONS FOR USE IN SHOES, SAID GOODS BEING IN THE NATURE OF FOOT CORRECTIVE APPLIANCES. ROBERT V. PARSONS, doing business as Johnstown Orthopedic Co., Johnstown, Pa.
Filed January 28, 1932. Serial No. 323,353. PUBLISHED APRIL 26, 1932. Class 44.

298,745. MOTION PICTURE FILM, AND ESPECIALLY FILM FOR USE IN TELEVISION PROGRAMS. NATIONAL BROADCASTING COMPANY, INC., New York, N. Y.
Filed January 9, 1932. Serial No. 322,858. PUBLISHED AUGUST 16, 1932. Class 26.

298,746. MOTION PICTURE FILM, AND ESPECIALLY FILM FOR USE IN TELEVISION PROGRAMS. NATIONAL BROADCASTING COMPANY, INC., New York, N. Y.
Filed January 9, 1932. Serial No. 322,857. PUBLISHED AUGUST 16, 1932. Class 26.

298,747. TOYS, PULL TOYS, TOY VEHICLES, TOY FURNITURE, TOY MOTOR BOATS, TOY BUILDING BLOCKS, TOY ANIMALS, AND DOLLS' CLOTHES HANGERS. WOOD PARTS, INCORPORATED, West Helena, Ark.
Filed December 15, 1931. Serial No. 322,150. PUBLISHED AUGUST 23, 1932. Class 22.

298,748. TOY ANIMALS, PARTICULARLY WOOD ANIMALS CONTAINING COLORED CRAYONS. WOOD PARTS, INCORPORATED, West Helena, Ark.
Filed December 15, 1931. Serial No. 322,151. PUBLISHED AUGUST 23, 1932. Class 22.

298,749. CARTONS. MONO SERVICE CO., Newark, N. J.
Filed December 18, 1931. Serial No. 322,301. PUBLISHED JULY 19, 1932. Class 2.

[ACT OF MARCH 19, 1920, SEC. 1 (b)]

THESE REGISTRATIONS ARE NOT SUBJECT TO OPPOSITION

298,750. (CLASS 9. EXPLOSIVES, FIREARMS, EQUIPMENTS, AND PROJECTILES.) IVER JOHNSON'S ARMS & CYCLE WORKS, Fitchburg, Mass. Filed Sept. 14, 1931. Serial No. 319,027.

SEALED EIGHT

For Revolvers.
Claims use since June 1, 1931.

298,751. (CLASS 21. ELECTRICAL APPARATUS, MACHINES, AND SUPPLIES.) EDWIN L. WIEGAND COMPANY, Pittsburgh, Pa. Filed Sept. 26, 1931. Serial No. 319,461.

FINSTRIP

For Electric Heating Units, Electric Heating Elements, and Parts Therefor, Suitable for Use in Space Heaters, Cooking and Heating Plates, Immersion Heaters, Drying Rolls, and Otherwise.
Claims use since Sept. 8, 1931.

298,752. (CLASS 1. RAW OR PARTLY-PREPARED MATERIALS.) ECONOMY NURSERY COMPANY, Little Silver, N. J. Filed Sept. 28, 1931. Serial No. 319,479.

SUR-GRO

For Trees, Plants, and Seeds—Namely, Garden, Lawn, and Field.
Claims use since Sept. 23, 1931.

298,753. (CLASS 21. ELECTRICAL APPARATUS, MACHINES, AND SUPPLIES.) WESTINGHOUSE ELECTRIC AND MANUFACTURING COMPANY, East Pittsburgh, Pa. Filed Nov. 11, 1931. Serial No. 321,056.

"QUIK-SET"

For Electric Motor Units.
Claims use since July, 1931.

298,754. (CLASS 16. PAINTS AND PAINTERS' MATERIALS.) THE PATTERSON-SARGENT COMPANY, Cleveland, Ohio. Filed Nov. 18, 1931. Serial No. 321,253.

SHEEN-TONE

For Dry and Ready Mixed Paints, Paint Enamels, Stains, Lacquers, and Varnishes.
Claims use since Aug. 26, 1931.

298,755. (CLASS 12. CONSTRUCTION MATERIALS.) PALMER PRODUCTS, INC., Waukesha, Wis. Filed May 23, 1932. Serial No. 327,370.

SEAL-KOTE

For a Floor Dressing or Filler That is Rubbed into the Floor to Seal Up the Pores of Wood Floors or Cement Floors for an Additional Application of the Same Material or Preferably for the Subsequent Addition of Wax-Like Material.
Claims use since June, 1931.

298,756. (CLASS 17. TOBACCO PRODUCTS.) THE BLOCH BROS. TOBACCO CO., Wheeling, W. Va. Filed Sept. 1, 1932. Serial No. 330,034.

"TREAT YOURSELF TO THE BEST"

For Chewing and Smoking Tobacco.
Claims use since Sept. 1. 1928.

298,757. (CLASS 45. BEVERAGES, NONALCOHOLIC.) GRIMES MFG. CO., Walnut Ridge, Ark. Filed Aug. 31, 1932. Serial No. 330,056.

Mr. Grimes

For Nonalcoholic, Noncereal, Maltless Beverages Sold as Soft Drinks and Sirups and Extracts for Making the Same.
Claims use since June 1, 1931.

TRADE-MARK REGISTRATIONS RENEWED

39,047. CERTAIN NAMED LUBRICANTS. Registered October 14, 1902. THE IRONSIDES COMPANY, Columbus, Ohio, a Corporation of Ohio. Renewed October 14, 1932.

39,155. LUBRICANTS AND LUBRICATING COMPOUNDS. Registered October 28, 1902. THE IRONSIDES COMPANY, Columbus, Ohio, a Corporation of Ohio. Renewed October 28, 1932.

39,304. CONFECTIONERY. Registered November 18, 1902. JAMES PASCALL, LIMITED, London, England. Renewed November 18, 1932, to James Pascall, Limited, Mitcham, England, a Corporation of Great Britain.

39,405. AUTOMOBILES. Registered December 2, 1902. OLDS MOTOR WORKS, Detroit and Lansing, Mich. Renewed December 2, 1932, to General Motors Corporation, Detroit, Mich., a Corporation of Delaware, assignee.

39,580. A URINARY ANTISEPTIC. Registered December 30, 1902. FARBENFABRIKEN OF ELBERFELD CO. Renewed December 30, 1932, to Winthrop Chemical Company, Inc., New York, N. Y., a Corporation of New York, assignee by mesne assignments.

39,898. CERTAIN NAMED PAPER AND ENVELOPS. Registered March 10, 1903. WILLIAM MANN COMPANY, Philadelphia, Pa., a Corporation of Pennsylvania. Renewed March 10, 1933.

87,910. BREAD. Registered August 13, 1912. THE NORMAN BAKING COMPANY, Minneapolis, Minn. Renewed August 13, 1932, to Holmes Bakery and Confectionery, Inc., Chicago, Ill., a Corporation of Illinois, assignee by mesne assignments.

88,272. GOLF-CLEEKS, GOLF-IRONS OF ALL KINDS, AND WOODEN GOLF-CLUBS. Registered September 10, 1912. WILLIAM GIBSON AND COMPANY. Renewed September 10, 1932, to William Gibson & Co., Limited, Kinghorn, Scotland, a Corporation of Great Britain, assignee.

88,555. WRITING, PRINTING, AND TISSUE PAPER. Registered October 1, 1912. C. H. DEXTER & SONS. Renewed October 1, 1932, to C. H. Dexter & Sons, Incorporated, Windsor Locks, Conn., a Corporation of Connecticut, assignee.

88,556. WRITING, PRINTING, AND TISSUE PAPER. Registered October 1, 1912. C. H. Dexter & Sons. Renewed October 1, 1932, to C. H. Dexter & Sons, Incorporated, Windsor Locks, Conn., a Corporation of Connecticut, assignee.

88,574. CABLE AND ROPE FILLERS. Registered October 1, 1912. THE IRONSIDES COMPANY, Columbus, Ohio, a Corporation of Ohio. Renewed October 1, 1932.

88,575. CABLE AND ROPE FILLERS. Registered October 1, 1912. THE IRONSIDES COMPANY, Columbus, Ohio, a Corporation of Ohio. Renewed October 1, 1932.

88,622. WINE MADE FROM THE SCUPPERNONG-GRAPE. Registered October 8, 1912. GARRETT & CO., Norfolk, Va. Renewed October 8, 1932, to Fruit Industries, Ltd., Los Angeles, Calif., a Corporation of California, assignee by mesne assignments.

88,623. BLACKBERRY-WINE. Registered October 8, 1912. GARRETT & CO., Norfolk, Va. Renewed October 8, 1932, to Fruit Industries, Ltd., Los Angeles, Calif., a Corporation of California, assignee by mesne assignments.

88,624. WINE MADE FROM THE SCUPPERNONG-GRAPE. Registered October 8, 1912. GARRETT & CO., Norfolk, Va. Renewed October 8, 1932, to Fruit Industries, Ltd., Los Angeles, Calif., a Corporation of California, assignee by mesne assignments.

88,670. WINE MADE FROM THE SCUPPERNONG-GRAPE. Registered October 15, 1912. GARRETT & CO., Norfolk, Va. Renewed October 15, 1932, to Fruit Industries, Ltd., Los Angeles, Calif., a Corporation of California, assignee by mesne assignments.

88,682. CERTAIN NAMED TOYS. Registered October 15, 1912. ERNST PAUL LEHMANN. Renewed October 15, 1932, to Ernst Paul Lehmann, Patentwerk, Brandenburg-on-the-Havel, Germany, a Firm, successor.

88,744. CHAMPAGNE, SCUPPERNONG, CLARET, SHERRY, WHITE, RED, PORT, AND HUCKLEBERRY WINES. Registered October 22, 1912. MILTON L. EPPSTEIN. Renewed October 22, 1932, to Monie Weixel, Fort Worth, Tex., assignee.

88,776. FERTILIZER. Registered October 22, 1912. MORRIS FERTILIZER CO., Atlanta, Ga. Renewed October 22, 1932, to Armour Fertilizer Works, Chicago, Ill., a Corporation of New Jersey, successor.

88,812. CORSETS. Registered October 22, 1912. THE WARNER BROTHERS COMPANY, Bridgeport, Conn., a Corporation of Connecticut. Renewed October 22, 1932.

88,846. ORANGES, LEMONS, GRAPE-FRUIT, TANGERINES, AND LIMES. Registered October 29, 1912. THE CITRA FRUIT COMPANY, Citra, Fla. Renewed October 29, 1932, to Citra Packing Co., Ocala, Fla., a Corporation of Florida, assignee.

88,913. CANDY. Registered October 29, 1912. CHARLES N. MILLER. Renewed October 29, 1932, to Charles N. Miller Company, Boston, Mass., a Corporation of Massachusetts, assignee.

89,292. METAL RAIL-ANCHORS, ANTICREEPERS, TIE-PLATE, SPLICE-BAR, GUARD-RAIL CLAMPS, AND RAIL-BONDS. Registered December 8, 1912. THE P. & M. COMPANY, Chicago, Ill., a Corporation of Illinois. Renewed December 8, 1932.

89,382. POPCORN COATED WITH CANDY. Registered December 10, 1912. SHOTWELL MFG. CO. Renewed December 10, 1932, to The Cracker Jack Co., Chicago, Ill., a Corporation of Illinois, assignee.

89,676. WOOD-STAINS. Registered December 31, 1912. LOUISVILLE VARNISH COMPANY, Louisville, Ky., a Corporation of Kentucky. Renewed December 31, 1932.

89,787. GOLF BALLS. Registered January 7, 1913. THE WORTHINGTON BALL COMPANY, Elyria, Ohio, a Corporation of Ohio. Renewed January 7, 1933.

89,812. CERTAIN NAMED FIREARMS AND PARTS THEREOF. Registered January 14, 1913. THE BIRMINGHAM SMALL ARMS COMPANY LIMITED, Birmingham, England, a Corporation of Great Britain. Renewed January 14, 1933.

89,978. SUGAR. Registered January 28, 1913. ARBUCKLE BROTHERS, New York, N. Y., a Firm. Renewed January 28, 1933.

90,351. MIXED FEED FOR DAIRY-CATTLE. Registered February 18, 1913. THE LARROWE MILLING CO., Cohocton, N. Y. Renewed February 18, 1933, to General Mills, Inc., Minneapolis, Minn., a Corporation of Delaware, assignee by mesne assignments.

90,360. CERTAIN NAMED LINOTYPE SUPPLIES. Registered February 18, 1913. MERGENTHALER LINOTYPE CO., New York, N. Y. Renewed February 18, 1933, to Mergenthaler Linotype Company, Brooklyn, N. Y., a Corporation of New York.

90,485. OLIVES. Registered February 25, 1913. S. J. VALK & BRO. Renewed February 25, 1933, to Falcon Packing Co., Inc., New York, N. Y., a Corporation of New York, assignee.

90,609. AN ANTISEPTIC PRESCRIPTION USED FOR TREATING CERTAIN NAMED COMPLAINTS. Registered March 4, 1913. P. N. WHITNEY, Cedar Vale, Kans. Renewed March 4, 1933, to P. N. Whitney, doing business as The Dr. Whitney Medicine Co., Arkansas City, Kans.

90,664. PUBLICATIONS. Registered March 11, 1913. UNITED BROTHERHOOD OF CARPENTERS & JOINERS OF AMERICA, Indianapolis, Ind., a Voluntary Association. Renewed March 11, 1933.

90,698. STARCH SIZING. Registered March 18, 1913. THE GUM TRAGASOL SUPPLY COMPANY LIMITED. Renewed March 18, 1933, to Tragasol Products Limited, Hooton, England, a Corporation of Great Britain, by change of name.

90,700. CORN-SALVE. Registered March 18, 1913. W. T. HANSON CO., Schenectady, N. Y., a Corporation of New York. Renewed March 18, 1933.

90,708. BADGES AND BUTTONS. Registered March 18, 1913. ANNA JARVIS, Philadelphia, Pa. Renewed March 18, 1933.

90,720. CHOCOLATE AND COCOA. Registered March 18, 1913. MASSACHUSETTS CHOCOLATE COMPANY, Boston, Mass., a Corporation of Massachusetts. Renewed March 18, 1933.

90,763. A MOSQUITO-REPELLING PREPARATION. Registered March 18, 1913. UNITED DRUG COMPANY. Renewed March 18, 1933, to United Drug Company, Boston, Mass., a Corporation of Delaware, assignee by mesne assignments.

90,805. ADHESIVE SIZINGS. Registered March 25, 1913. THE GUM TRAGASOL SUPPLY COMPANY LIMITED. Renewed March 25, 1933, to Tragasol Products Limited, Hooton, England, a Corporation of Great Britain, by change of name.

90,806. ADHESIVE SIZINGS. Registered March 25, 1913. THE GUM TRAGASOL SUPPLY COMPANY LIMITED. Renewed March 25, 1933, to Tragasol Products Limited, Hooton, England, a Corporation of Great Britain, by change of name.

90,899. A DRIED BEET-PULP FOR STOCK FOOD. Registered April 1, 1913. THE LARROWE MILLING CO., Cohocton, N. Y., and Detroit, Mich. Renewed April 1, 1933, to General Mills, Inc., Minneapolis, Minn., a Corporation of Delaware, assignee by mesne assignments.

LABELS

REGISTERED NOVEMBER 1, 1932

41,344.—*Title:* ALL AMERICAN. For Touch Up Black. AMERICAN AUTO ACCESSORIES STORES, doing business as All American Products Co., Wilkes-Barre, Pa. Published May 21, 1932.

41,345.—*Title:* ALL AMERICAN. For Black Top Dressing. AMERICAN AUTO ACCESSORIES STORES, doing business as All American Products Co., Wilkes-Barre, Pa. Published May 21, 1932.

41,346.—*Title:* ALL AMERICAN. For Radiator Stop Leak. AMERICAN AUTO ACCESSORIES STORES, doing business as All American Products Co., Wilkes-Barre, Pa. Published May 21, 1932.

41,347.—*Title:* BEECH-NUT BLACK COUGH DROPS. For Cough Drops. BEECH-NUT PACKING COMPANY, Canajoharie, N. Y. Published September 20, 1932.

41,348.—*Title:* BEECH-NUT BLACK COUGH DROPS. For Cough Drops. BEECH-NUT PACKING COMPANY, Canajoharie, N. Y. Published September 20, 1932.

41,349.—*Title:* BEECH-NUT BLACK COUGH DROPS. For Cough Drops. BEECH-NUT PACKING COMPANY, Canajoharie, N. Y. Published September 20, 1932.

41,350.—*Title:* BEECH-NUT MENTHOL COUGH DROPS. For Cough Drops. BEECH-NUT PACKING COMPANY, Canajoharie, N. Y. Published September 20, 1932.

41,351.—*Title:* BEECH-NUT MENTHOL COUGH DROPS. For Cough Drops. BEECH-NUT PACKING COMPANY, Canajoharie, N. Y. Published September 20, 1932.

41,352.—*Title:* BEECH-NUT MENTHOL COUGH DROPS. For Cough Drops. BEECH-NUT PACKING COMPANY, Canajoharie, N. Y. Published September 20, 1932.

41,353.—*Title:* BEECH-NUT OVEN BAKED BEANS. For Baked Beans. BEECH-NUT PACKING COMPANY, Canajoharie, N. Y. Published February 1, 1932.

41,354.—*Title:* BLIZZARD BAR. For Candy. BUNTE BROTHERS, Chicago, Ill. Published July 1, 1932.

41,355.—*Title:* CHIC GIRL. For Shoes. M. B. CLAFF & SONS, INC., Randolph, Mass. Published August 9, 1932.

41,356.—*Title:* SUPER-MILK BREAD. For Bread. DAIRY CORPORATION OF AMERICA, Bloomington, Del., Milwaukee, Wis., and Chicago, Ill. Published September 7, 1932.

41,357.—*Title:* ONE FIL ANTI-FREEZE. For Anti-Freeze Solution for Motor Vehicle Radiators. CADY L. DANIELS, INC., Colorado Springs, Colo. Published September 30, 1932.

41,358.—*Title:* FOLEY'S MEDICATED COUGH DROPS. For Cough Drops. FOLEY & CO., Chicago, Ill. Published September 21, 1932.

41,359.—*Title:* FRANKLIN CHOCOLATE MALT SYRUP. For Chocolate Malt Syrup. FRANKLIN STORES CO., Newark, N. J. Published October 5, 1932.

41,360.—*Title:* SILVER NYMPHE TALC. For Talc. THE GOODMAN CHEMICAL CO., Brooklyn, N. Y. Published July 7, 1932.

41,361.—*Title:* HELLER'S PUNCH-OLA. For Powder for Making Fruit Flavored Drinks. B. HELLER & COMPANY, Chicago, Ill. Published May 9, 1932.

41,362.—*Title:* DROMEDARY COCOANUT. For Cocoanut. THE HILLS BROTHERS COMPANY, New York, N. Y. Published September 21, 1932.

41,363.—*Title:* LONDON SHOE. For Boxes. HOAGUE-SPRAGUE CORPORATION, Lynn, Mass. Published August 17, 1932.

41,364.—*Title:* I. G. A. 'UP-SIDE-DOWN' OR LOAF CAKE PAN. For Pans. L. J. HOIS, Milwaukee, Wis. Published July 21, 1932.

41,365.—*Title:* HURD'S WONDER OINTMENT. For Ointment. S. J. HURD, doing business as S. J. Hurd & Company, Mendota, Ill. Published August 12, 1932.

41,366.—*Title:* BANQUET TEA-PAKS. For Tea. MCCORMICK & CO., INC., Baltimore, Md. Published July 15, 1932.

41,367.—*Title:* PENNSEALD. For Motor Oil. MCLEAN-JONES OIL CO. INC., Boston, Mass. Published July 12, 1932.

41,368.—*Title:* DRY-O-LIT POULTRY LITTER "FOR HAPPY HENS." For Poultry Litter. THE PACIFIC LUMBER COMPANY, San Francisco, Calif. Published September 6, 1932.

41,369.—*Title:* ICE CREAM ON TOAST. For Ice Cream Confection. CARMELO RAFFA, Bakerton, Elmora P. O., Pa. Published July 1, 1932.

41,370.—*Title:* CANOODLES. For Butter Scotch. REED CANDY COMPANY, Chicago, Ill. Published August 30, 1932.

41,371.—*Title:* ROBERTSON GRANULATED SOAP. For Granulated Soap. THE J. T. ROBERTSON COMPANY INC., Syracuse, N. Y. Published June 15, 1932.

41,372.—*Title:* OVEN BROWNED VIRGINIA STYLE HAM. For Hams. KARL SEILER & SONS, Philadelphia, Pa. Published September 9, 1932.

41,373.—*Title:* LA PERLA DEL ORIENTE. For Liniment. ALBERTO SOLIZ, Los Angeles, Calif. Published September 1, 1932.

41,374.—*Title:* CHASE & SANBORN'S DIAMOND 60. For Tea. STANDARD BRANDS INCORPORATED, New York, N. Y. Published May 16, 1932.

41,375.—*Title:* OUR GANG BREAD PAN-DANDY BREAD. For Bread. SUTORIUS BREAD COMPANY, Newton and Salina, Kans. Published August 16, 1932.

41,376.—*Title:* WILBERT'S NO-RUB. For Floor Wax. THE WILBERT PRODUCTS CO. INC., New York, N. Y. Published June 20, 1932.

41,377.—*Title:* KLENZIT. For Glass Cleaning Compound. ROLLIN H. WILLIAMS, doing business as General Laboratories Products, Chicago, Ill. Published August 8, 1932.

41,378.—*Title:* WRIGLEY'S P. K. For Chewing Gum. WM. WRIGLEY, JR. COMPANY, Chicago, Ill. Published September 9, 1932.

41,379.—*Title:* WRIGLEY'S P. K. For Chewing Gum. WM. WRIGLEY, JR. COMPANY, Chicago, Ill. Published September 9, 1932.

LABELS RENEWED

11,945. COLUMBUS MITCHELINE QUILT. For Quilts. Registered March 7, 1905. SWIFT MANUFACTURING COMPANY, Columbus, Ga. Renewed March 7, 1933.

PRINTS

REGISTERED NOVEMBER 1, 1932

13,952.—*Title:* PEOPLE BEGAN TO THINK WE WERE NEGLECTING DORIS. For Wheat Breakfast Food. THE CREAM OF WHEAT CORPORATION, Minneapolis, Minn. Published October 5, 1932.

13,953.—*Title:* ESKIMO. For Electric Fans. FRANKLIN E. EVERSON, doing business as Everson Display, New York, N. Y. Published May 15, 1932.

13,954.—*Title:* FREE! WOMEN! ACCEPT BETTY CROCKER'S IMPROVED CAKE COOLING RACK FREE! For Cake Flour. GENERAL MILLS, INC., Minneapolis, Minn. Published October 1, 1932.

13,955.—*Title:* BOYS—GIRLS.—DRAW PICTURES ON YOUR SNEAKERS. For Sneakers. G. R. KINNEY CO., INC., New York, N. Y. Published June 13, 1932.

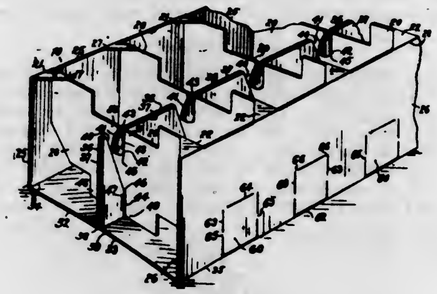
13,956.—*Title:* PURA-SMOKE. For Pipes, Cigar and Cigarette Holders and Filter Cartridges Therefor. THE PURA-SMOKE COMPANY, INC., Burlington, N. C. Published September 29, 1932.

13,957.—*Title:* WRIGLEY'S P. K. For Chewing Gum. WM. WRIGLEY JR. COMPANY, Chicago, Ill. Published September 9, 1932.

REISSUES

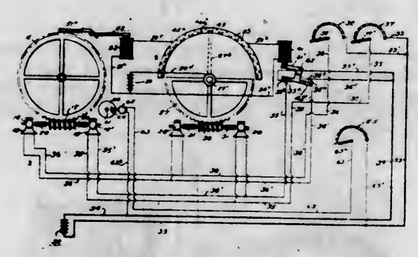
NOVEMBER 1, 1932

18,639. TWO-PIECE BOX OR CARTON. HENRY LEVINE, Philadelphia, Pa., assignor to Leon Benoit, Chicago, Ill. Original No. 1,838,997, dated Dec. 29, 1931, Serial No. 431,782, filed Feb. 27, 1930. Application for reissue filed July 11, 1932. Serial No. 621,997. 10 Claims. (Cl. 229—29.)



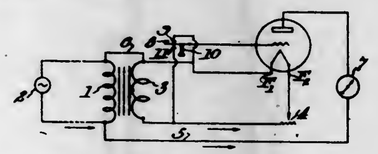
9. A cellular box open at the top having a bottom from which upstand sides connecting integrally at their upper edges with partitions which extend transversely between the sides, a lid formed independently of the box and separable therefrom, and means adjacent the upper edges of the partitions adapted to engage the proximate edges of the lid to secure the latter in place detachably over the open upper side of the box.

18,640. RADIO TUNING MECHANISM. GEORGE R. FREMONT, Charleston, S. C. Original No. 1,681,529, dated Aug. 21, 1928, Serial No. 51,275, filed Aug. 18, 1925. Application for reissue filed Mar. 4, 1932. Serial No. 596,845. 7 Claims. (Cl. 250—40.)



2. The combination with a radio receiving set, of means for simultaneously adjusting the tuning elements thereof, which includes a motor actuated movable member operatively connected with the tuning elements, a portable unit including a motor actuated movable member movable in synchronism with the first mentioned movable member, selective means associated with the unit for selecting a predetermined radio broadcasting station, and means actuated by the station broadcasting selecting means to render the motors inoperative when the tuning elements tune in on the selected station.

18,641. TESTING VACUUM TUBES. WILLIAM NELSON GOODWIN, Jr., Newark, N. J., assignor to Weston Electrical Instrument Corp., Newark, N. J., a Corporation of New Jersey. Original No. 1,704,566, dated Mar. 5, 1929, Serial No. 213,643, filed Aug. 17, 1927. Application for reissue filed July 11, 1930. Serial No. 467,377. 7 Claims. (Cl. 250—27.)



1. The method of testing an audion tube which comprises supplying alternating current to the plate and cathode heating circuits to energize the same, whereby the resulting flow of current establishes a potential drop in said circuits, and alternatively connecting the grid to two spaced points in one of said circuits, whereby different biasing voltages are applied to the grid.

18,642. WATERPROOF EXPANSION JOINT. ALBERT C. FISCHER, Chicago, Ill., assignor to The Philip Carey Manufacturing Company, a Corporation of Ohio. Original No. 1,807,905, dated June 2, 1931, Serial No. 700,734, filed Mar. 20, 1924. Application for reissue filed June 19, 1931. Serial No. 545,615. 9 Claims. (Cl. 106—31.)

1. The process of making elastic packing material characterized by preparing a quantity of bituminous compound in a fluid condition, treating fibrous material with a substance impervious to the bituminous compound, incorporating the treated fibrous material in the bituminous compound, and solidifying the bituminous compound.

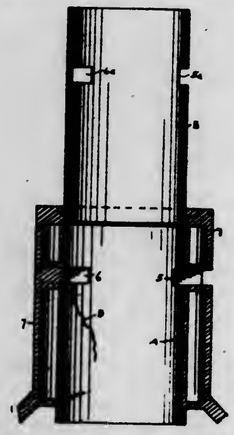
18,643. VAT DYESTUFF AND PROCESS OF MAKING SAME. WILHELM ECKERT and HEINRICH GREUNE, Frankfort-on-the-Main-Hochst, Germany, assignors to General Aniline Works, Inc., a Corporation of Delaware. Original No. 1,588,451, dated June 15, 1926, Serial No. 44,369, filed July 17, 1925, and in Germany July 21, 1924. Application for reissue filed Apr. 8, 1930. Serial No. 442,678. 7 Claims. (Cl. 260—44.)

1. Apparatus for producing box parts having inserted edge linings comprising a support, a die mounted thereon to which said edge linings are mountable, a counter die adapted to cooperate with said first named die serving to clamp therebetween a box cutting and bending means adapted to engage laterally overlapping edges of said clamped cutting and fold them against the inserted edge lining on said first named die and auxiliary independently movable presser means adapted to press said bent over edges against said edge lining.

18,644. METHOD OF REPAIRING ENGINE CYLINDERS. HORACE J. YOUNT, deceased, Indianapolis, Ind., by Eagle Machine Company, Incorporated, Indianapolis, Ind., assignee. Original No. 1,842,441, dated Jan. 26, 1932, Serial No. 405,069, filed Nov. 6, 1929. Application for reissue filed Mar. 21, 1932. Serial No. 600,351. 2 Claims. (Cl. 29—156.4.)

2. The method of repairing a worn gas engine cylinder which comprises forming a tubular sleeve to have a

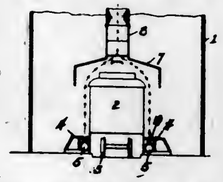
finished external predetermined diameter exceeding that of the original standard internal diameter of said cylinder and to have an internal diameter less than the standard internal diameter of the cylinder, forming the cylinder to a uniform diameter a little less than the



said predetermined diameter of the sleeve to provide for a force-fit of the sleeve within the cylinder, pressing the sleeve into the cylinder, and forming the sleeve internally to a finished diameter required for the piston to be used therein.

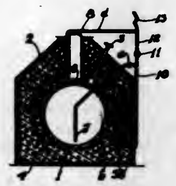
18,645. SPRAY COATING EXHAUST SYSTEM. EDSON G. WHITMORE, Toledo, Ohio, assignor to The De Vilbiss Company, Toledo, Ohio, a Corporation of Ohio. Original No. 1,748,161, dated Feb. 25, 1930, Serial No. 181,623, filed Apr. 7, 1927. Application for reissue filed Dec. 28, 1931. Serial No. 583,500. 7 Claims. (Cl. 91—60.)

1. A protective device for use in spray coating an object, comprising a support adapted to extend about the object to be coated near the base thereof for supporting the operator, an air supply conduit having a slit opening upwardly from the vicinity of said support in a plane substantially parallel to the surface of an object being coated and spaced therefrom to discharge a continuous upwardly moving pneumatic curtain, a canopy spaced



above said support, overhanging the side of said object and having an outlet for receiving the flow of air from the pneumatic curtain, and means for creating said flow.

18,646. METHOD AND APPARATUS FOR PREPARING COMPRESSED GASES. CHRISTIAN WILHELM PAUL HEYLANDT, Berlin-Britz, Germany, assignor to Fluga Aktiengesellschaft, St. Moritz, Switzerland, a Corporation of Switzerland. Original No. 1,773,140, dated Aug. 19, 1930, Serial No. 301,886, filed Aug. 24, 1928, and in Germany Sept. 20, 1927. Application for reissue filed June 24, 1932. Serial No. 619,117. 19 Claims. (Cl. 62—1.)

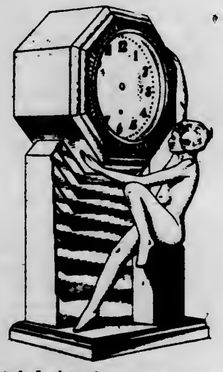


1. The method of preparing compressed gas from a body of liquefied gas held in an insulated container which comprises causing the withdrawal of gas material from said container by first passing the same through a temperature environment which heats the same, and then passing the same in heat exchanging relation with said body of liquefied gas.

DESIGNS

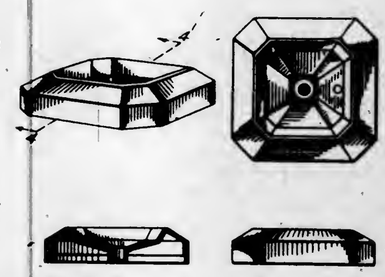
NOVEMBER 1, 1932

88,139. CLOCK CASE. FRANK J. ABEL, Massapequa, N. Y., assignor to Henry Hyman, Brooklyn, N. Y. Filed June 24, 1932. Serial No. 44,182. Term of patent 14 years.



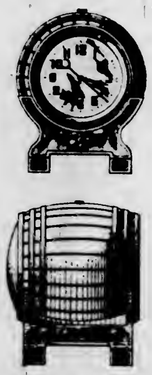
The ornamental design for a clock case, as shown.

88,140. CAP FOR WATER COOLERS. STEPHEN J. BENN, Philadelphia, Pa., assignor to Merchant & Evans Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed July 21, 1932. Serial No. 44,405. Term of patent 3½ years.



The ornamental design for a cap for water coolers, as shown and described.

88,141. CLOCK CASE. PAUL BUHRLE, Bronx, N. Y. Filed Aug. 26, 1932. Serial No. 44,699. Term of patent 3½ years.



The ornamental design for a clock case, as shown and described.

88,142. BUILDING. HENRY E. CONKLIN, Roslyn, N. Y. Filed Jan. 27, 1932. Serial No. 42,635. Term of patent 14 years.



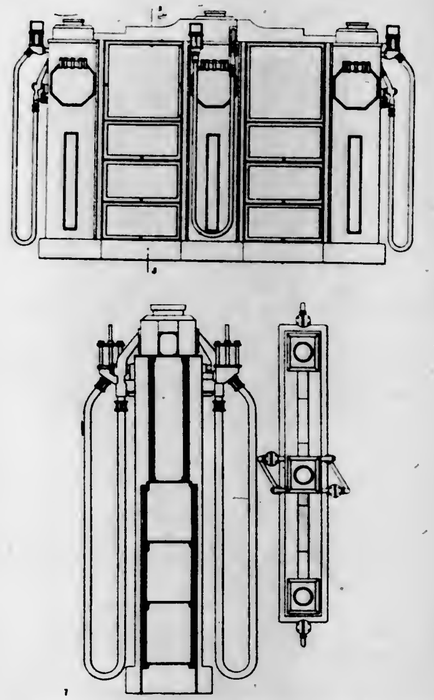
The ornamental design for a building as shown and described.

88,143. WAFER CONTAINER FOR ICE CREAM AND THE LIKE. JOSEPH H. DICKER, Jersey City, N. J. Filed Aug. 29, 1932. Serial No. 44,714. Term of patent 3½ years.



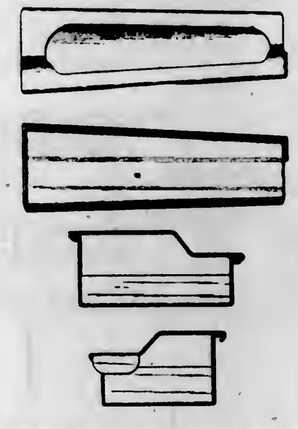
The ornamental design for a wafer container for ice cream and the like, as shown.

88,144. GASOLINE OR OTHER ARTICLE DISPENSING PUMP. EARL E. EICKMEYER and GEORGE W. EICHHOFF, Dayton, Ohio, assignors to The Dayton Pump & Mfg. Company, Dayton, Ohio, a Corporation of Ohio. Filed July 28, 1932. Serial No. 44,470. Term of patent 3½ years.



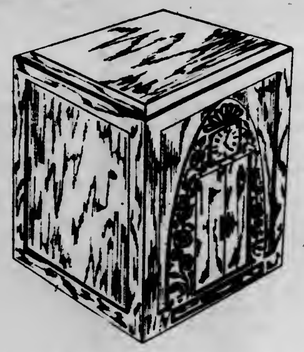
The ornamental design for a gasoline or other article dispensing pump as shown.

88,145. DISPLAY BOX FOR TOOLS. CARL EKBERG, Lombard, Ill. Filed May 25, 1931. Serial No. 39,962. Term of patent 3½ years.



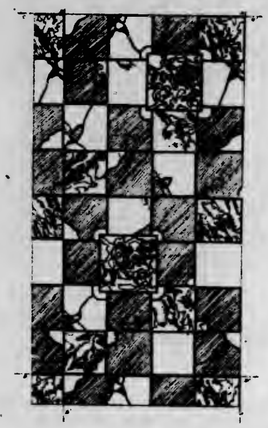
The ornamental design for a display box for tools, as shown.

88,146. RADIOCABINET. JOHN L. EMBREE, Omaha, Nebr. Filed July 22, 1932. Serial No. 44,412. Term of patent 14 years.



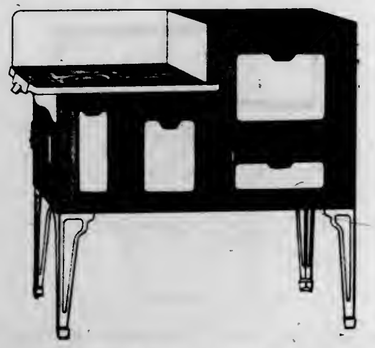
The ornamental design for a radiocabinet as shown.

88,147. PRINTED FLOOR COVERING. GUSTAVE M. FAUSER, Ardsley on Hudson, N. Y. Filed Aug. 23, 1932. Serial No. 44,668. Term of patent 7 years.



The ornamental design for printed floor covering, substantially as shown and described.

88,148. STOVE. CHRISTOPHER L. HARDWICK, Cleveland, Tenn. Filed Aug. 19, 1932. Serial No. 44,635. Term of patent 3½ years.



The ornamental design for a stove as shown.

88,149. RANGE OR SIMILAR ARTICLE. STANLEY H. HOBSON, Rockford, Ill., assignor to Geo. D. Roper Corporation, Rockford, Ill., a Corporation of Illinois. Filed Oct. 9, 1931. Serial No. 41,349. Term of patent 7 years.



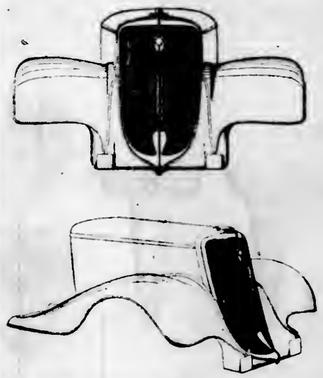


The ornamental design for a range or similar article, substantially as shown and described.

88,150. PANEL FOR A RANGE OR SIMILAR ARTICLE. STANLEY H. HOBSON, Rockford, Ill., assignor to Geo. D. Roper Corporation, Rockford, Ill., a Corporation of Illinois. Filed Oct. 9, 1931. Serial No. 41,350. Term of patent 7 years.

The ornamental design for a panel for a range or similar article, substantially as shown and described.

88,151. COMBINED RADIATOR, HOOD, AND FENDERS FOR VEHICLES. JAMES R. HUGHES, South Bend, Ind., assignor to The Studebaker Corporation, South Bend, Ind., a Corporation of New Jersey. Filed Sept. 3, 1932. Serial No. 44,758. Term of patent 14 years.



The ornamental design for a combined radiator, hood, and fenders for vehicles substantially as shown.

88,152. BOTTLE OR SIMILAR ARTICLE. EDGAR E. KAHN, Mount Vernon, N. Y. Filed Jan. 27, 1932. Serial No. 42,641. Term of patent 3½ years.



The ornamental design for a bottle or similar article, substantially as shown.

88,153. TEXTILE FABRIC OR SIMILAR ARTICLE. HERBERT KATZMAN, New York, N. Y., assignor to William Willheim Co., Inc., New York, N. Y. Filed Sept. 28, 1932. Serial No. 45,087. Term of patent 3½ years.



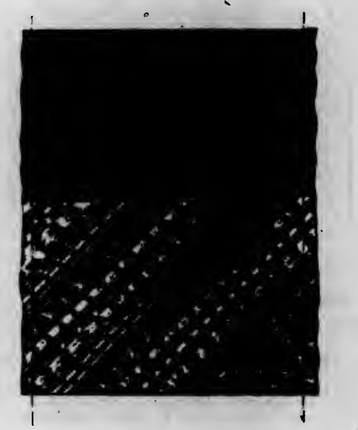
The ornamental design for a textile fabric or similar article as shown and described.

88,154. TEXTILE FABRIC OR SIMILAR ARTICLE. HERBERT KATZMAN, New York, N. Y., assignor to William Willheim Co., Inc., New York, N. Y. Filed Sept. 28, 1932. Serial No. 45,088. Term of patent 3½ years.



The ornamental design for a textile fabric or similar article as shown and described.

88,155. TEXTILE FABRIC OR SIMILAR ARTICLE. HERBERT KATZMAN, New York, N. Y., assignor to William Willheim Co., Inc., New York, N. Y. Filed Sept. 30, 1932. Serial No. 45,172. Term of patent 3½ years.



The ornamental design for a textile fabric or similar article as shown and described.

88,156. ELECTRIC COOKING OVEN. ANDREW S. KNAPP, Belleville, Ill., assignor to Knapp-Monarch Company, Belleville, Ill., a Corporation of Missouri. Filed May 23, 1932. Serial No. 43,884. Term of patent 7 years.



The ornamental design for an electric cooking oven substantially as shown.

88,157. BOX OR SIMILAR CONTAINER. WALDEMAR KOPS, New York, N. Y., assignor to Kops Brothers, Inc., New York, N. Y., a Corporation of New York. Filed Mar. 4, 1932. Serial No. 43,073. Term of patent 14 years.



The ornamental design for a box or similar container, as shown.

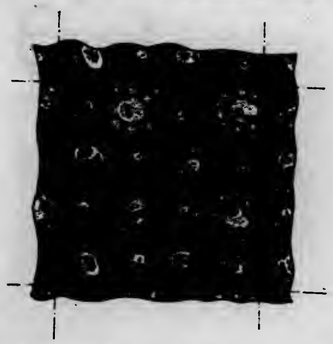
88,158. CENTER BAR FOR OPHTHALMIC MOUNTINGS. HARRY L. LASHER, Jersey City, N. J., assignor to Martin-Copeland Company, Providence, R. I., a Trusteeship. Filed June 4, 1932. Serial No. 43,981. Term of patent 7 years.





The ornamental design for a center bar for ophthalmic mountings substantially as shown.

88,159. TEXTILE FABRIC OR SIMILAR ARTICLE. PAUL LESSER, Brooklyn, N. Y., assignor to William Willheim Co., Inc., New York, N. Y. Filed Sept. 30, 1932. Serial No. 45,168. Term of patent 3½ years.



The ornamental design for a textile fabric or similar article as shown and described.

88,160. TEXTILE FABRIC OR SIMILAR ARTICLE. PAUL LESSER, Brooklyn, N. Y., assignor to William Willheim Co., Inc., New York, N. Y. Filed Sept. 30, 1932. Serial No. 45,173. Term of patent 3½ years.



The ornamental design for a textile fabric or similar article as shown and described.

88,161. SIGN. THEODORE E. LOUIS, Berkeley, Calif. Filed Mar. 14, 1932. Serial No. 43,194. Term of patent 7 years.



The ornamental design for a sign as shown and described.

88,162. TEXTILE FABRIC OR THE LIKE. JULIA LUKAS, New York, N. Y. Filed Sept. 29, 1932. Serial No. 45,147. Term of patent 3½ years.



The ornamental design for a textile fabric or the like substantially as shown and described.

88,163. TEXTILE FABRIC OR THE LIKE. JULIA LUKAS, New York, N. Y. Filed Sept. 29, 1932. Serial No. 45,148. Term of patent 3½ years.



The ornamental design for a textile fabric or the like substantially as shown and described.

88,164. TEXTILE FABRIC OR THE LIKE. JULIA LUKAS, New York, N. Y. Filed Sept. 29, 1932. Serial No. 45,149. Term of patent 3½ years.



The ornamental design for a textile fabric or the like substantially as shown and described.

88,165. TEXTILE FABRIC OR THE LIKE. ROGER MEGROZ, Bronxville, N. Y. Filed Sept. 29, 1932. Serial No. 45,155. Term of patent 3½ years.



The ornamental design for a textile fabric or the like substantially as shown and described.

88,166. SHOE. CHARLES MILLER, New York, N. Y. Filed Aug. 25, 1932. Serial No. 44,692. Term of patent 3½ years.



The ornamental design for a shoe, as shown.

88,167. COMBINED SET OF TOILET ACCESSORY CONTAINERS AND HOLDER THEREFOR. ROY O. NERRIM, Highland Park, Ill. Filed Mar. 18, 1932. Serial No. 43,233. Term of patent 3½ years.



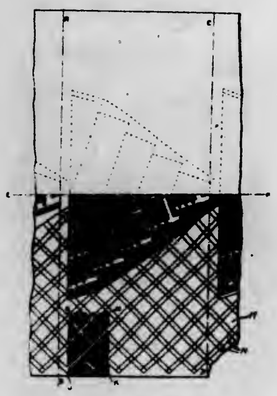
The ornamental design for a combined set of toilet accessory containers and holder therefor as shown and described.

88,168. UPHOLSTERY AND DRAPERY FABRIC. SAMUEL J. OLIVER, East Orange, N. J. Filed Aug. 22, 1932. Serial No. 44,663. Term of patent 3½ years.



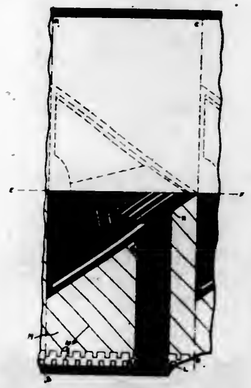
The ornamental design for upholstery and drapery fabric, as shown and described.

88,169. TEXTILE FABRIC OR SIMILAR ARTICLE. ERNEST M. ORKIN, New York, N. Y., assignor to William Willheim Co., Inc., New York, N. Y. Filed Sept. 30, 1932. Serial No. 45,169. Term of patent 3½ years.



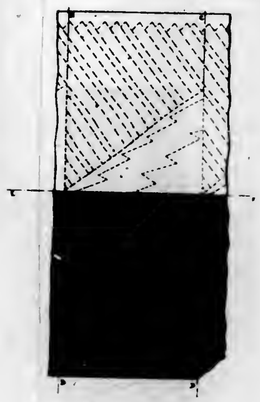
The ornamental design for a textile fabric or similar article as shown and described.

88,170. TEXTILE FABRIC OR SIMILAR ARTICLE. ERNEST M. ORKIN, New York, N. Y., assignor to William Willheim Co., Inc., New York, N. Y. Filed Sept. 30, 1932. Serial No. 45,170. Term of patent 3½ years.



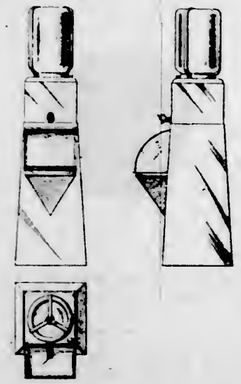
The ornamental design for a textile fabric or similar article as shown and described.

88,171. TEXTILE FABRIC OR SIMILAR ARTICLE. ERNEST M. ORKIN, New York, N. Y., assignor to William Willheim Co., Inc., New York, N. Y. Filed Sept. 30, 1932. Serial No. 45,171. Term of patent 3½ years.



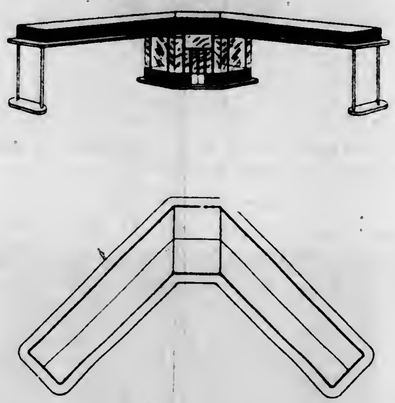
The ornamental design for a textile fabric or similar article as shown and described.

88,172. DISPENSER FOR LIQUIDS. FRED A. OSTWALD, Los Angeles, Calif. Filed Aug. 11, 1932. Serial No. 44,578. Term of patent 3½ years.



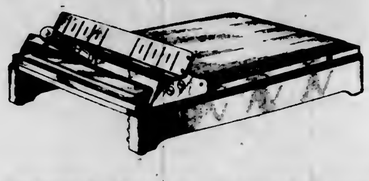
The ornamental design for a dispenser for liquids, as shown.

88,173. SERVICE STATION. TIMOTHY L. PFLUEGER, San Francisco, Calif., assignor to Standard Stations, Inc., San Francisco, Calif., a Corporation of Delaware. Filed Feb. 15, 1932. Serial No. 42,869. Term of patent 14 years.



The ornamental design for a service station, as shown and described.

88,174. HECTOGRAPH MACHINE. CHARLES H. REYNOLDS, Evanston, Ill., assignor to The Reynolds-Schier Co., Inc., Chicago, Ill., a Corporation of Illinois. Filed June 6, 1932. Serial No. 43,990. Term of patent 3½ years.



The ornamental design for a hectograph machine as shown.

88,175. SCREW BOLT OR SIMILAR ARTICLE. HEYMAN ROSENBERG, New York, N. Y. Filed Aug. 9, 1932. Serial No. 44,563. Term of patent 14 years.



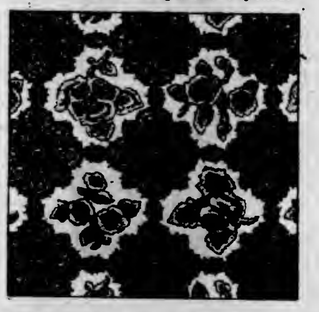
The ornamental design for a screw bolt or similar article, substantially as shown and described.

88,176. SCREW BOLT OR SIMILAR ARTICLE. HEYMAN ROSENBERG, New York, N. Y. Filed Aug. 9, 1932. Serial No. 44,564. Term of patent 14 years.



The ornamental design for a screw bolt or similar article, substantially as shown and described.

88,177. CARPET. ANTHONY E. SMIDLEIN, Yonkers, N. Y., assignor to Bigelow-Sanford Carpet Co., Inc., a Corporation of Massachusetts. Filed Sept. 28, 1932. Serial No. 45,101. Term of patent 7 years.



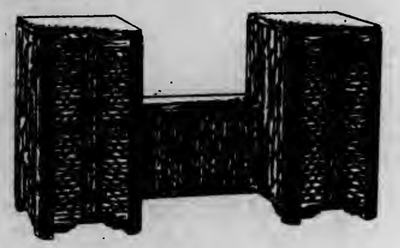
The ornamental design for a carpet substantially as shown and described.

88,178. TEXTILE FABRIC OR THE LIKE. ALICE THOMPSON, New York, N. Y. Filed Sept. 29, 1932. Serial No. 45,161. Term of patent 3½ years.



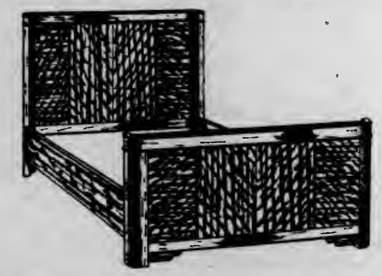
The ornamental design for a textile fabric or the like substantially as shown and described.

88,179. DRESSING TABLE. GEORGE VAN DE RIET, Holland, Mich., assignor to West Michigan Furniture Company, Holland, Mich., a Corporation of Michigan. Filed Aug. 22, 1932. Serial No. 44,661. Term of patent 3½ years.



The ornamental design for a dressing table, as shown.

88,180. BEDSTEAD. GEORGE VAN DE RIET, Holland, Mich., assignor to West Michigan Furniture Co., Holland, Mich., a Corporation of Michigan. Filed Aug. 22, 1932. Serial No. 44,662. Term of patent 3½ years.



The ornamental design for a bedstead, as shown.

88,181. TEXTILE FABRIC OR THE LIKE. IRENE A. WEITZ, Brooklyn, N. Y. Filed Sept. 29, 1932. Serial No. 45,150. Term of patent 3½ years.



The ornamental design for a textile fabric or the like substantially as shown and described.

88,182. TEXTILE FABRIC OR THE LIKE. IRENE A. WEITZ, Brooklyn, N. Y. Filed Sept. 29, 1932. Serial No. 45,151. Term of patent 3½ years.



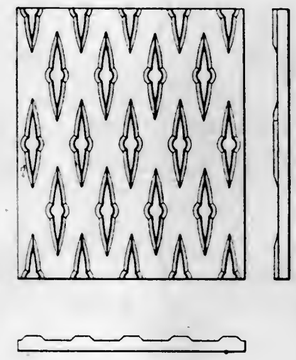
The ornamental design for a textile fabric or the like substantially as shown and described.

88,183. TEXTILE FABRIC OR THE LIKE. IRENE A. WEITZ, Brooklyn, N. Y. Filed Sept. 29, 1932. Serial No. 45,152. Term of patent 3½ years.



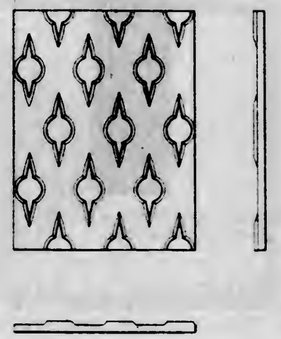
The ornamental design for a textile fabric or the like substantially as shown and described.

88,184. TREAD PLATE. ROY L. WHEELER, Mount Oliver, Pa., assignor to Aluminum Company of America, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Sept. 21, 1932. Serial No. 45,004. Term of patent 14 years.



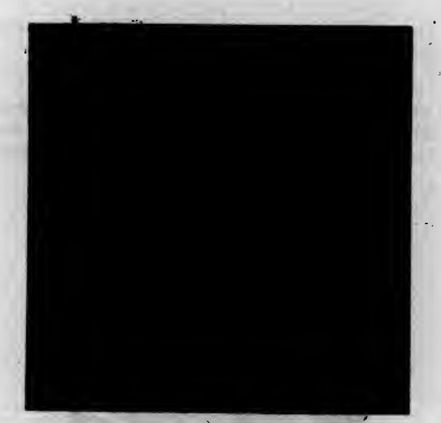
The ornamental design for a tread plate, as shown.

88,185. FLOOR PLATE. ROY L. WHEELER, Mount Oliver, Pa., assignor to Aluminum Company of America, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Sept. 21, 1932. Serial No. 45,005. Term of patent 14 years.



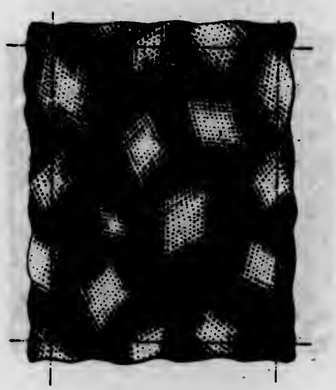
The ornamental design for a floor plate, as shown.

88,186. TEXTILE FABRIC OR SIMILAR ARTICLE. WILLIAM WILLHEIM, New York, N. Y. Filed Sept. 24, 1932. Serial No. 45,042. Term of patent 3½ years.



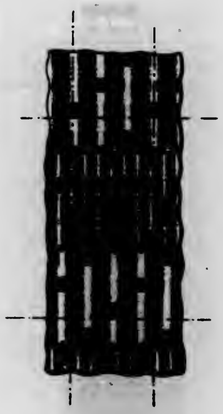
The ornamental design for a textile fabric or similar article as shown and described.

88,187. TEXTILE FABRIC OR SIMILAR ARTICLE. WILLIAM WILLHEIM, New York, N. Y. Filed Sept. 29, 1932. Serial No. 45,144. Term of patent 3½ years.



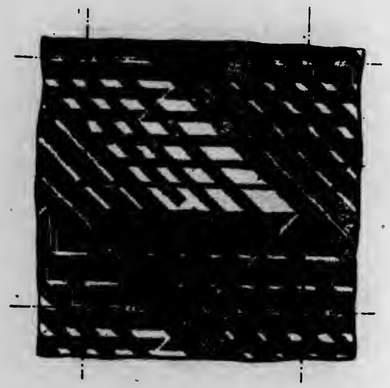
The ornamental design for a textile fabric or similar article as shown and described.

88,188. TEXTILE FABRIC OR SIMILAR ARTICLE. WILLIAM WILLHEIM, New York, N. Y. Filed Sept. 24, 1932. Serial No. 45,047. Term of patent 3½ years.



The ornamental design for a textile fabric or similar article as shown and described.

88,189. TEXTILE FABRIC OR SIMILAR ARTICLE. WILLIAM WILLHEIM, New York, N. Y. Filed Sept. 24, 1932. Serial No. 45,048. Term of patent 3½ years.



The ornamental design for a textile fabric or similar article as shown and described.

88,190. TEXTILE FABRIC OR SIMILAR ARTICLE. WILLIAM WILLHEIM, New York, N. Y. Filed Sept. 24, 1932. Serial No. 45,051. Term of patent 3½ years.



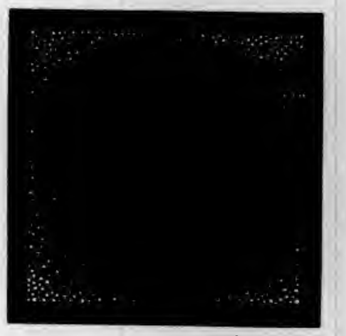
The ornamental design for a textile fabric or similar article as shown and described.

88,191. TEXTILE FABRIC OR SIMILAR ARTICLE. WILLIAM WILLHEIM, New York, N. Y. Filed Sept. 28, 1932. Serial No. 45,092. Term of patent 3½ years.



The ornamental design for a textile fabric or similar article as shown and described.

88,192. TEXTILE FABRIC OR SIMILAR ARTICLE. WILLIAM WILLHEIM, New York, N. Y. Filed Sept. 28, 1932. Serial No. 45,094. Term of patent 3½ years.



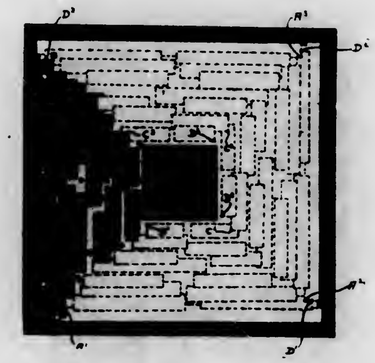
The ornamental design for a textile fabric or similar article as shown.

88,193. TEXTILE FABRIC OR SIMILAR ARTICLE. WILLIAM WILLHEIM, New York, N. Y. Filed Sept. 28, 1932. Serial No. 45,095. Term of patent 3½ years.



The ornamental design for a textile fabric or similar article as shown and described.

88,194. TEXTILE FABRIC OR SIMILAR ARTICLE. WILLIAM WILLHEIM, New York, N. Y. Filed Sept. 28, 1932. Serial No. 45,097. Term of patent 3½ years.



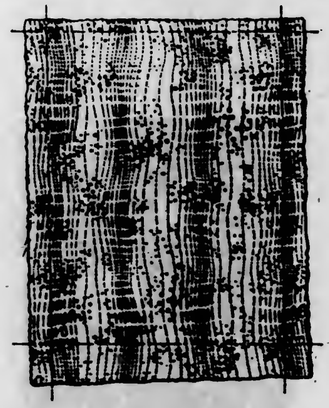
The ornamental design for a textile fabric or similar article as shown and described.

88,195. TEXTILE FABRIC OR SIMILAR ARTICLE. WILLIAM WILLHEIM, New York, N. Y. Filed Sept. 29, 1932. Serial No. 45,124. Term of patent 3½ years.



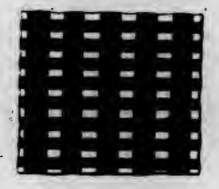
The ornamental design for a textile fabric or similar article as shown and described.

88,196. TEXTILE FABRIC OR SIMILAR ARTICLE. WILLIAM WILLHEIM, New York, N. Y. Filed Sept. 29, 1932. Serial No. 45,125. Term of patent 3½ years.



The ornamental design for a textile fabric or similar article as shown and described.

88,197. TEXTILE FABRIC OR SIMILAR ARTICLE. WILLIAM WILLHEIM, New York, N. Y. Filed Sept. 29, 1932. Serial No. 45,127. Term of patent 3½ years.



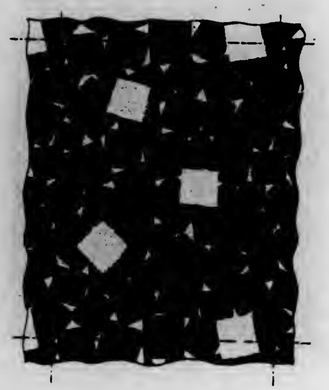
The ornamental design for a textile fabric or similar article as shown and described.

88,198. TEXTILE FABRIC OR SIMILAR ARTICLE. WILLIAM WILLHEIM, New York, N. Y. Filed Sept. 29, 1932. Serial No. 45,135. Term of patent 3½ years.



The ornamental design for a textile fabric or similar article as shown and described.

88,199. TEXTILE FABRIC OR SIMILAR ARTICLE. WILLIAM WILLHEIM, New York, N. Y. Filed Sept. 29, 1932. Serial No. 45,137. Term of patent 3½ years.



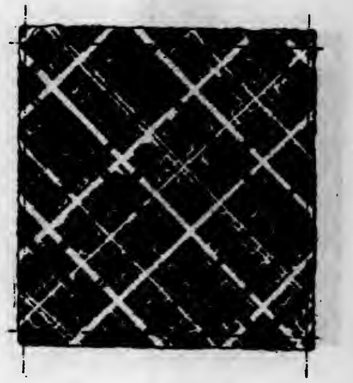
The ornamental design for a textile fabric or similar article as shown and described.

88,200. TEXTILE FABRIC OR SIMILAR ARTICLE. WILLIAM WILLHEIM, New York, N. Y. Filed Sept. 29, 1932. Serial No. 45,138. Term of patent 3½ years.



The ornamental design for a textile fabric or similar article as shown and described.

88,201. TEXTILE FABRIC OR SIMILAR ARTICLE. WILLIAM WILLHEIM, New York, N. Y. Filed Sept. 29, 1932. Serial No. 45,140. Term of patent 3½ years.



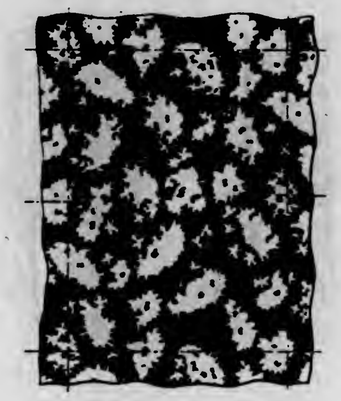
The ornamental design for a textile fabric or similar article as shown and described.

88,202. TEXTILE FABRIC OR SIMILAR ARTICLE. WILLIAM WILLHEIM, New York, N. Y. Filed Sept. 29, 1932. Serial No. 45,143. Term of patent 3½ years.



The ornamental design for a textile fabric or similar article as shown and described.

88,203. TEXTILE FABRIC OR SIMILAR ARTICLE. WILLIAM WILLHEIM, New York, N. Y. Filed Sept. 29, 1932. Serial No. 45,145. Term of patent 3½ years.



The ornamental design for a textile fabric or similar article as shown and described.

88,204. TEXTILE FABRIC OR SIMILAR ARTICLE. WILLIAM WILLHEIM, New York, N. Y. Filed Sept. 29, 1932. Serial No. 45,146. Term of patent 3½ years.



The ornamental design for a textile fabric or similar article as shown and described.

88,205. FLASH LIGHT LANTERN. ROBERT G. WILLIAMS, Toledo, Ohio. Filed June 16, 1932. Serial No. 44,096. Term of patent 3½ years.



The ornamental design for a flashlight lantern, as shown.

88,206. PILLOW COVER OR THE LIKE. MILTON W. BERLFEIN, New York, N. Y. Filed Sept. 8, 1932. Serial No. 44,780. Term of patent 3½ years.



The ornamental design for a pillow cover or the like substantially as shown.

88,207. TEXTILE FABRIC OR SIMILAR ARTICLE. HERBERT KATZMAN, New York, N. Y., assignor to William Willheim Co., Inc., New York, N. Y. Filed Sept. 28, 1932. Serial No. 45,089. Term of patent 3½ years.



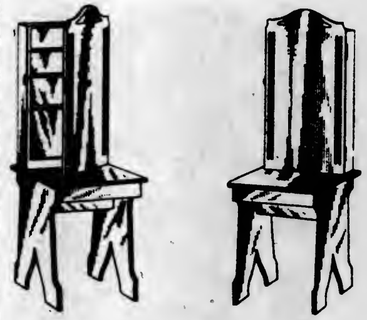
The ornamental design for a textile fabric or similar article as shown and described.

88,208. TEXTILE FABRIC OR SIMILAR ARTICLE. HERBERT KATZMAN, New York, N. Y., assignor to William Willheim Co., Inc., New York, N. Y. Filed Sept. 28, 1932. Serial No. 45,091. Term of patent 3½ years.



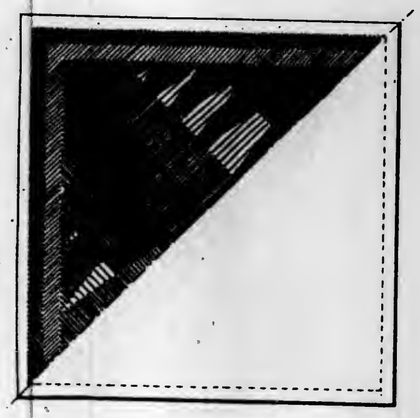
The ornamental design for a textile fabric or similar article as shown and described.

88,209. COMBINATION BATH CHAIR AND CABINET. CHARLES KOLODNY, Brookline, Mass. Filed Aug. 25, 1932. Serial No. 44,696. Term of patent 7 years.



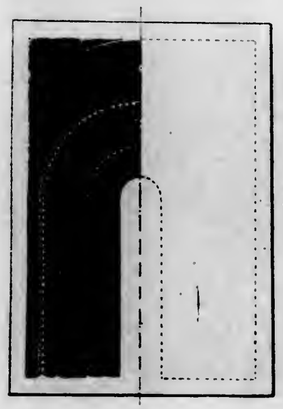
The ornamental design for a combination bath chair and cabinet as shown.

88,210. TEXTILE FABRIC OR SIMILAR ARTICLE. WILLIAM WILLHEIM, New York, N. Y. Filed Sept. 24, 1932. Serial No. 45,043. Term of patent 3½ years.



The ornamental design for a textile fabric or similar article as shown and described.

88,211. TEXTILE FABRIC OR SIMILAR ARTICLE. WILLIAM WILLHEIM, New York, N. Y. Filed Sept. 24, 1932. Serial No. 45,044. Term of patent 3½ years.



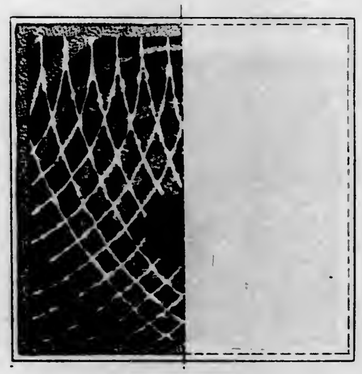
The ornamental design for a textile fabric or similar article as shown and described.

88,212. TEXTILE FABRIC OR SIMILAR ARTICLE. WILLIAM WILLHEIM, New York, N. Y. Filed Sept. 28, 1932. Serial No. 45,096. Term of patent 3½ years.



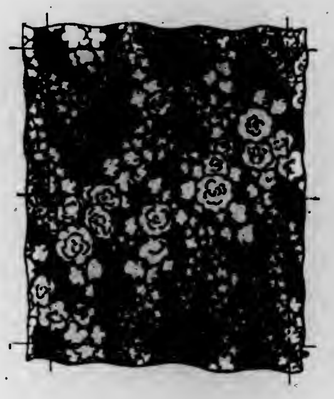
The ornamental design for a textile fabric or similar article as shown and described.

88,213. TEXTILE FABRIC OR SIMILAR ARTICLE. WILLIAM WILLHEIM, New York, N. Y. Filed Sept. 28, 1932. Serial No. 45,098. Term of patent 3½ years.



The ornamental design for a textile fabric or similar article as shown and described.

88,214. TEXTILE FABRIC OR SIMILAR ARTICLE. WILLIAM WILLHEIM, New York, N. Y. Filed Sept. 29, 1932. Serial No. 45,126. Term of patent 3½ years.



The ornamental design for a textile fabric or similar article as shown and described.

88,215. TEXTILE FABRIC OR SIMILAR ARTICLE. WILLIAM WILLHEIM, New York, N. Y. Filed Sept. 29, 1932. Serial No. 45,128. Term of patent 3½ years.



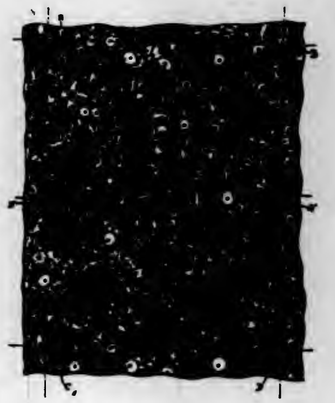
The ornamental design for a textile fabric or similar article as shown and described.

88,216. TEXTILE FABRIC OR SIMILAR ARTICLE. WILLIAM WILLHEIM, New York, N. Y. Filed Sept. 29, 1932. Serial No. 45,129. Term of patent 3½ years.



The ornamental design for a textile fabric or similar article as shown and described.

88,217. TEXTILE FABRIC OR SIMILAR ARTICLE. WILLIAM WILLHEIM, New York, N. Y. Filed Sept. 29, 1932. Serial No. 45,132. Term of patent 3½ years.



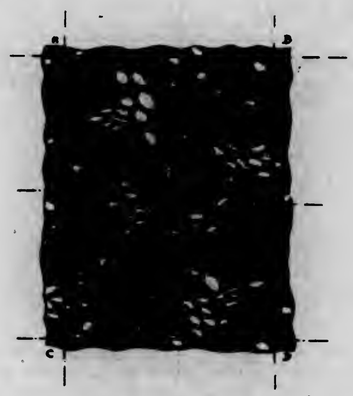
The ornamental design for a textile fabric or similar article as shown and described.

88,218. TEXTILE FABRIC OR SIMILAR ARTICLE. WILLIAM WILLHEIM, New York, N. Y. Filed Sept. 29, 1932. Serial No. 45,139. Term of patent 3½ years.



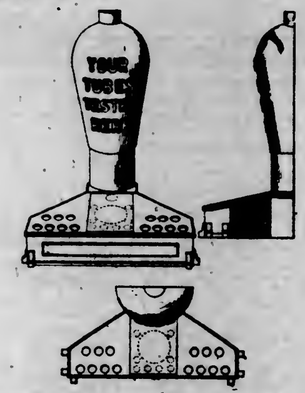
The ornamental design for a textile fabric or similar article as shown and described.

88,219. TEXTILE FABRIC OR SIMILAR ARTICLE. WILLIAM WILLHEIM, New York, N. Y. Filed Sept. 29, 1932. Serial No. 45,141. Term of patent 3½ years.



The ornamental design for a textile fabric or similar article as shown and described.

88,220. RADIO TUBE TESTER. JEWELL R. WILLIAMS, Little Rock, Ark., assignor to Apparatus Design Company, Little Rock, Ark., a Corporation of Arkansas. Filed Sept. 12, 1932. Serial No. 44,812. Term of patent 7 years.

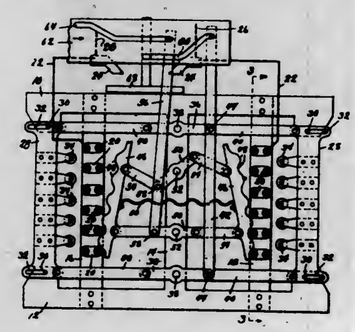


The ornamental design for a radio tube tester substantially as shown.

PATENTS

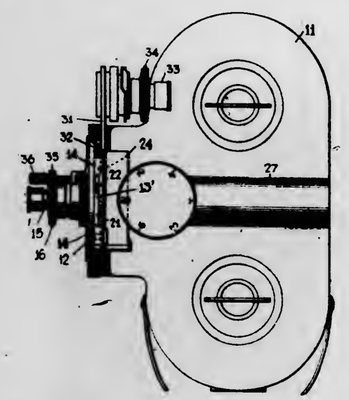
GRANTED NOVEMBER 1, 1932

1,885,101. MULTIBREAK ELECTRIC SWITCH. CHESTER D. AINSWORTH, Wollaston, Mass., assignor to Condit Electrical Manufacturing Corporation, South Boston, Mass., a Corporation of Massachusetts. Filed Sept. 30, 1929. Serial No. 396,195. 13 Claims. (Cl. 200—145.)



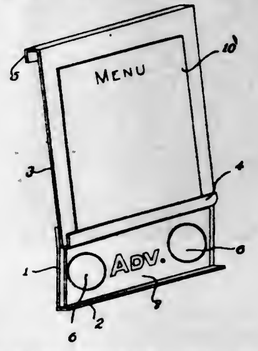
1. An electric switch having a plurality of sets of separable contact members connected in series in the switch circuit, said separable contact members normally engaging each other when the switch is closed, and means to effectively include said contact members in a progressive manner in the switch circuit while said contact members are in engagement prior to the separation of the contact members.

1,885,102. CAMERA. LUIS AZARRAGA, Hempstead, N. Y. Filed Jan. 27, 1931. Serial No. 511,544. 7 Claims. (Cl. 95—44.)



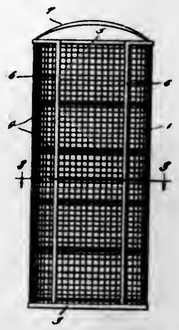
1. In a camera, the combination of a view finder including a view finder lens, a ground glass, a slide within which both the view finder lens and the ground glass are mounted, a camera lens movable from an operative position at one side of to a different operative position in line with the view finder, and means operable simultaneously with the movement of said camera lens to move said slide and by such movement shift the view finder lens and the ground glass either into or out of operative position.

1,885,103. DISPLAY FIXTURE. ISAAC BARNETT, Bronx, N. Y. Filed Mar. 1, 1932. Serial No. 596,014. 6 Claims. (Cl. 40—125.)



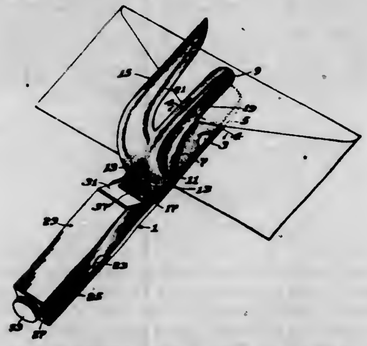
1. A display device comprising a sheet metal base portion, suction means on said base portion adapted to engage with a flat vertical surface to mount the base portion in upstanding position, a sheet metal supporting portion carried by and extending upwardly from the upper part of the base portion in a direction inclined away from said surface, and a transversely extending shelf mounted on one of said portions and projecting outwardly in the direction of the flat vertical surface on which the device is mounted.

1,885,104. BASKET. WILLIAM ERNEST PERCY BATES, Orlando, Fla. Filed Feb. 5, 1931. Serial No. 513,755. 1 Claim. (Cl. 211—181.)



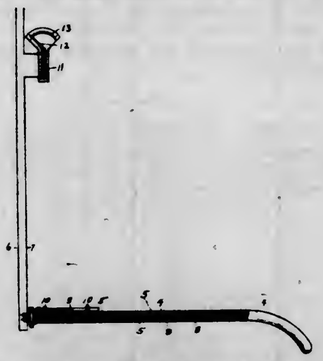
A basket of the character described comprising a split, vertically disposed, foraminous cylinder, a series of vertically spaced, foraminous shelves mounted in the cylinder, said cylinder having laterally and constantly spaced vertical walls defining an opening to all of said shelves, a foraminous bottom in the lower end of the cylinder, a metallic binding enclosing the upper end portion of the cylinder, an arcuate carrying handle extending transversely above the cylinder and having rolled end portions encircling the binding at diametrically opposite points in a manner to connect the carrying handle thereto, an annulus of angle iron cross section encircling the lower end portion of the cylinder and constituting a base therefor, and a metallic binding mounted on the vertical marginal portions of the cylinder and extending between the first named binding and the annulus.

1,885,105. COMBINED ENVELOPE SEALER AND OPENER. CLAYTON M. BOUDETTE, Revere, Mass. Filed July 28, 1930. Serial No. 471,164. 10 Claims. (Cl. 120—6.)



1. A hand envelope sealer comprising a base having channels therein, a moistening pad in one of the channels, a tongue overlying the pad, and a cartridge for receiving water removably mounted in the other channel and having a port for feeding water to the pad.

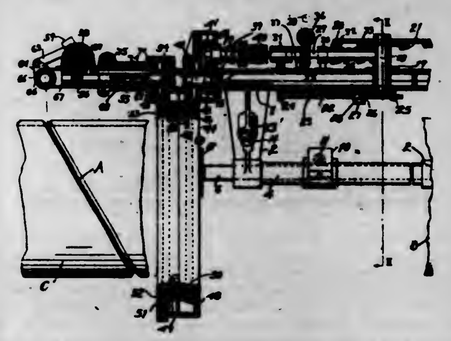
1,885,106. MEANS FOR TREATMENT OF DISEASES OF THE GENITO-URINARY TRACT. JOHN J. BRIGGS, Indianapolis, Ind. Filed Sept. 9, 1927. Serial No. 218,563. 1 Claim. (Cl. 128—256.)



In a device for killing micro-organisms within the genito-urinary tract of a human body, a sound having an elongated straight tube, an electrical heating element within said straight tube, a closed curved end projecting from one end of said tube, said heating element terminating back of the point of juncture of said curved end and said tube, said curved end being shaped to guide said tube through said tract under the pubic bone and pass on and be entirely within the bladder and said straight tube being of sufficient length and diameter to lie along the entire length of and to distend the walls of said tract, whereby the entire length of the tract may be distended and heated simultaneously without heating the bladder.

1,885,107. PIPE-CUTTING MACHINE. HUGH F. BROWN, San Francisco, Calif., assignor to Brown Brothers Welding Company, San Francisco, Calif., a Copartnership composed of Hugh F. Brown and William P. Brown. Filed Mar. 14, 1932. Serial No. 598,644. 14 Claims. (Cl. 266—23.)

1. A pipe cutting machine of the class described comprising a frame adapted to be mounted on a pipe to be cut, a rotatable ring concentric to the pipe, a cutting torch on said ring, means to drive the ring to carry the torch completely around the pipe in one direction, means



to hold the torch at an angle to the pipe, and means to change the angle of said torch progressively and automatically as it is carried around the pipe, to cut it off at any desired angle.

1,885,108. TERMINAL CONNECTION AND METHOD OF MAKING THE SAME. FREDERIC H. BULLINGER, Bronxville, N. Y., assignor to Ward Leonard Electric Company, a Corporation of New York. Filed Dec. 7, 1929. Serial No. 412,310. 15 Claims. (Cl. 29—155.5.)



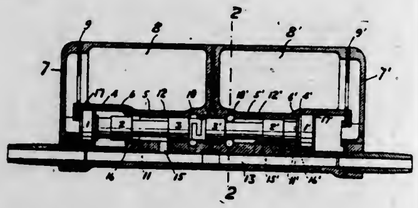
1. The method of making a connection between a sheet metal terminal and conductor which comprises upsetting a projection from the body of the terminal and curving the projection along its length in the direction of from one side of the projection to the other, placing the conductor between the projection and the body of the terminal, and bending the projection back towards its original location against the conductor.

1,885,109. UPHOLSTERY. HARRY J. BURKART, Kirkwood, Mo. Filed June 8, 1928. Serial No. 283,815. 9 Claims. (Cl. 155—184.)



2. In an article of upholstery adapted to be secured, as a unit, to a support therefor, a pad, a pad-shaping element, secured to the pad to receive a support between the pad and element, an element extending from the margin of the pad, and adapted to be attached to the shaping element for retaining the pad and shaping element relative to the support.

1,885,110. MILKING MACHINE PULSATOR. JOHN L. HULBERT, Poughkeepsie, N. Y., assignor to The De Laval Separator Company, New York, N. Y., a Corporation of New Jersey. Filed July 9, 1931. Serial No. 549,696. 7 Claims. (Cl. 31—61.)



1. In a milking machine pulsator, the combination of a cylinder, a reciprocable piston, ports and passages, sources of high and low pressures, and two air chambers connected with opposite ends of the piston and adapted, in either end position of the piston, to be connected one with the source of high pressure and the other with the source of low pressure and effect the shift of the piston toward the other end position of the piston, said piston, cylinder, ports and passages being symmetrical about the center of length of the cylinder and piston to effect equal dwells of the piston at opposite end positions.

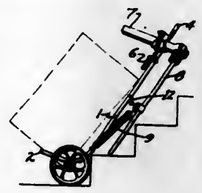
1,885,111. FUSE BOX. FOSS C. HUSH, Lincoln, Nebr. Filed July 27, 1929. Serial No. 381,444. 7 Claims. (Cl. 200—50.)



1. In combination, a casing having an opening in its wall, a removable closure for said opening, a member secured to said closure and extending into the casing therefrom, means for guiding said closure and member for sliding movement toward and away from said opening, a contact block mounted within said casing, contacts on said contact block, a fuse block, contacts on said fuse block adapted to engage those on the contact block, one end of said fuse block being pivotally connected to said member, and a link pivotally connected to the other end of said fuse block and pivotally mounted in said box in position to guide such other end of said fuse block toward said opening as said closure is moved away from said opening.

1,885,112. HANDTRUCK. MARTIN JANKISZ, Brooklyn, N. Y. Filed Mar. 11, 1932. Serial No. 598,103. 3 Claims. (Cl. 280—29.)

1. In a handtruck having a frame with an axle at its lower end, a pair of wheels mounted on the axle, a lever connected to the upper part of the frame and a lifting rod having one end connected to the lever and the other end adapted to coact with the tread of a stairway, means for imparting a lifting force to said frame comprising a spring having one end attached to said lifting rod and the



other end attached to the body of said truck, and means for securing the said lifting rod out of operating position comprising a stud arranged on the body of said truck and adapted to coact with said rod in such a manner that when the rod is placed in engagement with said stud it is held in that position by the tension of said spring.

1,885,113. WATER AND FLAMEPROOF PAPER. THOMAS JENKINS, Norristown, Pa., assignor to Norristown Magnesia & Asbestos Company, Norristown, Pa., a Corporation of Pennsylvania. Original application filed Nov. 12, 1930, Serial No. 495,267. Divided and this application filed May 20, 1932. Serial No. 612,657. 8 Claims. (Cl. 92—3.)

1. A pink tinted water and flameproof paper including asbestos fibers ninety-three per cent.; wood cellulose three per cent.; starch two per cent.; iron oxide two per cent.; sodium silicate one-half of one per cent.; and alum one-fourth of one per cent.

1,885,114. CREEL. FREDERICK KLEIN, College Point, N. Y., assignor to Sipp-Eastwood Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Mar. 27, 1931. Serial No. 525,801. 8 Claims. (Cl. 242—131.)

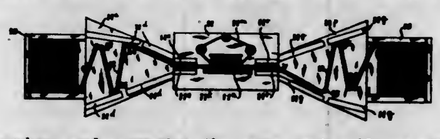


5. In a creel, the combination of an upright supporting element and a pair of yarn-package carriers pivoted to said element at opposite sides thereof on substantially vertical axes and each movable into and out of simultaneous lapping relation to the other and crossing relation to said element and having means to support a yarn package.

1,885,115. APPARATUS FOR MANUFACTURING THIN RUBBER ARTICLES. FRED L. KILLIAN, Akron, Ohio. Filed Aug. 9, 1928. Serial No. 298,578. 16 Claims. (Cl. 18—2.)

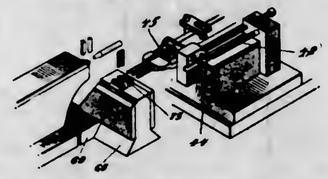
12. Apparatus of the class described comprising a series of members, each rotatably supporting a plurality of dipping forms arranged in a row, means hingedly connecting said members whereby the same may be extended in a

straight line or folded in a compact bed, means to hold said members in a compact bed while the forms are dipped, means to operate on the forms, means for extending said



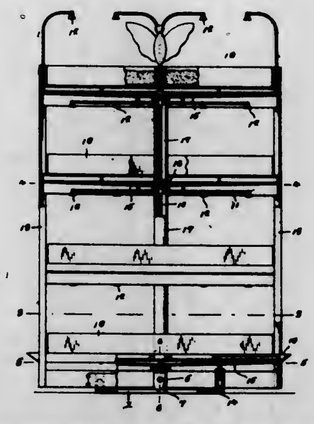
members and conveying the same past said operating means and means for rotating said forms during the movement of said members past said operating means.

1,885,116. LINKING MACHINE. CHARLES P. KUEHNER, North Providence, R. I. Filed Apr. 17, 1930. Serial No. 445,007. 19 Claims. (Cl. 59—1.)



1. In a linking machine, means for guiding and feeding a blank of sheet stock with spaced openings therein, means for forming a wire into U-shape, and inserting it through said openings, and means for bending the arms of the U-wire to complete the link.

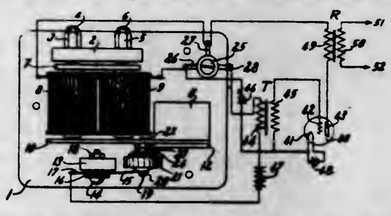
1,885,117. REVOLVING PLANT RACK. LOUIS LEMERT, Pawnee, Okla. Filed Oct. 23, 1931. Serial No. 570,691. 3 Claims. (Cl. 47—39.)



1. A rack comprising a track, a wheel mounted frame located upon the track, pans mounted upon the rack and having central collars, drain pipe sections attached to the rack and receiving said collars, a watering pipe passing through the drain pipe sections and having arms attached thereto, said arms having nozzles.

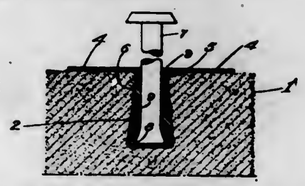
1,885,118. OSCILLATION DEVICE. LAURENCE J. LESH, Chicago, Ill., assignor, by mesne assignments, to Associated Electric Laboratories, Inc., Chicago, Ill., a Corporation of Delaware. Filed May 11, 1928. Serial No. 276,970. 3 Claims. (Cl. 175—373.)

1. In an oscillating device, the combination of an electron tube having a cathode, grid, and anode, an electromagnet provided with a tuned magnetic reed having a microphone mounted thereon, an input transformer and an output transformer, an electrical circuit including the anode, winding of said magnet and the primary winding



of said output transformer, an electrical circuit including the microphone, a source of current and the primary winding of said input transformer, and an electrical circuit including the secondary winding of said input transformer and the grid of said tube.

1,885,119. GRINDING TOOL. JULIUS E. LOEWY, Philadelphia, Pa. Filed Dec. 31, 1931. Serial No. 584,221. 6 Claims. (Cl. 51—204.)



2. An abrasive element for use in a machine as set forth, comprising a body having a studhole therein, a guard plate overlying said body having an aperture in alignment with the studhole, a stud extending through said aperture in the guard plate and into the studhole, and means filling said studhole, effecting a substantially integral and rigid unit for abrasive purposes.

1,885,120. CHOCKING DEVICE FOR AUTOMOBILES AND AEROPLANES. WILLIAM A. LOMBARDI, East Stroudsburg, Pa. Filed June 20, 1930. Serial No. 462,630. 3 Claims. (Cl. 188—4.)

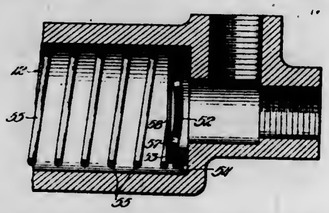


1. In a chocking device for vehicles, a shoe having a curved upper surface, an inverted U-shaped member having its parallel sides pivotally connected with the chock at their lower ends, an arm rising from said member and slightly inclined forwardly, a link having a yoke-like extremity pivotally connected with the upper end of said arm and pivotally mounted on the vehicle, and means for operating the device including a manually controlled lever, and an operative connection between the lever and said U-shaped member.

1,885,121. VALVE MECHANISM. ERWIN F. LOWEKE, Detroit, Mich., assignor to Hydraulic Brake Company, Detroit, Mich., a Corporation of California. Filed Feb. 2, 1929. Serial No. 337,122. 6 Claims. (Cl. 277—45.)

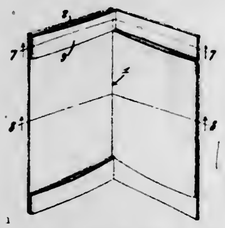
1. A double acting valve mechanism comprising a valve seat, a cup-shaped member having an aperture therein,

a peripheral flange thereon, a yielding member in the cup-shaped member having an aperture laterally spaced from the aperture in the cup-shaped member, said yielding member being movable from the cup-shaped member



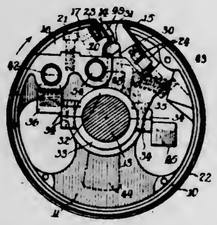
to provide a passage through the valve and into contact with the cup-shaped member to close the passage through the valve, and means for maintaining said resilient member in engagement with the valve seat.

1,885,122. ADVERTISING NOVELTY. ROBERT WRAY MANNING, Cleveland, Ohio. Filed July 24, 1931. Serial No. 552,953. 3 Claims. (Cl. 273—155.)



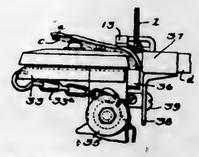
I. A folder formed from a sheet of material folded to provide a pair of outer and a pair of inner panels, the inner panels being slitted longitudinally between the fold lines of the outer panels to form a pair of outer strips and a central strip, and the outer strips thus provided being folded upon themselves and connected to one of the outer panels, and the central strips when folded upon itself being directed against and secured to the opposite outer panel.

1,885,123. SANDING DRUM. CARL LAWRENCE MATTISON, Rockford, Ill., assignor to Mattison Machine Works, Rockford, Ill., a Corporation of Illinois. Filed Jan. 4, 1929. Serial No. 330,206. 6 Claims. (Cl. 51—194.)



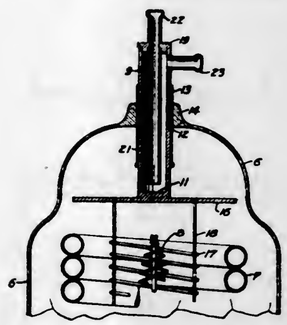
1. A sanding drum comprising, in combination, a shaft, a drum mounted rigidly on said shaft having an external surface for presenting an abrasive sheet to a piece of work, a plurality of clamping structures including longitudinally extending clamping heads mounted on said shaft for relative swinging movement into and out of clamping engagement with the sheet, a plurality of tensioning structures including longitudinally extending sheet-engaging tensioning heads mounted alternately on said shaft with respect to said clamping structures and also swingable for engagement with said sheet, said clamping heads being shorter than the tensioning heads to permit swinging movement of said tensioning heads past said clamping heads.

1,885,124. SEWING MACHINE. ALFRED F. MCCOLLUM, Bloomsburg, Pa., assignor to The Magee Carpet Co., Bloomsburg, Pa., a Corporation of Pennsylvania. Original application filed Apr. 7, 1927, Serial No. 181,744. Divided and this application filed Apr. 30, 1928. Serial No. 274,065. 9 Claims. (Cl. 112—162.)



1. In a sewing machine, the combination with a reciprocatory needle, of means for feeding a fabric to said needle including a guide adjacent the needle position and in which the fabric is supported in a plane substantially parallel to that in which the needle operates, and means for intermittently advancing said fabric with respect to the needle including a rotary member constituting an element of said guide underlying the fabric adjacent the needle position, and a reciprocatory feeding foot adapted to engage the upper side of the fabric above the said rotary element.

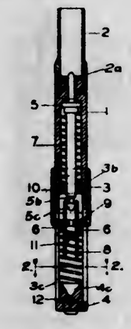
1,885,125. ELECTRICAL DISCHARGE DEVICE. FREDERICK S. MCCULLOUGH, Edgewood Borough, Pa. Filed Apr. 8, 1929. Serial No. 353,396. 1 Claim. (Cl. 250—27.5.)



A device of the character described, comprising an envelope, an anode within the envelope, a cathode within the envelope, a post passing through the envelope having a fluid circulating passage therein, a shield carried by the post within the envelope, and a grid electrode within the envelope carried by and supported on the shield, the shield being of a diameter greater than the diameter of the grid and approximately spanning the distance between the anode and cathode but in spaced relation to the anode and cathode.

1,885,126. TEAR GAS GUN. WENDYL R. MEDLOCK, Pocatello, Idaho, assignor of twenty-four and one-half per cent to Percy B. Glasser and twenty-four and one-half per cent to William W. Goodman, Pocatello, Idaho. Filed Dec. 11, 1931. Serial No. 580,447. 3 Claims. (Cl. 42—1.)

1. A device of the kind indicated comprising a barrel and connected breech, a firing pin disposed in the breech and spring impelled toward the rear end of the barrel, a sleeve slidably mounted on the breech and having pawls engageable with the firing pin, and a pawl tripping device at that end of the breech remote from the barrel and



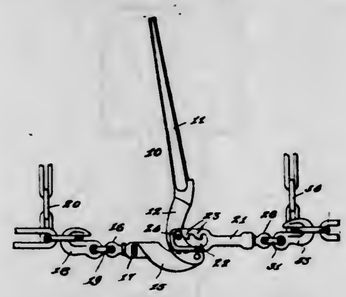
functioning to disengage the pawl from the firing pin when the sleeve is moved a sufficient distance down the breech, the sleeve being spring impelled in a direction away from the pawl tripping device.

1,885,127. ANTIFREEZING DEVICE FOR WINDOWS, WINDSHIELDS, AND THE LIKE. ALPHONSE MILETTE and PHILIPPE DUPUIS, Montreal, Quebec, Canada. Filed Mar. 19, 1930. Serial No. 437,187. 3 Claims. (Cl. 20—40.5.)



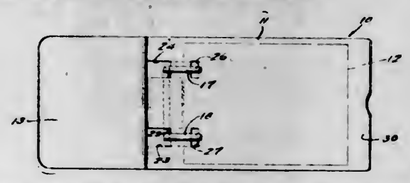
1. An anti-frosting device for window panes consisting of a unit in strip form and of U-shape in cross section adapted to snugly embrace the edges of a window pane, and a heating member embedded in and carried by the unit, said heating unit contacting with the surface of the glass pane when the strip is in position on the pane.

1,885,128. LOAD BINDER. STONEWALL J. MONTGOMERY, Cedar Vale, Kans. Filed Apr. 21, 1930. Serial No. 446,111. 1 Claim. (Cl. 254—78.)



In a load binder, a lever having an offset end which is bifurcated to afford a shank, a hook carrying link received within the furcation of the shank, pivotally secured to the outer end thereof and having its opposite end provided with a laterally extending head whose inner walls are cut at an inclination to afford a rest for the shank when the lever is swung toward the link, a hook-carrying yoke which is bifurcated and which has its parallel arms adjacent one end thereof slotted longitudinally, and one of the longitudinal walls provided by the slots being formed with teeth and laterally extending headed studs on the shank designed to engage with the teeth of the yoke when the arms of the yoke are spread outwardly with respect to each other to permit of the said yoke being arranged over the shank and to receive in the slots thereof the said studs.

1,885,129. DESK CALENDAR STAND. BERT M. MORRIS, Los Angeles, Calif. Filed May 5, 1932. Serial No. 609,372. 7 Claims. (Cl. 40—120.)



1. A calendar stand comprising in combination a body, a grooved supporting member secured to the under side of said body forming thereby a channel, openings in said body, a pair of adjustable arches having interlocking members residing in said channel, said arches extending through the openings in said body for calendar pad engaging purposes.

1,885,130. PROPORTIONAL VALVE. GEORGE F. NAAB and GEORGE R. BROWN, Cleveland, Ohio, assignors to The North American Manufacturing Company, Cleveland, Ohio, a Corporation of Ohio. Filed May 23, 1929. Serial No. 365,368. 7 Claims. (Cl. 277—4.)

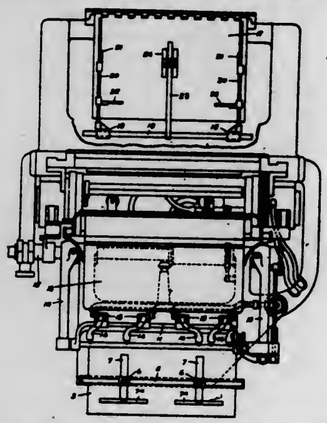


1. A proportioning control unit for a gas burner comprising a casing having a cavity with inlet and outlet openings and a mouth, a cover for said mouth, said cover having a cavity with inlet and outlet openings and a mouth, and a cap for said last named mouth, whereby casing means are had, having a pair of chambers and inlet and outlet openings for each chamber, one of said chambers being adapted for arrangement in the air supply to said burner and the other chamber for arrangement in the gas supply line thereto, valve means in each chamber for controlling flow between said openings thereof, and means connecting said valve means for simultaneous operation.

1,885,131. PRINTING PRESS. NELS H. NELSON, Dayton, Ohio, assignor to Merchants Association, Inc., Dayton, Ohio, a Corporation of Ohio. Original application filed July 26, 1930, Serial No. 470,824. Divided and this application filed July 13, 1931. Serial No. 550,403. 4 Claims. (Cl. 271—61.)

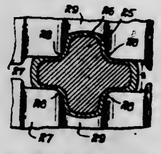
1. In combination, a feeder table adapted to support a plurality of stacks of sheets, an arch member carried by

said table arranged over and transversely of said sheets, supporting clamp members mounted over the stacks of said sheets adjustably on said arch, transversely adjustable



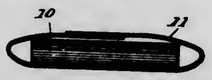
members carried thereby, and adjustable depending fingers supported by each transversely adjustable member engaging the backs of the stacks of said sheets.

1,885,132. METHOD OF SHAPING COMPOSITE RODS. FRANCIS B. NIMICK, Coraopolis, Pa., assignor to Colonial Steel Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Oct. 1, 1931. Serial No. 566,221. 7 Claims. (Cl. 80—63.)



4. The method of shaping composite bars having a metal sheath and a relatively hard metal core which comprises shaping a bar to provide a plurality of longitudinally-extending ribs arranged in pairs at diametrically opposite points, forging said bars by pressure applied mainly against the outermost surfaces of two diametrically opposite ribs, and repeating the forging operation against the outer faces of two other diametrically opposite ribs.

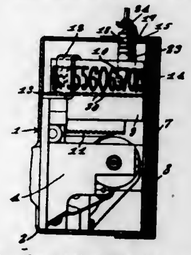
1,885,133. DETERGENT. WILLIAM S. OPPENHEIMER, St. Petersburg, Fla. Filed Apr. 15, 1929. Serial No. 355,214. 3 Claims. (Cl. 87—5.)



1. A detergent material comprising a pad of a plurality of layers of absorbent paper, and a mixture of fuller's earth and mineral spirits having the volatility and grease-solvent property of coal tar naphtha impregnating said paper pad, the quantity of said solvent being insufficient to saturate the pad.

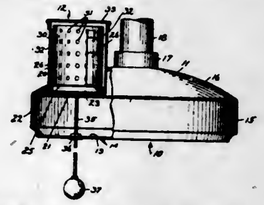
1,885,134. AUTOMOBILE SPEEDOMETER. CLAUDE M. PAXSON, Tipton, Okla. Filed Apr. 17, 1931. Serial No. 530,931. 1 Claim. (Cl. 240—2.1.)

A speedometer comprising a casing having an opening, a speed indicating drum having stencilled characters mounted in the casing, a rim for said casing, and provided with a cut-away portion adjacent the opening and having one wall thereof bevelled, a plate provided with a bevelled end engaging the bevelled wall of said cut-away portion and having the opposite end offset outwardly from the casing, a separable fastener between the offset end of the plate and said rim, a socket carried by said plate



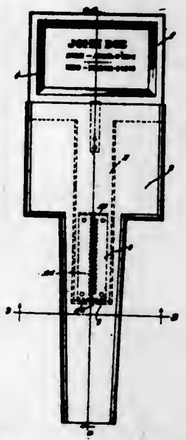
and extending into the casing by way of the opening and having the opposite end extending beyond the plate, an electric lamp carried by the socket and extending into the drum, an electrical terminal strip carried by the plate and insulated therefrom and engaging a terminal of the lamp, and an electrical terminal secured to said plate.

1,885,135. SPRAY DEVICE. WILLIAM E. PEARL, Brooklyn, N. Y. Filed Nov. 10, 1930. Serial No. 494,503. 10 Claims. (Cl. 299—83.)



1. In combination with a high overhead shower head, means for retaining soluble material adapted to be dissolved by water flowing in said head, and means extending from said head to a point beneath said head for moving said material into the path of said flowing water.

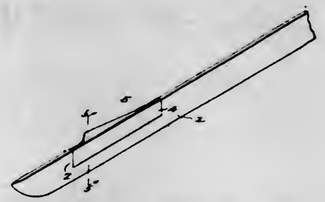
1,885,136. DISAPPEARING GRAVE MARKER. PARIS PERREAU, Exeter, Calif. Filed Oct. 30, 1931. Serial No. 572,155. 2 Claims. (Cl. 40—124.5.)



1. A grave marker comprising a hollow body, an enlarged upper portion included in said body, a tapered lower portion, a name plate mounted for movement into

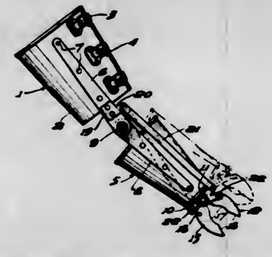
and out of the enlarged upper portion, an arm formed with said name plate and extending into the lower portion, a coil spring secured within said body and to the arm respectively for urging the name plate to its outer position, and a latching means for securing the name plate in its inner position.

1,885,137. METHOD OF MAKING PILE WIRES. FRED PICKARD, Philadelphia, Pa., assignor to Joseph Pickard's Sons Co., Philadelphia, Pa., a Partnership composed of Oliver J. Pickard, Fred Pickard, and Frederick A. Atkinson. Filed Mar. 9, 1929. Serial No. 345,731. 1 Claim. (Cl. 29—170.)



The method of forming a pile wire, which consists in forming a blank wire having a recess in its upper edge terminating intermediate the ends of the wire, bending a strip of sheet metal upon itself to form a slotted element corresponding substantially with the dimensions of the recess and the thickness of the said blank, securing the slotted element in the recess whereby a socket is formed for reception of a cutting blade, and forcing said cutting blade into said recess to expand the walls thereof beyond the plane of the walls of the blank.

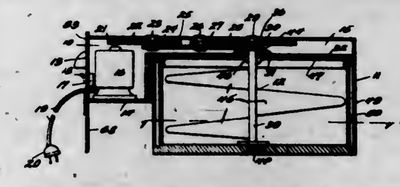
1,885,138. MECHANICAL ARM. SAM PILSON, Benton, Ill. Filed Sept. 20, 1929. Serial No. 394,028. 2 Claims. (Cl. 3—12.)



1. A mechanical arm comprising an upper arm unit, a forearm unit, said units being hingedly connected together, jaws pivoted to the end of the forearm unit, extension lugs mounted upon the upper arm unit and a pair of bars, both of said bars being pivotally connected each with one of the lugs at a point to one side of the point of pivotal connection between the upper and forearm units, one of the said bars being pivotally connected with one of the jaws at a point at one side of the point of pivotal connection of the jaws with the forearm unit and the other bar being pivotally connected with the other jaw at the opposite side of the point of pivotal connection of the jaws with the forearm unit.

1,885,139. REFRIGERATING APPARATUS. CLARENCE H. PORTER, Washington, D. C. Filed Jan. 30, 1929. Serial No. 336,250. 4 Claims. (Cl. 62—114.)

1. Dessert-freezing apparatus comprising a top-opening container for substance to be frozen, a stirrer within the container, an electrical motor for causing relative movement of the stirrer and container, means fastening the motor to the container so that the motor and container may be handled as a unit, said motor being disposed at one side of the container not directly above or below the



container, whereby the container is suitable to be inserted within the ice making compartment of a household refrigerator with the top of the container uppermost.

1,885,140. SUBMERGED ALTERNATING CURRENT DRIVE. MATTHIAS REHSE, Rotenhahn near Voorde, Holstein, Germany. Filed Oct. 22, 1927. Serial No. 228,089. 1 Claim. (Cl. 172—120.)



A well pump aggregate comprising a low voltage alternating current motor having an open stator and an open motor, a water discharge pipe extending upwardly above the motor and a transformer mounted above and forming a set with the motor and through which said pipe extends, said transformer being adapted to convert high voltage into low voltage for the motor so that the water being pumped acts as insulating material and also for cooling the motor and so that the transformer winding is cooled both from the inside and the outside and any loss by heat of the current in the winding is compensated for.

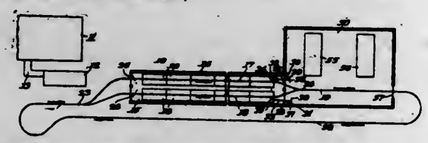
1,885,141. PROCESS OF MAKING ABSORPTIVE CARBON AND PRODUCT THEREOF. ARTHUR B. RAY, Bayside, N. Y., assignor to Carbide & Carbon Chemicals Corp., a Corporation of New York. Filed May 25, 1927, Serial No. 194,235. Renewed Sept. 17, 1931. 13 Claims. (Cl. 252—3.)

1. The process of making granular carbon suitable for the recovery of gases and vapors, which comprises reducing a non-coking coal to granules larger than 20 mesh, impregnating the granules with a carbonising agent, and calcining the so-treated particles at a temperature above 600° C., the quantity of carbonising agent used being insufficient to disintegrate the particles on calcination.

12. The process of making absorbent carbon which comprises comminuting a non-coking coal into a fine powder, impregnating the powdered coal with zinc chloride, the amount of zinc chloride used being substantially

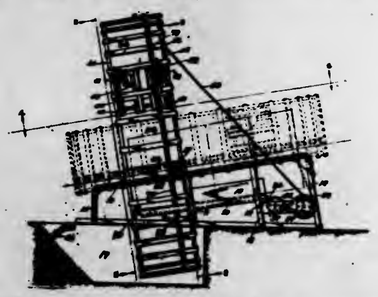
equal in weight to that of the coal being treated, compressing the impregnated coal into briquettes, calcining the briquettes at a temperature above 600° C., and sizing the calcined briquettes to form dense, hard and strong bodies of carbon of the size desired.

1,885,142. METHOD OF COOLING BAKERY PRODUCTS. WADE W. REECE and LOUIS W. HAAS, Chicago, Ill., assignors to The W. E. Long Co., a Corporation of Illinois. Filed July 24, 1931. Serial No. 552,912. 13 Claims. (Cl. 107—54.)



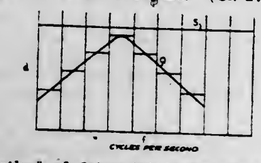
1. The process of cooling bakery products which consists in conducting the unwrapped products directly from the baking oven into one end of and through a cooling passage in one direction, and conducting a stream of air having a predetermined moisture content and at a predetermined temperature into the opposite end only of said passage and causing the same to flow therethrough in a direction counter to the movement of said products and to discharge from the said one end of the passage for cooling said products without substantial loss of weight, and then immediately wrapping said products while subject to the conditioned air and before exposure to atmospheric air.

1,885,143. ICE SCORING MACHINE. ALVIN V. ROWE, Galesburg, Ill. Filed June 28, 1932. Serial No. 619,801. 19 Claims. (Cl. 125—13.)



1. An ice scoring machine including in combination a slide upon which an ice block is adapted to be supported, a continuous runway surrounding the block and a power driven saw carried upon said runway in such manner as to score the ice block upon a horizontal axis and in a continuous manner.

1,885,144. TRANSMISSION SYSTEM FOR TELEPHONY. EDWARD KENNETH SANDEMAN, Aldwych, London, England, assignor to International Standard Electric Corporation, New York, N. Y., a Corporation of Delaware. Filed Dec. 12, 1930, Serial No. 501,774, and in Great Britain Jan. 7, 1930. 4 Claims. (Cl. 178—44.)



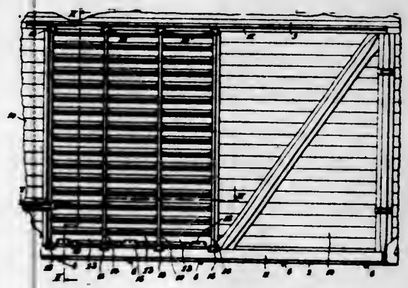
1. The method of determining the characteristic of a wave translating device for producing in a line a favourable energy level for the frequencies it is desired to transmit thereover which comprises the step of producing an equal overload intelligibility spectrum.

1,885,145. BOX CAR DOOR. JAMES A. SHAFER, East Cleveland, Ohio, assignor to National Malleable and Steel Castings Company, Cleveland, Ohio, a Corporation of Ohio. Filed Oct. 30, 1928. Serial No. 315,981. 23 Claims. (Cl. 189—46.)



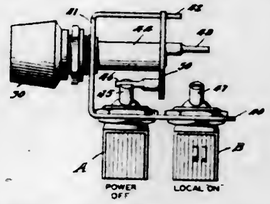
7. A door for a railway car, comprising a plurality of panels and means for flexibly coupling said panels, said coupling means being adapted to the consecutive mounting of said panels on the car by a rotary movement.

1,885,146. BOX CAR DOOR. JAMES A. SHAFER, East Cleveland, Ohio, assignor to National Malleable and Steel Castings Company, Cleveland, Ohio, a Corporation of Ohio. Filed Oct. 1, 1929, Serial No. 396,483. Renewed June 13, 1932. 10 Claims. (Cl. 189—46.)



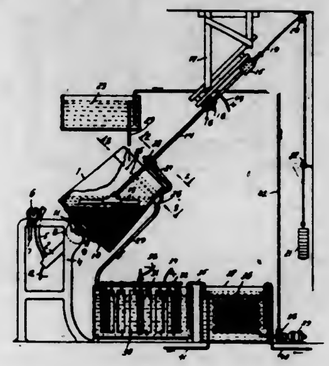
1. A flexible door structure, adapted to move on a track, said door consisting of a plurality of panels connected by coupling members extending the length of the panels, and guide members at an end of said coupling members, and adapted to engage the said track.

1,885,147. PLURAL SWITCH OPERATING MEANS. PERCY C. SMITH, Hartford, Conn., assignor to The Arrow-Hart & Hegeman Electric Company, Hartford, Conn., a Corporation of Connecticut. Filed Oct. 30, 1930. Serial No. 492,308. 9 Claims. (Cl. 200—18.)



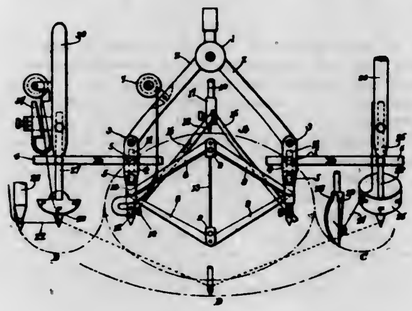
1. The combination comprising a stamped sheet metal bracket having a portion bent perpendicular to the central portion thereof, a toggle switch mounted in said perpendicularly-bent portion and having a slotted actuating shaft projecting therefrom, a bearing boss mounted in the central portion of said bracket, an operating shaft rotatably mounted in said bearing boss, a disc mounted on said shaft, and a pin projecting perpendicularly from said disc in the opposite direction from said shaft, said pin engaging in said slot to cause actuation of said switch as said shaft is rotated.

1,885,148. APPARATUS FOR ELECTROPLATING. PHILIP A. SMITH, Hamden, Conn., assignor, by mesne assignments, to Winchester Repeating Arms Company, New Haven, Conn., a Corporation of Maryland. Filed Sept. 13, 1929. Serial No. 392,321. 2 Claims. (Cl. 204—5.)



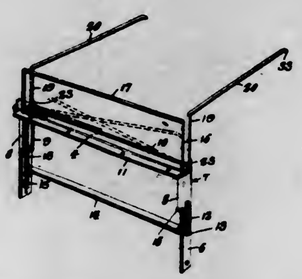
1. Apparatus for electro-plating comprising a rotating barrel, an anode and a cathode arranged in said barrel, the wall of said barrel being provided with perforations, means for delivering electrolyte to said barrel, means for catching the over-flow of electrolyte passing through said perforations, and means for returning the electrolyte to said barrel.

1,885,149. COMBINATION DRAWING INSTRUMENT. JOHN C. SOMMER, St. Louis, Mo. Filed Nov. 1, 1930. Serial No. 492,698. 7 Claims. (Cl. 33—30.)



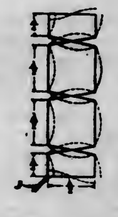
1. A drawing instrument comprising an adjustable supporting body of divider-like form, a pair of spaced, opposed socket forming members pivotally connected to said body, a scribing instrument guide for forming elliptical curves and provided with graduations, a point piece attached to each member, a winding reel carried by said body for said guide, means for detachably anchoring a portion of the length of said guide to said point pieces, and an automatically operable combined expansible and contractile center indicating element having opposed ends permanently seated in said point pieces above the anchoring points for said length of the guide.

1,885,150. SUN AND RAIN PROTECTOR FOR RUMBLE SEATS. JACOB SPECTOR, Keystone, W. Va. Filed June 20, 1932. Serial No. 618,316. 2 Claims. (Cl. 296—98.)



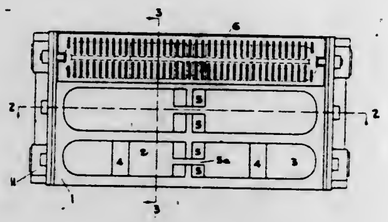
1. In combination with the back rest for the rumble seat of an automobile having a transversely arranged pocket entering from the outer end thereof, a frame having an open top received in the pocket and secured to the back cushion and likewise having its ends, for a distance from its top, formed with sleeves, the sides of the said frame having alining elongated slots, a spring wound roller journaled in said slots, spring means urging the roller toward the ends of the slots, a substantially U-shaped member having its sides received in two of the adjacent sleeves, rightangular members having one of their arms received in the remaining pair of sleeves, and said spring wound roller having attached thereto the rear of a canopy that comprises a top and sides, which sides are divided from the back and said back having flaps to be removably attached to the sides, and means between the sleeves and the rightangular members for holding the said members as well as the U-shaped members rigidly when partly withdrawn from the sleeves as when the canopy is in set up position.

1,885,151. DIRECTIVE ANTENNA SYSTEM. ERNEST J. STERBA, Asbury Park, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed July 30, 1929, Serial No. 382,103, and in Great Britain Feb. 13, 1929. 8 Claims. (Cl. 250—11.)



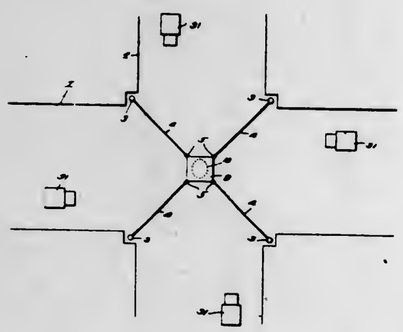
1. In an antenna system, a plurality of verticals spaced an odd multiple of one-half wave length, said verticals each comprising a plurality of co-linear radiating elements positioned relatively close together, the top and bottom radiating elements being a quarter wave length long and the intermediate elements a half wave length long, substantially horizontal elements connecting the extremities of the top elements and the extremities of the bottom elements, other horizontal elements for conveying energy from the radiating elements of one vertical to those of another, the last mentioned elements being positioned with respect to each other so as to neutralize radiation therefrom, and means for energizing the system.

1,885,152. PALLET FOR SINTERING MACHINES. HENRY J. STEHLI, Cedar Grove, N. J. Filed Jan. 8, 1932. Serial No. 585,502. 6 Claims. (Cl. 266—21.)



1. A pallet for sintering machines having spaced ribs and openings therebetween, said ribs being provided with projections to engage portions of gratebars resting on the pallet.

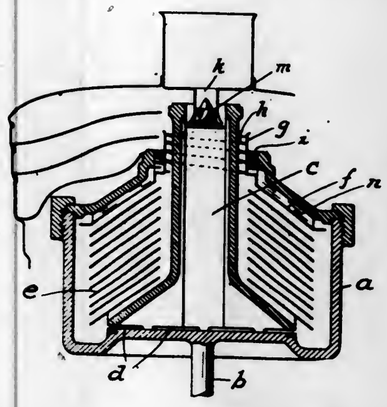
1,885,153. CROSSING SIGNAL. ALLAN STEWART, Dearborn, Mich. Filed Nov. 10, 1930. Serial No. 494,784. 1 Claim. (Cl. 88—1.)



In a device of the class described, a rectangular frame, cross pieces disposed at right angles to each other and having their outer ends connected to the intermediate portions of the sides of the frame, braces extending across the corners of the frame and having their ends connected to the sides of the frame, ears on the bottom of the frame and projecting outwardly in a diagonal direction at the corners of the frame, the inner ends of the ears being secured to the braces, supporting means assembled with the outer portions of the ears, a depending member carried by the cross pieces, and a cover for the depending member, the cover fitting around the frame and being supported on the ears, between the frame and the supporting means.

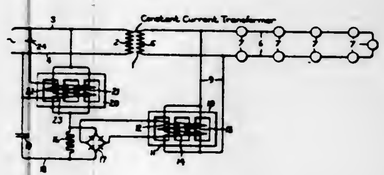
1,885,154. PROCESS OF PRODUCING CONCENTRATED AND PURIFIED RUBBER LATEX. GEORGE J. STREZYNSKI and NORMAN A. FRASER, Poughkeepsie, N. Y., assignors to The De Laval Separator Company, New York, N. Y., a Corporation of New Jersey. Filed Aug. 8, 1930. Serial No. 474,050. 4 Claims. (Cl. 18—50.)

1. The process of effecting the purification of rubber latex and securing a high concentration of the bulk of the rubber which comprises separating the latex into a rubber concentrate and a dilute rubber phase, obtaining



a second rubber concentrate by centrifuging the dilute phase, and concentrating the second rubber concentrate together with the first named latex.

1,885,155. CONTROL OF CONSTANT CURRENT CIRCUITS. CHAUNCEY G. SUITS, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Feb. 18, 1932. Serial No. 593,809. 7 Claims. (Cl. 171—97.)

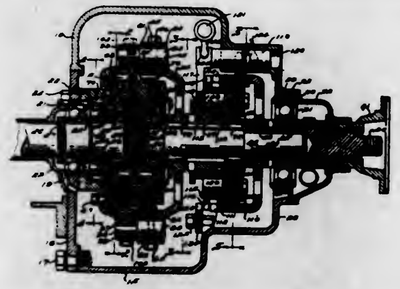


1. In combination, a constant current source, a load circuit connected therewith, means for shunting said load circuit and means entirely electrical for varying the impedance of said shunting means at regular recurring intervals.

7. In combination, a constant current transformer, a load circuit connected with the secondary thereof, saturable core reactor arranged to shunt said load circuit, a non-linear pulsating alternating current circuit including a resistor, a capacitor and a second saturable core reactor, means for supplying a rectified saturating current to said second reactor, and a full wave rectifier having its input connected across said resistor and its output connected to supply saturating current to the first reactor.

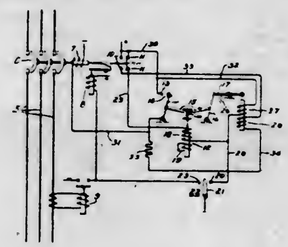
1,885,156. TRANSMISSION MECHANISM. HORACE T. THOMAS and JOHN BETHUNE, Lansing, Mich., and ALBERT B. HAYS, Rochester, N. Y., assignors to Reo Motor Car Company, Lansing, Mich., a Corporation of Michigan. Filed Apr. 3, 1931. Serial No. 527,520. 9 Claims. (Cl. 74—34.)

1. A speed controlling transmission comprising a fixed supporting member, a driving shaft journaled in the member and having a gear non-rotatably mounted thereon, a pair of web members rotatably disposed upon the shaft, one upon each side of the gear, a one way clutch having one element thereof rigidly secured to the supporting member and the other element secured to the adjacent web member, a gear mounted in concentric relation with respect to the shaft upon the other web member, gear-



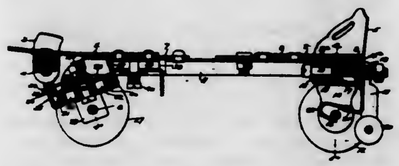
ing providing a positive driving connection between the latter gear and the gear upon the shaft and means for locking the two web members together.

1,885,157. CONTROL OF ELECTRIC SWITCHES. OLIVER C. TRAVER, Drexel Hill, Pa., assignor to General Electric Company, a Corporation of New York. Filed Aug. 3, 1931. Serial No. 554,662. 8 Claims. (Cl. 175—294.)



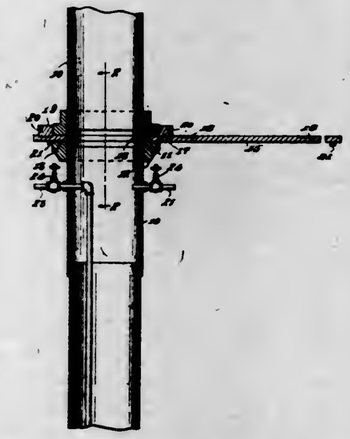
1. In combination, an electric circuit, a circuit breaker for controlling said circuit, electromagnetic means for closing said circuit breaker, means for opening said circuit breaker, means for effecting the energization of said closing means including a switch, means for effecting the opening of the circuit of said closing means upon the closing of the circuit breaker and means connected to be energized in accordance with the inductive discharge of said closing means upon the opening of the circuit thereof for preventing a reclosure of the circuit breaker upon the opening thereof while said switch is closed.

1,885,158. ROLLER SKATE. CLARENCE VOGT, Wenonah, N. J. Filed Feb. 3, 1932. Serial No. 590,754. 10 Claims. (Cl. 208—173.)



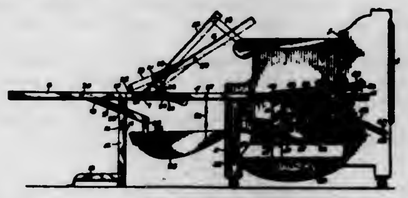
1. A roller skate including a foot plate comprising front and rear portions, a bearing plate mounted beneath the front end of the forward section and disposed at a rearwardly inclined angle with respect thereto, a bracket, an axle carried by said bracket, wheels mounted on said axle, a pivot pin connecting said bracket and the bearing plate, bearings disposed intermediate the bracket and the bearing plate effecting relatively friction free turning of the bracket and wheels with respect to the foot plate, the direction and degree of turning of said bracket depending upon the location and amount of pressure applied to said foot plate, and a plate intermediate the bracket and the bearing plate having openings therein constituting means maintaining the bearings in operative relation with respect to the bearing plate and the bracket.

1,885,159. GATE VALVE. CARL F. WAXMAN, Oakland, Calif. Filed Dec. 22, 1930. Serial No. 504,157. 2 Claims. (Cl. 251—51.)



1. In a gate valve, a coupling adapted to connect the adjacent ends of pipe sections and having a slot therein, a slide movable in said slot and having an opening therein for register with the pipe, said slide having spaced arcuate grooves in one face, and a collar threaded upon the coupling and adapted to be removably seated within said grooves to hold the valve in open or closed position.

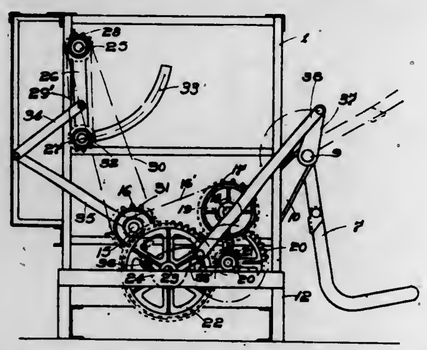
1,885,160. COMBINATION FOLDING BED AND DAVENPORT. EDWIN L. WEINMAN, Chicago, Ill., assignor of one-tenth to James J. McKenna and Sol W. Harris, Chicago, Ill. Filed Aug. 16, 1923, Serial No. 657,668. Renewed Mar. 19, 1932. 13 Claims. (Cl. 5—13.)



1. In a device of the class described, the combination with a frame, of a back, a seat provided with supporting means in front thereof, a folding bed and all its upper parts covered on top by said back, comprising pivotally connected intermediate inner and outer sections, the intermediate section being pivotally mounted within said frame, a supporting and adjusting means hinged to the inner section actuated by the swinging of the intermediate section to and from elevated position to raise and lower the inner section, and means whereby the bed may

be collapsed within said frame with said intermediate section in a rearwardly inclined position at the rear of the seat with said inner section supported in a horizontal position at the lower end of said intermediate section and projecting in front of the rear end of the seat and said outer section with the legs collapsed thereon suspended in a vertical position at an angle to the said intermediate section outside the end of the folding lower rear section.

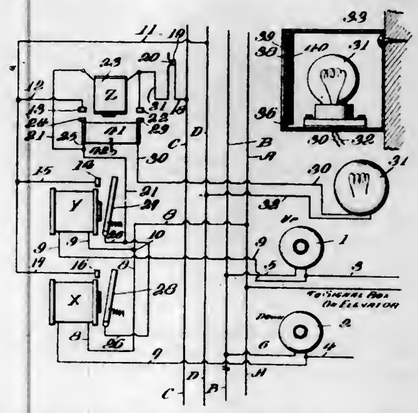
1,885,161. MACHINE FOR CLEANING CARCASSES OF HOGS. NIELS ERIK WERNBERG, Copenhagen, Denmark. Filed July 3, 1930. Serial No. 465,618. 4 Claims. (Cl. 17—16.)



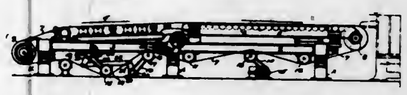
1. A machine for cleaning hog carcasses comprising in combination a suitable housing through which the carcass is passed for cleaning, means for delivering carcasses into the carcass-receiving side of said housing, a first carcass scraping drum revolubly mounted adjacent said receiving side of said housing and in receiving relation to the delivery point of said delivery means, a second carcass-scraping and ejecting drum having a diameter substantially the same as the diameter of said first drum mounted in said housing adjacent the delivery side thereof lower down than and in co-operative bristle-removing relation to said first drum, said two drums being adapted to fully support the carcass thereon, a third swingingly-mounted drum normally positioned above and outwardly toward the delivery side of said housing from said second drum also in co-operative coincident, bristle-removing relation to said first and second drums and furthermore, in retaining relation to the carcass being cleaned, means for mounting said third drum consisting of a link at each end of said drum in which the projecting ends of its shaft are respectively carried, said links being positioned exteriorly of said housing; whereby it is adapted to have an arcuate, inward, upward swing whereby it assumes a carcass releasing position and continues its cleaning action upon the outgoing carcass during its travel to said releasing position, also exerts its cleaning action upon the incoming carcass while traveling back to its normal position, and power generating and transmission means whereby said carcass delivery means and said drums are caused to respectively operate and to swing in the manner stated.

1,885,162. ADVERTISING SYSTEM. LE ROY O. WERNER, Wheeling, W. Va. Filed Apr. 24, 1931. Serial No. 532,641. 1 Claim. (Cl. 40—132.)

In combination with an electrical signaling system for elevators wherein the elevator is signaled by the pushing of an electric push button, an advertising medium adapted to be displayed by illumination, pushing of said electric button automatically illuminating said advertising display, means comprising a magnetic switch energized upon the pushing of said push button for closing and maintaining a closed circuit to continue the illumination of said advertising medium, and a circuit breaker adapted to be actuated by the elevator shaft door upon the arrival of the elevator and the opening of said shaft door for breaking the closed circuit of said magnetic circuit maker and breaker for opening the circuit illuminating means and causing the discontinuation of the illumination, for the purpose described.

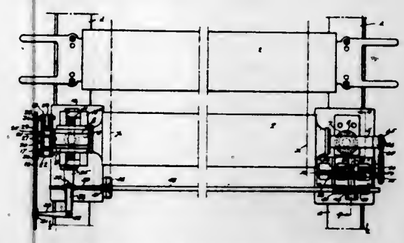


1,885,163. TAKE-UP FOR FOURDRINIER MACHINES. JOSEPH A. WHITE, Melrose Park, Pa., assignor to The Moore & White Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Dec. 12, 1931. Serial No. 580,711. 5 Claims. (Cl. 92—94.)



1. The combination in a Fourdrinier paper making machine, of a making wire; means for guiding the wire through the machine; two take-up rolls arranged to move in opposite directions for either taking up the slack or providing slack in the making wire and means for operating the two take-up rolls in unison.

1,885,164. FOURDRINIER MACHINE. JOSEPH A. WHITE, Melrose Park, Pa., assignor to The Moore & White Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Dec. 31, 1931. Serial No. 584,191. 5 Claims. (Cl. 92—44.)



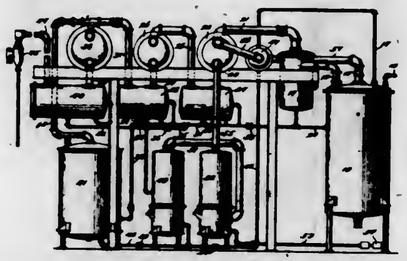
1. The combination in a Fourdrinier paper-making machine, of suction boxes; a guide roll; an endless wire passing over the suction boxes and guide roll; a pad bearing against the edge of the wire; means for skewing the roll to shift the wire laterally on the roll; and positive means connected to the pad and the said shifting means for positively moving the mechanism to continuously shift the wire on the roll.

1,885,165. ARMORED CASHIER'S WICKET STRUCTURE. GEORGE L. WILLEMS, New York, N. Y., assignor to Fifth Avenue Coach Company, a Corporation of New York. Filed May 7, 1931. Serial No. 535,633. 18 Claims. (Cl. 20—1.01.)



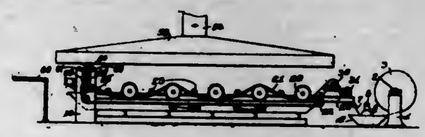
1. In combination with a wall or partition, a casing in said wall having openings through it respectively at opposite sides of the wall, a shelf to which access may be had from the opposite sides of the wall through the respective openings in the casing, a member oscillatable in the casing between the said openings and having portions adapted in the different positions of the member to cover and uncover the respective casing openings alternately; whereby in the different positions of said member, access may be had from one side of the wall to the shelf, while access to said shelf from the other side of the wall will be cut off, and vice versa.

1,885,166. PROCESS OF AND APPARATUS FOR DISTILLING GLYCERINE. OSCAR H. WURSTER, Chicago, Ill. Filed Feb. 13, 1928. Serial No. 253,827. 8 Claims. (Cl. 202—39.)



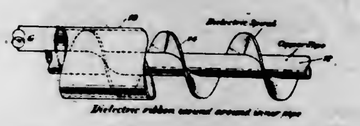
6. A process of distilling glycerine under vacuum and in an atmosphere of steam which comprises the injection of superheated steam into the liquid to be distilled, condensing the major part of the glycerine from the mixture of steam and vapor, passing the remaining vapors to a sweet-water condenser where the same are condensed to form a condensate, evaporating the latter condensate and using the vapors therefrom to evaporate water under vacuum, preheating the steam formed from said water by the vapors from the distilling liquid, and superheating the preheated steam by means of high temperature steam above the temperature of the vapors arising from the distilling liquid to form the said superheated steam injected into the liquid to be distilled, said sweet-water being evaporated by the said high temperature steam after being used to superheat the said preheated vapors.

1,885,167. MACHINE FOR TREATING PAPER BOARD AND PROCESS. ALLEN ABRAMS, Wausau, Wis., assignor to Marathon Paper Mills Company, Rothschild, Wis., a Corporation of Wisconsin. Filed Dec. 19, 1928. Serial No. 326,919. 5 Claims. (Cl. 91—70.)



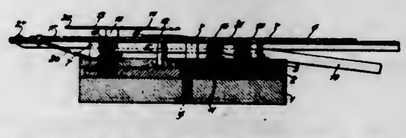
3. A process for impregnating web material which comprises first moistening the web with water and then passing said moistened web through molten sulphur.

1,885,168. CONCENTRIC CONDUCTING SYSTEM. HERMAN A. AFFEL, Ridgewood, N. J., assignor to American Telephone and Telegraph Company, a Corporation of New York. Filed May 28, 1929. Serial No. 365,521. 10 Claims. (Cl. 173—265.)



1. In a conducting system for the communication of intelligence, two conductors connected one as a return for the other, each conductor being cylindrical in form and the two conductors being arranged concentrically, means to separate the two conductors electrically and maintain them in concentric relation, said means comprising a strip of insulating material coiled spirally edgewise about the inner conductor with its outer edge supporting the outer conductor, said strip being of such thin cross-section and the successive coils thereof being so spaced that the dielectric in the space between the conductors is largely gaseous.

1,885,169. ORNAMENTING DIE. ARTHUR W. ALTVATER, University City, Mo. Filed May 22, 1931. Serial No. 539,153. 32 Claims. (Cl. 164—93.)

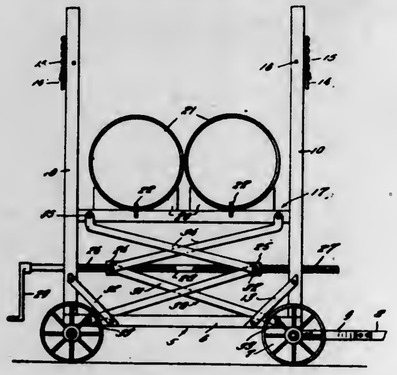


1. A machine of the character described comprising rigid ornamenting dies, a movable support having holes therethrough for the projection of said dies when said support is moved, a gage device supported by said support for gaging and locating the work properly with respect to said dies, and means for operating said gage device to position against the upper side of the work that is mounted on said support.

1,885,170. PORTABLE HOISTING APPARATUS. GLENN ANDERSON, Onawa, Iowa. Filed Feb. 11, 1931. Serial No. 515,077. 1 Claim. (Cl. 254—9.)

The herein described portable apparatus for the purpose described, consisting essentially of a frame having upstanding corner posts and guideways in said posts, the upper portions of the posts being apertured, ground wheels connected with and supporting said frame, a vertically movable platform disposed between said posts and interlocked therewith, pins flexibly connected with

the upper portions of the posts and adapted to be arranged in the apertures thereof to positively support the platform in an elevated position, lazy-tongs arranged at opposite sides of the wheel-supported frame and including transverse bars with appropriately threaded central horizontally disposed and aligned apertures therein and also including lower side links crossed and connected at their lower ends to opposite end portions of the frame and at



their upper ends to said transverse bar, and upper crossed links arranged at opposite sides of the apparatus and connected at their lower ends to said transverse bars and at their upper ends to opposite end portions of said vertically movable platform, and a longitudinal central screw mounted in the frame and having oppositely threaded portions engaging in the threaded apertures of the transverse bars and also having at one end a handle.

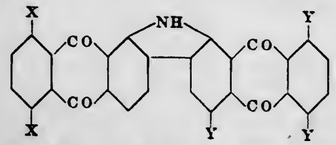
1,885,171. PENCIL LEAD INDICATOR. LESLIE G. BALMER, St. Louis, Mo. Filed Nov. 23, 1931. Serial No. 576,890. 3 Claims. (Cl. 116—114.)



1. In a lead for mechanical lead pencils, an indicating means comprising a cap disposed on one end of the lead.

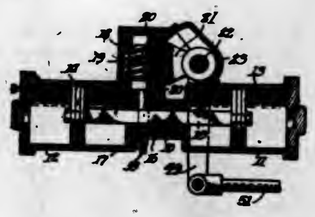
1,885,172. NEW DERIVATIVES OF 1.2.7.8-DIPHTHALOYLCARBAZOLE. FRITZ BAUMANN, Leverkusen-on-the-Rhine, Germany, assignor to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Apr. 17, 1928, Serial No. 270,791, and in Germany July 13, 1926. 5 Claims. (Cl. 260—46.)

1. As new products the compounds of the general formula:



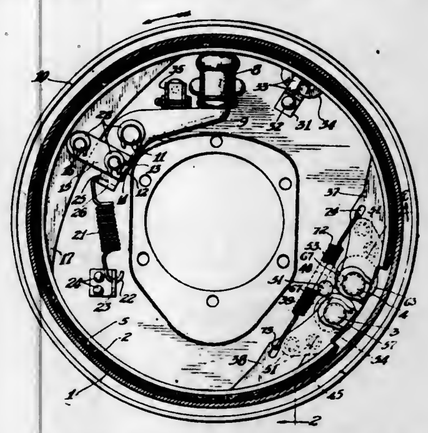
wherein one X and one Y stand for benzoylamino groups, at least one X or one Y for an alkoxy group and the remaining X's and Y's for hydrogen, dyeing cotton orange to red to red-brown shades of excellent clearness and very good fastness to light and to washing.

1,885,173. REVERSING GEAR MECHANISM. CLARENCE C. BERTRAM, Chicago, Ill., assignor to Barco Manufacturing Company, Chicago, Ill., a Corporation of Illinois. Filed July 31, 1920. Serial No. 400,503. 8 Claims. (Cl. 121—41.)



1. In a mechanism for operating valve gears, the combination of a cylinder and a piston operable therein, a rack bar extending from said cylinder, a worm having a gear toothed extension lying on an axis at substantially right angles to and meshing with said rack bar, a removable end bearing for said worm permitting bodily removal of the worm and toothed extension without material disturbances of the other elements, and a segmental gear mounted in bearings on said cylinder and meshing with said worm to form an irreversible connection and adapted to be connected to a valve gear.

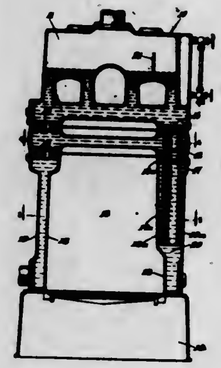
1,885,174. BRAKE MECHANISM. HERBERT C. BOWEN and JOSEPH R. HEIDLOFF, Detroit, Mich., assignors to Hydraulic Brake Company, Los Angeles, Calif., a Corporation of California. Filed Feb. 14, 1930. Serial No. 428,293. 7 Claims. (Cl. 188—79.5.)



1. In a brake mechanism the combination of a drum with a shoe, pivot means for anchoring the ends of the shoe, a disk on each of said pivots having their ends abutting each other, one of said disks being eccentrically positioned on its pivot and fixed for rotation therewith, whereby the rotation of the last said pivot causes lateral movement of the other said pivot.

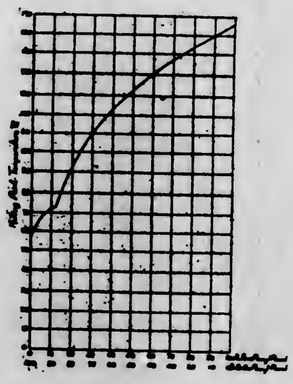
1,885,175. BOILER. CHARLES W. BRABBÉE, Bronxville, and BERNHARD GOEBEL, Mount Vernon, N. Y., assignors to American Radiator Company, New York, N. Y., a Corporation of New Jersey. Filed Nov. 10, 1931. Serial No. 574,190. 5 Claims. (Cl. 122—218.)

1. A horizontal sectional boiler comprising a relatively-deep fire-pot section, and at least one upper section thereon, nipple ports at opposite sides of boiler in the opposing faces of said sections and a nipple secured in the ports at one side of the boiler and constituting the sole passage for the ascending currents of heated water, and water-accelerating means disposed in the nipple ports at the opposite side of the boiler; said means comprising a nipple portion uniting said upper section with said



fire-pot secton, and a tubular portion substantially coextensive in length with the height of said fire-pot section extending from said last-named nipple portion into said fire-pot section and having its free end terminating adjacent the base of said fire-pot section, substantially as specified.

1,885,176. METHOD FOR SEPARATING PHENYLPHENOLS. EDGAR C. BRITTON and FRED BRYNER, Midland, Mich., assignors to The Dow Chemical Company, Midland, Mich., a Corporation of Michigan. Filed Dec. 5, 1929. Serial No. 411,761. 14 Claims. (Cl. 760—154.)



1. The method of separating ortho- and para-phenylphenols which comprises dissolving the same in an aqueous solution of an alkali metal hydroxide, precipitating a salt of para-phenylphenol therefrom by treatment with a soluble salt of an alkaline earth metal, and treating the precipitated salt to recover para-phenylphenol therefrom.

1,885,177. CLASSIFYING WOOD PRODUCTS. ROBERT G. BRUCE, Memphis, Tenn., assignor to E. L. Bruce Company, Memphis, Tenn., a Corporation of Delaware. Filed Jan. 31, 1929. Serial No. 336,661. 8 Claims. (Cl. 209—3.)

1. The method of classifying wood products that are to receive a finishing coat comprising applying to the wood while it is "in the white" a composition that will wet the surface of the wood and then classifying the product according to the appearance of the surface that has been wet.

1,885,178. DIE LAPPING AND GRINDING MACHINE. RUDOLF BSTEH, Vienna, Austria. Filed Oct. 31, 1929, Serial No. 403,762, and in Austria Oct. 11, 1929. 12 Claims. (Cl. 51—62.)



1. Die lapping and grinding machine of the type using a wire as carrier for an abrasive powder, including the combination, with a gear casing, of a gear associated with an eccentric and a toothed wheel rotatably coupled with said eccentric and a pinion meshing with said toothed wheel, a vertical fixed frame consisting of two pillars connected by means of a tensioning plate and fixed on said gear casing, a reciprocating wire clamping frame having spaced posts and clamping plates screwed together slidably mounted on said vertical frame and provided with a vertical shaft journaled on the vertical frame and being movable up and down by said eccentric, jaws disposed on the intermediate portions of said clamping plates for clamping the wire, a rotating die holder mounted on said fixed frame and means for adjusting the height and the angular position of the latter on the pillars.

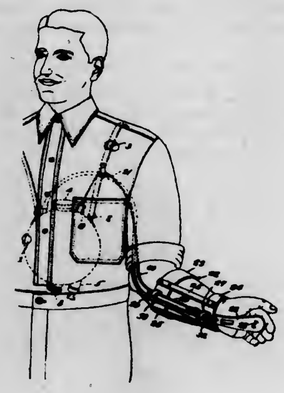
1,885,179. IMPREGNATING LEATHER. HEINRICH BURGER, Berlin-Charlottenburg, Germany. Filed Sept. 22, 1931, Serial No. 564,459, and in Germany Dec. 30, 1925. 12 Claims. (Cl. 149—6.)

1. The method of producing impregnated leather consisting in soaking the tanned leather at an elevated temperature in a liquor containing elementary sulfur and an organic volatile solvent liquid at ordinary room temperature and having a boiling point above 100° C.

1,885,180. BURGLAR WARD. DANIEL W. CAMERON, Grand Island, Nebr. Filed Nov. 16, 1931. Serial No. 575,457. 4 Claims. (Cl. 292—95.)

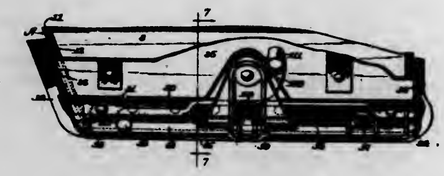
1. In a burglar ward, a reservoir, means for mounting the reservoir on the body of a wearer, a movable outlet for the reservoir, means for mounting the outlet movably on the wearer's body at a point near his hand, means for advancing the outlet with respect to the wearer's hand,

mechanism holding the outlet releasably retracted with respect to the wearer's hand, mechanism for creating pressure in the reservoir to bring about an expulsion of the



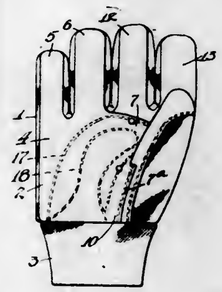
contents of the reservoir, through the outlet, and means for operating both of said mechanisms at substantially the same time, from a point on the wearer's hand.

1,885,181. DOOR CONSTRUCTION FOR HOPPER CARS. ARGYLE CAMPBELL, Chicago, Ill., assignor to Enterprise Railway Equipment Company, Chicago, Ill., a Corporation of Illinois. Filed Apr. 20, 1931. Serial No. 531,470. 32 Claims. (Cl. 105—308.)



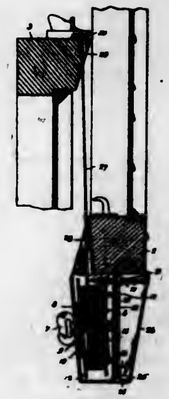
1. In a railway car, the combination of a hopper having a discharge opening, a frame for said opening, a door hinged on said frame, locking mechanism for supporting the door in closed position, said locking mechanism including a bracket member disposed centrally in the plane of said discharge opening, and a movable latch member carried by the door and adapted to have co-operating engagement with the bracket for maintaining the door in closed position; and a reinforcing beam member secured to the door and constituting a support for the movable latch member, said beam member embodying in an integral unit means for supporting and guiding the movable latch member and having re-inforcing portions extending to either side of the locking mechanism for supporting the portions of the door overhanging beyond the latching mechanism.

1,885,182. GLOVE PALM. AARON CHARNEY, Chicago, Ill. Filed Dec. 12, 1930. Serial No. 501,768. 4 Claims. (Cl. 2—159.)



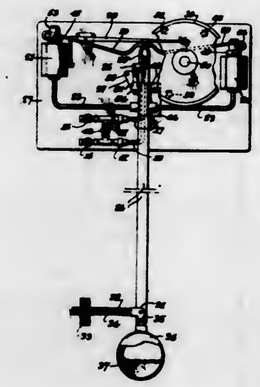
1. A glove palm constructed of a plurality of separate palm sections separated lengthwise of the glove, said sections secured to one another and having portions of said sections overlapping to provide a reinforced portion of double thickness, each of said sections including a finger receiving portion as a part of the section.

1,885,183. WINDOW CLOSING DEVICE. ROBERT G. COLLINS, St. Albans, N. Y. Filed Dec. 6, 1929. Serial No. 412,207. 6 Claims. (Cl. 268—128.)



1. A window closing device comprising a housing for mounting on one of the two sashes of a window, a drum rotatably mounted in the housing and having a flexible member reeled thereon, one terminal of said member being adapted for connection with the other sash, a key actuated member rotatably mounted in the housing and having latching means to prevent rotation in one direction, a spool rotatably mounted in the housing, latching means for said spool, a heavy primary spring connecting said key actuated member with said spool, a relatively light secondary spring connecting said spool with said drum, and a moisture receiving tripping device operatively connecting with the latch for said drum to release the latter upon the accumulation of moisture.

1,885,184. FLOW METER. WILLIAM J. CROWELL, Jr., Wyncote, Pa. Filed Jan. 16, 1926. Serial No. 81,637. 16 Claims. (Cl. 73—167.)



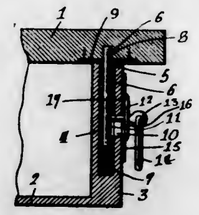
1. In a U-tube type of balance, a long vertical arm, a horizontal forwardly and rearwardly extending pivot at its upper end, a bearing support for the pivot, a U-tube carried by the upper end of the arm from a point beneath the pivot and including vertical arms on opposite sides of the pivot and a pipe connecting the bottoms of the arms, pressure pipes having each an end at the axis of the pivot and flexible connections from the upper ends of the cylinder arms of the U into the open ends of the respective pressure pipes, said flexible connections leaving the cylinder arms from the front, extending forwardly then outwardly and backwardly and inwardly toward the pivot and reversely bending near the pivot to make the connections with the open ends at the axis of the pivot.

6. A differential balance having an adaptation to be set substantially neutral with respect to angular deflection throughout its range thereof and to receive a deflecting moment from differential pressure, a horizontally pivoted cam member having its center of gravity substantially in its pivotal axis, having a zero position and a range of angular movement therefrom, having its cam surface on one side of its pivot arcuate, its cam surface on the other side of its pivot being so shaped that the horizontal distance from effective points on said surface to a vertical plane through said pivot progressively increase with progressive increase of angular deflection from the said zero position and having another portion concentric with the pivot, a flexible connection between the neutral balance and the cam member upon the said concentric portion thereof, flexible connections, one depending from the first arcuate surface and the other from the non-arcuate cam surface, a member suspended by each of said last named flexible connections and exerting respectively through said connections uniform and variantly increasing turning moments upon the cam member when the latter member is deflected from a neutral position corresponding to a zero position for the balance.

1,885,185. METHOD OF SIZING FIBROUS MATERIAL. FRANCIS J. CURTIS, Belmont, Mass., assignor to Merrimac Chemical Company, Inc., Boston, Mass., a Corporation of Massachusetts. Filed Aug. 10, 1929. Serial No. 385,084. 7 Claims. (Cl. 92—21.)

1. The process of cementing negatively charged colloidal size to the cellulose fibers in a mixture of the two which comprises adding alum and sodium aluminate.

1,885,186. FURNITURE LATCH. LÉONCE DEFOY, Three Rivers, Quebec, Canada. Filed May 10, 1930. Serial No. 451,356. 1 Claim. (Cl. 292—175.)

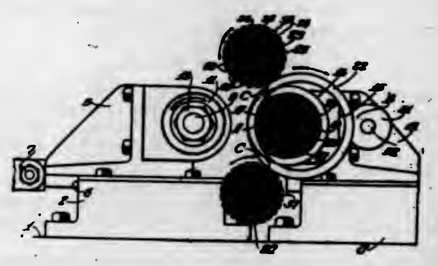


A latch comprising in combination with a fixed member and a drawer slidable relatively thereto, a spring pressed bolt in said drawer adapted to enter said fixed member, said drawer being formed with a slot adjacent said bolt, a pin extending from said bolt through said slot to the forward face of said drawer, a cover plate carried by said pin and adapted to cover said slot in all positions of said pin, and a pull ring carried by the exposed end of said pin.

1,885,187. PRODUCTION OF TITANIUM PIGMENTS. CHARLES DE ROHDEN, Baltimore, Md., assignor, by mesne assignments, to Krebs Pigment and Color Corporation, Newark, N. J., a Corporation of Delaware. Filed Jan. 17, 1928. Serial No. 247,465. 2 Claims. (Cl. 23—202.)

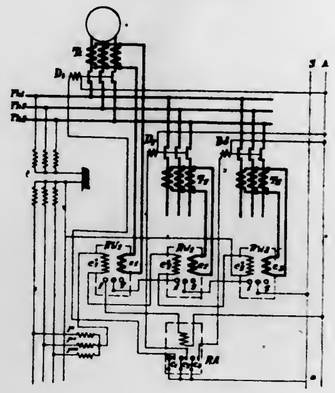
1. A process for producing a white pigment which comprises digesting hydrolytically precipitated titanium dioxide with dilute hydrochloric acid in the presence of a reducing agent.

1,885,188. ARBOR FOR RING SPLITTING MACHINES. FRITZ DEUTSCH, Memphis, Tenn., assignor, by mesne assignments, to Sparta Foundry Company, Sparta, Mich., a Corporation of Michigan. Filed May 4, 1931. Serial No. 534,888. 6 Claims. (Cl. 29—70.)



1. In a machine of the class described, an arbor for supporting a plurality of annular members, said arbor having spacing means for spacing said members having diameters considerably greater than the diameter of the arbor, a resilient surface intermediate said spacing means for contacting the inner peripheral surfaces of said annular members, drive rolls for holding said annular members against said resilient surfaces and rotating said annular members by contact with the outer peripheral surfaces thereof and a pin parallel to and adjacent said arbor, said pin having spacing means aligned with the spacing means on said arbor to prevent the wabbling of said annular members.

1,885,189. CIRCUIT PROTECTING DEVICE. ROGER DUBUSC and AVRAM DAVID ILIOVICI, Paris, France, assignors to Compagnie pour la Fabrication des Compteurs et Materiel d'Usines a Gaz, Montrouge, France, a Joint-Stock Company of France. Filed Jan. 25, 1930, Serial No. 423,507, and in France Feb. 6, 1929. 8 Claims. (Cl. 175—294.)



1. In a protective system for the bus-bars of an alternating current supply system to which are connected a plurality of feeders, the combination of a plurality of relays, means fed from said bus bars for making said relays responsive to one of the symmetrical phase sequence components of the power in said supply system, a plurality of circuit-breakers mounted in said feeders and adapted when tripped to isolate said feeders from said bus-bars, an auxiliary source of current, electrical means adapted to be energized by said auxiliary current source for operating said circuit-breakers, and a plurality of contacts controlled by said relays and adapted when closed by said relays to establish a circuit for the electrical means operating said circuit-breakers, one at least of said relays closing one of said contacts for a predetermined direction of said phase sequence component of the power, while none of said relays close any of said contacts for the opposite direction of said phase sequence component of power.

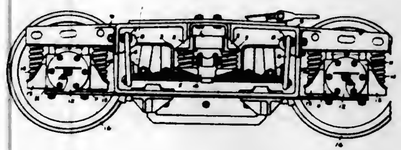
1,885,190. PROCESS FOR STABILIZING GASOLINE AND THE LIKE. GUSTAV EGLOFF, Chicago, Ill., assignor to Universal Oil Products Company, Chicago, Ill., a Corporation of South Dakota. Filed Nov. 4, 1929. Serial No. 404,839. 4 Claims. (Cl. 44—9.)

1. A process for preventing deterioration during storage of cracked gasoline having anti-knock properties which comprises adding to such gasoline from a trace up to two percent of anthraquinone.

2. Motor fuel comprising cracked gasoline having anti-knock properties and containing from a trace up to two percent of anthraquinone.

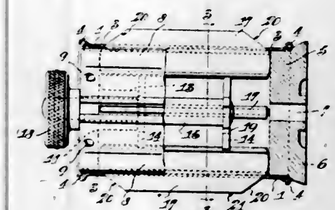
1,885,191. CAR TRUCK. CHARLES J. ELLIS, Cincinnati, Ohio, assignor, by mesne assignments, to The Cincinnati Car Corporation, Cincinnati, Ohio, a Corporation of Ohio. Filed Feb. 23, 1929. Serial No. 341,936. 4 Claims. (Cl. 105—119.)

3. In combination a car truck, a driving means mounted thereon, a driving shaft connecting said driving means to one of said axles, a worm mounted on said driving means, a solid axle carrying car truck supporting wheels, a gear casing mounted on said solid axle for supporting said worm having a pair of oppositely inclined tapered roller thrust bearings at the rear end thereof and a roller bearing at the forward end thereof, a worm gear mounted



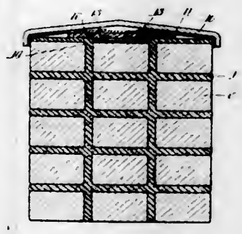
on the axle in said gear casing, tapered roller bearings on each of the oppositely tapered roller thrust bearings for taking the lateral thrust therebetween and the axle.

1,885,192. SPOOL AND HOLDER THEREFOR. RICHARD ELSSNER and RALPH H. CARTER, Johnson City, Tenn., assignors to American Glanzstoff Corporation, New York, N. Y., a Corporation of Delaware. Filed Apr. 20, 1931. Serial No. 531,566. 10 Claims. (Cl. 242—130.)



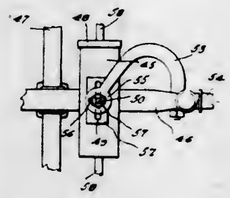
1. In combination, a spool comprising a perforated body portion, elongated slots running longitudinally thereof, and provided with inturned edges projecting into the said spool body portion, a spool holder including rib-like elements and means actuated by an element of the spool holder whereby the rib-like elements may be caused to enter and project outwardly through the slots of the spool.

1,885,193. BUILDING GASKET. CARROLL C. FIGGE, Chicago, Ill. Filed May 20, 1929. Serial No. 364,416. 8 Claims. (Cl. 72—86.)



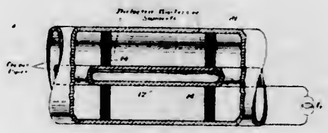
1. A gasket of the class described comprising a flexible fabric strip with a bituminous coating, and separate fastening means thereon adapted to engage a wall to which it is applied for holding the gasket in place.

1,885,194. HYDRAULIC AUTOMOBILE STEERING MECHANISM. ROBERT L. FRANCIS, Hendersonville, N. C. Filed Aug. 8, 1927. Serial No. 211,470. 1 Claim. (Cl. 280—87.)



In combination with an axle having a wheel carrying spindle pivotally connected to each end thereof, and an arm connected to each spindle for swinging the same, a cylinder connected to each end of the axle, said cylinder having a centrally arranged longitudinally extending slot therein, a piston in each cylinder, a bolt passing through the free end of the arm, the slot and into the piston for connecting the piston to the arm for rocking the arm by the movement of the piston, and means for forcing fluid into either end of each cylinder to move the piston.

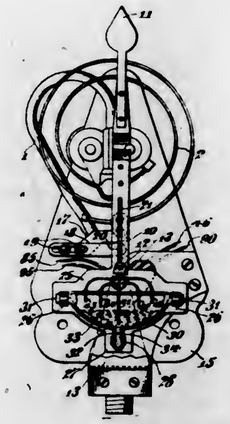
1,885,195. CONCENTRIC CONDUCTOR TRANSMISSION SYSTEM. ESTILL I. GREEN, East Orange, N. J., assignor to American Telephone and Telegraph Company, a Corporation of New York. Filed May 23, 1929. Serial No. 365,519. 5 Claims. (Cl. 173—265.)



1. A concentric conductor system comprising two concentrically arranged cylindrical conductors, said conductors having a predetermined amount of conductive material per unit of length apportioned thereto, the inner diameter of the outer conductor and the outer diameter of the inner conductor bearing such ratio to each other that for the predetermined apportionment of conductive material to the two conductors the attenuation of the system will be a minimum at high frequencies.

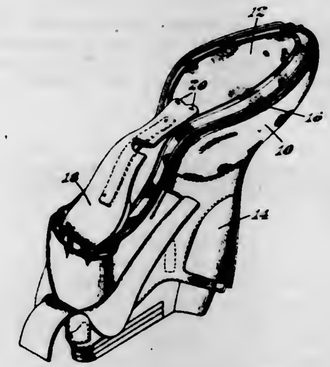
1,885,196. ELECTRICALLY CONTROLLED REGULATING MEANS. WALTER H. J. GERBER, Philadelphia, Pa., assignor to Schutte and Koerting Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed June 17, 1930. Serial No. 461,704. 8 Claims. (Cl. 50—10.)

1. Electrically controlled regulating means for maintaining a fluid at a predetermined pressure, comprising in combination an oscillatable member responsive to variations of the pressure of said fluid, a plurality of electric circuits, means actuated by said circuits for controlling and regulating the pressure of said fluid, and a mercury contact device mounted upon the said member and oscillating therewith, said contact device including a plurality of contacts one of which is at all times in contact with the mercury of the said device while other contacts on opposite sides thereof are normally out of contact with said mercury but certain of which contact



with the mercury depending upon the direction of movement of the said contact device to close one or the other of the circuits controlled by the said contact device.

1,885,197. METHOD OF MAKING SHOES. GEORGE GODDU, Winchester, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed July 19, 1929. Serial No. 379,419. 6 Claims. (Cl. 12—142.)

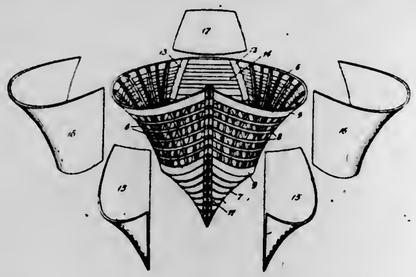


1. That improvement in methods of making turn shoes which comprises working an upper including a counter inside out over a sole upon a last, securing the upper and sole permanently together, and then before the shoe is turned securing a shank piece at its front end to the sole adjacent to the ball line.

1,885,198. HULL STRUCTURE. WARREN L. HALE, East Hartford, Conn., assignor to Hale Marine Corporation, New York, N. Y., a Corporation of New York. Filed June 28, 1930. Serial No. 464,483. 20 Claims. (Cl. 114—82.)

8. A boat hull comprising a substantially complete and self-sustaining frame, and a shell having the parts there-

of closely interfitted and substantially free of absorbed water secured thereon and consisting of a small number

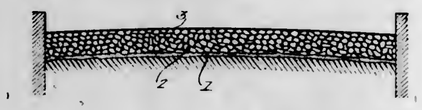


of panels of the general character of ply-wood having on the water-side thereof a continuous coating of a hardened waterproof plastic of the plastic wood type.

1,885,199. PROCESS FOR SEPARATING THE HYDROXY-ACIDS FROM THE OXIDATION PRODUCTS OF HYDROCARBONS. THEODOR HELLTHALER, Granschutz, and ERICH PETER, Webau, Germany, assignors to Firm A. Riebeck'sche Montanwerke Aktiengesellschaft, Halle, Germany. Filed Apr. 23, 1930, Serial No. 446,780, and in Germany Apr. 10, 1928. 9 Claims. (Cl. 260—122.)

1. In the process for separating the fatty acids and hydroxy-acids contained in the products obtained by oxidising hydrocarbons, the steps which consist in heating the said oxidized products with low-boiling benzines which are bad solvents for the hydroxy-acids, and separating the resulting solution from the undissolved matter.

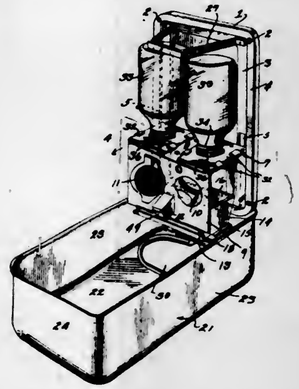
1,885,200. ROAD CONSTRUCTION. DONALD MCK. HEPBURN, Philadelphia, Pa., assignor to Amiesite Asphalt Company of America, Philadelphia, Pa., a Corporation of New Jersey. Filed Apr. 25, 1927. Serial No. 186,304. 2 Claims. (Cl. 94—23.)



1. The method of making roads and highways, which consists in laying a course of clean crushed stone of relatively large sizes free from fines, spraying said stone with a bitumen solvent, distributing thereover a bitumen-coated graded aggregate of relatively small sizes, said aggregate carrying a sufficient quantity of a slowly volatile solvent to retard the cohesion of the individual bitumen-coated particles into a solid mass at normal temperatures and being laid in an unheated condition, and rolling the said bitumen-coated aggregate into the upper voids of the lower course.

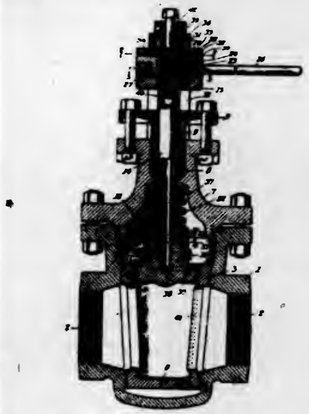
1,885,201. VENDING MACHINE. CLARENCE M. HOLLEY, Highland Park, Mich. Filed Apr. 1, 1931. Serial No. 526,909. 10 Claims. (Cl. 221—107.)

8. A vending machine comprising a rear wall, a dispensing device detachably secured thereto and removable as a unit, a merchandise container detachably supported on the dispensing device, means adapted for introduction between the container and the unit to prevent discharge of material from the container to the dispensing unit and to permit removal of the container and the material contained from the unit without loss of material, a hollow box like cover encasing the device and supported on the said rear wall and adapted to be locked in position



covering the container and dispensing devices to prevent removal of the said parts when the cover is in locked position.

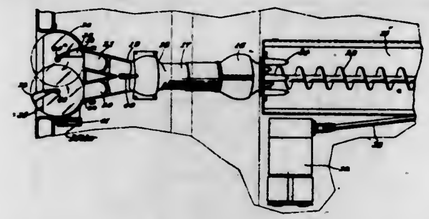
1,885,202. LUBRICATED PLUG COCK. ARTHUR M. HOUSER, Oak Park, and RICHARD FENNEMA, Chicago, Ill., assignors to Crane Co., Chicago, Ill., a Corporation of Illinois. Filed Jan. 30, 1931. Serial No. 512,234. 9 Claims. (Cl. 251—93.)



1. In a plug cock, a body having a transverse passage therethrough, a tapered plug seated in said body for closing said passage, one end of said plug terminating in interlocking members and a hollow plug stem providing a lubricant duct and having interlocking members upon one end adapted to removably engage the locking members on said plug and means for maintaining said locking members engaged to provide a leak proof connection between said stem and plug, said stem having means at its other end for engagement with a handle for rotating said stem and plug.

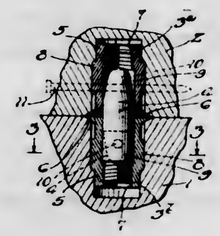
1,885,203. MECHANICAL STOKER. ANDREW M. HUNT, New York, N. Y., assignor to The Standard Stoker Company, Incorporated, a Corporation of Delaware. Filed Aug. 24, 1928. Serial No. 301,730. 7 Claims. (Cl. 110—101.)

1. In a mechanical stoker, the combination of a plurality of mechanically operated fuel projecting and distributing members pivoted to swing about vertical axes and adapted to scatter fuel over a firebox grate and feed-



ing means controlled independently of the operation of said members for delivering a stream of fuel in the plane of the path of each of said members.

1,885,204. PATTERN MAKER'S DOWEL. RAYMOND L. JOHNSON, Chicago, Ill. Filed Apr. 25, 1930. Serial No. 447,311. 2 Claims. (Cl. 85—42.)



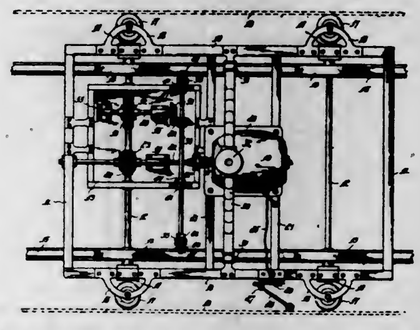
1. A dowel pin structure comprising a pair of axially opposed members each provided with a socket threaded in part, a pin including a head and a threaded shank interchangeably receivable in the threaded part of one socket with said head extending into the unthreaded part of the other socket, said head having a tool-receiving slot extending transversely therethrough for inserting said pin into and removing it from its socket, and ribs on the exterior of said members adapted to engage the walls of a recess to secure said members therein.

1,885,205. HAT DELIVERY CONTAINER. SAMUEL J. JOHNSON, Cincinnati, Ohio, assignor to The Seinsheimer Paper Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Mar. 24, 1930. Serial No. 438,410. 5 Claims. (Cl. 206—8.)



1. A container of the nature described, comprising, a cardboard sheet folded into two sections, one of which is flat and the other of which is secured in bowed condition relative to the flat section, the flat section having a hat form included therewith, and a paper shroud for closing the ends of the container between the respective sections.

1,885,206. PASSENGER CAR FOR AMUSEMENT PARKS. JOHN KAHL, Kansas City, Mo. Filed July 6, 1931. Serial No. 549,029. 3 Claims. (Cl. 104—85.)



1. A car for amusement parks comprising a pair of wheeled trucks and car bodies mounted thereon and connected to each other for rocking motion one with respect to the other, rods connected to and depending from the car bodies at opposite sides of the center thereof, a driven shaft on each truck, and means interposed between the driven shafts and aforesaid rods for imparting rocking motions to said car bodies.

1,885,207. TENNIS COURT AND METHOD OF TREATING SAME. GELSTON TYLER KING, Brookline, Mass. Filed Apr. 17, 1930. Serial No. 445,222. 4 Claims. (Cl. 94—22.)

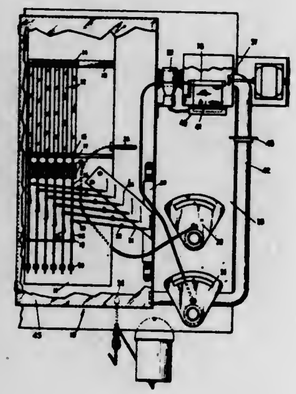
1. That improvement in methods of modifying the surface characteristics of a clay type paved area which consists in spraying the surface of the area with a coloring compound suspended in a relatively light non-drying oil.

1,885,208. PROJECTION SCREEN. LEONHARD KOEPPE, Halle-on-the-Saale, Germany. Filed Aug. 29, 1930, Serial No. 478,689, and in Germany July 30, 1929. 3 Claims. (Cl. 88—24.)



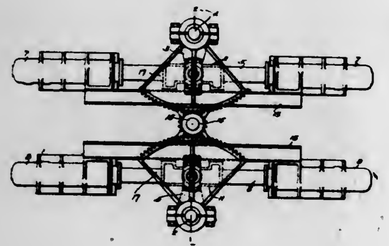
1. A projection screen having a surface comprising contiguously arranged vertical cylindrical segments arranged in parallel to each other, each segment having a convex elliptical horizontal cross section having its major axis arranged horizontally.

1,885,209. PAPER STRETCH TESTER. HERMAN KOBSTER, Waterbury, Conn., assignor to The Bristol Company, Waterbury, Conn., a Corporation of Connecticut. Filed July 1, 1930. Serial No. 465,086. 5 Claims. (Cl. 73—51.)



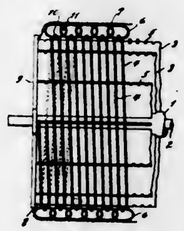
3. A paper-stretch tester, comprising a closed test chamber, a panel swingably mounted therein, means to suspend from said panel at one end a plurality of test strips, tensioning members attachable to the opposite ends of the individual strips, bearing means on said panel for guiding the tensioning members for vertical movement resulting from the stretch of a strip, a scale-bearing member movable with the panel, and respective measuring means pivotally mounted on said panel, actuated by the movement of a tensioning member and co-operating with the scale-bearing member.

1,885,210. MULTIPLE RUDDER STEERING MECHANISM. CHARLES V. KOONS, Philadelphia, Pa., assignor to American Engineering Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed May 22, 1931. Serial No. 539,408. 6 Claims. (Cl. 114—163.)



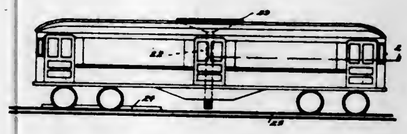
1. A steering mechanism comprising a plurality of rudders, a stock for each of said rudders, a motor operatively connected with each of said stocks, and means for operatively connecting one of said stocks with another comprising segmental gears respectively attached to the stocks, and a pinion intermediate and meshing with both of said gears.

1,885,211. IRONING ROLL AND PAD. ARTHUR H. ADAMS, La Grange, Ill., assignor to Troy Laundry Machinery Company, Inc., New York, N. Y., a Corporation of Delaware. Filed Apr. 13, 1928. Serial No. 269,852. 11 Claims. (Cl. 68—9.)



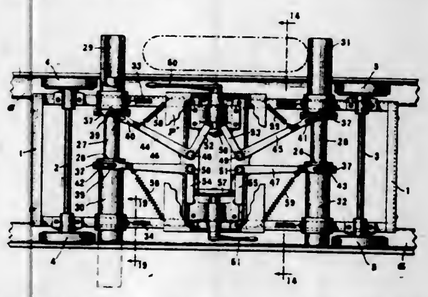
7. In a laundry ironing machine, a roll comprising a hub, a plurality of supporting members projecting radially from said hub and extending longitudinally of the axis thereof, and spaced members in contact with the outer extremities of said radial members and bridging the intervals therebetween to provide a grate-like surface for the roll.

1,885,212. SYSTEM OF RAILWAY MAIL COLLECTION. LYTLE S. ADAMS, Washington, D. C. Filed Dec. 31, 1930. Serial No. 505,883. 20 Claims. (Cl. 258—8.)



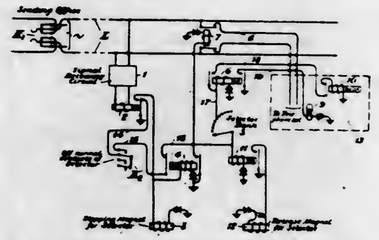
7. In combination with a track and a passenger car running thereon, a fixed chute mounted to discharge above said track, a hopper alongside the track below the discharge level of said chute, and a chute passing through the car for receiving articles from said chute and discharging articles into said hopper.

1,885,213. AUTOMOBILE PARKING APPARATUS. WILLIAM J. AITKEN, Chicago, Ill., assignor, by mesne assignments, to National Parking Garages, Incorporated, a Corporation of Delaware. Original application filed July 19, 1929, Serial No. 379,509, now Patent No. 1,803,583, dated May 5, 1931. Divided and this application filed Sept. 25, 1930. Serial No. 484,273. 12 Claims. (Cl. 254—35.)



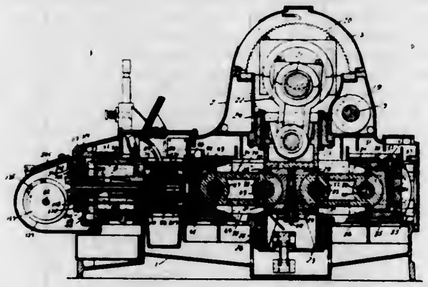
1. An apparatus for handling automobiles comprising a parker having a frame and supporting wheels, means for driving said wheels, and power transmitting means operatively arranged to engage the wheels of the parker and the wheel of an automobile for rotating the latter.

1,885,214. SIGNALING SYSTEM. MILTON L. ALMQUIST, Maplewood, and ALBERT C. THOMPSON, Mountain Lakes, N. J., assignors to American Telephone and Telegraph Company, a Corporation of New York. Filed Mar. 18, 1932. Serial No. 599,756. 8 Claims. (Cl. 179—85.)



1. A transmission line having a plurality of stations connected thereto, means for applying code signals to said line, and means at each of said stations responsive to said code signals, each of said responsive means comprising a selector mechanism including a switch arm cooperating with a bank of contacts, a stepping magnet operated by said code signals for stepping said selector switch arm ahead, relay means operated by said code signals and released at an interval after said code signals cease, and a signaling circuit for said station connected to one of the contacts of said selector bank and completed by the release of said relay.

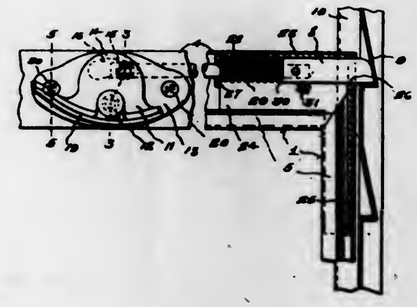
1,885,215. DIAL ARRANGEMENT FOR NUT MAKING APPARATUS. SAMUEL W. AVIS, Millbrook, Greenwich, Conn., assignor to Russell, Burdsall & Ward Bolt & Nut Company, Port Chester, N. Y., a Corporation of New York. Original application filed June 23, 1928, Serial No. 287,828, and in Switzerland June 10, 1929. Divided and this application filed Mar. 19, 1930. Serial No. 437,082. 4 Claims. (Cl. 192—150.)



1. A safety device for drive mechanisms comprising a rotatably mounted ring, a coil spring mounted in said ring and normally retained under compression, a locking member engaging said ring, a pawl normally retained in an inoperative position by said locking member, means for releasing said locking member when the drive mechanism is disconnected whereby said ring is rotated in a reverse direction by said spring and said pawl assumes an operative position, and ratchet teeth formed on the driven member and adapted to be engaged by said pawl.

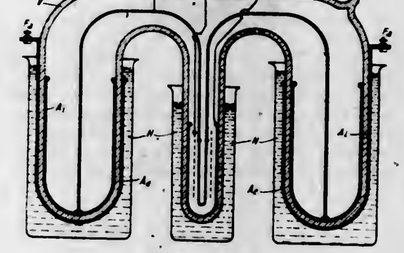
1,885,216. WINDOW AND WINDOW SASH CONSTRUCTION. ROY T. AXE, Syracuse, N. Y., assignor to The O. M. Edwards Company, Inc., Syracuse, N. Y., a Corporation of New York. Filed June 4, 1929. Serial No. 368,315. 6 Claims. (Cl. 292—173.)

1. In a window sash construction, the combination of a hollow sash member, a latch bolt movable lengthwise of said member within the same and normally projecting beyond the edge of the outer side of the sash and an operating member mounted on the sash member and comprising a pivoted lever having one arm connected to the latch



bolt and its other arm provided with a hand engaging portion extending transversely of the axis of the lever and the former arm and extending to the opposite sides of the axis of the lever.

1,885,217. ELECTRON DISCHARGE DEVICE. LUCIEN BEGIN, Paris, France, assignor of one-half to William B. Weaver, Birmingham, Ala., and Harold F. Wilhelm, New York. Filed Mar. 2, 1926, Serial No. 91,670, and in France Mar. 14, 1925. 8 Claims. (Cl. 250—27.5.)

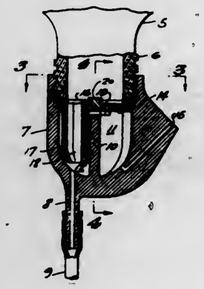


1. In combination, an envelope of dielectric material having an electric device therein, means for leading alternating current energy to said device including a condenser whereby said dielectric material is used as the dielectric of said condenser, and means for leading direct current energy to said device.

1,885,218. NOZZLE FOR ASEPTIC DISCHARGE OF LIQUIDS. PHOEBUS BERMAN, Los Angeles, Calif. Filed Apr. 19, 1932. Serial No. 606,157. 4 Claims. (Cl. 128—272.)

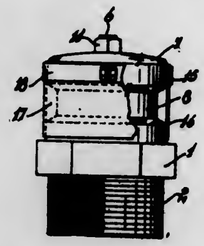
1. A nozzle cap of the character described comprising a shell having at one end a neck adapted to fit upon the neck of an inverted bottle and a chamber at the other end, a longitudinally extending web in said chamber dividing the latter into an air washing well and a vent well, an outlet for liquid at the bottom of said vent well having a stem for connection with a tube, an air passage extending upwardly from the bottom of said air washing well and opening to the exterior of said shell, a wall extending transversely across said shell and covering said wells,

there being a port at the upper edge of said web placing said wells in communication, a delivery duct extending from above said wall to said outlet whereby liquid may



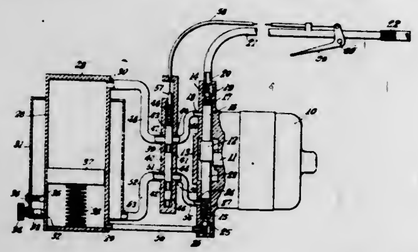
pass from said bottle to said outlet, and a vent duct extending from above said wall to a level above the bottom of said vent well.

1,885,219. SPRAY HEAD. CLAUD H. BILLS, La Habra, and GLENN G. GRISWOLD, Pico, Calif. Filed Jan. 20, 1930. Serial No. 422,060. 6 Claims. (Cl. 169—37.)



6. For use in producing a liquid spray, a hollow cylindrical head member having enlarged portions at each end provided with oppositely disposed faces having oppositely disposed inclined outlet ports therein so arranged that the jets therefrom impinge upon each other to discharge a spray substantially normal to the axis of said head.

1,885,220. HYDRAULIC GREASE DISPENSING SYSTEM. ANTHONY BIZZARRI, New York, N. Y. Filed Aug. 13, 1931. Serial No. 556,755. 20 Claims. (Cl. 221—47.1.)

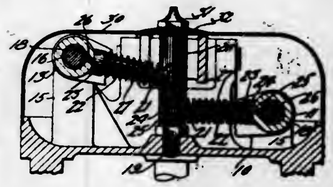


1. A hydraulic grease dispensing device, comprising a grease-containing reservoir, a piston operable in said grease-containing reservoir, a fluid-containing chamber, means communicating with said grease-containing reservoir to eject the grease therefrom under pressure, means communicating with said fluid-containing chamber to force the fluid therein beneath the piston in said grease-containing reservoir, and means to control the communications between said grease-containing reservoir and said first named means, and said fluid-containing chamber and said second named means.

1,885,221. CONDUCT OF EXOTHERMIC ACETALDEHYDE CONDENSATION REACTIONS. EDMOND JOHNSON BOAKE and LEONARD WILLIAM ERNEST TOWNSEND, Stratford, London, England, assignors to A. Boake, Roberts and Company Limited, London, England, a British Joint-Stock Company. Filed Mar. 23, 1931, Serial No. 524,752, and in Great Britain Mar. 29, 1930. 20 Claims. (Cl. 260—140.)

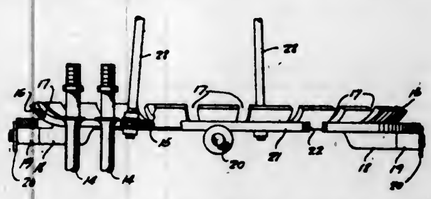
1. The improvement in the process for the condensation of acetaldehyde in the presence of an alkaline condensation catalyat and water, comprising the step of forming the water for the reaction in situ in the reaction sphere, and coincidentally controlling the reaction temperature, by causing the acetaldehyde to endothermically dehydrate an alkali-metal, hydrated-salt, present in the reaction mass in the solid state.

1,885,222. LUBRICATING SYSTEM. JOSEPH J. BOLAND, Keyport, N. J., assignor, by meane assignments, to Aeromarine Plane & Motor Company, Inc., Keyport, N. J., a Corporation of New York. Filed June 10, 1929. Serial No. 369,857. 6 Claims. (Cl. 184—9.)



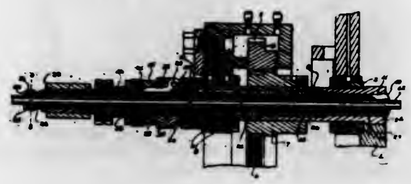
1. In a lubricating device, the combination with a rotatable member having an orifice for the introduction of a lubricant, of a hollow member having laterally extending branches of tubular formation rigid therewith, and an element telescopically mounted on each of said branches; each of said elements being adapted to yieldingly engage a rotatable member at the orifice for the purpose of conveying a lubricant thereto from said hollow member.

1,885,223. ROD RACK. JOHN G. BOUSLOG, Long Beach, Calif. Filed Feb. 3, 1930. Serial No. 425,571. 5 Claims. (Cl. 211—60.)



1. A rod rack comprising a body having a plurality of slots with front ends forming mouths disposed in a row, a gate confronting the mouths of said slots to close the latter, said gate being shiftable across said mouths and having an opening registerable with any selected slot for the admission or withdrawal of a rod, a bore in said body at the margin thereof and disposed between adjacent slots, the axis of said bore passing through said gate, and a stop member insertable in said bore to project through the opening in said gate and to lock the latter against shifting movement.

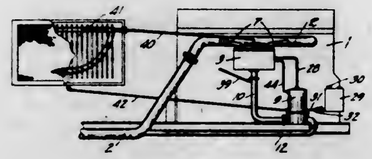
1,885,224. AUTOMATIC TOOL MACHINE. EARL W. BRINKMAN and EDWARD S. KLINE, Rochester, N. Y., assignors to Davenport Machine Tool Co., Inc., Rochester, N. Y., a Corporation of New York. Filed Apr. 20, 1931. Serial No. 531,381. 7 Claims. (Cl. 29—62.)



1. A work holder for automatic tool machines comprising a chuck carrying tube, a feed tube arranged within the same and having feeding jaws, and an adjustable non-gripping aligning device at the intake end of the feed tube for aligning the faces of non-circular work with the faces of the chuck and the feeding jaws as the non-circular work freely slides through the aligning device.

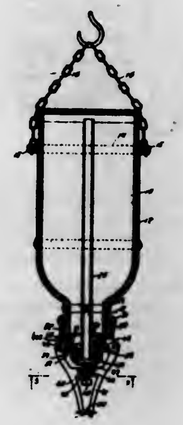
6. In a machine of the character specified and in combination with a work-receiving tube provided with a chuck having flat faced jaws, a feed tube within and projecting at one end beyond the work-receiving tube and provided with a chuck having jaws provided with flat faces corresponding with the flat faces of the chuck applied to the work-receiving tube, means preventing relative turning of the two tubes to maintain the flat faces of corresponding jaws in alignment, and means for reciprocating the feed tube, a work guide applied to the projecting end of the feed tube and provided with flat faces corresponding with the flat faced jaws of the work receiving and feed tube chucks, and externally tapered, a collar secured to the projecting end of the feed tube and internally tapered to receive the tapered portion of the work guide, and a nut fitted on the collar and engageable with the work guide to effect a clamping thereof in the required adjusted position.

1,885,225. HEATING SYSTEM. CLAUDE G. BORDEAUX, Slingerlands, N. Y. Filed June 12, 1930. Serial No. 460,632. 9 Claims. (Cl. 237—12.3.)



1. In a heating system, a source of hot gases, a radiator, a steam generator, a conduit connecting said generator to said radiator, a primary heater and generator feeding device connected to said generator and adapted to contain a small quantity of liquid, means for heating said primary heater by said hot gases and thereby expanding the fluid therein and forcing the same into said generator in small quantities, and means for returning the condensate from said radiator to said primary heater.

1,885,226. FIRE EXTINGUISHER. WILHELM B. BRONANDER, Montclair, N. J. Filed June 14, 1930. Serial No. 461,142. 6 Claims. (Cl. 169—26.)



1. A fire extinguisher comprising a receptacle, a discharge opening, a member for enclosing and sealing said opening, and heat controlled means for holding said sealing member in operative position and for positively ejecting said sealing member when released from said holding position.

1,885,227. GROUNDING DEVICE. STEPHEN N. BUCHANAN, New York, N. Y., assignor to The Thomas & Betts Co., Elizabeth, N. J., a Corporation of New Jersey. Filed Nov. 15, 1927. Serial No. 233,894. 16 Claims. (Cl. 247—1.)

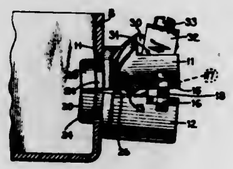


15. A grounding device comprising a thin flat segmental ring having a gap in its periphery, means having an inclined outer surface projecting from the side of the ring, and operating means mounted upon the ring opposite the gap and directed towards the axis of the ring.

1,885,228. CABLE CONNECTER. STEPHEN N. BUCHANAN, Elizabeth, N. J., assignor to The Thomas & Betts Co., Elizabeth, N. J., a Corporation of New Jersey. Filed June 11, 1930. Serial No. 460,317. 13 Claims. (Cl. 247—25.)

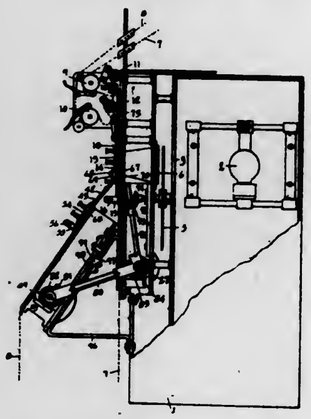
1. A connecter comprising a member formed of two longitudinal sections, rockers upon one of the sections engaging the edge of the other section, operating means to rock the sections relatively to each other to expand

and contract one end of the member, box hole anchorage means upon the expansible end of the member, clamping means independent of the operating means to clamp a



cable or conduit within the member, and closure means closing the space between the sections caused by the rockers.

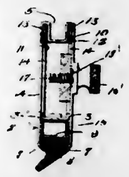
1,885,229. PRINTING MACHINE FOR MOVING PICTURE FILMS. JAKOB BURKHARDT, Detroit, Mich., assignor to Third Dimension Pictures, Inc., New York, N. Y., a Corporation of New York. Filed Jan. 7, 1929. Serial No. 330,709. 14 Claims. (Cl. 95—75.)



1. The combination in a printing machine including an exposure window and pressure shoe disposed in opposed relation to the window, of means for feeding a negative engaging the film at the rear of said pressure shoe, means for feeding a positive film disposed at an angle to the path of the negative and engaging the positive at the rear of said pressure shoe, means for driving said film feed means in synchronism so that their periods of rest coincide, a compensating roller disposed to engage the positive film at the rear of said pressure shoe, a spindle for said roller provided with eccentric supporting portions, said spindle being provided with a fingerpiece and with a pointer, there being engaging indicia operatively associated with said pointer, and means for securing said spindle in its adjusted positions.

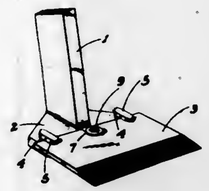
1,885,230. SHEET METAL SASH AND VENTILATOR. EDWARD F. CHAFFEE, Syracuse, N. Y., assignor to The O. M. Edwards Company Inc., Syracuse, N. Y., a Corporation of New York. Filed May 4. 1927. Serial No. 188,616. Renewed Nov. 21, 1930. 15 Claims. (Cl. 98—97.)

1. The combination of a window sash having a hollow member formed with openings in its opposite walls, a ventilator member slidable in the hollow sash member and having opposing walls formed with openings mov-



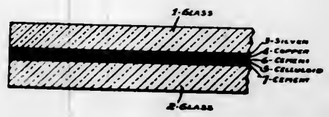
able into and out of register with the openings in the sash member and a screen covering the openings in one of said walls of the ventilator member.

1,885,231. CUTTING BLADE MOUNTING FOR GROUND WORKING IMPLEMENTS. LOOK L. CHONG, JUE L. CHONG, and SAM L. CHONG, Isleton, Calif. Filed Aug. 18, 1931. Serial No. 557,776. 1 Claim. (Cl. 97—198.)



Means to detachably secure a blade against a supporting pad, said pad having a tapped hole extending therethrough; said means comprising a headed screw projecting through the blade and threaded into the pad-hole; said screw having a non-circular bore extending completely therethrough to receive a turning tool of similar form whereby upon the insertion of the tool, any dirt in the bore will be pushed out of the same.

1,885,232. MIRROR. WILLIAM H. COLBERT, Brackenridge, Pa., assignor to Duplate Corporation, a Corporation of Delaware. Filed Oct. 20, 1930. Serial No. 489,923. 2 Claims. (Cl. 88—1.)

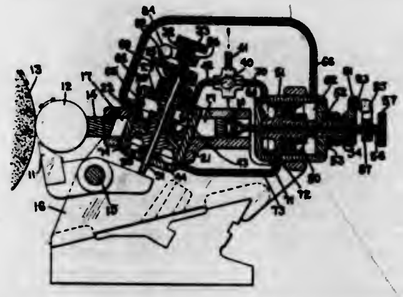


1. A composite mirror comprising a glass sheet silvered on its rear face, a coating of a different metal covering the silvering, a sheet of pyroxylin plastic cemented to said coating, and a third sheet of material secured to the rear face of the plastic sheet.

1,885,233. FLUID PRESSURE OPERATED STEADYREST. RAYMOND A. COLE, Worcester, Mass., assignor to Norton Company, Worcester, Mass., a Corporation of Massachusetts. Filed Feb. 10, 1926. Serial No. 87,414. 14 Claims. (Cl. 51—238.)

7. A steadyrest for grinding machines comprising a steadyrest frame, a pair of work supporting shoes mount-

ed on said frame which are arranged to steady the work during grinding, one of said shoes being arranged to take the cutting thrust of the grinding wheel and the

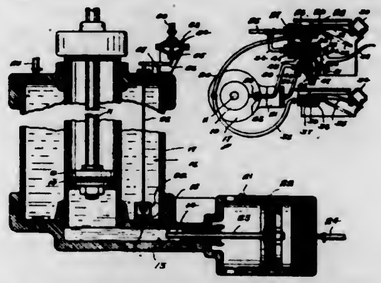


other shoe arranged to take the feeding thrust thereof, and individual fluid pressure motors to separately actuate said shoes.

1,885,234. CERAMICS. HENRY L. CROWLEY, East Orange, and ROBERT M. CROWLEY, Jersey City, N. J., assignors to Henry L. Crowley & Co. Inc., East Orange, N. J., a Corporation of New Jersey. Filed Mar. 2, 1929. Serial No. 344,091. 24 Claims. (Cl. 25—156.)

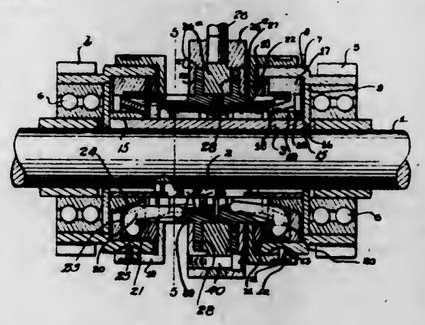
1. The method of producing a non-corrosive ceramic which comprises extruding under pressure a pulverized material and binder free from alkali and baking the same, said material and binder being freed from alkali by heating below the fusion temperature.

1,885,235. FOLLOW-UP ACTUATING MECHANISM FOR PRESSING MACHINES. ERNEST DAVIS, Syracuse, N. Y., assignor to The Prosperity Company Inc., Syracuse, N. Y., a Corporation of New York. Filed July 3, 1929. Serial No. 375,682. 1 Claim. (Cl. 68—9.)



In a pressing machine in combination, cooperative pressing elements, one of which is movable with respect to the other to open and close the press; actuating means for the movable pressing element including a cylinder and piston hydraulic motor to close the press successively under light and heavy pressure; a hydraulic fluid reservoir connected to the cylinder of said hydraulic motor; a normally open passage communicating with the reservoir and the cylinder; a compressed air supply line connected to said reservoir; first operator-operated control means in the connection between the supply line and the reservoir operable to supply compressed air thereto to displace the hydraulic fluid and actuate the hydraulic motor to close the press under light pressure and normally in a position to exhaust the air from the reservoir; compressed air operated means for closing said passage and applying additional pressure to the hydraulic fluid in the cylinder including a member movable into the hydraulic fluid in the cylinder to displace the same while the passage is closed; and a second operator-operated control means operable to connect the compressed air supply line with said compressed air operated means while the first operator-operated control means are in operated position and normally in a position to exhaust the air from the air operated means.

1,885,236. FRICTION CLUTCH. WILLIAM S. DAVENPORT, Rochester, N. Y., assignor to Davenport Machine Tool Co., Inc., Rochester, N. Y., a Corporation. Filed Sept. 14, 1928. Serial No. 305,974. 15 Claims. (Cl. 192—93.)



1. The combination with a driving member and a driven clutch member having a surrounding external clutch face, of a compressible clutch ring surrounding the driven clutch member and having an internal clutch face for engaging the clutch face of the driven clutch member, said compressible clutch ring also having a tapering outer face, an annular axially movable compression member having a tapering face for cooperating with the tapering face of the compressible clutch member to force the latter into engagement with the driven clutch member, and means connecting the compression member to the driving member independently of the compressible member to drive the compression member from the driving member.

1,885,237. BELT CLIP CARD. JAMES K. DIAMOND, Grand Rapids, Mich., assignor to Clipper Belt Lacer Company, Grand Rapids, Mich., a Corporation of Michigan. Filed June 29, 1931. Serial No. 547,682. 6 Claims. (Cl. 1—56.)

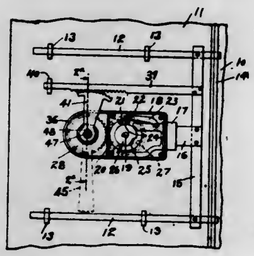


1. In a device of the class described, a channel shaped carding member of flexible material having a base and spaced apart sides, devices mounted on said sides having parts extending therethrough from the outside inwardly, said parts projecting beyond the inner surfaces of said sides and a stiffening member supported by said inwardly projecting parts and located in spaced apart relation with said base at its contacting edges, said stiffening member extending between said sides and being substantially the width of the distance between said sides.

1,885,238. LOCKING MECHANISM. WILLIAM F. DIBEL, Rochester, N. Y., assignor to Sargent & Greenleaf, Inc., Rochester, N. Y., a Corporation of New York. Filed Oct. 31, 1930. Serial No. 492,477. 5 Claims. (Cl. 109—8.)

1. In combination, a container having a closure, locking elements for the closure connected by a carrier bar,

a bolt for protecting the locking elements arranged when in locking position to engage and hold the carrier bar in check, a combination lock including a rotary operating member and notched tumblers for guarding the bolt, an operating part for the bolt pivoted thereon and arranged to take into the notches of the tumblers upon successful operation of the combination and to be actuated by the



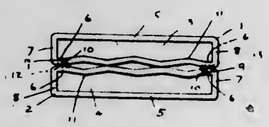
tumblers upon rotation of the operating member whereby to shift the bolt, a spindle journaled in said operating member and having an operating part on its outer end, an arm fixed on the inner end of the spindle, and a part for releasing the carrier bar extending therefrom into engagement with and arranged to be operated by said arm.

1,885,239. SLIDE BUCKLE. JOHN H. DOMKEE, West Haven, Conn., assignor to The Wire Novelty Manufacturing Company, West Haven, Conn., a Corporation of Connecticut. Filed July 16, 1931. Serial No. 551,117. 2 Claims. (Cl. 24—163.)



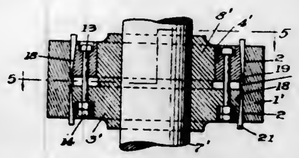
2. A slide buckle comprising a pair of loops, each loop being formed from a separate piece of wire, the lower bar of one loop and the upper bar of the other loop being formed with projections extending out of the plane of its respective loop, each projection having an apex intersected by its line of altitude dividing the projection into halves, the projections of one bar being unconnected to the projections of the other bar, and means securing the pair of loops one to the other.

1,885,240. SLIDE BUCKLE. JOHN H. DOMKEE, West Haven, Conn., assignor to The Wire Novelty Manufacturing Company, West Haven, Conn., a Corporation of Connecticut. Filed July 16, 1931. Serial No. 551,118. 3 Claims. (Cl. 24—163.)



3. A slide buckle comprising a pair of substantially rectangular loops, each loop formed from a separate piece of wire, and each loop having upper and lower horizontal bars and side structures, the wire end of each loop abutting one end against the other in one horizontal bar adjacent a side structure, the pair of loops being so associated, one with the other, in a common plane, that the engaging metal surfaces of both wire ends of each loop and an adjacent portion of a horizontal bar of the other loop may be united in permanent intimate union.

1,885,241. CRUSHING ROLL. CHARLES B. DUCKWORTH, Magna, Utah. Filed Oct. 24, 1930. Serial No. 490,935. 4 Claims. (Cl. 287—52.01.)

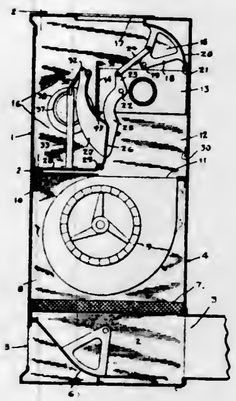


1. A crushing roll comprising a cylindrical shell having a straight core receiving bore extending inwardly from each end thereof and inwardly projecting retaining means between said bores, two core members disposed within the respective bores with their inner ends engaging said retaining means and having their peripheral surfaces tapered radially inwardly from their inner to their outer ends, means securing said core members together and in engagement with said retaining means, a plurality of wooden wedges fitting tightly between each of said core members and said shell, and cooperating abutment means on said shell and on one of said core members engaging one another to prevent relative turning of said shell on said core members.

1,885,242. MANUFACTURE OF ALDOLS. THOMAS HAROLD DURRANS, Stratford, London, England, assignor to A. Boake, Roberts and Company Limited, London, England, a British Joint Stock Company. Filed Mar. 14, 1931, Serial No. 522,788, and in England Mar 21, 1930. 8 Claims. (Cl. 260—40.)

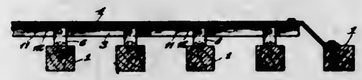
1. The condensation of acetaldehyde to acetaldol by contact of the aldehyde with a saturated solution of normal sodium carbonate in the continuous presence throughout the reaction of free water and of a large reserve of potential catalyst in the form of undissolved normal carbonate.

1,885,243. DOUBLE DAMPER FOR HEATING AND VENTILATING UNITS. WARREN EWALD, Ardsley-Philadelphia, and PERCIVAL P. HENSHALL, Philadelphia, Pa., assignors to John J. Nesbitt, Inc., Philadelphia, Pa., a Corporation of New Jersey. Filed Apr. 25, 1930. Serial No. 447,271. 3 Claims. (Cl. 98—37.)



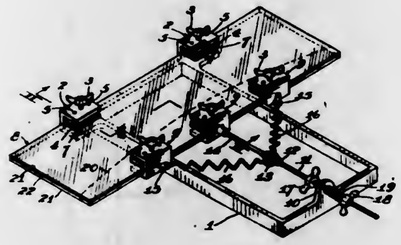
2. A heating and ventilating unit having, in combination, a heating element located at its back, an arcuate damper pivotally mounted above the heating element midway between the front and back thereof, and means for giving the damper circular movements whereby at one time it may shut off the corner of the casing above the heating element and deflect air passing from the latter toward the front of the casing and at another time it may shut off the passage of air through the radiator and prevent radiation therefrom.

1,885,244. RAILROAD HIGHWAY CROSSING. GEORGE FEANEDING and HERBERT N. WEST, Cincinnati, Ohio, assignors to Weir Kilby Corporation, Norwood, Ohio, a Corporation of Ohio. Filed May 5, 1931. Serial No. 535,174. 2 Claims. (Cl. 238—8.)



1. A railway highway grade crossing, comprising, rails and cross ties, beams extending parallel with the rails mounted upon and secured to the cross ties, a pair thereof longitudinally adjacent opposite sides of a rail, chairs for said pair of beams bearing upon and fixed to respective ties connecting the beam to the rail and providing a rest for the rail, and plates supported upon and secured to said beams, the plates each having an end depressed to overlie the corresponding ends of the beams and to bear upon and be secured to a cross tie.

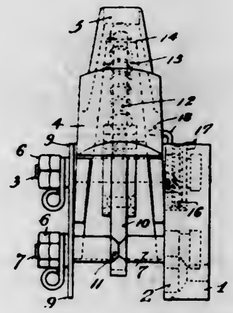
1,885,245. APPARATUS FOR SEPARATING COMPOSITE GLASS PLATES. EARL L. FIX, New Kensington, Pa., assignor to Duplate Corporation, a Corporation of Delaware. Filed Feb. 21, 1929. Serial No. 341,680. 2 Claims. (Cl. 49—81.)



1. Apparatus for separating a composite glass plate made up of a pair of glass sheets secured to the opposite sides of a sheet of tough material after the glass sheets have been cracked, comprising gripping devices faced with yielding anti-slip material adapted to be clamped to the opposite edges of said plate, and spreading means extending between said devices and adapted to apply stress tending to separate said devices and thus stretch the sheet of tough material, said spreading means including a spring and adjustable stop means for limiting the range of movement of the spreading means.

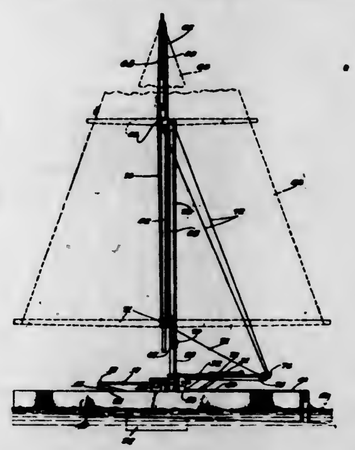
1,885,246. AUTOMATIC RETURN TOGGLE SWITCH. PARIS R. FORMAN, Rahway, N. J., assignor to National Pneumatic Company, New York, N. Y., a Corporation of West Virginia. Filed Feb. 2, 1929. Serial No. 337,105. 7 Claims. (Cl. 200—67.)

1. In a single-pole double-throw switch, a support having a pivot pin and a plurality of contacts therein, said pivot pin forming one terminal of the switch, an operating member journaled on said pivot pin, a switch arm pivoted on said pivot pin, and means connecting said member and arm for snapping said arm from one contact to the other



when said member is moved past the center of its path of movement together with means for normally holding said switch arm against one of said contacts.

1,885,247. SAILBOAT. JOHN PHILLIPS FOX, Gary, Ind. Filed July 17, 1929, Serial No. 378,877. Renewed Mar. 4, 1932. 12 Claims. (Cl. 114—39.)

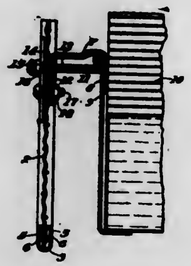


1. In a sailing craft, floatable means, a mast thereon, and sail supporting means including a vertical spirit attached immediate its ends to said mast, said sail supporting means being pivotal about said mast as a vertical center and swingable relatively to said mast about a transverse center, and a sail on said sail supporting means attached thereto intermediate its top and bottom adjacent the mast head whereby the portion of the said above said attachment may be lowered for reducing sail area.

1,885,248. MOTOR VEHICLE RADIATOR SHIELD. AUGUSTUS J. FRAME, Columbus, Ohio, assignor to The Columbus Auto Brass Company, Columbus, Ohio, a Corporation of Ohio. Filed July 17, 1931. Serial No. 551,438. 6 Claims. (Cl. 293—54.)

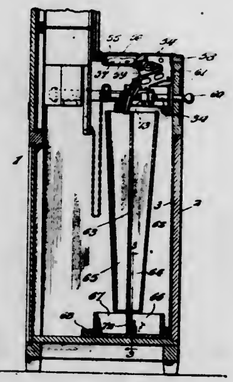
1. The combination with the radiator shell of a motor vehicle, of a foraminated shield positioned in front of the radiator shell, a bracket having spaced depending legs,

one of said legs being engaged with the radiator shell and the other of said legs engaging the shield body, and a screw threadedly mounted in an opening provided in the leg of said bracket in engagement with said shield, the



forward end of said screw being engaged with said radiator shell to place said bracket under tension and to maintain the same in frictional holding engagement with said shell.

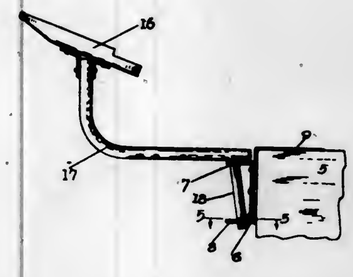
1,885,249. COIN RECEPTACLE FOR VENDING MACHINES. BENJAMIN L. FAY, St. Louis, Mo., assignor to National Sales Machine Company, St. Louis, Mo., a Corporation of Missouri. Filed Nov. 18, 1929, Serial No. 408,081. Renewed Mar. 7, 1932. 1 Claim. (Cl. 194—1.)



In a vending machine cabinet having a plurality of coin-controlled mechanisms therein extending in a series from side to side thereof, a hopper disposed below said mechanisms and having its upper end coextensive with the series and its sides converging downwardly, a partition disposed within the hopper and forming front and rear compartments, and a coin receptacle disposed beneath the small end of the hopper and provided with a central partition defining separate compartments registering with the compartments of the hopper.

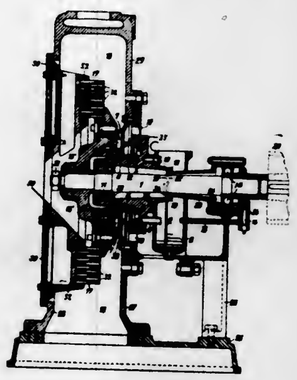
1,885,250. BOOTBLACK STAND FOOT REST CONSTRUCTION. LEE E. FRYE, San Francisco, Calif. Filed Sept. 8, 1931. Serial No. 561,740. 1 Claim. (Cl. 15—265.)

In a device of the character described, a bracket having out-turned horizontal ends one above the other, one of said out-turned ends having a circular opening formed therethrough, the other of said out-turned ends having a keyhole shaped opening formed therethrough, a cylindrical pin extending through said circular opening and through the round portion of the keyhole opening, one end of said pin



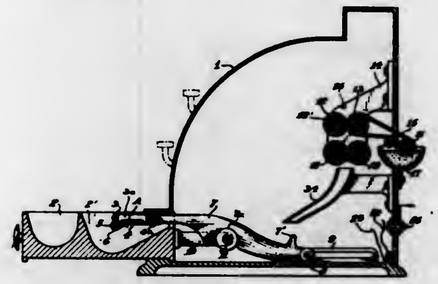
having the opposite sides thereof flattened to enable said pin to enter the slot portion of said keyhole opening, the opposite end of said pin from said flattened portion having an arm secured thereto, and a supporting block positioned on said arm.

1,885,251. CRUSHING AND GRINDING MACHINE. OTTO GAISER, Augsburg, Germany, assignor to Firm Alpine Aktien-Gesellschaft Machinenfabrik & Eisengiesserei, Augsburg-Goggingen, Germany. Filed Oct. 1, 1929. Serial No. 396,511. 11 Claims. (Cl. 83—11.)



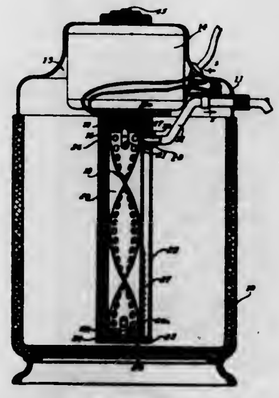
1. In a grinding and crushing machine for pulverizing material, a crushing and grinding chamber, a rotor operative in said chamber, a shaft rotatably mounted in a plurality of ball bearings and to which said rotor is attached, an oil container, means for continuously feeding oil to said bearings while said shaft and rotor are revolving, means for guiding said oil through said bearings and back to said container, an oil chamber located in the oil path between one of said bearings and said oil container, a first and second means for isolating said oil chamber from said grinding chamber, an air chamber located between said first and said second separating means and having openings communicating with the atmosphere and means attached to said rotor within said grinding chamber for continuously by preventing the passage of particles of material to the part of said chamber adjacent said first separating means.

1,885,252. CASH REGISTER. HENRY J. GAISMAN, Hartsdale, N. Y. Filed Feb. 2, 1931. Serial No. 512,850. 20 Claims. (Cl. 133—11.)



3. A cash register provided with a money drawer, means to disinfect money and a money receiver operative by the drawer to present money to the disinfecting means.

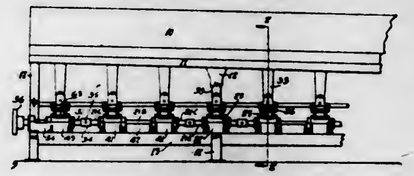
1,885,253. AGITATING MECHANISM. ROBERT R. GONSETT, Los Angeles, Calif., assignor of one-tenth to Virgil V. Ullom, one-sixth to Howard A. Burrell, one-tenth to Wesley D. Spencer, Los Angeles, Calif., and three-fifteenths to Buck Walker, Whittier, Calif. Filed May 9, 1927. Serial No. 189,936. 4 Claims. (Cl. 259—9.)



1. A soap lathering device, comprising a cylindrical chamber, a slightly helical agitator extending throughout the length of the chamber forming substantially a paddle device within the chamber, the chamber having a small inlet at one end for the entrance of matter to be agitated and closed at its opposite end except for a small single outlet at said opposite end, the latter for the slow discharge of the agitated matter from the chamber, a finished product.

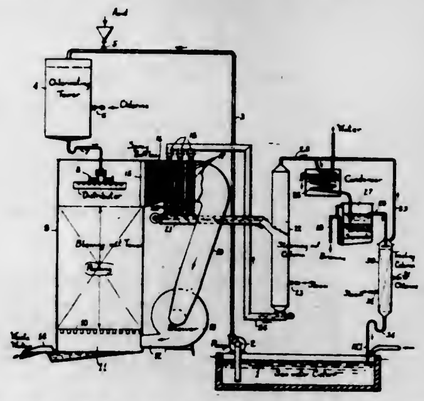
1,885,254. ARTICULATED DRIVE SHAFT FOR FLAT SCREENS. SIDNEY B. GOSSETT, Portland, Oreg., assignor to Electric Steel Foundry Company, Portland, Oreg. Filed Apr. 7, 1930. Serial No. 442,244. 2 Claims. (Cl. 92—32.)

1. A flat screen the combination of an elongated screen box having a series of vibrator diaphragms forming the bottom thereof, and an elongated articulated drive shaft parallel with the length of the screen box for vibrating said diaphragms consisting of a plurality of sections of shafting flexibly joined, each of said sections having dia-



phragm operating means mounted thereon and having anti-friction bearings on both sides of said diaphragm operating means.

1,885,255. CONTINUOUS PROCESS FOR RECOVERING BROMINE FROM SEA WATER AND THE LIKE. JOHN J. GREBE and RAY H. BOUNDY, Midland, Mich., assignors to The Dow Chemical Company, Midland, Mich., a Corporation of Michigan. Filed July 2, 1930. Serial No. 465,438. 12 Claims. (Cl. 23—218.)



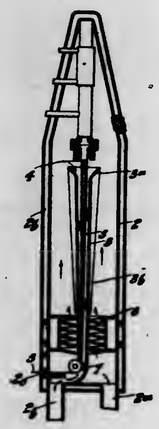
9. The process of recovering bromine which comprises contacting a current of bromine-laden air with a body of an adsorbent material of the class consisting of active carbon, active charcoal, and a metallic oxide gel, heating the bromine-charged adsorbent material with steam to distill the bromine therefrom, condensing the vapors of water and bromine and separating liquid bromine from the aqueous solution thereby obtained.

10. The continuous process of extracting bromine from sea water and the like which comprises acidifying the same, treating with chlorine to liberate bromine therein, blowing out the bromine with a current of air, removing bromine from such air current by contact with a body of active charcoal, recycling the debrominated air to said blowing-out step, heating the bromine-charged charcoal with steam to vaporise bromine therefrom, condensing the vapors, separating liquid bromine from the aqueous distillate containing hydrobromic acid, treating the latter with chlorine to liberate bromine therefrom, distilling off such bromine with steam, returning the vapors to the condensing step and employing the residual aqueous hydrochloric acid solution for acidifying more raw sea water.

1,885,256. MANUFACTURE OF ARTIFICIAL SILK. ADOLF EWALD GULL, London, England. Filed Sept. 10, 1928, Serial No. 305,057, and in Great Britain Sept. 14, 1927. 3 Claims. (Cl. 18—8.)

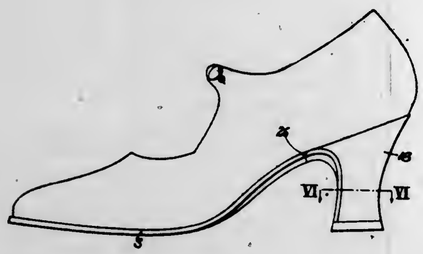
1. Apparatus for the manufacture of artificial silk by the dry spinning process comprising a drying chamber, a filament extrusion nozzle within the upper portion of the

chamber, a gas inlet in the lower end of the drying chamber, a gas outlet also in the lower end of the drying chamber, a central tube within the chamber, a heater for the gas in the drying chamber, the upper end of the tube being open to the gas space within the chamber while the lower



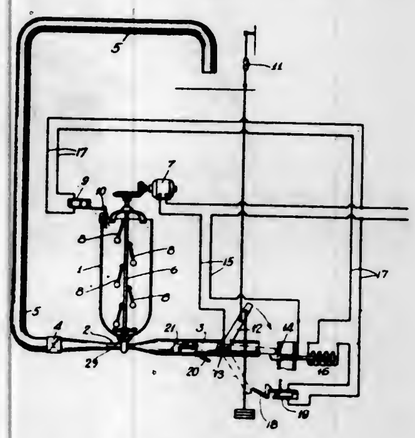
end of the tube forms an outlet for the filaments and the gas at the lower end of the chamber, the central tube being of gradually decreasing cross sectional area throughout its length, and the gas heater arranged on the outside of the central tube.

1,885,257. METHOD OF MAKING SHOES AND HEELS. NIKOLAUS HÄRIG, Pirmasens, Palatinate, Germany, assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Mar. 23, 1928, Serial No. 264,153, and in Germany Apr. 13, 1927. 5 Claims. (Cl. 36—24.5.)



1. That improvement in the art of making shoes which consists in providing a Louis heel with a thin feather edge extending entirely across the heel at the front end of its seat face and with a breast surface having a heightwise curvature shaped to merge into the lengthwise curvature of the shank portion of the sole of a shoe, attaching the heel to a shoe so as to form a close joint between the upper portion of the heel breast and the sole of the shoe, applying a coating to both the bottom of the sole and the breast of the heel to obliterate said joint and simulate the appearance of the surface of a sole flap covering the heel breast, and finishing a narrow strip at each side of the heel adjacent to the respective breast corner to simulate the appearance of the edge of said sole flap.

1,885,258. FOAM EXTINGUISHING SYSTEM. GEORGE H. HARRIS, Utica, N. Y., assignor to American La France and Foamite Corporation, New York, N. Y., a Corporation of New York. Filed Aug. 9, 1928. Serial No. 298,467. 11 Claims. (Cl. 169—15.)



4. A foam system including a receptacle containing solid foam-making material, a water supply, means for continuously feeding such material to the water and means responsive to the absence of such material in the receptacle for rendering the feeding means inactive.

6. In a system for feeding dry material to a water stream, a receptacle containing a supply of the material, a movable member within the receptacle normally restrained from operative movement by the resistance opposed by the presence of said material in the receptacle, and a control member adapted to be engaged by said member when it overcomes said resistance.

1,885,259. ADJUSTABLE ARCH CONSTRUCTION FOR SHOES. MORRIS HIRSHFIELD, Brooklyn, N. Y. Filed Sept. 4, 1931. Serial No. 561,175. 8 Claims. (Cl. 36—71.)



1. In an arch construction for shoes, in combination, an insole, a shank member, a plate member below said shank member in contact therewith and fixed at its ends to said insole, means loosely connecting said shank and plate members, said insole and shank member being provided with registering openings, and an adjusting screw threaded into the opening in said shank member and bearing against said plate member, said screw being accessible from the interior of the shoe through said registering openings.

1,885,260. STICK GAME. KARL CHRISTIAN HÖGLIND, Jersey City, N. J. Filed Nov. 15, 1929. Serial No. 407,319. 6 Claims. (Cl. 273—153.)

6. In a pick for individually lifting a plurality of scrambled sticks, a handle having a longitudinal hollow

portion, a hook having a stem portion engaging through and extending from said hollow portion, means for urging

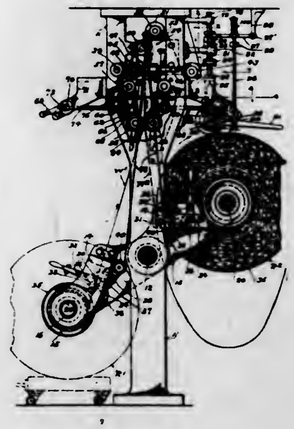


said hook downwards, and means for holding the hook in various adjusted rotative positions, comprising a peg engageable in radial slots formed on the top of the handle.

1,885,261. STENCIL SHEET. SHINJIRO HORII, Kanda-Ku, Tokyo, Japan. Filed Oct. 17, 1931. Serial No. 569,547. 6 Claims. (Cl. 41—38.6.)

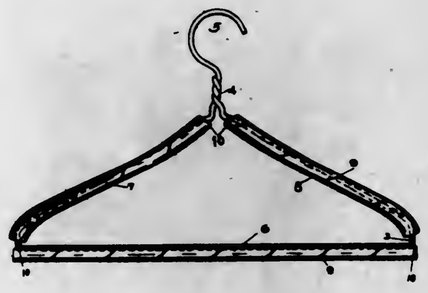
1. A stencil sheet adapted to be stencilized by pressure, comprising a base of thin tissue paper coated with a mixture of mineral waxes and an esterification product of bleached montan wax and polyhydric alcohols.

1,885,262. MECHANISM FOR SUPPLYING WEBS OF PAPER TO A ROTARY PRINTING PRESS. ALBERT J. HORTON, White Plains, N. Y., assignor to R. Hoe & Co., Inc., New York, N. Y., a Corporation of New York. Filed Apr. 5, 1928. Serial No. 267,705. 4 Claims. (Cl. 242—58.)



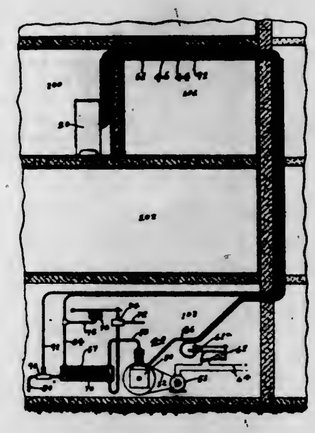
1. In a mechanism for feeding a web to a printing machine, a roll support adapted to hold a running web roll and a spare web roll and movable to bring the rolls from loading position to running position, a pasting mechanism including rollers supported on each side of the path of the web running to the machine and movable toward each other to press the end of the web from a new web roll against the running web, jaws or the like adjacent each of the rollers, adapted to hold the end of a web and arranged to open when the rollers are pressed together, and a normally inactive accelerating roller adapted to engage the periphery of the roll in running position and rotate it at a slower peripheral speed than the speed at which the web is taken by the machine.

1,885,263. CLOTHES HANGER. SCHUYLER C. HULETT, Spokane, Wash. Filed June 15, 1931. Serial No. 544,433. 1 Claim. (Cl. 223—61.)



The combination with a wire clothes hanger, of a tube of resilient material and cylindrical in shape, said tube having a spiral slit throughout its length to permit "screwing" on the wire, and notches in the ends of the tube for co-action with the wire to prevent turning of the tube on the wire.

1,885,264. REFRIGERATING APPARATUS. HARRY B. HULL, Dayton, Ohio, assignor to Frigidaire Corporation, Dayton, Ohio, a Corporation of Delaware. Filed June 30, 1930. Serial No. 465,021. 3 Claims. (Cl. 62—115.)

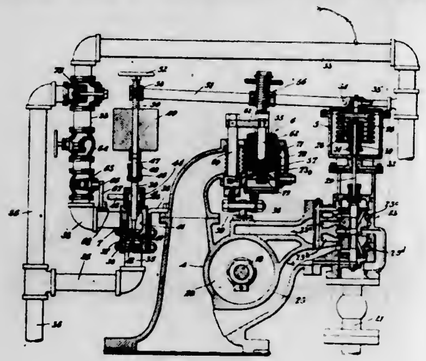


1. Refrigerating apparatus comprising in combination, a closed refrigerant circulating system including an evaporator and a water cooled condenser, said condenser having a water flow circuit associated therewith, a pan disposed below the evaporator for receiving moisture collected upon said evaporator, and means connected with the water flow circuit of said condenser and to said pan and having a portion thereof extending a substantial distance above said pan, said means being rendered effective for removing water from said pan by the flow of water through said water circuit of said condenser.

1,885,265. HYDRAULIC TURBINE GOVERNOR. CHARLES A. JACKSON, Ridgewood, N. J. Filed Dec. 31, 1925. Serial No. 78,509. 22 Claims. (Cl. 121—42.)

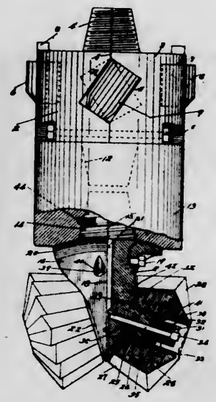
1. A governing mechanism comprising a servo-motor, a fluid pressure generating pump normally operative as a

speed governor whose pressure varies in accordance with its speed, actuating means therefor, and means separate



from said actuating means for controlling said pressure oppositely to the direction of variation and in accordance with movement of the servo-motor.

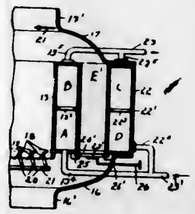
1,885,266. ROTARY DRILL. JENERS JOHNSON, Los Angeles, Calif. Filed Apr. 3, 1931. Serial No. 527,379. 5 Claims. (Cl. 255—71.)



1. A rotary drill bit having a foot body provided with an outwardly extending trunnion having its outer end reduced and provided with a screw thread, and a peripheral trunnion shoulder between said body and said threaded end, a rotary cutter mounted on said trunnion and having an internal flange presenting a shoulder lapping on the trunnion shoulder, a washer on the reduced end of the trunnion and lying against said flange, and a lockable thimble on the trunnion end to retain the cutter in place.

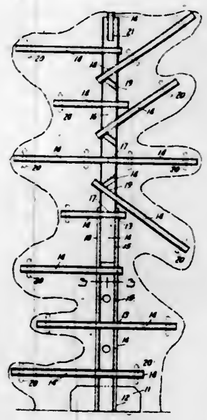
1,885,267. FLUID HEATING DEVICE. VICTOR KALFUS, New York, N. Y. Filed Oct. 28, 1929. Serial No. 402,927. 2 Claims. (Cl. 122—20.)

1. A fluid heater adapted to utilize waste gases of a furnace or the like comprising a casing having a hollow center portion, a partitioned compartment about said hollow center portion, a second concentric partitioned compartment about said first named compartment and spaced therefrom, fluid being adapted to flow through said two compartments, a damper located at the bottom of said hollow center portion for controlling the flow of gas there-



through and a second damper in the space between said two compartments whereby the temperature of the fluid flowing in said compartments may be controlled.

1,885,268. DISPLAY DEVICE. ALOYS W. KLING, Dayton, Ohio. Filed Apr. 21, 1932. Serial No. 606,581. 14 Claims. (Cl. 40—146.)



1. In a support for a display card, a main standard having a plurality of transverse sockets, a supplemental standard mounted on said main standard for vertical adjustment thereon and having a plurality of transverse sockets arranged in different angular relations to the length of said supplemental standard, a plurality of arms interchangeably mounted in the sockets in said standards, said arms having their front surfaces arranged substantially in a common plane, and means for supporting said main standard in an upright position.

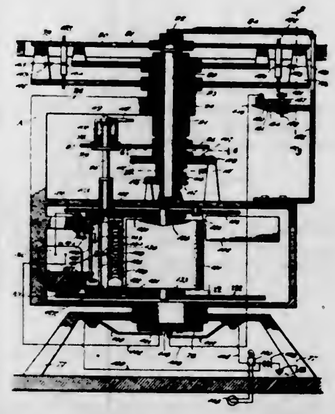
1,885,269. FOLDING CHAIR. JACOB C. KRANER, Pickerington, Ohio. Filed Feb. 20, 1931. Serial No. 517,253. 4 Claims. (Cl. 155—140.)

1. In a folding chair, a frame structure comprising a pair of spaced hinge members, rods uniting said hinge members, spaced pairs of pivotally united leg members, transverse pivotal connections between the upper ends of certain of said leg members and said hinge members, spaced back rest bars, similar pivotal connections uniting the lower portions of said bars and said hinge members, a flexible back rest carried in connection with said bars, a flexible chair seat carried in connection with said leg members, the pivotal connections between the hinge members, the leg members and said bars serving to permit said leg



members and the bars to extend substantially parallel to each other and said rods when the frame structure is folded.

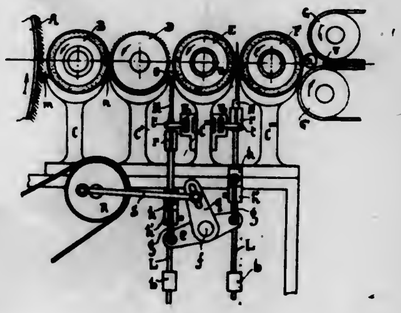
1,885,270. AUTOMATIC REMINDER. LEON Y. LASSITER, Tulsa, Okla. Original application filed Apr. 17, 1926, Serial No. 102,756. Divided and this application filed Apr. 9, 1928. Serial No. 268,694. 8 Claims. (Cl. 161—4.)



1. In a machine of the character described, a base, a frame rotatably mounted on the base, a plurality of concentric shafts journaled on the frame, a plurality of disk-like indicating members arranged in concentric relation and lying in the same plane, said disks being mounted on said shafts and the upper surface of each disk being divided into sections indicative of different periods of time and having spaces to receive inscribed data pertinent thereto, and time-controlled mechanism carried by the frame and in gear with said shafts for rotating one of said disks constantly at a predetermined speed and others of said disks intermittently and at predetermined speeds, whereby certain corresponding sections of the respective disks are adapted to be simultaneously brought into registering relation for inspection at a predetermined time.

1,885,271. PROCESS FOR CONVERTING THE WEBS FROM THE CARDING ENGINES INTO FINE ROVINGS FOR SPINNING. GUILLAUME CLEMENT LAURENCY, La Hulpe, Belgium. Original application filed Feb. 21, 1930, Serial No. 430,386, and in Belgium Feb. 5, 1930. Divided and this application filed Nov. 28, 1930. Serial No. 498,533. 5 Claims. (Cl. 19—151.)

1. In machines for preparing textile fibres for spinning, the combination of parallel rollers revolving with successively increased speeds and stretching between them a web of parallelized fibres, and a rake provided with sharp pointed teeth alternately moved in and out of said web



several times during the passage of a fibre, whereby the web is divided and grouped into rovings of parallel fibres and of regular section.

1,885,272. PROCESS FOR MAKING LAMINATED GLASS. WILLIAM O. LITTLE, New Kensington, Pa., assignor to Duplate Corporation, a Corporation of Delaware. Filed Oct. 10, 1931. Serial No. 568,201. 4 Claims. (Cl. 49—81.)

1. A process of laminating glass and reinforcing sheets of organic material, which consists in preliminarily cementing such sheets together, so as to seal the joints at the edges of the sheets, submerging the composite plate thus formed in a bath of corrosive fluid which will react with the material of the reinforcing sheet to form reaction products and remove the edges of the reinforcing sheet to a point inside the edges of the glass sheets, and applying pressure to the bath to complete the lamination of the sheet.

1,885,273. PISTON RING. ELLIS G. MALPAS, Muskegon, Mich., assignor to The Piston Ring Company, Muskegon, Mich., a Corporation of Michigan. Filed May 25, 1931. Serial No. 539,716. 3 Claims. (Cl. 74—109.)

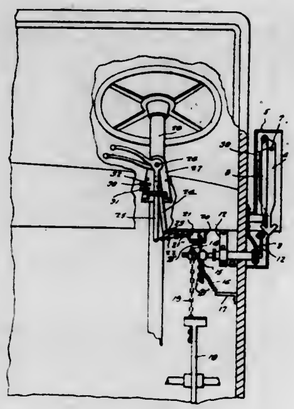


1. A piston ring of substantially circular form, having a parting at one side and grooved between its parallel flat sides and at its outer surface at and for a distance to each side of the parting, said groove directly at and a short distance to each side of the parting being shallow and then deeper, there being integral outwardly projecting portions of the piston ring at each side of said parting providing the bottom of the shallow portions of the groove and ends of the adjacent deeper portions thereof.

1,885,274. AUTOMOBILE SIGNAL. JOSEPH M. MALETTE, New London, Conn. Filed Mar. 30, 1932. Serial No. 602,040. 5 Claims. (Cl. 116—52.)

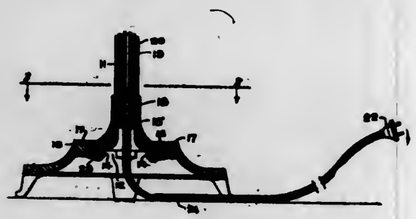
1. In a signaling apparatus of the class described, a signaling member, a shaft, means for rockably mount-

ing the shaft, means operatively connecting the shaft with the signaling member so that by rocking the shaft the signaling member may be actuated, a crank on the shaft, a



pair of chains of different lengths connected with the crank, and a pair of bell crank levers, one engaged with each chain.

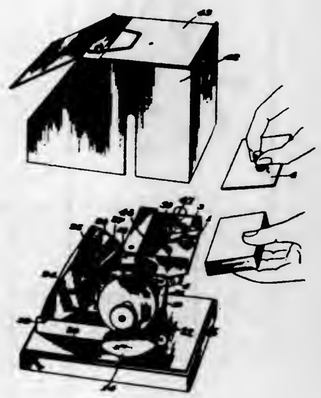
1,885,275. SEPARABLE LAMP STAND. MORRIS M. MARCUS, Philadelphia, Pa. Filed Jan. 20, 1930. Serial No. 421,948. 4 Claims. (Cl. 240—81.)



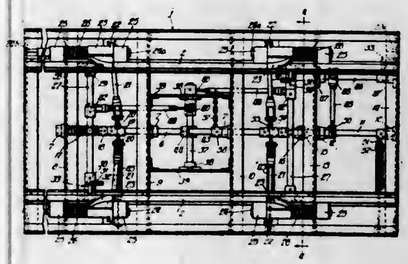
1. In a lamp structure, in combination, a base, a pedestal adapted to project upwardly from said base and arranged for detachable securement thereto, electric wiring extending through the bore of said pedestal and emerging from the lower end thereof and provided at the extremity of the emerging portion thereof with an attachment plug in such manner that said pedestal is wired complete and ready for use, said base being provided with an opening therein substantially coaxial with said pedestal and of sufficient diameter to permit the free passage therethrough of said plug, and a plurality of circumferentially spaced lugs projecting radially inwardly of said opening for supporting said pedestal upon said base.

1,885,276. AUTOMATIC CARD SHUFFLER AND DEALER. ROBERT C. MCKAY, Swampscott, Mass. Filed Jan. 22, 1931. Serial No. 510,365. 18 Claims. (Cl. 273—149.)

1. A device for shuffling objects comprising a container for a group of objects, means for feeding the objects one by one from the container, a series of selectors differential with respect to each other, means for selecting said selectors indiscriminately and means controlled by said selectors for variably delivering the objects according to the differential characteristics of the selectors.



1,885,277. CAGE LOCK. GLENN W. MERRITT, Bowerston, Ohio, assignor to Mining Safety Device Company, Bowerston, Ohio, a Corporation of Ohio. Filed June 21, 1930. Serial No. 462,810. 16 Claims. (Cl. 187—97.)



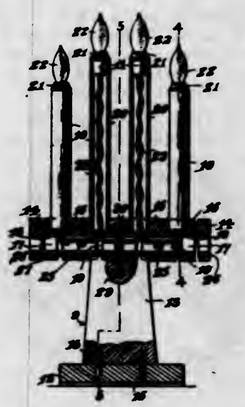
1. In combination with a cage and rail sections thereon, sets of stops mounted upon the cage adjacent each end thereof and movable into and out of closed position to extend over the rail sections, yielding means for normally holding the stops in closed position, said stops being adapted to be opened by the wheels of an entering car, means for opening the stops in the positioning of the cage at a landing and for holding the stops open, and means actuated by a car entering the cage for releasing both sets of stops to permit closing thereof.

1,885,278. MONEY STERILIZER. CHAUNCEY D. MONETT, San Francisco, Calif. Filed Oct. 24, 1931. Serial No. 570,854. 2 Claims. (Cl. 167—8.)



1. A money steriliser comprising a housing secured to a cash drawer, atomising means removably disposed in said housing and having spray tips extending into said cash drawer and a bulb on said cash drawer for said atomising means whereby pressure on said bulb closes the drawer and sprays the interior thereof.

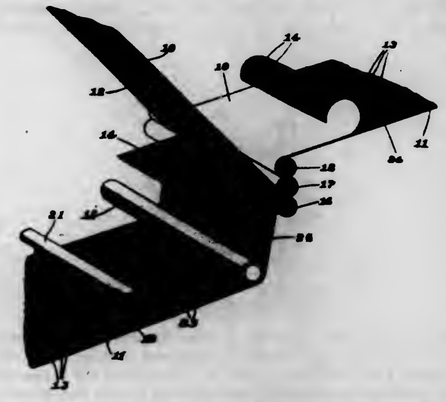
1,885,279. ILLUMINATING MEANS. SIDNEY J. MONK, Washington, D. C., assignor to Nora Monk, Washington, D. C. Filed June 4, 1930. Serial No. 459,198. 4 Claims. (Cl. 240—10.)



1. An illuminating device comprising a base member having bottomed sockets, tubular supports that detachably and interchangeably engage in the sockets against the bottoms thereof, a plurality of lamp holding socket elements that abut the free ends of the supports and are removable therefrom, and a plurality of wires to which the socket elements are permanently attached and form therewith a current conducting unit, said base member and tubular supports having means for permitting the introduction and removal of the wires with the lamp sockets attached and the introduction and removal of the latter to and from the supports respectively, the wires connecting the socket elements being sufficiently long to extend through the tubular supports and between the sockets and having a surplus amount to be twisted and thereby act as means to hold the supports in the sockets and the socket elements in the supports.

1,885,280. REENFORCED PAPER AND METHOD OF MAKING THE SAME. HENRY D. MOORE, Attleboro, Mass., assignor to American Reenforced Paper Company, Attleboro, Mass., a Corporation of Massachusetts. Filed Jan. 31, 1931. Serial No. 512,531. 14 Claims. (Cl. 154—2.)

1. As an article of manufacture, reenforced waterproof paper, comprising in its construction a paper fabric formed of two sheets of paper each having a coating of adhesive applied to its inner face and a reenforcing sheet of fibrous material secured to each sheet of paper by the adhesive and having a third coating of adhesive between the two sheets of fibrous material and in engagement with both of said fibrous sheets to firmly unite the two reenforced

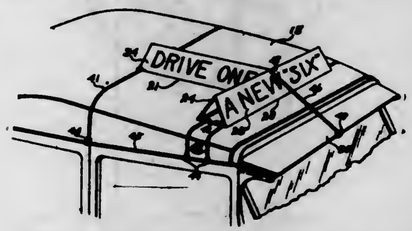


sheets of paper with the fibrous material of one fibrous sheet contacting with the other fibrous sheet, and at least one of said coatings being formed of waterproof adhesive.

1,885,281. METHOD OF NEUTRALIZING FATTY ACIDS IN OILS AND FATS. ROY C. NEWTON, Chicago, Ill., assignor to Swift and Company, Chicago, Ill., a Corporation of Illinois. Filed Dec. 19, 1930. Serial No. 503,522. 8 Claims. (Cl. 87—12.)

1. The process of removing free fatty acids from oils or fats comprising neutralizing the free fatty acids with sodium bicarbonate under reduced pressure and at a reaction temperature at or above substantially 320 degrees F.

1,885,282. ADVERTISING SIGN FOR A VEHICLE TOP. FRANK J. O'CONNOR, Dwight, Ill. Filed Sept. 5, 1931. Serial No. 561,334. 9 Claims. (Cl. 40—129.)

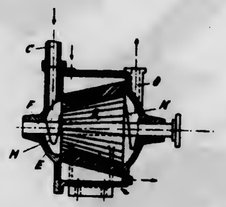


1. An advertising sign comprising two elongated advertising sign members secured together, one of said members comprising at least three elongated sections of sheet material hinged together along contiguous edges thereof, whereby the sections may be folded one upon the other in compact form, and whereby they may be arranged to provide a triangular construction in end view, and an elongated flexible holding element adjacent to each end of the device for securing the device upon the top of an automobile or the like.

1,885,283. COLLOID MILL. WALTER OSTERMANN, Oschersleben, Germany, assignor, by mesne assignments, to Travis Process Corporation, Jersey City, N. J., a Corporation of Delaware. Filed May 6, 1924, Serial No. 711,390, and in Germany May 18, 1923. 6 Claims. (Cl. 83—13.)

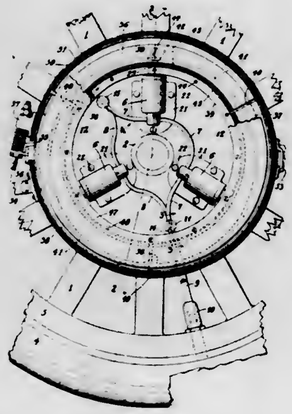
1. An apparatus for homogenising or emulsifying materials comprising members relatively movable at a high

speed having cooperating faces between which the materials are fed for treatment, the faces of both members being provided with alternating channels and teeth arranged in a direction generally transverse to the movement of one of said members, the teeth of both members having flat faces spaced with a slight clearance there-



between, and the channels of both members being curved in cross-section and relatively disposed so that when the members are relatively moved at a high speed the materials fed between the members are subjected to the film beating action of passing teeth edges, to the film shearing action of cooperating teeth surfaces, and to the repercussive churning action of cooperating channels.

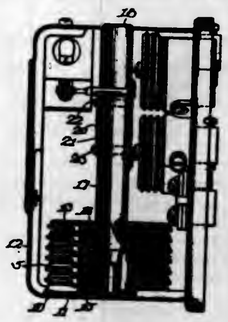
1,885,284. VEHICLE TIRE PUMP. CURT OTTO, New York, N. Y. Filed Aug. 31, 1928. Serial No. 303,222. 7 Claims. (Cl. 152—11.)



1. A mechanism for inflating vehicle tires, including in combination a vehicle wheel having a pneumatic tire, a pump on the wheel having a reciprocating plunger, a braking device for the wheel, and an eccentric member on the braking device for reciprocating the plunger when the brake is operated.

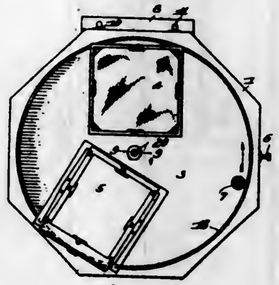
1,885,285. HEAT MOTOR. LAWRENCE M. PERSONS, St. Louis, Mo., assignor to Cook Electric Company, Chicago, Ill., a Corporation of Illinois. Filed May 29, 1929. Serial No. 366,933. 12 Claims. (Cl. 60—25.)

1. In a device of the class described, the combination of a thermally controlled element having a part adapted to move when actuated, a substantially hollow member having at least one end in communication with the interior of said thermally controlled element, a volatile fluid substantially completely filling said element and said member, a heating element for said member arranged to influence said volatile fluid whereby to depress the level thereof into said controlled element to actuate said mov-



able part, and means of a substantially low heat conductivity for interconnecting said member and said controlled element.

1,885,286. ROTARY CAMERA BACK. WILLIAM H. PETIT and EDSON S. HINELINE, Rochester, N. Y., assignors to The Folmer Graflex Corporation, Rochester, N. Y., a Corporation of Delaware. Filed Dec. 16, 1931. Serial No. 581,443. 5 Claims. (Cl. 95—49.)



1. In a camera back, the combination with a mounting board having an exposure opening in the axis of the camera lens, of a rotary back mounted on the board and provided with a focusing screen and with a plate holder revolvable with the back to selectively exchange operative position with respect to the exposure opening, a spring for rotating the back in one direction, and a dash pot operatively connected to the back to absorb the shock of the spring actuation.

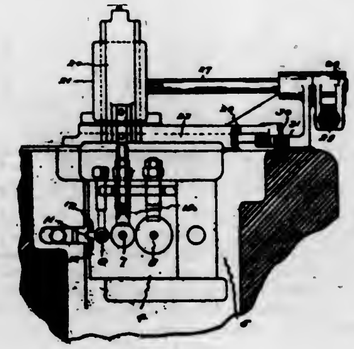
1,885,287. METHOD OF CLEANING MOLD PARTS. JOHN M. PORTER and GEORGE W. HANDY, Elizabeth, N. J., assignors to Structural Gypsum Corporation, Linden, N. J., a Corporation of Delaware. Filed Sept. 16, 1929. Serial No. 393,126. 8 Claims. (Cl. 25—155.)

1. A method of freeing aluminum mold parts in gypsum casting machines which consists in adding to a plastic gypsum mixture a substance which will react with the aluminum mold parts.

1,885,288. MACHINE FOR MAKING CAP SCREW BLANKS. JOHN E. PRACNY, Waterbury, Conn., assignor to The E. J. Manville Machine Company, Waterbury, Conn., a Corporation of Connecticut. Filed June 5, 1930. Serial No. 459,268. 3 Claims. (Cl. 10—12.)

1. The combination with a heading machine which has two fixed solid dies and two reciprocatory punches lo-

cated in the same horizontal plane, of a stock transfer mechanism which comprises a frame connected to the machine bed adjacent to the dies, a slide movable horizontally on said frame, means for reciprocating said slide, a bracket carried horizontally by said slide, a slide movable vertically on said bracket, fingers attached to



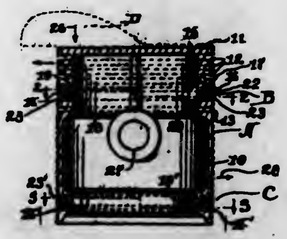
said vertically movable slide, a shaft mounted on the frame, means for rocking said shaft, and an arm rotatable with and movable longitudinally along said shaft and connected with the vertically movable slide, whereby the fingers are given vertical and horizontal movements for transferring stock from between one punch and die into line with the other punch and die.

1,885,289. HOSIERY DRYING FORM. THOMAS W. PROSSER, JOHN H. WAHLBECK, and ROY L. MITTELSTADT, Kankakee, Ill., assignors to Paramount Textile Machinery Co., Chicago, Ill., a Corporation of Illinois. Filed Jan. 21, 1930. Serial No. 422,422. 7 Claims. (Cl. 223—17.)



1. A hollow garment drying form provided with reinforcing members extending inwardly from its opposing inner surfaces and located wholly within the form, said reinforcing members being connected together independently of the drying surface of the form.

1,885,290. PISTON. ERNEST S. REILAND and PETER M. REILAND, St. Paul, Minn., assignors to Universal Piston Company, St. Paul, Minn., a Corporation of Minnesota. Filed Sept. 6, 1929. Serial No. 390,724. 16 Claims. (Cl. 74—109.)



1. A piston including, a body portion, a wrist pin connection therein, bearing means for said body portion on either side of said wrist pin connection, said bearing means including a bearing ring, a spring compensating ring, and a shoulder back of and contacting with said bearing ring formed in said piston.

1,885,291. CONTAINER-HANDLING DEVICE. ADOLPH RICKENBACHER, Los Angeles, Calif. Filed Mar. 30, 1931. Serial No. 526,402. 9 Claims. (Cl. 221—60.)

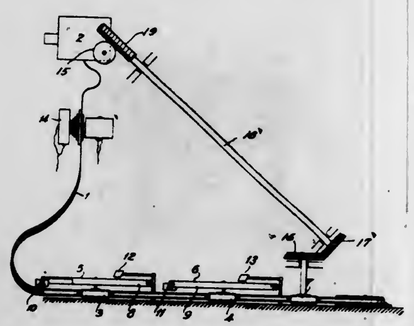


1. A device for dispensing the contents of a collapsible tube container which includes a base having spaced sides, a shaft extending between the sides and rotatably carried in openings therein, a transversely curved guide for slidably guiding the container to the shaft and supported on the base, a back on the guide extending between the sides and spaced from the shaft the outer end of the back being curved about the axis of rotation of the shaft, the shaft having a slot for receiving the closed end of the container and being operable to wrap the container upon itself and to pass it between the shaft and the back to press the contents therefrom, and spring means between the back and shaft for engaging the container.

1,885,292. MOTHPROOFING COMPOSITION. RICHARD M. RITTER, Kew Gardens, N. Y. Filed June 5, 1928. Serial No. 283,136. 12 Claims. (Cl. 167—37.)

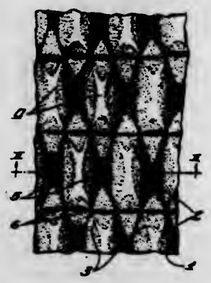
7. A mothproofing composition comprising a mixture of alkaloidal salts from seeds of Lupinus with saponins of quillaia and a metal mordant.

1,885,293. SIMULTANEOUS RECORDING OR REPRODUCTION OF SOUNDS AND MOVING PICTURES. JAMES ROBERT ROBERTSON, London, England. Filed Jan. 28, 1930, Serial No. 422,891, and in Great Britain Jan. 28, 1929. 2 Claims. (Cl. 88—16.2.)



1. In a combined sound and picture recording or reproducing means, the combination with a motion picture apparatus and means for propelling a film therethrough, of a rotatable table-like support for a sound record or blank, a film sprocket mechanically coupled to said table, a second film sprocket mechanically coupled to the film propelling means and adapted to drive the first named sprocket with the aid of a tensioned film, and a braking means cooperating with the rotatable table-like support and adapted to prevent overrunning thereof.

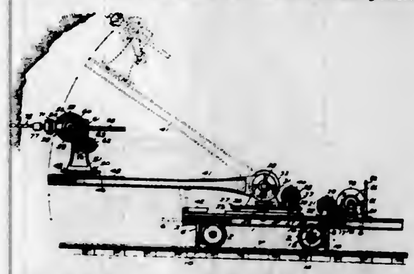
1,885,294. METHOD OF CORRUGATING SHEET METAL. ROBERT R. ROBERTSON, Chicago, Ill. Filed May 13, 1931. Serial No. 537,028. 4 Claims. (Cl. 153—68.)



2. The method of reinforcing sheet metal which consists in applying diagonal pressure to the sheet metal to produce diagonal main corrugations therein, and then turning the corrugated sheet metal upside down and again applying diagonal pressure thereto to produce diagonal auxiliary corrugations therein intersecting and distorting the main corrugations.

1,885,295. MINING MACHINE. WILLIAM THOMAS ROBINSON, Logan, W. Va. Filed Dec. 14, 1929. Serial No. 414,107. 1 Claim. (Cl. 255—51.)

In a machine of the class described a carriage, a base fixed on the carriage, a centrally pivoted table supported for rolling engagement with the base, a motor supported by and rotatable with the table, a gear supported above and rotatable with the table, an extensible boom movable with the gear for vertical swinging movement, means on the table and driven by the motor for rotating the gear, a base fixedly carried by the free end portion of



the boom, a vertically extensible pedestal supported on the base and mounted for rotation thereon about an axis perpendicular to the base, a drilling mechanism adjustable angularly on the pedestal, and motor driven means on the pedestal for operating said drilling mechanism while in any angular position.

1,885,296. CLASP. FLORA L. ROULEAU, Oakland, Calif. Filed Mar. 7, 1932. Serial No. 597,302. 2 Claims. (Cl. 24—208.)



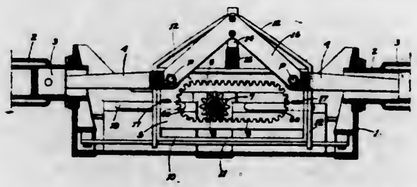
1. A clasp comprising a hollow stud having an annular base and a cylindrical body closed at its end remote from the base and provided at diametrically opposite points in its side with openings, inwardly extending tongues at the ends of said openings disposed in a diametrical plane of the body, and a resilient dog housed within the stud in the same plane as the tongues with each of its ends disposed between the tongues at one of the openings and arranged to project through the openings whereby to engage over a member through which the stud may be inserted so that said member will be held by the dog against the base of the stud.

1,885,297. SHOE. AMERIGO SANTORI, South Range, Mich. Filed Mar. 18, 1931. Serial No. 523,580. 7 Claims. (Cl. 36—51.)



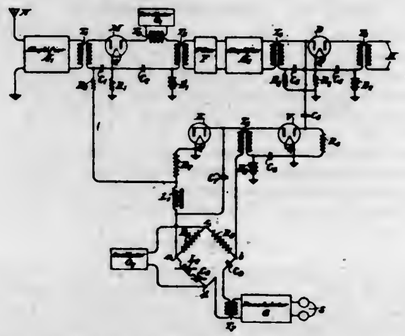
1. A shoe having lace holes or eyelets, an inner lining provided with slots extending between the lace holes or eyelets, an elastic lace passing through said eyelets and having stretches located in said slots, a tongue, and elastic webbing beneath the tongue and connected to the shoe.

1,885,298. INTERNAL COMBUSTION ENGINE. ARTHUR A. SCHELL, Marysville, Calif. Filed Feb. 27, 1932. Serial No. 595,513. 2 Claims. (Cl. 74—14.)



1. In a mechanism for converting reciprocatory to rotary motion, a shaft having a pinion thereon, a reciprocatory cage mounted for movement in a rectilinear path, an internal oblong gear shiftable transversely within the cage and engaging the pinion, means to shift the gear transversely at the ends of the reciprocatory stroke thereof, and means to counterbalance the weight of the gear comprising a compression spring supported on and upstanding from the cage centrally of its ends, a block overhanging and engaging the top of the spring, and arm units secured to the opposite sides of the block and extending thence to and secured to the sides of the gear adjacent its ends.

1,885,299. MONITORING SYSTEM. FRED W. SCHRAMM, East Orange, N. J., assignor to American Telephone and Telegraph Company, a Corporation of New York. Filed Dec. 6, 1930. Serial No. 500,605. 14 Claims. (Cl. 250—20.)



1. A monitoring apparatus for a double detection radio receiver comprising in combination with said radio receiver, means for by-passing part of the energy of the carrier wave at an intermediate frequency, means for producing a wave of substantially the same frequency, and means for obtaining a beat note from said frequencies and for preventing that beat note from being introduced into the circuits of the radio receiver.

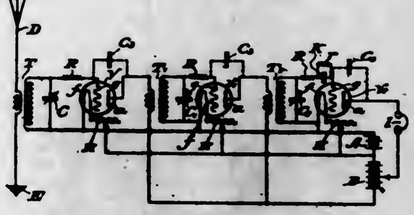
1,885,300. RAZOR. HYMAN R. SEGAL, New York, N. Y., assignor to Segal Founders Corporation, a Corporation of New York. Filed June 4, 1931. Serial No. 541,963. 7 Claims. (Cl. 30—12.)

1. A razor including a guard, a clamping plate, a stem mounted on the latter, a tube mounted on said guard said stem being formed with a groove having an offset end portion, means extending from said tube into said groove to guide said stem in its movements with respect to said tube, a sleeve slidably encircling said tube, said tube being formed with a slot and an actuating member



connected to said sleeve and extending through said slot to engage said stem whereby the latter will shift in response to shifting of said sleeve along said tube.

1,885,301. AMPLIFYING SYSTEM. ALBERT D. SILVA, Philadelphia, Pa., assignor to Atwater Kent Manufacturing Company, Philadelphia, Pa., a Corporation of Pennsylvania. Original application filed July 26, 1924, Serial No. 728,280. Divided and this application filed Jan. 19, 1929. Serial No. 333,683. 22 Claims. (Cl. 179—171.)



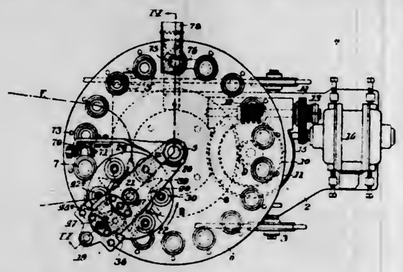
1. The combination with a thermionic amplifier, of an input system therefor tunable throughout a range of frequencies by fixed inductance and a variable condenser effectively in shunt therewith to form a tunable loop, an output system tunable throughout said range of frequencies by a fixed inductance with a variable condenser effectively in shunt therewith, a capacitative coupling between said output and input systems, the tendency of the amplifying system to become unstable increasing as said input and output systems are tuned to higher and higher frequencies of said range, the inductance effective in the anode circuit of said amplifier having relatively low magnitude, and a resistance in one of said systems external to the tunable loop thereof and in series with a small capacity, whereby the aforesaid tendency of the amplifying system to instability is compensated for by said resistance whose stabilizing effect rapidly increases with increase of frequency.

1,885,302. GLASS WORKING APPARATUS. EDWIN E. SLICK, Pittsburgh, Pa. Filed Mar. 24, 1927. Serial No. 177,919. 18 Claims. (Cl. 49—37.)

4. In a plastic shaping apparatus, a carrier of major diameter having a plurality of shaping elements thereon, a carrier of minor diameter vertically spaced with respect to said first mentioned carrier and having shaping elements thereon, each carrier having a single axis only about which it is movable and means periodically operable for causing the shaping elements of the respective carriers to travel in a common path.

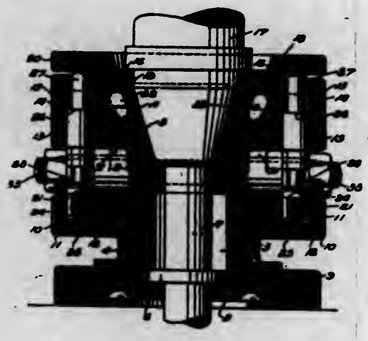
16. In a plastic shaping machine, a continuously driven carrier having a working surface extending in substan-

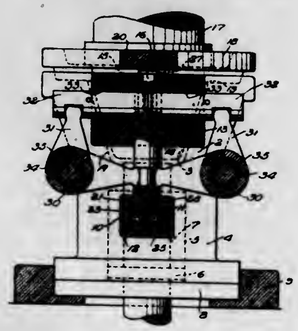
tially a horizontal plane, upwardly opening shaping elements carried thereby, a second separately supported carrier movable in a different path from that of the first-named carrier and in timed relation thereto, vertically movable shaping elements carried by the second carrier for cooperation with the first-named shaping elements, means for supplying glass gathers to successive shaping



elements on one of the carriers, means for bringing successive shaping elements on one carrier into engagement with the shaping elements on the other carrier for shaping the gathers, means for maintaining said elements in vertical alinement during their travel through a substantial distance, and means for automatically removing the shaped articles.

1,885,303. METHOD AND APPARATUS FOR MOLDING PLASTICS. EDWIN E. SLICK, Pittsburgh, Pa. Filed Mar. 27, 1929. Serial No. 350,191. 15 Claims. (Cl. 49—65.)





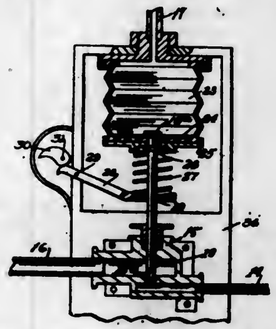
1. A mold having a matrix shaped for the simultaneous formation of a body of a vessel and a handle thereon, molding means cooperating with the handle forming portion for forming an opening through a handle, and automatic means for actuating said molding means during and after the forming operation.

1,885,304. SANITARY CIGARETTE ROLLING DEVICE. EDDY A. K. STANGER, Columbus, Ohio. Filed Nov. 8, 1931. Serial No. 572,868. 5 Claims. (Cl. 131—5.)



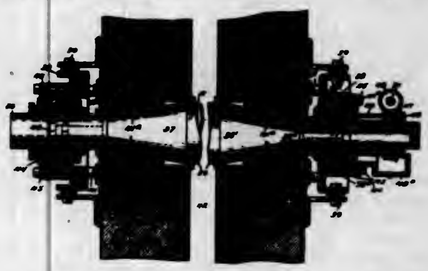
5. A cigarette rolling device comprising a trough, a cap rotatably mounted on each end of the trough and provided with a centrally located aperture, one of said caps having a tubular portion alining with the opening in said cap for telescopic reception within one end of a cigarette wrapper, a rolling apron, means connecting the apron at one end thereof interiorly of the trough with said caps, and an ejector insertable into the trough through the opening in the other of said caps.

1,885,305. APPARATUS FOR HEATING LIQUIDS. ROY C. SUTTON, University City, Mo. Filed June 24, 1929. Serial No. 373,117. 2 Claims. (Cl. 236—99.)



1. In a device of the character described, an expansible bellows, a tube communicating with the cavity of said bellows, an expansible element in said tube, a valve, means to hold one end of said bellows in fixed relation to said valve, said valve having a stem secured to the other end of said bellows, a spring for restraining the action of said bellows and means for regulating the tension of said spring, said means including a movable member bearing against said spring, a cam for moving said member and a lever for operating said cam.

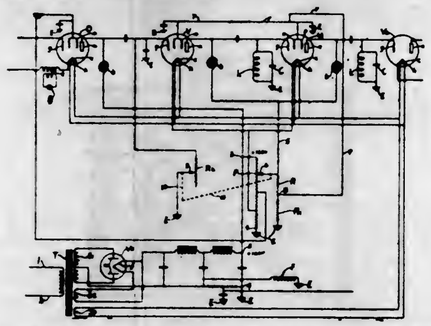
1,885,306. CONVEYER ROLLER. JULIUS SYLVESTER, Washington, Pa., assignor to Simplex Engineering Company, Washington, Pa., a Corporation of Delaware. Original application filed Jan. 21, 1929, Serial No. 333,887. Divided and this application filed July 21, 1931. Serial No. 552,243. 20 Claims. (Cl. 198—127.)



1. A conveyer roll comprising a cylindrical body portion of minimum thickness, cylindrical end portions of

major thickness, and tapered portions between the body portion and end portions of progressively increasing thickness between the body portion and the end portions.

1,885,307. VOLUME CONTROL. SARKES TARZIAN, Philadelphia, Pa., assignor to Atwater Kent Manufacturing Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed July 8, 1930. Serial No. 466,372. 24 Claims. (Cl. 250—20.)



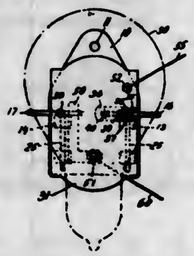
1. In the operation of a radio receiving system comprising an amplifier tube of the screen grid type, a method of control which comprises carrying the plate voltage of the tube to effect a change in the internal plate resistance thereof, and simultaneously so varying the screen grid voltage of the tube as to offset said variation of internal plate resistance and to effect a substantial change in the amplification by said tube.

1,885,308. LOUD SPEAKER. ADOLPH A. THOMAS, New York, N. Y. Original application filed Feb. 1, 1927, Serial No. 165,052. Divided and this application filed Apr. 12, 1929. Serial No. 354,495. 18 Claims. (Cl. 181—81.)



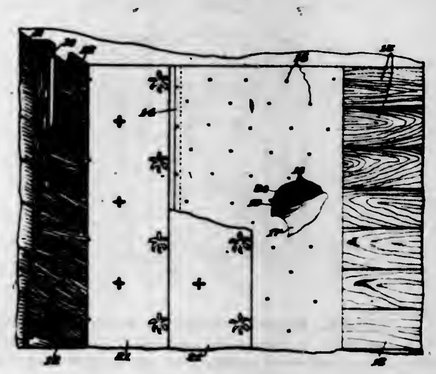
1. A loudspeaker comprising a pair of substantially flat tensioned diaphragm sheets supported at two opposite edges only and adapted to accentuate different bands of frequencies, and means for operating said diaphragm sheets.

1,885,309. FIRE EXTINGUISHER. EDWARD P. WAGNER, West New Brighton, N. Y., assignor to International Fire Equipment Corporation, West New Brighton, N. Y., a Corporation of Delaware. Filed Apr. 7, 1930. Serial No. 442,112. 13 Claims. (Cl. 200—52.)



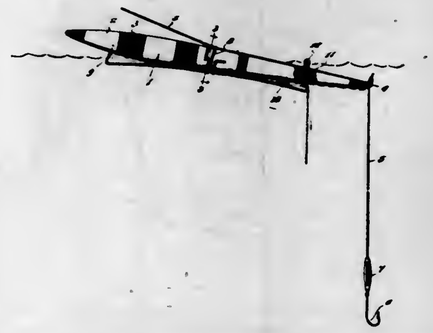
1. In combination, a supporting member, means carried thereby for releasably holding a frangible grenade, heat controlled means for retaining said holding means in grenade holding position, an electric circuit, and a circuit closer for said circuit controlled by said holding means and automatically operable upon release of said holding means.

1,885,310. BASE FOR WALL PAPER. LESTER N. WEBER, Chicago, Ill., assignor to American Reenforced Paper Company, Attleboro, Mass., a Corporation of Massachusetts. Filed Mar. 16, 1931. Serial No. 522,795. 3 Claims. (Cl. 20—4.)



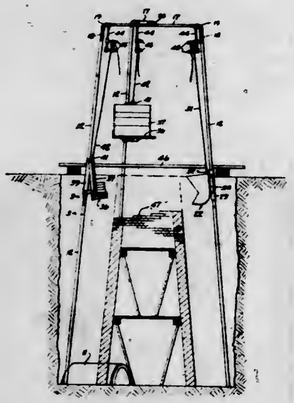
1. In a building having its inner walls formed of sheathing, a moisture and windproof covering for the sheathing, comprising a thin, flexible, multiply fabric formed of two sheets of paper secured together with a waterproof adhesive and reenforced with straightened filaments held between the sheets by the adhesive, means for securing said covering in a smooth, stretched condition to the face of the sheathing to form a wall paper base, and wall paper secured to the base of reenforced waterproof paper.

1,885,311. FLOAT FOR FISH LINES. JOSEPH C. WHITCOMB, Princeton, Minn. Filed Sept. 17, 1931. Serial No. 563,436. 4 Claims. (Cl. 43—51.)



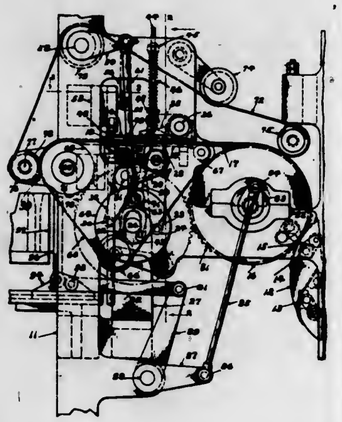
1. A float for fish lines having a line guide at one end, a line-holding element mounted upon the float between the ends thereof, and a reel extending longitudinally of the float upon which the line may be wound.

1,885,312. MATERIAL HANDLING DEVICE. MACK WILSON, Woodside, N. Y. Filed Mar. 20, 1929. Serial No. 348,473. 3 Claims. (Cl. 187—2.)



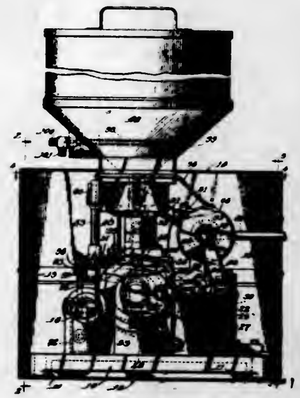
1. A material handling device including in combination a plurality of upwardly converging rod-like guides, means for spacing said guides from each other and holding them in substantially vertical position, material receiving means vertically slidable on and supported by a single guide, and freely movable thereon to be held by gravity within said guides.

1,885,313. FOLDER FOR PRINTING MACHINES. ADOLPH M. ZUCKERMAN, New York, N. Y., assignor to R. Hoe & Co., Inc., New York, N. Y., a Corporation of New York. Filed Sept. 9, 1929. Serial No. 391,200. 9 Claims. (Cl. 270—1.)



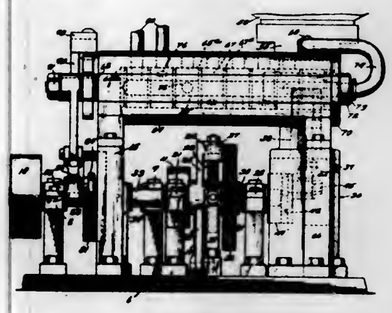
1. In combination with a printing machine folder, a perforating mechanism including a reciprocating punch, means for conveying a previously printed and cut product to the perforating mechanism and to a delivery point, means for registering the product for perforating, and means for compressing the product adjacent to the point at which it is perforated and holding it compressed while it is being perforated and while the punch is being withdrawn.

1,885,314. GREASE PUMP AND THE LIKE. HARRY J. ANDERSON, Chicago, Ill., assignor to Hills-McCanna Company, Chicago, Ill., a Corporation of Illinois. Filed June 6, 1930. Serial No. 459,499. 5 Claims. (Cl. 184—35.)



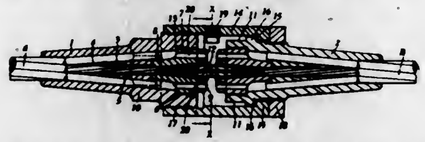
1. In a machine of the class described, the combination of adjustable means for pumping grease or other relatively stiff material with a variable displacement and with a high degree of accuracy in the metering thereof, said means including a variable stroke vertical cylinder pump having a plunger and means for always moving said plunger to the same upper limit of movement on the working stroke, the stroke of the plunger on the suction or intake stroke being variable, inlet and delivery connections into the upper portion of the cylinder, a rocker valve for controlling said connections to control inlet and delivery of the material into and from the pump cylinder, means for positively rocking said valve harmoniously with the plunger movements for the inlet and delivery functions, an emergency grease delivery connection from the upper portion of the cylinder, and a spring pressed emergency valve normally spring seated and resisting delivery of pumped material through said emergency connection up to an adjusted upper limit of pressure substantially as described.

1,885,315. GREASE PUMP AND THE LIKE. HARRY J. ANDERSON and FRANK GORDON, Chicago, Ill. Filed Mar. 18, 1929. Serial No. 348,046. 1 Claim. (Cl. 184—35.)



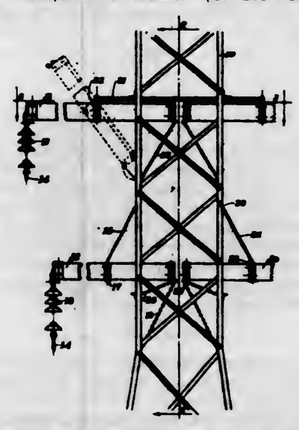
In a device of the class described, the combination of a pump shaft, a rotary valve, a reciprocating pump in conjunction with one end of said pump shaft, a pawl and ratchet connection between the other end of the pump shaft and the rotary valve, means for varying the stroke of the pump, and adjustable means between the pump shaft and the valve for adjusting the operation of the valve from the pump shaft, substantially as described.

1,885,316. CONNECTING DEVICE FOR USE WITH STRANDED METAL CABLES. JOHN WILLIAM ASTLEY, Prescot, England, assignor to British Insulated Cables Limited, Prescot, Lancashire, England, a British Company. Filed June 23, 1931, Serial No. 546,329, and in Great Britain July 5, 1930. 1 Claim. (Cl. 24—126.)



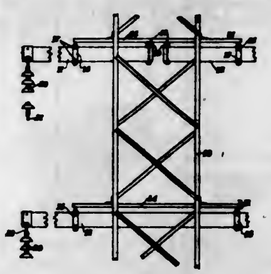
A device for connecting an end of a length of cable, comprising an outer group of wires and a core consisting of an inner group of wires or a single central wire, to another but possibly similar member, said device comprising means for engaging the said cable end, means for engaging the other member and a sleeve coupling these two engaging means together, the first of said engaging means comprising an inner clamping cone and an outer clamping cone for each group of wires, the inner clamping cone for the outer group of wires being located within the smaller end of the outer clamping cone for that group, the inner cone for the inner group being located at least in part, within the outer cone for that group, which latter cone is located within the larger end of the outer clamping cone of the outer group of wires so that it can press upon the inner clamping cone for the outer group of wires when the cable end is engaged, the outer clamping cone for the outer group of wires having at its larger end an internal screw thread and the outer cone for the inner group of wires having a corresponding external thread working therein and also having an axial projection engageable by a tool whereby it may be screwed into the outer cone for the outer group and thereby be caused to press against and tighten up the inner cone for the outer group of wires when the cable end is engaged.

1,885,317. TRANSMISSION LINE SUPPORT. ARTHUR O. AUSTIN, near Barberton, Ohio, assignor, by mesne assignments, to The Ohio Brass Company, Mansfield, Ohio, a Corporation of New Jersey. Filed Feb. 15, 1929. Serial No. 340,225. 8 Claims. (Cl. 189—33.)



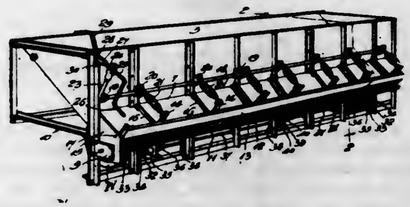
1. In combination a supporting structure, a cross arm projecting from said structure, a transmission line carried on the projecting portion of said cross arm, a swinging suspension member for supporting said cross arm on said structure, and a tension member connecting said structure and cross arm and arranged to hold said cross arm outwardly relative to said structure and to hold said suspension member in an inclined position relative to the vertical.

1,885,318. TRANSMISSION LINE SUPPORT. ARTHUR O. AUSTIN, near Barberton, Ohio, assignor, by mesne assignments, to The Ohio Brass Company, Mansfield, Ohio, a Corporation of New Jersey. Filed Oct. 2, 1929. Serial No. 396,821. 9 Claims. (Cl. 189—33.)



1. In combination a supporting structure, a rigid cross arm comprising a beam having greater strength against vertical than against lateral bending moment, a portion of said beam projecting beyond said supporting structure a distance several times the vertical height of said beam, said projecting portion being sustained entirely by its own rigidity, means for pivotally supporting said cross arm to rotate about an axis extending longitudinally of the cross arm, and a transmission line supported on said cross arm and attached to said cross arm at a point below the pivotal axis of said cross arm.

1,885,319. SPREADING MACHINE. VERSAL FORREST BAUMGARDNER, Celina, Ohio. Filed May 4, 1931. Serial No. 534,969. 13 Claims. (Cl. 221—130.)

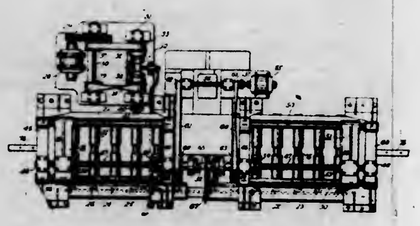


1. In a spreading machine, a hopper having an elongated outlet, a brush extending longitudinally of said outlet and having resilient bristles which control the discharge of material from said hopper, said bristles being adapted to remain under lateral tension, and adjusting means for relatively varying the tension of said bristles longitudinally of the brush to transversely vary the thickness of the layer of spread material.

1,885,320. AUTOMATIC CENTERING AND SHEARING MACHINE. FLOYD A. BEATTY, Corliss Station, Pa., assignor to Lewis Foundry & Machine Company, Groveton, Pa., a Corporation of Pennsylvania. Filed Mar. 28, 1931. Serial No. 525,927. 15 Claims. (Cl. 164—59.)

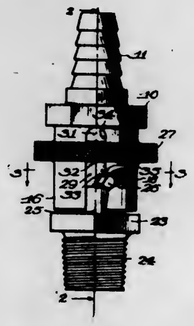
1. In combination, shearing apparatus, conveying means for material to be sheared, material engaging members

movable longitudinally of said conveying means toward shearing position from opposite sides of shearing position,



and means for simultaneously moving said members toward shearing position to center the material relative to said shearing apparatus.

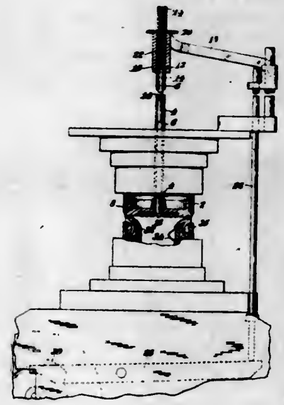
1,885,321. PIPE COUPLING. HOWARD H. BENN, Jackson, Mich., assignor to F. L. Parsons, Detroit, Mich. Filed May 15, 1930. Serial No. 452,572. 7 Claims. (Cl. 285—177.)



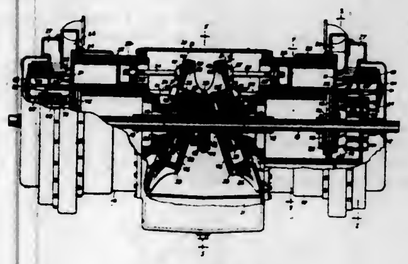
1. A coupling embodying two members one of which telescopes with the other, there being a bayonet slot opening through the end of one of the members, a lug carried by the other member and adapted to enter the said slot, means for locking the lug in the slot, the portion of the wall of the slot with which the lug contacts being inclined, the said locking means operating upon the lug to force the same upon the said inclined portion, and means operating directly upon the said locking means for positively advancing and retracting the same.

1,885,322. KNITTING MACHINE. PERCIVAL ARTHUR BENTLEY, CHARLES FREDERICK MANGER, and CARLYLE HERBERT WAINWRIGHT, Leicester, England. Filed Mar. 6, 1930, Serial No. 433,775, and in Great Britain Mar. 13, 1929. 6 Claims. (Cl. 66—14.)

1. In a knitting machine having a rib-needle cylinder and a plain needle cylinder and control mechanism therefor, automatic tension-applying means, comprising a work-engaging member normally located substantially within the rib-needle cylinder, and means to move said member substantially within the co-operating plain needle cylinder into pressing engagement with a part of the work adjacent the needles and to retain said member in engagement therewith during the knitting of a predetermined and substantial length of fabric, said means comprising operative connections, including a yielding element, between said member and control-mechanism of the machine.



1,885,323. PRIME MOVER. WILLIAM C. DURYEA, Princeton, N. J. Filed May 29, 1931. Serial No. 541,070. 19 Claims. (Cl. 74—14.)



1. In a motor, a drive shaft journaled for rotation, a pair of opposed wabbler elements mounted obliquely relative to the drive shaft and having frusto-conical annular faces constantly engaging at one point, means for progressively imparting thrusts at circumferentially spaced points in advance of the point of contact of said annular faces, and a driving connection between said elements and the drive shaft for imparting rotation to the latter upon wabbling of the wabbler elements.

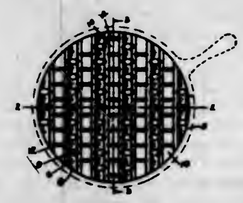
1,885,324. VENDING MACHINE. BERNARD T. BJORNSON, Duluth, Minn. Filed Apr. 5, 1930. Serial No. 441,846. 5 Claims. (Cl. 312—86.)

1. A coin-controlled vending machine comprising in combination a housing, a turntable within the housing carrying circumferentially disposed compartments thereupon, a door controlled exit in the housing for consecutive registration with said compartments, means attached to the door and successively to the compartments whereby opening of the door will rotate the turntable, locking means for the



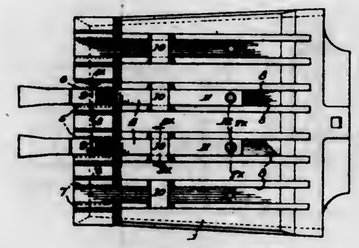
turntable registrable successively with each compartment made effective by the opening of the door, and manually controlled means for unlocking the turntable.

1,885,325. BROILER PLATE. PRESTON PEARCE BOGLEY, Chicago, Ill. Filed May 19, 1931. Serial No. 538,587. 4 Claims. (Cl. 53—5.)



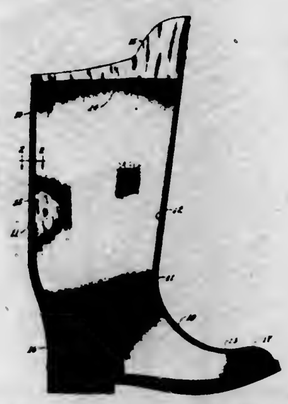
1. In combination with a cooking utensil a broiler plate comprising an annular flanged base, fins issuing out of said base, the walls of said fins being disposed at an angle to the base, and in spaced relation to each other, openings in the base between the fins to allow heat therethrough, said fins having apertures in the walls thereof near the base for the lateral flow of fluids, the upper ends of the fins being bent forming a top.

1,885,326. DIGGING TEETH AND MEANS FOR MOUNTING THEM UPON EXCAVATING IMPLEMENTS. WILLIAM H. BRUNE, Chicago, Ill. Filed Feb. 6, 1930. Serial No. 426,208. 9 Claims. (Cl. 37—141.)



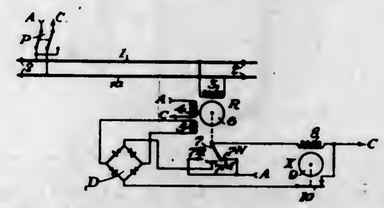
6. A digging wall for excavating implements in which longitudinal tooth confining channels are provided and the lateral confines of said channels are constructed for tongue and groove interlock with and connected by straps adapted to overlie teeth inserted in the channels and confine said teeth against displacement perpendicularly to the wall.

1,885,327. METHOD OF MAKING RUBBER BOOTS. LAURENCE H. BURNHAM, Lexington, Mass., assignor to The B. F. Goodrich Company, New York, N. Y., a Corporation of New York. Filed Apr. 15, 1930. Serial No. 444,413. 1 Claim. (Cl. 18—53.)



The method of making a rubber boot which comprises preforming a lining of such thick and open structure as to provide substantial ventilation through the material thereof and approximately to its final size and shape, pulling the lining onto an expansible last, building upon the lining the other parts of the boot including a layer of material next to the lining adapted to prevent extensive penetration of the lining by the rubber, and, by vulcanising the boot in a mold while holding it distended thereagainst by pressure fluid in the last, adhering the rubber composition to the lining without such penetration of the rubber into the lining as substantially to reduce the ventilating characteristics of the lining.

1,885,328. ELECTRICAL TRANSLATING APPARATUS. CHARLES W. BUTLER, Wilkinsburg, and ALLAN T. JOHNSTON, Mount Lebanon, Pa., assignors to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed Sept. 24, 1929. Serial No. 394,824. 10 Claims. (Cl. 175—320.)



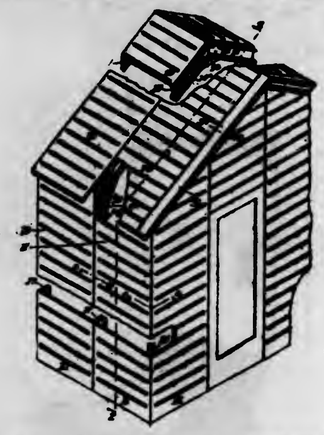
1. In combination, an alternating current relay of the induction type, and means for at times supplying direct current to a winding of said relay to delay the release of the relay.

10. In combination, an alternating current relay of the induction type, means for discontinuing the supply of alternating current to said relay for a short interval of time, and means for supplying direct current to said relay during such interval to prevent the relay from releasing.

1,885,329. SHED CONSTRUCTION. OTTO P. CHERDRON and CARL W. SCOTT, Salt Lake City, Utah. Filed Sept. 1, 1931. Serial No. 560,621. 6 Claims. (Cl. 189—2.)

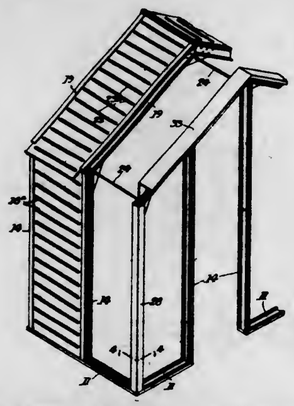
1. An insulated structural unit for walls and roofs of sheds comprising a sheet metal panel bent to provide edge flanges and a transverse series of stiffening beads extending substantially from one edge flange to the other,

an insulating board united to the inner beaded surface of said panel between said flanges, and said flanges being



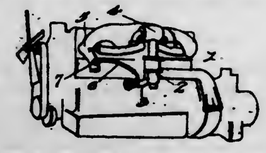
inturned and reversely bent upon themselves and terminating adjacent said insulating board to provide spaced flange strengthening beads and board supporting ears.

1,885,330. BUILDING CONSTRUCTION. OTTO P. CHERDRON and CARL W. SCOTT, Salt Lake City, Utah. Filed Sept. 1, 1931. Serial No. 560,622. 15 Claims. (Cl. 72—115.)



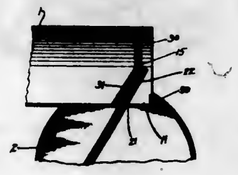
1. In a building construction, a structural member formed from sheet metal bent upon itself to form a cross section of substantially an I shape, having at one end of its cross section a bead and at the other end of the cross section two opposing channels with continuous integral flanges to engage panels by gripping spring action.

1,885,331. AUTOMATIC CHOKE. DOUGLAS COLLINS, Salisbury, N. C. Filed Nov. 5, 1929. Serial No. 404,996. 4 Claims. (Cl. 123—124.)



1. In a charge forming device for an internal combustion engine, the combination with an air feed pipe, of a choke device for the air pipe comprising a casing and its regulating valve, and means for introducing pressure of exhaust gas against said valve for opening the latter.

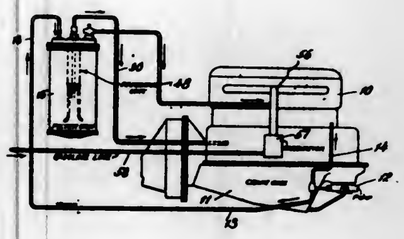
1,885,332. SPRAYER. FRED A. CUFF and MAURICE H. KEATING, Minneapolis, Minn., assignors to H. D. Hudson Manufacturing Company, Minneapolis, Minn., a Corporation of Minnesota. Filed Oct. 8, 1928. Serial No. 311,139. 5 Claims. (Cl. 299—88.)



1. A tank and a pump cylinder secured thereto with a portion of the pump cylinder including its end extending into the tank, said tank having a lip partially capping the end of said cylinder, and said cylinder having an end wall spaced from said capping element to form therewith a catch-chamber.

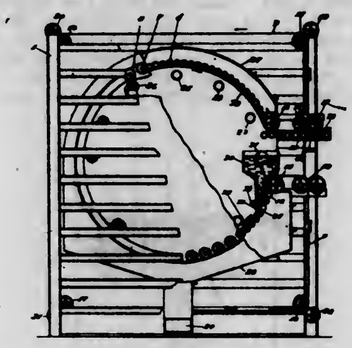
2. A supply tank and a pump cylinder secured thereto, said cylinder having a head having a discharge orifice and a portion below the orifice slanted inwardly away from the end of the cylinder to define a drip chamber between the head and the end of the cylinder, said portion being slanted toward the interior of the tank to form a tube attachment means, a straight tube attached to said slanted portion and passing through the cylinder into the tank, and having one end associated with the discharge orifice so that air forced through said orifice will create suction in the tube, and means closing the end of the cylinder to form one wall of the drip chamber, the top of said means being at a level below the discharge orifice.

1,885,333. OIL RECTIFYING APPARATUS. MARTIN CZARNY, Roselle, and FRANK C. FROLANDER, Elizabeth, N. J., assignors to Capilizer Holding Corporation, New York, N. Y., a Corporation of New York. Filed Nov. 13, 1928. Serial No. 319,129. 21 Claims. (Cl. 123—196.)



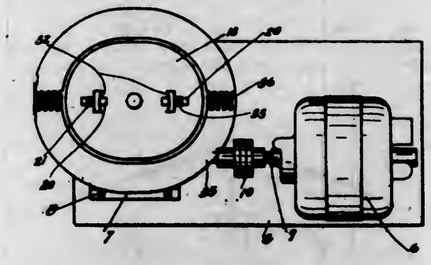
1. In oil rectifying apparatus, the combination of a container for the oil, a capillary device in the oil in said container, for abstracting liquid diluents from the oil, and a source of suction connected to the device for removing the abstracted diluents therefrom.

1,885,334. PROCESS AND EQUIPMENT FOR FORMING SHEETS. WILLIAM A. DARRAH, Chicago, Ill. Filed Sept. 9, 1929. Serial No. 391,235. 21 Claims. (Cl. 92—39.)



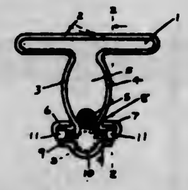
1. The process of removing liquids from pulp which consists in applying the pulp to a foraminous belt, removing a portion of the liquid therefrom by centrifugal force and then continuously removing said material from said belt.

1,885,335. LURING MACHINE. GEORGE A. DILAS, Bay City, Mich. Filed Dec. 9, 1929. Serial No. 412,748. 2 Claims. (Cl. 223—80.)



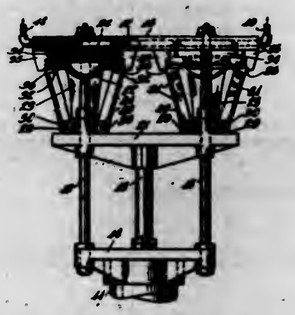
1. A luring machine including a table formed with an externally threaded tubular extension, levers pivotally mounted on said table, a hand wheel threaded on said extension, a plate mounted thereon, links connecting said levers and the plate, a sectional adjustable rim around said table and supported thereby, and means for rotating said table.

1,885,336. BUTTON LOOP. JOHN H. DOMKER, West Haven, Conn., assignor to The Wire Novelty Manufacturing Company, West Haven, Conn., a Corporation of Connecticut. Filed Apr. 18, 1931. Serial No. 531,145. 2 Claims. (Cl. 24—224.)



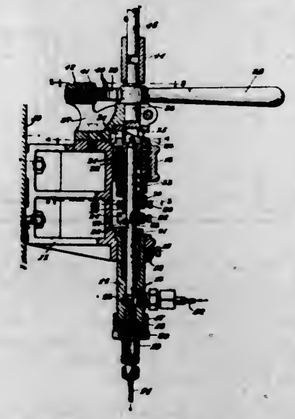
1. A two-member button loop, one member comprising a button-receiving loop having a laterally expansible throat portion and depending terminals providing shaft portions in relative alignment with each other, the other member comprising a substantially rigid button-retaining loop having terminals providing journals for said shaft portions, the bearing surfaces of the shaft portions and journals being so formed as to permit only a longitudinal movement of said shaft portions within said journals.

1,885,337. APPARATUS FOR MOLDING FOOTWEAR. WARREN R. DOW, Watertown, Mass., assignor to The B. F. Goodrich Company, New York, N. Y., a Corporation of New York. Filed Apr. 19, 1930, Serial No. 445,666. Renewed July 28, 1932. 4 Claims. (Cl. 18—17.)



3. Apparatus for molding soles on footwear, said apparatus comprising a pair of opposed press platens, means for moving one of the platens toward the other, a sole molding member mounted on one of the platens, a shoe-supporting last carried by the other platen for cooperation therewith, a plurality of edge-molding members hinged to the last supporting platen, and extending therefrom in spaced relation to the shoe on said last and means mounted on the sole-mold supporting platen for engaging said edge molding members and causing a lateral movement thereof toward the shoe and into contact therewith only adjacent the upper margin of the sole during the movement of the last-carrying platen.

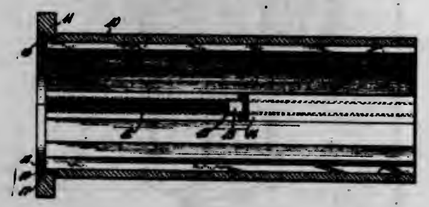
1,885,338. FUEL RELIEF VALVE. ADRIAN C. ESTEP, Seattle, Wash. Filed Nov. 1, 1924. Serial No. 747,312. 4 Claims. (Cl. 137—153.)



1. In a relief valve, in combination, a valve supporting bracket, a valve body removably secured within said bracket, a valve stem seating within said valve body, a compression spring for said valve stem, an exteriorly threaded sleeve removably secured upon said valve stem, a spring adjusting nut threadably engaged upon said sleeve to

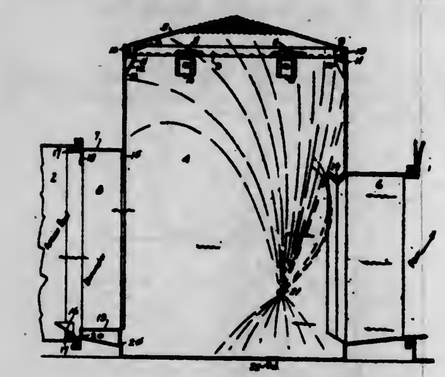
regulate the initial compression upon said spring to thereby predeterminately set said valve stem for actuation at a selected minimum terminal working pressure, a cam member slidably disposed within said valve supporting bracket to receive said spring and to co-act with said spring adjusting nut, and manually operable means engaging said cam member to increase the compression upon said spring to predeterminately set said valve stem for actuation at a selected working pressure greater than said minimum terminal working pressure.

1,885,339. RUBBER BEARING STRUCTURE. BENJAMIN A. EVANS, Cuyahoga Falls, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y., a Corporation of New York. Filed Sept. 20, 1928. Serial No. 307,098. 10 Claims. (Cl. 308—238.)



1. A bearing structure comprising a bearing member and a plurality of individually removable longitudinal bearing sections having rigid attaching portions and shaft-contacting portions of resilient rubber mounted upon the surface thereof, each of said sections having a bearing surface tangentially with relation to a shaft at zero pressure.

1,885,340. AIR WASHER FOR FURNACES. GEORGE F. GEHRI, Tacoma, Wash. Filed Jan. 29, 1930. Serial No. 424,272. 7 Claims. (Cl. 216—118.)



1. An air-washer for furnaces, comprising a main box with means for creating a liquid spray therein and having an open top an inturned trough formed around the said open top; a lid having sloping sides and a vertical peripheral flange resting in said trough; and drainage holes in said trough, adapted to conduct the water from the lid to the side walls of the box.

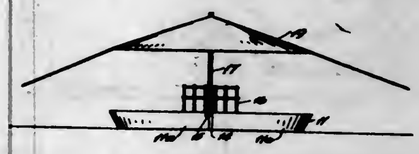
1,885,341. EXCHANGEABLE HEEL. ERICH GRAUERT, Halberstadt, Germany. Filed Mar. 25, 1931, Serial No. 525,176, and in Germany Mar. 26, 1930. 1 Claim. (Cl. 36—42.)

A detachable heel comprising in combination with a heel stump on the shoe, a metal plate corresponding to the shape of and fixed on said heel stump having its lower side two short dove-tailed grooves extending from its front face one near each corner and a short dove-tailed groove in the middle near its rear end, a recess extending from said middle groove to near the front face of the plate, a spring in the recess fixed at its front end to said plate, a downwardly projecting hemispherical knob near the free end of said spring, a detachable second metal plate also corresponding to the shape of the heel stump having a hemispherical depression in its middle, and short dove-



tailed projections on the upper side of said detachable plate registering with and corresponding in shape to the dove-tailed grooves in said fixed plate adapted to slide in said grooves to connect said detachable plate to said fixed plate, said knob adapted to engage in the depression in said detachable plate to lock said detachable plate on said fixed plate but to be disengaged from said depression upon sudden pressure being exerted on the rear end of the heel to allow said detachable plate to be slipped off said fixed plate.

1,885,342. STOCK TREATING APPLIANCE. JACOB H. GRAVES, Lexington, Ky. Filed June 3, 1931. Serial No. 541,903. 3 Claims. (Cl. 119—158.)



1. A stock treating appliance comprising inner and outer receptacles of which the latter is in surrounding relation to the former and consists of a plurality of detachably connected segments.

1,885,343. METALLIC LATH CONSTRUCTION. GERALD G. GREULICH, Cleveland, Ohio. Filed June 1, 1929. Serial No. 367,644. 7 Claims. (Cl. 72—117.)



7. In combination, a metallic reinforcing section having parallel ribs and a sheet of fibrous backing material therefor on the side opposite the ribs, said sheet being folded upon itself at its edges and extending into the ribs, and being held therein only by frictional contact with the walls thereof.

1,885,344. FOUNTAIN PEN. RICHARD T. GRIFFITHS, Akron, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y., a Corporation of New York. Filed Aug. 21, 1930. Serial No. 476,955. 4 Claims. (Cl. 120—42.)



1. In combination, a fountain pen comprising a fountain chamber having metallic actuating mechanism and a vulcanized soft rubber ink sac in said chamber coated with aluminum powder.

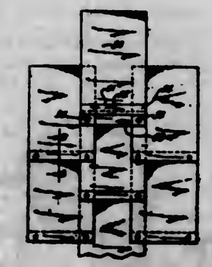
1,885,345. METHOD OF PROTECTING SURFACES. CHARLES C. GUTHRIE, Pittsburgh, Pa. Filed June 22, 1931. Serial No. 546,029. 7 Claims. (Cl. 41—21.)



7. A method of protecting a surface of an article, which consists in covering the surface to be protected with a thin sheet of dehydrated cellophane, permanently securing the edges of the sheet to the article, at points beyond the confines of the surface, or such portion thereof to be protected, by cementing such edges to the article, then moistening the exposed surface of the intermediate portion of the sheet, permitting such portion to dry and again moistening wrinkled portions of the exposed surface of the unsecured portion of said sheet, and then treating the exposed surface of the unsecured portion of the sheet with a protective coating.

1,885,346. SHINGLE ELEMENT. NORMAN P. HARNBERGER, Scarsdale, N. Y. Filed Sept. 24, 1930. Serial No. 484,077. 9 Claims. (Cl. 108—7.)

1. A shingle comprising a body of composition material, a section of material adjoining said body and foldable therebeneath, and a second section adjoining said first section and foldable below the latter, said second section having its free edge positionable adjacent the edge of the



body and providing for the insertion of nails or the like therethrough, and said first section being positionable over said second section to cover the latter and said nails.

1,885,347. DUPLEX RIVETING MACHINE. ARTHUR R. HAVENER, Wayland, Mass., assignor to Judson L. Thomson Manufacturing Co., Waltham, Mass., a Corporation of Massachusetts. Filed Dec. 24, 1931. Serial No. 582,962. 13 Claims. (Cl. 218—0.5.)

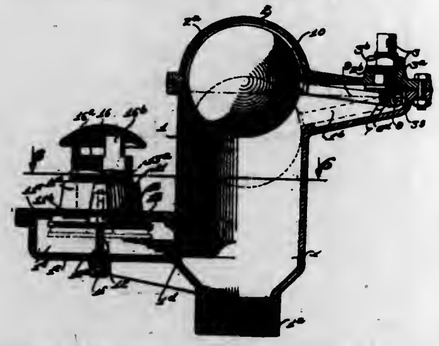


1. A riveting machine having, in combination, a slide, a rivet driver fast thereto, a rivet holder slidably mounted on said rivet driver, an anvil in alignment with said driver, mechanism to impart a reciprocatory motion to said slide toward and away from said anvil, means to frictionally retain the holder on the driver, and locking means to prevent the holder from moving while the driver is in motion, whereby the holder is caused to slide on the driver.

13. A riveting machine having, in combination, a slide, a rivet driver fast thereto and embodying a pair of driver stems, a rivet holder slidably mounted on said driver and provided with entrances and with vertical grooves therein to receive the shanks of two rivets, a pair of raceways terminating at their lower ends on opposite sides of said holder respectively, said holder being provided in said entrances with upwardly inclined grooves extending from said shank receiving grooves to said raceways and forming guideways for the heads of rivets as they pass from said raceways through said entrances and into said shank re-

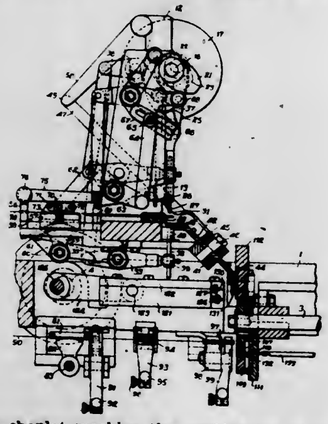
ceiving grooves, a pair of anvils in alignment with said driver stems, and mechanism to impart a reciprocatory motion to said slide toward and away from said anvils, said raceways constituting stops adapted to limit the distance to which said holder can be moved away from said anvils.

1,885,348. AIR VALVE STRUCTURE FOR PIPE LINES. JOHN C. HIGGINS, San Diego, Calif. Filed June 23, 1930. Serial No. 462,987. 8 Claims. (Cl. 137—69.)



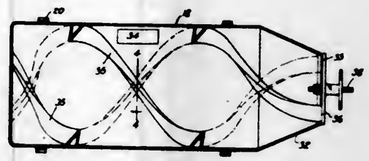
1. In a valve structure of the class described, a casing having an inlet opening at its lower portion, a hollow arm extending laterally from the upper portion of said casing, said arm provided with a discharge passage at the extended portion thereof, a valve seat in said discharge opening, a valve member arranged to coact with said valve seat, a lever fulcrumed at the extended end of said valve seat, a lever fulcrumed at the extended end of said arm, said valve member joined to said lever, a float joined to said lever and mounted in said casing, and a second hollow arm extending from said casing below said first hollow arm, said second arm forming a valve housing and provided with a discharge opening in its upper side, a valve support arranged transversely within said valve housing, a valve body slidably mounted on said valve support, and a valve element supported by said valve body arranged to close the discharge opening of said valve housing.

1,885,349. CHAPLET MAKING MACHINE. LOUIS C. HOBART, Avalon, Pa., assignor to Gem Manufacturing Company, a Corporation of Pennsylvania. Filed Apr. 15, 1929. Serial No. 355,014. 5 Claims. (Cl. 10—158.)



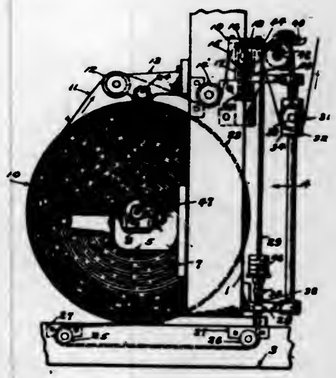
1. In a chaplet machine the combination of a reciprocating punch and means for feeding strip material thereto, wire scoring and cutting members and means for feeding wire thereto, a jig for receiving the cut off wire lengths, a transfer dial for receiving the strip punchings, means for forming a shoulder on the wire in the jig, means for transferring the strip punchings from said dial to the wire in said jig and means for fastening the punchings on the ends of the wire.

1,885,350. APPARATUS FOR TRANSPORTING AND CONDITIONING READY-MIXED CONCRETE. EDWARD A. HOFFMANN, Reading, Pa. Filed July 13, 1931. Serial No. 550,467. 9 Claims. (Cl. 83—73.)



1. Conditioning means for ready-mixed concrete comprising a cylindrical tank having an outlet, means to rotate the tank in one direction for conditioning and a reverse direction for discharging, and blades spirally disposed along the inner wall of the said tank extending to the said outlet at an obtuse angle with the said wall to prevent rupture of the surface of the concrete within the tank when rotated for conditioning and adapted to eject the concrete through the said outlet when rotated for discharging.

1,885,351. WEB ROLL CONTROLLING MECHANISM. ALBERT J. HORTON, White Plains, N. Y., assignor to R. Hoe & Co., Inc., New York, N. Y., a Corporation of New York. Filed June 8, 1927, Serial No. 197,394. Renewed Mar. 23, 1932. 6 Claims. (Cl. 242—75.)

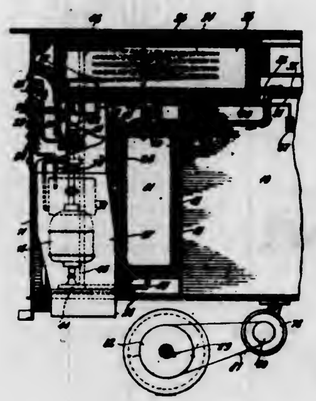


1. Web controlling mechanism having in combination a support for a running web roll, a friction strap or belt engaging the surface of the web roll for controlling its unwinding, a controller roll riding in a loop of the web, a pair of chains to which the controller roll is connected and located outside the path of the running web, connections between the chains and the strap, and a sprocket shaft over which the chains pass.

1,885,352. PROCESS OF TREATING WOOD PULP FOR NITRATION. ARTHUR HOUGH, Passaic, JOHN ROY DUFFORD, Paterson, and WILLIAM CLELAND LEONHARD, Passaic, N. J. Filed Jan. 29, 1930. Serial No. 424,440. 8 Claims. (Cl. 260—146.)

1. The process of making a nitrated product which comprises subjecting wood pulp to the action of sulfuric acid of a strength below that which produces dextrination or parchmentization of the cellulosic material, washing the product substantially free of acid, drying, and thereafter nitrating same.

1,885,353. APPARATUS FOR COOLING. GEORGE E. HULSE and JOHN D. STROBELL, New Haven, Conn., assignors to Safety Car Heating & Lighting Company, a Corporation of New Jersey. Filed Oct. 5, 1922, Serial No. 592,483. Renewed Jan. 10, 1931. 30 Claims. (Cl. 62—117.)

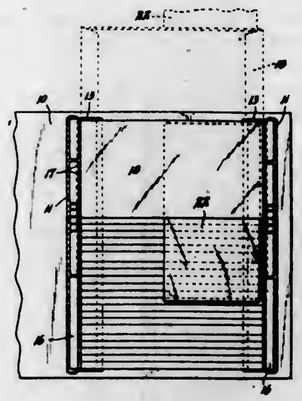


1. In apparatus of the general nature of that herein described, in combination, a conduit adapted to have passed therethrough a cooled refrigerating fluid for abstracting heat from the medium surrounding said conduit, a storage reservoir in connection with said conduit and positioned at a higher level than that of said conduit for supplying cooled fluid thereto, a second reservoir in connection with said conduit and adapted to receive the fluid therefrom, means for returning fluid from said second reservoir to said first reservoir, means for cooling said fluid returned to said first reservoir, and a source of energy inherently intermittently operative for operating both said returning means and said fluid-cooling means, said first reservoir having a capacity sufficiently great for storing fluid cooled to a lower degree by said cooling means during periods of inherent operativeness of said source of energy and adapted thereby to supply said conduit with cooled fluid during periods when said source of energy is inoperative.

1,885,354. FILE INDEX DEVICE. JOSEPH M. HURLEY, Minneapolis, Minn. Filed Oct. 25, 1930. Serial No. 491,208. 10 Claims. (Cl. 129—16.)

1. A file index having in comoination a backing panel, support housings mounted on said panel in parallel spaced relation, said housings having inner opposing sides with openings cut therethrough and each housing member having an outer imperforate side spaced outwardly a short distance from its inner side, spring wires having ends fitting within said openings, said wires being adapted to be flexed to release the same from said supports and memoranda members carried by said wires.

5. A filing envelope for use in connection with a file index device, said envelope having both ends and one side closed and having its remaining side open and having small wire-receiving openings at its corners which join

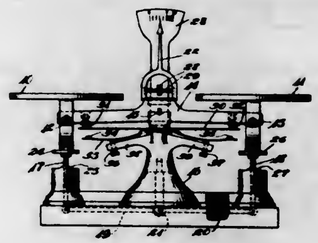


the closed ends and the closed side of the envelope, and inturned flaps on both top and bottom of the envelope at the open side thereof.

1,885,355. METHOD OF MAKING SECONDARY AROMATIC AMINES. PAUL C. JONES, Cuyahoga Falls, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y., a Corporation of New York. Filed Jan. 31, 1929. Serial No. 336,659. 4 Claims. (Cl. 260—128.)

1. The method of making symmetrical dibeta-naphthyl p-phenylene diamine which comprises heating a mixture of p-phenylene diamine and a 50% excess of beta-naphthol at atmospheric pressure to a temperature of about 300° C. in the absence of a catalyst.

1,885,356. METHOD OF WEIGHING. ENOCH KARRER, Akron, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y., a Corporation of New York. Filed May 21, 1929. Serial No. 364,767. 2 Claims. (Cl. 265—59.)



1. The method of weighing which comprises applying to the article to be weighed a determinate amount of energy in opposition to gravity to give it velocity, subjecting it to a stopping force in addition to gravity,

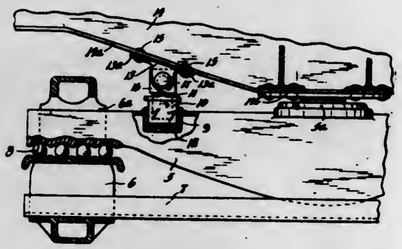
ascertaining the distance through which it is carried by velocity against gravity and the said additional stopping force, and gauging the weight of the article by the magnitudes of the said distance and the stopping forces.

1,885,357. OVEN DOOR. WILLIAM J. KIRBY, Somerville, N. J. Filed Oct. 15, 1931. Serial No. 568,907. 20 Claims. (Cl. 126—190.)



1. A door including a relatively thick rigid metal frame formed to embody in skeleton form the operating essentials of a door, in combination with outer and inner sheet metal panels secured against the outer and inner faces of said frame by transversely extending tension members.

1,885,358. SIDE BEARING. LAMBERT C. KOOPMANS, Chicago, Ill. Filed Oct. 19, 1927. Serial No. 227,226. 6 Claims. (Cl. 308—226.)



1. A side bearing structure having in combination, a bearing member having a plurality of circumferentially disposed faces, means carrying said member on which it is rotatable whereby different faces may be brought into operative position, a bearing roller against which one of said faces bears, said roller normally preventing rotation of said member for maintaining the operative face thereof in position.

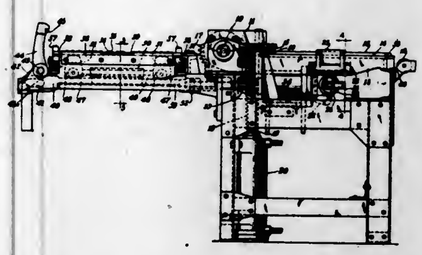
1,885,359. BIRD CAGE. ANTON M. KROCZEK, Chicago, Ill. Filed Jan. 27, 1930. Serial No. 423,668. 3 Claims. (Cl. 119—17.)

3. In a bird cage, an annular base member, a bottom member having a marginal flange, means for hingedly supporting said bottom member within the base member comprising studs inserted through registered apertures in the base member and the marginal flange of said bottom member, and a wire extended through transverse apertures provided therefor in said studs adjacent to the inner face of the marginal flange of said bottom member, and a latch device comprising a leaf secured at one end to the inner side of the marginal flange of said bottom



member and being yieldably held in engagement therewith, said leaf having an outwardly extending projection engageable in an opening provided therefor in said annular base member, said leaf having an inwardly extending lateral portion affording a handle for said latch device.

1,885,360. MOLD MANIPULATING APPARATUS. BERNHARD G. KUHNE, Akron, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y., a Corporation of New York. Filed July 26, 1927. Serial No. 208,563. 10 Claims. (Cl. 18—2.)

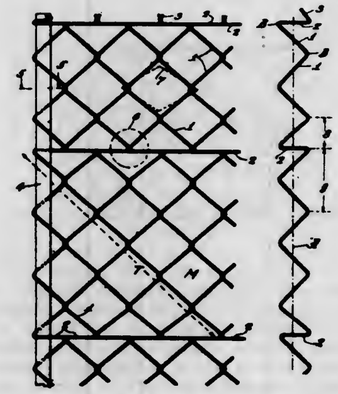


10. Apparatus of the class described comprising, in combination, a detached mold section having a mold cavity in its face, a second detached mold section adapted to mate therewith and having a projecting washer-supporting pin adapted to place a washer supported thereon in a determinate position in the mold cavity on assembly of the mold sections, means for supporting the said second section in a determinate position, means for supporting the first said section and for inverting it over the said second section in parallel, face to face relation thereto, and means for moving the said second section into assembled engagement with the first said section.

1,885,361. CHAIN-LINK WIRE FABRIC. ARTHUR A. G. LAND, Chicago, Ill. Filed Feb. 17, 1930. Serial No. 428,889. 8 Claims. (Cl. 245—8.)

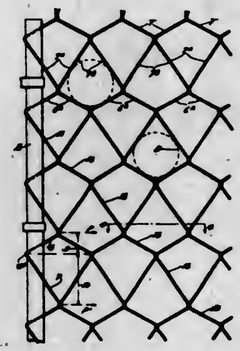
1. A wire fabric comprising flattened and consecutively intertwined zigzag strands extending transversely of the fabric, the zigzag formation of the strands being such that the intertwined strands form rows of meshes extending longitudinally of the strand; the meshes of each row in a portion of the fabric being composed entirely of meshes having at least four mesh-side portions oblique

to a longitudinal edge of the fabric; the fabric also including at a distance from both longitudinal edges of the fabric at least one longitudinal row of meshes each of which meshes has a mesh side extending longitudinally of the fabric.



4. A constituent strand for a chain-link wire fabric comprising a wire formed into a zigzag formation in elevation when the axis of the strand is upright, the strand presenting bights at each lateral edge of the strand and legs diverging from each such bight; the strand including consecutive legs each having a portion thereof extending oblique to the said axis, also including at least one leg interposed between obliquely extending legs and extending at right angles to the said axis.

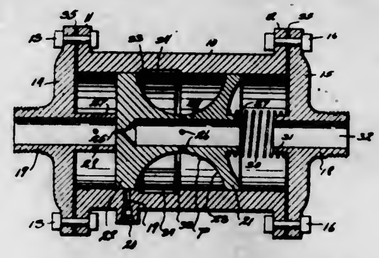
1,885,362. CHAIN-LINK WIRE FABRIC. ARTHUR A. G. LAND, Chicago, Ill. Filed Mar. 5, 1930. Serial No. 433,386. 10 Claims. (Cl. 245—5.)



1. A constituent strand for a chain link type of wire fabric comprising a wire bent to a flattened spiral zigzag formation of uniform width and presenting legs of two different lengths all disposed oblique to the general axis of the strand, the strand including a portion in which consecutive legs are of the same length and a portion in which consecutive legs are of different lengths.

1,885,363. AIR SIGNAL VALVE. LAWRENCE L. LEITNER, San Luis Obispo, Calif. Filed Jan. 19, 1932. Serial No. 587,601. 7 Claims. (Cl. 116—55.)

1. A signal valve comprising a cylinder having opposed intake and exhaust ports, and a signal port intermediate said ports, a piston slidable between said intake and exhaust ports, and means for automatically returning said



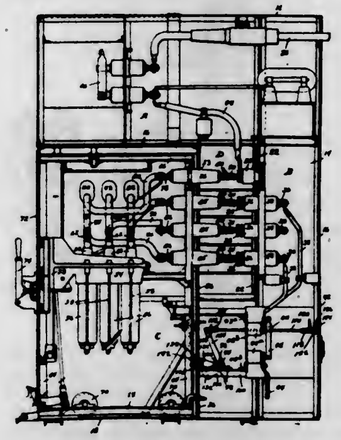
piston to a position overlying said signal port for closing thereof, said means including a bleeder opening through the piston to equalize the pressure on each side thereof.

1,885,364. INSULATING MATERIAL AND METHOD OF MAKING THE SAME. GEORGE K. LEWIS, Chicago, Ill., assignor to Met-L-Wood Corporation, Chicago, Ill., a Corporation of Illinois. Filed Oct. 28, 1929. Serial No. 403,102. 2 Claims. (Cl. 20—15.)



1. A method of forming a panel consisting in sandwiching a piece of insulating material between steel plates, applying pressure to said panel to bond said steel plates and insulating material together, and incorporating between said plates, as part of the panel, a spacing member capable of withstanding the bonding pressure for limiting the thickness to which the panel is compressed.

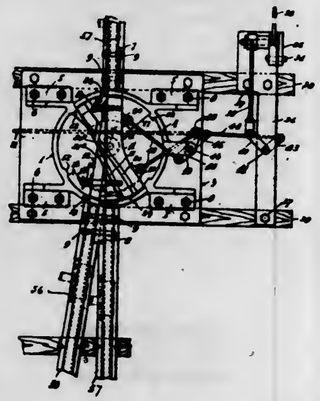
1,885,365. INCLOSED ELECTRIC SWITCH. FREDERICK H. MACNEIL, Boston, Mass., assignor to Condit Electrical Manufacturing Corporation, South Boston, Mass., a Corporation of Massachusetts. Filed Nov. 3, 1930. Serial No. 493,030. 21 Claims. (Cl. 175—298.)



1. In an electric switch gear, the combination of an inclosing cell, a truck type switch movable into and out of a circuit controlling position in the cell, a disconnect-

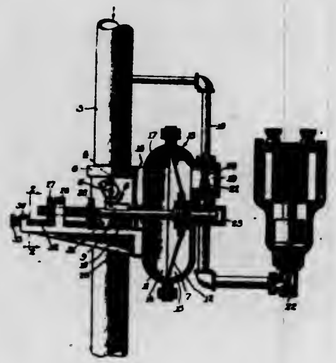
ing switch compartment having a door governing access thereto, a disconnecting switch located in said compartment, and cooperating means carried by the switch and cell governed by the movements of said switch to and from said circuit controlling position to control the locking and unlocking of said door.

1,885,366. RAILROAD TRACK-SWITCH. BIAGIO MARTINI, Pittsburgh, Pa. Filed July 20, 1931. Serial No. 551,822. 6 Claims. (Cl. 246—415.)



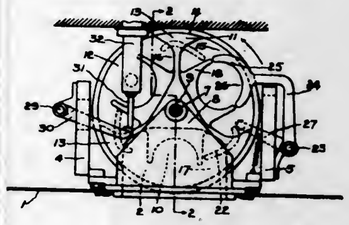
1. In a railroad track-switch of the character described, a base; a cylindrical crown supported thereon in spaced parallel relation; a spider-member comprising a spider-block and a separate spider-tongue partly supported by the block; yielding means to hold said tongue in cooperative relation to said block; a pivot-pin positioned on the spider-block and rotatably supported on the base, and means to oscillate said spider-member within the crown.

1,885,367. CONTROL DEVICE. GARNET W. MCKEE, Rockford, Ill. Filed Feb. 5, 1930. Serial No. 425,991. 14 Claims. (Cl. 137—139.)



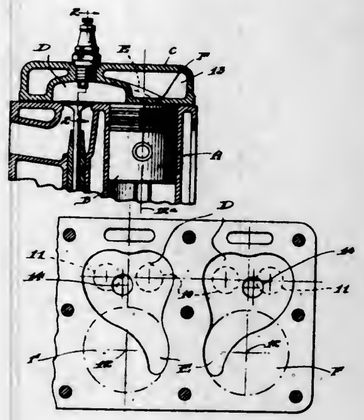
9. In combination, a support, a fixed stop on said support, a plunger reciprocable in said stop, a pair of stop nuts adjustably threaded on said plunger at opposite sides of said stop, each of said nuts having a longitudinal notch in its periphery, and a spline pin removably mounted on said support and when in position engaging said notches to lock said nuts against adjustment on said plunger.

1,885,368. DISPENSING DEVICE. JAMES HOWARD MCLELLAN, Vancouver, British Columbia, Canada, assignor to Auto Fount Limited, Vancouver, British Columbia. Filed Feb. 16, 1932. Serial No. 593,320. 7 Claims. (Cl. 225—21.)



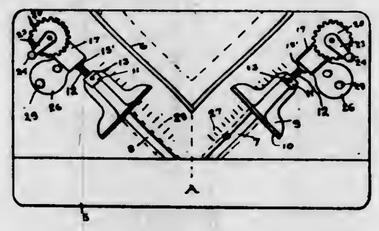
1. In a liquid dispensing machine equipped with a cup depositing device, a valve, means for operating the valve and a delivery opening, a cup carrier mounted adjacent the delivery opening, said carrier having cup pockets adapted to be moved progressively into coacting relation with the opening, one of said pockets being disposed to receive a cup from the cup depositing device, another pocket being disposed in position for a cup therein to be filled from the valve and a further pocket being disposed adjacent the opening for the delivery of a filled cup.

1,885,369. INTERNAL COMBUSTION ENGINE. ANDRE J. MEYER and LEWIS P. KALB, Detroit, Mich., assignors to Continental Motors Corporation, Detroit, Mich., a Corporation of Virginia. Filed Dec. 3, 1927. Serial No. 237,866. 2 Claims. (Cl. 123—191.)



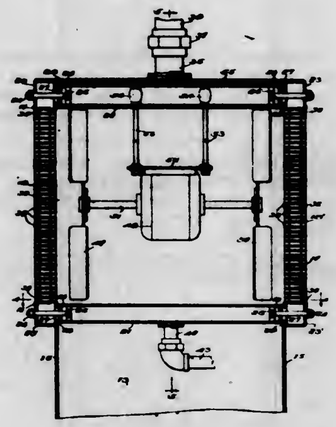
1. In an engine of the character described, a cylinder, a piston, intake and exhaust valves for the cylinder, a cylinder head provided with a primary chamber to one side of the cylinder into which said valves open and also provided with a communicating secondary chamber overlying a portion of the piston remote from the center of the piston face, a spark plug located in proximity with the exhaust valve, said secondary chamber sloping downwardly from the primary chamber to a point beyond the piston axis generally following the curvature of the piston face periphery, the cylinder head having a portion thereof providing a minimum clearance for the remainder of the piston face when the piston is in its upper limit of travel.

1,885,370. COMBINED ADJUSTING AND GAUGE HEADS FOR CORNER CUTTING MACHINES. ROBERT MINKOW, New York, N. Y. Filed Aug. 13, 1931. Serial No. 556,776. 2 Claims. (Cl. 164—59.)



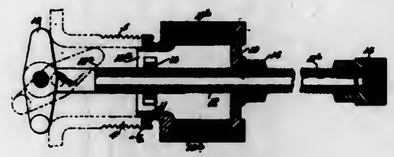
2. The combination with the cutting table of a machine for cutting corners from flat cardboard stock for making boxes, said table having a stationary right angular cutting knife thereon and T-slots disposed in parallel relation to the sides of the cutting knife and spaced therefrom, a gauge head slidable over each slot and having a depending flange fitting in the slot, a screw shaft swiveled to the gauge head, an adjusting head having an upright and an integral horizontal arm, a screw sleeve mounted to turn in the upright and constructed to engage and propel the screw shaft, a bevel pinion gear on the screw shaft, a shaft journaled on the horizontal arm, a bevel driving gear larger than the pinion gear carried by the shaft and arranged to work under the arm and meshing with the pinion gear, the screw shaft being mounted so that it can project under the bevel driving gear, the table being provided with scale markings located along each slot thereof to assist in the precision adjustment of the gauge head.

1,885,371. HEATING APPARATUS. ARTHUR B. MODINE, Racine, Wis., assignor to Modine Manufacturing Company, Racine, Wis., a Corporation of Wisconsin. Filed Aug. 9, 1929. Serial No. 384,733. 16 Claims. (Cl. 257—137.)



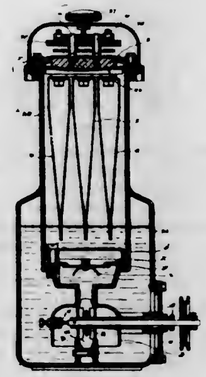
4. In a device of the class described, a housing, a plurality of radiator units forming walls of said housing, manifolds at the top and bottom of said units for respectively conducting heat exchange fluid to said units and for draining said fluid therefrom, a plurality of fans within said housing for inducing a current of air to flow into said housing and outwardly therefrom through said units in a plurality of directions, and a single motive means for operating said fans.

1,885,372. FIRE HYDRANT ATTACHMENT. EMIL L. NUEBLING, Reading, Pa. Filed Nov. 7, 1930. Serial No. 494,151. 2 Claims. (Cl. 137—13.)



1. In combination with a fire hydrant having a hollow barrel and laterally projecting nozzle, a coupling attachment comprising a hollow coupling head having a nozzle-seating face, and an axial head-connecting tube having a barrel-entering end provided with a tilting catch-bar and an oppositely projecting coupling end.

1,885,373. VARIABLE RHEOSTAT. RENÉ BENJAMIN PLANCHE, Villefranche-sur-Saone, France. Filed June 16, 1931, Serial No. 544,872, and in France June 25, 1930. 7 Claims. (Cl. 172—289.)

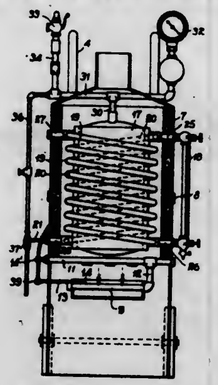


1. An automatic rheostat for starting electric motors comprising the combination with stationary resistance electrodes of a casing containing conducting liquid compartments within the casing within one of which the electrodes are mounted a pump driven by the motor to be started housed within a second compartment to pump liquid into the electrode compartment to progressively immerse the electrodes to a greater extent and means for finally short circuiting the resistance electrodes.

1,885,374. STEAM GENERATOR. SAMUEL PAUL, Pittsburgh, Pa. Filed Jan. 24, 1930. Serial No. 423,046. 2 Claims. (Cl. 122—245.)

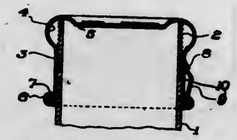
1. A steam generator comprising a boiler casing, a boiler within said casing, two spiral coils surrounding said boiler and communicating therewith at their upper ends, apertured extensions on said boiler, at diametrically opposite points adjacent to the bottom thereof, and each having connection with the lower end of one coil, an

inlet nipple extending through the wall of the casing and connected to one of said extensions, a nipple extending through said wall and connected to the other



extension, and a water gage connected to the last-named nipple and to the upper portion of the boiler, the said nipples serving to support the boiler within the casing.

1,885,375. PIPE THREAD PROTECTOR. LUCIEN G. PONCE, Parnassus, Pa., assignor to Allegheny Steel Company, Brackenridge, Pa., a Corporation. Filed Sept. 15, 1930. Serial No. 481,900. 3 Claims. (Cl. 137—91.)



3. A pipe thread protector comprising a sleeve adapted to envelop the threaded end of a pipe, and having a plurality of slots therein and having an end portion extending radially outward, clips disposed in the slots of said sleeve and abutting against said extended end, said clips being adapted to interlock with the threads of the pipe.

1,885,376. TRACTION WHEEL. CHARLES T. RAY, Louisville, Ky., assignor to B. F. Avery & Sons, Louisville, Ky., a Corporation of Kentucky. Filed Feb. 4, 1929. Serial No. 337,386. 8 Claims. (Cl. 301—41.)



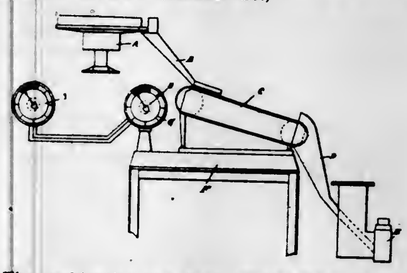
1. A traction wheel comprising a hub, a ring spaced from the hub, spokes connecting the hub and ring with each other, and a series of paddles whose outer ends are secured to the ring and project laterally therefrom alternately in opposite directions and whose inner ends project to a place inward of the ring and are respectively secured to the corresponding spokes, said paddles forming the major portion of the tread of the wheel, whereby the paddles and spokes mutually brace each other.

1,885,377. WEEDING IMPLEMENT. WILLIAM J. ROBINSON, Muskegon, Mich. Filed May 13, 1931. Serial No. 536,958. 8 Claims. (Cl. 55—65.)

1. In an implement of the character described: a pair of relatively movable telescoping members; a plurality of levers fulcrumed in angularly spaced relation on the inner one of said members, their lower arms forming gripping jaws; a collar on the outer one of said members having a face inclined from the axis of said members bearing on the upper arms of the levers to positively move the same by the relative movement of said members; a spring surrounding the upper arms of the levers and urging the same toward each other.

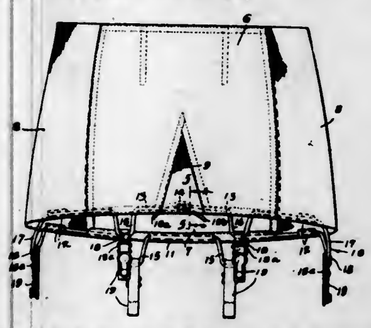


1,885,378. WEIGHING MACHINE. RALPH C. ROE, Englewood, N. J., assignor of one-half to Stephen W. Borden, Summit, N. J. Filed Feb. 5, 1929. Serial No. 337,714. 2 Claims. (Cl. 265—27.)



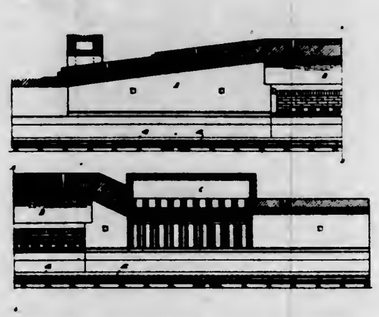
1. The combination of a direct reading weighing mechanism and a synchronous electric motor driven conveyor, the conveyor together with its driving motor being mounted upon the weighing platform of the weighing mechanism.

1,885,379. COMBINATION HOSE SUPPORTER AND WAIST-ENCIRCLING GARMENT. FRANCES W. ROLLER, St. Paul, Minn. Filed Oct. 6, 1930. Serial No. 486,537. 2 Claims. (Cl. 2—33.)



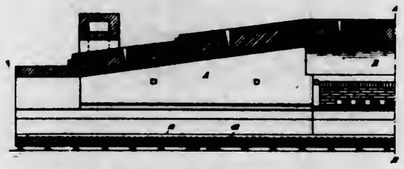
1. In combination with a waist encircling garment, such as a girdle, tubular guiding means disposed circumferentially of the entire garment at the lower edge thereof, an annular equalizing garter-supporting-cord connected to form an endless element extending through said tubular guiding means and freely slidable circumferentially of the garment, said guiding means having openings therein, said equalizing cord being considerably longer than the circumference of the garment and having loop sections depending from the openings in said guiding means and constituting garter supports and a series of hose clasps each mounted upon and freely slidable upon one of said loops.

1,885,380. METHOD OF PRODUCING FERROCHROME AND OTHER SIMILAR ALLOYS. KENNETH M. SIMPSON, New York, N. Y. Filed May 3, 1930. Serial No. 449,583. 9 Claims. (Cl. 75—17.)



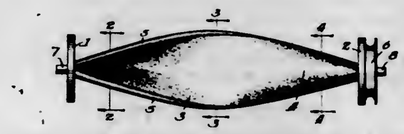
1. A process of producing ferrochrome from ores yielding iron and chromium which comprises reducing the metal-bearing ore in the presence of suitable reducing agent at a temperature sufficiently elevated to maintain the ferrochrome in a fluid state but not appreciably in excess of such temperature so as to prevent any substantial reduction of the components of the slag.

1,885,381. PROCESS FOR THE PRODUCTION OF IRON. KENNETH M. SIMPSON, New York, N. Y. Filed June 30, 1930. Serial No. 465,035. 8 Claims. (Cl. 75—14.)



1. A process for the production of iron from its ores which comprises passing a charge of ore in the presence of an amount of reducing agent sufficient to reduce the ore, into a zone in which reducing temperatures are maintained, holding the charge at reducing temperatures until substantial reduction has taken place, then introducing the charge so reduced into a zone in which the temperature is maintained sufficiently elevated to effect fusion of the reduced metal, holding the charge in said zone until the metal in the charge is reduced to a fluid state, then withdrawing the charge into a zone which is maintained at temperatures lower than the fusion point of the metal, the charge being maintained in said last named zone until it solidifies.

1,885,382. SUCTION CLEANER AGITATOR. DONALD G. SMELLIE, Canton, Ohio, assignor to The Hoover Company, a Corporation of Ohio. Filed Nov. 6, 1929. Serial No. 405,092. 9 Claims. (Cl. 15—13.)



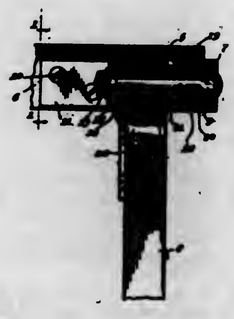
1. A suction cleaner agitator comprising spaced end members, means to rotatably support said end members and means maintaining said end members in fixed relative relation comprising a plate rigidly attached thereto the edges of which form beater elements.

1,885,383. METHOD OF MAKING FOOTWEAR. PEARL Y. SMILEY, Akron, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y., a Corporation of New York. Filed Mar. 26, 1930. Serial No. 439,041. 3 Claims. (Cl. 18—53.)



3. The method of making overshoes which comprises building an overshoe of fabric and unvulcanized rubber, molding a cuff by simultaneous contact over its entire area and partly vulcanizing it, adhering the cuff to the overshoe, and then vulcanizing the assembled structure.

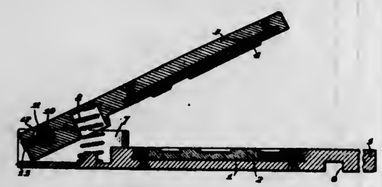
1,885,384. CARD TABLE. EUGENE A. SNOW, Oceanside, Calif. Filed Nov. 4, 1929. Serial No. 404,585. 2 Claims. (Cl. 45—11.)



1. The combination with a table having side-rails arranged at angles to each other, of an angle-bracket one arm of which is secured to a side-rail and the other arm pro-

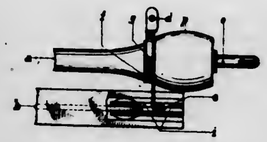
jects therefrom parallel with and spaced from the adjacent side-rail, a hinge-bolt extending from said adjacent side-rail through the projecting arm of said bracket, a leg pivotally mounted at one end on said bolt, a latch-plate on the upper portion of said leg with a surface opposed to a surface of the projecting arm of said bracket, a tenon and groove on the opposing surfaces of said arm and plate, and a spring interposed between said leg and said adjacent side-rail for urging the leg structure towards said projecting arm of the bracket..

1,885,385. DIE. FRANKLIN S. SPEICHER, Pittsburgh, Pa., assignor to M. E. Cunningham Company, a Corporation of Pennsylvania. Filed Feb. 2, 1932. Serial No. 590,453. 6 Claims. (Cl. 101—28.)



1. In combination in a die construction, a bottom die member, a top die member, and a hinge connection at the ends of the members comprising a sleeve mounted for oscillation in one of the members, means for limiting such oscillation, and a pivot pin extending through the sleeve eccentrically thereof and through the other of said members.

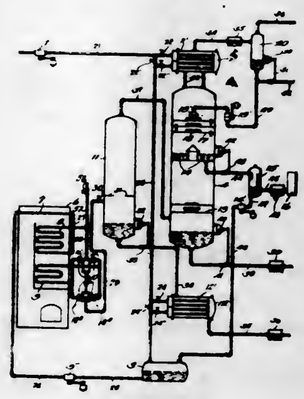
1,885,386. HAIR ROLL. KARL STRÖHER, Rothenkirchen, Germany. Filed June 22, 1931, Serial No. 546,069, and in Germany June 19, 1930. 6 Claims. (Cl. 132—33.)



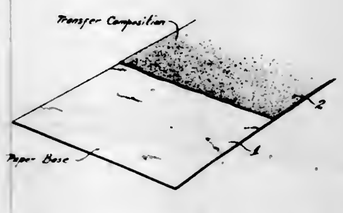
1. Apparatus for carrying out the process described, comprising a clamp, a roll, a frame member rotatably arranged on the said roll, a hook forming part of the said frame member and adapted to connect the said roll and clamp, and a two-part locking appliance, one part of the said appliance being secured to the said roll and the other part to the said frame member to prevent the said roll when in engagement with the said clamp to rotate in more than one direction relative to the said frame member.

1,885,387. METHOD AND APPARATUS FOR PRODUCING MOTOR FUEL FROM RESIDUAL OILS. STEPHEN SWARTZ, Chicago, Ill., assignor to Jenkins Petroleum Process Company, Chicago, Ill., a Corporation of Wisconsin. Filed May 28, 1928. Serial No. 281,333. 14 Claims. (Cl. 196—47.)

1. An apparatus for the production of motor fuel from heavy petroleum oils which includes a bank of heating tubes through which said petroleum oils are initially passed, a furnace, a cracking coil within said furnace through which the petroleum oils are subsequently passed, connections between the discharge end of said bank of heating tubes and the ends of said cracking coil, an expander, connections between the ends of said cracking coil and said expander, and means located in said connections for reversing the direction of flow through said cracking coil of the petroleum oils passing therethrough from the bank of heating tubes into the expander.



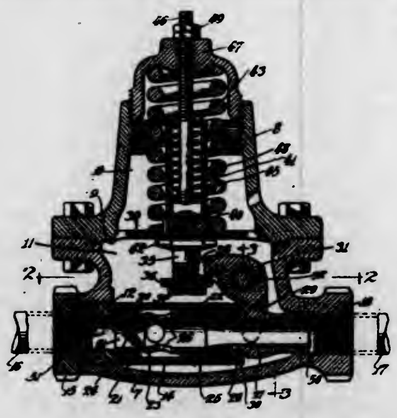
1,885,388. TRANSFER COMPOSITION. BERT S. TAYLOR and WEBSTER N. JONES, Akron, Ohio, assignors to The B. F. Goodrich Company, New York, N. Y., a Corporation of New York. Filed Dec. 23, 1925. Serial No. 77,389. 3 Claims. (Cl. 41—33.)



1. A transfer comprising a thin paper base coated on one side with a composition consisting largely of an oleoresinous varnish containing substantial proportions of a drying oil, a finely divided pigment, and a highly fatty acid.

1,885,389. PRESSURE REDUCING AND REGULATING VALVE. PAUL C. TEMPLE, Decatur, Ill., assignor to A. W. Cash Company, Decatur, Ill., a Corporation of Delaware. Filed May 29, 1931. Serial No. 540,869. 11 Claims. (Cl. 50—26.)

1. In a pressure reducing and regulating valve, a structure providing a high pressure space, a control pressure space and a delivery opening, a pressure responsive member subjected to the influence of the pressure in said control pressure space, a spring acting on said member, a valve associated with said member, and a tube affording an aspirating passage between said control pressure chamber and said delivery opening and automatically movable axially of said delivery opening responsive to said pressure responsive member.



1,885,390. CLEANING COMPOSITION. OSCAR TEXTOR, Shaker Heights, and BERT O. CRITES, Cleveland, Ohio. Filed Dec. 15, 1928. Serial No. 326,404. 2 Claims. (Cl. 87—5.)

1. A cleaning composition, which comprises finely divided sodium hydrogen sulphate about 25 per cent, and sodium sulphate about 75 per cent.

1,885,391. EXPANSION JOINT. WILLIAM B. THOMPSON and ALLAN B. MERRILL, Akron, Ohio, assignors to The B. F. Goodrich Company, New York, N. Y., a Corporation of New York. Filed Apr. 2, 1931. Serial No. 527,200. 7 Claims. (Cl. 94—18.)



1. In an expansion joint the combination of two spaced-apart slab members and a preformed, compressible strip of vulcanized sponge rubber mounted under compression between the slabs.

1,885,392. AEROPLANE. JAMES M. TUTEN, Hopedale, Mass. Filed June 5, 1931. Serial No. 542,408. 1 Claim. (Cl. 244—2.)

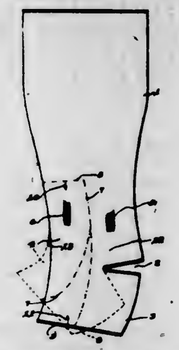


An aircraft of the class described comprising a fuselage, pockets formed in the fuselage, a wheel carrying member pivoted in each pocket, a cylinder, a piston therein, means for connecting each piston with a wheel carrying member, means for introducing compressed fluid into the ends of the cylinder for swinging the wheel carrying member into and out of the pocket, latch means for holding the wheel carrying member in retracted position, latch means for holding the wheel carrying member in projected position, means for moving the latch means to releasing position, an extension member on the upper end of the wheel carrying member, a guide for the upper end of said extension, and a latch on the guide for engaging the extension when the wheel carrying member is in projected position.

1,885,393. PROCESS OF DRYING LIQUIDS BY DIALYSIS. ROBERT H. VAN SCHAACK, Jr., Evanston, Ill., assignor to Van Schaack Bros. Chemical Works, Inc., Chicago, Ill., a Corporation of Illinois. Filed Apr. 29, 1929. Serial No. 359,165. 15 Claims. (Cl. 260—106.)

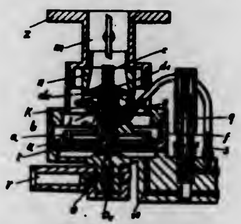
1. The process of dehydrating an organic liquid containing water which comprises the step of allowing water to pass from its solution in the liquid, through a semi-permeable membrane, and into another organic liquid that is hygroscopic.

1,885,394. SURGICAL STOCKING. OLIVER HERBERT WALTON, Needham Heights, Mass. Filed May 27, 1930. Serial No. 456,167. 1 Claim. (Cl. 66—187.)



In a surgical stocking of the class described, a leg portion and a foot portion knitted under normal tension, a heel gore, and an instep area opposite said heel gore knitted under higher tension to conform to the instep of the wearer, the space between the said heel gore and instep area being knitted under normal tension, said gore being approximately on line with the center of said portion knitted under higher tension.

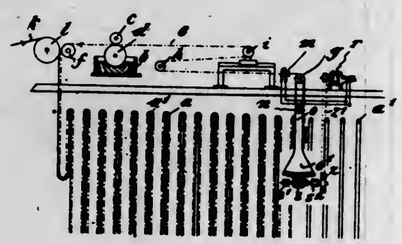
1,885,395. CARBURETOR. WILHELM WEMHÖNER, Berlin-Niederschonweide, Germany. Filed Sept. 23, 1930, Serial No. 483,822, and in Great Britain Aug. 11, 1930. 4 Claims. (Cl. 261—69.)



1. A carburetor with changeable air cross section for internal combustion engines, comprising in combination with the induction conduit, a carburetor casing, a column rigidly mounted in said casing, a piston on said column movable in opposite directions to the direction of induction

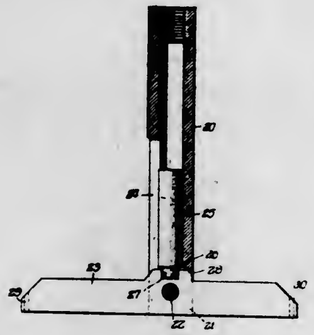
said piston communicating on the bottom side with the suction chamber and on the upper side with the atmosphere, a spring adapted to additionally load said piston in such a manner that the additional load thereby also the depression in the induction pipe decreases at increasing engine speed and inversely, and a toggle lever to an arm of which said spring is attached so that the lever arm of said spring decreases when said piston is ascending until at maximum stroke the additional spring loading on the piston is neutralized by said lever arm.

1,885,396. CONDITIONING MACHINE FOR CLOTHS. EMIL WENZEL, Aue, Germany, assignor to Ernst Gessner, Aktiengesellschaft, Aue, Germany, a Corporation of Germany. Filed May 11, 1931, Serial No. 536,625, and in Germany Feb. 10, 1931. 5 Claims. (Cl. 26—46.)



1. In a machine of the class described a wrapper, a moistening device and a system of guide rollers for said wrapper which system is disposed in front of said moistening device in the running direction of the wrapper, means for adjusting the position of at least one of said guide rollers, a feeler adapted to be permanently in contact with an edge of said wrapper, and means cooperable with said feeler for automatically establishing said adjustment upon deviation of said wrapper.

1,885,397. TEST ROD. ARTHUR J. WHITCOMB and OLAF C. CALLOW, Chicago, Ill., assignors to Freyn Engineering Company, Chicago, Ill., a Corporation of Maine. Filed Apr. 12, 1929. Serial No. 354,494. 11 Claims. (Cl. 33—125.)



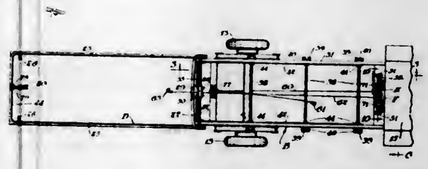
4. In a test member, in combination, an elongated columnar member having one of its extremities bifurcated, and an elongated foot disposed between the bifurcations of and pivoted to said elongated member, said elongated member adjacent to said bifurcations being recessed for the reception of one swinging extremity of said foot.

1,885,398. METHOD OF REPAIRING FLANGE ANGLES. ALLEN R. WILSON, Lansdowne, Pa., and ROBERT SEEMAN, Merrick, and MORRIS HALLEN, Long Island City, N. Y. Filed Nov. 28, 1930. Serial No. 498,720. 2 Claims. (Cl. 113—112.)



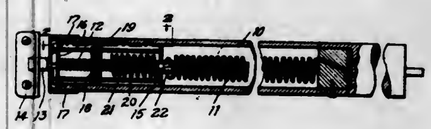
1. The method of repairing and reinforcing the cracked flange angle of a structural unit which consists in removing the metal adjacent the crack, welding in metal to replace the removed metal, and welding a brace in position between and against the legs of the angle and over and in contact with said replaced metal.

1,885,399. FREIGHT LOADING AND UNLOADING DEVICE FOR VEHICLES. VINCENT T. WARN, Lakeville, Minn. Filed July 6, 1931. Serial No. 548,872. 9 Claims. (Cl. 214—85.)



1. A freight loading and unloading device for vehicles having in combination, a vehicle chassis, a runway, a wheeled freight carrier, said runway being adapted to be extended from the rear of said chassis to form an approach thereto upon which said carrier may ride, means on said vehicle for drawing said carrier on said runway when rearwardly disposed and for drawing said carrier and said runway both forwardly onto said chassis, means mounted on said chassis for drawing said runway and said carrier rearwardly relative to said chassis to unload said carrier from both said chassis and runway, and means for lowering said runway and carrier relative to said chassis to permit said carrier to rest on said chassis as said runway and carrier are drawn toward the forward end of said chassis.

1,885,400. CURTAIN ROLLER. ALBERT KARLSSON YGGER, New York, N. Y. Filed Oct. 31, 1931. Serial No. 572,260. 5 Claims. (Cl. 156—36.)



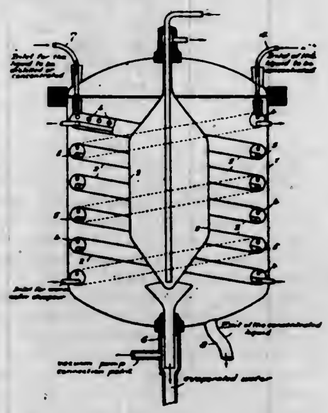
1. A device as characterized comprising a curtain roller having a spring for actuating the same, and another spring placed under compression as the roller rotates in one direction and functioning to limit rotation of the roller by said second spring reaching the limit of its permitted compression.

1,885,401. HOMOGENIZED CITROUS FRUIT CONCENTRATE. ELLIOT RITCHIE ALEXANDER, Orlando, Fla., assignor, by mesne assignments, to The Vitamin Company of America, a Corporation of Florida. Filed July 28, 1930. Serial No. 471,419. 6 Claims. (Cl. 99—11.)

2. Process which comprises separating, from the pulpy product resulting from cushing whole fresh citrous fruits and discarding the seeds and rind, a substantial amount of its normally liquid aqueous and oily content, separately preparing a sugar syrup, adding a suitable amount of the syrup to the product, and subjecting the mixture to homogenization treatment whereby to produce a stable and homogeneous fluid citrous fruit concentrate.

6. As a new product a stable homogeneous fluid consisting essentially of the homogenized isolated pulp and a portion of the normally liquid content of fresh citrous fruit and containing isolated citrous fruit resin and added sugar in solution.

1,885,402. APPARATUS FOR CONTINUOUS EVAPORATION OR DISTILLATION, ESPECIALLY WITH VACUUM. OTTORINO ANGELUCCI, Rome, Italy. Filed June 28, 1930, Serial No. 464,606, and in Germany July 8, 1929. 2 Claims. (Cl. 159—28.)



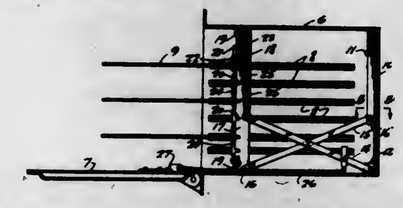
1. A device for evaporating and for distilling liquids in vacuo with simultaneous condensation of the vapor in the vacuum chamber comprising an air tight receptacle, an evaporator located in said air tight receptacle having the form of a perforated tube in which the liquid to be evaporated flows, heating tubes within said evaporator for heating said liquid, a condenser having the said evaporating system arranged in juxtaposition thereto, the surface of said condenser being considerably larger than the heating surface of the heating tubes so that a high vacuum may be obtained within said chamber.

1,885,403. AMPLIFYING HORN. JOSEPH J. AUERHAAN, Brooklyn, N. Y., assignor to John H. Worthington, Brooklyn, N. Y. Original application filed Aug. 23, 1929, Serial No. 387,930. Divided and this application filed Sept. 16, 1931. Serial No. 563,048. 16 Claims. (Cl. 154—2.)



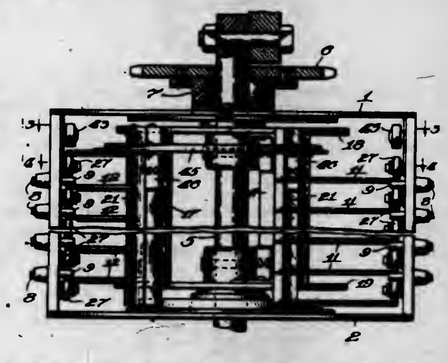
1. The method of making amplifying horns, which consists in building up a plurality of layers of wet paper on a core, applying paste between the successive layers of wet paper, pounding each layer of paper when applied, whereby the successive layers are beaten into a pulp-like mass, and subjecting the built-up mass to heat before removing the core.

1,885,404. OVEN RACK OPERATING MECHANISM. EDWARD C. BAMBERO, Tujunga, and LAWRENCE M. SILVA, Los Angeles, Calif. Filed Mar. 11, 1932. Serial No. 598,194. 6 Claims. (Cl. 126—340.)



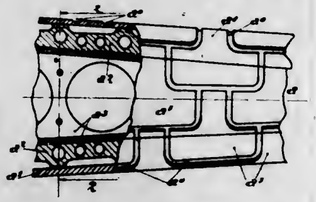
1. A unit adapted to be used with an oven having a door, rails for racks and racks slidably mounted on the rails; comprising an upright coupling bar for selective engagement with the racks; a lazy tongs having at its front an arm pivotally connected to said coupling bar and a companion arm slidably connected to said coupling bar, a plate adapted to be secured at the back wall of the oven, the arms at the rear end of said lazy tongs being pivotally and slidably connected to said plate inversely in relation to the front connections, and an operating rod secured to one of the arms of said lazy tongs and adapted to be secured to said door so as to be moved back and forth with opening and closing of said door.

1,885,405. COTTON HARVESTING APPLIANCE. OLIN H. BASQUIN, Chicago, Ill., assignor to G. R. Meyercord, Chicago, Ill. Filed Aug. 21, 1931. Serial No. 558,517. 9 Claims. (Cl. 56—44.)



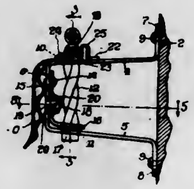
1. The combination with a rotatable hollow drum, two angularly spaced groups of stationary segments of flexible material within the drum, the segments lying in planes at right angles to the axis of rotation of the drum, vertical rows of rotatable picker fingers projecting radially through the wall of the drum and having inner ends adapted to overlap the segments, the two groups of segments being so placed lengthwise of the drum that each picker finger passes under a segment of one group and over the corresponding segment of the other group during each revolution of the drum, of idle rollers on the drum beside and cooperating with the inner ends of the picker fingers to press the segments and the fingers into driving contact with each other, and means positively to shift said rollers lengthwise of the drum as the finger pass from one group of segments to the other to maintain the proper driving relation between each finger and each of the segments along which it travels.

1,885,406. MANUFACTURE OF HOLLOW BODIES. LOUIS BÉCHEREAU, Paris, France, assignor to Societe Anonyme: Avions Kellner-Bechereau, Boulogne-sur-Seine, France, a French Company. Filed June 19, 1931, Serial No. 545,581, and in France June 20, 1930. 15 Claims. (Cl. 29—84.)



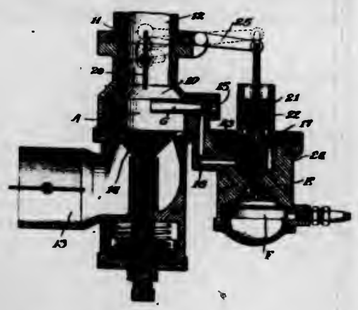
1. A method of manufacturing hollow bodies and especially bodies having undevelopable metallic walls which comprises applying a plurality of panels on a mold having the desired shape, temporarily assembling said panels, providing registering holes throughout said panels, separating said panels from said mold, and permanently assembling said panels through fixation means extending through said holes.

1,885,407. CURTAIN CRANE SUPPORT. JAMES H. BOYE, Chicago, Ill., assignor to James H. Boye Manufacturing Company, Chicago, Ill., a Corporation of Illinois. Filed Apr. 18, 1932. Serial No. 605,816. 13 Claims. (Cl. 156—22.)



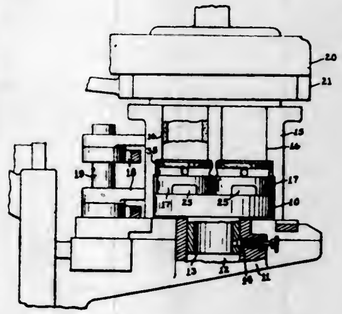
1. A curtain crane support, comprising a bracket formed with a hole to receive the pivot shank of the crane, a shiftable member mounted on said bracket and engageable with said shank, and means for adjusting said shiftable member.

1,885,408. FUEL FEED SYSTEM FOR MOTOR VEHICLES. ROBERT F. BRACKE, Chicago, Ill., assignor to Curtis B. Camp, trustee, Glencoe, Ill. Filed Apr. 18, 1928. Serial No. 270,916. 4 Claims. (Cl. 123—119.)



1. The combination with a carburetor for a motor vehicle engine including a fuel nozzle and a throttle valve, a main supply tank, a normally uninterrupted passage connecting the main tank with the fuel nozzle of the carburetor and a check valve in the passage at the carburetor end of the passage for preventing back suction at the fuel nozzle as upon the sudden forward movement of the elements and consequent inertia of fluid in the passage and means operable by said throttle for momentarily creating back pressure in that portion of the fuel passage between the check valve and the nozzle when the throttle is quickly opened.

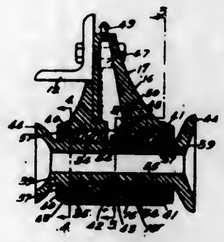
1,885,409. GLASSWARE FORMING MACHINE. THOMAS A. BRAGG, Toledo, Ohio, assignor to Owens-Illinois Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed Mar. 26, 1928. Serial No. 264,877. 9 Claims. (Cl. 49—65.)



1. In combination, a bottom plate holder, a plurality of bottom plates thereon, connection between the bottom plates and holder whereby the plates are free for limited lateral and vertical movement independently of each other on said holder, keys projecting radially from said plates, and a partible mold closeable about said plates and formed with ways to receive said keys, said plates being movable at times by closing of the mold.

9. The combination of a mold, comprising separable sections, a bottom plate holder, a bottom plate, connecting pins at opposite sides of and depending from the bottom plate, means cooperating with said pins to form loose connection between said plate and holder permitting relative lateral movement of said plate and holder, said means including collars carried by and held against movement relative to the pins, and outwardly directed flanges at the lower ends of said collars, said holder having vertical openings of greater diameter and less length than the collar to loosely receive them.

1,885,410. BEARING CONSTRUCTION. LOUIS BRENNEIS, Oxnard, Calif., assignor to Brenneis Manufacturing Company, Oxnard, Calif., a Corporation of California. Filed Jan. 25, 1930. Serial No. 423,298. 4 Claims. (Cl. 308—19.)

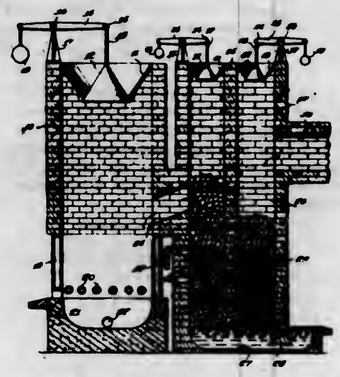


1. A bearing structure of the character described, including: a bearing housing comprising a downwardly extending body and a cap therefor, there being a lubricant chamber formed within said body and a journal receiving cavity formed between said body and said cap; a journal bearing adapted to be held in said cavity, said journal bearing having parts disposed in cylindrical relationship, an opening communicating with said lubricant chamber, and an annular groove communicating with said opening; and a rotary bearing part rotatable within said journal bearing, said part having a flange extending into said groove and being adapted to carry lubricant from said opening of said journal bearing.

1,885,411. PROCESS OF MAKING ENZYMATIZED STOCK FEED. EDWARD M. BROWN, Toledo, Ohio. Filed Mar. 30, 1929. Serial No. 351,459. 1 Claim. (Cl. 99—11.)

The process of preparing a stock feed which includes the preparation of an enzymatic compound by sprouting cereal grains in a solution containing soluble mineral salts, said salts becoming organically incorporated in said sprouts, said solution also containing calcium carbonate in a quantity sufficient to neutralize any excess acid in the solution, stopping the growth when the grain has reached its highest enzyme content, then drying and grinding the sprouts and mixing them with finely cut roughage, maintaining said mixture at a temperature of substantially 130° F., whereby said roughage is partially enzymatized and hydrolyzed.

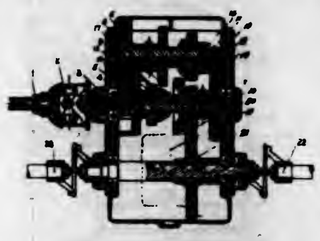
1,885,412. PROCESS OF AND APPARATUS FOR TREATING METALLIC ORES. EVANS W. BUSKETT, Joplin, Mo. Filed June 20, 1928. Serial No. 286,789. 15 Claims. (Cl. 75—28.)



1. The process of reducing ore of metals volatile at relatively low temperatures which comprises heating the ore in a blast furnace in the presence of a reducing agent to form metal vapor of the relatively volatile metal having a relatively small oxide content, withdrawing the vapor thus formed from the furnace, immediately passing the vapor into a condensing chamber having a downward heat gradient, providing sufficient suction to promote withdrawal of vapor from the furnace and draw vapors through the condensing chamber, and introducing a reducing agent into said chamber to assist in reducing the oxide constituent of said vapor.

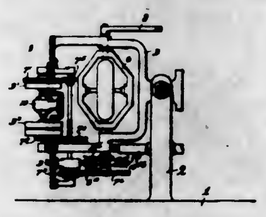
1,885,413. CHANGE SPEED GEAR FOR MOTOR CARS. GIULIO CESARE CAPPA, Turin, Italy, assignor to Societá Anonima Automobili Ansaldo, Turin, Italy. Filed Apr. 8, 1929, Serial No. 353,471, and in Italy Apr. 14, 1928. 1 Claim. (Cl. 74—56.)

A driving gear comprising in combination a box, a driving shaft and a countershaft in said box in alignment with each other, a secondary shaft in said box, a gear fixed on said secondary shaft and having two toothed rims, a pinion on the driving shaft constantly meshing with one of said toothed rims, a slidable member on the countershaft for connecting this latter at will with the other toothed rim, a gear fixed on said countershaft having three toothed rims, a slidable member on the secondary shaft and having two toothed rims, one of which meshes with a rim of the gear on the countershaft in one end position of said slidable member and the other of which rims



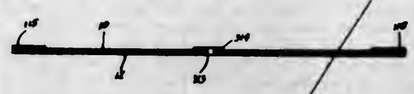
meshes with another toothed rim of the gear on the countershaft in the other end position of said slidable member, a driven shaft mounted in the box on the side remote from the secondary shaft and reducing gears for connecting said driven shaft to said countershaft, said reducing gears comprising the third toothed rim of the gear on the countershaft.

1,885,414. GYROSTABILIZER. ALEXANDER CHESSIN, New York, N. Y. Filed Dec. 12, 1921. Serial No. 521,929. 57 Claims. (Cl. 74—78.)



4. In a body subject to angular deviations, a gyroscope, a time lock on said gyroscope, and means whereby said time lock is controlled by said angular deviations.

1,885,415. FLEXIBLE PHONOGRAPH RECORD HOLDER. EDWARD B. COLLISON, Fort Wayne, Ind., assignor to The Capehart Corporation, Fort Wayne, Ind., a Corporation. Filed Sept. 20, 1930. Serial No. 488,781. 5 Claims. (Cl. 274—42.)

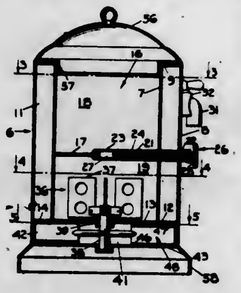


1. The combination with a thin flexible disc phonograph record having a central opening therein, of a removable support for adapting the same to manipulation in an automatic record changing phonograph comprising a rigid bottom plate extending throughout the entire surface of one side of the record, and a member centrally positioned of said plate and extending through the opening in the record adapted to engage the upper surface thereof surrounding said opening and removably clamp said record centrally to said plate.

1,885,416. LATHERING DEVICE. EMMETT L. CONNELLY, Los Angeles, Calif. Filed June 10, 1931. Serial No. 543,360. 6 Claims. (Cl. 259—97.)

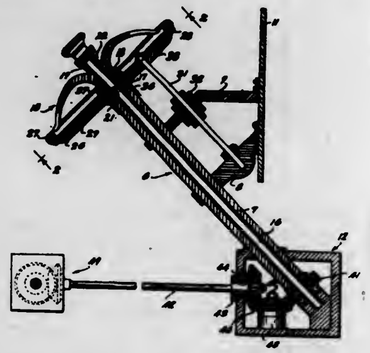
1. In a lather mixer, a receptacle comprising spaced inner and outer shells defining a hot water reservoir there-

between, a horizontal partition within said inner shell dividing the space therein into a soap chamber and a lather reservoir, means for conducting soap solution from said chamber to said lather reservoir, exteriorly operable means for controlling flow through said conducting means,



a rotor chamber, a rotor journaled therein and having a shaft extending into said lather reservoir, a beater carried by said shaft within said lather reservoir, means for directing water against said rotor to turn said shaft, each shell being provided with a separate outlet accessible exteriorly of said shells.

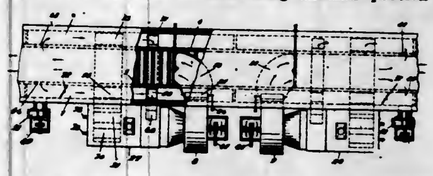
1,885,417. STEERING APPARATUS. HENRY CREMER, South Gate, Calif. Filed Sept. 2, 1931. Serial No. 560,807. 1 Claim. (Cl. 74—79.)



In a steering mechanism for a vehicle, a tube rigid with said vehicle, a shaft extending rotatably therethrough, a steering wheel having a rim and mounted adjacent the upper end of said tube, said wheel being revoluble with respect to both said tube and said shaft, a ring rigid on the under side of said rim and disposed coaxially with respect to the steering wheel, teeth formed on the inner periphery of said ring, a driven gear rigid with said shaft and lying within the plane of said ring, a countershaft mounted adjacent said tube, an idler gear carried by said countershaft and connecting said driven gear to said driving gear, and means for connecting said shaft to the dirigible wheels of said vehicle.

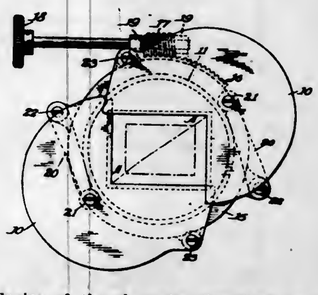
1,885,418. PROCESS OF HEAT APPLICATION AND EQUIPMENT THEREFOR. WILLIAM A. DARRAH, Chicago, Ill. Filed July 20, 1929. Serial No. 379,641. 9 Claims. (Cl. 34—12.)

1. A drying unit comprising a drying chamber, a heater, a combustion chamber within said heater, a gas moving device, a duct connecting said heater with said gas moving device, a series of distributing nozzles supplied with circulating gases from said gas moving device, deflectors controlling the flow of gases into said nozzles, deflectors controlling the flow of gases out of said nozzles, a duct delivering a portion of the circulating gases back to said heater, a duct for delivering another portion of



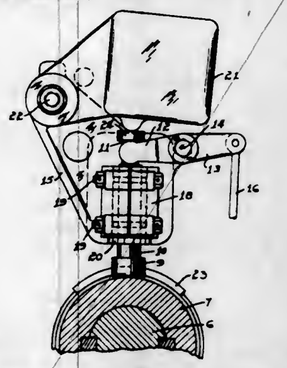
said circulating gases back to said gas moving device, and control means for regulating the amount of return gases passing back to said heater.

1,885,419. DOWSER. AUGUSTO DINA, New York, N. Y. Filed Dec. 20, 1930. Serial No. 503,682. 7 Claims. (Cl. 88—19.3.)



6. In a device of the character described, in combination, a plurality of shutter sections each having angularly cut recesses forming complemental edges for a polygonal opening, and each of said shutter sections being mounted on a plurality of pivots; means for moving said pivots; and means for preventing angular displacement of said shutter sections.

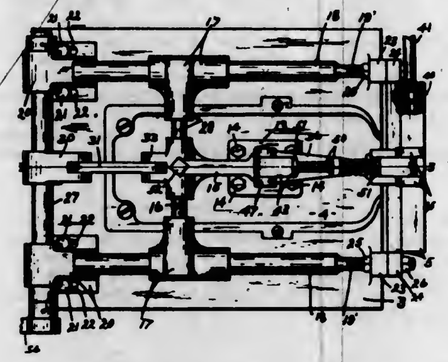
1,885,420. ADJUSTABLE TRIPPING DEVICE. NEAL W. DORMAN, Toledo, Ohio, assignor to The Toledo Machine & Tool Company, Toledo, Ohio, a Corporation of Ohio. Filed Mar. 5, 1931. Serial No. 520,280. 1 Claim. (Cl. 192—24.)



The combination with a rotatable clutch member, of a plunger normally engageable with said clutch member to throw the latter out of engagement after each operation, a split bearing having an eccentric bushing in which the plunger is mounted, said bushing having a head at its lower end for adjusting it circumferentially, transverse bolts intersecting said bearing and adapted to clamp the same on said bushing, said bushing having

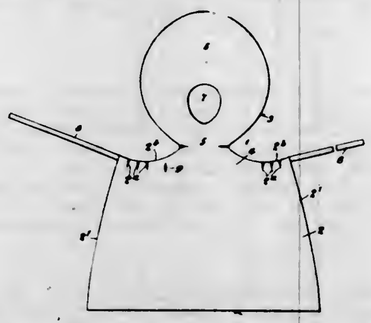
circumferential grooves engaged by said bolts to prevent longitudinal movement of the bushing while it is adjusted, said plunger having a reduced cylindrical portion terminating in a head, and a trip lever having arms straddling said reduced portion and engageable with said head to shift the plunger longitudinally out of engagement with the clutch member, there being sufficient clearance between said arms and said reduced portion to permit the bodily adjustment of the plunger by the rotation of said bushing without moving said lever.

1,885,421. DIE-CASTING MACHINE. WILLIAM J. DURING, Syracuse, N. Y., and NATHAN LESTER, Cleveland, Ohio, assignors to Precision Castings Company, Inc., Syracuse, N. Y., a Corporation of New York. Filed Sept. 23, 1929. Serial No. 394,675. 12 Claims. (Cl. 22—69.)



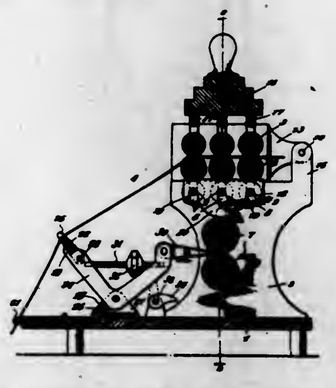
1. In a die-casting machine in combination, a delivery pot, a pivotal support for said delivery pot mounted for rectilinear movement towards and from a casting position, actuating means connected with said support, and additional means connected with the delivery pot for producing a rocking movement of said pot during the rectilinear movement of the pivotal support.

1,885,422. KIMONO. GERMAINE FAUTRAD, New York, N. Y. Filed Mar. 2, 1932. Serial No. 596,179. 1 Claim. (Cl. 2—74.)



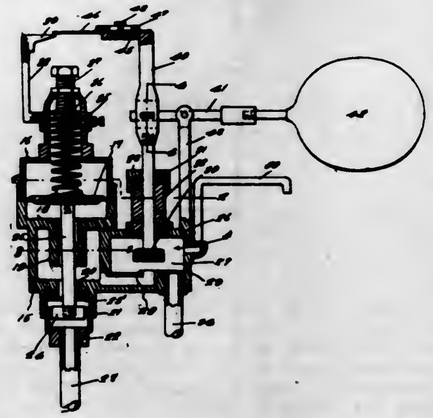
A kimono embodying, in combination, a skirt portion comprising a relatively wide piece of fabric having lateral extensions adapted to be overlapped at the back of the lower portion of the body of the wearer and wrapped around said lower portion of the body to form a complete skirt, a thorax-covering portion having a neck-aperture of sufficient area for the passage of the head and neck of the wearer, and a connecting portion having a relatively wide base portion connected with the skirt portion and a gradually reduced upper portion covering the breast, a portion of the ribs and crossing at the back of the wearer and having edges inclining from said wide base connection toward said head and neck aperture whereby the wrapping of the skirt portion around the lower portion of the body also causes a tightening of the connecting portion about the breast and ribs of the wearer and permits a close fitting of the garment about the upper portion of the body and the neck of the wearer.

1,885,423. STOP MOTION. JOHN A. FENTON, North Andover, Mass. Filed June 15, 1931. Serial No. 544,532. 7 Claims. (Cl. 117—80.)



1. In a stop-motion device, the combination of upper and lower feeding rollers, driving rollers arranged below the feeding rollers and in operative relation thereto, a saddle supported by the driving rollers and disposed below the feeding rollers, a lifting roller below and bearing against the saddle, and means whereby the lifting roller will be raised to move the saddle from the driving rollers when a thread engaged by the feeding rollers breaks.

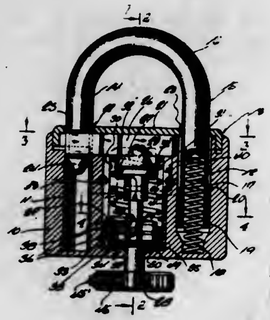
1,885,424. HYDRAULIC CONTROL FAUCET AND BALL COCK. LEO A. FISCHER, Springfield, Ohio. Filed July 12, 1929. Serial No. 377,761. 2 Claims. (Cl. 137—104.)



1. In a device of the class described, a casing having a port, a valve for controlling said port, a stem connected with said valve, a trip arm on said stem, a pivoted float

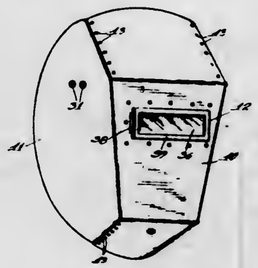
lever connected with the trip arm, a float on said lever, a pivoted trip lug, and a resilient trip arm carried by the first mentioned trip arm and disposed in the path of the trip lug.

1,885,425. PADLOCK. JOHN W. FITZ GERALD, Milwaukee, Wis., assignor to Briggs & Stratton Corporation, Milwaukee, Wis., a Corporation of Delaware. Filed June 18, 1931. Serial No. 545,206. 15 Claims. (Cl. 70—113.)



1. In a padlock including a body and a shackle, a retaining member carried by the body and having cooperating spring fingers arranged to grip opposite sides of one leg of the shackle to hold the shackle closed, means for releasing the shackle from said retaining member comprising a member movable longitudinally into engagement with the spring fingers of the holding members to spread the same, and means for preventing longitudinal movement of said members, said last mentioned means being releasable to free the longitudinally movable member for longitudinal movement by predetermined rotation of said longitudinally movable member.

1,885,426. HELMET. OSCAR S. FLOOD, Chicago, Ill., assignor to Sellstrom Manufacturing Company, Chicago, Ill., a Corporation of Illinois. Filed Mar. 8, 1929. Serial No. 345,561. 13 Claims. (Cl. 2—8.)



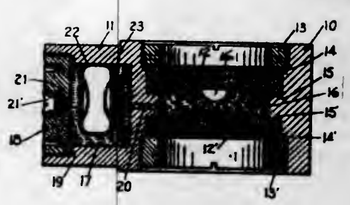
1. A helmet of the class described comprising a body portion adapted to encompass the face and part of the head, a head harness for holding said body portion in a desired position, and a pair of arms pivotally mounted on opposite sides of said harness, said arms having horizontally and vertically extending intercommunicating slots, and connecting means adjustably engaging said slots in a horizontal and vertical direction and secured to said body portion whereby the latter is universally adjustable.

1,885,427. DRIVING MECHANISM FOR MOTOR VEHICLES. JACOB GARLI, Lincoln Park, Mich. Filed Aug. 29, 1930. Serial No. 479,917. 2 Claims. (Cl. 180—44.)



1. A front wheel drive mechanism comprising an axle casing, a circular hollow head mounted on the outer end of said axle casing, a disk having a circular recess in which said circular head is received, diametrically opposite spindles on said head and projecting into semi-circular recesses in the face of said disk surrounding said opening therein, strap members secured to said disk and having semi-circular recesses coinciding with the recesses in said disk to form bearings for said spindles, an axle in said casing, a universal joint on said axle and received in said hollow head, a wheel rotatably mounted on said disk, and means for connecting said universal joint to said wheel.

1,885,428. LIQUID LEVEL. GEORGE B. GALLASCH, Rochester, N. Y., assignor to Bausch & Lomb Optical Company, Rochester, N. Y., a Corporation of New York. Filed Jan. 7, 1929. Serial No. 330,798. 4 Claims. (Cl. 33—211.)



1. A liquid level comprising means providing a bubble chamber, a reservoir chamber, and a passageway connecting said chambers, a closed container in said reservoir chamber, said container having yieldable walls and a gaseous substance enclosed therein.

1,885,429. MAGNESIUM BASE ALLOYS. JOHN A. GANN and FRED L. REYNOLDS, Midland, Mich., assignors to The Dow Chemical Company, Midland, Mich., a Corporation of Michigan. Filed Feb. 1, 1932. Serial No. 590,307. 6 Claims. (Cl. 75—1.)

1. As a new product, a magnesium base alloy consisting of from 0.5 to 12 per cent of cadmium and from 0.5 to 12 per cent of tin, the balance being magnesium.

1,885,430. ENDLESS BELT TRACTION DEVICE. CHARLES L. GEORGE, Findlay, Ohio, assignor to The Buckeye Traction Ditcher Company, Findlay, Ohio, a Corporation of Ohio. Filed Aug. 20, 1928. Serial No. 300,739. 14 Claims. (Cl. 305—9.)

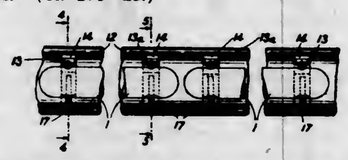
1. In combination with front and rear load supporting axles of a vehicle, a traction device comprising a central main frame having the ends of said front and rear axles mounted in the ends thereof, end frames pivoted to swing about said axles, the respective end frames projecting forwardly and rearwardly from the main frame

and normally in alinement therewith, the projecting end of one end frame being swingable downwardly and the projecting end of the other being swingable upwardly from their normal relation to the main frame, means



positively preventing the swinging of the respective end frames in the other direction from normal position, an endless belt tread mounted for travel about said frames, and means for driving said tread.

1,885,431. ELECTRIC INCANDESCENT LAMP AND HOLDER THEREOF. EDWIN RUDOLPH GROTE, Wimbledon, London, England. Filed Dec. 5, 1928, Serial No. 325,949, and in Great Britain Dec. 13, 1927. 2 Claims. (Cl. 176—29.)



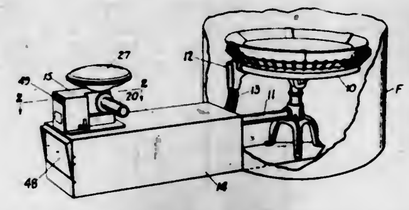
1. An incandescent lamp comprising an elongated glass bulb having exposed hemispherical ends, an elongated glass supporting rod extending longitudinally within said bulb adjacent a wall thereof and anchored at the ends of the bulb, filament-carrying posts projecting from said rod at points spaced apart along its length, a filament carried by said post extending longitudinally within the bulb and into the hemispherical ends thereof, and lateral contacts on the bulb electrically connected with the ends of said filament, said bulb having shallow sockets on the side thereof opposite that carrying said lateral contacts, said sockets being adapted to receive spring detents.

1,885,432. TELEPHONE BOOTH. OLE GULLICKSEN, Chicago, Ill., assignor to Churchill Cabinet Company, Chicago, Ill., a Corporation of Illinois. Filed Sept. 15, 1930. Serial No. 481,859. 2 Claims. (Cl. 20—35.)



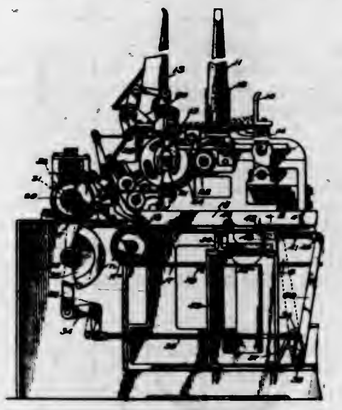
2. A telephone booth comprising a floor, side walls, rear wall and ceiling, each constructed of a plurality of contacting layers of laminated wood, a door frame secured to said side walls and ceiling, a door carried by said frame, a pair of detachable panels carried by said side walls, and a second ceiling carried by said walls and spaced from the first mentioned ceiling, said ceilings having staggered air vents.

1,885,433. GAS CONTROLLING MEANS. ERNEST A. HALL, Toledo, Ohio, assignor to The Columbia Burner Company, Toledo, Ohio, a Corporation of Ohio. Filed Mar. 5, 1931. Serial No. 520,263. 18 Claims. (Cl. 236—1.)



1. In combination, a gas supply line pressure regulator comprising a valve, means including a thermostat operable at a predetermined room temperature independently of the gas pressure to completely close said valve and to maintain it closed, thus cutting off the supply of gas, and means operable at another predetermined temperature to render said valve closing means ineffective and permit said valve to function normally as a pressure regulator.

1,885,434. FEEDING DEVICE FOR STUFFING MACHINES. SEVERIN HALVORSEN, Chicago, Ill., assignor to The Newspaper Stuffing Machine Company, Seattle, Wash., a Corporation of Washington. Filed June 21, 1929. Serial No. 372,661. 13 Claims. (Cl. 270—55.)



1. In a machine of the class described, the combination with a reciprocating frame of a pair of feeder arms attached to said frame arranged to engage paper sections and carry said sections forward in a horizontal plane.

1,885,435. BUMPER FOR VEHICLES. MILTON B. HAMMOND, Grand Rapids, Mich., assignor to Wolverine Bumper & Specialty Company, Grand Rapids, Mich., a Corporation of Michigan. Filed Nov. 25, 1931. Serial No. 577,273. 4 Claims. (Cl. 293—55.)



1. A bumper for vehicles comprising: an impact bar cross-sectionally convex forwardly and concave rearward-

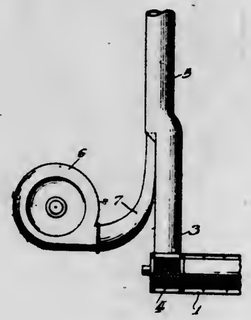
ly; inwardly-concave end members fitting over the ends of said bar and having means extending therethrough for connecting said bar and said end members with the vehicle.

1,885,436. FLUID TRANSFER DEVICE. LEON N. HAMPTON, New York, N. Y., assignor to A C Spark Plug Company, a Corporation of Michigan. Filed Aug. 18, 1928. Serial No. 300,567. 5 Claims. (Cl. 103—53.)



1. In a fuel pump, a pumping member, a magnetizable plate secured thereto, a solenoid adjacent said plate to actuate the same in one direction, and a spring surrounding said solenoid and engaging said plate to actuate the same in the opposite direction.

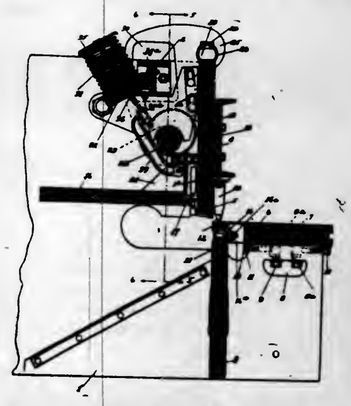
1,885,437. COTTON ELEVATOR. CHARLES HARAZIN, Chicago, Ill., assignor to G. R. Meyercord, Chicago, Ill. Filed May 11, 1931. Serial No. 536,384. 4 Claims. (Cl. 302—29.)



1. In a cotton handling apparatus, a container for cotton, a conduit of large cross sectional area rising from and stepped laterally at some distance above the container, a blower, and a discharge pipe leading from the blower upwardly into the overhanging portion of the conduit at such step.

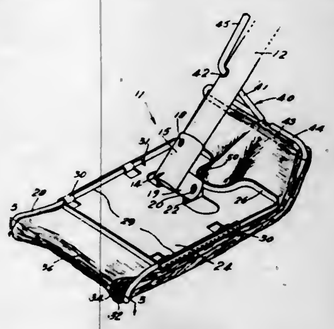
1,885,438. METAL SHEARS. ROBERT T. HAZELTON, Cincinnati, Ohio, assignor to The Cincinnati Shaper Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Nov. 29, 1929. Serial No. 410,437. 16 Claims. (Cl. 164—47.)

1. In a shears the combination with the housings thereof of a shear ram having its movement guided in a defined path, of an operating device for the said ram comprising eccentric means located below the top of the



ram and above the level of the bed, and links operated thereby extending therefrom to the upper portion of the ram.

1,885,439. MOP. WILLIAM H. HEISE, Los Angeles, Calif. Filed Jan. 7, 1930. Serial No. 419,061. 9 Claims. (Cl. 15—120.)



1. In a mop, the combination of: a handle; a plate member pivoted to said handle about a point intermediate the ends of said plate member; a rod member carried by one end of said plate member; a wringer means carried by said handle; a mop cloth having one end thereof mounted over said rod member and having the other end thereof secured to said wringer means; and an open coil spring on said rod member engaging the end of said mop cloth for extending said end of said mop cloth to a mopping position after said mop cloth has been wrung out by said wringer means.

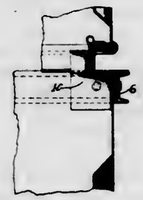
1,885,440. FISHING SPOON. VICTOR P. HENDRICK, Manhattan Beach, Calif. Filed Oct. 6, 1931. Serial No. 567,236. 2 Claims. (Cl. 43—45.)



1. A fishing spoon comprising an elongated relatively broad body having elongated concave elliptical areas

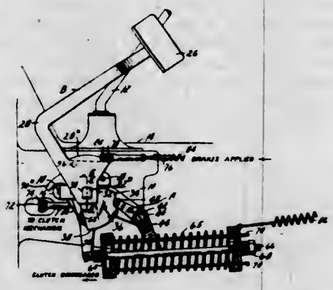
formed in opposed relation in opposite sides thereof, said areas being so disposed relative to one another as to have overlapping ends, and means for attaching a line and a hook to the body.

1,885,441. SHEET METAL CASE. EMIL L. HERBOLSHEIMER, Defiance, Ohio, assignor to The Defiance Pressed Steel Company, Defiance, Ohio, a Corporation of Ohio. Filed Sept. 24, 1930. Serial No. 484,027. 4 Claims. (Cl. 220—97.)



1. A metal case of the class described, having sheet metal side and end walls, and a frame of L-form in cross-section disposed at the lower edge of said walls and forming a foot rest therefor, said walls having portions near their lower edge of said walls and forming a foot rest therefor, said walls having portions near their lower edges doubled upon themselves and forming flanges which extend outwardly, downwardly and inwardly around the free edge of the horizontal flange of the frame.

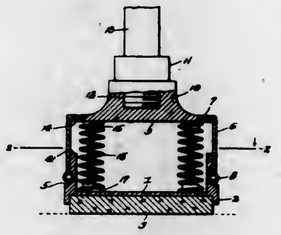
1,885,442. COMBINED BRAKE AND CLUTCH PEDAL STRUCTURE. HARVISON C. HOLLAND, Des Moines, Iowa. Filed Aug. 19, 1931. Serial No. 558,009. 11 Claims. (Cl. 74—81.)



1. For use with brake and clutch mechanisms, a combined brake and clutch pedal structure comprising a pedal connected with said brake mechanism by a lost motion connection, a spring interposed between said pedal and said clutch mechanism and a normally effective lock for said clutch mechanism, spring means constraining said pedal to normally assume a predetermined position from which it is movable to assume a clutch operating position, said pedal being operatively connected with said clutch lock to render the same ineffective when said pedal is moved to clutch operating position.

1,885,443. OIL BURNER FOOT. WALTER E. HOLT, Dover, Del. Filed May 10, 1932. Serial No. 610,459. 3 Claims. (Cl. 248—16.)

1. An oil burner foot comprising a base, an annular flange depending from the base, a supporting pad mounted beneath the base and encircled by the flange, an annular flange rising from the base, the upstanding flange being inwardly offset relative to the depending flange, a horisontal shoulder on the base, a cylinder encircling the upstanding flange and rising therefrom, said cylinder resting on the shoulder, means securing the cylinder to the upstanding flange, an inturned flange at the upper end of the cylinder, a plate mounted for vertical reciprocation



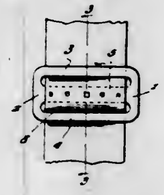
in the cylinder, compression springs yieldingly supporting the plate on the base, the upstanding flange being in the path of movement of the plate and engageable thereby for limiting the downward movement of said plate against tension of the springs and means for connecting the plate to the leg of the oil burner.

1,885,444. STROPPER. HENRY A. HUBER, Toronto, Ontario, Canada. Filed Oct. 19, 1931. Serial No. 569,656. 3 Claims. (Cl. 30—25.)



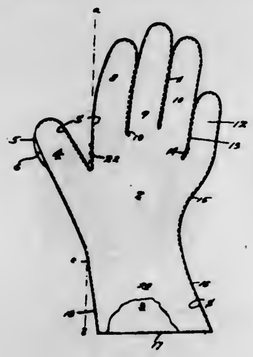
1. A stropper for razor blades comprising two jaws movable relative to one another and adapted to hold a blade therebetween with its edge projecting beyond the edge of the jaws, one of said jaws having a slot formed therethrough, and the other jaw having a projecting rib thereon adapted to extend through a slot in the blade and through the slot in the other jaw and beyond the outer surface of said jaw, the outer edge of said rib and the cutting edge of the blade being adapted to contact with the strop when the stropper is in operation, whereby the blade is positioned at a proper stropping angle to the strop.

1,885,445. BUCKLE. WILLIAM M. HUESEMAN, Dillsboro, Ind. Filed Jan. 18, 1932. Serial No. 587,424. 1 Claim. (Cl. 24—186.)



A slide buckle comprising side and end bars and a center bar defining strap receiving slots, said center bar being formed with a row of spurs projecting therefrom, the outermost spur at each end of said row of spurs being relatively short to underlie the hemmed margins of a strap carried in said strap receiving slot and the inner spurs being relatively long to support the center of said strap, whereby a uniform upper surface for the strap will be provided.

1,885,446. FOURCHETTE-LESS DUPLEX-FINGER SYSTEM GLOVE. CARL H. JOHANSON, Los Angeles, Calif. Filed Aug. 24, 1931. Serial No. 558,905. 7 Claims. (Cl. 2—169.)

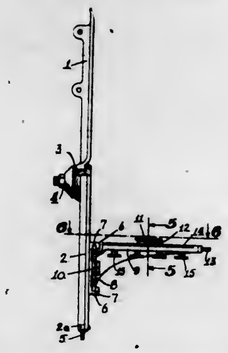


1. A glove including palm and back parts each having substantially duplicate finger width systems, in which the roots of the first and fourth front and back fingers incurve toward the center of the palm; the palm and the back being of equal width.

1,885,447. PROCESS FOR THE PREPARATION OF A CHLORO-PHOSPHATE OF LEAD. PIERRE JOLIBOIS, Paris, and GEORGES CHAUDRON, Lille, France. Filed Feb. 19, 1931, Serial No. 517,104, and in France Feb. 27, 1930. 4 Claims. (Cl. 23—50.)

4. A process of preparing a chloro-phosphate of lead from a natural phosphate of lime, which comprises subjecting the natural phosphate to grinding, treating it, in presence of the hydrochloric acid, with a salt of lead selected from the group consisting of litharge, lead chloride, and lead carbonate, and separating from the solution the resulting precipitate of chloro-phosphate of lead.

1,885,448. ADJUSTABLE TRACTION ANKLE SPLINT. CARL P. JONES, Grass Valley, Calif. Filed Feb. 23, 1932. Serial No. 594,551. 3 Claims. (Cl. 128—88.)

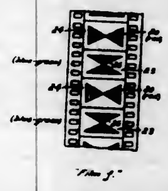


1. A surgical splint comprising an anchor bar affixed to the limb above the fracture; a plate affixed to the foot of the patient; a carrier member forming an extension of said anchor bar and connected therewith by a universal joint; a bracket associated with said extension member, and carrying said foot plate; means for adjusting the bracket lengthwise of the extension member; means for adjusting it crosswise thereof; and means for adjusting said foot plate upon the bracket in a direction at right angles to the crosswise adjustment of said bracket upon the extension member.

1,885,449. COLORING MATTERS AND INTERMEDIATES OF THE BENZANTHRONE SERIES. DAVID CLARENCE RHYS JONES, Polmont, Scotland, ROBERT FRASER THOMSON, Carlisle, England, and JOHN THOMAS, Polmont, Scotland, assignors to Imperial Chemical Industries Limited, a Corporation of Great Britain. Filed Mar. 26, 1931, Serial No. 525,608, and in Great Britain Apr. 1, 1930. 13 Claims. (Cl. 260—61.)

1. Process for the manufacture of valuable products comprising the condensation of an organic acid halide in presence of aluminum chloride with the product obtainable by the interaction of benzanthrone and formaldehyde in a sulphuric acid medium.

1,885,450. COLOR-PHOTOGRAPHY. WILLIAM V. D. KELLEY, Hollywood, Calif., assignor of one-half to G. Allan Hancock, Los Angeles, Calif. Filed May 7, 1930. Serial No. 450,595. 6 Claims. (Cl. 95—2.)



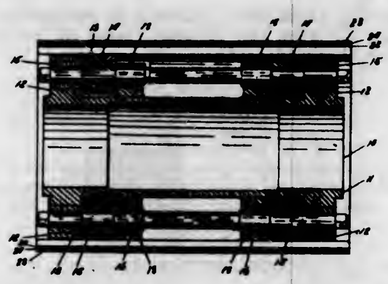
1. The method of coloring a photographic film which comprises; treating the gelatine of the film in a manner to color it; protecting the portions of the colored gelatine that correspond to similarly colored portions of the subject photographed, by means of a transparent coating that is insoluble in water; removing the color from the unprotected portions of the film in a water bath containing a bleach; and then dyeing said unprotected portions a color that corresponds to other colored portions of said subject.

1,885,451. PROCESS OF PREPARING AN ACTIVE MASS FOR CATHODES OF ELECTRIC ALKALINE ACCUMULATORS. GEORG KRANZLEIN, Frankfort-on-the-Main-Hochst, RICHARD KARL MÜLLER, Bad Soden-on-the-Taunus, and LUDWIG WILHELM BERLIN, Frankfort-on-the-Main-Hochst, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Filed May 22, 1930, Serial No. 454,826, and in Germany June 6, 1929. 3 Claims. (Cl. 136—25.)

1. In the process of preparing an active mass for cathodes of electric alkaline accumulators the steps which consist in mixing highly active pulverulent irons with cadmium hydroxide so as to form a paste and then reducing it in a current of hydrogen.

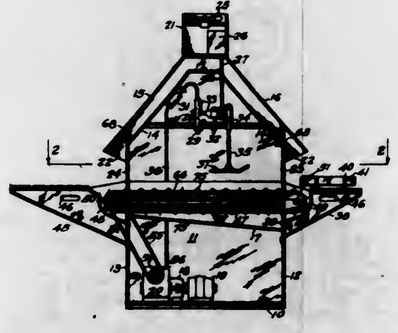
1,885,452. ABRADING, BUFFING, OR POLISHING DRUM. BERNHARD G. KUHNS, Akron, Ohio. Filed Feb. 25, 1929. Serial No. 342,391. 5 Claims. (Cl. 51—194.)

1. An expansible abrading or polishing drum construction comprising a hub, drum sections pivoted on the hub, the pivots for the sections including shafts, the sections being arranged so that the free end of one section is adjacent the pivoted end of another section, interengaging hook means on the hub and the free ends of the sections, said hook means being adapted to be held in engagement by centrifugal force when the drum is rotated, and means for expanding the drum comprising eccentrics on said shafts, adapted to cooperate with the outer faces of lugs on the hub and with the rear faces of the hooks on the drum sections to lock the drum in expanded condition, the



sections, pivots, hooks and the drum expanding means being disposed at diametrically opposite points so as to counterbalance each other.

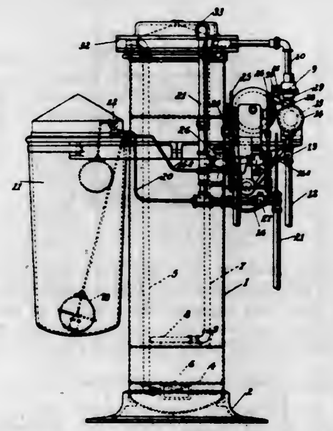
1,885,453. PAN GREASING MACHINE. SVEN P. LARSON, Berkeley, Calif. Filed Mar. 2, 1931. Serial No. 519,898. 4 Claims. (Cl. 91—44.)



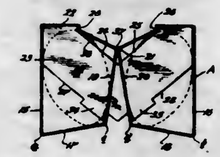
1. A pan spraying machine comprising in combination with spray means and pan actuated controlling means therefor, a cabinet, a conveyor extending through said cabinet, pan entrance and exit at the opposite ends of said conveyor, a hood integral with each end of said cabinet and extending over and beyond said entrance and said exit, a screen formed with a series of corrugations in each of said hoods, and means for creating an up draft through said hoods whereby spray and vapor issuing from said entrance and exit is drawn through said screen and condensed thereon.

1,885,454. WATER SOFTENING APPARATUS AND PROCESS OF SOFTENING WATER. FRANK X. LAUTERBUR, EDWARD J. LAUTERBUR, and HOWARD L. MINTCHELL, Sidney, Ohio, assignors to The Peerless Bread Machine Company, Sidney, Ohio, a Corporation of Ohio. Filed Nov. 3, 1928. Serial No. 317,004. 7 Claims. (Cl. 210—24.)

1. In a water softening apparatus having a tank for water softening material and means for automatically inducing cycles of regeneration therein, means operating to alternately divert the flow of water to be softened to different levels within said tank having a control therefor operatively connected with said first noted means.



1,885,455. BOX OR CARTON. HENRY LEVINE, Philadelphia, Pa., assignor to Leon Benoit, Chicago, Ill. Filed June 30, 1932, Serial No. 620,231. 12 Claims. (Cl. 229—29.)

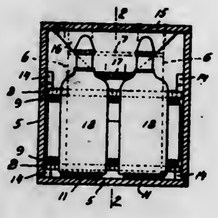


1. A cellular box open at the top having longitudinal side walls with inwardly extending webs supporting transverse partitions whose upper edges between the webs lie below and having portions underlying the latter, and a lid formed independently of the box and separable therefrom formed to rest upon the partitions with its opposite edges disposed adjacent the inner edges of the webs, the upper edges of the partitions cooperating with the inner edges of the webs for securing the lid detachably over the open upper side of the box.

1,885,456. SHIPPING CONTAINER. WILLIAM HENRY LOHMANN, Wilmington, Del., and GEORGE WILLIAM KARSTNER, Montclair, N. J., assignors to General Chemical Company, New York, N. Y., a Corporation of New York. Filed Sept. 27, 1929. Serial No. 395,576. 1 Claim. (Cl. 217—21.)

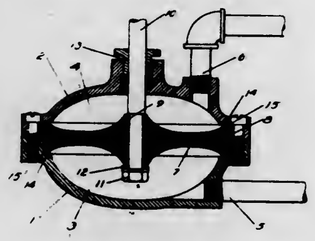
A container for shipping a plurality of bottles comprising a rectangular case having rigid ends and sides, a rigid bottom and a rigid cover, longitudinally and transversely extending spacing strips located in said case and positioned to prevent lateral displacement of bottles packed in said case, members engaging said case and spac-

ing strips to prevent displacement of said strips with respect to said case, a yieldable support for said bottles spaced from the rigid bottom of said case, said support permitting limited movement of the bottles with reference to the bottom of said case and a yieldable spring strip



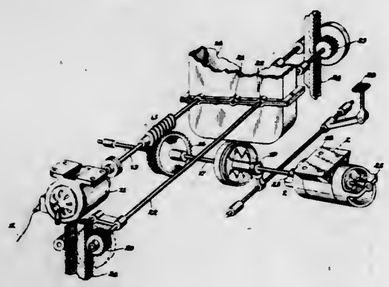
carried by the cover of said case and extending parallel with one of said spacing strips, said member being spaced from said cover and engaging the shoulder of bottles positioned within said case and resting upon said yieldable support to aid in positioning said bottles in said case.

1,885,457. DIAPHRAGM MECHANISM. HUGH C. LORD and IRVING P. WHITEHOUSE, Erie, Pa.; said Whitehouse assignor to said Lord. Filed Mar. 19, 1928. Serial No. 262,947. 13 Claims. (Cl. 137—157.)



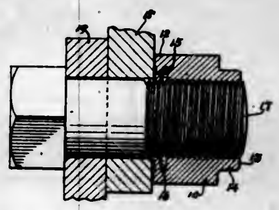
1. In a diaphragm mechanism, the combination of a diaphragm chamber; a fluid connection leading to the chamber; and a rubber diaphragm forming a wall of the chamber, said rubber being supported at its edge and being under inherent initial tension when in the plane of its support.

1,885,458. SPEED CONTROL FOR ELEVATORS. PIETRO MANISCALCO, St. Louis, Mo., assignor of one-fourth to Joseph Maniscalco, one-fourth to Joseph Bocchieri, and one-fourth to Corinna Bocchieri, St. Louis, Mo. Filed Mar. 15, 1930. Serial No. 436,095. 10 Claims. (Cl. 187—42.)



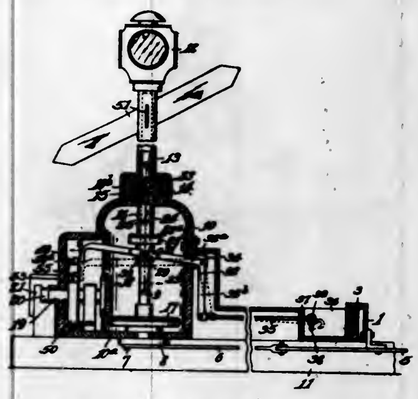
1. In a speed control for elevator of the character described, comprising a main drive shaft, a worm secured thereto, an auxiliary shaft, a gear wheel secured to the auxiliary shaft and meshing in said worm and means for driving same, and a frictional brake mechanism secured to one end of said auxiliary shaft.

1,885,459. LOCK-NUT. ALOYSIUS S. MCDONNELL, Chicago, Ill. Filed July 24, 1930. Serial No. 470,372. 3 Claims. (Cl. 151—14.)



1. A lock-nut comprising a body portion having a threaded opening therein, and an integral collar containing and protecting a plurality of locking elements at one end of said body portion to co-operate with the threads therein for gripping a bolt, said elements being pre-set to the gripping position before its application on the bolt, thereby being effective in confining an object movably on the bolt.

1,885,460. GAP INDICATING MECHANISM FOR RAILWAY SWITCH SIGNALS. ROBERT S. MCELHANEY, Shadyside, Ohio. Filed June 24, 1931. Serial No. 546,461. 4 Claims. (Cl. 246—393.)

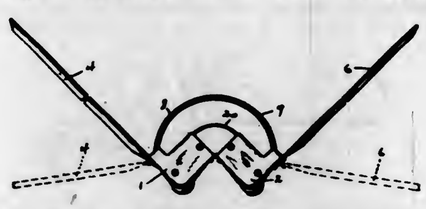


1. A gap indicating signal for railway switch points including a rotatable standard, means connecting the switch point and standard, means for actuating the switch point and standard in unison, a rotatable and vertically movable signal on said standard, means carried by the actuating means for moving the signal to its elevated position, latch means for retaining the signal in its elevated position, and means carried by the switch point for releasing the latch and thereby the signal to permit the latter to move to its signalling position upon unauthorized movement of the switch point.

1,885,461. LOOSE LEAF BINDER. JOHN L. MCMILLAN, Syracuse, N. Y., assignor to McMillan Book Company, Syracuse, N. Y., a Corporation of New York. Filed Sept. 23, 1929. Serial No. 394,529. 2 Claims. (Cl. 129—17.)

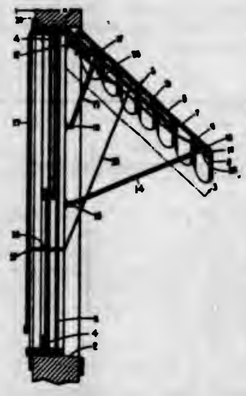
2. In a loose leaf binder, opposed housings hingedly connected together, a plurality of prongs carried on each housing, a cover hinged to the outer longitudinal edge of each housing, each of said housings including an upwardly

and outwardly extending plate, the upper edge portion of said plate having apertures to permit the passage therethrough of the prongs carried on the housing and said



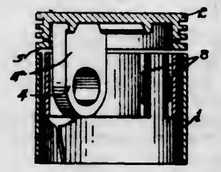
edge portion extending outwardly into approximately the plane of the outer side of the housing and being positioned above the hinge of the cover carried on the housing.

1,885,462. CONVERTIBLE AWNING AND SHUTTER. CHARLES F. MILLER and SETH W. BRUNDAGE, Miami, Fla. Filed Dec. 11, 1928. Serial No. 325,225. 14 Claims. (Cl. 189—55.)



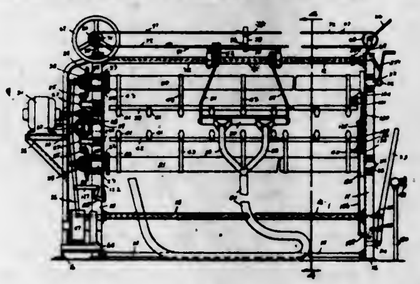
1. In a protective device for a window opening, a rigid member including a plurality of relatively movable sections, one section being pivoted adjacent the top of the window opening and the other being adapted to slide over the first named to overlap the same, means connected with the second named section for moving it upwardly into said overlapping relation to the first named section, and means connected with the second named section for moving both sections downwardly into alinement for closing the window opening.

1,885,463. PISTON BLANK AND METHOD OF MANUFACTURING PISTONS. DORE MILLER, Detroit, Mich., assignor to The Toledo Alloyed Castings Company, Toledo, Ohio, a Corporation of Ohio. Original application, filed Nov. 18, 1929, Serial No. 407,852. Divided and this application filed July 22, 1930. Serial No. 469,826. 6 Claims. (Cl. 29—156.5.)



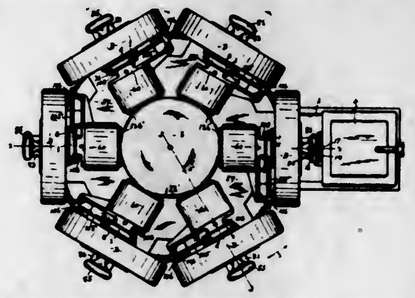
6. The method of forming a piston comprising casting a cup-shaped piston with concentric outer and inner skirts and a pair of piston pin bosses respectively having an integral connection with the inner skirt and the disc portion of the cup-shaped piston with the inner sides of said connections being smooth and at approximately right angles to the disc portion of the cup-shaped piston, and severing the inner and outer skirts above the bosses from the wall of the cup-shaped piston.

1,885,464. RUG CLEANING MACHINE. MORTON G. MILLER, Summit Grove, Ind., assignor of one-fourth to Frank R. Miller, Terre Haute, Ind. Filed Feb. 15, 1930. Serial No. 428,611. 12 Claims. (Cl. 15—15.)



1. A machine for cleaning and otherwise treating rugs, carpets and the like, including an upper roll and a lower roll on which the ends of a rug are mounted, so that it will move vertically from one roll to the other roll, means for treating the rug, means for applying the rug treating means to the side of the vertical portion of the rug as it is moved through the machine, means controlled by each of said rolls for reversing the direction of moving the rug, and means for automatically stopping the movement of the rug after it has been cleaned.

1,885,465. CENTRIFUGAL GANG-CASTING MACHINE. LLOYD W. MOULTON, Syracuse, N. Y. Filed Oct. 21, 1931. Serial No. 570,168. 11 Claims. (Cl. 22—65.)

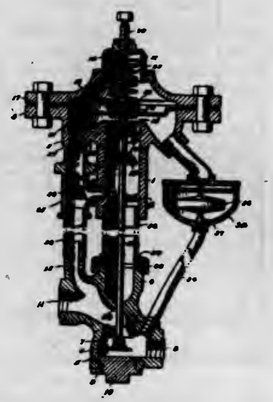


1. In a centrifugal gang-casting machine, a rotary carrier, means for rotating the carrier, a plurality of work-holders mounted on the carrier to move therewith about its axis of rotation, means for introducing molten metal into the work of each work-holder as the latter are successively brought to a predetermined position, and means for rotating each work-holder when the molten metal is introduced into its work, the means for introducing molten metal into the work including a plurality of valve-operating members, one for each work-holder mounted on the carrier, and means actuated by each of said members as the work-holders are successively brought to said predetermined position for opening the valve.

1,885,466. AUTOMATIC BLOW OFF. THEOPHILUS EALEY NEAL, Prairie View, Tex. Filed Aug. 25, 1930. Serial No. 477,672. 9 Claims. (Cl. 236—54.)

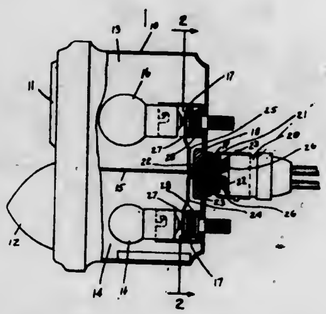
1. A blow off valve comprising a body having upper and lower chambers and an inlet and an outlet at different

levels, an upwardly closing valve in the lower chamber intermediate the inlet and outlet, a diaphragm within the upper chamber and connected to said valve to effect an opening and a closing thereof, a connection between the upper and lower chambers of the body including a valve



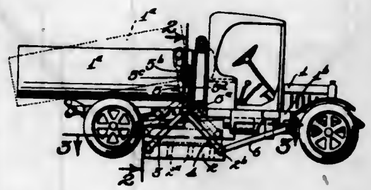
mechanism adapted to be unseated by pressure entering the inlet, a connection establishing communication between the upper chamber at a point below the diaphragm and the lower chamber adjacent the outlet, and a thermostatic valve in said connection.

1,885,467. ELECTRICAL CONTACT FOR LAMPS. FREDERICK W. C. NEUNER, Connersville, Ind., assignor to Indiana Lamp Corporation, Connersville, Ind., a Corporation. Filed Mar. 17, 1928. Serial No. 262,550. 4 Claims. (Cl. 173—335.)



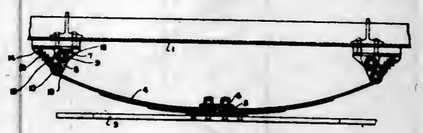
2. In a lamp construction, the combination with a pair of lamp bulb sockets therein, a double electric circuit connecting plug mounted therein, said plug being provided with a pair of substantially parallel recesses therethrough, each laterally enlarged at the same end, compression springs mounted in said enlargements of said recesses, of a pair of oppositely disposed substantially angular electric contact strips supported by said plug and having one arm portion freely slidable in said recesses to one side of the springs, heads formed on the inner ends of said sliding arm portions adapted to engage the free and exposed ends of said compression springs for maintaining said strips in contact position under spring tension, the free end outer angular ends of said contact strips extending into the sockets for bulb contact, said free ends being constrained for exerting an outward pressure for bulb contact and retention in the sockets.

1,885,468. COMBINED DUMP TRUCK AND ROAD DRAG. HOWARD J. NEVIN, Escondido, Calif. Filed July 17, 1931. Serial No. 551,881. 6 Claims. (Cl. 37—153.)



3. In a combined dump truck and road drag, the combination with a tilting dump truck of a drag member suspended on the forward portion only of said dump truck body and means connecting said drag with the truck in front of said drag.

1,885,469. DIAPHRAGM BUFFER MECHANISM. CHARLES W. NICHOLAS, Chicago, Ill., assignor to Union Metal Products Company, Chicago, Ill., a Corporation of Delaware. Filed Nov. 25, 1931. Serial No. 577,269. 5 Claims. (Cl. 105—14.)



1. In a railway car having an end wall and a diaphragm face plate, the combination of a bowed spring having its medial portion attached to said face plate, a shackle pivotally attached to each end of said spring, each shackle also being pivotally attached to said end wall, and yielding means between each of said shackles and said end wall.

1,885,470. DAM AND THE METHOD OF CONSTRUCTING THE SAME. FRED A. NOETZLI, Los Angeles County, Calif. Filed Jan. 15, 1932. Serial No. 586,717. 17 Claims. (Cl. 61—30.)

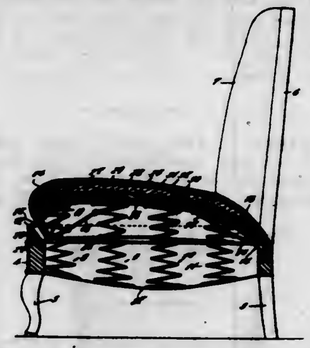


1. A dam of the filled type comprising a seal wall, certain portions of said seal wall being divided into panels by intersecting joints, said seal wall being connected to a cut-off wall extending into the foundation upwardly along the side hills, some of said joints extending roughly parallel to the slope of the side hills and at a distance of roughly 10 to 30 ft. from said cut-off wall.

1,885,471. CHAIR. ERNEST A. OEHRL, Grand Rapids, Mich. Filed Mar. 15, 1930. Serial No. 436,200. 1 Claim. (Cl. 155—179.)

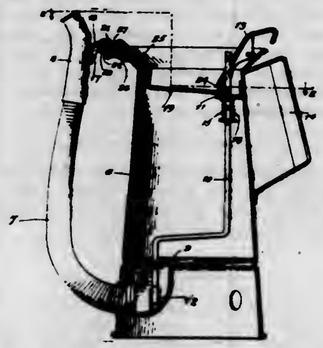
In an article of upholstered furniture, a seat frame including front and rear pieces and side pieces, a cushioned bead secured to the upper face of the front and side pieces having its inner face inclined inwardly and downwardly, front, rear, and intermediate rows of coil springs, means connecting the springs together, means connecting the lower convolutions of the springs to the

seat bottom, means anchoring the upper convolutions of the rear row of springs to the rear piece to limit the upward thrust thereof, a seat pad resting on the upper convolutions of the springs and having its rear edge contacting with the upper face of the rear piece, the



sides and front of the pad inclining inwardly and downwardly and being free from the seat bottom, the inclination of the free sides and front of the pad corresponding to the inclined inner face of the cushioned bead to permit the telescoping of the pad within said seat bottom during the rising and falling of said pad.

1,885,472. OIL CAN. VINCENZO PAONE, Utica, N. Y. Filed June 23, 1931. Serial No. 546,298. 3 Claims. (Cl. 221—16.)



1. In an oil can embodying a vertically swingable spout, a valve for said spout, means for opening said valve, catch means for holding the valve in open position when moved to said position, and means for closing the valve upon release of said catch means; a rigid hook carried by said spout, a rigid keeper fixedly secured to the can for engagement by said spout-carried hook to hold the spout normally raised, and a releasing rod for said catch means having an end which bars engagement of the spout-carried hook with said keeper until the rod is so shifted as to release said catch means.

1,885,473. EXERCISING DEVICE. LOUIS PAT, Chicago, Ill. Filed July 17, 1931. Serial No. 551,483. 1 Claim. (Cl. 272—79.)



An exerciser comprising a rubber strip having openings near the ends, the ends rounded enlarged and the transverse edges of the rounded enlarged ends roughened.

1,885,474. AUTOMOBILE BUMPER. LOUIS PAT, Chicago, Ill. Filed July 18, 1931. Serial No. 551,739. 5 Claims. (Cl. 293—58.)

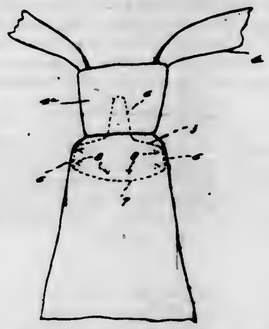


1. A vehicle bumper comprising a metallic base of concavo-convex shape in cross section and rounded in longitudinal planes, said base terminating in a central, longitudinally projecting ear and in fingers arranged rearwardly of the ear and in planes offset from the ear, a casing open on the inner side and fitting within the concave face of the base, said casing being closed at the ends, with the closed ends engaging over the ear and beneath the fingers to interlock the casing and base, and an inflating tube within the casing.

1,885,475. ARTIFICIAL PRODUCTS FROM CELLULOSE DERIVATIVES AND PROCESS OF PREPARING THE SAME. HANS PERSIEL, Hoechst in Taunus, and GERHARD BALLE and KURT SPONSEL, Hochst-on-the-Main, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed Feb. 7, 1928, Serial No. 252,672, and in Germany Feb. 12, 1927. 9 Claims. (Cl. 106—40.)

1. The process which comprises dissolving in an organic solvent a cellulose derivative which is substantially insoluble in water and does not swell therein, mixing said solution with another cellulose derivative dissolved in water, and desiccating the emulsion thus obtained.

1,885,476. SHAPE RETAINING DEVICE FOR NECKTIES. ERNEST N. PETTIT, Jr., Little Rock, Ark. Filed Nov. 27, 1931. Serial No. 577,694. 2 Claims. (Cl. 2—157.)



1. A tie form or shape retainer comprising a substantially T-shaped body member including a shank portion adapted to be inserted upwardly into the knot of a tie four-in-hand tie, together with a head portion for disposition between the front and rear scarf portions of the tie, and prongs on opposite faces of the head portion engaging the proximate scarf portions of the tie.

1,885,477. TERMINAL. EARL F. POTTER, Waukegan, Ill., assignor to The Potter Company, North Chicago, Ill., a Corporation of Delaware. Filed June 9, 1930. Serial No. 459,885. 6 Claims. (Cl. 173—324.)

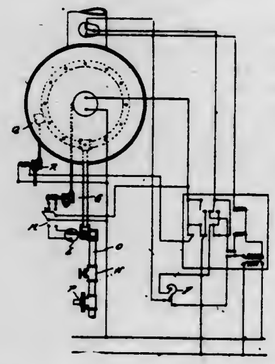
2. In combination with an L-shaped electrical terminal, lugs disposed below said L and having the outer edges

thereof defining a polygonal area, and an insulator containing a round hole through which said lugs are forced, the portion of the lugs projecting through the insulator



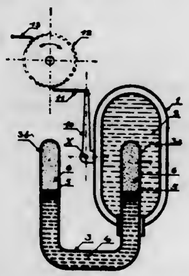
being swedged over against the insulator, and the end portions of said lugs being bent at an angle to said swedged portions to provide connecting means for the terminal.

1,885,478. COMBINED OIL AND GAS BURNER. MILTON A. POWERS, Detroit, Mich., assignor to The Timken Silent Automatic Company, Detroit, Mich., a Corporation of Michigan. Filed Dec. 15, 1930. Serial No. 502,598. 3 Claims. (Cl. 158—28.)



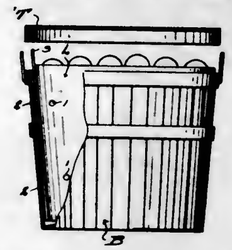
1. A fluid fuel burner comprising a motor driven rotary member for spraying liquid and for supplying air to support combustion, a refractory ring against which said fuel and air is directed and means for alternatively supplying a proportionate quantity of gaseous fuel to said refractory ring and for cutting off the liquid fuel supply.

1,885,479. DEVICE FOR AUTOMATICALLY RE-WINDING CLOCKS OR OTHER MECHANISMS BY THE VARIATIONS OF THE ATMOSPHERIC TEMPERATURE. JEAN LÉON REUTTER, Paris, France. Filed May 24, 1929, Serial No. 365,754, and in France Nov. 28, 1928. 6 Claims. (Cl. 60—25.)



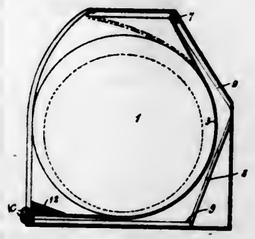
1. In an apparatus of the character described, the combination with a U tube including a pair of spaced interconnected branches, and a mass of mercury disposed within said U tube and normally extending a distance into both said branches, of a pivotally mounted container of slowly varying temperature supporting one branch of said U tube, a liquefied gas together with its saturated vapor disposed in each branch of said tube above the level of the mercury therein, and a mass of material of high specific heat arranged within said container in heat exchange contact with said one branch of said tube and extending above and below the general level of the mercury in said branch, the other branch of the U tube being exposed in thermal contact with the atmosphere.

1,885,480. BASKET LINER. JOHN S. RICE, Biglerville, Pa., assignor to Rice, Trew & Rice Co., Inc., Biglerville, Pa., a Corporation of Pennsylvania. Filed Apr. 11, 1929. Serial No. 354,366. 6 Claims. (Cl. 217—3.)



1. As a new article of manufacture, a split basket liner for use in packing fruit and the like having a plurality of openings in its end portions, the openings in one end portion registering with the openings in the other end portion when said end portions are in over-lapping relation, and a substantially rigid member threading through said openings, said openings and substantially rigid member being so proportioned to provide a degree of adjustability in assembling the basket over the filled liner and permitting the liner to accommodate itself to the content and basket.

1,885,481. FILING DEVICE FOR PHONOGRAPH DISKS. JULES PAUL ANTOINE ROUSSEL, Paris, France. Filed Nov. 7, 1930, Serial No. 494,139, and in France Jan. 24, 1930. 1 Claim. (Cl. 312—15.)

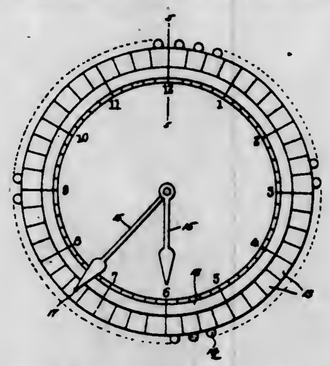


Means for filing phonograph records comprising a box open at one side, partitions dividing the box into compartments each receiving a single record, and a flexible strip in each compartment supporting the record therein and consisting of parallel wires anchored at the back of the compartment and permanently united at their front ends to form a handle projecting from the open side of the box, the wires being connected at intervals in their length.

1,885,482. TIME CONTROLLED SWITCH. ADOLF H. SAAR, Jr., Omaha, Nebr. Filed May 15, 1931. Serial No. 537,703. 1 Claim. (Cl. 200—37.)

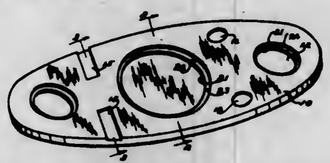
In a clock switch, a clock casing provided with a dial opening, the edge portion of the casing at the opening

being provided with an inwardly disposed circumferentially extending flange, an annular wall extending outwardly from the flange and provided with a backwardly disposed



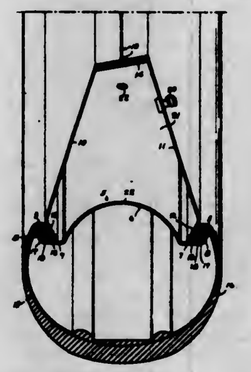
circumferentially extending flange defining a trough, and removably disposed conductor blocks in the trough for engagement by one hand of the clock.

1,885,483. TRAY. FRANK E. SAMUELSON, Jamestown, N. Y. Filed June 7, 1929. Serial No. 369,084. 3 Claims. (Cl. 65—53.)



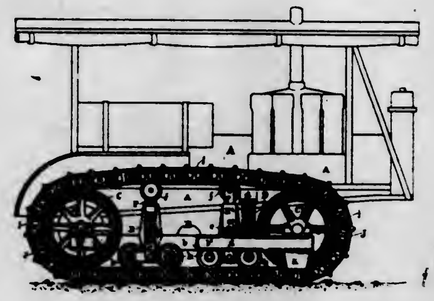
3. A lap tray for individual use comprising a body member formed from suitable strong light weight material, annular depressions in one face of said member, small shallow recesses in said face for retaining silverware, and means in said depressions, said means constituting an annular step or ledge by which said depressions are adapted to support and horizontally retain dishes and glassware of various sizes.

1,885,484. PNEUMATIC TIRE AND WHEEL. ALVIN H. SHOEMAKER, Seattle, Wash. Filed Oct. 31, 1931. Serial No. 572,814. 10 Claims. (Cl. 152—29.)



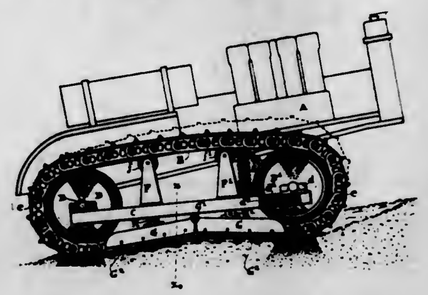
2. In devices of the class described, a wheel having relatively movable side discs forming a pneumatic chamber therebetween, a rim on said wheel, and a tire having bead portions extending between the peripheral portions of said side discs and parts of said rim whereby air pressure within said pneumatic chamber will move said side discs and clamp said tire bead portions.

1,885,485. CONVERTIBLE NOISELESS TRACKLAYER TRACTOR. WILLIAM H. SMYTH, Berkeley, Calif. Filed July 9, 1928. Serial No. 291,361. 32 Claims. (Cl. 305—9.)



14. A track assembly comprising a power-driven cushion-tire support-wheel with a second cushion-tire wheel longitudinally spaced apart therefrom, an endless track trained around the wheels, spring opposed cushion tire wheels travelable on the endless track in its ground run, spring-opposed wheels located above the last mentioned wheels adapted to support and tension the upper run of the track chain intermediate the first mentioned wheels.

1,885,486. CONVERTIBLE TRACTOR. WILLIAM H. SMYTH, Berkeley, Calif. Filed Mar. 19, 1929. Serial No. 348,229. 14 Claims. (Cl. 305—9.)

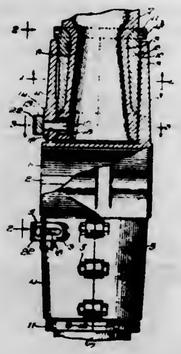


14. A convertible tractor comprising a frame, motor means thereon, cushion-tire support-wheels journaled on the frame, a track-chain with laterally extended tread shoes trained around the support-wheels in friction driven circumferential contact, a flexibly hinged spring opposed guide paralleling the chain with cushion-tire rollers journaled on the guide rollable on the laterally extended tread-shoes in the ground run, cushion-tire rollers adapted to support the upper run and means adapted to detachably position the track-chain guide.

1,885,487. PROPELLER. JOHN SQUIRES, Detroit, Mich. Filed Mar. 8, 1929. Serial No. 345,304. 15 Claims. (Cl. 170—160.)

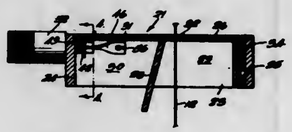
1. A propeller comprising a hub member having a radial socket, a propeller blade having a shank rotatively fitted in said socket, a split collar rotative upon said

shank and restrained from shifting longitudinally of said shank and screw threaded into said socket whereby the shank is adjustable to and from the axis of the



hub member by rotation of said collar, and means for radially contracting said socket about said collar and shank.

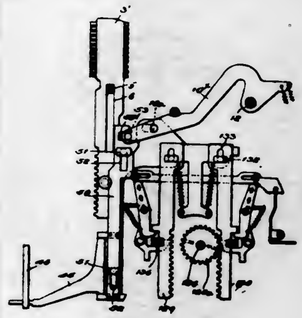
1,885,488. FIRE PREVENTIVE DEVICE FOR MOTION PICTURE APPARATUS. HAROLD H. STERNBERG, Los Angeles, Calif. Filed June 10, 1931. Serial No. 543,346. 12 Claims. (Cl. 88—17.)



2. In combination with a moving picture projecting machine including a magazine for holding a film, a safety attachment comprising: a casing detachably connected to said projecting machine and said magazine; a plate closing one end of said casing; a wall forming a primary chamber and a secondary chamber formed in said casing, said plate having an opening for the passage of said film from said magazine through said secondary chamber to said projecting machine; a blade slidable in said casing across said opening for severing said film; means in said primary chamber for holding said blade in non-severing position; and a fusible element associated with said holding means and adapted upon combustion in said primary chamber to release said blade holding means, whereby said blade is moved from said primary chamber to said secondary chamber in a manner to sever the film and close said film passage opening.

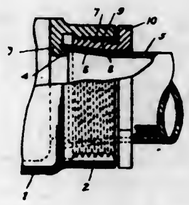
1,885,489. DECIMAL AND NONDECIMAL ADDING AND SUBTRACTING MACHINE. OSCAR J. SUNDSTRAND, Rockford, Ill., assignor to Sundstrand Corporation, Wilmington, Del., a Corporation of Delaware. Filed June 13, 1928. Serial No. 284,978. 6 Claims. (Cl. 235—60.)

2. In a computing machine, a non-decimal type bar, a slide mounted on the type bar for movement longitudinally of the latter, a group of stops, said slide being arranged to coact with said stops, and means for moving the type



bar comprising a pivoted arm connected to the type bar and the slide at different distances from the axis of the arm.

1,885,490. CONDUIT FITTING. ELMER J. S. SWANSON, Erie, Pa., assignor to Erie Malleable Iron Company, Erie, Pa., a Corporation of Pennsylvania. Filed Apr. 4, 1928. Serial No. 267,413. 1 Claim. (Cl. 247—25.)

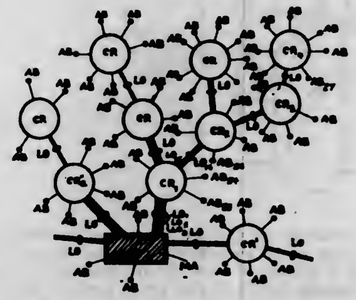


In combination with a conduit having a flared end flaring both the inner and outer surfaces of said end, of a conduit fitting having a body with a conduit-receiving opening terminating in a guard shoulder at its inner end, said guard shoulder having an outwardly extending rib having the corner between its inner periphery and outer end rounded, the outer periphery of the rib engaging the inner surface of the flared end; a follower in the opening in the body engaging the flared end of the conduit, the end of the follower being in axially spaced relation from the end of the rib whereby the flared end may be contracted into engagement with the outer periphery of the rib and through its elasticity by reason of the spaced relation conform to the surface of the rib; and means forcing the follower toward the guard shoulder.

1,885,491. AUTOMATIC TELEPHONE SYSTEM. MICHEL TCHOUBRITCH, Paris, France, assignor to Societe Nouvelle de Constructions Telephoniques, Paris, France, a Corporation of France. Filed Jan. 24, 1931, Serial No. 511,041, and in France Jan. 31, 1930. 20 Claims. (Cl. 179—27.)

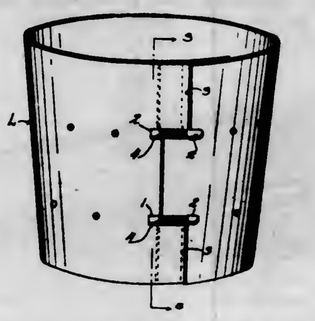
1. In a telephone system of the type including a manual main exchange and several automatic rural exchanges with which subscribers are connected, each of the latter being equipped with local battery telephones having magneto ringing means, and wherein each rural exchange is connected with the manual exchange by trunk lines, some directly and the others through the intermediary of less remote rural exchanges, the combination in each rural exchange of main trunk lines leading towards the manual

exchange, transformers inserted in said lines, the primary and the secondary of which are each constituted by two windings separated by a condenser; secondary trunk lines leading towards the more remote rural exchanges, and crossing the outer main trunk lines on their outer side opposite the transformers, subscriber's lines crossing the main trunk lines on that side thereof on which the transformers are located; a local line crossing the said sub-



scribers' lines and the said secondary trunk lines; relays responsive, some to the operations of the subscribers, and some to the operations of the manual exchange, and including local communications and communication relays calling relays and observation relays; means responsive to the operations of said relays for connecting the lines crossing each other, and a calling line finder and an individual selector for each main trunk line.

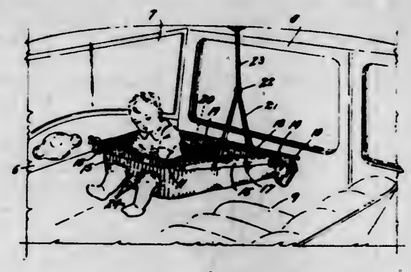
1,885,492. BASKET LINER. JAMES W. TREW, Baltimore, Md., assignor to John S. Rice, Biglerville, Pa. Filed Aug. 31, 1929. Serial No. 389,807. 2 Claims. (Cl. 217—3.)



1. As a new article of manufacture, a split packing liner for use in packing fruit or the like having the ends adjustably connected together by a plurality of means located substantial distances from the longitudinal center line of the liner and on opposite sides of said center line, each means being integral with an end portion of the liner and interlocking with the opposite end portion whereby a degree of adjustment of the liner is secured in the application of a basket around a filled liner and expansion of said liner is allowed to accommodate it to the size of the basket, said means serving to maintain the filled liner in shape before the basket is applied.

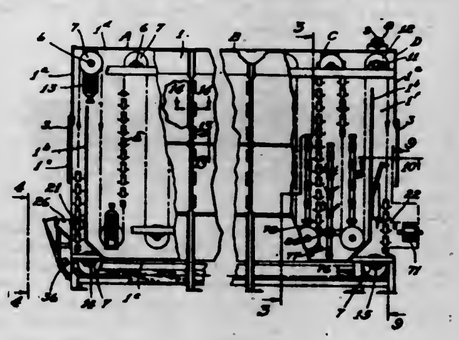
1,885,493. AUTOMOBILE BABY CRIB. WILLARD G. TYLER, Denver, Colo. Filed July 8, 1931. Serial No. 548,485. 3 Claims. (Cl. 5—94.)

1. Means for carrying a child in an automobile comprising: a horizontally positioned U-shaped frame; means for supporting said frame from said automobile, one side of said frame being substantially shorter than the other side thereof; a swinging bar hinged to the shorter



side so that it can swing toward and away from the longer side; and a fabric carrier secured at its upper edge along said frame and along said bar.

1,885,494. EXHAUST BOX. EDGAR A. ULMANN, Los Angeles, Calif., assignor to Standard Boiler & Steel Works, Los Angeles, Calif. Filed Nov. 29, 1929. Serial No. 410,518. 15 Claims. (Cl. 126—272.)

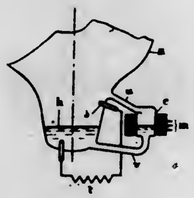


1. In an apparatus of the class described, an enclosure, a container feed grid mounted at one side of the enclosure and adapted to receive a plurality of containers, a continuous conveyer extending through the enclosure and passing through said grid and adapted to pick up all containers thereon, a feed conveyer at one side of the feed grid for conveying containers thereto, and means timed with the first conveyer for periodically directing the containers from the feed conveyer to the grid.

1,885,495. STARTING DEVICE FOR MERCURY ARC RECTIFIERS. MARIO URBINATI, Rome, Italy. Filed Oct. 25, 1930, Serial No. 491,098, and in Italy Nov. 5, 1929. 1 Claim. (Cl. 250—27.5.)

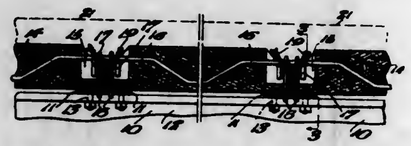
Device for producing the formation of the arc in mercury vapour rectifiers, comprising in combination a rectifier having a mercury cup at its bottom part, a cylindrical container filled with mercury and disposed externally of and at the same level as the bottom of said rectifier, a lower tube connecting the bottom of said rectifier with the bottom of said container, the mercury circulating from the former to the latter through said tube, a polyphase winding surrounding said container and arranged to produce a rotating magnetic field around said container, an upper tube connecting the top of said container with said rectifier, delivering the mercury there-

in at a level higher than the normal level of the mercury, two poles of an electric circuit, the first being inserted into said rectifier below and in correspondence to the delivery therein of said upper tube, and the other contacting with the mercury contained in said rectifier, the action of said polyphase winding surrounding said container causing the mercury therein to revolve and



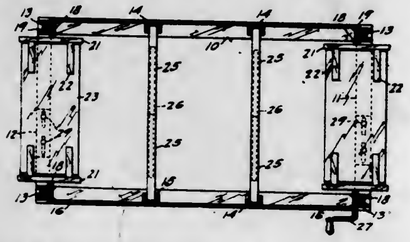
to raise its level along its sides due to the centrifugal action developed thereby and to escape through said upper tube into said rectifier, meeting during its fall therein the pole of the electric circuit inserted below the delivery of said upper tube and falling on to the mercury in said rectifier thus establishing electrical contact between the said two poles of the electric circuit.

1,885,496. BUILDING CONSTRUCTION. FREDERICK M. VENZIE, Philadelphia, Pa. Filed Sept. 19, 1931. Serial No. 563,693. 6 Claims. (Cl. 72—66.)



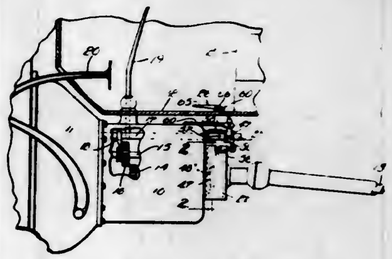
1. In a building construction of the character stated, metal beams arranged in parallelism, angle-irons arranged upon said beams at right angles thereto, said angle-irons abutting, the flanges of which are adapted to receive adjacent ends of cementitious slabs, cementitious slabs supported by the flanges of said angle-irons, adjacent ends of said slabs being cut-away, reinforcing rods embedded in said slabs which project into said cut-away portions, and tie-wires for coupling together adjacent ends of said slabs.

1,885,497. WINDING DEVICE. THOMAS WATKINS and LORIN D. BAUM, Berkeley, Calif. Filed Nov. 11, 1929. Serial No. 406,326. 8 Claims. (Cl. 242—62.)



1. A winding device consisting of a pair of base members transversely adjustable relative to each other, telescopic adjusting members connecting said base members, a standard at each end of each base member, a bolt core retaining device rotatably mounted on each of said standards and intermediate pairs of standards, each pair connected by two spaced apart telescopic guides.

1,885,498. BACKSTOP FOR AUTOMOTIVE VEHICLES. LEO C. WILLEY, Glendale, Calif., assignor of five per cent to Elsie May Kramer, Los Angeles County, Calif. Filed Mar. 28, 1931. Serial No. 524,594. 2 Claims. (Cl. 192—4.)



1. A device of the character described including a housing adapted to be stationarily mounted around a drive shaft of a vehicle, a rotor to be mounted on the shaft in the housing, a plurality of levers pivoted to the rotor, a finger on each lever adapted to engage the housing to hold the shaft against rotation in a reverse direction, the levers having their centers of greatest mass related to their pivotal axes so that rotation of the shaft in a forward direction causes centrifugal force to hold the levers in positions where their fingers are free of the housing and so that gravity acts to hold one or more of the levers in positions where their fingers engage the housing when the shaft is stationary, a sleeve in the housing shiftable to a position where it holds the levers where their fingers are free of the housing, automatic control means for the sleeve, and manual means for shifting the sleeve.

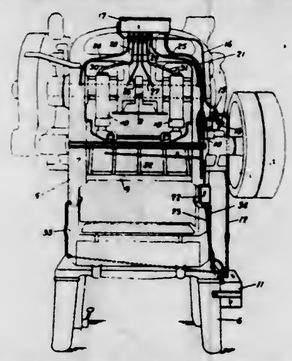
1,885,499. BROODER. ROY C. WILLIAMS, Wayne, Ohio. Filed May 10, 1929. Serial No. 362,011. 2 Claims. (Cl. 119—34.)



1. A brooder of the class described comprising a casing having an opening in its front and a chamber in the rear upper part thereof, the bottom of the chamber being formed of cloth, a heating element in the chamber, a diagonally arranged support in the casing having its high end arranged under the heating chamber whereby chicks resting on said high part will have their backs in contact with the cloth, and by moving down the support, the chicks will pass from the chamber, said support comprising a removable frame, wire mesh covering the upper part of the frame and a removable plate in the lower part of the frame.

1,885,500. LUBRICATING SYSTEM. LARKIN R. WILLIAMSON, Toledo, Ohio, assignor to The Toledo Machine and Tool Company, Toledo, Ohio, a Corpration of Ohio. Filed Feb. 21, 1931. Serial No. 517,430. 4 Claims. (Cl. 184—6.)

1. The combination with a power press comprising a drive shaft, a crank shaft, a slide, and connections between the crank shaft and slide, of a reservoir for lubricant, means for causing the lubricant to flow by gravity to the crank shaft and connection bearings, said slide be-



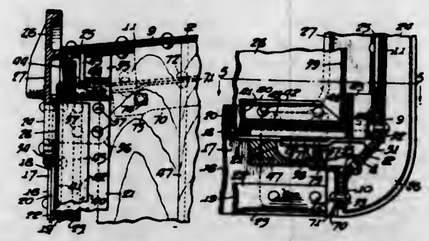
ing formed with a trough in its upper face for collecting the lubricant as it drains from the connection bearings, and means for returning the lubricant to said reservoir.

1,885,501. FLAT SHEET DISPENSING PACKAGE. JOSEPH C. WILSON, Middletown, Ohio, assignor to The Crystal Tissue Company, Middletown, Ohio, a Corporation of Ohio. Filed June 18, 1930. Serial No. 462,091. 6 Claims. (Cl. 248—39.)



5. In combination with a dispensing package, means for mounting said package on a surface comprising a vacuum cup, said vacuum cup being mounted on a flat piece of material provided with locking tongues, and said dispensing package having slots for receiving said tongues.

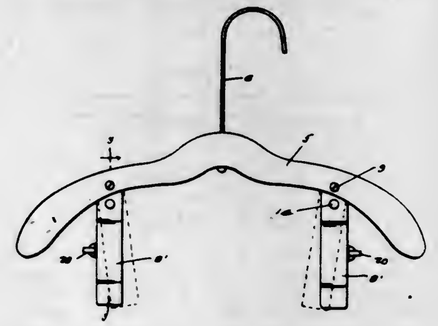
1,885,502. RAILWAY CAR. WILLIAM E. WINE, Toledo, Ohio. Filed Oct. 10, 1931. Serial No. 568,178. 27 Claims. (Cl. 105—406.)



1. A railway gondola car involving side sills, an end sill having a substantially vertical portion and a substantially horizontal portion, and corner posts respectively secured to said side sills, each of said corner posts being integrally provided with portions respectively secured to the vertical and horizontal portions of the end sills.

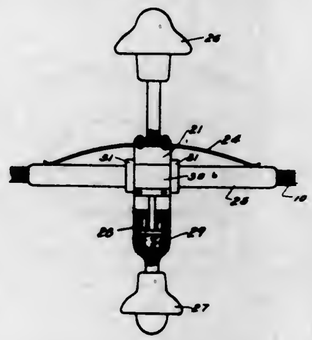
2. A railway gondola car involving side sills, an end sill provided with a substantially vertical plate portion and a substantially horizontal portion projecting inwardly therefrom, and corner posts respectively secured to the side sills, each of said corner posts having portions respectively secured to said plate and horizontal portions of the end sill.

1,885,503. GARMENT HANGER. JOHN P. ACTON, El Paso, Tex. Filed Mar. 11, 1932. Serial No. 598,277. 4 Claims. (Cl. 223—65.)



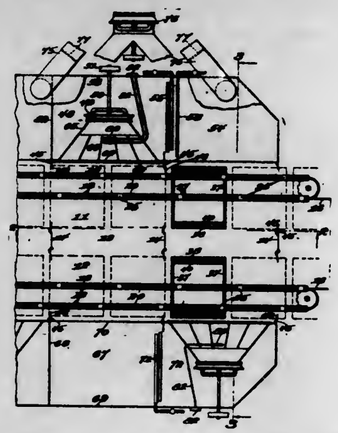
1. In a garment hanger of the class described, a bar having recesses in one end thereof, a pair of clamps having ends seated and secured in said recesses, brackets in the clamps, and means supported by the brackets whereby the clamps may be opened, each clamp being in the form of a strip of spring material bent over upon itself with the bracket mounted therein, said means comprising a shaft rockable in sleeves on the ends of the bracket and a cam on the shaft.

1,885,504. TRANSMISSION LINE. ARTHUR O. AUSTIN, near Barberton, Ohio, assignor, by mesne assignments, to The Ohio Brass Company, Mansfield, Ohio, a Corporation of New Jersey. Filed Mar. 1, 1928. Serial No. 258,445. 14 Claims. (Cl. 173—13.)



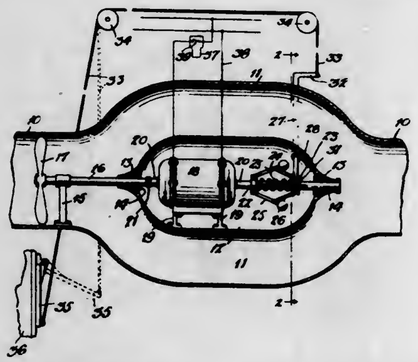
3. The combination with a conductor of a bearing member fixed to said conductor, a rider movably mounted on said conductor and supported entirely thereby, said rider having frictional yielding engagement with said bearing member to dissipate energy and dampen vibrations of said conductor.

1,885,505. DRIER. KENNETH E. BELL, Marblehead, Mass., assignor to A. C. Lawrence Leather Company, Boston, Mass., a Corporation of Maine. Filed Mar. 10, 1926, Serial No. 93,644. Renewed Aug. 28, 1929. 9 Claims. (Cl. 34—12.)



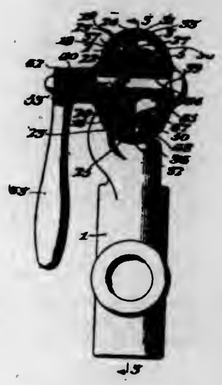
1. A drier comprising a tunnel, means for supporting the material to be dried and for carrying it through the tunnel, chambers arranged in pairs on one side of the tunnel and in communication therewith and with each other and each pair of chambers being separate from adjacent pairs by imperforate partitions, a fan in one of the chambers of each pair for causing the air to flow across the tunnels, an air heater between the chambers of each pair arranged transversely of the longitudinal axis of the tunnel to expose a minimum amount of radiating surface to the material passing through the tunnel, and means on the opposite side of the tunnel for receiving the air from the fan chamber and returning it across the tunnel to the chamber communicating with the fan chamber whence it came.

1,885,506. FURNACE DRAFT CONTROL. FRANK J. BERCHTOLD and LOUIS CLEVEN, Washington, D. C. Filed Feb. 27, 1930. Serial No. 431,991. 12 Claims. (Cl. 110—162.)



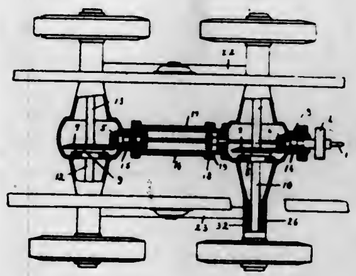
1. The combination with a furnace having a door therein and a flue leading from said furnace, of a fan arranged to draw gases through said flue, means to operate said fan, and automatic means operated by said fan operating means to open the door of the furnace during the operation of said fan.

1,885,507. HEADREST. GEORGE H. BROWNE, Prince Bay, N. Y., assignor to The S. S. White Dental Manufacturing Company, a Corporation of Pennsylvania. Filed Apr. 2, 1929. Serial No. 351,875. 12 Claims. (Cl. 155—177.)



11. A head-rest assembly comprising stationary and rotatable structures, an expansible spring member interposed between said structures and having a conical friction bearing periphery, means to draw said structures toward each other thereby expanding said spring member to frictionally engage its conical bearing periphery with an opposing friction bearing surface on one of said structures.

1,885,508. AUTO OF SIX OR MORE WHEELS. MAX BROZINCEVIC, Wetzikon, Switzerland. Filed Oct. 18, 1928, Serial No. 312,379, and in Germany and Switzerland Oct. 28, 1927. 1 Claim. (Cl. 180—22.)

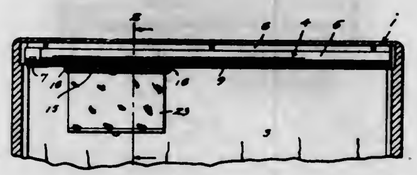


In a motor vehicle, the combination of a plurality of rear axle housings, an axle within each housing and carrying a bevel gear thereon, a torque tube disposed between and rigidly secured to each housing, a power shaft with a plurality of universal joints in said torque tube and below the plane of the axles whereby the power shaft extends beneath one axle, a drive shaft in alignment with said power shaft, a flexible coupling between said shafts, gears on said power shaft operatively associated with said bevel gears, said torque tube composed of two sleeves, one sleeve having outwardly projecting flanges and the other sleeve having lip portions arranged to detachably engage said flanges to allow swiveling movement between the sleeves but to rigidly hold the sleeves and axle housings against relative longitudinal displacement.

1,885,509. MANUFACTURE OF A VULCANIZED RUBBER PRODUCT. HORACE G. BYERS, Montclair, N. J., assignor to Rubber Service Laboratories Company, Akron, Ohio, a Corporation of Ohio. Filed Aug. 27, 1926. Serial No. 132,036. 8 Claims. (Cl. 18—53.)

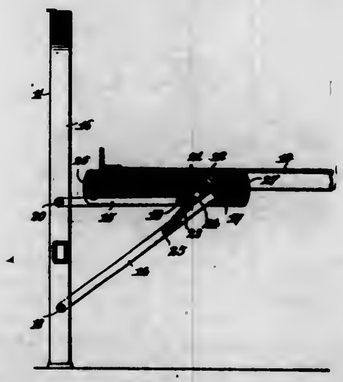
3. The process of manufacturing a vulcanised rubber product which comprises heating a rubber compound containing sulfur in the presence of a relatively small proportion of the compound obtained by reacting an aliphatic aldehyde upon the reaction product of tri-methylene-dibromide with aniline.

1,885,510. GLARE SCREEN OR VISOR FOR MOTOR VEHICLES. FRED J. CHAPMAN, Douglas, Ariz. Filed July 7, 1931. Serial No. 549,281. 5 Claims. (Cl. 296—97.)



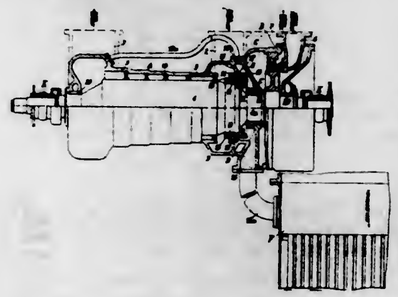
1. An attachment for a motor vehicle having a windshield, comprising an elongated casing adapted to be mounted transversely of the upper part of the windshield, a shade, a shade roller having said shade mounted thereon, and a frame having said roller mounted therein and shiftably positioned in said casing, said casing having an opening through the wall thereof for the passage of said shade.

1,885,511. FOLDING BED END ATTACHING DEVICE. EDGAR COCKS, Los Angeles, Calif. Filed Apr. 14, 1931. Serial No. 530,084. 5 Claims. (Cl. 5—178.)



1. A folding bed end attaching device comprising, attaching members respectively at the sides of said bed end, first and second rigid members arranged between each attaching member and the bed end, and also arranged in spaced relation with respect to each other, and pivotally connected with the attaching member and the bed end, a link pivotally connected at one end with each attaching member, a spring having its ends connected respectively with the free end of each link and the related first rigid member, studs on said attaching members for the second rigid members to cooperate therewith to retain the bed and substantially perpendicular to the attaching members, and stops on the attaching members to cooperate respectively with the links to limit the movement of the latter, so that the springs connected therewith will be disposed substantially parallel to said first rigid members when the bed end is in folded position.

1,885,512. TURBINE. STANLEY SMITH COOK and ANDREW PHILP BENNETT, Newcastle-on-Tyne, and CHARLES ALGERNON PARSONS, deceased, Newcastle-on-Tyne, England, by Katherine Parsons, Kirkwhelpington, Vincent Thompson, Newcastle-on-Tyne, and Frederick Gordon Hay Bedford, Wylam-on-Tyne, England, executors; said Cook and said Bennett assignors to said executors. Filed Oct. 21, 1931, Serial No. 570,118, and in Great Britain Oct. 13, 1930. 3 Claims. (Cl. 60—64.)



1. An elastic-fluid parallel-flow turbine unit comprising an ahead turbine and an astern turbine having a common rotor body and a common casing, at least one of said turbines being of the reaction type, the exhaust end of said astern turbine being arranged adjacent the inlet end of said ahead turbine, casing diaphragm means between said ahead and said astern turbines, said diaphragm means having walls spaced apart axially of said turbines with a chamber therebetween, each wall being in substantially fluid-tight relation to said common rotor body, a condenser and means for connecting said chamber to said condenser.

1,885,513. MULTIPLE ELECTRICAL CONDUIT RECEPTACLE AND PLUG. MARTIN J. DE MASK, Pittsfield, Mass. Filed Dec. 8, 1927. Serial No. 238,633. 2 Claims. (Cl. 24—3.)

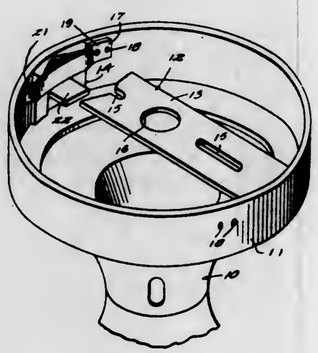


1. A multiple electric conduit comprising a casing constructed with openings in its side to receive plug terminals, a core of insulation within the casing having longitudinal walls registering with the openings in the casing, the core being spaced from the casing at the closed side thereof to form a way, and conductor strips embedded flush in the longitudinal walls of the core.

1,885,514. CANOPY FASTENER. LEWIS T. DEUBLER, Scranton, Pa. Filed Apr. 9, 1932. Serial No. 604,209. 3 Claims. (Cl. 240—85.)

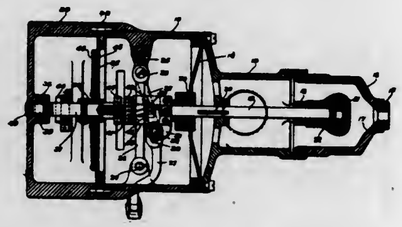
1. In combination, a canopy including a substantially cylindrical base, a flat bar disposed diametrically of the base and having openings therethrough to receive securing bolts to secure the bar to an outlet box, a flange carried

by each end of the bar and adapted to engage the inner surface of the base, a second flange carried by the first flange and disposed in parallel relation to the bar, and



a pair of yieldable members mounted on the base and engaging between said second flange and the bar to releasably lock the canopy on the bar.

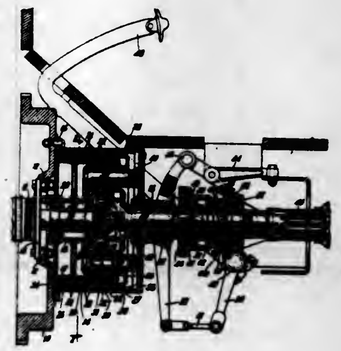
1,885,515. THERMOSTATIC BURNER CONTROL. ANTHONY J. DONOHUE, Philadelphia, Pa., assignor to Simplex Gas Products Corporation, Philadelphia, Pa., a Corporation of Delaware. Filed July 30, 1929. Serial No. 382,144. 7 Claims. (Cl. 236—68.)



1. In a thermostatic valve control, a valve, a seat therefor, a dished bi-metallic disc, electrical heating means therefor including heating units of varying intensities, a circuit for one of said units including a remotely disposed switch, a connection between said disc and the valve shifting the valve to unseat the same as the disc moves from one to another of its positions and means operated by shifting of the valve from one to the other of its positions for substituting in said circuit the other of the heating units.

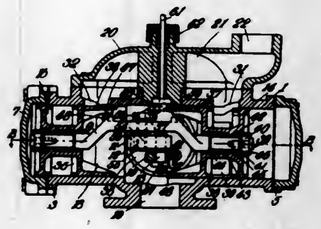
1,885,516. BRAKE AND CLUTCH CONSTRUCTION. GUSTAVE FAST, Annapolis, Md., assignor to Gustave Fast Engineering Corporation, Annapolis, Md., a Corporation of Maryland. Filed Feb. 4, 1930. Serial No. 425,757. 7 Claims. (Cl. 192—13.)

1. In a device of the class described a shaft, a housing secured thereto, said housing having a recess therein, an element telescopically slidable within said recess, said element having a friction face, yieldable means normally holding said element in predetermined relation in said recess, a member shiftable relatively to said housing, said member having a friction face adapted to co-operate with



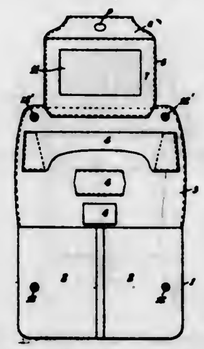
the friction face of said element, and means for shifting said member to force its friction face against that of the member and thereby force the latter inwardly in said recess.

1,885,517. FLOW METER FOR THE MEASUREMENT OF LIQUID. JOHN FRASER, Leckmelm by Garve, Scotland, assignor, by mesne assignments, to Anglo-Persian Oil Company, Limited, London, England. Filed May 25, 1931, Serial No. 539,706, and in Great Britain May 29, 1930. 3 Claims. (Cl. 73—30.)



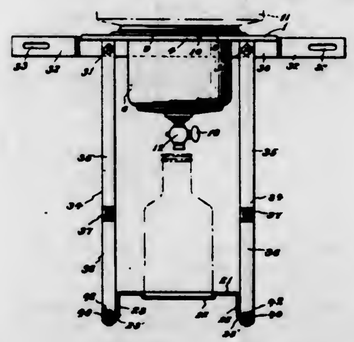
1. A flow meter comprising in combination radially arranged cylinders lying mutually opposite in pairs, a piston in each cylinder, piston rods respectively connecting opposite pistons in pairs, means including a common connecting link jointed to each of said rods, each of said cylinders having a port and a channel whereby communication is made between one cylinder and the cylinder next in sequential order, an admission chamber in communication with each of said cylinders, a delivery chamber, there being a port in each cylinder leading into said delivery chamber, a valve rigidly connected with each of said pistons and in operative relation with said ports in said corresponding cylinder and means for adjusting each valve relatively to its co-operating ports and for ensuring that, on replacement of the said valve after removal, such adjustment shall be undisturbed.

1,885,518. TOILET KIT. MAURICE GOLDSMITH, New York, N. Y. Filed July 12, 1932. Serial No. 622,057. 2 Claims. (Cl. 132—79.)



1. In a toilet kit comprising a body, a cover flap hingedly secured thereto and means for holding the cover flap to the body when closed, a mirror flap secured to a free edge of the cover flap, a frame secured to said mirror flap and a padded back mirror in said frame for the purpose set forth.

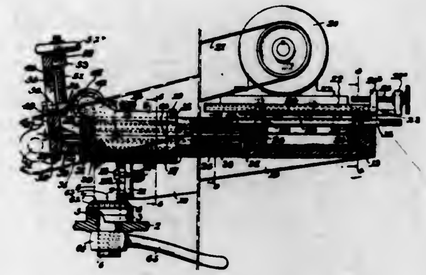
1,885,519. BOTTLE SUPPORT. LOUIS W. HASSENSALL, Toledo, Ohio. Filed Sept. 5, 1930. Serial No. 479,953. 3 Claims. (Cl. 211—74.)



1. A bottle support comprising an upper platform, a lower platform, brackets disposed vertically in transverse spaced relation to each other and having their upper and lower ends secured to said platforms adjacent opposite sides thereof at their inner ends, braces secured to said brackets and extending forwardly and secured to said platforms, and a cross strip extending transversely beneath the upper platform and secured to said brackets with its ends projecting therefrom and adapted to be secured to a support.

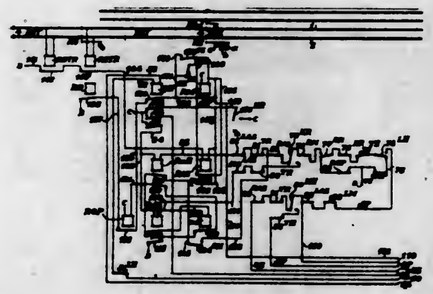
1,885,520. WOODWORKING MACHINE. MACKINTOSH HUTCHINSON, Philadelphia, Pa. Filed Dec. 7, 1928. Serial No. 324,490. 10 Claims. (Cl. 143—6.)

1. A woodworking machine comprising a motor supporting frame of tubular formation extending substantially throughout the length of travel of a motor carriage, a traveling carriage upon which the motor is mounted, a track for the motor carriage constituting part of the tubular frame, a member slidable within the tubular supporting frame and connected with the traveling carriage, a cross-cut saw driven from the motor and connected with



the slidable member, the weight of the motor and its carriage being borne by the track of the tubular frame so as to relieve the slidable member from the weight.

1,885,521. RAILWAY TRAFFIC CONTROLLING APPARATUS. RALPH R. KEMMERER, Swissvale, Pa., assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed July 23, 1930, Serial No. 469,941. Renewed Feb. 26, 1932. 10 Claims. (Cl. 246—160.)

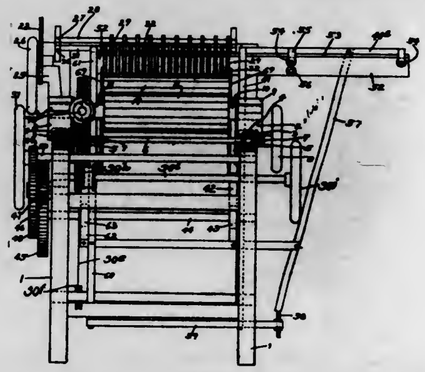


1. In combination, a railway switch, a first track section remote from the switch, a second track section adjacent to the switch, an approach control relay, a normally closed stick circuit to normally energize said relay, a track relay for said first track section to rupture the stick circuit in response to a train in said first track section, a track relay for said second track section, a traffic governing relay controlled by the track relay of the second track section arranged to be deenergized in response to a train in said second track section, a pick-up circuit for said approach control relay effective to reenergize said approach control relay when the track relay of the first track section is energized and the traffic governing relay is deenergized, and means to control the operation of the switch rendered effective with said approach control relay energized.

1,885,522. MACHINE FOR MAKING PLATING BARRELS. JOHN KING, Dayton, Ohio. Filed June 10, 1931. Serial No. 543,840. 19 Claims. (Cl. 139—11.)

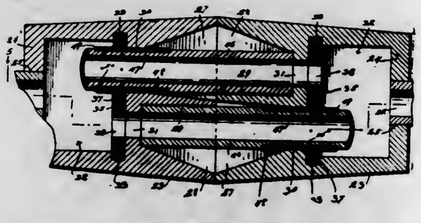
1. In a machine of the class described, the combination with a pair of co-acting fluted forming rolls, alternately

movable fingers for presenting pliable splints to said rolls, a ram movable to a position between the splints to place the dowel between them, means for withdrawing



the ram after the dowel is gripped between the splints, and means for rotating the rolls and reversing the fingers to bend the splints around the dowel.

1,885,523. AUTOMATIC AIR OR STEAM COUPLING FOR RAILWAY CARS. BURKE B. KOSANOVICH, Milwaukee, Wis., assignor of one-fourth to Raymond A. Erdmann, Milwaukee, Wis. Filed Apr. 9, 1932. Serial No. 604,301. 7 Claims. (Cl. 284—5.)

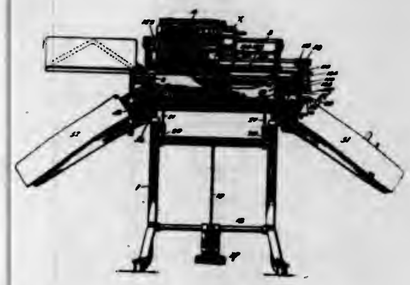


1. A steam or air pipe coupling for railway cars including a hollow coupling head communicatively connected at its rear end to the train pipe line, the forward end of the coupling head having two inwardly tapering recesses, each terminating in an opening leading into the interior of the head, a rubber block extending across the interior of the head immediately behind the front wall of the head and having openings registering with the openings at the rear ends of the recesses, a pipe engaged with one of said openings and extending through the corresponding recess and beyond the head, and a valve in the hollow interior of the head adapted to close against the rubber block and close the openings therethrough but automatically opened when two coupling heads are engaged.

1,885,524. PROCESS FOR TREATING HYDROCARBON OILS. ARTHUR LAZAR, Associated, Calif., assignor to Associated Oil Company, San Francisco, Calif., a Corporation of California. Filed Dec. 17, 1927. Serial No. 240,931. 5 Claims. (Cl. 196—37.)

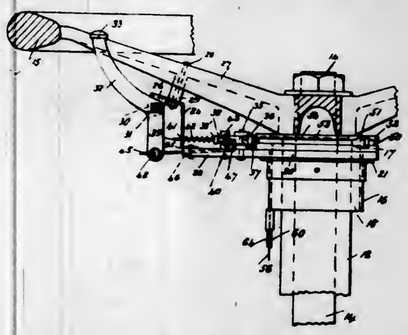
1. The process of treating hydrocarbon oils which comprises treating the lubricating fractions with liquid sulphur dioxide, separating the undissolved portion from the dissolved portion, and reducing by distillation the undissolved portion in the presence of an adsorbent decolorizing material.

1,885,525. PUBLIC SERVICE BILLING MACHINE. WALTER E. LIPPERT, Harrisburg, Pa., assignor to Elliott-Fisher Company, Harrisburg, Pa., a Corporation of Delaware. Filed Mar. 25, 1927. Serial No. 178,393. 65 Claims. (Cl. 197—128.)



1. In a billing machine, the combination with a platen and a carriage, of a pair of bill receiving hoppers mounted upon opposite sides of the platen, and mechanism controlled by movement of the carriage and automatically feeding a bill from one hopper onto the platen and from the platen into the other hopper.

1,885,526. SIGNAL SWITCH FOR MOTOR CARS. WILLIAM LUCIUS, Gainesville, Fla. Filed Nov. 11, 1930. Serial No. 494,970. 7 Claims. (Cl. 200—59.)



1. In an electric switch for a motor vehicle, a vehicle steering post and a steering wheel supported by the post, a steering column, an insulated sleeve secured on the steering column and provided with a contact flange, a stationary contact member supported by the said column and insulated from the said contact flange, an insulated support mounted on the said sleeve and rotating with the steering wheel, a movable contact member carried by the said support, and means arranged adjacent to the hand steering wheel and mounted on the said support and adapted to operate the movable contact member to close a circuit from the said sleeve to the said stationary contact member.

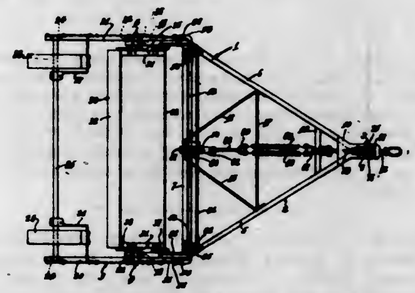
1,885,527. GARMENT. ARTHUR LUFT, Lynbrook, N. Y. Filed Jan. 9, 1930. Serial No. 419,485. 1 Claim. (Cl. 2—227.)

A child's unitary garment adapted to afford protection against cold and dampness comprising in combination lower leg portions formed of a tough water-proof material, each leg portion being provided with a slot on the outer side from the bottom upwardly through a portion of its length and having fastening means to close the slot, and an upper leg and body portion formed of a woven fabric having better heat insulating properties than the lower portion, said upper portion being provided with



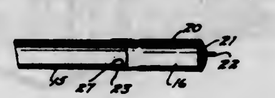
a slot closed by a fastening means and extending from the top of the garment along one side into the upper leg portion.

1,885,528. SCRAPER. HARRY R. LYTLE, North Sacramento, Calif., assignor to Killefer Manufacturing Company, Los Angeles, Calif., a Corporation of California. Filed Sept. 5, 1931. Serial No. 561,853. 5 Claims. (Cl. 37—140.)



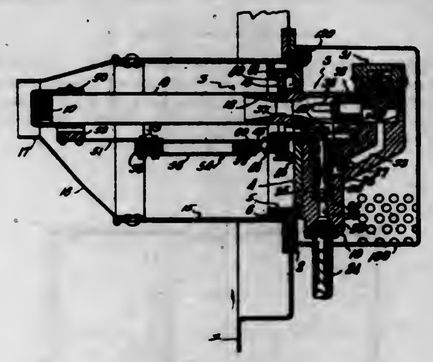
3. A scraper including an articulated frame, wheels journaled to said frame, a scraper bowl also journaled to the frame, an unbalanced draft control means operable for articulating said frame to elevate the bowl from a loading to a carrying position, means for locking said control means to positively retain the bowl in the loading position, and means for releasing said locking means.

1,885,529. ELECTRODE FOR NEON SIGNS. JOHN J. MADINE, Los Angeles, Calif. Filed Feb. 9, 1927. Serial No. 166,857. 4 Claims. (Cl. 176—50.)



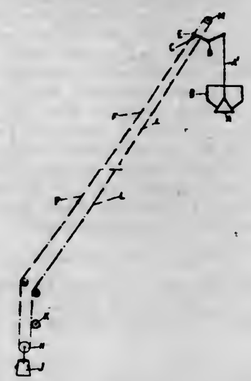
1. A high voltage luminous discharge tube having a filling of gaseous product of the noble monatomic group, and an electrode structure sealing the tube for conducting current to the column of gas in the tube, said structure including a hollow member having an internal cylindrical surface forming the main active electrode area, the external area of the member being exposed and providing a connection means to a source.

1,885,530. COMBUSTION APPARATUS. ALVIN S. MANCIB, Somerville, Mass., assignor to Comstock & Wescott, Inc., Boston, Mass., a Corporation of Massachusetts. Filed Feb. 3, 1931. Serial No. 513,142. 15 Claims. (Cl. 158—117.1.)



1. Apparatus of the class described comprising a burner tube, a fuel duct connected to the burner tube, a valve in said duct, a spring tending to close the valve, a heat-responsive element adjoining the tube, control means actuable by said element to hold the valve open in response to a normal operating temperature range, said element and control means being operative to release the valve when the temperature of the burner tube either rises above or falls below the normal operating range.

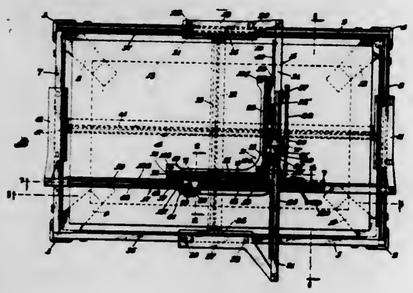
1,885,531. OPERATING GEAR FOR FURNACE BELLS. WILFRID MARLEY, Workington, Cumberland, England. Filed Sept. 19, 1931, Serial No. 563,881, and in Great Britain Sept. 26, 1930. 1 Claim. (Cl. 214—36.),



In bell-operating gear for furnace bells, in combination with the bell, a bell-beam constituted as a double-armed lever from one arm of which said bell is suspended, a rope-haulage device, a first rope extending downwardly in the form of a loop from the other arm of said lever to said rope-haulage device, a loaded sheave freely carried by said rope at the bight of the loop tensioning said rope whereby to rock said beam in the direction to impart closing movement to said bell, a sheave mounted on a fixed axis above said beam, and a second rope extending upwardly from said other arm around said second mentioned sheave to said haulage device whereby on operation of said haulage device in one direction the bell is first moved to closing position without vertical movement of said first mentioned sheave, and then on continued operation of

said haulage device said second rope is slackened so that the load on said first mentioned sheave acts through said first mentioned rope to hold said bell closed, and on operation of said rope-haulage device in the other direction said bell is moved from closed position to open position without vertical movement of said first mentioned sheave.

1,885,532. PHOTOMECHANICAL MACHINE. DANTE V. MAZZOCCO, New York, N. Y., assignor to Eureka Photo Mechanical Equipment, Inc., New York, N. Y., a Corporation of New York. Filed Aug. 2, 1930. Serial No. 472,598. 19 Claims. (Cl. 95—76.)



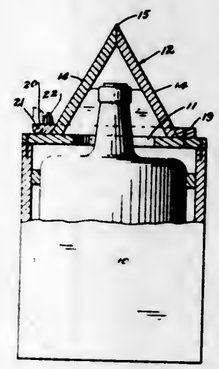
1. In a machine of the character described the combination of a bed frame comprising a longitudinal rail and a transverse rail formed on two sides thereof, each of said rails having inclined guide surfaces and a second longitudinal rail and a second transverse rail formed respectively on the other two sides of said bed frame, a first carriage supported on said longitudinal rails as a track and having a cross bar, a second carriage supported on said transverse rails as a track and having a cross bar, said carriage being provided respectively with roller means adjacent the outer ends thereof adapted for rolling engagement on said rails with the roller means engaging said inclined guide surfaces being of bifurcated arrangement and serving to maintain the respective paths of movement of said bars 90° one with respect to the other and to hold said bars in such relation to each other, and means for carrying a photographic plate freely movable longitudinally of either of said bars while rigidly secured to and movable with the other of said bars.

1,885,533. APPARATUS FOR THE DELIVERY OF MATERIALS. CARL S. MOLITOR, Dobbs Ferry, N. Y. Filed July 25, 1931. Serial No. 553,059. 4 Claims. (Cl. 221—60.)



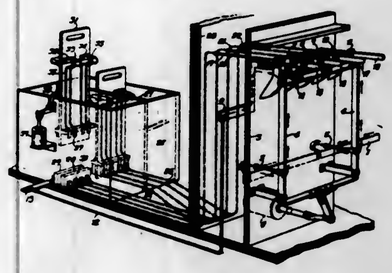
4. In apparatus for dispensing materials in measured quantities, the combination of means providing a reduced outlet, a valve for said outlet, means for locking the valve in open position until the outlet has been filled, pressure on the material being dispensed effecting an unlocking of the valve and outward movement thereof to close the inner end of said outlet while effecting discharge of that portion of the material in the outlet head of said valve.

1,885,534. CAP FOR CARBOY CASING. JOHN R. MOSCROP, Stege, Calif., assignor to Stauffer Chemical Company, San Francisco, Calif., a Corporation of California. Filed Dec. 9, 1931. Serial No. 579,838. 3 Claims. (Cl. 217—52.)



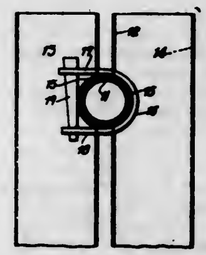
1. A device for detachably connecting a cap to a carboy casing including a frame fixed to the carboy casing and adapted to embrace the lower perimeter of the cap, one side of said frame being pivotal and adapted when in latching position to engage the cap and latch it relative to the frame and when in unlatching position enabling said cap to be detached and removed from engagement with the frame.

1,885,535. CIRCUIT CONTROLLING MECHANISM. THOMAS E. MURRAY, Brooklyn, N. Y.; Joseph Bradley Murray, Thomas E. Murray, jr., and John F. Murray, executors of said Thomas E. Murray, deceased, assignors to Metropolitan Device Corporation, a Corporation of New York. Filed Nov. 10, 1928. Serial No. 318,384. 16 Claims. (Cl. 200—114.)



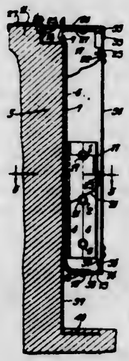
1. An electric circuit including in combination a switch and a branch containing a fuse through which the current passes when said switch is opened, said switch comprising two contact members, one being positively movable and the other being independently and automatically movable away from the first when they are separated so as to make a quick wide break.

1,885,536. RADIATOR. THOMAS E. MURRAY, deceased, Brooklyn, N. Y., by John F. Murray, Joseph B. Murray, and Thomas E. Murray, jr., executors, Brooklyn, N. Y., assignors, by mesne assignments, to American Radiator & Standard Sanitary Corporation, a Corporation of Delaware. Filed Feb. 4, 1930. Serial No. 425,753. 9 Claims. (Cl. 257—141.)



4. A radiator including a heating element, an extended area structure comprising portions embracing the heating element and means for securing the structure to the heating element including straps fitting the outside of said portions where they embrace the heating element and wedges for drawing said straps tightly to press and hold said portions into extensive and close engagement with the heating element.

1,885,537. RADIATOR INCLOSURE. THOMAS E. MURRAY, Jr,. Brooklyn, and FRANK C. REYNOLDS, New York, N. Y., assignors, by mesne assignments, to American Radiator & Standard Sanitary Corporation, a Corporation of Delaware. Filed Aug. 3, 1929. Serial No. 383,194. 10 Claims. (Cl. 257—136.)



1. An inclosure for radiators comprising a top, a side and a front in combination with brackets supported from and alined with a window sill of a room the lower edge of the front being supported and alined and spaced from the wall by said brackets.

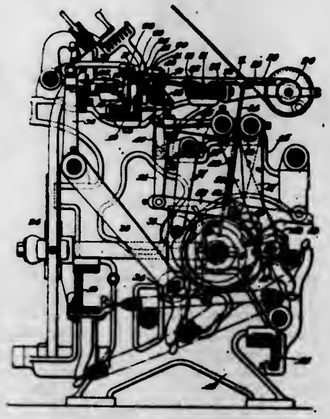
1,885,538. PISTON AND CONNECTING ROD. RUSSELL C. LOBB, Myerstown, Pa. Filed Aug. 17, 1931. Serial No. 557,644. 1 Claim. (Cl. 308—63.)

In combination with a connecting rod having a bearing and a wrist pin extending therethrough, a bushing between the pin and the bearing and including a pair of semi-cylindrical sections and each section tapered toward one edge to provide a comparatively narrow edge and a comparatively wide edge and said wide edge having a tapered face, an adjusting member slidably mounted in the bearing and having wedge shaped faces to engage the tapered faces of the sections to cause the latter to adjust themselves to the pin, sleeves on the connecting rod, pins



carried by the adjusting member and slidably received by the sleeves, plugs adjustably secured in said sleeves, and tension means between the plugs and the adjusting member.

1,885,539. EQUALIZING DEVICE FOR KNITTING MACHINES. ERNST OSCAR NEBEL, Jenkintown, Pa. Filed Jan. 29, 1931. Serial No. 511,946. 6 Claims. (Cl. 66—90.)

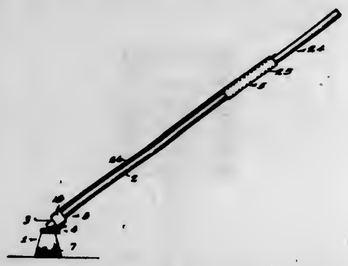


1. In a full-fashioned machine having sinkers and dividers from which the thread loops are intended to be cast off concurrently, a plurality of teeth spaced across the fabric and beneath the fabric but near to the sinkers and dividers and intermittent means for lifting the teeth concurrently to press the fabric into contact with the sinkers and dividers just before the cast off, releasing them for the cast off.

1,885,540. BRUSH HEAD SWINGING DEVICE AND CONTROL. JAMES M. OBERTI, San Francisco, Calif. Filed Aug. 18, 1931. Serial No. 557,867. 5 Claims. (Cl. 306—11.)

1. A cleaning device comprising a cleaning element, a handle swingably secured thereto, a tubular member telescoped over the handle and adapted to be grasped by the

operator, and means connecting said member with said element for swinging the latter about its pivot into angular positions when said member is manually turned, said means



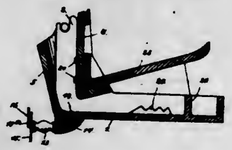
being made to move the cleaning element in a direction corresponding with that in which the tubular member is turned.

1,885,541. HANDY CHART AND PENCIL. JOSEPH F. O'KEEFE, Dumont, N. J. Filed Mar. 21, 1932. Serial No. 600,128. 4 Claims. (Cl. 40—95.)



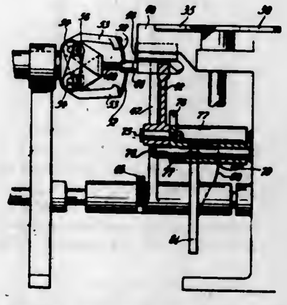
1. In a combination of the class described, a tubular body portion having a chamber, a chart receiving rod rotatably disposed therein, the end of the chart wrapped around said rod, said rod having a transverse aperture therein and an engaging wire or cord passing through the end of the chart and the transverse aperture in the rod to tie the chart to the rod.

1,885,542. OIL BURNER. FLORENTINO OLIVA, Mexico, Mexico, assignor of one-half to Guillermo A. Alonso, Mexico, Mexico. Filed Mar. 3, 1931, Serial No. 519,863, and in Mexico May 13, 1930. 3 Claims. (Cl. 158—91.)



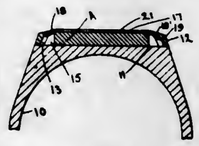
1. Oil burner for hydrocarbons, comprising a pan-shaped receptacle, raised portions in the bottom of said receptacle, lateral vertical supports in the front part of said receptacle, an inwardly sloping curved front door suspended from said supports, a vertical division suspended from said supports back of and in spaced relation to said front door and separated from the bottom of said receptacle, a fuel inlet opening into said receptacle, means for covering the rear open part of said receptacle, and a refractory transverse wall at the rear end of said receptacle.

1,885,543. METHOD OF AND APPARATUS FOR FOLDING WRAPPERS AROUND TABLETS. FREDERICK GROVER, Leeds, England, assignor to The Forgrove Machinery Company Limited, Leeds, England. Filed Apr. 27, 1931, Serial No. 533,327, and in Great Britain June 20, 1930. 8 Claims. (Cl. 93—5.)



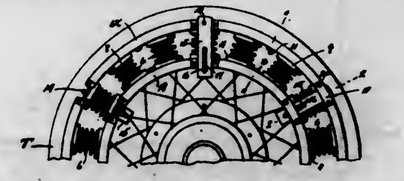
1. Apparatus for folding wrappers around tablets comprising folding means for enclosing one end of the tablet in a wrapper and forming oppositely projecting wrapper sides and a projecting wrapper end, side tucking projections adapted to tuck the upper portions of the oppositely projecting wrapper sides down on to their lower portions to form side tucks and upstanding loops in said projecting wrapper sides, folding plates adapted to fold said upstanding loops against the sides of the tablet and wrapper sides to form secondary folds overlapping the tucks, side folding devices adapted to fold the projecting wrapper sides and secondary folds around the sides and top of the tablet with the one wrapper side overlapping the other wrapper side, said folding of said wrapper sides to form a single overlapping joint in the wrapper also forming the projecting wrapper end into an open cylinder, and grippers for gripping said open cylinder and twisting said open cylinder in such a direction as to retain the wrapper sides in their overlapping relationship.

1,885,544. GEM SETTING. SVEN A. PILBLAD, Boston, Mass. Filed Oct. 15, 1931. Serial No. 569,033. 5 Claims. (Cl. 63—26.)



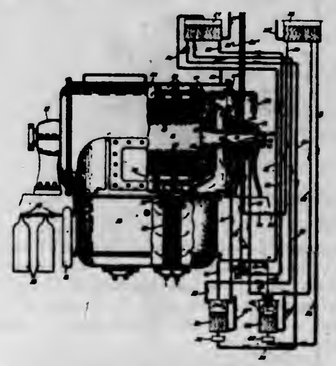
1. A gem setting comprising a stone or jewel to be set; a box like socket to receive same, provided in opposite walls with channels from respective inner faces, axially normal to the socket base and divergent from the open side of the socket toward the socket base; and a cover member having projections adapted to slidably engage the respective channels at their outlets and to be deflected under pressure applied normal to the socket base, to increase the over-all distance across opposite projections to retain engagement with the angular walls of the respective channels and to resist separation therefrom.

1,885,545. VEHICLE WHEEL. FELIPE RANGEL RANGEL, Habana, Cuba. Filed Mar. 17, 1932. Serial No. 599,502. 2 Claims. (Cl. 152—38.)



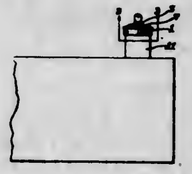
1. A wheel structure comprising a rim, a felly disposed therearound and spaced therefrom, flange sections carried by the marginal portions of the rim and felly, adjacent sections being spaced, rigid links pivotally connected to the felly between adjacent flange sections, the free end portions of the links being disposed between adjacent ends of the flange sections of the rim, parts carried by the rim between the flange sections engaging within slots in the links, and cushioning elements interposed between the rim and felly.

1,885,546. LIQUID FILM SEAL. CHESTER W. RICE, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed July 22, 1927. Serial No. 207,800. 10 Claims. (Cl. 286—19.)



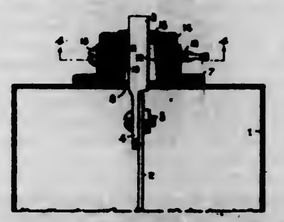
1. In combination, an enclosed machine comprising a gas filled casing and a rotatable member having a shaft extending through said casing, and means for forming a liquid seal, said sealing means comprising a liquid film saturated with the kind of gas within said casing and introduced between said casing and said shaft and an air saturated film introduced between said casing and said shaft between said first-mentioned liquid film and the exterior of said machine.

1,885,547. GAS TANK LOCK. FRED A. RIDER, Watertown Township, Clinton County, Mich. Filed Oct. 3, 1931. Serial No. 566,647. 3 Claims. (Cl. 70—90.)



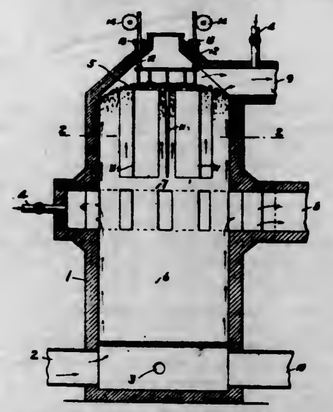
1. The combination with a tank neck having a locking rim therein, a cap provided with a multiplicity of lugs corresponding with a plurality of grooves or notches in said locking rim, said cap being provided with a lock having a rotating locking plate thereon, said locking plate being provided with a plurality of lugs corresponding with the grooves or notches in the aforesaid locking rim which when adjusted to a locked position will hold the cap firmly against the aforesaid tank neck, the said rotary locking plate being provided with a groove therein taking the form of a quadrant of a circle in which a pin securely mounted in the aforesaid lock may slide.

1,885,548. DAMPER APPARATUS. HEYMAN ROSENBERG, New York, N. Y. Filed May 27, 1931. Serial No. 540,481. 10 Claims. (Cl. 126—295.)



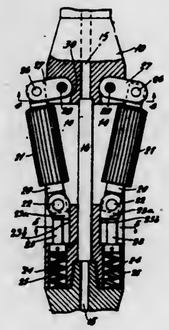
1. In damper apparatus, the combination of a bearing plate having an outstanding tubular portion, the bearing plate being adapted to be mounted fixed to the exterior of a damper-containing flue, a damper-stem engaging member telescoping with said tubular portion and movable into and out of engagement with the tubular portion longitudinally of the tubular portion while the tubular portion is thus mounted, means detachably interlocking the said stem engaging member and tubular portion against accidental detachment while leaving said parts free for relative movement, and means for locking said parts against relative movement.

1,885,549. DIFFUSION PLATES IN GAS GENERATORS. JOHN M. RUSBY, Philadelphia, Pa., assignor to The United Gas Improvement Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Jan. 21, 1929. Serial No. 334,096. 3 Claims. (Cl. 48—85.2.)



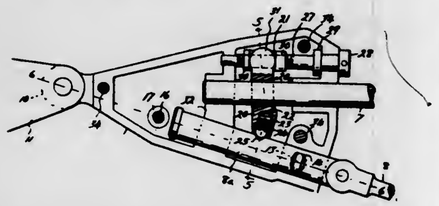
1. Apparatus for the manufacture of gas, comprising a water gas generator adapted to contain a fuel bed comprising a layer of incandescent coke surmounted by a layer of coal, and separate substantially flat plates mounted in the upper end of said generator but spaced from the outer wall and from the center of the generator and completely surrounded by the fuel in said bed.

1,885,550. SWINGING CUTTER EXPANDING REAMER. JAMES J. SANTIAGO, Los Angeles, Calif., assignor to John Grant, Los Angeles, Calif. Filed Nov. 13, 1928. Serial No. 319,080. 12 Claims. (Cl. 255—75.)



1. An expanding reamer comprising a body adapted to be attached to a drill stem, a cutter-carrying arm mounted to swing on a horizontal pivot on the body, a cutter pivotally mounted on the swinging end of said arm, and actuating means carried by the body tending to swing the arm on its horizontal pivot.

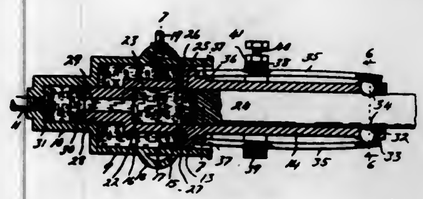
1,885,551. VARIABLE LEVERAGE BRAKE MECHANISM. CHARLES A. SAWTELLE, Detroit, Mich., assignor, by direct and mesne assignments, to S. and D. Engineering Company, Detroit, Mich., a Corporation of Michigan. Filed June 24, 1929. Serial No. 373,274. 14 Claims. (Cl. 74—110.)



1. The combination with a pivotal lever and an actuating element for said lever, of a connection from said element to said lever operative to actuate the lever in an initial relatively free travel thereof, a second connection from said element to said lever, engaging the lever at a point more remote from its pivot than the point of engagement of the first connection, and means for automatically breaking the first connection and establishing the second connection responsive to the application to the lever of its working load.

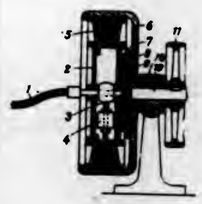
1,885,552. HYDRAULIC BRAKE CONTROL MECHANISM. CHARLES A. SAWTELLE, Detroit, Mich., assignor, by direct and mesne assignments, to S. and D. Engineering Company, Detroit, Mich., a Corporation of Michigan. Filed July 8, 1929. Serial No. 376,546. 8 Claims. (Cl. 60—54.6.)

1. In a liquid pressure appliance, a piston and a plunger coaxial with and of less diameter than said piston, working cylinders receiving said piston and plunger, means for transmitting liquid pressure from said cylinders to a common point, means for actuating said plunger, a sleeve carried by said piston slidably receiving said plunger, a detent member carried by said sleeve, means upon said sleeve acting upon said detent to normally engage said detent with the plunger to actuate the piston from the plunger, said last named means



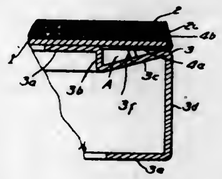
being yieldable responsive to a predetermined liquid resistance opposing travel of said piston to afford the plunger travel relative to the piston.

1,885,553. METHOD OF AND MEANS FOR TRANSFORMING OSCILLATORY MOVEMENT INTO ROTARY MOVEMENT. GEORG HEINRICH SCHIEFERSTEIN, Berlin-Charlottenburg, Germany. Filed Jan. 15, 1929, Serial No. 332,707, and in Germany Jan. 15, 1928. 12 Claims. (Cl. 74—14.)



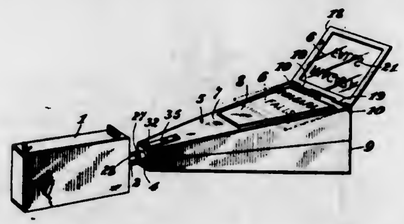
1. Mechanism for transforming oscillatory into rotary movement, which comprises a mass and elastic means on which the mass rolls and is deformed thereby, a driving shaft connected to the mass, a driven shaft for said means and a yielding connecting means between said means and driven shaft.

1,885,554. EDGE CONSTRUCTION FOR DESK TOPS AND THE LIKE. FRED A. SCHMITZ, Canton, Ohio, assignor to Republic Steel Corporation, Youngstown, Ohio, a Corporation of New Jersey. Filed May 10, 1930. Serial No. 451,268. 12 Claims. (Cl. 45—31.)



1. In an edge construction for desk tops and the like, a top plate, a reinforcing member secured to the lower surface of said plate and having an inclined portion spaced from said top plate and providing with a horizontal portion of the top plate a pocket or recess adapted to receive a portion of a binding strip, and means formed integrally with said inclined portion and adapted to engage said binding strip and maintain the same in fixed position.

1,885,555. APPARATUS FOR TITLING MOVIE FILMS. CHARLES W. SCHWARTZ, New York, N. Y. Filed July 9, 1930. Serial No. 466,773. 7 Claims. (Cl. 88—24.)

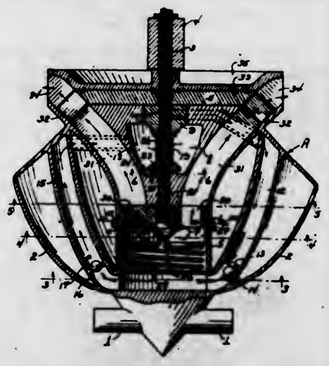


1. A titling device for moving picture cameras comprising a collapsible body, a removable head for one end of said collapsible body to hold the same in extended position when in place, means to secure said head to a moving picture camera lens tube, means on the outer end of said body to hold said body in extended position, and a title screen supported by and mounted on the outer end of said body.

1,885,556. PROCESS FOR THE VULCANIZATION OF RUBBER AND PRODUCTS OBTAINED THEREBY. WINFIELD SCOTT, Nitro, W. Va., assignor to The Rubber Service Laboratories Co., Akron, Ohio, a Corporation of Ohio. Filed July 25, 1928. Serial No. 295,848. 8 Claims. (Cl. 18—53.)

1. The process of vulcanising rubber which comprises heating rubber and sulfur in the presence of a vulcanization accelerator comprising the reaction product of an alkylidene aryl amine and alpha-ethyl-beta-propyl-acrolein.

1,885,557. ROTARY ENGINE. LUIGI M. SERRA, Rome, Italy. Filed Dec. 27, 1929. Serial No. 416,958. 5 Claims. (Cl. 60—41.)



1. A motor of the class described comprising a stationary supporting member, a body rotatably arranged on said member and having a part thereof forming a cylinder, a chamber in the body, means for connecting the chamber with the cylinder, means for introducing explosive charges into the cylinder, valve controlled means for leading the mixture from the chamber into the cylinder, a piston in the cylinder acted on by the explosions for compressing the mixture in the cylinder and forcing it into the chamber, ignition means in the cylinder and means for actuating the valve by the rotary movement of the body and movable blades acted on by the exploded gases for rotating the body.

1,885,558. BED COVERING. ELVIRA STARR SMITH, Newark, N. J. Filed Nov. 24, 1930. Serial No. 497,622. 5 Claims. (Cl. 5—334.)



1. A bed covering adapted to receive the bed mattress therewithin comprising, a tie member of sheeting material arranged to extend under and completely across the mattress, side panels attached respectively at their lower edges to the respective side edges of said tie member and extending upwardly at the sides of the mattress, and a cover portion adapted to overlie the mattress, said cover portion having its respective side edges attached to the respective upper edges of said side panels, said side panels being of greater height than the thickness of the mattress to provide a space between said cover portion and the mattress for receiving a person and sheeting, said cover portion having a flap at its bottom end extending beyond the foot ends of said side panels and adapted to be tucked around and under the bottom of the mattress, so that the free end portion of said flap is frictionally confined between the under surface of the mattress and said tie member.

1,885,559. FUEL MIXING DEVICE FOR INTERNAL COMBUSTION ENGINES. JOHN WILLIAM SMITH, Syracuse, N. Y. Filed May 16, 1929. Serial No. 363,633. 1 Claim. (Cl. 48—180.)



A mixing unit for a mixing conduit in an internal combustion engine, said mixing unit comprising a plurality of short blades and an elongated blade, each of the blades being triangular in form and adapted to be arranged in position inclining in the direction of the intake flow of the mixture through said conduit, the apices of the short blades terminating in a circle concentric with the periphery of the mixing unit, and the apex of the elongated blade terminating beyond the apices of the short blades and extending across the central opening formed between the apices of the short blades whereby when said mixing unit is in place within a mixing conduit, said elongated blade will cooperate with the walls of said conduit and with the elongated blades of similar mixing units therein extending in different directions to impart a spiral wave motion to the fuel mixture as it passes through said mixing conduit.

1,885,560. BANK WINDOW. CHARLES HASSEY, New Orleans, La., assignor of one-half to Ben C. Casanas, New Orleans, La. Filed May 6, 1931. Serial No. 535,495. 6 Claims. (Cl. 20—1.01.)

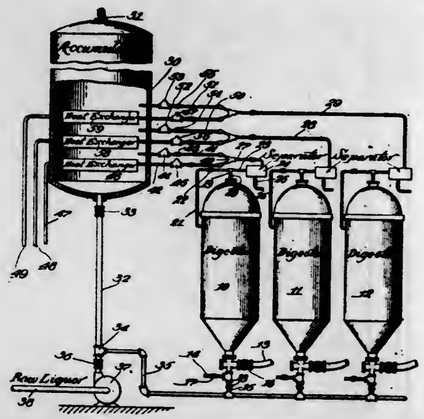
1. A bank window comprising a support, a spindle upstanding from said support, a tray having a bottom and a pair of side walls disposed at an angle to one another, said bottom and walls being secured to said spindle, a front panel having an opening therein opposite said tray.

a first fixed wall on said support extending in a substantially radial direction from said spindle toward said front panel and an arcuate fixed wall on said support extending concentrically to said spindle and slightly spaced from said tray whereby to permit movement of the tray



about the spindle axis, and substantially horizontal closing means extending from said front panel and connected to said fixed walls for covering the top of said tray when presented toward said panel and when presented toward said arcuate wall.

1,885,561. ACCUMULATOR SYSTEM. JERRY W. STEVENS and WILLIAM H. KENETY, Cloquet, Minn., assignors to Chemipulp Process Inc., Watertown, N. Y., a Corporation of New York. Filed Jan. 15, 1931. Serial No. 508,911. 9 Claims. (Cl. 92—11.)



1. Apparatus for recovering relief material and the heat thereof from the bleeding of heated pressure cookers which comprises a plurality of pressure digesters, a pressure vessel for holding liquid to be heated, a pipe connection from each digester discharging into said pressure vessel, a valve in each of said pipe connections, a heat exchanger in said vessel for each digester, a pipe connection from each heat exchanger to a digester, and a pressure operated valve in each of said last named pipe connections adapted to open the pipe line at a predetermined pressure from the digester.

1,885,562. MASSAGE APPARATUS. SOPHIE STÉPHANI, Zurich, Switzerland. Filed July 30, 1928, Serial No. 296,148, and in Germany June 21, 1928. 1 Claim. (Cl. 128—300.)

A suction cup having a cylindrical hollow nipple for connection with a hose adapted to transmit a pulsating flow of air to the suction cup, an open cylinder its upper end slidable in said nipple and its lower end projecting into the cup, a removable open plate fitted on the lower end of the cylinder, a spring surrounding said cylinder and bearing at its opposite ends on said cup and said plate, respectively, the cylinder being guided in the cylindrical hollow nipple and adjustable stop means in the



nipple for the movable cylinder, said cylinder having holes for leading the pulsating flow of air to the interior of the suction cup, when the removable open plate is closed by the skin.

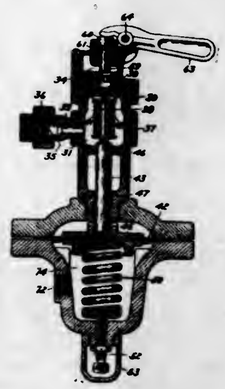
1,885,563. PROCESS OF UTILIZING IVORY SCRAP. EMILE BORMANS, Villemonble, France, assignor to Georges Touranchet, Vincennes, France. Filed July 1, 1930, Serial No. 465,238, and in Germany Dec. 8, 1928. 6 Claims. (Cl. 260—4.)

1. A process of utilizing natural ivory scrap, consisting in washing the ivory scrap in dilute soda lye, rinsing the washed scrap, classifying the rinsed and washed product according to size, mixing the rinsed and washed product with phenol, subjecting the mixture to the action of steam to produce phenic ivory, and combining the phenic ivory with formaldehyde.

1,885,564. MANUFACTURE OF VULCANIZED RUBBER COMPOUNDS. WILLIAM P. TER HORST, Nitro, W. Va., assignor to The Rubber Service Laboratories Company, Akron, Ohio, a Corporation of Ohio. Original application filed Jan. 20, 1927, Serial No. 162,416. Divided and this application filed Oct. 27, 1927. Serial No. 229,271. 8 Claims. (Cl. 18—53.)

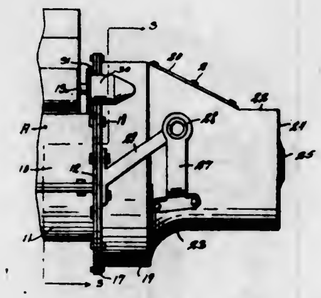
1. The process of manufacturing vulcanized rubber which comprises heating a mixture of rubber and sulphur in the presence of an accelerator comprising a symmetrical di-aryl-aryl-imino-guanidine.

1,885,565. FLUID PRESSURE ACTUATED CONTROL MECHANISM. CHARLES M. TERRY, Decatur, Ill., assignor to A. W. Cash Company, Decatur, Ill., a Corporation of Delaware. Filed Apr. 21, 1930. Serial No. 445,978. 13 Claims. (Cl. 137—78.)



1. A fluid pressure actuated control mechanism comprising walls forming a chamber having an inlet for fluid, an opening for transmitting fluid pressure to a secondary apparatus, and a fluid outlet for releasing said pressure, a valve controlling the outlet flow, and a pressure responsive device which is subjected to the pressure within the chamber and so arranged that a decrease in said pressure tends to open the valve and release the pressure transmitted to the secondary apparatus.

1,885,566. ENGINE BLOCK. ANTHONY M. TEVIS and LOUIS M. SUTTER, Eureka, Calif. Filed June 4, 1931. Serial No. 542,148. 1 Claim. (Cl. 74—56.)



The combination with an engine block having an annular flange at its rear end, of a clutch and fly wheel housing having an annular flange at its inner end removably bolted to the first named flange, the housing being formed to provide a cylindrical portion for enclosing the fly wheel, and rearward of this cylindrical portion the housing having a downwardly and rearwardly inclined upper wall provided with a removable cover and with a rear wall, a shaft bearing disposed in the rear wall, the side walls of the housing being provided with bearings for a transverse clutch pedal shaft, a bearing support for the clutch pedal shaft attached to one side wall of the housing and a brace for the clutch pedal shaft bearing extending downward and forward and bolted to the flange of the housing.

1,885,567. HOSIERY. CLARKE W. TOBIN, East Orange, N. J., assignor to Gotham Silk Hosiery Company, Inc., a Corporation of Delaware. Filed Dec. 5, 1931. Serial No. 579,207. 2 Claims. (Cl. 66—178.)



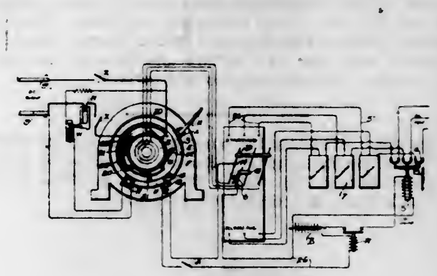
1. In knit hosiery having a foot portion of heavier material than the main portion, the improvement which comprises providing a portion of the sole intermediate the heel and toe thereof with a narrow transverse elastic section comprising fibre-covered rubber threads forming an integral part of said foot portion.

1,885,568. EXTENSIBLE CONVEYER. HERBERT E. TWOMLEY, Riverside, Calif., assignor to Clara B. Parker, executrix of the estate of George D. Parker, deceased. Filed May 9, 1932. Serial No. 610,027. 6 Claims. (Cl. 198—35.)



1. In a conveyer structure, a plurality of thin ribbon joists having considerable width and set upon edge in spaced parallel relation to each other extending longitudinally of said conveyer, a plurality of parcel supporting axles slidably mounted upon said joists in spaced relation along the length of said conveyer, and a lazy tong construction interconnecting adjacent axles for extension and contraction longitudinally of said joists to evenly space said axles along said joists in any of the extended or contracted positions.

1,885,569. CONTROL CIRCUIT. JOHN F. USENER, Sr., and JOHN F. USENER, Jr., Houston, Tex. Filed Aug. 17, 1928. Serial No. 300,189. 5 Claims. (Cl. 171—123.)

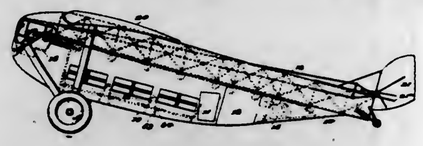


1. The combination of a rotary converter having a commutator and commutator brushes, means for raising and lowering the brushes comprising a rotatable ring, brush arms pivoted thereto, means for causing the brushes to lift when the ring is rotated in one direction and lowering the brushes to contact the commutator when the ring is rotated in the other direction, load conductors connected to the brushes, a contactor in one of the load conductors, electromagnetic means for closing said contactor, a circuit for energising said electromagnetic means, contacts in said circuit, means on the ring and stator for closing the contacts when the ring is moved to lower the brushes, whereby the contactor is closed and the load circuit can only be connected to the converter brushes when the brushes are in their commutator contacting position.

1,885,570. AIRCRAFT. SOLOMON LEE VAN METER, Jr., Washington, D. C. Filed Aug. 2, 1929. Serial No. 382,954. 20 Claims. (Cl. 244—21.)

5. In aircraft, the combination of the fuselage, a passenger cabin detachably connected to said fuselage and adapted to move relative to the fuselage in a plane sub-

stantially parallel to the direction of movement of the fuselage when said fuselage and cabin are disconnected upon the craft getting out of control and gravitating to



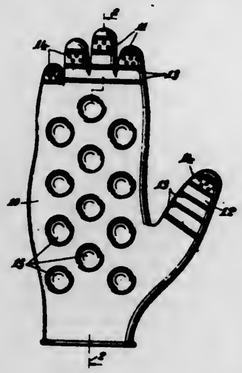
earth and a parachute connected to said cabin for retarding the descent thereof when detached from the fuselage.

1,885,571. AEROPLANE. BRAYTON F. WILSON, Cambridge, Mass. Filed Sept. 4, 1931. Serial No. 560,907. 12 Claims. (Cl. 244—12.)



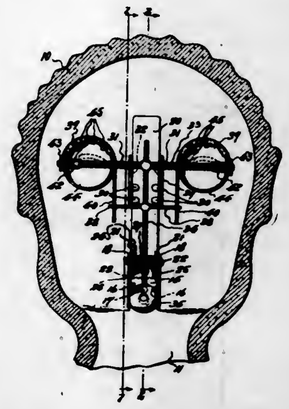
1. An aeroplane comprising a body, a supporting surface therefor, a yielding connection between said supporting surface and body comprising a system of parallel linkages which constrains said supporting surface to move relative to said body in parallel lines only, and elastic means included in said connection and which opposes movement between said body and surface and absorbs the shocks transmitted between said body and surface.

1,885,572. MASSAGING GLOVE. SIDNEY C. WOOD, Noank, Conn., assignor to Horatio D. Nelson and Joseph Hahn, Jersey City, N. J. Filed Sept. 5, 1931. Serial No. 561,348. 4 Claims. (Cl. 128—62.)



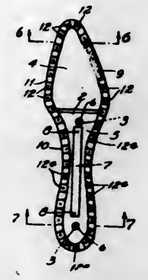
4. A massaging glove having a pliable palm portion and flexible finger tip receiving portions, the glove being substantially coextensive in size with the hand of the wearer, but the palm portion being considerably longer than the palm of the wearer and the finger tip portions being correspondingly shorter, and massaging projections on the palm and finger tip portions, the projections on the palm portion being larger than those on the finger tip portions for greater frictional massaging action than the latter, and said projections on the palm portion coacting with those on the finger tip portions in arcing massaging action of the glove, and the back wall of the glove being thinner than the palm portion and adjacent portions of the finger tip portions.

1,885,573. MOVABLE EYES FOR DOLLS. DAVID ZAIDEN, Brooklyn, N. Y., assignor of one-fourth to Isaac Kaufman, one-fourth to Samuel Kaufman, Forest Hills, N. Y., and one-fourth to Jacob Kaufman, Brooklyn, N. Y. Filed Feb. 23, 1932. Serial No. 594,437. 11 Claims. (Cl. 46—40.)



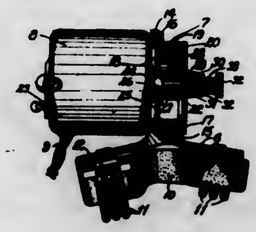
1. Movable eyes for dolls, comprising an anchor means fixed within a doll head having eye-socket openings and at a point below the horizontal plane of said openings, an upwardly extending carrier plate pivotally supported by said anchor means, spring means for yieldably pressing said carrier plate forwardly toward the plane of said eye-socket openings, an adjustable stop-means to limit the forward movement of said carrier plate, fixed stop means for limiting the rearward movement of said carrier plate, a slide plate adjustable on said carrier plate, a cross arm carried by said slide plate, eye elements pivoted on said cross arm, a weighted pendulum lever fulcrumed by said cross arm, and cooperating means in connection with said pendulum lever and eye-elements whereby the latter are actuated.

1,885,574. PROCESS OF MAKING SHOES. WILLIAM H. BAIN, University City, Mo. Filed Dec. 4, 1929. Serial No. 411,411. 3 Claims. (Cl. 12—142.)



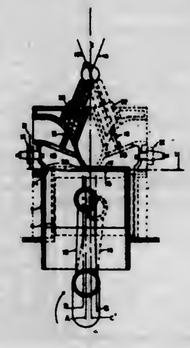
2. The process of making shoes, which comprises placing a paper sock on the fore part of a last, tacking a shank piece that extends from heel seat to ball of last to said last, temporarily cementing a shoe upper to said sock for holding said upper in shape, tacking said upper to said shank piece, laying on an outsole, removing the last, securing said outsole to said upper and shank piece and removing the paper sock.

1,885,575. FINGER MASSAGE MACHINE. CHARLES L. BANKS, St. Louis, Mo. Filed June 27, 1930. Serial No. 464,175. 3 Claims. (Cl. 128—35.)



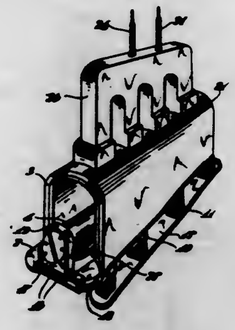
2. In a device of the character described an applicator, a motor secured thereto, said applicator comprising a cylindrical shell, the armature shaft of said motor passing into said shell, a cam secured to said shaft in said shell, means of selectively moving the shaft of said motor axially, said means comprising a screw in contact with the end of said shaft, through the medium of a ball and a coiled spring.

1,885,576. INTERNAL COMBUSTION ENGINE. JEAN A. H. BARKEIJ, Altadena, Calif. Original application filed Feb. 15, 1928, Serial No. 254,543, Patent No. 1,773,072, dated Aug. 12, 1930. Divided and this application filed Aug. 26, 1930. Serial No. 477,972. 18 Claims. (Cl. 123—54.)



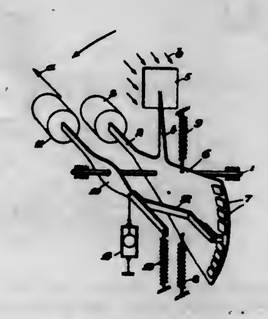
1. In an internal combustion engine, having at least one row of cylinders in line, at least four and a multiple of two, cylinderheads on said cylinders, inverted valves in said heads, said inverted valves overlapping said cylinder-bore, said valves inverted at a slant, with their stems towards the plane of the cylinders, said inverted valves opening downwardly into combustion chambers in said heads, said combustion chambers located alternately on opposite sides of the plane of the cylinders.

1,885,577. HAIR WAVING APPLIANCE. ROBERT BIBRINGER, Allison Park, Pa. Filed Apr. 26, 1928. Serial No. 272,929. 8 Claims. (Cl. 132—36.)



1. In a hair-treating device, a heating member comprising a hollow casing of substantially U-shape in cross-section, reinforcing members for rigidly maintaining the shape of said casing and a base portion for yieldingly engaging the side portions of said casing.

1,885,578. APPARATUS FOR USE IN CONTROLLING AIRCRAFT. JOHANN MARIA BOYKOW, Berlin-Lichterfelde-West, Germany. Filed Feb. 26, 1931, Serial No. 518,479, and in Germany Mar. 4, 1930. 16 Claims. (Cl. 244—29.)

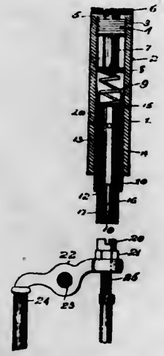


1. Apparatus for use in controlling aircraft comprising a measuring device responsive to variations in air speed, a measuring device responsive to acceleration, a coupling between said devices such that upward acceleration of the aircraft acts in the opposite sense to the wind pressure on the device responsive to air speed and downward acceleration acts in the same sense as the wind pressure, a second device responsive to accelerations in the same sense as that first mentioned, means for damping rapid oscillations of said second device, and means associated with the two coupled measuring devices for indicating movements thereof relative to a datum associated with said second acceleration-responsive device.

1,885,579. TAPPET ADJUSTING TOOL. WALTER BOYNTON, Carthage, N. Y., assignor of one-half to Frederick Weir, Carthage, N. Y. Filed Aug. 29, 1930. Serial No. 478,716. 2 Claims. (Cl. 81—3.)

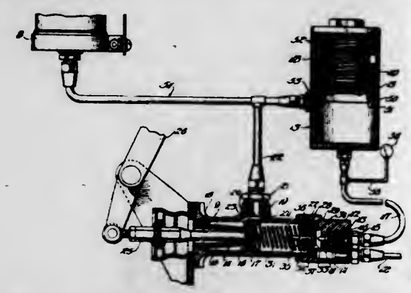
1. A device of the character described comprising a cylindrical hand grip, a slotted tubular member fixedly disposed within the grip, a slidable sleeve positioned in

the tubular member, a pin carried by the sleeve having its extremities extending into the slots of the tubular member, said sleeve being formed at its lower end with a slot engaging tool, the lower end of which is spaced from the end of said tubular member to form a socket to re-



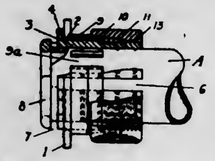
ceive the slotted tappet adjusting screw, a spring in the hand grip coacting with the sleeve to normally maintain the same in extended position, and means for loading said spring to the approximate tension of the particular tappet under adjustment.

1,885,580. BRAKE MECHANISM. CLIFFORD C. BRADBURY, Glencoe, Ill., assignor to Hydraulic Brake Company, Los Angeles, Calif., a Corporation of California. Filed Sept. 3, 1929. Serial No. 389,901. 17 Claims. (Cl. 188—152.)



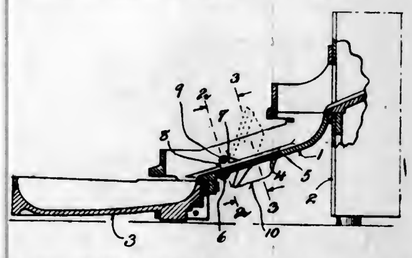
2. In a hydraulic brake system, means for producing a fluid pressure in the system, means for actuating said means, means for preventing excessive pressure in the system, means for storing energy by the operation of the actuating means, said pressure preventing means effective to release said energy for increasing the pressure in the system when the actuating means has moved a predetermined distance.

1,885,581. CONDUIT FITTING. JAMES G. BRADBURY, Erie, Pa., assignor to Erie Malleable Iron Company, Erie, Pa., a Corporation of Pennsylvania. Filed Oct. 24, 1929. Serial No. 402,153. 9 Claims. (Cl. 247—25.)



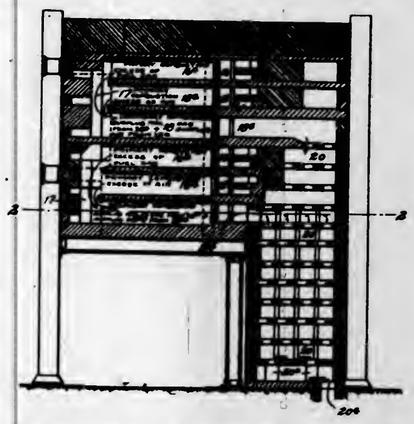
1. In a conduit fitting, the combination of a slotted sleeve adapted to be passed through a conduit box opening; locking means on the inner end of the sleeve adapted to engage the wall of a box with the sleeve in the opening; wedging means on the outer end of the slotted sleeve adapted through its wedging action to contract the sleeve; and means on the sleeve acting on the wedging means to contract the sleeve.

1,885,582. COIN DELIVERY CHUTE. EDWARD J. BRANDT, Watertown, Wis., assignor to Brandt Automatic Cashier Company, Watertown, Wis. Filed Dec. 10, 1928. Serial No. 325,064. 1 Claim. (Cl. 133—1.)



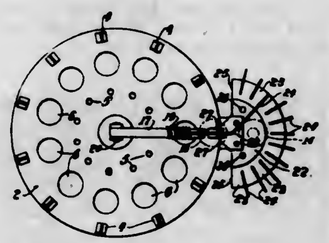
In a coin delivery machine, a coin chute comprising an inclined trough having an opening in its bottom wall and recesses formed upon the interior of its side walls adjacent the lower end of said opening, a flap normally forming a flush closure for said opening and provided with ears positioned within said recesses and horisontally pivotally connected to the side walls of said trough, said flap opening upwardly and depending means carried upon the lower side of said flap and outside of said trough for manipulating the same and serving to deflect coins into the operator's hand.

1,885,583. PROCESS OF HEATING MUFFLES, RETORTS, AND THE LIKE. FREDERICK BREDEL, St. Louis, Mo., assignor of thirty one-hundredths to Thomas D. Miller, St. Louis, Mo.; Lee W. Grant administrator of said Frederick Bredel, deceased. Filed May 9, 1930. Serial No. 450,892. 2 Claims. (Cl. 202—2.)



1. The improvement in the process of heating a muffle or retort having two primary combustion flues and one secondary combustion flue contiguous to the walls thereof for heating the same, with the primary combustion flues arranged to discharge into the secondary combustion flues, which improvement comprises continuously burning in one of said primary combustion flues a fuel gas with insufficient air for complete combustion of the fuel gas, separately burning in the other of said primary combustion flues a second portion of fuel gas with an excess of air over that required for the complete combustion of the second portion of fuel gas and then passing the gases from the combustions of the two portions of fuel gas from said primary combustion flues into said secondary combustion flue and combining the gases therein and continuing the combustion in said secondary combustion flue and conveying heat to said muffle or retort from each of the three combustion flues.

1,885,584. PROCESS OF JOINING TYPE CHARACTERS AND TYPE BARS. ODILON BRISBOIS, Gary, Ind., assignor, by direct and mesne assignments, of one-fourth to Charles Turner Brown, Chicago, Ill., and one-half to Joseph Weidenhoff. Filed May 23, 1929. Serial No. 365,582. 5 Claims. (Cl. 219—12.)



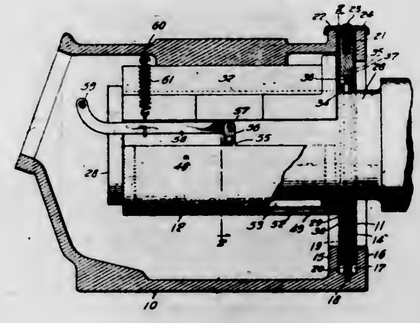
1. The process of joining type bars and type characters which consists in turning a rotatably mounted disk which is provided with a plurality of type matrices rigidly mounted thereon in spaced relation to the pivotal axis of said disk, to place a determined one of said matrices in a determined position, in holding said disk with said matrix in said position, in placing a corresponding type character in said placed matrix, in placing a plate provided with a plurality of type bars pivotally mounted thereon in spaced relation to said disk, and in holding said plate in said spaced relation, in turning a corresponding type bar into determined relation with said type character in said placed matrix, in holding said type character in said matrix and holding said type bar in said relation to said type character, and in heating said character and the portion of said bar in said relation thereto to a temperature sufficiently high to join, and joining said character and bar; substantially as herein described.

1,885,585. PROCESS FOR THE SULPHATION OF ETHYLENE AND THE SULPHATION OF A MIXTURE OF ETHYLENE AND PROPYLENE. BENJAMIN T. BROOKS, Greenwich, Conn., assignor to Petroleum Chemical Corporation, a Corporation of Delaware. Filed Aug. 9, 1930. Serial No. 474,302. 14 Claims. (Cl. 260—98.)

1. Process of sulphating ethylene, which comprises contacting ethylene in gas phase with aqueous sulphuric acid of from 80 to 95%, H_2SO_4 content, under a pressure in excess of 250 pounds per square inch and at a temperature of from 30 to 125° C.

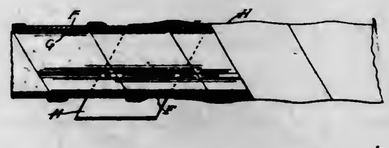
1,885,586. SELF LUBRICATING BEARING. JOSEPH M. BRYAN and BRINAY SMARTT, Indianapolis, Ind. Filed Aug. 5, 1931. Serial No. 555,814. 1 Claim. (Cl. 308—91.)

A journal-bearing comprising a casing, a shaft rotatably mounted therein, a substantially rectangular oil-pan extending lengthwise with respect to said shaft, a pair of parallel strips secured to the oil-pan providing a trough therefor, a roller loosely mounted in the trough and disposed between said shaft and the oil-pan, a pair of pivotally mounted arms flexibly connected to said oil-pan, and



a pair of coil springs interposed between the casing and said arms for supporting the pan resiliently against said shaft.

1,885,587. SPIRALLY COILED PAPER TUBING AND METHOD OF MAKING. RALPH P. BURTON, Chicago, Heights, Ill. Filed Feb. 12, 1931. Serial No. 515,220. 11 Claims. (Cl. 93—94.)

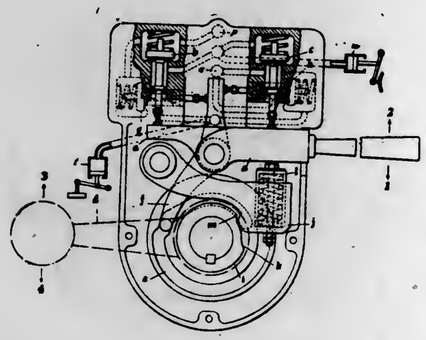


1. The method of making tubing to form the bodies of paper containers for liquids and semi-liquids consisting in producing a liquid-proofed thin paper strip and a second narrower and heavier strip to form an inner body member and spirally coiling the two strips together with adhesive between them with the marginal portions of the first mentioned strip at both lateral edges extending beyond the corresponding edges of the second strip; causing said marginal portion at one edge to be folded about the edge of the second strip and causing the opposite marginal portion to be lapped inwardly by the first mentioned edge of the adjacent coil of the spiral.

1,885,588. BRAKE CONTROL. GEORGE NORMAN CADBUAY, West Bromwich, England. Filed Feb. 9, 1931, Serial No. 514,608, and in Great Britain Mar. 27, 1930. 3 Claims. (Cl. 303—8.)

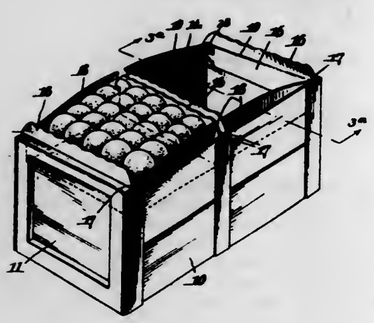
1. In brakes for tramway vehicles and other rolling stock having pneumatic wheel and track brakes and an electric brake, the combination of valves for admitting air to and releasing air from the wheel brake, valves for admitting air to and releasing air from the track brake, a hand lever acting on the wheel brake valves, a hand lever acting on the electric brake, a lever acting

on the track brake valves, a cam connected with the electric brake lever and engaging the track brake valve lever, an intermediate lever for transmitting releasing



motion from the electric brake lever to the wheel brake valve lever, and a spring interposed between the latter lever and the intermediate lever.

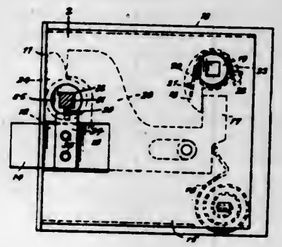
1,885,589. PROTECTIVE COLLAR FOR BOXES. WILLIAM H. CASSELL and FLOYD E. DAHN, Wenatchee, Wash.; said Dahn assignor to said Cassell. Filed Mar. 30, 1932. Serial No. 602,058. 9 Claims. (Cl. 217—3.)



1. A guard collar for boxes, comprising a body having sides and an end, said body adapted to fit within the open end of the box and to snugly engage the sides and end thereof, and shoulders projecting longitudinally from said end beyond the sides of said body.

1,885,590. LOCK. ARTHUR CLAUD-MANTLE, Bridgeport, Conn., assignor to The Bassick Company, Bridgeport, Conn. Filed Aug. 29, 1929. Serial No. 389,128. 6 Claims. (Cl. 70—91.)

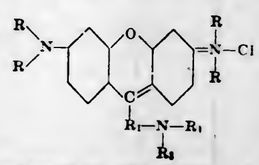
3. In a latch, a latch casing, a latch bolt, a roll-back for retracting said bolt, a handle shaft adapted to be engaged with said roll back and including a lateral abutment spaced from the end, and abutment means carried



by said bolt adapted in the projected position of said bolt to abut said abutment of the shaft upon longitudinal withdrawal movement thereof.

1,885,591. PROCESS FOR THE MANUFACTURE OF NEW XANTHEN DYES. ALBERT COULTHARD and ERNEST HARRY RODD, Blackley, Manchester, England, assignors to Imperial Chemical Industries Limited, London, England. Filed June 29, 1929, Serial No. 374,942, and in Great Britain July 7, 1928. 15 Claims. (Cl. 260—63.)

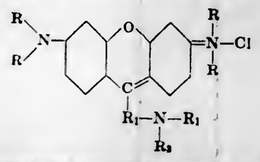
9. As new products, new basic dyes, of the xanthen type having in the form of the hydrochloride the probable formula



wherein R represents an alkyl group, one R_1 represents a phenyl or naphthyl radical while the other R_1 represents a phenyl radical or an alkyl group and R_2 represents hydrogen or analkyl group, the said dyes dyeing tannin mordanted cotton in shades which exhibit a blue fluorescence when exposed to ultra violet rays.

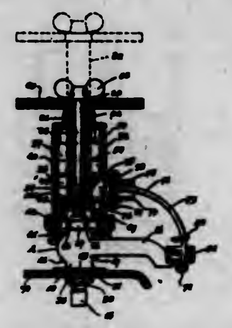
1,885,592. PROCESS FOR THE MANUFACTURE OF NEW XANTHENE DYES. ALBERT COULTHARD and ERNEST HARRY RODD, Blackley, Manchester, England, assignors to Imperial Chemical Industries Limited, London, England. Original application filed June 29, 1929, Serial No. 374,942. Divided and this application filed June 29, 1929, Serial No. 374,943, and in Great Britain July 7, 1928. 25 Claims. (Cl. 260—63.)

11. As new products, new sulphonated acid dyes of the xanthene type which may be obtained by sulphonating basic dyes of the xanthene type which have in the form of the unsulphonated hydrochloride the probable formula



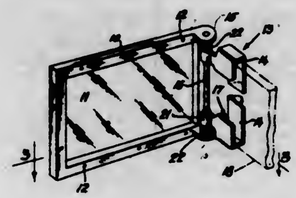
wherein R represents an alkyl group, one R_1 represents a phenyl or naphthyl radical while the other R_1 represents a phenyl radical or an alkyl group and R_2 represents hydrogen or an alkyl group, the said new sulphonated acid dyes dyeing wool in red shades which become appreciably bluer when exposed to ultra violet rays.

1,885,593. UNDER PRESSURE FAUCET AND VALVE TOOL. ARTHUR J. DOWNER, Minneapolis, Minn. Filed June 6, 1931. Serial No. 542,582. 14 Claims. (Cl. 29—86.3.)



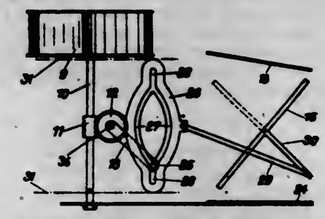
1. An assembling and dissembling device for valves including a chambered body formed with a valve seat and an opening communicating with the chamber therein and a core mounted in said chamber having a valve head adapted to seat against said seat and removable from said body through said opening, said device comprising a housing applicable to the valve body and adapted to enclose the opening therein, said housing having a chamber therein, a member within said housing for engagement with the valve core and operable from without said housing to disengage said valve core from said body, said member being movable to withdraw the valve core from the valve body and into said chamber and an auxiliary valve member carried by said housing and operable from without said housing for engagement with the seat of said body to obstruct the flow of fluid into said chamber after the valve core has been removed from the valve body.

1,885,594. ANTIGLARE MIRROR ATTACHMENT. WENDELL B. DRURY, Stamford, Conn. Filed Dec. 19, 1929. Serial No. 415,277. 1 Claim. (Cl. 45—97.)



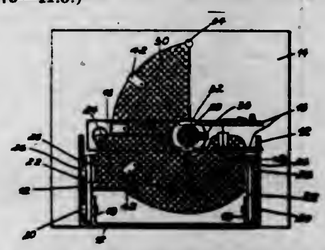
In an anti-glare device for quick detachable engagement with a rear view mirror in a motor vehicle, such mirror of the type having substantially straight and parallel edge portions at top and bottom, the combination of a pane of transparent material of a light-dimming character, a frame in which said plane is set, hinge means on one end of said frame and including a vertical hinge pin offset laterally from the plane of said frame, a pair of fitments rotatable on said pin and slidable toward and away from each other along said pin, the upper fitment having near its free end a clip portion defining substantially an inverted U in cross-section and the lower fitment having near its free end a clip portion defining substantially a U in cross-section, said clip portions being shaped one for clasping the top, back and front of the upper edge portion of said mirror and the other for clasping the bottom, back and front of the lower edge portion of said mirror, and spring means urging said clip portions toward each other along said pin.

1,885,595. DISPLAY APPARATUS. ALEXANDER EHRENSWEIG, Zurich, Switzerland. Filed Aug. 12, 1931, Serial No. 556,693, and in Germany Aug. 14, 1930. 6 Claims. (Cl. 40—37.)



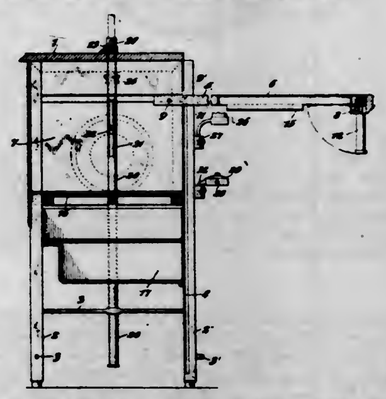
1. The herein described apparatus, comprising a displaying mirror having oscillating movement from one displaying position into another one, a driving member having continuous rotary movement, and gearing intermediate said driving member and displaying mirror for transforming the continuous rotary movement of said driving member into oscillating movement of said displaying mirror, and display signs arranged to co-operate with said mirror in the respective displaying positions of the mirror.

1,885,596. ELECTRICAL APPARATUS. RODGER J. EMMERT, Dayton, Ohio, assignor to General Motors Radio Corporation, Dayton, Ohio, a Corporation of Ohio. Filed Oct. 18, 1930. Serial No. 488,347. 13 Claims. (Cl. 175—41.5.)



1. An electrical condenser including a pair of condenser plates and means for adjusting the capacity of said condenser comprising a metallic clip adjustably mounted on one of said condenser plates for changing the capacity of the condenser.

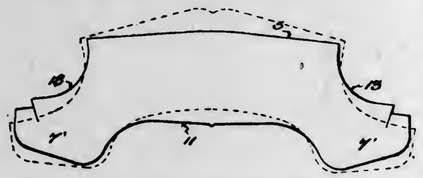
1,885,597. BEDSIDE UNIT. JOHN THEODORE FEHL and ALVA BELCHER, Jersey City, N. J. Filed Feb. 25, 1930. Serial No. 431,189. 6 Claims. (Cl. 312—46.)



4. In a bedside unit, a frame, a flat top cover for said frame forming a table top, a compartment below said

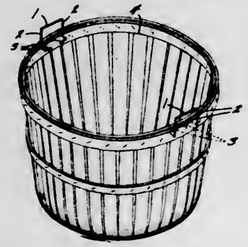
table top having an open side, a movable panel having a flat side to normally close said open side of said compartment and a magazine and paper rack secured to the lower portion of the other side of said panel, channels in said bedside unit, said panel sliding vertically in said channels, means for supporting said panel in the horizontal plane with the flat side thereof upwards for a bedside table when said panel is manually raised vertically in said channels and swung to the horizontal.

1,885,598. SHOE CONSTRUCTION. ALBERT P. GILBERT, Thiensville, Wis., assignor to The Gilbert Shoe Co., Thiensville, Wis. Filed Apr. 18, 1932. Serial No. 605,908. 7 Claims. (Cl. 12—146.)



1. In a shoe upper assembly, a seamless rear quarter comprising a one-piece outer quarter and a one-piece quarter lining, said outer quarter and quarter lining being of different blank configurations when in flat form with the upper edge of the outer quarter formed in a greater curvature than the lining, and stitches securing the quarter and lining together along their upper edges whereby to cause their lower edges to flare apart for reception of a heel counter and to cause the quarter lining to snugly and smoothly hug the last and outer quarter to smoothly shape itself around the heel and under the heel seat.

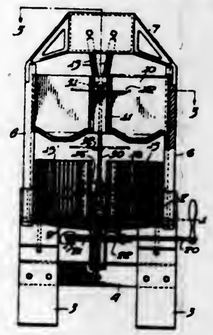
1,885,599. BASKET HANDLE MACHINE. LESLIE M. HILL, Benton Harbor, Mich. Filed Oct. 5, 1931. Serial No. 566,891. 18 Claims. (Cl. 140—93.)



1. In a basket handle machine for attaching wire handles to baskets by inserting the handle ends through the basket rim, the combination of means for supporting the basket in position to have the wire handle inserted in the rim thereof, clinchers pivoted to operate inside of the basket, against the inner side of the basket rim, endwise reciprocating elements having engagement at one end thereof with said clinchers, and rotary means for engaging the other ends of said elements, thereby to actuate said clinchers to bend or clinch the handle ends in the desired manner.

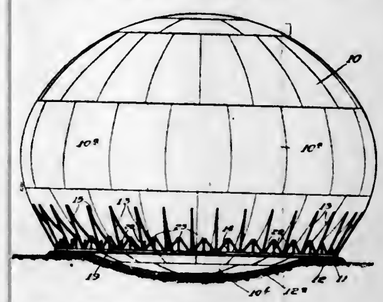
1,885,600. FRUIT CUTTING MACHINE. MARSHALL C. HJELTE, Honolulu, Territory of Hawaii, assignor to Hawaiian Pineapple Company, Limited, Honolulu, Hawaii, a Corporation of Hawaii. Filed Jan. 14, 1932. Serial No. 586,641. 9 Claims. (Cl. 226—129.)

1. A machine of the class described, comprising a supporting frame, a knife slidable perpendicularly therein, means for receiving two stacks of damaged slices in position to be cut by the knife into stacks of half slices, means for discharging the damaged half slices,



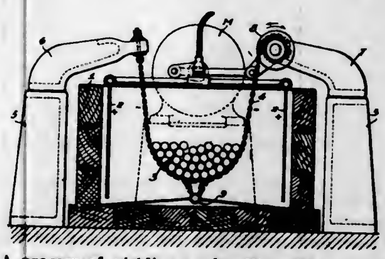
and mechanism for moving the receiving means and the stacks of perfect half slices into juxtaposition and returning said receiving means to initial position.

1,885,601. CONTAINER. GEORGE T. HORTON, Chicago, Ill., assignor to Chicago Bridge and Iron Company, a Corporation of Illinois. Filed May 23, 1931. Serial No. 539,578. 3 Claims. (Cl. 220—1.)



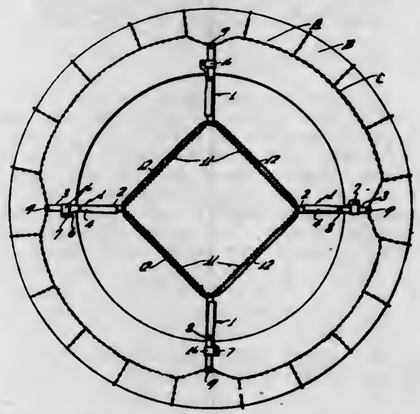
1. A closed liquid container of the character described, substantially in the shape of a spheroid, provided with external bracing means; said means including a circular member attached to the shell by means of vertical radial brackets with their upper edges fastened to the shell at a plurality of separated points and their lower edges attached to the circular member to prevent distortion of the shell adjacent said circular member.

1,885,602. PROCESS OF CLEANING SCALE FROM BARS. ELWOOD T. ICKES, Pittsburgh, Pa. Filed Sept. 10, 1930. Serial No. 480,943. 3 Claims. (Cl. 204—1.)



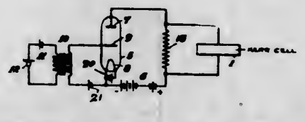
1. A process of pickling a plurality of bars, rods, and the like articles formed of ferrous metal, comprising suspending the articles in a bath of mineral acid heated to an elevated temperature and containing from about 0.5 to 3.0 per cent of acid, and tumbling the articles upon themselves while passing a direct electric current from a ferrous metal anode through the bath to the articles as cathodes, the current density being from about 2.5 to 40 amperes per square foot of exposed cathode surface, and thereby removing surface scale from the articles and providing them with clean ferrous metal surfaces.

1,885,603. TIRE CHAIN TIGHTENER. WALTER JOHNSON, East Auburn, Me. Filed May 14, 1931. Serial No. 537,301. 3 Claims. (Cl. 152—14.)



1. In a device of the kind described, a plurality of expansible stretching mechanisms, hooks on one end of the stretching mechanisms and resilient connecting elements connecting the other ends of the stretching mechanisms, and equalising chains connected to the said stretching mechanisms and disposed alongside the resilient connecting elements.

1,885,604. INSTANTANEOUS CONTROL OF LIGHT. AUGUST KAROLUS, Leipzig, Germany, assignor to Radio Corporation of America, a Corporation of Delaware. Filed June 2, 1925, Serial No. 34,338, and in Germany June 20, 1924. 29 Claims. (Cl. 250—1.)

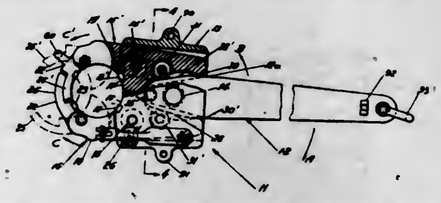


4. In combination, a Kerr cell having a plurality of electrodes and nitrobensene contained in said cell, means for applying an electrostatic field upon the electrodes of the cell for producing electric double refraction of a light ray passing therebetween and means for simultaneously decreasing the electric conductivity of said nitrobensene.

21. A Kerr cell comprising a plurality of pairs of electrodes, the corresponding electrodes of each of the pairs being connected in parallel.

1,885,605. PIPE TONG. FRANK J. KIGHTLINGER, Brea, Calif. Filed Feb. 10, 1930. Serial No. 427,252. 8 Claims. (Cl. 81—91.)

1. For use in handling pipe, a tong unit embodying: a handle; a jaw supporting head pivotally mounted on said handle; jaw members pivotally mounted in said head; and latch means for controlling the pivotal movement of said head relative to said handle to effect a gripping action in one direction only, said latch comprising a bevel pointed spring pressed plunger mounted in said



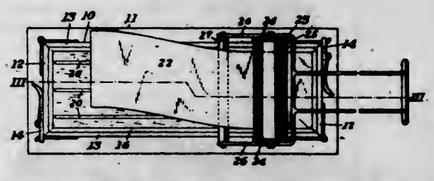
jaw supporting head and a square shouldered recess in said handle adapted to receive said plunger and engage the same when said handle is swung in one direction only.

1,885,606. SAFETY SWIMMING DEVICE. JOHN L. KIMMEL, Bronx, N. Y. Filed June 23, 1931. Serial No. 546,305. 5 Claims. (Cl. 9—21.)



1. A buoyant device for swimming comprising a pair of inflatable wings integrally connected by a neck portion, branch conduits communicating with said wings and merging into a common nozzle within said neck portion, and a clamping member associated with and extending transversely through said neck portion, adapted to open or close said conduits for the admission or expulsion of air.

1,885,607. METHOD OF MAKING COMPOUND WALL STRUCTURES. LUTHER L. KNOX, Bellevue, Pa., assignor to Knox Products Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Original application filed May 14, 1926, Serial No. 109,182. Divided and this application filed Dec. 9, 1929. Serial No. 412,656. 8 Claims. (Cl. 154—28.)

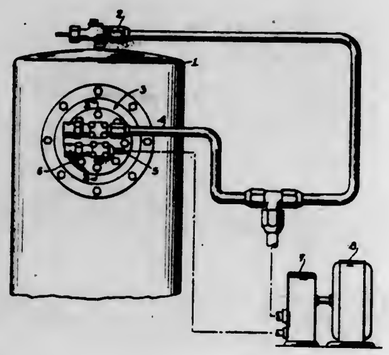


1. The method of making compound wall structures, comprising arranging a solid nonplastic insulating body in a frame, coating at least one side of the body with a binding material, placing a protective sheathing on the coated body, and exerting pressure on the sheathing to cause it to adhere to the binding material while maintaining it in positive spaced relation to the insulating body.

1,885,608. CONTROL DEVICE FOR MECHANICAL REFRIGERATION MACHINES. LESTER U. LARKIN, Atlanta, Ga., assignor to Larkin-Warren Refrigerating Corporation, Atlanta, Ga. Filed July 8, 1929. Serial No. 375,869. 7 Claims. (Cl. 62—2.)

1. In a boiler of a refrigerating machine having a liquid inlet conduit and float-controlled valve in said

conduit, an oil suction conduit opening into the boiler, a valve in said oil suction conduit and means connecting

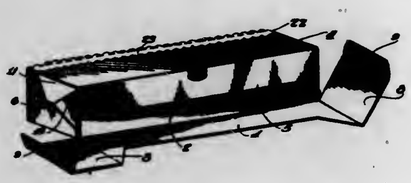


said last mentioned valve with the float controlled valve whereby said valves will be operated in unison or predetermined sequence as desired.

1,885,609. MANUFACTURE OF POLYAZO DYESTUFFS. HANS LEEMANN, HEINRICH LIER, and OSKAR KNECHT, Basel, Switzerland, assignors to Chemical Works formerly Sandos, Basel, Switzerland, a Firm. Filed June 19, 1931. Serial No. 545,616. 11 Claims. (Cl. 260—74.)

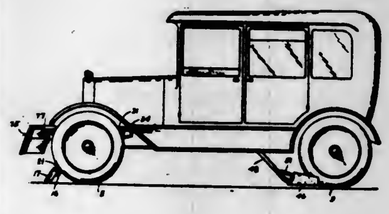
1. A process for the manufacture of trisazo-dyestuffs, consisting in first combining in mineral acid solution one molecule of a tetrazotized diamine of the diphenyl series with one molecule of 1 : 8-aminonaphthol-3 : 6-disulphonic acid and then coupling the intermediate product with one molecule of a sulphonated monodiazo compound of the benzene and naphthalene series and one molecule of a meta-amino-phenol compound substituted in the amino group by at least one of alkyl-, phenyl- or naphthalene radicles.

1,885,610. CUTTER RECEPTACLE. EDWARD H. LEWANDOWSKI, Neenah, Wis., assignor to The Menasha Products Company, Chicago, Ill., a Corporation of Wisconsin. Filed Oct. 21, 1929. Serial No. 401,311. 2 Claims. (Cl. 206—58.)



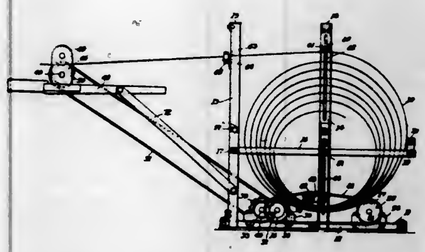
1. A receptacle for a supply of rolled material formed from a single blank of material, scored and folded into box-like form, a flap or short front wall depending from the top panel of the receptacle and a second or short front wall rising from the bottom of the receptacle with one short wall overlapping the other and forming a passage for the withdrawal of the web of the material, and a tear off member on the receptacle having a cutting edge against which said web may be severed.

1,885,611. SNOWPLOW EQUIPMENT FOR AUTOMOBILES. CHARLES H. LILLEY, Newburgh, N. Y. Filed Dec. 17, 1931. Serial No. 581,700. 5 Claims. (Cl. 37—42.)



1. In combination with a vehicle; wherein the vehicle includes a frame, axle structures on which the frame is mounted, and wheels on the axle structures; of an equipment including a plow mounted on the front of the frame extending a distance slightly below the front axle structure said plow extending across the front of the vehicle and sloping from its middle to each end, and a plurality of plows one in front of each wheel, and means for supporting the last mentioned plows from the frame.

1,885,612. POWER DRIVEN REEL. FREDERICK J. LITTELL, Chicago, Ill., assignor to F. J. Littell Machine Company, Chicago, Ill., a Corporation of Illinois. Filed Feb. 28, 1930. Serial No. 432,083. 2 Claims. (Cl. 242—66.)

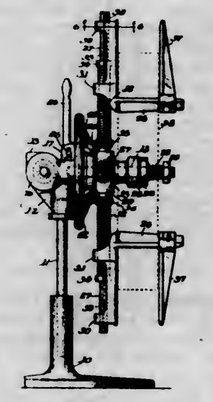


1. In a device of the character described, a base member, a plurality of spaced supporting rollers journaled in the base, a driving shaft journaled in said base, pinions operatively connecting said drive shaft with one of said rollers, means operatively connecting said rollers, a clutch located on said drive shaft comprising, a hub loosely mounted thereon, a sprocket wheel secured to the hub, a collar keyed to the shaft, and resilient means which serve to transmit rotations of the sprocket wheel to the collar and to permit continued rotation of the collar after the rotary movement of the sprocket wheel has stopped.

1,885,613. AUTOMATIC CENTERING REEL. FREDERICK J. LITTELL, Chicago, Ill., assignor to F. J. Littell Machine Company, Chicago, Ill., a Corporation of Illinois. Filed July 16, 1931. Serial No. 551,121. 8 Claims. (Cl. 242—110.)

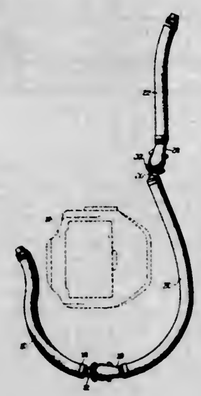
1. A reel of the character described including, in combination, a base, a vertical support mounted in said base, a laterally projecting shaft pivotally mounted on the upper end of said support, a hub member mounted for rotation on the projecting shaft, members supported by the hub and projecting radially therefrom, arms mounted for movement on the members, elongated screws mounted

for rotation on the members and threaded to the arms, means for simultaneously rotating said screws to actuate the arms including a rotatable gear wheel meshing with



pinions integral with the screws and a locking member for engaging means on the gear wheel to lock the wheel against rotation.

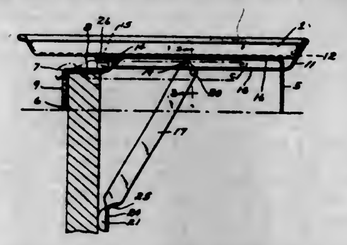
1,885,614. AIR HOSE COUPLING. SIDNEY A. MAIN, Duluth, Minn. Filed June 18, 1931. Serial No. 544,227. 3 Claims. (Cl. 285—62.)



1. Means for connecting the air line between railroad cars and the like, including an air hose, a standard coupling secured to one end of the hose, and a special coupling secured to the other end of the hose, the shank of said special coupling being off-set in a direction reverse to that of the standard coupling.

1,885,615. DETACHABLE SERVICE TRAY. WILLIAM L. MCGINLEY, Dallas, Tex. Filed Aug. 15, 1930. Serial No. 475,502. 3 Claims. (Cl. 45—51.)

3. The combination with a service tray adapted to be hooked over a vertical support of a slotted member upon the under side of the tray and a brace shiftable on said slotted member to and from engagement with the side of a support over which the tray is hooked, said brace having an end portion extending through said slot whereby the brace is adapted to be swung in said slot longitudinally thereof and means on said brace on the opposite sides of said slotted member for retaining said brace on the slotted member and adapted to contact



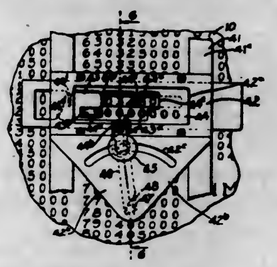
the opposite sides of said slotted member when the brace is against the side of said vertical support to hold the brace extended.

1,885,616. WRENCH. HOMER A. MEAD, Turlock, Calif., assignor to Masterench Corporation, Turlock, Calif., a Corporation. Filed Apr. 9, 1931. Serial No. 528,712. 1 Claim. (Cl. 81—99.)



A wrench comprising a shank having a fixed jaw on one end and provided in one side near the jaw with a relatively deep groove, a movable jaw member having a gripping face opposed to the fixed jaw and a hub projecting into the groove, and pivoted on the shank, and a relatively flat U-shaped spring mounted in the groove, the outer leaf of said spring at its free end engaging the hub in a manner to turn the movable jaw member to a closed position, and the under leaf extending along the bottom of the groove; the free end of said under leaf passing through the space between the hub and the bottom of the groove and being provided beyond the hub with an enlargement incapable of passing through said space.

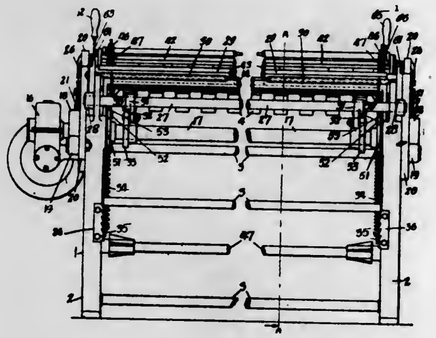
1,885,617. CALCULATOR. ALBERT C. MEYER, San Diego, Calif. Filed May 4, 1926. Serial No. 106,633. 19 Claims. (Cl. 235—86.)



1. In a calculating means, a tabulation having a plurality of distinct groups of characters positioned side by side, the characters in a group being arranged in

horizontal and vertical lines, a slide reciprocably mounted over said tabulation, and adapted to frame any one group of characters, a second slide reciprocably mounted on said first slide at right angles to its movement, and movable from end to end of the respective group, and a third slide reciprocably mounted on the second slide in a direction parallel with the horizontally arranged characters of said respective group.

1,885,618. APPARATUS FOR EMBOSSING FABRICS. JAMES MILLER, Brixton, London, and ABRAM SIMON, Bow, London, England. Filed June 17, 1930, Serial No. 461,723, and in Great Britain Sept. 25, 1929. 10 Claims. (Cl. 223—39.)

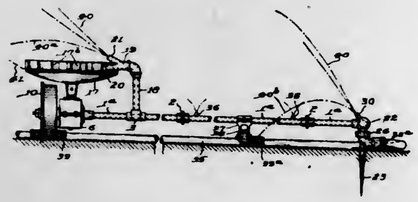


1. Apparatus for ribbing flexible material comprising a member, a second member, spring for holding said members normally apart, projections on said members, means for operating one of said members against the action of said springs, and means for causing the material to be alternately engaged and compressed by said members and for releasing same therefrom.

1,885,619. COMPOUND FOR PURIFYING OILS. HENRY H. MOORETON, Santa Monica, Calif., assignor of one-third to O. B. Englisch, Chicago, Ill., and one-third to Charles F. Craig, Los Angeles, Calif. Filed Oct. 8, 1928. Serial No. 311,241. 7 Claims. (Cl. 252—1.)

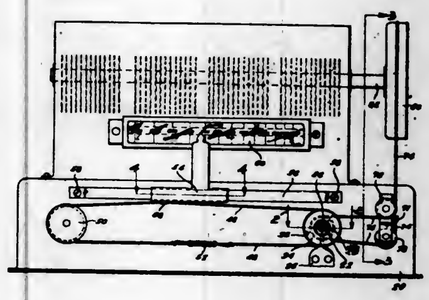
1. A compound for purifying oils consisting of a mixture of one gallon of sulphuric acid, 100 pounds of powdered silica, and 100 pounds calcium sulphate.

1,885,620. TRAVELING LAWN SPRINKLER FOR IRRIGATING EXTENSIVE SURFACES. WILLIAM W. MOYER, West Collingswood, N. J. Filed Nov. 3, 1931. Serial No. 572,768. 2 Claims. (Cl. 299—54.)



1. In a traveling lawn sprinkler including a length of rigid tubing, a hollow pivotal rotatable member mounted on a pin adapted to be thrust into the earth, one end of said tubing being coupled to said pivotal member to swing about the axis of said pin on a vertical axis, the combination of a housing rigidly secured to the free end of said length of tubing, a shaft mounted to rotate in said housing on an axis radial to said pivot pin, a traction wheel mounted on said shaft to rotate therewith outside of said housing, a vertical spindle journaled in said housing and extending through the top of said housing, gearing connecting said shaft and said spindle whereby said shaft may be driven from said spindle at a greatly reduced angular speed of rotation, a propeller wheel rigidly secured directly to the upper end of said spindle to rotate therewith in a substantially horizontal plane, and having a circular series of blades, and a branch pipe leading from said tubing upwardly and terminating in a nozzle directed against said blades, the direction of the axis of said nozzle being substantially tangential to the pitch line of the said blades on said propeller wheel.

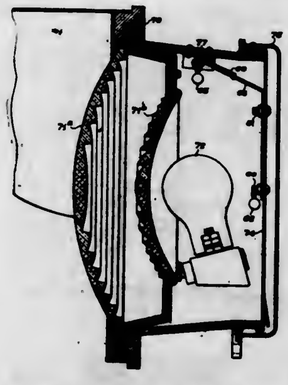
1,885,621. ELECTRICAL APPARATUS. EDWARD B. NEWILL, Dayton, Ohio, assignor to General Motors Radio Corporation, Dayton, Ohio, a Corporation of Ohio. Filed Oct. 17, 1930. Serial No. 489,316. 3 Claims. (Cl. 74—7.)



1. A control for a radio receiver comprising in combination, an adjustable impedance mechanism, an indicating mechanism for indicating the setting of said impedance, a screw threaded shaft for driving one of said mechanisms, said shaft having an axial keyway, a rotary member screw threadly engaging said shaft, said rotary member rotating with the shaft and moving in cooperation with said other mechanism, and adjusting means for adjusting said rotary member on said shaft, said means including a lock nut carried by said shaft, and a washer having a detent engaging said key-way so as to be non-rotatable with respect to said shaft, said washer being mounted intermediate said rotary member and said lock nut so as to prevent relative rotary movement between said rotary member and said shaft when the lock nut is tightened and permits a relative movement between said rotary member and said shaft when loosened so as to permit adjustment of the relative position of the indicating mechanism with respect to the setting of the impedance mechanism.

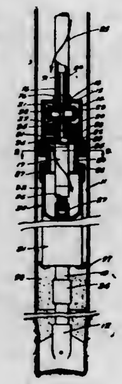
1,885,622. LIGHT SIGNAL. THOMAS J. O'MEARA, Pittsburgh, Pa., assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed June 30, 1930. Serial No. 464,879. 2 Claims. (Cl. 177—329.)

1. In a light signal comprising an enclosing casing, a lens in the front wall of the casing, a lamp in the casing for projecting a beam of light through said lens, and a removable cover in the rear of the casing; the combination with the foregoing instrumentalities of an opaque screen mounted in said casing between said cover and said lamp and biased to closed position and capable when the cover is removed of being manually opened to give access to the lamp, said screen having a part which



cooperates with the casing to prevent the screen being opened far enough to admit an unsafe amount of light to the casing.

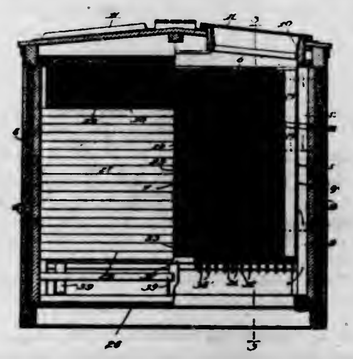
1,885,623. FISH UNSCREWING TOOL. RALPH A. PHILLIPS, Torrance, Calif. Filed Sept. 30, 1930. Serial No. 485,344. 11 Claims. (Cl. 255—35.)



1. A fish unscrewing device of the character described, including: a gear case adapted to enter a well; an upper shaft projecting upwardly from said gear case; a lower shaft projecting downwardly from said gear case; an engager on the lower end of said lower shaft for engaging the fish; an anchor connected to said gear case for preventing rotation of said gear case, said anchor comprising a hollow structure having engaging means therein; and gear means operatively positioned relative to said gear case and connecting said upper and lower shafts in such a manner that forward rotation of one shaft will result in reverse rotation of the other shaft.

1,885,624. REFRIGERATOR CAR ICE BUNKER. RAYMOND C. PIERCE, Chicago, Ill., assignor to General American Tank Car Corporation, Chicago, Ill., a Corporation of West Virginia. Filed Aug. 15, 1931. Serial No. 557,893. 10 Claims. (Cl. 62—19.)

1. In a refrigerator car ice bunker, the combination of an ice-basket having perforated side walls, ice-supporting means at its lower end, walls surrounding said basket and spaced from the walls of the latter to provide air passages therebetween, perforated members at the inside of certain of said walls of said basket and therewith defining other upwardly extending air-passages, spacers in said last-referred-to air passages, spacers in certain of

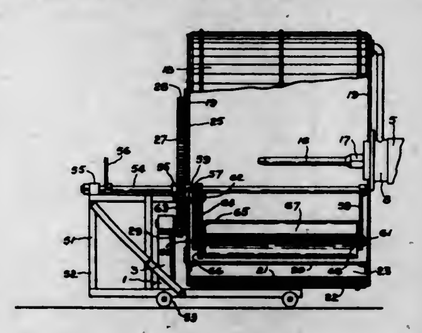


said first-referred-to air passages, and securing devices clamping together said members, spacers, the wall against which said spacers extend and the adjacent one of said second-referred-to walls.

1,885,625. METHOD OF MAKING AROMATIC AMINES. MARK E. PUTNAM, Midland, Mich., assignor to The Dow Chemical Company, Midland, Mich., a Corporation of Michigan. Filed July 5, 1928. Serial No. 290,718. 5 Claims. (Cl. 260—130.5.)

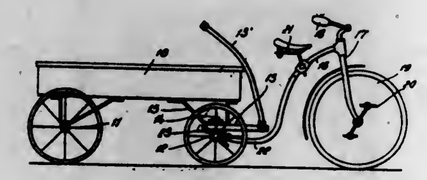
1. In a method of making an aromatic amine by reacting at high temperature and pressure between a halogenated aromatic hydrocarbon and an aqueous ammonia solution in the presence of a catalytic cuprous compound, the step which consists in maintaining said compound substantially in the cuprous state by adding to the reaction mixture an organic reducing agent capable of converting cupric compounds to cuprous compounds.

1,885,626. CHURN. VICTOR QUARDVLIEG, Keremeos, British Columbia, Canada. Filed Feb. 9, 1931. Serial No. 514,418. 2 Claims. (Cl. 31—38.)



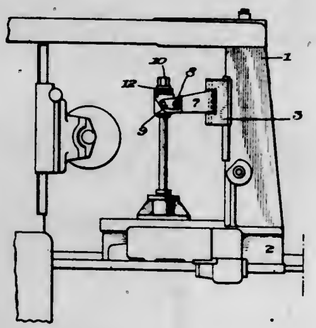
1. The combination with a churn of the horizontal drum type and having a concentric opening at one end, of a butter worker comprising a supporting frame, a shaft extending longitudinally thereof and adapted to be inserted into the drum parallel to the longitudinal axis of said drum, arms swingable about the shaft, a butter working roller carried at the free ends of the arms, means for driving the roller from the shaft, and means for driving the shaft.

1,885,627. TOY VEHICLE. ROBERT J. RADER, New Rochelle, N. Y., assignor to J. C. Penney Company, a Corporation of Delaware. Filed July 2, 1931. Serial No. 548,333. 7 Claims. (Cl. 208—45.)



1. In a toy vehicle, the combination of a wagon having a fixed axle and a steerable axle, a member having a steerable pedal driven wheel at one end, and latch connections between the other end of the member and the steerable axle of the wagon, whereby the member is at least partially supported by the wagon and propels the same.

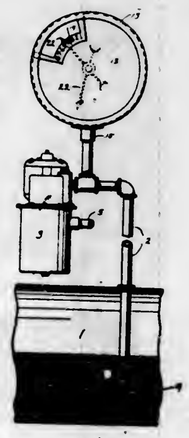
1,885,628. ARBOR SUPPORT FOR GEAR CUTTING MACHINES. RICHARD REINECKER, Chemnitz, Germany, assignor to J. E. Reinecker, A. G., Chemnitz, Germany. Filed Sept. 22, 1931, Serial No. 564,847, and in Germany Mar. 10, 1931. 8 Claims. (Cl. 90—1.)



1. The combination of a supporting column, a slide member mounted thereon, an arbor supporting arm comprising a pair of swingable members vertically pivoted on said slide and swingable toward and from each other in a horizontal plane, and means for clamping the ends of said members together to support the upper end of an arbor.

1,885,629. GAUGE. CLAUDE R. RICH, Grand Rapids, Mich., assignor to Teesdale Manufacturing Co., Grand Rapids, Mich., a Corporation of Michigan. Filed May 18, 1931. Serial No. 538,226. 3 Claims. (Cl. 116—129.)

1. In a gauge for determining the quantity of liquid within a supply tank having a nipple adapted to be inserted in the feed line from the supply tank, an adjustably rotatable dial bearing lift indicia, and a pointer operable



by the liquid withdrawal from the supply tank for indicating the quantity of liquid therein.

1,885,630. CHAIR. KENNETH M. RONAN, Wayne, Mich., assignor to Manning & Co., Chicago, Ill., a Corporation of Illinois. Filed Sept. 13, 1930. Serial No. 481,639. 5 Claims. (Cl. 155—194.)

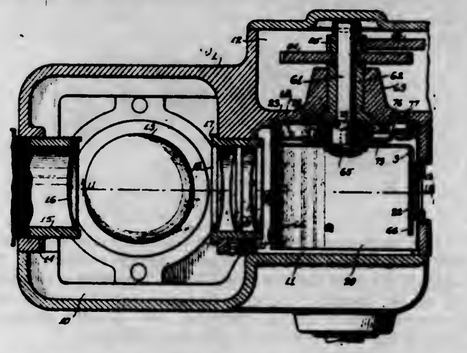


1. A chair embodying therein a frame made of metallic tubing and comprising pairs of front and rear legs, the rear legs having upright extensions forming a part of the back for the frame and the front legs having rearward extensions welded to the rear legs and forming the side rails for the frame, an X-shaped brace connecting the upright extensions together and welded at its ends thereto and a member connecting the top ends of said upright extensions together and welded thereto and including downwardly and forwardly extending portions crossing and welded to said side rails and terminating at and being welded to the bottom ends of said front legs.

1,885,631. MOTION PICTURE PROJECTING MACHINE. ABRAHAM SAPIER, Chicago, Ill., assignor to Universal Stamping & Mfg. Co., Chicago, Ill., a Corporation of Illinois. Filed June 7, 1929. Serial No. 369,126. 3 Claims. (Cl. 88—19.3.)

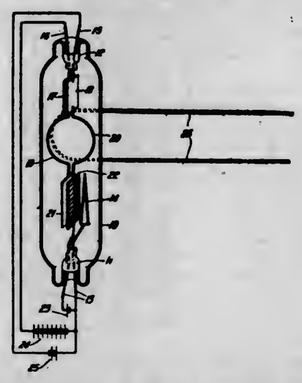
2. A cinemtograph comprising a casing having a light aperture therein, a lamp located behind said aperture, a

shaft journaled in said casing, mechanism for rotating said shaft, a pair of drum shutters supported on said shaft, one of said shutters being normally urged into the



path of light and being also shiftable axially, and a spring arranged to shift said one shutter axially toward said other shutter for frictionally connecting said shutters together.

1,885,632. OSCILLATION GENERATOR. JOHN C. SCHELLENG, Millburn, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Oct. 13, 1924. Serial No. 743,321. 10 Claims. (Cl. 250—275.)

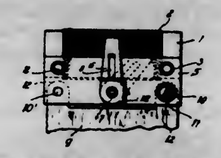


1. In combination, an evacuated vessel, a cathode, a plate electrode and a grid electrode each supported therein, leading-in wires for said last two electrodes, and conductors connecting said leading-in wires to said plate and grid electrodes respectively, said conductors having opposed bowed portions.

6. In combination, an evacuated vessel, enclosing a cathode, a grid, an anode, and a frequency determining circuit wholly within said vessel and comprised solely by the direct current leads for said grid and anode and the capacities between said grid and anode, and an element inductively coupled to said frequency determining circuit.

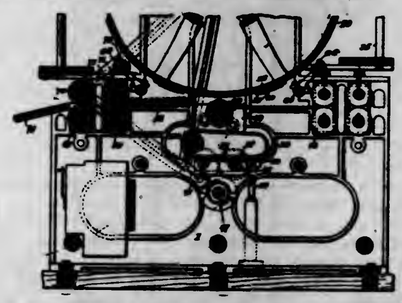
1,885,633. HUM BALANCER. NEWTON C. SCHELLENGER, Elkhart, Ind., assignor to Chicago Telephone Supply Company, Elkhart, Ind., a Corporation of Delaware. Filed Mar. 1, 1929. Serial No. 343,827. 3 Claims. (Cl. 201—56.)

2. A rheostat comprising a flat strip of insulation having a resistance wire wound upon the central part thereof, a second flat strip of insulation substantially parallel to the first strip and partially overlapping the same and holding the wire winding against lateral displacement, terminal means for the ends of the wire passing through the ends of the overlapping portions of both strips and holding them together, said terminal means comprising hollow metal eyelets, the portion of the second strip which does not overlap the first strip bearing a pivot pin, and a thin metal contact arm having a flat hub held flat against the



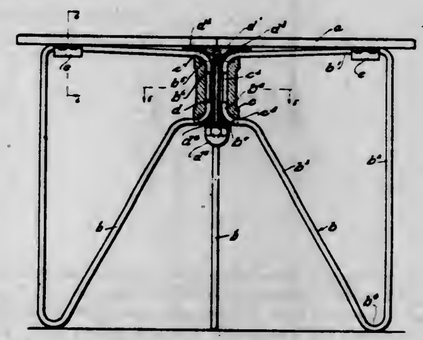
surface of the second strip by the pivot pin and having a contact making end portion bent toward the first strip and being adapted to engage the turns of the winding, the travel of said arm angularly being limited by engagement with the edge of the second strip, said arm having a centrally arched portion bearing a slot for receiving a screwdriver to swing the arm about the pivot pin.

1,885,634. SHEET METAL PRINTING MACHINE. JULIUS SCHMUTZ, Louisville, Ky. Filed Nov. 7, 1927. Serial No. 231,653. 18 Claims. (Cl. 101—242.)



3. A sheet metal printing machine comprising a support, a printing cylinder journaled thereon, means for feeding a sheet toward the cylinder, adjustable and movable means to lift the leading sheet into contact with the cylinder, barrier means for interrupting the forward movement of a second sheet prior to the completion of the printing of a previously inserted sheet thereto, said barrier means being movable to release the second sheet, and means connecting the sheet lifting means and barrier whereby the latter is actuated at predetermined times.

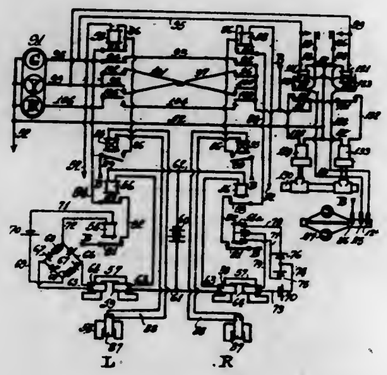
1,885,635. TABLE. PAUL SCHWEITZER, State College, Pa. Filed July 18, 1931. Serial No. 551,656. 14 Claims. (Cl. 45—11.)



1. In a table, the combination of a series of leg-structures, each consisting of a bent strip of metal with in-

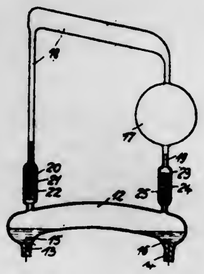
tegral leg, brace, and top members, centrally disposed means for connecting the inner ends of the top and the brace members, and a table top over the top members of the leg-structures.

1,885,636. INDUCTION CAB SIGNAL SYSTEM. DANIEL HERBERT SCHWEYER, Easton, Pa. Filed May 6, 1930. Serial No. 450,178. 15 Claims. (Cl. 246—63.)



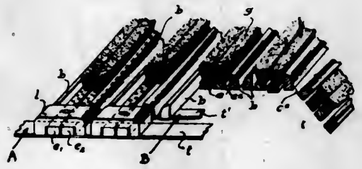
1. In a railway traffic controlling system, a track divided into blocks, a track circuit for each block, a track battery and a track relay for each track circuit and a vibrator having an operating coil changing the current from said battery into pulsating current for operating said track relay, said coil operating in series with said track relay.

1,885,637. METAL ARC LAMP. HANNS STAMMREICH, Charlottenburg, near Berlin, Germany, assignor to Piepmeyer & Co., Kommanditgesellschaft, Kassel-Wilhelmshohe, Germany, a Company of Germany. Filed July 13, 1928, Serial No. 292,348, and in Germany July 19, 1927. 2 Claims. (Cl. 176—42.)



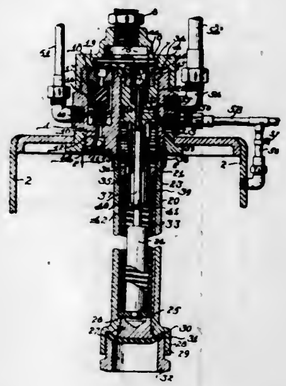
1. A metal arc lamp, comprising an arc chamber containing a metal composition adapted to be used in the arc stream to produce light, a receiver connected to said chamber, to retain one component distilled out of said metal composition, and means controlling the communication of said receiver with said chamber.

1,885,638. DOORMAT. SAMUEL STEINMETZ, Kispest, Hungary. Filed June 30, 1928, Serial No. 289,577, and in Hungary Oct. 15, 1927. 3 Claims. (Cl. 15—216.)



1. A mat comprising an under frame including a plurality of spaced bars and flexible means connecting the ends of the bars, and an upper frame including a plurality of spaced parallel cleaning elements and flexible means connecting the cleaning elements, said cleaning elements being removably positioned between the bars.

1,885,639. PRESSURE REGULATOR. FRANK B. STOVER, Detroit, Mich., assignor to Sky Specialties Corporation, Detroit, Mich., a Corporation of Michigan. Filed Jan. 14, 1930. Serial No. 420,739. 2 Claims. (Cl. 137—153.)

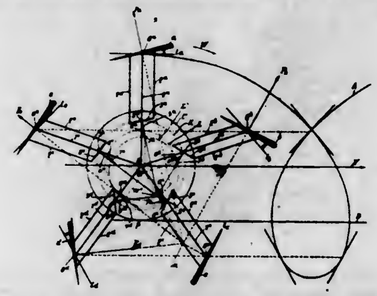


1. A pressure regulating device adapted for connection between a pump and a receptacle comprising a body member having a channel for establishing communication between the pump and receptacle and having an exhaust passage adapted to communicate with the pump, a valve seat formed in said passage, a valve in said passage normally obstructing the passage at said seat, a barrel extending from said body, a diaphragm mounted in said barrel and exposed at one side to pressure within the receptacle, a plunger operative on the diaphragm on the other side thereof, a spring acting on said diaphragm at said other side, a stem extending from said plunger and adapted to move said valve from its seat when the plunger is moved by pressure in the receptacle, and a valved outlet pipe extending from said receptacle and connected to said barrel at the side of the diaphragm subjected to pressure of said spring.

1,885,640. TURBINE WHEEL PROPELLER AND MOTOR. CARL BRUNO STRANDGREN, Versailles, France. Filed Oct. 21, 1930, Serial No. 490,266, and in France Nov. 20, 1929. 4 Claims. (Cl. 170—25.)

1. A turbine wheel for working in a fluid in relative motion thereto, comprising in combination a rotary member,

a number of oscillating members pivoted to said rotary member about axes substantially parallel to the axis of rotation of said rotary member, rigid members extending in a substantially radial direction and respectively pivoted to said oscillating members, cross-members respectively pivoted to said rotary member and to said rigid mem-

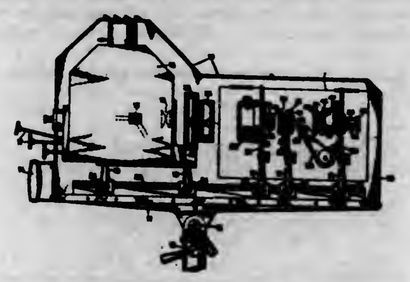


bers, guide members rigidly secured to said cross-members respectively, guide-followers cooperating with said guide members, a common shiftable member carrying the various guide-followers, arranged in a circle on said common shiftable member, and means for shifting off centre said shiftable member with respect to said axis of rotation.

1,885,641. DYESTUFFS CONTAINING METALS AND PROCESS OF MAKING SAME. FRITZ STRAUB, Basel, and HERMANN SCHNEIDER, Riehen, near Basel, Switzerland, assignors to Society of Chemical Industry in Basle, Basel, Switzerland. Filed May 6, 1929, Serial No. 360,986, and in Switzerland May 10, 1928. 10 Claims. (Cl. 260—12.)

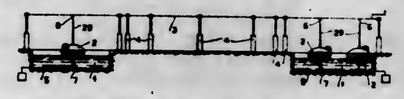
1. Process for the manufacture of fast black dyeing metal compounds of azo-dyestuffs containing besides chromium at least one other metal adapted to form complex compounds, consisting in treating the complex chromium compounds obtained by treating ortho-hydroxy-azo-dyestuffs with chromium salts adding soluble salts of an aliphatic monocarboxylic acid in such a quantity that after the chroming process is complete the reaction mixture contains soluble salts of an aliphatic monocarboxylic acid, with at least one compound yielding at least one metal other than chromium adapted to form complex compounds with azo-dyestuffs.

1,885,642. THEATER FLOODLIGHT. HERBERT T. STRONG, Chatham, N. J. Filed Apr. 4, 1932. Serial No. 603,072. 14 Claims. (Cl. 272—10.)



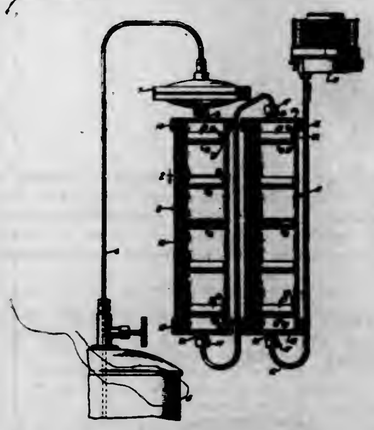
1. A floor light for theaters and the like, comprising projecting means, including a source of light, for brilliantly illuminating a stage drop or the like, and associated means disposed in the path of the projected rays for modifying the same to produce decorative illumination on the drop, said last-mentioned means comprising a polarising device, an analysing device, and a cooperating crystalline aggregate.

1,885,643. MECHANICAL CONTRIVANCE FOR POPULAR AMUSEMENT. CONRAD WERNER THOERIG and EDUARD JETILEK, Vienna, Austria; said Jetilek assignor to Hugo Karvaly, Neuilly, Seine, France. Filed Nov. 19, 1929, Serial No. 408,887, and in Austria Mar. 2, 1928. 5 Claims. (Cl. 104—73.)



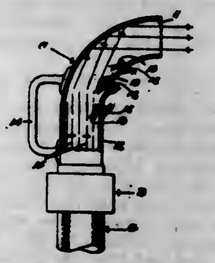
1. In an amusement device, an enclosed pond, a current conducting net stretched above the pond, an earthing net stretched on the bottom of the pond, boats movable on the pond, electrically driven means therefor, and means for connecting the driving means in circuit with the respective nets to drive the boats freely in straight course, or revolving the same on the pond.

1,885,644. EXPANSION TUBE FOR LIQUID GAS SYSTEMS. STEPHEN S. THOMAS, Lebanon, Ohio. Filed May 1, 1931. Serial No. 534,425. 3 Claims. (Cl. 257—251.)



1. In a liquid gas system comprising a source of liquid fuel supply under pressure and a pressure regulating valve through which liquid fuel is discharged from the source of supply, an expansion tube into which the liquid fuel is discharged at a reduced pressure from the pressure regulating valve, said expansion tube having a series of spaced reticulated means therein through which the fuel is sprayed and progressively subdivided, and expanded.

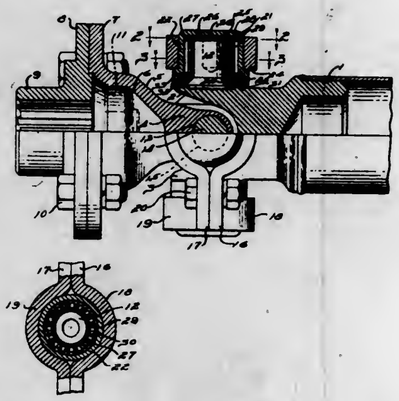
1,885,645. CEMENT GUN NOZZLE. JOHN T. VAWTER, Los Angeles, Calif. Filed Jan. 4, 1930. Serial No. 418,489. 6 Claims. (Cl. 91—45.)



1. In a nozzle for projecting material particles by means of a compressed agent: means for separating and

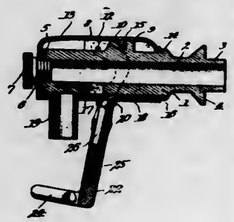
diverting from the particles of material a portion of said compressed agent prior to passage through the orifice of the nozzle, said means including a nozzle having a bend therein; and an air outlet in the wall of the nozzle corresponding to the short radius of the bend.

1,885,646. UNIVERSAL JOINT. ARCHIBALD A. WARNER, Royal Oak, Mich. Filed Mar. 23, 1931. Serial No. 524,447. 7 Claims. (Cl. 64—102.)



1. In a universal joint, a rotatable member including a trunnion, and a bearing journaled on said trunnion including an outer casing, an inner bushing and an intermediate sleeve having lubricant containing grooves in its outer periphery communicating with the interior of said casing.

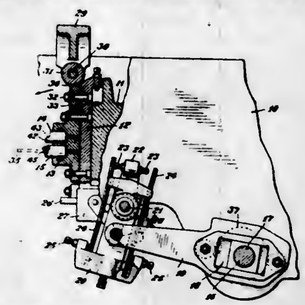
1,885,647. RECEPTACLE ACTUATED FAUCET. IVAR W. WATERVAL, Evanston, Ill. Filed June 9, 1931. Serial No. 543,224. 20 Claims. (Cl. 251—116.)



1. A faucet comprising a body portion having a passage provided with a delivery port, a plate constituting a valve member slidingly mounted on said body portion and controlling the delivery port, a delivery spout on said valve member and manually operable means to actuate said valve member, and a spring in the operating means to retain the valve plate in position.

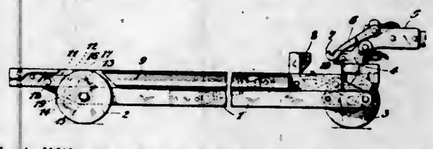
1,885,648. UPSETTING MECHANISM. RICHARD LESTER WILCOX, Waterbury, Conn., assignor to The Waterbury Farrel Foundry and Machine Company, Waterbury, Conn., a Corporation of Connecticut. Filed Feb. 18, 1929. Serial No. 340,907. 10 Claims. (Cl. 78—17.)

1. In combination with a die for holding a workpiece with a projecting end disposed at an angle to that portion of the workpiece within the die, a reciprocating gate movable toward and from the die, a punch carried by the gate for upsetting said projecting angular end of the workpiece, and means to move the punch transversely of the movement of the gate during the forward movement of the gate, whereby the punch will travel in an angular path, the angle of which is substantially the



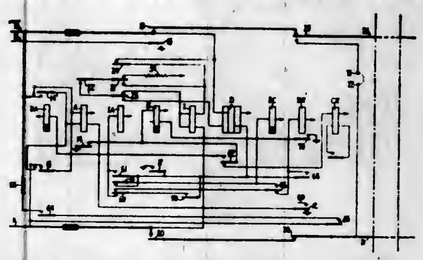
same as that of the end of the workpiece and by its engagement therewith upsets said end while the workpiece remains rigid in the die.

1,885,649. LIFTING TRUCK. WILLIAM STUEBING, Jr., Cincinnati, Ohio, assignor, by mesne assignments, to The Yale & Towne Manufacturing Company, Stamford, Conn., a Corporation of Connecticut. Filed Nov. 15, 1928. Serial No. 319,692. 4 Claims. (Cl. 254—10.)



1. A lifting truck comprising, in combination, a main frame, an elevating frame, a member pivotally mounted on said main frame, and a member pivotally mounted on said elevating frame, said pivotally mounted members being pivotally connected to each other and having interengaging portions for limiting the pivotal movement of said members with respect to one another during lifting movement of said elevating frame, said members being movable together during that portion of the lifting movement of said elevating frame that said portions are engaged.

1,885,650. TELEPHONE SYSTEM. REGINALD TAYLOR, Liverpool, and CHARLES EDMUND BEALE, London, England, assignors to Associated Telephone and Telegraph Company, Chicago, Ill., a Corporation of Delaware. Filed Jan. 20, 1930, Serial No. 421,940, and in Great Britain Feb. 12, 1929. 17 Claims. (Cl. 179—16.)



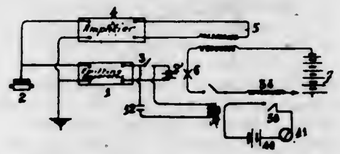
1. In a telephone system, a trunk line terminating in an automatic numerical switch, means responsive to impulses transmitted over the two conductors of said trunk line in parallel for operating said switch to connect with a succeeding switch, and means in said first switch for repeating subsequent impulses to operate said succeeding switch.

1,885,651. HOLDING MEANS FOR BRUSHES. LEONARD B. TERHUNE, Newark, N. J., assignor to Du Pont Viscoloid Company, Wilmington, Del., a Corporation of Delaware. Filed May 23, 1929. Serial No. 365,497. 11 Claims. (Cl. 300—10.)



1. A brush holding means comprising a carrier having an opening, a removable brush holder carried in said opening, said holder having a socket for receiving the brush blank and adapted to surround the bristle receiving portion of the brush blank.

1,885,652. METHOD AND APPARATUS FOR TAKING SOUNDINGS. MARCEL L. TOULY, Boulogne-sur-Seine, France, assignor to Societe de Condensation et d'Applications Mecaniques, Paris, France, a Corporation of France. Filed Sept. 23, 1927, Serial No. 221,588, and in France Oct. 28, 1926. 8 Claims. (Cl. 177—386.)

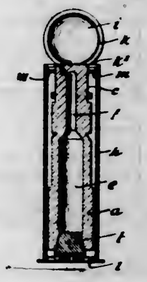


2. In a sounding apparatus of the type described, a signal transmitter for emitting waves into water, means for transforming incoming elastic waves transmitted through water into electrical oscillations, an amplifier connected to the last-mentioned means, an output circuit for said amplifier, another circuit, a low voltage glow discharge tube in the second mentioned circuit, a source of potential in said second mentioned circuit, said source being of such a voltage as to normally impress upon said tube a tension comprised between its upper critical value and its lower critical value, means operatively connected to said signal transmitter for causing the tension of said tube to suddenly take a value outside of the above mentioned limits when a signal is emitted through said transmitter, means for causing the tension of said tube to be brought back to a value within the above mentioned limits a predetermined time after the signal has been transmitted, means for coupling said output circuit of the amplifier to said circuit of the tube so arranged that the reception of an echo will produce a variation of the voltage of said tube to a value outside of the above mentioned limits but in a direction opposed to that of the variation resulting from the emission of a signal, and means for recording the interval of time between the variations in the luminous state of the tube.

1,885,653. PROCESS OF POLYMERIZING HYDROCARBONS OF THE BUTADIENE SERIES. LUDWIG VAN ZUTPHEN, Frankfort-on-the-Main-Hochst, Germany, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Filed Dec. 24, 1929, Serial No. 416,306, and in Germany Jan. 9, 1929. 6 Claims. (Cl. 260—6.)

1. Process of polymerizing hydrocarbons of the butadiene series which consists in treating the hydrocarbon with a homogeneous mixture of metallic sodium and an indifferent solid diluent in the form of powder.

1,885,654. CONTAINER AND CASE COMBINED FOR USE AS A LIP STICK. ALFREDO J. VERCELLI, Buenos Aires, Argentina. Filed Aug. 25, 1931, Serial No. 559,156, and in Argentina July 23, 1931. 2 Claims. (Cl. 206—56.)

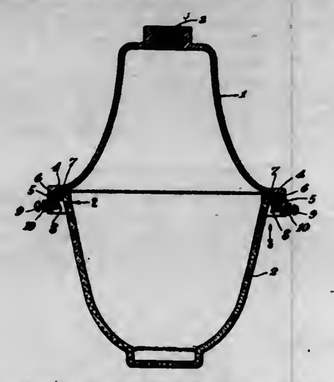


1. An improved container and case combined for toilet purposes adaptable to substitute lipsticks and the like, comprising a cylindrical container of various diameters, provided with a circular external groove, a top portion bevelled on both sides in order to form the sharp edge of a lipstick and provided with a conduit which communicates with the interior of the container, said bevelled portion being covered with a chamois leather cover held in position by a ring, a bottom portion adaptable to be closed with a stopper, an interior of two diameters, one forming a tube in direct communication with the conduit in the upper portion, said container being adaptable to be introduced in a case provided with an upper cap or cover hinged to same and a bottom cap or disk, both constructed in such a manner as to snap into position and close the case, the top cap being provided with an inner ridge that combines with the circular groove on the outside of the container in order that when the latter has fallen out of the case a certain distance to be retained by the larger diameter portion abutting against the circular ridge in the interior of the case it is held in this position by a slight pressure of the finger against the upper cap resting on the side of the container allowing the ridge provided in the cap to combine with the groove on the container.

1,885,655. SHADE HOLDER. JOSEPH A. VOLK, South Norwalk, Conn. Filed Apr. 30, 1931. Serial No. 533,925. 8 Claims. (Cl. 240—128.)

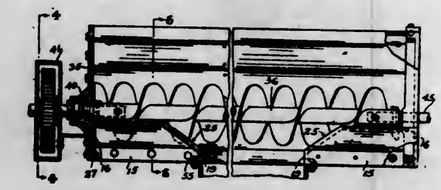
1. A shade holder having at its mouth an outwardly extending flange provided with a transverse rim at its outer periphery; a glass shade having an outwardly extending flange at its mouth receivable loosely within the rim of the holder against the flange thereof; and means for attaching shade and holder together comprising a strip of suitable material extending lengthwise of the inner periphery of the rim of the holder in the space between said rim and the flange of the shade, said strip

being attached at one end to said rim and being free at its other end, said strip being considerably wider than the thickness of the flange of the shade; and a screw



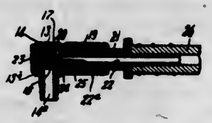
operatively supported by the rim of the holder at the free end of the strip to bear against its portion which is below or beyond the flange of the shade.

1,885,656. DOUBLE CONVEYER DISTRIBUTOR. JEFFREY J. WALLACE, Amite, La., assignor to Gullett Gin Company, Amite, La. Filed Apr. 16, 1931. Serial No. 530,655. 5 Claims. (Cl. 19—74.)



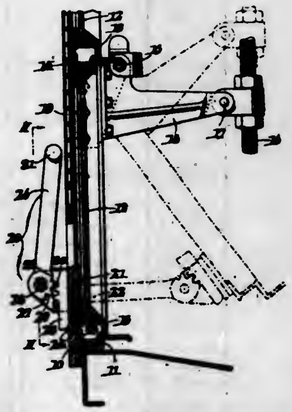
1. A cotton distributor comprising a trough having the sides thereof bent from sheet metal to form a plurality of plane faces arranged at an angle to each other, spaced apart filler members detachably connecting the opposite sides to each other, a bearing plate connected to one of said filler pieces and to the adjacent ends of a pair of sides, a cross bar connecting the upper edges of the other ends of said sides, a pair of arms depending from said cross bar and having journal bearings formed in the ends thereof, a pair of screw conveyers journaled in said bearing plate and bearings, and means for rotating said screw conveyers in opposite directions.

1,885,657. SEPARABLE CONNECTER. HARRY E. WALKER, Fairfield, Me. Filed Aug. 6, 1931. Serial No. 555,440. 4 Claims. (Cl. 284—17.)



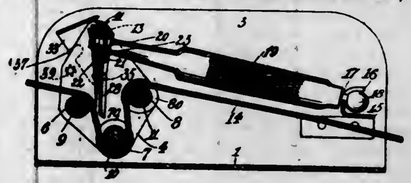
1. A separable connecter comprising a headed conduit member, the head whereof has a longitudinally extending external side face containing a port which is flush with said face and forms an end of a passage extending to one end of the headed member, a spring-pressed valve within said head having an outer face which is flush with the ported side face of the head when said valve is closed, and a socketed conduit member the socket whereof is formed to receive said head, and has a transversely extending internal wiping face containing a port which forms an end of a passage extending to one end of the socketed member, said members being relatively movable to cause the socket to receive the head and register its port with the head port and thereby operatively connect the members, the socket being formed to closely embrace the head and maintain the wiping face in close contact with the port-containing side face of the head, so that each face automatically wipes and cleans the other when the members are being connected, the socketed member being provided with a laterally movable compressible annular washer surrounding the port therein, and with pressing means for forcing said washer laterally against the ported side face of the headed member to prevent leakage between said contacting faces, and clamp the opposite side face of the headed member against an internal face of the socketed member to oppose separation of the connected members.

1,885,658. WINDOW LATCH. HOWARD T. WALTON, Collingswood, N. J., assignor to David Lupton's Sons Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed May 21, 1930. Serial No. 454,209. 5 Claims. (Cl. 292—39.)



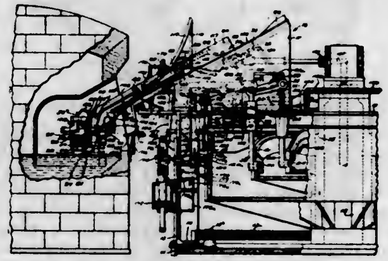
1. A pivot sash window latch comprising a bracket with provisions for securing it to a swinging edge of the window sash; a bolt having gear teeth slidably-guided in the bracket and adapted to lock over the rail of the window frame against which the swinging edge of the sash closes, and an actuating member with gear teeth concentric to its pivot axis intermeshing the rack teeth on said bolt, said member also embodying a stop for engagement by the bolt in limiting upward movement of the actuating member.

1,885,659. SAFETY RAZOR AND STROPPING DEVICE. ALEC VERNON WATSON, St. Albans, England, assignor of one-half to Thomas Anderson Davis, London, England. Filed Apr. 7, 1928, Serial No. 268,244, and in Great Britain Apr. 22, 1927. 8 Claims. (Cl. 51—153.)



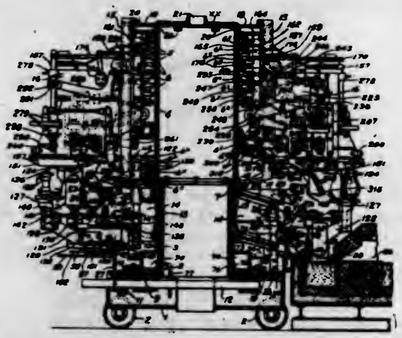
1. Safety razor stropping device operative for stropping a blade fixed in a safety razor device, comprising a strop, an elongated carriage adapted for reciprocation over the strop, a cradle swingably mounted within said carriage and comprising a plurality of anti-friction rollers so disposed as to form a bight in the strop trained over said rollers, supports within said carriage adapted for supporting and positioning the safety razor device with the edge of the blade entering the open mouth of the bight, and a movable catch adjustable from one operative position in which it engages the cradle to prevent swinging thereof to another operative position in which it locks the razor on its supports within the carriage substantially as set forth.

1,885,660. METHOD OF AND APPARATUS FOR MANUFACTURING GLASSWARE. THOMAS WAUGH, Jr., Hartford, Conn., assignor to Hartford-Empire Company, Hartford, Conn., a Corporation of Delaware. Filed June 7, 1928. Serial No. 283,595. 26 Claims. (Cl. 49—5.)



10. In a combined suction gathering and blowing device for glass, a suction head, a neck mold and a blank mold associated therewith, means for moving said head and molds into a glass gathering position, means for creating a vacuum in said head and molds to gather glass for a blank, means for moving said head and molds containing the blank into a glass forming position, means for disengaging the blank mold and blank, means for rotating the head, the neck mold, and the blank attached to the neck mold substantially 180° around a horisontal axis to an inverted position, means for puff blowing and reheating said blank in the inverted position, means for rotating the head and the blown blank 180° to its original position, and means for completing the blowing operation while the blown blank is still attached to the neck mold.

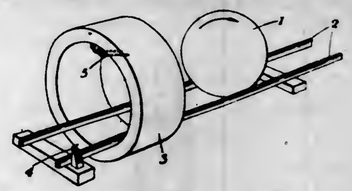
1,885,661. APPARATUS FOR FORMING GLASSWARE. THOMAS WAUGH, Jr., West Hartford, Conn., assignor to Hartford-Empire Company, Hartford, Conn., a Corporation of Delaware. Filed May 1, 1929. Serial No. 359,589. 22 Claims. (Cl. 49—5.)



1. In a press and blow machine for forming articles of glassware, the combination of a rotary support, a press and blow mechanism mounted on said support and comprising a press mold, means for pressing a mold charge therein, a blow mold, means for blowing the parison formed from said mold charge to final form in said blow mold, a neck-ring device from which said parison is suspended and by which it is transferred to the blow mold, and means for timing the occurrences of the several operations to cause a parison to be formed during one revolution of the support and said parison to be expanded to final form during the next revolution thereof.

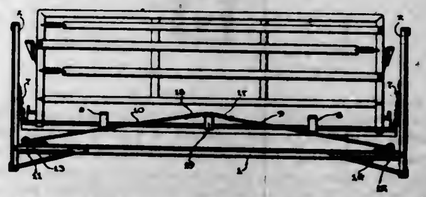
15. Apparatus for forming hollow glassware of the paste mold type, comprising a rotary support, a press mold and a final blow mold mounted on said suppoft, a carrier rotatably mounted on said support on a vertical axis eccentric to the axis of said support, two neck-rings rotatably mounted in said carrier and arranged to be brought alternately into cooperative relation with said press mold and said blow mold, means for pressing a charge of glass in one of said neck-rings and said press mold, means to move said press mold to an inoperative position leaving the pressed glass suspended from said neck-ring while said carrier is retained in a fixed position with respect to said support, means for puff blowing the glass to form a parison while thus suspended, means for then indexing said carrier to bring said parison into alignment with the operative position of said blow mold with respect to said support, means for closing said blow mold about the parison, means for blowing the parison to final form in said blow mold, means for imparting rotative movement to the neck-ring while the glass blank is being puff blown, means for imparting rotative movement to said neck-ring during the final blowing of the parison in said blow mold, and timing means to cause a parison initially formed in said press mold to be final blown in said blow mold during at least a part of the time a succeeding parison is being formed by the parison forming means including said press mold.

1,885,662. ELECTRIC RAILWAY SYSTEM. HAROLD KENNETH WHITEHORN, Maidstone, England. Filed Oct. 29, 1931, Serial No. 571,882, and in Great Britain Oct. 30, 1930. 6 Claims. (Cl. 104—148.)



1. In an electric transport system the combination of a track, a spherical body, running thereon, and direct-current electro-magnetic coils spaced along the track and energized to accelerate the said body along the said track.

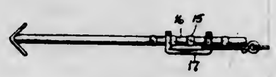
1,885,663. STABILIZER FOR GLIDER SEATS. WILLIAM F. WILLIAMS, Rochester, N. Y., assignor to Quality Mattress Company, Rochester, N. Y., a Corporation of New York. Filed Jan. 16, 1932. Serial No. 587,052. 1 Claim. (Cl. 5—129.)



A glider seat comprising end pieces, a base to which the end pieces are connected and including slightly elevated longitudinal parallel members and transverse cross pieces

connecting the same adjacent the ends thereof, a seat member swingingly suspended from the end pieces over the base and including a rigid transverse cross piece arranged substantially intermediate the ends thereof and above the plane of the aforesaid transverse cross pieces, and a stabilizer comprising two bars each pivoted at its outer end to the respective transverse cross piece of the base and resilient elements connected to the transverse cross piece of the seat member and to the inner ends of said bars whereby to prevent undue endwise movement of the seat during swinging movement thereof.

1,885,664. FURNITURE BRACE. THEODORE H. WITTLIFF, Cleveland, Ohio. Filed Mar. 4, 1927. Serial No. 172,594. 1 Claim. (Cl. 287—58.)



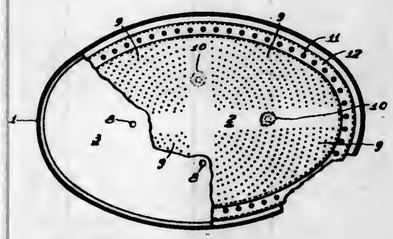
A securing device for furniture braces, comprising a terminal member having a shank, a fastening member having a body portion and angularly disposed ends provided with apertures adapted to engage over said shank in freely slidable relation thereto, means permitting transverse movement of one end portion, and shoulder portions on said shank and fastening member adapted to interlock at predetermined spaced points of adjustable along said shank, and a flexible member having a loop adapted to be engaged between said fastening member and said shank and movable longitudinally with respect thereto to a position below the transversely movable portion of said fastening member to latch said fastening member in predetermined adjustment with said shank.

1,885,665. FLUID MOTOR. JOHN M. WOLF, Kansas City, Mo., assignor of one-half to Carl Bingesser, Kansas City, Mo. Filed Apr. 24, 1930. Serial No. 446,989. 1 Claim. (Cl. 121—164.)



A device of the class described having a block for the intake and exhaust of power fluid, a valve movable to control said intake and exhaust, a pinion on said valve, a valve actuating slide having rack teeth in engagement with the pinion, spring pressed detents to engage the slide, said detents having projections, pins engageable with said projections to spread the detents for the purpose specified, said pins being operable by said piston heads, guide members on the slide through which the pins pass, and coil springs on the rods engaging said guide members and abutments on the rods whereby the springs will be compressed through the action of the respective heads prior to engagement of the projections by the companion spring.

1,885,666. COFFEE POT. IRVING W. WOOD, New Kensington, Pa., assignor to The Aluminum Cooking Utensil Company, New Kensington, Pa., a Corporation of Pennsylvania. Filed Mar. 14, 1932. Serial No. 598,608. 1 Claim. (Cl. 53—3.)



In a coffee pot, a water reservoir having apertures in its lower portion, a coffee container below the water reservoir, said coffee container having apertures in its lower portion, the lower portion of the coffee container having an imperforate area below each of the apertures in said water reservoir, and means for positively aligning said water reservoir with respect to said coffee container whereby the imperforate portions of the latter are maintained in a position directly below the apertures in the former.

1,885,667. STEEL ALLOY. WILLIAM H. WOODHALL, Attica, Ind., assignor to The Harrison Steel Castings Company, a Corporation of Indiana. Filed Dec. 4, 1930. Serial No. 500,141. 3 Claims. (Cl. 75—1.)

1. A casting composed of a steel alloy containing carbon .20 to .60%, molybdenum .05 to .50%, manganese 1.00 to 1.50%, copper, .90 to 1.50% and zirconium .15 to .30% and the balance substantially iron.

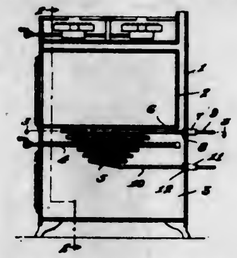
1,885,668. VENTILATING DEVICE FOR VEHICLES. JOSÉ AGUSTIN YANIZ Y DIAZ, Habana, Cuba. Filed Oct. 11, 1930, Serial No. 488,180, and in Cuba Aug. 8, 1930. 4 Claims. (Cl. 98—2.)



1. In a vehicle having a relatively enclosed portion, a ventilating device for said enclosed portion comprising a conduit extending lengthwise of the vehicle with its rear end open to the atmosphere and its forward end opening into said enclosed portion; and means arranged at spaced intervals along said conduit for inducing a draft through the latter.

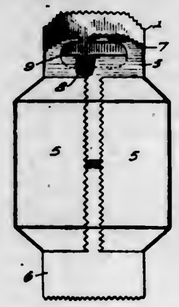
1,885,669. ATTACHMENT FOR HEATING WATER. JOHN H. APP, Medford, Mass. Filed Dec. 20, 1930. Serial No. 503,841. 1 Claim. (Cl. 156—5.8.)

A stove comprising a body, an oven located therein and disposed in spaced relation above the bottom thereof, a coil located in the body and disposed in the space between the bottom of the body and the bottom of the oven, water inlet and outlet pipes passing through the side of the body and connected with the ends of the coil, burners passing



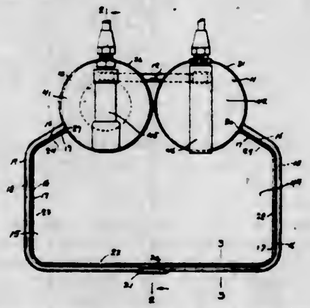
through the side of the body and disposed one at each side of the coil and located under the oven, said burners being disposed at a level lying between the levels of the inlet and outlet pipes.

1,885,670. FOIL LINED BAG. TRUE M. AVERY, Glens Falls, N. Y., assignor to Union Bag & Paper Corporation, Hudson Falls, N. Y., a Corporation of New Jersey. Filed July 1, 1931. Serial No. 548,177. 8 Claims. (Cl. 229—55.)



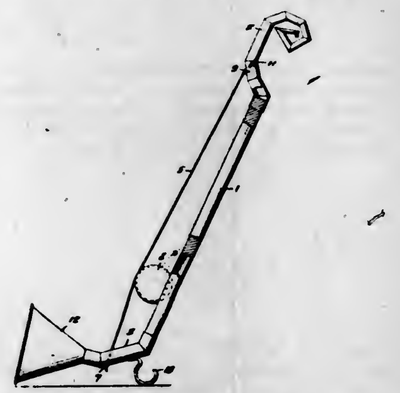
1. A bag or receptacle comprising an outside sheet and a liner and backing sheet therefor portions of which sheet and liner form flaps one of which is folded against the other, the portions of the liner and its backing sheet on one flap and which lie between the folded flaps being perforated to expose a portion of the outside sheet of the respective flap to the outside sheet of the other flap for pasting thereto.

1,885,671. EVAPORATING UNIT. EUGENE L. BARNES, Buffalo, N. Y. Filed Mar. 28, 1931. Serial No. 525,945. 4 Claims. (Cl. 62—126.)



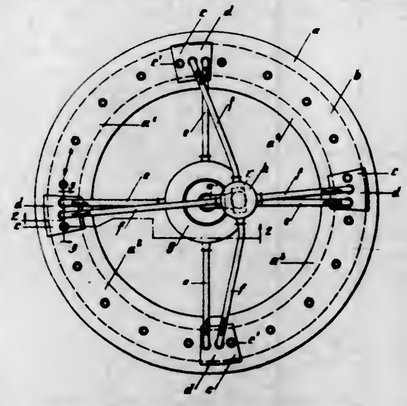
3. An evaporating unit for refrigerating apparatus, comprising a pair of adjacent, refrigerant chambers arranged in a substantially horizontal plane, and an ice tray compartment arranged beneath the chambers, the bodies of the chambers and ice tray compartment being formed of a single piece of material formed with refrigerant passageways.

1,885,672. MUSICAL STRING INSTRUMENT. JOSÉ B. BARREDO, Los Angeles, Calif. Filed June 26, 1931. Serial No. 547,092. 1 Claim. (Cl. 84—173.)



A musical string instrument comprising an elongated tubular body forming a portion of a sound box, a head of hollow formation secured to one end of the body, a musical string adjustably secured to the head, a tubular element connected to the other end of the body and cooperating with the latter to form a complete sound box, said element including angularly related portions and one of said portions disposed at substantially right angles to the body and provided with oppositely disposed openings to receive the string and permit the latter to enter the sound box and to extend substantially parallel with the body, a string securing means having the string secured thereto and mounted in one of the openings of the sound box with a string extending across said sound box, and a bridge between the string and the body.

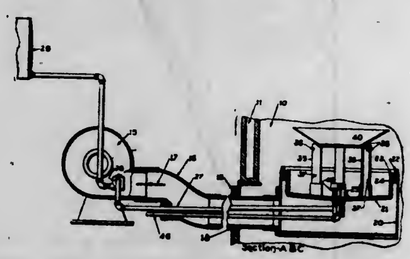
1,885,673. ROTARY ANNULAR SOLE OVEN. FRIEDRICH BARTLING, Munich, Germany. Filed June 22, 1928, Serial No. 287,618, and in Germany July 7, 1927. Renewed June 30, 1932. 3 Claims. (Cl. 202—102.)



1. A rotary annular hearth oven comprising an annular hearth arranged horizontally and mounted for rotation on an axis that is vertical, said hearth being concentrically disposed relative to said axis, a casing sur-

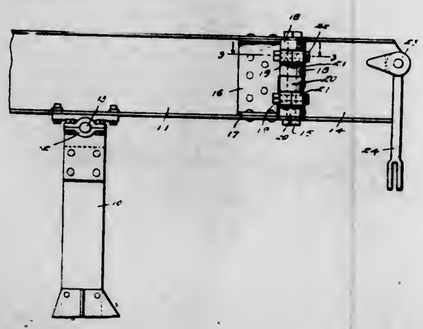
rounding and covering said hearth and forming an annular oven chamber above said hearth, a series of partitions extending transversely across the casing above the hearth and dividing the oven chamber into a plurality of equal segmental sections, devices located at one side of each partition for charging the rotating hearth with a thin layer of pulverulent material which is to be distilled or dried, and devices arranged on the other side of each of said partitions for removing the pulverulent material from said hearth.

1,885,674. LIQUID FUEL BURNER. LYNN C. BEADLE, Detroit, Mich., assignor, by mesne assignments, to Timken Silent Automatic Company, Detroit, Mich., a Corporation of Michigan. Filed July 7, 1930. Serial No. 466,083. 1 Claim. (Cl. 158—92.)



In a liquid fuel burner adapted to be placed as a unit in the combustion chamber of a furnace, an air chest adapted to have air supplied thereto under pressure, an open bowl member within the upper part of said chest and forming a closure for the latter, a liquid fuel inlet leading into said bowl, a plurality of upwardly directed air passages from said chest at the periphery of said bowl, a plurality of vertically arranged tubular members located in the bottom of the bowl, said tubular members being arranged in a ring about the center portion of said bowl and spaced therefrom and provided near their upper ends with air jets outwardly directed, and a metallic deflector element supported above said members and adapted to direct combustion gases into said center space.

1,885,675. WALKING BEAM. LEE J. BLACK, Beaumont, Tex. Filed Apr. 2, 1931. Serial No. 527,272. 8 Claims. (Cl. 74—5.)



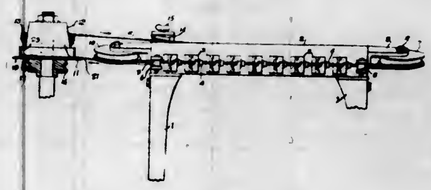
1. A walking beam and an extension hinged to said walking beam for lateral movement into or out of an operative position of alignment with the body of the walking beam, and means for locking the extension in this position of alignment.

1,885,676. BRAIDED BRAKE LINING AND MACHINE FOR MAKING SAME. SIDNEY B. BLAISDELL, Wyncote, Pa., assignor to Fidelity Machine Company, Philadelphia, Pa., a Corporation of Delaware. Filed Aug. 18, 1930. Serial No. 476,147. 24 Claims. (Cl. 96—2.)



1. A braided strip comprising a plurality of series of interbraided threads, the threads of one series extending diagonally through the strip from one face thereof to the opposite face thereof, the threads of the other series extending diagonally through the strip from one face thereof to the opposite face thereof and crossing the threads of the first said series, each of said series of threads being divided into two divisional series running in opposite directions to each other and interbraided with each other in a common plane throughout the strip.

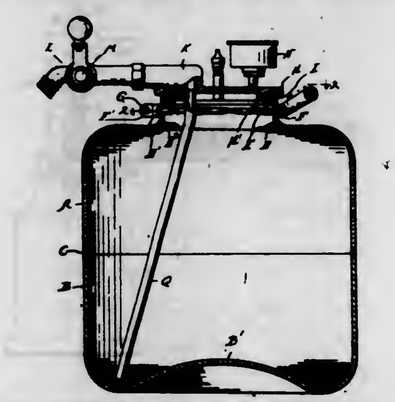
1,885,677. STEEL WOOL MACHINE. RAYMOND F. BOEHLER, Jr., Springfield, Ohio. Filed July 8, 1927. Serial No. 204,247. 11 Claims. (Cl. 29—4.5.)



1. In combination in a steel wool machine of a bed, having a face, a vertically arranged wire feeding means on said bed, cutting tools and tool holders carrying said tools mounted on the face of said bed, means to guide said wire adjacent thereto consisting of sheaves at either end thereof, the face of said sheaves being tilted to the vertical, and tilted with relation to the face of said bed.

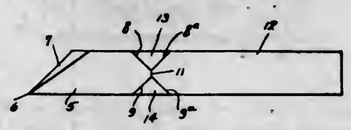
1,885,678. CARBONATING VESSEL. HAROLD R. BOYER, Grosse Pointe Farms, Mich. Filed Feb. 15, 1932. Serial No. 593,164. 3 Claims. (Cl. 225—21.)

1. An apparatus for carbonating liquids comprising a tank formed of two pressed metal cups having their edges welded together, the upper cup being provided with a neck portion having an annular bead pressed therein and also provided with a radially inwardly extending flange at its upper end, a grooved split band or collar clamped about said bead, a cap, clamping bolts for securing said cap upon said flange, said bolts engaging threaded apertures in said band or collar, a discharge fitting integral with said cap and projecting laterally therefrom, a tube connected to said fitting and projecting downward to the bottom of said tank, a valve stem connected with said cap for the introduction of gas into the tank and a valve controlled tap connecting to said fitting.



3. An apparatus for carbonating liquids comprising a tank provided with a neck portion with a surrounding bead thereon, a cap for closing the tank and a split band or collar grooved to fit about said bead and clamped upon said neck, said band being provided with a handle portion projecting therefrom and lugs distributed thereabout having threaded apertures therein and clamping screws for said cap engaging said threaded apertures.

1,885,679. TOOL AND METHOD OF CONSTRUCTING THE SAME. ROBERT R. BROOKS, Pensacola, Fla. Filed May 1, 1931. Serial No. 534,399. 4 Claims. (Cl. 76—101.)

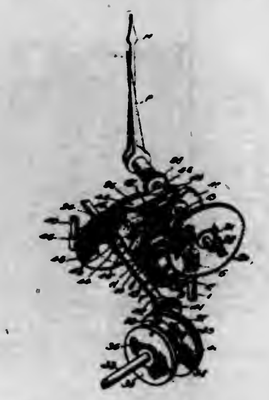


1. A method of constructing a tool of the type described comprising preparing a tool stub by reducing all of the corners of a squared end thereof, preparing a shank of scrap metal or similar cross section by similarly reducing all of the corners of a squared end thereof, clamping the stub and shank in longitudinal alinement and welding the prepared ends of the stub and shank together, and filling the resultant voids with welding material to the size of the shank and stub.

2. A tool of the type described comprising a hardened tool stub, and a shank of lower grade material of the same cross section, welded in end to end relation, all of the corners of the substantially abutting ends of the stub and shank being angularly cut away to provide on each abutting end a centralized projecting right angularly related surface elongated in the greatest transverse dimension of the said abutting ends, the resulting voids being filled with weld material.

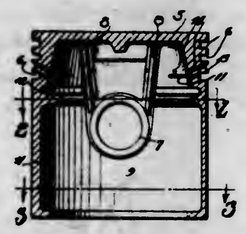
1,885,680. RESETTABLE COUNTER. WALTER S. BRUBAKER, Oakland, Calif., assignor to Granberg Meter Corporation, San Francisco, Calif., a Corporation of California. Filed Mar. 28, 1929. Serial No. 350,644. 3 Claims. (Cl. 235—144.)

1. In a resettable register, a rapidly rotatable unit pointer, a slowly rotatable multiple pointer, driving means for maintaining invariable synchronism of said pointers, a rotary stop permanently synchronized with said pointers, a relatively stationary stop mounted for movement into and out of the path of said rotary stop and adapted to co-act with the latter in limiting resetting movement, and a rotary cam synchronized with said



pointers for holding said relatively stationary stop out of the path of said rotary stop until said multiple pointer reaches substantially the end of its resetting movement and said unit pointer is making its last resetting revolution.

1,885,681. PISTON CONSTRUCTION. NEWTON J. BURNS, Tacoma, Wash. Filed Feb. 13, 1930. Serial No. 428,182. 2 Claims. (Cl. 74—108.)

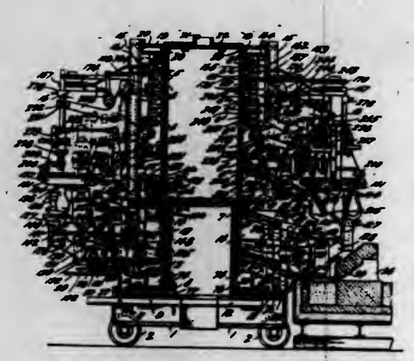


1. A piston construction of the character described, comprising a piston head, annular piston packing ring grooves formed in the head, a piston skirt depending from the piston head having a vertical slot extending from the bottom of the skirt to approximately the top thereof and terminating in a horisontal slot, and eccentric rings formed integral with the inner wall of the piston skirt and concentrically disposed relative thereto wherein the largest areas of the eccentric rings are directly opposite the vertical slot of the skirt whereby the piston skirt will be made more rigid.

1,885,682. APPARATUS FOR FORMING GLASSWARE. ROBERT W. CANFIELD, West Hartford, Conn., assignor to Hartford-Empire Company, Hartford, Conn., a Corporation of Delaware. Filed July 13, 1929. Serial No. 377,934. 19 Claims. (Cl. 49—5.)

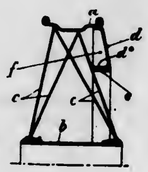
1. In glass fabricating mechanism, a glass melting furnace, a gathering pool connected with said furnace to permit a travel of glass from the furnace into one end of the pool and from the other end of the pool back into the furnace, a bridge extending across the pool adjacent to the outlet end of the latter, a suction-gathering receptacle arranged to travel from the inlet end of the pool toward the outlet end of the pool and to gather a mold charge of molten glass therefrom, and means to cut the

tail of glass connecting the charge in the receptacle with the glass in the pool after the receptacle has passed over the bridge, whereby the chilled tail is dropped into the pool adjacent to its outlet.



3. In a machine for forming articles of glass, the combination of a rotary support, a suction-gathering parison mold and a finishing mold associated on said support, means for transferring the parisons from the parison mold to the finishing mold, and means for inverting and lowering the parison mold to gather a charge of molten glass therein, the gathering position of the parison mold being inside the circle of the path of movement of the finishing mold.

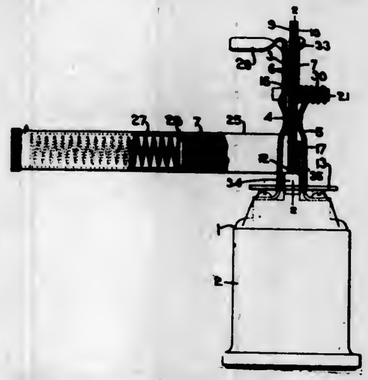
1,885,683. BRAKE WHEEL FOR AIRPLANES. MAURICE CHARLES, Courbevoie, France. Filed July 14, 1931, Serial No. 550,781, and in France July 21, 1930. 2 Claims. (Cl. 301—6.)



1. A wheel for airplanes comprising in combination, a hub, a rim, metallic spokes for connecting said hub to said rim, a metallic ring, independent of said spokes, located substantially in the plane of the wheel, a flange on the outer edge of said ring engaging the inner face of said rim and fixed thereto, another flange, of cylindrical shape, on the inner edge of said ring, adapted to receive a brake drum, and a plurality of ribs, extending radially between said flanges and integral therewith, for reinforcing said ring.

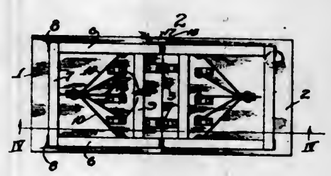
1,885,684. FILM SOCKET FILLER. CHARLES M. COLE, South Weymouth, Mass., assignor to Wheeler Reflector Company, Boston, Mass., a Corporation of Massachusetts. Filed Jan. 13, 1932. Serial No. 586,372. 6 Claims. (Cl. 29—84.)

1. A device for inserting insulating films between the bayonet blades of a socket receptacle, said device having a body adapted to be placed between the separated portions of said blades and provided with a delivery passage having its discharge end adjacent the portions of the blades between which the film is to be inserted, means



for supplying insulating films to said passage, and means to eject each film separately from the passage and introduce it between the blades.

1,885,685. FOLDABLE TABLE. WILLIAM C. COLLIGNON, Chicago, Ill. Filed Feb. 11, 1928. Serial No. 253,616. 2 Claims. (Cl. 45—116.)

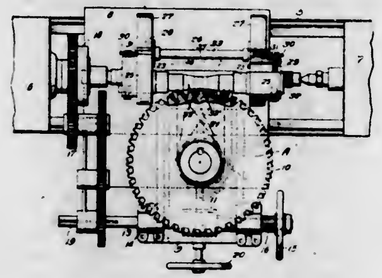


1. A foldable table comprising a table top of two halves in end to end relation when the table is opened for use, hinges on the underside of the table connecting the two halves providing oppositely directed inclined bracing members and opposed abutting surfaces at the center of the table, foldable supports at each end of the table, each support comprising a pair of spaced legs and a yoke connecting the upper ends of the legs, said yoke abutting the underside of the table when the table is in use, bracing means for the supports comprising a set of inclined members hinged on the underside of the table and converging to a common pivotal connection and another set of inclined members pivotally connected to the legs and converging to and connected to the pivotal point common to the first named set of inclined members, the two sets of inclined members being movable to lie in a common plane between the legs when the legs are folded, the two halves of the table being foldable to a position with the undersides of the halves in spaced opposed relation to each other, the pivot point of the central hinges being spaced from the table top substantially the thickness of the legs.

1,885,686. METHOD OF AND APPARATUS FOR CUTTING WORM GEARING. SAMUEL I. CONE, Norfolk, Va., assignor to Cone Worm Gearing Corporation, Norfolk, Va., a Corporation of Virginia. Filed May 2, 1927. Serial No. 188,214. 48 Claims. (Cl. 90—4.)

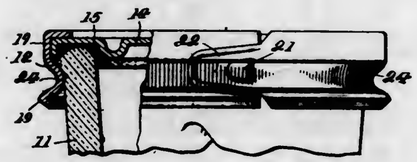
1. Apparatus for forming gearing, comprising, in combination, blank supporting means and forming means

rotatable on axes perpendicular to each other, means for changing their relative positions during rotation, means for driving said elements in accordance with any predetermined timed relationship, and means for establishing and/or maintaining throughout the forming operation a fixed distance between said axes.



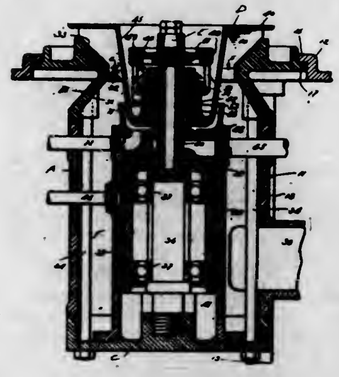
44. The method of producing worm wheels to cooperate with worms of the enveloping type, by operating with a hob having threads thinner in cross section than the corresponding worm threads and presenting cutting edges so arranged that when the opposed edges are extended in a plane, passing through the axis of said hob, the angle so formed differs from the corresponding angle on the worm, but nevertheless having the property in common with said worm that said edge projections when taken in a plane passing through the axis of the hob, are tangent to the same base circle, whereby finishing of the wheel teeth flanks is possible while maintaining the predetermined center distance of the gear set.

1,885,687. JAR CLOSURE. LINDSAY THORNE CRABBE, Chicago, Ill., assignor to Phoenix Metal Cap Co., Inc., Chicago, Ill., a Corporation of New York. Filed Aug. 7, 1930. Serial No. 473,652. 1 Claim. (Cl. 215—95.)



The combination of a tumbler having an outwardly projecting portion adjacent its upper end, a closure for said tumbler comprising a sealing disk, a sealing composition between the disk and the end of the tumbler wall, and a securing band overlying said sealing disk and provided with a depending skirt extending along the outer face of the tumbler, one end of said band having a releasing tongue and the other end having a locking lug passing through the tongue for joining the ends of the band, said skirt at the lower edge thereof having an outwardly projecting bead, and an annular inwardly projecting securing bead of uniform cross section extending all the way around said skirt and across said tongue and lug and bearing against said projection for holding the closure in tight sealing contact with the tumbler.

1,885,688. LIQUID FUEL BURNER. TRAYHARN DAVIS, Lomita, Calif., assignor of one-half to Julius H. Becker, San Francisco, Calif. Filed May 24, 1927. Serial No. 193,763. 2 Claims. (Cl. 158—77.)



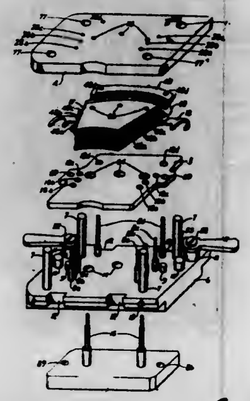
1. A burner of the character described including a body having a head closing one end, a post projecting into the body from the head, a spindle, a bearing rotatably mounting the spindle on the post, a cup carried by the spindle, a housing projecting from the head around the bearing, and a fuel supply conduit carried by the housing to extend around the spindle and into the cup.

1,885,689. CHECK VALVE FOR SMOKING ARTICLES. JOHN L. DORSCHEL, Kitchener, Ontario, Canada. Filed Jan. 12, 1931, Serial No. 508,269, and in Canada Feb. 20, 1930. 2 Claims. (Cl. 131—12.)



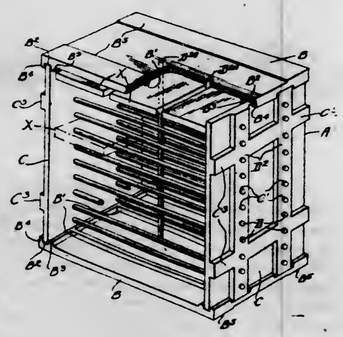
1. In a tobacco pipe, in combination a bowl provided with a stem, said stem being provided with a passageway opening from said bowl; a mouthpiece adapted to be coupled to said stem, and having a passageway therethrough from one end to the other portion of which is tapered, said passageway near the inner end of the mouthpiece enlarged to form a chamber of greater diameter than the diameter of said passageway in said mouthpiece, the balance of the passageway in said mouthpiece from said chamber having a diameter less than the diameter of said chamber thus forming shoulders; a conduit having a closed outer end and having apertures through which smoke passes, located in said stem and mouthpiece and spaced apart therefrom for the major portion of its length, the inner end of said conduit being located in the said tapered portion of the passageway through said mouthpiece, and having its inner end located in said tapered passageway formed at an angle less than a right angle so as to form a seat, and a check valve located in said chamber and adapted to co-act with said seat and said shoulders, for the purpose specified.

1,885,690. ASSEMBLING MACHINE AND JIG. FREDERICK W. DOYLE, Chicago, Ill., assignor, by mesne assignments, to Associated Electric Laboratories, Inc., Chicago, Ill., a Corporation of Delaware. Filed June 27, 1928. Serial No. 288,601. 18 Claims. (Cl. 29—84.)



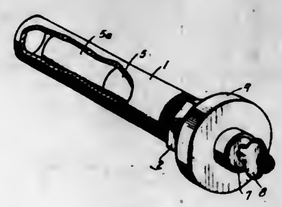
1. In combination, a jig for positioning parts of an assembly, and a two-way compressor, said compressor comprising means to compress the assembly when operated in one direction and means to move the assembly from the jig when operated in the other direction.

1,885,691. WARE SUPPORT. PHILLIP D'HUC DRESSLER, Cleveland, Ohio, assignor to New Castle Refractories Company, New Castle, Pa., a Corporation of Delaware. Filed Apr. 24, 1928. Serial No. 272,422. 10 Claims. (Cl. 25—153.)



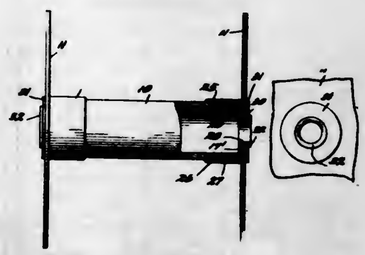
1. A light weight support for firing ceramic tile consisting of an open ended tube of refractory material which is rectangular in vertical cross section and is formed with vertical rows of openings in opposed side walls, each such opening in one side wall being in alignment with a corresponding opening in the opposed side wall, the remaining walls of said tube being similarly formed to permit either to serve as the supporting base for said support when the latter forms one of a stack of such supports, tile supporting bars extending across the interior of said support and each having its ends received in a corresponding pair of aligned openings in the opposed side walls, said holes being similarly spaced relative to said remaining walls whereby said support has the same tile capacity when either of said remaining walls is uppermost.

1,885,692. RECORD CONTAINER FOR MOTOR VEHICLES. IRA E. DUGAN, Ponca City, Okla. Filed Oct. 27, 1930. Serial No. 491,357. 5 Claims. (Cl. 40—19.)



1. A record container for automotive vehicles, comprising an armoring vessel externally threaded at one end, a threaded collar and lock nut for mounting the vessel in the vehicle, a container within the armoring vessel and a lock mounted thereon and having locking engagement with the armoring vessel.

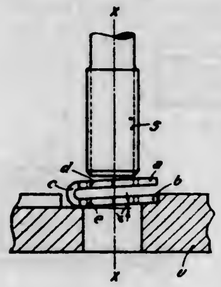
1,885,693. SPOOL. CHARLES K. DUNLAP, Hartsville, S. C., assignor to Sonoco Products Company, Hartsville, S. C., a Corporation of South Carolina. Filed Dec. 15, 1930. Serial No. 502,517. 7 Claims. (Cl. 242—119.)



6. In a bobbin, spool, or the like comprising a tubular barrel or body member and a centrally apertured end disc, a hollow annular fastening element for securing said end disc to said body member comprising a cylindrical portion receiving and enclosing an end of said body member and provided with an internal annular shoulder against which said end abuts, a narrowed hollow cylindrical portion extending outwardly from said shouldered portion, and an annular integral flange spun radially outwardly from said narrowed hollow cylindrical portion and overlapping the margin of the aperture in the end disc to retain said end disc.

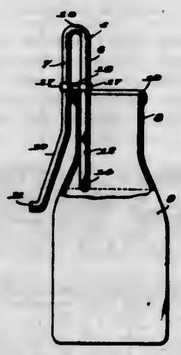
1,885,694. LOCK NUT. ADOLF DYCKERHOFF, Cologne-on-the-Rhine, Germany. Filed Apr. 20, 1932, Serial No. 606,483, and in Germany Apr. 22, 1931. 1 Claim. (Cl. 151—21.)

A lock-nut consisting of a U-shaped stirrup in which the threaded holes of the two U-limbs are displaced parallel to one another, characterised by the feature that the axis of the thread in the holes of the limbs is inclined towards



the lower edge of the web joining the two limbs so that when the nut is screwed up it first touches the workpiece or the supporting nut at the side nearer to the web.

1,885,695. SIPHON. RALPH D. EDWARDS, Osceola, Ind. Filed May 20, 1931. Serial No. 538,828. 1 Claim. (Cl. 137—20.)



A substantially U-shaped siphon formed from a length of tubing bent upon itself to provide a pair of communicating legs, the legs having a main body portion substantially in the same plane with one leg being shorter than the other, the shorter leg being adapted to be disposed within a container, the longer leg being located externally of the container, said shorter leg having a free end portion located at a right angle to the plane passing through the main body portions of the legs and an annular portion connecting the free end portion with the body portion, the free end portion and the angular portion providing means for priming the siphon when the free end portion and angular portion having been submerged in a liquid in the container and the main body portions of the legs have been moved to a downwardly inclined position exteriorly of the container.

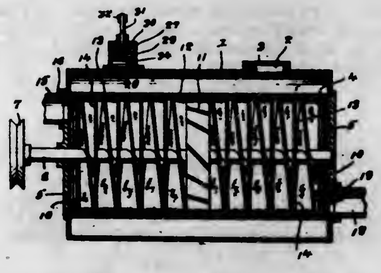
1,885,696. COMBINED PACKING AND EXPANSION RING. FRED ANTHONY EICHORN, Chattanooga, Tenn. Filed Jan. 8, 1931. Serial No. 507,412. 7 Claims. (Cl. 74—109.)

1. A packing assemblage comprising a transversely split ring of packing material to be seated in a piston groove, a transversely split expansion ring located inside of the packing ring to keep the latter pressed against the wall of a cylinder both while the packing ring remains intact and in the event of its breakage into sections, and separating means acting simultaneously against the confront-



ing ends of the split rings, augmenting the expansive function of the expanding ring and assisting in keeping the packing ring pressed against said wall.

1,885,697. VAPORIZER AND SUPERCHARGER FOR INTERNAL COMBUSTION ENGINES. LOUIS M. FABBRO, Cleveland, Ohio, assignor of forty-five per cent to Anna M. Fabbro, and forty per cent to E. C. Balshiser, Cleveland, Ohio, and fifteen per cent to Charles Di Lorenzio. Filed Oct. 11, 1929. Serial No. 399,029. 4 Claims. (Cl. 123—144.)

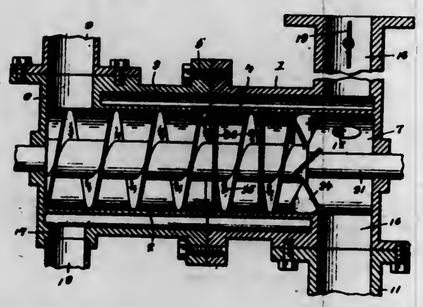


1. In combination with an internal combustion engine, including its carbureter and the inlet and exhaust manifolds, a tank attached to the engine and adapted to contain a liquid, said tank having a cylindrical bore, the ends of which are closed, a cylinder of foraminous material arranged in the bore, a shaft passing through the bore, means for supporting the cylinder from the shaft, a fan midway the ends of the shaft and connected with the shaft, a spiral connected with the shaft on each side of the fan and formed of foraminous material, said spirals also being connected with the cylinder, baffles of foraminous material connected with the shaft and cylinder and arranged between the convolutions of the spirals, means for rotating the shaft from a movable part of the engine, a pipe connecting the front end of the bore with the carbureter, a pipe connecting the rear end of the bore with the inlet manifold, pipes passing through the tank, a pipe connecting said pipes with the exhaust manifold, a discharge pipe connected with the other ends of the tank pipes, whereby the exhaust gases will pass through the tank pipes and heat the liquid therein and thus heat the explosive mixture passing through the device.

1,885,698. VAPORIZER AND SUPERCHARGER FOR INTERNAL COMBUSTION ENGINES. LOUIS M. FABBRO, Cleveland, Ohio, assignor of forty-five per cent to Anna M. Fabbro, and forty per cent to E. C. Balshiser, Cleveland, Ohio, and fifteen per cent to Charles Di Lorenzio. Filed Sept. 19, 1930. Serial No. 483,102. 4 Claims. (Cl. 48—180.)

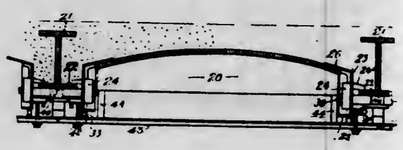
1. A mixing device for an explosive mixture comprising a casing, means for introducing an explosive mixture into one end of the bore of the casing, means for discharging

the mixture from the other end of the bore, a chamber surrounding the bore, means for passing a heating medium through the chamber to heat the mixture passing through the bore, a shaft passing through the bore, means for rotat-



ing the shaft, a fan carried by the shaft, a helical member carried by the shaft, means for connecting the bore to the atmosphere and an automatic valve controlling such connection.

1,885,699. METAL FORM HOLDER FOR CONCRETE WALL CONSTRUCTION. HERMAN L. FELDBLET, New York, N. Y. Filed Oct. 30, 1928. Serial No. 316,000. 6 Claims. (Cl. 25—1315.)



4. In a form structure for pouring concrete walls of required dimensions, a form-member comprising a pan shaped structure having a slot therein, toothed members in said pan adjacent said slot, said rib members having a head with a hook to support a spreader bar, a clamp having jaws extending from said pan, said clamp operating in said slot, a clamp block having teeth to engage the toothed members adjacent said slot, and means to protect said clamp from concrete when the wall is poured.

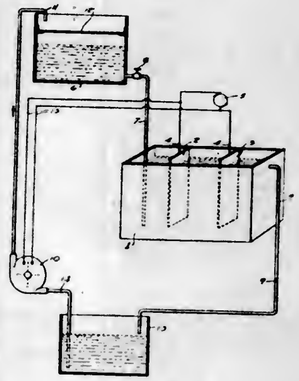
1,885,700. ELECTROPLATING AND PROCESS OF PRODUCING SAME. COLIN G. FINK, New York, N. Y. Filed Apr. 12, 1927, Serial No. 183,287. Renewed Dec. 7, 1931. 20 Claims. (Cl. 204—1.)

1. An electroplating bath comprising an aqueous solution formed by adding tungstic acid and an alkali metal salt to water in proportions producing a hydrogen-ion concentration in the resultant bath represented by a pH value of about 12.

1,885,701. TUNGSTEN PLATING AND METHOD OF PRODUCING SAME. COLIN G. FINK and FRANK L. JONES, New York, N. Y.; said Jones assignor to said Fink. Filed May 13, 1929. Serial No. 362,854. 10 Claims. (Cl. 204—1.)

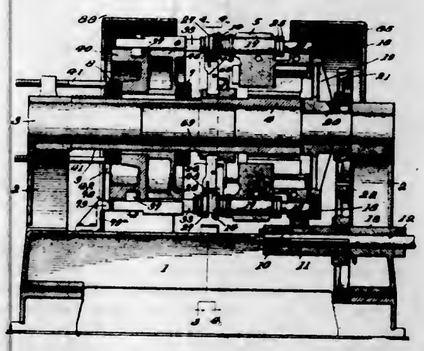
1. An electrolytic plating bath comprising an aqueous solution of tungstic acid and an alkali metal carbonate such as sodium carbonate, the hydrogen-ion concentration of which solution is represented by a pH number of about 12.5.

1,885,702. SUBSTANTIALLY PURE TUNGSTEN PLATING AND PROCESS FOR PRODUCING SAME. COLIN G. FINK, New York, N. Y. Filed Sept. 27, 1929. Serial No. 395,489. 13 Claims. (Cl. 204—1.)



1. An electrolytic bath adapted for use in producing substantially pure tungsten plating of any desired thickness, which bath comprises an aqueous solution of a tungstate with a trace of nickel dissolved therein.

1,885,703. MACHINE FOR FORMING CLOSURE UNITS FOR CONTAINERS. HENRY A. FINK, New York, N. Y., assignor to Continental Can Company, Inc., New York, N. Y., a Corporation of New York. Filed June 9, 1930. Serial No. 459,963. 6 Claims. (Cl. 113—1.)

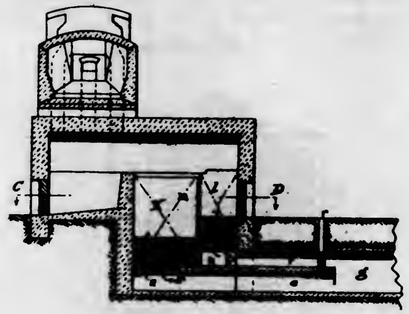


1. The combination of a rotating sleeve, turrets carried thereby, a series of chuck spindles carried by one of said turrets, means for rotating said chuck spindles, a series of reciprocating slide bars carried by the other turret, a rotating head carried by each bar, a yielding support attached to said rotating head, a crimping roll associated with each chuck, a support for the crimping roll, and a stationary cam cooperating with the support for the crimping roll for forcing said crimping roll into engagement with the rotating sealing ring.

1,885,704. REGENERATOR OF SIEMENS-MARTIN FURNACES. FERDINANDO FIORELLI, Terni, Italy, assignor to Terni Societa per l'Industria e l'Elettricita, Terni, Italy. Filed Jan. 20, 1930, Serial No. 422,136, and in Italy Jan. 25, 1929. 3 Claims. (Cl. 263—15.)

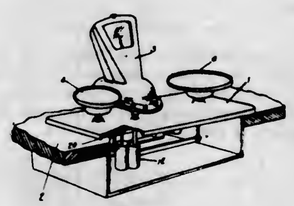
1. A heat regenerator for a regenerative melting furnace, the volumetric size, and the heat absorption capacity

of which is controllable to accommodate the volume of the gaseous products of combustion passing through the melting furnace during both its melting and refining periods of operation, comprising a regenerating unit having a large and a small heating chamber therein adjacent to each other, each chamber having a mass of checkerwork brick therein, the total volumetric and heat absorption capacity of the two chambers and checkerwork being



adapted to meet the major requirements of the melting furnace during its melting period of operation, and the capacity of the larger chamber and checkerwork being adapted to meet the lesser requirements of the melting furnace during its refining period of operation, and means for temporarily excluding the flow of gaseous products of combustion through the smaller chamber of the heat regenerator during the refining period, the volumetric size of said chambers being approximately 2 to 1.

1,885,705. WEIGHING SCALE. THOMAS B. FLANAGAN, Columbus, Ohio, assignor to The Exact Weight Scale Company, Columbus, Ohio, a Corporation of Ohio. Filed June 5, 1928. Serial No. 283,020. Renewed Mar. 14, 1932. 12 Claims. (Cl. 265—54.)



1. In a weighing scale, a plate, weighing mechanism suspended from the under surface of said plate, weight pans and weight indicating mechanism disposed above said plate and an inclined housing for said weight indicating mechanism.

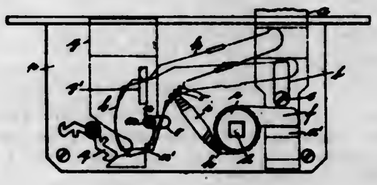
1,885,706. POLISHING BRUSH. CLINTON E. FROST, Youngstown, Ohio, assignor, by mesne assignments, to The Pittsburgh Plate Glass Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Oct. 24, 1928. Serial No. 314,708. 2 Claims. (Cl. 15—179.)

1. In a polishing brush, a body composed of looped wires and a sheet metal disc secured to each side thereof, one of said discs providing a hub therefor, one disc being provided with a central opening and the other disc being provided with a central opening of lesser diameter for the reception of a mandrel of a particular diameter, the marginal wall of said opening in the disc having the lesser



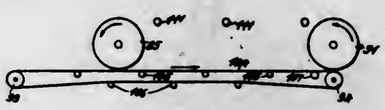
opening being offset axially to position the edge of said lesser opening substantially in the central plane of said brush and axially spaced from the other disc.

1,885,707. DOORLOCK WITH MULTIPLE ACTION SPRING. MAXIMILIAN FÜBER, Lubeck, Germany, assignor to Wilhelm Krakow, Schlutup, near Lubeck, Germany. Filed Apr. 8, 1931, Serial No. 528,687, and in Germany Apr. 30, 1930. 3 Claims. (Cl. 70—29.)



1. A door lock including a latch bolt, a roll back for the latch bolt, a bolt tumbler having an extension forming a lever engaging the latch bolt, a locking bolt, and a locking pin for the locking bolt carried by the bolt tumbler and guided for sliding movement into and out of locking engagement with the locking bolt, said pin forming a pivot for the bolt tumbler and lever.

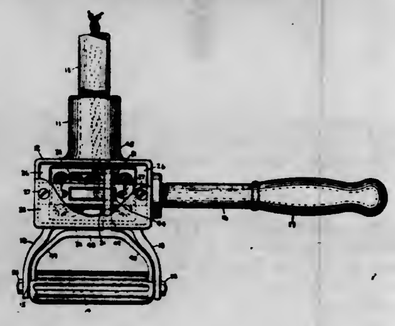
1,885,708. MACHINE FOR MAKING BELTS. CHARLES C. GATES, Denver, Colo. Filed Dec. 4, 1931. Serial No. 579,062. 5 Claims. (Cl. 154—3.)



5. A belt making machine comprising, in combination, an elongated frame having two parallel supporting rails extending longitudinally thereof, a carriage mounted on the rails and movable therealong, means for interconnecting the carriage and the rails at predetermined points, a shaft rotatably mounted on the carriage and projecting from one side thereof, a drum secured to the shaft, a shaft

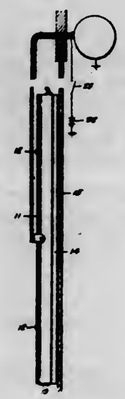
mounted on the frame near one end thereof, a drum carried by the shaft, the two shafts having their axes parallel, means varying the distance between the shafts while the carriage remains stationary, means for rotating the two drums simultaneously in the same direction and at the same peripheral speed, a plurality of spaced freely rotatable rollers located below a plane tangnet to the lower surfaces of the drums, the upper surfaces of the rollers being tangent to a plane parallel to the first mentioned plane, a belt conveyor enclosing the rollers and means for moving the conveyor belt at a speed substantially equal to the peripheral speed of the drums.

1,885,709. ELECTRIC SWITCH. ARTHUR C. GAYNOR, Stratford, Conn. Filed Nov. 25, 1930. Serial No. 498,004. 4 Claims. (Cl. 200—157.)



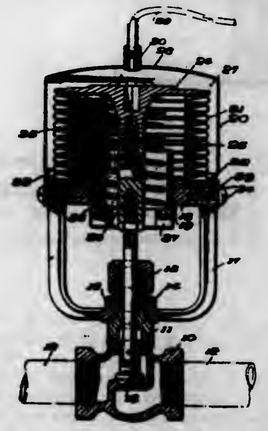
1. In combination with a tool handle, a hand-grip mounted for rotary movement; an electric switch; and means interconnecting the hand-grip and electric switch for actuation either one by the other.

1,885,710. WINDSHIELD WIPER. CHALMUS CHARLES GENTRY, Bluefield, W. Va., and CARLYLE W. GENTRY, Pocahontas, Va. Filed Oct. 10, 1930. Serial No. 487,844. 1 Claim. (Cl. 15—255.)



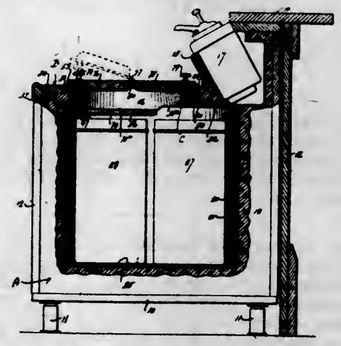
A windshield wiper comprising elongated inner and outer metallic plates bent into substantially U-shape in cross section, a flexible wiping strip secured between said plates and having the longitudinal edges thereof projecting beyond the longitudinal edges of the plates, an insulating tube arranged within the inner plate and extending the full length thereof, an electrical heating coil in said tube, an insulated block mounted in one end of the tube and supporting one end of the coil, an arm formed on the inner plate and engaging the other end of the tube and having the other end of the coil secured thereto, and tongues struck out from the inner plate and bent into engagement with the tube leaving the major portion of the inner plate to co-operate with the outer plate to provide backings for the flexible wiping strip.

1,885,711. TEMPERATURE OR PRESSURE REGULATOR. JEAN V. GIESLER, Knoxville, Tenn., assignor to The Fulton Syphon Company, Knoxville, Tenn., a Corporation of Delaware. Filed Apr. 1, 1929. Serial No. 351,795. 6 Claims. (Cl. 236—99.)



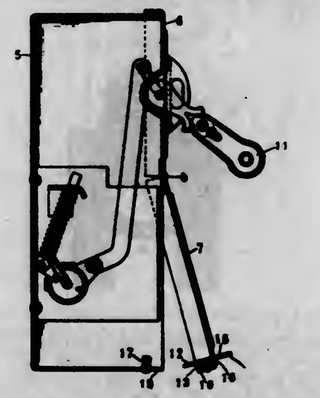
1. In a device of the character described, in combination with means to be controlled, an expansible and collapsible container having a rigid cup-like outer wall and a flexible corrugated inner wall, said cup-like wall also constituting the outer wall of the device, a movable end wall for said corrugated wall, a spring opposing movement of said movable end wall and substantially housed within said flexible wall; means connecting said movable end wall with said means to be controlled, and an elongated hollow member embracing said spring and projecting within said flexible wall for guiding and adjusting said spring, said container being adapted to be connected with a source of pressure.

1,885,712. INSULATING COLLAR FOR ICE CREAM CABINETS. WILLIAM GREENBERG, Philadelphia, Pa., assignor to Fischman & Sons, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Nov. 26, 1929. Serial No. 409,922. 5 Claims. (Cl. 220—14.)



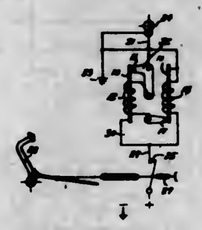
1. As an article of manufacture an elongated insulation collar for use in defining an access opening to the compartment of a soda fountain or cooler cabinet, of band-like insulation material having an elongated opening therethrough, the collar being flared divergently downwardly to increase the size of the opening from the top of the collar towards the bottom thereof.

1,885,713. ELECTRIC SWITCH BOX LATCH AND HANDLE. HERMAN J. HAMMERLY, New Britain, Conn., assignor to The Trumbull Electric Manufacturing Company, Plainville, Conn., a Corporation of Connecticut. Filed Oct. 10, 1931. Serial No. 568,024. 2 Claims. (Cl. 292—128.)



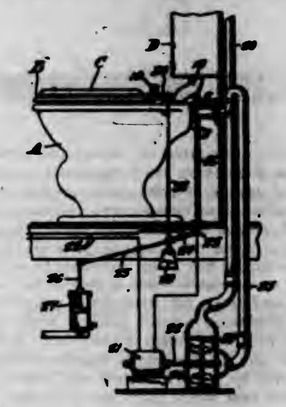
1. A switch box having a door hinged thereto, said door having a flange overlapping outside the edges of the box, a latch pivoted to the flange of the door, an inwardly projecting rounded stud carried by a wall of the box adjacent one edge thereof for engagement by the latch when the door is closed, and a spring for automatically forcing said latch into latching engagement with said stud, said latch having an externally projecting operating fingerpiece, said flange adjacent said latch providing a finger-hold adjacent the finger-piece of said latch.

1,885,714. SIGNAL FOR VEHICLES. LEON N. HAMPTON, New York, N. Y. Filed Jan. 7, 1928. Serial No. 245,069. 6 Claims. (Cl. 177—339.)



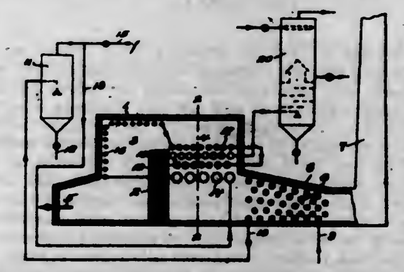
1. A vehicle signal comprising in combination a main switch, a heat-responsive bar, a contact adapted to be engaged by said bar, a lamp, said main switch, heat-responsive bar, contact and lamp being connected in series, a heater coil for said heat-responsive bar for deflecting the bar out of engagement with said contact, a second heat-responsive bar, a contact adapted to be engaged thereby, said main switch, the first-mentioned heat responsive bar, the contact engaged thereby, said heater coil, the contact engaged by the second heat responsive bar and the second bar being connected in series with each other and in shunt with said lamp, a heater coil for the second heat-responsive bar for deflecting the second bar out of contact with its co-operating contact, said second heater coil being connected in series with said main switch and in shunt with said heat-responsive bar switches and said lamp, deflection of the second-mentioned heat-responsive bar being slower than deflection of the first-mentioned bar, so that during one period of operation, with the main switch closed, the circuit of said lamp will be opened and closed intermittently and during another period said circuit will be maintained closed.

1,885,715. VENTILATING LAVATORY BOWL. LOUIS HANSON, Spokane, Wash. Filed Sept. 25, 1931. Serial No. 565,182. 2 Claims. (Cl. 4—213.)



2. The combination with a closet bowl having a vent and water supply chambers, of a movable seat for said bowl, a lead from said vent, a fluid control check, lever connections between the check and seat, a motor circuit control switch associated with the connections, a fan within the lead and operated by the motor on the closing of its circuit by the switch, and a resistance weight carried by the connections between the check and seat.

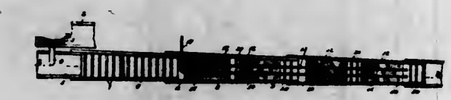
1,885,716. OIL CONVERTER. AUDLEY E. HARNSBERGER, Chicago, Ill., assignor to Gyro Process Company, Detroit, Mich., a Corporation of Michigan. Filed Jan. 25, 1930. Serial No. 423,520. 2 Claims. (Cl. 196—110.)



1. In a converter for cracking hydrocarbons in the vapor phase, a setting formed with an internal bridge wall which divides the setting into combustion and tube chambers, the latter being in relative open communication over the top of the bridge wall, burner mechanism arranged in said combustion chamber, an outlet duct in communication with the lower part of the tube chamber, a bank of drying tubes arranged in the lower part of the tube chamber, means for supplying vaporized oils to said drying tubes, a bank of cracking tubes arranged in said combustion chamber, said cracking tubes possessing a cross-sectional area materially less than that of the drying tubes, means for passing oil vapor from the drying tubes to the

cracking tubes, and a second bank of cracking tubes arranged in said tube chamber and through which the vaporized oils are passed following their passage through said first named cracking tubes, the cracking tubes in said tube chamber being individually of greater cross-sectional area than the individual cracking tubes in the combustion chamber but of less cross-sectional area than the individual drying tubes.

1,885,717. MAGNETIC SEPARATOR. FRED HARRIS, Anchorage, Territory of Alaska. Filed Oct. 22, 1930. Serial No. 490,508. 2 Claims. (Cl. 209—40.)



1. A magnetic separator for separating gold and magnetic material from black sand comprising a flume having a plurality of groups of riffles, said groups being spaced apart, a metallic plate forming the bottom of said flume between said groups of riffles, bars upstanding from said plate, said bars being trianguiar in cross section and having one edge facing the flume entrance to divide the oncoming fluid and produce eddies, means for magnetizing said plates and bars for attracting magnetic material thereto and producing a rough surface, whereby sand and gold passing over said rough surface will be agitated so that the gold may be more easily separated from the sand and find its way by gravity against said riffles, and means extending over said metal plate and the riffles for directing water transversely of the flume near the bottom thereof for causing the black sand to be agitated as it moves downwardly through the flume.

1,885,718. APPARATUS FOR PRODUCING CREPE RUBBER SPRING-HEELED SHOE BOTTOMS. BENJAMIN F. HARTWELL, Winchester, Mass. Filed Jan. 29, 1929. Serial No. 335,951. 1 Claim. (Cl. 12—1.)



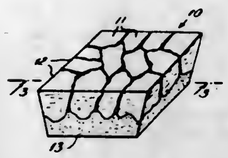
Apparatus for use in preparing crepe rubber spring-heeled shoe bottoms composed of separately formed soles and heels, said apparatus comprising an endless conveyor belt, pulleys supporting said belt and providing it with a substantially horizontal upwardly facing upper stretch which is elongated to provide a receiving portion whereon the soles and heels may be separately deposited, an assembling portion whereon the soles and heels may be assembled, and a delivering portion, the width of the belt being such that soles and heels treated with a solvent to gelatinize surfaces thereof, may be separately deposited on the receiving portion, with their gelatinized surfaces exposed, means for directing an air blast against the upper stretch at a location between the receiving and assembling portions, to evaporate excess solvent and condition the gelatinized surfaces for quick adhesion to each other on the assembling portion, and regulable means for driving one of said pulleys to progressively move the belt at different speeds, according to the hygrometric condition of the surrounding air, and thereby cause a relatively slow speed and a relatively long exposure of the gelatinized surfaces to the air blast when the humidity of the air is relatively high, and a faster speed and a shorter exposure of said surfaces to the air blast when the humidity of the air is relatively low, the top surface of the upper stretch being unobstructed to permit manipulation of the work thereon, longitudinal edges of the receiving and assembling portions being unobstructed, to provide stations at opposite sides of the receiving portion for operators positioned to separately deposit the soles and heels on said portion, and a station for an assembling operator positioned to assemble said soles and heels on the assembling portion.

1,885,719. COMBUSTION CHAMBER FOR INTERNAL COMBUSTION ENGINES. VICTOR HEIDELBERG, Bensberg, near Cologne, Germany, assignor to Motorenfabrik Deutz, Aktiengesellschaft, Cologne-Deutz, Germany. Filed Apr. 23, 1929. Serial No. 357,461. 1 Claim. (Cl. 123—32.)



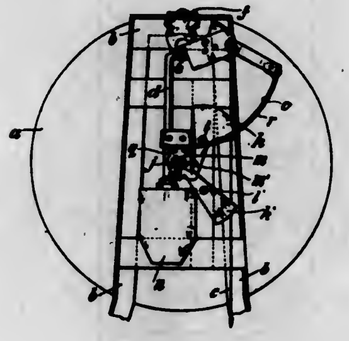
An internal combustion engine having, in combination, a cylinder, a piston therein, the upper face of the latter formed to provide a deep hemispherical recess the surface of which is coaxial with said piston, a cylinder head the under surface of which coacts with the surface of said recess to form a substantially smooth-walled chamber symmetrical with the axis of said cylinder, means for injecting fuel oil under high pressure into said cylinder including a fuel injection nozzle coaxial with said piston, the center of curvature of the surface of said hemispherical recess being substantially at the mouth of said nozzle, an air inlet valve for injecting air into said cylinder longitudinally thereof to avoid whirling, said means for injecting fuel oil being timed to inject said oil into said cylinder after said air inlet valve has closed and the air in said cylinder is highly compressed and quiescent, whereby said fuel oil is injected into a hot core of quiescent air, and the fuel rays are caused to travel through said air without deflection so as to travel equal distances toward the walls of said recess.

1,885,720. COMPOSITE PAVING BLOCK. LOUIS F. HEWETT, New York, N. Y., assignor to Hilda E. Hewett, Brooklyn, N. Y. Filed Oct. 29, 1929. Serial No. 403,223. 4 Claims. (Cl. 94—11.)



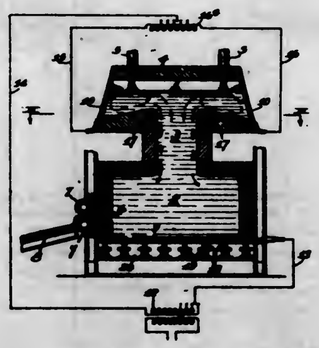
1. A composite paving block comprising a wearing surface composed for the most part of granite pieces of substantial size firmly imbedded in a concrete matrix, said granite pieces being irregular in size and shape and having wearing surfaces that are substantially flat, said granite pieces forming the corners and the edges of the wearing surface side of the block in order to strengthen the same, the ratio of the volume of granite wearing surface to the concrete matrix being substantially one to one.

1,885,721. SCALE BEARING. KARL VIKTOR HIEBER, Graz, Austria. Filed Dec. 30, 1929, Serial No. 417,526, and in Austria Apr. 15, 1929. 2 Claims. (Cl. 308—37.)



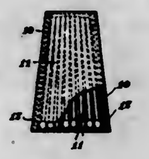
1. Shaft-bearing particularly for weighing scales comprising a frame, a shaft arranged in the same, a rocking arm arranged above said shaft, a rocking arm arranged below the latter, the said rocking arms crossing each other, a concave shaft-bearing face on one rocking arm, and a convex shaft-bearing face on the other rocking arm.

1,885,722. PROCESS OF MELTING GLASS BY ELECTRICITY. HARRY F. HITNER, Oakmont, Pa., assignor to Pittsburgh Plate Glass Company, a Corporation of Pennsylvania. Filed Sept. 27, 1930. Serial No. 484,794. 7 Claims. (Cl. 13—6.)



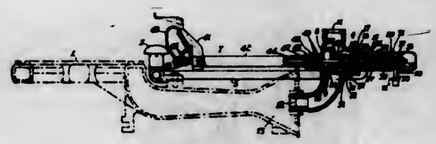
1. A process of melting glass which consists in maintaining a body of molten glass of substantial depth, causing a flow of electric current vertically through the body having its maximum density centrally of said body, so as to produce a boiling action in the glass with an upward flow thereof centrally of the body and a downward flow outward from the central portion, supplying batch to the upper end of the body, and withdrawing glass from the lower end thereof.

1,885,723. MATCH PACKAGE. JOHN W. HOOLEY, Larchmont, N. Y. Filed Aug. 24, 1931. Serial No. 559,013. 4 Claims. (Cl. 206—20.)



1. A box comprising a tray and a tapered shell enclosing the tray, one end of the tray substantially fitting the larger end of the shell, the taper of the shell being such as to prevent drawing the tray entirely through the smaller end of the shell.

1,885,724. AUTOMATIC CUT-OFF VALVE. ERNEST J. HORTON, Pittsburgh, Pa., assignor to Ruud Manufacturing Company, a Corporation of New Jersey. Filed Feb. 17, 1932. Serial No. 593,469. 6 Claims. (Cl. 158—117.2.)

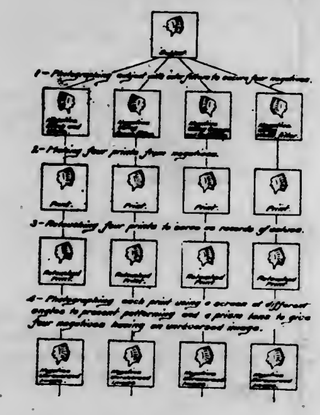


1. In combination with a pilot burner and a main burner, of a valve disposed to control the flow of fuel to the pilot burner, a valve disposed to control the flow of fuel to the main burner, means for manually opening said pilot burner valve and holding said valve open, and means responsive to the heat developed by said pilot burner for opening said main burner valve and releasing said pilot valve holding means to a position in which said valve may close upon the extinguishment of the pilot burner.

1,885,725. METHOD FOR MAKING MULTICOLOR PRINTING PLATES. GERALD S. HOWLAND, Brookline, Mass. Filed Oct. 8, 1929. Serial No. 398,275. 2 Claims. (Cl. 95—5.2.)

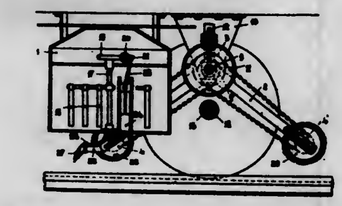
1. The method of making multicolor printing plates for reproduction in color consisting in making a series of photographic negatives, one in black and white and the others with color filters, said negatives corresponding in number to the number of plates desired, preparing a print from each of said negatives, retouching said prints to bring out in black and white the color values of the respective colors in the subject, then preparing photographic negatives of said series of prints, using a suitable half-tone screen and with a prism lens for secur-

ing upon said negatives the images of said prints in unreversed position, said prints being arranged at different angles when photographed to avoid patterning, then



printing from said negatives upon sensitized plates suitable for etching and finally etching said plates to obtain the respective color values shown in said retouched prints.

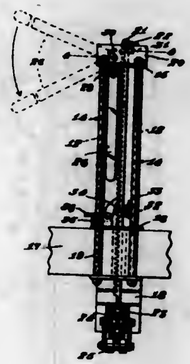
1,885,726. RAIL CLEANING AND GREASING APPARATUS. GIOACHINO BENVENUTO ISABELLA, Turin, Italy. Filed Aug. 18, 1931, Serial No. 557,852, and in Italy Aug. 21, 1930. 11 Claims. (Cl. 184—3.)



1. A rail cleaning and greasing apparatus for tram lines comprising, in combination with a tramcar, two frames loosely mounted on a cross shaft, bearings for said shaft movably mounted on brackets secured to the car body, friction wheels keyed on said shaft, cooperating friction wheels keyed on a car axle, means for simultaneously displacing said bearings to bring the friction wheels of said shaft into engagement with the friction wheels on the car axle in order to transmit rotating motion to said shaft, a greasing device at one end of each frame, a rail cleaning device at the other end of each frame and means to transmit rotating motion from said shaft to said cleaning and greasing devices.

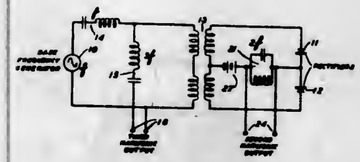
1,885,727. HAND BRAKE FOR RAILROAD CARS. EDGAR B. KNEBLY, Mammoth, W. Va. Filed Dec. 9, 1931. Serial No. 579,928. 1 Claim. (Cl. 74—54.)

A brake actuating device comprising spaced standards having means for anchoring them to the bolster of a car, a cap plate secured to the standards at their upper ends and having a U-shaped web portion, a bar operatively connected with the brake beam and extended through into the U-shaped portion of the cap plate, a roller spanning and carried by said U-shaped portion to constitute a bearing for the upper end of the bar, a similar roller



supported between adjacent standards adjacent the bolster, and an actuating lever operatively engaging the bar on the opposite edge from that which engages said roller, said lever having a pivotal mounting in said cap plate.

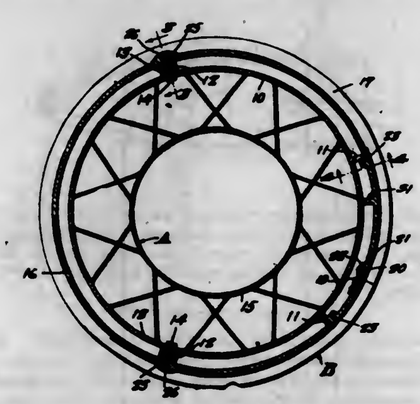
1,885,728. HARMONIC GENERATING AND SELECTING SYSTEM. CLYDE R. KEITH, Aldwych, London, England, assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed June 19, 1930. Serial No. 462,169. 3 Claims. (Cl. 172—281.)



1. In a system of harmonic generation, a source of electric current of base frequency, a transformer having a primary winding and a divided secondary winding, a secondary circuit including a pair of rectifying elements serially connected with the secondary winding, the conductive directions of the rectifying elements being mutually opposed, a supply circuit tuned to the base frequency and adapted to connect the source to the primary winding of the transformer, a load circuit tuned to an odd harmonic of the base frequency and bridged across said primary winding, and a second load circuit tuned to an even harmonic of the base frequency and connected between the dividing point of the said secondary winding and a point in the secondary circuit between said rectifying elements.

1,885,729. WHEEL CONSTRUCTION. FRED KLENTZER, La Fayette, Ind. Filed Dec. 11, 1931. Serial No. 580,458. 1 Claim. (Cl. 301—28.)

The combination of a channeled felly, a rim removably carried thereby and having threaded sockets, tubular projections at intervals inside the channel, said felly having openings registering with the projections, headed bolts removably received in the projections through the openings in the felly and adapted for detachable engagement in



the sockets in the rim, and cooperative lugs distributed about the felly and rim to properly locate the rim with the sockets in alignment with the openings in the felly whereby the bolts in said felly may be detachably engaged in the sockets in the rim.

1,885,730. EXTENSION HANDLE FOR UTENSILS, SUCH AS FLY SWATTERS AND THE LIKE. FRANZ K. KRAG, Chicago, and JOHN VICTOR NELSON, Maywood, Ill., assignors to U. S. Manufacturing Corporation, Decatur, Ill., a Corporation of Illinois. Filed Nov. 2, 1928. Serial No. 316,668. 5 Claims. (Cl. 43—137.)



1. An extension handle construction including a main handle part formed of a tube having an aperture formed in one side thereof near the open end thereof, an extension handle member slidably mounted in said tube composed of wire and the part fitting within the tube including a pair of strands, one of said strands being provided with a positive stop element to engage said aperture to limit the extension movement of the parts relative to each other.

1,885,731. PLASTICIZING HYDRAULIC CEMENT. CHARLES E. KRAUS, Brooklyn, N. Y., assignor to Sialco, Incorporated, a Corporation of New York. Filed Feb. 23, 1928, Serial No. 620,830. Renewed Dec. 19, 1930. 12 Claims. (Cl. 106—25.)

1. A reagent for cements and plasters, consisting of flocculated bentonite in an alkaline solution.

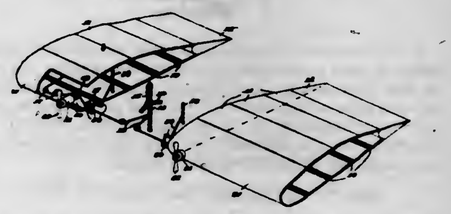
1,885,732. RAISING AND TRAVERSING MECHANISM FOR SUSPENDED STREET LAMPS. FRITZ KROHN, Essen-Ruhr, Germany. Filed Apr. 14, 1931, Serial No. 530,040, and in Germany Apr. 17, 1930. 6 Claims. (Cl. 240—63.)

1. In a winding device for suspended street lamps: a lamp trolley adapted to roll on a suspension rope, a guide rope pulley fixed to the suspension rope; a pulley mounted in the said lamp trolley; an endless cable to actuate the said pulley and running about the guide rope pulley; a



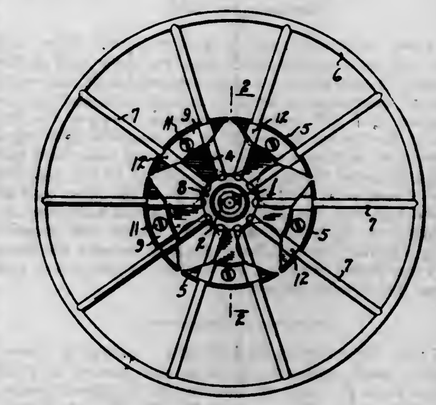
lamp winch arranged in the trolley and rigidly connected to the said pulley; and means for locking the endless cable to the said trolley.

1,885,733. SHUTTER WING FOR AIRSHIPS. FREDERIC CHARLES KRUMMEL, Brightwaters, N. Y. Filed Dec. 3, 1930. Serial No. 499,767. 12 Claims. (Cl. 244—12.)



1. An airship wing having a shutter providing a part of its upper surface, said shutter being movable from a position in which the passage of air through the wing from beneath the shutter to above the shutter is prevented to a position in which air may pass through the wing, and means to move the shutter periodically from one position to the other.

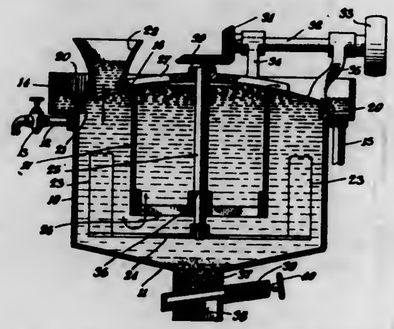
1,885,734. RIBBON REEL. LAURENCE S. LACHMAN, Forest Hills, and EDWARD FULDA, New York, N. Y. Filed Sept. 19, 1929. Serial No. 393,611. 6 Claims. (Cl. 242—70.)



1. A reel of the type described consisting of a hollow central spindle, a molded central drum secured to said

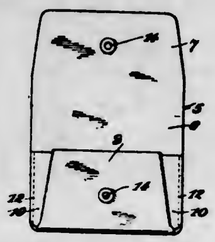
spindle and having an interrupted cylindrical surface, side frame members, and means for securing the side frames to the molded drum.

1,885,735. CENTRIPETAL SEPARATOR. WILLIAM C. LAUGHLIN, Glendale, Calif., assignor to The L. A. B. Company, New York, N. Y., a Corporation of New York. Filed June 16, 1930. Serial No. 461,880. 5 Claims. (Cl. 209—211.)



1. The process of cleaning a suspension which comprises applying said suspension to a tank and causing the same to flow downwardly and thence upwardly in said tank, causing slow rotary movement of said suspension whereby the heavy particles are discharged centrally thereof, and removing the floating particles from the top of said suspension prior to said downward passage.

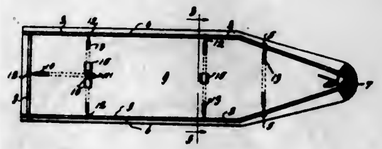
1,885,736. COIN PURSE. CHARLES L'ENFANT, New York, N. Y. Filed Nov. 13, 1929. Serial No. 406,766. 1 Claim. (Cl. 150—37.)



A purse comprising inner and outer pocket walls, said inner wall being of less width than the outer wall at the bottom of the pocket and flexibly connected with said outer wall and decreasing in width from said connected end to its other free end, relatively foldable closures for the sides of the pocket connected to the opposite side edges of said inner wall and to the edges of said outer wall and expansible under inward pressure applied to the opposite edges of said outer wall to widely space the inner wall at its free end from the outer wall and afford maximum accessibility to the pocket, and said foldable side closures having relatively movable parts disposed between the inner and outer pocket walls at the bottom of the pocket and closing the corners thereof.

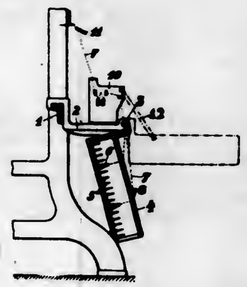
1,885,737. IRONING TABLE COVER. GEORGE W. LEWIS, Berlin, Mass., assignor, by mesne assignments, to Fold-Well Table Co. Inc., a Corporation of Massachusetts. Filed Oct. 21, 1931. Serial No. 570,169. 2 Claims. (Cl. 68—10.)

1. A cloth cover for conventional ironing boards having in combination turned over edges sewed to the body of the cover to form tubular pockets, a flexible wooden rod of small diameter in the pocket at the rear edge of the cover and a plurality of spaced and flexible wooden rods of small diameter in the pocket along each side edge of the cover with the cover left more flexible at the edges between the



ends of said rods, the ends of the rod at the rear edge being spaced slightly from the ends of the adjacent rods along the side edges, whereby the cover may be drawn smoothly over an ironing board by pulling said rods inwardly.

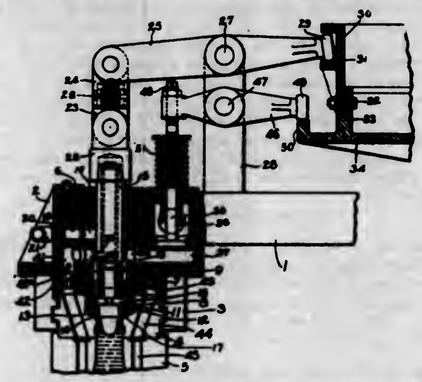
1,885,738. STRAIGHT KNITTING MACHINE. KARL RICHARD LIEBERKNECHT, Oberlungwitz, Germany, assignor to Karl Lieberknecht, G. m. b. H., Oberlungwitz, Germany, a Corporation of Germany. Filed Aug. 21, 1931, Serial No. 558,563, and in Germany Aug. 26, 1930. 4 Claims. (Cl. 66—125.)



4. A straight knitting machine having jacquard apparatus including a plurality of jacquard bobbins, a frame and a bobbin holder pivotally mounted on said frame, the tops of said bobbins being carried below the pivotal axis of the holder when the latter is horizontal, in combination with a guide located coaxial with the pivotal axis of the holder so as to guide the bobbin yarns through the pivotal axis of the holder at all times without any change in tension of the bobbin yarns.

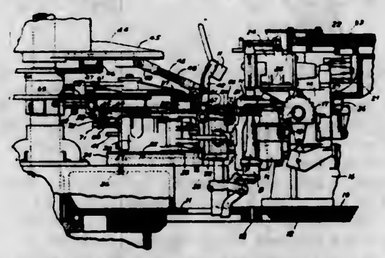
1,885,739. APPARATUS FOR FABRICATING GLASSWARE. EDWARD H. LORENZ, West Hartford, Conn., assignor to Hartford-Empire Company, Hartford, Conn., a Corporation of Delaware. Filed Sept. 18, 1929. Serial No. 393,406. 9 Claims. (Cl. 49—5.)

8. In glassware fabricating apparatus, an open ended glass gathering receptacle adapted to be moved to and from a glass gathering position at the surface of a pool of molten glass, means providing vertically spaced passages respectively adapted for connection with a source of suction and a source of preliminary blowing pressure and communcating with the interior of the gathering receptacle at different levels, a neck pin movable axially in the upper part of said gathering receptacle from a retracted relatively raised position to a downwardly projected lower position, said neck pin being adapted when in its retracted position to open communication between both of said passages and the interior of the gathering receptacle and adapted when in its downwardly projected position to shut off communication between the passage for the preliminary blowing pressure and the interior of the gathering receptacle and to restrict communication between the passage for the suction and the interior of the gathering receptacle, and cam actuated means for raising and lowering said neck



pin independently of said gathering receptacle and in timed relation with the movement of said gathering receptacle to and from its glass gathering position at the surface of said pool.

1,885,740. PARISON TRANSFER MECHANISM. EDWARD H. LORENZ, West Hartford, Conn., assignor to Hartford-Empire Company, Hartford, Conn., a Corporation of Delaware. Filed Oct. 29, 1931. Serial No. 571,788. 3 Claims. (Cl. 49—9.)

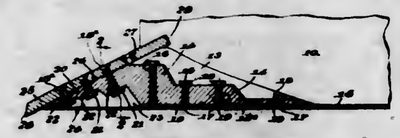


2. A glassware forming machine comprising a parison mold table, a parison forming unit thereon, a finishing mold table, a finishing mold thereon, means for continuously rotating said tables about eccentric vertical axes so that the parison forming unit and a parison therein and the finishing mold arrive simultaneously on the line of centers of said tables in a transfer zone, a pair of recessed tongs on the finishing mold table, means for at least partially exposing the parison in the parison forming unit as said unit moves toward said line of centers, means for closing the tongs about the parison substantially on said line of centers, means for closing the finishing mold about the parison when supported by said tongs, means for opening the tongs to release the parison in the finishing mold, and means for supporting said tongs with the center of the recesses thereof in alignment with the axial center line of the finishing mold cavity during the closing and opening movements of said tongs.

1,885,741. POWER SHOVEL. SIMPSON LUTES, Louisville, Ky. Filed Oct. 7, 1931. Serial No. 567,488. 1 Claim. (Cl. 37—142.)

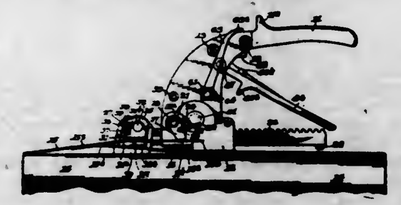
In a power shovel, a scoop, a dipper tooth having a body which is triangular in shape thereby providing three faces, one face forming the bottom being flat and having a portion adapted to be secured to the inner face of the bottom of the scoop, the remaining portion of the flat face projecting beyond the outer edge of the scoop and having

a groove formed therein, the bottom wall of the groove being stepped, the last-mentioned portion being provided with transverse passages to receive securing means for removably connecting a bit to another face which is inclined inwardly from the outer free end of the projecting end of



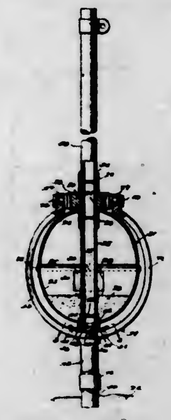
the bottom face, the remaining face being inclined downwardly from the inner and second-mentioned face and provided with a groove, the bottom wall of said groove being stepped, the portion of the body between the first and last-mentioned faces having passages to receive securing means for connecting the body to the bottom of the scoop.

1,885,742. STRAP STRETCHING DEVICE. CHESTER M. MACCHESNEY, RALPH H. NORTON, and JOHN EKERN OTT, Chicago, Ill., assignors to Acme Steel Company, Chicago, Ill., a Corporation of Illinois. Filed May 10, 1928. Serial No. 276,659. 12 Claims. (Cl. 254—66.)



1. The combination in a strap stretching device, of a pair of relatively movable members, gripping members carried by each of said first named members and constructed to grip the ends of a flat metal strap with said ends overlapping one above the other, and means for moving said first named members away from each other for drawing said strap taut around a package and maintaining said overlapping portions in taut condition.

1,885,743. POLE OR MAST CONSTRUCTION. GEORGE M. MAGRUDER, Blackville, S. C. Filed Mar 26, 1932. Serial No. 601,437. 6 Claims. (Cl. 116—173.)



1. A mast construction comprising a support, a mast having the lower end swingably mounted in the support, a

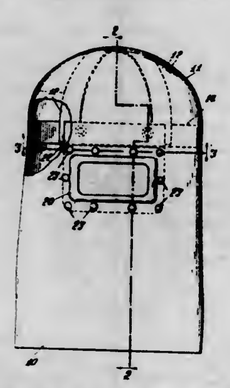
weighted member carried by the mast below the mounting, a tubular member connected with the mast and extending through the weighted member and means for removably securing the tubular member to the support to prevent swinging movement of the mast.

1,885,744. WELDER'S DEVICE. ROBERT MALCOM, Chicago, Ill. Filed Jan. 15, 1931. Serial No. 508,894. 1 Claim. (Cl. 2—11.)



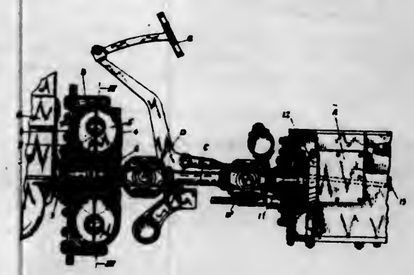
A welder's device of the character described comprising a main body portion provided with an opening in the front wall, a housing disposed entirely about said opening and open at the front and rear thereof, a protection lens mounted across the open front, a pair of frame members removably secured to the opposite side walls within the upper end of the housing so as to slope downwardly toward the opening in the main body portion, means whereby said frame members are clamped in place and limited adjustment of the frame members permitted, a reflecting element supported at its ends by said frame members, a frame disposed transversely within the housing adjacent to the bottom thereof and pivotally secured at its rear end to the side walls of the housing so as to permit vertical swinging movement, a non-glare reflecting element mounted in said frame, and means disposed through the side of the housing whereby the frame may be tilted about the pivot of the frame.

1,885,745. HELMET. ROBERT MALCOM, Chicago, Ill. Filed Apr. 9, 1931. Serial No. 528,795. 1 Claim. (Cl. 2—205.)



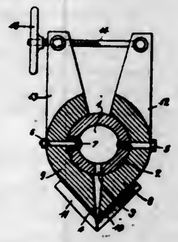
A helmet of the character described comprising a head encircling split band whose ends are provided with straps for adjusting said band to the head, a skeleton head frame adapted to be disposed over the head with the lower end of the frame supported in spaced relation with the head band, a dished glass-holding frame provided with marginal flanges thereabout having a plurality of openings, the dished portion of said frame being adapted to receive a lens from the rear side thereof, while the top flange is removably secured to the skeleton frame so as to depend therefrom, a cloth hood loosely disposed over and independent of said skeleton frame and provided at the front with an opening to fit about the dished portion of the glass-holding frame and to lap the forward sides of the frame flanges, and removable means disposed through the hood and through the openings in the flanges of the glass-holding frame whereby the cloth hood is removably secured in place.

1,885,746. POWER TRANSMISSION MECHANISM. PERCY MARTIN, Coventry, England, assignor to The Daimler Company Limited, Coventry, Warwickshire, England, a British Company. Filed Jan. 5, 1931, Serial No. 506,814, and in Great Britain May 2, 1930. 4 Claims. (Cl. 74—34.)



1. A power transmission system comprising in combination a variable speed prime mover, a hydraulic coupling of the fluid fly-wheel type embodying a primary driven member at all times in positive driving relation with said prime mover and a secondary or output member, a planetary or epicyclic toothed gearing of the type set forth connected to said output member, and a driven shaft connected to said gearing, said members providing between them a chamber for a fluid serving as the sole connection between said members for all driving conditions and operating by centrifugal action at high speeds of either or both said members to restrict the slippage between said members.

1,885,747. DRAWING APPARATUS WITH PIVOTALLY MOVABLE LIPS FOR THE MANUFACTURE OF CELLULOSE FILMS OF VARIOUS THICKNESSES. ALFRED MAURER, Milan, Italy. Filed Jan. 7, 1931, Serial No. 507,241, and in France Jan. 27, 1930. 5 Claims. (Cl. 18—15.)



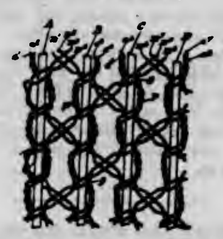
1. In a drawing apparatus for the manufacture of cellulose films, a cylindrically shaped pipe, two cooperating walls associated with said pipe forming a slot, at least one of said walls being rotatable on said pipe whereby the thickness of said slot may be adjusted.

1,885,748. BOX CONSTRUCTION. JOHN F. MAURER, Jr., Woodcliff, N. J. Filed July 31, 1930. Serial No. 472,096. 8 Claims. (Cl. 217—65.)



1. A box corner connecting and bracing device comprising a unitary member having angularly disposed hollow communicating wings each defining an open end of a size to snugly receive and embrace an end of the box wall and into each of which wings the ends of the adjacent box walls are embracingly received and interengaging means on each wing and embraced end of the box wall received thereby for securing the wall within the device, said embraced end having an inwardly extending horisontal slit to allow for expansion within its height and a horisontal rivet traversing the open end of the wing which rivet is freely received by the slit.

1,885,749. ELASTIC LACE BRAID. HUGO MEHLER, Philadelphia, Pa. Filed June 13, 1932. Serial No. 616,813. 5 Claims. (Cl. 96—24.)



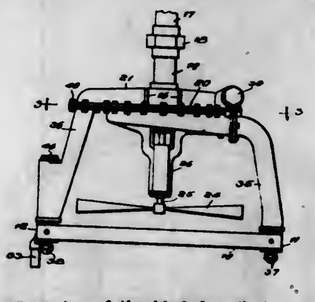
1. An elastic lace braid having elastic warps, transverse non-elastic braiding threads interconnecting the elastic warps and holding the braid against substantial lateral extension, and double non-elastic threads connecting the transverse threads at the points same cross each warp to bind the same firmly thereto.

1,885,750. LEG SUPPORT FOR AUTOMOBILE DRIVERS. CALVIN L. MILLER, Jr., Concord, N. C. Filed Apr. 18, 1930. Serial No. 445,394. 1 Claim. (Cl. 155—165.)



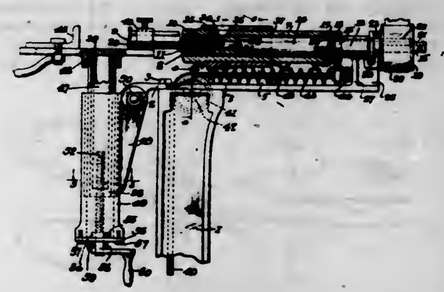
A support for the leg of an automobile driver, adapted to be secured to the gear shift lever, comprising a curved plate, a resilient member secured to the front surface of said plate, and against which the leg of the driver may rest, a rod threadably engaging the rear surface of said plate, two clamping members adjustably secured on said rod, means on said rod for forcing said clamping members against the gear shift lever of the automobile to secure the support in position.

1,885,751. HEATING DEVICE. ARTHUR B. MODINE, Racine, Wis., assignor to Modine Manufacturing Company, Racine, Wis., a Corporation of Wisconsin. Filed Dec. 24, 1928. Serial No. 328,078. 13 Claims. (Cl. 257—137.)



1. In apparatus of the kind described, a radiator unit, a steam supply pipe, a turbine casing into which said pipe discharges, a conduit connecting said casing with the inlet end of the radiator unit, a second conduit connecting said casing with the outlet end of the radiator unit, and float valve means in said second conduit automatically operable to intermittently discharge water from the conduit into the outlet end of the radiator unit.

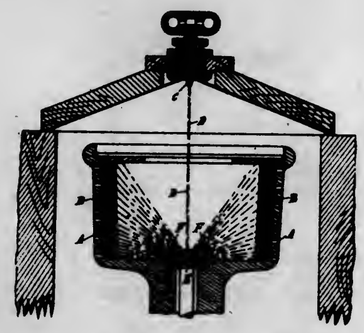
1,885,752. MORTISING MACHINE. FREDERICK W. MONROE, Atlantic City, N. J., assignor to Mackintosh Hutchinson, Philadelphia, Pa. Filed Mar. 18, 1930. Serial No. 436,774. 2 Claims. (Cl. 144—78.)



1. A mortising machine comprising a bed or plate having two spaced projecting members each having a tubular bearing portion parallel to said plate, a tubular splined sliding spindle guided in one of said bearing portions and carrying a hollow mortising chisel, a bit spindle sliding and rotating in the other of said bearing portions and also in the tubular splined spindle, having a thrust bearing engagement with the splined sliding spindle and carrying a bit projecting into said hollow chisel, means for rotating said bit spindle having a sliding rotation producing relation to said spindle, and means for rotatably connecting said means to the bearing portion in which the bit spindle rotates; an operating cable secured to the splined sliding spindle and running parallel thereto and between it and said bed plate and through the member having the bearing portion in which the splined member slides, a spiral spring surrounding said cable partly

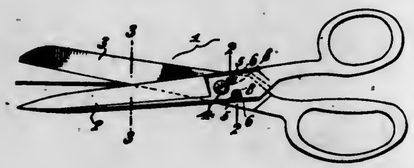
enclosed in the said bearing portion member and having its reaction bearing therein for one end of the spring and the other end of the spring engaging the means for connecting the cable to the splined sliding spindle.

1,885,753. PROCESS AND APPARATUS IN AND RELATING TO THE MANUFACTURE AND PRODUCTION OF ARTIFICIAL THREADS, FILAMENTS, AND THE LIKE. ERIC ANDREW MORTON, Coventry, England, assignor to Courtaulds Limited, London, England, a British Company. Filed Feb. 15, 1929, Serial No. 340,080, and in Great Britain Apr. 10, 1928. 4 Claims. (Cl. 18—8.)



3. A process for treating an annular cake of fibre by rotating it rapidly about its vertical axis and projecting a jet of liquid more or less vertically downward into the cake and causing the jet to break up into spray, which reaches and permeates all parts of the said cake.

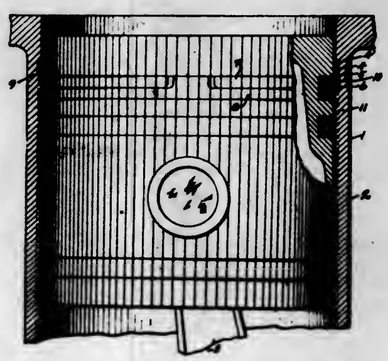
1,885,754. SELF-SHARPENING AND BALANCING SHEARS OR SCISSORS. RICHARD J. NACHTIGALL, Philadelphia, Pa., assignor of one-half to Andrew Pecsi, Philadelphia, Pa. Filed June 29, 1932. Serial No. 620,000. 4 Claims. (Cl. 30—13.)



1. In a pair of shears or scissors, a pair of shear blades pivotally united, ball bearings with means for mounting the same in both blades, said ball bearings and their mountings being arcuately out of register at all times when the blades are closed or open, thereby imparting a twisting action to the respective blades to retain their cutting edges in constant contact.

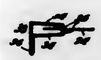
1,885,755. CYLINDER CONSTRUCTION. OTTO NONNENBRUCH, Philadelphia, Pa., assignor to I. P. Morris & De La Vergne, Incorporated, a Corporation of Delaware. Filed Dec. 19, 1930. Serial No. 503,378. 9 Claims. (Cl. 74—106.)

1. In combination, a cylinder, a reciprocating piston therein, and a radially expansible sealing ring carried by said piston, the wall of said cylinder having a cam-forming groove therein adjacent the point at which the



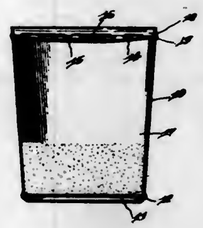
advancing edge of said piston ring stops in one limit of its travel, said cylinder on each side of said groove being of smaller diameter than the groove.

1,885,756. WINDOW SCREEN. RALPH A. NORQUIST and GLENN H. NORQUIST, Jamestown, N. Y. Filed Aug. 28, 1929. Serial No. 389,029. 3 Claims. (Cl. 156—39.)



1. In a rolling window screen, the combination with a screen, of guides engaging the side edges of the same and including mating jaws between the edges of which the screen passes, slides carried by the lower corners of the screen and extending into the guides, and rolling balls mounted within said slides to travel between the jaws of the guides and having diameters greater than the distance between the edges of the jaws to span the space between the jaws.

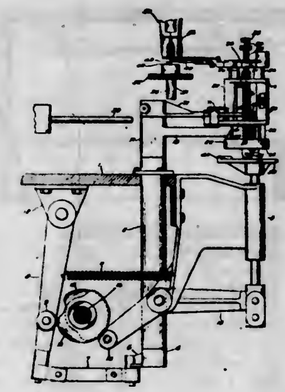
1,885,757. MEANS AND METHOD FOR MIXING PLASTIC OF FLUID SUBSTANCES. PIATT M. ORLOPP, Chicago, Ill. Filed Mar. 27, 1928. Serial No. 265,067. 5 Claims. (Cl. 206—47.)



1. A container having a bottom wall, a lid for said container disposed in spaced relation to the upper edge of said container a predetermined distance, said lid having an opening formed therein, and a relatively thin breakable member adapted to close said opening, said container enclosing material for admixture with liquid, and

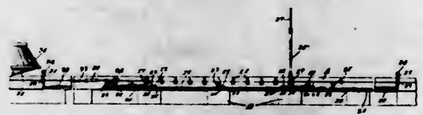
the section of the container above the lid adapted when full to hold a proper proportionate amount of liquid for admixture with the amount of material enclosed in the container.

1,885,758. RADIO APPARATUS. WILLIAM PARKER, Oak Park, Ill., assignor to Grigsby-Grunow Company, Chicago, Ill., a Corporation of Illinois. Filed Feb. 1, 1930. Serial No. 425,244. 14 Claims. (Cl. 250—27.5.)



1. A tipping off mechanism for exhaust machines comprising two parallel supporting journals, shafts mounted therein, means for oscillating one shaft and reciprocating the other shaft, a torch and bulb retaining assembly supported on one shaft, and means whereby the remaining shaft operates on said assembly.

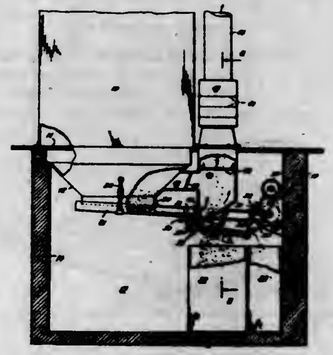
1,885,759. RAILWAY CROSSING SIGNAL AND GUARD. HAROLD ARMOUR PARSON, Fawn Lake, Alberta, Canada. Filed Dec. 2, 1931. Serial No. 578,577. 3 Claims. (Cl. 246—293.)



1. The combination with a track at a road crossing, of a plurality of rocking arms arranged longitudinally of the track, a plate carried by said arms and having teeth to protrude above the tread of the track on movement of the arms in one direction, links pivoted to the ends of the plate, levers pivoted to the links, actuator levers, shift rods connecting the first and second named levers and each having a turnbuckle and tension compensating connection, and wheeled spring tensioned members carried by the actuator levers and projected above the tracks.

1,885,760. SAND BLAST SYSTEM. LOUIS D. PEIK, Mishawaka, Ind., assignor to The American Foundry Equipment Company, New York, N. Y., a Corporation of Delaware. Filed Oct. 31, 1929. Serial No. 403,682. 5 Claims. (Cl. 51—8.)

1. A blasting apparatus comprising a blasting chamber having a perforated floor, a transfer pan mounted beneath said chamber, a hopper for directing material from said chamber onto said pan, a screen associated with said pan, means for causing abrasive material to move longitudinally of said pan and to drop onto said screen, an exhaust duct terminating adjacent said screen and means



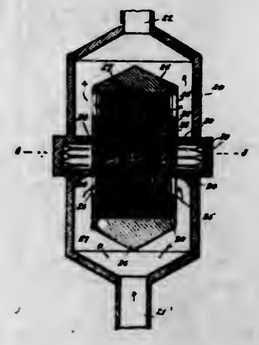
for causing an air current to pass through the particles of material falling from said pan to said screen whereby the dust and finer particles are removed therefrom.

1,885,761. LOCK WASHER. CHARLES L. PEIRCE, Jr., Pittsburgh, Pa., assignor of one-half to Hubbard and Company, a Corporation of Pennsylvania. Filed Jan. 16, 1931. Serial No. 509,128. 6 Claims. (Cl. 151—35.)



4. A lock washer comprising an apertured body portion having a plurality of ribs formed thereon between the inner and outer peripheries thereof, each of said ribs having a rounded portion projecting beyond one face of said body portion and a biting edge normally disposed within the plane of the opposite face of said body portion.

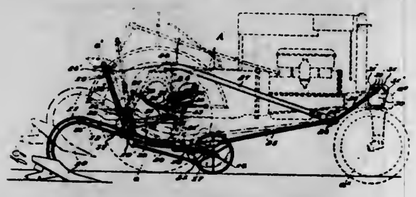
1,885,762. SCREEN. EUGENE P. POLUSHKIN, New York, N. Y. Filed Feb. 4, 1930. Serial No. 425,909. 13 Claims. (Cl. 257—241.)



1. A screen including a surrounding frame, a plurality of longitudinally contacting wires retained under transverse compression therein, and means for varying said transverse compression applied to said wires, said means

comprising a tightening member movably carried by said frame, said frame and member having contacting cam surfaces whereby movement of said member longitudinally of said wires will move said member transversely thereof to vary the transverse compression thereon.

1,885,763. TILLAGE IMPLEMENT. CHARLES T. RAY, Louisville, Ky., assignor to B. F. Avery & Sons, Louisville, Ky., a Corporation of Kentucky. Filed Dec. 29, 1930. Serial No. 505,416. 40 Claims. (Cl. 97—50.)

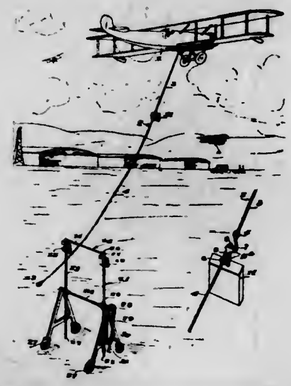


1. A tillage attachment for a wheeled tractor, including a beam to extend beneath the body of the tractor, a tillage element carried by said beam, a depth regulating means, including an adjustable land engaging gage member connected to the front end of the beam in substantially the vertical plane of the tillage element to cause the beam and the tillage element to follow the conformation of the land engaged by said gage member and also including an adjusting lever positioned to be immediately adjacent the seat of the tractor, and a flexible draft means extending from the front end of the longitudinal member and arranged to be underneath the tractor body and adapted to be connected to the front end portion of said body.

1,885,764. PULP MANUFACTURE. ROGER W. RICHARDSON, Wilmington, Del., assignor to E. I. du Pont de Nemours & Company, Wilmington, Del., a Corporation of Delaware. Filed Oct. 21, 1931. Serial No. 570,259. 8 Claims. (Cl. 92—2.)

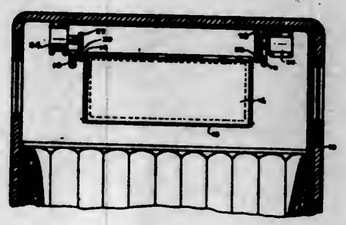
1. A process for the production of pulp which comprises subjecting cellulosic material to preliminary treatment with a dilute aqueous solution of ammonia and thereafter digesting with ammonium bisulfite.

1,885,765. PICK-UP AND RELEASE DEVICE FOR AIRCRAFT. GEORGE A. RICKS, Lafayette, Ind. Filed Feb. 28, 1929. Serial No. 343,328. 13 Claims. (Cl. 258—1.)



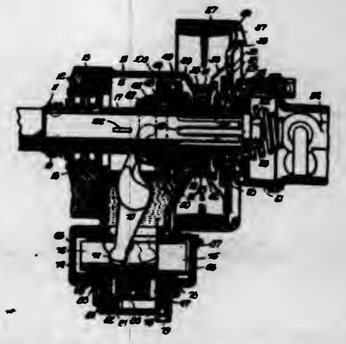
1. An extended holder to which an object is attachable being formed with convolutions, means upon which the holder is spanned in a receiving position, and means suspended from a movable carrier to sweep across the holder and catch in the convolutions at any point and lift the holder from said foregoing means.

1,885,766. ELECTRICAL DEVICE FOR OPERATING REAR CURTAINS OF AUTOMOBILES. JAY R. EDPATH and JOHN L. HAGIE, Minneapolis, Minn. Filed Oct. 17, 1928. Serial No. 313,030. 2 Claims. (Cl. 156—28.)



1. An electrical device for operating rear curtains of automobiles comprising a shaft to which the inner end of the curtain is secured, a motor connected to said shaft, a field coil for said motor, a limiting switch having rotatable members operated by said shaft, a manually operable switch device mounted within reach of the driver, and a divided circuit one portion of which includes said switch device, limiting switch and motor and the other portion of which includes said switch device, limiting switch and field coil.

1,885,767. POWER MECHANISM. EDWARD A. ROCKWELL, Chicago, Ill. Filed May 22, 1929. Serial No. 365,071. 38 Claims. (Cl. 188—140.)

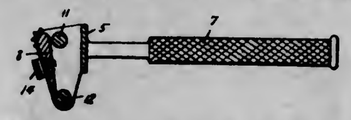


1. In combination, a vehicle power shaft, a power brake device deriving its energy from the rotation of said power shaft, said power brake device including a lubricant receiving casing, an operative member for applying the vehicle brakes extending outward of said casing and means enclosed within the casing for cushioning the movement of said brake applying member.

1,885,768. SAFETY RAZOR. DERVEN T. RYOMYR, Forest City, Iowa. Filed May 2, 1930. Serial No. 449,246. 1 Claim. (Cl. 30—12.)

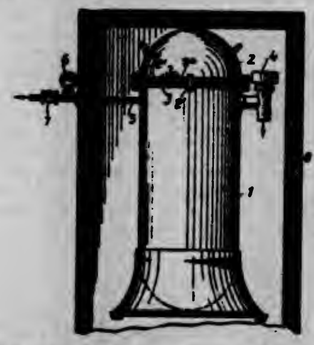
A safety razor of the class described comprising a head consisting of triangular shaped end parts and a bar connecting the side edges of the base portions of the triangular end portions together, a handle connected with the central part of the bar, a blade having trunnions at its ends journalled in the outer corners of the base parts of the triangular shaped ends, a roller journalled in the

apexes of said ends, a holder bar for holding the blade against said roller, whereby said roller acts as a guard for the cutting edge of the blade when the razor is being used for shaving, a second roller journalled in the ends of the



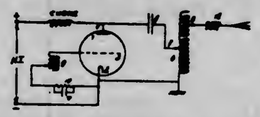
head and spaced inwardly from the pivoted edge of the blade and gears connected with the trunnions of the blade and said second roller and meshing with each other for imparting a rocking movement to the blade when a strop is passed over the rollers.

1,885,769. USING AND STORING DRY-ICE. PETER SCHLUMBOHM, Berlin, Germany, assignor to The American Thermos Bottle Company, Norwich, Conn., a Corporation of Ohio. Filed Nov. 12, 1930, Serial No. 495,246, and in Germany Nov. 16, 1929. 10 Claims. (Cl. 62—91.5.)



1. The method of substantially preventing the evaporation of dry ice which comprises storing it under pressure to raise its normal temperature, while continuously subjecting the stored dry ice to an outside temperature at least as low as said normal temperature.

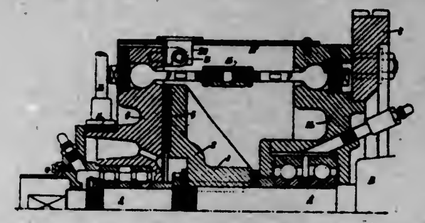
1,885,770. THERMIONIC TRANSMITTER AND RECEIVER. GERRIT SCHOTEL, The Hague, Netherlands. Filed Sept. 20, 1926, Serial No. 136,652, and in the Netherlands Sept. 25, 1925. 8 Claims. (Cl. 250—17.)



1. The combination with a thermionic discharge tube having an input circuit and an output circuit, of a high frequency network constituted by a plurality of tightly coupled circuits connected in one of said tube circuits so as to form a network with a plurality of resonance frequencies lying in the range of radio frequencies and means for bringing one of the higher frequencies into action.

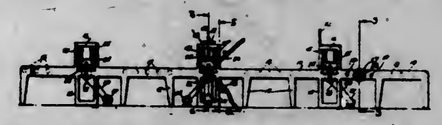
1,885,771. FREE WHEEL CLUTCH MECHANISM FOR USE IN HOISTING AND LOAD-CARRYING MACHINES. MURRAY DUNCAN SCOTT. London, England. Filed July 13, 1929, Serial No. 378,107, and in Great Britain Dec. 4, 1928. 14 Claims. (Cl. 192—42.)

1. In combination, a transmission shaft member adapted for driving at normal running speed, a driving member adapted for slow speed running, clutch mechanism having a stationary part coupled to one of said members, a movable clutch part, links for transmitting drive from the



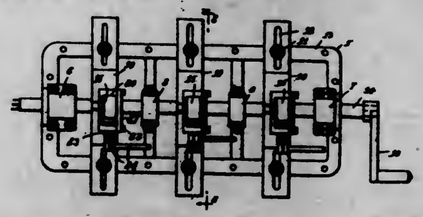
driving member to and for causing actuation of said movable part, and means for causing lag of the movable clutch part.

1,885,772. APPARATUS FOR CLEANING IRON BARS. MIKE SENKO, Warren, Ohio, assignor of one-half to Rocco Yanucci, Warren, Ohio. Filed May 6, 1931. Serial No. 535,520. 1 Claim. (Cl. 51—87.)



Apparatus of the character described, comprising a frame bed, a set of feeding rollers adjacent each end thereof, a set of cleaning rollers intermediate the end rollers, means for driving one roller of each set of feed rollers, separate drives for each of the cleaning rollers, a suction device associated with each cleaning roller, the drive and the suction device for the shiftable cleaning roller being movable therewith, and means for guiding bars or plates through the apparatus including a pair of transversely shiftable blocks, springs for moving the blocks toward each other, and means for limiting movement of the blocks.

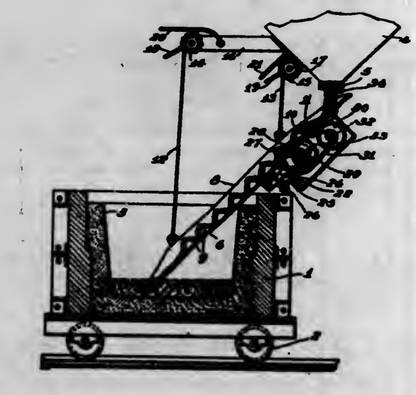
1,885,773. LINE BORING MACHINE. HARRY C. SHOEMAKER, Freeport, Ill. Filed Apr. 22, 1929. Serial No. 356,948. 6 Claims. (Cl. 77—2.)



1. Main bearing boring apparatus comprising a plurality of brackets to be secured to an inverted crank case and extending laterally thereof between adjacent main bearings, said brackets being adjustable laterally of said crank case, one of said brackets extending above said crank case and being provided with a vertically extending slot, a pilot bearing supporting member having a vertically extending portion positioned within said slot for vertical adjustment therein, said slot being of greater width longitudinally of said crank case than the corresponding width of said portion to provide for tilting movement of said supporting member, and means to lock said member in adjusted position, said supporting member having a rectangular slot at its lower end extending laterally of said crank case, a rectangular block positioned within said slot for tilting movement laterally of said crank case and being provided with a vertically ex-

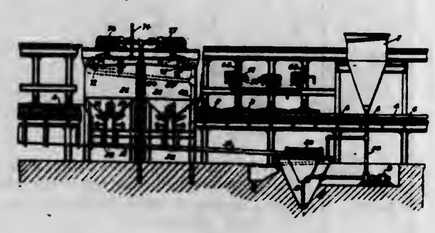
tending circular bore, a pilot bearing provided with a vertically extending shank, said shank being positioned within said bore for vertical movement and rotation about a vertical axis, and means to lock said rectangular member and said pilot bearing shank in adjusted position.

1,885,774. CLAY POURING APPARATUS. LEE SHOWMAN, Charleroi, Pa., assignor to Pittsburgh Plate Glass Company, a Corporation of Pennsylvania. Filed Nov. 2, 1928. Serial No. 316,714. 8 Claims. (Cl. 25—108.)



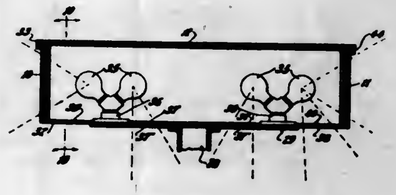
1. The combination with an apparatus for mixing clay and water having an outlet, of an inclined member in position to receive the discharge from said outlet and which in turn discharges to a mold, such member being provided with a series of steps over which the clay mix flows on its way to the mold.

1,885,775. PROCESS AND APPARATUS FOR SUPPLYING SAND TO GRADING APPARATUS. JACOB SOMMARIVA, Pittsburgh, Pa., assignor to Pittsburgh Plate Glass Company, a Corporation of Pennsylvania. Filed July 8, 1927. Serial No. 204,229. 4 Claims. (Cl. 51—263.)



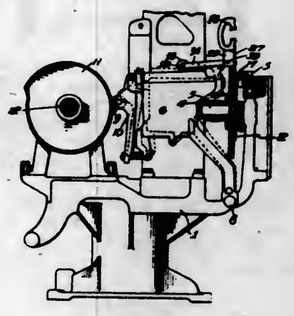
4. In combination in apparatus for supplying sand to a grading tank, a storage tank having a hopper bottom, means for supplying a mixture of sand and water to the tank at intervals, a sump below the storage tank, an outlet from said bottom provided with a regulating valve, means for conducting the mixture from said outlet to the sump, means for supplying the mixture in the sump to the grading tank, a supplemental water supply for said storage tank, and automatic means regulating said supply and adapted to maintain the level of the water in the storage tank constant.

1,885,776. COMBINED STREET AND TRAFFIC SIGN. EARLE E. SMITH, West Springfield, Mass. Filed Apr. 28, 1932. Serial No. 607,939. 4 Claims. (Cl. 40—130.)



1. A street and traffic sign post comprising in combination, a hollow post member having signs on the sides of said post member, an audible signal device located within said post member, a sign box secured to said post member, a transparent top member removably secured in said sign box, corner posts in said sign box formed with grooves open at the top of said corner posts, and normally covered by said top member, side and end sign panels slidably secured in the grooves in said corner posts whereby said side and end panels may be removed from said sign box after the top member has been removed, and means for illuminating the interior of said sign box and the sides of said post.

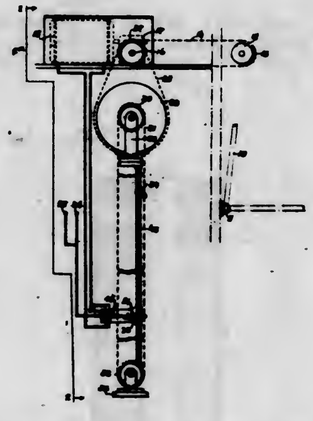
1,885,777. MOLD FOR TYPOGRAPHICAL MACHINES. SAMUEL E. SPERRY, Hollis, N. Y., assignor to Intertype Corporation, Brooklyn, N. Y., a Corporation of New York. Filed Nov. 7, 1930. Serial No. 494,099. 9 Claims. (Cl. 199—55.)



1. In a typographical machine having a mold movable to and from a stationary casting position and closed by relatively movable parts presenting parallel faces for casting parallel-sided slugs, means for holding said mold parts yieldingly in closed cooperative relation while the mold is out of casting position, and means operative while the mold is in stationary casting position to hold said mold parts firmly in closed casting relation.

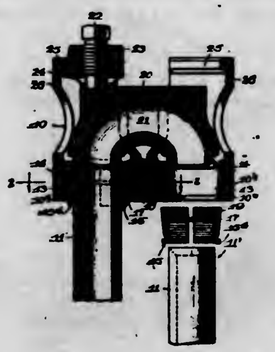
1,885,778. ATTACHMENT FOR RAISING AND LOWERING AWNINGS AND THE LIKE. JACOB STARR, Bronx, N. Y., assignor of one-half to Julius Margolin, New York, N. Y. Filed Apr. 20, 1932. Serial No. 606,466. 4 Claims. (Cl. 156—44.)

1. In an awning adapted to be raised and lowered and having a roller for receiving the awning cover, means for raising and lowering the awning including an electric circuit controlled with a manually operable switch, a motor connected in said circuit and with said roller, a reversing switch having two positions and located in said circuit and connected with said motor to control the direction of rotation according to its position, and means for operating said switch comprising a speed reduction unit connected with said motor, an endless member



connected with said speed reduction unit, a pair of fingers on said endless member and on opposite sides of said reversing switch and selectively consecutively engageable with said reversing switch to move it from one to the other position, and means for firmly guiding the fingers for actuating the switch.

1,885,779. TUBE CONNECTION FOR OIL REFINERY FITTINGS. CARLYLE V. STEWART, Springfield, Ohio, assignor to The Ohio Steel Foundry Company, Lima, Ohio, a Corporation of Ohio. Filed Nov. 10, 1930. Serial No. 494,554. 1 Claim. (Cl. 285—20.)

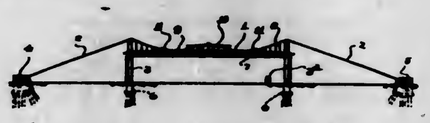


In a device of the character described, and in combination with a tube of substantially uniform diameter, a casing having a tapered aperture for said tube, a split ring fitting in said tapered aperture and having a serrated inner surface engaging the outer surface of said tube, a communicating fixture non-rotatably mounted on said casing, clamping means acting to force said fixture endwise against the end of said tube in a direction to contract said split ring in said tapered aperture and lock said tube therein said split ring having an extension at its smaller end projecting beyond said casing to permit unlocking said tube by reverse movement of said ring.

1,885,780. WOOD FILLER COMPOSITION. ERNST T. STILLE, Chicago, Ill. Filed May 18, 1929. Serial No. 364,824. 10 Claims. (Cl. 134—49.)

1. A wood filler comprising a vegetable drying oil, an inorganic resinate dryer, asphaltum varnish and pyroxylin lacquer, characterized by the property of rapidly drying when applied to the raw surface of wood.

1,885,781. ROOF SUPPORT FOR BUILDINGS. ERASTUS ROOT ST. JOHN, New York, N. Y. Filed Feb. 19, 1929. Serial No. 341,161. 9 Claims. (Cl. 108—28.)



1. A roof support for buildings comprising in combination a cable anchored at its opposite ends, spaced uprights on which the cable is hung, a continuous rigid truss connecting the upright supports for stiffening the cable, hangers connected to the cable and truss at frequent intervals, and upright struts supported on the rigid truss unconnected to the cable or to the hangers to support a roof framing and a roof over certain portions of the cable.

1,885,782. SHIELDED TUBE AND SOCKET. HERMAN L. STRONGSON, New York, N. Y. Filed June 17, 1926. Serial No. 116,533. 10 Claims. (Cl. 250—27.5.)



1. A vacuum tube comprising the usual bulb and base supporting it, bosses formed on the base, contacts anchored in the bosses, a metallic coating covering the bulb and base but not covering the bosses.

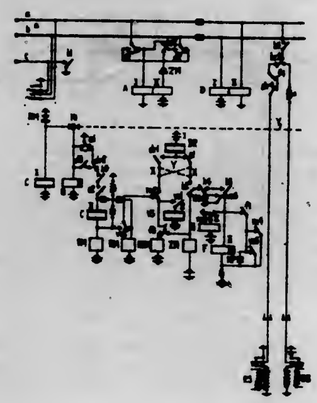
1,885,783. REFRIGERATING APPARATUS. OTTO M. SUMMERS, Dayton, Ohio, assignor to Frigidaire Corporation, Dayton, Ohio, a Corporation of Delaware. Filed May 30, 1928. Serial No. 281,600. 8 Claims. (Cl. 200—83.)



1. The combination, in controlling apparatus, of a member adapted to be moved from one position to another,

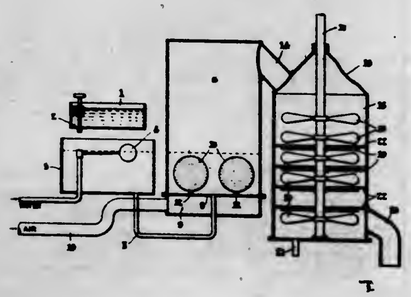
a pressure responsive device connected to said member, a pivot for said member, and means for moving said pivot only during abnormal movement of said pressure responsive device.

1,885,784. AUTOMATIC SWITCH. JAMES ERRIGAL TEBB, London, England, assignor to Siemens Brothers & Company Limited, London, England. Filed Mar. 16, 1931, Serial No. 523,133, and in Great Britain Mar. 31, 1930. 14 Claims. (Cl. 179—18.)



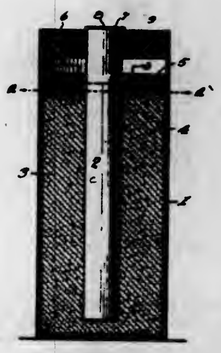
1. In a telephone system, an automatic switch, a trunk group accessible to said switch comprising two different valued subgroups, said trunk group being assigned a number corresponding to the higher valued sub-group, means for operating said switch responsive to impulses to the higher valued sub-group, means for causing said switch to hunt over said higher valued sub-group for an idle trunk, and means operative in case no idle trunk is found in said higher valued sub-group for automatically operating said switch to the lower valued sub-group and for continuing the hunting operation over this sub-group.

1,885,785. APPARATUS FOR MAKING FOAM. GEORGE MILLER THOMSON, Caledonia, Ontario, Canada, assignor to Canada Gypsum and Alabastine Limited, Paris, Ontario, Canada. Filed Sept. 19, 1927. Serial No. 220,615. 4 Claims. (Cl. 261—122.)



1. A foam making apparatus comprising a chamber provided with a quantity of a bubble-forming fluid, means for producing a rising column of relatively coarse bubbles on said fluid, an agitating chamber, means for positively directing said bubbles downwardly through said agitating chamber, said agitating chamber having annular rings secured to its inner walls and rotatable plates cooperating therewith to direct the flow of said bubbles in a circuitous path through the chamber and to subdivide said bubbles.

1,885,786. DRY CELL AND SEAL THEREFOR. WALTER G. WAITT, Lakewood, Ohio. Filed Mar. 15, 1930. Serial No. 436,085. 2 Claims. (Cl. 136—133.)



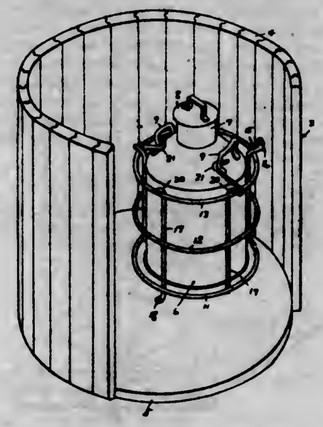
1. A dry cell comprising a metal container having therein a carbon electrode and a mass of depolarising mix insulated from said container, a layer of sealing material sealing the upper end of the container, the upper portion of said carbon electrode being impregnated with a sufficient quantity of oil to form a self-closing seal to prevent ingress of air therethrough, an apertured metal cap disposed over said carbon electrode, said seal and metal cap completely closing said cell except for the aperture in said cap.

1,885,787. MOTOR SLED. RICHARD JOSEF WEISSER, Braunau, Czechoslovakia. Filed Oct. 2, 1929. Serial No. 396,763. 1 Claim. (Cl. 180—6.)



In a motor sled, a frame having upper and lower side bars, perpendicular connecting bars for the side bars of each pair, a motor propelled roller, leaf springs having a journal support at one end on the perpendicular bars and supporting the roller at their other ends, a hand lever and cooperating rack segment with the lever in communication with the journalled ends of the springs whereby the roller may be pressed against a road with the desired pressure and so maintained by the lever and associated rack segment.

1,885,788. CAN HOLDER. JOEL WESTBURG, Onamia, Minn. Filed Sept. 29, 1931. Serial No. 565,906. 3 Claims. (Cl. 220—85.)



1. A milk can holder for use in a cooling tank, said holder comprising a plurality of vertically spaced rings, and circumferentially spaced vertically disposed rods fastened to said rings in spaced assembled relationship, certain of said rods having their upper ends bent outwardly to facilitate placement of the can in the holder.

1,885,789. SHELL. JOHN M. ALDERFER, Sharon Center, Ohio. Filed June 13, 1929. Serial No. 370,547. 6 Claims. (Cl. 242—68.)



4. A shell for the uses and purposes set forth consisting of a core and a laminated cover, the core being composed of a plurality of flat ribs, the inner edge of each rib being seated against one side of an adjacent rib and secured thereto, and braces located between the faces of the ribs, the cover consisting of superposed plies of material applied about the core and secured thereto.

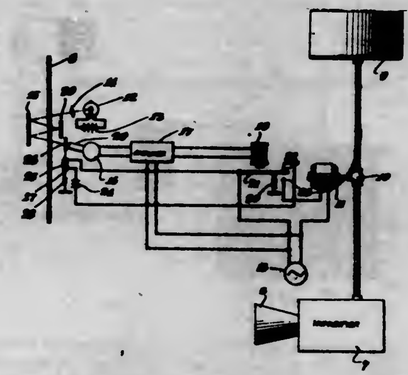
1,885,790. CHUCK. PIERRE ULYSE JEAN AMYOT, Les Gras, Doubs, France, assignor to Les Fils de Virgile Amyot, Les Gras, Doubs, France, a Limited Company of France. Filed Sept. 19, 1931, Serial No. 563,690, and in France Jan. 16, 1931. 4 Claims. (Cl. 279—63.)

1. A chuck of the character described, comprising a body portion provided with a central cavity having an internal flange to form a seat and a plurality of unobstructed bores surrounding the cavity and following in their relative positions the outline of a cone, locking elements slidably mounted in said bores, a regulating element disposed in the cavity and received in said seat to engage the locking



elements, and a regulating screw adjustable in the flange and against the regulating element to control the longitudinal position thereof.

1,885,791. FLUID CONDITIONING METHOD AND APPARATUS. SAMUEL M. ANDERSON, Sharon, Mass., assignor to B. F. Sturtevant Company, Hyde Park, Mass. Filed Feb. 6, 1931. Serial No. 513,809. 6 Claims. (Cl. 236—44.)

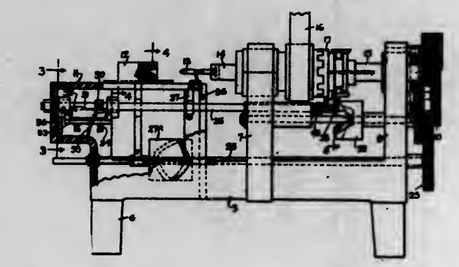


1. Apparatus for controlling the amount of vapor in a fluid contained within an enclosure, comprising a vapor source, control means for controlling the addition of vapor from said source, a medium contained within said enclosure having one side exposed to a different temperature from that within said enclosure, means for directing a light beam upon the surface of said medium, means actuated by light variations from said medium caused by any condensation thereon for actuating said control means, and means for decreasing the intensity of the light beam reaching said second mentioned means when there is no condensation of vapor on the surface of said medium, and for increasing the intensity of the light beam reaching said second mentioned means when said control means have been actuated by the condensation of moisture on the surface of said medium.

1,885,792. MACHINE FOR CUTTING DOUBLE THREAD, SINGLE POINT SCREWS. JOHN A. ARENZ, Mount Vernon, N. Y., assignor to International Screw Company, Wilmington, Del., a Corporation of Delaware. Filed Jan. 24, 1931. Serial No. 510,925. 1 Claim. (Cl. 10—101.)

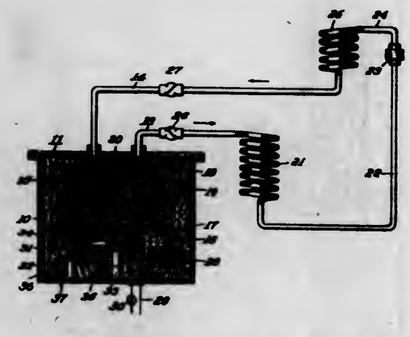
In a screw machine, a blank revolving spindle, a thread cutting tool, a cam for moving the tool longitudinally equal-

work performing distances a plurality of times during a single cam revolution, a plurality of lobes of equal height on the cam having spaces of equal depth therebetween



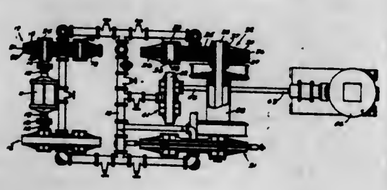
each lobe forming one-half the complete cam, means for operating said spindle and cam, and said means being arranged to turn the spindle an odd number of complete revolutions to each complete revolution of the cam.

1,885,793. REFRIGERATION MOTOR AND PUMP. ARNOLD B. BAILEY, Lynn, Mass. Filed June 25, 1927. Serial No. 201,417. 3 Claims. (Cl. 230—49.)



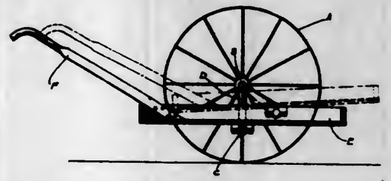
1. In a pumping apparatus for a refrigerating machine, the combination of a casing, a flexible pump in the casing, an expansible fluid surrounding the pump in the casing, an electrical heating coil in the expansible fluid for operating the pump in one direction, corrugated walls in the pump and a spring for operating the said pump in the opposite direction, and means for controlling the heating coil.

1,885,794. HYDRAULIC DRIVING APPARATUS FOR WELLS. WALTER C. BAILEY, Norwalk, Calif. Filed May 10, 1930. Serial No. 451,300. 15 Claims. (Cl. 255—19.)



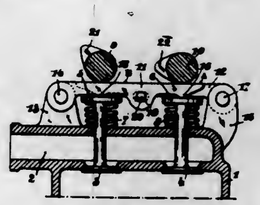
1. In a hydraulic driving apparatus for wells, the combination of: pumping means for providing fluid under pressure; a fluid operated rotary table transmission cannected to said pumping means for driving a rotary table; two fluid operated drum transmissions connected to said pumping means, to each other, and to said rotary table transmission for rotating a drum; a fluid operated line shaft transmission connected to said pumping means, to said rotary table transmission, and to said drum transmissions for driving a line shaft; and valves so associated with said connections between said transmissions and said connections between each of said transmissions and said pumping means that the fluid from said pumping means operates any one of said transmissions alone or with any one or two or all of the other of said transmissions or said drum transmissions and said rotary table transmission together so that the torque output of said drum transmissions varies directly with the load on said rotary table transmission.

1,885,795. VEHICLE. EARL M. BARROWS, Minneapolis, Minn. Filed Jan. 3, 1931. Serial No. 506,446. 1 Claim. (Cl. 280—51.)



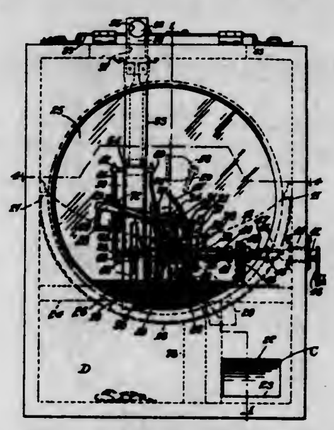
An apparatus for transporting compost or other comminuted materials over a golf course and sifting it on the greens, said apparatus comprising an axle having crank end portions, two relatively large carrying wheels rotatively mounted on said cranks whereby the axle is pendently supported between said wheels, a sifter pivotally mounted upon the axle and substantially balanced thereon, handles rigidly secured to said sifter at one side of the axle adapted to act as levers to raise and lower the rear and front portions of the sifter and to propel and guide the apparatus, the handles projecting lengthwise of the sifter and beyond the end of the same whereby the sifter may be conveniently swung back and forth during the sifting operation about the axis of said wheels and whereby the ends of the sifter may be raised and lowered to maintain the material over the bottom of the sifter and sift it on the greens by a to and fro motion as well as by a tilting or a leveling motion of the ends of the sifter.

1,885,796. VALVE OPERATING MECHANISM. GEORGES BOULET, Sevres, France. Filed Feb. 9, 1931, Serial No. 514,360, and in France Feb. 15, 1930. 3 Claims. (Cl. 123—90.)



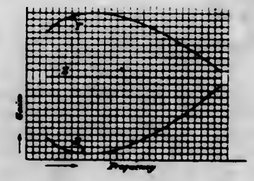
1. A valve operating mechanism for internal combustion engines comprising in combination two separate camshafts, two rocker arms adapted to cooperate with said cam-shafts respectively, and means for mechanically connecting said rocker arms to each other, whereby rotation of one rocker arm by the corresponding cam-shaft will produce rotation of the other rocker arm through said mechanical connecting means.

1,885,797. COIN CONTROLLED VENDING APPARATUS. FORTUNATO BRANICA, Brooklyn, N. Y. Filed June 3, 1931. Serial No. 541,810. 12 Claims. (Cl. 194—2.)



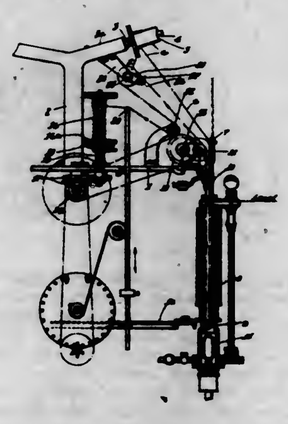
1. In coin controlled vending apparatus, a rotatable actuating shaft, merchandise dispensing means including a rotatable shaft, a member loose on the actuating shaft having a driving connection with the shaft of the dispensing means and arranged as a clutch member, a clutch member rotatable with and slidable on the actuating shaft normally urged to clutching position, a clutch shifter rotatable with and operative upon each revolution of the shaft of the dispensing means to move the clutch member on the actuating shaft to and releasably retain it in unclutching position, and means normally uncoupled from and adapted to be coupled with the actuating shaft by a coin and rotation of said shaft to release the shifter from the clutch member and permit the clutch member to move to clutching position and connect the actuating shaft with and actuate the shaft of the dispensing means.

1,885,798. TRANSMISSION REGULATION. SMART BRAND, Yonkers, N. Y., assignor to American Telephone and Telegraph Company, a Corporation of New York. Filed May 17, 1930. Serial No. 453,284. 2 Claims. (Cl. 178—44.)



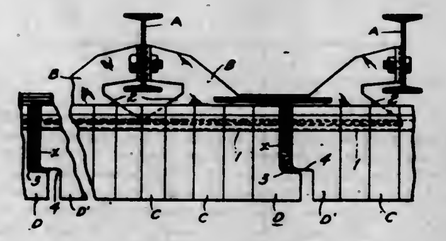
1. In a transmission circuit in which the transmission varies with temperature and also with the frequency of the transmitted currents, a repeater, a potentiometer connected across said repeater and having a plurality of steps to correspond to temperature variation, a shunt impedance connected across said potentiometer, said potentiometer and said shunt impedance serving to produce a gain of said repeater which is variable with the frequency of the transmitted currents, a second potentiometer connected across said repeater, said second potentiometer having a plurality of steps to correspond to temperature variation and being so constructed that it introduces no transmission-frequency distortion, and means for simultaneously controlling the two potentiometers.

1,885,799. APPARATUS FOR DRYING FILAMENTARY MATERIAL. GEORGE L. BROWNELL, Worcester, Mass., assignor to G. L. Brownell, Inc., Worcester, Mass., a Corporation of Massachusetts. Filed Dec. 19, 1930. Serial No. 503,540. 3 Claims. (Cl. 28—61.)



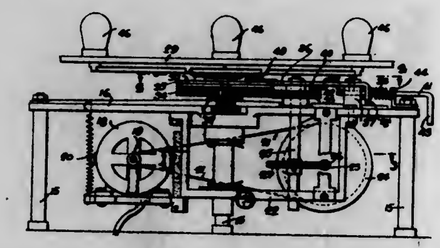
1. In apparatus of the class described, the combination with a supply of filamentary material, means for moistening the same and means for winding the moistened material on a carrier in a stretched condition, of a rotatably mounted, heated drum providing a groove around which the material passes on the way to said drum, and means for automatically moving said material out of said groove upon interruption of the winding of said material on said drum.

1,885,800. SUSPENDED FLAT ARCH FOR FURNACES, KILNS, AND THE LIKE. SAMUEL F. BURNET, Webster Groves, Mo., assignor to Laclede Christy Clay Products Company, St. Louis, Mo., a Corporation of Missouri. Filed Aug. 10, 1929. Serial No. 385,011. 1 Claim. (Cl. 110—99.)



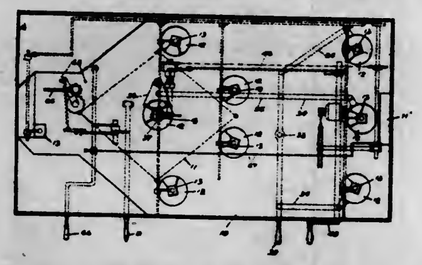
A suspended flat arch for furnaces and the like, comprising an overhead supporting structure, rows of tile suspended from said supporting structure and arranged to form a plurality of separate and distinct arch sections, each of which is made up of a plurality of tile, an expansion joint between said sections located at a point remote from two of the opposed edges of the arch and disposed parallel to said edges, a mass of compressible fire-resistant material in said joint, and means for maintaining said fire-resistant material in position and protecting it from the direct action of the flames of the furnace, comprising substantially L-shaped tile forming part of one of said arch sections and arranged so that the horizontal legs of same serve as a support for said fire-resistant material, and co-acting tile forming part of the adjacent arch section and provided at their lower ends with recesses, notches or cut-outs that form a clearance for the horizontal legs of said L-shaped tile.

1,885,801. DISPLAY TABLE. FRANK R. CHESTER, New York, N. Y., assignor, by mesne assignments, to Chesterfield Control Company, Dover, Del., a Corporation of Delaware. Filed Jan. 20, 1927. Serial No. 162,334. 13 Claims. (Cl. 211—1.6.)



1. A display device, including a turn-table, driving means, a two-part friction connection having one of its elements associated with said driving means, the second element thereof being associated with said turn-table whereby the latter will move when said driving means is operated, and means acting to prevent movement of said turn-table during the continued operation of said driving means, the parts of said friction connection moving in contact and with respect to each other during such latter conditions of operation.

1,885,802. GAME. FRANK R. CHESTER, New York, N. Y., assignor to Chesterfield Control Company, New York, N. Y., a Corporation of Delaware. Filed May 16, 1930. Serial No. 452,832. 7 Claims. (Cl. 273—89.)

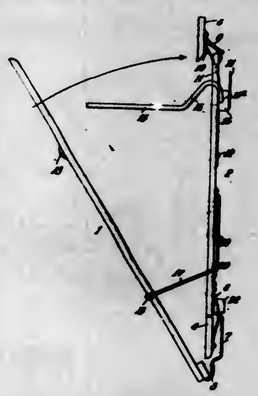


1. A game including a plurality of missile impelling units, plungers forming a part of the impelling means of said units, a further unit, a plunger associated with the latter to provide an impelling means therefor, reciprocating means coupled to said first named plungers for actuating the same, and means for optionally coupling the plunger of the last named unit to said plunger reciprocating means.

2. A game including, in combination, a deck, fixedly mounted missile receiving and impelling members carried by said deck, movable missile receiving and impelling members additionally carried by said deck, said movable members being adapted to project a missile in the direction of any of said first members, and all of said fixed members being adapted to project a missile in the direction of one of said movable members.

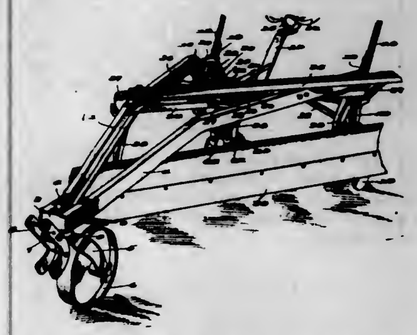
1,885,803. PRESSER AND STRETCHER FOR TROUSERS OR OTHER FABRIC GARMENTS OR ARTICLES. JOHN SIDDONS COSBY, Windsor, England. Filed Apr. 6, 1931, Serial No. 527,914, and in Great Britain Dec. 16, 1930. 6 Claims. (Cl. 223—19.)

1. A presser and stretcher of the kind herebefore mentioned, comprising a rigid clamping element and a sectional clamping element hinged together, wherein the sectional element comprises a main clamping board for the main part of the legs of the trousers which is hinged at the bottom of the rigid element, a lower clamping board for clamping and pressing the ends of the trousers,



the said lower clamping board being normally in alignment with the main board, and mounted thereon by springs, and means for clamping the rigid element and the said main clamping board together.

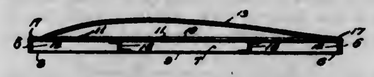
1,885,804. TERRACER, ROAD GRADER, AND DITCHER. CHARLES W. CUNDIFF, Owensboro, Ky., assignor to Owensboro Ditcher & Grader Co., Inc., Owensboro, Ky., a Corporation of Kentucky. Filed July 17, 1930. Serial No. 468,641. 10 Claims. (Cl. 37—168.)



1. In a machine of the character described, the combination of a supporting frame, a cross bar carried thereby, a scraping blade, blade cross bars supporting the blade, a fifth wheel pivoted to the first-mentioned cross bar and fixed to one of the blade cross bars, for adjusting the angle of the blade to the frame, and means for locking the blade in said angular position.

1,885,805. LINOLEUM TOPPED FILING CABINET. GEORGE H. DAWSON, Boston, Mass., assignor to Columbia Steel Equipment Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Jan. 30, 1929. Serial No. 336,179. 2 Claims. (Cl. 45—81.)

1. An article of the class described comprising a rectangular frame having end members and side members joined at the corners, said members having upstanding walls and inturned bottom flanges providing a flat base, an apertured bed plate fitting within the frame and having depending end supporting members seating upon the flanges at the ends of the frame, a cover sheet of yielding material on the upper side of the plate having its edges abutting the upper margins of the frame walls, an anchoring strip applied on the under side of the plate and cemented to the bottom surface of the cover sheet through the plate apertures, the side walls of the frame



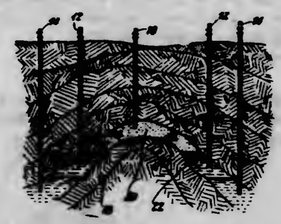
lying in a vertical plane and the upper margins of the end walls being beat over the adjacent edges of the cover sheet to secure said edges and the bed plate within the frame, thereby providing a unitary top assembly adapted for attachment upon filing cabinets and the like.

1,885,806. SNAP FASTENER. JOSEPH W. DEWS, Waterbury, Conn., assignor to Scovill Manufacturing Company, Waterbury, Conn., a Corporation of Connecticut. Filed Apr. 28, 1932. Serial No. 607,964. 3 Claims. (Cl. 24—77.)



1. A snap fastener socket comprising a plate having a perforation therein of the approximate size and form of a complementary snap fastener stud with which the socket is to be used, and a piece of resilient wire having curved portions approximately following and lying just within the oppositely-disposed portions of the perforation at one surface of the plate to resiliently engage the neck of an inserted stud, the wire having also an approximately rectangular attaching portion lying against the surface of the part of the plate surrounding the perforation and the plate having a plurality of attaching lugs struck up therefrom and rolled over the adjacent portions of the wire, the lugs being so positioned as to project upwardly from the plate at the four inner corners of the attaching portion of the wire.

1,885,807. PRODUCTION OF OIL FROM OIL SANDS IN THE EARTH. HENRY L. DOHERTY, New York, N. Y. Filed Aug. 28, 1924. Serial No. 734,627. 7 Claims. (Cl. 166—1.)



1. A method of developing a partially depleted oil body, comprising closing all oil and gas wells penetrating the oil sand, inserting a series of water wells at spaced intervals around substantially the entire original outer boundary of the oil body with their lower ends extending into the oil sand below the oil body, pumping gas into the oil sand above the oil body under pressure sufficient to prevent the oil from rising into unwetted sand and to prevent substantial channelling, opening oil wells in the outer rim of the oil body and introducing water into the water wells simultaneously around the greater portion of the area of the oil body to thereby gradually displace the oil body as a unit from below upwardly.

1,885,808. TAPE FOR CONTROLLING ELECTRICAL APPARATUS. WILLIAM L. DUCKER, Norman, Okla. Filed June 3, 1930. Serial No. 459,091. 11 Claims. (Cl. 200—46.)



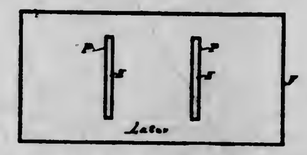
1. The combination with mechanism for making and breaking electrical circuits through the agency of a traveling perforated tape, of a perforated tape embodying a strip of a fibrous material faced with an insulating material.

1,885,809. APPARATUS FOR HANDLING TIRES. LEO A. ELLIS, Brooklyn, N. Y. Filed May 29, 1929. Serial No. 366,917. 5 Claims. (Cl. 280—6.)



1. A tire handling device comprising a substantially vertical frame having a supporting roller at its lower end, and means for rigidly clamping the upper and lower end portions of the frame to a vehicle tire and to its rim, said means engaging said rim on its edges at opposite sides thereof and at a plurality of pairs of points opposite each other.

1,885,810. PROCESS FOR THE SEPARATION OF ELECTRICALLY CHARGED PARTICLES FROM FLUIDS WITH THE AID OF AN ELECTRIC CURRENT. WILHELM ESMARCH, Berlin-Halensee, Germany, assignor to Siemens & Halske, Aktiengesellschaft, Siemensstadt, near Berlin, Germany, a Corporation of Germany. Filed Mar. 5, 1929, Serial No. 344,600, and in Germany Mar. 12, 1928. 11 Claims. (Cl. 204—1.)



1. In a process for the separation of rubber from latex the step of leading an alternating current, the average value of which is zero through the latex.

1,885,811. TUNNEL KILN. JOHN FETZER, Pittsburgh, Pa. Filed Jan. 11, 1930. Serial No. 420,107. 4 Claims. (Cl. 25—142.)

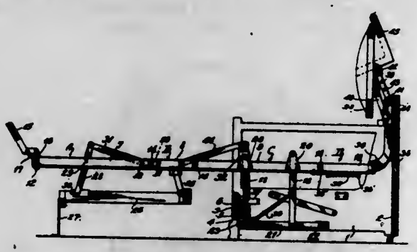
1. In a tunnel kiln for firing clay articles, a longitudinal chamber having end closures, a plurality of wheeled

trucks for supporting the articles in their passage through said chamber, baffles depending from the trucks to the



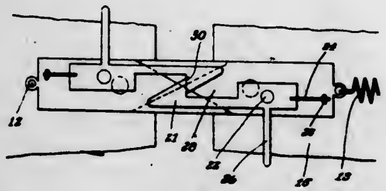
bottom of said chamber, and baffles projecting from the top and side walls of the chamber, said baffles dividing said chamber into separate heating and cooling zones.

1,885,812. FOLDING BED OR COUCH. OSCAR FICHTENBAUM, Brooklyn, N. Y., assignor to Joseph P. Fichtenbaum and Harry Fichtenbaum, Brooklyn, N. Y. Filed July 14, 1930, Serial No. 467,945. Renewed June 4, 1932. 3 Claims. (Cl. 5—81.)



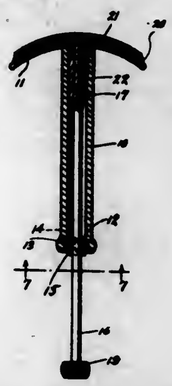
1. A folding bed or couch, comprising a conch structure including a seat frame, a mattress frame composed of alternating relatively narrow and relatively wide sections pivoted together to occupy a common plane or to fold with the relatively wide sections substantially parallel and the relatively narrow sections substantially perpendicular thereto, a pivotal connection between said seat frame and the outermost relatively narrow section, a lever pivotally connected at one end to said seat frame and intermediate its ends to said outermost relatively wide section, a plate secured to said outermost relatively narrow section and extending across the pivot between said section and the outermost relatively wide section, and a link connected at one end to said plate beyond the pivot between the outermost relatively wide and outermost relatively narrow sections and to the end of said lever to enable said seat frame to fold upon the outermost relatively wide section at substantially a right angle to the relatively narrow section.

1,885,813. TRAIN COUPLING. EDWARD P. FICKEISSEN, Richmond Hill, N. Y. Filed July 14, 1931. Serial No. 550,675. 1 Claim. (Cl. 213—104.)



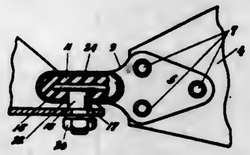
A car coupling device comprising a pair of substantially rectangular plates rigidly attached to each other, forming a unitary member of a thickness equal to the sum of the thicknesses of the two plates, one end of said member having an angular cut-out bounded by intersecting sides, one of said intersecting sides of one of said plates being continued in a straight line to the opposite side of said plate to form an elongated cam surface on said plate, the opposite intersecting side on the other of said plates being likewise continued to form a similar but oppositely disposed cam surface on said other plate, the ends of said plates being thereby formed into oppositely-disposed tongues, a pawl pivotally mounted on said member and having a jaw thereon lying adjacent said cut-out, and resilient means normally urging said jaw into said position.

1,885,814. SAFETY-RAZOR. WARREN WILLIAMS FLAGG, Orono, Me. Filed Apr. 11, 1932. Serial No. 604,582. 1 Claim. (Cl. 30—12.)



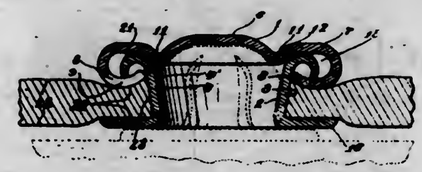
A razor of the class described comprising a tubular handle member, a guard connected to the inner end of said member, a plug threaded in the outer end of said handle member and having an opening passing therethrough, and a slot intersecting the opening, a rod passing through the handle member, a pin carried by the rod and adapted to pass through the slot when the rod is in a certain position and when the rod is in another position, the pin engages the plug to hold the rod in said other position, said rod having a handle member at its outer end, and an enlarged part at its other end provided with a threaded socket, said enlarged part fitting in the inner end of the handle member when the pin is passed through the slot and the rod turned to cause the pin to engage the outer face of the plug, a second guard having a threaded stem for engaging the socket for holding a blade between itself and the first guard when the rod is moved to a position to place this enlarged part in the handle member, said enlarged part having a snug fit in the handle member.

1,885,815. ENGINE SUPPORT. HOWARD A. FLOGAUS, Toledo, Ohio, assignor to The Willys-Overland Company, Toledo, Ohio, a Corporation of Ohio. Filed Apr. 23, 1930. Serial No. 446,567. 2 Claims. (Cl. 248—14.2)



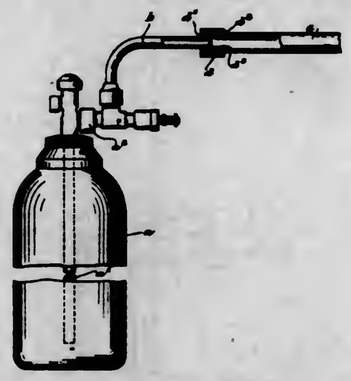
1. A motor support for an engine comprising a stud, a mass of resilient material secured to a portion of the stud, a pair of bracket members having complementary cup-shaped depressions partially embracing the resilient material, and said bracket members having integrally formed substantially parallel extensions thereon for attaching the bracket to the engine.

1,885,816. FASTENER. MALCOLM J. FORD, Baltimore, Md., assignor to Alma Manufacturing Company, Baltimore, Md., a Corporation of Maryland. Filed Nov. 4, 1931. Serial No. 572,953. 2 Claims. (Cl. 24—220.)



2. A snap fastening socket installation comprising a top member, a tubular socket member and a supporting structure, said top member being positioned at one side of said supporting structure and having an annular deflecting rib, the outer edge portion of said top member being turned, first downwardly, inwardly and then upwardly toward the under surface of the top member, the inturned portion of the top member being substantially parallel with the main portion of the top member, a plurality of slits formed in the inwardly and upwardly turned portion for the purpose of facilitating the bending of the outer edge portion of the top member, and also to secure the top member more firmly to the supporting structure, said tubular socket member extending through an opening in said supporting structure and having a flanged bottom portion cooperating with the opposite side of said supporting structure and an outwardly flared upper edge portion, the tubular socket member being of a diameter to fit closely within the opening defined by the inturned slotted edge, the upper edge portion of the tubular socket member engaging the outer side of the annular deflecting rib to deflect the edge portion of said tubular socket member outwardly and downwardly into contact with the inturned slotted portion of the top member to more securely bind the supporting structure between the flanged bottom of the tubular socket member and the inwardly turned portion of the top member.

1,885,817. DISCHARGING A FIRE EXTINGUISHING MEDIUM. WALTER H. FREYGANG, Weehawken, N. J., assignor to Walter Kidde & Company, Inc., New York, N. Y., a Corporation of New York. Filed July 24, 1928. Serial No. 295,054. 5 Claims. (Cl. 62—121.)



1. A fire extinguishing medium discharge system comprising a container, supply piping for removing the medium from the container and of such diameter and capacity as to prevent the pressure of the medium from falling to the triple point within it, continuation piping of substantially uniform diameter and of from one to five times the area of the supply piping, and a fitting connecting the supply and continuation piping and including an orifice through which the medium is discharged into the continuation piping, said orifice having an area such that it does not restrict materially the flow of the medium through the supply piping.

1,885,818. JOINT FOR CONVEYERS. FRANK L. FURBUSH, Graniteville, Mass., assignor to C. G. Sargent's Sons Corporation, Graniteville, Mass., a Corporation of Massachusetts. Filed Feb. 24, 1932. Serial No. 594,904. 4 Claims. (Cl. 198—193.)



1. In a conveyer, the combination of a series of sections of foraminous metallic material, the ends of the adjacent sections being bent downwardly at an angle and a joint connecting the said ends, consisting of a triangular spring extending transversely of the conveyer and having a bottom and two converging sides which are adapted to receive between them and be engaged by the said ends when the conveyer is in a straight condition, the interior of the triangular joint being unobstructed to allow said ends free play therein, for the purpose described.

1,885,819. PHOTO-ELECTRIC TUBE. HEINRICH H. GEFFCKEN and HANS R. RICHTER, Leipzig, Germany. Filed Dec. 7, 1928, Serial No. 324,470, and in Germany Dec. 9, 1927. 4 Claims. (Cl. 250—27.5.)



1. A photo-electric tube having a sealed envelope; a light sensitive cathode; an anode electrode positioned within said envelope in the end to be exposed to the light rays; a terminal connected to said cathode; a terminal connected to said anode electrode; and a conduit extending into said envelope through said cathode and separately mounting said anode terminal.

1,885,820. PUMPING APPARATUS. THOMAS J. GOTHARD, Los Angeles, and RICHARD WUNN, Hynes, Calif. Filed July 16, 1929. Serial No. 378,768. 10 Claims. (Cl. 103—46.)

1. A fluid operated pump of the character described, including: an outer shell adapted to be secured to the lower end of a casing; an inner tubular member within said outer shell, there being an annular pumping cylinder formed between the lower parts of said outer shell and said inner tubular member; a check valve at the lower end of said inner tubular member; an inlet valve;

walls providing passage means connecting said pumping cylinder with said check valve and said inlet valve; an annular pumping piston in said pumping cylinder; and



hydraulic means above said piston and between said outer shell and said inner tubular member for reciprocating said annular pumping piston.

1,885,821. WIRE ROPE AND METHOD OF MAKING THE SAME. RICHARD DUANE GREEN, Trenton, N. J., assignor to John A. Roebling's Sons Company, Trenton, N. J., a Corporation of New Jersey. Filed Oct. 3, 1931. Serial No. 566,648. 17 Claims. (Cl. 117—58.)



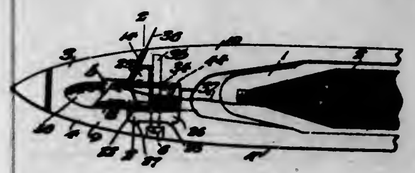
1. The method of making stranded wire structure of the class referred to which comprises forming the components into permanent helices throughout portions of their length and laying them to form the wire structure in sections longitudinally of the structure with some of the components thus formed and some unformed in the same section.

1,885,822. PROCESS OF BLEACHING AND DECOLORIZING HAIR, ANIMAL FIBERS, AND FUR SKINS. STANLEY S. GROGGINS, Brooklyn, N. Y., assignor to Coloxide Patents Corporation, New York, N. Y., a Corporation of New York. Filed Jan. 16, 1932. Serial No. 587,165. 4 Claims. (Cl. 8—2.)

1. The method of bleaching fur skins which comprises treating the same with an approximately neutral aqueous solution consisting of hydrogen peroxide and a colloid selected from the group consisting of starch, silicate of soda and aluminum hydroxide, at 20–35° C.

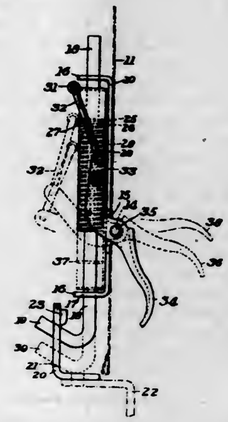
1,885,823. SHUTTLE. WASHINGTON L. HALL, Philadelphia, Pa., assignor to James H. Billington Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Sept. 6, 1930. Serial No. 480,120. 6 Claims. (Cl. 139—223.)

1. A shuttle threading block of the kind described comprising a body portion bent and folded upon itself to provide a pair of opposed walls, one of said walls having a folded over part carried to a point adjacent the other of said walls to form a thread guiding channel therebetween, said first mentioned wall having an integrally formed securing hook, the other of said walls having a flange provided with a pair of hooks, and an element on said first mentioned wall formed integrally therewith for preventing



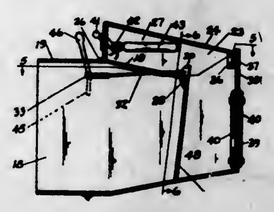
the thread from backing out of said shuttle in action, said element consisting of an arcuate hook disposed adjacent a channel formed in the bottom of said shuttle eye.

1,885,824. HOOD FASTENER. CARL R. HENNICKE, Cleveland, Ohio. Filed Sept. 9, 1930. Serial No. 480,640. 8 Claims. (Cl. 292—123.)



1. A hood fastener comprising an eye-plate, a hook rod for engaging said eye-plate, a bracket for slidably supporting the hook rod, a spring surrounding the rod, a spring carriage slidable on said rod, and a toggle linkage pivoted to the bracket and carriage for compressing the spring to operate the hook rod.

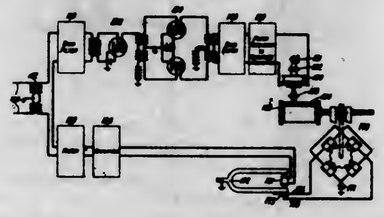
1,885,825. SHUTTER APPARATUS FOR MOVING PICTURE MACHINES. ERNEST V. HOFFMANN, St. Albans, and JAMES E. SOONS, Yonkers, N. Y., assignors to Hoffmann-Soons Electrical & Engineering Corporation, New York, N. Y., a Corporation of New York. Filed Sept. 9, 1929. Serial No. 391,362. 6 Claims. (Cl. 88—17.)



5. In an apparatus of the character described, a casing having an aperture in its forward end, a shutter element pivotally suspended intermediate the front and rear ends

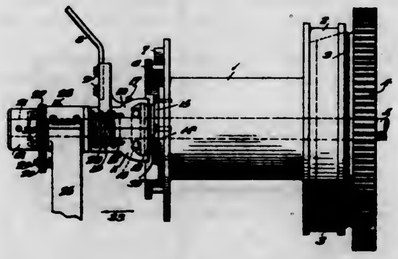
of the said casing and adapted to swing into closed position with its lower edge in spaced relation to the said forward end of the casing and its upper edge in spaced relation to the top wall, and an illuminating means placed within the space intervening between the upper edge of the shutter and the said top wall.

1,885,826. SYSTEM OF PHOTOGRAPHY EMPLOYING FREQUENCY MODULATION. WILLIAM H. T. HOLDEN, Brooklyn, N. Y., and RALPH K. BONNELL, East Orange, N. J., assignors to American Telephone and Telegraph Company, a Corporation of New York. Filed Dec. 8, 1926. Serial No. 153,408. 7 Claims. (Cl. 178—44.)



7. A signaling system comprising means for receiving a carrier current wave the frequency of which is modulated in accordance with signals, a wave amplitude limiting device of the push-pull type means for impressing said wave upon said limiting device to produce a corresponding wave of limited and constant amplitude, means for eliminating from said last mentioned wave harmonic components caused by said current limiting device, and means for utilizing the resultant wave in the reproduction of the signal.

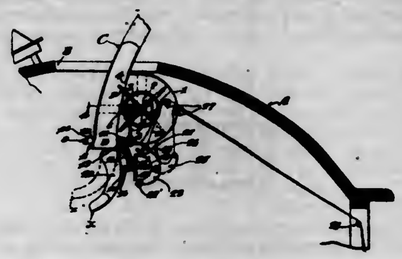
1,885,827. HOIST CLUTCH CONTROL MECHANISM. CHARLES W. HOTTMAN, Jr., Sandusky, Ohio, assignor to The Brown Clutch Company, Sandusky, Ohio, a Corporation of Ohio. Filed Jan. 30, 1929. Serial No. 336,274. 3 Claims. (Cl. 192—[illegible].)



1. A hoist clutch control mechanism comprising a thrust screw, a threaded operating nut engaging said screw, means for rotating said operating nut about said screw through a fixed arcuate distance, and means for adjusting and for retaining said thrust screw in any desired position, including a gear carried by said thrust screw and a pinion adapted to engage said gear.

1,885,828. DISTRIBUTING APPARATUS. ORLEY C. HOUGHTON, Racine, Wis. Filed Dec. 5, 1930. Serial No. 500,264. 2 Claims. (Cl. 302—60.)

1. A distributing apparatus comprising a delivery chute, an impeller having blades extending into the chute, a ring rotatably mounted with relation to the chute mouth, a gear connection between the ring and impeller, a boot pivoted to the ring, an arm extending from said ring, a star wheel carried by the arm, a spindle in threaded union with the star wheel for engagement with the boot, and a



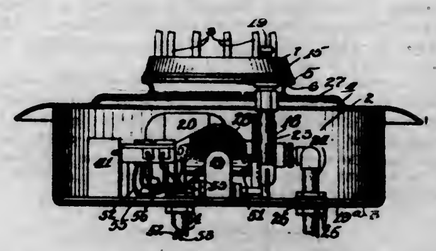
manually controlled oscillatory anchor having tappet pins adapted to be selectively shifted in the path of travel of the star wheel.

1,885,829. FISH FIN AND TAIL GUIDE MEANS FOR FILLETING MACHINES. WILLIAM H. HUNT, National City, Calif. Filed Jan. 15, 1931. Serial No. 508,899. 14 Claims. (Cl. 17—2.)



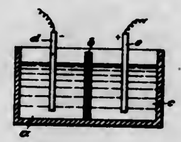
1. In a fish fin and tail guide means for fish filleting machines, a guide, a fin diverting gate forming a section of said guide, and gate opening means associated with said guide operable by the tail portion of a fish after passing said gate means, whereby the fins of said fish are diverted from said guide.

1,885,830. PORTABLE ELECTRIC FOUNTAIN. STEPHEN B. HUTCHINGS and WALTER L. HAANEL, Chicago, Ill.; said Haanel assignor to said Hutchings. Filed Aug. 24, 1929. Serial No. 388,060. 5 Claims. (Cl. 299—4.)



1. In a fountain, a container, a cover secured to said container and having a transparent section, a multi-color light producing means within said container, and adjustable prisms for reflecting light from said means through said transparent section, said prisms being rotatably mounted.

1,885,831. PROCESS FOR THE SEPARATION OF RUBBER. KURT ILLIG, Berlin-Wilmersdorf, and NIKOLAUS SCHÖNFELDT, Berlin-Charlottenburg, Germany, assignors to Siemens-Elektro-Osmose G. m. b. H., Siemensstadt, near Berlin, Germany, a Corporation of Germany. Filed Mar. 5, 1929, Serial No. 344,579, and in Germany Mar. 14, 1928. 5 Claims. (Cl. 204—1.)



1. A process for the separation of rubber from latex by means of a direct current which comprises adding to the latex a water-soluble polyhydric alcohol, adding furthermore thorium nitrate to the latex and leading a direct current of a voltage higher than 400 volts through the mixture.

1,885,832. CATALYTIC OXIDATION OF ANTHRACENE. ALPHONS O. JAEGER, Crafton, Pa., assignor, by mesne assignments, to The Selden Research & Engineering Corporation, Pittsburgh, Pa., a Corporation of Delaware. Original application filed June 3, 1927, Serial No. 196,393, now Patent No. 1,709,583, dated Apr. 23, 1929. Divided and this application filed Mar. 24, 1928. Serial No. 264,571. 14 Claims. (Cl. 260—57.)

1. A method of oxidising anthracene containing materials to anthraquinone, which comprises causing the anthracene containing materials in the vapor phase to react with an oxidizing gas at reaction temperatures in the presence of a contact mass having associated therewith at least one compound of an element falling within the group consisting of alkali metals, alkaline earth metals.

1,885,833. CONTACT SULPHURIC ACID PROCESS. ALPHONS O. JAEGER, Crafton, Pa., assignor to The Selden Company, Pittsburgh, Pa., a Corporation of Delaware. Filed Jan. 22, 1929. Serial No. 334,365. 14 Claims. (Cl. 23—175.)

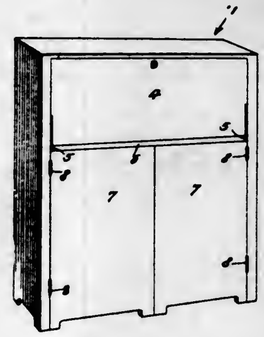
1. A method of catalytically oxidizing sulphur dioxide to sulphur trioxide, which comprises passing a gaseous mixture containing sulphur dioxide and oxygen at an elevated temperature over a non-permutogenetic contact mass, said mass containing at least one catalytically active silicate.

1,885,834. PRODUCTION OF MONOCARBOXYLIC ACIDS AND THEIR DERIVATIVES. ALPHONS O. JAEGER, Mount Lebanon, Pa., assignor, by mesne assignments, to The Selden Research & Engineering Corporation, Pittsburgh, Pa., a Corporation of Delaware. Filed July 29, 1930. Serial No. 471,594. 16 Claims. (Cl. 260—108.)

1. A method of transforming a metal salt of a polycarboxylic acid to that of the corresponding monocarboxylic acid, which comprises subjecting a mixture containing the metal salt of the polycarboxylic acid and a strong inorganic base, the inorganic base being in at least 10% excess of the amount theoretically required for the reaction, at reaction temperatures of 410–450° C.

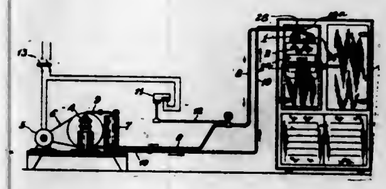
1,885,835. FOLDABLE DESK. MEHRAN KASPARIAN, Jersey City, N. J., assignor, by direct and mesne assignments, of one-half to John Fanarjian, Jersey City, N. J., and one-half to Paul M. Hammalian, John M. Hammalian, and Jacob M. Hammalian. Filed Oct. 11, 1930. Serial No. 487,931. 5 Claims. (Cl. 45—6.)

1. A foldable desk composed of upper and lower body sections, said upper body section having a vertically-swinging hinged closure member comprising, when extended, a writing table top and the lower body section being provided with horizontally-swinging doors, lever mechanism connecting said doors and table top and arranged upon vertical movement of the table top to swing the doors horizontally into folded position to close the lower compartment and into open position to support the table top, said



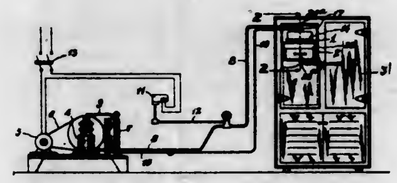
lever mechanism comprising door-moving members pivotally mounted at the sides of the casing and having an operative connection with said doors, a crank arm operable to move said door-moving members and extending into the upper compartment, and lever mechanism having at one end a pivotal connection with the table top and at the other end having an operative connection with said crank arm.

1,885,836. REFRIGERATING APPARATUS AND METHOD OF LUBRICATING SAME. HERBERT C. KELLOGG and EDWARD M. MAY, Detroit, Mich., assignors to Glen P. Cowan, Detroit, Mich.; Grace A. Cowan executrix of said Glen P. Cowan, deceased. Filed July 25, 1928. Serial No. 295,174. 23 Claims. (Cl. 62—115.)



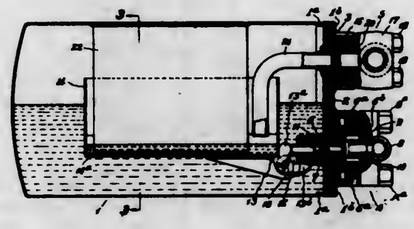
1. In the process of refrigeration in which a liquid refrigerant in a closed system is evaporated from a body thereof maintained in one chamber of the system, the gaseous refrigerant withdrawn into another chamber of the system and condensed therein, and then returned in liquid form into the first chamber at a reduced pressure, the method of lubricating the working parts of the apparatus which comprises introducing into the closed system a liquid lubricant soluble in the liquid refrigerant whereby lubricant escaping from the pump into the condensing chamber dissolves in the liquid refrigerant therein and passes with said liquid refrigerant into the evaporating chamber; effecting separation from the liquid refrigerant in the evaporator of lubricant lifted above the normal level of the body of liquid in the evaporator by ebullition thereof, and conducting the thus separated lubricant out of the evaporating chamber back to the pump to lubricate the latter.

1,885,837. REFRIGERATING APPARATUS AND MEANS FOR LUBRICATING SAME. HERBERT C. KELLOGG and EDWARD M. MAY, Detroit, Mich., assignors to Glen P. Cowan, Detroit, Mich.; Grace A. Cowan executrix of said Glen P. Cowan, deceased. Filed Mar. 30, 1929. Serial No. 351,372. 8 Claims. (Cl. 62—115.)



1. In refrigerating apparatus, the combination of an evaporator of the flooded type; a compressor having its inlet connected to the evaporator to withdraw refrigerant gas therefrom; a condenser connected to receive compressed refrigerant from the compressor and deliver the liquefied refrigerant to the evaporator; a body of refrigerant in the closed system; liquid lubricant in the closed system of lower specific gravity than the liquid refrigerant and soluble to a limited extent in the latter; means for intermittently driving the compressor; a receptacle secured in fixed position in the evaporator and having an inlet for lubricant and refrigerant gas of relatively long horizontal perimeter; a discharge duct leading from the said receptacle to the suction conduit of the compressor; and means associated with the evaporator for controlling admission thereto of the liquid refrigerant and maintaining in the evaporator a normal liquid level at a distance below the said inlet of the receptacle such that the intermittent rise of said lever when the compressor is intermittently started causes discharge into the receptacle of liquid lubricant from the top of the body of liquid in the evaporator without such discharge of liquid refrigerant.

1,885,838. EVAPORATOR FOR REFRIGERATING APPARATUS. HERBERT C. KELLOGG and EDWARD M. MAY, Detroit, Mich., assignors to Glen P. Cowan, Detroit, Mich.; Grace A. Cowan executrix of said Glen P. Cowan, deceased. Filed Apr. 5, 1929. Serial No. 352,678. 14 Claims. (Cl. 62—126.)



1. In an evaporator for refrigerating apparatus, the combination of a casing structure having an upright wall with an inlet passage for liquid refrigerant and an outlet passage for gaseous refrigerant and oil; a valve for controlling the said inlet passage; an open topped, cup-shaped float in the casing for actuating said valve; and a discharge conduit for gas and oil connected to the aforesaid outlet passage and having its inlet within the cavity of the float.

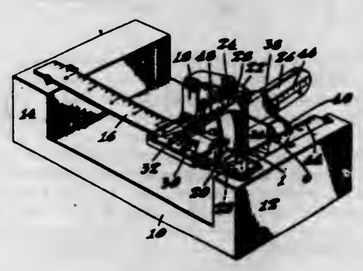
1,885,839. BINDER MATERIAL FOR COAL, COKE, AND THE LIKE, AND THE MANUFACTURE THEREOF. LUDWIG KERN and FERNANDO C. KERN, Webster Groves, Mo. Filed June 18, 1930. Serial No. 462,128. 10 Claims. (Cl. 87—1.)

1. A binder material for pulverized coal and the like comprising an acid solution of coal gangue containing an excess of acid.

5. The process of manufacturing a binder material for pulverized coal and the like which comprises comminuting the gangue material ordinarily naturally associated with said coal, treating the pulverized gangue with hydrochloric acid whereby various constituents of said gangue are dissolved, and removing said acid with the substances dissolved therein from the undissolved gangue.

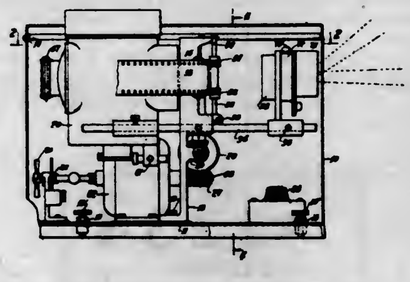
10. The filter material which comprises a comminuted mixture of approximately 70% silica, 4% iron oxide, 6% alumina, and the remainder carbonaceous material.

1,885,840. MANUFACTURE OF HEELS. RALPH F. KNIGHT, Beverly, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Jan. 26, 1929. Serial No. 335,873. 21 Claims. (Cl. 12—42.)



1. That improvement in methods of making heels which consists in measuring the height of any heel perpendicularly to the tread face from the tread face to the edge of the attaching surface in a transverse plane which intersects the breast surface at a predetermined distance below the intersection of the said plane with the edge of the attaching surface.

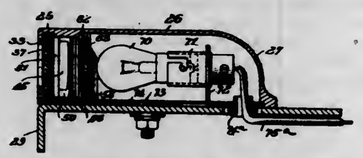
1,885,841. SIGN PROJECTION APPARATUS. PHILLIP KRUPNIK, Chicago, Ill. Filed Feb. 10, 1930. Serial No. 427,112. 5 Claims. (Cl. 58—28.)



1. An advertising device comprising an endless flexible strip, having at recurring intervals surfaces forming characters, said characters running lengthwise of the strip, the character bearing surfaces and characters being of

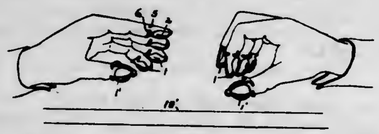
different degrees of transparency, means for projecting the image of said characters on a screen, driving means including sprockets for continuously moving said strip so that the projected image is in continuous motion, a strip steadying device consisting of an inner frame member and an outer frame member, pivotally supported thereon, means for opening said frame members to allow said strip to be inserted between the same and to be then closed to keep said strip thus inserted, cooperating rollers mounted upon said frame members adapted to hold said strip vibrationless as it passes therethrough, and projections formed integral with said inner frame for partially surrounding said sprockets for preventing the film from winding around said sprockets when accidentally caught thereon.

1,885,842. INDICATING LAMP FOR VEHICLES. HENRY F. KURTZ, Rochester, N. Y., assignor to Benneville Lloyd Singley, Meadville, Pa. Filed Apr. 19, 1930. Serial No. 445,659. 5 Claims. (Cl. 240—8.2.)



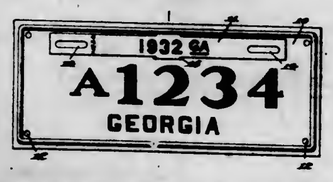
1. An indicating lamp comprising, in combination, a body having a generally rectangular portion provided with a window in each of three sides thereof and a generally semi-cylindrical portion connected to said rectangular portion on a fourth side thereof to provide a light chamber, said rectangular portion and said semi-cylindrical portion each being open at one side, an electric illuminating unit in said light chamber to furnish light to pass through all of said windows, and a single closure member for closing the open side both of said rectangular portion and of said semi-cylindrical portion.

1,885,843. MUSICAL NOVELTY. FRIEDRICH J. LANGER, South Euclid, Ohio. Filed June 29, 1931. Serial No. 547,651. 7 Claims. (Cl. 84—322.)



1. A musical novelty comprising a member of thin flexible material for embracing a person's finger, said member having a plurality of rounded thickened tapping portions formed thereon.

1,885,844. LICENSE PLATE. ROY L. LEWIS, Atlanta, Ga. Filed Apr. 14, 1931. Serial No. 530,081. 1 Claim. (Cl. 40—125.)



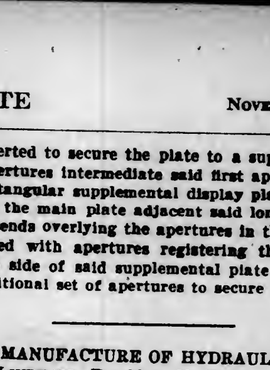
In a license tag, the combination of a rectangular main display plate having spaced apart apertures adjacent one of the long edges thereof through which fastening means may be inserted to secure the plate to a support, and additional apertures intermediate said first apertures and a narrow rectangular supplemental display plate located on the face of the main plate adjacent said long edge thereof with its ends overlying the apertures in the main plate and provided with apertures registering therewith, and tabs on the side of said supplemental plate for insertion in said additional set of apertures to secure the plates together.

1,885,845. MANUFACTURE OF HYDRAULIC CEMENT. POUL T. LINDHARD, Brooklyn, N. Y., assignor to F. L. Smidth & Co., New York, N. Y., a Corporation of New Jersey. Filed June 20, 1930. Serial No. 462,441. 5 Claims. (Cl. 222—7.)



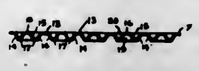
1. In a rotary kiln, the combination of a main shell closed by a partition, a series of tubes interconnected in pairs, one tube of each pair being connected to the shell at one side of the partition and the other tube being connected to the shell at the other side of the partition, and means to cause the material to move upward through one of the tubes of each pair.

1,885,846. VALVE AND ITS OPERATION. EDGAR EARLE LITTLEFIELD, Los Angeles, Calif. Filed Oct. 4, 1928. Serial No. 139,454. 15 Claims. (Cl. 137—139.)



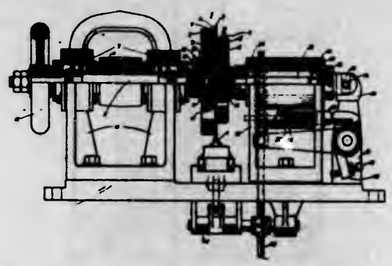
1. A combination including a valve casing having a seat; a closure at times supported by said seat; an auxiliary valve; latching means supportable by said closure designed to cause the auxiliary valve to assume an open position after it is de-energized; means for energizing and de-energizing the auxiliary valve.

1,885,847. CUSHION SEAT. LEON MANN, Mount Vernon, N. Y., assignor to Holed-Tite Packing Corporation, a Corporation of New York. Filed June 2, 1928. Serial No. 282,396. 5 Claims. (Cl. 155—182.)



1. A cushion seat of the character described comprising a plurality of sheet sections formed of unfinished pulp material, one of said sections having a relatively smooth surface, and another section having frusto-conical protuberances associated therewith.

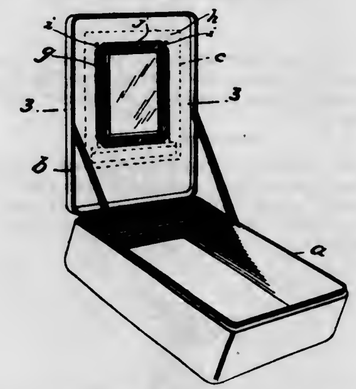
1,885,848. MACHINE FOR SMOOTHING THE EDGES OF PHONOGRAPH RECORDS. NORRIS E. MARCH, Muskegon, Mich., assignor, by mesne assignments, to United Research Corporation, Long Island City, N. Y., a Corporation of Delaware. Filed June 5, 1928. Serial No. 283,102. 9 Claims. (Cl. 82—2.)



1. The combination of a pair of holders for a phonograph record of the disk type, means for rotating the same, a tool having a cutting jewel thereon movable into engagement with the unfinished edge of said record, a pedal movable by an operator and means operable on the depression of said pedal for moving one of said holders into opposed relation with respect to the other for gripping a record therebetween and thereafter moving said tool to apply said jewel to the edge of said record.

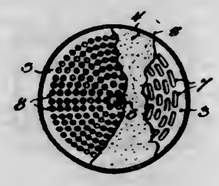
8. A record trimming machine, comprising a spindle, means for supporting and driving said spindle, a record holder thereon, comprising a face plate, having a concentric recess, a spring operated stripper plate within said recess, a pad covering said face plate and said stripper plate, a second spindle coaxial with said first mentioned spindle, means for moving it endwise towards said first mentioned spindle, a second face plate and pad mounted thereon, and a cutter tool adapted to be advanced towards said record holders, and a pedal means adapted to actuate said second mentioned spindle, and to advance said cutter tool towards said record holders.

1,885,849. TRAVELING CASE. SILVIO MARELLA, Philadelphia, Pa., assignor to The F. H. White Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Aug. 12, 1930. Serial No. 474,747. 4 Claims. (Cl. 190—41.)



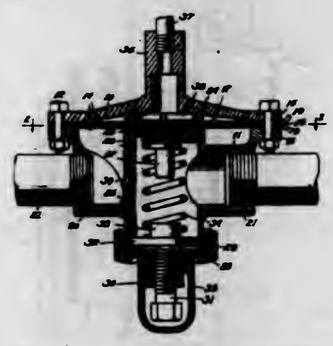
1. In a traveling case, a box frame secured therein and having a front opening, a mirror frame insertable in said opening, a spring-tensioned member adapted to hold the mirror frame in said opening and movable to allow the withdrawal of the mirror frame, the mirror frame constituting a removable closure for the box.

1,885,850. STRAINER. RICHARD G. MARTIN, Milwaukee, Wis., assignor to National Enameling & Stamping Company, Milwaukee, Wis. Filed Apr. 20, 1931. Serial No. 531,318. 5 Claims. (Cl. 210—159.)



4. A strainer comprising a pair of perforated plates superimposed upon each other, the perforations of said plates being aligned circumferentially, the openings in one of said plates being elongated circumferentially to provide slots, whereby to provide a substantially uniform area of opening through the plates irrespective of the relative position of the plates.

1,885,851. REGULATOR. GARNET W. MCKEE, Rockford, Ill. Filed Sept. 10, 1928. Serial No. 304,986. 6 Claims. (Cl. 50—23.)

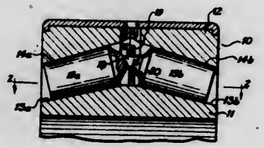


1. A regulator comprising, in combination, a casing formed of two sections, a diaphragm secured between said sections, said diaphragm comprising a plurality of superimposed layers including an intermediate screen layer with open interstices, means for admitting pressure fluid to one section of said casing, a fluid line including said other section of said casing, and valve means in said other section for controlling the flow of fluid through said line, said valve means being responsive to the movements of said diaphragm, said diaphragm having the intermediate layer in free communication with the exterior of the casing so that upon a rupture of a layer on either side of the intermediate layer the fluid admitted through the rupture will vent to atmosphere.

1,885,852. DOUBLE THRUST ROLLER BEARING. NICHOLAS MEDVED, Canton, Ohio. Filed Aug. 13, 1929. Serial No. 385,514. 17 Claims. (Cl. 308—214.)

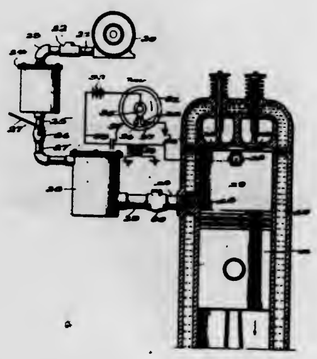
1. A roller bearing including an inner sleeve having a pair of oppositely tapered conical raceway surfaces and the bases of the conical surfaces being adjacent each other, an outer sleeve having a pair of oppositely tapered conical raceway surfaces and the bases of the conical surfaces being adjacent each other, the raceway surfaces of the inner and outer sleeve forming two sets of opposite raceway surfaces, the raceway surfaces of each set converging outwardly a set of tapered rollers interposed between each set of raceway surfaces and rolling thereon

each raceway surface being limited to a conical surface, and the inner axial end of each roller in one set being in the form of a flat pitched cone, terminating in a steeply



tapered thrust transmitting protuberance projecting axially therefrom, and a socket in each roller of the other set receiving and fitting one of the protuberances.

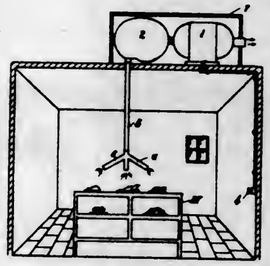
1,885,853. INTERNAL COMBUSTION ENGINE. CHARLES R. MINEA, San Francisco, Calif., assignor of one-fourth to Mike Tambor and one-fourth to Simeon Powell, San Francisco, Calif. Filed Jan. 23, 1930. Serial No. 422,758. 3 Claims. (Cl. 123—37.)



1. In combination with an internal combustion engine, means for producing a dual explosion during a single piston stroke, said means including a suitable ignition device, a timer having an additional arm for producing a spark at a suitable interval after the first explosion, and means for supplying compressed auxiliary air to the cylinder simultaneously with the second ignition, the means for supplying compressed air comprising a pump, a compressed air reservoir for receiving air from the pump, a check valve located between the pump and reservoir, a drain tank beyond the said reservoir, a manually operated valve in the passage between the drain tank and reservoir, a passage leading from the drain tank to the cylinder, a one-way flap valve in said passage to prevent return of pressure from the cylinder, a fitting having a jet nozzle therein, interposed between the flap valve and the cylinder, and a relatively reduced passage through the cylinder wall between said fitting and the interior of the cylinder.

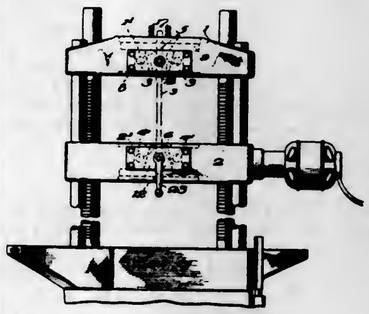
1,885,854. APPARATUS FOR KILLING INSECTS. NESTOR MONTELLANO, Buenos Aires, Argentina. Filed Feb. 26, 1930, Serial No. 431,539, and in Argentine Republic Oct. 24, 1929. 2 Claims. (Cl. 43—139.)

2. In an apparatus of the class described, a suction device having an air inlet and an air outlet, a collector receptacle connected to the air inlet side of said suction device, a suction conduit leading from said receptacle, and a revolvable suction head at the free end of said suction conduit, said head having a pair of oppositely directed



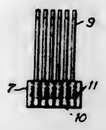
tubes, the ends of the tubes being turned in opposite directions whereby a movement of the air will cause the head to revolve.

1,885,855. TESTING MACHINE. WILLIAM C. MORAN, Laurel Springs, N. J., assignor to Riehle Bros. Testing Machine Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Aug. 13, 1931. Serial No. 556,899. 28 Claims. (Cl. 73—51.)



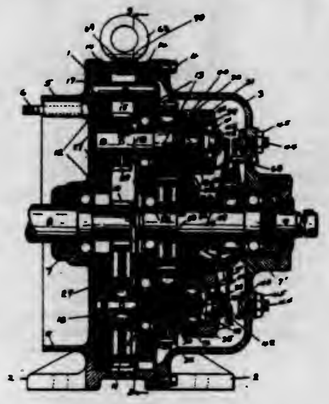
1. In a testing machine, means for gripping a specimen to be tested, and means having an inclined face for moving said gripping means transversely of the specimen to grip the same.

1,885,856. SAFETY MATCH CONTAINER. CHARLES H. PALMER, Akron, Ohio, assignor to The Palmer Match Company, Akron, Ohio, a Corporation of Ohio. Filed Feb. 2, 1929. Serial No. 337,087. 1 Claim. (Cl. 206—29.)



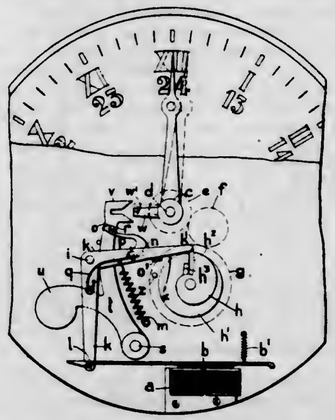
A safety match container comprising a corrugated strip having side members joined thereto forming individual match receiving compartments, and matches disposed with their head ends in said corrugations, said container being distored between adjacent matches and in the region of the head ends of said matches to firmly secure them in the container.

1,885,857. MULTIPLE SPEED TRANSMISSION. WILLIAM ROBERTS, Oakland, Calif. Filed May 31, 1930. Serial No. 458,061. 15 Claims. (Cl. 74—59.)



1. In a multiple speed gear transmission, a casing, driving and driven shafts extending therefrom, change speed gears within the casing arranged for transmitting power between the shafts, a circular row of axially slidable clutches associated with said gears, and a rotatable device provided with means for resiliently forcing said clutches selectively into engagement.

1,885,858. ELECTRIC ADJUSTING DEVICE FOR THE HANDS OF CLOCK MECHANISMS. CHARLES ROSAT, Boudry, JAKOB OTTO MOSER, Bern, and PAUL REYMOND, Colombier, Switzerland; Rose-Lucy Rosat, née Bôle, administrator of said Charles Rosat, deceased. Filed July 21, 1930, Serial No. 469,450, and in Switzerland Aug. 12, 1929. 1 Claim. (Cl. 58—34.)

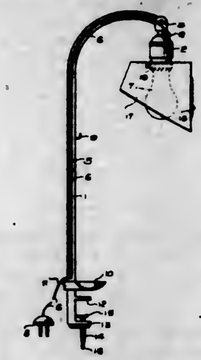


An electric driven clockwork, comprising an operating current circuit therefor, a hand adjusting lever, an electro control magnet having an armature, said magnet being connected in the same operating current circuit as the clockwork to be energized thereby, an interconnecting control lever between the armature of said control magnet and said hand adjusting lever, a snail disc arranged to be operated by the clockwork and to control the operation of said interconnecting control lever in dependence of time, a device for briefly varying energization of said control magnet, a spring urged latch member for releasably coupling said interconnecting control lever with the hand adjusting lever in combination with a stop so arranged as to produce disengagement of said latch member when adjustment of the hand has been made and to thus allow the hand adjusting lever to return to its normal position.

1,885,859. PROCESS FOR REFINING VEGETABLE OILS. LUDWIG ROSENSTEIN and WALTER J. HUND, San Francisco, Calif. Filed Aug. 21, 1931. Serial No. 558,556. 17 Claims. (Cl. 87—12.)

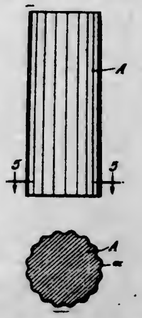
1. In a process of purifying a substance of the class consisting of oils, fats and waxes of the ester type, the step which comprises contacting the material to be treated with an alkylolamine.

1,885,860. LAMP FOR ADVERTISING PURPOSES. GUY LANDIS ROWE, Dallas, Tex. Filed Jan. 2, 1932. Serial No. 584,563. 3 Claims. (Cl. 40—131.)



1. As a new article of manufacture, an advertising lamp comprising a standard having a longitudinal groove therein to receive a wire, said standard having a curved upper end, a lamp socket adjustably suspended from the upper end of said standard, a lamp shade connected to said lamp socket, a translucent panel in said lamp shade for bearing advertising copy and means for securing the lower end of said standard to a supporting object.

1,885,861. METHOD OF MAKING RAILS. HERBERT C. RYDING, Birmingham, Ala. Filed Aug. 15, 1929. Serial No. 386,214. 5 Claims. (Cl. 80—66.)



1. In the manufacture of rails the method which consists in providing a fluted ingot which is substantially circular in cross section, reheating the ingot and subject-

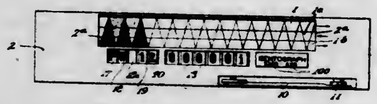
ing it to a number of passes in a blooming mill to form a bloom of substantially rectangular cross section and subjecting said bloom to a number of passes in a rolling mill to produce a rail of the desired cross sectional contour.

1,885,862. FEED BAR AND PEN POINT. SOLOMON M. SAGER, Glencoe, Ill. Filed June 29, 1931. Serial No. 547,549. 4 Claims. (Cl. 120—50.)



1. A fountain pen feed unit comprising a feed bar having an externally threaded shank integrally formed on one end thereof, said feed bar having a pen point receiving recess formed therein with the margins bounding the recess grooved to provide overhanging flanges, and a pen point slidably engaged in the feed bar recess with the body portion of the pen point shaped complementally to the shape of the feed bar recess with margins of the pen point engaged beneath the flanges to hold the pen point frictionally interfitting the feed bar.

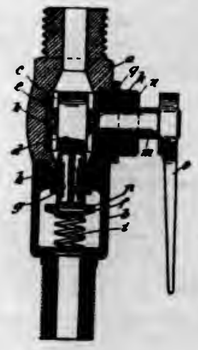
1,885,863. IDENTIFYING APPARATUS. HENRY S. SATTERLEE, New York, N. Y., assignor to The Identograph Company, Inc., a Corporation of New York. Original applications filed Jan. 20, 1922, Serial No. 530,504, and Apr. 7, 1925, Serial No. 21,430. Divided and this application filed June 19, 1930. Serial No. 462,390. 27 Claims. (Cl. 95—1.1.)



1. An identifying device having a plurality of symbol-bearing elements movable longitudinally with respect to one another, a plurality of rotatable symbol-bearing elements movable with respect to one another and with respect to said longitudinal movable elements and a common actuating means independent of the will of the operator to vary the relative position of all of said elements.

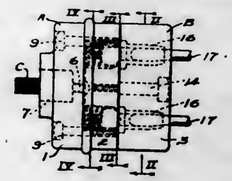
1,885, 864. STOP VALVE. HEINRICH SCHMITT, Witten-on-the-Ruhr, Germany. Filed Apr. 4, 1931, Serial No. 527,692, and in Germany July 25, 1930. 1 Claim. (Cl. 251—132.)

A stop valve for steam, water, gas and compressed air, especially for pneumatic hammers, comprising in combination a casing having a circular cavity in two opposite sides, an oval eccentric, circular discs one on each side of said eccentric fitting into said circular cavities, a handle on said eccentric, a check valve projecting into said casing, said eccentric adapted to act in axial direction upon said check valve and to move said valve away



from its seat so that the pressure medium can pass through if said eccentric is turned with its longitudinal axis in the axial direction of said check valve.

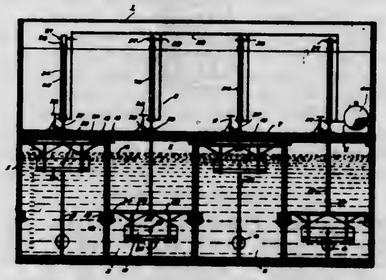
1,885,865. ELECTRICAL SWITCH. GEORGE J. SCHNEIDER, Detroit, Mich. Filed Dec. 20, 1929. Serial No. 415,561. 2 Claims. (Cl. 200—11.)



1. An electrical switch comprising a base, a disc portion secured thereto, said base and said disc portion being formed of insulating material, a member of insulating material, terminal plates on the face of said base adjacent said disc, said base having an aperture formed therethrough for the introduction of leads to said plates, said member and said disc being axially and relatively rotatably connected, said disc, having circularly spaced passages therethrough, springs in said passages one extremity of each of which rests on one of said terminal plates, balls housed at least partly within said passages, said member having circularly arranged openings therein, and contact sleeves in said openings held against axial movement and terminating substantially flush with the inner face of said member, said balls being adapted to rotate against the inner face of said member and to seat on the extremities of said contact sleeves when said member and disc are rotated relative to one another.

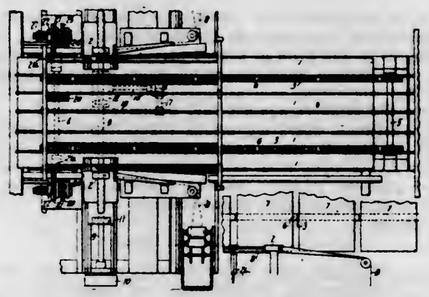
1,885,866. TIDAL MOTOR. ALBERT T. SCHILLER, Walla Walla, Wash. Filed Aug. 23, 1930. Serial No. 477,212. 3 Claims. (Cl. 253—9.)

1. In a tidal motor, a basin of water provided by and having a flood water level equaling the level of the flood tide, means to maintain the flood level until ebb tide, said means being adapted to reduce said level at ebb tide to the ebb level and to maintain said ebb level until flood tide, buoyant bodies in said basin, means to secure said bodies until flood level occurs and to release said bodies according to a predetermined plan to rise through said water during the sustained flood level, said means being adapted to secure said bodies until ebb level occurs in the basin, and to release said bodies according to the



same plan to drop by gravity to the sustained ebb level, to provide a cycle of energy for each body during the flood and ebb cycle of time, and means to communicate and store the energy so provided for power.

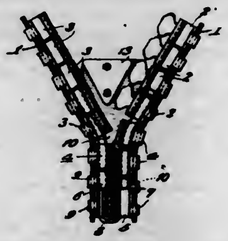
1,885,867. TAPE CUTTER. WILLIAM E. SHARKEY, Middletown, Ohio, assignor to The Raymond Bag Company, Middletown, Ohio, a Corporation of Ohio. Filed Feb. 9, 1931. Serial No. 514,377. 18 Claims. (Cl. 112—252.)



1. In a machine comprising means for advancing a series of articles which are connected in spaced relation by a continuous tape, a rotary cutter having a substantially radial blade arranged to be moved across the path of travel of said tape, an actuating device for said cutter, and a device connected with said article advancing means for movement in timed relation thereto and having a part to periodically engage said actuating device and impart movement thereto and having another part to engage said actuating device and hold the same against movement while the first mentioned part is out of engagement therewith.

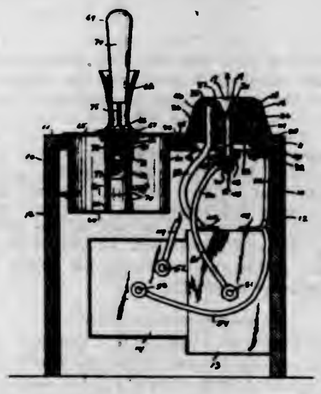
1,885,868. TERMINAL FASTENING DEVICE. JOHN A. H. SIEBS, Jersey City, N. J. Filed Dec. 10, 1931. Serial No. 580,010. 3 Claims. (Cl. 24—205.)

1. Terminal fastening means for uniting the ends of series of complementary interlocking fasteners, comprising, a terminal member for one of said series, provided with hook portions having ends extending substantially parallel with the direction of the successive fasteners of said series and with transverse grooves, and a complementary terminal element having transverse grooves that



are used to receive said hooking portions, whereby said terminal members may be hooked together and unhooked when said series of fasteners are disengaged.

1,885,869. LIGHTER. JOSEPH L. SMITH, Buffalo, N. Y., assignor, by mesne assignments, to Faries Manufacturing Company, Decatur, Ill., a Corporation of Illinois. Filed Oct. 18, 1928. Serial No. 313,304. 3 Claims. (Cl. 67—4.)



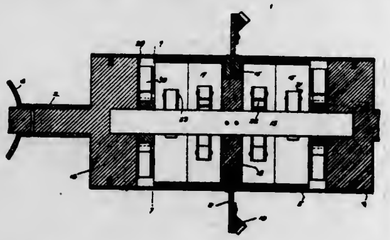
1. In a lighter, the combination of a holding and feeding device and a torch member cooperating therewith, said device comprising a fuel holding receptacle, a tubular member extending through the top of said receptacle having a cylindrical section extending from the top to the bottom of said receptacle, a body of wicking material filling said cylindrical section and formed to provide an elongated upwardly opening socket in the upper end portion thereof, a torch extinguishing and guiding section extending above said device from the upper end of said cylindrical section and formed to provide an outwardly flared open upper end and a contracted passage adjacent said cylindrical section of smaller size than said cylindrical section; and said cooperating torch member having a torch element provided with an exposed body of absorptive material having a size adapted to snugly fit and be housed in said socket in said body of wicking material in contact therewith below said second-mentioned section, and a handle on said torch member extending outwardly through said second-mentioned section beyond the upper end thereof when said torch element is housed in said socket, and said contracted passage cooperating to extinguish flame on said torch element during insertion through and guiding by said second-mentioned section.

1,885,870. PROCESS OF FLAME-PROOFING AND PRODUCT FORMED THEREBY. CHESTER SNYDER, Yonkers, N. Y. Filed Aug. 9, 1930. Serial No. 474,313. 10 Claims. (Cl. 91—68.)

1. Process which comprises impregnating an inflammable fibrous material with a flameproofing agent, and coating the impregnated material with a chlorine-containing vinyl resin; whereby said flame-proofing agent is protected from water and from dislodgment, and the tendency to after-glow is diminished.

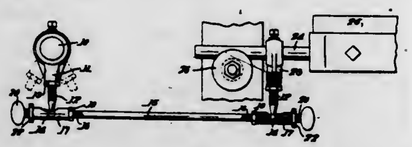
10. A flame-proof screen on which to project pictures, said screen comprising fabric impregnated with a heavy metal oxide and coated with a chlorine-containing vinyl resin.

1,885,871. TWO WHEEL DRIVE DIFFERENTIAL. CLARENCE E. SCHOENBORN, Conklin, Mich. Filed Aug. 1, 1931. Serial No. 554,586. 4 Claims. (Cl. 74—7.)



1. A device of the class described comprising a cylinder, a shaft rotatably arranged in the cylinder, means for driving the shaft, a pair of sectional shoes, spring means for normally holding the shoes out of engagement with the cylinder, forward and reverse driving wedge means connected with the shaft for forcing the shoes into engagement with the cylinder, spring members rotatably supported by the shaft for moving the wedge means outwardly into engagement with the shoes, and pawls slidably supported on a part of the cylinder for connecting the spring members to the cylinder when the cylinder is idle, and releasing the spring members when the cylinder is rotating.

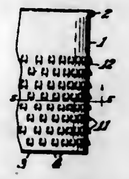
1,885,872. DOCTOR VIBRATOR. STEPHEN B. STAFFORD, Oxford, and HERMAN A. SMITH, Worcester, Mass., assignors to Rice, Barton & Fales, Incorporated, Worcester, Mass., a Corporation of Massachusetts. Filed Feb. 17, 1931. Serial No. 516,375. 5 Claims. (Cl. 101—169.)



1. In a device for vibrating a doctor blade, the combination with an oscillatory shaft, of an arm projecting therefrom, a rod having means for pivotally connecting said arm with it, and an arm fixed on the shaft of the doctor blade and pivotally connected with said rod for transmitting motion of the rod to the doctor blade.

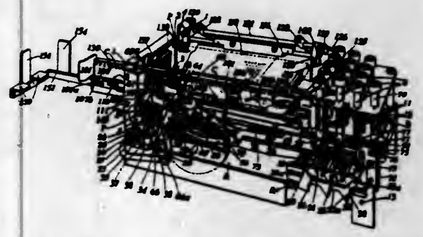
1,885,873. POTATO RICER. GEORGE E. STEIN, Marietta, Ohio. Filed Apr. 28, 1931. Serial No. 533,442. 2 Claims. (Cl. 146—176.)

1. In a potato ricer, a sheet metal basket of cylindrical form having port-like apertures in its side wall, the metal of said wall above each port being outwardly pressed to form an outwardly and downwardly inclined



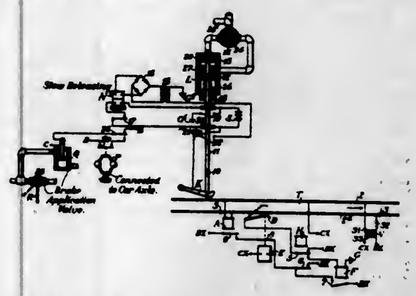
concavo-convex lip, and the port being defined on its under side by an inwardly pressed upwardly and inwardly inclined lip.

1,885,874. CARD FEEDING MECHANISM. ARTHUR THOMAS, Thornton Heath, and RICHARD FITZ POWER, Hampstead, London, England, assignors to The Accounting & Tabulating Corporation of Gt. Britain Limited, London, England. Filed Aug. 9, 1929, Serial No. 384,602, and in Great Britain Aug. 20, 1928. 16 Claims. (Cl. 271—54.)



1. A statistical card feeding mechanism including in combination a carriage in the form of a plate on edge, grippers in the form of spaced plates pivoted to one face of said carriage, an abutment overlying each said gripper, springs connecting said grippers and carriage tending to move the grippers against said abutment to grip a card there-between, operating means connecting said grippers and adapted to tilt said grippers simultaneously about their pivots away from said abutment, means for holding said grippers in such removed position, and means for releasing said grippers simultaneously for return to said abutment.

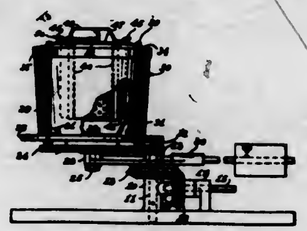
1,885,875. RAILWAY TRAFFIC CONTROLLING APPARATUS. HOWARD A. THOMPSON and FRANK H. NICHOLSON, Edgewood, Pa., assignors to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed June 24, 1931. Serial No. 546,514. 15 Claims. (Cl. 246—182.)



1. Railway traffic controlling apparatus comprising an element constituting a combined tripping device and contact arm located in the trackway and movable to a

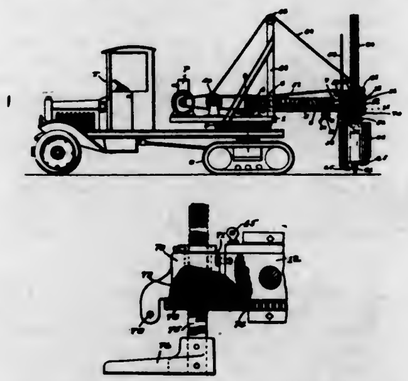
retracted or a projected position according as traffic conditions in advance are safe or unsafe, a car-carried brake applying trip arm arranged to be operated by said trackway element when the latter is in its projected position but not when it is in its retracted position, a manually controlled car-carried contact shoe adapted to at times engage said trackway element in its projected position and to at other times engage said trackway element in its retracted position, means for at times moving said trackway element to its retracted position in response to engagement of said contact shoe and said trackway element in its projected position and for imposing a low speed limit on the car, and means for removing such speed limit restriction in response to engagement of said contact shoe and the trackway element in its retracted position.

1,885,876. METHOD AND APPARATUS FOR GALVANIZING. DAVID TULLOCH, Garwood, N. J., assignor to Henry B. Newhall Corporation, Garwood, N. J., a Corporation of New Jersey. Filed June 25, 1931. Serial No. 546,777. 8 Claims. (Cl. 210—63.)



1. An apparatus for removing excess molten metal from articles, said apparatus comprising a support; means for imparting curvilinear movement to said support; a drum secured on the support; and a removable cage secured in said drum for holding a perforated basket within said drum.

1,885,877. POLE SETTING APPARATUS AND THE LIKE. HARRY L. WHEELDEN, Bangor, Me. Filed Feb. 3, 1931. Serial No. 513,145. 19 Claims. (Cl. 214—3.)

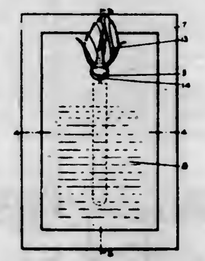


1. In an apparatus of the class described, a vehicle, a horizontally disposed platform rotatably mounted thereon, a pair of extensible spaced arms pivoted to said rotatable platform and having a head between their free ends, an upright on said platform, a reversible hoist, a flexible connection wound on said hoist and passing over said upright for raising and lowering the arms, and means for rotatably adjusting the platform on its vertical axis.

1,885,878. IDENTIFIABLE MATERIAL AND METHOD OF MAKING THE SAME. WILLIAM WHITEHEAD and HENRY WALTER KUHL, Cumberland, Md., assignor to Celanese Corporation of America, a Corporation of Delaware. Filed July 27, 1928. Serial No. 295,839. 5 Claims. (Cl. 106—40.)

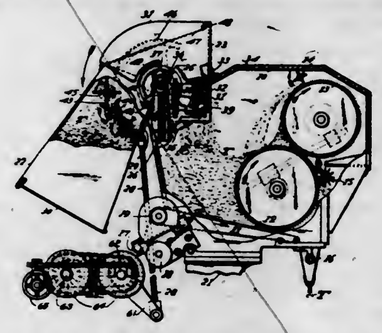
1. Artificial silk containing 10 to 40 parts of a readily identifiable metal compound per one million parts of the silk.

1,885,879. GREETING CARD. LORING M. WHITTINGTON, Seattle, Wash., assignor to Shirley G. Keown, Renton, Wash. Filed Jan. 21, 1929, Serial No. 334,060. Renewed Mar. 9, 1932. 4 Claims. (Cl. 47—41.)



1. A greeting card for mailing purposes, embodying a card member and a receptacle of narrow thickness lying flat against the back of the card member and secured to the back of said card member for receiving and holding the stem of a flower closely against the back of said card member and supporting said flower in a position where it is visible from the front of the card.

1,885,880. CONSTANT LEVEL TOBACCO FEED FOR CIGARETTE MACHINES. ALFRED E. WIENER, Brooklyn, N. Y., assignor to American Machine & Foundry Company, a Corporation of New Jersey. Filed May 16, 1928. Serial No. 278,283. 14 Claims. (Cl. 131—39.)

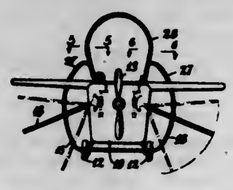


1. In a tobacco feed, the combination with a device for feeding a stream of tobacco from a magazine, of mechanism for intermittently delivering quantities of tobacco to said magazine and means for regulating at will the amount of tobacco delivered by said mechanism to that fed from the magazine, said mechanism including a source of supply and a measuring chamber into which said source of supply delivers tobacco.

1,885,881. SAFETY FRAME FOR AIRPLANES. GABRIEL WOLF, Bratislava, Czechoslovakia. Filed Nov. 19, 1931, Serial No. 576,093. 7 Claims. (Cl. 244—12.)

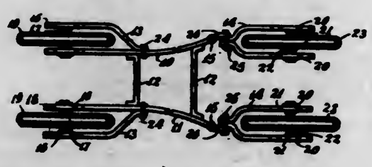
1. In combination with the fuselage of an airplane having a landing gear, transverse frame sections spaced from each other and each extending from one side to the

other side of the fuselage around the bottom, wings hinged on the sides of the fuselage and having slots through which the transverse frame sections pass and of lengths



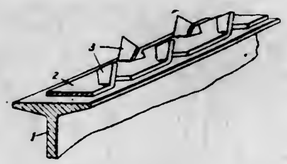
capable of being pivoted downwards so that their free edges engage against the ground, and means for adjusting the angular positions of said wings.

1,885,882. HANGING CHASSIS. GABRIEL WOLF, Bratislava, Czechoslovakia. Filed Nov. 19, 1931. Serial No. 576,095. 6 Claims. (Cl. 280—80.)



1. A hanging chassis for motor vehicles, comprising side-forming members connected with transverse members constituting a frame, forks removably attached upon the front and rear ends of said frame, and links pivotally connected with said forks and for attachment upon the axles of wheels of a vehicle.

1,885,883. JOIST CONSTRUCTION. HOWARD F. YOUNG, Kalamazoo, Mich., assignor of one-half to Leonie S. Young, Kalamazoo, Mich. Filed Sept. 22, 1930. Serial No. 483,439. 5 Claims. (Cl. 72—71.)



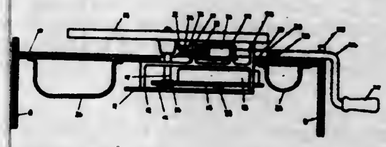
5. The combination with a metal joist having a T head, and a supplementary bonding strip having dove-tail shaped angular prongs struck up therefrom welded to the said joist head.

1,885,884. INSECTICIDE AND PROCESSES OF MAKING SAME. EARL B. ALVORD, Cleveland Heights, Ohio, assignor, by mesne assignments, to The Grasselli Chemical Company, Cleveland, Ohio, a Corporation of Delaware. Filed Aug. 10, 1928. Serial No. 298,870. 7 Claims. (Cl. 23—53.)

3. As a new product, an insecticide comprising a manganese arsenate associated with a lead compound, said lead compound being the product obtained by reacting in aqueous suspension with manganese arsenate upon one of the compounds of the group consisting of oxygen compounds of lead and lead salts of weak acids.

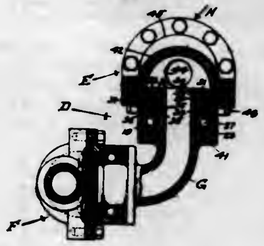
4. In a process of producing a complex manganese-lead arsenate from manganese arsenate produced by the action of a pyrolusite ore upon arsenious acid in water suspension and under super-atmospheric pressure, the steps which comprise reacting upon manganese arsenate with litharge in an amount not exceeding about 20% of that equivalent to the manganese combined with the arsenic acid.

1,885,885. WINDING MECHANISM. GUSTAVE F. BAHR, Fairfield, Conn., assignor to Columbia Phonograph Company, Inc., Bridgeport, Conn., a Corporation of Connecticut. Filed Apr. 12, 1930. Serial No. 443,692. 8 Claims. (Cl. 185—39.)



1. In a talking machine, a casing, a partition within the casing, a spring motor, disposed below said partition, a winding means including a crank and a gear disposed above said partition for winding the spring of said motor, and a sliding connection between the crank and gear whereby the crank may be slid into a position within the casing.

1,885,886. UNIVERSAL CONNECTION FOR ALL METAL ROTARY HOSE FOR OIL WELLS. CHARLES G. BANKS, Los Angeles, Calif. Filed Nov. 12, 1929. Serial No. 406,580. 8 Claims. (Cl. 285—96.)



1. A universal joint for a rotary hose for oil wells including: an elbow; means on each end of said elbow for swingingly mounting a conduit connection, said means comprising a casing; a closure head having a conduit connection mounted upon said casing; means for rotatably supporting an open end of said elbow in said casing, said last mentioned means including a collar mounted on the inner portion of said elbow; an inwardly extending flange formed on said casing; and anti-friction means interposed between said collar and said flange, said elbow having a flange arranged to rotatably bear against the outer surface of said inwardly extending flange on said casing.

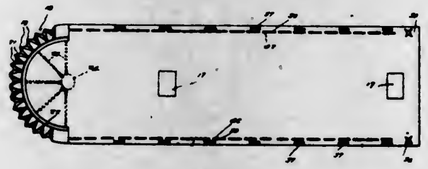
1,885,887. METHOD OF CARROTING FUR. GEORGE D. BEAL and ROB ROY MCGREGOR, Pittsburgh, Pa., assignors to Mellon Institute of Industrial Research, a Corporation of Pennsylvania, trustee. Filed July 16, 1930. Serial No. 468,449. 4 Claims. (Cl. 8—21.)

1. The method herein described of simultaneously hydrolyzing and oxidizing fur fiber in preparation for felting which consists in treating the fiber with an oxidizing agent, together with a hydrolyzing acid which is not volatile at the temperature at which the carroted fur is dried, and which within the range of temperatures experienced is not consumed by oxidation reactions with the fur, the oxidizing agent being present in quantity not less than 3.36 per cent, and the hydrolyzing agent being present in free and uncombined state.

1,885,888. METHOD OF CARROTING FUR. GEORGE D. BEAL and ROB ROY MCGREGOR, Pittsburgh, Pa., assignors to Mellon Institute of Industrial Research, a Corporation of Pennsylvania, trustee. Filed Nov. 7, 1930. Serial No. 494,181. 1 Claim. (Cl. 8—21.)

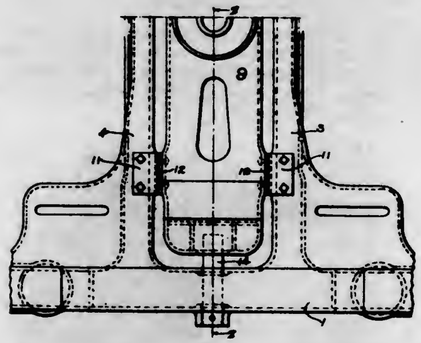
The method herein described of simultaneously hydrolyzing and oxidizing fur fiber in preparation for felting which consists in treating the fiber with a solution containing hydrogen peroxide in concentration ranging from 2 to 10 per cent. and sulphuric acid in concentration ranging from 0.3 normal to 1.5 normal.

1,885,889. AIRCRAFT LANDING FLOAT. HARRY L. BEAM, Otter, Mont. Filed Oct. 24, 1931. Serial No. 570,934. 7 Claims. (Cl. 114—0.5.)



5. A buoyant body formed of a plurality of vertically arranged hollow bodies connected together in contacting relation with the outer bodies of greater length than the inner bodies with the upper ends of the outer bodies projecting beyond the plane of the upper ends of the inner bodies to form a recess, the bottom of which is formed by the upper ends of the inner bodies.

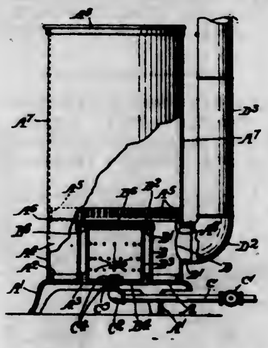
1,885,890. RAILWAY TRUCK AND BOLSTER LOCKING DEVICE. EDMUND S. BECKETTE, East St. Louis, Ill., assignor to General Steel Castings Corporation, Granite City, Ill., a Corporation of Delaware. Filed June 6, 1931. Serial No. 542,676. 14 Claims. (Cl. 105—190.)



1. In a truck for a railway vehicle, a truck frame and a bolster, there being a lateral opening in said bolster, and an element projecting horizontally from said frame and extending into said opening to limit relative vertical movement of said bolster and frame.

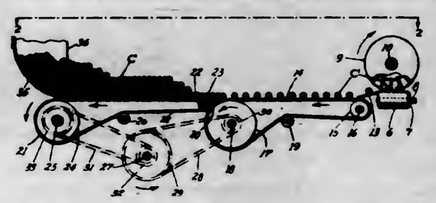
1,885,891. HEATER. JAMES L. BREESE, Jr., Santa Fe, N. Mex., assignor to Oil Devices Corporation, Chicago, Ill., a Corporation of Illinois. Filed Nov. 7, 1930. Serial No. 493,938. 10 Claims. (Cl. 126—93.)

1. In a burner, a base, a mixing chamber mounted upon said base and having air inlet means, means for delivering a fluid fuel to said mixing chamber for mixture with the air, a drum mounted upon said base and surrounding said mixing chamber, a flue mounted upon said drum and in communication with the space between said drum and mixing chamber, the connection between drum and flue being below the upper edge of said drum, and a radiation



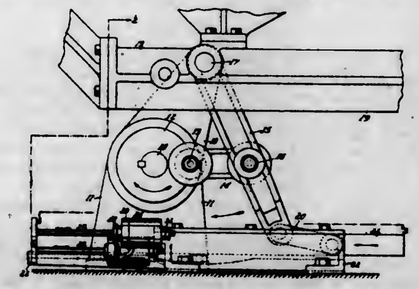
member movably mounted upon said drum, the interior of said radiation member being in communication with the space within the mixing chamber and with the space between mixing chamber and drum.

1,885,892. TWO-SPEED COLLECTOR BELT FOR CIGARETTE MACHINES. WILHELM B. BRONANDER, Montclair, N. J., assignor to American Machine & Foundry Company, a Corporation of New Jersey. Filed May 6, 1931. Serial No. 535,517. 2 Claims. (Cl. 198—76.)



1. In a cigarette collector, the combination with a primary collecting belt operating to move cigarettes sidewise in spaced relationship, of an abutment, and a secondary collecting belt arranged in tandem with said primary belt and moving at a slower speed to cause the cigarettes to pile up on said secondary belt against said abutment.

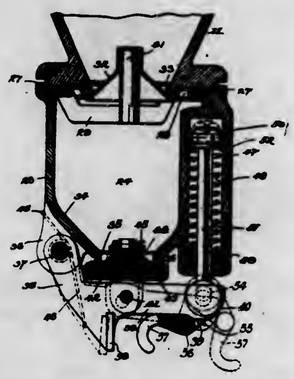
1,885,893. PLUNGER OPERATING MECHANISM FOR WRAPPING MACHINES. WILHELM B. BRONANDER, Montclair, N. J., assignor to American Machine & Foundry Company, a Corporation of New Jersey. Filed Aug. 19, 1931. Serial No. 558,135. 5 Claims. (Cl. 93—44.)



1. In a wrapping machine, the combination with a hollow mandrel adapted to have a pouch formed thereon, of a slide, a plunger yieldingly mounted on said slide, means

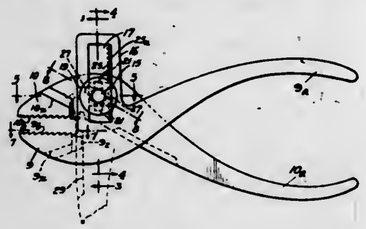
for reciprocating said slide to move said plunger in and out of said mandrel, and a stop arranged to engage said plunger to stop it with its forward end at the far end of of said mandrel before said slide reaches the end of its forward stroke to produce a dwell in the motion of said plunger, whereby the far end of said mandrel is closed during said dwell to permit the ends of a pouch to be folded thereover.

1,885,894. DRAIN CUP FOR AIR BRAKES. CHARLES A. CAMPBELL, Watertown, N. Y., assignor to The New York Air Brake Company, a Corporation of New Jersey. Filed Oct. 17, 1930. Serial No. 489,434. 8 Claims. (Cl. 303—88.)



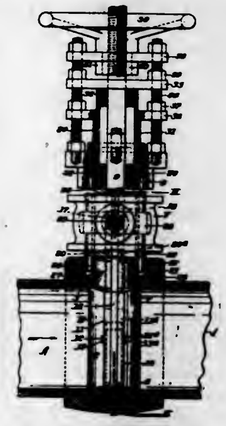
1. In an air brake system, the combination of a brake pipe; a branch pipe leading therefrom; a stop cock in the branch pipe; a dust collector interposed in the branch pipe beyond said cock and having a dust collecting chamber formed with a discharge aperture at its lower portion; a triple valve connected to the branch pipe beyond said dust collector; and a quickly releasable outward opening valve controlling said discharge aperture.

1,885,895. TOOL. EDWARD J. CAREY, Pasadena, Calif. Filed Sept. 21, 1931. Serial No. 564,051. 2 Claims. (Cl. 81—51.3.)



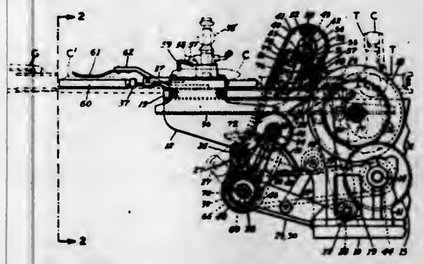
1. In a tool of the kind described, a pivot member, and a pair of cooperating gripping members operatively connected by said pivot member, one of said members having a slotted extension which is internally toothed along one side and the other of said gripping members having an aperture therethrough wherein said pivot member is slidable in an endwise manner, said aperture being provided with a pair of oppositely disposed key seats, said pivot member having a circular central portion to fit the circular portion of said aperture and being provided at each end with a head of greater diameter than the portions of said pivot member between said heads, said pivot member having adjacent to one of said heads a diametrically enlarged portion provided with teeth which are adapted to cooperate with the aforementioned teeth of said slotted extension, said pivot member having adjacent to its other head a pair of oppositely disposed radially extending keys adapted to cooperate with said key seats, the length of said pivot member between its said toothed portion and key portions being sufficient to permit of endwise adjustment thereof to bring the toothed portion thereof into and out of engagement with the toothed side of said slot and also to bring said keys into and out of engagement with said key seats.

1,885,896. PIPE LINE STOPPER. UHEL U. CARR and MAJOR R. MCKINLEY, Monongahela, Pa. Filed Feb. 8, 1931. Serial No. 513,140. 8 Claims. (Cl. 137—76.)



1. A device of the character described including a slotted body adapted for insertion through an opening in a pipe, a pair of diaphragm members carried by said body and operable in a slot thereof, and means for expanding and retracting said members in spaced-apart parallel planes at right-angles to the longitudinal axis of the pipe.

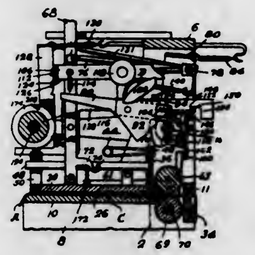
1,885,897. AUTOMATIC CIGAR HANDLING DEVICE. NELSON CHRISTENSEN, Brooklyn, N. Y., assignor to International Cigar Machinery Company, a Corporation of New Jersey. Filed Nov. 20, 1930. Serial No. 497,050. 11 Claims. (Cl. 131—39.)



1. In a cigar handling device, the combination with a support for cigars, of a guide on said support arranged to deliver the cigars to a cigar branding machine, means for gripping the mid-section of cigars and transferring them from said support to said guide and turning them about their own vertical axes in transit, and a device for moving the cigars along said guide, said means including a rock shaft, an arm secured to said rock shaft, a stud rotatably mounted on said arm, a stationary clamping finger fixed on said stud, a movable clamping finger pivoted on said stud, a spring connected to said movable finger and normally causing it to close, means for opening said movable finger to engage a cigar on said support, mechanism for turning said shaft, whereby to swing said arm to carry said cigar to a position overlying said guide, gear means for rotating said stud to align said cigar with said guide, and cam means for opening said movable finger to permit said cigar to drop into said guide.

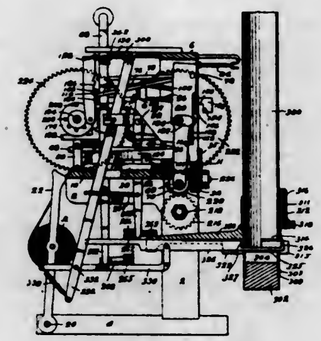
CARNEGIE LIBRARY OF ATLANTA

1,885,898. VENDING MACHINE. SAMUEL M. COFFMAN, Kansas City, Mo., assignor, by mesne assignments, to National Postage Machines Co. Ltd., Reno, Nev., a Corporation of Nevada. Filed Jan. 20, 1930. Serial No. 422,042. 16 Claims. (Cl. 194—63.)



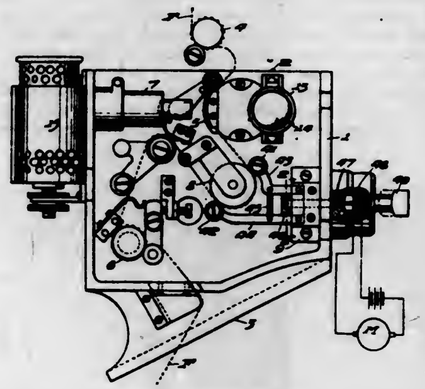
14. In a vending machine, strip feeding means, strip checking means, coin controlled mechanism for adjusting and holding said checking means in inactive position to permit advancement of the strip, means for locking said coin controlled mechanism in active position, an orbitally movable member for tripping said locking means to permit the coin controlled means to return to inactive position and the checking means to active position, and rotary means carrying said member and adapted to be adjusted forwardly or backwardly to vary the timing of the tripping operation.

1,885,899. COMBINATION VENDING, CHANGE MAKING, AND COIN DISTRIBUTING MACHINE. SAMUEL M. COFFMAN, Kansas City, Mo., assignor, by mesne assignments, to National Postage Machines Co. Ltd., Reno, Nev., a Corporation of Nevada. Filed Jan. 20, 1930. Serial No. 422,043. 4 Claims. (Cl. 133—4.)



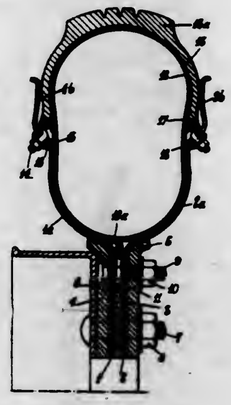
1. In a machine of the character described, a coin holder, a reciprocatory ejector for ejecting coins from said holder, a guide for said ejector, an element operably connected to the intermediate portion of said ejector to actuate the latter, means whereby said element is caused to yieldably hold the ejector in operative relation with said guide, and means for operating said element.

1,885,900. TALKING MOTION PICTURE ATTACHMENT. LEE DE FOREST, Hollywood, Calif., assignor to General Talking Pictures Corporation, New York, N. Y., a Corporation of Delaware. Original application filed Dec. 22, 1928, Serial No. 327,787. Divided and this application filed Oct. 30, 1931. Serial No. 572,167. 5 Claims. (Cl. 179—100.3.)



1. In sound recording and reproducing apparatus, the combination of a light station, a lamp for supplying light at said station, and a driving motor, rotatable means for causing a film to travel past said light station, a light sensitive element at said station for receiving the film modulated light, shiftable means for normally retaining said film in engagement with said rotatable means, manually operable means for shifting said retaining means into and out of operative position, and means actuated by said shifting means to control the motor circuit.

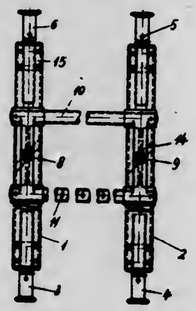
1,885,901. SOLID AND PNEUMATIC TIRED WHEEL. WILLIAM FRANCIS ENNIS, Zamalek, Cairo, Egypt. Filed July 6, 1931, Serial No. 548,836, and in Great Britain July 30, 1930. 3 Claims. (Cl. 152—18.)



1. A vehicle wheel adapted to carry a resilient tire and a beaded edge cover comprising in combination with a wheel frame, a pair of disc plates flanged outwardly and then approximately parallel to the plane of the disc plates to form a relatively deep tire housing channel, the parallel sides of the said channel being bent intermediately be-

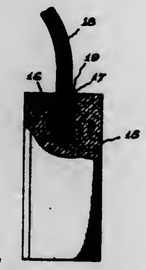
tween the periphery and the base of the channel to form annular open seatings for mounting the beaded edge of the cover so that the tread of the cover projects beyond the periphery of the channel with a large proportion of the tire located in the portion of the channel below the said seatings, the sides of the said channel above the said seatings serving to support the sides of the cover when assembled, packing between the body of said plates between the said channel, bolts passing through holes in the said frame and disc plates and through recesses in the said packing, internal nuts to the said bolts disposed within the recesses in the packing to clamp one of said disc plates to the frame, and outer nuts to the said bolts clamping the second disc plate against the said packing so that the said second disc plate can be readily removed for the purpose of mounting and demounting the tire.

1,885,902. MACHINE FOR SPLICING CABLES. PETER EUFINGER, Frankfort-on-the-Main, and WILHELM QUANTE, Wupperthal-Elberfeld, Germany. Filed May 28, 1931, Serial No. 540,772, and in Germany June 16, 1930. 24 Claims. (Cl. 140—1.)



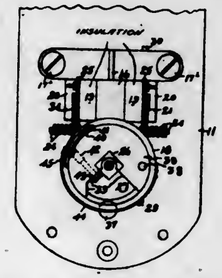
1. Cable splicing machine of the character described comprising in combination means for placing the wires into the machine, winding tongues having means for removing the insulation from said wires prior to splicing, gear means for driving the winding tongues and locking means for locking the gear driven by said driving means in a definite position, said locking means consisting of a ball catch having a spring casing situated in the casing of the machine, the said gear means being provided with a recess, into which the ball drops.

1,885,903. MOTOR BRUSH. HOWARD B. EYNON, Wellsville, N. Y. Filed Mar. 26, 1931. Serial No. 525,464. 5 Claims. (Cl. 171—326.)



1. The herein described method of making brushes for electrical machines which comprises moulding a block composed of uniformly interspersed particles of metal and graphite and providing an opening therein, inserting a metallic conductor cable in said opening, tamping a mixture composed of copper and tin in powdered form and containing a small quantity of a fluxing material around the cable in said opening and heating said block cable and mixture in a reducing atmosphere to a temperature sufficient to melt said mixture.

1,885,904. SWITCH. PARIS R. FORMAN, Rahway, N. J., assignor to National Pneumatic Company, New York, N. Y., a Corporation of West Virginia. Original application filed Jan. 29, 1931, Serial No. 511,952. Divided and this application filed July 24, 1931. Serial No. 552,903. 11 Claims. (Cl. 200—44.)

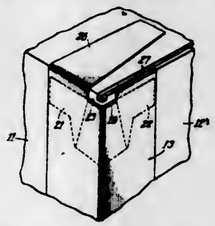


1. An article of manufacture as described comprising a supporting casing, a ring-shaped member supported in said casing, a shaft journaled at one end in the casing, a disc mounted on the other end of the shaft and journaled in said ring, a switch drum mounted on said shaft, a contact mounted on the drum, contact fingers mounted in said casing and cooperating with the contact on the drum, resilient means mounted on said ring and cooperating with said disc for preventing rotation of the disc, drum and shaft in one direction, key operated means for moving the resilient means to a position to free the disc, shaft and drum for operation in one direction, and handle actuated means for operating the disc, shaft and drum in the opposite direction independently of the resilient locking means.

1,885,905. TRI-SODIUM PHOSPHATE HYDRATE-SOAP COMPOSITIONS. FRANK L. FROST, Jr., East Cleveland, Ohio, assignor to The Grasselli Chemical Company, Cleveland, Ohio, a Corporation of Delaware. Filed Mar. 26, 1931. Serial No. 525,613. 8 Claims. (Cl. 23—248.)

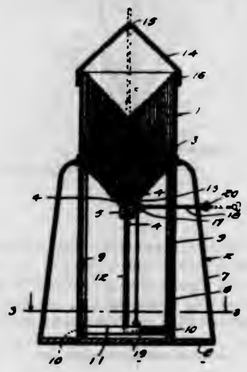
3. A co-crystallized tri-sodium phosphate hydrate-soap composition, the crystals of which have a satin like sheen or luster.

1,885,906. CARTON. CLARENCE P. GALLISTEL, Chicago, Ill., assignor to Container Corporation of America, Chicago, Ill., a Corporation of Delaware. Filed May 2, 1930. Serial No. 449,135. 3 Claims. (Cl. 229—49.)



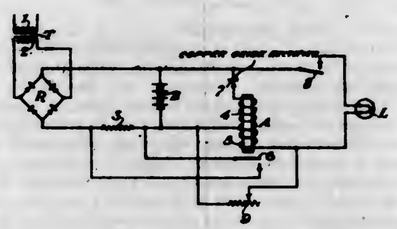
1. A flexible strip for reinforcing joints of boxes, cartons and the like, said strip comprising a body portion, a tongue connected to the body portion and formed by cutting slits lengthwise of the body portion, wings extending laterally from the tongue to the side margins of the strip, and formed by cuts extending laterally from the lengthwise cuts forming said tongue, and side tabs formed from said strip by the said lengthwise and lateral cuts.

1,885,907. DISPENSING DEVICE. CHARLES S. GARLUTZO, Ludlow, Colo. Filed May 5, 1931. Serial No. 535,209. 1 Claim. (Cl. 312—79.)



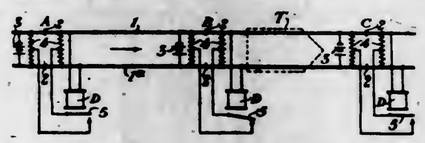
A dispenser for elongated articles, comprising a receptacle having a depending cone-like body terminating at its apex in a tubular sleeve which opens into the lower part of the receptacle, a cone-like top removably attached to the other end of the receptacle and having an aperture through its apex, said receptacle being vertically disposed, a cylindrical base member disposed beneath and concentric with said receptacle, a pair of bars disposed vertically in the cylindrical base and extending throughout the length thereof, a disk weight body of a diameter substantially conforming to the interior diameter of the base and having edge slots each slidably receiving one of said bars, a push rod supported by said disk and extending vertically therefrom and having its upper end disposed in said sleeve and further having its upper end recessed to receive an article in the receptacle, and means for raising said disk body to force an article upwardly from the depressed upper end of said rod through the aperture in the apex of said top.

1,885,908. APPARATUS FOR CHARGING STORAGE BATTERIES. ROBERT M. GILSON, Pittsburgh, Pa., assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed July 3, 1930. Serial No. 465,570. 5 Claims. (Cl. 171—314.)



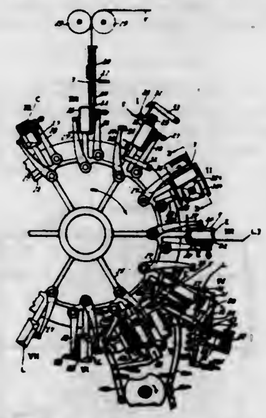
1. In combination, a storage battery, a charging circuit and an output circuit for said battery, a relay having two opposing windings one of which is connected across the terminals of said battery and the other of which is included in said output circuit, the relay being so adjusted that it is open when the output circuit is closed and that it will close when the output circuit is open if and only if the battery is fully charged, and means for increasing the charging rate of said battery responsive to the opening of said relay.

1,885,909. APPARATUS FOR SIGNALING BETWEEN TWO POINTS ON A RAILROAD TRAIN. ROBERT M. GILSON, Pittsburgh, Pa., assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed Mar. 24, 1931. Serial No. 524,824. 8 Claims. (Cl. 246—7.)



1. Trackway apparatus for use in connection with an electrical system of signaling between two points on a train through the track rails and the ground, comprising, in combination with the usual insulated track sections each provided with a track relay, an impedance connected across the rails at each end of each section, and a connection between each two adjacent impedances including a back contact of the adjacent track relay.

1,885,910. PACKAGING CIGARETTES. GEORGE W. GWINN, Hewlett, and CHARLES ARELT, Richmond Hill, N. Y., assignors to American Machine & Foundry Company, a Corporation of New Jersey. Filed Oct. 16, 1930. Serial No. 489,207. 18 Claims. (Cl. 93—44.)

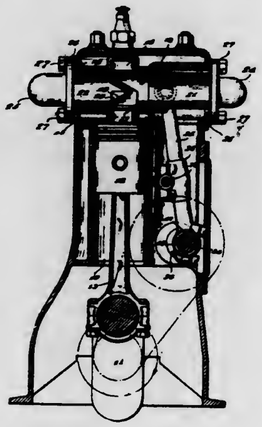


1. In a wrapping machine, the combination with a traveling mandrel, of means for wrapping an inner wrapper circumferentially about said mandrel and overhanging an end thereof, devices for folding in opposite overhanging end flaps leaving two opposite flaps outstanding, devices for wrapping an outer wrapper about the mandrel and overhanging the same end thereof, folders for folding as a unit each outstanding flap of the inner wrapper, and adjacent flap of the outer wrapper, and mechanism for folding in the remaining ends flaps of the outer wrapper, to form non-interlocking inner and outer containers.

1,885,911. SLEEVE-VALVE ENGINE. JULES HALTENBERGER, Indianapolis, Ind., assignor, by mesne assignments, to Joseph C. Schaf, Jr., Indianapolis, Ind. Filed Mar. 30, 1928, Serial No. 265,935. Renewed Mar. 14, 1932. 6 Claims. (Cl. 123—81.)

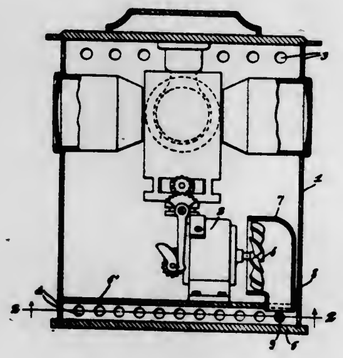
1. An internal combustion engine, comprising a cylinder having a head, a piston reciprocable in said cylinder, a crankshaft connected to said piston, a sleeve valve mount-

ed in said cylinder head and controlling a port for said cylinder, a valve operating shaft parallel with said crankshaft, an eccentric on said valve shaft, a guide block pivotally mounted on an axis parallel to that of said



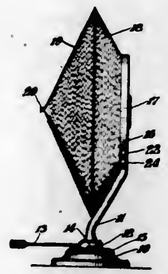
valve operating shaft, and a connecting rod slidably mounted in said guide block, said connecting rod at one end being connected to said eccentric and at the other end to said sleeve valve through a universal connection.

1,885,912. VENTILATED STOP SIGNAL CASING. HERMAN C. BOHNET, Lansing, Mich. Filed Feb. 16, 1931. Serial No. 516,122. 1 Claim. (Cl. 98—1.)



A means for circulating air and ejecting dust and dirt from a housing that has mechanism thereon operated by an electric motor and in which the housing is provided with and lower series of air ports and with a false bottom arranged above the lower series of ports and upon which the motor rests and a suction fan driven by the shaft of the motor, comprising a hollow angle member in whose horizontal branch the suction fan is received and whose vertical branch is secured to the false bottom and communicates with the space between said false bottom and the bottom of the housing.

1,885,913. RADIO APPARATUS. PAGE S. HASELTON, Evanston, Ill. Filed Feb. 16, 1925. Serial No. 9,593. 5 Claims. (Cl. 250—16.)



4. In radio receiving apparatus, the combination of an antenna comprising one or more turns of a conductor, and a reproducer of the signal energy received on said antenna, said reproducer having a diaphragm, the said antenna being integrally formed with the reproducer diaphragm.

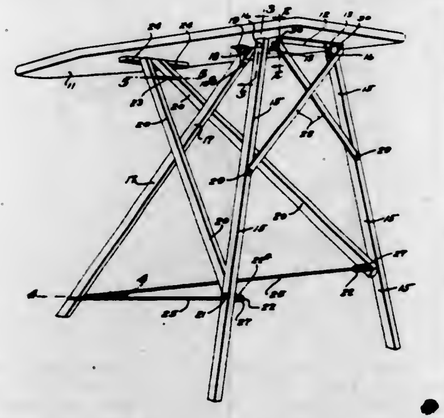
1,885,914. BEARING CONSTRUCTION. LEWIS R. HEIM, Danbury, Conn. Filed Nov. 2, 1928. Serial No. 316,740. 12 Claims. (Cl. 29—148.4.)

1. The herein described art of making an anti-friction bearing which consists in arranging a pair of tubular members in alignment with their opposing ends spaced, inserting between said opposing ends a retaining ring, forming a set of rolls each with an annular peripheral groove, inserting the rolls into position within said members with a portion of said ring lying within the groove in each of said rolls and inserting a supporting member within the set of rolls to temporarily maintain the rolls in said position.

1,885,915. IRONING BOARD. JOHN E. KALGREN, Minneapolis, Minn., assignor to J. R. Clark Co., Minneapolis, Minn., a Corporation of Minnesota. Filed June 30, 1930. Serial No. 464,820. 10 Claims. (Cl. 68—10.)

1. The combination with an ironing board, of a supporting structure therefor comprising rear legs pivotally connected thereto for lateral spreading movements when turned to board-supporting position, and transversely crossed rear leg braces connected to the bottom of said board at their upper ends by pivots that are out of axial alignment with the rear leg pivots and at their lower ends attached to the respective legs transversely opposite to their pivoted upper ends, and arranged to brace said rear legs laterally and in spread positions when said legs are turned to board-supporting positions.

8. The combination with an ironing board, of a supporting structure therefor including pivoted rear legs, a yoke-like bracket rigidly secured to the bottom of the board, an inclined leg pivotally connected to said yoke-like bracket and having portions engageable with the bottom of said yoke and with the bottom of said board to



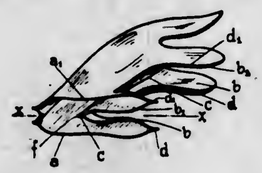
limit the downward movement of said oblique leg in respect to the board, and braces co-operating with said rear legs and oblique leg to support the board.

1,885,916. PLAITED CURTAIN. DOROTHY KAUFMAN, New York, N. Y. Filed July 11, 1931. Serial No. 550,077. 9 Claims. (Cl. 156—10.)



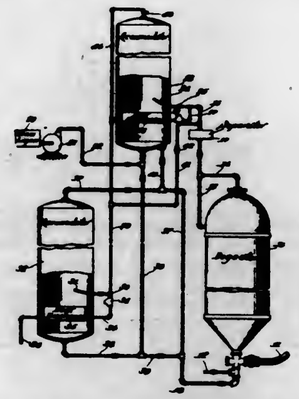
3. A curtain, comprising material in the form of a curtain and having a downturned edge, and the portions on opposite sides of the bend forming the downturned edge being reinforced, at spaced substantially vertical areas.

1,885,917. INFLATABLE RUBBER ARTICLE. LEWIS KELEMEN and ZOLTAN KELETI, Budapest, Hungary. Filed June 29, 1929, Serial No. 374,795, and in Great Britain June 29, 1928. 1 Claim. (Cl. 46—40.)



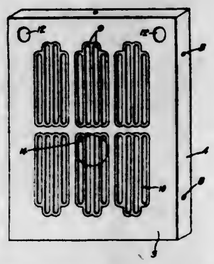
An inflatable rubber toy simulating human or animal forms having projecting parts or limbs offset from the median plane of the article, comprising two side pieces of sheet rubber shaped according to the side outlines of the article in its uninflated state, and an intermediate piece inserted between and secured to said side pieces along their outlines to form the faces of the projections or limbs turned towards the median plane of the article, said intermedinte piece comprising a single rubber sheet, extending completely around the article, bent along a curvilinear fold following the outlines of the median plane of the uninflated article.

1,885,918. RECOVERY OF RELIEF MATERIAL. WILLIAM H. KENETY, Cloquet, Minn., assignor to Chemipulp Process Inc., Watertown, N. Y., a Corporation of New York. Filed Jan. 17, 1931. Serial No. 509,299. 18 Claims. (Cl. 92—11.)



1. Apparatus for recovering relief material and the heat thereof from the bleeding of a heated pressure cooker which comprises a pressure digester, a pressure vessel for containing liquid to be heated, a discharge pipe entering said vessel, a heat exchanger in said vessel, a pipe connection from said discharge pipe to said digester, a pipe connection from said heat exchanger to said digester, and a pressure operated valve in said last pipe connection adapted to open and establish flow from said digester to said heat exchanger at a predetermined pressure on the digester side of said line.

1,885,919. MOTHPROOFING CABINET. HYMAN KLIOT, Bronx, N. Y., assignor to Cliot Closet Moth Proofer, Inc., New York, N. Y., a Corporation of New York. Filed July 17, 1931. Serial No. 551,448. 7 Claims. (Cl. 299—24.)

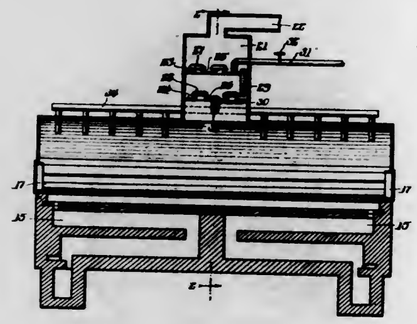


5. A moth proofing cabinet embodying a casing adapted to contain volatile moth proofing pellets and provided with vent holes in the wall thereof to permit the escape of vapors and fumes evolved from said pellets, and a sheet of porous matted material covering said holes to permit the escape of said vapors and fumes from the casing in limited quantities to conserve the pellets and prolong the period of their volatilization.

1,885,920. METHOD OF TREATING LIQUID HYDROCARBONS. ALEXANDER S. KNOWLES and CHARLES W. ANDREWS, Chicago, Ill., assignors to Tar & Petroleum Process Company, Chicago, Ill., a Corporation of Illinois. Filed Oct. 27, 1928. Serial No. 315,411. 1 Claim. (Cl. 202—5.)

The method of treating heavy hydrocarbon material in liquid form, which comprises introducing the liquid into

the upper portion of a closed chamber, the material passing down through the chamber in contact with gases given off below and falling upon a floor heated to a coking temperature, coking the solid residue of said liquid

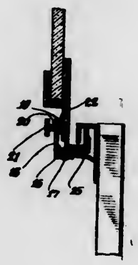


upon said floor, and refluxing some of the gaseous products of the coking process by passing said gaseous products in counter current contact through the entering liquid, said contacts serving to heat the incoming liquid to near a coking temperature.

1,885,921. PROCESS FOR REDUCING THE OIL ABSORPTION OF TITANIUM DIOXIDE PIGMENT. GABRIEL KUBIN, Aussig, Czechoslovakia, assignor, by mesne assignments to Kreba Pigment and Color Corporation, Newark, N. J., a Corporation of Delaware. Filed Feb. 16, 1929. Serial No. 340,652. 6 Claims. (Cl. 134—58.)

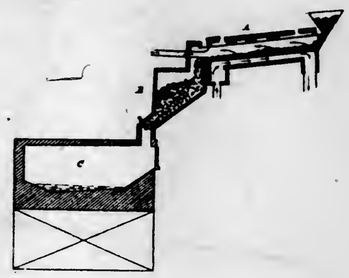
2. A process for producing titanium dioxide pigment characterized by a low oil absorption which comprises wet grinding calcined TiO_2, drying the same, and grinding said pigment in dry condition.

1,885,922. CLOSURE STRIP FOR WINDOWS. JOHN KUNZ and JOSEPH DAMMER, Richmond Hill, N. Y. Filed Nov. 28, 1931. Serial No. 577,734. 3 Claims. (Cl. 189—65.)



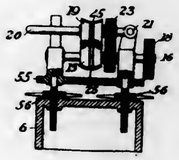
1. A closure for casement windows to prevent air, moisture, dust, and insects to enter a room through the space between the upper and lower window sashes at their meeting point, comprising a holder, a rubber pad exchangeably held therein, and means to removably clamp said holder and pad to the lower part of the upper window sash frame.

1,885,923. CONTINUOUS PROCESS FOR THE TREATMENT OF IRON AND OTHER ORES. MAURICE LAMBOT, Forest-Brussels, Belgium. Filed May 1, 1928, Serial No. 274,336, and in Belgium Nov. 23, 1927. 1 Claim. (Cl. 75—14.)



A process for the production of manufactured metal from iron ores which consists in mixing ore with coal, lignite or other carbonaceous material in such proportions as to have an excess of carbon, in progressing the mixture through a closed vessel which is heated externally to the temperature necessary to effect reduction of the ore and partial carbonization of the reduced metal, and from which the excess products of reduction are continuously withdrawn, in transferring the mixture of carbon and partly reduced metal to a second vessel in which the carbonization of the metal is completed and in discharging the mixture of carbon reduced metal from the second vessel into a melting vessel heated by the furnace.

1,885,924. METHOD AND APPARATUS FOR THE MANUFACTURE OF TUBES. ALEXANDER LAUGHLIN, Jr., Pittsburgh, Pa.; Margaret M. Laughlin and The Union Trust Co. of Pittsburgh, executors of the estate of said Alexander Laughlin, Jr., deceased, assignors to Central Tube Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Mar. 21, 1925, Serial No. 17,196. Renewed Jan. 18, 1932. 6 Claims. (Cl. 78—87).

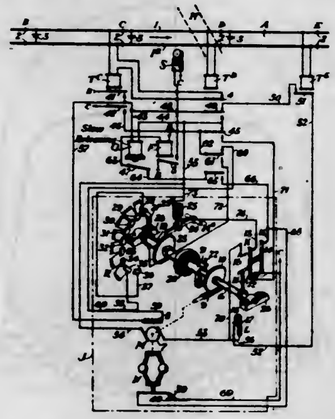


1. Forming means for the manufacture of tubing, comprising a pair of forming rolls, guiding means cooperating therewith, pinch rolls for feeding a heated strip through said guiding means and into the path between said rolls, and tongs for said heated strip, said pinch rolls having one portion shaped to engage and permit the passage therebetween of said pair of tongs and another portion shaped for cooperation with said strip.

1,885,925. APPARATUS FOR THE CONTROL OF HIGHWAY CROSSING SIGNALS. BRANKO LAZICH, Edgewood, Pa., assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed May 12, 1931, Serial No. 536,725. Renewed Mar. 24, 1932. 21 Claims. (Cl. 246—130.)

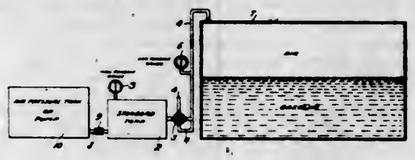
1. In combination, a stretch of railway track intersected by a highway, a highway crossing signal located

adjacent the intersection, a member normally occupying one position, means for moving said member away from said one position at a constant speed during the time interval required for a train approaching said highway to traverse a fixed distance, means effective when the train



has traversed said fixed distance for restoring said member to said one position at a speed which depends upon the position to which said member was previously moved, and means responsive to the position of said member for controlling said signal.

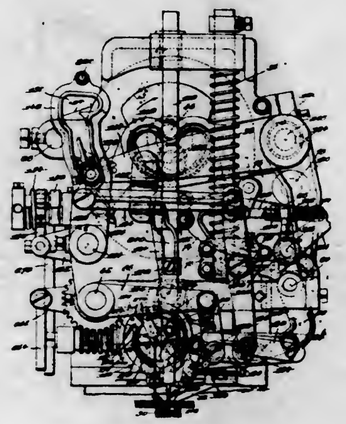
1,885,926. LIQUID MEASURING DEVICE. HARRY T. LEWIS, Hampton, Va. Filed June 24, 1931. Serial No. 546,439. 1 Claim. (Cl. 73—54.)



In an apparatus of the class described, a standard tank, a pressure responsive gage mounted thereon, means for supplying the standard tank with a limited amount of gas under pressure, whereby a definite amount of gas at a definite pressure may be placed in this tank, a liquid containing tank, piping communicating with said standard tank and with the upper portion of said liquid containing tank above the liquid level therein, said piping having a vent to the atmosphere, a two way valve in said piping adapted in one position to establish communication between said tanks and adapted in another position to sever communication between said tanks and to establish communication between said vent and said liquid containing tank, and a pessure responsive gage communicating with said piping between said valve and said liquid containing tank, said last named gage being adapted to indicate the amount of liquid in said liquid containing tank.

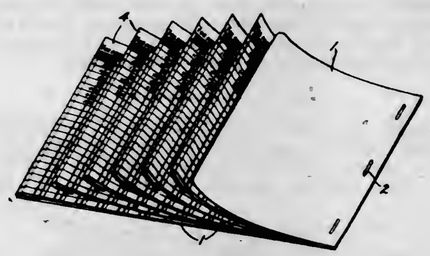
1,885,927. LOCKSTITCH SEWING MACHINE. BERNARD T. LEVEQUE, Wenham, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Feb. 18, 1927. Serial No. 169,208. 32 Claims. (Cl. 112—36.)

1. A lockstitch sewing machine having, in combination, stitch forming devices including a straight hook needle, a shuttle, a shoe supporting horn arranged to extend within the shoe, needle threading mechanism located within the horn, a sewing shaft and suitable connections for actuating the stitch forming devices, means for driving the sewing shaft, and means for disconnecting the sewing



shaft from its driving means and for rendering inoperative the actuating connections between the shaft and the needle and shuttle while the needle is at the limit of a loop drawing stroke and before the shuttle has taken the loop from the needle.

1,885,928. ACCOUNTING DEVICE. MARK R. LILLY, Orange, N. J., assignor to Monroe Calculating Machine Company, Orange, N. J., a Corporation of Delaware. Filed July 22, 1932. Serial No. 623,918. 1 Claim. (Cl. 283—63.)

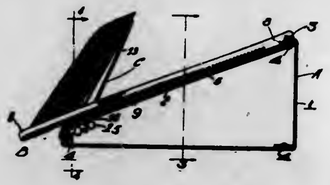


An accounting device comprising a series of superposed guide leaves attached along one edge in book form and having their opposite edges stepped to provide a series of shingled reveals of equal dimensions, in combination with a series of multi-column spread sheets, scored upon their reverse sides, between the columns, the scorings of said sheets being spaced to correspond to the width of the reveals of said leaves whereby the spread sheets are adapted to be folded back, each upon a guide leaf, to reveal a selected column.

1,885,929. VISIBLE CARD RACK. LESTER T. LLOYD, Oak Park, and HENRY OLSEN, Chicago, Ill., assignors to W. G. Lloyd Company. Filed Oct. 18, 1929. Serial No. 400,700. 10 Claims. (Cl. 129—16.)

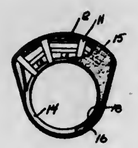
1. In a device of the character set forth, a rack frame, file cards provided with loops, rods adapted to engage said

loops, means for releasably securing said rods to said frame and means for releasably locking said rods in said first mentioned means.



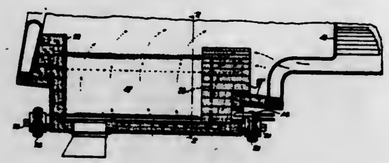
8. In a device of the character set forth, a rack frame equipped with side strips, a follower block provided with shoulders engaging the upper side of said side strips and being also provided with a flange adapted to engage the underside of said side strips, and means for releasably securing said follower block in position.

1,885,930. RING GUARD. JAMES LOWY, New York, N. Y. Filed Oct. 23, 1930. Serial No. 490,604. 6 Claims. (Cl. 63—2.)



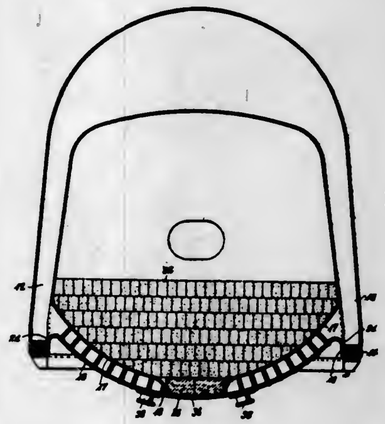
1. For use with articles of jewelry, such as rings, a readily removable and reusable sheathing thereover including a thermo-plastic, waterproof coating material, molded or shaped into a contour corresponding to predetermined forms of the settings of rings, said molded material engaging the ring in such a way as to permit the ring and sheathing to be removed as an assembly.

1,885,931. BOILER. JESSE C. MARTIN, Jr., Los Angeles, Calif. Original application filed June 1, 1928, Serial No. 282,162. Divided and this application filed Oct. 6, 1930. Serial No. 486,787. 8 Claims. (Cl. 122—58.)



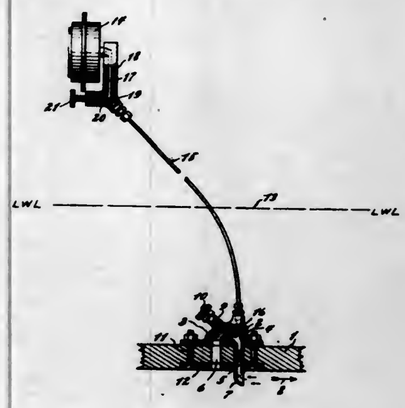
1. A bottom for a firebox having side water legs comprising, in combination, downwardly and inwardly sloping water carrying elements closed along one side and both ends and forming extensions of the water legs of the firebox, a refractory lining between the bottom edges of said elements, refractory end walls residing at the front and rear ends respectively of said elements transversely of the firebox, and a refractory covering for the front inner face of each element extending rearwardly of said refractory front end wall.

1,885,932. SELF SUPPORTING WATER BOTTOM. JESSE C. MARTIN, Jr., Los Angeles, Calif. Refiled for abandoned application Serial No. 301,124, filed Aug. 21, 1928. This application filed Aug. 17, 1932. Serial No. 629,244. 4 Claims. (Cl. 122—58.)



1. A self-supporting water bottom comprising, in combination, a relatively heavy carrier sheet forming one wall of a water enclosing space having an air opening adjacent its central portion, a second relatively light sheet spaced from the first named sheet forming a second wall of the water enclosing space, the end margins of said second sheet and portions thereof adjacent the longitudinal edges of said opening turned into contact with and joined to said carrier sheet to complete a water containing enclosure.

1,885,933. BOAT METER. IRVIN W. MASTERS, Newark, N. J., assignor to The National Lock Washer Company, Newark, N. J., a Corporation of New Jersey. Filed Oct. 18, 1928. Serial No. 313,291. 8 Claims. (Cl. 73—122.)

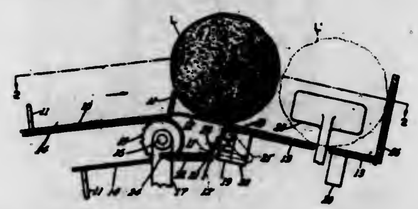


6. In combination, a boat hull having two openings therein, a tube projecting from one opening and forming an inlet and the other forming an outlet for water when the boat is in motion, means forming a passage connecting said inlet and outlet, a pressure tube communicating at one end with said passage between said inlet and outlet, and an indicator connected to said tube and adapted to be operated by the pressure in said tube.

1,885,934. ART OF PRODUCING OXIDES OF THE FOURTH GROUP METALS. MAX MAYER, Carlsbad, Czechoslovakia, assignor, by mesne assignments, to Krebs Pigment & Color Corporation, Newark, N. J., a Corporation of Delaware. Filed Mar. 14, 1929. Serial No. 347,192, and in Germany and Czechoslovakia Mar. 15, 1928. 9 Claims. (Cl. 23—202.)

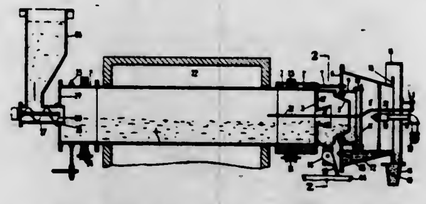
1. In the manufacture of oxides of fourth group metals from fluid halogen compounds of such metals, the method which consists in incorporating said compounds in solid salt non-reactive on said oxides and decomposing said compounds by treating the mass with steam.

1,885,935. SLICED BREAD TRANSFER. DAVID MCALLISTER, Seattle, Wash., assignor to American Machine & Foundry Company, a Corporation of New Jersey. Filed Feb. 25, 1932. Serial No. 595,182. 5 Claims. (Cl. 198—26.)



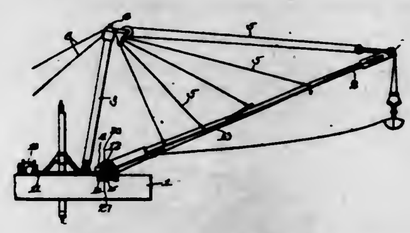
1. The combination with a table, of conveyor chains extending along said table, pushers extending across said table and fixed on by said chains, a delivery runway extending transversely of said table and spaced therefrom, a transfer bridge disposed between the delivery end of said table and said runway to guide articles forwarded by said pushers onto said runway, and means yieldingly supporting said bridge to permit the passage of said pushers beyond the delivery end of said table when they engage said bridge.

1,885,936. DUST CATCHING AND QUENCHING DEVICE. FORD H. MCBERTY, Wilmington, Del., assignor, by mesne assignments, to Krebs Pigment & Color Corporation, Wilmington, Del., a Corporation of Delaware. Filed Apr. 26, 1930. Serial No. 447,735. 3 Claims. (Cl. 134—78.)



1. In an externally heated rotary retort for the calcination and quenching of solid materials in which there is normally produced a current of dust laden gases and vapors, the combination with means for passing said solid material through a highly heated zone and discharging it therefrom, of means for removing dust from said current and quenching said solid material, comprising a receptacle rigidly mounted to rotate with said first named means, said receptacle communicating with the interior of said retort and having an outlet aperture therein for the passage of said gases, and a separately mounted nozzle adapted to throw a circular spray of dust catching liquid into the interior of said receptacle.

1,885,937. BOOM SWINGING APPARATUS. GEORGE A. MCWILLIAMS, Chicago, Ill., assignor to McWilliams Dredging Company, Chicago, Ill., a Corporation of Illinois. Filed May 2, 1929. Serial No. 359,763. 1 Claim. (Cl. 212—66.)

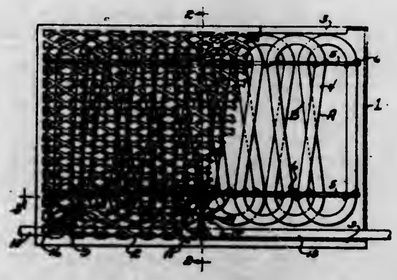


Apparatus for swinging an element with respect to a base upon which it is pivotally mounted and from which it extends forwardly and upwardly, said apparatus comprising a flexible connector having both ends secured to said element, a single driving member located on said base and operatively connected to said flexible connector and two devices for guiding said flexible connector mounted on said base and spaced laterally from and on opposite sides of the point where said element is pivotally mounted on said base and slightly in advance of said pivot point, the distance the guide devices are in advance of said pivot point being such as to cause the flexible connector to remain substantially taut as the element swings over an arc of nearly 180 degrees, the distance the guide devices are in advance of the pivot point being substantially that found for X when the known values for a given arrangement are substituted in the following formula:

$$\left(\frac{A}{2}\right)^2 - h^2 = (B - X)^2$$

in which A—the sum of the distances from the guide devices to the point of connection of the flexible connector to said element when said element is swung to a position substantially over said guide devices; h is the vertical distance the point of connection of the flexible connector and said element is above said base; and B is the horizontal distance from either guide device to the point of connection of said flexible connector and said element when said point of connection is equidistance from said guide devices.

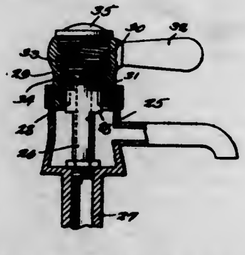
1,885,938. WALL RADIATOR. HORACE S. MELDAHL, New York, N. Y. Filed June 7, 1930. Serial No. 459,728. 5 Claims. (Cl. 257—137.)



3. A radiator of the class described comprising a casing adapted to be placed in an opening in a wall or the like and having its front open, a pair of coils in the casing arranged in parallel position and with their rear ends connected together, a valve casing in the casing to which the front ends of the coils are connected, a discharge pipe connected with the valve casing, a supply pipe connected

with the valve casing, a valve member in the valve casing for causing the fluid from the supply pipe to pass through the coils and then through the discharge pipe or through the discharge pipe without entering the coils or through both the coils and the discharge pipe, a grille plate closing the front of the casing and means whereby the valve member can be operated by the foot of a person.

1,885,939. VALVE. JOHN R. MILLER, Baldwin Park, Calif. Filed June 24, 1930. Serial No. 463,487. 2 Claims. (Cl. 251—47.)

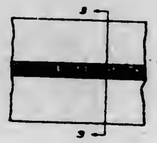


1. In a device of the class described, a body portion, a tube extending into the body portion, and having a valve seat at its free end, ribs extending laterally from the tube, an inner exteriorally threaded member having recesses to receive the ribs, a valve washer within the threaded member and adapted to move with the threaded member to engage and disengage the valve seat and control the passage of liquid through the valve body, and a rotary and non-reciprocable member operating over and threadedly engaging the inner threaded member for moving the threaded member and washer vertically.

1,885,940. MANUFACTURE OF SUNFAST AND INERT LITHOPONE. KENNETH S. MOWLDS, Hillcrest, and WILLIAM SEGUINE, Jr., Newport, Del., assignors, by mesne assignments, to Krebs Pigment & Color Corporation, Wilmington, Del., a Corporation of Delaware. Filed Sept. 21, 1929. Serial No. 394,378. 8 Claims. (Cl. 134—78.)

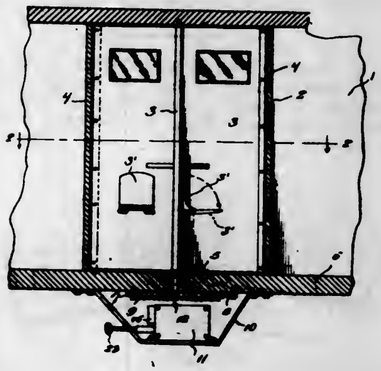
2. The process of removing zinc oxide from heat treated lithopone consisting in suspending the lithopone in an ammonia solution, in passing carbon dioxide through the suspension and separating the zinc-oxide-containing solution from the lithopone.

1,885,941. ROAD MARKER. JAMES RAYMOND O'BRIEN, Chicago, Ill., assignor, by mesne assignments, to Rubber Products Corporation, Dover, Del. Filed Aug. 10, 1928. Serial No. 298,713. 2 Claims. (Cl. 94—1.5.)



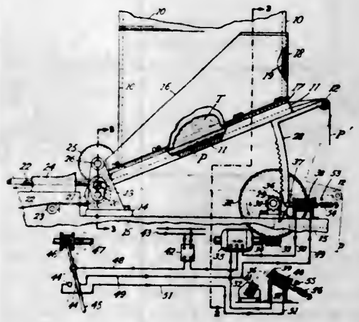
1. A road marker embodying a readily compressible rubber element embodying a body portion and a centrally disposed depending web of a width considerably less than the width of the body, said body and web adapted to be embedded in the pavement, a reticulated reinforcing member embedded in said body and extending thereacross, a reticulated reinforcing member embedded in said web and being transversely arranged with respect to the reinforcing member in said body, with one edge thereof in close proximity to the reinforcing member in said body, and an anchor member opening extending transversely through said web and the reinforcing member therein, intermediate the ends of said web.

1,885,942. DOORLOCK. CLEMENS L. PAAS, Spring Lake, Mich. Filed Feb. 18, 1930. Serial No. 429,369. 4 Claims. (Cl. 70—63.)



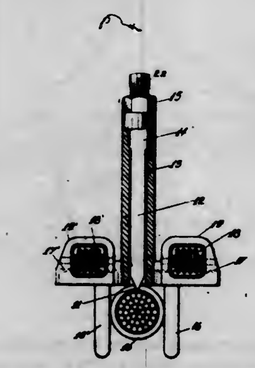
1. A locking mechanism for use in connection with a rotatable element, comprising a wheel carried by said element and having ratchet teeth, a spring actuated bolt adapted to engage said teeth, means for holding said bolt retracted including a normally stationary spring influenced slidably mounted rod, reversely disposed ratchet teeth on the opposed edges of the rod, independently operable pawls engaging said teeth, means for effecting a release of the rod from one of said pawls to permit operation of the rod to release said bolt, the other of said pawls maintaining the rod in its bolt released position, and means for releasing the rod from the latter mentioned pawl at a predetermined time.

1,885,943. INCLINED FEED FOR CIGARETTE MACHINES. MOREHEAD PATTERSON, New York, N. Y., assignor to American Machine & Foundry Company, a Corporation of New Jersey. Filed May 28, 1931. Serial No. 540,718. 19 Claims. (Cl. 131—39.)



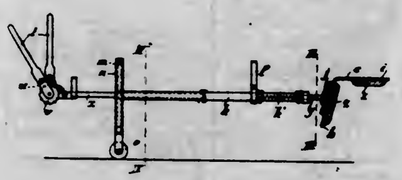
1. The combination with a cigarette machine feed chute having an open bottom inclined from the horizontal and adapted to confine tobacco falling therethrough in a shower, of means traveling under the bottom of said chute and angularly intercepting the falling tobacco and forwarding it out of the range of action of said chute.

1,885,944. CABLE CUTTING AND SKINNING TOOL. JOHN A. PENNMANN, Brooklyn, N. Y., assignor to John A. Roebling's Sons Company, Trenton, N. J., a Corporation of New Jersey. Filed Dec. 10, 1930. Serial No. 501,813. 2 Claims. (Cl. 81—9.5.)



1. A cable skinning tool, having an adjustable cutter and a handle; a lower guiding part provided with movable guides; the separation between the said guides being capable of adjustment, and means for regulating the said separation so as to correspond to the diameter of the cable or insulated conductor to be skinned, the said means consisting of a worm and rack suitably mounted on the said lower guiding part and guide respectively.

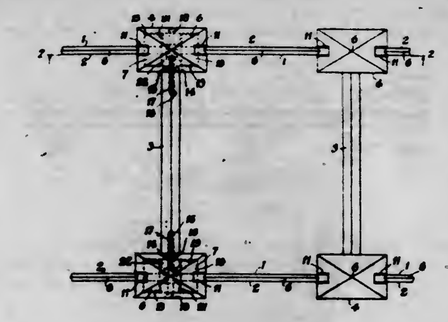
1,885,945. VETERINARY APPLIANCE FOR FACILITATING THE PARTURITION OF COWS IN CALF. ULRIC RANSY, Stavelot, Belgium. Filed Mar. 30, 1931, Serial No. 526,467, and in Belgium Apr. 4, 1930. 6 Claims. (Cl. 128—352.)



3. In the appliance of the type described, a head portion, a tubular frame pivotally adapted to the head portion, a hoop enclosing and supporting the tubular frame, means for rotatably supporting the hoop, and a traction mechanism at the end of the frame opposite to the head portion.

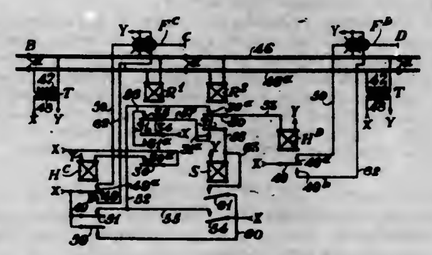
1,885,946. SELF-CLEANING CHAIN. ARNOLD REDLICH, Sharpness Docks, England, assignor to Redlich Conveyor Company, Quincy, Mass., a Corporation of Massachusetts. Filed Feb. 13, 1926, Serial No. 88,124, and in Great Britain Feb. 13, 1925. 8 Claims. (Cl. 198—198.)

1. In a conveyor chain, the combination comprising articulated frames formed of side-bars and cross-bars, and housings associated with said frames at the junction of said side-bars and cross-bars, the upper portions of said



side-bars, cross-bars and housings being terminated with substantially plane surfaces inclined obliquely with respect to the plane of the frame.

1,885,947. RAILWAY SIGNALING APPARATUS. DANIEL W. RICHARDS, Roanoke, Va. Filed Apr. 9, 1931. Serial No. 528,865. 2 Claims. (Cl. 246—33.)

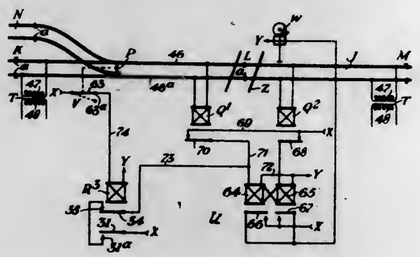


1. In combination, two adjacent sections of railway track, a track circuit for each track section including a track relay, one of said track relays being provided in addition to the usual front and back contacts with an auxiliary contact which becomes closed after the back contacts of the relay have become opened when the relay becomes energized and which subsequently remains closed when the relay becomes deenergized until after the back contacts have become closed, a third relay controlled in part by said one track relay, a stick relay, a pick-up circuit for said stick relay including said auxiliary contact and a front contact of said one track relay as well as a back contact of the other track relay, a stick circuit for said stick relay including a back contact of said third relay and a front contact of said stick relay; a fourth relay controlled by said other track relay, said stick relay and said third relay; and signals for governing traffic over said two sections controlled by said third and fourth relays.

1,885,948. RAILWAY SIGNALING APPARATUS. DANIEL W. RICHARDS, Glenvar, Va. Original application filed Apr. 9, 1931, Serial No. 528,865. Divided and this application filed Mar. 5, 1932. Serial No. 597,037. 5 Claims. (Cl. 246—122.)

5. In combination, two adjoining sections of railway track, a track circuit for each of said sections including a track relay, a siding connected with the first section by means of a switch having two extreme positions, a third relay controlled in accordance with the position of the switch and having a contact which becomes closed during

movement of said switch from one of its extreme positions to the other, an interlocking relay provided with two magnets one controlled by the track relay for the second sec-



tion and the other controlled by the track relay for the first section and by said contact of said third relay, and signaling means controlled by said interlocking relay.

1,885,949. ORGANIC COMPOUNDS OF MANGANESE AND METHOD OF MAKING SAME. SIMON L. RUSKIN, New York, N. Y. Filed Feb. 24, 1930. Serial No. 431,068. 3 Claims. (Cl. 260—9.)

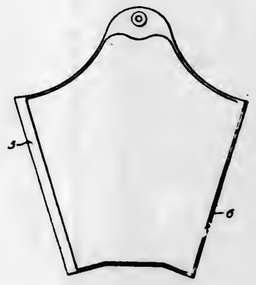
1. The process of making nucleinate of manganese consisting in dissolving sodium nucleinate in water, dissolving manganous sulphate in water, slowly mixing the two solutions with stirring, filtering off the precipitate, washing the precipitate in water, placing the washed precipitate in water and dissolving the same with a solution of sodium acetate, reprecipitating the nucleinate of manganese with ethyl alcohol and drying the precipitate.

1,885,950. TOOTHBRUSH. MAXIMILIAN SANDIG and DAVID BUCK, Vienna, Austria. Filed Aug. 21, 1929. Serial No. 387,459. 3 Claims. (Cl. 15—167.)



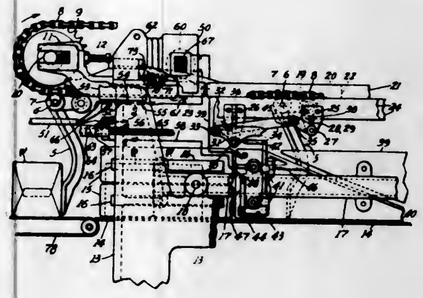
1. A toothbrush comprising two handles, one handle at its free end being provided with a concavely curved brush, the other handle being provided at its free end with a convexly curved brush, said first-named brush being of greater overall dimensions as compared with said second-named brush, and said brushes each extending transversely of the length of their respective handles, and means for pivotally interconnecting said handles adjacent their opposite ends to locate the convexly curved brush below and within the outline of said concavely curved brush.

1,885,951. PROCESS OF MAKING RUBBER SLEEVES. MOSES B. SALISBURY, Chicago, Ill. Filed Feb. 24, 1931. Serial No. 517,746. 2 Claims. (Cl. 18—56.)



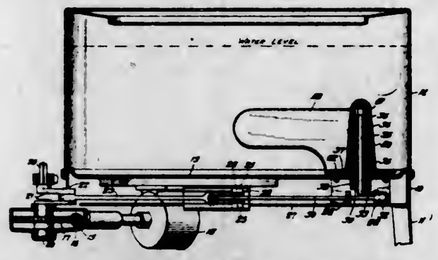
1. A method of forming rubber sleeves for covering and insulating the arms of workers which comprises molding the rubber under a very high pressure into a flat blank of substantially uniform thickness and shape so that when the side edges are joined the tubular member so formed will make a tapering sleeve, removing the blank from the mold, applying rubber cement to the side edges of the blank drying the cement, and overlapping and pressing them together turning the sleeve thus formed inside out, and applying heat and a low pressure thereto to complete the bond between the edges.

1,885,952. AUTOMATIC PACKAGE CONVEYER CONTROL FOR WRAPPING MACHINES. FRANK REINHOLD SCHMITT, Queens Village, N. Y., assignor to American Machine & Foundry Company, a Corporation of New Jersey. Filed May 13, 1931. Serial No. 537,126. 5 Claims. (Cl. 93—2.)



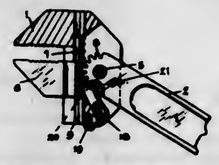
1. The combination with a device for heat sealing a row of packages, of mechanism normally operating to cause a row of packages to eject the leading package in said sealing device, and means for causing said mechanism to eject all the packages in said sealing device to prevent overheating, said means including a movable guide plate, a solenoid connected to said plate and adapted to move it into operative position, an electrical circuit connected to said solenoid, a movable contact finger adapted to close said circuit when moved into the path of the packages, and a spring urging said finger into the path of the packages, whereby said circuit is opened when said contact finger is engaged by a package.

1,885,953. WASHING MACHINE. SIMON E. SCHROEDER, Minier, Ill. Filed Feb. 18, 1929. Serial No. 340,790. 8 Claims. (Cl. 259—101.)



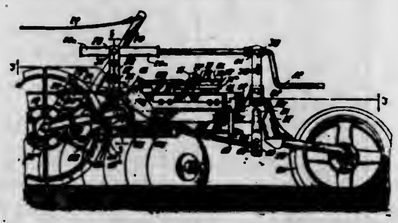
1. A machine of the character described comprising, in combination, a tub, an agitator therein mounted on a vertical axis located adjacent one side of said tub and having a single vane, and driving means for said agitator.

1,885,954. WRENCH. HARRY A. SCHSINGER, Toledo, Ohio, assignor of one-half to Adolph Peters, Toledo, Ohio. Filed July 30, 1931. Serial No. 553,979. 2 Claims. (Cl. 81—127.)



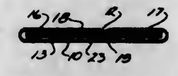
1. In a wrench, a jaw, a handle, a pin connected to the handle, the end portions of the pin being oblong in their cross sections and having cylindrical end portions, the said jaw having a hole and a slot connecting the hole, the end portions of the pin located in the hole, the oblong end portions having cylindrical surfaces fitting the hole and lateral surfaces fitting the slot, a second jaw, a rack connected to the second jaw and slidably movable relative to the first named jaw, the handle having a gear part meshing with the rack for moving the second named jaw relative to the first named jaw when the handle is pivotally moved, the mesh connection between the rack and the gear part being disconnected by the slidable movement of the handle relative to the first named jaw to move the pin into the slot, a spring interengaging the first named jaw and the handle for yieldingly resisting the pivotal movements of the handle relative to the first named jaw in one direction and normally preventing the entrance of the pin into the slot.

1,885,955. AGRICULTURAL IMPLEMENT. WALTER H. SILVER, Moline, Ill., assignor to Deere & Company, Moline, Ill., a Corporation of Illinois. Filed Apr. 23, 1930. Serial No. 446,505. 30 Claims. (Cl. 97—72.)



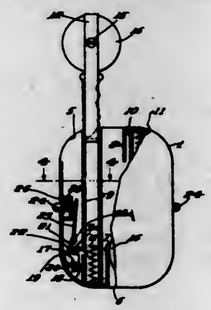
1. In an implement, the combination with a frame, a front supporting wheel for said frame, a crank axle pivotally mounted at one end on said frame, a land wheel on the swinging end of said crank axle, and means for raising said frame relative to said land wheel, of a lever mounted on said frame and swinging in a substantially horizontal plane, and means operatively connecting said lever with said crank axle and with said front supporting wheel for raising said frame relative to said latter wheel.

1,885,956. NECKTIE. ISIDOR SIMAON, Milwaukee, Wis. Filed Dec. 11, 1931. Serial No. 580,838. 4 Claims. (Cl. 2—146.)



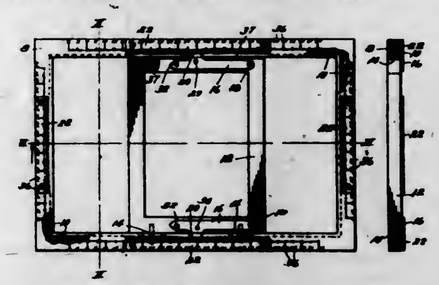
1. The combination with a tie casing, of a liner therefor including a base liner and a pair of spaced wing liners having free exterior side margins.

1,885,957. AUTOMATIC KEY CASE. ROSCOE ELWOOD SINGLETON, Chicago, Ill. Filed Aug. 15, 1929. Serial No. 386,031. 3 Claims. (Cl. 59—96.)



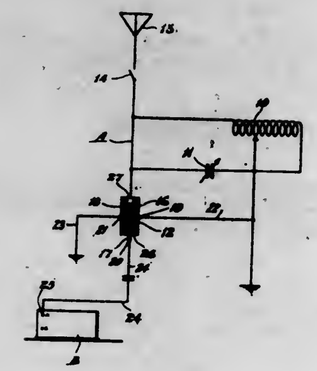
1. In automatic key cases, a casing having openings in its ends, said openings being obliquely opposite each other, runways extending lengthwise of said casing and each having one terminal in one of said openings, springs at the closed ends of said runways, key holders slidably arranged in said runways for contact with and movement by said springs, and manually operable means for releasably locking said key holders in said casing in engagement with said springs.

1,885,958. ADJUSTABLE PRINTER'S CHASE. ROBERT J. SNEDDEN, Kansas City, Mo. Filed Jan. 18, 1930. Serial No. 421,739. 6 Claims. (Cl. 101—393.)



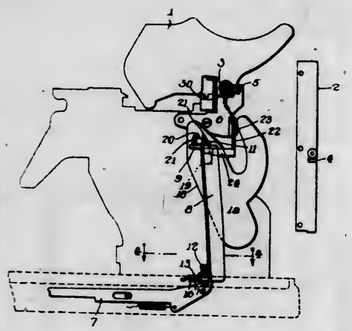
1. A device of the character described comprising a rigid frame, a non-adjustable chase supported for slidable movement by said frame, resilient means whereby one surface of said chase is maintained against said frame, and means for holding the chase in any predetermined position along the path of movement.

1,885,959. APPARATUS FOR THE FILTRATION OF RADIO WAVE SIGNALS. ROBERT HERBERT STEVENS, Edmonton, Alberta, Canada. Filed Oct. 12, 1928. Serial No. 312,178. 4 Claims. (Cl. 250—20.)



1. Apparatus for the filtration of radio wave signals comprising in combination, a tuned circuit, a pair of open-ended spiral coils arranged in spaced apart, parallel relation, one end of each of said coils conductively connected to the tuned circuit, a plate of conducting material capacitatively associated with the spiral coils and positioned therebetween, radio receiving apparatus conductively connected to said plate, and a ground plate overlying and insulated from the outer face of each spiral coil and capacitatively associated therewith.

1,885,960. COMPUTING MACHINE. OSCAR J. SUNDSTRAND, Rockford, Ill., assignor to Sundstrand Corporation, Wilmington, Del., a Corporation of Delaware. Filed June 21, 1929. Serial No. 372,646. 8 Claims. (Cl. 235—60.)



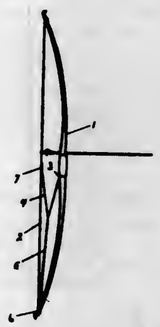
1. In a calculating machine of the character described the combination of a laterally movable paper carriage, a controlling member operable as an incident to cycling of the machine, a lever for moving said member, means for automatically oscillating said lever in every cycle of operations of the machine, said lever being translatable into and out of position to engage said member, and means for thus moving said lever comprising a lever pivoted in the framework of the machine and engaging the first-mentioned lever, a plunger connected to the second lever, and a cam located on the paper carriage in position to engage said plunger when the paper carriage occupies one of its operative positions.

1,885,961. RAILROAD SWITCH STAND DOG. PETER SWANSON, Ely, Minn. Filed July 7, 1932, Serial No. 622,153, and in Canada Nov. 5, 1931. 5 Claims. (Cl. 246—413.)



1. In a switch stand lock, the combination with the hand lever of the switch, of a two-part bracket for clamping engagement about the hand lever and having an upwardly projecting portion, a gravity dog pivotally carried by said portion and including a depending hook-like member, and an upstanding weighted handle portion to assist in biasing the dog towards its locked position.

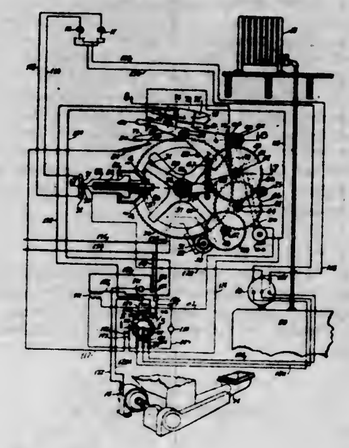
1,885,962. ANCHOR STRINGS FOR ARCHERY BOWS. ALVIN L. SWENSON and ORVAR SWENSON, Independence, Mo. Filed Feb. 9, 1932. Serial No. 591,804. 7 Claims. (Cl. 273—107.5.)



1. In a device of the class described, the combination with a bow and bow string, of a means for limiting the distance which the string may be drawn away from the bow.

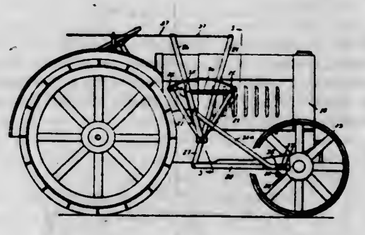
1,885,963. STOKER CONTROL SWITCH. LAWRENCE R. TEEPLE, Portland, Oreg. Filed Mar. 26, 1930. Serial No. 438,980. 3 Claims. (Cl. 236—46.)

1. A control for stoker motors consisting of a motor operating circuit a time train including means for driving same, a mercurial switch for the motor circuit associated with the time train said time train having a segment gear for rocking the switch, a pinion normally meshing with said segment gear and driven from said time train, means



for resetting said segment gear to its starting point at the completion of or during an intermediate position of its travel, and contact arms actuated by said segment gear.

1,885,964. STEERING DEVICE FOR TRACTORS. WILLIAM B. THIEMANN, Albert City, Iowa. Filed Apr. 23, 1929. Serial No. 357,507. 4 Claims. (Cl. 280—87.)



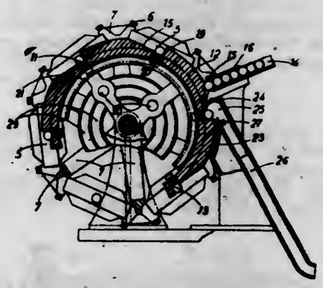
1. In combination, a tractor frame, having front axles provided at each end with wheel spindles and the usual connecting links and devices for causing said wheels to be steered in unison, and also including a steering arm, a bracket member for said tractor frame, a pair of upright lever devices pivotally connected to said bracket member, each being provided at its upper end with a flexible steering device, one of said levers having a downwardly extending arm, a steering link having one end pivotally connected to said arm and its opposite end pivotally connected to said steering device, an auxiliary steering link pivotally connected to the other upright lever at a point above its pivot center, said auxiliary steering link being pivotally connected to the first said steering link, an arm pivotally mounted between said levers and having laterally extending lugs designed to engage the rear edges of said levers, and a spring for imparting forward movement to said arm.

1,885,965. PRINTER'S REGISTERING DEVICE. EMIL E. THIEL, Cincinnati, Ohio, assignor to The Printing Machinery Company, Cincinnati, Ohio, a Corporation of Ohio. Filed May 16, 1929. Serial No. 363,575. 6 Claims. (Cl. 101—387.)



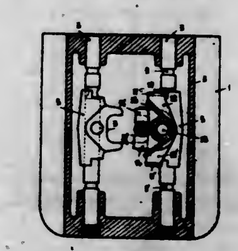
1. A clamping member for a printer's registering device comprising a body in the shape of a trunicated cone and a hook part fixed on the small end of said body and extending laterally therefrom, and pressure means extensible from the large end of said body.

1,885,966. AUTOMATIC ROTARY MACHINE HEATING BY INDUCTION. PIERRE VIEY, Chatellerault, France. Filed Dec. 4, 1928, Serial No. 323,710, and in France Dec. 12, 1927. 3 Claims. (Cl. 13—26.)



1. An electric furnace comprising a rotary wheel having a plurality of electric furnaces spacedly arranged on the periphery thereof, a plurality of buckets arranged on said wheel in alinement with the opening of each of said furnaces, a single feed conduit adapted to supply material to each of said buckets upon the rotation of said wheel, means for injecting said material from said buckets into each of said furnaces, means for rotating said wheel, a source of electric supply connected to said electric furnaces, and means for ejecting the heated material from said furnaces.

1,885,967. CHANGE SPEED MECHANISM. LEO VITALBA, Turin, Italy, assignor to Fiat Societa Anonima, Turin, Italy. Filed Feb. 3, 1932, Serial No. 590,751, and in Italy Nov. 3, 1931. 2 Claims. (Cl. 24—39.)



1. Device for locking movable pinion sets in change speed gears, comprising in combination with a control lever for said change speed gear, a pinion set shifting fork, a sleeve fixedly connected with said fork and having a seat engaging said control lever, a guide rod on which said sleeve is slidably mounted, a lever pivoted to said sleeve,

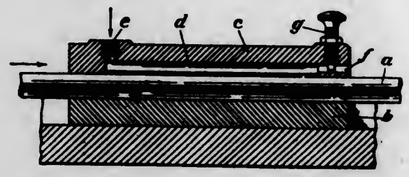
an arm of which reaches into said seat, while the other arm is in the form of a tooth adapted to engage into notches formed in said guide rod, when said fork reaches the end of its stroke and a spring for keeping said tooth pressed against said guide rod.

1,885,968. COLLAPSIBLE UMBRELLA. RICHARD G. WEDEMANN, Milwaukee, Wis. Filed Feb. 19, 1930, Serial No. 429,743, and in Germany Sept. 21, 1929. 2 Claims. (Cl. 135—33.)



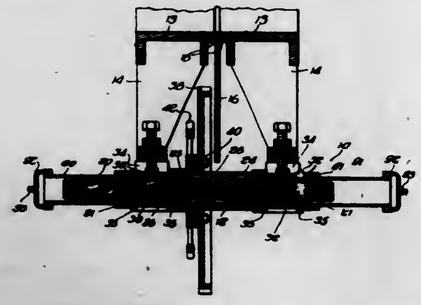
1. In a collapsible umbrella, a hollow handle having a spiral rib interiorly thereof and a plunger movable in the handle and having a groove complementary to said rib.

1,885,969. CIGARETTE ROD MACHINE. ALBERT WERNER, Dresden, Germany, assignor to Universelle Cigarettenmaschinen-Fabrik J. C. Muller & Co., Dresden, Germany. Filed Sept. 17, 1931, Serial No. 563,481, and in Germany Oct. 20, 1930. 8 Claims. (Cl. 131—43.)



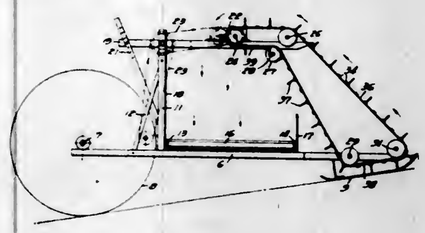
1. An apparatus for uniting the adhesive-bearing edges of the paper of a cigarette rod, comprising a support over which the rod passes and pneumatic means for pressing together the edges of the paper to unite them together.

1,885,970. ANTIFRICTION SCREW. CARL J. WESTLING, Chicago, Ill. Filed Jan. 10, 1929. Serial No. 331,642. 5 Claims. (Cl. 74—41.)



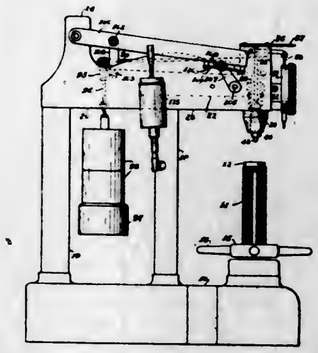
1. In combination, a pair of members, one having an external thread and the other having a cooperating internal thread, said threads having relatively wide spaces therebetween forming helical spaces between each of the opposite sides of each thread and the sides of the adjacent turns of the other thread, ball bearing members disposed in said helical spaces for action between the threads of said members, and a pressed metal helical retainer for said bearing members, said retainer being disposed between the thread of one member and the bottom of the space between the thread turns of the other member and having its sides deflected diagonally into said helical spaces and carrying said ball members, said ball members contacting the bottoms of the threads of the respective members to take radial thrusts between said members and contacting the sides of the threads of said members to take end thrusts between said members and said helical retainer being disposed wholly outside the spaces between the top of the external thread of the externally threaded member and the bottom of the internal thread of the internally threaded member.

1,885,971. PICK-UP. ELMER E. WICKERSHAM, San Leandro, Calif., assignor to Caterpillar Tractor Co., San Leandro, Calif., a Corporation of California. Filed Apr. 17, 1929. Serial No. 355,684. 19 Claims. (Cl. 56—364.)



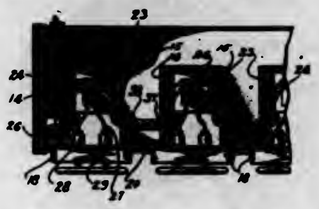
1. A pick-up comprising a framework having relatively adjustable portions, a plurality of parallel rollers mounted on said several portions, a belt encompassing said rollers, tangs on said belt, and means for retaining said portions in a selected adjusted position.

1,885,972. HARDNESS TESTING GAUGE. CHARLES H. WILSON, Pelham, N. Y., assignor to Wilson Mechanical Instrument Co. Inc., New York, N. Y., a Corporation of New York. Filed Apr. 16, 1930. Serial No. 444,726. 41 Claims. (Cl. 265—12.)



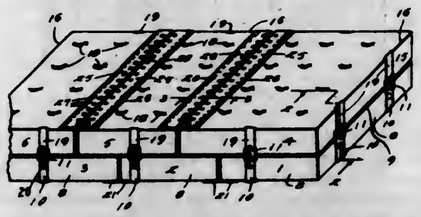
1. In a hardness tester, a plunger member adapted to carry a penetrator; supporting means extremely remote from the penetrator engaging a transverse circumferential line portion only of said member; said member when moved by the penetrator being guided solely by the penetrator and said supporting means.

1,885,973. DISPLAY DEVICE. WILLIAM B. WILSON, Los Angeles, Calif., assignor, by mesne assignments, to Metlox Corporation, Ltd., Manhattan Beach, Calif., a Corporation of California. Filed Mar. 5, 1930. Serial No. 433,344. 4 Claims. (Cl. 40—130.)



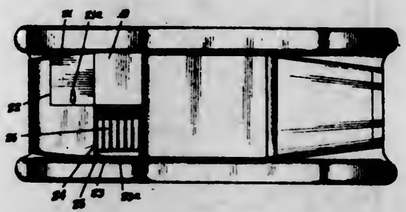
4. In a sign structure, a plurality of units placed in edge to edge relation and arranged to form a display at the front of said structure, each unit comprising a luminous gas tube and a support therefor, means forming a separable circuit through the tubes, said means comprising connectors correspondingly arranged on the units and so positioned that the act of placing them in said relation engages a connector of each unit with the adjacent connector of the next unit.

1,885,974. SECTIONAL MATTRESS. JOHN ALBERT WINN, Salem, Ark. Filed July 24, 1930. Serial No. 470,466. 1 Claim. (Cl. 5—87.)



A mattress comprising a lower series of sections, an upper series of sections, the sections of the lower series being disposed in staggered relation to the sections of the upper series and each series having one section wider than the remaining members of the series, the wide member of one series being disposed at the end oppositely from the wide member of the other series whereby to dispose the members of the lower series in staggered relation to the members of the upper series, straps carried by the outer edges of the sections of the lower and upper series for securing the lower series to the upper series, confronting apertured strips carried by the abutting edges of each section and lacing engaging pairs of said strips for releasably holding the sections of each series together.

1,885,975. RUMBLE SEAT. WILLIAM J. WINGELMAN, Brooklyn, N. Y. Filed June 25, 1931. Serial No. 546,780. 3 Claims. (Cl. 296—76.)



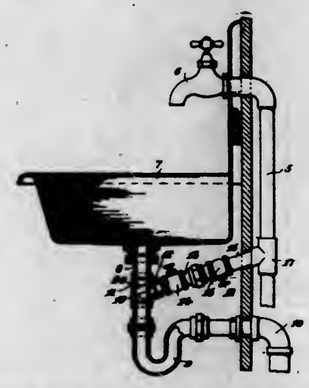
1. In an automobile having a rumble seat, a plurality of covers for said rumble seat, adjacent and diagonally opposite to each other, said covers being capable of being raised independently of each other.

1,885,976. CONNECTING ROD. WILLIAM H. YANDELL, Davenport, Iowa. Filed Oct. 25, 1929. Serial No. 402,410. 4 Claims. (Cl. 74—17.)



1. A pump connecting rod comprising a pair of body elements, a pair of bushings, and securing means to hold the parts in assembled relation, the body elements being formed from sheet metal and having their extremities separated a substantial distance for the reception of the bushings, means securing the intermediate portions of the body elements together each body element being a unitary piece perforated adjacent each of its two ends, the bushings passing through the respectively opposed openings in the body elements, the bushings having projecting portions extending between the ends of the body elements to hold them spaced apart, and the whole being held assembled by reason of the securing means holding the two body elements fastened together.

1,885,977. DRAIN PIPE FOR FLUSHING ATTACHMENTS. LOUIS S. DENISON, Santa Cruz, Calif., assignor to Alberta E. Denison, Santa Cruz, Calif. Filed Feb. 17, 1930. Serial No. 429,149. 1 Claim. (Cl. 182—22.)

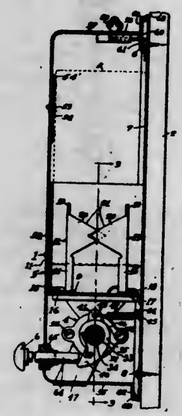


The combination with a sink and the pipe for supplying water thereto, a downwardly inclined pipe connected with the water supply pipe and having connection with the drain pipe of the sink, spaced valves in the inclined pipe for controlling the passage of water therethrough, and a swinging valve at the lower end of the inclined pipe, and adapted to swing to a position to direct water under pressure through the drain pipe and adapted to close one end of the inclined pipe under normal conditions.

1,885,978. DISPENSER FOR DRY MATERIALS. ARTHUR L. BOBRICK, Los Angeles, Calif. Filed Aug. 5, 1931. Serial No. 555,226. 9 Claims. (Cl. 221—106.)

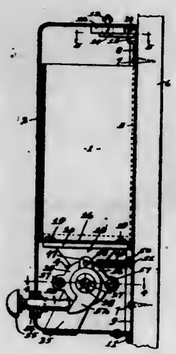
8. A dispenser for dry materials comprising a holder provided with a plate attachable to a supporting member, a bottom having an opening therein, and side walls, forming with said plate a holder of the form and size of a particular package of materials to be dispensed, a multiple

edged cutter provided with a pair of spaced cutting edges having points for piercing the package and relatively right angular cutting edges leading inwardly therefrom



at spaced points for cutting a rectangular opening in the bottom of a package when the package is pressed forcibly into the holder over the cutter, for the purpose described.

1,885,979. SOAP DISPENSER. ARTHUR L. BOBRICK, Los Angeles, Calif. Filed Aug. 14, 1931. Serial No. 557,068. 12 Claims. (Cl. 221—106.)



1. A dispenser for dry materials comprising a receptacle for the materials, a casing adjustably mounted relative to the receptacle for enclosing the receptacle against unauthorized access, a dispensing mechanism on the receptacle and having an outlet projecting thru said casing, and an operating member mounted on the casing and operatively engaging and for actuating said dispensing mechanism, as described.

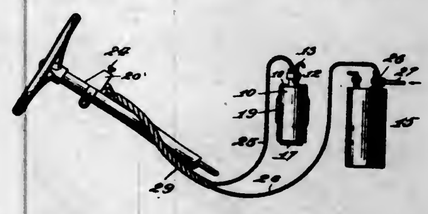
1,885,980. PROCESS OF ASSEMBLING ROLLER BEARINGS. ERNEST G. BODEN, Canton, Ohio, assignor to The Timken Roller Bearing Company, Canton, Ohio, a Corporation of Ohio. Filed Dec. 15, 1930. Serial No. 502,280. 2 Claims. (Cl. 29—84.)

1. The process of assembling rollers in an outer bearing member having a conical bore and a thrust rib at the large end of said bore, which consists in arranging a circular series of rollers in said bore with their ends



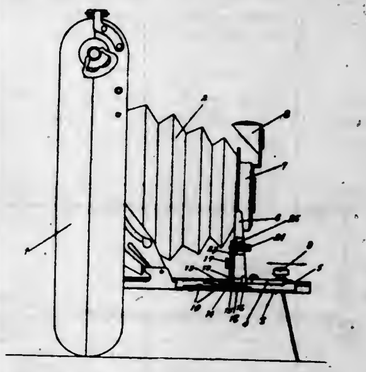
against said thrust rib and selecting the last roller of the series of a size to require snapping into place, thereby making the rollers self-contained in the cup.

1,885,981. UPPER CYLINDER OILER. CHARLES C. BOGARDUS, Los Angeles, Calif. Filed Mar. 14, 1929. Serial No. 346,907. 2 Claims. (Cl. 123—196.)



1. The combination with an internal combustion engine and its fuel suction means, of a liquid lubricant container, a housing provided with windows, a source of light arranged on the exterior of the housing adjacent to one of said windows, a valve in the upper portion of said housing, a suction tube leading from the liquid lubricant container to said housing and a suction tube leading from said housing to the fuel suction means associated with the engine.

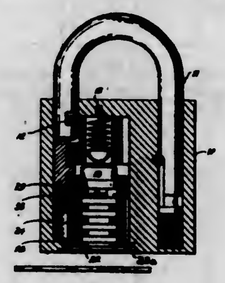
1,885,982. FOCUSING DEVICE FOR CAMERAS. CARL BORNMANN, Binghamton, N. Y., assignor to Agfa Ansco Corporation, Binghamton, N. Y. Filed May 20, 1929. Serial No. 364,570. 3 Claims. (Cl. 95—46.)



1. In combination with a camera having a platform and a front slidable thereon, an index plate on said platform having stop lugs thereon at positions of predeter-

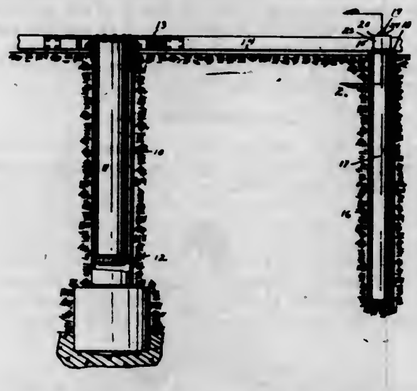
mined focus, a lever on said front having a portion normally in the path of said lugs, certain of said lugs permitting the free passage of said portion thereover in one direction and an intermediate one of said lugs preventing the free passage of said portion thereover.

1,885,983. LOCK. KARL A. BRAUNING, Stamford, Conn., assignor to The Yale & Towne Manufacturing Company, Stamford, Conn. Filed Aug. 24, 1929. Serial No. 388,101. 2 Claims. (Cl. 70—46.)



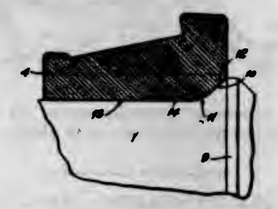
1. In a lock, a warded mechanism comprising a tubular casing, a series of wards mounted in said casing and secured against movement relatively thereto, a cam mounted for rotation in said casing, and having an upstanding and protruding lug portion, a spring member carried by said casing and adapted to deadlock said cam member, a movable ward in said series of wards, said ward being operable by the proper key to move said spring member out of deadlocking position, said tubular casing and its contents being insertable as a unit into the particular lock for which it is intended.

1,885,984. GUIDE DEVICE FOR AUTOMOBILE LIFTS. CYRUS J. BRISTOL, Des Moines, Iowa, assignor to Globe Machinery & Supply Company, Des Moines, Iowa, a Corporation of Iowa. Filed June 23, 1930. Serial No. 463,150. 2 Claims. (Cl. 254—89.)



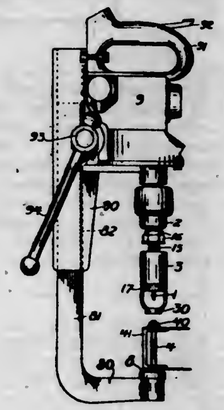
1. A guide device for automobile lifts, comprising a casing designed to be embedded in the ground and having an open upper end, a guide member slidingly movable within the casing, a plate secured to the top of the guide member, a bolt extended upwardly through the plate, a head member having said bolt extended upwardly through it, said head member being provided with a hook at one side designed to overlap the flange of an automobile wheel rail to clamp the rail between the hook and the said plate, and a nut on said bolt to engage the top of the head member.

1,885,985. AXLE BEARING MOUNTING. TRACY V. BUCKWALTER, Canton, Ohio, assignor to The Timken Roller Bearing Company, Canton, Ohio, a Corporation of Ohio. Filed June 10, 1931. Serial No. 543,286. 6 Claims. (Cl. 308—207.)



1. An axle bearing mounting comprising an axle having a conical shoulder and a bearing member mounted on said axle having a tapering bore portion fitting said conical shoulder.

1,885,986. BOLT-END SPINNING TOOL. LEO M. BUTLER, Seattle, Wash., assignor to Boeing Airplane Company, Seattle, Wash., a Corporation of Washington. Filed Sept. 9, 1931. Serial No. 561,864. 10 Claims. (Cl. 81—10.)

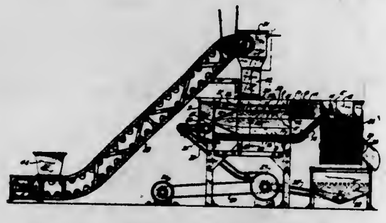


1. A device for spinning the end of a bolt down upon a nut threaded thereon, comprising a sleeve socketed at one end to closely embrace the nut, a spinning tool, a tool support therefor, means for rotating the same, the sleeve being rotatively supported from the tool support, means to move the tool and its support axially relative to the sleeve, and anvil means applied to the head of the bolt cooperating with the tool support to resist the axial thrust of the tool.

1,885,987. METHOD OF AND MEANS FOR QUALITY GRAVITY SEPARATING MATERIALS. FRANK D. CHAPMAN, Berlin, Wis. Filed Dec. 12, 1929. Serial No. 413,507. 16 Claims. (Cl. 209—173.)

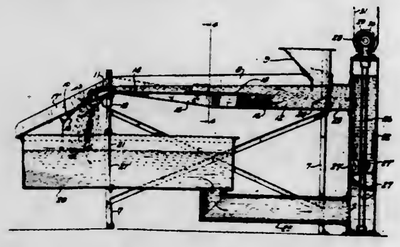
9. The method of grouping like quality of edible leguminous vegetable seeds, which consists in creating a plurality of superimposed liquid strata having different horizontal speeds, separating the seeds by specific gravity by discharging the mixed quality seeds below the surface of

and into an intermediate slower moving stratum, and then removing the separated seeds together with the liquid from the separated fluid strata while causing seeds



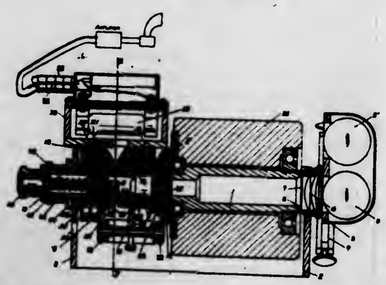
which tend to remain in suspension in the intermediate stratum to discharge selectively with either of the other strata.

1,885,988. QUALITY GRADING. FRANK D. CHAPMAN, Berlin, Wis. Filed Oct. 13, 1930. Serial No. 488,216. 11 Claims. (Cl. 209—173.)



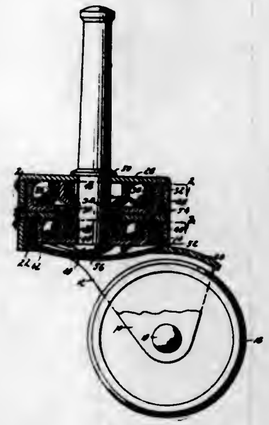
1. The method of grading peas or the like, which comprises, producing a horizontally flowing stream of liquid, introducing peas of mixed quality into one portion of the stream and maintaining the same therein for a sufficient length of time to permit rising of the floaters and sinking of the others, subsequently dividing the stream into upper and lower portions to segregate the floaters and sinkers from each other, and overflowing the stream divisions carrying the separated materials at different levels adjusted to maintain the necessary speeds of flow to carry the separated materials.

1,885,989. DEVICE REPRODUCING THE SOUNDS RECORDED ON A TALKING CINEMATOGRAPHIC FILM. ANDRÉ MARIE BERNARD CHARLIN, Montrouge, and PIERRE MARIE GABRIEL TOULON, Puteaux, France. Filed Apr. 21, 1931, Serial No. 531,774, and in France Apr. 28, 1930. 6 Claims. (Cl. 179—100.3.)



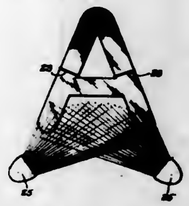
1. A sound reproducing apparatus of the type described for film records cooperating with a cinematographic apparatus, and comprising in combination, a support, a tube fixed at one end to said support, and provided with an aperture in its wall, two rotary rollers for guiding the film around said tube, concentrically journalled on said tube and leaving between them an annular gap registering with the aperture of the tube, means for projecting a light beam through said tube from the fixed end thereof, means for deflecting the beam through said aperture in the tube and said annular gap, photoelectric means disposed in the path of travel of said beam after its passage through the film for transforming the luminous variations into sounds, means for causing the rotation speed of one of the rollers to remain constant, and means for adjusting, according to said speed, the speed of the motor of the cinematographic apparatus.

1,885,990. SWIVEL CASTER. SEIBERT W. CHESNUTT, Kansas City, Mo. Filed June 16, 1930. Serial No. 461,543. 5 Claims. (Cl. 16—36.)



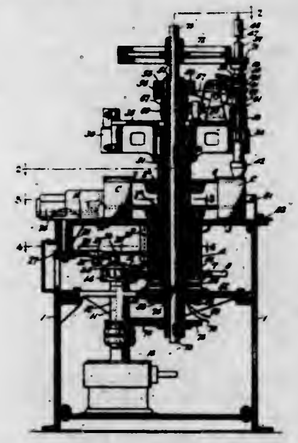
1. A swivel caster comprising a wheel-carrying member including a downwardly opening cylindrical part, a load-bearing member having a downwardly opening cylindrical part arranged above the first named member and communicating centrally with the interior thereof, an imperforate closing plate mounted in the lower end of the cylindrical part of the wheel-carrying member, and an annular gasket mounted between the cylindrical part of the wheel-carrying member and the open lower end of the cylindrical part of the load-bearing member.

1,885,991. SIGN CHARACTER. JOSEPH T. COCHRAN, Chicago, Ill. Filed July 14, 1930. Serial No. 467,855. 6 Claims. (Cl. 40—141.)



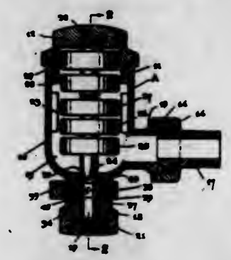
1. A sign letter or character comprising a body with a front lens portion and a flat back, and a curved reflector at the back having an outline similar to and running with the body of the letter or character and curved transversely of the body.

1,885,992. MACHINE FOR SOLDERING NOZZLES TO CAN BODIES. JOHN COYLE, Baltimore, Md., and WALTER PLUMB, Jersey City, N. J., assignors to Continental Can Company, Inc., New York, N. Y., a Corporation of of New York. Filed July 2, 1931. Serial No. 53,428. 9 Claims. (Cl. 219—12.)



1. The combination of a series of traveling electrically heated soldering units, means for positioning the article to be soldered beneath the soldering units, means for placing the article in the positioning means, means for moving the soldering units into and out of contact with the article to be soldered, and means for removing the article from the positioning means after it is soldered.

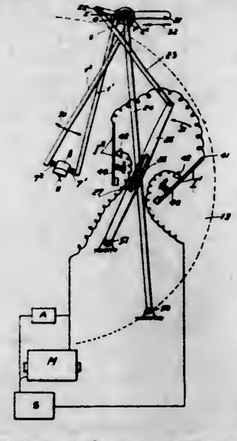
1,885,993. RADIATOR RETURN TRAP. ARTHUR P. CROSBY, Minneapolis, Minn. Filed Nov. 2, 1931. Serial No. 572,584. 3 Claims. (Cl. 236—58.)



1. A radiator return trap comprising a body formed with a chamber therein and having an inlet and an outlet communicating therewith, a valve in said housing for closing communication between said outlet and chamber, temperature controlled means for closing said valve, a steam nozzle, an auxiliary valve for bringing said steam nozzle in communication with said chamber through said first named valve and means operated by said valve for closing communication between said outlet and said chamber.

1,885,994. TALKING MACHINE. JEAN DIEUX, Paris, France. Filed Aug. 6, 1929, Serial No. 383,868, and in France Jan. 4, 1929. 4 Claims. (Cl. 274—23.)

1. In a sound recording and reproducing machine, a casing, a grooved record disk adapted to revolve in said casing, a pivot pin provided in said casing adjacent said disk, a hub adapted to rotate about said pivot pin, two crossing members forming an X in a plane substantially parallel to said disk and each pivotally connected with one end to said hub, a pick-up pivotally carried on the other ends of said members, a stylus provided on said pick-up so as to rest in a groove of said disk in engagement



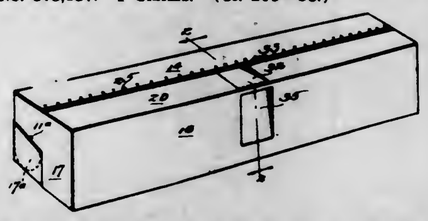
with the lateral face of the groove, whereby the position of said pick-up and the deformation of said crossing members are determined.

1,885,995. HAIR RETAINER. BENJAMIN DOWICK, Jersey City, N. J. Filed Jan. 6, 1932. Serial No. 585,056. 7 Claims. (Cl. 132—46.)



1. A hair retainer comprising the combination of a member adapted to concealingly locate against the rear of the wearer's head and underneath the wearer's hair, and each end of said member having a hair retaining device located on the exterior side thereof and adapted to engage the side locks of the wearer.

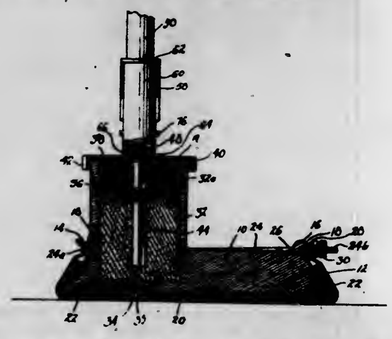
1,885,996. CONTAINER FOR PAPER IN ROLLS. JOHN V. DUFFIN, Chicago, Ill. Filed June 24, 1929. Serial No. 373,187. 4 Claims. (Cl. 206—58.)



1. A container of the character described having a wall portion carrying a paper-severing device with a cut-

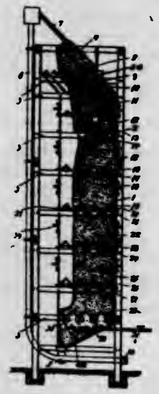
ting edge and having a wall portion including a leaf-like part adapted to extend under said other wall portion, there being an offset in said secondly-mentioned wall normally close to said cutting edge, the cutting edge being directed toward said offset and protectingly guarded thereby.

1,885,997. FLOOR WAXER AND POLISHER. DONALD DURHAM, Des Moines, Iowa. Filed Dec. 15, 1928. Serial No. 326,835. 5 Claims. (Cl. 91—39.)



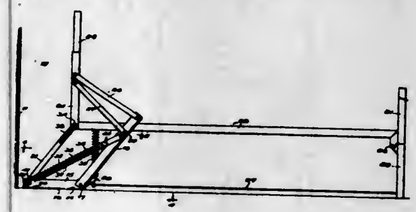
1. In a floor waxer, a base, a wax container thereon, said waxer having a passage leading from the container through the base, a plunger in the container having a peripheral threaded connection with the interior wall thereof, a post slidably but non-rotatably associated with the plunger, a handle, a member pivoted to said base, means for mounting said handle on said member for limited sliding and for rotary movement, coacting socket and lug elements, associated with said handle and said first-named member so that in one position of the pivotal movement of the handle the coacting socket and lug element may be brought into engagement and the handle then rotated for operating said plunger, while in another position of such pivotal movement the handle is entirely out of operative association with said post and in position to operate the waxer.

1,885,998. TREATMENT OF GRAINY MATERIALS. HARALD EDHOLM, Solsidan, Saltsjobaden, Sweden, assignor to Aktiebolaget Svenska Flaktfabriken, Stockholm, Sweden, a Company of Sweden. Filed Dec. 27, 1929, Serial No. 416,790, and in Sweden Jan. 2, 1929. 3 Claims. (Cl. 34—34.)



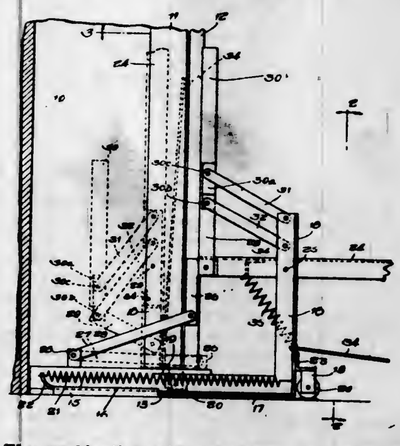
1. A drying zone in a silo or similar apparatus, comprising a plurality of horizontal beams extending across the gravitating grainy mass, and forming an equal number of air channels therebeneath, a corresponding number of lists extending parallel with said beams, said beams being disposed alternately in different horizontal and vertical planes, and said lists being disposed between the lower edges of two adjacent beams and forming, in conjunction with said edges, narrow slots for the gravitating mass.

1,885,999. RECESS BED. ROSS J. ELLSWORTH, Woodstock, Ill., assignor to Holmes Disappearing Bed Company, Woodstock, Ill., a Corporation of Illinois. Filed Oct. 5, 1927. Serial No. 224,041. 7 Claims. (Cl. 5—138.)



1. The combination with base plates located within a wall recess, of supporting bars hinged to the forward ends of said plates, a connection between said bars whereby they act as a unit, a bed frame pivoted to and between the upper ends of said bars, a guiding bar pivoted to the inner end of each base plate, having a slot in the outer end thereof, a pin on the bed frame operating in said slot, a brace element pivoted to the inner end of each base plate, a companion brace element pivoted to the adjacent supporting bar, said brace elements having their adjoining ends pivotally connected, and a stop on one of said brace elements projecting therefrom to lie in the path of movement of said bed frame.

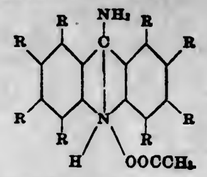
1,886,000. BED END. ROSS J. ELLSWORTH, Woodstock, Ill., assignor to Holmes Disappearing Bed Company, Woodstock, Ill., a Corporation of Illinois. Original application filed Apr. 28, 1927, Serial No. 187,391. Divided and this application filed May 1, 1930. Serial No. 448,827. 9 Claims. (Cl. 5—53.)



1. The combination with a support, of a bed frame pivoted thereto, a sectional bed end cooperating with the frame, connections between the sections of said end whereby they may move relatively and a connection between each section of the bed end and said support whereby the movement of the frame causes a relative movement of the said sections.

1,886,001. READILY SOLUBLE SALTS OF ACRIDINE BASES SUBSTITUTED IN 9-POSITION BY BASIC RESIDUES. ALFRED FEHRLE, Bad-Soden on Taunus, Germany, assignor to Winthrop Chemical Company, Inc., New York, N. Y., a Corporation of New York. Filed Aug. 9, 1929, Serial No. 384,808, and in Germany Oct. 8, 1928. 5 Claims. (Cl. 260—36.)

1. As new products the aminoacridine compounds of the following probable general formula:



wherein one R represents hydrogen, alkyl or amino in which latter case one further R may be alkoxy or hydrogen, the remaining R's being hydrogen, said compounds forming yellow crystals readily soluble in water.

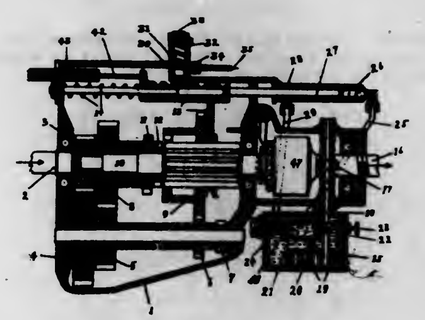
1,886,002. PEN HOLDING DEVICE FOR INKWELLS. CHARLES FOTI, Arnold, Pa., assignor of one-seventh to Antonio Saulle, one-seventh to Menotti Guidice, Arnold, Pa., one-seventh to Salvatore Tamburo, one-seventh to Frank Mangone, New Kensington, Pa., one-seventh to Dominick Verteramo, and one-seventh to Ferdinando Gatto, Arnold, Pa. Filed Nov. 19, 1930. Serial No. 496,731. 1 Claim. (Cl. 120—4.)



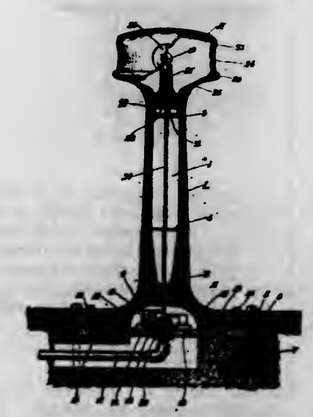
An inkwell comprising a body having a top provided with a plurality of concentrically arranged circular series of openings of various shapes to receive the writing end of a pen, said openings having vertical walls and being of a size whereby the portions of the top about the same provide pen holder engaging shoulders to support a holder in a substantially upright position, and the top being relatively thick so that ink within the body may extend into the openings a sufficient distance to surround the writing end of the pen.

1,886,003. AUTOMOBILE TRANSMISSION. ALLEN DARNABY GARRISON, Houston, Tex. Filed Dec. 14, 1931. Serial No. 580,830. 9 Claims. (Cl. 74—97.)

1. In an automatic automobile transmission, means for transmitting power through a plurality of speed ratios, a movable shift member being instrumental in the change from one speed ratio to another, means constraining the said shift member toward the position where power is transmitted at low speed; means for effecting the motion of the said shift member to a position where power is transmitted at high speed comprising a plastic material, a pump, means for operating the pump and means communicative between the said plastic material and the said shift member; means for limiting the movement of the shift member to predetermined automobile speeds comprising a member having surface irregularities, an irregularity-engaging element, means engaging the said irregularity-engaging element with the said surface irregularities whereby movement of the said shift member can occur only by displacement of the said irregularity-engaging element, means for adjusting the force of engagement of the said irregularity-engaging element relative to the force of the said means constraining the shift member, and means for adjusting the pressure of the said plastic material relative to the speed of the automobile and relative to the force of the said means constraining the shift member whereby the pressure of the said plastic material which is just large enough to disengage the irregularity-engaging element is also just large enough to complete the movement of the shift member and to change the speed ratio at a predetermined automobile speed.



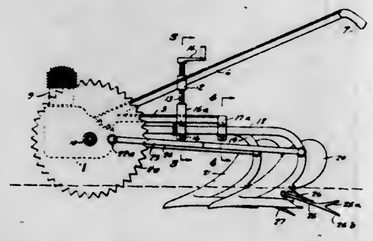
1,886,004. SIGNAL LAMP. MATHILDE T. GEYSER, Elmhurst, N. Y. Filed Feb. 21, 1929. Serial No. 341,797. 6 Claims. (Cl. 40—145.)



1. A signal lamp comprising an elongated body portion, a base portion, and a head portion, the base portion being of a character adapted to be fixed rigidly to a suitable support and to hold the body portion as a standard

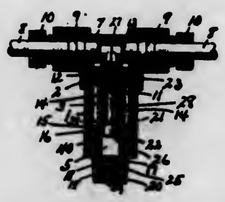
projecting upwardly therefrom, the head portion being arranged at the upper end of the body portion, said body and said head portion being formed of resilient material of a character enabling both of said portions to yield when struck and to return to their normal condition when the blow has passed, the body and head portions being hollow illuminating means arranged within the head, conductors extending through the hollow of the body to said illuminating means, means providing a resilient support within the head for the illuminating means, and the head having a window therethrough through which rays from the illuminating means may emanate.

1,886,005. POWER PLOW. HAROLD H. GLABIER, Los Angeles, Calif. Filed Nov. 12, 1931. Serial No. 574,518. 10 Claims. (Cl. 97—48.)



1. A tilling implement comprising a frame, a reciprocating ground working tool mounted on said frame for advance through the soil, a stepper advanceable and retractable with said tool and upon retraction thrusting against the soil to urge said implement forwardly, and means to simultaneously reciprocate said tool and stepper.

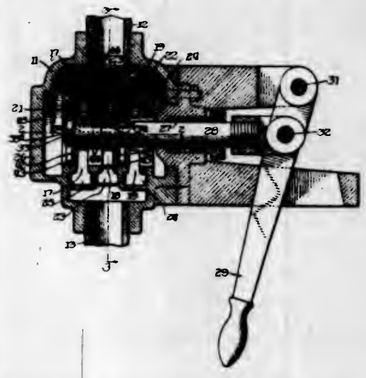
1,886,006. LUBRICATOR. FREDERICK H. GLEASON, Auburn, N. Y., assignor to Bowen Products Corporation, Auburn, N. Y., a Corporation of New York. Filed Sept. 28, 1926. Serial No. 138,234. 25 Claims. (Cl. 184—7.)



1. A lubricating system including a control device comprising a chamber for receiving a volume of lubricant, a member movable in the chamber under pressure of lubricant in the system to expel lubricant therefrom, and flexible means reversible to two positions upon opposite sides of a normal plane for preventing the outflow of lubricant from the chamber in one position and permitting its flow therefrom in another position.

1,886,007. VALVE. DAVID D. GOLDBERG, Chicago, Ill. Filed Jan. 16, 1932. Serial No. 587,008. 5 Claims. (Cl. 251—76.)

1. In a valve, the combination of a valve-casing having four external openings and a cylinder with ports connected by passages to said openings, a longitudinally-divided valve slidable in said cylinder to change said port connections, and means to slide said valve in said cylinder, the space between the valve-sections being constantly in connection with said passage united to a specific one of said openings, whereby the fluid under

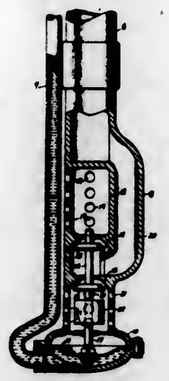


pressure entering the valve-casing through such openings tends to expand said valve against the walls of said cylinder to prevent leakage.

1,886,008. PROCESS OF TREATING PETROLEUM OILS. FRANK F. GORMAN, Bristow, Okla. Filed Dec. 22, 1926. Serial No. 156,521. 2 Claims. (Cl. 196—1.)

1. The herein described process of treating paraffin and allied hydrocarbons in oils and oil-bearing strata which comprises adding thereto a reagent resulting from the admixture of gas oil, soda ash, sodium bicarbonate, sodium hydroxide, and naphthalene, in the proportions of approximately one gallon of gas oil, five ounces of soda ash, five ounces of sodium bicarbonate, five ounces of sodium hydroxide and one ounce of naphthalene.

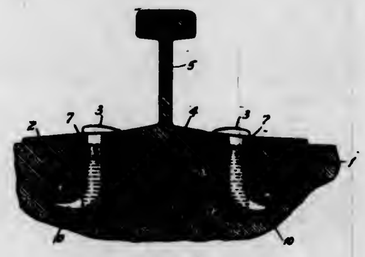
1,886,009. DEVICE FOR PRESERVING NATURAL GAS PRESSURE IN OIL WELLS. EDWARD H. GRISWOLD, Ponca City, Okla., assignor to Continental Oil Company, Ponca City, Okla., a Corporation of Delaware. Filed Nov. 23, 1931. Serial No. 576,708. 3 Claims. (Cl. 166—2.)



1. A device for preventing the escape of natural gas pressure from an oil well, comprising a flow pipe having an opening disposed within the well, a balanced valve adapted to control the flow of oil out through said opening, a valve stem for said valve connected to a hydrostatic piston, openings for placing one side of said piston

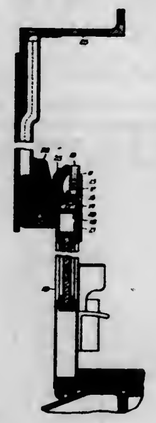
in communication with the oil in said well, a standpipe containing liquid adapted to produce a hydrostatic head, said head being in communication with the other side of said piston, whereby said valve will be moved to closed position when the hydrostatic head in said standpipe exceeds the hydrostatic pressure of the oil present in the well.

1,886,010. APPARATUS FOR AND METHOD OF SPIKING RAILS. JOSEPH F. HADDOCK, Valley Park, Mo. Filed Oct. 21, 1931. Serial No. 570,113. 9 Claims. (Cl. 238—371.)



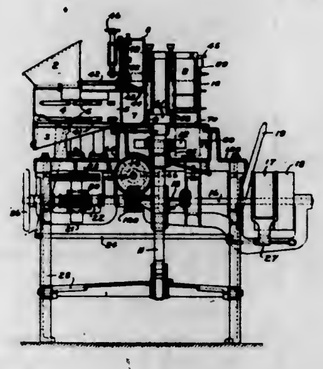
1. In combination with a cross tie, a rail mounted thereon, a spike-jacket embedded in the cross tie adjacent to the side of the base of the rail and provided in its wall near the bottom with an opening, and a spike inserted in said jacket having its head engage the base of the rail and its lower end turned outward through said opening into the material of the cross tie.

1,886,011. SASH CONSTRUCTION. WILLIAM S. HAMM, Elkhart, Ind., assignor to The Adlake Company, Chicago, Ill., a Corporation of Illinois. Filed Mar. 14, 1931. Serial No. 522,605. 11 Claims. (Cl. 20—69.)



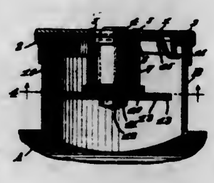
1. In sash construction, in combination, a vertically slidable sash, an upstanding weather strip on the top rail of the sash, and an upstanding bumper on the top rail behind the weather strip, said bumper being so arranged with respect to the weather strip as to protect the latter and prevent the upstanding portion thereof from being subjected to any vertically directed compressive forces when the sash is moved into its uppermost position.

1,886,012. CAN FILLING MACHINE. OSWALD H. HANSEN, Cedarburg, Wis., assignor to Hansen Canning Machinery Corporation, Cedarburg, Wis., a Corporation of Wisconsin. Filed Apr. 5, 1928. Serial No. 267,545. 14 Claims. (Cl. 226—100.)



1. In combination, a series of measuring pockets movable about an axis, a feeding chamber formed to compress material passing therethrough and being communicable with the successive pockets of said series, said chamber having openings for removing liquid from a mass of material passing through said chamber, and a plurality of movable fingers for urging fibrous material through said chamber and into said pockets.

1,886,013. TANK CAP LOCK. CHARLES E. HARRIS, Montpelier, Idaho. Filed Dec. 11, 1931. Serial No. 580,460. 3 Claims. (Cl. 70—90.)



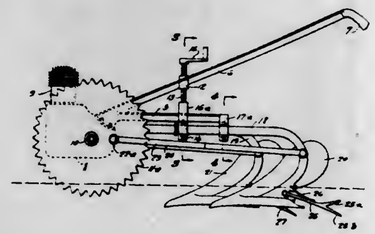
1. A lock cap for a fuel tank comprising a top, a cylinder lock having a cylinder arranged through an opening formed in said top, a sleeve surrounding the cylinder and having connection with said top, a frame mounted for reciprocation on said sleeve, means for reciprocating said frame from said cylinder, and a lug carried by said frame and being adapted to be received in a slot arranged in the filling spout of the fuel tank to prevent movement of said cap on said filling spout.

1,886,014. BEARING CONSTRUCTION. SHIRREL A. HASTINGS, Canton, Ohio, assignor to The Timken Roller Bearing Company, Canton, Ohio, a Corporation of Ohio. Filed Apr. 2, 1931. Serial No. 527,183. 8 Claims. (Cl. 308—187.)

4. The combination of a housing and a journal member extending therein, roller bearings interposed between

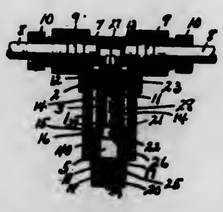
projecting upwardly therefrom, the head portion being arranged at the upper end of the body portion, said body and said head portion being formed of resilient material of a character enabling both of said portions to yield when struck and to return to their normal condition when the blow has passed, the body and head portions being hollow illuminating means arranged within the head, conductors extending through the hollow of the body to said illuminating means, means providing a resilient support within the head for the illuminating means, and the head having a window therethrough through which rays from the illuminating means may emanate.

1,886,005. POWER PLOW. HAROLD H. GLASIER, Los Angeles, Calif. Filed Nov. 12, 1931. Serial No. 574,518. 10 Claims. (Cl. 97—48.)



1. A tilling implement comprising a frame, a reciprocating ground working tool mounted on said frame for advance through the soil, a stepper advanceable and retractable with said tool and upon retraction thrusting against the soil to urge said implement forwardly, and means to simultaneously reciprocate said tool and stepper.

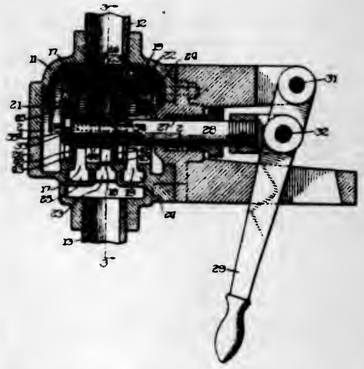
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1,886,007. VALVE. DAVID D. GOLDBERG, Chicago, Ill. Filed Jan. 16, 1932. Serial No. 587,008. 5 Claims. (Cl. 251—76.)

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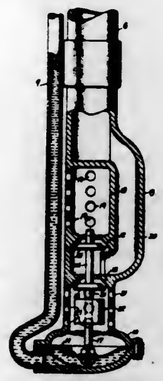


pressure entering the valve-casing through such openings tends to expand said valve against the walls of said cylinder to prevent leakage.

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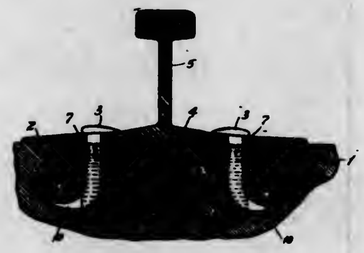
1,886,009. DEVICE FOR PRESERVING NATURAL GAS PRESSURE IN OIL WELLS. EDWARD H. GRISWOLD, Ponca City, Okla., assignor to Continental Oil Company, Ponca City, Okla., a Corporation of Delaware. Filed Nov. 23, 1931. Serial No. 576,703. 3 Claims. (Cl. 166—2.)



1. A device for preventing the escape of natural gas pressure from an oil well, comprising a flow pipe having an opening disposed within the well, a balanced valve adapted to control the flow of oil out through said opening, a valve stem for said valve connected to a hydrostatic piston, openings for placing one side of said piston

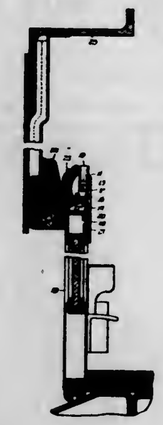
in communication with the oil in said well, a standpipe containing liquid adapted to produce a hydrostatic head, said head being in communication with the other side of said piston, whereby said valve will be moved to closed position when the hydrostatic head in said standpipe exceeds the hydrostatic pressure of the oil present in the well.

1,886,010. APPARATUS FOR AND METHOD OF SPIKING RAILS. JOSEPH F. HADDOCK, Valley Park, Mo. Filed Oct. 21, 1931. Serial No. 570,113. 9 Claims. (Cl. 238—371.)



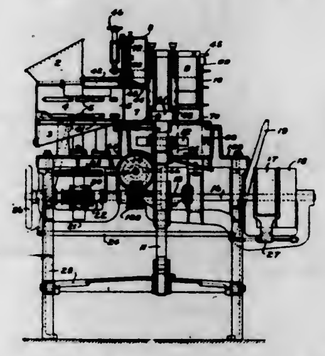
1. In combination with a cross tie, a rail mounted thereon, a spike-jacket embedded in the cross tie adjacent to the side of the base of the rail and provided in its wall near the bottom with an opening, and a spike inserted in said jacket having its head engage the base of the rail and its lower end turned outward through said opening into the material of the cross tie.

1,886,011. SASH CONSTRUCTION. WILLIAM S. HAMM, Elkhart, Ind., assignor to The Adlake Company, Chicago, Ill., a Corporation of Illinois. Filed Mar. 14, 1931. Serial No. 522,695. 11 Claims. (Cl. 20—69.)



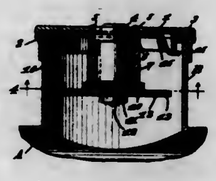
1. In sash construction, in combination, a vertically slidable sash, an upstanding weather strip on the top rail of the sash, and an upstanding bumper on the top rail behind the weather strip, said bumper being so arranged with respect to the weather strip as to protect the latter and prevent the upstanding portion thereof from being subjected to any vertically directed compressive forces when the sash is moved into its uppermost position.

1,886,012. CAN FILLING MACHINE. OSWALD H. HANSEN, Cedarburg, Wis., assignor to Hansen Canning Machinery Corporation, Cedarburg, Wis., a Corporation of Wisconsin. Filed Apr. 5, 1928. Serial No. 267,545. 14 Claims. (Cl. 226—100.)



1. In combination, a series of measuring pockets movable about an axis, a feeding chamber formed to compress material passing therethrough and being communicable with the successive pockets of said series, said chamber having openings for removing liquid from a mass of material passing through said chamber, and a plurality of movable fingers for urging fibrous material through said chamber and into said pockets.

1,886,013. TANK CAP LOCK. CHARLES E. HARRIS, Montpelier, Idaho. Filed Dec. 11, 1931. Serial No. 580,460. 3 Claims. (Cl. 70—90.)

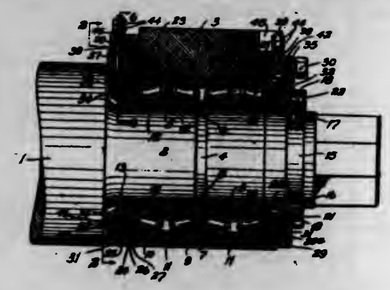


1. A lock cap for a fuel tank comprising a top, a cylinder lock having a cylinder arranged through an opening formed in said top, a sleeve surrounding the cylinder and having connection with said top, a frame mounted for reciprocation on said sleeve, means for reciprocating said frame from said cylinder, and a lug carried by said frame and being adapted to be received in a slot arranged in the filling spout of the fuel tank to prevent movement of said cap on said filling spout.

1,886,014. BEARING CONSTRUCTION. SHIRREL A. HASTINGS, Canton, Ohio, assignor to The Timken Roller Bearing Company, Canton, Ohio, a Corporation of Ohio. Filed Apr. 2, 1931. Serial No. 527,133. 8 Claims. (Cl. 308—187.)

4. The combination of a housing and a journal member extending therein, roller bearings interposed between

said housing and said journal member, a closure ring inserted around said journal member near the end of said housing, a filler plate that is split in two parts interposed



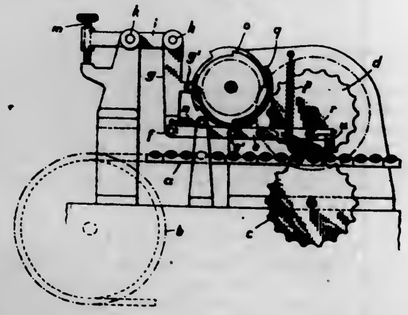
between the end of said closure ring and the end of said housing and removable means for securing said closure ring and said filler plate to said housing.

1,886,015. **FIXTURE FOR HOLDING BIRD FOOD.** LESLIE G. HENNING, Lakewood, and JOHN REIN, Cleveland, Ohio, assignors to The H & R Sales Company, Cleveland, Ohio, a Corporation of Ohio. Filed Jan. 12, 1931. Serial No. 508,187. 4 Claims. (Cl. 119—18.)



1. A fixture for holding bird food, adaptable for mounting upon a cage having spaced bars, comprising a flexible central body member, opposed spring members extending at an angle from said body member, and converging opposed claws extended from said spring members, the connecting portions of said spring members and claws being formed into grooved sections adapted to accommodate bird-cage bars and to rotate about said bars.

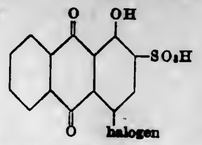
1,886,016. **DETECTING DEVICE FOR CIGARETTE TURNING MACHINES.** MAX PAUL ERNST HOHN, Dresden, Germany, assignor to Universelle Cigarettenmaschinen-Fabrik J. C. Muller & Co., Dresden, Germany. Filed Nov. 5, 1931, Serial No. 573,243, and in Germany Mar. 5, 1931. 3 Claims. (Cl. 226—5.)



1. A feeler for detecting incorrectly lying cigarettes in packing machines, comprising a brush which is adapted to engage the seam of an incorrectly lying cigarette.

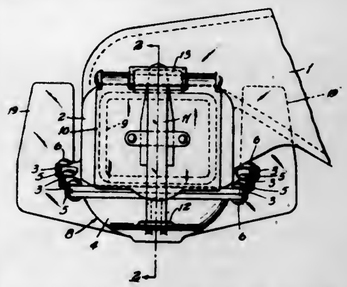
1,886,017. **1-HYDROXY-4-HALOGEN-ANTHRAQUINONE-2-SULFONIC-ACID AND PROCESS OF MAKING SAME.** ERNST HONOLD, Frankfort-on-the-Main-Fechenheim, Germany, assignor to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed July 30, 1930, Serial No. 471,896, and in Germany Aug. 28, 1929. 5 Claims. (Cl. 260—58.)

4. As new compounds the 1-hydroxy-4-halogen-anthraquinone-2-sulfonic acids, of the formula:



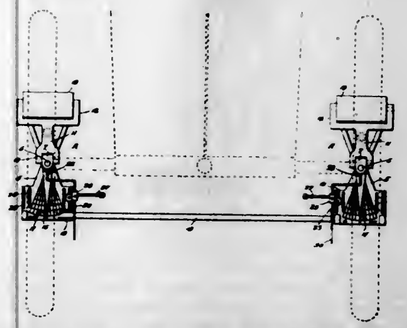
which compounds are in the form of their sodium salts soluble in water with yellow tints turning to red on the addition of alkali.

1,886,018. **JOURNAL BOX CONSTRUCTION.** OSCAR J. HORGER, Canton, Ohio, assignor to The Timken Roller Bearing Company, Canton, Ohio, a Corporation of Ohio. Filed Apr. 30, 1931. Serial No. 533,981. 5 Claims. (Cl. 308—83.)



1. A dump car journal box having a hollow stand pipe communicating with the inside lower portion thereof adjacent to its inner end, said stand pipe extending upwardly along the side of said journal box and partially beyond the inner end thereof.

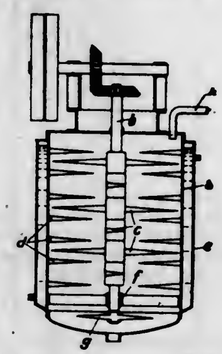
1,886,019. **AUTOMOBILE WHEEL ALIGNING DEVICE.** FRANK W. HOWE, Sidney, N. Y., assignor, by mesne assignments, to Clyde H. Phelps, Mount Vernon, N. Y. Filed Jan. 28, 1928. Serial No. 250,209. 13 Claims. (Cl. 33—203.)



11. A machine for determining the misalignment of vehicle wheels comprising two members for engagement by two wheels whose misalignment is to be tested, each of said members having its wheel engaged portion movable

in the direction of travel of the vehicle and at least one of said members being movable transversely of said direction, means for supporting said movable members, positioning means for cooperating with two spaced points arranged transversely of the vehicle in order to relatively position the vehicle and the machine so that the axle of the vehicle lies exactly at right angles to said direction while the wheels are in engagement with said members, and means for supporting said positioning means in fixed position to the supporting means of the movable members.

1,886,020. **PROCESS OF AND APPARATUS FOR TREATING FIBROUS MATERIAL.** FRITZ HOYER, Kothen, Germany, assignor to A. G. fur Halbzellstoff-Industrie, Basel, Switzerland, a Corporation of Switzerland. Filed Oct. 14, 1930, Serial No. 488,642, and in Germany Aug. 29, 1930. 8 Claims. (Cl. 92—20.)



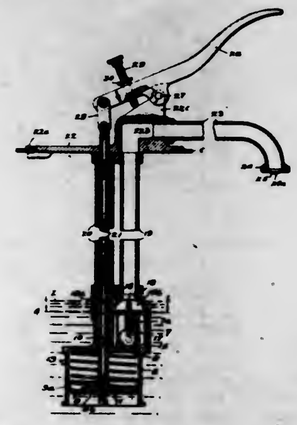
1. A process of preparing a vegetable cellulose-containing raw material, said process consisting in mixing said material with water having a temperature not exceeding 80° C., carrying the mixture so obtained at high velocity and with the aid of centrifugal force generated within said mixture against cutting elements, producing a temperature not exceeding 80° C. within said mixture by action of friction, supplying hot steam to said mixture, until a temperature not exceeding 80° C. is produced therein, and continuing motion of said mixture against said cutting elements, until the fibers have been disintegrated from the structure of said material.

1,886,021. **CIGARETTE PACKAGE OPENER.** GEORGE D. HUFF, Bellingham, Wash. Filed Apr. 5, 1932. Serial No. 603,340. 1 Claim. (Cl. 131—59.)



A device of the character described including a metal plate bent at right angles providing a base and a bracket, two spaced lugs on the bracket wall overhanging the said base providing a channel on said bracket wall, and a blade removably fastened flatwise to the said bracket wall offset therefrom between the said lugs and the said base with its cutting edge adjacent the said lugs.

1,886,022. **LIQUID DISPENSING AND MEASURING DEVICE.** ALBERT D. HUTTON, Minneapolis, Minn., assignor, by mesne assignments, to Delbert L. Rand, Minneapolis, Minn. Filed June 11, 1928. Serial No. 284,289. 6 Claims. (Cl. 221—80.)



1. A device for dispensing measured quantities of liquid comprising a cylinder having an intake passage communicating therewith, a vertically extending discharge chamber at the upper end of said cylinder, a plunger working in said cylinder, a passage connecting the upper end of said cylinder with said discharge chamber, said passage terminating at its upper end in an annular valve seat at the bottom of said discharge chamber, said discharge chamber having a plurality of circumferentially arranged vertical ribs extending longitudinally thereof, and a spherical valve slidably engaging the edges of said circumferentially arranged ribs for precise alinement with said valve seat and normally held in closed position.

1,886,023. **CATALYTIC OXIDATION OF ANTHRACENE.** ALPHONS O. JAEGER, Crafton, Pa., assignor to The Selden Company, Pittsburgh, Pa., a Corporation of Delaware. Original application filed Aug. 26, 1927, Serial No. 215,759. Divided and this application filed Mar. 29, 1928. Serial No. 265,818. 11 Claims. (Cl. 260—57.)

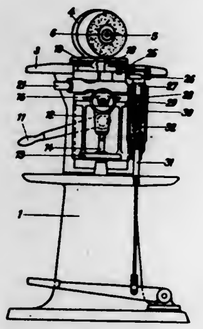
1. A method of oxidising anthracene to anthraquinone, which comprises vaporising anthracene and causing the vapors to react with an oxidising gas at reaction temperature in the presence of a contact mass containing at least one zeolite which is the reaction product of at least one silicate, at least one metallate and at least one salt, the basic radical of which is a metal capable of entering into the non-exchangeable nucleus of a zeolite.

1,886,024. **TOOTHBRUSH.** FREDERICK W. JANSSEN, Detroit, Mich. Filed Sept. 16, 1931. Serial No. 563,163. 3 Claims. (Cl. 15—167.)



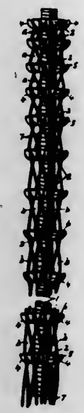
1. A tooth brush comprising a flat base member forming a head portion and a handle portion with a plurality of pairs of holes in said head portion, a bristle tuft passed through the holes of each pair and formed with a loop portion at the upper side of said base, and a cap member secured flat upon said base member throughout the length of said head portion thereof and formed with a hollow protuberance to receive said loop portions of said tufts.

1,886,025. TWIST DRILL GRINDING MACHINE. VIKTOR JERECZEK, Berlin-Steglitz, Germany. Filed Aug. 9, 1930, Serial No. 474,227, and in Germany Aug. 27, 1929. 7 Claims. (Cl. 51—34.)



1. A twist drill grinding machine comprising in combination a grinding disc of truncated cone form having sharply formed convex surface angles, a reciprocatory support for said grinding disc and means for setting said grinding disc axis at an inclination relatively to the direction of movement of said reciprocatory support, a work carrier for non-rotatably holding the work piece, and means for rotating said grinding disc.

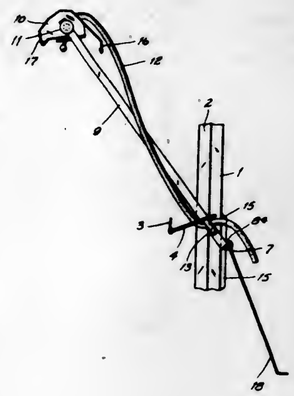
1,886,026. OPEN-MESH WOVEN WIRE TUBE. EDGAR E. KELLEMS, New York, N. Y., assignor to Kellems Products, Inc., New York, N. Y., a Corporation of New York. Filed Mar. 30, 1931. Serial No. 526,349. 5 Claims. (Cl. 24—123.)



4. An open-mesh woven-wire tube having different lengthwise portions thereof of different size mesh but of equal diameter.

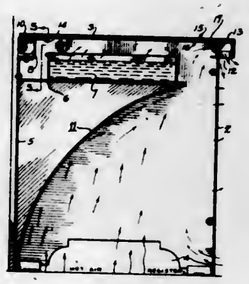
1,886,027. COPYHOLDER LIGHT. OSWALD W. KLINGSICK, St. Louis, Mo., assignor to Day-Brite Reflector Company, St. Louis, Mo., a Corporation of Missouri. Filed Oct. 1, 1930. Serial No. 485,650. 2 Claims. (Cl. 240—2.)

1. A copyholder light construction comprising a stationary base, a mounting strip extending across the back of said base and provided with elongated slots, screws extending from said base through said slots to hold said strip in position, upwardly and forwardly inclined arms extending from the ends of said strip, a light containing



reflector shell movably mounted between the upper ends of said arms, and a downwardly extending brace for said base secured to said mounting strip.

1,886,028. REGISTER COVER. HUGO GOTTLIEB KLOSTERMAN, Louisville, Ky. Filed Dec. 21, 1928. Serial No. 327,737. 2 Claims. (Cl. 98—105.)



1. A heat dispensing cabinet comprising rear and side walls and a top, said rear of less height than said side walls, a channel member secured to said rear wall, the side walls having notches corresponding to the channel member, hinges connecting the top with the upper wall of the channel member and a brace plate covering said hinges and extending from one side of the cabinet to the other.

1,886,029. MASSAGING AND STIMULATING IMPLEMENT. HERMANN KRAUTER, Vienna, Austria. Filed Aug. 3, 1931, Serial No. 554,835, and in Germany Aug. 4, 1930. 3 Claims. (Cl. 128—62.)

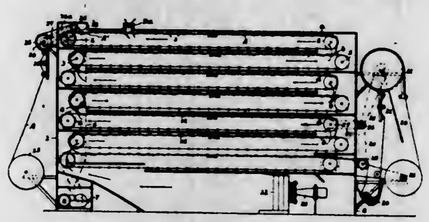
1. A massaging and stimulating device comprising a handle to be grasped by the hand of the user and adapted

to support a massage bulb at one end thereof, a longitudinally bored stem extending from the opposite end of the handle, said stem having lateral openings, a flexible bulb supported on and surrounding the stem and the openings, and means rigidly secured to the stem adapted for attaching a suction cup thereto, said means having an aperture extending therethrough for communicating with said stem and cup.



2. A massaging and stimulating device comprising a handle to be grasped by the hand of the user, said handle being provided with a laterally apertured sleeve at one end thereof, the latter having a pin positioned therewithin opposite the apertures in said sleeve, and a massage bulb movably engaging the sleeve to uncover said apertures and to receive said pin.

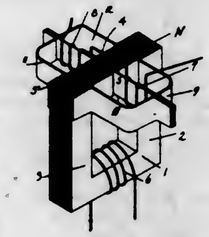
1,886,030. METHOD OF AND APPARATUS FOR DRYING CLOTH. GEORGE W. LANE, Clifton, N. J., assignor to Van Vlaanderen Machine Company, Paterson, N. J., a Corporation of New Jersey. Filed Jan. 20, 1931. Serial No. 509,932. 3 Claims. (Cl. 34—12.)



1. The hereindescribed method of drying a fabric which consists in delivering the same progressively onto the upper one of a series of superposed conveyors, of which each travels in the reverse direction to and discharges onto the one next below and which have uniformly spaced fabric supports extending transversely of their travel, and while maintaining the rate of such delivery relatively to the speed of the upper conveyor not exceeding that which will leave the fabric when so delivered hanging between said supports of such conveyor in a curve all the radii of which are substantially equal from one to the other of said supports.

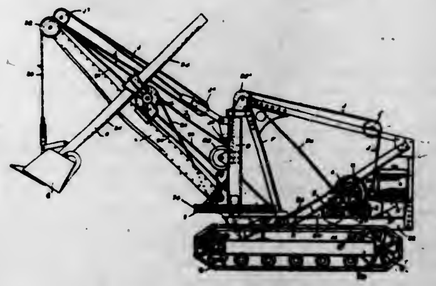
1,886,031. MECHANICAL CONSTRUCTION OF LOUD SPEAKERS. RALPH H. LANGLEY, Cincinnati, Ohio, assignor to The Crosley Radio Corporation, Cincinnati, Ohio, a Corporation of Ohio. Filed Jan. 19, 1931. Serial No. 509,555. 12 Claims. (Cl. 175—339.)

1. In a loud speaker motor, a field core structure comprising interspaced pole pieces, a pair of brackets attached at interspaced points to said field core structure, said brackets having clamping members arranged to en-



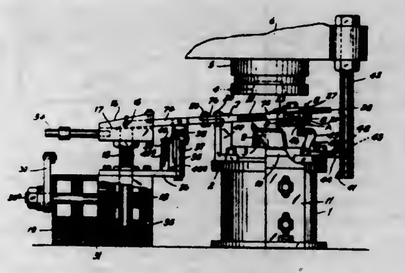
gage and hold an armature in a plane such that it will extend between the said pole pieces.

1,886,032. EXCAVATING MACHINE. CHARLES H. LOTTS, Ravenna, Ohio, assignor to Byers Machine Company, Ravenna, Ohio, a Corporation of Maryland. Filed Apr. 11, 1931. Serial No. 529,443. 4 Claims. (Cl. 214—135.)



1. In a transmission assembly for a material handling machine, a jackshaft, a hoist shaft, a swing shaft, gears on each of said shafts, a gear fast on said jackshaft, a gear fast on said hoist shaft double the width of the other gears, a gear rotatable upon said swing shaft, a clutch adapted to connect between the swing shaft and its gear, said jackshaft gear and said swing shaft gear overlapping one another and both engaging said hoist shaft gear, but in different planes.

1,886,033. AUTOMATIC FEEDING DEVICE. SAMUEL C. LUCAS, Canton, Ohio, assignor to The Timken Roller Bearing Company, Canton, Ohio, a Corporation of Ohio. Filed Oct. 11, 1930. Serial No. 488,182. 20 Claims. (Cl. 153—48.)



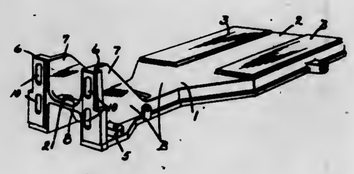
1. In combination, a feeding chute, a work receiving member, means provided on said feeding chute for rotat-

ing the same, an abutment on said chute and located near said rotating means for stopping the work in said chute as soon as it is rotated and an oscillatively mounted arm adapted to carry the work from said feeding chute to said work receiving member.

1,886,034. ODORANT FOR REFRIGERATION. ALEXANDER DOUGLAS MACALLUM, Niagara Falls, N. Y., assignor to The Roessler & Hasslacher Chemical Company, New York, N. Y., a Corporation of Delaware. Filed Sept. 4, 1931. Serial No. 561,309. 7 Claims. (Cl. 252—5.)

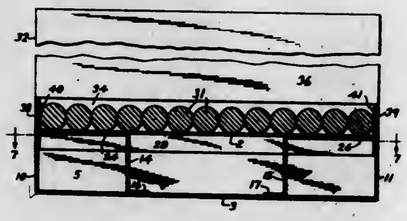
1. A composition of matter comprising a relatively inodorous refrigerant containing a lachrymatory alkyl bromacetate in amounts suitable for warning purposes.

1,886,035. BED PLATE. JOHN MANN, Seneca Falls, N. Y., assignor to Goulds Pumps, Inc., Seneca Falls, N. Y., a Corporation of New York. Filed May 22, 1930. Serial No. 454,686. 2 Claims. (Cl. 248—14.)



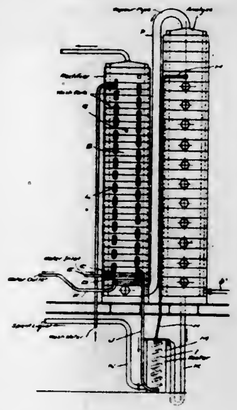
1. A device of the class described comprising a one-piece base for driving and driven members and having a pair of supporting surfaces arranged at right angles to each other, one of said surfaces comprising a pair of spaced supports provided with elongated slots adapted to receive securing screws therethrough whereby one of said members may be adjustably mounted directly on the bed plate to extend between said supports and in fixed coaxial relation with the member mounted on the other surface, a rib connecting the supports, and an adjusting screw associated with said rib adapted to move the adjustably mounted member into coaxial relation with the other member.

1,886,036. CARDBOARD DISPLAY DEVICE. FRANK A. MARX, Cincinnati, Ohio. Refiled for abandoned application Serial No. 482,681, filed Sept. 18, 1930. This application filed July 12, 1932. Serial No. 622,161. 6 Claims. (Cl. 40—126.)



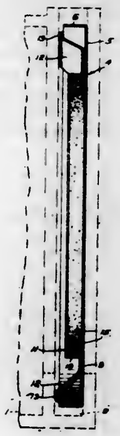
1. A cardboard-box display dummy, comprising an open-ended four-walled body collapsible in the manner of a hinged parallelogram, two hinged ends which extend outward from the body in the flat condition, and two folding braces to hold the dummy in setup condition, said braces being connected with the hinged ends and extending into the interior of the body, the extremities of each brace being glued to the wall of the body to which its connected end is hinged.

1,886,037. DISTILLING APPARATUS. JAMES MCDOUGALL, Glasgow, Scotland. Filed Apr. 12, 1929, Serial No. 354,577, and in Great Britain Apr. 18, 1928. 3 Claims. (Cl. 202—159.)



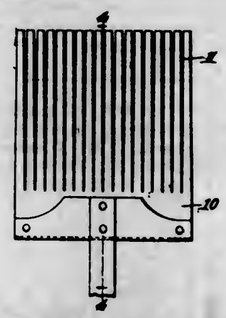
1. In a distilling apparatus of the Coffey type for alcoholic wash, comprising an analyzer in communication with a source of steam, a rectifier in communication with said analyzer and having a number of compartments and coils fitted within the lower compartments of the rectifier, means for cooling the vapour coming from the analyzer and extracting the excess heat from spirit vapour.

1,886,038. OIL AND DUST GUARD. HUGH E. MCGIVERON, Haslett, Mich., assignor to Motor Wheel Corporation, Lansing, Mich., a Corporation of Michigan. Filed Jan. 22, 1931. Serial No. 510,570. 9 Claims. (Cl. 286—6.)



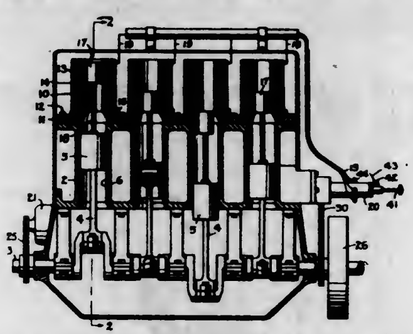
9. In a metal dust guard for railway journal boxes, two apertured steel stampings fixedly secured together to provide a central annular packing-receiving chamber, a packing ring in the chamber, one of said stampings having an extensive flat rear bearing surface, the other stamping having three integral outwardly and forwardly directed spring tongues.

1,886,039. INSECT DESTROYER. ALBERT D. MILLER, Goshen, Ind. Filed Aug. 10, 1929. Serial No. 384,887. 1 Claim. (Cl. 43—137.)



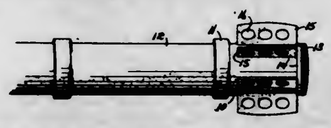
A device of the kind described including a body consisting of a sheet of soft and highly flexible but relatively heavy rubber like material of substantially rectangular form provided with a series of spaced and tapered slots extending from the front edge of the body to a line parallel to the rear edge of said body whereby to provide tapering strips extending forwardly from the unslotted portion, said strips normally being in the same plane and having their longitudinal middle lines parallel, and said slots being unobstructed and of sufficient width to allow free passage of air therethrough.

1,886,040. ELECTRIC MOTOR. EDWIN F. MOODYMAN, Houston, Tex., assignor of one-tenth to W. S. Hunt, Houston, Tex. Filed Aug. 28, 1930. Serial No. 478,425. 7 Claims. (Cl. 172—126.)



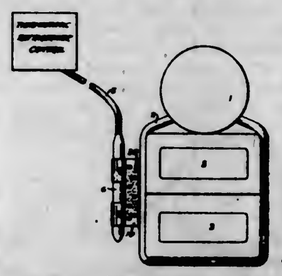
2. A multicylinder motor including a solenoid for each cylinder, means to vary the time of the operation of each solenoid, and a crankshaft rotatable by the movement of said solenoids.

1,886,041. CURB PIPE. HOWARD C. FREY, Maplewood, N. J. Filed Feb. 27, 1931. Serial No. 518,888. 4 Claims. (Cl. 94—33.)



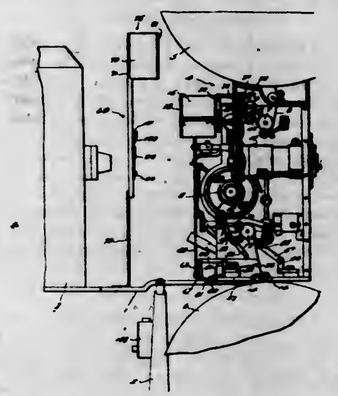
1. A drain pipe construction for use beneath sidewalks and curbs having a plurality of spaced laterally extending reinforcing elements arranged at intervals upon the outer surface thereof, and each of said elements having passages within and through which portions of the sidewalk and curb composition may be forced.

1,886,042. REFRIGERATOR. FRED H. OSBORNE, Chicago, Ill., assignor, by mesne assignments, to Grigsby-Grunow Company, a Corporation of Illinois. Filed Oct. 13, 1930. Serial No. 488,390. 4 Claims. (Cl. 62—2.)



1. A bracket for mounting a temperature control member to the cooling unit of a refrigerator comprising a mounting portion for mounting said bracket on said cooling unit, a clamping portion for fixedly retaining said heat control member and a heat conducting portion joining said two portions, said heat conducting portion having removable means for readily varying the amount of metal joining said two portions and thereby varying the heat transfer therebetween.

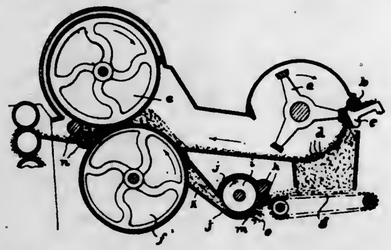
1,886,043. FIRE PREVENTING DEVICE FOR MOVING PICTURE MACHINES. JOHN C. PFEIL, Johnstown, Pa., assignor of one-half to Vernon F. Scott, Johnstown, Pa. Filed Jan. 21, 1930. Serial No. 422,262. 4 Claims. (Cl. 88—17.)



1. In a device of the character described, the combination of a moving picture machine having an aperture plate and electric motor driven means for feeding a film strip past the aperture plate, said film strip having a loop therein above the aperture plate, the electric circuit to the motor having a control switch interposed therein, a shaft journaled for rotation on the moving picture machine, a plate fixed on the shaft and projecting therefrom above the loop for engagement and actuation by the film strip when the loop is increased, a bell crank lever mounted for independent swinging movement on the shaft, a lug mounted on one end portion of the bell crank lever and engageable with the plate for operatively connecting the shaft to the bell crank lever for actuation thereby upon swinging movement of the bell crank lever in one direction, a member mounted on the moving picture and disposed within the loop for engagement and actuation by the film strip when the loop is substantially eliminated, means operatively connecting the bell crank

lever to the member for actuation thereby, and means operatively connecting the control switch to the shaft for actuation by said shaft.

1,886,044. MACHINE FOR THE SCUTCHING, OPENING, AND LIKE TREATMENT OF COTTON AND LIKE FIBROUS MATERIALS. FRANK QUINN and LEONARD WILD, Bolton, England. Filed May 6, 1931, Serial No. 535,508, and in Great Britain May 7, 1930. 3 Claims. (Cl. 19—88.)

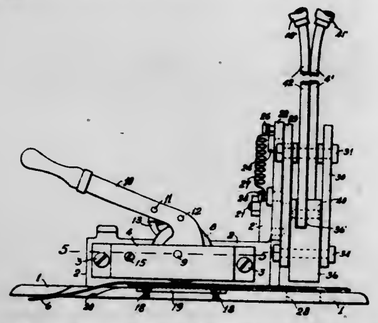


1. In machines for the scutching, opening and like treatment of cotton and like fibrous materials, comprising a casing, scutching or opening means at the feed end of said casing, grate bars disposed beneath said scutching or opening means, and means for applying suction at the delivery end of said casing, the combination of a slow motion lattice beneath said grate bars for receiving the leaf, stalk and fibers discharged through said grate bars, means associated with said slow motion lattice for subjecting said fibers to a cleaning treatment, a casing surrounding said means and means for applying the suction of the scutcher, opener or the like to said means, substantially as set forth.

1,886,045. UTILIZATION OF WASTE ORGANIC MIXTURES. GUSTAVE T. REICH, Anaheim, Calif. Filed Apr. 1, 1927. Serial No. 180,841. 8 Claims. (Cl. 23—121.)

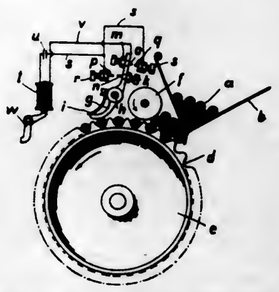
1. Process for separating alkali metal compounds from organic matter in waste organic mixtures containing alkali metal chlorides, such as fermentation residues, which comprises adding ammonium sulfate to an aqueous solution of such residues, concentrating the solution until it has a specific gravity of 1.25–1.35 whereby alkali metal sulfate and ammonium chloride are precipitated, separating the precipitate from the solution, and separating the alkali metal sulfate from the ammonium chloride by selective dissolution in ethyl alcohol.

1,886,046. APPARATUS FOR SEALING STRAPS. GERARDO GARCIA RICO, Habana, Cuba, assignor to Alfred Bensabat, New York, N. Y. Filed May 13, 1929, Serial No. 362,837, and in Cuba Apr. 10, 1929. 3 Claims. (Cl. 81—91.)



1. In a device of the character described a base having an upstanding transverse wall, a carrier for a sealing mechanism pivotally mounted on said wall, said sealing mechanism comprising a pair of spaced plates rectilinearly slidable on said pivoted carrier, a pair of jaws pivotally supported between said plates, and levers connected with said jaws having a common fulcrum slidable in said plates and connected with the crimping jaws.

1,886,047. CIGARETTE PACKING MACHINE. ARTHUR RITSCHER, Dresden, Germany, assignor to United Cigarette Machine Company A.-G., Dresden-A., Germany. Filed Jan. 5, 1931, Serial No. 506,812, and in Germany Jan. 23, 1930. 6 Claims. (Cl. 226—5.)



1. An apparatus for detecting and setting an ejecting apparatus in operation for an incorrectly filled cigarette or the like, comprising an individual feeding device for the cigarettes; a feeler along which the cigarettes are individually fed by said feeding device thereby contacting the cigarettes individually; and means cooperating with the feeler to set the ejecting apparatus in operation when a cigarette detected by the feeler contains an under or over supply of tobacco.

1,886,048. GARMENT. BENJAMIN ROTHBLUM, New York, N. Y. Filed Nov. 18, 1931. Serial No. 575,792. 3 Claims. (Cl. 2—67.)



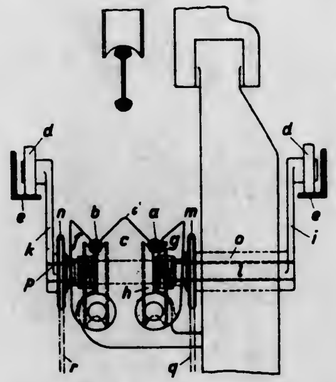
1. A ladies' garment for solar action including a chest portion and a waist portion, a back portion hinged to the rear of said waist portion being swingable about said waist portion to interchangeably cover up or expose the wearer's back, shoulder support portions for said chest portion, said back portion having means for attaching it to and detaching it from said shoulder support portions, and said shoulder support portions having means for securing them to each other upon detachment of said back portion.

1,886,049. GARMENT. BENJAMIN ROTHBLUM, New York, N. Y. Filed Nov. 18, 1931. Serial No. 575,794. 8 Claims. (Cl. 2—67.)



1. A garment including a chest portion and waist portion, said chest portion having a pair of shoulder support portions, one of said shoulder support portions forming into a back portion and terminating in a securing means, the other of said shoulder support portions forming into a back portion that overlaps said former back portion and terminates in a securing means, means for fastening said back portions to the rear of said waist portion, said back portions being adapted to fold over forwardly toward the front of the wearer to expose their reverse sides and the wearer's back, and said back portions being held by said securing means while in position to cover the wearer's back and when in position to expose the wearer's back.

1,886,050. PROCESS FOR THE WORKING OF PASSENGER ROPEWAYS WITH CONTINUOUS TRAFFIC. ADOLPH RUBIN, Leipzig, Germany, assignor to the Firm Adolf Bleichert & Co. A.-G., Leipzig, Germany. Filed Nov. 3, 1930, Serial No. 492,981, and in Germany Mar. 14, 1930. 7 Claims. (Cl. 104—208.)



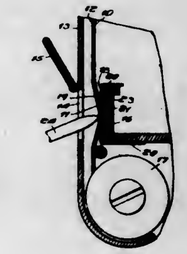
1. A track, a vehicle movable therealong, a pair of power ropes extending contiguous to the track and travelling, respectively, one at a substantially constant rate of speed and the other at a variable speed, and means for coupling and uncoupling the car selectively with and from said ropes.

1,886,051. PERMANENT HAIR WAVING DEVICE. NICHOLAS SAMANTAS, San Francisco, Calif. Filed Aug. 11, 1930. Serial No. 474,513. 9 Claims. (Cl. 132—33.)



1. In combination, a spool having a longitudinally extending groove therein, a clamping member disposed in the groove for holding the end of a paper, and a lid pivoted to the spool and having a slot for receiving the end of a second paper.

1,886,052. ART OF AUTOGRAPHING PHOTOGRAPHIC FILMS. JOHN P. SCANNELL, Oak Park, Ill., assignor to Edward E. Emmerich, Chicago, Ill. Filed Feb. 24, 1930. Serial No. 430,487. 21 Claims. (Cl. 95—1.1.)



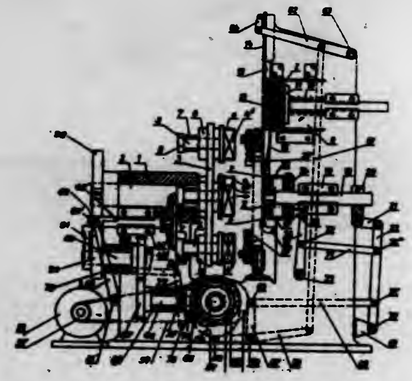
1. The method of autographing a photographic film consisting in exposing one portion of the film to create an image and exposing another portion thereof to light and retarding or preventing the development of parts of such last exposed portion.

1,886,053. AUTOGRAPHIC FILM CARTRIDGE. JOHN P. SCANNELL, Oak Park, Ill., assignor to Edward E. Emmerich, Chicago, Ill. Filed Feb. 24, 1930. Serial No. 430,488. 8 Claims. (Cl. 95—1.1.)



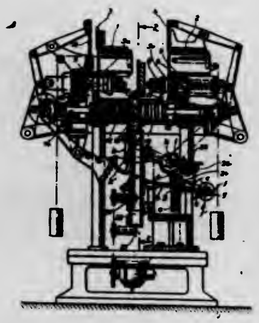
1. An autographic film comprising a film, a light transmitting back therefor, spaced ray-emitting panels arranged transversely of said back on the face thereof, adjoining the film, and a light obstructing coating on the inner face of said back forming a permanent part thereof and covering said panels.

1,886,054. DEVICE FOR PRODUCING BOX PARTS WITH INSERTED EDGE LINING. ALFRED JOHANNES SCHMIEDEL, Dresden, Germany, assignor to the Firm "Universelle" Cigarettenmaschinen Fabrik J. C. Muller & Co., Dresden, Germany. Filed June 12, 1929, Serial No. 370,867, and in Germany June 16, 1928. 7 Claims. (Cl. 93—39.)



1. The process which comprises condensing a 1.4.5.8-naphthalenetetra-carboxylic acid with an ortho-diamine.

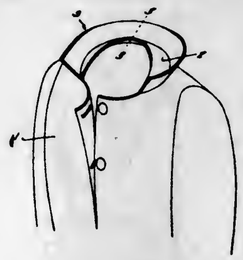
1,886,055. METHOD OF FORMING BOXES CONSISTING OF TWO PARTS ONE OF WHICH HAS A CURVED WALL. JOHANNES SCHMIEDEL, Dresden, Germany, assignor to the Firm "Universelle" Cigarettenmaschinen-Fabrik J. C. Muller & Co., Dresden, Germany. Filed Jan. 9, 1930, Serial No. 419,576, and in Germany Jan. 11, 1929. 6 Claims. (Cl. 93—39.)



1. The method of producing boxes consisting of two parts and having a curved wall, comprising forming each part of the box simultaneously, combining the two parts and binding said two box parts together cutting open the bound box parts along side edges and curving one face of one of the box parts.

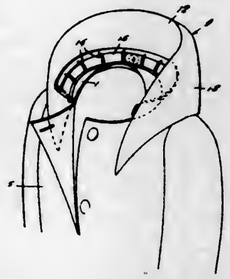
1,886,056. GARMENT. CARL SCHWARTZ, New York, N. Y. Filed June 20, 1932. Serial No. 618,381. 6 Claims. (Cl. 2—98.)

1. A garment comprising a body, and a substantially firm collar base for carrying a collar, said collar base being attached along its length to said body adjacent and spaced from the edge of said body, the end portions of



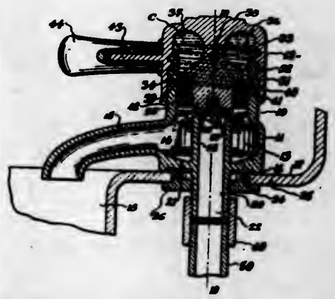
said collar base being bent inwardly, thereby to cup the collar base with respect to the body.

1,886,057. COLLAR ATTACHING MEANS. CARL SCHWARTZ, New York, N. Y. Filed June 20, 1932. Serial No. 618,382. 6 Claims. (Cl. 2—98.)



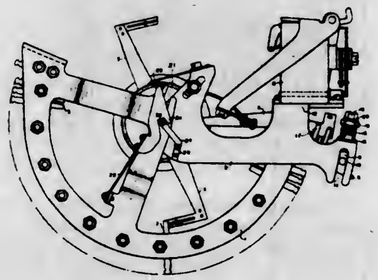
1. A garment comprising a body, a collar base attached to the body and having slots therein, a collar, loops on the collar insertable through the slots, and means on the base insertable through the loops for securing said loops to the base.

1,886,058. FAUCET. EDWARD J. SHOEMAKER, Canton, Ohio. Filed Mar. 7, 1929. Serial No. 345,056. 6 Claims. (Cl. 251—50.)



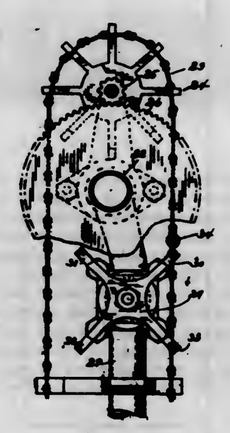
2. A faucet including a base having a well formed therein, and an opening at one end of the well, an outlet duct for the well, an inlet duct extending within the well across the well end of the outlet duct, and the inlet duct having an orifice end terminating within the well, a movable closure head for the well opening of the base, the closure head being in screw thread engagement with the base, and the closure head including a plunger adapted for opening and closing the orifice end of the inlet duct by movements of the head.

1,886,059. AUTOMATIC SWITCHING MECHANISM. CHARLES PERCY SMITH and GEOFFREY NEWTON, London, England, assignors to International Standard Electric Corporation, New York, N. Y., a Corporation of Delaware. Filed Oct. 31, 1930, Serial No. 492,591, and in Great Britain Nov. 6, 1929. 17 Claims. (Cl. 200—11.)



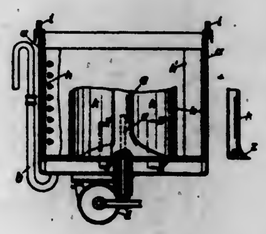
1. A selector switch comprising in combination a frame having an arcuate bank of contacts and a bearing centrally disposed with respect to said contacts, a subframe having a wiper shaft and wipers mounted thereon for cooperation with said contacts, means for securing said wiper shaft in said bearing and means for locking said sub-frame to said frame.

1,886,060. BOILER CLEANER. NORMAN L. SNOW, New Canaan, Conn., assignor to Diamond Power Specialty Corporation, Detroit, Mich., a Corporation of Michigan. Filed Nov. 26, 1928, Serial No. 677,165. Renewed May 12, 1931. 27 Claims. (Cl. 122—392.)



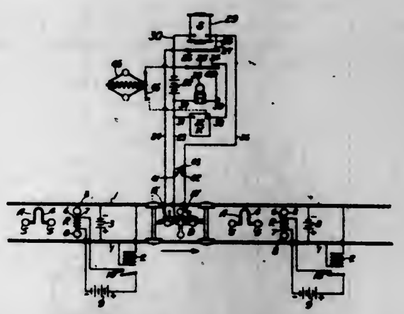
1. In a boiler cleaner, the combination with the blower element and a valve for controlling the admission of steam or the like thereto, of a flexible member for actuating said blower element having an enlargement, and means cooperating with said enlargement for causing the actuation of said valve, said means including a slotted arm.

1,886,061. APPARATUS FOR PEELING POTATOES. ROBERT SPEIDEL, Pforzheim, Germany. Filed Dec. 17, 1926, Serial No. 414,762, and in Germany May 2, 1929. 1 Claim. (Cl. 146—49.)



A machine for peeling potatoes or the like comprising a container for receiving a volume of water, an overflow pipe carried by the container, a stationary abrading casing in the container and spaced from the wall thereof, stationary deflecting members secured to the abrading casing, an abrading bottom for the casing mounted therein, a rotary double vane having cam surfaces adapted to deliver the potatoes continuously from the center of the bottom of the container and upwardly and outwardly therein.

1,886,062. TRAIN CONTROL. FRANK JULIAN SPRAGUE, New York, N. Y. Filed June 12, 1928. Serial No. 284,801. 9 Claims. (Cl. 246—63.)

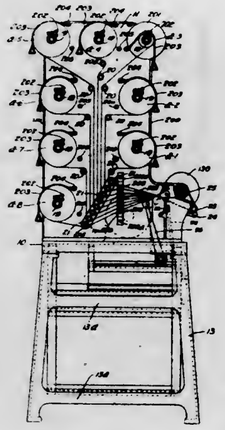


1. In an inductive train control system, the combination of permanently active trackway elements followed in close succession by traffic controlled track elements, said two kinds of track elements being in different angular positions relative to the rails and located within the rails with vehicle-carried apparatus, said apparatus being inversely influenced by said trackway elements, whereby one kind of trackway element initiates operation of the vehicle-carried apparatus and the other kind of trackway element restrains operation thereof.

1,886,063. WINDING MACHINE. FRANK DESMOND SPRAGUE, Quincy, Mass., assignor to Sprague Specialties Company, Quincy, Mass., a Corporation of Massachusetts. Filed Dec. 17, 1929. Serial No. 414,787. 11 Claims. (Cl. 242—56.)

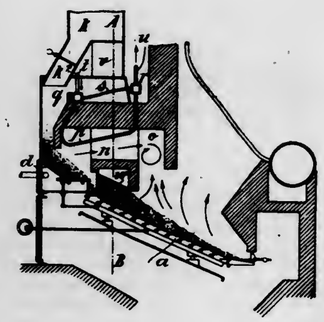
6. In a winding apparatus stock feeding and cutting means, comprising a rotatable feeding frame and means

to maintain said frame in a normal position, a cutting device, and means under manual control to move the frame and approach the stock to the cutting device, and



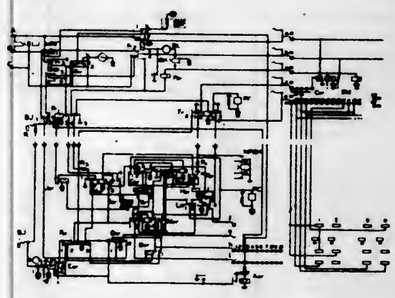
simultaneously advance the stock for the beginning of a new condenser, and to subsequently sever the stock through actuation of the cutting device.

1,886,064. FURNACE. LEBRECHT STEINMULLER, Gummersbach, Germany, assignor to the Firm L. & C. Steinmuller, Gummersbach/Rheinland, Germany. Filed June 29, 1928, Serial No. 289,169, and in Germany Feb. 20, 1928. 4 Claims. (Cl. 110—32.)



1. In combination a main inclined grate, a secondary inclined grate arranged above the main grate for delivering incandescent fuel thereto, means for supplying fuel to both grates, so as to form a burning layer on the main grate on which fresh fuel is supplied, a combustion chamber for said secondary grate, a combustion chamber for said main grate, brickwork in which said grates are located, said brickwork having a passage formed therein, said passage forming a means of communication between said combustion chambers, and cooling pipes located in said passage to retard combustion in the chamber for the secondary grate.

1,886,065. AUTOMATIC TELEPHONE SYSTEM. CHARLES EDWARD STEVENS and JOHANNUS CORNELIS SCHOONEMAN, Antwerp, Belgium, assignors to International Standard Electric Corporation, New York, N. Y., a Corporation of Delaware. Filed Sept. 8, 1930, Serial No. 480,460, and in Great Britain Oct. 9, 1929. 22 Claims. (Cl. 179—18.)



1. In a telephone exchange system the combination of a plurality of selector switches, a plurality of lines divided into groups and terminating in contacts of said selector switches, a control switch, means for transmitting digit impulses to said control switch, means under control of said control switch in response to two digit impulses to cause one of said selector switches to advance, first to a group of lines and then to a line within said group, comprising electrical connections between contacts in the selector switch and said control switch to which marking potentials are applied.

1,886,066. FINNED-TUBE RADIATOR AND THE LIKE. CHARLES J. STUART, Cheshire, Conn., assignor to The Chase Companies, Incorporated, Waterbury, Conn., a Corporation. Filed June 8, 1932. Serial No. 616,045. 5 Claims. (Cl. 257—124.)

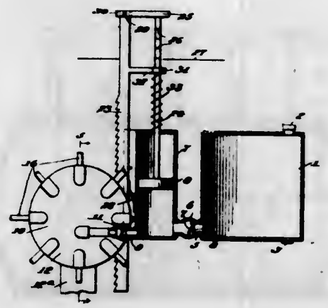


2. In a finned-tube radiator or the like, the combination with a pair of complementary headers; of a plurality of thin-walled metal tubes interconnecting the said headers and having a multiplicity of fins projecting therefrom; a pair of complementary side-members extending between the said headers and respectively located on the opposite sides of the said tubes and the fins projecting therefrom; and a supporting-member extending crosswise between the said complementary side-members and provided with one or more laterally-offsetting fin-seats engaging one or more of the fins of the said tubes to support the latter through the intermediary of the said fins, against undue flexure.

1,886,067. LUBRICATING SYSTEM. HERBERT B. MOSES, San Francisco, Calif., assignor to Irma H. Moses. Filed May 15, 1928. Serial No. 277,906. 18 Claims. (Cl. 184—35.)

1. In a lubricating system, a reservoir for lubricant, a series of branch conduits leading to points to be lubricated, means for forcing the lubricant from the reservoir

to and through said conduits serially, and means operated by said forcing means while functioning as such to indicate which point to be lubricated has not received sufficient lubricant if and when the forcing means does not force sufficient lubricant to the whole series of points to be lubricated.



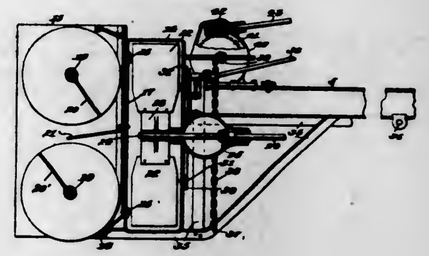
1,886,068. WALL CABINET FOR TELEPHONES. CHARLES F. THOLIN, Rockford, Ill. Filed July 12, 1930. Serial No. 467,468. 9 Claims. (Cl. 312—113.)



1. In a wall cabinet of the class described, the combination with a cabinet having the front thereof open, of a door hinged on a vertical axis on one side of the cabinet serving as a closure for the upper portion of the open front of the cabinet, a panal serving as a closure for the lower portion of the open front of the cabinet below the door, the same being hinged at opposite sides of the cabinet for swinging movement on a substantially horisontal axis and being arranged when swung out to serve as a seat, and means interconnecting the door and seat panel whereby the same operate together and the movement of the one communicates movement to the other in the opening and closing of the cabinet.

1,886,069. SNOW REMOVER. DAN WANDSCHEER, Dubuque, Iowa, assignor of one-fourth to Gerrit Wandscheer, one-fourth to Jacob Wandscheer, and one-fourth to Ben Wandscheer, Dubuque, Iowa. Filed Mar. 20, 1928. Serial No. 263,089. 5 Claims. (Cl. 37—43.)

3. In a snow removing apparatus, an ejecting means, a plurality of superposed conveyors for engaging the snow in front of the snow removing apparatus and feeding it toward said ejecting means, means adjacent the peripheries of and cooperating with said conveyors to distribute snow



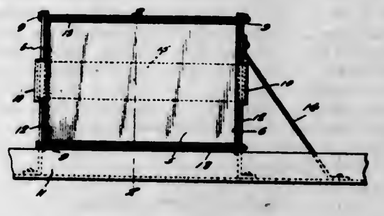
evenly to each of said conveyors and to prevent clogging and cause uniform passage of the snow, and means for driving said conveyors.

1,886,070. FINGER POSITION INDICATING MEANS FOR VIOLINS AND THE LIKE. HERBERT O. WEBB, Philadelphia, Pa. Filed Nov. 9, 1931. Serial No. 573,844. 5 Claims. (Cl. 84—281.)



1. Finger positioning means for attachment to a violin comprising a block having a portion formed to conform with a portion of the back surface of the violin head, clamping means comprising a U-shaped member and a pair of adjustable hooks operatively secured thereto embracing the block and adapted to maintain the block and head in mutual engagement, a rod carried by the block adapted to extend in substantial parallelism with the neck of the violin and to engage the neck base thereof and means adjustable longitudinally of the rod adapted to be engaged by the left thumb of the player when the violin is held in playing position.

1,886,071. BATTERY REPLACEMENT BOX. HUGH A. WILEY, Memphis, Tenn. Filed Apr. 9, 1931. Serial No. 528,962. 1 Claim. (Cl. 180—68.5.)



A battery replacement box formed from a single sheet of metal bent on two parallel transverse fold lines into a substantial U whereby to provide a bottom and opposed sides, said plate at relatively opposite edges of said sides and bottom being bent at substantially right angles to pro-

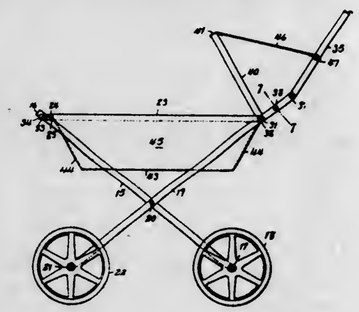
vide opposed parallel flanges extending lengthwise of the sides and bottom, and said plate at relatively opposite ends thereof being reduced in width to provide extensions for said sides bent upon themselves to form hooks.

1,886,072. STREAMLINE WIRE SEPARATOR. SELDEN T. WILLIAMS, Forest Hills, N. Y., assignor to A. Schrader's Son, Incorporated, Brooklyn, N. Y., a Corporation of New York. Filed Nov. 14, 1929. Serial No. 407,052. 8 Claims. (Cl. 244—31.)



1. A device for restraining a plurality of aircraft wires from fluttering, which comprises elastic means for engaging the wires and spacer means cooperating with the elastic means, said elastic means comprising a head portion and a tail portion, which, in their cooperative relation, are streamline in form.

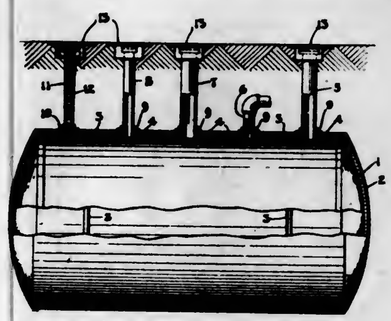
1,886,073. DOLL CARRIAGE. WILLIAM C. WOOD, East Hampton, Conn., assignor to The N. N. Hill Brass Company, East Hampton, Conn., a Corporation. Filed Mar. 30, 1931. Serial No. 526,328. 1 Claim. (Cl. 280—41.)



A vertically-collapsible doll carriage having on either side a rigid front and a rigid rear frame-piece pivoted together about midway of their length on the same axis, front wheels carried by the lower ends of the rear frame-pieces, rear wheels carried by the lower ends of the front frame-pieces, a non-collapsible body-frame narrower than the spread between the said wheels and pivotally connected with the rear ends of the rear frame-pieces and adapted at its forward end to be engaged with and disengaged from the forward ends of the front frame-pieces, a handle-frame pivotally connected with the rear ends of the rear frame-pieces, and a canopy-frame pivotally connected with the ends of the rear end-piece of the body-frame, whereby, when the body-frame is disengaged from the front frame-pieces, the carriage collapses in the vertical plane, the wheels then moving apart and the body-frame coming to rest between them.

1,886,074. STORAGE TANK. DIETRICH WORTMANN, Brooklyn, N. Y. Filed Jan. 16, 1931. Serial No. 509,210. 4 Claims. (Cl. 220—13.)

1. A leak detector for an underground storage tank for fluids, comprising a readily observable fluid in combination with a tank having a double shell the walls of which are held in spaced relation, and which space is filled with said fluid, whereby leakage into the ground through the outer shell, or from the inner shell to the jacket space,



or into the inner shell from the jacket space may be quickly observed, and a tube extending from the jacket to show the level of the indicator fluid.

1,886,075. KNIFE AND SPOON PAN RACK. EDWARD A. ZORSCH, Rochester, N. Y. Filed May 12, 1931. Serial No. 536,874. 3 Claims. (Cl. 65—65.)

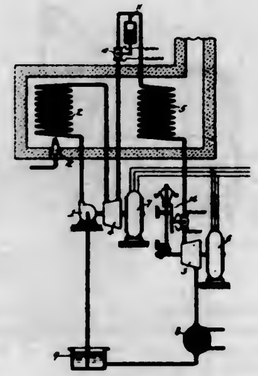


1. A device of the class described comprising a body formed of a substantially rectangular shaped frame open throughout its extent and having at its marginal top edge an inbent rest flange unbroken throughout said edge, a tray received in the frame and having an outturned marginal flange to rest upon the flange of the frame and overlap the same, an upright plate carried at one end of the frame and extended above the plane of the top thereof and having vertical slots disposed an equi-distance from each other, and means on the plate and projected laterally outwardly therefrom to constitute a rest for articles when engaged in the slots and received in the tray.

1,886,076. METHOD OF GENERATING WORKING STEAM. WILHELM ABENDROTH, Berlin-Charlottenburg, and HANS GLEICHMANN, Berlin-Siemensstadt, Germany, assignors to Siemens-Schuckertwerke Gesellschaft mit beschrankter Haftung, Siemensstadt, Germany, a German Corporation. Filed Feb. 5, 1926, Serial No. 86,216, and in Germany Feb. 5, 1925. 2 Claims. (Cl. 60—73.)

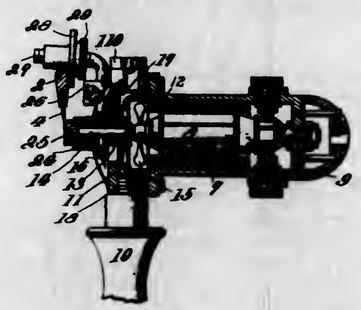
1. In a speed flow vapor power plant in combination a tube system constituting the vapor generator, a centrifugal pump for forcing a liquid working medium in a continuous stream through said system, means for heating the liquid in a portion of said system to generate vapor at high pressure, a main prime mover operating at a vapor pressure lower than the generating pressure, and means for reducing the pressure of the generated vapor to the pressure required for the main prime mover, said reducing means comprising an auxiliary prime mover operated by said vapor and connected in the supply line to said main prime mover and acting as a vapor throttling element, said auxiliary prime mover operating said pump, and an electric equalizing machine connected to an electric power line and connected in fixed relation to said

auxiliary prime mover and said pump, and operating as a motor when the delivered auxiliary prime mover power is below the required pump power, and operating as a generator when the delivered prime mover power is above



the required pump power, whereby said auxiliary prime mover acts as a vapor throttling element, and the pump output varies substantially with the amount of vapor produced by said generator.

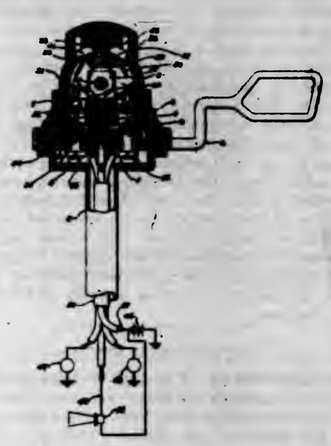
1,886,077. CLOTH CUTTING MACHINE. JACOB BLOCH and ALBERT G. WAGNER, Cincinnati, Ohio, assignors, by direct and mesne assignments, to The Wolf Machine Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Sept. 8, 1927. Serial No. 218,307. 12 Claims. (Cl. 51—173.)



1. A portable grinding tool comprising a casing, a motor therein, an abrading member at one end of the casing driven directly by the motor, a ventilating cap over said end of the casing, a yoke secured over the cap and constructed at one end to be mounted on a cutting machine and having a handle at the opposite end, and a guide element carried by the yoke and cooperating with the abrading member as the latter is moved along a knife which is to be sharpened.

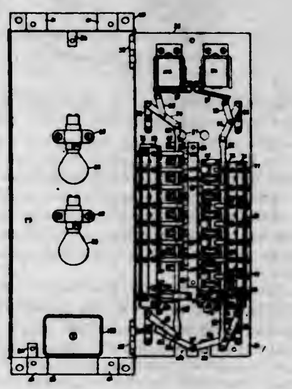
1,886,078. SWITCH FOR SIGNALING SYSTEMS FOR VEHICLES. BORNETT L. BORROFF, Racine, Wis. Filed Mar. 31, 1930. Serial No. 440,287. 10 Claims. (Cl. 200—4.)

1. A signal switch comprising a body portion, a plurality of stationary contacts carried by said body portion, a shell surrounding said body portion, a rocking contact carried by said shell, and means connected to said rocking contact and located exteriorly of said shell



for operating said rocking contact, said rocking contact being supported independently of the exteriorly located operating means.

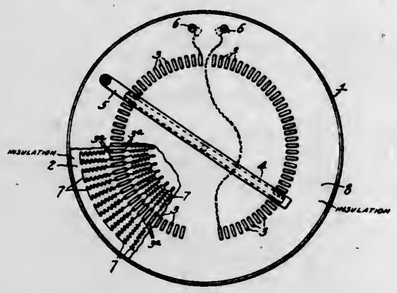
1,886,079. INDICATOR. THOMAS BRADY, East Orange, N. J., assignor to Otis Elevator Company, New York, N. Y., a Corporation of New Jersey. Filed Feb. 18, 1930. Serial No. 429,235. 2 Claims. (Cl. 177—336.)



2. In an annunciator for an elevator system; a panel; a plurality of translucent floor-designating targets arranged vertically on said panel in single file formation; a light source in rear of said panel for illuminating all of said targets; a plurality of shutters, one for each of said targets, mounted between said targets and said light source, each of said shutters being arranged for individual movement laterally of the line of said targets between a normal, extended, light-obscuring position and a retracted, light-transmitting position; an actuating rod secured to each shutter, each actuating rod having a stub portion bent at right angles thereto, the end of such stub portion being secured to the corresponding shutter so that the main portion of the actuating rod extends horizontally and laterally of the line of said targets; a solenoid surrounding each actuating rod so

that the actuating rods constitute movable cores for said solenoids, the arrangement being such that energization of each solenoid causes the movement of its associated rod and shutter from said normal, extended position to said retracted position; a member extending vertically in a plane perpendicularly intersecting the stub portions of said actuating rods, said member being positioned between said solenoids and said stub portions; parallel links secured to the ends of said member by which said member, when raised, moves in its vertical plane laterally away from said solenoids, thereby engaging the stub portions of the actuating rods for such of the shutters as are then in retracted position and, moving such shutters to their normal, extended position; manual reset mechanism associated with the lever of said parallel links for restoring the shutters which are in retracted position to their normal. extended position; and a reset magnet having an armature connected to the upper of said parallel links for effecting an automatic power reset of the shutters which are in their retracted position to their normal, extended position.

1,886,080. RHEOSTAT. FREDERIC H. BULLINGER, Bronxville, N. Y., assignor to Ward Leonard Electric Company, a Corporation of New York. Filed June 21, 1930. Serial No. 462,754. 10 Claims. (Cl. 201—53.)

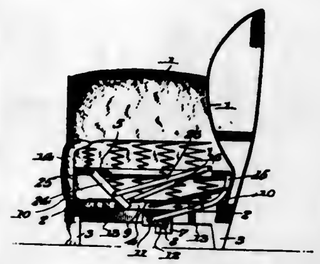


3. A rheostat comprising an insulating support, a resistive conductor, said conductor having outwardly projecting looped portions, fixed contacts on said support, said contacts being of rectangular form and having openings on their inner ends extending lengthwise and towards the faces thereof receiving said looped portions and the walls of said openings being compressed inwardly and compressing said looped portions, and an insulating coating covering said conductor and embedding the inner ends of said contacts.

9. The method of making a rheostat having a series of contacts connected to a resistive conductor which comprises forming said contacts with projecting portions at the outer portions thereof, causing said projecting portions to engage a positioning element, applying the contacts and conductor to their support, applying an insulating coating over the resistive conductor and around the bases of the contacts, maturing said coating, and then removing said positioning element.

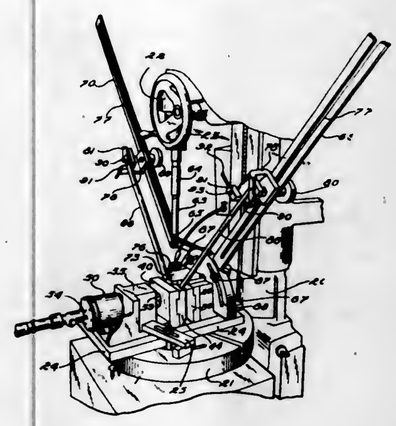
1,886,081. FOLDING DAVENPORT BED. DANIEL H CALDEMEYER, Evansville, Ind. Filed Dec. 31, 1927. Serial No. 243,911. 8 Claims. (Cl. 5—22.)

1. In a folding davenport bed, the combination with a bed frame, and a main bed bottom section, of means mounting said main section on said bed frame for bodily raising and lowering and tilting, a supplemental swing-over bed bottom section, means mounting said supplemental swing-over section on said bed frame so that said swing-over section is adapted to be superposed on said main section when the latter is in lowered position, or, to be extended horizontally in relation to said main section when the latter is in raised position, means operated by the supplemental swing-over bed bottom section whereby the main bed bottom section is bodily raised or lowered and tilted, and means on the bed frame and main bottom



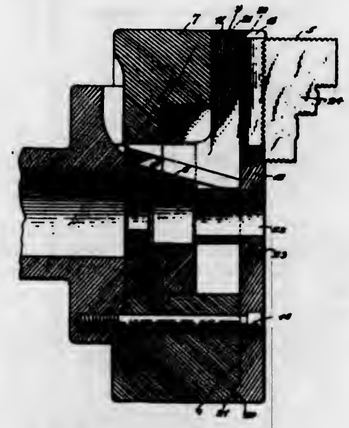
section, respectively, adapted to automatically adjust and retain the main section in horizontal position when it is raised and tilted, on the extension of the swing-over section to horizontal position.

1,886,082. RADIUS FORMING FIXTURE. MEARL J. CHAPMAN, Cleveland, Ohio. assignor to Great Lakes Aircraft Corporation, a Corporation of Delaware. Filed Apr. 8, 1930. Serial No. 442,709. 1 Claim. (Cl. 77—62.)



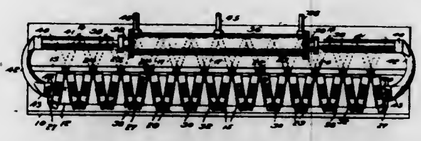
In a device of the type described, a pair of relatively movable central clamping members, matching depressions being provided in said clamping members adapted to receive and clamp one end of a tube therein, an axially movable cutting tool of drill type, supported with its axis in intersecting relation with respect to the axis of one of said depressions, an arm pivotally secured relative to one of said clamping members, means for locking said arm in pivotally adjusted position, a member slidably mounted on said arm, means for clamping said member in slidably adjusted position, and means carried by the last mentioned member for locating the other end of said tube at a predetermined distance from the point of intersection of the axis of said depression and that of said tool and at a predetermined angular relation with respect to the axis of said tool, said locating means comprising a member adapted to contact with a side of said tube and another member engageable with the corresponding end surface of said tube.

1,886,083. CHUCK. ALBERT E. CHURCH, New Britain, Conn., assignor to The Union Manufacturing Company, New Britain, Conn., a Corporation of Connecticut. Filed Jan. 2, 1931. Serial No. 506,265. 2 Claims. (Cl. 279—110.)



1. In a slidable jaw chuck, a head having radial grooves through its front face, said head being provided near the peripheral edge of said face with a shoulder facing toward the periphery of the head, a heavy one-piece plate secured against said face of said head, said plate having an inwardly facing shoulder abutting the aforesaid shoulder and having radial slots narrower than and registering with said grooves, said plate having sufficient resistance to radial expansion to counteract the weakening effect of said slots and hold said head against radial expansion under strain, and jaws passing slidably through said slots and held in slidable contact with walls of said grooves by means of the portions of said plate along said slots.

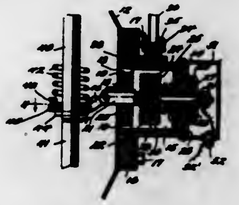
1,886,084. MULTIPLE PERMANENT MOLD., MONROE S. CLAWSON, Montclair, N. J.; Anna Irons Clawson executrix of said Monroe S. Clawson, deceased. Filed Aug. 30, 1929. Serial No. 389,516. 23 Claims. (Cl. 22—92.)



1. In a multiple mold apparatus, a support, a lazy tongs structure mounted thereon, means for extending or contracting the lazy tongs, and a plurality of coacting mold units mounted on said lazy tongs and movable therewith into contacting or spaced relation.

1,886,085. OIL TESTER. GEORGE W. COPLAND, Lawrence, N. Y. Filed June 14, 1928. Serial No. 285,420. 9 Claims. (Cl. 177—311.)

1. In a device for testing the dilution of oil in an internal combustion engine, in combination, a pair of elements having confronting, complementary surfaces, means associated with said engine to cause periodic relative movement between said elements to alternately attempt to engage and separate said surfaces, resilient means supporting one of said elements and flexed when they are attempting to engage, means to apply a fresh quantity



of oil from the engine supply to said surfaces when separated and means to indicate positive contact of said surfaces with each other.

1,886,086. CONNECTER FOR CABLES. JOHN C. DAMON, Cheshire, Conn., assignor to The American Brass Company, Waterbury, Conn., a Corporation of Connecticut. Original application filed Sept. 29, 1927, Serial No. 222,731. Divided and this application filed Sept. 8, 1928. Serial No. 304,827. 2 Claims. (Cl. 287—75.)



1. An article of manufacture of the class described comprising two cables arranged in alinement with their ends spaced apart and reduced in diameter, a connecter tube surrounding said reduced ends, a second connecter tube surrounding said first mentioned tube and extending a distance over the bodies of the cables, the inner tube being reduced in diameter between said spaced ends of the cables and the materials of said inner tube and said reduced ends of the cables, the materials of said outer tube and the bodies of the cables, and the material of the two tubes throughout the length of the inner tube being in intimate interengagement.

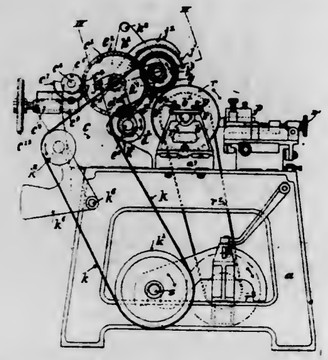
1,886,087. PROCESS OF MAKING DI-SUBSTITUTED GUANIDINES. HERBERT W. DAUDT, Carneys Point, N. J., assignor to E. I. du Pont de Nemours & Company, Wilmington, Del., a Corporation of Delaware. Filed May 18, 1928. Serial No. 278,905. 12 Claims. (Cl. 260—125.)

1. In the process of making a diaryl guanidine, the step which comprises taking a solution of cyanogen halide in a compound of the benzene series which is a solvent for and substantially inert toward the reacting substances, and treating it with a primary aromatic amine to form the diaryl guanidine.

1,886,088. APPARATUS FOR GRINDING AND TREATING WIRE CLOTHED ROLLERS. JAMES DRONSFIELD, Atlas Works, Oldham, England. Filed Dec. 21, 1928, Serial No. 327,544, and in Great Britain Mar. 3, 1928. 7 Claims. (Cl. 51—3.)

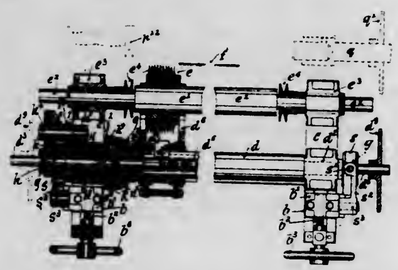
1. An apparatus for grinding and burnishing saw-tooth wire on rollers, comprising a framework, adjustable means mounted thereon for carrying a roller to be operated upon, driving means for the roller, brackets supported on said frame, a movable head mounted for rotation on said brackets, a grinding device pivoted for bodily movement concentric with said head and rotatable about its own axis, means for traversing and driving said grinding device, a burnishing brush movably supported on concentric relation to said head, means for adjusting the brush

angularly with relation to the head, means for driving said burnishing brush, manually operable means for moving the brush supports, and manually operable gear



mechanism associated with said head for rotating the same thereby to bring the grinding device and burnishing brush alternately into action on said roller.

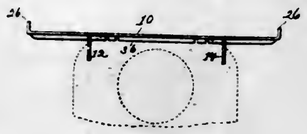
1,886,089. GRINDING MACHINE. JAMES DRONSFIELD, Atlas Works, Oldham, England. Filed Jan. 23, 1932, Serial No. 588,306, and in Great Britain Oct. 8, 1931. 8 Claims. (Cl. 51—242.)



1. An apparatus for grinding or re-needle pointing in situ the dents or teeth of filleting or clothing on carding engine cylinders, doffers, and like cylindrical bodies, comprising a traversible grinder device, axles therefor, means to drive the same, bearings for the axles, movable slides for the bearings, hand adjusted slides and means to set the same, brackets on the movable slides, and a right and left hand screw-threaded shaft having its axle ends supported in said brackets on the movable slides, sleeve devices in the brackets, eccentrics and sheaths, anchorages for the sheaths, and a toothed gear slow motion for actuating said eccentrics to operate the movable slides to very slowly advance and retract the traversible grinder device between the dents or teeth of the filleting or clothing, and means to rotate the right and left hand screw-threaded shaft and an operative connection between same and the traversible grinder device.

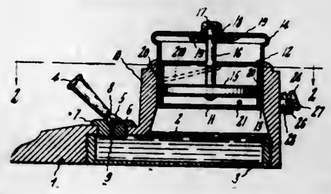
1,886,090. SUPPORTING DEVICE. CHARLES I. GEDDES, Arlington, Mass., assignor to Peter Gray & Sons Inc., Cambridge, Mass., a Corporation of Massachusetts. Filed Feb. 25, 1930. Serial No. 431,197. 4 Claims. (Cl. 211—86.)

1. A supporting device of the character specified, comprising a body portion provided with depending radiator-engaging means spaced apart and extending transversely of the body portion and adapted when the device is positioned on a radiator to extend lengthwise of the radiator to engage portions of sections upon opposite sides of the



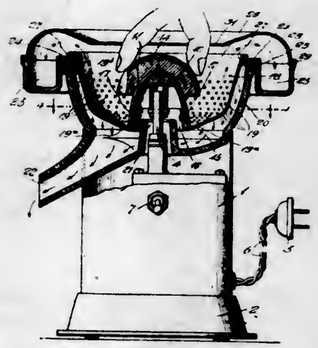
radiator to retain the body portion in a position resting upon the top of the radiator and, extending transversely thereof.

1,886,091. DESK SET. ALFRED GIBSON, Boston, Mass. Filed Apr. 16, 1931. Serial No. 530,474. 4 Claims. (Cl. 226—63.)



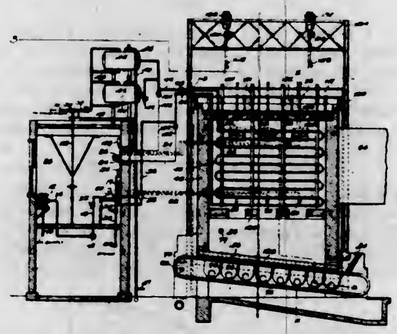
1. A device of the class described, comprising in combination a fountain pen pedestal having a liquid ink reservoir, a vacuum chamber within said pedestal adjacent to said ink reservoir but separated therefrom by a partition, an apertured, hollow plug for hermetically engaging the writing end of the pen, said device having channels leading from said plug to said chamber and to said ink reservoir and said plug being rotatable to register selectively with either of said channels.

1,886,092. CITROUS FRUIT JUICE EXTRACTOR. EDWIN C. GRAHAM, Washington, D. C., assignor to National Electrical Supply Company, Washington, D. C., a Corporation of Virginia. Filed Feb. 23, 1932. Serial No. 594,697. 7 Claims. (Cl. 146—3.)



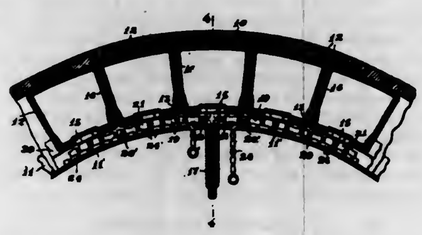
1. A fruit juice extractor comprising a rotatable shaft, a reamer removably carried by said shaft, a bowl shaped strainer disposed about said reamer, a juice collecting bowl disposed about said strainer, and a removable annular trough surrounding said bowl and having a portion resting upon the upper edge of the bowl to removably support the trough, said strainer having a portion overlying the supporting portion of the trough for engagement thereby when the trough is lifted upwardly to cause the strainer and reamer to be drawn upwardly and detached from the shaft when the trough is lifted out of place.

1,886,093. PROCESS FOR TREATING HYDROCARBON OILS. CHARLES J. GREENSTREET, New York, N. Y., assignor, by mesne assignments, to Raymond F. Adams, New York, N. Y. Original application filed Aug. 9, 1920, Serial No. 402,381. Divided and this application filed June 24, 1929. Serial No. 373,364. 6 Claims. (Cl. 196—61.)



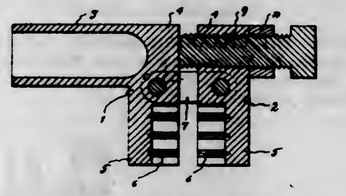
1. The method of treating heavy hydrocarbon oils for the production of light hydrocarbons suitable for use for motor fuel, which comprises forcing the oil rapidly through a long heating conduit and heating the oil therein to a temperature around 1100° F. or higher to effect conversion of a substantial portion of the oil into lighter hydrocarbons suitable for use as motor fuel, immediately cooling the cracked products to a temperature at which cracking ceases by direct contact with hydrocarbon oil containing light hydrocarbons to effect vaporisation thereof simultaneously with the cooling of the cracked product and further cooling the vapors of the light hydrocarbons formed by the cracking reaction and vapors of the light hydrocarbons liberated from the cooling medium to condense them.

1,886,094. PNEUMATIC TIRE. JOSÉ LEANDRO MONTALVO GUENARD, Ponce, Puerto Rico. Filed Dec. 16, 1929. Serial No. 414,513. 5 Claims. (Cl. 152—22.)



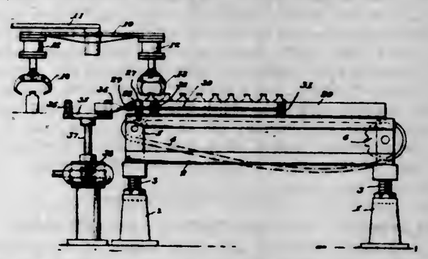
5. A pneumatic tire having the combination of a plurality of inflatable sections, valves for inflating said sections, means which establishes an air line between said valves, said means including insertable and removable sections to increase or decrease the length thereof, and a flexible element connected with said valves to open and close them, said flexible element having insertable and removable parts to increase or decrease the length thereof.

1,886,095. BATTERY TERMINAL CLAMP. JOSEPH E. HAMBY, Pawhuska, Okla., assignor of one-third to J. H. Ward, one-third to George Irwin, and one-third to Charley Harris, Pawhuska, Okla. Filed Feb. 10, 1931. Serial No. 514,868. 3 Claims. (Cl. 173—259.)



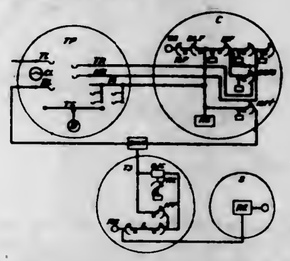
1. A battery terminal clamp comprising in combination a pair of complemental members having corresponding portions semi-cylindrical in cross section for accommodating therebetween the battery post, connecting bars pivoted at their ends to said members, and a bolt threaded through one of said members and engageable with the other of said members for urging the cylindrical parts of said members into engagement with the battery post.

1,886,096. WARE-STEADYING MECHANISM. COY H. HARDMAN and MARTIN H. THOMAS, Zanesville, Ohio, assignors to Hazel-Atlas Glass Company, Wheeling, W. Va., a Corporation of West Virginia. Filed Sept. 22, 1931. Serial No. 564,450. 13 Claims. (Cl. 198—30.)



1. A ware-steadying device including a conveyer, a take-out mechanism for transferring ware from a forming machine to the conveyer, two parallel guide rails extending longitudinally of the conveyer and forming a passage along which the ware passes, and an intermittently operated gate for aligning ware with said passage.

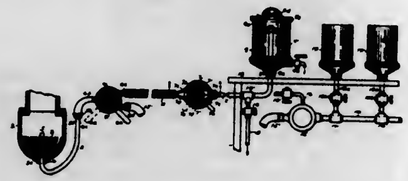
1,886,097. AUTOMATIC TELEPHONE SYSTEM. WILLIAM HATTON, Antwerp, Belgium, assignor to International Standard Electric Corporation, New York, N. Y., a Corporation of Delaware. Filed Sept. 20, 1930, Serial No. 483,233, and in Great Britain Oct. 16, 1929. 7 Claims. (Cl. 179—27.)



1. In a telephone exchange system the combination of a main exchange and a satellite exchange, an operator's position, automatic switching mechanism at each exchange

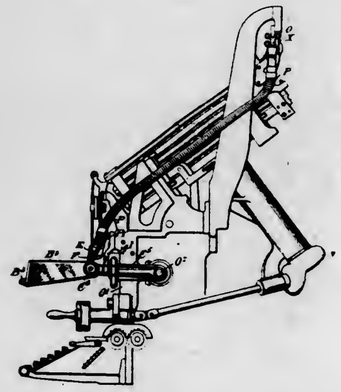
provided with banks, a junction line extending from the satellite exchange to the main exchange terminating in two branches, one leading to the operator's position and the other leading to the banks, and means whereby calls can be extended over each branch.

1,886,098. OIL CHANGING SYSTEM. MEAD HEDGLON, Syracuse, N. Y., assignor to De Banks M. Henward, jr., Syracuse, N. Y. Filed Apr. 2, 1930. Serial No. 441,066. 8 Claims. (Cl. 184—1.5.)



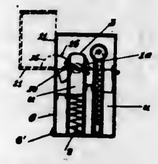
1. An oil changing system for use with an internal combustion engine, including a distant inspection tank, an oil transmission line connecting said crank-case with said tank, said line comprising a draining and filling pipe connected to the crank-case and communicating with its interior, reversible siphon means in said transmission line communicating with said tank, a two-way valve interposed between said pipe and said siphon means, said valve having two nozzles, one of said nozzles communicating with said siphon means, means to adjust said valve to enable said siphon means to transfer the used oil from the crank-case to said tank, means to adjust said siphon means to recharge said crank-case with said used oil, a source of fresh oil supply, an auxiliary transmission line adapted to connect said fresh oil supply with the second nozzle of said valve for charging the crank-case with unused oil by the reversing of said valve, and means for forcing the unused oil through said auxiliary transmission line.

1,886,099. TYPOGRAPHICAL DISTRIBUTING MACHINE. JOHN H. HILPMAN, Hollis, N. Y., assignor to Mergenthaler Linotype Company, a Corporation of New York. Filed Feb. 15, 1930. Serial No. 428,678. 6 Claims. (Cl. 199—34.)



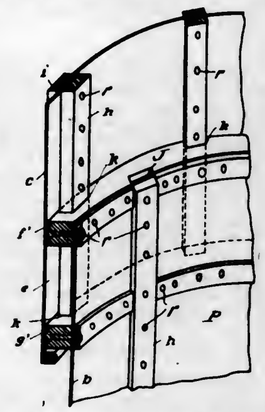
1. In or for a typographical distributing machine, a pi-stacker for circulating sorts-matrices including, in combination, a ledge whereon the matrices are supported, a throat or chute located at the receiving end of the pi-stacker for directing the matrices onto the ledge, a rotary two-arm star wheel for stacking the matrices successively in line as they emerge from the throat, a yielding resistant for sustaining the line, and a resilient member arranged at the lower end of the throat for guiding the matrices into the line.

1,886,100. FRICTION-WHEEL LIGHTER FOR SOLID FUEL. ALFRED R. HOCHSTRASSER, Vienna, Austria. Filed Mar. 24, 1930, Serial No. 438,599, and in Germany Mar. 26, 1929. 3 Claims. (Cl. 67—7.1.)



1. A friction wheel lighter including a member for containing solid fuel, a flexible scraping member arranged across the containing member and embracing the end of the fuel therein, means for yieldingly holding the scraping member and fuel in engagement with each other, and means for moving one of the members relative to the other.

1,886,101. GASOMETER. KONRAD JAGSCHITZ, Mainz, Germany, assignor to Maschinenfabrik Augsburg-Nuernberg A.-G., Nuremberg, Germany, a Corporation of Germany. Filed July 22, 1929, Serial No. 380,005, and in Germany July 30, 1928. 4 Claims. (Cl. 48—177.)

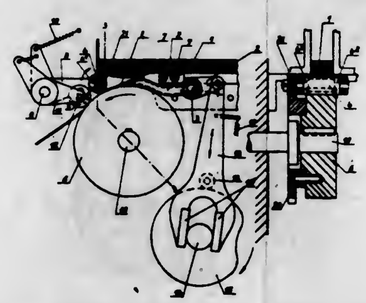


2. A telescopic gasometer comprising a plurality of bells, each composed of riveted plates equal in height to their respective bells, said plates being so formed that the joints therebetween lie along a line parallel to the direction of movement of said bells, reinforcing bars located at the joints of said plates and likewise extending along such line, sunken rivets connecting the plates to each other and to said bars, the faces of the bars receiving the rivet heads being thereby maintained substantially smooth, and a guiding element located on one of each pair of adjacent bells and cooperating with the bars of the adjacent bell to guide the bells in their telescoping movements.

1,886,102. DEVICE FOR DETACHING LABELS FROM A PILE. ERNST HERMANN JÄHNE, Dresden, Germany, assignor to the Firm Universelle Cigarettenmaschinen-Fabrik. J. C. Muller & Co., Dresden, Germany. Filed July 7, 1930, Serial No. 465,932, and in Germany July 8, 1929. 4 Claims. (Cl. 271—29.)

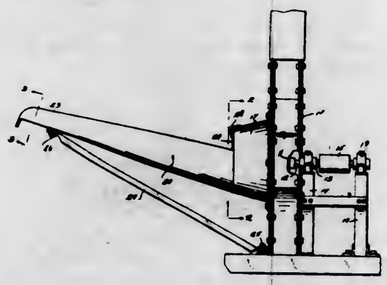
1. A device for transferring and feeding labels comprising in combination, a magazine adapted to contain a pile

of said labels, a suction gripper adapted to operate on one end of the bottom label of said pile, a carrier roller with a central recess adjacent to the end of the pile on which the gripper operates, a delivery roller in contact with the carrier roller and a presser roller arranged behind the



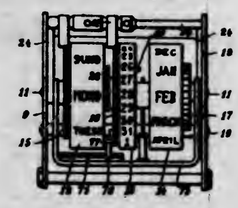
carrier roller and in contact with the delivery roller, said carrier roller and the presser roller being both mounted on levers on a common pivot, said levers being fitted with springs which press the said two rollers against the delivery roller.

1,886,103. PULVERIZING MACHINE. PETER V. JALI, Portland, Oreg. Filed July 1, 1931. Serial No. 548,183. 3 Claims. (Cl. 83—11.)



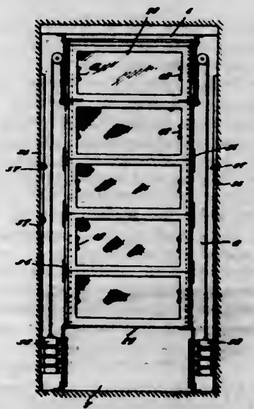
1. In a pulverizing means, a frustro-conical intake member, and a closure engaging the outer end of the member, said closure comprising an upper portion swingable outwardly of the outer end of the member, and a lower portion swingable transversely of the outer end of the member.

1,886,104. SAVINGS-BOX CALENDAR. HANS JÖRGEN JEPSEN and KAI CHRISTIAN NIELSEN, Copenhagen, Denmark. Filed Nov. 6, 1929, Serial No. 405,250, and in Denmark July 30, 1929. 3 Claims. (Cl. 40—112.)



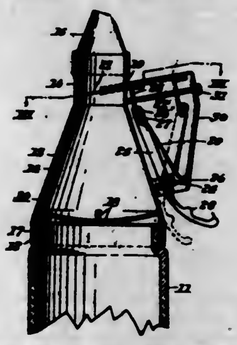
1. A savings box calendar having a rotary disc indicating the date, a ratchet wheel with thirty-one teeth connected to the disc, a lever which is pivoted about the shaft of the said ratchet wheel and which may be turned by means of a handle provided thereon, a pawl provided on the said lever which pawl, whenever the lever is turned, moves the said ratchet wheel with thirty-one teeth one tooth forward, an arm provided on the lever which arm actuates another lever having a pawl the operation of which is supplementary to that of the first named pawl and means operated automatically by said date disc to cause said supplementary pawl, whenever the date disc indicates the last date of a month of less than 31 days, to coact with a tooth on the side of the said ratchet wheel with thirty-one teeth and, thereby, move the said ratchet wheel and the date disc so far forward that the date disc indicates the date one.

1,886,105. WINDOW CONSTRUCTION. CLARENCE E. JULIN, Jamestown, N. Y. Filed Feb. 14, 1931. Serial No. 515,852. 2 Claims. (Cl. 20—52.1.)



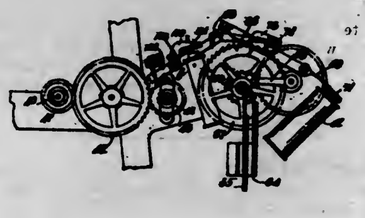
1. In a structure of the class described, a frame, closure sections slidable with respect to the frame, said frame being provided with a compartment to receive said sections side by side, means connecting the sections, a cable connected to one of said sections, counter-balancing weights suspended from said cable, and latching devices to arrest the movement of certain of said weights in response to a change of position of said closure sections.

1,886,106. DISPENSING DEVICE. GERALD P. KEAN, Homestead, Pa. Filed Jan. 30, 1932. Serial No. 589,956. 5 Claims. (Cl. 221—16.)



1. In a dispensing device, a spout, and a conduit leading thereto, a valve for said conduit and means for guiding said valve including guideways and a guide rod extending radially of said conduit, and a member secured to said valve and slidable on said guide rod.

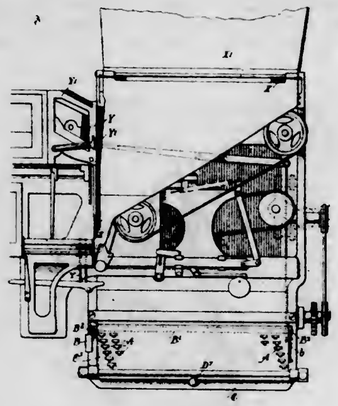
1,886,107. **ELECTRIC CLOCK SYSTEM.** SAUL KEILIEN, Springfield, Mass., assignor to The Standard Electric Time Company, Springfield, Mass., a Corporation of Connecticut. Filed July 6, 1929. Serial No. 376,406. 6 Claims. (Cl. 58—24.)



1. An electric clock system comprising a master clock and secondary clocks controlled thereby, a line interconnecting the clocks, and means at the master clock operative after interruption of current for effecting the transmission to said line of corrective impulses corresponding in number to the time of current interruption, including a controller normally disconnected from the master clock, means for advancing said controller during current interruption, and means responsive to said corrective impulses for returning the controller toward said position while the secondaries are being corrected.

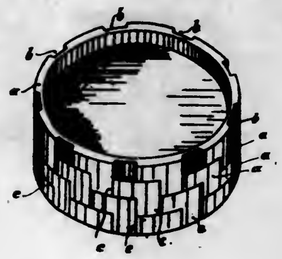
5. An electric clock system comprising master and secondary clocks interconnected by a transmission line, and means including an electromagnet for automatically resetting the secondary clocks after current interruption, said electromagnet being responsive to impulses transmitted from the master clock only during the resetting period.

1,886,108. **TYPOGRAPHICAL COMPOSING MACHINE.** LUTHER L. KENNEDY, Brooklyn, N. Y., assignor to Mergenthaler Linotype Company, a Corporation of New York. Filed Nov. 6, 1930. Serial No. 493,737. 11 Claims. (Cl. 199—18.)



1. A keyboard for typographical composing machines including, in combination, a supporting frame, a series of matrix releasing keys and a spacer releasing key movably mounted therein, and unitary locking means adjustable to active and inactive position and arranged to engage all of said finger keys directly so as to prevent or permit their actuation according to the adjusted position of said locking means.

1,886,109. **MULTIPLE ASH TRAY COMPOSED OF NESTED ELEMENTS.** LOUIS LENFANT, Paris, France, assignor to Cartier, Societe Anonyme, Paris, France, a Company of France. Filed June 12, 1930, Serial No. 460,711, and in France June 17, 1929. 3 Claims. (Cl. 131—51.)



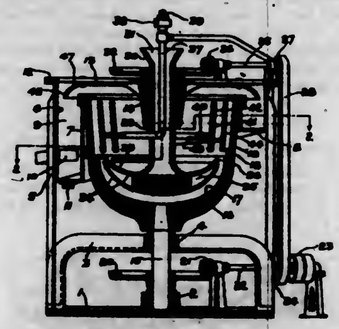
1. A multiple ash tray comprising a plurality of cup-shaped elements adapted to serve as independent ash trays and provided with notches, and projections on said elements adapted to fit into the notches of the adjacent element so as to keep said elements spaced apart from one another, whereby the different elements can be assembled, so as to form a whole when not in use.

1,886,110. **KEY HOLDER.** ISABEL G. LIPPSTADT, New York, N. Y. Filed Jan. 24, 1931. Serial No. 511,059. 6 Claims. (Cl. 59—97.)

1. A key holder formed from a single blank of material forming a plurality of spaced, parallel, resilient walls defining key receiving compartments alternately opening on opposite sides of the holder, and having means for holding keys at the ends of said resilient walls, the said key holding means cooperating with the said resilient walls to form spring clasps for yieldingly engaging and pivoting said keys.

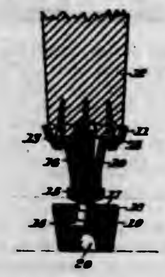
1,886,111. **CENTRIFUGAL MINERAL SEPARATOR.** LAURITS I. LORENTSEN, Vancouver, British Columbia, Canada. Filed Dec. 15, 1930, Serial No. 502,273, and in Canada Nov. 25, 1930. 2 Claims. (Cl. 233—7.)

1. In a centrifugal mineral separator having a rotatable bowl adapted to support a column of mercury by centrifugal force, and means for delivering pulp to the base of the bowl for passage upwards across the inner surface of the mercury column, a scraper rotatable within the bowl adapted to agitate the pulp while in contact with the mercury column, said scraper being flexibly connected to arms mounted for rotation within the bowl whereby the scraper is urged into contact with



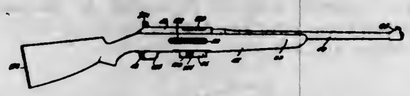
the mercury column by centrifugal force, and a plurality of flexible members attached to the scraper adapted to increase the zone of agitation of the pulp.

1,886,112. **ADJUSTABLE CUSHION SUPPORT.** JOSEPH A. LUARDS, McDonald, Ohio. Filed Jan. 14, 1932. Serial No. 586,535. 5 Claims. (Cl. 45—189.)



1. An adjustable support for the legs of furniture comprising a threaded sleeve adapted to be secured to the lower ends of said legs, a stem threaded in said sleeve, a rubber foot on said stem, the end of the stem being enlarged to secure the foot thereto, and a flange on said stem for transmitting the load to said foot.

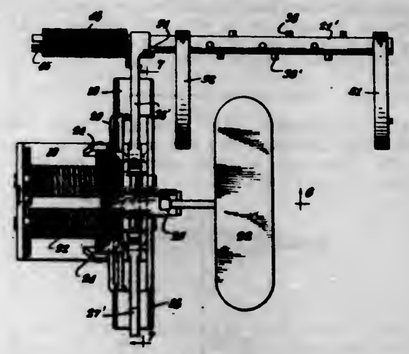
1,886,113. **AUTOMATIC RIFLE.** GEORGE B. LUTTON, Kalispell, Mont. Filed Sept. 15, 1931. Serial No. 562,937. 16 Claims. (Cl. 42—4.)



2. In an automatic rifle, the combination of a magazine; a bolt carrier; a bolt; a barrel; cooperating means on the bolt carrier and bolt to effect locking of the bolt when the bolt is returned to firing position; a bolt carrier latch; and means on the magazine which engages said latch to move it into such a position that the bolt carrier and hence the bolt is prevented from being returned to firing position.

12. An automatic rifle comprising, in combination, a recoiling barrel; a frame on which the barrel reciprocates; a cover for said frame beneath which the barrel moves; said cover having throughout its length a sliding, interlocking connection with the frame; and a spring operated latch on the frame and engageable with the cover for holding the cover in frame-closing position.

1,886,114. **TRAP.** ALLEN MCMULLEN, Number Four, N. Y. Filed June 28, 1930. Serial No. 464,566. 13 Claims. (Cl. 43—63.)



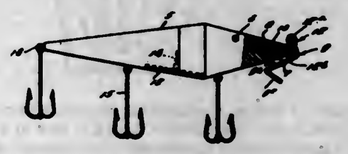
1. An animal trap comprising a base having front and rear flanges, a pair of rods carried by said flanges, a pair of pivots carried by said front flange, ears carried by said base adjacent said front flange, a hinge pin, arms pivoted on said rods and swingable between open and closed positions, springs mounted on said rods and terminally urging said arms, a pair of jaws movably mounted on said pivots and seated on said arms, a dog swingably mounted on said ears and retaining said arms in an open position against the action of said springs, and an operating lever hingedly mounted on said pin and having thereon a finger, said finger slidably contacting with said dog, whereby on operation of said lever, said dog is swingable for releasing said springs to urge said arms into the closed position, thereby also closing said jaws.

1,886,115. **TUBE-LIKE CONTAINER FOR CIGARS.** CARL WILHELM MÜLLER, Dresden-Weisser Hirsch, Germany. Filed Mar. 5, 1931, Serial No. 520,231, and in Germany Nov. 13, 1930. 3 Claims. (Cl. 229—66.)



1. An envelope for cigars comprising a tube-like container whose ends are flattened and pressed together without folding, one of said ends being provided with a row of perforations, and a U-shaped clip mounted over each of said flattened ends, the clip over the perforated ends covering said row of perforations and said clips effecting air tight sealing of said container.

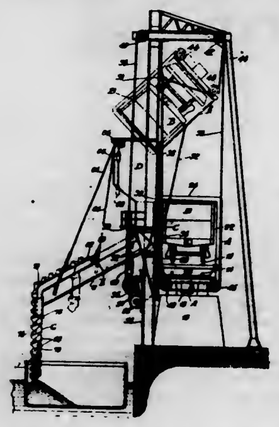
1,886,116. **FISH LURE.** JOSEPH A. NOLAN, Fort Pierce, Fla. Filed Nov. 20, 1931. Serial No. 576,358. 2 Claims. (Cl. 43—46.)



1. A fish lure comprising a body tapered in opposite direction, members on said body adjacent one end to simulate eyes, means on said body providing a lure or attrac-

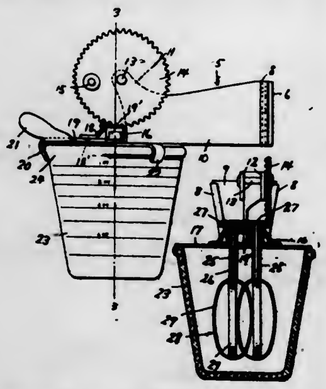
tion for the fish, hooks on said body to engage the fish, a pilot member secured to the body at said one end and provided with an aperture, and means at said one end engageable with the pilot for connecting a fish line to the body, said last named means comprising a member extending through the aperture in said pilot member and embracing the adjacent end of said body and having its opposite end portions provided with eyes.

1,886,117. COMBINED CAR DUMPING AND COAL LOWERING APPARATUS. FRANK PARDEE, Jr., Hazleton, Pa. Filed Apr. 30, 1931. Serial No. 533,966. 20 Claims. (Cl. 214—45.)



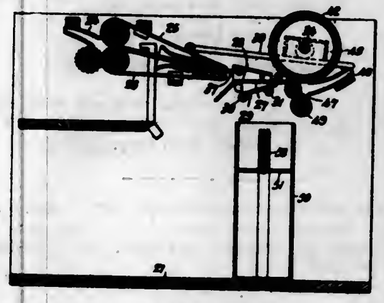
1. An apparatus of the character described comprising a hopper having a movable retaining wall, movable means for dumping material into the hopper and means for automatically moving said wall to progressively increase the holding capacity of the hopper as the dumping movement of said dumping means proceeds.

1,886,118. AGITATOR. PHILIP N. POTTSGROVE, Altoona, Pa. Filed Feb. 13, 1930. Serial No. 428,121. 1 Claim. (Cl. 220—55.)



In an agitating device, a supporting bracket, a receptacle cover attached to the lower edge thereof, a pair of spaced outwardly extending ears on the cover for engaging part of a receptacle, a bracket connected to the upper face of the cover and having its bight part spaced from the cover, and a bearing part having its upper end passing through the bight part of the bracket and the cover, said bearing part being spaced from the center of the cover, a lever having a tubular end part encircling that portion of the bearing part between the bight and the cover, a downwardly depending prong on the bracket having a projection on the under face of its free end, said lever having a recess therein for receiving the projection when the lever is in operative position, a hook on the free end of the lever for engaging a part of the receptacle to lock the cover in place and a finger engaging part on the lever.

1,886,119. ENVELOPE FILLING MECHANISM. SAMUEL J. T. PRICE, Macon, Ga. Original application filed Jan. 20, 1926, Serial No. 82,583. Divided and this application filed Oct. 9, 1930. Serial No. 487,564. 4 Claims. (Cl. 93—6.)

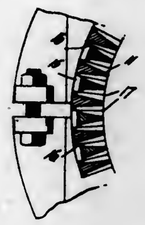


2. An envelope filling device comprising a table, a plate pivotally mounted beneath the table and having stops projecting above the bottom of the table for retaining envelopes thereon, means for opening the envelopes, and means operated in timed relation with the last named means for lowering the said plate to permit the envelope to be moved from the table.

1,886,120. PAPER MANUFACTURE. HAROLD ROBERT RAFTON, Andover, Mass., assignor to Raffold Process Corporation, a Corporation of Massachusetts. Filed Dec. 30, 1931. Serial No. 584,012. 55 Claims. (Cl. 92—21.)

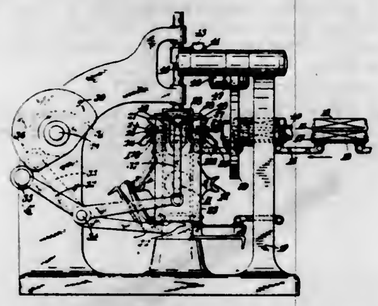
1. In a process of manufacturing paper wherein a paper mix containing fibrous material and alkaline filler is prepared and then run off on a web-forming device and wherein there is added size comprising saponifiable material, said size being added at at least one of a group of points consisting of the paper mix and the web, the improvement which comprises adding the substantially preponderating amount of said saponifiable material in unsaponified form.

1,886,121. WELL SCREEN. CHESTER E. RECORDS, Columbus, Ohio. Filed Nov. 4, 1929. Serial No. 404,786. 12 Claims. (Cl. 166—5.)



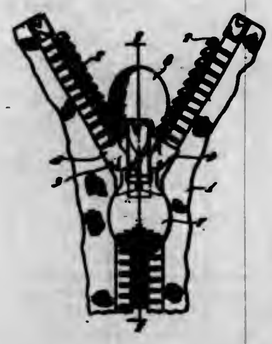
1. A well screen including vertically arranged bars assembled in circumferential relation and in partial contact to form a single cylindrical screen wall bars being respectively formed beyond the points of contact to provide a water passage between them, certain of the bars being horizontally offset with respect to the remaining bars to provide water receiving pockets in the outer surface of the screen.

1,886,122. MACHINE FOR PACKING ARTICLES INTO BOXES. ALFRED GERMAN ROSE, Gainsborough, England, assignor to Rose Brothers (Gainsborough) Limited, Gainsborough, England, a British Company. Filed Mar. 3, 1931, Serial No. 519,860, and in Great Britain Mar. 13, 1930. 12 Claims. (Cl. 226—18.)



1. In a packing machine of the kind in which a succession of open boxes and a succession of articles to be placed in them are brought one box and one article at a time to a filling station at which an article is supported above the open mouth of a box by hinged blades which can be turned into substantially vertical planes to permit the passage of an article between them, the combination of a movable blade-carrier, a plurality of blades pivotally mounted thereon to form a horizontal platform, means for positioning an open box below the blades and an article on the platform constituted by the blades, means for turning the blades into substantially vertical positions in which they extend to approximately the bottom of the box so as to guide the article completely into the box, and means for raising the carrier and the blades in relation to the box subsequent to said insertion and while the blades are still in their vertical positions to withdraw them from the box.

1,886,123. AUTOMATIC FASTENING DEVICE. WILLIAM F. RUST, Pittsburgh, Pa. Filed July 28, 1928. Serial No. 295,919. 8 Claims. (Cl. 24—205.)



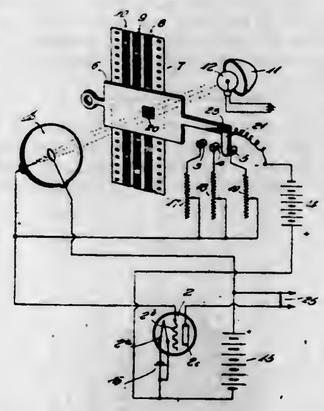
1. An automatic fastener comprising two rows of coacting members, supporting means therefor, a slider for controlling the connection of said members in accordance with its position and a guard comprising an elongated member carried by said slider and adjacent to and spaced from said rows of members for maintaining a free path for their relative movements, said guard being of such width as to extend directly beneath the rows of coacting members and positioned to force away obstructing material at the point of engagement and disengagement of the coacting members.

1,886,124. SMOKER'S PIPE. EDWARD C. SASSER, Chevy Chase, Md. Filed June 17, 1931. Serial No. 545,088. 5 Claims. (Cl. 131—12.)



1. A tobacco pipe comprising a bowl and a stem, a mouthpiece fitting within the stem, an inner stem fitting within the mouthpiece, a tube fitting over the stem and of slightly larger diameter than the said stem, said tube extending across the bottom of the bowl the tube being perforate near its rear end and the said tube being less in diameter than the bore of the stem of the pipe to thereby cause the smoke to be drawn from the bowl through a tortuous passageway before reaching the mouth of the smoker.

1,886,125. PHOTOCELL COMPENSATING SYSTEM. GORDON BROWN SCHEIBELL, Newark, N. J. Filed Aug. 1, 1930. Serial No. 472,370. 9 Claims. (Cl. 179—100.8.)

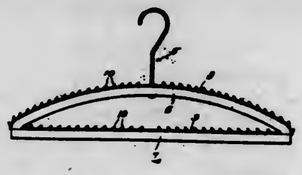


1. A photo-sensitive cell compensation system comprising a source of irradiations, a photo-sensitive cell under control of said irradiations, an output circuit for said cell, a film interposed between said source of irradiations and said photo-sensitive cell, a shutter movable with respect to said film for selectively exposing different longitudinal portions of said film to said cell, and means under control of said shutter adapted to alter the constants of said circuit by predetermined values in definite relationship with the movement of said shutter.

1,886,126. GARMENT HANGER. IVY SESSIONS, Oakland, Calif. Filed Sept. 30, 1931. Serial No. 566,084. 1 Claim. (Cl. 223—64.)

A garment hanger including an arcuate bar, and a relatively straight bar connecting the ends of the arcuate bar,

and each of said bars including a supporting surface of resilient elastic material having staggeredly arranged inclined teeth of similar material projecting upwardly there-



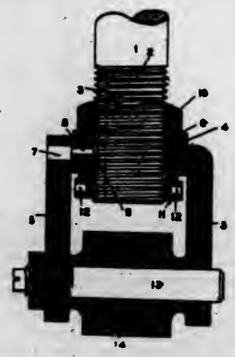
from, the teeth on one side of the transverse median of each surface being inclined oppositely to the teeth on the other side of said transverse median.

1,886,127. TWEEZERS. ROBERT E. SILVIS, Mill City, Oreg. Filed Apr. 15, 1931. Serial No. 530,284. 2 Claims. (Cl. 128—355.)



2. In a device of the class described, the combination of a pair of pointed jaws made of spring material and in one piece, an arm secured to each one of the jaws and forming a slot therein, each one of said jaws adapted to slide within the slot formed by the arm secured to the other of the jaws thereby adapted to maintain the respective jaws in alignment with each other, a loop disposed upon the free end of the arms, and spring means integrally disposed within the jaws adapted to normally maintain the pointed ends of said jaws in intimate contact with each other.

1,886,128. KEY CONSTRUCTION. CHESLEY T. SMALL, St. Louis, Mo. Original application filed Jan. 25, 1928, Serial No. 249,385. Divided and this application filed Aug. 3, 1929. Serial No. 383,825. 2 Claims. (Cl. 287—20.)



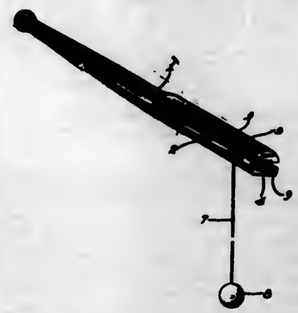
1. In a device of the class described, the combination with a shaft provided with a key way, of a member having a bore in which said shaft is movable longitudinally, a lateral bore in said member intersecting said first named bore, and a key comprising a cylindrical stem and a rectangular head, said head having sliding engagement with the key way, said stem being located in the lateral bore and having pivotal movement therein to compensate for unevenness in the key way.

1,886,129. SUCTION CLEANER AGITATOR. DONALD G. SMELLIE, Canton, Ohio, assignor to The Hoover Company, a Corporation of Ohio. Filed Nov. 18, 1929. Serial No. 407,849. 7 Claims. (Cl. 15—182.)



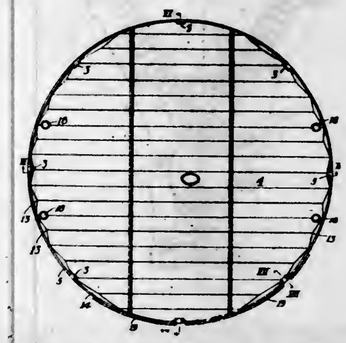
3. An agitator comprising a cylindrical body having a helical groove therein forming a brush seat, a brush positioned therein, a metallic covering encircling said body and a helical beater element thereon extending parallel to said groove.

1,886,130. TOY. ARTHUR C. SMITH, San Antonio, Tex. Filed Sept. 16, 1931. Serial No. 563,174. 2 Claims. (Cl. 46.)



1. A clapper means having a handle portion and a clapping portion, said clapping portion including two elongated clapping members connected to said handle portion at their inner end and separated from each other at their outer end, one of said clapping members being flexible and adapted to snap against the other of said clapping members for the purpose of making a noise, each of said clapping members being perforated and threaded intermediate its center and its outer end by a string having a ball secured thereto for the purpose herein described, said perforations extending transversely through the clappers and being in substantial alignment with each other.

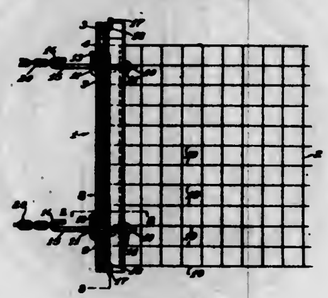
1,886,131. STORAGE TANK. HUBERT P. SMITH, Emsworth, Pa. Filed Sept. 18, 1930. Serial No. 481,698. 29 Claims. (Cl. 220—26.)



1. A storage tank comprising a shell, a plurality of guides disposed on the inner wall thereof, a floating deck in said shell, and means on the periphery of said deck adapted

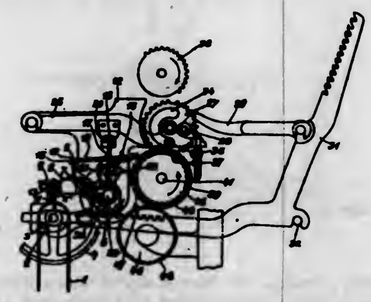
to cooperate with said guides for leveling said deck, said guides being helically disposed on said shell so that rotation will be imparted to said deck on each change of elevation.

1,886,132. CLAMP. FRANK R. SPURGEON and SAMUEL LYNCH, Sabina, Ohio. Filed Feb. 11, 1931. Serial No. 514,975. 4 Claims. (Cl. 254—33.)



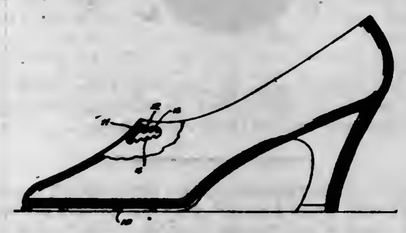
1. A device of the character described, comprising a pair of clamping bars angle shaped in cross section, one of said bars being of greater length than the other, a plurality of members extending transversely of the longer of said bars and secured to the outer side thereof, each of said members terminating at one end along one edge of said longer bar in a rearwardly projecting hook, the other ends of said members terminating in elongated end portions extending substantially parallel with and spaced from the opposite edge of said last named bar, elongated clamping rods pivotally carried at one end by said rearwardly directed hooks and adapted to be positioned across said clamping bars with their free ends in engagement with said elongated end portions, and an upwardly and inwardly directed hook carried by the end of the longer of said clamping bars.

1,886,133. SHEDDING MECHANISM FOR LOOMS. HUGO STÄUBLI, Zurich, Switzerland, assignor to Gebr. Staubli & Co., Horgen, Switzerland. Filed May 12, 1931. Serial No. 536,822. 7 Claims. (Cl. 139—77.)



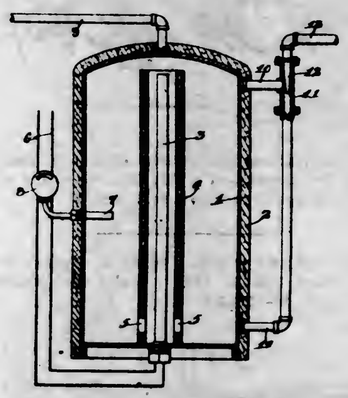
1. In a shedding mechanism for looms, the combination of an endless pattern-card of Verdol-paper or like thin light material, with a pick-reading device comprising pick-reading needles hanging above said pattern-card and adapted to be lowered on to this pattern-card to read the picks therefrom in unloaded condition while it is at rest balanced levers on which said pick-reading needles are suspended, a harness-controlling mechanism comprising a vibrator-lever arranged in reach of said pick-reading device, the position of this lever depending on the position of the associated reading-needle relatively to the pattern-card, a vibrator-gear located between two cylinder-gears to alternately be brought in reach of one or the other thereof according to the position of said vibrator-lever, and a harness-controlling lever connected with said vibrator-gear.

1,886,134. ATTACHMENT FOR SHOES. KATHERINE B. SUNDERLAND, Danbury, Conn. Filed Feb. 7, 1929. Serial No. 338,157. 2 Claims. (Cl. 36—72.)



1. As an article of manufacture, an attachment for low cut shoes comprising a member formed from soft yieldable material having its upper and lower edges shaped to correspond to the forwardmost edge of the opening of a low cut shoe and having a latent adhesive material upon one surface thereof.

1,886,135. WATER HEATER. VERNON L. TANNEHILL, Fort Wayne, Ind., assignor to Fort Wayne Engineering and Manufacturing Company, Fort Wayne, Ind. Filed Oct. 1, 1930. Serial No. 485,680. 2 Claims. (Cl. 122—18.)



1. A water heater comprising a storage tank, a heating element arranged within the tank, a pipe for supplying cold water to the bottom of the tank, and means for drawing a part of the heated water from the top of the tank into said supply pipe, said means including a communication between the top of the tank and the water supply pipe.

1,886,136. POLISHER. JOHN E. S. TAYLOR, Alexandria, Va., assignor to Universal Power Tool Company, Inc., Baltimore, Md., a Corporation of Virginia. Filed Sept. 22, 1930. Serial No. 483,682. 3 Claims. (Cl. 15—230.)

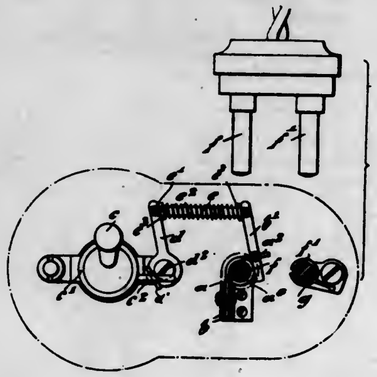
1. A polishing device of the character set forth, comprising a cylindrical body having a tubular side wall and

end walls of flexible material, at least one of the end walls being inwardly dished and having a juncture with the side wall that provides a yielding substantially sharp outer



peripheral meeting edge, the end wall being dished inwardly from said edge so that the said edge constitutes the furthest extended end portion of the body.

1,886,137. ELECTRICAL PLUG AND SOCKET CONNECTION. JOHN BRISTOW TUCKER, Tyseley, Birmingham, England. Filed Aug. 19, 1929, Serial No. 386,792, and in Great Britain Jan. 16, 1929. 11 Claims. (Cl. 200—50.)



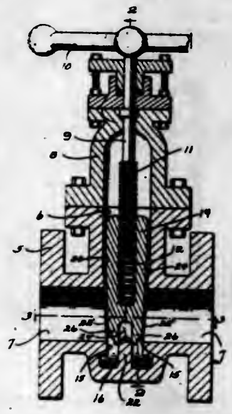
1. In combination, an electric switch, a contractile socket for the reception of a plug pin, and means whereby closing of the switch contracts said socket.

1,886,138. SAFETY HOOK. LOREN E. WELLS, Modesto, Calif. Filed Feb. 1, 1932. Serial No. 590,036. 3 Claims. (Cl. 24—230.5)



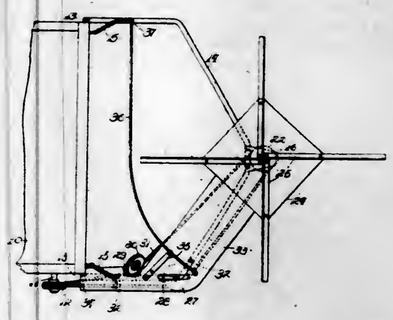
2. A safety hook comprising a closed eye adapted for permanent engagement, with a block eye, another eye beyond the first eye for engagement with a link at its bend, a connection between and rigid with one side of the eyes, a relatively small hook below and extending in a plane substantially at right angles to the longitudinal plane of the connection and transversely thereof, and an extension from the second named eye on the side opposite to the connection to the lower end of the hook; said extension being spaced from the connection and from the upper end of the hook a distance greater than the thickness of a leg of the link and the upper end of the hook being similarly spaced from the connection.

1,886,139. GATE VALVE. RICHARD WELLS, Bartlesville, Okla., assignor, by mesne assignments, to Columbia Products, Incorporated, Bartlesville, Okla., a Corporation. Filed Sept. 2, 1930. Serial No. 479,351. 7 Claims. (Cl. 251—59.)



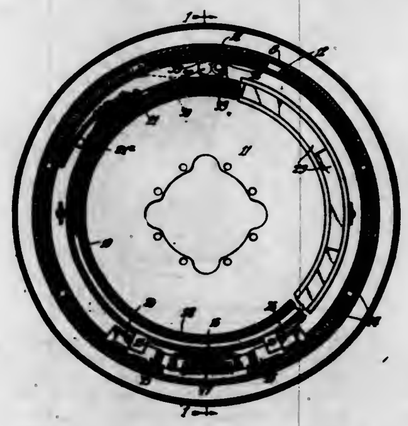
1. A valve comprising a body portion having a chamber and spaced apart valve seats adjacent one end of the chamber, a web extending between a portion of the confronting faces of the valve seats in spaced relation thereto, and a valve member movable in the chamber and having a portion co-acting with said web for substantially cutting off all of the flow thru the valve prior to the point of seating contact of the valve member on said seats.

1,886,140. STRAW SPREADER FOR HARVESTER THRESHERS. ALBERT B. WELTY, Chicago, Ill., assignor to International Harvester Company, a Corporation of New Jersey. Filed Apr. 6, 1931. Serial No. 527,879. 5 Claims. (Cl. 275—6.)



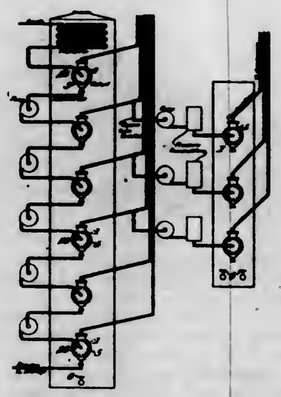
1. A straw spreader for harvesting threshers having a body and a driven wheel carried on a horizontal axis at the side of said body, said straw spreader comprising a frame member pivotally attached to the said body, means for supporting the frame member from the body, a flat horizontally disposed bracket carried by the frame member and provided with a fore and aft extending slot, a straw spreader including a drive wheel rotatably mounted on said bracket on a vertical bushing, a single endless element for directly driving the drive wheel from the driven wheel, said vertical bushing including means mounted in said slot adjustably to fix the straw spreader toward or from said body.

1,886,141. BRAKE. JOHN WHYTE, Beloit, Wis., assignor to Warner Electric Brake Corporation, South Beloit, Ill., a Corporation of Illinois. Filed Mar. 26, 1930. Serial No. 438,922. 11 Claims. (Cl. 188—106.)



3. A friction brake combining a rotatable drum, a braking member extending around a cylindrical surface of said drum with its ends disposed adjacent each other, a nonrotatable stop for anchoring either of said ends arranged for abutting engagement with the ends so as to permit circumferential movement of either end in one direction, a main operator operatively associated with said ends, and an auxiliary operator having a bearing engagement with a portion of said member spaced circumferentially from said main operator and adapted when actuated to press such portion into gripping engagement with the drum surface and to permit circumferential movement of the engaged portion during the application of pressure thereto.

1,886,142. FRACTIONAL DISTILLATION PROCESS AND APPARATUS. WALTER G. WILLIAMS, Plainfield, N. J., assignor to Byrnes, Townsend & Potter, Washington, D. C., a Firm consisting of Clinton P. Townsend and Charles H. Potter. Filed June 6, 1929. Serial No. 368,826. 9 Claims. (Cl. 196—112.)



7. In a retort for the distillation of liquid hydrocarbons, a revolvable horizontal cylinder, a header at each end of the cylinder, a heating bath surrounding at least a portion of said cylinder, means for delivering the liquid upon the inner surface of said cylinder, and means adapted to convey undistilled portions of the liquid from the center of the cylinder into the headers provided at the ends of said cylinder.

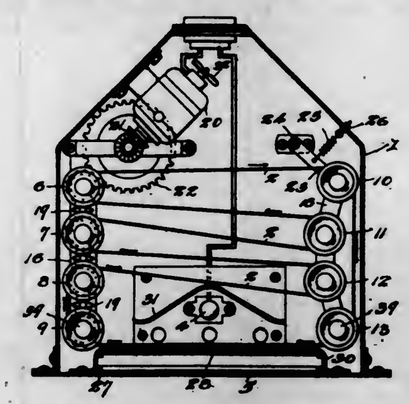
9. Continuous process for the fractional distillation of petroleum oils, which comprises a plurality of operations each of which consists in maintaining a movable surface forming the interior boundaries of a closed space at a constant and predetermined temperature sufficient to effect vaporization of at least some of the constituents of the material to be treated, continuously applying thereon a film of oil of constant and predetermined thickness, continuously withdrawing the resulting separated vapors and non-vaporized residue, subjecting the vapors to cracking treatment, condensing the vapors and subjecting the residue to a succeeding similar operation, each succeeding operation being practiced at successively increased temperature.

1,886,143. AUTOMATIC TAKE-UP BUSHING. EDWARD F. ZAPARKA, New York, N. Y. Filed Dec. 11, 1928. Serial No. 325,265. 1 Claim. (Cl. 287—85.)



An automatic take-up bushing comprising, in combination, an annular outer housing, a longitudinally split bushing adapted to be rotatably secured on a central spindle and having a concave peripheral surface, one end of which is of greater diameter than the internal diameter of the housing, and a resilient bushing interposed under compression between the concave peripheral surface of the split bushing and the housing.

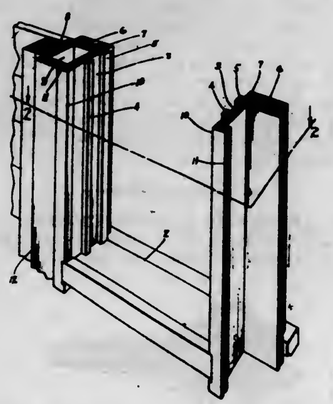
1,886,144. DISPLAY DEVICE. ALFRED H. ZELEDON, Chicago, Ill., assignor to Scene-in-Action Corporation, Chicago, Ill., a Corporation of Illinois. Filed Apr. 20, 1932. Serial No. 606,446. 11 Claims. (Cl. 40—32.)



1. In an illuminated sign of the endless traveling-belt type, the combination with a straight display-flight of the belt having light-transmitting portions and a lamp back of said flight, of means for operating the belt, a display-panel arranged in parallelism with said flight and adapted to receive images projected through said light-

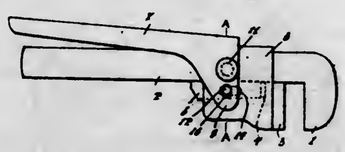
transmitting portions, means for varying the distance between said display-panel and display-light, an intermediate screen, and coacting means on the belt and screen for producing animated movement effects on the panel.

1,886,145. WINDOW FRAME. FRED C. ANDERSEN, Bayport, Minn. Filed Feb. 3, 1930. Serial No. 425,624. 1 Claim. (Cl. 20—11.)



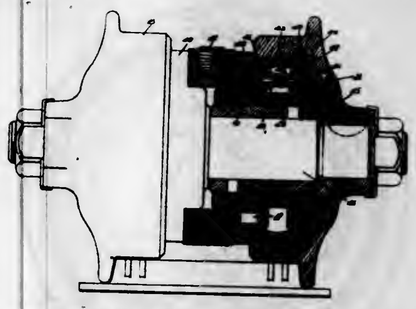
In a window frame, a narrow blind stop adapted to be inserted between the jamb and the outside casing and projecting inwardly beyond the face of the jamb, and a board wider than said stop having an edge to edge closed joint therewith and forming an outward continuation of said stop, an inner liner strip secured to the inner edge of the jamb and having one exposed edge face flush substantially with the normally exposed face of the jamb and forming a continuation thereof and said strip extending laterally beyond the normally concealed face of the jamb and a board having an edge to edge closed joint with the other edge face of said liner strip and forming a lateral continuation thereof.

1,886,146. ADJUSTABLE WRENCH. FREDERICK HAROLD ANDREWS, Taihape, New Zealand, assignor to Leo Brooks, Karori, Wellington, New Zealand. Filed Oct. 14, 1930, Serial No. 488,612, and in New Zealand Aug. 18, 1930. 2 Claims. (Cl. 81—149.)



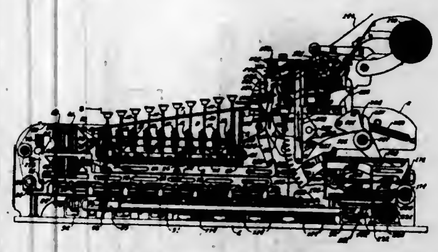
1. In an adjustable wrench, a fixed jaw, a stock carried by said jaw, an adjustable jaw member slidably receiving said stock, a sliding wedge located in the space between the adjustable jaw member and the stock, a lever having an angular bifurcated end, the bifurcations of said lever receiving the adjustable jaw member and being pivotally connected to the portions of the latter overlying the stock midway the length of the sliding wedge, said adjustable jaw member having the portions thereof lying at opposite sides of the wedge slotted, a pin carried by the wedge projecting through said slots and permitting movement of said wedge relatively to the adjustable jaw member, the bifurcations of said lever having slots therein disclosed substantially perpendicularly to the first mentioned slots and receiving said pin to accommodate axial movement of said wedge.

1,886,147. OIL AND DIRT SEAL FOR TRACTOR TRUCK ROLLERS. DAVID B. BAKER and NORMAN O. PANEBRAU, Chicago, Ill., assignors to International Harvester Company, a Corporation of New Jersey. Filed July 9, 1930. Serial No. 466,869. 4 Claims. (Cl. 286—11.)



2. A seal structure between a stationary journal hub part and a wheel rotatable with a shaft passed through said journal hub part, said wheel having a rim overhanging and extending around the journal hub part in spaced relation to leave an annular space in which the seal structure is located, the seal structure comprising an inner pressure member surrounding the hub part, said inner pressure member being cup shaped to provide a rim arranged inside the wheel rim, an outer pressure member slidably surrounding the hub part and spaced laterally of the inner pressure member on the hub part, a packing element between a face of the wheel and the inner pressure member, an annular flexible channel shaped sealing diaphragm connected between the inner and outer pressure members, means to prevent rotation of said pressure members, and means to slide the outer pressure member away from the inner pressure member to force the packing into sealing engagement with the wheel face, the bight of the diaphragm having sealing contact with the inner face of the rim of the cup shaped inner pressure member.

1,886,148. CALCULATING MACHINE. ADOLF BAUMANN and CARL P. HORLACHER, St. Louis, Mo., assignors, by mesne assignments, to The American Exchange National Bank of St. Louis, a Banking Corporation. Filed Apr. 11, 1927. Serial No. 182,766. 64 Claims. (Cl. 235—60.)

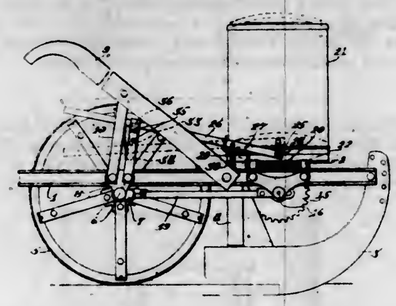


1. In a calculating machine, the combination with selective manipulative means for setting up a multi-digit multiplier and multiplicand, of means controlled by the multiplier means for concurrently setting up all the various resulting partial products corresponding to the multiplication of the various digits in each order by the digits of the multiplier set up, and means controlled by the multiplicand means for selecting from the various set up partial products those corresponding to the set digits in the orders of the multiplicand set up.

48. In a calculating machine, an element having steps corresponding to partial products, a tappet adapted to selectively cooperate with said steps to shift said element, and a stop adapted to arrest said element in various shifted positions.

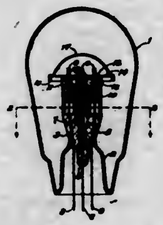
49. In a calculating machine, a series of receivers arranged in alinement, each receiver having stops corresponding numerically to digits, indices cooperating with said stops to set the receivers in accordance with selected partial products, and means for accumulating the settings of said receivers.

1,886,149. GRAIN PLANTER. WILLIAM L. BEALL, Chattanooga, Tenn., assignor to International Harvester Company, a Corporation of New Jersey. Filed Aug. 14, 1929. Serial No. 385,718. 2 Claims. (Cl. 275—9.)



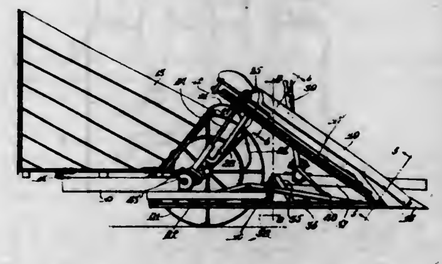
1. In a grain planter, a frame, a hopper support on said frame, a seed hopper hinged to said support at one side of the frame, dispensing mechanism carried by said hopper and having an actuating member extending below the hopper, driving means carried by the frame positioned to engage said actuating member, said means being disengageable by movement of the planter in a reverse direction, a bracket mounted on the frame on the side of the hopper opposite the hinge, a slot in said bracket open at the top, a tilting lever extending through said slot and being pivotally connected to the hopper, a resilient tensioning means attached to the tilting lever, said tilting lever having an extension beyond the bracket, and means for holding said extension in a pivoted position whereby the hopper may tilt with the lever pivoting about said means, said means permitting the removal of said lever from the holding means for manually tilting the hopper.

1,886,150. ELECTRON DISCHARGE DEVICE. ROLAND F. BEERS, Boston, Mass., assignor to Raytheon, Inc., Cambridge, Mass., a Corporation of Massachusetts. Filed Aug. 15, 1928. Serial No. 299,645. 2 Claims. (Cl. 250—27.5.)



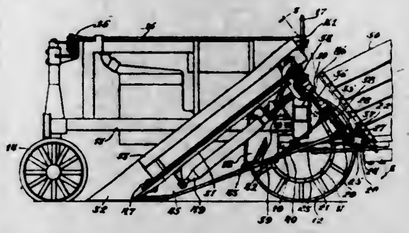
1. An electron discharge device comprising a hermetically sealed container having a reentrant stem, a plurality of upstanding portions formed on said stem, said projections lying in a plurality of planes, a plurality of electrodes, each of said projections supporting one of said electrodes, and an additional electrode, said additional electrode being supported by and mechanically interconnecting said projections, whereby a rigid three-dimensional support is afforded for all of said electrodes and for said projections.

1,886,151. COTTON STRIPPER. BERT R. BENJAMIN, Oak Park, Ill., assignor to International Harvester Company, a Corporation of New Jersey. Filed July 27, 1928. Serial No. 295,642. 6 Claims. (Cl. 56—35.)



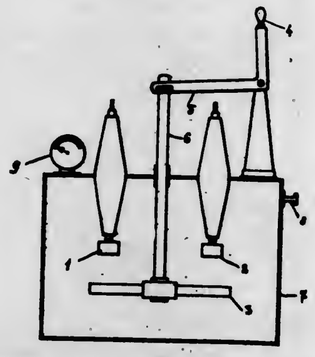
1. A cotton harvester comprising, in combination, a wheel supported frame, inclined gathering boards secured to the frame in laterally spaced relation to provide a plant passage therebetween, combined stalk receiving and boll stripping chains on said boards having their inner runs movable upwardly along the sides of the passage, inwardly projecting lugs carried by the chains and extending into the passage-way, means underneath the chains for engaging plant stalks to pull them through the passage between the chains, and means carried by the frame for operating the chains.

1,886,152. TRACTOR ROW-CROP HARVESTER. BERT R. BENJAMIN, Oak Park, Ill., assignor to International Harvester Company, a Corporation of New Jersey. Filed Aug. 24, 1929. Serial No. 388,111. 5 Claims. (Cl. 56—14.)



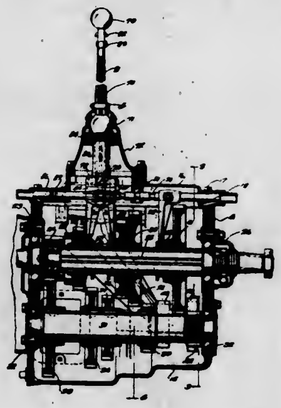
1. The combination with a tractor having a rear axle structure, a body extending forwardly from the axle structure, and a power take-off shaft projecting adjacent the axle structure, of a support extending rearwardly from the axle structure and carried thereby, a transversely extended shaft journaled on the support behind the axle structure, an inclined elongated frame at the side of the tractor body having its forward end adjacent the ground level and its rear portion above the axle structure, a rearward extension on said frame pivotally supported on the transversely extending shaft, means on the tractor forward of the axle structure for adjustably supporting the forward portion of the frame, a driving connection between the power take-off shaft and the transverse shaft, crop gathering mechanism carried by the inclined frame, and driving connections between said mechanism and the transverse shaft.

1,886,153. ELECTRIC SWITCH. FRANCESCO PERROTTI, Milan, Italy. Filed July 15, 1930, Serial No. 468,169, and in Germany Dec. 19, 1929. 8 Claims. (Cl. 200—144.)



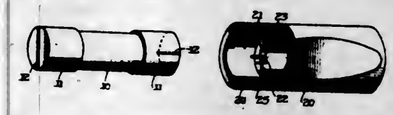
1. A high tension electric switch, comprising a gas-tight chamber enclosing the electrodes of the switch, the chamber containing a gas which has a middle specific mobility of the ions lower than 0.8.

1,886,154. SPEED TRANSMISSION. LEO A. BIXBY, Milwaukee. Wis., assignor to Unit Corporation of America, Milwaukee, Wis. Filed Aug. 8, 1930. Serial No. 473,819. 5 Claims. (Cl. 74—58.)



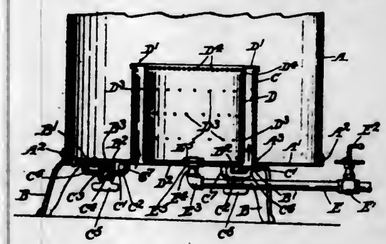
1. In a transmission including a drive gear, a countershaft, a countershaft drive gear rigidly mounted on said shaft meshing with the drive gear whereby the countershaft is driven by the drive gear, a mainshaft, and means for clutching the mainshaft to the drive gear; a set of speed gears of different diameters secured to the countershaft, a set of independently shiftable gears of different diameters splined on the mainshaft shiftable into and out of engagement with the gears on the countershaft, a set of idler gears fixed for unitary movement shiftable into engagement with one of the gears on the countershaft and one of the mainshaft gears, a single means for simultaneously shifting another of said mainshaft gears and the idler gears, a second set of idler gears fixed for unitary movement, and independent means for shifting the last mentioned set of idler gears into meshing engagement with the last mentioned mainshaft gear, when the same is out of engagement with its countershaft gear, and with one of the countershaft gears.

1,886,155. FUSE WRENCH. ERNEST A. BOHLMAN, Chicago, Ill., assignor to Jefferson Electric Company, Chicago, Ill., a Corporation of Illinois. Filed June 21, 1930. Serial No. 462,731. 6 Claims. (Cl. 145—50.)



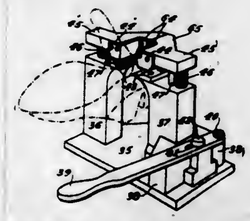
1. A wrench for turning threaded members on the ends of ferrule-type fuses comprising, in combination, a hollow body member shaped to be readily grasped in the hand, a guide sleeve secured against rotation in the end of said body member and arranged to fit easily over the end of the fuse, and a blade extending diametrically across and secured to the inner end of said sleeve and arranged to enter the slot in the threaded member of the fuse when the end of the fuse is inserted in said sleeve.

1,886,156. HEATER. JAMES L. BREESE, Jr., Santa Fe, N. Mex., assignor to Oil Devices Corporation, Chicago, Ill., a Corporation of Illinois. Filed Nov. 7, 1930 Serial No. 493,939. 3 Claims. (Cl. 126—93.)



1. In a stove for use with fluid hydrocarbons, a radiation chamber member and a supporting base therefor, a mixing chamber member positioned within said radiation chamber, said member including an outer wall extending upwardly from an aperture in the bottom of said base and removably positioned in relation to said base, and an inner wall supported upon and spaced inwardly from said outer wall, said inner wall including portions extending outwardly for contact with the upper edge of said outer wall, said inner wall being pierced by a plurality of air apertures, the space between the outer and inner walls being accessible to an exterior air supply, and a fuel line extending to the space within the inner wall, said inner wall having associated with it a bottom closure portion independent of said base and supported upon said inner wall.

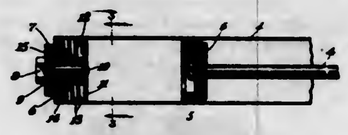
1,886,157. PROCESS AND APPARATUS FOR FORMING THE HEEL END OF A SOLE. ARTHUR J. BRAUER and FREDERICK P. WAGNER, St. Louis, Mo. Filed Feb. 10, 1930. Serial No. 427,279. 10 Claims. (Cl. 12—31.5.)



1. The process of forming a tongue portion in the heel end of a sole while on a shoe, comprising, supporting the sole concurrently on both sides of the shoe but only at

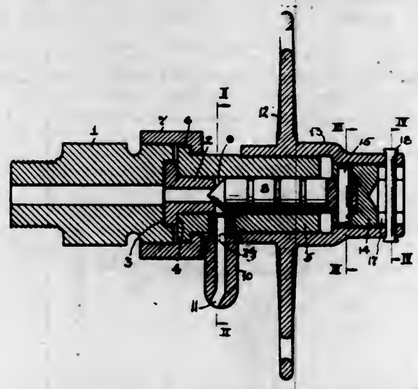
the sole margin adjacent the breast line and back thereof to a point defining the end of the tongue portion to be formed, and cutting through the sole margin normally against the supporting backing concurrently at the ends of the breast line and along lines extending back from the breast line toward the end of the sole when so supported.

1,886,158. PUMP FOR PRESSURE TANKS. GREGORY BROWN, Fairfield, Conn., assignor to Bridgeport Brass Company, Bridgeport, Conn., a Corporation of Connecticut. Filed July 19, 1930. Serial No. 469,063. 7 Claims. (Cl. 230—190.)



1. A pump including in combination a cylinder, a plunger or piston reciprocable therein, the discharge end of the cylinder being provided with an inturned annular flange narrow in width with respect to the diameter of the cylinder so as to afford a valve seat and discharge opening of substantial width, a check valve of substantial width adapted to engage said seat and resilient means for normally holding said check valve on its seat.

1,886,159. GAUGE COCK. JOHN ROWLAND BROWN, Cleveland, Ohio, assignor to The Reliance Gauge Column Company, Cleveland, Ohio, a Corporation of Ohio. Filed Oct. 30, 1926. Serial No. 145,182. 15 Claims. (Cl. 251—43.)



10. In a device of the character described, the combination of a connection-member, a valve-seat member at one end thereof, a casing engaging said valve-seat member, means for securing said casing and said connection-member together, a valve-plunger in said casing, an operating lever having a hub screw-threaded on said casing, stop-lugs extending from such hub, a removable abutment for such stop-lugs, an adjusting plug secured to said valve-plunger and screw-threaded within such hub, and means for locking said plug in adjusted position in the hub.

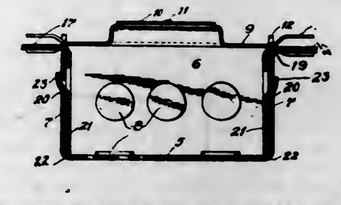
1,886,160. TIRE DEFLATION ALARM. SERENO W. BISHOP, Long Beach, Calif. Filed Dec. 1, 1930. Serial No. 499,183. 2 Claims. (Cl. 116—34.)

1. A tire alarm adapted to be mounted between the tire and the rim comprising a spring strip, one end of said spring strip being curled whereby a rounded surface is provided for contact with the tire, a reinforcing plate, the end of said spring strip being crimped over the plate



to hold the same in position, said reinforcing plate being mounted on the end of the spring strip which extends between the tire and the rim.

1,886,161. OUTLET BOX AND HANGER AND METHOD OF MAKING THE SAME. CHRISTOPHER C. BUCKELS. Chicago, Ill., assignor, by mesne assignments, to Chicago Mechanical Manufacturing Co., Chicago. Ill., a Corporation of Illinois. Filed Jan. 2, 1930. Serial No. 417,957. 6 Claims. (Cl. 247—21.)



1. In combination, an outlet box, a hanger strip for said box, and an angular portion on said strip extending into said box and secured to the bottom thereof.

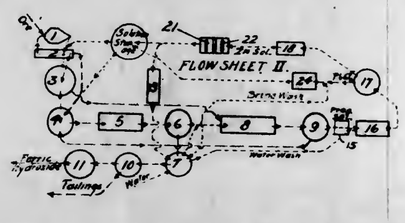
1,886,162. PROCESS OF TREATING SULPHIDE ORES OF ZINC. NIELS C. CHRISTENSEN, Salt Lake City, Utah. Filed Nov. 2, 1925. Serial No. 66,400. 17 Claims. (Cl. 23—135.)

1. The process of treating sulphide ores of zinc containing lead and silver which consists in agitating said comminuted ore together with a hot concentrated calcium chloride solution containing hydrochloric acid and thereby dissolving the zinc and silver and lead out of said ore in said solution, separating the pregnant solution from said ore, and precipitating the silver from the hot solution with metallic lead and thereafter cooling said solution and precipitating lead therefrom as lead chloride, precipitating the residual lead from the cold solution as a sulphide, and thereafter adding a finely divided calcium carbonate to said solution and passing H_2S into said mixture and thereby precipitating the zinc out of said solution as a sulphide.

1,886,163. PROCESS FOR THE TREATMENT OF OXIDIZED ORES. NIELS C. CHRISTENSEN, Salt Lake City, Utah. Filed Oct. 19, 1927. Serial No. 227,244. 1 Claim. (Cl. 204—15.)

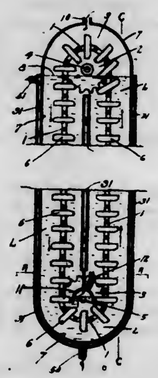
The process of treating oxidized ores, and the like, containing lead and zinc for the recovery of lead and zinc therefrom which consists in mixing said ores with a concentrated sodium chloride brine containing dissolved iron in the ferrous condition and heating and agitating and aerating said mixture and thereby dissolving zinc and lead out of said ore in said solution and precipitating iron from said solution as ferric hydroxide and thereafter diluting and cooling said brine and precipitating lead chlo-

ride therefrom and precipitating the residual lead from said solution with metallic zinc, and precipitating zinc from said solution by electrolysis with an iron anode so as to form ferrous chloride in said solution, and heating last said brine containing ferrous chloride and dissolving above



said precipitated lead chloride therein and recovering the lead therefrom by electrolysis with an iron anode so as to form ferrous chloride in said solution, and using said brines containing said ferrous chloride in the treatment of more ore.

1,886,164. APPARATUS FOR COMPRESSING GASES. NIELS C. CHRISTENSEN, Salt Lake City, Utah. Filed Mar. 18, 1930. Serial No. 436,912. 5 Claims. (Cl. 230—77.)



1. The apparatus for compressing gases which consists of a series of nests of superimposed shallow compression pans attached at opposite ends to similar parallel endless carriers suspended between similar driving wheels on parallel upper and lower horizontal shafts placed substantially, one vertically above the other, a housing surrounding said pans, chains, wheels and shafts, a liquid medium filling said housing to a level beneath said upper shaft, a compressed gas receiving chamber above said lower shaft in said housing, means for supplying gas to be compressed to the space above said liquid in said housing, guide arms attached to said nests of pans and arranged to move in guides within said housing, all arranged so that when one of said shafts is rotated said chains carry said nests of pans over said upper shaft through said gas above said liquid, down through said liquid in said housing, beneath said lower shaft, up through said liquid in said housing out of said liquid and over said upper shaft again in continuous circuit, said compression pans being held in horizontal position with the opening downward when entering said liquid, so as to trap a thin layer of gas in said pans, and in passing down through said downward path in said liquid by said guide arms and guide, said compressed gas receiving chamber being arranged to catch the compressed gas discharged from said pans as they are tilted in passing through their path beneath said lower shaft.

1,886,165. PROCESS FOR THE PRECIPITATION OF ZINC SULPHIDE AND THE MANUFACTURE OF ZINC SULPHIDE PIGMENTS. NIELS C. CHRISTENSEN, Salt Lake City, Utah. Filed Nov. 5, 1930. Serial No. 493,685. 12 Claims. (Cl. 134—78.)

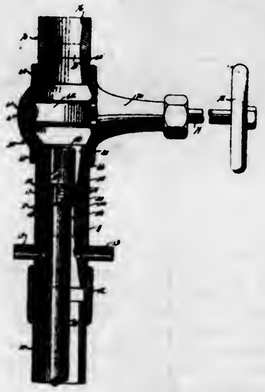
4. The process of precipitating zinc from a chloride solution which consists in mixing finely divided calcium carbonate with said solution and adding calcium sulphydrate to said mixture in substantially equi-molecular proportions to the added calcium carbonate and thereby precipitating the zinc as a sulphide and forming calcium chloride in said solution from said calcium compounds.

1,886,166. ATTACHING MEANS FOR TIMEPIECE DIALS. HENRI COLOMB, Tavannes, Switzerland. Filed Sept. 6, 1930, Serial No. 480,212, and in Switzerland Sept. 9, 1929. 2 Claims. (Cl. 58—127.)



1. In a watch movement having a movement plate and a bridge, said bridge having a perforation therein, a dial provided with a dial foot extending through the movement plate, a rotatable arbor penetrating said perforation and being provided with an axial recess, eccentric means on said arbor adapted to exert lateral pressure on said dial foot upon rotation of said arbor, and a pivot carried by the movement plate and extending into said axial recess, said pivot and said recess being situated substantially in the plane in which acts the sidethrust exerted by said dial foot on said eccentric means upon rotation of the arbor.

1,886,167. CASING HEAD CONSTRUCTION. JESS J. CONROY, Maracaibo, Venezuela. Filed Dec. 12, 1929. Serial No. 413,598. 5 Claims. (Cl. 166—15.)



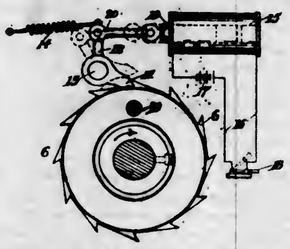
1. In combination with a well casing, a casing head therefor, the upper portion of the casing head being formed to detachably receive the usual superstructure, a gate valve detachably connected upon the upper end of the casing head provided with a passageway axially aligning with the passageway thru the casing head, a valve slidable transversely across the passageway of said housing to seal off the same about the casing head, and a tubing spider carried by said valve having a passageway axially aligning with said passageway thru said valve.

1,886,168. SHIM. FRED A. COOK, Rock Island, Ill. Filed Dec. 24, 1930. Serial No. 504,484. 3 Claims. (Cl. 267—52.)



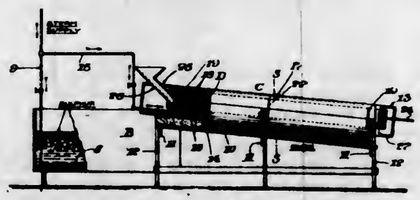
1. A shim for the purpose indicated comprising a pair of lateral elongated wedge-shaped members connected at both ends by a thinner portion.

1,886,169. WHEEL LOCK AND EASY STARTING DEVICE FOR VEHICLES. CLEMENT ARTHUR K. CORNWALL, Victoria, British Columbia, Canada. Filed Jan. 8, 1931, Serial No. 507,424, and in Canada Feb. 12, 1930. 3 Claims. (Cl. 185—41.)



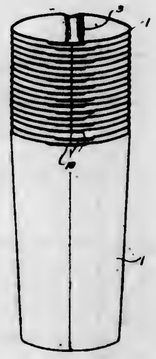
1. A vehicle wheel lock and easy starting device comprising the combination with a power shaft adapted to drive the road wheel of said vehicle, of a ratchet wheel carried by and revolvable on said shaft, a resilient member encircling said shaft and having one extremity secured to said ratchet wheel and the other extremity secured to said shaft by a suitable intervening member, a pawl adapted to engage the said ratchet against the action of a spring, electrical means opposing said spring and adapted to pull said pawl into engagement with said ratchet, whereby upon any backward movement of said vehicle a corresponding movement is given to said shaft which is resisted by the resilient member and its momentum absorbed by torsional compression of the latter between the ratchet held by the pawl and the shaft until the forces are in equilibrium and the vehicle comes to rest, and whereby when the vehicle is re-started by the engine and the first increment of power in the forward direction reaches the ratchet and releases the pawl the latter is pulled out of contact by its spring and the function of the device has been completed when stored energy of the resilient member has been expended as a forward thrust to aid in starting the vehicle.

1,886,170. METHOD OF TREATING FIBROUS MATERIAL WITH SULPHUR. FREDERICK V. D. CRUSER, Oswego, N. Y., assignor, by mesne assignments, to The Diamond Match Company, a Corporation of Maryland. Filed Dec. 19, 1929. Serial No. 415,261. 6 Claims. (Cl. 91—70.)



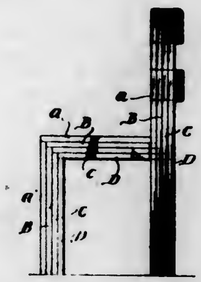
1. A method of treating fibrous material, comprising partially saturating the material with molten sulphur, and subsequently tumbling and subjecting the material to the action of heat at a temperature sufficient to effect the absorption of the sulphur by and into the body of the material, thus leaving the exposed surfaces of the material free from sulphur film or scale.

1,886,171. METHOD OF NESTING CAN BODIES. MERTON L. DODGE and PAUL E. PEARSON, Seattle, Wash., assignors to Continental Can Company, Inc. Filed Mar. 21, 1930. Serial No. 437,914. 2 Claims. (Cl. 220—97.)



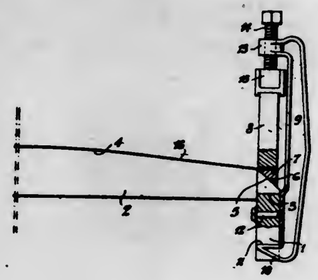
1. A can body pack comprising a plurality of cylindrical can bodies, each having its edges joined in a permanent side seam, and each can body having the wall thereof curved inwardly on an axis extending lengthwise of the can body whereby said can body is deformed so as to give thereto a diameter which gradually increases from one end thereof toward the other for permitting the can bodies to be nested one within the other, each can body at the large end thereof having the edge thereof turned outwardly throughout a portion of its length to form a substantial right angle flange for limiting the extent to which one can body can be forced into another and to aid in the separating of the can bodies when the pack is disassembled.

1,886,172. NEST OF CHAIRS. LAURA DOETSCH, Chicago, Ill. Filed Nov. 22, 1929. Serial No. 408,941. 1 Claim. (Cl. 155—2.)



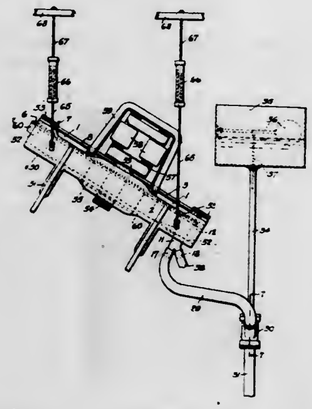
A plurality of chairs comprising a nest, having anterior and posterior chairs with their seat portions in close proximity, said posterior chairs having said seat portions cutaway on the sides at the back and forming an abutment, said cutaway portions adapted to receive the rear legs of the anterior chairs, said abutments adapted to contact the rear legs of the first anterior chair adjacent the seat portion thereof, the legs of said chairs having their lower termini in the same plane, whereby to permit said chairs to be occupied as a nest or separately.

1,886,173. SCREEN. JAMES A. FLINT, Denver, Colo., assignor to The Traylor Vibrator Company, Denver, Colo., a Corporation of Colorado. Filed Jan. 9, 1928. Serial No. 245,298. 5 Claims. (Cl. 209—403.)



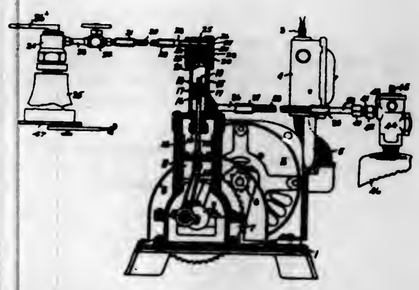
1. In a screening device, a supporting frame including side members, a screening element disposed across said side members, there being a downwardly and outwardly disposed surface on at least one of said side members, a bar to which one edge of the screening element is secure, there being a downwardly and outwardly disposed surface on said bar and coacting with the surface on the side member, and means for exerting substantially vertical pressure on said bar adapted to cause relative movement between said surfaces to force the bar outwardly.

1,886,174. APPARATUS FOR THE WET SCREENING OR SEPARATION OF INTERMIXED MATERIALS. JAMES A. FLINT and FRANCIS T. HAZELTINE, Denver, Colo., assignors to The Traylor Vibrator Company, Denver, Colo., a Corporation of Colorado. Filed Jan. 10, 1929. Serial No. 331,492. 13 Claims. (Cl. 209—269.)



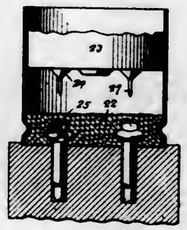
1. Wet screening apparatus, comprising a screening compartment adapted to contain a substantially confined body of liquid and having upper and lower walls, a perforate screen member within said compartment intermediate the upper and lower walls thereof and mounted for movement toward and away from said walls, said compartment having an opening for the introduction of materials thereinto at one side of said screen member, and vibrating means for imparting vibratory movement to said screening compartment and the body of liquid therein, in a direction substantially perpendicular to the plane of said screen member.

1,886,175. METHOD OF CHARGING CONTAINERS WITH CARBON DIOXIDE. WALTER H. FREYGANG, Weehawken, N. J., assignor to Walter Kidde & Company, Inc., New York, N. Y., a Corporation of New York. Filed May 7, 1930. Serial No. 450,412. 1 Claim. (Cl. 62—1.)



The method of transferring liquid carbon dioxide under its own vapor pressure from a supply container to another container through an intermediate chamber, which consists in delivering liquid carbon dioxide under its own vapor pressure from the supply container in the receiving container through the intermediate chamber, isolating the intermediate chamber from the supply chamber container, increasing the pressure in said chamber above that in the receiving container to cause flow of carbon dioxide from said chamber to said receiving container, isolating said chamber from said receiving container, decreasing the pressure in said chamber to below that in the supply container, so that the isolation of said chamber from the supply container is removed and the flow of liquid carbon dioxide under its own vapor pressure into said chamber is reestablished, and repeating the cycle of operations.

1,886,176. METHOD OF AND APPARATUS FOR MOLDING PINS IN RADIO TUBE BASES. WILLIAM J. GAGNON, Bridgeport, Conn., assignor to The Bead Chain Manufacturing Company, Bridgeport, Conn., a Corporation of Connecticut. Filed June 28, 1927. Serial No. 202,082. 8 Claims. (Cl. 18—23.)



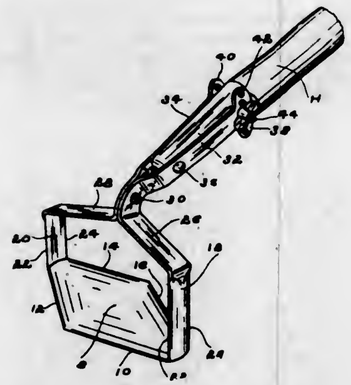
7. Apparatus for molding contact pins in an audion base, comprising a mold having recesses for the accommodation of the shanks of a plurality of spaced pins, and adapted to support the heads of said pins above the mold face, in combination with a plunger die cooperating with said mold to embed said pin heads under pressure in interposed base material, said die having on its operating face projections aligned with said recesses and adapted to engage the pin heads to open wireways to the interior of the pins incident to the molding operation.

1,886,177. BORING TOOL AND HOLDER. EMIL GAIRING, Detroit, Mich., assignor to Gairing Tool Company, Detroit, Mich., a Corporation of Michigan. Filed July 9, 1931. Serial No. 549,637. 5 Claims. (Cl. 279—79.)



3. In a device of the character described, the combination of a socket member and a tool provided with a circular shank formed with a relatively short annular peripheral groove and a substantially flat longitudinal passage-way connecting the peripheral groove with the end of the tool shank; a transverse locking pin supported in the wall of the socket member adapted upon entering the shank into the socket member to traverse the longitudinal flat passage in the shank of the tool and upon rotating the tool shank in relation to the socket to enter the peripheral groove in the shank, thereby locking the tool shank in the socket member; and a spring supported in the wall of the socket member including a projecting detent, extending into a longitudinal groove in the tool shank, adapted upon the rotation of said tool shank in the holder to engage the flattened portion of the tool shank, whereby the tool shank is held against accidental rotation and release from the socket member.

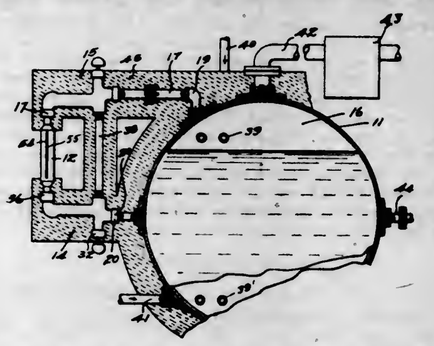
1,886,178. SOIL CULTIVATOR. CHARLES A. GODDARD, Seattle, Wash. Filed Nov. 17, 1930. Serial No. 496,194. 2 Claims. (Cl. 97—69.)



1. A soil cultivator consisting of a horizontally disposed cutting blade having a diamond shaped contour and convex section across its minor axis; vertically disposed, double edged cutting blades secured to the ends of the diamond shaped blade; extensions of the vertical blades diverted inwardly until they meet, at which point they are turned in the plane of the minor axis of the blade and also twisted to form an acute angle with the horizontal; means for joining the extension together, and securing means for a handle.

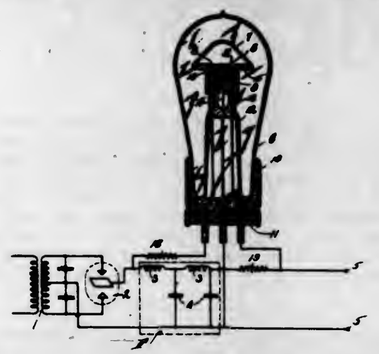
1,886,179. CONNECTION FOR LIQUID LEVEL INDICATORS. MEADE GOODLOE, Los Angeles, Calif. Filed Aug. 24, 1927. Serial No. 215,125. 11 Claims. (Cl. 73—54.)

1. Liquid level indicating means for use in connection with a liquid of low boiling point and where conditions of temperature and pressure may cause an evolution of bubbles therein, said means comprising: an evacuated outer shell;



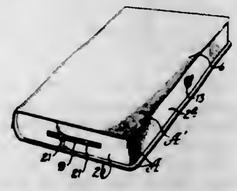
a meniscus tube extending therethrough; and means for diverting bubbles from near the lower end of said tube, to prevent the same from rising therethrough.

1,886,180. VOLTAGE SMOOTHING AND REGULATING SYSTEM. CECIL H. GREEN, Brookline, Mass., assignor to Raytheon Inc., Cambridge, Mass., a Corporation of Massachusetts. Filed Nov. 24, 1926, Serial No. 150,500. Renewed Dec. 17, 1930. 16 Claims. (Cl. 178—44.)



1. In combination, a source of current providing a varying and a steady component and means for effectively removing said varying component, said means including a low-pass filter and a gaseous discharge device having two anodes and a cathode, said anodes being connected on opposite sides of said filter.

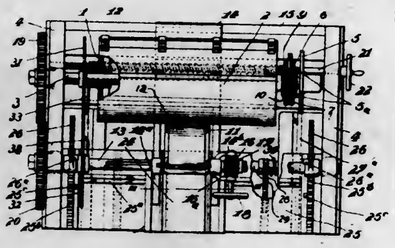
1,886,181. SAVINGS BANK. ALBERT C. GRUNWALD, Chicago, Ill., assignor to The Automatic Recording Safe Company, Chicago, Ill., a Corporation of Illinois. Filed Aug. 23, 1930. Serial No. 477,431. 1 Claim. (Cl. 232—4.)



A book-form safe comprising a plate equipped with a flange forming a back, said plate having upwardly struck clinching-lugs; a U-shaped edge member of angular cross-

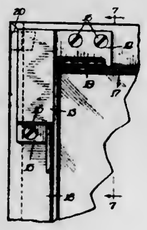
section, having a longitudinal base-flange provided with slots through which said clinching-lugs extend and said flange being further provided with upturned flanges adapted to engage the edge-portions of the base-flanges of a housing member; a longitudinal housing member of general Z-shaped cross section disposed adjacent the longitudinal portion of said edge member and having a base-flange provided with slots engaged by said clinching-lugs; a slide-bar housed between said housing member and the adjacent edge-wall; a spring interposed between said housing member and side-bar; a key-barrel journaled in said housing member and the adjacent edge-wall; and a closure pivoted on the upper edge of said back and equipped with a slotted-flange adapted for engagement by the locking-projections carried by said slide-bar.

1,886,182. MACHINE FOR MAKING PRINTING PLATES. HATSUJIRO HAMADA, Tokyo-Fu, Japan. Filed Jan. 19, 1931. Serial No. 509,767. 8 Claims. (Cl. 101—33.)



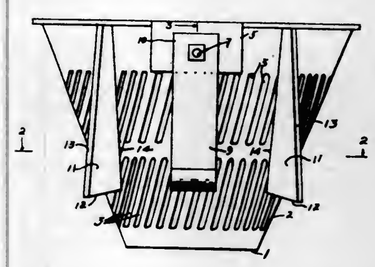
1. A machine for making printing plates comprising a blanket cylinder, a shaft for the blanket cylinder having sector gears fixed thereto an endwise movable slide bed having racks thereon and carrying the holder for the original, projections on the sector gears and on the bed, the projections of the sector gears being adapted to engage the projections on the bed prior to engagement of the sector gears with the racks for ensuring correct engagement of the teeth of the gears and racks.

1,886,183. SASH LOCK. WILLIAM S. HAMM, Elkhart, Ind., assignor to The Adlake Company, Chicago, Ill., a Corporation of Illinois. Filed Apr. 9, 1931. Serial No. 528,804. 6 Claims. (Cl. 292—169.)



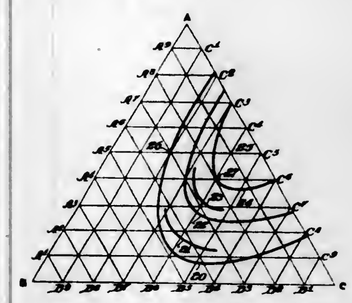
1. In combination, a narrow-railed sheet metal drop type sash, a casing attached to the sash at one of the upper corners thereof, a bolt-retracting lever pivotally mounted in the casing and projecting horizontally therefrom along the top rail of the sash in closely bordering relation to the top edge of the glazing area, resiliently yieldable means for resisting pivotal movement of the lever, a lift pivotally mounted in the casing and projecting downwardly therefrom along the adjacent side rail in closely bordering relation to the adjacent side edge of the glazing area, and resiliently yieldable means for resisting pivotal movement of the lift.

1,886,184. MOP WRINGER. MICHAEL HEBER, San Jose, Calif. Filed Sept. 26, 1931. Serial No. 565,346. 1 Claim. (Cl. 15—263.)



A mop wringer comprising, a perforated receptacle having radially disposed triangular webs mounted on its outer surface with their outer edges adapted to seat squarely against the inclined inner surface of a pail whereby to support the said receptacle in a vertical position in the pail, said receptacle having a means formed thereon to overhang the pail edge, and spring means mounted on the overhanging means whereby to engage the outer side of the pail.

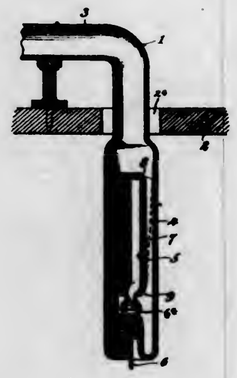
1,886,185. REFRACTORY BRICK AND METHOD. RUSSELL P. HEUER, Haverford, Pa., assignor to General Refractories Company, a Corporation of Pennsylvania. Filed Mar. 2, 1931. Serial No. 519,591. 32 Claims. (Cl. 25—156.)



1. The method of making refractory brick from hydrous alumina-silica mineral containing less than 60% of silica, which consists in calcining the mineral at a temperature above 1400° C. and in subsequently forming a mix containing at least 85% calcined mineral into brick under pressure exceeding 1000 pounds per square inch.

1,886,186. ELECTRODE FOR NEON TUBES. HENRY HILGENBERG, Chicago, Ill., assignor to Neon Electric Sign Co., Inc., Chicago, Ill., a Corporation of Illinois. Filed Aug. 20, 1928. Serial No. 300,773. 7 Claims. (Cl. 176—126.)

1. The electrode end of a neon or other rarified gas filled tube, consisting of the outer tube, an electrode element supported therein, and means providing a shield about the element to prevent the sputtered material emitted from the outer or inactive surface thereof from reaching the opposed wall of the outer tube, said shield being carried by said element.



1,886,187. MINE CAR. WILBUR D. HOCKENSMITH, Jr., Irwin, Pa. Filed Aug. 20, 1930. Serial No. 476,508. 12 Claims. (Cl. 105—364.)

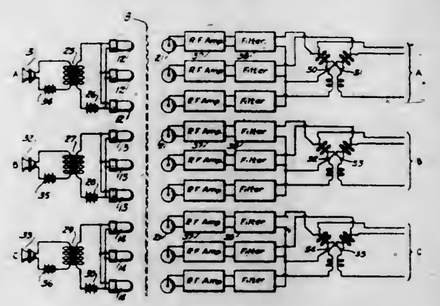


1. In a mine car having side walls, side sills, side floors, connecting said side walls and said side sills, wheel axles journaled in said side sills, a bottom suspended from said axles, flat belts around said bottom and countersunk therein for reinforcing said car, said belts having ends extending inside said side walls and outside said side floor and side sills for increasing the capacity of the car without increasing the overall dimensions thereof and a gate for closing the open end of said car having triangular plates adjacent the outer surface of said side wall and pivoted thereto.

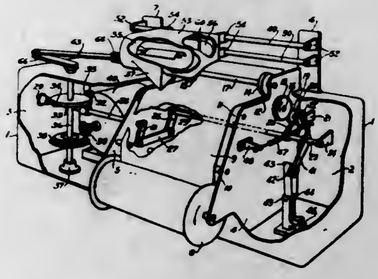
2. In a mine car having a side wall, a side floor, and a bottom, a reenforcing member inside said side wall and extending underneath said side floor and said bottom for bracing said car.

1,886,188. HIGH FREQUENCY GENERATOR AND MODULATOR. CLINTON W. HOUGH, New York, N. Y., assignor to Wired Radio, Inc., New York, N. Y., a Corporation of Delaware. Filed July 22, 1930. Serial No. 469,725. 7 Claims. (Cl. 179—171.)

1. A high frequency generator and modulator comprising, a source of irradiations, means adapted to vary the intensity of said irradiations at audible frequencies, a plurality of photosensitive cells under control of said irradiations, an output circuit for each of said photosensitive cells, a source of current for each of said output circuits, said output circuits being electrically connected in definite groups; and mechanical means adapted to periodically intercept said irradiations to produce a definite super-audible frequency current in each of said groups of output circuits, the photosensitive cells connected to the circuits forming any one of said groups being relatively positioned with respect to said mechanical means in a manner adapted to produce phase displacement of the currents in said group.

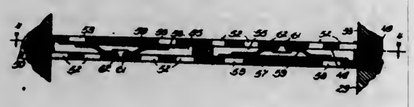


1,886,189. FACSIMILE SYSTEM. CLINTON W. HOUGH, New York, N. Y., assignor to Wired Radio, Inc., New York, N. Y., a Corporation of Delaware. Filed Oct. 7, 1930. Serial No. 486,923. 1 Claim. (Cl. 178—11.)



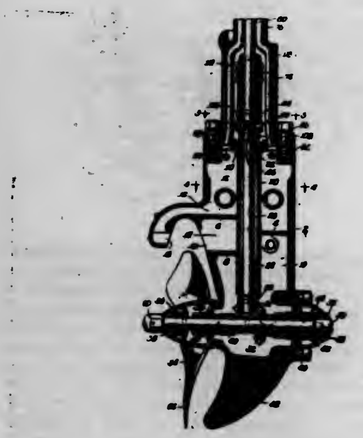
A facsimile system comprising, an image sheet, a photoelectric cell, a source of light, a unitary housing for said photoelectric cell and said source of light constructed so that said light is directed to said image sheet and reflected therefrom to said photoelectric cell, mechanical means for relatively moving said housing and said image sheet whereby different areas of said image sheet are sequentially exposed to said photoelectric cell, means for transmitting electrical signals under control of said photoelectric cell, means controlled by said mechanical means for causing said last mentioned means to transmit a synchronizing impulse at predetermined times with respect to the relative movement of said housing and said image sheet, means for receiving said signals, a recording sheet upon which an image is to be recorded, a locally energized coil for producing a steady magnetic field, a moving coil positioned in the vicinity of said field and controlled by said signals transmitted under control of said photoelectric cell, an inked cloth ribbon mounted adjacent said recording sheet, a stylus actuated by said moving coil for depressing said ribbon upon said recording sheet for making a visible record thereon, a structure supporting said coils, means for relatively moving said structure and said recording sheet, means controlled by said transmitted synchronizing impulses for adjusting the movement of said last mentioned means, and means controlled by said transmitted synchronizing impulses for relatively moving said transfer ribbon and said recording sheet.

1,886,190. VALVE MECHANISM FOR PUMPS. FLOYD G. HODSDON, La Grange, Ill., assignor to International Harvester Company, a Corporation of New Jersey. Original application filed May 8, 1930, Serial No. 450,660. Divided and this application filed May 20, 1931. Serial No. 538,729. 7 Claims. (Cl. 230—231.)



1. In a pump having a piston chamber and a head divided into inlet and exhaust chambers, valve mechanism between the piston chamber and head comprising an upper and a lower plate, inlet and exhaust ports in said plates cooperating respectively with the inlet and exhaust chambers, a spacer plate between the two plates mentioned, said spacer plate provided with openings, inlet and exhaust valves nested in said openings, and means in said openings for holding the valves lightly to their respective ports.

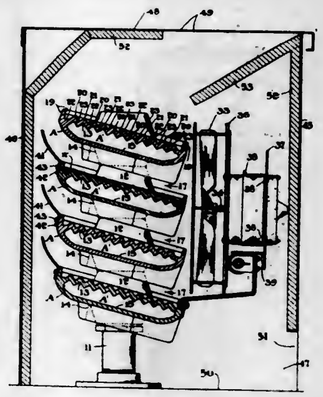
1,886,191. SHOCK ABSORBING DEVICE FOR OUTBOARD MOTOR DRIVES. LOUIS J. JOHNSON, South Bend, Ind., assignor to Johnson Brothers Engineering Corporation, South Bend, Ind., a Corporation of Indiana. Filed Apr. 4, 1928. Serial No. 267,274. 16 Claims. (Cl. 115—18.)



1. In an outboard motor assembly the combination of a detachable submersible gear housing, a propeller carrying shaft mounted in the lower portion of said housing, a propeller on said shaft, a vertically disposed shaft mounted in said housing, gearing connections between said two shafts, an engine driven shaft and a slip clutch connection disposed at the upper end of said detachable housing and connecting said engine driven shaft and the vertically disposed shaft.

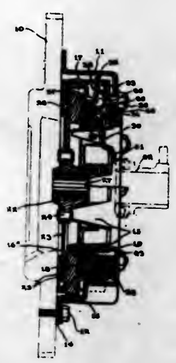
1,886,192. HUMIDIFYING RADIATOR. ANDREW U. JONES, Montreal, Quebec, Canada. Filed Mar. 25, 1932. Serial No. 601,179. 9 Claims. (Cl. 257—180.)

6. A humidifying radiator installation comprising a plurality of vertically spaced radiator sections, each having a top water evaporating surface, a fan positioned in front of the central portions of the radiator for blowing



air toward and between said sections, and deflectors between the sections for diverting the air passing between towards the ends of the evaporating surface.

1,886,193. CLUTCH. FRANK H. JONES, Upper Sandusky, Ohio. Filed Oct. 10, 1929. Serial No. 398,759. 8 Claims. (Cl. 192—68.)

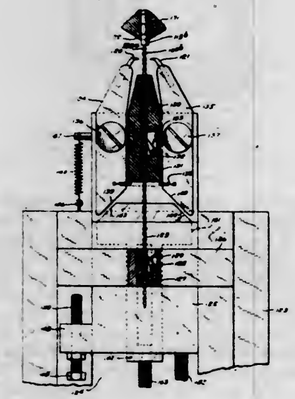


1. A clutch for mounting on the fly wheel of an internal combustion engine and comprising a driven member embodying a friction disk and associated friction members, a pressure ring, and a housing adapted to be bolted onto the fly wheel, and formed at its center with internally directed fingers constituting centering means for the pressure ring, the latter being yieldingly impelled towards the friction disk and being provided with means for withdrawing it from the friction disk.

1,886,194. METHOD AND APPARATUS FOR CHAIN MAKING. CHRISTIAN KOHM, Providence, R. I., assignor to Edwin F. M. Speidel, Cranston, R. I. Filed July 8, 1931. Serial No. 549,370. 66 Claims. (Cl. 59—25.)

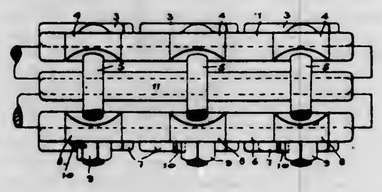
1. In a device of the character described, in combination, means for disposing pairs of dumb-bell links in registry with successive pieces of channeled wire so that one head of each dumb-bell link lies inside one of the flanges of said channeled wire, one of said links being a portion of a dumb-bell wire, means for bending the ends of said

pieces of channeled wire around adjoining heads of each of said pairs of dumb-bell links to form a substantially cylindrical link having inwardly extending annular flanges at its opposite ends for retaining said dumb-bell links,



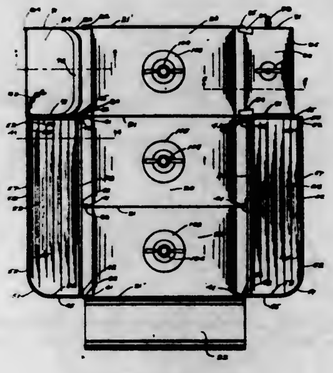
means for severing said one dumb-bell link from said dumb-bell wire, and means for repositioning said cylindrical link so that the head of said one dumb-bell link extending therefrom lies within the flange of the next portion of channeled wire.

1,886,195. PARALLEL GROOVE CLAMP. WILLIAM H. KLEINSTEIBER, Toronto, Ontario, Canada, assignor to Canadian Line Materials Limited, Scarboro Junction, Ontario, Canada. Filed Sept. 17, 1930. Serial No. 482,500. 5 Claims. (Cl. 24—135.)



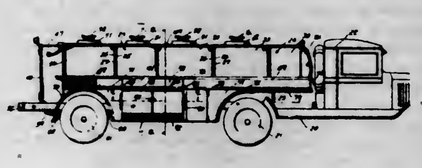
5. In a cable clamp, the combination with a pair of longitudinally grooved members having lugs, bolts non-rotatable in the lugs of one of said members and extending through the corresponding lugs of the other member, and nuts threaded on the bolts and engaging the latter lugs, said latter clamping member being formed of cast metal and having a plurality of locking members formed separate from the cast member of a softer material than that of the said cast member embedded therein in the casting operation in proximity to the lugs of said member, said locking members being adapted to be displaced into locking engagement with said nuts to hold same from rotation.

1,886,196. TANK VEHICLE. ANDREW A. KRAMER, Kansas City, Mo. Filed Apr. 15, 1929. Serial No. 355,154. 17 Claims. (Cl. 280—5.)



10. In a tank, a body portion having a transversely curved shell, vertically elongated ears extending laterally from and beyond the portion of maximum transverse diameter of said shell and depending below said portion of maximum transverse diameter and supplemental carrying means secured to said ears at a point laterally outwardly beyond the widest portion of said body portion and at a point spaced above the bottom of said tank.

1,886,197. SEMITRAILER TANK VEHICLE. ANDREW A. KRAMER, Kansas City, Mo. Filed May 13, 1930. Serial No. 451,978. 16 Claims. (Cl. 280—5.)

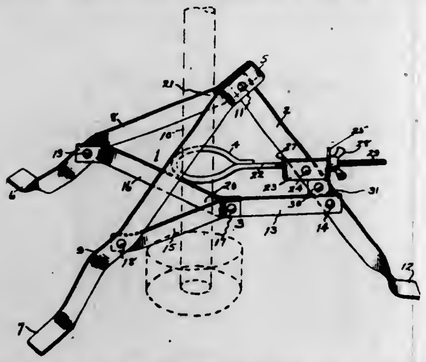


14. The combination with a pulling vehicle, of a semitrailer tank vehicle comprising a tank body having an offset therein providing a reduced end portion on said tank body, a fifth wheel structure on said pulling vehicle supporting the reduced end portion of said tank body, and a skirting on said semi-trailer vehicle depending below the bottom of said reduced end portion on both sides of said tank body at said fifth wheel structure, said skirting having a portion depending below the bottom of said tank body at said offset.

1,886,198. TREE HOLDER. HARVEY H. KRUEGER, South Bend, Ind. Filed Mar. 18, 1931. Serial No. 523,422. 3 Claims. (Cl. 248—38.)

1. A collapsible holder of the character described comprising elements providing a tripod structure the legs whereof have their upper termini pivotally connected together and providing a tree seat between two of said legs,

a collapsible spider element connecting the legs of said tripod and providing a tree seat below the first mentioned seat, said collapsible spider comprising a plurality of links



hinged together and also hinged to the tripod legs and means for clamping a tree trunk within both of said tree seats.

1,886,199. PLUG RECEPTACLE. EUGENE R. KULKA, New York, N. Y., assignor to C. D. Wood Electric Co., Inc., New York, N. Y., a Corporation of New York. Filed May 6, 1926. Serial No. 107,104. 4 Claims. (Cl. 173—338.)



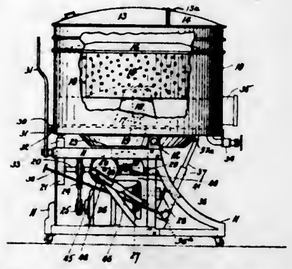
3. A plug receptacle comprising a body portion having a plurality of contact blades located in openings communicating with the front face of said body portion, said openings communicating with a rear annular recess in said body portion, the rear end portions of said blades being adapted to contact with respective wires, said body portion having a rear peripheral wall, said wall having recesses intermediate said contact blades, a rear detachable cover for said body portion having lugs adapted to engage said last-mentioned recesses to prevent the turning of said cover and a connecting member detachable and spaced from said annular recess and extending wholly through said body portion and also through said cover and adapted to connect said cover to said body portion.

1,886,200. PIPE. SALVATORE LAFRANCA, New York, N. Y. Filed Dec. 26, 1930. Serial No. 504,895. 2 Claims. (Cl. 131—12.)



1. In a smoker's appliance, a body having a bowl and a stem, said body having a bore extending through the bowl and stem, the end portion of said bore within the bowl being reduced in diameter, a bit, a tubular member attached to said bit and positioned within said bore, one end portion of said tubular member being provided with a plurality of incisions extending lengthwise thereof and defining partly severed portions having tapering free ends for engaging the wall of the constricted portion of the bore.

1,886,201. WASHING MACHINE. ROBERT STEWART LANGE, Gore, New Zealand. Filed Mar. 8, 1929, Serial No. 345,556, and in New Zealand Mar. 16, 1928. 2 Claims. (Cl. 68—18.)



1. A washing machine including a water containing tank, a clothes receiving bowl mounted to rotate within said tank, a frame horizontally pivotally supporting said tank to enable the latter to move from vertical to inclined positions, a friction driving wheel arranged externally of the tank and connected with the bowl for rotation therewith and having a flat friction surface and a peripheral friction surface lateral thereto, and separate driving members supported in the frame alternately engageable with the flat and peripheral friction surfaces of the wheel respectively when the tank is shifted from one position to the other.

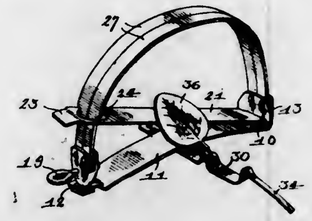
1,886,202. PRINTING APPARATUS. ADOLPH LANGSNER, Chicago, Ill., assignor to Eugene Dietzgen Co., Chicago, Ill., a Corporation of Delaware. Filed Jan. 11, 1930. Serial No. 420,170. 7 Claims. (Cl. 95—77.5.)



1. In a photo-printing apparatus having a movable lamp, means for controlling the speed of said lamp comprising a pair of vertically disposed and integrally framed asynchronized reciprocating dashpots operatively connected thereto for actuation thereby and gear mechanism interposed to speed up the dashpots, said gear including a spring coupling to cushion the torsional stress.

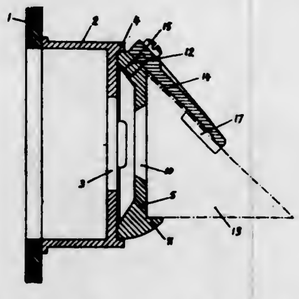
1,886,203. ANIMAL TRAP. ALEXIS LAVOIE, St. Gabriel East, Quebec, Canada. Filed June 16, 1931. Serial No. 544,881. 1 Claim. (Cl. 43—88.)

In an animal trap, an elongated arched base bar, having an upturned flange at one end thereof, a bracket detachably connected with the opposed end of the base bar, an elongated spring bar attached to one end of the base bar extending longitudinally over the base bar and provided with an aperture adjacent the opposed end engageable with a pair of jaws, a pair of co-operating jaws having an aperture in the ends thereof, pivot pins passed through the bracket, the flange of the base bar and the end of the spring respectively and through the aperture of the jaws to pivotally secure said jaws, a trigger bar,



a treadle formed in simulation of a leaf pivotally connected with the trigger bar and adapted to normally overlie the base and spring bars, and a trigger pivoted to the trigger bar and detachably engageable with the treadle for releasably securing the jaws in set position.

1,886,204. PRISM CARRIER FOR CAMERAS AND THE LIKE OPTIC APPARATUS. LOUIS PAUL LEMAIRE, La Garenne, France. Filed Apr. 24, 1931, Serial No. 532,647, and in France May 8, 1930. 2 Claims. (Cl. 88—1.)



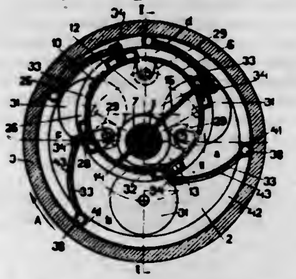
1. A prism carrier for cameras and the like optic apparatuses comprising an apertured support for carrying the prism through a face adjacent its straight solid angle, said support being adapted to rotate freely round the optic axis of the apparatus and provided with a bevelled surface, a projection raised on the support diametrically opposite the bevelled surface and adapted to serve as an abutment for the prism, a shoe adapted to bear on the hypotenuse face of the prism and to press said prism against the support and projection thereon and means for securing the shoe to the bevelled surface of the support.

1,886,205. SPRING PRESSURE CONTACT ELEMENT. ROBERT E. LYFORD, Chicago, Ill., assignor to International Harvester Company, a Corporation of New Jersey. Filed July 1, 1929. Serial No. 375,271. 1 Claim. (Cl. 251—144.)



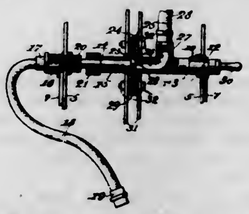
A check valve comprising a one-piece casing formed with a bore therethrough and openings at each end communicating with said bore, said openings being smaller than the bore in diameter and one of said openings being smaller than the other, a valve member fitted in said bore, said member having an engaging head smaller than the larger opening and larger than the other opening, and an integral spring portion spirally extending from the engaging head, said spring portion having a diameter larger than the larger opening, thereby retaining the valve member within the bore.

1,886,206. ROTARY BLOWER. EUGEN MANDLER, Vienna, Austria, assignor to the Firm Climax Motorenwerke und Schiffswerft Linz A. G., Vienna, Austria. Filed Aug. 26, 1930, Serial No. 477,954, and in Austria Aug. 30, 1929. 10 Claims. (Cl. 230—140.)



1. A blower comprising a rotary casing mounted upon the crank shaft of an internal combustion engine and adapted to serve as a fly-wheel, a fixed drum eccentrically mounted within the said casing, blades adapted to oscillate arranged in the space between the drum and the casing, a hollow cylinder projecting from the said drum at its end adjacent the engine, an air inlet and an air outlet socket secured radially to the said projection, inlet openings, communicating with the outer atmosphere and an opening communicating with the inside of the crank case being provided in the inlet socket.

1,886,207. HOSE REEL. CLYDE R. MARSHALL, Cedar Rapids, and FRANK D. MARSHALL, Center Point, Iowa. Filed Nov. 22, 1929. Serial No. 409,000. 1 Claim. (Cl. 399—78.)



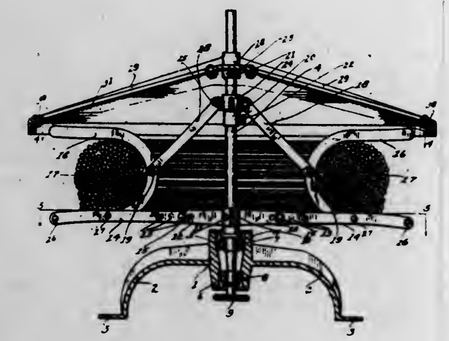
In a hose-reel, a supporting framework having oppositely arranged openings in a pair of sides thereof, a multi-piece axle extending through said openings and having a crank at one end thereof connected in driving relation to the proximate axle section, said axle including a fixed section and a pair of rotatable rigidly connected sections, one of which surrounds the fixed section and is rotatable thereon as a bearing, the axle sections being connected in water-tight relation, the fixed section being longitudinally apertured and being connected in water-tight relation with a water carrying hose, said rotatable axle sections being flanged at their proximate ends and having the flanges connected together in water-tight relation, and a reel drum carried by said flanges, one of said rigidly connected axle sections having a laterally extending tubular connection communicating with the aperture in the fixed section.

1,886,208. GARTER. JOSÉ MIERRS, Buenos Aires, Argentina. Filed Aug. 20, 1931. Serial No. 558,279. 2 Claims. (Cl. 24—246.)



1. A clasp comprising a flat flexible strip shaped to form a body with an integral tongue at one end and in the same plane therewith, and a headed stud attached to said body and adjacent the end opposite said tongue, said tongue being provided with an eye of smaller diameter than the head of said stud and having an elastic margin for engagement therewith, and said tongue having a stiff reinforcement around its outer marginal edges and spaced away from said eye so that the margin of said eye will yield when it engages and disengages said stud.

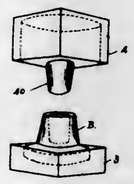
1,886,209. REEL. CLARENCE E. VEST, Troutdale, Oreg. Filed Dec. 15, 1930. Serial No. 502,467. 2 Claims. (Cl. 242—111.)



1. In a device of the class described, the combination of a base, legs having feet disposed upon the lower end thereof outwardly disposed relative to the base and secured thereto, journal bearings disposed within the base, a shaft vertically disposed within the base and journaled within the bearings, manually adjustable means for limiting the freedom of rotation of the shaft, a spider disposed upon the shaft and secured thereto, arms outwardly extending from the spider hub, adjusting holes disposed within the arms, a cradle base hingedly secured to the arms, cradle arms upwardly extending from the cradle base and secured thereto, a collar adjustably disposed upon the shaft, links disposed between the cradle arms and the adjustable collar, and collars disposed upon the shaft adapted for limiting the movement of the adjustable collar.

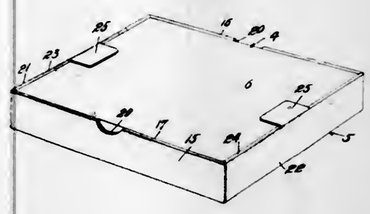
1,886,210. METHOD OF MAKING CUPPED FORGINGS. RALPH ANSON MITCHELL, Edgeworth, Pa., assignor to Pittsburgh Forgings Company, a Corporation of Delaware. Filed May 5, 1931. Serial No. 535,106. 1 Claim. (Cl. 29—148.2.)

The method herein described of forming a cupped forging having a cylindrical surface which consists in forging a body of metal to cupped shape with walls tapering both interiorly and exteriorly from a relatively thick base to a relatively thin rim, with the taper requisite to afford clearance and to allow the forging to come freely away from the dies, and then, beginning at the



rim and progressing to the base exerting pressure radially upon one surface of the wall while leaving it free and unconfined upon the opposite surface, until that opposite surface is brought to cylindrical shape.

1,886,211. BOX. FREDERICK H. MIX, Brooklyn, N. Y., assignor to Joseph Dixon Crucible Company, Jersey City, N. J., a Corporation of New Jersey. Filed Aug. 21, 1931. Serial No. 558,440. 2 Claims. (Cl. 229—45.)

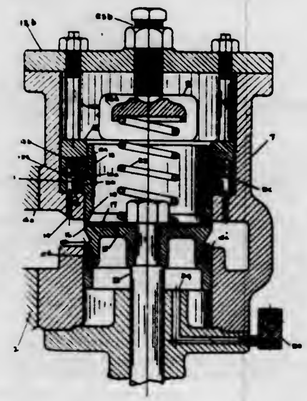


1. A box having a body portion and a cover portion telescoped thereon, said cover being formed from a blank having side and end flaps, each flap being foldable on a line at the edge of the blank and on a line spaced from the blank to provide side and end walls of double thickness throughout their lengths, the side flaps having cut-out notches on the fold lines spaced from the edge of the blank forming finger grips on the body portion of the box and the end flaps having relatively small tabs cut out therefrom inwardly of the outer edges of the flaps without destroying the continuity of the outer section of the end flaps forming the double walls, said tabs being bendable on the fold lines spaced from the edge of the blank to underlie the bottom of the body portion and be adhesively secured thereto.

1,886,212. EXHAUST VALVE MECHANISM. HERMAN G. MUELLER, Erie, Pa., assignor to Skinner Engine Company, Erie, Pa., a Corporation of Pennsylvania. Filed July 9, 1928. Serial No. 291,358. 9 Claims. (Cl. 121—136.)

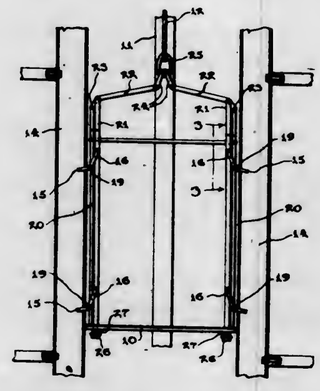
1. In an exhaust valve mechanism, the combination of a cylinder having an exhaust port and an exhaust valve chest communicating with the port; a seat case in the chest forming a closure with the walls of the chest; a yielding seat carried by the case with a steam

space between the seat and the case, the seat presenting a preponderant pressure face yieldingly holding the seat in position; a steam connection leading to said space



from a pressure source having a pressure approximating the pressure of the steam on the valve; and a valve operating on the seat.

1,886,213. ELEVATOR SAFETY APPLIANCE. JOHN B. MURPHY, Cottonwood, Ala. Filed Oct. 17, 1929. Serial No. 400,286. 1 Claim. (Cl. 187—81.)



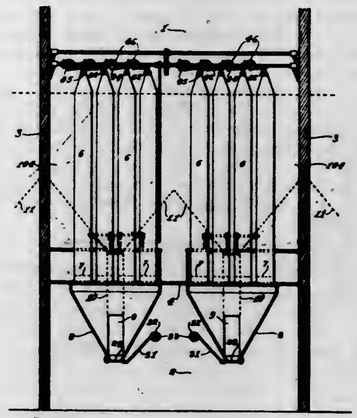
In combination with an elevator, safety rails disposed on opposite sides of the elevator and arranged in parallelism with its line of travel, said rails being formed with spaced parallel flanges and a connecting web portion joined with the flanges on an intermediate longitudinal line, grippers pivotally mounted on the elevator and consisting of levers the work arms of which are formed with gripper feet provided with T-shaped slots of a form to embrace one flange of the safety rails and the adjacent web portion thereof, and means connected with the force arms of the levers to normally hold them in a position where the walls of the T-shaped slots parallel the flanges of the safety rails, and additional means connected to the force arms of the levers to swing the gripper feet to a position where the edges of the T-shaped slots will bite into the flanges of the safety rails.

1,886,214. BOILER. THOMAS E. MURRAY, Brooklyn, N. Y.; Joseph Bradley Murray, Thomas E. Murray, jr., and John F. Murray, executors of said Thomas E. Murray, deceased, assignors to Metropolitan Engineering Company, a Corporation of New York. Filed Mar. 23, 1927. Serial No. 177,534. 11 Claims. (Cl. 122—235.)



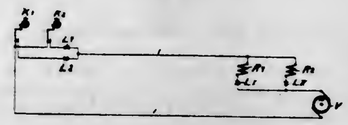
9. A boiler furnace wall having an outer portion of insulating material at the inner side of which are water tubes having their front half and part of their back half exposed to the gases within the furnace, said tubes being slightly spaced away from said outer insulating portion of the wall and having fins extending backward from the tubes and exposed to the gases within the furnace.

1,886,215. BAG HOUSE. WILLIAM E. NEWNAM, Collinsville, Ill., assignor to National Lead Company, St. Louis, Mo., a Corporation of New Jersey. Filed Jan. 19, 1928. Serial No. 247,836. 9 Claims. (Cl. 183—58.)



1. A bag house comprising, a bag chamber, rows of bags therein, operating shafts extending along the respective rows, means on said shafts for shaking said bags, and a drive shaft connecting said operating shafts.

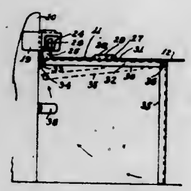
1,886,216. ELECTRICAL SIGNALING AND OPERATING CIRCUIT. NILS EMIL NILSSON, Stockholm, Sweden, assignor to Telefonaktiebolaget L. M. Ericsson, Stockholm, Sweden, a registered Company. Filed June 18, 1930, Serial No. 462,106, and in Sweden June 21, 1929. 4 Claims. (Cl. 179—16.)



2. In a circuit arrangement for alternately actuating two relays included in a line loop by means of currents of determined directions, devices consisting of two uni-

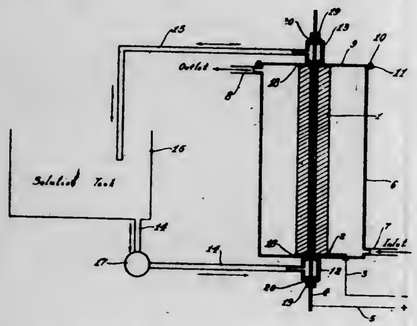
directional resistances included in said line loop for sending operating currents and adapted to control said relays by converting alternating current to direct current of the one or the other direction, means to associate said uni-directional resistances parallelly with each other to the line loop so as to block current in different directions, and relay means to actuate said sending devices.

1,886,217. FOLDING TABLE. GEORGE W. NOONAN, New York, N. Y. Filed Aug. 6, 1930. Serial No. 473,365. 19 Claims. (Cl. 45—51.)



1. In combination, an attaching bracket comprising a main portion, an intermediate abutment portion thereon provided with a recess, and end portions perpendicular to the main portion and forming fulcrum ears, each provided with a vertical inner fulcrum slot, an inwardly and downwardly slanted cam slot and a slot connecting the other slots; a table comprising an inner section having upturned inner corner ears respectively carrying pivot pins engageable in said slots; an outer section pivoted to the inner section whereby said sections may fold against each other to be disposed in the same plane; a supporting member pivoted on the lower face of the outer section, and disposable longitudinally or transversely of the sections, the inner end being engageable in said recess; a leg pivoted to the outer end of said supporting member; and means adapted to hold the table parts in folded position.

1,886,218. GUN BARREL AND PROCESS OF FINISHING THE SAME. JOHN M. OLIN and ALFONS G. SCHURICHT, Alton, Ill., assignors to Western Cartridge Company, East Alton, Ill., a Corporation of Delaware. Filed June 29, 1927. Serial No. 202,255. 4 Claims. (Cl. 42—76.)

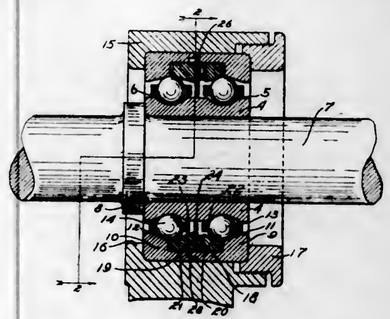


1. A gun barrel whose bore has a plating of metallic chromium.

2. In the art of finishing gun barrels, the process comprising, completing the bore to the approximate diameter and depositing metallic chromium on the bore walls.

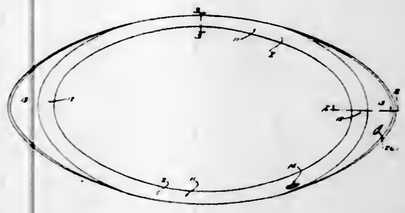
3. In the art of restoring gun barrels, the process comprising, reboring the gun barrel and depositing metallic chromium on the bore walls to an extent sufficient to restore the calibre.

1,886,219. BEARING. JOHN W. PARKER, Detroit, Mich. Filed Sept. 27, 1929. Serial No. 395,652. 2 Claims. (Cl. 308—196.)



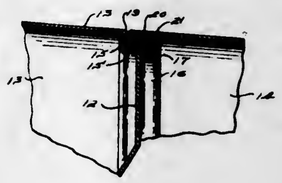
1. A bearing structure comprising, in combination, two annular bearing members one positioned within the other, one of said bearing members formed of two parts and having a groove formed between said parts, a pair of rings in said groove, said rings and parts having cooperating faces forming a pair of axially spaced, annular radially facing ball raceways, the other of said members having raceways formed therein in opposed relation to the first mentioned raceways, a plurality of balls received between each pair of opposed raceways, and means constantly urging said rings apart.

1,886,220. SPEED BOAT RACING TANK. RAYMOND J. PAYNE, Isanti, Minn. Filed Jan. 19, 1931. Serial No. 509,623. 7 Claims. (Cl. 272—3.)



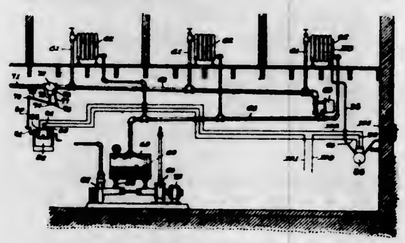
1. An endless channel-shaped tank, the outer wall of which is of a varying elevation and constituting an extension of the bottom of the tank.

1,886,221. MOTOR VEHICLE CONSTRUCTION. EMMETT G. PURDY, Detroit, Mich., assignor to Detroit Body Die Company, a Corporation of Michigan. Filed Apr. 7, 1931. Serial No. 528,338. 6 Claims. (Cl. 180—69.)



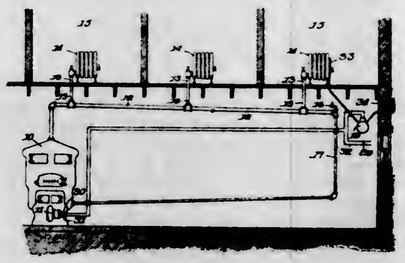
1. A device for supporting the hood of a motor vehicle comprising a cowl having a shoulder portion adjacent one end thereof and a channel portion at one side of the shoulder portion, a rubber gasket positioned in the channel portion, a part thereof extending over the shoulder portion, and a hood having a reversely bent portion terminating in a flange disposed in the gasket, the end of the hood being supported by the shoulder portion of the cowl.

1,886,222. METHOD OF HEATING BY STEAM. FRED I. RAYMOND, River Forest, Ill. Filed May 29, 1930, Serial No. 457,114, and in Canada July 4, 1929. 13 Claims. (Cl. 237—12.)



1. The method of regulating the supply of steam to a steam heating system comprising a plurality of radiators connected in parallel to a common source of steam, which comprises controlling the supply of steam to the system in accordance with temperature changes of the system at a point remote from said source.

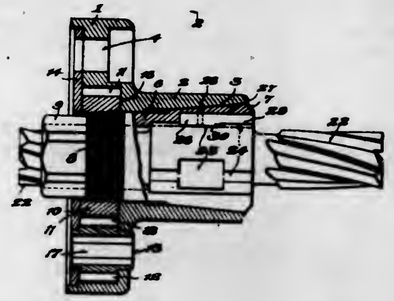
1,886,223. STEAM HEATING SYSTEM. FRED I. RAYMOND, River Forest, Ill. Original application filed May 29, 1930, Serial No. 457,114, and in Canada July 4, 1929. Divided and this application filed June 29, 1931. Serial No. 547,767. 11 Claims. (Cl. 236—91.)



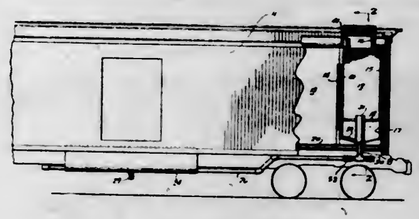
1. In a steam-heating system, a source of heat supply, a plurality of radiators, and means for regulating the rate of heat-delivery from said radiators comprising thermostatic means attached to the system at a point remote from the source of heat supply, means controlled by said thermostatic means for controlling the supplying of the heating medium to all of the radiators and means for adjusting said thermostatic means in accordance with the requirements for heat.

1,886,224. CONE CHUCK. JOSEPH M. REDINGER, Johnston, R. I. Filed Dec. 5, 1931. Serial No. 579,157. 9 Claims. (Cl. 279—52.)

9. In a chuck, a body having an opening in its front, axially movable tool gripping means in the body having a part of non-circular cross section, means in the body, removable through said opening thereof, for effecting axial movement of said gripping means, and a plate-like member removably attached to the body and disposed over said opening thereof to removably hold said operating means of the gripping means in the body and having an opening substantially corresponding in shape to that of the non-circular part of the gripping means to hold the latter against rotation while permitting said axial movement thereof.



1,886,225. REFRIGERATOR CAR. DAMIAN L. REYNOLDS, Hillsborough, Calif., assignor of one-half to Luther L. Yates, San Francisco, Calif. Filed May 13, 1929. Serial No. 362,674. 3 Claims. (Cl. 62—19.)



1. In a refrigerator car, means forming an ice bunker therein, means forming a storage space beneath the car, a pan having turned in edges in the bottom of the bunker, and means for draining the pan into the storage space.

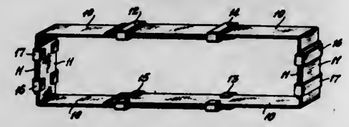
1,886,226. DIFFERENTIAL FOR AUTOMOBILES. ANDREW RIENERTH, Cleveland, Ohio. Filed Dec. 7, 1929. Serial No. 412,298. 2 Claims. (Cl. 74—7.)



1. A differential motion mechanism, comprising a rotatable cage having hub portions on opposite sides, a driving shaft for said cage, two separate driven shafts mounting said cage extending through said hub portions thereof, left and right-handed threads on the opposed ends of said driven shafts, a collar for each of said driven shafts screw-connected with the threaded end thereof and rotatable

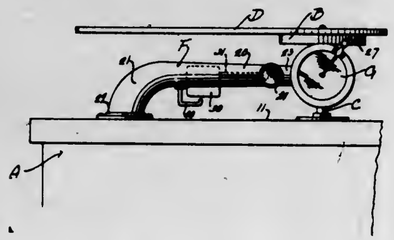
and axially shiftable with respect to said cage, an extension on each of said collars to rotatably mount said collar within one hub portion of said cage, locking means for said collars on said cage and means on said collars cooperating with said locking means to interlock said collars with said cage when axially shifted to predetermined positions and to permit continuous free rotation of one of said collars when said collars are shifted to other predetermined positions.

1,886,227. ADJUSTABLE LINEN BAND. MILTON RIESNER, Pelham Manor, N. Y. Filed Mar. 4, 1932. Serial No. 596,791. 3 Claims. (Cl. 24—17.)



1. A rigid linen band adjustable to varying sizes in both longitudinal and transverse directions comprising a plurality of L-shaped members arranged in a rectangle so that the long legs of each pair of two adjacent members overlap, forming the sides of the rectangle and the arms of said pairs of members overlap to form the ends of the rectangle, and means for retaining said legs and arms in overlapping relationship whereby said L-shaped members are slidably mounted with respect to each other to make a larger or a smaller rectangle.

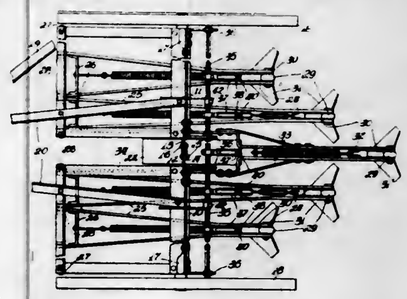
1,886,228. PHONOGRAPH. BEECHAM ROBERTS, Kobe, Japan. Filed Mar. 13, 1930. Serial No. 435,564. 6 Claims. (Cl. 274—9.)



1. In a phonograph the combination of a supporting frame, a turn table rotatably supported upon the frame, a tone arm swingably mounted upon the frame, and reproducing mechanism operatively mounted upon the tone arm, said tone arm and reproducing mechanism being so related to the turn table that when a record is operatively supported upon the turn table the reproducing mechanism will play on the lower face of the record with the latter having at all times all of the tone arm and reproducing details thereunderneath.

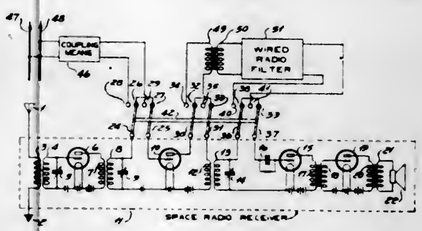
1,886,229. FIELD CULTIVATOR. CHARLES W. ROBINSON, Hamilton, Ontario, Canada, assignor, by mesne assignments, to International Harvester Company, Chicago, Ill., a Corporation of New Jersey. Filed Sept. 24, 1931. Serial No. 564,796. 13 Claims. (Cl. 97—176.)

1. A field implement comprising two frame sections, a hinge connecting said sections together side by side, supporting wheels mounted at the outer sides of said sections, a center wheel mounted directly under the hinge between the sections, draft means attached to said sections, a plu-



rality of spaced soil working elements mounted on each section, and a center element connected to one section and positioned directly behind the center wheel.

1,886,230. RADIO RECEIVING SYSTEM. CHARLES R. ROWE, Maplewood, N. J., assignor to Wired Radio, Inc., New York, N. Y., a Corporation of Delaware. Filed July 24, 1931. Serial No. 552,873. 3 Claims. (Cl. 179—2.5.)

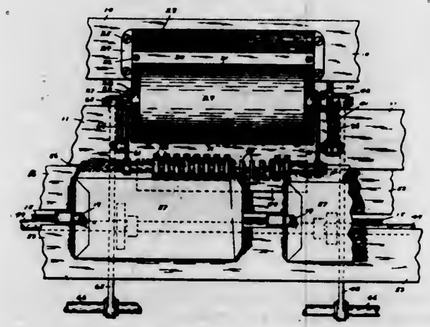


2. A radio receiving system comprising, a space radio energy collecting system for receiving space radio signals, a plurality of space discharge tubes for amplifying said signals at radio frequencies, a source of carrier frequency signals, means for connecting one of said space discharge tubes to said source of carrier frequency signals, a carrier frequency output circuit for said last mentioned space discharge tube, a radio frequency output circuit for said last mentioned space discharge tube, a demodulation and audible frequency system common to said output circuits, and means for rendering either of said output circuits effective for transfer of energy from said last mentioned space discharge tube to said demodulation and audible frequency system.

1,886,231. COATING DEVICE. GEORGE SAGUE, Oakes, N. Y., assignor to George Sague Mfg. Corp., a Corporation of New York. Filed Oct. 24, 1927. Serial No. 228,381. 1 Claim. (Cl. 93—61.)

A liquid coating device for envelopes and the like, comprising in combination with means for conveying a succession of envelopes through the device with their flaps open, a liquid stock tank located adjacent the path of travel of the envelopes and a supply drum mounted in said tank and adapted to be rotated in a direction at right angles to the direction of travel of the envelopes, of a comb-shaped plate mounted below the envelope flap and adapted to support the same while being coated, a transfer roller formed with a series of spaced grooves, means operated in timed relation to the movement of the

envelope for bringing said transfer roller, first into contact with the supply drum and then into contact with the flap of the envelope for applying the coating thereto,



and a stripper plate mounted on said tank in the path of travel of the transfer roller for the purpose of removing the excess coating liquid from the grooves thereof.

1,886,232. CELLULAR CONCRETE. ROLF KARL OSKAR SAHLBERG, New York, N. Y., assignor to The Aerocrete Corporation of America, New York, N. Y., a Corporation of Delaware. Filed June 29, 1929. Serial No. 374,960. 5 Claims. (Cl. 106—18.)

1. The method of making cellular concrete which comprises pulverizing a substantial portion of the sand used in the concrete mixture so that substantially all the pulverized portion passes through a 200 mesh screen, and causing the resultant mix to become porous.

1,886,233. TREATMENT OF DRIED FRUITS AND RAISINS. ARTHUR H. SANDERS, Fresno, Calif. Filed Dec. 1, 1928. Serial No. 323,205. 2 Claims. (Cl. 99—11.)

1. The method of treating dried fruits and raisins comprising submerging the same in boiling water to which cocoanut oil has been added, then withdrawing the same from the water, puncturing the same to cause the oil to be impregnated therein, then subjecting the same to heat and then cooling the same.

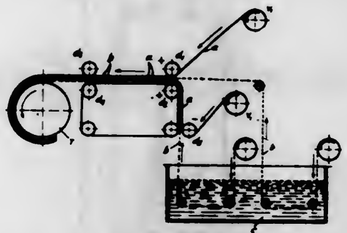
1,886,234. METHOD OF MAKING HIGH GRADE DIELECTRIC MATERIALS. ALEXANDER MEISSNER, Berlin, Germany, assignor to Telefunken Gesellschaft für Drahtlose Telegraphie m. b. H., Berlin, Germany, a Corporation of Germany. Filed Nov. 19, 1928, Serial No. 320,549, and in Germany Dec. 21, 1927. 3 Claims. (Cl. 252—1.)

1. A synthetic piezo-electric crystal, composed of powder like dielectric particles, the electrical axes of which are orientated in similar sense.

1,886,235. METHOD OF STABILIZING NONCRYSTALLINE PIEZO-ELECTRIC MICROPHONE DIAPHRAGMS. ALEXANDER MEISSNER, Berlin, Germany, assignor to Telefunken Gesellschaft für Drahtlose Telegraphie m. b. H., Berlin, Germany, a Corporation of Germany. Filed Sept. 10, 1929, Serial No. 391,585, and in Germany Aug. 1, 1928. 9 Claims. (Cl. 252—1.)

1. A piezo-electric element comprising a body of the class of materials including resins, waxes, asphaltum and electret.

1,886,236. METHOD OF MAKING WOUND (ROLL) CONDENSERS OF GREATER BREAKDOWN STRENGTH. ALEXANDER MEISSNER, Berlin, Germany, assignor to Telefunken Gesellschaft für Drahtlose Telegraphie m. b. H., Berlin, Germany, a Corporation of Germany. Filed July 16, 1930, Serial No. 468,351, and in Germany July 25, 1929. 3 Claims. (Cl. 175—41.)

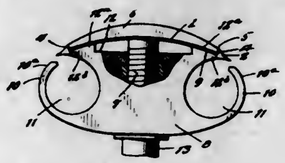


1. An electrical condenser body comprising layers of conducting material and dielectric material, said dielectric material being impregnated with a dielectric substance having its molecular structure aligned by the action of an electric field.

1,886,237. PRODUCTION OF BENZOYL-O-BENZOIC ACID DERIVATIVES AND ANTHRAQUINONE BODIES THEREFROM. DONALD G. ROGERS, Hamburg, and JAMES OGILVIE and JOYCE H. CROWELL, Buffalo, N. Y., assignors to National Aniline & Chemical Company, Inc., New York, N. Y., a Corporation of New York. Filed June 22, 1928. Serial No. 287,640. 21 Claims. (Cl. 260—58.)

1. In the production of quinizarine, the improvement which comprises condensing 4-chlorphenol with phthalic anhydride in the presence of anhydrous aluminum chloride to produce a composite product comprised of 5'-chlor-2'-hydroxybenzoyl-o-benzoic acid and 4-calor-1-hydroxyanthraquinone, and subjecting said composite product to ring closure and hydrolysis to produce quinizarine.

1,886,238. RAZOR BLADE AND HOLDER THEREFOR. JOHN T. SCULLY, New York, N. Y. Filed Apr. 14, 1930. Serial No. 444,026. 12 Claims. (Cl. 30—12.)

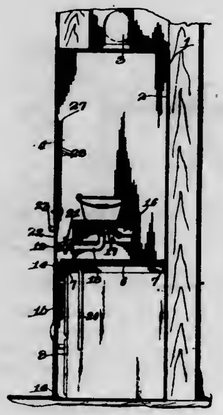


1. A double edge razor blade including for the greater part of its width a transversely flexible middle body portion, outwardly and oppositely disposed cutting end portions extending from said flexible middle portion, each cutting end defined at an outer end by a cutting edge and at its inner end by juts projecting from the plane of the flexible middle body portion, said cutting end portion being pronouncedly narrow in width.

1,886,239. STOVE. SIGMOND G. WEILER, Milwaukee, Wis. Filed Aug. 23, 1930. Serial No. 477,411. 1 Claim. (Cl. 126—37.)

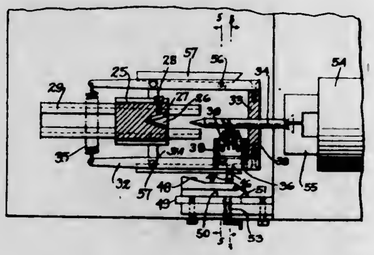
The combination with the wall of a room of substantially ordinary thickness having a recess therein and a

flue, of a fireproof cooking equipment including a completely closed rigid metallic casing of the same size as the recess and snugly fitted therein, said casing having its outer face flush with one face of the wall, a row of cooking burners in the casing arranged in longitudinal



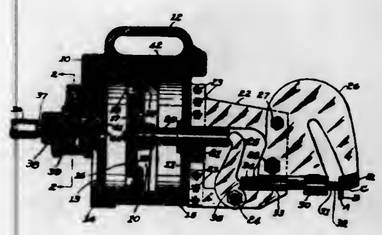
alignment whereby to reduce the width of the casing, so that the casing can be used in the wall of substantially ordinary thickness, and an outlet flue communicating with the upper end of the casing and the flue in the wall, said casing having its outer face provided with entrance doors adapted to enclose the cooking burners.

1,886,240. SCREW CUTTING TOOL. JOHN A. ARENZ, Mount Vernon, N. Y., assignor to International Screw Co., Wilmington, Del., a Corporation of Delaware. Filed Oct. 18, 1929, Serial No. 400,676, and in Canada Sept. 6, 1928. 2 Claims. (Cl. 10—101.)



1. A screw pointing and threading machine comprising in combination a movable slide, a cam for reciprocating said slide in a feed and return movement, a tool holder carried at one side of said slide and having an extension, a guide cam having a feed path and a return surface along both of which the extension moves, means for forcing the extension off the feed surface at the end thereof and on to said return surface and a yieldable latch gate at the end of said return surface through which the extension passes for shunting the extension on to said feed path upon a feed movement of said slide, and a plurality of threading tools carried in said tool holder and arranged to cut one thread at a time of a double threaded screw blank during a feed movement of said slide.

1,886,241. PNEUMATIC RIVET SQUEEZER. MEARL J. CHAPMAN, Cleveland Heights, Ohio, assignor, by mesne assignments, to Chicago Pneumatic Tool Company, New York, N. Y., a Corporation of New Jersey. Filed Nov. 7, 1927. Serial No. 231,415. 1 Claim. (Cl. 78—38.)

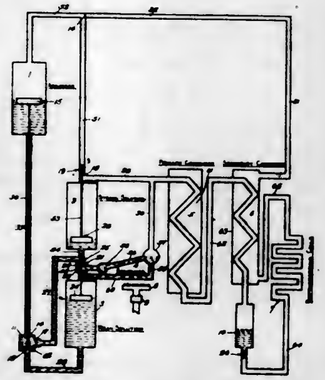


In a rivet squeezer, a body forming a motor and having a plunger projecting therefrom adapted to reciprocate in a straight line, an extension on said body substantially in line with said plunger, a riveting tool slidably supported by said extension, a lever pivotally mounted on said extension for transmitting movement of said plunger to said tool, a spring connected to a portion of said tool and arranged to maintain the latter in engagement with said lever and said lever in engagement with said plunger, and a yoke member secured to said extension and supporting an abutment in line with said tool.

1,886,242. COMPOSITIONS CONTAINING A SYNTHETIC RESIN OR BALSAM. CARLETON ELLIS, Montclair, N. J., assignor to Ellis-Foster Company, a Corporation of New Jersey. Filed Dec. 2, 1927. Serial No. 237,340. 3 Claims. (Cl. 134—26.)

1. A coating composition comprising a benzoic polyhydric alcohol resin complex having an acid number below 30.

1,886,243. ABSORPTION REFRIGERATION APPARATUS. DAVID L. GORDON, Pittsburgh, Pa. Filed Oct. 22, 1927. Serial No. 227,919. 13 Claims. (Cl. 62—5.)



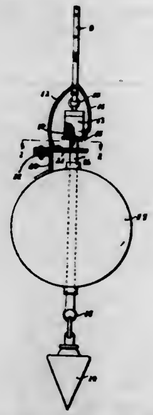
1. In a refrigeration apparatus of the absorption type, including a generator for supplying a refrigerant under pressure, an absorber adapted to receive a medium capable of absorbing said refrigerant, a tank located above said generator adapted to contain a liquid rich in the refrigerant, a tank located below said generator and adapted to receive from said generator an absorptive liquid from which the refrigerant has been largely expelled, and means operated by the pressure of said refrigerant for forcing the absorptive liquid from said tank receiving liquid from the generator, into said absorber.

1,886,244. MULTIPLE PLY TEXTILE FABRIC. SYDNEY BERTHAM HAINSWORTH, Kingston-upon-Hull, England, assignor to J. H. Fenner & Company, Ltd., Kingston-upon-Hull, England. Filed May 6, 1930, Serial No. 450,232, and in Great Britain May 8, 1929. 4 Claims. (Cl. 139—408.)



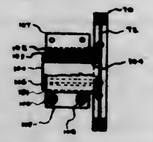
1. A woven multiple ply textile fabric for use as a power transmission, conveyor or like belt, in which portions of the warp on at least one face thereof are brought to the surface to form closed areas enclosing spaces where all the warp is taken below the surface to form a series of spaced suction pockets.

1,886,245. AEROPLANE SIGNAL. MILOS KRAJAC, Detroit, Mich. Filed Oct. 17, 1927. Serial No. 226,548. 2 Claims. (Cl. 200—84.)



1. A make and break mechanism of the class described, comprising: a supporting member; a contact member carried by said supporting member; a rod extending downwardly from said supporting member; a weight on the end of said rod; a float slidably mounted on said rod; and a contact carried by said float adapted, upon upward movement of said float on said rod a predetermined distance, for engaging said contact.

1,886,246. HARMONIC ANTIVIBRATOR. ALEXANDER J. BOCZ, Detroit, Mich. Filed July 30, 1927. Serial No. 209,460. 3 Claims. (Cl. 74—6.)



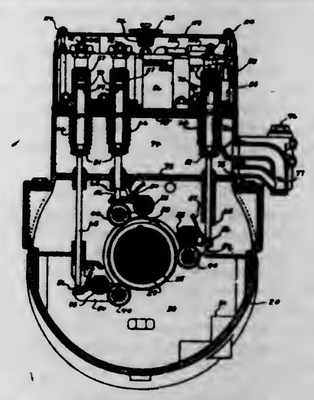
3. A vibration damper for a shaft comprising a sleeve member adapted to be secured to said shaft, resilient means mounted on said sleeve member, a flywheel structure comprising an inertia ring, a flexible web attached to said ring and means having its sole support on said resilient means for supporting said web.

1,886,247. CABLE SPLICE. ELMER K. COLE, Winterset, Iowa. Filed Dec. 15, 1930. Serial No. 502,425. 1 Claim. (Cl. 24—126.)



A cable splice especially designed for use in connection with a cable having a central strand composed of a number of wires twisted together and a series of outer strands each composed of a number of wires twisted together and comprising in combination a cable splice body portion formed with a tapered opening to receive the cable, the interior of the body portion being formed with longitudinally arranged grooves to receive the outer cable strands, and a tapered cylindrical wedge made of malleable metal and of such thickness at its small end that when it is forced into position surrounding a central cable strand and engaging the interior surfaces of the outer cable strands it will become formed with longitudinally arranged helical grooves fitting the adjacent contours of the wires composing the central cable strand and also the adjacent surfaces of the wires composing the outer cable strands to thereby uniformly distribute the clamping strains upon all of the adjacent surfaces of the inner and outer strands of the cable.

1,886 248. FUEL SUPPLY AND INJECTION MEANS. MORRIS J. GOLDBERG, Beloit, Wis., assignor to Fairbanks, Morse & Co., Chicago, Ill., a Corporation of Illinois. Original application filed Apr. 19, 1926, Serial No. 103,034, Patent No. 1,836,236, dated Dec. 15, 1931. Divided and this application filed July 1, 1927. Serial No. 202,956. 20 Claims. (Cl. 123—139.)

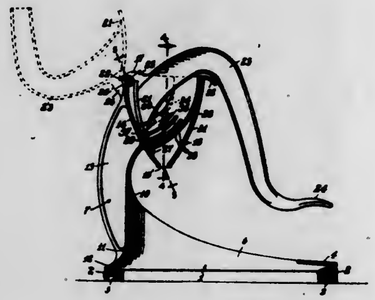


1. In combination within a housing about a shaft of an internal combustion engine, means forming with said housing an oiling compartment, a fuel reservoir disposed above and spaced from the oiling compartment, an injection pump, an injection pump valve and operating means for said pump and valve, a fuel supply pump and operating means therefor, said pumps and injection valve being disposed within and substantially enclosed by the fuel reservoir, and said operating means extending below the fuel reservoir, into said oiling compartment, and into driven relation with said shaft.

1,886,249. MOLD FOR HIGH TEMPERATURE CASTINGS. LE RUE P. BENSING, Lebanon, Pa., assignor to Lebanon Steel Foundry, Lebanon, Pa., a Corporation of Pennsylvania. Filed Oct. 4, 1930. Serial No. 486,520. 2 Claims. (Cl. 22—188.)

1. A mold for castings in which the metal contacting surfaces are formed substantially of zircon and a binder.

1,886,250. JUICE EXTRACTOR. GEORGE W. BUNGAY, Plainfield, N. J., assignor, by mesne assignments, to Bungay-Wolf Corporation, New York, N. Y., a Corporation of New York. Filed Dec. 2, 1931. Serial No. 578,436. 18 Claims. (Cl. 100—41.)



1. A juice extractor comprising a bowl, a presser plate pivoted adjacent the bowl and adapted to be swung on its pivot to press fruit against one side of the bowl, and a strainer plate removably seated in the bowl adjacent and conforming to the path of travel of the presser plate throughout the major portion of its travel in the bowl.

1,886,251. MAGNESIUM-MANGANESE-ZINC ALLOYS. JOHN A. GANN, Midland, Mich., assignor to The Dow Chemical Company, Midland, Mich., a Corporation of Michigan. Filed Nov. 20, 1930. Serial No. 497,077. 6 Claims. (Cl. 75—1.)

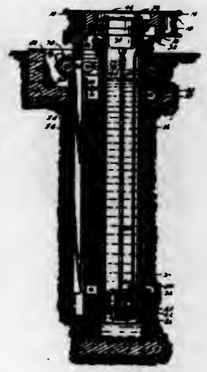
1. As a new product, an alloy containing magnesium, manganese, and zinc, wherein the manganese is present in amount from 0.1 to 3.0 per cent, zinc in amount from 1.5 to 16.0 per cent, the balance being substantially magnesium.

1,886,252. CASTING FREELY OXIDIZABLE METAL. JOHN A. GANN and MANLEY E. BROOKS, Midland, Mich., assignors to The Dow Chemical Company, Midland, Mich., a Corporation of Michigan. Filed July 30, 1931. Serial No. 554,148. 20 Claims. (Cl. 22—188.)

1. The process of casting a freely oxidizable metal which consists in forming a mold from pulverized carbon, a plasticizer and an oxidation inhibitor rendered moldable by the addition of water, and casting said metal in said mold.

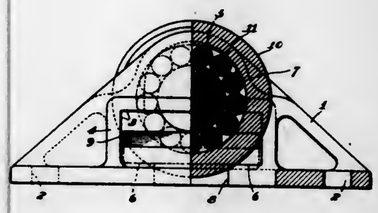
1,886,253. MULTIPLE PLUNGER LIFT. LOUIS C. STUKENBORG, Memphis, Tenn., assignor to Standard Lift Company, Memphis, Tenn., a Corporation of Delaware. Filed Feb. 24, 1930. Serial No. 430,585. 2 Claims. (Cl. 254—93.)

1. In a multiple plunger lift, a plurality of cylinders and a plurality of plungers constituting lift devices, a vehicle support to be lifted by all of said devices and an operative connection between said plungers for synchronizing their lifting motion regardless of the weight distribution on the vehicle support, said operative connection comprising a bracket supported on each cylinder, an equalizer shaft journalled in said brackets, a rack bar movable with each



plunger and each adjacent one of said brackets and an equalizer pinion meshing with each rack bar and connected with said equalizer shaft.

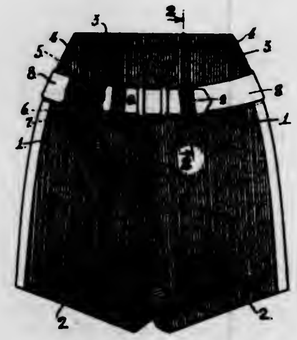
1,886,254. SIDE ROLLER BEARING. FRANKLIN T. REESE, Pittsburgh, Pa., assignor, by mesne assignments, to Continental Roll & Steel Foundry Company, Wilmington, Del., a Corporation of Delaware. Filed Aug. 21, 1928. Serial No. 301,019. 5 Claims. (Cl. 308—226.)



1. A side roller bearing comprising an integral base, a roller mounted for rolling movement therein and bearing plates disposed in said base, said base being provided with slotted openings through which the bearing plates are inserted and off-set shoulder portions in which the bearing plates are retained by contacting with the sides of the roller itself when in assembled position.

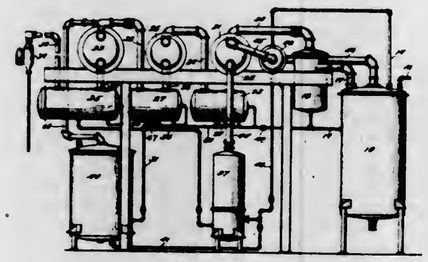
1,886,255. SWIMMING AND SUN BATHING TRUNKS. THEODORE R. UPLAND, Burlingame, Calif., assignor to Gantner & Mattern Company, San Francisco, Calif., a Corporation of California. Filed Jan. 18, 1932. Serial No. 587,221. 3 Claims. (Cl. 2—224.)

3. A bathing garment having an abbreviated trunk portion with its upper edge terminating at the waist line, and a body portion extending above the waist line to cover the umbilical and renal portions of the body of the wearer, said body portions being formed of a double thickness of elastic self-supporting material folded upon itself and



snugly engaging the body of the wearer above the waist line, and belt engaging means arranged around the waist line.

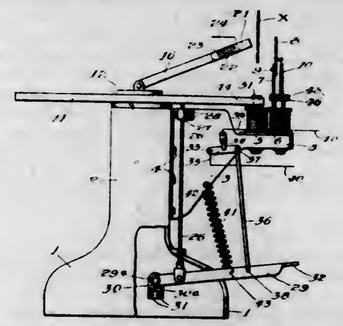
1,886,256. PROCESS OF AND APPARATUS FOR DISTILLING LIQUIDS. OSCAR H. WURSTER, Chicago, Ill. Filed Feb. 13, 1928. Serial No. 253,826. 9 Claims. (Cl. 202—47.)



1. A process of distilling liquids under vacuum and in an atmosphere of steam which comprises the injection of superheated steam into the liquid to be distilled, condensing the mixture of steam and vapor from the distilling liquid, evaporating a fraction of said condensate under vacuum and preheating the vapor therefrom by the vapors from the distilling liquid, and superheating said preheated vapors by high temperature and pressure steam to form the said superheated steam injected into the liquid to be distilled, said condensate being evaporated by the said high pressure steam after being used to superheat the said preheated vapors.

1,886,257. TYPE BAR SOLDERING MACHINE. ODILON BRISBOIS, Gary, Ind., assignor of one-fourth to Charles Turner Brown, Chicago, Ill., and one-half to Joseph Weidenhoff. Continuation of application Serial No. 363,367, filed May 15, 1929. This application filed Nov. 30, 1931. Serial No. 577,982. 16 Claims. (Cl. 219—12.)

1. In a type bar soldering machine, in combination, a base, a disk rotatably mounted on said base, means to determine the angular position of said disk, matrices on said disk, a table in determined spaced relation to said disk, means to hold a plate provided with type bars mounted



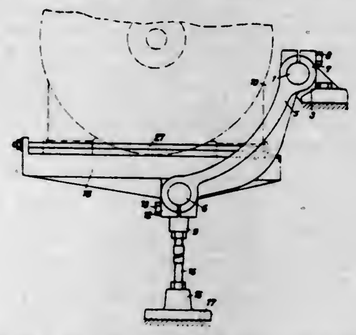
thereon in determined relation with type characters in said matrices and means to solder a determined type bar and a type character in a determined matrix together.

1,886,258. RULING-PEN. HEINRICH HAFF, Pfronten-Ried, Germany, assignor to the Firm Gebruder Haff G. m. b. H., Pfronten-Ried, Bavaria, Germany. Filed Feb. 24, 1930, Serial No. 430,885, and in Germany Dec. 6, 1928. 2 Claims. (Cl. 120—109.5.)



1. A ruling pen comprising two adjacent arms of rust resisting and resilient material secured together, means to resiliently flex the arms towards and away from each other to adjust the separation of the points, and points of high speed steel having hard wear resisting qualities secured to the ends of the arms, the points having straight adjacent surfaces and sharp ruling edges at their ends.

1,886,259. BRACKET FOR ELECTRIC MOTORS. KARL RICHARD LIEBERKNECHT, Oberlungwitz, Germany. Filed Apr. 17, 1930, Serial No. 445,122, and in Germany Feb. 26, 1929. 1 Claim. (Cl. 248—15.)



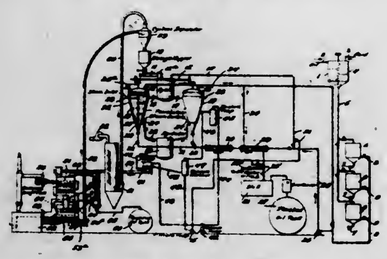
On a flat hosiery frame a new supporting arrangement for connecting electric motors to the knitting machine in such a manner that they are adjustable in the case of mo-

tors of different sizes so that their axles are always in the same position, comprising in combination with bearings of the flat hosiery frame, an axle arranged in said bearings, clamping bosses of said bearings adapted to fix said axle, arms fixably arranged on said axle, clamping bosses on the free ends of said arms, a second axle journaled in said clamping bosses and shiftable therein, supporting and connecting parts for the motors adjustably and fixably arranged on said second axle adapted to allow said clamping bosses to be shifted individually and also all together to allow said bosses to turn or move laterally individually and in common and also with said arms and said connecting parts for the motor, and a vertically adjustable carrying support adapted to relieve the entire supporting device.

1,886,260. METHOD OF REFINING LIQUID HYDROCARBONS. ERNEST B. MILLER, Baltimore, Md., assignor to The Silica Gel Corporation, Baltimore, Md., a Corporation of Maryland. Filed Mar. 3, 1925, Serial No. 12,996. Renewed Apr. 8, 1932. 11 Claims. (Cl. 196—147.)

4. In the method of refining liquid hydrocarbon distillates the step of treating the liquid with a hard porous gel impregnated with a slight amount of acid.

1,886,261. METHOD OF REFINING LIQUID HYDROCARBONS. ERNEST B. MILLER and GERALD C. CONNOLLY, Baltimore, Md., assignors to The Silica Gel Corporation, Baltimore, Md., a Corporation of Maryland. Filed June 17, 1931, Serial No. 545,099, and in Russia Mar. 22, 1926. 52 Claims. (Cl. 196—40.)



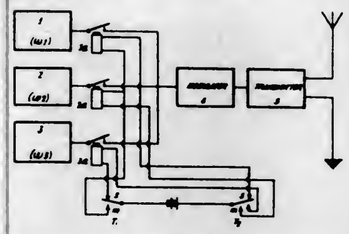
14. The method of refining light hydrocarbons, comprising treating said hydrocarbon with a suitable reagent in such quantity as will polymerize a portion only of gum forming constituents in said hydrocarbon, contacting said treated hydrocarbon with silica gel at an elevated temperature of at least 150° F. in the liquid phase and separating the hydrocarbon from the reaction products and other impurities contained therein.

23. The method of refining light hydrocarbons comprising treating the hydrocarbon with from 0.1% to 0.5% of strong sulphuric acid, removing the resulting sludge, treating the hydrocarbon with a hard, porous gel in an amount less than about 4% of the hydrocarbon said latter treatment accomplishing polymerization of remaining gum-forming constituents and distilling the hydrocarbon from the reaction products.

1,886,262. DISTILLATION OF CARBONACEOUS MATERIALS. HARALD NIELSEN, Bromley, and BRYAN LAING, Petty France, Westminster, England. Original application filed Nov. 21, 1927, Serial No. 234,904, and in Great Britain Dec. 4, 1926. Divided and this application filed Apr. 19, 1929. Serial No. 356,599. 1 Claim. (Cl. 196—151.)

An oil of a lubricating character obtained from tar oils derived from coal having a specific gravity ranging from 0.95 to 1.08 at from 12° C. to 18° C., and a static co-efficient of friction of from 0.1 up to 0.85.

1,886,263. MULTIPLEX COMMUNICATION SYSTEM. WALDEMAR ILBERG, Berlin, Germany, assignor to Telefunken Gesellschaft fur Drahtlose Telegraphie m. b. H., Berlin, Germany, a Corporation of Germany. Filed Jan. 7, 1931, Serial No. 507,065, and in Germany Jan. 3, 1930. 13 Claims. (Cl. 178—51.)



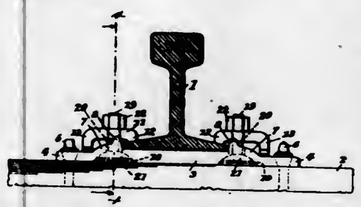
1. A multiplex telegraphy system comprising a keying means for each channel in the multiplex system, each of said keying means having a marking and spacing position, an energy transmitter, and means coordinated with said keying means for separately modulating said energy transmitter by a plurality of modulation frequencies corresponding in number to the possible combinations of simultaneous operating conditions of the keying means for the several channels.

1,886,264. ELECTRON TUBE. KARL POHLHAUSEN, Berlin-Halensee, Germany, assignor to Siemens-Schuckertwerke Aktiengesellschaft, Berlin-Siemensstadt, Germany, a Corporation of Germany. Filed May 15, 1929, Serial No. 363,157, and in Germany May 12, 1928. 4 Claims. (Cl. 250—27.5.)



1. An electron tube having an anode and a thermionic cathode mounted within said anode, said cathode consisting of a plurality of substantially parallel filaments, and a plurality of mechanically resistive auxiliary electrodes mounted in parallel to said filaments and at the corners of a polygon which includes said filaments, some of the polygon sides including each at least one of the said filaments, whereby each of said filaments included in a polygon side is shielded by two of said electrodes in a direction co-planar with the polygon side against the electro-static forces exerted by the anode.

1,886,265. RAIL FASTENING. BORIS PAVLOVICH ANDREIANOV, Moscow, Union of Socialist Soviet Republics. Filed Oct. 20, 1931, Serial No. 570,023, and in the Union of Socialist Soviet Republics June 16, 1930. 11 Claims. (Cl. 238—304.)



1. In a rail holder, a tie plate formed in spaced relation to its ends with shoulders projecting upwardly and defining a rail seat between the shoulders, openings being formed through the shoulders intermediate their ends and communicating with recesses formed in the under face of the plate, clamps extending across said shoulders and having inner and outer flanges to bear against a rail base

and end portions of the plate, and fasteners passed through the clamps and openings in the shoulders and having heads at their lower ends seated in said recesses and movable therein whereby the clamps may have rocking motion upon the plate without slipping out of engagement with a rail.

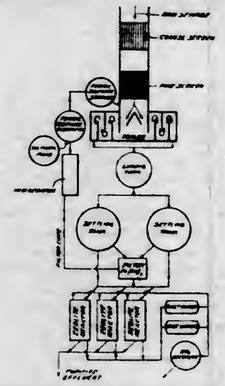
1,886,266. PHOTOGRAPHIC FILM PICTURE AND PROCESS OF PRODUCING THE SAME. OSKAR BORNHAUSER, Frankfort-on-the-Main, Germany. Filed Sept. 10, 1928, Serial No. 305,066, and in Germany Oct. 3, 1926. 10 Claims. (Cl. 88—16.)



1. In a photographic negative, the combination of a negative having the usual characteristics of a photographic negative in which the fine lines and tracings of the object image are present, and a photographic mask in superposed and registered position with said negative and in which the silhouette outline only of the object image corresponding to the first negative is present, said silhouette outline being larger than said object image.

9. The process of producing a photographic negative, which comprises taking a negative of the desired object in such manner that details of the object are present on the negative object image, printing from said negative on to a silvered and chromatized film to produce a positive copy of said negative, treating said positive to provide a photographic mask by dissolving unexposed parts and slightly reducing exposed parts of said positive to thereby provide a transparent silhouette of said image homologous to but slightly larger than the image of said negative and suitably treating said positive to provide a darkened field exterior to said silhouette, and aligning such mask in proper registered position with the said negative so that the homologous images thereof are in register.

1,886,267. TREATING SEWAGE. GEORGE H. GLEASON, Montclair, N. J., and ALFRED C. LOONAM, Brooklyn, N. Y., assignors to Guggenheim Brothers, New York, N. Y., a Copartnership. Filed May 7, 1932. Serial No. 609,968. 14 Claims. (Cl. 210—2.)



1. The method of treating sewage which comprises removing putrescible matter suspended in the sewage by precipitating a metal hydroxide within a body of the sewage and separating the resulting precipitate therefrom, and then removing putrescible matter in solution in the residual sewage by treatment with an agent in the nature of a base-exchange zeolite.

1,886,268. METHOD FOR PRODUCING REFRACTORY BODIES. ARTHUR SPRENGER, Berlin-Karlshorst, Germany. Filed July 6, 1931, Serial No. 549,124, and in Germany Oct. 10, 1927. 7 Claims. (Cl. 25—156.)

1. A method of producing refractory bodies, such as stones, blocks, plates and the like, from masses produced in the smelting process, consisting in admixing to molten masses, containing as main constituents magnesia and alumina, in granulated state, small quantities of chromium-iron-magnesia compounds in fine condition, moulding the mixture and burning the bodies.

1,886,269. COMPOSITION FOR BATTERY BOXES. RUFUS N. CHAMBERLAIN, Chicago, Ill., assignor, by mesne assignments, to American Container Corporation, St. Paul, Minn., a Corporation of Delaware. Filed Dec. 6, 1927. Serial No. 238,239. 6 Claims. (Cl. 106—2.)

3. The steps in the method of making a moldable mixture of bitumens and vegetable fiber comprising: reducing low melting point bitumens to a substantially fluid state and adding vegetable fiber therein at such low temperature as will not materially weaken said fiber, melting higher melting point bitumen at such higher temperature as would weaken said fiber if it were present therein, and then intermixing the fiber-impregnating bitumen with said higher melting point bitumen whereby the fiber is protected to a substantial degree by being first coated with bitumen at a lower temperature.

4. The process of producing an asphalt composition which comprises placing together hard blown asphalt and gilsonite and diatomaceous earth and mixing the same in the presence of heat sufficient to melt the asphalts for completely coating the particles of diatomaceous earth with the asphalts, adding vegetable fiber to the mixture, and continuing the mixing until homogeneity of the three ingredients is attained.

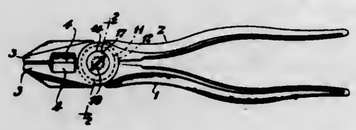
1,886,270. TIRE COVER. CLARENCE M. ELLENBERGER, Indianapolis, Ind., assignor to Lyon Cover Company, Detroit, Mich., a Corporation of Michigan. Filed Sept. 19, 1927. Serial No. 220,411. 13 Claims. (Cl. 150—54.)



13. A metallic spare tire cover having a metallic outer side portion for disposition over an outer side wall of the tire, and a metallic tread covering portion for disposition over the tread of the tire having its inner edge of a normally larger diameter than that of the outermost periphery of the tire and leaving the inner side wall of the tire exposed and provided to the rear of the median plane of the tire with resilient cover retaining means extending over the rear side of the tire tread and

cooperating with said tread portion to draw the outer side covering portion toward the tire and so as to enable the cover to accommodate variations in size and contour of the tire and to hold the cover in retaining engagement with the tire.

1,886,271. PLIERS. WILLIAM E. HOKE, Baltimore, Md., and ROBERT THOMSON, Newark, N. J., assignors to Dardelet Threadlock Corporation, New York, N. Y., a Corporation of Delaware. Filed Dec. 26, 1930. Serial No. 504,812. 6 Claims. (Cl. 81—51.)



1. A tool of the character described comprising a pair of pivoted members having portions disposed face to face and having registering pivot apertures; a pivot in said apertures; opposed, contacting bearing surfaces on said opposed faces surrounding said apertures and radially spaced therefrom, said opposed faces having registering depressions extending between said bearing surfaces and the pivot apertures, with inwardly converging bottom walls and cooperating to form a recess tapering radially inward in cross section, surrounding the apertures and communicating with them therearound; and a lubricant-containing packing confined in said recess and held radially spaced from the pivot by said converging walls, for supplying lubricant to the pivot and to said bearing surfaces.

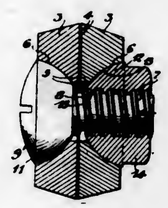
1,886,272. PLIERS. ROBERT THOMSON, Arlington, N. J., assignor to Dardelet Threadlock Corporation, New York, N. Y., a Corporation of Delaware. Filed Apr. 17, 1931, Serial No. 530,803. Renewed Aug. 6, 1932. 11 Claims. (Cl. 81—51.)



10. A pivotal connection comprising a pair of pivoted members having pivoted portions formed with registering pivot apertures and having concave, spherical pivot head seats at the outer faces thereof; a pivot extending through said apertures and having heads formed with opposed inner, convex, spherical faces fitted in said concave seats for universal rotation, the pivot being tiltable to accommodate itself to want of alinement of the seats; and reaction means carried by the pivoted members independently of the pivot and radially spaced therefrom to limit relative lateral displacement of the pivoted portions and prevent strain upon the pivot.

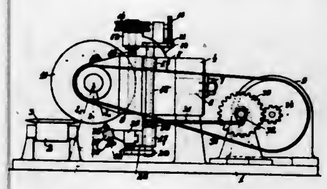
1,886,273. SHEARS. ROBERT THOMSON, Arlington, N. J., assignor to Dardelet Threadlock Corporation, New York, N. Y., a Corporation of Delaware. Filed June 24, 1931. Serial No. 546,508. 5 Claims. (Cl. 30—13.)

1. A pair of shears comprising blade and handle members pivoted together with the blades in overlapped relation when closed and shiftable to place their cutting edges in crossed relation, the pivotal portions of said members having registering pivot apertures, and concave spherical pivot head seats at their outer faces each blade having a longitudinally extending cutting edge and said cutting edges being adapted to wipe across each other progressively as said blades are moved from open position into closed overlapping relation, and a pivot comprising a bolt having a threaded shank inserted through said registering apertures and a head having a convex, spherical inner face fitted for universal rotation in one



of said concave seats, and a nut screwed upon the bolt shank and having a convex, spherical inner face fitted for universal rotation in the other concave seat, the pivot being universally tiltable by rotation of said convex faces in the seats, and the pivoted portions being freely shiftable transversely of the pivot relatively to each other upon shearing resistance of work between the blades to tilt and foreshorten the pivot and thereby cause the pivot to draw them close together for effective shearing coaction of the blades.

1,886,274. GRINDING APPARATUS. FOLKE KYLBERG, Gottenborg, Sweden, assignor to Aktiebolaget Tonsor, Gottenborg, Sweden, a Joint-Stock Company of Sweden. Filed July 7, 1930, Serial No. 466,229, and in Sweden Dec. 7, 1928. 5 Claims. (Cl. 51—74.)



1. A grinding machine for the working of edges of work pieces, comprising a rotary grinding disc, means for rotating said disc about an axis situated substantially in a plane extending through the edge to be worked, a truing device including a diamond, means for reciprocating said truing device transversely across the peripheral portion of said grinding disc, a guideway for said truing device, and means for feeding the grinding disc towards the work piece and the diamond by advancing the axis of the grinding disc in a plane located substantially midway between the worked edge of the work piece and the path of movement of the diamond, the rate of feed of the grinding disc being not less than the rate of natural wear of the disc against the work piece.

1,886,275. METHOD OF JOINING PIPE ENDS. BERNHARDT NELL, Dusseldorf, Germany, assignor to the Firm Vereinigte Stahlwerke Aktiengesellschaft, Dusseldorf, Germany. Filed Mar. 31, 1930, Serial No. 440,491, and in Germany May 2, 1925. 1 Claim. (Cl. 285—111.)

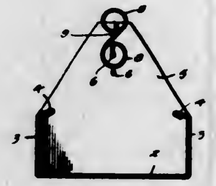
A pipe joint comprising inner and outer pipes, an exterior enlargement on the end portion of the inner pipe

presenting two conical surfaces arranged base to base, the outer pipe being positioned over the enlargement of the inner pipe and bearing tightly against both conical



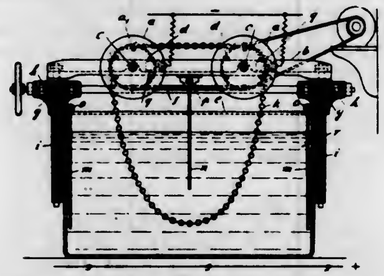
surfaces of the enlargement, the edge of the outer pipe end being welded directly to the enlargement of the inner pipe.

1,886,276. CHICKEN FEEDER. RALPH L. WIDNEY, La Harpe, Ill. Filed June 22, 1929. Serial No. 373,007. 11 Claims. (Cl. 119—61.)



1. A poultry feed trough having opposed upstanding end walls, and an oscillatable guard bar mounted therebetween, said bar having the lower portion thereof of cylindrical design.

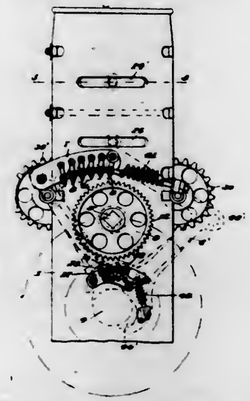
1,886,277. METHOD AND APPARATUS FOR GALVANIZING FANCY CHAINS AND THE LIKE. ALFRED WINKLER, Pforzheim, Germany. Filed Apr. 17, 1930, Serial No. 445,185, and in Germany Apr. 26, 1929. 2 Claims. (Cl. 204—5.)



2. An apparatus for galvanizing fancy chains, comprising in combination with a bath, a bridge arranged on said bath, parallel axles journalled on both sides of said bridge over said galvanic bath, pairs of non-circular reels carrying the chains in closed endless strands mounted on said axles adapted to be driven in the same direction to draw said chains through the bath and impart a shaking movement to same during their passage through the bath, and insulated sliding contacts connected with the plus pole fastened on said bridge adapted to pass current through said bath.

1,886,278. AUTOMATIC SAFETY LANDING REVERSING PROPELLER. RICHARD C. WILSON, Miami, Fla. Filed Feb. 12, 1931. Serial No. 515,829. 11 Claims. (Cl. 170—163.)

1. An airplane propeller having a hub, a main shaft to which the hub is rigidly secured, a plurality of sleeves rotatably fitted within said hub, a pivoted and adjustable link member carried at the inner side of the hub, said link having an upper and a lower toothed rack secured



thereto means disposed within the hub and meshing with externally disposed means coacting with said racks and teeth for reversing the propeller blades with said sleeves.

1,886,279. LASTING MACHINE. REGINALD BOYD WOODCOCK and HAROLD LANE, Leicester, England, assignors to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Nov. 16, 1931, Serial No. 575,306, and in Great Britain Dec. 9, 1930. 23 Claims. (Cl. 12—4.)

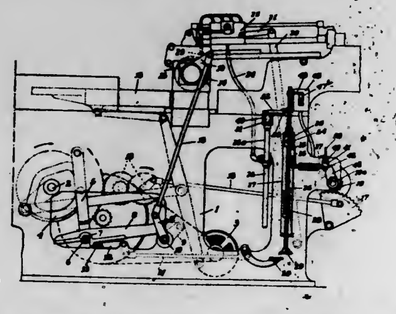


1. In an end-lasting machine, the combination with wipers for wiping the marginal portion of an upper into lasted position about an end of a shoe, of upper-fastening means comprising a plurality of tack drivers movable in directions substantially perpendicular to the plane of the wipers to drive tacks through the upper into the shoe bottom, said upper-fastening means including mechanism for suspending the tacks by their heads in such positions as to incline their shank portions inwardly away from the edge of the shoe bottom in angular relation to the paths of movement of the drivers preparatory to the tack-driving operation.

1,886,280. ULTRA VIOLET RAY TRANSMITTING GLASS AND TO A BATCH AND METHOD FOR MAKING THE SAME. FRED M. LOCKE and FRED J. LOCKE, Victor, N. Y.; Mercie P. Locke, administratrix of said Fred M. and Fred J. Locke, deceased, assignor to Corning Glass Works, Corning, N. Y., a Corporation of New York. Continuation of application Serial No. 101,825, filed Apr. 13, 1926. This application filed Jan. 17, 1927. Serial No. 161,704. 10 Claims. (Cl. 106—36.1.)

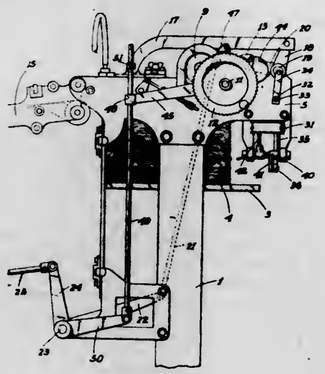
10. The hereinbefore described method of producing a colorless glass having high ultra-violet transmission which comprises melting a fluorine containing batch in a carboniferous container.

1,886,281. AUTOMATIC TRIP MECHANISM FOR PRINTING PRESSES. CHARLES L. LOW, Fresno, Calif., assignor to Lisenby Manufacturing Company, Fresno, Calif., a Corporation. Filed Nov. 22, 1929. Serial No. 408,986. 7 Claims. (Cl. 101—284.)



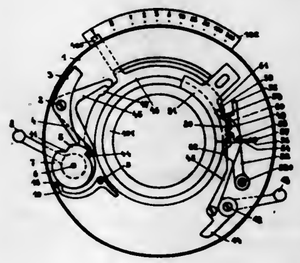
1. In a printing press having a printing cylinder, means for depressing the cylinder, an electric motor for driving said means, a switch for the motor, a suction nozzle for feeding sheets to the cylinder and a suction line leading to the nozzle; a means functioning automatically with a reduction of negative pressure in the suction line for opening the motor switch.

1,886,282. ELEVATOR CONTROL MECHANISM FOR PRINTING PRESSES. CHARLES L. LOW, Benton Harbor, Mich., assignor to Lisenby Manufacturing Company, Fresno, Calif., a Corporation. Original application filed Mar. 25, 1929, Serial No. 349,637, now Patent No. 1,762,661, dated June 10, 1930. Divided and this application filed Jan. 27, 1930. Serial No. 423,625. 3 Claims. (Cl. 271—62.)



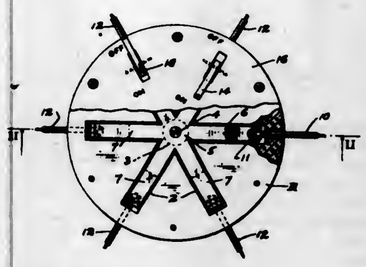
1. In combination with a vertical movable support for a pile of sheets adapted to be individually withdrawn therefrom and means to thus withdraw the sheets; a pivoted lever, means to raise the support by the turning of the lever in one direction, means for thus turning the lever only when the latter assumes a predetermined position, means tending to turn the lever to such position, a lip projecting laterally from the lever, a member normally engaging the lip from that side which will prevent the lever from thus turning, a turnable shaft from which the member projects, a second shaft parallel to the first shaft, a horizontal rod projecting from said second shaft over the support and the pile thereon, a finger mounted on said rod to engage the topmost sheet of the pile, connections between said shafts whereby a downward swinging of the rod a certain distance as governed by the lowering of the pile will rotate said first shaft sufficiently to cause the lip engaging member to clear the lip, means incorporated with said connections to permit of a limited upward swing of the rod without moving the lip engaging member, and means applied to the second shaft and functioning in co-ordinated conjunction with the operation of the sheet withdrawing means to intermittently rotate said second shaft to the lift the rod.

1,886,283. CAMERA SHUTTER. LOTHAR LUDWIG, Dresden, and ERHARD BÖHME, Dresden-Leuben, Germany, assignors to the Firm Lothar Ludwig G. m. b. H., Dresden, Germany. Filed Oct. 20, 1931, Serial No. 569,942, and in Germany Oct. 23, 1930. 9 Claims. (Cl. 95—62.)



1. A camera shutter comprising a rotary slide, a detent, means operated by said rotary slide for locking and releasing said detent, a release, an operating pawl connected to said release, shutter-operating means adapted to be actuated by said pawl, a bolt adapted to cooperate with said pawl and to arrest said shutter-operating means in the "T"-position of said slide, means on said slide for throwing out said bolt with respect to said shutter-operating means in the "B"-position of said slide, and means on said bolt for throwing out said operating pawl with respect to said shutter-operating means in the snap-shot positions of said slide.

1,886,284. ELECTRIC SWITCH. JOHN B. LUTHER, Grass Valley, Calif. Filed Apr. 8, 1931. Serial No. 528,498. 6 Claims. (Cl. 200—5.)



1. In a switch of the character described, a base member having a plurality of pockets formed therein, a contact member in each pocket, a main contact plate secured to the base and connected with a source of electric current supply, said contact plate being insulated with relation to the contacts, a plurality of resilient contact arms on the plate, one for each pocket and normally maintained out of engagement with the contacts in the pockets, and means for moving the resilient contact arms into and out of engagement with the contacts.

1,886,285. PROCESS OF MAKING METAL ABRASIVE MATERIAL. DAVID MARTIN, Mansfield, Ohio, assignor to The Globe Steel Abrasive Company, Mansfield, Ohio, a Corporation of Ohio. Filed Jan. 9, 1930. Serial No. 419,495. 3 Claims. (Cl. 83—91.)



1. The process of forming approximately spherical metal shot suitable for use for abrasive purposes comprising supplying molten metal in a restricted stream to a larger stream of water projected at a more rapid rate across and under the molten metal stream to intercept the same, and bearing particles of the metal on the surface of the stream, through air, and thereafter immediately depositing the particles formed by the water into a body of water.

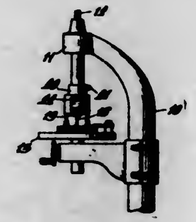
1,886,286. ELECTRIC CLOTHES DRIER. LEO I. MARTIN, Seattle, Wash. Filed Oct. 6, 1930. Serial No. 486,830. 2 Claims. (Cl. 34—19.)



2. In a drier, the combination of a casing formed near its bottom with an opening, a partition passage from the top of the casing to form an air circulating passage, the partition having an opening and the space being open at the ends to afford communication with the interior of the casing, a hollow inverted cone-shaped casing open at its bottom and supported above the partition, motor means mounted above and within the hollow inverted cone-shaped casing, a fan mounted on the motor and operating in the opening in the partition, whereby the fan creates a downward current of air in the casing and circulation of air through the ends of the passage above the partition.

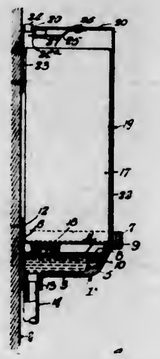
1,886,287. TAPER BORING ATTACHMENT FOR MILLING MACHINES AND THE LIKE. JOSEPH MAUTE, Buffalo, N. Y. Filed June 24, 1930. Serial No. 463,375. 11 Claims. (Cl. 77—4.)

1. In a boring machine and the like, the combination of a laterally displaceable boring head, including horizontally-split sections, a member revolvable with and about said head, the latter and said member being mounted for relative axial movement, a taper-governing member carried by said revolvable member positioned radially outward from said head, and means carried by said boring head between the sections thereof for movement in the



joint-plane thereof and operatively connected to said taper-governing member for controlling the degree of displacement of the head during the boring operation.

1,886,288. DISPENSING DEVICE. EVERETT EARL McDOW, Wilmette, Ill., assignor to Antiseptol Liquid Soap Company, Chicago, Ill., a Corporation of Illinois. Filed Nov. 29, 1929. Serial No. 410,282. 6 Claims. (Cl. 221—94.)

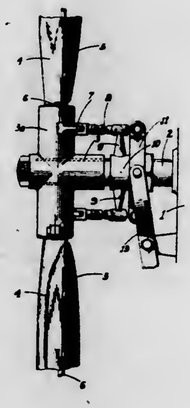


1. A dispensing device embodying therein an open top vessel adapted to be secured to a perpendicular supporting surface, means for controlling the discharge from said vessel, a supply container adapted to seat on a part of the open top of said vessel to discharge thereinto, a cover removably engaged upon a second part of the open top of said vessel and being open at that side facing said supporting surface and coacting therewith to enclose the container and coacting means on the cover and supporting surface respectively for locking said cover in place upon said vessel.

1,886,289. VARIABLE CAMBER PROPELLER. ARTHUR E. MILLER, Sacramento, and HERVEY M. SALISBURY, Walnut Grove, Calif. Filed Feb. 16, 1931. Serial No. 515,915. 1 Claim. (Cl. 170—161.)

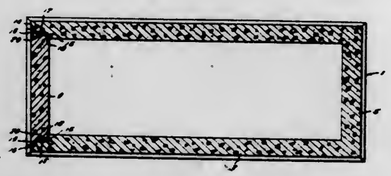
A propeller comprising main blade portions and trailing edge portions initially separate therefrom, hinge means between the blade portions including shafts secured to the trailing edge portions and projecting beyond the inner ends of the same, a hub having laterally extending portions from which the main blade portions project, the shafts overhanging said lateral hub portions, pylons rigidly connected to the projecting ends of the shafts and extending rearwardly and laterally of the blades on opposite sides of the

hub, a shaft projecting rearwardly from the hub, a collar splined on said shaft, opposed arms projecting outwardly from the collar, links parallel to the shaft flexibly con-



necting said arms and pylons, the latter being positioned so as to be concealed from in front by the lateral hub portions, and means to slide the collar along the shaft.

1,886,290. BURIAL VAULT. JAMES G. MILLER, Buffalo, N. Y. Filed Oct. 23, 1931. Serial No. 570,730. 3 Claims. (Cl. 72—7.)



1. A burial vault open at one end, a closure for the open end of the vault, the marginal edges of the closure and adjacent portions of the vault being beveled and having channels therein constituting, in conjunction with each other, passages for the reception of a sealing medium, and locking bars disposed in the side passages and each having one edge engaged with the vault and the other edge engaged with the closure for retaining said closure in position, the channel in the bottom of the vault being of considerable width and the lower edge of the closure having a flange at its rear fitting in the rear part of the last-mentioned channel, said flange leaving the front part of the channel open.

1,886,291. KNITTING MACHINE NEEDLE. ROBERT KIRKLAND MILLS, Sherwood, Nottingham, England. Filed Aug. 19, 1931. Serial No. 558,155, and in Great Britain Aug. 20, 1930. 8 Claims. (Cl. 66—121.)

2. A needle applicable for producing knitted fabrics, comprising a shank, a hook on said shank, a latch pivoted to said shank, said latch having two open positions, one wherein the tip of the latch is spaced from the shank to permit of thread being fed or drawn between the open latch and shank, and a second open position wherein the



latch tip coacts with the shank and provides an enclosed space between the latch and shank adapted freely to accommodate the thread fed or drawn therein.

1,886,292. RADIATOR. ARTHUR B. MODINE, Racine, Wis., assignor to Modine Manufacturing Company, Racine, Wis., a Corporation of Wisconsin. Filed Feb. 1, 1930. Serial No. 425,158. 12 Claims. (Cl. 257—136.)

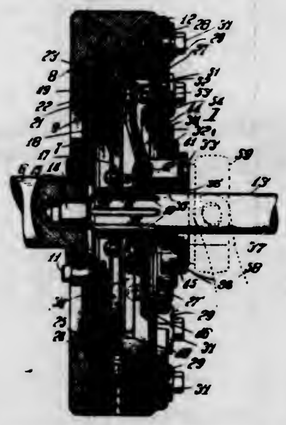


3. In a heating exchange device, the combination of a plurality of heating elements arranged relatively to each other to provide means for respectively heating by radiation and convection, one of said elements providing a wall of a vertically extending air passage of said heat exchange device and having a fluid inlet and a fluid outlet, the other element including co-extending tubular members communicating with each other at one end and having one extremity of the opposite end fixedly connected with the outlet of the other member and the other extremity of said last mentioned end adapted for connection with an outlet for both elements to thereby provide means permitting expansion and contraction of the co-extending tubular members said co-extending tubular members being located in said vertically extending air passage.

1,886,293. TREATING OILS AND COMPOSITION THEREFOR. ELLIOTT MORRILL, Chicago, Ill. Filed Feb. 8, 1929. Serial No. 338,615. 6 Claims. (Cl. 196—4.)

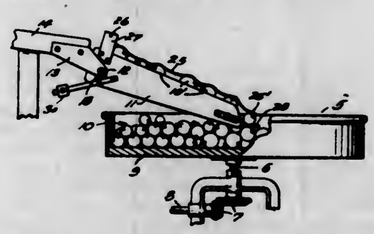
6. A composition of matter for breaking an emulsion of a hydrocarbon and for treating fuel oils and the like which contains a comminuted mixture, a solid caustic alkali, a solid hydrocarbon from the group naphthalene, anthracene and phenanthrene, and a metallic soap which is oil soluble.

1,886,294. FRICTION CLUTCH. JAMES J. MORRIS, Chicago, Ill. Filed Sept. 4, 1928. Serial No. 303,805. 18 Claims. (Cl. 192—68.)



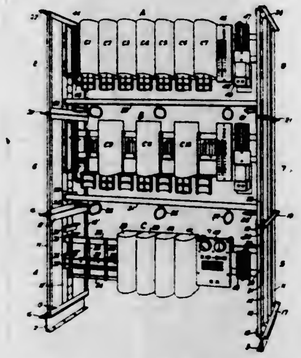
1. In a friction clutch, the combination of a driving element, a driven element, a thrust member adapted to establish driving engagement between said elements, a spring, a clutch actuating collar responsive to said spring, levers actuated by said collar for transmitting spring pressure to said thrust member, and fulcrums for said levers intermediate the effective ends thereof, and permitting transverse rocking movement of said levers, each of said levers comprising laterally spaced members applying spring pressure to said thrust member at laterally spaced points.

1,886,295. FRUIT FEEDING DEVICE. ROSS MORRIS, Zillah, Wash. Filed Apr. 22, 1929. Serial No. 356,964. 6 Claims. (Cl. 198—122.)



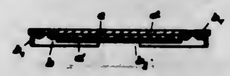
1. In apparatus of the character described, the combination with a bin rotatable about a vertical axis and adapted to contain fruit for grading the same, and a pivoted chute having a power driven feed belt therein for depositing the fruit in said bin, said chute being disposed tangentially of an arc taken about said bin axis, of a fruit landing apron of a yieldable material secured to said chute and extending into said bin to overlie fruit previously deposited therein, said chute belt being adapted to deliver fruit to the upper surface of said apron, fruit retarding flaps of a yieldable material extending from opposite sides of the chute into the path of travel of the fruit upon said belt, a drape suspended from the upper end of said chute to frictionally overlie fruit traveling with the belt, said last named means projecting the length of the chute and over the apron to co-operate with the latter in retarding a delivery of the fruit to the bin.

1,886,296. TELEPHONE SYSTEM. EARL R. NEIR, Wilmette, and SAMUEL E. WITT, Geneva, Ill., assignors, by mesne assignments, to Associated Electric Laboratories, Inc., Chicago, Ill., a Corporation of Delaware. Filed Apr. 7, 1931. Serial No. 528,352. 21 Claims. (Cl. 179—91.)



1. In combination, a switchboard built up of similar sections arranged and adapted so that one lies flat on top of the other, each section comprising two similar, parallelly disposed, frame-like section ends, a separate interconnecting framework for each section arranged to be fastened to both frame-like ends of the associated section, and facilities for mounting electrical switchboard apparatus on the interconnecting framework of each section.

1,886,297. COOKING PLATE. FRIEDRICH NEUBER, THERESE NEUBER, NÉE DREHMANN, and LUDWIG M. HERMANN, Hamburg, Germany. Filed Dec. 22, 1930. Serial No. 504,038. 1 Claim. (Cl. 126—221.)



A cooking plate, comprising in combination an upper iron plate, a lower iron plate fixed by rivets on the under side of said upper iron plate, and a mica plate inserted between said upper iron plate and said lower iron plate.

1,886,298. GARMENT HANGER. CHRISTINA NORDVALL, Birch River, Manitoba, Canada. Filed Feb. 19, 1931. Serial No. 516,957. 3 Claims. (Cl. 223—65.)

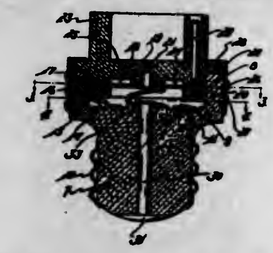


1. A garment hanger including a pair of arcuate flat bars longitudinally adjustable on one another; said bars having central longitudinal slots; a guide stud carried by each of said bars and operating in the slot of the other bar; a suspending member adjustably positioned in said slots; and means to secure said suspending member in adjusted position and retain said bars against independent movement.

1,886,299. FUSE PLUG. LEO S. O'NEIL, Detroit, Mich. Filed Nov. 28, 1930. Serial No. 498,618. 6 Claims. (Cl. 200—125.)

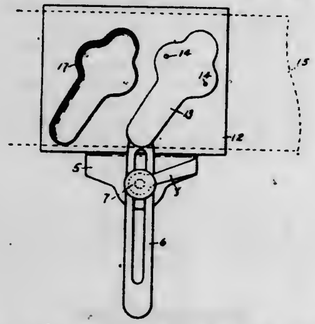
1. In a device of the class described, a fuse plug formed cup shaped at one end; a metallic disc; a plurality of

fusible strips radiating outwardly from said disc; an annular member; contact pins connected to the outer end of each of said strips and projected through said



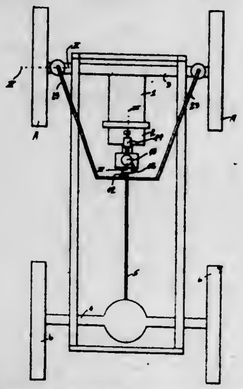
annular member; a transparent cover, said cover and said annular member being projectable into the cup shaped portion of said plug.

1,886,300. DIE MAKER'S TEMPLATE HOLDER. JOHN E. OSLUND, Hartford, Conn. Filed Dec. 16, 1930. Serial No. 502,758. 6 Claims. (Cl. 33—174.)



1. A die maker's template and a holder therefor, said holder including a base, a blade slidably and pivotally attached to the base, means for clamping the blade, to the base, the template being secured to and projecting from the end of the blade in the plane of the blade.

1,886,301. AIR BRAKING MEANS. ADOLPHE C. PETERSON, Minneapolis, Minn. Filed Dec. 7, 1926. Serial No. 153,197. 7 Claims. (Cl. 188—90.)



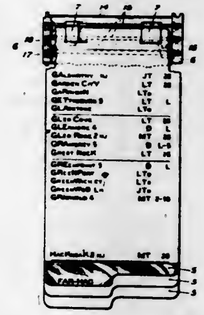
1. A wheel having secured thereto one element of an air compressing means, another element of the air compressing means fixed stationary, a port whereby the air compressing means may receive air under inspiration by relative action of the elements of the air compressing means, a port whereby the air compressing means may exhaust air to the atmosphere, and a means whereby the exhaust to the atmosphere may be controlled.

1,886,302. APPARATUS FOR ROLLING GLASS SHEETS. LEANDER N. POND, Kingsport, Tenn., assignor to Blue Ridge Glass Corporation, Kingsport, Tenn. Filed May 23, 1931. Serial No. 539,569. 2 Claims. (Cl. 257—95.)



1. In a device of the character described, the combination with a hollow forming roll, means for producing a general circulation of water through the roll, and supplemental means for locally chilling one side of the roll.

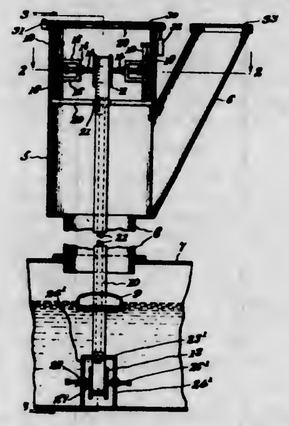
1,886,303. LEAF HINGE CLIP. JULIUS S. POPPER, Elizabeth, N. J. Filed Nov. 3, 1931. Serial No. 572,847. 1 Claim. (Cl. 129—16.)



A hinged leaf including a card having a slit near one margin, a pintle member about which said card member may be rotated, and a clip formed of a strip of resilient material passed through said slit and bent to form a bight within the slit, the bent sides of said strip clamping the surfaces of the card, and having a portion near the free end of at least one of said sides of the strip being curved to form with the other side a hinge joint to engage said pintle, and hooked portions at the extremities of the clip bent in opposite directions from each other and having an opening therebetween leading to the hinged joint, the hooked portions forming a snap through which the hinged leaf is engaged with and disengaged from the pintle member.

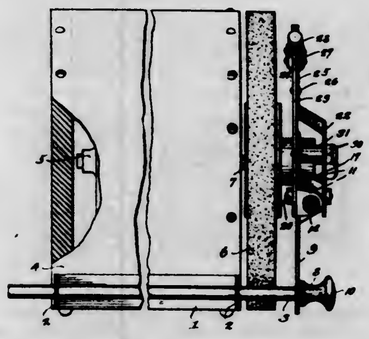
1,886,304. GAUGE. WOFFORD R. RATHBONE, Hammond, and VERSTILLE G. MCPHERSON, New Orleans, La. Filed Mar. 4, 1931. Serial No. 520,039. 2 Claims. (Cl. 73—82.)

1. In a gauge, a housing, a filling neck extending off said housing, a glass cover for the housing, an opaque cover above the housing, means to lock the last mentioned cover, a cut away plate within the housing, an endless calibrated tape tracking through the cut away portions of the plate, a pulley above the plate for receiving the tape, an adjustable support for said pulley, a rod extending down from said plate, a bracket carried by said rod, adjustable bearings carried by said bracket, a lower



flanged pulley carried by the adjustable bearings for receiving the lower portion of the tape, and a float affixed to the tape.

1,886,305. HOLLOW GRINDER FOR HAMBURGER KNIVES AND THE LIKE. EDWARD C. RICHARDS, Fayette, Iowa. Filed Dec. 7, 1931. Serial No. 579,545. 2 Claims. (Cl. 51—92.)



1. A knife holder for sharpening apparatus including attaching means, a member slidable and rotatable therein, a main arm movable with said member, a supplemental arm pivotally connected to the main arm, means on the supplemental arm for holding a knife thereon, cooperating means on the arms for adjusting said arms angularly relative to each other, said means including a screw carried by one of the arms, a nut slidably engaging one of the arms and guided thereby, and means for movably connecting the nut to the other arm.

1,886,306. ELECTRIC FIXTURE. MARK N. RUSSELL, Syracuse, N. Y., assignor to Pass & Seymour, Inc., Syracuse, N. Y., a Corporation of New York. Filed Aug. 26, 1927. Serial No. 215,721. 6 Claims. (Cl. 173—334.)

I. In a convenience outlet, the combination with a fixed supporting means having plug blade openings, of an insulating block secured to said supporting means and having a recess for and in communication with each opening and a spring contact loosely arranged and fully housed in each recess with its longitudinal axis



extending at right angles to the line of movement of a plug blade and with its greatest width less than the distance a plug blade extends into said recess.

1,886,307. FOUNTAIN PEN SECTION. SOLOMON M. SAGER, Evanston, Ill. Filed Mar. 29, 1930. Serial No. 439,867. 9 Claims. (Cl. 120—52.)



1. A fountain pen comprising a barrel, a cap adapted to be removably engaged over one end thereof, a shoulder formed in said cap, a section rigidly secured in one end of said barrel and having a flange formed on the outer end thereof against which the cap shoulder is adapted to seat, a collar integrally formed on the outer end of said section projecting beyond said flange and having an excess ink-receiving pocket formed therein, a feeder free from contact with the collar and projecting through said collar pocket and into the section, and a pen point engaged on said feeder and projecting through said collar and into said section.

1,886,308. SPRING SEAT WITH LATHS COVERING. PAUL SCHULTZE, Leichlingen, Germany. Filed Aug. 21, 1929, Serial No. 387,517, and in Germany Aug. 24, 1928. 6 Claims. (Cl. 155—50.)

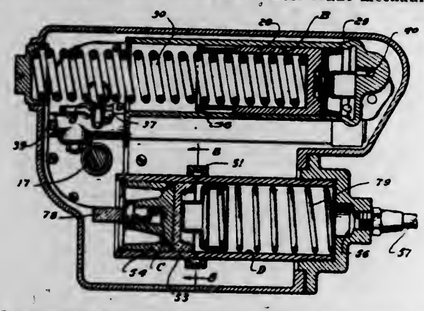


1. A spring seat comprising transverse laths forming the seat and back surface and supporting carriers arranged at the sides of the seat composed of parts bent to form trough-shaped grooves arranged one behind the other and serving to receive the ends of laths, and intermediate connecting parts between the trough-shaped parts for exerting a spring action.

1,886,309. HYDRAULIC BRAKING MECHANISM. DONALD O. SCOTT, Detroit, Mich., assignor to Hydraulic Brake Company, Detroit, Mich., a Corporation of California. Filed Sept. 6, 1927. Serial No. 217,590. 6 Claims. (Cl. 188—152.)

2. In a fluid brake system, a wheel brake mechanism, a driven pump for supplying fluid under pressure, a reservoir for storing fluid pressure supplied by the pump, a manually controllable valve for controlling the admission of fluid pressure from the reservoir to the wheel brake

mechanism, and manually actuated means for augmenting the fluid pressure admitted to the wheel brake mechanism.



said manually actuating means providing a pressure conduit connection between said valve and said wheel brake mechanism.

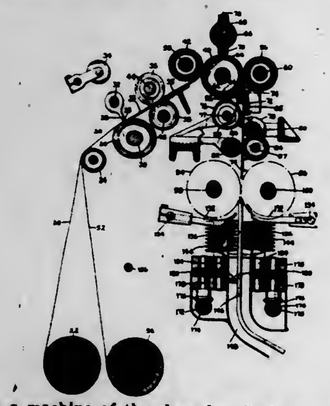
1,886,310. RUBBER COMPOSITION AND METHOD OF PREPARING THE SAME. WALDO L. SEMON, Cuyahoga Falls, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y., a Corporation of New York. Filed Apr. 18, 1931. Serial No. 531,253. 20 Claims. (Cl. 18—50.)

1. The method of preparing a rubber composition which comprises incorporating into rubber a small proportion of the product of the reaction of a primary aromatic amine and a non-volatile fatty acid with the elimination of water.

1,886,311. PROCESS FOR PREPARING THYMOL. SIEGFRIED SKRAUP, Wurzburg, KARL SCHÖLLKOPF, Dusseldorf-Oberkassel, and ARTHUR SERINI, Dusseldorf-Heerdt, Germany, assignors to Rheinische Kampfer-Fabrik Gesellschaft mit beschrankter Haftung, Dusseldorf-Oberkassel, Germany. Filed June 30, 1928, Serial No. 289,612, and in Germany July 11, 1927. 6 Claims. (Cl. 260—154.)

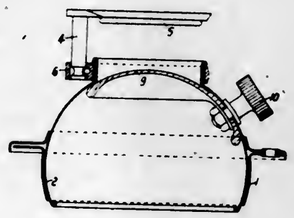
1. A process for preparing thymol (3-hydroxy-1-methyl-4-isopropyl-benzene) which consists in causing propylene to react with m-cresol at temperatures from 100° to 400° C. and subjecting the reaction product obtained to fractional distillation.

1,886,312. PAPER FOLDING MACHINE. FREDERICK L. STANTON, Carthage, N. Y., assignor to National Paper Products Company, Carthage, N. Y., a Corporation of California. Filed Nov. 30, 1929. Serial No. 410,677. 24 Claims. (Cl. 270—73.)



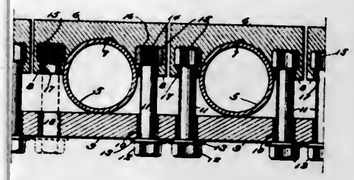
1. In a machine of the class described, in combination, means for drawing a wide web of paper into the machine, means for slitting the web into a plurality of narrow strips, means for marking said strips at predetermined intervals, means for cutting the strips into short sheets, and means for folding the sheets with the marks at the folds thereof, for the purpose set forth.

1,886,313. VENTILATING APPARATUS. ALEXANDER WILLIAM STEWART, Glasgow, Scotland. Filed May 20, 1931, Serial No. 538,717, and in Great Britain June 12, 1930. 1 Claim. (Cl. 98—40.)



In ventilating apparatus, an air outlet device comprising, in combination, a ball socket, a ball member penetrated by an air passageway and universally adjustable in said socket, a clamp engaging said ball member, a pillar fitted to said clamp, said pillar being disposed external to and parallel with said passageway in all positions of adjustment of said ball member in said socket, and a flat deflector rotatable about the axis of said pillar to occupy a position intercepting the stream of air delivered through said passageway and rotatable to occupy a position out of register with said passageway.

1,886,314. TUBULAR WALL STRUCTURE. EDWARD H. TENNEY, Webster Groves, Mo. Filed June 26, 1928. Serial No. 288,333. 3 Claims. (Cl. 122—6.)

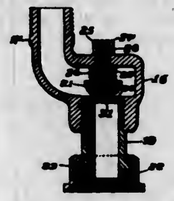


3. A fluid cooled furnace wall structure comprising a system of spaced circulation tubes, a series of hard cast iron facing blocks at the face sides of the tubes, and shaped for extensive contact with the tubes, a series of transverse backing members behind the tubes, and clamping means connecting the blocks with the backing members, comprising threaded bolts extending through from the blocks to the backing members, between the tubes, and for each bolt a threaded nut of wrought iron preformed and embedded unitarily within and near the back side of a cast iron block and a back access aperture in the block substantially larger than the diameter of the bolt, and smaller than the largest diameter of the nut, whereby the bolt may be inserted, engaged with the nut and tightened against a backing member to draw each block forcibly into intimate heat conducting contact with a tube.

1,886,315. VALVE. GEORGE H. THACHER, Melrose, Mass. Filed July 21, 1931. Serial No. 552,089. 8 Claims. (Cl. 137—162.)

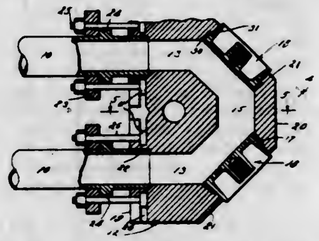
2. An emergency valve adapted to close automatically in case of fire, comprising a valve casing having a valve seat, a valve within the casing, and means within the casing for holding the valve open including a threaded ele-

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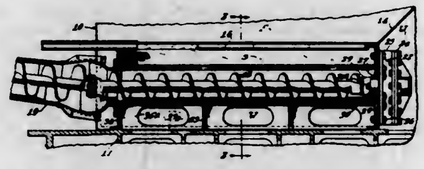
ment formed of solder and connected by its threads to the valve to maintain the valve open but in position to close automatically in case the solder is melted.

1,886,316. JUNCTION BOX. BERTRAM C. TRAVIS, Los Angeles, Calif., assignor of one-half to Pacific Copper and Brass Works, Incorporated, Los Angeles, Calif., a Corporation of California. Filed Nov. 9, 1927. Serial No. 232,080. 4 Claims. (Cl. 285—20.)



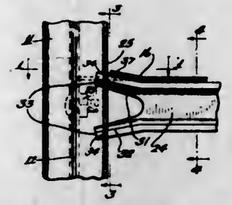
1. A junction box including a body with beveled surface at its forward end corners and having spaced tube openings extending into it from its rear end, a transverse connecting opening connecting the tube openings, and service openings in the beveled corners, each having its axis normal to a beveled surface, the service openings forming direct straight openings from the tube openings and the connecting opening to the exterior of the body.

1,886,317. LOCOMOTIVE TENDER. EDWIN ARCHER TURNER, New York, N. Y., assignor to The Standard Stoker Company, Incorporated, a Corporation of Delaware. Filed Nov. 5, 1931. Serial No. 573,053. 4 Claims. (Cl. 105—234.)



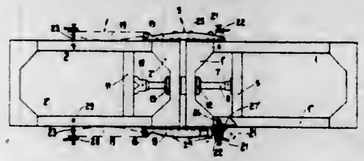
1. In combination in a tender, a base, fuel and water compartments, means separating said compartments including sloping partition walls and a stoker trough secured to said walls to form a water tight connection, said trough being mounted on said base, a transverse rear wall for said trough extending laterally beyond the sides thereof, and extending vertically between the base and said partition walls, a transverse front wall for the trough arranged to form a closure at the front of the tender for one side of the water compartment, an imperforate leg upstanding between said trough and said base and extending longitudinally of the trough connecting its front and rear walls, an upstanding plate spaced at one side of the trough extending from the trough rear wall to the front wall of the tender forming with the trough and base a water tight compartment open at its forward end for receiving a drive shaft, the marginal edges of the walls forming the drive shaft compartment being welded to form a seal against water passing from the water compartment into the drive shaft compartment, said rear wall having an opening communicating with said trough and a second opening therein at one side of said trough communicating with said drive shaft compartment, a housing enclosing gearing detachably mounted on the rearward side of said rear wall and covering the openings therein, said housing contacting the water within said water compartment and forming a water tight joint with said rear wall, a screw in said trough, a gear shaft extending through the first named opening of said rear wall connecting the screw with the gearing in the housing, a pinion shaft extending from the housing through said second named opening of the rear wall into the drive shaft compartment, and a drive shaft within said drive shaft compartment connected to said pinion shaft, said trough being apertured adjacent the pinion and drive shaft connection permitting access thereto.

1,886,318. SHELF RACK CONSTRUCTION. WALTER N. VANCE, North Aurora, Ill., assignor to Lyon Metal Products, Incorporated, Aurora, Ill., a Corporation of Illinois. Filed Mar. 29, 1929. Serial No. 350,938. 2 Claims. (Cl. 248—19.)



1. The combination of an upright supporting member provided with a series of bearer receiving slots, and a bearer comprising an I-beam having a central web and top and bottom flanges, the top and bottom flanges being spread apart and extending above and below the top and bottom of the I-beam to provide upper and lower supporting arms, said arms being provided with slots or grooves in opposite vertical faces of said arms and adjacent their ends, said slots being located so as to register with the material surrounding the receiving slots.

1,886,319. VEHICLE. CARLO COHEN-VENEZIAN, Turin, Italy. Filed Dec. 2, 1930, Serial No. 499,592, and in Germany Dec. 12, 1929. 5 Claims. (Cl. 280—111.)

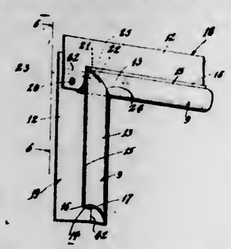


1. A vehicle comprising wheeled frame sections pivotally interconnected together around the longitudinal axis of the vehicle, and manually operable releasable locking means whereby said frame sections can be made rigid with respect to each other to form a rigid vehicle.

1,886,320. METAL TRIM. ROY WAITE, Los Angeles, Calif. Filed Apr. 8, 1929, Serial No. 353,296. Renewed July 11, 1932. 13 Claims. (Cl. 72—98.)

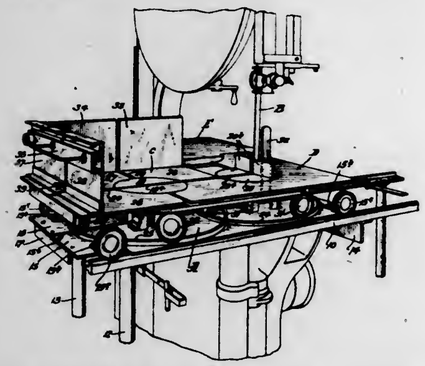
11. A metal trim for plaster surfaces, comprising a first portion adapted to be secured to a support and a

second portion continuous with said first portion and extending therefrom and terminating in an edge coincident with the plaster surface, said second portion being



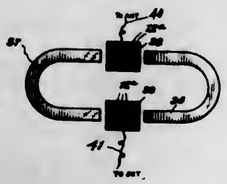
provided with a groove along its exterior face adjacent said edge to receive a margin of a wall covering, the outer surface of the strip on each side of said groove lying substantially in the plane of the plaster surface.

1,886,321. ATTACHMENT FOR BAND SAWS. FRED G. WALKER, Chicago, Ill., assignor to Jones Superior Machine Co., Chicago, Ill., a Corporation of Illinois. Filed Apr. 25, 1932. Serial No. 607,232. 10 Claims. (Cl. 143—25.)



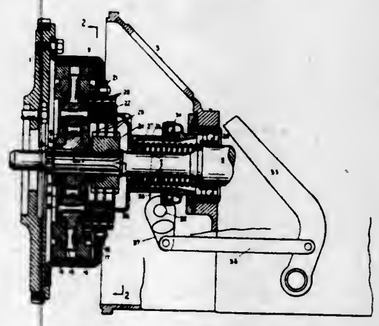
1. In combination, a band saw having a vertically movable straight sawing portion, an attachment therefor comprising a runway in a plane substantially at right angles to said straight portion, a carriage adapted to move longitudinally on said runway, and means adapted to rotate with respect to the carriage and to hold a block to be sawed, said carriage and means having a slot therein through which the band saw operates as the carriage is advanced to saw through said block, and a bar situated back of said saw blade to act as a guard for it.

1,886,322. ANTENNA. TERIJON WEITLING, New York, N. Y. Filed Nov. 30. 1929. Serial No. 410,698. 2 Claims. (Cl. 250—33.)



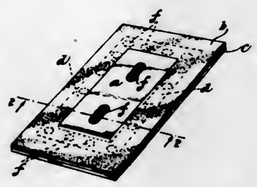
1. In an antenna system for radio receiving sets, an antenna adapted for connection to a receiver intended for the reception of broadcast sounds, a fixed gap located in the antenna and interrupting the continuity thereof, a magnet of the permanent type so arranged relative to the antenna gap that the magnetic flux of the magnet is disposed therein to bridge the gap and intensify the received signal.

1,886,323. CLUTCH. ERNEST E. WEMP, Detroit, Mich. Filed Oct. 22, 1930. Serial No. 490,521. 18 Claims. (Cl. 192—48.)



1. The combination of a driving member, a driven member, centrifugal clutch members carried by the driven member for engaging the driving member, an overrunning clutch between the centrifugal clutch members and the driven member, and controllable means for imparting rotation to the centrifugal clutch members.

1,886,324. TRAFFIC SIGN FOR ROAD SURFACES. ALEXANDER P. WHITE, Caldwell, N. J., assignor of one-half to Edward T. Wilkinson, Montclair, N. J. Filed Oct. 18, 1929. Serial No. 400,607. 2 Claims. (Cl. 94—1.5.)



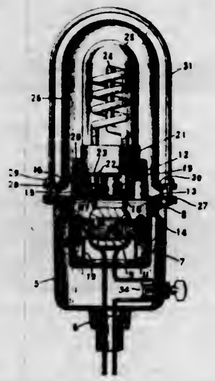
1. As an article of manufacture, a traffic marker comprising a homogeneous body sheet of bituminous material throughout adapted to be adhesively fastened to a normal road surface, and an exposed symbol marker held within and secured by the material of the body in a position with its edges shielded by the body material, said symbol marker being out of direct contact with the road surface.

1,886,325. ARTICLE OF UPHOLSTERY AND METHOD OF MAKING SAME. HARRY J. BURKART. Kirkwood, Mo. Filed Dec. 7, 1929. Serial No. 412,437. 8 Claims. (Cl. 154—33.)



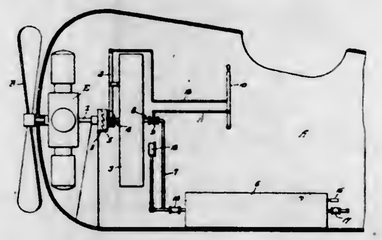
1. As an article of manufacture, a roll of fibrous upholstery material formed of a sheet having a tapered margin, and having portions overlying each other, in which the greater proportion of the fibers are of a trend along the depth of the roll.

1,886,326. GAS SIGNAL LIGHT APPARATUS. JOSEPH O. CADIEUX, Meriden, Conn., assignor to Connecticut Telephone & Electric Corporation, Meriden, Conn., a Corporation of Delaware. Filed Feb. 5, 1930. Serial No. 426,097. 7 Claims. (Cl. 175—356.)



1. A gas lamp socket having two insulating parts directly fastened to one another and substantially enclosing a chamber between them, a step-up transformer supported by one part in said chamber and having output leads secured to the other part, the latter part having contact terminals for tube prongs.

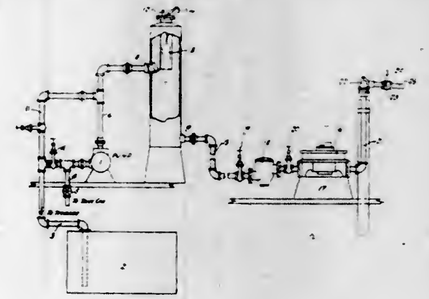
1,886,327. SAFETY MOTOR FOR AIRCRAFT. EDWARD CARLSON, Tombstone, Ariz. Filed Mar. 14, 1932. Serial No. 598,811. 1 Claim. (Cl. 244—25.)



In an aircraft including the fuselage, a propeller shaft rotatably suported in the front end of the fuselage and having one end extending beyond said front end, a propeller on said end, a motor connected to an intermediate part of the shaft, a clutch part connected to the rear end of the shaft, an air motor located in the front part of the fuselage and having a shaft extending forwardly, a clutch part on the forward end of the last mentioned shaft, a lever for moving the last mentioned part into and out of engagement with the first mentioned clutch part, a hand lever, means for connecting the same with the first mentioned lever, an air tank in the fuselage, pipes connecting the same with the air motor, a valve in one of said pipes, a second-hand lever and a link connecting the same with the valve.

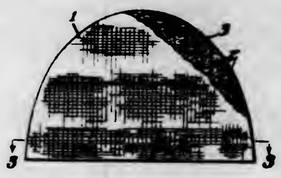
1,886,328. LIQUID METER SYSTEM. WILLIAM H. CURTIS, Portland, Oreg., assignor to Granberg Meter Corporation, San Francisco, Calif., a Corporation of California. Filed Apr. 16, 1929. Serial No. 355,522. 2 Claims. (Cl. 221—95.)

1. In a liquid metering system, a liquid pump, a surge chamber into which said pump discharges, an air and gas escape passage from the upper end of said surge chamber having a valve adapted to automatically close upon predetermined rise of liquid in said surge chamber, there-



by trapping air and gas in the upper end of said surge chamber to cushion surges of incoming liquid, said valve having an operating float in said surge chamber, a meter-equipped discharge line leading from the lower portion of said surge chamber and having its delivery end disposed at an elevation between the top of said surge chamber and the point at which the latter communicates with said discharge line, and an air admission passage independent of said air and gas escape passage and having pressure-actuated means for admitting air to the upper end of said surge chamber when, after pump stopping, lowering of liquid in said surge chamber before opening of the float-operated valve, creates sub-atmospheric pressure in said surge chamber, said means being adapted to close upon subsequent existence of super-atmospheric pressure in the surge chamber when pumping liquid into the latter.

1,886,329. BOX TOE BLANK AND METHOD OF PRODUCING THE SAME. JOHN J. DALY, West Newton, Mass., assignor, by mesne assignments, to Beckwith Manufacturing Company, Boston, Mass., a Corporation of Massachusetts. Filed Jan. 13, 1927. Serial No. 160,824. 7 Claims. (Cl. 91—70.)

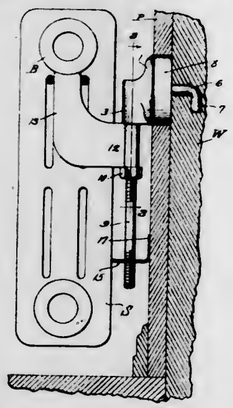


1. As a new article of manufacture, a normally stiff and hard box toe blank softenable when heated, comprising a base layer, and a filling material mixed with a thermo-plastic binding and rubber and fused to said base layer.

1,886,330. RADIATOR HANGER. JOHN T. EVANS, Kingston, Pa. Filed Aug. 28, 1930, Serial No. 478,507. Renewed Sept. 8, 1932. 1 Claim. (Cl. 248—17.)

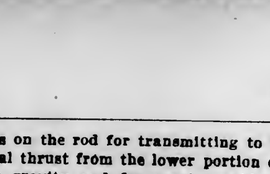
A radiator hanger including a base for attachment to a wall, a rod connected to and depending from the base, a sheet metal carrier having an integral sleeve at one end, slidably embracing the rod for vertical adjustment and adapted to swing on the rod for angular adjustment of the carrier, there being an upwardly extended arm formed by the other end of the carrier for engaging under the upper portion of and supporting a radiator, means on the rod for adjustably supporting the sleeve of the carrier,

and means on the rod for transmitting to the supporting wall lateral thrust from the lower portion of the radiator caused by gravity and for spacing said portion of the



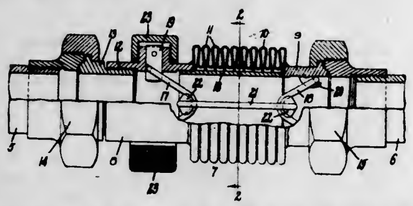
radiator from the walls, said means being beneath the carrier and separate from and adjustable upwardly and downwardly independently of the base and carrier.

1,886,331. REFRIGERATING APPARATUS. MORTIMER W. FISH, Dayton, Ohio, assignor to Frigidaire Corporation, Dayton, Ohio, a Corporation of Delaware. Filed May 30, 1928. Serial No. 281,603. 1 Claim. (Cl. 200—83.)



In a control device, an electrical contact device for making and breaking an electrical circuit, a toggle member for actuating said contact device, a snap acting device connected to actuate said toggle member, said toggle member including two arms in substantial alignment when the device is closed.

1,886,332. NOISE ELIMINATOR. WALTER K. FLAVIN, Arlington, Mass. Filed Dec. 13, 1929. Serial No. 413,699. 2 Claims. (Cl. 285—90.)



1. A noise eliminator of the character described having, in combination, a pair of longitudinally aligning fluid conducting members, a bellows constructed of flexible sheet metal interposed between said fluid conducting members and attached at its opposite ends thereto, oppositely disposed radial pins rigidly mounted in one of the fluid conducting members, oppositely disposed hooks integral with the other fluid conducting member, a strut loosely mounted upon said pins, another strut loosely mounted upon said hooks, and a link extending through the bellows and loosely connected at its opposite ends to each of the struts.

1,886,333. MAGAZINE PENCIL. AMBROSE FLEMING, West Lynn, Mass. Filed May 12, 1931. Serial No. 536,871. 3 Claims. (Cl. 120—18.)

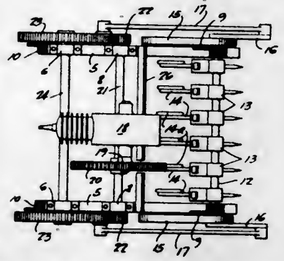


3. In a magazine pencil, a tubular casing having a writing end, a flat lead supporting platform within the casing cooperating with the latter and arranged in parallel relation to the axis of said casing to form a magazine for leads, said platform having a central groove and an overall width such that an odd number only of leads can be accommodated, whereby to insure that a single lead will always be in position to fall into said groove.

1,886,334. EMULSION CONTAINING INDIA RUBBER. LEONARD GOWEN GABRIEL and JOHN FREDERICK BLOTT, London, England, assignors, by mesne assignments, to Colas Roads Inc., Boston, Mass., a Corporation of Massachusetts. Filed Feb. 18, 1930, Serial No. 429,457, and in Great Britain Feb. 27, 1929. 3 Claims. (Cl. 134—1.)

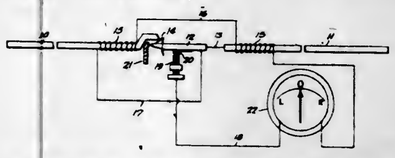
1. A process for the manufacture of an aqueous bituminous emulsion containing india rubber, which consists in subjecting to agitation in a colloid mill a mixture of molten bituminous material and rubber latex, emulsification being effected without the addition of soap or other of the usual dispersing agents.

1,886,335. POWER SPADER. HAROLD H. GLASIER, Los Angeles, Calif. Filed July 1, 1931. Serial No. 548,119. 6 Claims. (Cl. 97—40.)



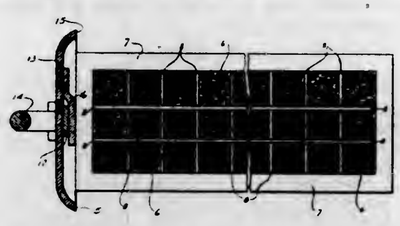
1. A power spader comprising in combination: a frame; a foot depending therefrom for anchoring in the ground against rearward movement; a spade movably mounted on the frame for movement through an arc with its toe along the ground in relation to said foot so as to be initially projected into the ground, moved away from the foot, to be lifted from the ground and returned to its initial position; and power actuated means mounted on said frame to move said spade.

1,886,336. INDUCTION COMPASS. ROSS GUNN, Washington, D. C. Filed July 30, 1927. Serial No. 209,598. 12 Claims. (Cl. 33—204.)



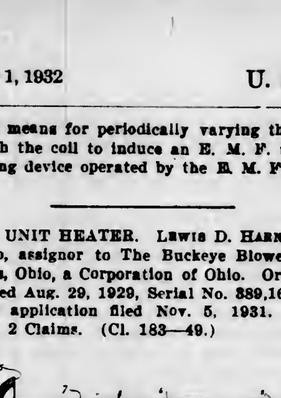
1. An orientation indicator comprising a stationary coil, means for concentrating the earth's magnetic flux in the coil, means for periodically varying this magnetic flux through the coil to induce an E. M. F. therein, and an indicating device operated by the E. M. F. induced in the coil.

1,886,337. UNIT HEATER. LEWIS D. HARNETT, Columbus, Ohio, assignor to The Buckeye Blower Company, Columbus, Ohio, a Corporation of Ohio. Original application filed Aug. 29, 1929, Serial No. 389,163. Divided and this application filed Nov. 5, 1931. Serial No. 573,126. 2 Claims. (Cl. 183—49.)



1. In combination, a frame, filtering medium therein, a stop on one end of said frame and a casing cover having a tongue inserted beneath said stop whereby said casing cover may be detached from the frame when the filtering medium is being cleaned.

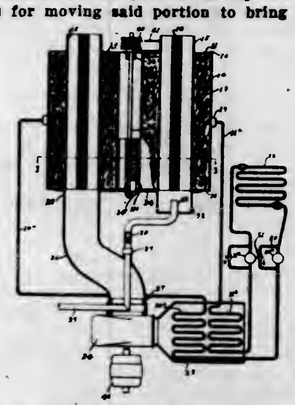
1,886,338. CLEANING MATERIAL SUPPORTING DEVICE. LOUIS S. HIRTH, Oak Park, Ill., assignor of one-half to Louis Cecilius Sahm, Chicago, Ill. Filed Mar. 6, 1930. Serial No. 433,640. 3 Claims. (Cl. 15—147.)



1. In a mop holder, the combination with a handle of a head secured thereto, said head having substantially straight side portions, a slightly arcuate channeled center portion integral with the side portions, a ferrule integral with said side portions adapted to receive said handle, a pair of hooks disposed on opposite sides of said ferrule, a mop supporting stranded flexible cable, and means secured to said cable and cooperating with said hooks for drawing said cable taut in said channel.

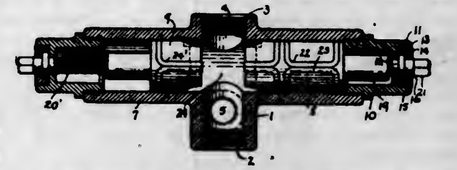
1,886,339. REFRIGERATING APPARATUS. CHARLES F. KETTERING, Dayton, Ohio, assignor to Frigidaire Corporation, Dayton, Ohio, a Corporation of Delaware. Filed Dec. 31, 1928. Serial No. 329,428. 2 Claims. (Cl. 62—5.)

1. Refrigerating apparatus comprising in combination a pair of generator-absorbers to be operated alternately, a flue for circulating air, said flue having a movable portion, a heater carried by said portion and spaced therefrom, and means for moving said portion to bring the heater



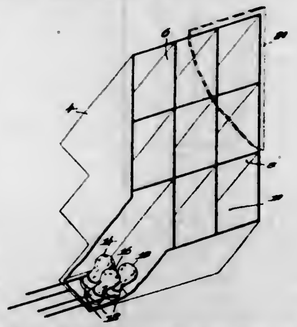
in heat exchange relation with either generator-absorber and to circulate air in heat exchange relation with the other generator-absorber.

1,886,340. COMBINED BLOW-OUT PREVENTER AND VALVE. WALTER E. KING, Houston, Tex., assignor to James S. Abercrombie, Houston, Tex. Filed May 17, 1928. Serial No. 278,539. 3 Claims. (Cl. 251—62.)



1. A device of the character stated including a tubular body having a passage therethrough threaded at its ends for engagement within a casing, oppositely extending cylinders on said body, a recessed plug closing each cylinder, pistons in said cylinders, said piston having their forward faces concaved to fit about a drill stem and the other end thereof reduced to fit said recessed plug, one of said pistons being adapted to be moved entirely across said passage when desired, packing on said pistons to close the passage of fluid about said pistons, and means to move said pistons.

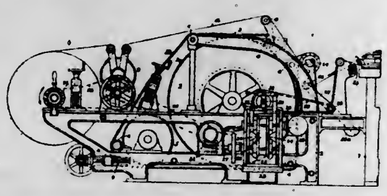
1,886,341. DISPLAY METHOD AND APPARATUS. EDWARD B. KIRK, New Haven, Conn., assignor to Kirk Holding Corporation, New York, N. Y., a Corporation of New York. Filed Apr. 13, 1929. Serial No. 354,895. 4 Claims. (Cl. 40—130.)



1. A sign comprising a plurality of cells each containing a plurality of light emitting devices of different colors,

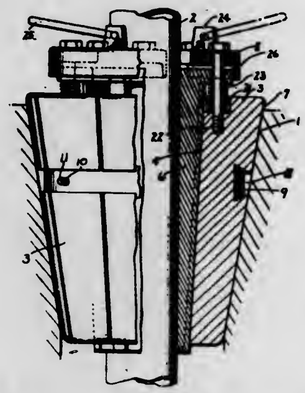
the cells being inclined with respect to the front thereof to prevent direct visualisation of the rays and having reflecting inside surfaces to mix the rays and produce light of a composite color, each of the separate cells being visible as an area of the composite color.

1,886,342. MEANS FOR CONTROLLING SPEED OF AND EXPANDING CLOTH. WILLIAM J. KOCH, Midland Park, N. J., assignor to Van Vlaanderen Machine Company, Paterson, N. J., a Corporation of New Jersey. Filed Sept. 24, 1931. Serial No. 564,835. 3 Claims. (Cl. 26—54.)



1. Apparatus for expanding cloth comprising a tenter and a machine for setting the cloth delivered by the tenter having a revoluble cloth-setting element around and in tractive engagement with which the thus-delivered cloth extends, said apparatus including spaced guides bridged by the cloth between said tenter and machine, means to drive said element at variable speed having a shifter movable in one direction to accelerate and in the opposite direction to retard the output speed of said means, a lever having a cloth-guide and normally urged to hold the cloth-guide against the bridging portion of the cloth, and means, connecting said lever and shifter, for moving the shifter in its first direction when said portion of the cloth slackens and in its second direction when said portion tautens.

1,886,343. PIPE ENGAGING DEVICE. GERALD R. LIVERGOOD, Houston, Tex.; Marie E. Livergood administratrix of estate of said Gerald R. Livergood, deceased. Filed Mar. 13, 1928. Serial No. 261,225. 6 Claims. (Cl. 24—263.5.)



1. A pipe engaging device including a plurality of outer segmental supporting members, tapered downwardly on their outer faces to fit releasably within a tapered bowl, their inner faces being tapered on a more acute angle to the vertical than said outer faces, longitudinally slidable pipe engaging jaws of greater length than said members and shaped to fit on said inner faces, and means whereby said members and said jaws may be moved as a unit.

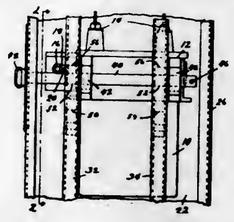
1,886,344. REMOVAL OF WAX FROM HYDROCARBON OILS. HUGH LOWERY, Alton, Ill., assignor to Standard Oil Company, Chicago, Ill., a Corporation of Illinois. Filed Oct. 27, 1928. Serial No. 315,597. 4 Claims. (Cl. 196—19.)

4. The method of dewaxing a petroleum oil lubricating distillate having a viscosity between 75 and 120 seconds Saybolt at 210° F. and containing wax of the slop wax type which consists in diluting said distillate with between 65 and 80% of a naphtha of end point not substantially over 400° F., adding between about 1 and 5% of petrolatum, chilling to about 10° F., allowing to settle at such temperature for 60 to 80 hours, and removing the supernatant layer of oil.

1,886,345. SHOE STIFFENER MANUFACTURE. JOSEPH M. LURIE, Brookline, Mass., assignor, by mesne assignments, to Arden Box Toe Company, Watertown, Mass., a Corporation of Massachusetts. Filed Mar. 12, 1930. Serial No. 435,359. 7 Claims. (Cl. 36—77.)

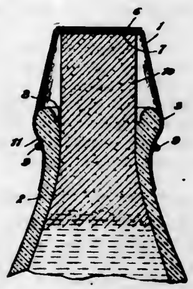
1. A shoe stiffener comprising a fibrous foundation carrying pulverized celluloid bonded thereto by rosin size and dried, water-dispersed rubber, said stiffener being quickly permeable throughout to celluloid solvents and said celluloid particles being exposed to make direct contact with said solvents to induce said permeability.

1,886,346. ELECTRIC SWITCH AND SUPPORTING MECHANISM THEREFOR. FREDERICK H. MACNEIL, Boston, Mass., assignor to Condit Electrical Manufacturing Corporation, South Boston, Mass., a Corporation of Massachusetts. Filed Sept. 30, 1930. Serial No. 485,432. 16 Claims. (Cl. 175—298.)



6. The combination of an electric switch having a supporting frame, a supporting structure for the switch, and a switch supporting bar slidably carried by said switch frame and adapted to rest upon said supporting structure.

1,886,347. BOTTLE CLOSURE. PETER T. MCAVOY, Brooklyn, N. Y. Filed Feb. 26, 1931. Serial No. 518,445. 8 Claims. (Cl. 215—38.)



1. A bottle closure composed of a sheet of flexible slippery-surfaced transparent material fitted over the top of a bottle and formed with a skirt portion extending downward

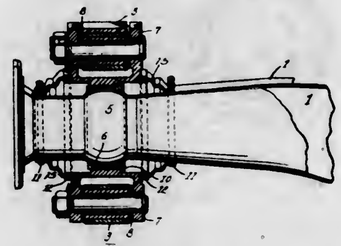
on the neck of the bottle, and resilient means for holding the closure on the bottle neck, said resilient means permitting an upward shifting movement of the closure relative to it under the pressure of frozen contents of the bottle.

1,886,348. COMMERCIAL ENVELOPE. HILARY MILLAN, Jr., New York, N. Y. Filed Feb. 18, 1931. Serial No. 516,575. 3 Claims. (Cl. 229—85.)



1. An advertising envelope, comprising sheet material in the form of an envelope having a front face divided by a perforated line extending from the top to the bottom so as to form a right hand and left hand section, miscellaneous matter or the like printed upon the left hand section and the right hand section being for the purpose of the sender's name and address, the receiver's name and address, and the necessary postage stamp, a pair of spaced parallel transverse perforated lines at the base of said perforated line, and said sheet material being formed with cuts connecting the ends of said spaced perforated lines.

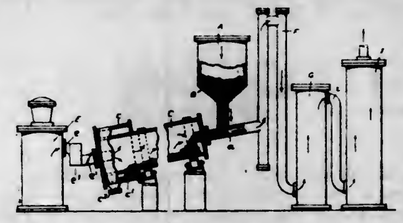
1,886,349. MOTOR VEHICLE. WATT L. MORELAND, Los Angeles, Calif., assignor of one-half to Moreland Motor Truck Company, Burbank, Calif. Filed July 21, 1930. Serial No. 469,535. 3 Claims. (Cl. 280—124.)



1. In a motor vehicle, a plurality of axle housings, said axle housings interconnected by a plurality of springs, the axle housings in universal connection with the spring ends through ball-and-socket joints, the balls rigid with the axle housings, spring brackets in pivotal connection with the spring ends and means for permitting said brackets to slide horizontally sidewise with respect to the universal joints.

1,886,350. METHOD OF DISTILLING SOLID CARBONIZABLE MATERIAL. HARALD NIELSEN, Muswell Hill, and BRYAN LAING, Hatfield, England. Filed Feb. 17, 1927, Serial No. 169,123, and in Great Britain Mar. 6, 1926. 2 Claims. (Cl. 202—15.)

1. A method of distilling raw, solid, distillable and carbonizable material, which comprises passing the raw material to be distilled in a continuous manner through a retort, admitting to the retort, at a temperature of approximately 1200° C., a controlled volume of a heated non-oxidizing gas, and passing the heated gas in the form of a continuously flowing stream through the retort in counter-flow to the carbonizable material passing therethrough, so that the sensible heat of the heating gas is utilized both for the purpose of expelling from the material, at low temperatures, in vapor form, the oil yielding constituents and carrying the same into cooler zones in unflow with the heating gas, and also for expelling at a higher temperature, gaseous hydrocarbons contained in



the solid residue remaining after the oils have been expelled, whereby the coke formed contains from 1.5% to 2% volatile matter.

1,886,351. MANUFACTURE OF RUBBER ARTICLES. EDWARD ARTHUR MURPHY, Wylde Green, ROBERT GILBERT JAMES, Birmingham, and DOUGLAS FRANK TWISS, Wylde Green, England, assignors to Dunlop Rubber Company Limited, Birmingham, England, a Corporation of Great Britain. Filed Sept. 17, 1929, Serial No. 393,309, and in Great Britain Oct. 6, 1928. 8 Claims. (Cl. 18—58.)

1. A process for the manufacture of rubber articles which comprises contacting uncoagulated layers of an aqueous dispersion of rubber with a bath containing coagulating and swelling material.

1,886,352. LICENSE PLATE HOLDER FOR MOTOR VEHICLES. WILLIAM H. NICKERSON, Jr., Newton, Mass. Filed Dec. 8, 1931. Serial No. 579,667. 3 Claims. (Cl. 40—125.)



1. A license plate holder comprising a marginal frame including a rim and a flange projecting inwardly therefrom at the outer side of the holder, a transparent pane whose outer side is seated on the inner side of said flange, compressible gasket strips cemented to the marginal portions of the inner side of the pane and meeting at portions of their edges to form butt joints, said strips being arranged to form a frame shaped gasket, a shallow license plate-receiving pan formed to enter the frame rim and including a bottom constituting the back of the holder, and a marginal rim projecting into the frame, separable connections between the frame and the pan, said connections including means for maintaining a license plate spaced from the pane a distance less than the thickness of the gasket strips, so that said strips are compressed and their butt joints closed, to exclude dust and water from the visible side of the license plate.

1,886,353. SYNTHETIC RESIN AND METHOD OF MAKING SAME. EMIL E. NOVOTNY and CHARLES J. ROMIEUX, Logan, Pa., assignors to John Stogdell Stokes, Huntingdon Valley P. O., Pa. Filed Apr. 27, 1922. Serial No. 557,010. 14 Claims. (Cl. 260—2.)

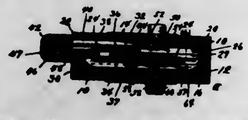
1. A resinous product resulting from reacting a phenol with a carbohydrate at temperatures above the normal boiling points of the components and under a pressure greater than atmospheric pressure.

1,886,354. THERMAL RELAY. GEORGE W. O'KEEFFE, Milton, Mass., assignor to Condit Electrical Manufacturing Corporation, South Boston, Mass., a Corporation of Massachusetts. Filed May 18, 1929. Serial No. 364,149. 24 Claims. (Cl. 200—122.)



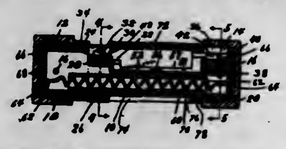
1. A thermal relay including an enclosing casing having a pair of main-circuit terminals carried by the ends of said casing, a heating element carried by said casing and connected between said terminals, a pair of opposed auxiliary-circuit terminals carried by said casing between and insulated from said main-circuit terminals, and a U-shaped thermally-expansible member heated by said heating element and having one leg connected to one of said auxiliary circuit terminals and having its other leg controlling the connection between said auxiliary-circuit terminals.

1,886,355. THERMORESPONSIVE DEVICE. GEORGE W. O'KEEFFE, Milton, Mass., assignor to Condit Electrical Manufacturing Corporation, South Boston, Mass., a Corporation of Massachusetts. Filed Feb. 17, 1930. Serial No. 428,910. 15 Claims. (Cl. 200—122.)



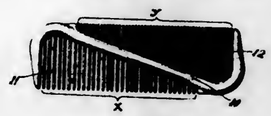
1. A thermal relay including an insulating enclosing casing having end terminals and a pair of intermediate terminals, a U-shaped thermally expansible element having spaced parallel legs normally connecting said intermediate terminals, a heating element electrically connecting said end terminals and located alongside said expansible element, said heating element having a grid portion extended laterally therefrom and disposed between the arms of said U-shaped expansible element.

1,886,356. THERMAL RELAY AND CUT-OUT. GEORGE W. O'KEEFFE, Milton, Mass., assignor to Condit Electrical Manufacturing Corporation, South Boston, Mass., a Corporation of Massachusetts. Filed Feb. 17, 1930. Serial No. 428,911. 25 Claims. (Cl. 200—123.)



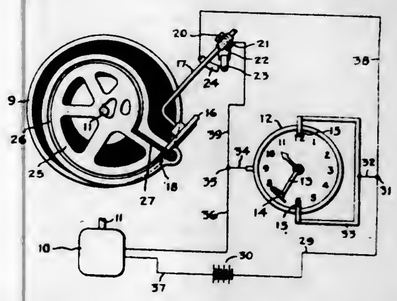
1. A thermal relay comprising a pair of spaced fixed supports, a thermal element comprising two sections having their adjacent ends united by a fusible material and having their remote ends secured to said supports, and a heater element which is extended along the length of and close to said thermal element and on one side only thereof, one of said sections of said thermal element being resilient and being held under stress to its support and adapted to snap away from the cooperating section and also away from said heater element when said fusible material melts.

1,886,357. COMB. JOHN J. RUGABER, Trenton, N. J., assignor to The Vulcanized Rubber Company, New York, N. Y., a Corporation of Maine. Filed June 22, 1932. Serial No. 618,592. 7 Claims. (Cl. 132—11.)



1. A comb comprising a rib extending obliquely substantially from one corner of the comb to the diagonally opposite corner thereof, a set of teeth extending in one direction from one side of said rib, and a second set of teeth extending in an opposite direction from the other side thereof.

1,886,358. AUTOMATIC TIME-CONTROLLED SUGGESTION MACHINE. ALOIS B. SALIGER, New York, N. Y. Filed Oct. 20, 1928. Serial No. 313,749. 4 Claims. (Cl. 161—1.)



1. An automatic time-controlled suggestion machine having, in combination, a sound reproducing mechanism comprising a turntable for supporting a sound reproducing record, a sound reproducer, and a tone arm, an electric motor for driving said sound reproducing mechanism, a clock mechanism electrically connected to said motor, means carried by the minute hand of said clock mechanism for establishing electrical contacts at predetermined intervals to cause said motor to start, and an electrical contact carried by the tone arm of said sound reproducing mechanism to close an electric circuit and cause said motor to continue its operation until said sound reproducing record has been played and said sound reproducing mechanism is returned to its initial playing position.

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Labels	24—No.	41,390 to No.	41,413, inclusive.
Prints	2—No.	13,958 to No.	13,959, inclusive.
Reissues	5—No.	18,647 to No.	18,651, inclusive.
Plant Patents	4—No.	40 to No.	43, inclusive.
Designs	60—No.	88,221 to No.	88,280, inclusive.
Patents	1128—No.	1,886,359 to No.	1,887,486, inclusive.
Total	1,380		

Trade-Marks Canceled

68,442. Ham, bacon, and sausages. William H. Miner, Chicago, Ill., and Chazy, N. Y. Registered April 7, 1908. Canceled October 10, 1932.

68,692. Butter, cheese, milk, and cream. William H. Miner, Chazy, N. Y. Registered April 21, 1908. Canceled October 10, 1932.

68,693. Poultry, and eggs. William H. Miner, Chazy, N. Y. Registered April 21, 1908. Canceled October 10, 1932.

68,850. Maple-syrup and maple-sugar. William H. Miner, Chicago, Ill., and Chazy, N. Y. Registered April 28, 1908. Canceled October 10, 1932.

70,463. Certain knit goods. John F. Brooks Co., Needham and Needham Heights, Mass. Registered Sept. 1, 1908. Canceled September 30, 1932.

96,760. Tooth-powder and tooth-paste. Dr. J. A. Walsh Co., Boston, Mass. Registered April 28, 1914. Canceled September 14, 1932

122,748. Depilatory, Sheffield Pharmacal Co., Chicago, Ill. Registered September 10, 1918. Canceled October 10, 1932.

176,983. Certain named electrical apparatus and supplies. American Bosch Magneto Corporation, Springfield, Mass. Registered December 4, 1923. Canceled October 10, 1932.

179,054. Fresh apples. Resetar Bros., Watsonville, Calif. Registered February 5, 1924. Canceled September 27, 1932.

184,572. Certain named toilet preparations. Frederick Stearns & Company, Detroit, Mich. Registered May 27, 1924. Canceled October 10, 1932.

225,017. Certain named electrical apparatus, machines, and supplies. Reichmann Company, Chicago, Ill. Registered March 8, 1927. Canceled October 10, 1932.

262,451. Toilet soaps. Societe des Savons Francais, (Societe Anonyme), Paris, France. Registered October 8, 1929. Canceled September 27, 1932.

276,909. Toilet-bowl cleaners. The Clean-ite Company, Charlton, Iowa. Registered October 28, 1930. Canceled October 10, 1932.

277,382. Paper napkins. Yorkville Paper Company, New York, N. Y. Registered November 11, 1930. Canceled September 27, 1932.

286,081. Motor trucks and chassis. Standard Motor Truck Company, Detroit, Mich. Registered August 11, 1931. Canceled September 27, 1932.

291,565. Certain named toilet preparations. Standard Beauty Parlor Supply Co., New York, N. Y. Registered February 16, 1932. Canceled September 27, 1932.

Interference Notice

U. S. PATENT OFFICE, *Washington, Oct. 21, 1932.*

Harry Harris, his assigns or legal representatives, take notice:

An interference having been declared by this Office between the application of the Brown Shoe Company, Inc., 1600 Washington Avenue, St. Louis, Mo., for registration of a trade-mark and trade-mark registered November 23, 1915, No. 107,421, to Harry Harris, 800-802 Penn Avenue, Pittsburgh, Pa., and a notice of such declaration sent by registered mail to said Harris at the said address having been returned by the post office as undeliverable, notice is hereby given that unless said Harris, his assigns or legal representatives, shall enter an appearance therein within 30 days from the first publication of this order the interference will be proceeded with as in case of default. This notice will be published in the OFFICIAL GAZETTE for three consecutive weeks.

WM. A. KINNAN,
First Assistant Commissioner.

Condition of Applications Under Examination at Close of Business October 22, 1932

(Total number of applications awaiting action, excluding Trade-Mark Division, 66,222; Trade-Mark Division, 1,021 Oldest new case, Apr. 22, 1932; oldest amended, Apr. 22, 1932.)

Room No.	Divisions, Examiners, and Subjects of Inventions	Oldest new application and oldest action by applicant awaiting office action: New	Amended	No. of applications awaiting action
6624	1. LOEFFLER, F. A., Closure Operators; Fences; Gates; Tillage; Handling Implements	July 29	Aug. 15	281
6706	2. HERMAN, D. (Act.), Fishing and Trapping; Dairy; Animal Husbandry; Presses; Tobacco; Velocipedes.	June 24	June 27	828
4093	3. LINDSEY, A., Heating; Metal Founding; Metallurgy; Metal Treatment; Electric Furnaces	July 7	July 28	689
7083	4. MERRITT, A. D., Conveyers; Hoists; Handling Apparatus; Excavating	July 22	Aug. 24	343
3628	5. MACNAB, F., Harvesters; Music; Acoustics; Sound Recording; Knotters	June 25	June 27	204
4596C	6. LEWERS, A. M., Carbon Chemistry	Apr. 25	Apr. 29	1,996
5725	7. JARBOE, C. G., Optics; Photography	June 6	June 6	1,343
7514	8. ADAMS, F. L., Beds; Chairs; Kitchen and Table Articles; Racks and Cabinets	June 23	June 27	871
4624	9. ADAMS, R. E., Pumps; Fluid and Fluid-Current Motors	July 22	Aug. 11	635
6612	10. HUNTER, O. F., Land Vehicles—Animal Draft Appliances, Bodies and Tops	May 26	May 26	764
5087B	11. BENHAM, E. V., Boots, Shoes, and Leggins; Button, Eyelet, and Rivet Setting; Harness; Leather Manufactures; Nailing and Stapling; Whip Apparatus.	June 24	June 28	615
7701	12. HENRY, C. C., Machine Elements	July 6	July 15	439
5096	13. BORLIK, F. J., Gear Cutting, Milling, and Planing; Metal Drawing; Metal Forging and Welding; Metal Rolling; Metal Working; Needle and Pin Making; Turning; Boring and Drilling.	June 17	June 17	999
5097	14. BRUMBAUGH, N. J., Farriery; Metal Bending; Metal Tools and Implements, Making; Sheet Metal Ware, Making; Wire Fabrics; Wire Working; Metal Working, Blanks and Processes.	July 9	July 14	666
4807	15. WORRELL, L. W., Glass; Plastic Block and Earthenware Apparatus; Plastics	May 24	May 24	1,661
5612	16. SPENCER, C. J., Telegraphy; Telephony	July 3	July 6	773
5701	17. ARMSTRONG, H. (Act.), Label Pasting and Paper Hanging; Ornamentation; Paper Manufactures; Printing; Type Casting; Sheet-Material Associating or Folding; Sheet or Web Feeding; Type Setting.	May 4	May 5	1,386
4612	18. PORTER, M. E., Motors, Expansible-Chamber Type; Power Plants; Speed-Responsive Devices	June 27	July 2	595
4096	19. KENNEDY, A. R., Furnaces and Stoves; Heating Systems; Fuel Burners	Apr. 22	Apr. 23	1,804
6613	20. GROVE, S. D., Miscellaneous Hardware; Closure Fasteners; Locks and Latches; Safes; Undertaking	July 15	July 16	408
7733	21. THOMPSON, T. J., Textiles; Cloth Finishing	June 15	June 16	846
5724	22. RINGLE, D. (Act.), Aeronautics; Firearms, Ordnance, and Explosive Devices; Air Guns, Catapults, and Targets; Boats and Buoys; Ships; Marine Propulsion.	July 25	Aug. 4	438
7892	23. GROESBECK, W. D., Coin Handling; Recorders; Registers	May 11	May 4	837
5063	24. DURAS, C. O., Apparel; Apparel Apparatus; Garment Supporters; Sewing Machines	July 24	Aug. 2	535
5709	25. BLAKELY, C. F., Agitating; Butchering; Classifying Solids; Centrifugal-Bowl Separators; Mills; Threshing; Vegetable and Meat Cutters and Comminutors.	May 12	May 16	1,336
5893	26. ADAMS, W. M. (Act.), Electricity, Generation; Motive Power	May 9	May 9	891
5708	27. CLARK, W. N. (Act.), Brushing, Scrubbing, and Cleaning; Washing Apparatus	June 28	June 30	795
4628	28. BENSON, A. R., Internal-Combustion Engines	Apr. 27	Apr. 25	1,329
5082	29. MORRIS, B. N., Woodworking; Tools; Compound Tools; Furniture; Metal Working, Assembling	Apr. 22	Apr. 28	766
4074	30. SHIPMAN, J. L., Automatic Temperature and Humidity Regulation, Illuminating Burners; Illumination; Thermostats and Humidostats.	June 25	June 24	764
4716	31. HOLMES, W. N., Gas, Heating and Illuminating; Mineral Oils	May 16	May 14	1,481
4086	32. BARTHOLOMEW, J. A., Gas and Liquid Contact Apparatus; Heat Exchange; Gas Separation	July 13	July 20	694
6096	33. WYMAN, W. I., Bridges; Masonry and Concrete Structures; Metallic Building Structures; Roads and Pavements; Roofs; Wooden Buildings.	Apr. 23	Apr. 23	2,207
6625	34. SAPERSTEIN, S. (Act.), Electricity, Transmission to Vehicles; Pneumatic Dispatch; Railways, Rolling Stock, Switches, and Signals; Store Service; Vehicle Fenders; Track Sanders.	May 24	May 25	819
3600	35. REYNOLDS, E. C., Buckles, Buttons, Clasps, Etc.; Card and Sign Exhibiting; Signals; Toilet	Aug. 22	Sept. 2	334
7624	36. McFAYDEN, A. D. (Act.), Automatic Weighers; Geometrical and Measuring Instruments; Force Measuring.	Apr. 27	May 2	1,504
5889	37. WEAVER, M. E., Electricity, Circuit Makers and Breakers	May 31	June 2	981
7510	38. KRAFFT, C. F., Earth Boring; Hydraulic and Earth Engineering; Mining, Quarrying, and Ice Harvesting; Stoneworking; Wells.	Sept. 6	Sept. 7	97
4874	39. WHITNEY, F. J. (Act.), Fluid-Pressure Regulators; Multiple Valves; Valves; Water Distribution	Apr. 28	May 2	1,331
7880	40. OBERLIN, J. J., Receptacles	May 28	May 31	2,185
6082	41. WHITNEY, M. L., Land Vehicles, Wheels, and Axles: Resilient Tires and Wheels; Wheel Substitutes; Railway Draft Appliances; Spring Devices.	July 25	Aug. 17	446
5882	42. CUTTING, H. O., Electric Signaling	Apr. 30	Apr. 23	1,268
4886B	43. KLINGE, E. F., Baths, Closets, Sinks, and Spittoons; Sewerage; Electricity, Medical and Surgical; Medicines; Surgery; Dentistry; Artificial Body Members.	May 25	May 25	1,498
4067B	44. SHAFFER, C. H., Dispensing; Filling and Closing Portable Receptacles; Refrigeration	Apr. 25	Apr. 25	1,730
7007	45. HILL, H. D., Pulleys and Shafting; Lubrication; Bearings and Guides	July 11	July 11	848
4613	46. TAYLOR, M., Evaporators; Fluid Sprinkling; Fire Extinguishers; Boilers	June 24	June 29	543
7600	47. BARKER, H., Clutches and Power Stops; Brakes; Motors	May 24	May 24	1,883
5731	48. ROEPKE, O. B., Electricity, General Applications	June 2	June 1	662
7725	49. SHEFFIELD, E. L., Check-Controlled Apparatus; Domestic Cooking Vessels; Ventilation; Driers; Liquid Separation or Purification.	May 2	May 2	1,415
4701	50. BLAKE, C. L., Plastic and Liquid Coating Compositions; Coating	Apr. 22	Apr. 22	2,101
5628	51. BACKUS, C. D., Radiant Energy	June 10	June 10	1,092
7709	52. KNOTTS, M. K., Supports; Chucks; Joint Packing; Pipe and Rod Joints or Couplings; Tool-Handle Fastenings.	July 25	July 28	668
6897	53. PECK, M. K., Books; Manifolding; Printed Matter; Stationery, Educational Appliances; Paper Files and Binders; Tents, Canopies, Umbrellas, and Canes; Curtains, Shades, and Screens.	July 28	Aug. 12	415
5874	54. WAITE, W. E., Electric Lamps; Vapor Electric Devices; Space Discharge Tubes; Light Sensitive Circuits.	May 11	May 11	1,066
5887	55. BOWEN, S. T., Bread, Pastry, and Confection Making; Cutlery	July 28	July 28	349
	Designs	Oct. 1	Oct. 10	208
4725	56. PORTER, F. J., Electrochemistry; Laminated Fabrics; Paper Making; Substance Preparation	May 7	May 5	1,344
3623	57. NICHOLSON, G. D. G., Cutting and Punching; Bolt, Nut, Rivet, Nail, Screw, Chain, and Horse-Shoe Making; Driven and Screw Fastenings; Jewelry; Nut and Bolt Locks.	June 15	June 20	645
5605	58. DOWELL, E. F., Abrading; Typewriting	Apr. 23	Apr. 23	1,276
4709	59. RICHARD, V. I., Chemistry; Alcohol; Fertilizers; Cement and Lime; Hides, Skins, and Leather; Fuel.	Apr. 22	Apr. 22	1,660
5896	60. GLASS, R. L., Electricity, Heating, and Welding; Batteries; Resistances and Rheostats; Prime Mover Dynamo Plants.	May 5	May 5	1,396
6724	61. PARKS, G. E., Elevators; Winding and Reeling; Pushing and Pulling; Fire Escapes; Ladders; Scaffolds; Horology; Time-Controlling Apparatus.	May 14	May 23	1,219
7525	62. COCHRAN, W. W., Toys; Amusement Devices; Baggage; Package and Article Carriers; Bottles and Jars; Deposit and Collection Receptacles.	May 28	May 28	1,478
4888	63. WINKELSTEIN, A. H., Bleaching and Dyeing; Explosive Pyrotechnic, and Match Compositions; Preserving; Sugar, Starch, and Carbohydrates.	May 3	May 6	1,379
4706	64. NASH, P. N., Acetylene; Distillation; Gas Mixers; Oils, Fats, and Glue	July 10	July 15	439
5624	65. McDERMOTT, F. P., Electricity, Conductors; Conduits and Housings; Repeaters; Relays; Wave Transmission.	May 3	Apr. 28	1,512
2099B	Trade-Marks, Labels, and Prints: F. A. RICHMOND. Trade-Marks	Sept. 27	Oct. 8	876
	Labels and Prints	Oct. 3	Oct. 10	145

DECISIONS IN PATENT AND TRADE-MARK CASES

Commissioner's Decision

ARMITAGE *v.* ARCHEA

Decided September 26, 1932

INTERFERENCE—MOTION TO AMEND ISSUE—APPLICATIONS OF COMMON OWNERSHIP—ELECTION.

Where a motion was filed by the assignee of one of the parties to an interference to declare a further interference between the application of the other party and two applications owned by said assignee *Held* that the Examiner of Interferences properly required the assignee to show cause why it should not be required to elect between the two applications and, no such showing having been made, properly required an election.

Mr. Fred A. Parsons and *Messrs. Cushman, Bryant, Darby & Cushman* for Armitage.

Mr. Harold K. Parsons for Archea.

ON PETITION.

KINNAN, *First Assistant Commissioner:*

This is a petition by Armitage that the Commissioner, in the exercise of his supervisory authority, review and vacate the order of the Examiner of Interferences requiring Armitage and his assignee to elect with respect to two proposed applications owned by the same assignee.

Interference was declared between the application of Archea and the patent to Armitage on four claims copied from the latter. A motion was filed to declare a further interference between the application of Archea and an application of Kearney and Armitage for reissue of Patent No. 1,715,604 and an application of Kearney, Parsons and Armitage. With two exceptions the claims presented in these two applications are the same. The Examiner of Interferences has required that the assignee elect on which of these two applications he proposes to stand.

It is argued that there is no provision in the rule for requirement such as the Examiner of Interferences has made and that rule 94 only provides that where two or more co-owned applications contain conflicting claims the owner will be required to show cause why the claims should not be eliminated from all or one of the applications.

While there is no specific rule as to motions to amend on this point, it is deemed that the practice in reforming an interference under the provisions of rule 109 should follow the practice as to the declaration of an interference.

If for example claims had been suggested from the Archea application in the Kearney and Armitage case and they had been presented also in the Kearney, Parsons and Armitage case, it would have been the duty of the Examiner to require the common owner to show cause why the claims should not have been eliminated from one of the applications.

The Examiner of Interferences, in his letter of May 28, 1932, advised the party Armitage that an assignee would not be permitted to prosecute more than one application in an interference on the same counts "unless supported by a showing which would justify such a course." No showing was presented except a statement that the meaning of the claims was uncertain and therefore the requirement to elect should not be made until after the hearing and decision on the motions.

It is not deemed that this is any such showing as required by rule 94. If, in the hypothetical case above suggested, the claims had been presented in both cases with the same argument, according to the petitioner's theory it would have been necessary to declare the interference and determine, if motions were presented and decided, which application should be eliminated.

It is not considered that any such practice should be permitted. In the reissue application the joint inventors have filed an oath that they were the inventors of the invention as defined by certain claims taken from the Archea application. The same claims have been presented in the three-party case without any explanation whatever why, if they were proper in the one case they were presented in the other.

It is held that the requirement of the Examiner of Interferences for a showing was properly made and that, no showing other than that above indicated having been made, his requirement for election was also proper. It is not thought that either the parties to the interference or this office should be put to the trouble and the expense of determining on which of the two applications owned by the same party in interest the claims are properly readable and if they are readable on both, whether the invention was first made by the two joint inventors or the three joint inventors. The purpose of requiring a sufficient showing, or in the alternative an election, was to avoid trying questions of priority between applications owned by the same party.

The petition is denied.

U. S. Court of Customs and Patent Appeals

IN RE SCHOENROCK

No. 3,898. Decided June 20, 1932

1. PATENTABILITY—CHANGE OF MATERIAL.

"It has been held that the mere substitution of materials used as means of making an article is not invention. If the use of a new material involves a new method of construction, or if the new material has not been theretofore known to the art, or if the use of such new material develops new uses and properties of the article, then such substitution may constitute invention."

2. SAME—SAME—ROLLED STEEL TRACTION LUG.

Claims for a traction lug differing from the prior art only in the lug being made of rolled steel *Held* unpatentable.

APPEAL from the Patent Office. Affirmed.

Mr. Henry P. Doolittle for Schoenrock.

Mr. T. A. Hostetler and *Mr. Howard S. Miller* for the Commissioner of Patents.

GRAHAM, *P. J.*:

The appellant filed an application for a patent on improvements in rolled steel shapes, such as are used for traction lugs upon the wheels of vehicles, particularly tractors. The appellant's device is sufficiently described by claim 4, which is as follows:

4. A traction lug characterized as being formed of rolled steel with lateral wings and with parts projected from inner edges of the wings at inclinations thereto and forming an inverted truncated V in cross section, and having a solid soil penetrating portion into which the inclined parts merge, the sides of the inclined parts being in the form of rectangular parallelograms, the lug being open at the ends.

The Examiner rejected the claims, three in number, 4, 5, and 8, and this rejection was affirmed, on appeal, by the Board of Appeals. The claims were rejected on reference to the following: Baker, 374,770, December 13, 1887; Morton, 1,195,066, August 15, 1916; Bradley, 1,277,287, August 27, 1918; Nelson, 1,482,139, January 29, 1924.

The principal contention of appellant here is that he has, by the use of rolled steel, perfected a traction lug which is more durable, more efficient, and cheaper than anything heretofore known in the art. He contends that heretofore traction lugs have been made of cast or stamped metal, and that he is the originator of the rolled shape as applied to such lugs. He contends that by using the rolling process, the lugs are of better shape for resistance to wear than any heretofore devised.

On the other hand, the Patent Office tribunals held, and the Solicitor for the Patent Office argues, that the art of rolling plates or bars of metal in the general shape shown by appellant is old, as shown in the reference patents to Baker and Bradley. It is also argued that the reference patent to Morton shows a traction lug of approximately the same shape and applied in the same manner. It is, therefore, argued that the form and shape of the lug being old, and the process of rolling being well known to the art, there is no invention in appellant's application. We agree with the Board of Appeals in its conclusion.

[1] It has been held that the mere substitution of materials used as means of making an article is not invention. If the use of a new material involves a new method of construction, or if the new material has not been theretofore known to the art, or if the use of such new material develops new uses and properties of the article, then such substitution may constitute invention.

[2] We are unable to find from the facts presented by this record anything novel in the article produced by the applicant, except such as would be produced by the substitution of another material having properties and uses well known in the art. In such case, a patent should not issue. *Hotchkiss et al.* v. *Greenwood et al.*, 11 How. 248, 265; *Florsheim* v. *Schilling*, 137 U. S. 64, 76, 53 O. G. 1737; *Potts* v. *Creager*, 155 U. S. 597, 608, 70 O. G. 494; *In re de van Horning*, 54 App. D. C. 271, 296 Fed. 1018, 322 O. G. 266; *In re Stevens*, 17 C. C. P. A. (Patents) 684, 36 F.(2d) 296, 392 O. G. 5; *Drake C. P. S. Lug Co.* v. *Brownell*, 123 Fed. 86; *In re Orcutt*, 32 App. D. C. 345, 141 O. G. 567.

The decision of the Board of Appeals of the United States Patent Office is affirmed.

Affirmed.

U. S. Court of Customs and Patent Appeals

HALL *v.* SHIMADZU

Nos. 2,982 and 2,983. Decided June 20, 1932

1. INTERFERENCE—CONSTRUCTION OF COUNTS—INTRODUCTORY PHRASE.

Certain of the counts specify "A process of manufacturing a fine powder of lead suboxide intermingled with a powder of metallic lead", comprising, etc., *Held* that the phrase above quoted is more than a mere introductory phrase and is absolutely essential to point out the invention involved.

2. SAME—TESTIMONY—EX PARTE TESTS.

Where S. built an apparatus for the purpose of testing the process shown in the H. application to ascertain whether by that process a suboxide of lead could be produced as required in the counts and before taking testimony with reference to these tests and during the cross-examination invited H. to visit the testing plant and operate it himself and H. declined to do so, *Held* that the Patent Office was justified in giving credit to the testimony concerning the tests.

3. SAME—PRIORITY—RIGHT TO MAKE THE CLAIMS.

Evidence reviewed and *Held* to establish that priority was properly awarded to S. on the ground that the invention in issue is not disclosed in the H. application.

APPEAL from the Patent Office. Affirmed.

Mr. Edward S. W. Farnum, jr., and *Mr. Augustus B. Stoughton* for Hall.

Mr. J. T. Newton, Messrs. Marks & Clerk, Mr. E. B. Whitcomb, and *Messrs. Braselton, Whitcomb & Davis* for Shimadzu.

LENROOT, *J.*:

These are appeals in two interference proceedings from decisions of the Board of Appeals of the United States Patent Office, awarding priority of invention in each interference to appellee. Interference No. 54,798 is involved in the first appeal, being appeal No. 2,982, while interference No. 56,224 is involved in the other appeal, being appeal No. 2,983. For the purposes of the hearing before us, the records in both interferences were consolidated.

Inasmuch as the principal questions involved in each of these appeals are common to both cases, we shall dispose of both appeals in one opinion.

Interference No. 54,798

The invention herein involved relates to a product which has as its essential ingredient the substance suboxide of lead, and a process for making the same. In this interference the issue is stated in eight counts, of which the following are illustrative:

1. A process of manufacturing a fine powder of lead suboxide intermingled with powder of metallic lead, comprising in putting in a rotatable vessel pieces of metallic lead, introducing air thereinto and rotating the vessel maintaining the temperature of the material at not less than 60° C. by the heat generated by friction and chemical reaction.

2. Comminuted lead—lead suboxide mixture with apparent specific gravity 1 to 3.

3. As a new composition of matter, a highly chemically reactive powder, comprising a large portion of lead suboxide, said powder being capable of spontaneous reaction on contact with moisture.

5. A process of manufacturing a fine powder of lead suboxide intermingled with a powder of metallic lead, comprising in putting in a rotatable vessel pieces of metallic lead in a dry state, introducing into the said vessel while rotating blasts of a gas containing oxygen, such as air, causing such blast to blow the powder produced out of the vessel.

The issue involves Patent No. 1,584,150, of May 11, 1926, issued to appellee upon an application therefor filed July 14, 1923, and appellant's application was filed March 29, 1924, which application was allowed, forfeited and renewed on December 24, 1926. While the record is very indefinite with respect to any added claims included in the application of appellant when renewed on December 24, 1926, it seems to be conceded by the parties that, at the time of such renewal, appellant copied claims 6, 14, 16 and 17 from appellee's said patent and added them to his renewed application. These claims became counts 1, 2, 3 and 4 of the interference before us, which was declared on January 20, 1927.

Thereafter, appellee moved to dissolve the interference upon the ground that appellant had no right to make claims corresponding to said counts. At the same time, appellant moved to amend his application by adding thereto certain other claims taken from the said patent to Shimadzu, included among which were claims corresponding to Shimaduz claims 2, 3, 4 and 15. Appellee's motion to dissolve was denied and appellant's motion to amend was allowed with respect to the claims corresponding to said Shimadzu claims 2, 3, 4, and 15. Thereafter the interference was amended by adding thereto counts 5, 6, 7 and 8, corresponding to said Shimaduz claims 2, 3, 4 and 15. Thus it appears that all of the counts of the interference were copied from the Shimadzu patent.

In his decision denying appellee's motion to dissolve the interference, the Law Examiner said:

The motion to dissolve attacks Hall's disclosure largely for the reason that he does not disclose lead suboxide, Pb_2O. He does not refer to lead suboxide by name and it must be determined if he has sufficiently identified a material which would be recognized by chemists as lead suboxide so that he would be allowed to give his material that name. • • •

The Law Examiner thereupon entered upon a detailed discussion of appellant's disclosure and came to the conclusion that the process disclosed by him would result in the production of lead suboxide, and that therefore appellant was entitled to make the claims.

Thereafter, both parties took testimony.

In his preliminary statement, appellant alleged conception of the invention set forth in the counts on or about July, 1920, and reduction to practice in January, 1921.

While the preliminary statement of appellee alleged conception and reduction to practice prior to his filing date of July 14, 1923, both the Examiner of Interferences and the Board of Appeals held him to said filing date for both conception and reduction to practice. In view of the conclusions we have reached, it is unnecessary to examine the action of the Patent Office tribunals on this point.

The testimony shows that appellee set up a Hardinge mill at Depew, N. Y., for experimentation, it appearing from appellant's disclosure that he used a Hardinge mill in carrying out his process. Testimony on behalf of appellee, including that of witnesses who were chemical experts, is to the effect that the process described by appellant in his disclosure was carefully carried out at Depew, as a result of which about 77 pounds of olive gray powder was secured, which is the color of the powder described in appellant's disclosure, but that none of such powder contained an appreciable amount of lead suboxide, it being mainly composed of lead monoxide or litharge.

The tribunals of the Patent Office apparently found such testimony to be of sufficient weight to cause them to come to a different conclusion than that reached by the Law Examiner in his decision, and both tribunals held that appellant's specification, as originally filed, does not warrant claims corresponding to the counts here in issue; that appellant has no right to make the claims; that the process disclosed by appellant does not produce a substantial amount of suboxide and powdered lead as required by the counts, and both tribunals further found that appellant was not sufficiently corroborated as to conception and reduction to practice, which appellant attempted to establish as prior to appellee's filing date. Accordingly the Board of Appeals concurred with the Examiner in awarding priority of invention to appellee.

[1] Appellant here makes three principal contentions. The first is that, as to counts 1, 5, 6 and 7, the language first appearing in said counts—

a process of manufacturing a fine powder of lead suboxide intermingled with powder of metallic lead

should be construed as an introductory phrase merely, and that it can not be considered in construing said counts. In this contention appellant relies upon our decision in the case of *Braren* v. *Horner*, 18 C. C. P. A. (Patents) 971, 47 F.(2d) 858, 408 O. G. 825, in which case we held that the introductory phrase in the counts there involved, reading "In an engraving machine and the like," could not be considered as a part of the subject matter of the counts. Generally speaking, it is well established that an introductory phrase will not be considered as a part of the subject matter of a claim, but there are exceptions to this rule, and this was recognized in our opinion in said case where, speaking through Presiding Judge Graham, we said:

• • • It is true, as stated by the Examiner of Interferences, that in some cases courts have held that similar introductory words should be considered as limitations. However, we think it may be safely said that in all such cases an examination of the facts disclosed by the record will show that the words thus considered as limitations were an essential element in the novelty of the device and of the invention in issue there. No such contention is properly made here, as it is obvious that if there be invention, it is not in the construction of an engraving or similar machine, but in the drive by which such machine is operated.

With reference to the counts here in issue, we think that the phrase here under consideration is more than merely an introductory phrase and is absolutely essential to point out the invention that is here involved.

In the case of *Schram Glass Co.* v. *Homer Brooke Glass Co.*, 249 Fed. 228, there was involved the construction of the following phrase:

An automatic device for cutting or separating an unsupported freely flowing stream of molten material into unformed molten masses.

In its opinion the court said:

> • • • While it is true that this clause of itself does not describe an element in the combination, it should not for that reason be ignored. Each of the elements of the combination should be read in the light of this clause and should be modified by it. Such a clause of itself may entirely fail to supply a necessary element in a combination (*American Envelope Co. v. A. W. P. Co.*, 152 U. S. 425, 14 Sup. Ct. 627, 38 L. Ed. 500) yet it may so affect the enumerated elements as to give life and meaning and vitality to them, as they appear in the combination. • • •

So here, surely it can not be said that a process which will not result in the production of suboxide of lead, if such be the fact, is the same invention as a process that will produce it. The production of suboxide of lead is the very heart of each of the counts where the phrase under consideration occurs, and this phrase is necessary "to give life and meaning and vitality" to the counts, and we are clear that, in determining the question of whether or not the process disclosed by appellant involves the same invention as that disclosed by appellee, this phrase must be considered. Furthermore, it must be borne in mind that appellant's claims, corresponding to the counts in issue, were all copied from appellee's patent, and the production of suboxide of lead is the whole purpose of appellee's process, while in appellant's disclosure, as originally filed, the words "suboxide of lead" are nowhere found.

Appellant's next contention is that little or no weight should be given to the tests of appellant's process conducted by appellee, for the reason that such tests were made without notice to appellant and without his presence when the same were made. Appellant cites many cases to the point that little or no weight should be given to ex parte tests or demonstrations, and some cases to the point that no weight should be given to experiments made by one party in the absence of the other.

[2] We should be inclined to agree with appellant that little or no weight should be given to these tests, were it not for the fact that, as the record shows, before the taking of any testimony upon behalf of appellee, and during the cross examination of appellant, appellant was invited by appellee's counsel to visit the testing plant set up by appellee and operate it himself, and that appellant declined to do so; that during the taking of testimony upon behalf of appellee a second invitation was extended to appellant to visit Depew, examine the mill that had been set up for purposes of the tests, and observe its operation, but appellant did not accept this invitation; later, during the taking of testimony by appellee, a third invitation was extended to appellant to go to Depew and observe the machine operate, and in this third invitation appellee offered to pay the expenses of appellant if he would do so; this invitation, like the others, was not accepted. We think this so important that we quote from the record the evidence of these invitations, as follows:

> X-Q. 146. Mr. Hall, to be perfectly frank with you, we have duplicated your apparatus at Buffalo and we cannot get it to work according to your specifications. Would you be willing to go up there and operate that machine?
>
> Mr. STOUGHTON [counsel for Hall]: It is perfectly well known that it is very easy to show how not to do a thing. The entire suggestion is objected to as immaterial and irrelevant and the witness is instructed he can use his own judgment about going up there and complying with the request. To my mind, there is no legal process by which he can be required to go to Buffalo and play with some apparatus that is supposed to be something like what is in his application. You can answer the question.
>
> The WITNESS. What was the question?
>
> (The last question was then read by the stenographer.)
>
> A. No, sir.
>
> • • • • • • •
>
> Mr. NEWTON [counsel for Shimadzu]. It is now desired to put upon the record the fact that in cross examination of Mr. Hall on October 4th, 1928, Mr. Hall was requested to visit the mill that we had erected and which we thought was a reproduction of the mill as shown in his application for patent and to assist us in performing this experiment. He did not see fit to accept that invitation, and we now extend to him a second invitation to go to Depew and examine that mill that was set up and has been referred to by the witness, and observe its operation and cross examine the witness in connection with the operation of the mill.
>
> Mr. STOUGHTON. We haven't anything to say.
>
> Mr. NEWTON. Attorney for Hall and Mr. Hall refuse to accept the invitation extended to them.
>
> Mr. STOUGHTON. I haven't said a word.
>
> • • • • • • •
>
> Mr. NEWTON. This finishes the direct examination of this witness, and before cross examination the attorney and the inventor who are present are again requested to go to Depew and see this machine, at our expense, and see the machine operate.
>
> Mr. STOUGHTON. Without waiving objection and reserving all benefit thereof, I will cross examine the witness for what it is worth.

In view of the foregoing we have no hesitation in saying that the tribunals of the Patent Office were justified in giving credit to said testimony concerning such tests.

Finally, appellant contends that the weight of the evidence is clearly contrary to the conclusion reached by the Patent Office tribunals. Appellant introduced testimony attempting to discredit the testimony upon behalf of appellee concerning the tests heretofore referred to. We have carefully examined such testimony and find no reason to come to a conclusion different than that reached by the Examiner of Interferences and the Board of Appeals; on the contrary, a careful examination of the disclosures of the respective parties tends to corroborate the testimony upon behalf of appellee concerning the result of such tests. We are therefore unable to agree with appellant upon this contention.

We are of the opinion that the Board of Appeals committed no error in finding that appellant's original specification does no warrant claims corresponding to the counts in issue; that the process described by appellant does not produce a substantial amount of suboxide of lead as required by the counts; and that the record is insufficient to establish conception or reduction to practice of the subject matter of the counts by appellant prior to appellee's filing date.

For the reasons stated, the decision of the Board of Appeals in this interference is affirmed.

Interference No. 56,224

This interference involves an application of appellant filed Dec. 24, 1926, as a division of an application filed Mar. 29, 1924, which earlier application was referred to in our decision in interference No. 54,798, on the one hand, and a patent, No. 1,584,152, issued to appellee on May 11, 1926, upon an application filed on April 18, 1924.

The claims in appellant's said application filed December 24, 1926, corresponding to the counts here in issue, are not found in his application of March 29, 1924, but were copied by him from the said patent to appellee, being claims 1 and 2 thereof.

The subject matter of the issue is a paint formed of a vehicle and a powder containing a major proportion of suboxide of lead and a minor proportion of metallic lead, said powder being defined by the process employed to produce the same. The counts of the interference read as follows:

> 1. A paint comprising a vehicle and a finely divided chemically reactive powder containing a major proportion of lead suboxide and a minor proportion of metallic lead, said powder resulting from the impingement of a current of air on relatively large masses of lead in a dry state, subjecting the lead to surface attrition, controlling the temperature to cause the formation of lead suboxide in the said proportions, and carrying of the powder resulting from the above by the said current of air.
>
> 2. A paint comprising a vehicle and a finely divided chemically reactive powder containing a major proportion of lead suboxide and a minor proportion of metallic lead, said powder resulting from the impingement of a current of air on relatively large masses of lead in a dry state, subjecting the lead to surface attrition, controlling the temperature to be not less than sixty degrees centigrade so as to form powder containing lead suboxide in the above proportion and carrying of the powder so formed by the above mentioned current of air.

The process of producing a powder containing a major proportion of suboxide of lead and a minor proportion of metallic lead is the subject matter of interference No. 54,798, in which we have affirmed the decision of the Board of Appeals awarding priority of invention to appellee. Therefore, the only difference between the issues in this interference and those in said interference No. 54,798 is in the added element of utilizing said powder in paint.

The Board of Appeals in its decision in this interference said:

> Since the powder involved in the two issues is the same the controversy here is merely the added limitation of utilizing it in paint. So far as appears from the record or is known as a matter of common knowledge the specific conclusion lead suboxide and powdered lead is a new product. Hall claims that the paint constituting the issue of this interference was made from the powder produced according to his application involved in the other interference. No other source is alleged. It follows therefore that if that record fails to prove that he prepared such powder this case falls with that.
>
> Reference is made to our decision in interference 54,798 concerning the merits of the proof as to the powder and process of preparing it. The record of the present interference consists mainly of a further contest as to the merits of the showing of the test at Depew concerning the process of preparing the powder and the right of Hall to allege that the disclosed process is operative to produce such powder.

Prior to the taking of any testimony in this interference, it was stipulated by the parties that the testimony taken in said interference No. 54,798 might be used in the present interference, so far as relevant and material, with a right of either party to take additional testimony. Both parties did take additional testimony, most of which, as stated by the Board, was in the nature of a further contest as to the merits of the showing of the tests conducted at Depew concerning the process of preparing the powder and upon the question of whether appellant's disclosed process is operative to produce such powder, which matters have been discussed by us in our opinion in said interference No. 54,798.

Appellant contends that, although his present application was filed subsequent to the application upon which patent was issued to appellee, he is entitled, upon the theory that his instant application is a division of his original application, to a date not later than the filing date of said original application, namely, March 29, 1924, for conception and constructive reduction to practice, and that therefore appellant is the senior party and the burden was upon appellee to establish prior conception and reduction to practice of the invention involved in the counts.

Inasmuch as we have held, in interference No. 54,798, that appellant's application of March 20, 1924, did not disclose the powder containing suboxide of lead, and that suboxide of lead is not referred to in said application, appellant is not entitled to the date of March 29, 1924 for conception and reduction to practice of the invention herein involved, and he is therefore the junior party and the burden was upon him to establish conception and reduction to practice prior to appellee's filing date, April 18, 1924.

As heretofore observed, most of the additional testimony taken in this interference related to the merits of the showing of the tests at Depew, which tests we have discussed in our opinion in said interference No. 54,798. In our judgment, said additional testimony does not warrant our reaching a contrary conclusion with respect to the formation of a powder containing suboxide of lead by appellant's process.

The Board of Appeals in its decision further stated:

> It is found that little is said about paint in this record. The substance of the showing in that respect is that Hall very broadly states that paint was made of the powder involved in the other interference and that parts of the mill and building were painted therewith. He is corroborated by Smith, Gorrell and Kohl but only by the same very general allegations that paint was made and used. No trace of any of the painting and presumably of other exhibits could be found according to Hall's testimony. We hold that this record is not sufficient to prove the reduction to practice of paint of the issue aside from the holding that Hall has failed to prove that he has a powder conforming to the issue in this respect to its composition before Shimadzu's filing date or that he had conception of the subject matter of the issue before that date followed by diligence up to a later reduction on his filing date.

We have carefully examined the record and are in accord with the foregoing findings of the Board of Appeals, and the decision of the Board in this interference is therefore affirmed.

For the reasons stated, the decisions of the Board of Appeals in both of the interferences herein involved are affirmed.

Affirmed.

Patent Suits

[Notices under sec. 4921, R. S., as amended Feb. 18, 1922.]

1,199,775, A. Garbell, Toy torpedo; 1,467,755, A. Cimorosi, same, filed Sept. 30, 1932, D. C. Md., Doc. E 2100, *J. N. Mackall et al* v. *Commercial Novelty Fireworks Mfg. Co.*

1,258,423, F. Lowenstein, Variable electrical apparatus, C. C. A., 3d Cir., Doc. 4644, *M. Balistockey et al.* v. *Scovill Mfg. Co.* Decree reversed Sept 22, 1932.

1,307,733, A. V. Gullborg, Lubricating apparatus; 1,307,734, same, Lubricating means, D. C., N. D. Calif. (San Francisco), Doc. E 1656, *Alemite Corp.* v. *W. Fischer et al.* Dismissed for want of prosecution July 11, 1932.

1,307,734, A. V. Gullborg, Lubricating means, D. C. Kans. 2d Div., Doc. 641–N, *Alemite Corp.* v. *The Air Shot Mfg. Co.* Patent held valid (notice Sept. 19, 1932.)

1,307,784. (See 1,307,733.)

1,335,894, F. J. Rustige, Fire extinguisher, D. C. Del., Doc. E 794, *Walter Kidde & Co., Inc.*, v. *American Car & Foundry Co* Dismissed upon stipulation Aug. 29, 1932.

1,896,397, W. R. Borst, Sewage treatment, D. C. Del., Doc. E 682, *W. R. Borst* v. *Simplex Ejector & Aerator Corp.* Dismissed Aug. 23, 1932.

1,467,614, C. W. Eades, Finger nail cleaning compound; 1,819,004, W. C. Roessinger, Toilet article, filed Sept. 26, 1932, D. C., E. D. N. Y., Doc. E 6580, *Northam Warren Corp.* v. *Allied Shops, Inc., et al.*

1,467,755. (See 1,199,775.) 1,558,215. (See Re. 17,416.)

1,608,065, C. M. Hogue, Shipping basket, filed Oct. 1, 1932, D. C., W. D. Mich., S. Div., Doc. E 2584, *C. M. Hogue et al.* v. *Bryan Wise.*

1,619,798, Lewis & Murray, Container for hair in permanent waving process, filed Sept. 26, 1932, D. C., S. D. N. Y., Doc. E 71/191, *The Nestle Le Mur Co.* v. *Mme. Fischer's Beauty Salons, Inc.*

1,623,469, F. A. Fahrenwald, Metallurgical furnace, C. C. A., 3d Cir., Doc. 4787, *F. A. Fahrenwald et al.* v. *Republic Iron & Steel Co.* Dismissed Sept. 28, 1932.

1,669,235, J. T. Fenton, Dry cleaning system; 1,728,343, Hatfield & Alliott, Cleaning process; 1,704,604, A. E. Hatfield, Purifying dry cleaning solvent, D. C. Mo. (Kansas City), Doc. 15, *Butler Mfg. Co.* v. *W. A. Alexander* (*Alco Cleaners*). Patents held valid Sept. 26, 1932.

1,673,727, L. V. Aronson, Cigar lighter, filed Sept. 23, 1932, D. C., S. D. N. Y., Doc. E 71/171, *Art Metal Works, Inc.*, v. *C. P. Landon.*

1,704,604. (See 1,669,235.) 1,728,343. (See 1,669,235.)

1,808,692, E. W. Sudduth, Highway advertising sign, D. C., N. D. Ala. (Birmingham), Doc. 735, *E. W. Sudduth* v. *Sunny South Display, Inc.* Patent held valid but not infringed (notice Sept. 28, 1932).

1,819,004. (See 1,467,614.)

1,828,533, H. W. Hoffmann, Full fashioned stocking and method of producing same, D. C., S. D. N. Y., Doc. E 69/77, *Ajax Hosiery Mills* v. *Gimbel Bros., Inc.* Consent order of discontinuance (notice Sept. 22, 1932).

1,836,742, A. Auerbach, Attachment for sewing machines for the manufacture of piping, filed Sept. 26, 1932, D. C., S. D. N. Y., Doc. E 71/190, *Garment Attachment Corp. et al.* v. *B. & W. Mfg. Co., Inc. et al.*

1,844,629. (See Re. 17,219.)

1,856,230, A. Silberstein, Cap, filed Sept. 15, 1932, D. C., E. D. N. Y., Doc. E 6567, *New York Mfg. Corp.* v. *A. Galinson et al.*

1,876,433, M. Sanders, Doll, filed Sept. 23, 1932, D. C. S. D. N. Y., Doc. E 71/168, *Ideal Novelty & Toy Co., Inc.*, v. *American Character Doll Co., Inc.*

Re. 16,327, H. B. Imes, Lifting jack, filed Sept. 29, 1932, D. C., N. D. Ohio, W. Div., Doc. 1298, *Dayton Malleable Iron Co. et al.* v. *The Bingham Stamping & Tool Co.*

Re. 17,219, W. H. Walker, Lifting jack; 1,844,629, J. H. Bate, Balloon tire jack, filed Sept. 29, 1932, D. C., N. D. Ohio, W. Div., Doc. E 2197, *Walker Mfg. Co.* v. *The Bingham Stamping & Tool Co.*

Re. 17,416 (of 1,558,215), O. Aram, Stoker construction, C. C. A., 3d Cir., Doc. 4813, *Westinghouse Electric & Mfg. Co.* v. *American Engineering Co.* Decree affirmed Sept. 23, 1932.

Disclaimer

1,625,640.—*Joseph H. Dillon*, Wilmette, Ill. PULLEY. Patent dated April 19, 1927. Disclaimer filed October 14, 1932, by the assignee, *Dillon Pulley Company.*

Hereby enters this disclaimer to claims 12, 13, 14, and 24 in said Letters Patent, the said claims being here quoted as follows, to wit:

"12. In a device of the class described, a sheet metal casing, a pulley therein, and lugs inside the casing bent in from the sides thereof to guide a cord passing partly round the pulley.

"13. In a device of the class described, a sheet metal casing, a pulley therein, apertures in said casing for the entry and exit of a cord passing partly round the pulley, and guides inside the casing adjacent the exit aperture for directing a free end of cord out through said aperture.

"14. In a device of the class described, a sheet metal casing, a pulley therein, apertures in said casing for the entry and exit of a cord passing partly round the pulley, and guides adjacent the exit aperture for directing a free end of cord out through said aperture, said guides consisting of lugs bent in from the side walls of said casing."

"24. In a device of the class described, a casing, a pulley within said casing, apertures in said casing for receiving a cord, said apertures encircling said cord only at points beyond where the cord leaves the pulley, and a baffle struck in from said casing adjacent the edge of one of said apertures to prevent the end of a cord from following the pulley groove past said aperture."

Notice of Cancellation

U. S. PATENT OFFICE, *Washington, October 15, 1932.*

National Eggoscope Corpor., its assigns or legal representatives, take notice:

A cancellation proceeding having been instituted by this Office upon the application of Cecil Starke Hassell, of 2028 S. W. 24th Terrace, Miami, Fla., to effect the cancellation of the trade-mark registration of the National Eggoscope Corpor., of 18–19 Hudson Street, New York, N. Y., No. 193,600, dated January 6, 1925, and the notice of such proceeding sent by registered mail to the said National Eggoscope Corpor. at the said address having been returned by the post-office as undeliverable, notice is hereby given that unless said National Eggoscope Corpor., its assigns or legal representatives, shall enter an appearance therein within 30 days from the first publication of this order the cancellation will be proceeded with as in case of default. This notice will be published in the OFFICIAL GAZETTE for three consecutive weeks.

WM. A. KINNAN,
First Assistant Commissioner.

TRADE-MARKS

OFFICIAL GAZETTE, NOVEMBER 8, 1932

[VOL. 424. No. 2]

The following trade-marks are published in compliance with section 6 of the act of February 20, 1905, as amended March 2, 1907. Notice of opposition must be filed within thirty days of this publication.

Marks applied for "under the ten-year proviso" are registrable under the provision in clause (b) of section 5 of said act as amended February 18, 1911.

As provided by section 1 of said act, a fee of ten dollars must accompany each notice of opposition.

CLASS 2

Receptacles

Ser. No. 327,556. GENERAL BOX COMPANY, Chicago, Ill. Filed May 31, 1932.

FOWLER

The surname "Fowler" is disclaimed apart from the mark as shown.

For Wooden Crates and Boxes.

Claims use since May 11, 1932.

Ser. No. 328,247. NEWARK PARAFFINE & PARCHMENT PAPER CO., Newark, N. J. Filed June 28, 1932.

AQUALEEN

For Waxed Paper Bags and Transparent Containers Used for Bakery Products Such as Doughnuts, Etc.

Claims use since Jan. 25, 1927.

CLASS 4

Abrasive, Detergent, and Polishing Materials

Ser. No. 311,543. U. S. MANUFACTURING CORPORATION, Decatur, Ill. Filed Feb. 27, 1931.



For Impregnated or Treated Cleaning and Polishing Cloths, Rags, Dusters, Yarns, or Similar Fabric Cleaning and Polishing Articles.

Claims use since Apr. 1, 1930.

Ser. No. 323,927. JACK ZWICK, doing business as Menth-A-Frost Products, Cleveland Heights, Ohio. Filed Feb. 6, 1932.

MENTH-A-FROST

For Shaving Creams—Namely, Brushless Shaving Cream.

Claims use since Oct. 1, 1931.

Ser. No. 329,495. H. TH. BÖHME AKTIENGESELLSCHAFT, Chemnitz, Germany. Filed Aug. 12, 1932.

Fibrotol

For Soap Preparations for Use in the Treatment of Textile Fabrics and Leather in the Course of Their Manufacture.

Claims use since May 27, 1932.

Ser. No. 329,943. AMEDEE M. GATIEN, doing business as P. W. Co., River Rouge, Mich. Filed Aug. 29, 1932.

PAINT IT ON
P.W.
WIPE IT OFF

The words "Paint It On" and "Wipe It Off" are hereby disclaimed apart from other features of the mark as shown on the drawing.

For Cleaning Compound for Painted or Soiled Surfaces, Porcelain, and the Like.

Claims use since July 1, 1932.

Ser. No. 330,245. THE CARBORUNDUM COMPANY, Niagara Falls, N. Y. Filed Sept. 12, 1932.

BLASTITE

For Artificial Abrasive Grains.
Claims use since May 18, 1932.

Ser. No. 330,429. NATIONAL MILLING & CHEMICAL COMPANY, Philadelphia, Pa. Filed Sept. 17, 1932.

TRISOAP

No claim is made to the word "Soap" except in the manner shown.
For Soap Compound.
Claims use since Aug. 1, 1932.

Ser. No. 330,627. IOWA SOAP COMPANY, Burlington, Iowa. Filed Sept. 24, 1932.

COMPETITION

For Laundry Soap.
Claims use since Apr. 1, 1931.

CLASS 5

Adhesives

Ser. No. 329,809. THE STARK METAL PRODUCTS COMPANY, Massillon, Ohio. Filed Aug. 24, 1932.

PLASTYX

For Adhesive Cement.
Claims use since Aug. 16, 1932.

Ser. No. 330,370. ALFRED JEFFERY & CO., doing business as Jeffery's Patent Marine Glue Works, London, England. Filed Sept. 15, 1932. Under 10-year proviso.

JEFFERY'S MARINE GLUE

For Marine Glue.
Claims use since 1887.

Ser. No. 330,768. UNITED STATES RUBBER COMPANY, New York, N. Y. Filed Sept. 28, 1932.

SPRING-STEP

For Rubber Cement.
Claims use since Aug. 20, 1932.

CLASS 6

Chemicals, Medicines, and Pharmaceutical Preparations

Ser. No. 318,905. JOHN C. DEINZER, doing business as The Hy-Ca-Mel Remedy Co., Hamilton, Ohio. Filed Sept. 10, 1931.

HY-CA-MEL

For General Tonic and Cough Medicine.
Claims use since July 8, 1931.

Ser. No. 322,343. THE VIAVI COMPANY, San Francisco, Calif. Filed Dec. 21, 1931.

VIAVI TABLETTES

The word "Tablettes" is disclaimed apart from the mark as shown.
For Digestive Tablets.
Claims use since 1897.

Ser. No. 323,953. D. F. MANAHAN, doing business as Chabot, Los Angeles, Calif. Filed Feb. 8, 1932.



For Perfumes and Other Toilet Preparations, and Cosmetics—Namely, Toilet Cream, Toilet Water, Hair Tonic, Face Powder, Bath Salts, Brilliantine, Bandoline, Rouge, Vegetal, Shampoos, and Talcum Powder.
Claims use since Jan. 2, 1932.

Ser. No. 324,225. AUGUST KARRETH, doing business as Luitpold-Werk, Chemisch-Pharmaseutische Fabrik, Munich, Germany. Filed Feb. 16, 1932.

Luizym

For Medicines Used in the Treatment of Dyspeptic Indigestion, Accumulation of Gas in the Intestines, and Other Conditions Resulting from Increased Gas Generation, Such as Meteorism, Flatulence, Gastrocardial Symptom-Complex, Etc.; Chemicals Used in Treatments Preparatory to the Taking of X-Ray Exposures of the Intestines, Insecticides, Food Preservatives, Chemical Substances for Use in Extinguishing Fires, Disinfectants, Perfumes, Face Creams and Lotions, and Chemical Substances Used in the Decomposition of Carbohydrates, Cellulose, Albumins, (Proteins) and Fats.
Claims use since December, 1930.

Ser. No. 325,098. THE KENDALL COMPANY, Chicago, Ill., and Boston, Mass. Filed Mar. 14, 1932.

BAUER & BLACK

The mark consists of a dark blue bar across one end of the container or label, carrying the name "Bauer & Black" in parenthetical brackets.
For Aromatic Spirits of Ammonia, Castor Oil, Carbolated Petrolatum; First Aid for Burns (An Ointment Prepared Especially for the Relief of Burns, Scalds, Sunburn, Windburn, Insect Bites, and Chapped Skin); Iodine Swabs, Petrolatum with Sodium Bicarbonate, Vivo Tubes (An Aromatic Inhalant), Adhesive Plasters Comprising a Pressure Sensitive Rubber Mass on Cloth or Similar Backing, Medicated Plasters (Such as California Back Plasters), Fumigators (Such as Sulphur Fumes Generators) Comprising a Material Which When Heated Gives Off a Germicidal Gas, Medicated Powder Talc Containing an Antiseptic Ingredient, Dibron-Oxymercuri-Fluorescein Solution and Swabs.
Claims use since Jan. 1, 1930.

Ser. No. 326,762. DOCTOR ERNST SILTEN, Berlin, Germany. Filed May 4, 1932.

Jnhaledrin

For Asthma Inhalant.
Claims use since Sept. 7, 1928.

Ser. No. 327,957. THE FEDERAL COMPOSITION & PAINT COMPANY, INC., New York, N. Y. Filed June 11, 1932.

·TEX·

For Nitrocellulose Liquid Solution for Sizing and/or Waterproofing Textiles, Fabric, Straw, Wood, Metal, Etc.
Claims use since May 2, 1932.

Ser. No. 328,075. RIMMEL, INC., West Orange, N. J. Filed June 17, 1932.



Rimmel

For Astringents, Astringent Cerates, Bleach Creams, Beauty Creams, Cold Creams, Cleansing Creams, Obesity Creams, Refreshing Creams, Obesity Astringents, Dry Rouges, Liquid Rouges, Face Bleaches, Face Packs, Skin Whitener in Liquid and Solid Form, Eyebrow and Eyelash Grower, Eyedrops, Eyebrow Pencils, Hand Lotions, Skin Lotions, After Shaving Lotions, Pomades, Face Powders, Talcum Powders, Body Powders, Sachets, Hair Salves, Hair Elixirs, Dandruff Preparations, Chemical Preparations Suitable for the Darkening of Eyelashes and Eyebrows, Hair Tonics, Hair Oils, Shampoos, Hair Dyes, Bath Salts, Smelling Salts, Lip Sticks, Incense, Tooth Powders, Mouth Washes, Dentifrices, Tooth Pastes, Depilatories, Nail Powders, Nail Creams, Nail Polishes, Nail Bleaches, Witch Hazel, Peroxide, Petroleum Jellies, Witch Hasel, Salves, Camphor Creams, Foot Powders, Corn Salves, Deodorants, Disinfectants, Bay Rums, Perfumes and Toilet Waters.
Claims use since Apr. 1, 1932.

Ser. No. 328,540. FREDERICK A. UPSHER SMITH, doing business as Upsher Smith Co., Minneapolis, Minn. Filed July 2, 1932.

Digismith

For Digitalis in Solid and Liquid Form.
Claims use since June 20, 1932.

Ser. No. 328,738. MARTIN E. POPKIN, New York, N. Y. Filed July 12, 1932.

OLIVÉSTEROL

For Preparations for Treating the Scalp and Skin.
Claims use since June 21, 1932.

Ser. No. 329,090. SIMEON MOUKAETOFF, Sofia, Bulgaria. Filed July 26, 1932.

VITAN



For Veterinary Products, Particularly for Use Against Liver Fluke.
Claims use since Mar. 30, 1928.

Ser. No. 329,118. FERD. MÜLHENS, INC., New York, N. Y. Filed July 27, 1932.

BLAUGOLD-ETIKETT

For Eau de Cologne, Perfumery, Hair Tonics, Shampoo, Pomade, Brilliantine, Cold Cream, Vanishing Cream, Rouge, Face Powder, Baby Powder, After-Shaving Lotion, Tooth-Paste, Mouth Wash, Preparation for the Treatment of the Scalp, and Ethereal Oils.
Claims use since September, 1930.

Ser. No. 329,177. OTIS CLAPP & SON, INC., Boston, Mass. Filed July 29, 1932.

CALCACAINE

For Antacid, Antipyretic Tablet.
Claims use since July 13, 1932.

Ser. No. 329,870. P. O. BUGGE, Bisbee, N. Dak. Filed Aug. 6, 1932.

NOVO-BIOCIN

For Medicinal Preparation for the Relief of Distress and Disorders of the Nervous System Due to Change of Life, Sleeplessness, Neurasthenia, and Conditions of Excitement of the Nervous System.
Claims use since May 2, 1932.

Ser. No. 329,434. EDWARD H. THOMAS, Philadelphia, Pa. Filed Aug. 9, 1932.

The Scientific DEODOREX Refrigerator Deodorant

No claim is made to the words "The Scientific Refrigerator Deodorant" except in the manner shown.
For Preparation for Use in Removing Odors From Refrigerators.
Claims use since July 1, 1932

Ser. No. 329,614. ELMER RICHARDS COMPANY, Chicago, Ill. Filed Aug. 17, 1932.

cartet

For Chemical Preservative for Silk, Wool, and Cotton Fabric, and Fire Extinguishing Fluid.
Claims use since July 1, 1922.

Ser. No. 329,900. LA GERARDINE INC., New York, N. Y. Filed Aug. 27, 1932.

GREYBAN

For Preparation for Restoring the Color of Hair.
Claims use since Apr. 25, 1932.

Ser. No. 330,071. PI-RO-DRAM COMPANY, Lubbock, Tex. Filed Sept. 2, 1932.

PI-RO-DRAM

For Astringent for the Gums.
Claims use since Aug. 1, 1932.

Ser. No. 330,079. ADVANCE BATTERY CORPORATION, New York, N. Y. Filed Sept. 8, 1932.

ADVANCE

PERMA-FLO

For Antifreeze Solution for Automobile Radiators.
Claims use since Aug. 10, 1932.

Ser. No. 330,099. THE PEPSODENT CO., Chicago, Ill. Filed Sept. 3, 1932.

Bi-sprin

For Medicinal Tablets for the Treatment of Headache, Neuralgia, Colds, Grippe, Sore Throat, Toothache, Earache, Rheumatism, Lumbago, Sciatica, and the Like.
Claims use since July 21, 1932.

Ser. No. 330,197. SYDNEY M. BRUCKHEIMER, doing business as Susco Sales Co., Buffalo, N. Y. Filed Sept. 9, 1932.

SUSCO

For Chemical Powder to be Dissolved in Water to Treat Silk Stockings to Further Wear.
Claims use since July 1, 1932.

Ser. No. 330,270. MAYNARD, INC., Chicago, Ill. Filed Sept. 12, 1932.

POR-FLUSH

For Face Creams.
Claims use since Sept. 3, 1932.

Ser. No. 330,276. THE PURO CO., INC., St. Louis, Mo. Filed Sept. 12, 1932.

BOWL-ITIZER

For Deodorant Which Has Incidental Cleansing Properties.
Claims use since Aug. 1, 1932.

Ser. No. 330,277. THE PURO CO., INC., St. Louis, Mo. Filed Sept. 12, 1932.

BOWL-A-KLEEN

No exclusive claim being made to the words "Bowl" and "Kleen" apart from the mark shown.
For Deodorant Which Has Incidental Cleansing Properties.
Claims use since Aug. 1, 1932.

Ser. No. 330,349. PETER MURDOCK, doing business as Murdock Pharmacal Co., New York, N. Y. Filed Sept. 14, 1932.

ATHLENE

For Preparations for Skin Irritation.
Claims use since July 15, 1930.

Ser. No. 330,377. MCLAUGHLIN GORMLEY KING CO., Minneapolis, Minn. Filed Sept. 22, 1932.

SELOCIDE

For Insecticides.
Claims use since May 5, 1932.

Ser. No. 330,610. EZL. DUNWOODY CO., Philadelphia, Pa. Filed Oct. 13, 1932.

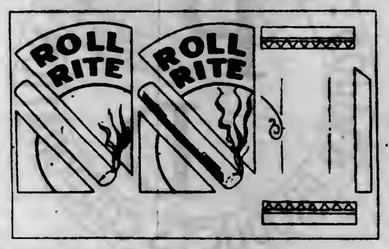
SUPER X

For Cod Liver Oil.
Claims use since September, 1924.

CLASS 8

Smokers' Articles, Not Including Tobacco Products

Ser. No. 320,981. LARUS & BROTHER COMPANY, INCORPORATED, Richmond, Va. Filed Nov. 10, 1931.



No claim is made to the outline of the label appearing on the drawing.
For Cigarette Papers and Cigarette Booklets.
Claims use since Oct. 31, 1931.

CLASS 9

Explosives, Firearms, Equipments, and Projectiles

Ser. No. 330,424. HERCULES POWDER COMPANY, Wilmington, Del. Filed Sept. 17, 1932.

HERCOTOL

For Dynamite.
Claims use since Feb. 4, 1931.

CLASS 11

Inks and Inking Materials

Ser. No. 330,769. THE WAHL COMPANY, Chicago, Ill. Filed Sept. 28, 1932.

EVERSHARP

For Ink.
Claims use since May, 1932.

CLASS 13

Hardware and Plumbing and Steam-Fitting Supplies

Ser. No. 327,240. VOGT BROTHERS MFG. CO., Louisville, Ky. Filed May 19, 1932.

AER-O-MIX

For Fluid Mixing Heads and Throats for Aeration, Purification, and Treatment by Mixing Water and Air, Two Gases of Different Densities, or a Fluid and a Gas Whereby It is Particularly Adaptable for Use in Water Works, Sewage Disposal Plants and Industrial Fields.
Claims use since Mar. 1, 1930.

Ser. No. 330,565. PHELPS DODGE COPPER PRODUCTS CORPORATION, Dover, Del., and New York, N. Y. Filed Sept. 15, 1932.

PHELPS DODGE · COPPER PRODUCTS CORPORATION · NON
P D
MINE TO MARKET

For Seamless Brass and Copper Tubing.
Claims use since July 20, 1932.

CLASS 14

Metals and Metal Castings and Forgings

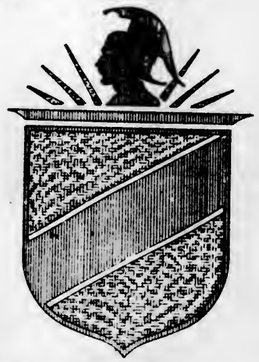
Ser. No. 329,781. ANGIER & EARLE, INC., Boston, Mass. Filed Aug. 24, 1932.

RODON
PLASTIC SOLDER

No claim is made to the words "Plastic Solder" apart from the mark shown in the accompanying drawing.
For Plastic Solder.
Claims use since May, 1932.

CLASS 15

Ser. No. 329,670. THE GENERAL REFINING COMPANY, Baltimore, Md. Filed Aug. 19, 1932.



The drawing is lined to show the colors red and yellow, but applicant does not confine itself to these particular colors.
For Oils and Greases Having a Hydrocarbon Base, Consisting of Burning Oils, Motor Fuels, Fuel Oils, and Lubricants.
Claims use since June 14, 1932.

Ser. No. 330,210. STANDARD OIL COMPANY OF NEW JERSEY, Wilmington, Del. Filed Sept. 9, 1932.

THE 5 STAR

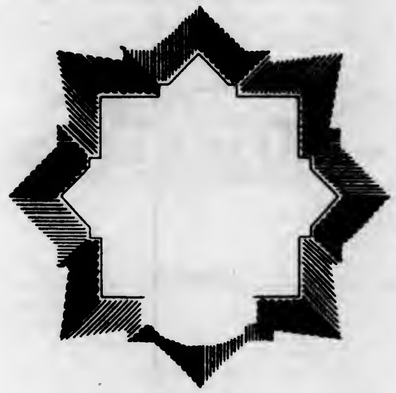
For Lubricating Oils.
Claims use since July 28, 1932.

Ser. No. 330,613. ALTA-VIS OIL COMPANY, Portland, Oreg. Filed Sept. 24, 1932.

Alta-Vis

For Lubricating Oils.
Claims use since Jan. 15, 1932.

Ser. No. 330,786. GASETERIA INCORPORATED, Indianapolis, Ind. Filed Sept. 29, 1932.



For Lubricating Oils and Greases and Gasoline.
Claims use since December, 1929.

CLASS 16

Paints and Painters' Materials

Ser. No. 327,383. EVERETT D. WOLBERT, doing business as Inwood Products Corporation, San Francisco, Calif. Filed May 23, 1932.

SATENSELOSE

For a Finish in the Nature of a Paint or Varnish Used for Priming, Filling, and/or Finishing Surfaces of Wood, Concrete, Linoleum, Tile, Leather, and the Like.
Claims use since Mar. 17, 1917.

Ser. No. 330,554. STANCO INCORPORATED, Wilmington, Del., and New York, N. Y. Filed Sept. 21, 1932.

TRIME

For Liquid Automobile and Furniture Cleaning and Polishing Preparation, Not Including Soap or Saponaceous Materials.
Claims use since Aug. 29, 1932.

Ser. No. 330,770. WILCKES, MARTIN, WILCKES COMPANY, New York, N. Y. Filed Sept. 28, 1932.

BEARTEX

For Carbon Black.
Claims use since Nov. 25, 1931.

CLASS 17

Tobacco Products

Ser. No. 323,575. EXCELSIOR TOBACCO CO. INC., St. Louis, Mo. Filed Jan. 29, 1932.

"Joy"

For Cigarettes, Cigars, and Smoking Tobacco.
Claims use since August, 1922.

Ser. No. 330,658. JEAN JOSEPHS, doing busines as Jay Tobacco Company, Philadelphia, Pa. Filed Sept. 26, 1932.

MIBLEND

For Cigarettes.
Claims use since Aug. 26, 1932.

CLASS 19

Vehicles, Not Including Engines

Ser. No. 326,792. THE SMITH ENGINEERING COMPANY, Cleveland, Ohio. Filed May 5, 1932.



Applicant disclaims the words "Controllable Pitch Propeller, Cleveland, Ohio, U. S. A.", and the representation of the propeller apart from the mark as shown. The drawing is lined to indicate an outer red circular band surrounding an inner blue portion in which is mounted an orange airplane from the rear of which extends a representation of the exhaust gases therefrom representing a brown letter S.
For Propellers and Devices for Changing the Pitch of Propellers.
Claims use since Apr. 12, 1932.

CLASS 21

Electrical Apparatus, Machines, and Supplies

Ser. No. 312,905. THE ELECTRIC AUTO-LITE COMPANY, Toledo, Ohio. Filed Apr. 3, 1931.

ELO

For Electric Generating, Storage, Ignition, and Engine Electric Starting Systems, Connections, and Parts Thereof; Audible and Visual Signaling Apparatus Responsive to Electric Currents, Connections, and Parts Thereof, Particularly Adapted for Self-Propelling Vehicles.
Claims use since Mar. 25, 1931.

Ser. No. 315,479. SETH THOMAS CLOCK COMPANY, Thomaston, Conn. Filed June 5, 1931. Under section 5b of the act of 1905 as amended in 1920.

SETH THOMAS

For Electrical Motors.
Claims use since May 1, 1931.

Ser. No. 326,206. ELECTROMASTER, INC., Detroit, Mich. Filed Apr. 18, 1932.

WALDORF

For Electric Stoves and Ranges.
Claims use since Apr. 1, 1932.

Ser. No. 328,227. SCOPHONY LIMITED, London, England. Filed June 22, 1932.

SCOPHONY

For Unitary Television Transmitting and Receiving Equipment and Parts Thereof, Unitary Telegraphic Apparatus and Parts Tuereof, Unitary Telephonic Apparatus and Parts Thereof, Unitary Transmitting and Receiving Radio Equipment and Parts Thereof, Thermionic Valves and Electric Motors and Parts Thereof.
Claims use since Nov. 3, 1930.

Ser. No. 330,087. HARN MFG. CO., Philadelphia, Pa. Filed Sept. 8, 1932.

"Lepus"

For Electric Heating Pads for Miscellaneous Purposes.
Claims use since Aug. 30, 1932.

CLASS 22

Games, Toys, and Sporting Goods

Ser. No. 329,396. THE BRUNSWICK-BALKE-COLLENDER COMPANY, Wilmington, Del., and Chicago, Ill. Filed Aug. 8, 1932.



The drawing is lined for red. The representation of the pin and the groove around the center of the pin are disclaimed apart from the mark as shown. The mark consists of a red band around the middle of that type of bowling pin known as a candle pin.
For Bowling Pins, Particularly the Type Known as Candle Pins.
Claims use since Dec. 1, 1930.

Ser. No. 330,151. AMERICAN RECORD CORPORATION, New York, N. Y. Filed Sept. 7, 1932.

HI HO

For Game Played with Blocks of Geometric Design.
Claims use since Aug. 17, 1932.

Ser. No. 330,510. FANESS INDUSTRIES, Chicago, Ill. Filed Sept. 20, 1932.

Baseballette

For Table Board Game Played with Pieces.
Claims use since Aug. 5, 1932.

Ser. No. 330,598. THE HORTON MANUFACTURING COMPANY, Bristol, Conn. Filed Sept. 23, 1932.

"Bristol"

Applicant is the owner of registrations 50,916 (renewed) and 135,462.
For Fishing Reels.
Claims use since July 15, 1931.

CLASS 23

Cutlery, Machinery, and Tools, and Parts Thereof

Ser. No. 289,306. AMERICAN BRASS & STEEL PRODUCTS CO., New York, N. Y. Filed Sept. 4, 1929.



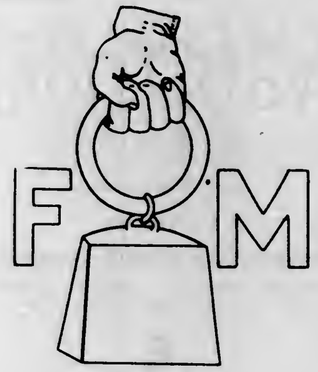
For Metal Stamping Dies, Assembling Tools for Buttons and Ornaments, Button Covering Machines, Button Attaching Tools, Eyelet Setting Machines and Implements, Button Setting Machines and Implements, Rivet Setting Machines and Implements, Machines and Implements for Attaching Ornaments to Fabric, Machines for Stamping Metal Parts, Machines for Assembling Metal Parts of Ornaments and Buttons, and Dies and Assembling Tools for Use in Making Toys.
Claims use since Apr. 1, 1929.

Ser. No. 329,583. FRED KASSEKERT, Greenwich, Conn. Filed Aug. 16, 1932.

FAMOS

For Razor Blades.
Claims use since Aug. 4, 1932.

Ser. No. 329,631. FAIRBANKS, MORSE & CO., Chicago, Ill. Filed Aug. 18, 1932.



For Internal Combustion Engines, Pumps, Pumping Plants, Windmills, and Feed Grinders.
Claims use since May 18, 1920.

Ser. No. 330,007. THE BRITISH VACUUM CLEANER & ENGINEERING CO. LTD., London, England. Filed Aug. 31, 1932.



GOBLIN

For Suction Cleaning Machines for Carpets, Floors, Etc.
Claims use since October, 1926.

Ser. No. 330,257. ELLSWORTH GRAY, doing business as Saxet Tool Company, Houston, Tex. Filed Sept. 12, 1932.

SAXET

For Oil Well Supplies—Namely, Fishing Tools.
Claims use since Sept. 6, 1932.

CLASS 25

Locks and Safes

Ser. No. 330,656. GUNITE FOUNDRIES CORPORATION, Rockford, Ill. Filed Sept. 26, 1932.

Pot O'Gold

For Safes.
Claims use since Aug. 31, 1932.

CLASS 26

Measuring and Scientific Appliances

Ser. No. 325,695. SCHUTTE & KOERTING COMPANY, Philadelphia, Pa. Filed Mar. 31, 1932.

ROTAMETER

The word "Meter" is disclaimed apart from the mark shown.
For Apparatus for Measuring by Indication the Quantity of Liquids and Gases Which Involves the Principle of Flow Through an Orifice.
Claims use since Jan. 4, 1932.

Ser. No. 327,051. DUOVAC RADIO TUBE CORP., Brooklyn, N. Y. Filed May 13, 1932.

TUNE-A-LITE

For Electric Meter and Tone Indicator for Indicating Peak Resonance of Radio Signals and Indicator of High Frequency Currents and Voltages.
Claims use since March, 1931.

Ser. No. 328,170. GUY D. HASELTON, Hollywood, Calif. Filed June 21, 1932.

TRAVELETTES

For Motion Pictures.
Claims use since June 1, 1931.

Ser. No. 329,542. UNITED AMERICAN BOSCH CORPORATION, Springfield, Mass. Filed Aug. 18, 1932.

CONDENS-O-SCOPE

For Electrical Condenser Testing Instruments.
Claims use since July 29, 1932.

Ser. No. 329,565. STERILOMETER LABORATORIES, Los Angeles, Calif. Filed Aug. 15, 1932.

STERILOMETER

For Controls Comprising a Pyro-Recording Composition Disposed on Cardboard and Reacting at Critical Temperature to Produce a Change in Color and Thereby Provide a Visual Record.
Claims use since Nov. 15, 1931.

CLASS 28

Jewelry and Precious-Metal Ware

Ser. No. 329,708. GOTHAM SHOCK-BILT, INC., New York, N. Y. Filed Aug. 20, 1932.

GOTHAM

For Watch Bracelets, Fobs, and Chains; Pins, Necklaces, Finger Rings; Cases for Cigars, Cigarettes, and/or Matches; Vanity Cases, Purses, Powder Boxes, Card Cases, Stamp Cases—of Gold, Silver, Platinum, in Whole or in Part or of Combinations Thereof.
Claims use since June 4, 1929.

Ser. No. 330,702. BENJAMIN & EDWARD J. GROSS CO., INC., New York, N. Y. Filed Sept. 27, 1932.

"CHERRY BLOSSOM"

For Finger Rings and Mountings Therefor.
Claims use since Sept. 6, 1932.

Ser. No. 330,815. THE HADLEY COMPANY, INC., Providence, R. I. Filed Sept. 30, 1932.

HADLEYITE

For Bracelets.
Claims use since Apr. 2, 1931.

CLASS 32

Furniture and Upholstery

Ser. No. 328,770. SAMUEL LEWIS CO. INC., New York, N. Y. Filed July 13, 1932.

"Durafold"

For Folding Chairs Designed Especially for Use in Churches, Schools, Homes, Etc.
Claims use since June 1, 1932.

Ser. No. 330,678. SLEEPER PRODUCTS, INC., Wilmington, Del., and Philadelphia, Pa. Filed Sept. 21, 1932.

The ONOTUFT

For Box-Springs and Mattresses.
Claims use since Aug. 19, 1932.

CLASS 33

Glassware

Ser. No. 292,013. THE SAFETY CAR HEATING & LIGHTING COMPANY, New Haven, Conn., and New York, N. Y. Filed Nov. 4, 1929.



For Globes, Shades, and Reflectors Made of Glass, for Lighting Fixtures.
Claims use since Aug. 1, 1920.

CLASS 34

Heating, Lighting, and Ventilating Apparatus, Not Including Electrical Apparatus

Ser. No. 312,713. LENNOX FURNACE COMPANY, Marshalltown, Iowa. Filed Mar. 30, 1931.

GasMaster

For Automatic Gas Burning Units, a Unit Comprising a Burner and Draft and Fuel Controlling Devices Therefor Applied to Warm Air Furnaces and Boilers, Both Steam and Hot Water.
Claims use since Mar. 18, 1931.

Ser. No. 328,609. HART & COOLEY MFG. COMPANY, New Britain, Conn. Filed July 7, 1932.

McKNIGHT



For Registers for Air Conditioning, Heating, and Ventilating.
Claims use since Jan. 1, 1931.

CLASS 35

Belting, Hose, Machinery Packing, and Non-Metallic Tires

Ser. No. 329,846. ARMOR PRODUCTS INC., New York, N. Y. Filed Aug. 26, 1932.



Applicant disclaims all right to the exclusive use of the descriptive word "Packings."
For Mechanical Packings, Belting, Hose; Machinery Packing of All Kinds, in Particular, Flax, Jute, Asbestos, Duck and Rubber; Lead, Copper, and Metal Shredded Packings and Linings and Any Combination Thereof; Plastic Packings, Furnace Door Packings, Sheet Packings, Ring Packings, Semi-Metallic Packings, and Pump Valves and Non-Metallic Tires.
Claims use since Aug. 9, 1932.

Ser. No. 330,571. DARLING VALVE & MANUFACTURING COMPANY, Williamsport, Pa. Filed Sept. 22, 1932.

DARFLEX

For Fabric Cups for Use in Oil Wells.
Claims use since Sept. 16, 1932.

CLASS 36

Musical Instruments and Supplies

Ser. No. 330,677. HARRY BETTONEY, doing business as The Cundy-Bettoney Co., Boston, Mass. Filed Sept. 21, 1932.

Silva-Bet

For Soprano Clarinets, Bass and Alto Clarinets, Flutes, Piccolos, Oboes, and Bassoons.
Claims use since Nov. 1, 1926.

CLASS 37

Paper and Stationery

Ser. No. 313,771. SAMUEL CUPPLES ENVELOPE COMPANY, St. Louis, Mo. Filed Apr. 25. 1931.

"SELF-ADDRESSING"

Applicant is the owner of registration 45,689.
For Mailing Envelopes.
Claims use since Mar. 1, 1931.

Ser. No. 317,645. MILLERS FALLS PAPER COMPANY, Millers Falls, Mass. Filed Aug. 4, 1931.



FALMOUTH BOND

No claim is made to the word "Bond" or to the name "Falmouth" except as used as a trade-mark by the applicant.
For Bond Paper.
Claims use since July 21, 1931.

Ser. No. 329,441. BUFFALO ENVELOPE COMPANY, INC., Buffalo, N. Y. Filed Aug. 10, 1932.

E-See

For Correspondence and Mailing Envelopes.
Claims use since July 1, 1932.

Ser. No. 330,054. TACHETTE MANUFACTURING COSPORATION, Long Island City, N. Y. Filed Sept. 1, 1932.

TACHETTE

For Packets of Absorbent Tissue.
Claims use since Aug. 26, 1932.

Ser. No. 330,055. TACHETTE MANUFACTURING CORPORATION, Long Island City, N. Y. Filed Sept. 1, 1932.



For Packets of Absorbent Tissue.
Claims use since Aug. 26, 1932.

Ser. No. 330,136. WILSON-JONES COMPANY, Chicago, Ill. Filed Sept. 6, 1932.



No claim is made herein to the use of the words "High Grade" apart from the mark shown in the drawing.
For Covered and Bound Blank Books, Trial Balance Books, Memorandum Books, Note Books, Duplicating Books, Index Books, Invoice Books, Letter Copying Books, Scrap Books, Time Books, Memorandum Pads, Columnar Ruled Pads, Printed Blank Forms, Filing Envelopes, Filing Folders, Ruled Papers, and Desk Pads.
Claims use since January, 1899.

Ser. No. 330,173. WORTHY PAPER COMPANY ASSOCIATION, North Agawam, Mass. Filed Sept. 3, 1932.



For Bond, Ledger, Linen, and Manuscript Cover Papers.
Claims use since 1887.

Ser. No. 330,353. LESTER VAN WAGNER, doing business as Van Wagner & Co., Richmond Hill, N. Y. Filed Sept. 14, 1932.

VANCO

For Sanitary Paper Sheets for Use in Covering Physicians' Examination Tables.
Claims use since December, 1931.

Ser. No. 330,661. NASHUA PACKAGE SEALING CO. INC., Nashua, N. H. Filed Sept. 26, 1932.

THE MIDGET

For Devices and Appliances for Moistening and/or Serving Adhesive or Gummed Tape, Wrappers, Labels, and the Like Sheet or Strip Material, Particularly for Package and Container Sealing, Wrapping, Securing, and Labelling Purposes, and Said Sheet or Strip Material Used with Said Devices and Appliances.
Claims use since June, 1926.

Ser. No. 330,662. NASHUA PACKAGE SEALING CO. INC., Nashua, N. H. Filed Sept. 26, 1932.

TAY-PER

For Devices and Appliances for Moistening and/or Serving Adhesive or Gummed Tape, Wrappers, Labels, and the Like Sheet or Strip Material, Particularly for Package and Container Sealing, Wrapping, Securing, and Labelling Purposes, and Said Sheet or Strip Material Used with Said Devices and Appliances.
Claims use since February, 1932.

Ser. No. 330,663. NASHUA PACKAGE SEALING CO. INC., Nashua, N. H. Filed Sept. 26, 1932.

THE SHIPPER

For Devices and Appliances for Moistening and/or Serving Adhesive or Gummed Tape, Wrappers, Labels, and the Like Sheet or Strip Material, Particularly for Package and Container Sealing, Wrapping, Securing, and Labelling Purposes, and Said Sheet or Strip Material Used with Said Devices and Appliances.
Claims use since October, 1926.

Ser. No. 330,697. THE ESTERBROOK STEEL PEN MANUFACTURING COMPANY, Camden, N. J. Filed Sept. 27, 1932. Under 10-year proviso.

128 EXTRA FINE ELASTIC

For Writing Pens of All Kinds.
Claims use since April, 1868.

Ser. No. 330,698. THE ESTERBROOK STEEL PEN MANUFACTURING COMPANY, Camden, N. J. Filed Sept. 27, 1932.

239 CHANCELLOR

For Writing Pens of All Kinds.
Claims use since April, 1878.

Ser. No. 330,699. THE ESTERBROOK STEEL PEN MANUFACTURING COMPANY, Camden, N. J. Filed Sept. 27, 1932.

313 PROBATE

For Writing Pens of All Kinds.
Claims use since 1883.

Ser. No. 330,700. THE ESTERBROOK STEEL PEN MANUFACTURING COMPANY, Camden, N. J. Filed Sept. 27, 1932. Under 10-year proviso.

322 INFLEXIBLE

For Writing Pens of All Kinds.
Claims use since April, 1879.

Ser. No. 330,743. THE ESTERBROOK STEEL PEN MANUFACTURING COMPANY. Camden, N. J. Filed Sept. 28, 1932.

RADIO

For Writing Pens of All Kinds.
Claims use since May 4, 1912.

Ser. No. 330,831. PIONEER PAPER STOCK COMPANY, Chicago, Ill. Filed Sept. 30, 1932.

MYRACOL

For Paper Excelsior.
Claims use since May 1, 1932.

CLASS 38

Prints and Publications

Ser. No. 308,508. EDWARD J. HERBERT, Mount Vernon, N. Y. Filed Dec. 2, 1930.

STRANGE BUT TRUE

For Featured Published Articles Published in a Series.
Claims use since Jan. 12, 1930.

Ser. No. 329,071. ANTHONY J. BUTTITTA, doing business as Contempo, Ltd., Chapel Hill and Durham, N. C. Filed July 23, 1932.

CONTEMPO

For Literary Magazine.
Claims use since Apr. 20, 1931.

Ser. No. 330,159. CURTIS-MARTIN NEWSPAPERS, INC., Philadelphia, Pa. Filed Sept. 7, 1932.

STUFF AND NONSENSE

For Column of Humor in Newspaper Publications.
Claims use since Sept. 25, 1927.

Ser. No. 330,168. STANDARD RATE & DATA SERVICE, Chicago, Ill. Filed Sept. 7, 1932.

RADIO ADVERTISING

For Periodical.
Claims use since May, 1931.

Ser. No. 330,711. RESERVE OFFICERS' ASSOCIATION OF THE UNITED STATES. Washington, D. C. Filed Sept. 27, 1932.

THE
RESERVE OFFICER

For Periodical Magazine Published Monthly.
Claims use since Jan. 1, 1924.

Ser. No. 330,771. WILSON-HALL PRINTING COMPANY, Rockford, Ill. Filed Sept. 28, 1932.

The MILK BOTTLE

For Periodical Publication.
Claims use since June 1, 1932.

CLASS 39

Clothing

Ser. No. 319,696. CHAS. KATZ, New York, N. Y. Filed Oct. 3, 1931.

Greystone

For Ladies' Dresses.
Claims use since Nov. 1, 1930.

Ser. No. 329,327. EAGLE KNITTING MILLS, Milwaukee, Wis. Filed Aug. 4, 1932.

EAGLE-TEX

For Knitted Caps, Hats, and Sweaters for Women and Children.
Claims use since July 25, 1932.

Ser. No. 329,810. VANITY FAIR SILK MILLS, Reading, Pa. Filed Aug. 24, 1932.

Pantomine

For Corsets, Hosiery, and Knitted and Textile Underwear for Women and Children—i. e., Vests, Bloomers, Drawers, Knickerbockers, Union Suits, Combination Underwear, Step-Ins, Chemises, Corset Covers, Nightgowns, Pajamas, Petticoats, Princess Slips, Bandeaux, Bandeau Chemises; and Knitted and Textile Underwear for Men—i. e., Union Suits, Shirts, and Drawers.
Claims use since Aug. 17, 1932.

Ser. No. 329,811. VANITY FAIR SILK MILLS, Reading, Pa. Filed Aug. 24, 1932.

SLEEKS

For Hosiery and Knitted and Textile Underwear for Women and Children—i. e., Vests, Bloomers, Drawers, Knickerbockers, Union Suits, Combination Underwear, Step-Ins, Chemises, Corset Covers, Corsets, Nightgowns, Pajamas, Petticoats, Princess Slips, Bandeaux, Bandeau Chemises; and Knitted and Textile Underwear for Men—Namely, Union Suits, Shirts, and Drawers.
Claims use since Aug. 17, 1932.

Ser. No. 329,894. GLOVECRAFT, INC., Johnstown, N. Y. Filed Aug. 27, 1932.



No claim is made to the words "Fine Gloves" apart from the mark shown in the drawing.
For Ladies' and Men's Leather Gloves.
Claims use since January, 1932.

Ser. No. 329,955. THE MENIHAN COMPANY, Rochester, N. Y. Filed Aug. 29, 1932.

Arch-aid

For Leather and Fabric Shoes.
Claims use since Aug. 16, 1932.

Ser. No. 329,974. JACOB C. LAMM, Baltimore, Md. Filed Aug. 30, 1932.

GENUINE
Glen-Du-Roy

The word "Genuine" is hereby disclaimed apart from the mark as shown on the drawing.
For Trench Coats, Men's and Boys' Top Coats, Men's and Boys' Trousers, Riding Breeches, Knickers, Jackets, Mackinaws, Men's and Boys' One and Two Piece Suits.
Claims use since Sept. 1, 1931.

Ser. No. 329,989. HOLLYWOOD KNITTING MILLS, INC., Los Angeles, Calif. Filed Aug. 30, 1932.

"The Pigskin"

For Knitted Sweaters, Dresses, Coats, Vests, and Bathing Suits for Men, Women, and Children.
Claims use since July 18, 1932.

Ser. No. 330,344. GERMAINE MILLINERY, INC., New York, N. Y. Filed Sept. 14, 1932.

"Hy-lite"

For Ladies' Hats.
Claims use since July 11, 1932.

Ser. No. 330,532. WORTHY MANUFACTURING COMPANY, Chicago, Ill. Filed Sept. 20, 1932.

JACKSHIRT

No claim is made to the word "Shirt" apart from the mark shown in the drawing.
For Men's Work, Dress, and Negligee Shirts.
Claims use since May 9, 1932.

Ser. No. 330,533. JACOBS BROTHERS, INCORPORATED, Baltimore, Md. Filed Sept. 15, 1932.

Bob Evans
HANDICOAT

No claim is made to the descriptive word "Coat" apart from the mark shown in the drawing.
For One Piece Outer Garment Designed for Nurses, Maids, Beauticians, Housewives, and Attendants.
Claims use since Aug. 20, 1932.

Ser. No. 330,550. NORTHBILT MANUFACTURING CO., Minneapolis, Minn. Filed Sept. 21, 1932.

QUIXY

For Children's Playsuits.
Claims use since Aug. 15, 1932.

Ser. No. 330,950. GOTHAM SILK HOSIERY COMPANY, INC., New York, N. Y. Filed Oct. 5, 1932.

Gothamettes

For Hosiery.
Claims use since Oct. 1, 1932.

CLASS 40

Fancy Goods, Furnishings, and Notions

Ser. No. 329,239. PEDO & DANIELS, INC., Jamaica Plain, Mass. Filed July 30, 1932.

PEDROC

For French Cord Binding for Use on Boots and Shoes.
Claims use since June 25, 1932.

CLASS 42

Knitted, Netted, and Textile Fabrics

Ser. No. 330,014. HAYWARD HOSIERY COMPANY, Ipswich and Waltham, Mass. Filed Aug. 31, 1932.



No claim is made to the word "Babylam" apart from the trade-mark shown in the drawing.
For Woolen Piece Goods.
Claims use since July 28, 1932.

Ser. No. 330,081. M. C. D. BORDEN & SONS, INC., New York, N. Y. Filed Sept. 3, 1932.

PILGRIM

For Cotton Piece Goods.
Claims use since Nov. 23, 1910.

Ser. No. 330,761. LOUIS ROESSEL & CO., INC., Hazleton, Pa., and New York, N. Y. Filed Sept. 28, 1932.

MONOPOLE

For Silk Goods in the Piece.
Claims use since Aug. 15, 1932.

CLASS 43

Thread and Yarn

Ser. No. 330,608. TUBIZE CHATILLON CORPORATION, New York, N. Y. Filed Sept. 23, 1932.

CRALON

For Artificial Silk Yarn and Thread.
Claims use since May 14, 1932.

CLASS 44

Dental, Medical, and Surgical Appliances

Ser. No. 302,214. HAROLD C. DESBECKER, doing business as Tic Toc Toy Company, Buffalo, N. Y. Filed June 6, 1930.

TICK TOCKS FOR THE BABY

Applicant hereby disclaims the exclusive right to the use of the words "For the Baby" except as the same are used in connection with the other features of the mark shown on the drawing.
For Teething Rings or Infant Pacifiers Which Partake of the Nature of Toys.
Claims use since June 3, 1930.

Ser. No. 318,459. E. A. MYERS AND SONS, Pittsburgh, Pa. Filed Aug. 26, 1931.



For Electrically Operable Hearing Aids for Aiding the Hearing of Persons with Impaired Hearing.
Claims use since Apr. 1, 1930.

Ser. No. 326,645. MARY J. PIDGEON, Great Neck, N. Y. Filed Apr. 30, 1932.

My Secret Beautymould

For Bandages for Use in Beauty Parlors.
Claims use since Mar. 22, 1932.

Ser. No. 330,261. THE KENDALL COMPANY, Chicago, Ill. Filed Sept. 12, 1932.

TENSOR

For Elastic Bandages.
Claims use since Aug. 26, 1932.

Ser. No. 330,319. THERM-A-MODE, INC., Orange, N. J. Filed Sept. 13, 1932.

THERM-A-MODE

For Electric Blankets and Pads Used for Therapeutic and General Heating Purposes.
Claims use since Aug. 20, 1932.

CLASS 45

Beverages, Nonalcoholic

Ser. No. 330,792. LOFT, INC., Long Island City, N. Y. Filed Sept. 29, 1932.

Loft

The mark as shown in the drawing is a facsimile of the handwriting of George W. Loft.
For Ginger Ale.
Claims use since June 1, 1932.

CLASS 46

Foods and Ingredients of Foods

Ser. No. 305,024. A. ARENA & CO., LTD., Los Angeles, Calif. Filed Aug. 26, 1930.

ARENAS

For Fresh Vegetables—Namely, Lettuce, Carrots, Peas, Chicory, Spinach, Tomatoes, Onions, Potatoes, Parsley, Brocoli, Squash, Brussel Sprouts, Artichokes, Celery, Asparagus; Fresh Melons—Namely, Cantaloupes, Honeydews, Honeyballs, Persian Melons; Fresh Deciduous Fruits—Namely, Peaches, Plums, Pears, Apricots, Cherries; Fresh Citrus Fruits—Namely, Oranges, Grapefruit; Fresh Grapes.
Claims use since Jan. 15, 1930.

Ser. No. 316,229. THE BEE BEE CONFECTION COMPANY, Dayton, Ohio. Filed June 24, 1931.



For Chewing Gum.
Claims use since Jan. 15, 1930.

Ser. No. 318,810. EMIL C. ROSCHMAN, doing business as Brownie's Corn Shop, Belvidere, Ill. Filed Sept. 4, 1931.

WONDER CORN

No claim is made to the word "Corn" apart from the mark as shown.
For Popcorn Candy Confection.
Claims use since Aug. 25, 1931.

Ser. No. 319,426. CONSTANTINE ZURAS, doing business as Secret Food Specialty Co., Washington, D. C. Filed Sept. 25, 1931.

"OH-YES"

For Peanut Butter Sandwiches.
Claims use since May 1, 1931.

Ser. No. 319,485. GENERAL MILLS, INC., Minneapolis, Minn. Filed Sept. 28, 1931.



For Wheat Flour.
Claims use since Sept. 11, 1931.

Ser. No. 324,555. THE FRIEDMAN MANUFACTURING COMPANY, doing business as Pantry Maide Products Co., Chicago, Ill. Filed Feb. 27, 1932.

Pantry Maide

For Fruit Jellies, Apple Butter, Orange Marmalade, Grape Jam, Red Cherries, Green Cherries, Fruit Preserves, and Peanut Butter.
Claims use since Jan. 29, 1932.

Ser. No. 324,789. CHARLES HEUDEBERT, Nanterre, France. Filed Mar. 4, 1932.



All wording except the word "Heudebert", the word "Radiopaque", and the words "La Société l'Aliment Essentiel" being hereby disclaimed apart from the mark shown.
For Special Food Preparations Intended to Facilitate X-Ray Examinations of the Stomach and Alimentary Canal.
Claims use since Mar. 31, 1924.

Ser. No. 325,362. BLUE EARTH CANNING COMPANY, Blue Earth, Minn. Filed Mar. 22, 1932.

Country Kist

For Canned Vegetables.
Claims use since Feb. 1, 1928.

Ser. No. 325,749. FABRIQUE DE CHOCOLAT ET DE PRODUITS ALIMENTAIRES DE VILLARS, S. A., Fribourg, Switzerland. Filed Apr. 2, 1932.

TALISMALT

For Food Preparation and Ingredient Containing Malt, Milk, Honey, Eggs, and Cocoa.
Claims use since Aug. 1, 1930.

Ser. No. 326,568. MONTGOMERIE & CO. LTD., Glasgow, Scotland. Filed Apr. 26, 1932.

BERMALINE

For Bread, Cakes, Biscuits, Rusks, Cookies, Wheat Flour, Malted Wheat Flour, Malted Barley Flour, Infants' and Invalids' Foods, Malt, and Malt Extracts.
Claims use since Aug. 24, 1894.

Ser. No. 326,594. SYLVESTER E. SANTANGELO, doing business as Baldwin City Mills Company, Youngstown, Ohio. Filed Apr. 28, 1932.



No claim is made to the words "Purified Flour," "Warranted," and "Youngstown, O.," apart from the mark as shown on the drawing.
For Wheat Flour.
Claims use since Dec. 8, 1931.

Ser. No. 328,250. PLOUGH, INC., doing business as Puck Food Products Co., Memphis, Tenn. Filed June 28, 1932.

PUCK

For Food Products—Namely, Flavoring Extracts for Food Purposes, Olive Oil, Spices, and Cocoa.
Claims use since 1893.

Ser. No. 328,492. DAVID S. ISAIN, doing business as D. Isrin Co., New York, N. Y. Filed July 1, 1932.



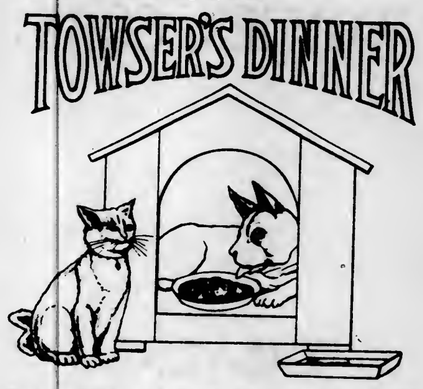
Applicant disclaims all the words shown in the drawing except the words "Philippoff" and "D. Isrin." The characters appearing in the upper part of the mark are in the Russian language, and translated into English, mean "Tea."
For Tea.
Claims use since Mar. 15, 1926.

Ser. No. 329,022. NATIONAL BISCUIT COMPANY, New York, N. Y. Filed July 23, 1932.

AMERICAN PRIDE

For Bakery Products—Namely, Biscuit.
Claims use since June 15, 1932.

Ser. No. 329,316. PURE FOOD FACTORY "HANSA", Mamaroneck, N. Y. Filed Aug. 3, 1932.



The word "Dinner" being disclaimed apart from the mark shown in the drawing.
For Dog Foods.
Claims use since July 16, 1932.

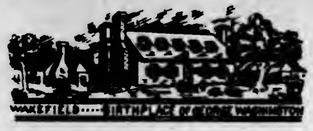
Ser. No. 329,421. THE CITRA PACKING COMPANY, Citra, Fla. Filed Aug. 9, 1932.



Applicant makes no claim to exclusive use of the fruit representation shown apart from the drawing.
For Oranges, Lemons, Grape-Fruit, Tangerines, and Limes.
Claims use since July, 1883, on oranges; November, 1885, on remaining goods.

Ser. No. 329,904. SIMPSON BROS., INC., doing business as Wakefield Dairy, Washington, D. C. Filed Aug. 27, 1932.

Wakefield Dairy



No claim being made to the word "Dairy" apart from the mark shown.
For Dairy Products—Namely, Butter, Milk, Ice Cream, Cream, Cheese, and Eggs in the Shell.
Claims use since May 19, 1931.

Ser. No. 330,289. BEATRICE CREAMERY COMPANY, Chicago, Ill. Filed Sept. 13, 1932.

Curli-Q

For Confection—Namely, an Ice Cream and Cake Combination.
Claims use since Aug. 30, 1932.

Ser. No. 330,373. LEVER BROTHERS COMPANY, Cambridge, Mass. Filed Sept. 15, 1932.

Hydora

For Vegetable Shortening.
Claims use since Jan. 28, 1915.

Ser. No. 330,374. LEVER BROTHERS COMPANY, Cambridge, Mass. Filed Sept. 15, 1932.

I.X.L.

For Vegetable Oil for Salads and Cooking.
Claims use since September, 1884.

Ser. No. 330,375. LEVER BROTHERS COMPANY, Cambridge, Mass. Filed Sept. 15, 1932.

La Hacienda

For Vegetable Oil for Salads and Cooking.
Claims use since Nov. 1, 1893.

Ser. No. 330,376. LEVER BROTHERS COMPANY, Cambridge, Mass. Filed Sept. 15, 1932.

Union

For Vegetable Oil for Salads and Cooking.
Claims use since May 1, 1867.

Ser. No. 330,444. BORDEN'S PRODUCE COMPANY, INC., Omaha, Nebr. Filed Sept. 19, 1932.

Farmland

For Condensed Buttermilk.
Claims use since July 9, 1932.

Ser. No. 330,945. WM. P. DEYO, INC., Brooklyn, N. Y. Filed Oct. 5, 1932



No claim is made to the words "It's High Grade" apart from the combination and arrangement shown in the drawing.
For Horse Radish.
Claims use since October, 1901.

CLASS 48

Malt Beverages and Liquors

Ser. No. 330,381. PREMIER MALT PRODUCTS CO., Peoria Heights, Ill. Filed Sept. 15, 1932.



For Malt Beverage Containing Less Than One-Half of One Per Cent Alcohol by Volume.
Claims use since June 13, 1908.

CLASS 50

Merchandise Not Otherwise Classified

Ser. No. 321,679. COTTONWOOD PRODUCTS, INC., Reading, Mass. Filed Dec. 2, 1931.

JIFFY

For Packing Pads and Wrappers, Insulating Mat or Sheet for Packing Pads.
Claims use since Aug. 13, 1929.

Ser. No. 330,242. BEHR-MANNING CORPORATION, Troy, N. Y. Filed Sept. 12, 1932.

KORK-O-LEX

No claim is made to the word "Kork" per se.
For Composition Sheet Material—Namely, Fibrous Sheets and Sheets Composed of Cork and Fibres.
Claims use since Aug. 22, 1932.

TRADE-MARK REGISTRATIONS GRANTED

[ACT OF FEBRUARY 20, 1905]

NOVEMBER 8, 1932

298,758. ADVERTISING SIGNS MADE OF SHEET METAL OR FIBRE, OR MADE PARTLY OF SHEET METAL AND PARTLY OF FIBRE, FOR ADVERTISING A GREAT VARIETY OF PRODUCTS FOR BOTH INDOORS AND OUTDOORS. AMERICAN CAN COMPANY, New York, N. Y.
Filed June 30, 1932. Serial No. 328,415. PUBLISHED AUGUST 30, 1932. Class 50.

298,759. MOLYBDENUM AND MOLYBDENUM TUNGSTEN TOOL AND CUTTING STEEL. CYCLOPS STEEL COMPANY, Titusville, Pa.
Filed June 27, 1932. Serial No. 328,325. PUBLISHED AUGUST 30, 1932. Class 14.

298,760. MACHINE WIRE STAPLES FOR PAPER AND OTHER GENERAL FASTENING PURPOSES. FASTIK PRODUCTS, INC., Chicago, Ill.
Filed June 17, 1932. Serial No. 328,058. PUBLISHED AUGUST 30, 1932. Class 13.

298,761. METALLIC WELDING ELECTRODES. THE LINCOLN ELECTRIC COMPANY, Cleveland, Ohio.
Filed June 15, 1932. Serial No. 328,012. PUBLISHED AUGUST 30, 1932. Class 14.

298,762. METALLIC WELDING ELECTRODES. THE LINCOLN ELECTRIC COMPANY, Cleveland, Ohio.
Filed June 15, 1932. Serial No. 328,011. PUBLISHED AUGUST 30, 1932. Class 14.

298,763. AMMETERS, VOLTMETERS, WATTMETERS, AND INTEGRATING WATT HOUR METERS. WESTINGHOUSE ELECTRIC & MANUFACTURING COMPANY, East Pittsburgh, Pa.
Filed May 18, 1932. Serial No. 327,287. PUBLISHED AUGUST 30, 1932. Class 26.

298,764. BARN SIPHON HEAD VENTILATORS. STAR-LINE, INC., Harvard, Ill.
Filed May 9, 1932. Serial No. 326,916. PUBLISHED AUGUST 30, 1932. Class 34.

298,765. LUBRICATING OILS. EDWARD R. TOLFREE, doing business as "X" Laboratories, New York, N. Y.
Filed July 22, 1932. Serial No. 329,000. PUBLISHED AUGUST 30, 1932. Class 15.

298,766. STORAGE BATTERIES. PREST-O-LITE STORAGE BATTERY CORPORATION, Speedway, Ind.
Filed July 19, 1932. Serial No. 328,893. PUBLISHED AUGUST 30, 1932. Class 21.

298,767. STORAGE BATTERIES. ATLAS SUPPLY COMPANY, Wilmington, Del., and Newark, N. J.
Filed July 16, 1932. Serial No. 328,833. PUBLISHED AUGUST 30, 1932. Class 21.

298,768. HUB ASSEMBLIES FOR AUTOMOBILES AND AEROPLANES, INCLUDING HUBS, HUB CAPS, RIMS, WHEEL DISCS, COVER PLATES, BRAKES, AND BRAKE MECHANISMS. THE GOODYEAR TIRE & RUBBER COMPANY, Akron, Ohio.
Filed June 30, 1932. Serial No. 328,423. PUBLISHED AUGUST 16, 1932. Class 19.

298,769. PORTABLE ELECTRIC LAMPS. THE GREIST MFG. CO., New Haven, Conn.
Filed June 28, 1932. Serial No. 328,386. PUBLISHED AUGUST 30, 1932. Class 21.

298,770. LUBRICATING OILS AND LUBRICATING GREASES, ESPECIALLY SOLID GREASES IN STICK FORM. THE LUBRI-GRAPH CORPORATION, Cleveland, Ohio.
Filed June 24, 1932. Serial No. 328,275. PUBLISHED AUGUST 23, 1932. Class 15.

298,771. RADIO RECEIVING SETS, RADIO FREQUENCY COUPLERS, RADIO COUPLING NETWORKS, SHIELDS, CONDENSERS, TRANSFORMERS, COILS, AND CONDENSERS. KOLSTER RADIO, INC., Newark, N. J.
Filed June 23, 1932. Serial No. 328,242. PUBLISHED AUGUST 23, 1932. Class 21.

298,772. ELECTRICAL EMERGENCY LIGHTING APPARATUS. THE ELECTRIC STORAGE BATTERY COMPANY, Philadelphia, Pa.
Filed June 22, 1932. Serial No. 328,218. PUBLISHED AUGUST 30, 1932. Class 21.

298,773. PORTABLE FOLDING ROWBOATS. BAIR & EDGERTON BOAT WORKS, Glen Cove, Long Island, N. Y.
Filed June 20, 1932. Serial No. 328,114. PUBLISHED AUGUST 23, 1932. Class 19.

298,774. SPECIAL LUBRICATING OILS TO BE ADDED TO CONVENTIONAL OILS FOR THE LUBRICATION OF INTERNAL COMBUSTION MOTORS. JOHN C. EDGAR, doing business as Mid-States Oil Company, Troy, Ohio.
Filed June 9, 1932. Serial No. 327,846. PUBLISHED AUGUST 23, 1932. Class 15.

298,775. IGNITION DEVICES—NAMELY, SPARK PLUGS, SPARK PLUG ATTACHMENTS, AND SPARK PLUG INTENSIFIERS. PATTERSON O. STEWART, doing business as Electro Products Company, New York, N. Y.
Filed June 1, 1932. Serial No. 327,638. PUBLISHED AUGUST 23, 1932. Class 21.

298,776. STORAGE BATTERIES, THEIR PARTS AND ACCESSORIES COMPRISING ELECTRODES OR PLATES, CONTAINERS, COVERS, SEPARATORS, RETAINERS, TERMINAL CONNECTORS, AND VENT AND FILLING PLUGS. THE ELECTRIC STORAGE BATTERY COMPANY, Philadelphia, Pa.
Filed June 1, 1932. Serial No. 327,629. PUBLISHED AUGUST 23, 1932. Class 21.

298,777. GLARE DEFLECTOR FOR AUTOMOBILE HEADLIGHTS. SAFE-T-LITE, INC., Minneapolis, Minn.
Filed May 9, 1932. Serial No. 326,914. PUBLISHED AUGUST 23, 1932. Class 19.

298,778. HEATERS, RADIATORS, AND PARTS THEREOF. YOUNG RADIATOR COMPANY, Racine, Wis.
Filed July 9, 1932. Serial No. 328,676. PUBLISHED AUGUST 30, 1932. Class 34.

298,779. PNEUMATIC RUBBER TIRES FOR VEHICLES. THE PHARIS TIRE AND RUBBER COMPANY, Newark, Ohio.
Filed May 9, 1932. Serial No. 326,911. PUBLISHED AUGUST 30, 1932. Class 35.

298,780. FROZEN CUSTARD AND FROZEN SHERBET. BEATRICE CREAMERY COMPANY, Chicago, Ill.
Filed May 21, 1932. Serial No. 327,299. PUBLISHED AUGUST 23, 1932. Class 46.

298,781. FROZEN FLAVORED AND SWEETENED WATER KNOWN AS WATER ICE, FROZEN BAR WITH MILK BASE AND CHOCOLATE COATING, FROZEN BAR WITH CREAM BASE AND CHOCOLATE COATING, AND FROZEN CONFECTIONS. FRIGIE CORPORATION OF AMERICA, Chicago, Ill.
Filed April 28, 1932. Serial No. 326,420. PUBLISHED AUGUST 23, 1932. Class 46.

298,782. FRENCH DRESSING. MARY HARDING, Utica, N. Y.
Filed March 16, 1932. Serial No. 325,275. PUBLISHED AUGUST 23, 1932. Class 46.

298,783. SINK TRAPS, FAUCETS, TUB WASTES, ETC. JOS HIGH, INC., Washington, D. C.
Filed July 11, 1932. Serial No. 328,691. PUBLISHED AUGUST 30, 1932. Class 13.

298,784. CAMERAS, PROJECTORS, AND MOTION PICTURE APPARATUS. STEWART-WARNER CORPORATION, Chicago, Ill.
Filed July 1, 1932. Serial No. 328,571. PUBLISHED AUGUST 30, 1932. Class 26.

298,785. PYROPHORIC POCKET LIGHTERS. RICHARD E. BERTHOLD, Richmond Hill, N. Y.
Filed July 5, 1932. Serial No. 328,543. PUBLISHED AUGUST 30, 1932. Class 34.

298,786. MALT SYRUP. ADAM SCHEIDT BREWING COMPANY, Norristown, Pa.
Filed June 28, 1932. Serial No. 328,372. PUBLISHED AUGUST 23, 1932. Class 46.

298,787. MALT SYRUP. BIRK BROS. MALT PRODUCTS, INC., Chicago, Ill.
Filed June 28, 1932. Serial No. 328,348. PUBLISHED AUGUST 23, 1932. Class 46.

298,788. GELATINE. NU-SET SPECIALTY CO., INC., New York, N. Y.
Filed June 28, 1932. Serial No. 328,367. PUBLISHED AUGUST 23, 1932. Class 46.

298,789. MALT SYRUP. BIRK BROS. MALT PRODUCTS, INC., Chicago, Ill.
Filed June 28, 1932. Serial No. 328,347. PUBLISHED AUGUST 23, 1932. Class 46.

298,790. MALT SYRUP. BIRK BROS. MALT PRODUCTS, INC., Chicago, Ill.
Filed June 24, 1932. Serial No. 328,259. PUBLISHED AUGUST 23, 1932. Class 46.

298,791. NONALCOHOLIC, MALTLESS BEVERAGE SOLD AS A SOFT DRINK. HYGRADE NUT CO. INC., New York, N. Y.
Filed June 10, 1932. Serial No. 327,875. PUBLISHED AUGUST 9, 1932. Class 45.

298,792. CANNED APPLE SAUCE AND PEAS. THE LYNDONVILLE CANNING COMPANY, INC., Lyndonville, N. Y.
Filed June 1, 1932. Serial No. 327,633. PUBLISHED AUGUST 23, 1932. Class 46.

298,793. BLEND OF PURE DEHYDRATED EGG YOLK, SELECTED PROTEINS OF MILK, SALTS, AND CARBOHYDRATES FOR THE PURPOSE OF IMPROVING THE TEXTURE AND THE BODY OF BAKED AND FRIED FOOD PRODUCTS. JOE LOWE CORPORATION, Brooklyn, N. Y.
Filed May 28, 1932. Serial No. 327,558. PUBLISHED AUGUST 23, 1932. Class 46.

298,794. BLEND OF PURE DEHYDRATED EGG YOLK, SELECTED PROTEINS OF MILK, SALTS, AND CARBOHYDRATES FOR THE PURPOSE OF IMPROVING THE TEXTURE AND BODY OF ICE CREAM. JOE LOWE CORP. RATION, Brooklyn, N. Y.
Filed May 28, 1932. Serial No. 327,557. PUBLISHED AUGUST 23, 1932. Class 46.

298,795. FRESH VEGETABLES. W. B. GRAINGER PACKING COMPANY, Salinas, Calif.
Filed May 24, 1932. Serial No. 327,396. PUBLISHED AUGUST 23, 1932. Class 46.

298,796. SPECIAL BREAD SUGAR. THE AMERICAN MOLASSES CO. OF NEW YORK, New York, N. Y.
Filed May 24, 1932. Serial No. 327,386. PUBLISHED AUGUST 23, 1932. Class 46.

298,797. NON-ALCOHOLIC, MALTLESS BEVERAGE SOLD AS A SOFT DRINK. ABRAHAM KOLTER, Brooklyn, N. Y.
Filed June 30, 1932. Serial No. 328,433. PUBLISHED AUGUST 30, 1932. Class 45.

298,798. NONALCOHOLIC, MALTLESS BEVERAGES SOLD AS SOFT DRINKS AND INGREDIENTS FOR MAKING SAME. GARRES-FOURCHÉ, Bordeaux, France.
Filed July 2, 1932. Serial No. 328,525. PUBLISHED AUGUST 30, 1932. Class 45.

298,799. NONALCOHOLIC, MALTLESS BEVERAGES SOLD AS SOFT DRINKS AND INGREDIENTS FOR MAKING SAME. GARRES-FOURCHÉ, Bordeaux, France.
Filed July 2, 1932. Serial No. 328,526. PUBLISHED AUGUST 30, 1932. Class 45.

298,800. FIRECRACKERS AND FIREWORKS. BALFOUR, GUTHRIE & CO., LIMITED, San Francisco, Calif.
Filed July 27, 1932. Serial No. 329,108. PUBLISHED AUGUST 30, 1932. Class 9.

298,801. FINANCIAL PUBLICATION. JOSEPH T. PERNICE, New York, N. Y.
Filed April 23, 1932. Serial No. 326,449. PUBLISHED AUGUST 23, 1932. Class 38.

298,802. MEN'S, WOMEN'S, AND CHILDREN'S SHOES MADE OF LEATHER, RUBBER, AND FABRIC AND COMBINATIONS OF THE SAME. CARSON PIRIE SCOTT & CO., Chicago, Ill.
Filed April 28, 1932. Serial No. 326,577. PUBLISHED AUGUST 30, 1932. Class 39.

298,803. BUTTER. AMERICAN STORES COMPANY, Philadelphia, Pa.
Filed May 11, 1932. Serial No. 326,970. PUBLISHED AUGUST 30, 1932. Class 46.

298,804. WEEKLY PUBLICATION. MANUEL URRUELA, New York, N. Y.
Filed May 12, 1932. Serial No. 327,035. PUBLISHED AUGUST 23, 1932. Class 38.

298,805. PERIODICAL. THE CLAYTON MAGAZINES, INC., New York, N. Y.
Filed May 26, 1932. Serial No. 327,461. PUBLISHED AUGUST 23, 1932. Class 38.

298,806. NEWSPAPER COLUMN. HAROLD A. RIPLEY, Washington, D. C.
Filed May 27, 1932. Serial No. 327,528. PUBLISHED AUGUST 23, 1932. Class 38.

298,807. SECTION OF MAGAZINES AND NEWSPAPERS. HAROLD A. RIPLEY, Washington, D. C.
Filed June 6, 1932. Serial No. 327,774. PUBLISHED AUGUST 23, 1932. Class 38.

298,808. GIRDLES AND HOSE SUPPORTERS. A. STEIN & COMPANY, Chicago, Ill.
Filed June 13, 1932. Serial No. 327,950. PUBLISHED AUGUST 30, 1932. Class 39.

298,809. WHEAT FLOUR. BLISH MILLING COMPANY, Seymour, Ind.
Filed June 16, 1932. Serial No. 328,024. PUBLISHED AUGUST 30, 1932. Class 46.

298,810. BOOTS AND SHOES AND TIPS THEREFOR. HOLLAND SHOE CO., Holland, Mich.
Filed June 20, 1932. Serial No. 328,125. PUBLISHED AUGUST 30, 1932. Class 39.

298,811. SHOES OF LEATHER, RUBBER, OR FABRIC CONSTRUCTION OR A COMBINATION OF THESE MATERIALS. MELVILLE SHOE CORPORATION, New York, N. Y.
Filed June 28, 1932. Serial No. 328,359. PUBLISHED AUGUST 30, 1932. Class 39.

298,812. NEWSPAPER CARTOONS PUBLISHED IN A CONTINUING SERIES. THE ASSOCIATED PRESS, New York, N. Y.
Filed July 8, 1932. Serial No. 328,630. PUBLISHED AUGUST 30, 1932. Class 38.

298,813. NEWSPAPER CARTOONS PUBLISHED IN A CONTINUING SERIES. THE ASSOCIATED PRESS, New York, N. Y.
Filed July 8, 1932. Serial No. 328,629. PUBLISHED AUGUST 30, 1932. Class 38.

298,814. BOOTS AND SHOES MADE OF LEATHER AND COMBINATIONS OF LEATHER AND FABRIC. FIELD AND FLINT CO., Brockton, Mass.
Filed July 7, 1932. Serial No. 328,599. PUBLISHED AUGUST 23, 1932. Class 39.

298,815. DAILY NEWSPAPER. BOSTON TRANSCRIPT COMPANY, Boston, Mass.
Filed July 19, 1932. Serial No. 328,885. PUBLISHED AUGUST 30, 1932. Class 38.

298,816. ROTARY CHART. KELLOGG COMPANY, Battle Creek, Mich.
Filed July 21, 1932. Serial No. 328,956. PUBLISHED AUGUST 30, 1932. Class 38.

298,817. COMBINED CLOCKS AND TEMPERATURE INDICATING DEVICES. THE LUX CLOCK MFG. COMPANY, INC., Waterbury, Conn.
Filed September 28, 1931. Serial No. 319,492. PUBLISHED AUGUST 16, 1932. Class 27.

298,818. MEN'S, WOMEN'S, AND CHILDREN'S KID, LAMB, AND LEATHER GLOVES. GOODHAND-GRAFMULLER, INC., New York, N. Y.
Filed September 21, 1931. Serial No. 319,244. PUBLISHED AUGUST 30, 1932. Class 39.

298,819. RADIO RECEIVING SETS. THE CROSLEY RADIO CORPORATION, Cincinnati, Ohio.
Filed July 30, 1931. Serial No. 317,455. PUBLISHED AUGUST 30, 1932. Class 21.

298,820. MOTOR LUBRICATING OILS. NATIONAL REFINING COMPANY, Seattle, Wash.
Filed February 15, 1932. Serial No. 324,185. PUBLISHED AUGUST 23, 1932. Class 15.

298,821. RAZOR BLADES. CONRAD RAZOR BLADE CO. INC., Long Island City, N. Y.
Filed February 8, 1932. Serial No. 323,977. PUBLISHED AUGUST 30, 1932. Class 23.

298,822. ROCK DRILLS, ROCK HAMMERS, SINKERS, ETC. WORTHINGTON PUMP AND MACHINERY CORPORATION, New York, N. Y.
Filed January 30, 1932. Serial No. 323,644. PUBLISHED AUGUST 9, 1932. Class 23.

298,823. ROCK DRILLS AND HAMMERS, SINKERS, DRIFTERS, ETC. WORTHINGTON PUMP AND MACHINERY CORPORATION, New York, N. Y.
Filed January 30, 1932. Serial No. 323,641. PUBLISHED JULY 26, 1932. Class 23.

298,824. CLOVER AND ALFALFA HULLERS. BIRDSELL MANUFACTURING CO., South Bend, Ind., assignor to Allis-Chalmers Manufacturing Company, Milwaukee, Wis., a Corporation of Delaware.
Filed January 23, 1932. Serial No. 323,319. PUBLISHED APRIL 19, 1932. Class 23.

298,825. BULLETINS AND PAMPHLETS, OR PERIODICAL MAGAZINES, PUBLISHED FROM TIME TO TIME. WARREN PIPER, doing business as Jewelers Syndicate, Chicago, Ill.
Filed January 21, 1932. Serial No. 323,252. PUBLISHED AUGUST 23, 1932. Class 38.

298,826. GASOLINE. SIGNAL OIL & GAS COMPANY, Los Angeles, Calif.
Filed January 13, 1932. Serial No. 322,972. PUBLISHED AUGUST 23, 1932. Class 15.

298,827. KITCHEN TOOLS AND UTENSILS. THE A. & J. KITCHEN TOOL CO., Chicago, Ill.
Filed January 7, 1932. Serial No. 322,786. PUBLISHED AUGUST 30, 1932. Class 23.

298,828. MOTOR FUEL OIL AND FURNACE FUEL OIL. HANLEY OIL CO., INC., Boston, Mass.
Filed January 5, 1932. Serial No. 322,738. PUBLISHED APRIL 26, 1932. Class 15.

298,829. CANDY AND ICE CREAM. ORANGE-CRUSH COMPANY, Chicago, Ill.
Filed January 2, 1932. Serial No. 322,648. PUBLISHED AUGUST 23, 1932. Class 46.

298,830. RECTAL SUPPOSITORIES. THE VIAVI COMPANY, San Francisco, Calif.
Filed December 21, 1931. Serial No. 322,342. PUBLISHED AUGUST 16, 1932. Class 6.

298,831. MEDICINE—NAMELY, A LIQUID PREPARATION FOR INFLAMMATION OF THE MUCOUS MEMBRANES. THE VIAVI COMPANY, San Francisco, Calif.
Filed December 21, 1931. Serial No. 322,341. PUBLISHED AUGUST 16, 1932. Class 6.

298,832. CERATE—NAMELY, AN OINTMENT FOR APPLICATION TO INFLAMED AND INJURED SURFACES. THE VIAVI COMPANY, San Francisco, Calif.
Filed December 21, 1931. Serial No. 322,340. PUBLISHED AUGUST 16, 1932. Class 6.

298,833. CAPSULES—NAMELY, GELATINE CAPSULES ENCASING VAGINAL SUPPOSITORIES. THE VIAVI COMPANY, San Francisco, Calif.
Filed December 21, 1931. Serial No. 322,339. PUBLISHED AUGUST 16, 1932. Class 6.

298,834. NONALCOHOLIC, MALTLESS BEVERAGE SOLD AS A SOFT DRINK. LEGE-ON-AIRE BEVERAGE COMPANY, Minneapolis, Minn.
Filed November 20, 1931. Serial No. 321,848. PUBLISHED AUGUST 30, 1932. Class 45.

298,835. PASTRIES—NAMELY, PIES, CAKES, BUNS, DOUGHNUTS, FRENCH PASTRIES, SOLD IN CARTONS. WILLIAM S. WASSELL, doing business as The Wassell Pie Bakery, Philadelphia, Pa.
Filed October 30, 1931. Serial No. 320,653. PUBLISHED AUGUST 23, 1932. Class 46.

298,836. SODA FOUNTAINS. THE RUSS MANUFACTURING COMPANY, Cleveland, Ohio.
Filed October 13, 1931. Serial No. 320,036. PUBLISHED AUGUST 30, 1932. Class 23.

298,837. A POWDER FOR MANUFACTURE OF A CREAMY ORANGE AND OTHER FRUIT JUICE BEVERAGES. CREME ORANGE PRODUCTS CO. LTD., Los Angeles, Calif.
Filed September 29, 1931. Serial No. 319,599. PUBLISHED AUGUST 23, 1932. Class 46.

298,838. FLATWARE, HOLLOW-WARE, AND CUTLERY, PLATED ENTIRELY OR IN PART WITH SILVER. ONEIDA COMMUNITY LIMITED, Oneida, N. Y.
Filed April 9, 1932. Serial No. 325,957. PUBLISHED AUGUST 30, 1932. Class 28.

298,839. GARTERS. I. B. KLEINERT RUBBER COMPANY, New York, N. Y.
Filed July 7, 1932. Serial No. 328,612. PUBLISHED AUGUST 23, 1932. Class 39.

298,840. CERTAIN NAMED WEARING APPAREL. BERMAN-LURIE, INC., New York, N. Y.
Filed May 28, 1932. Serial No. 327,548. PUBLISHED AUGUST 23, 1932. Class 39.

298,841. WOMEN'S AND CHILDREN'S SHOES OF LEATHER, RUBBER, AND FABRIC, AND COMBINATIONS OF THOSE MATERIALS. J. C. PENNEY COMPANY, Wilmington, Del., and New York, N. Y.
Filed July 6, 1932. Serial No. 328,582. PUBLISHED AUGUST 23, 1932. Class 39.

298,842. SHOES OF LEATHER, RUBBER, OR FABRIC CONSTRUCTION OR A COMBINATION OF THESE MATERIALS. MELVILLE SHOE CORPORATION, New York, N. Y.
Filed June 28, 1932. Serial No. 328,360. PUBLISHED AUGUST 23, 1932. Class 39.

298,843. MEDICINAL PREPARATION FOR CLEANING THE TEETH, ETC. ETHEL ZEMAN, Los Angeles, Calif.
Filed June 15, 1932. Serial No. 328,023. PUBLISHED AUGUST 9, 1932. Class 6.

298,844. PERFUMES. GUERLAIN PERFUMERY CORPORATION OF DELAWARE, Wilmington, Del., and New York, N. Y.
Filed June 14, 1932. Serial No. 327,978. PUBLISHED AUGUST 16, 1932. Class 6.

298,845. ANTI-KNOCK COMPOUNDS TO BE ADDED TO GASOLINE. ADVANCE PAINT COMPANY, Indianapolis, Ind.
Filed June 14, 1932. Serial No. 327,963. PUBLISHED AUGUST 16, 1932. Class 6.

298,846. MOTHPROOFING COMPOUND. GEORGE S. EATON, New York, N. Y.
Filed June 10, 1932. Serial No. 327,868. PUBLISHED AUGUST 16, 1932. Class 6.

298,847. PERMANENT WAVING SOLUTIONS SUCH AS OILS OF LAVENDER, BERGAMOT, YOSOY-WOOD, EAU-DE-QUININE, PINE, AND NEUTRAL. A. GABRIEL LANTIERI, doing business as Flis Laboratories, Chicago, Ill.
Filed June 13, 1932. Serial No. 327,941. PUBLISHED AUGUST 16, 1932. Class 6.

298,848. CHEMICAL PRODUCTS FOR USE IN SCOURING, DYEING, AND BLEACHING TEXTILES. WARWICK CHEMICAL CO., West Warwick, R. I.
Filed June 10, 1932. Serial No. 327,896. PUBLISHED AUGUST 16, 1932. Class 6.

298,849. GERMICIDAL PREPARATIONS. E. R. SQUIBB & SONS, New York, N. Y.
Filed June 9, 1932. Serial No. 327,856. PUBLISHED AUGUST 16, 1932. Class 6.

298,850. WOMEN'S LEATHER AND FABRIC SHOES. THE IRVING DREW CO., Portsmouth, Ohio.
Filed May 31, 1932. Serial No. 327,584. PUBLISHED AUGUST 23, 1932. Class 89.

298,851. BREATH DEODORIZING TABLETS. JAMES L. NOONAN, Cleveland, Ohio.
Filed May 27, 1932. Serial No. 327,522. PUBLISHED AUGUST 16, 1932. Class 6.

298,852. ASPIRIN, CASCARA, AND SODA MINT TABLETS, ZINC OINTMENT, ETC. FOUR SQUARE PRODUCTS, INC., Dover, Del.
Filed May 25, 1932. Serial No. 327,431. PUBLISHED AUGUST 16, 1932. Class 6.

298,853. PREPARATION FOR EXTERMINATING MOLES. THE C. B. DOLGE COMPANY, Westport, Conn.
Filed May 24, 1932. Serial No. 327,391. PUBLISHED AUGUST 16, 1932. Class 6.

298,854. NAIL POLISH. NORTHAM WARREN CORPORATION, New York, N. Y.
Filed May 13, 1932. Serial No. 327,066. PUBLISHED AUGUST 16, 1932. Class 6.

298,855. SULPHO ICHTHYOLATE OF AMMONIUM AND MEDICINAL COMPOUNDS CONTAINING THE SAME, USED AS A BASE OR INGREDIENT IN THE MANUFACTURE OF SUPPOSITORIES, TABLETS, OINTMENTS, LINIMENTS, DISINFECTANTS, AND ANIMAL MEDICINES. AMICO LABORATORIES, INC., Chicago, Ill.
Filed May 9, 1932. Serial No. 326,884. PUBLISHED AUGUST 18, 1932. Class 6.

298,856. PREPARATION FOR THE TREATMENT OF HEMORRHOIDS. LOUISE BELL, Sacramento, Calif.
Filed April 9, 1932. Serial No. 326,442. PUBLISHED AUGUST 16, 1932. Class 6.

298,857. PHARMACEUTICAL PREPARATION (PAIN RELIEVING TABLET). HAROLD H. STERN, doing business as Diacin Chemical Company, Detroit, Mich.
Filed March 14, 1932. Serial No. 325,121. PUBLISHED AUGUST 16, 1932. Class 6.

298,858. NON-ELECTRICAL ADVERTISING DISPLAY SIGNS. U. S. CAST MAGNET STEEL CORPORATION, Lawrence, Mass.
Filed April 9, 1931. Serial No. 313,161. PUBLISHED AUGUST 30, 1932. Class 50.

298,859. HATS AND KNITTED AND WOVEN CAPS FOR MEN, WOMEN, AND CHILDREN. AKTIENGESELLSCHAFT DER ÖSTERREICHISCHEN FEZFABRIKEN, Vienna, Austria.
Filed July 10, 1931. Serial No. 316,800. PUBLISHED AUGUST 23, 1932. Class 39.

298,860. MEN'S AND BOYS' FELT AND STRAW HATS AND CLOTH CAPS, MEN'S SILK HATS, AND FELT AND STRAW HATS FOR WOMEN AND CHILDREN. JOHN B. STETSON COMPANY, Philadelphia, Pa.
Filed July 16, 1929. Serial No. 287,209. PUBLISHED AUGUST 30, 1932. Class 39.

298,861. BIRD SEED, BIRD BISCUIT. AND BIRD FOOD. THE R. T. FRENCH COMPANY, Rochester, N. Y.
Filed March 1, 1932. Serial No. 324,663. PUBLISHED JUNE 14, 1932. Class 46.

298,862. STERILIZING BATH APPARATUS FOR THE STERILIZATION OF VARIOUS APPLIANCES FOR MANUAL USE. AUTOFUME STERILIZER COMPANY, Oakland, Calif.
Filed October 8, 1930. Serial No. 306,545. PUBLISHED AUGUST 30, 1932. Class 23.

298,863. AIR CONDITIONING AND APPLYING APPARATUS FOR FOOD PRODUCTS—NAMELY, AIR CONDITIONERS AND COOLING TUNNELS. ECONOMY EQUIPMENT CO., Chicago, Ill.
Filed January 15, 1931. Serial No. 309,968. PUBLISHED AUGUST 30, 1932. Class 23.

298,864. SOLUTION OF METALLIC CITRATES FOR MEDICINAL INJECTIONS FOR USE IN TRANSFUSIONS AND ALL TYPES OF ANEMIAS. HIGH CHEMICAL CO., Philadelphia, Pa.
Filed January 19, 1931. Serial No. 310,126. PUBLISHED AUGUST 16, 1932. Class 6.

298,865. ELECTRIC GENERATING, STORAGE, AND IGNITION SYSTEMS, AUDIBLE AND VISUAL SIGNALING APPARATUS RESPONSIVE TO ELECTRIC CURRENT, ENGINE ELECTRIC STARTING SYSTEMS, CONNECTIONS AND PARTS THEREOF PARTICULARLY ADAPTED FOR SELF-PROPELLING VEHICLES. THE ELECTRIC AUTO-LITE COMPANY, Toledo, Ohio.
Filed April 3, 1931. Serial No. 312,906. PUBLISHED AUGUST 23, 1932. Class 21.

298,866. TENNIS RACKETS. STANLEY J. TRACEY, doing business as United Tennis Racket Co., New York, N. Y.
Filed April 9, 1931. Serial No. 313,160. PUBLISHED AUGUST 30, 1932. Class 22.

298,867. CANNED OLIVE OIL. JOSEPH DELL'OMO, Brooklyn, N. Y.
Filed July 17, 1931. Serial No. 317,030. PUBLISHED AUGUST 23, 1932. Class 46.

298,868. BLANK BOOKS, SCRATCH PADS, PAPER TABLETS, WRITING PAPER, AND LEAD PENCILS. A. NEUSTADTER & CO. INC., Brooklyn, N. Y.
Filed July 26, 1932. Serial No. 329,091. PUBLISHED AUGUST 30, 1932. Class 37.

298,869. PAPER FOR PRINTING. OXFORD PAPER COMPANY, New York, N. Y.
Filed July 22, 1932. Serial No. 328,995. PUBLISHED AUGUST 30, 1932. Class 37.

298,870. TOILET PAPER, PAPER TOWELS, PAPER NAPKINS, AND COLORED CREPE PAPER. FORT HOWARD PAPER COMPANY, Green Bay, Wis.
Filed July 22, 1932. Serial No. 328,985. PUBLISHED AUGUST 30, 1932. Class 37.

298,871. POSTAGE STAMP HINGES. HENRY ELLIS HARRIS, Boston, Mass.
Filed July 14, 1932. Serial No. 328,859. PUBLISHED AUGUST 30, 1932. Class 37.

298,872. PENCILS. JOSEPH DIXON CRUCIBLE COMPANY, Jersey City, N. J.
Filed July 16, 1932. Serial No. 328,838. PUBLISHED AUGUST 23, 1932. Class 37.

298,873. CREPE TISSUE, AND TOILET PAPER AND PAPER NAPKINS AND HANDKERCHIEFS. AMERICAN TISSUE MILLS, Holyoke, Mass.
Filed July 15, 1932. Serial No. 328,807. PUBLISHED AUGUST 23, 1932. Class 37.

298,874. BLOTTING PAPER. THE ALBEMARLE PAPER MANUFACTURING COMPANY, Richmond, Va.
Filed July 2, 1932. Serial No. 328,517. PUBLISHED AUGUST 23, 1932. Class 37.

298,875. TOILET PAPER, PAPER TOWELS, AND PAPER NAPKINS. HOBERG PAPER & FIBRE COMPANY, Green Bay, Wis.
Filed July 1, 1932. Serial No. 328,489. PUBLISHED AUGUST 23, 1932. Class 37.

298,876. TOILET PAPER, PAPER TOWELS, AND PAPER NAPKINS. HOBERG PAPER & FIBRE COMPANY, Green Bay, Wis.
Filed July 1, 1932. Serial No. 328,488. PUBLISHED AUGUST 23, 1932. Class 37.

298,877. TOILET PAPER, PAPER TOWELS, AND PAPER NAPKINS. HOBERG PAPER & FIBRE COMPANY, Green Bay, Wis.
Filed July 1, 1932. Serial No. 328,487. PUBLISHED AUGUST 23, 1932. Class 37.

298,878. TOILET PAPER. HOBERG PAPER & FIBRE COMPANY, Green Bay, Wis.
Filed July 1, 1932. Serial No. 328,490. PUBLISHED AUGUST 23, 1932. Class 37.

298,879. BLANK BOOKS, PADS, ENVELOPES, ETC. WILSON-JONES COMPANY, Chicago, Ill.
Filed June 22, 1932. Serial No. 328,233. PUBLISHED AUGUST 30, 1932. Class 37.

298,880. TOILET PAPER. SEMINOLE PAPER CORPORATION, Chicago, Ill.
Filed June 21, 1932. Serial No. 328,187. PUBLISHED AUGUST 30, 1932. Class 37.

298,881. PAPER AND STATIONERY, PARTICULARLY PAPER RECORD FORMS FOR BILLING MACHINES AND SIMILAR DEVICES. AMERICAN SALES BOOK COMPANY, LIMITED, Toronto, Canada, and Niagara Falls and Elmira, N. Y.
Filed May 28, 1932. Serial No. 327,546. PUBLISHED AUGUST 23, 1932. Class 37.

298,882. TISSUE PAPERS GENERALLY, BUT MORE PARTICULARLY THOSE ADAPTED TO BE MADE INTO CARBONIZING TISSUES AND STEREOTYPING AND OTHER FINE TISSUES. BRITTAINS LIMITED, Cheddleton, near Leek, England.
Filed May 24, 1932. Serial No. 327,388. PUBLISHED AUGUST 23, 1932. Class 37.

298,883. TISSUE PAPERS GENERALLY, BUT MORE PARTICULARLY THOSE ADAPTED TO BE MADE INTO CARBONIZING TISSUES AND STEREOTYPING AND OTHER FINE TISSUES. BRITTAINS LIMITED, Cheddleton, near Leek, England.
Filed May 2, 1932. Serial No. 326,667. PUBLISHED AUGUST 23, 1932. Class 37.

298,884. POSTER AND CONSTRUCTION PAPERS OF DIFFERENT COLORS FOR EDUCATIONAL PURPOSES. THE AMERICAN CRAYON COMPANY, Sandusky, Ohio.
Filed April 22, 1932. Serial No. 326,357. PUBLISHED AUGUST 30, 1932. Class 37.

298,885. WRITING AND PRINTING PAPER. STRATHMORE PAPER COMPANY, Mittineague, Mass.
Filed March 28, 1932. Serial No. 325,604. PUBLISHED AUGUST 23, 1932. Class 37.

298,886. PENPOINTS, PENHOLDERS, AND INKSTANDS. E. S. PERRY, LIMITED, London, England.
Filed March 3, 1932. Serial No. 324,757. PUBLISHED AUGUST 23, 1932. Class 37.

[ACT OF MARCH 19, 1920, SEC. 1 (b)]

THESE REGISTRATIONS ARE NOT SUBJECT TO OPPOSITION

298,887. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) THE BORG & BECK COMPANY, Chicago, Ill. Filed Aug. 29, 1932. Serial No. 329,932.

BORG & BECK

For Mechanical Clutches, Clutch Plates, and Parts Thereof.
Claims use since Aug. 1, 1923.

298,888. (CLASS 39. CLOTHING.) CLASSIC NOVELTY CO., New York, N. Y. Filed June 17, 1932. Serial No. 328,201.

Classy Form

For Brassières and Ladies' Underwear.
Claims use since June 1, 1930.

298,889. (CLASS 31. FILTERS AND REFRIGERATORS.) THE S. M. HOWES COMPANY, Boston, Mass. Filed Apr. 27, 1932. Serial No. 326,543.

FREEZER-TRAY

For Electric Ice-Cream Freezers.
Claims use since June 1, 1931.

298,890. (CLASS 2. RECEPTACLES.) GRAHAM PAPER COMPANY, St. Louis, Mo. Filed Apr. 1, 1932. Serial No. 325,709.

SAFE-T

For Paper, Cardboard and Pulp Cans, Pails, Dishes, Plates, Cups, and Cartons.
Claims use since Dec. 15, 1928.

298,891. (CLASS 40. FANCY GOODS, FURNISHINGS, AND NOTIONS.) LEO HEILBRUN CO., INC., New York, N. Y. Filed Mar. 30, 1932. Serial No. 325,652.

"STAIN-PROOF"

For Leather Straps for Wrist Watches.
Claims use since Mar. 10, 1931.

298,892. (CLASS 40. FANCY GOODS, FURNISHINGS, AND NOTIONS.) RED-E-KUT QUILT PATCH COMPANY, Kansas City, Mo. Filed Mar. 17, 1932. Serial No. 325,239.

RED-E-KUT

For Quilt Patches.
Claims use since Sept. 15, 1931.

298,893. (CLASS 16. PAINTS AND PAINTERS' MATERIALS.) THE PATTERSON-SARGENT COMPANY, Cleveland, Ohio. Filed Sept. 26, 1932. Serial No. 330,667.

BUOYKOTE

For Dry and Ready Mixed Paints, Varnishes, and Paint Enamels.
Claims use since July 22, 1930.

298,894. (CLASS 16. PAINTS AND PAINTERS' MATERIALS.) CHILTON PAINT COMPANY, College Point, N. Y. Filed Sept. 28, 1932. Serial No. 330,741.

FLUSHING

For Ready Mixed Paints.
Claims use since Jan. 1, 1924.

298,895. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) HENRY SCHEPKER, New York, N. Y. Filed May 8, 1931. Serial No. 314,315.

For A Better Appetite

YEAST BRITTLE

TRADE MARK

It's Best For Your Health

For Candy.
Claims use since Mar. 1, 1931.

298,896. (CLASS 48. THREAD AND YARN.) THE AMERICAN THREAD COMPANY, Jersey City, N. J., and New York, N. Y. Filed Apr. 10, 1931. Serial No. 313,172.

FINESTITCH

For Spool Cotton, Thread, and Sewing Cotton.
Claims use since Mar. 12, 1931.

298,897. (CLASS 38. PRINTS AND PUBLICATIONS.) THE METHODIST BOOK CONCERN, doing business as The Ruter Press, Cincinnati, Ohio. Filed Jan. 14, 1932. Serial No. 323,012.

THE RUTER PRESS

For Books and Publications in Series.
Claims use since March, 1931.

298,898. (CLASS 40. FANCY GOODS, FURNISHINGS, AND NOTIONS.) GLADYS M. KENDALL, doing business as Ezywaver Company, San Francisco, Calif., assignor to Tomlinson I. Moseley, San Francisco, Calif. Filed July 31, 1931. Serial No. 317,656.

EZYWAVER

For Non-Electrical Hair Wavers.
Claims use since Feb. 4, 1929.

298,899. (CLASS 37. PAPER AND STATIONERY.) THE GUMMED PRODUCTS COMPANY, Troy, Ohio. Filed Mar. 10, 1932. Serial No. 324,995.

FIBRE-BAK

For Gummed Paper Tape.
Claims use since Aug. 25, 1931.

298,900. (CLASS 16. PAINTS AND PAINTERS' MATERIALS.) CHEMICAL PRODUCTS COMPANY, Helena, Mont. Filed Mar. 2, 1932. Serial No. 324,697.

TRU-GLOS

For Polishing and Cleaning Liquid for Use on Furniture, Floors, Etc.
Claims use since June 18, 1931.

298,901. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) KLAUBER-WANGENHEIM CO., San Diego, Calif. Filed Feb. 15, 1932. Serial No. 324,172.

ALL PURE

For Coffee.
Claims use since June 26, 1931.

298,902. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) C. KUNZLE LTD., Birmingham, England. Filed Feb. 8, 1932. Serial No. 322,947.

Kunzle

For Chocolate, Cocoa, Coffee, Tea, Cakes and Candy.
Claims use since Apr. 8, 1918.

298,903. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) JOHN PAUL HANCOCK, doing business as Hancock Products Co., La Plata, Md. Filed Mar. 2, 1931. Serial No. 311,966.

MADAM

For Hair Dressing.
Claims use since Aug. 18, 1930.

298,904. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) WALTER E. WEEKS, doing business as Tas-T-Nut Company, Baltimore, Md. Filed Mar. 24, 1930. Serial No. 297,330.

TAS-T-NUT

For Salted Peanuts, Almonds, Cashews, Pecans and Walnuts.
Claims use since Mar. 18, 1930.

TRADE-MARK REGISTRATIONS RENEWED

38,676. A REMEDY FOR DANDRUFF AND A HAIR AND SCALP TONIC. Registered July 29, 1902. SMITH T. DUSTON. Renewed July 29, 1932, to George A. Dustin, doing business as Ess-Tee-Dee Company, Chicago, Ill., successor.

39,760. TANNED LEATHER. Registered February 10, 1903. LEAS & MCVITTY, INCORPORATED. Renewed February 10, 1933, to Leas & McVitty, Incorporated, Philadelphia, Pa., a Corporation of Delaware, assignee.

40,011. CERTAIN NAMED MALT LIQUORS. Registered March 31, 1903. THE J. & P. BALTZ BREWING CO., Philadelphia, Pa., a Corporation of Pennsylvania. Renewed March 31, 1933.

87,496. AWNINGS AND TENTS. Registered July 16, 1912. FRANK STEVENS. Renewed July 16, 1932, to New York Awning Company, Inc., New York, N. Y., a Corporation of New York, successor.

88,658. RADIATORS. Registered October 15, 1912. AMERICAN RADIATOR COMPANY, East Orange, N. J.; Chicago, Ill.; New York, N. Y.; Philadelphia, Pa.; Boston, Mass.; London, England; Paris, France; and Berlin, Germany. Renewed October 15, 1932, to American Radiator Company, New York, N. Y., a Corporation of New Jersey.

89,273. PIANOS. Registered December 3, 1912. KRAKAUER BROS., New York, N. Y., a Corporation of New York. Renewed December 3, 1932.

89,480. COTTON YARNS. Registered December 17, 1912. ROBERT MARSLAND & CO., LIMITED, Manchester, England, a Corporation of Great Britain. Renewed December 17, 1932.

89,519. MARINE PAINTS AND COMPOSITIONS. Registered December 17, 1912. VON HÖVELING AMERICAN COMPOSITION COMPANY LTD. Renewed December 17, 1932, to The Federal Composition & Paint Company, Inc., a Corporation of New York, assignee.

90,456. PAINTS, READY-MIXED PAINTS FOR INTERIOR AND EXTERIOR USE, AND WOOD-STAINS. Registered February 25, 1913. MINNESOTA LINSEED OIL PAINT COMPANY, Minneapolis, Minn., a Corporation of Minnesota. Renewed February 25, 1933.

90,857. BAKING-POWDER. Registered March 25, 1913. THE MORNY MERCANTILE COMPANY, Denver, Colo., a Corporation of Colorado. Renewed March 25, 1933.

LABELS

REGISTERED NOVEMBER 8, 1932

41,380.—*Title:* SWEET BUNCH. For Fresh Grapes. D. H. BAGDASARIAN & SONS, INC., Fresno, Calif. Published August 2, 1931.

41,381.—*Title:* CARROCIO'S SPAGHETTI. For Spaghetti. T. A. CARROCCIO & SONS, New York, N. Y. Published October 11, 1932.

41,382.—*Title:* TREASURE CHEST. For Fresh Oranges. CRAFTON MUTUAL ORCHARDS, Mentone, Calif. Published April 21, 1931.

41,383.—*Title:* BOURSETTE. For Game. CHARLES WILBUR ELSENHEIMER, Meriden, Conn. Published September 10, 1932.

41,384.—*Title:* DR. FISCHER'S LAXATIZED SUGAR. For Laxatives. HAYDN L. FISCHER, doing business as De Lax Sugar Co., Ottawa, Ill. Published September 15, 1932.

41,385.—*Title:* HELLER'S $1000.00 GUARANTEED SILVER POLISH. For Powder for Cleaning Silver, Gold, Chromium, Nickel, Monel Metal, Copper, Etc. B. HELLER & COMPANY, Chicago, Ill. Published August 26, 1932.

41,386.—*Title:* LONE EAGLE. For Boxes. HOAGUE-SPRAGUE CORPORATION, Lynn, Mass. Published September 17, 1932.

41,387.—*Title:* TOM MANNING. For Boxes. HOAGUE-SPRAGUE CORPORATION, Lynn, Mass. Published August 15, 1932.

41,388.—*Title:* I–O–C DOUBLE DUTY CLEANER. For Combined Cleaner and Polisher. CHARLES F. KELLOM & CO., INC., Holmesburg Station, Philadelphia, Pa. Published June 6, 1932.

41,389.—*Title:* I–O–C AUTO POLISH. For Polisher and Cleaner Combined. CHARLES F. KELLOM & CO., INC., Holmesburg Station, Philadelphia, Pa. Published June 6, 1932.

41,390.—*Title:* HONEY. For Honey. EMRICK KOCSIS, Detroit, Mich. Published May 13, 1932.

41,391.—*Title:* MILK-BONE CRUMBS. For a Food for Cats, Kittens, Puppies, and Toy Dogs. NATIONAL BISCUIT COMPANY, New York, N. Y. Published July 15, 1932.

41,392.—*Title:* O–P CRAFT COLOR PORTFOLIO. For Color Portfolios. THE O–P CRAFT COMPANY, INC., Sandusky, Ohio. Published August 30, 1932.

41,393.—*Title:* MILKI-MALT. For Cake. THE PH. ORTH CO., Milwaukee, Wis. Published November 16, 1931.

41,394.—*Title:* ROPER. For Fresh Tomatoes. H. D. ROPER, Antioch, Calif. Published August 25, 1932.

41,395.—*Title:* MODERN PAK. For Sliced Peaches. SUNICAL PACKING COMPANY, San Francisco, Calif. Published June 24, 1932.

41,396.—*Title:* MODERN PAK. For Halved Peaches. SUNICAL PACKING COMPANY, San Francisco, Calif. Published June 24, 1932.

41,397.—*Title:* QUALITY. For Butter. SUTHERLAND PAPER COMPANY, Kalamazoo, Mich. Published January 14, 1932.

41,398.—*Title:* CUSHING'S BEST. For Butter. SUTHERLAND PAPER COMPANY, Kalamazoo, Mich. Published January 2, 1932.

41,399.—*Title:* PERFECTION'S. For Ice Cream. SUTHERLAND PAPER COMPANY, Kalamazoo, Mich. Published June 21, 1932.

41,400.—*Title:* ISLAY'S. For Ice Cream. SUTHERLAND PAPER COMPANY, Kalamazoo, Mich. Published June 22, 1932.

41,401.—*Title:* FREE RUNNING SALT. For Salt. THE UNION SALT COMPANY, Cleveland, Ohio. Published October 7, 1932.

41,402.—*Title:* HOLSUM BREAD. For Bread. WAX PAPER PRODUCTS COMPANY, Omaha, Nebr. Published September 22, 1932.

41,403.—*Title:* WELAGAN TABLETS. For Tablets. WELAGAN TABLET SALES CO., Denver, Colo. Published June 6, 1932.

PRINTS

REGISTERED NOVEMBER 8, 1932

13,958.—*Title:* PANTI-DIPER. Infant's Breech Cloths or Diapers. INFANTWEAR, INC., Wilmington, Del., and Tulsa, Okla. Published October 7, 1932.

13,959.—*Title:* NO. 1121 E. For Dental Cream. THE KOLYNOS COMPANY, New Haven, Conn. Published August 12, 1932.

REISSUES

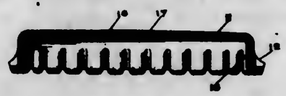
NOVEMBER 8, 1932

18,647. LEVELING CUSHION FOR RADIO CABINETS. HARRY PHILLIPS, Greenwich, Conn. Original No. 1,798,272, dated Mar. 31, 1931, Serial No. 380,125, filed July 22, 1929. Application for reissue filed June 6, 1932. Serial No. 615,739. 5 Claims. (Cl. 45—139.)



1. In combination with a radio cabinet, supports therefor, comprising superposed discs pyramided one on top of the other and of successively smaller sizes with pads of non-microphonic transmitting, cushioning material between adjacent discs, said pads being interlocked in opposing faces of adjoining discs to stabilize the multiple cushioned structure against lateral displacement.

18,648. BOTTLE CAP AND METHOD OF PRODUCING THE SAME. ALBIN H. WARTH, Baltimore, Md., assignor, by mesne assignments, to Crown Cork & Seal Company, Inc., New York, N. Y., a Corporation of New York. Original No. 1,732,958, dated Oct. 22, 1929, Serial No. 145,725, filed Nov. 2, 1926. Application for reissue filed Feb. 28, 1931. Serial No. 519,147. 7 Claims. (Cl. 215—38.)



1. A bottle cap comprising a crown shell and a three-ply, over-all sealing lining, said lining consisting of a paper base faced on both sides with relatively thin vegetable parchment.

18,649. TUBE AND LIKE CONTAINER. WALTHER KALB, Leipzig, Germany, assignor, by mesne assignments, to American Tube and Cap Corporation, a Corporation of Delaware. Original No. 1,601,396, dated Sept. 28, 1926, Serial No. 54,394, filed Sept. 4, 1925, and in Germany Apr. 22, 1925. Application for reissue filed Sept. 21, 1932. Serial No. 634,211. 6 Claims. (Cl. 221—60.)



4. A container comprising a body provided with a discharge opening, a cap for said discharge opening movable lengthwise of said body into open or closed position, the movement of said cap in either direction being initiated manually, and an elastic snap device connecting said body with said cap and operating to throw the latter either to the discharge position or to the closed position as soon as the cap passes beyond its median or neutral position.

18,650. TRAY FOR REFRIGERATING UNITS. FREDERICK C. GEILER, Dayton, Ohio, assignor, by mesne assignments, to Frigidaire Corporation, a Corporation of Delaware. Original No. 1,780,422, dated Nov. 4, 1930, Serial No. 111,874, filed May 26, 1926. Application for reissue filed July 29, 1932. Serial No. 626,164. 14 Claims. (Cl. 62—108.5.)



8. In combination, a tray member adapted to be placed in thermal contact with a cooling unit of a refrigerating system and adapted to contain a substance to be congealed or frozen, a grid member including intersecting walls of thermal conducting material for dividing the interior of the tray member into a plurality of compartments, said grid member being removable from said tray member, and thermal conducting means in detachable interlocking engagement with one of said members and extending into said compartments for altering the configuration of the interior of the compartments.

18,651. CASING SHOE AND VALVE. JOHN Q. LITTLE, Whittier, Calif., assignor to Baker Oil Tools, Inc., Huntington Park, Calif., a Corporation of California. Original No. 1,786,761, dated Dec. 30, 1930, Serial No. 401,144, filed Oct. 21, 1929. Application for reissue filed Mar. 7, 1931. Serial No. 520,910. 7 Claims. (Cl. 166—1.)



1. A casing shoe, a plug fitted thereto formed of resilient material with combination guide and centering members on the outside of the casing shoe and inserted through the casing shoe and into said casing plug and vulcanized thereto, for the purpose described.

PLANT PATENTS

GRANTED NOVEMBER 8, 1932

40. THORNLESS BARBERRY. WILLIAM GORDON SUTHERLAND, Boulder, Colo., assignor to Stark Bro's Nurseries & Orchards Company, Louisiana, Mo. Filed May 7, 1932. Serial No. 609,897. 1 Claim. (Cl. 47—1.)

A new and distinct variety of barberry characterized particularly by the absence of spines and the intense scarlet color of its leaves, as herein shown and described.

41. CHERRY. LUTHER BURBANK, deceased, Santa Rosa, Calif., by Elizabeth Waters Burbank, executrix, Santa Rosa, Calif., assignor to Stark Bro's Nurseries & Orchards Company, Louisiana, Mo. Filed Dec. 3, 1931. Serial No. 578 833. 1 Claim. (Cl. 47—1.)

A new variety of cherry tree as described characterized by its vigor of growth, the toughness of its wood, and the large size and absence of susceptibility of cracking and rot of its fruit, as shown.

42. GRAPE. HERMAN J. B. WIEDERKEHR, Altus, Ark., assignor to Stark Bro's Nurseries & Orchards Company, Louisiana, Mo. Filed Apr. 20, 1932. Serial No. 606,485. 1 Claim. (Cl. 47—1.)

A new and distinct variety of grape characterized particularly by the early ripening, exceptionally large size, and superior quality of its fruit, as herein shown and described.

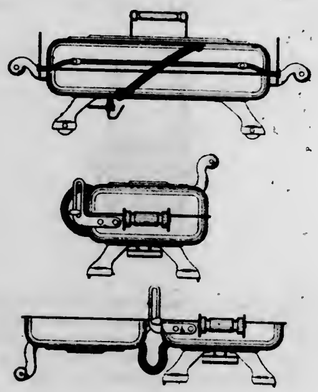
43. FREESIA. EDWARD A. MANDA, East Orange, N. J. Filed Sept. 17, 1931. Serial No. 563,632. 1 Claim. (Cl. 47—1.)

A freesia as herein shown and described, characterized by its long pure white, gracefully tapering perianth and flat opening floral segments.

DESIGNS

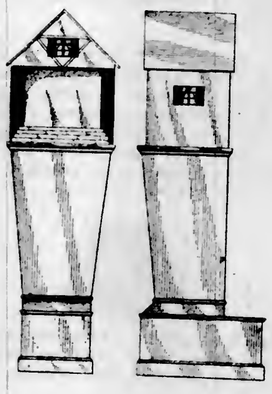
NOVEMBER 8, 1932

88,221. TOASTER OR SIMILAR ARTICLE. EDMOND DAVID CODDINGTON, East Cleveland, Ohio, assignor to The Forestek Plating & Mfg. Company, Cleveland, Ohio, a Firm. Filed Sept. 16, 1932. Serial No. 44,871. Term of patent 7 years.



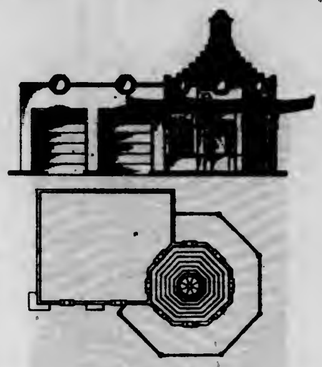
The ornamental design for a toaster or similar article as shown.

88,222. COMBINED CABINET AND SCREEN FOR A MOTION PICTURE PROJECTOR. HARRISON J. COWAN, Douglaston, N. Y., assignor to Kinatome Patents Corporation, New York, N. Y., a Corporation of New York. Filed July 21, 1932. Serial No. 44,400. Term of patent 7 years.



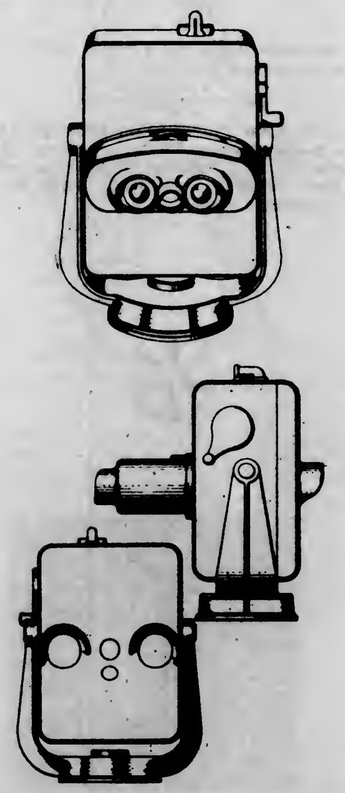
The ornamental design for a combined cabinet and screen for a motion picture projector, substantially as shown and described.

88,223. SERVICE STATION BUILDING. WILLIAM D. CYPRESS, Tulsa, Okla., assignor to The Ohio Oil Co., Findlay, Ohio, a Corporation of Ohio. Filed July 29, 1932. Serial No. 44,474. Term of patent 14 years.



The ornamental design for a service station building, as shown.

88,224. BINOCULAR. EDWARD O. FITZPATRICK, Seattle, Wash. Filed Sept. 13, 1932. Serial No. 44,826. Term of patent 7 years.



The ornamental design for a binocular, as shown.

88,225. BOTTLE. EDWIN W. FUMEST, Toledo, Ohio, assignor to Owens-Illinois Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed Sept. 19, 1932. Serial No. 44,996. Term of patent 14 years.



The ornamental design for a bottle substantially as shown.

88,226. FREEZING TRAY. LEO JAMES GOLD, Los Angeles, Calif. Filed Aug. 22, 1932. Serial No. 44,660. Term of patent 7 years.



The ornamental design for a freezing tray, substantially as shown.

88,227. PITCHER. LURELLE GUILD, New York, N. Y., assignor to The Aluminum Cooking Utensil Company, New Kensington, Pa., a Corporation of Pennsylvania. Filed June 16, 1932. Serial No. 44,101. Term of patent 7 years.



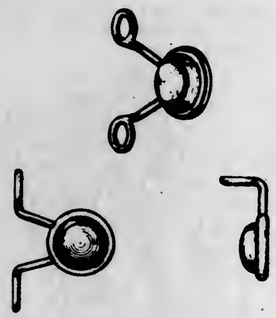
The ornamental design for a pitcher, as shown.

88,228. TEAKETTLE. LURELLE GUILD, New York, N. Y., and JAMES K. MATTER, New Kensington, Pa., assignors to The Aluminum Cooking Utensil Company, New Kensington, Pa., a Corporation of Pennsylvania. Filed June 16, 1932. Serial No. 44,102. Term of patent 7 years.



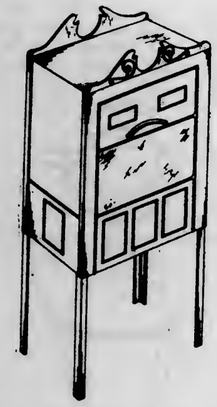
The ornamental design for a tea kettle, as shown.

88,229. CURTAIN ROLLER END BRACKET. WILLIAM S. HAMM, Elkhart, Ind., assignor to The Adlake Company, Chicago, Ill., a Corporation of Illinois. Filed Sept. 2, 1932. Serial No. 44,745. Term of patent 14 years.



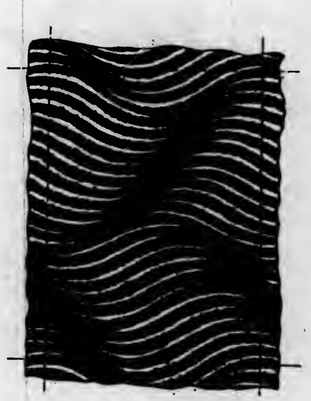
The ornamental design for a curtain roller end bracket, substantially as shown and described.

88,230. DISPLAY CABINET. JOSEPH W. HOLBROOK, Buffalo, N. Y. Filed Sept. 14, 1932. Serial No. 44,835. Term of patent 14 years.



The ornamental design for a display cabinet, substantially as shown.

88,231. TEXTILE FABRIC OR SIMILAR ARTICLE. HERBERT KATZMAN, New York, N. Y., assignor to William Willheim Co., Inc., New York, N. Y. Filed Sept. 28, 1932. Serial No. 45,090. Term of patent 3½ years.



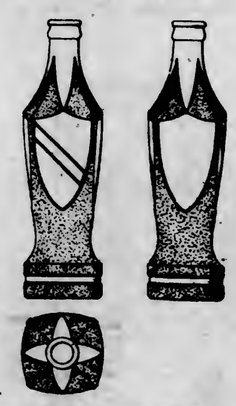
The ornamental design for a textile fabric or similar article as shown and described.

88,232. LOLLYPOP CLUSTER OR SIMILAR ARTICLE. FRIBUS KOBAK, Brooklyn, N. Y., assignor to The Metro Chocolate Co. Inc., Brooklyn, N. Y., a Corporation of New York. Filed Apr. 14, 1932. Serial No. 43,490. Term of patent 7 years.



The ornamental design for a lollypop cluster or similar article, substantially as shown.

88,233. BOTTLE. JOHN F. KOEPPEN, Marion, Ind. Filed Aug. 23, 1932. Serial No. 44,672. Term of patent 7 years.



The ornamental design for a bottle as shown.

88,234. ELECTRIC HEATER. MILOS KRAJAC, McDonald, Ohio, assignor of one-half to Sofi Lapcevich, McDonald, Ohio. Filed July 15, 1932. Serial No. 44,341. Term of patent 14 years.



The ornamental design for an electric heater, as shown.

88,235. CARPET. CHARLES LEHNER, Long Island City, N. Y., assignor to Bigelow Sanford Carpet Co., Inc., a Corporation of Massachusetts. Filed Oct. 1, 1932. Serial No. 45,185. Term of patent 7 years.



The ornamental design for a carpet substantially as shown and described.

88,236. TEXTILE FABRIC OR THE LIKE. JULIA LUKAS, New York, N. Y. Filed Oct. 6, 1932. Serial No. 45,239. Term of patent 3½ years.



The ornamental design for a textile fabric or the like substantially as shown and described.

88,237. TEXTILE FABRIC OR THE LIKE. JULIA LUKAS, New York, N. Y. Filed Oct. 6, 1932. Serial No. 45,240. Term of patent 3½ years.



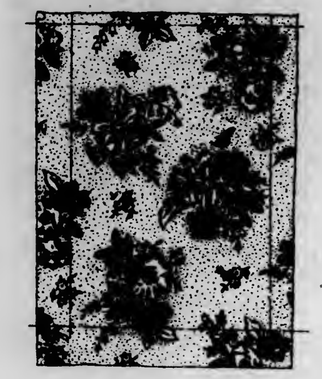
The ornamental design for a textile fabric or the like substantially as shown and described.

88,238. TEXTILE FABRIC OR THE LIKE. JULIA LUKAS, New York, N. Y. Filed Oct. 6, 1932. Serial No. 45,243. Term of patent 3½ years.



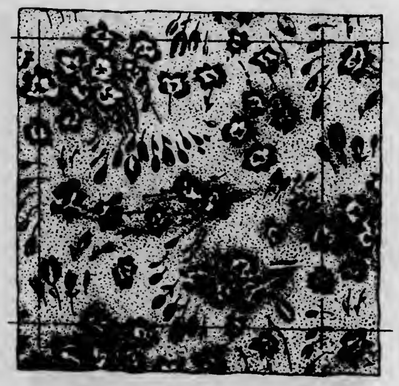
The ornamental design for a textile fabric or the like substantially as shown and described.

88,239. TEXTILE FABRIC OR THE LIKE. JULIA LUKAS, New York, N. Y. Filed Oct. 6, 1932. Serial No. 45,238. Term of patent 3½ years.



The ornamental design for a textile fabric or the like substantially as shown and described.

88,240. TEXTILE FABRIC OR THE LIKE. JULIA LUKAS, New York, N. Y. Filed Oct. 6, 1932. Serial No. 45,241. Term of patent 3½ years.



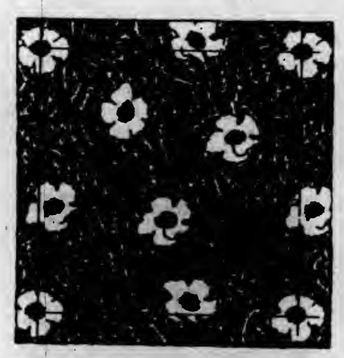
The ornamental design for a textile fabric or the like substantially as shown and described.

88,241. TEXTILE FABRIC OR THE LIKE. JULIA LUKAS, New York, N. Y. Filed Oct. 6, 1932. Serial No. 45,242. Term of patent 3½ years.



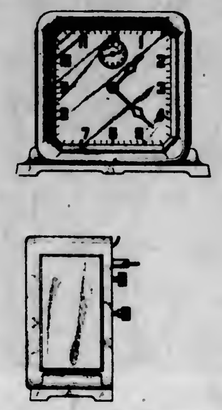
The ornamental design for a textile fabric or the like substantially as shown and described.

88,242. TEXTILE FABRIC OR THE LIKE. JULIA LUKAS, New York, N. Y. Filed Oct. 11, 1932. Serial No. 45,290. Term of patent 3½ years.



The ornamental design for a textile fabric or the like substantially as shown and described.

88,243. COMBINED ALARM CLOCK AND BASE THEREFOR. FREDERICK LUX, Waterbury, Conn., assignor to Lux Clock Manufacturing Company, Waterbury, Conn., a Corporation of Connecticut. Filed Sept. 17, 1932. Serial No. 44,984. Term of patent 7 years.



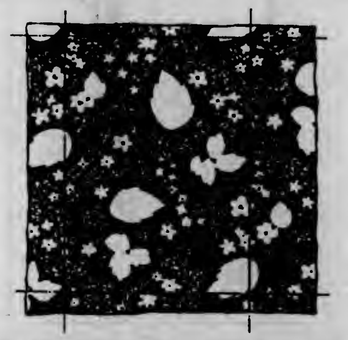
The ornamental design for a combined alarm clock and base therefor, as shown.

88,244. TEXTILE FABRIC OR THE LIKE. GEORGES MEGROZ, Bronxville, N. Y., assignor to Combier & Co. Inc., New York, N. Y., a Corporation of Delaware. Filed Oct. 4, 1932. Serial No. 45,201. Term of patent 3½ years.



The ornamental design for a textile fabric or the like substantially as shown and described.

88,245. TEXTILE FABRIC OR THE LIKE. GEORGES MEGROZ, Bronxville, N. Y., assignor to Combier & Co. Inc., New York, N. Y., a Corporation of Delaware. Filed Oct. 5, 1932. Serial No. 45,227. Term of patent 3½ years.



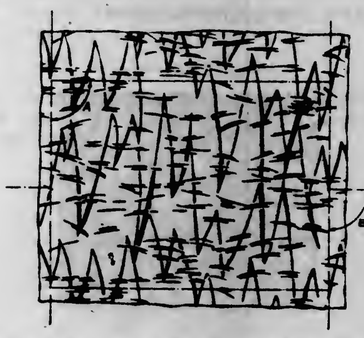
The ornamental design for a textile fabric or the like substantially as shown and described.

88,246. TEXTILE FABRIC OR THE LIKE. GEORGES MEGROZ, Bronxville, N. Y., assignor to The United Piece Dye Works, New York, N. Y., a Corporation of New Jersey. Filed Oct. 11, 1932. Serial No. 45,287. Term of patent 3½ years.



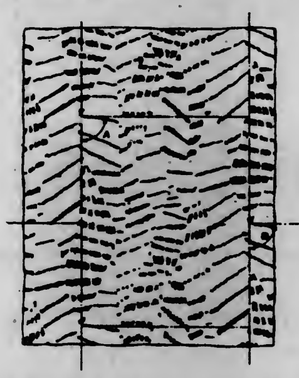
The ornamental design for a textile fabric or the like substantially as shown and described.

88,247. TEXTILE FABRIC OR THE LIKE. GEORGES MEGROZ, Bronxville, N. Y., assignor to The United Piece Dye Works, New York, N. Y., a Corporation of New Jersey. Filed Oct. 11, 1932. Serial No. 45,289. Term of patent 3½ years.



The ornamental design for a textile fabric or the like substantially as shown and described.

88,248. TEXTILE FABRIC OR THE LIKE. GEORGES MEGROZ, Bronxville, N. Y., assignor to The United Piece Dye Works, New York, N. Y., a Corporation of New Jersey. Filed Oct. 11, 1932. Serial No. 45,288. Term of patent 3½ years.



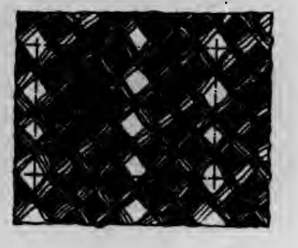
The ornamental design for a textile fabric or the like substantially as shown and described.

88,249. TEXTILE FABRIC OR THE LIKE. ELIZABETH MERRY, New York, N. Y. Filed Oct. 11, 1932. Serial No. 45,300. Term of patent 3½ years.



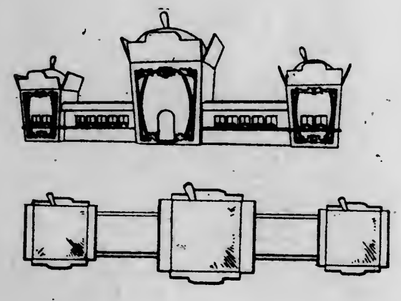
The ornamental design for a textile fabric or the like substantially as shown and described.

88,250. TEXTILE FABRIC OR THE LIKE. ELIZABETH MERRY, New York, N. Y. Filed Oct. 11, 1932. Serial No. 45,302. Term of patent 3½ years.



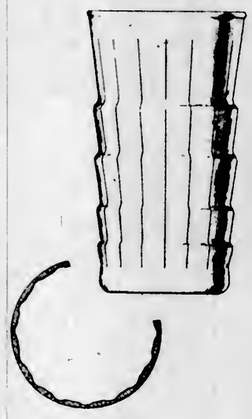
The ornamental design for a textile fabric or the like substantially as shown and described.

88,251. BUILDING. HOMER J. MESSIER and JAMES K. DONAGHY, New Bedford, Mass. Filed Sept. 21, 1932. Serial No. 45,013. Term of patent 14 years.



The ornamental design for a building as shown.

88,252. TUMBLER. ARTHUR DOUGLAS NASH, Toledo, Ohio, assignor to The Libbey Glass Manufacturing Company, Toledo, Ohio, a Corporation of Ohio. Filed Sept. 2, 1932. Serial No. 44,740. Term of patent 3½ years.



The ornamental design for a tumbler, as shown and described.

88,253. PITCHER. ARTHUR DOUGLAS NASH, Toledo, Ohio, assignor to The Libbey Glass Manufacturing Company, Toledo, Ohio, a Corporation of Ohio. Filed Sept. 2, 1932. Serial No. 44,741. Term of patent 3½ years.



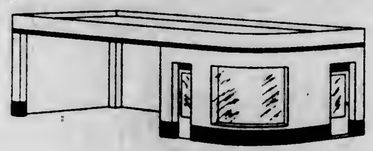
The ornamental design for a pitcher, as shown and described.

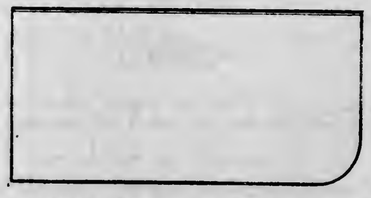
88,254. TEXTILE FABRIC OR THE LIKE. SOPHIE PATE, New York, N. Y. Filed Oct. 11, 1932. Serial No. 45,297. Term of patent 3½ years.



The ornamental design for a textile fabric or the like substantially as shown and described.

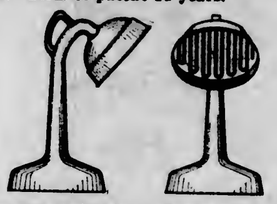
88,255. BUILDING. TIMOTHY L. PFLUEGER, San Francisco, Calif., assignor to Standard Stations, Inc., San Francisco, Calif., a Corporation of Delaware. Filed Feb. 15, 1932. Serial No. 42,870. Term of patent 14 years.





The ornamental design for a building, as shown.

88,256. THERAPEUTIC LIGHT STANDARD. WILLIS O. PROUTY, Hermosa Beach, Calif., assignor to Metlox Corporation, Ltd., Manhattan Beach, Calif., a Corporation of California. Filed Feb. 19, 1932. Serial No. 42,935. Term of patent 14 years.



The ornamental design for a therapeutic light standard substantially as shown and described.

88,257. HANDKERCHIEF OR SIMILAR ARTICLE. FREDERICK A. RAMIG, Brooklyn, N. Y. Filed July 29, 1932. Serial No. 44,482. Term of patent 3½ years.



The ornamental design for a handkerchief or similar article substantially as shown.

88,258. DRINKING GLASS. HENRY ROSS, Chicago, Ill. Filed Feb. 23, 1932. Serial No. 42,970. Term of patent 3½ years.



The ornamental design for a drinking glass substantially as shown and described.

88,259. TEXTILE FABRIC OR THE LIKE. ROBERT SCHEY, New York, N. Y., assignor to Combier & Co. Inc., New York, N. Y., a Corporation of Delaware. Filed Oct. 6, 1932. Serial No. 45,245. Term of patent 3½ years.



The ornamental design for a textile fabric or the like substantially as shown and described.

88,260. TEXTILE FABRIC OR THE LIKE. ROBERT SCHEY, New York, N. Y., assignor to Combier & Co. Inc., New York, N. Y., a Corporation of Delaware. Filed Oct. 6, 1932. Serial No. 45,244. Term of patent 3½ years.



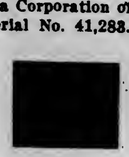
The ornamental design for a textile fabric or the like substantially as shown and described.

88,261. KNITTED FABRIC. PAUL SCHMIDT, Wyomissing, Pa., assignor to Berkshire Knitting Mills, Wyomissing, Pa., a Corporation of Pennsylvania. Filed Oct. 1, 1931. Serial No. 41,282. Term of patent 14 years.



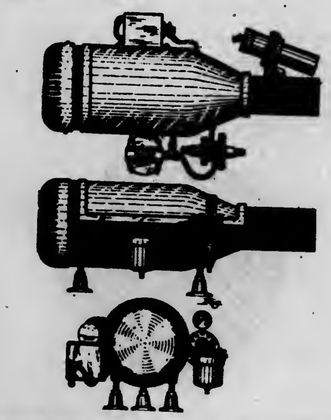
The ornamental design for a knitted fabric as shown and described.

88,262. KNITTED FABRIC. PAUL SCHMIDT, Wyomissing, Pa., assignor to Berkshire Knitting Mills, Wyomissing, Pa., a Corporation of Pennsylvania. Filed Oct. 1, 1931. Serial No. 41,283. Term of patent 14 years.



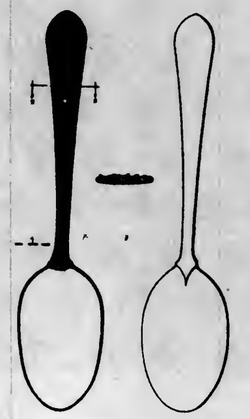
The ornamental design for a knitted fabric as shown and described.

88,263. OIL BURNER. CHARLES G. SIGWALD, Minneapolis, Minn. Filed Sept. 12, 1932. Serial No. 44,815. Term of patent 7 years.



The ornamental design for an oil burner, as shown.

88,264. SPOON OR SIMILAR ARTICLE. AXEL H. STAF, Providence, R. I., assignor to The Alvin Corporation, Providence, R. I. Filed Sept. 16, 1932. Serial No. 44,874. Term of patent 14 years.



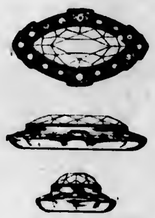
The ornamental design for a spoon or similar article as shown.

88,265. GEM SETTING FOR RINGS, PENDANTS, AND EAR RINGS. MILTON W. STERN, New York, N. Y. Filed Aug. 24, 1932. Serial No. 44,677. Term of patent 3½ years.



The ornamental design for a gem setting for rings, pendants, and ear rings as shown and described.

88,266. GEM SETTING FOR RINGS, PENDANTS, AND EAR RINGS. MILTON W. STERN, New York, N. Y. Filed Aug. 24, 1932. Serial No. 44,678. Term of patent 3½ years.



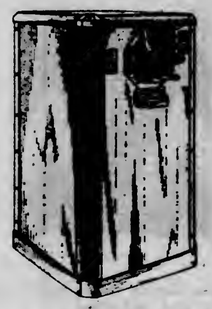
The ornamental design for a gem setting for rings, pendants, and ear rings as shown and described.

88,267. VEHICLE SIGNAL. CLARENCE B. STOW, Tulsa, Okla. Filed Aug. 20, 1932. Serial No. 44,646. Term of patent 3½ years.



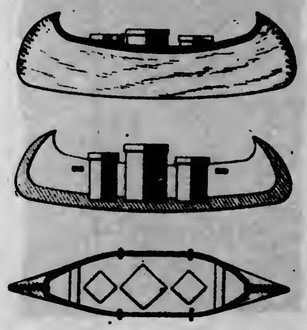
The ornamental design for a vehicle signal as shown.

88,268. ICE CREAM FREEZER. THEODORE SWANSON and THOMAS MCCREARY, San Francisco, Calif. Filed Aug. 23, 1932. Serial No. 44,676. Term of patent 3½ years.



The ornamental design for an ice cream freeser substantially as shown and described.

88,269. COMBINED TRAY AND RECEPTACLES FOR TOILET PREPARATIONS. ENID TAYLOR, New York, N. Y. Filed Mar. 31, 1931. Serial No. 39,309. Term of patent 7 years.



The ornamental design for a combined tray and receptacles for toilet preparations, substantially as shown and described.

88,270. PILE FABRIC RUG. JUANITA TODD, Yonkers, N. Y., assignor to Sidney Blumenthal & Co., Inc., New York, N. Y., a Corporation of New York. Filed Aug. 27, 1932. Serial No. 44,709. Term of patent 3½ years.



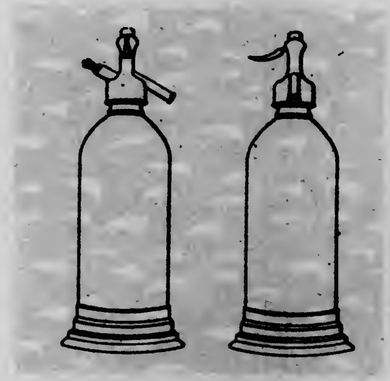
The ornamental design for a pile fabric rug substantially as shown.

88,271. PILE FABRIC RUG. JUANITA TODD, Yonkers, N. Y., assignor to Sidney Blumenthal & Co., Inc., New York, N. Y., a Corporation of New York. Filed Aug. 27, 1932. Serial No. 44,710. Term of patent 3½ years.



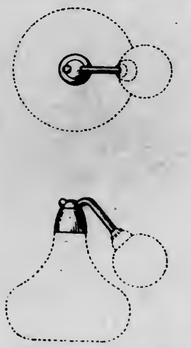
The ornamental design for a pile fabric rug substantially as shown.

88,272. SIPHON BOTTLE. CARLTON G. TOWNE, New Kensington, Pa., assignor to The Aluminum Cooking Utensil Company, New Kensington, Pa., a Corporation of Pennsylvania. Filed Sept. 26, 1932. Serial No. 45,073. Term of patent 7 years.



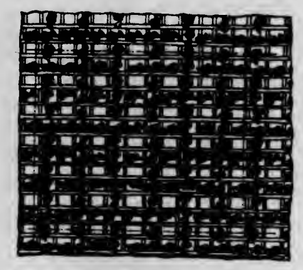
The ornamental design for a siphon bottle, as shown.

88,273. ATOMIZER. FREDERIC A. VUILLEMENOT, Toledo, Ohio, assignor to The De Vilbiss Company, Toledo, Ohio, a Corporation of Ohio. Filed May 25, 1932. Serial No. 43,902. Term of patent 7 years.



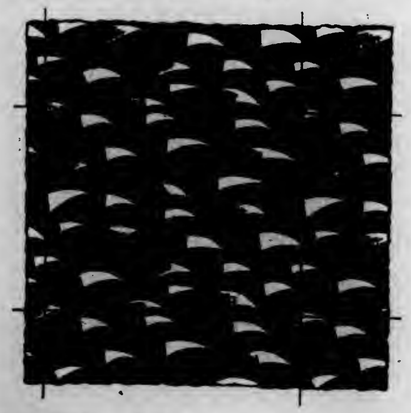
The ornamental design for an atomizer, substantially as shown and described.

88,274. TEXTILE FABRIC OR THE LIKE. EVELYN WAX, Briarwood, Long Island, N. Y. Filed Oct. 11, 1932. Serial No. 45,298. Term of patent 3½ years.



The ornamental design for a textile fabric or the like substantially as shown and described.

88,275. TEXTILE FABRIC OR THE LIKE. IRENE A. WEITZ, Brooklyn, N. Y. Filed Oct. 11, 1932. Serial No. 45,295. Term of patent 3½ years.



The ornamental design for a textile fabric or the like substantially as shown and described.

88,276. TEXTILE FABRIC OR SIMILAR ARTICLE. WILLIAM WILLHEIM, New York, N. Y. Filed Sept. 17, 1932. Serial No. 44,893. Term of patent 3½ years.



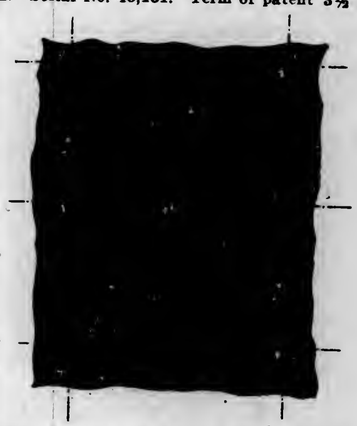
The ornamental design for a textile fabric or similar article as shown and described.

88,277. TEXTILE FABRIC OR SIMILAR ARTICLE. WILLIAM WILLHEIM, New York, N. Y. Filed Sept. 28, 1932. Serial No. 45,100. Term of patent 3½ years.



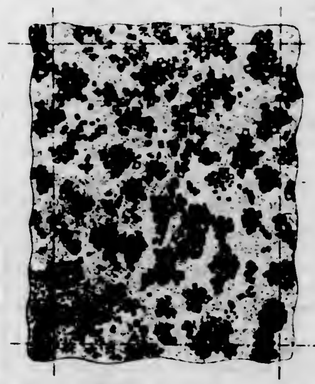
The ornamental design for a textile fabric or similar article as shown and described.

88,278. TEXTILE FABRIC OR SIMILAR ARTICLE. WILLIAM WILLHEIM, New York, N. Y. Filed Sept. 29, 1932. Serial No. 45,131. Term of patent 3½ years.



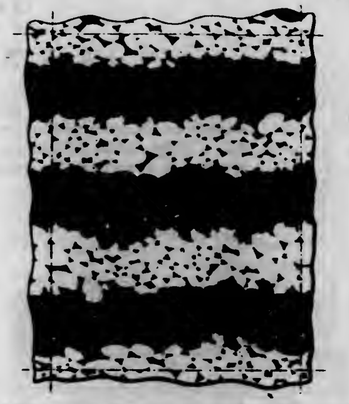
The ornamental design for a textile fabric or similar article as shown and described.

88,279. TEXTILE FABRIC OR SIMILAR ARTICLE. WILLIAM WILLHEIM, New York, N. Y. Filed Sept. 29, 1932. Serial No. 45,133. Term of patent 3½ years.



The ornamental design for a textile fabric or similar article as shown and described.

88,280. TEXTILE FABRIC OR SIMILAR ARTICLE. WILLIAM WILLHEIM, New York, N. Y. Filed Sept. 24, 1932. Serial No. 45,049. Term of patent 3½ years.

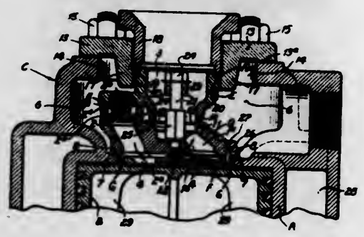


The ornamental design for a textile fabric or similar article as shown and described.

PATENTS

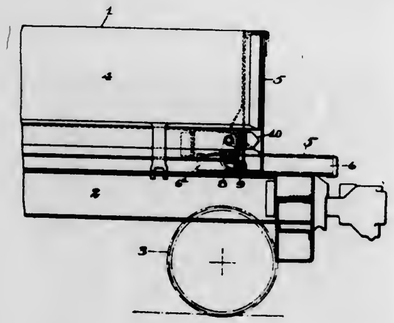
GRANTED NOVEMBER 8, 1932

1,886,359. AIR COMPRESSOR. FRANK ACKERMAN, St. Louis, Mo., assignor to Curtis Manufacturing Company, Wellston, Mo., a Corporation of Missouri. Filed May 11, 1931. Serial No. 536,416. 10 Claims. (Cl. 230—231.)



1. In an air compressor, the combination of a cylinder head having an internal space or chamber provided in its top wall with an opening, a valve structure adapted to be installed and removed through said opening and comprising a valve seat member whose diameter determines or controls the size of the hole in said top wall through which the valve structure is installed and removed, a seat on the head on which the peripheral portion of said valve seat member bears, a removable closure for said opening, and means carried by said closure for exerting a thrust on said valve seat member at a point far enough inwardly from the peripheral edge of same to insure said member bearing evenly on the seat provided for same on the head.

1,886,360. CAR CONSTRUCTION. JOHN P. ANDERSON, Koppel, Pa., assignor, by mesne assignments, to Koppel Industrial Car and Equipment Company, McKees Rocks, Pa., a Corporation of Pennsylvania. Filed Sept. 19, 1930. Serial No. 482,976. 16 Claims. (Cl. 105—261.)



1. In a dump car having a tiltable body, doors forming the end walls of said body, said doors being hinged adjacent the floor of said body, a downwardly depending member on said door, a depending member on said body, said depending door member detachably engaging with said depending body member to retain said door in closed position.

1,886,361. LOCOMOTIVE TENDER. RALPH W. ANDERSON, Wauwatosa, Wis. Filed May 25, 1931. Serial No. 539,672. 3 Claims. (Cl. 105—236.)



1. In a locomotive tender, a rigid structure provided with a water compartment and an oil holding compartment, the water compartment extending from one end of the tender to an intermediate point and below the top of the tender and terminating in water-legs extending to the opposite end of the tender along opposite sides and below the top, while the oil compartment extends across the top of the water compartment and its water-legs and between said water-legs; said oil compartment being provided with a top rigidly secured to the sides of the tender and to the end walls of the oil compartment; the oil compartment at spaced points throughout its length being provided with vertically disposed splash-plates arranged to permit oil flow thereabout.

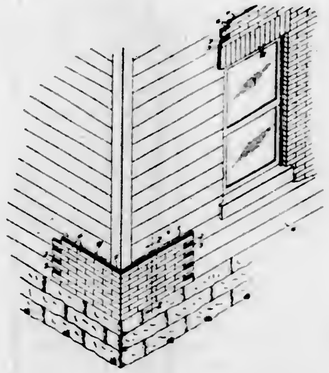
1,886,362. CONSTRUCTION OF FLEXIBLE AEROPLANE WINGS HAVING A VARIABLE PROFILE. UGO ANTONI, London, England. Filed Aug. 24, 1931. Serial No. 559,052, and in Great Britain Aug. 27, 1930. 11 Claims. (Cl. 244—12.)



1. Variable camber wing for aeroplanes comprising a pair of spacedly arranged spars and members rigidly connecting these spars together, wing ribs on these spars each comprising a lever having an aperture for the front spar pivotally connected to said spar, a lever having an aperture for the rear spar pivotally connected to said spar, said levers being provided on the upper sides with recesses adapted to receive flexible strips forming the top profile of the wing and on their lower side with recesses adapted to receive flexible strips forming the lower profile of the wing, one of said levers being pivotally connected to the corresponding spar at a point remote from (i. e. above) the point of attachment of the lower profile strip to the lever, whereby the said point of attachment can move through an arc and permit the curvature of the lower profile strip without any lengthening of this profile strip between its points of attachment to the front and rear levers, control means being associated with said levers whereby the profile of the wings is controlled by the pilot.

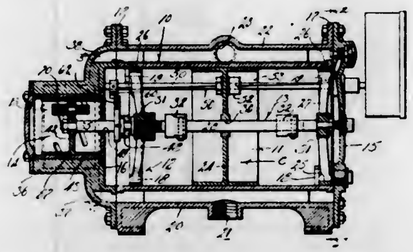
1,886,363. WALL VENEER. FRED C. AUFDERHEIDE, St. Louis, Mo. Filed Oct. 12, 1931. Serial No. 568,373. 5 Claims. (Cl. 20—5.)

5. A wall veneer comprising a series of individual unitary slabs attached to the wall, means interlocking the adjacent portions of said slabs, and a plurality of laterally and vertically spaced veneer elements attached to the



outer side of each of said slabs in symmetrical spaced relationship and leaving intervening spaces to receive fasteners for attaching said slabs to the wall.

1,886,364. DISPLACEMENT METER. CARLOS J. BASSLER, Alhambra, Calif., assignor to American Liquid Meter Company, Alhambra, Calif., a Corporation of Washington. Filed Feb. 28, 1929. Serial No. 343,422. 20 Claims. (Cl. 73—30.)

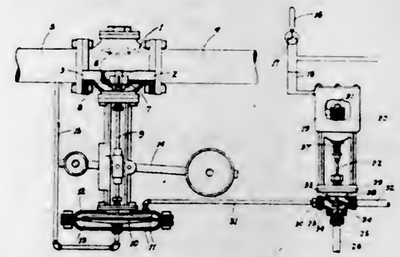


1. In a meter, a measuring cylinder having inlet and outlet ports at its ends, a piston operable in the cylinder, valves controlling flow of fluid through the ports, means positively moving the valves to dead center upon the piston reaching predetermined positions, and means operable to move the valves past dead center to give the valves lead for reversing the direction of movement of the piston.

1,886,365. NEW SULPHUR-DYESTUFFS AND A PROCESS OF PREPARING THEM. OTTO BAYER, Frankfort-on-the-Main, WILHELM HOHENEMSER, Frankfort-on-the-Main-Fechenheim, and KARL LARSIG, Frankfort-on-the-Main-Hochst, Germany, assignors to General Aniline Works, Inc. New York, N. Y., a Corporation of Delaware. Filed Nov. 7, 1930. Serial No. 494,182, and in Germany Nov. 19, 1929. 27 Claims. (Cl. 260—18.)

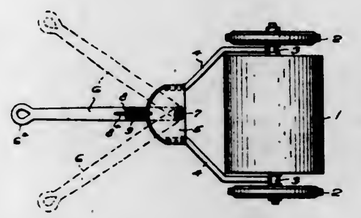
1. In the process of preparing sulphur-dyestuffs by melting an organic compound being a starting material for the preparation of sulphur-dyestuffs with an alkali metal polysulphide the step which comprises carrying out the melting process in the presence of a compound of a metal of the group consisting of molybdenum, tungsten, vanadium, uranium and antimony.

1,886,366. CONTROL APPARATUS FOR VACUUM HEATING SYSTEMS. CHARLES M. BAILEY, San Francisco, Calif. Filed June 27, 1931. Serial No. 547,249. 9 Claims. (Cl. 236—92.)



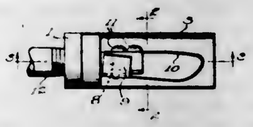
1. In a steam heating system having a conduit extending from the steam supply to the heating apparatus of the system, a compensating valve to said conduit functioning automatically by reason of pressure variations in the conduit to admit a predetermined steam pressure to such conduit, and independent thermostatically controlled means connected to said valve to operate the same to admit additional steam pressure to the conduit.

1,886,367. TRANSPORTING MEANS FOR ROAD ROLLERS. EDGAR V. BILES, San Antonio, Tex., assignor to Bart Moore, jr., San Antonio, Tex. Filed July 7, 1932. Serial No. 621,284. 4 Claims. (Cl. 280—1.)



1. A structure of the character described comprising a roller, supporting wheels for the same eccentrically disposed with respect to the roller, a shaft and axle structure upon which the roller and wheels are respectively mounted, and means for bodily inverting said structure.

1,886,368. AIR INLET VALVE FOR INTERNAL COMBUSTION ENGINES. AUGUSTUS C. BLANCKE, Chicago, Ill. Filed Aug. 25, 1930. Serial No. 477,658. 10 Claims. (Cl. 236—101.)



1. A thermostatic air inlet valve comprising a valve body having a flat surface with an inlet port opening thereto, a U-shaped valve embracing said body and having

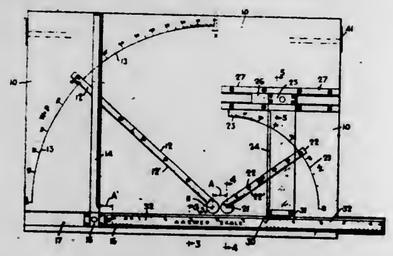
a wing slidable on said flat surface to open and close said port, and thermostatic means for actuating said valve.

1,886,369. TRACTION SPRAYER. JOHN C. BOGART, Bay City, Mich. Filed Sept. 19, 1930. Serial No. 482,980. 1 Claim. (Cl. 299—39.)



In a device of the character described, the combination with a horizontally disposed boom, of a plurality of headers journaled thereon by means of detachable caps, set collars adjustably mounted on the boom for limiting movement of the headers along the boom, upper and lower openings in each of said headers, flexible supply means suitably connecting the upper openings of the headers together, and discharge pipe connected to the lower openings and provided with spray nozzles on the ends thereof.

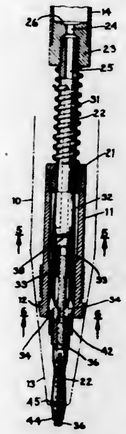
1,886,370. COMPUTING DEVICE. ARTHUR T. BOLTON, Pelham, N. Y. Filed May 31, 1928. Serial No. 281,630. 6 Claims. (Cl. 235—85.)



1. In a computing device, in combination, a table, a pair of arms pivoted thereto having their pivot-centers adjacently disposed and spaced a fixed distance apart, arcuate scales on said table cooperating with the free ends of said arms, a linear sliding member parallel to a line passing through said pivot-centers, a pair of parallel moving bars, one associated with each of said arms, said bars being disposed vertically to said linear sliding member, and a scale member associated with said linear sliding member and having the "zero" mark displaced thereon to compensate for the fixed distance between said pivot-centers, whereby said sliding member with its associated scale is adapted to give a resultant reading which is the sum of the projections of distances measured along said arms.

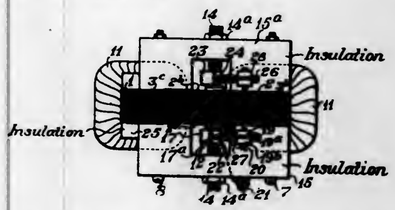
1,886,371. PENCIL. CLARE W. BOMAN, Brooklyn, N. Y., assignor to Eagle Pencil Company, New York, N. Y., a Corporation of Delaware. Filed Aug. 15, 1929. Serial No. 386,051. 7 Claims. (Cl. 120—17.)

6. In a pencil of the character described, a pencil casing, devices mounted for unitary reciprocatory movement in said casing comprising a lead guiding tube having slots in its sides and a clutch for the lead adjacent the writing point of the pencil, said devices being manually movable in one direction, a return spring between the casing and said devices for moving said devices in the other direction, lead gripping devices extending through the slots in the lead guiding tube, devices for operating the gripping devices during the return movement of the lead guide tube to hold the lead stationary with respect



to the tube and the aforesaid clutch, and a member on the tube acting to lock the lead gripping devices against the lead at the end of the return movement.

1,886,372. ELECTRICAL RELAY. PAUL N. BOSSART, Swissvale, Pa., assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed May 24, 1930. Serial No. 455,245. 1 Claim. (Cl. 200—166.)



A relay comprising a pivotally mounted shaft, a contact support fixed to said shaft, and a contact spring one end of which is attached to said support on one side of said shaft, which spring extends across the shaft and coacts at its other end with a fixed contact member, whereby the length of said spring from its point of attachment to its point of engagement with the fixed contact member is considerably greater than the distance from the axis of said shaft to the said point of contact engagement.

1,886,378. INSECTPROOF JAM JAR AND OTHER FOOD CONTAINER. HORACE EDWARD PEARCE BRACEY, Lithgow, New South Wales, Australia. Filed Apr. 11, 1929, Serial No. 354,394, and in Australia Apr. 26, 1928. 4 Claims. (Cl. 65—59.)



4. A container comprising a top portion and a bottom portion, each having a notch therein, said notches co-

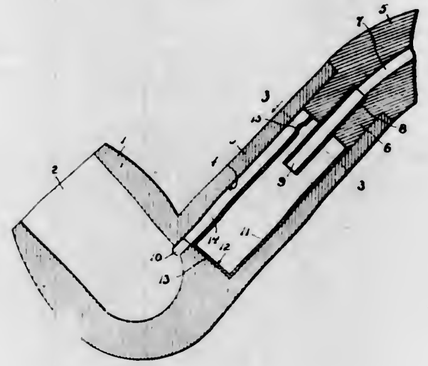
operating to form, upon relative rotation of said portions, an opening of a size progressively varying in all directions.

1,886,374. SHIPPING PACKAGE FOR PERISHABLE OBJECTS. RENE J. BRETON, Fresno, Calif. Filed Aug. 22, 1928. Serial No. 301,268. 4 Claims. (Cl. 229—6.)



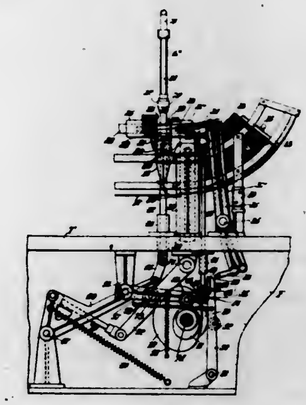
1. A shipping package comprising an upper and a lower section adapted to telescope with each other, each section having a main portion, vertical side, end and corner portions, and outwardly sloping marginal portions intermediate of the main portion and the side, end and corner portions.

1,886,375. SMOKING PIPE. WILLIAM GEORGE CLARK, Vancouver, British Columbia, Canada. Filed Jan. 21, 1931. Serial No. 510,237. 1 Claim. (Cl. 131—12.)



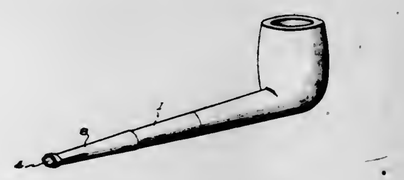
In pipes, a bowl having a tobacco chamber and a stem projecting from the bowl as an integral structure, said stem being provided with a bore entering from its outer end and terminating short of the tobacco chamber of the bowl to constitute a cylindrical chamber, a mouth piece having a stopper portion to fit the entrance of the cylindrical chamber and having a smoke duct from end to end, a tubular receptacle fitting said cylindrical chamber and having a closed end to lie against the end wall of said bore and having its other end located adjacent said stopper portion, said receptacle having an inwardly directed longitudinal groove along its outer surface extending from end to end, said bowl having a smoke port leading from said tobacco chamber at a substantial distance from the bottom thereof to the adjacent end of said longitudinal groove, said receptacle at its end adjacent said stopper portion having a passage for smoke from said groove into the receptacle, and a short tube carried by said mouth piece projecting into said receptacle and registering with the smoke duct of the mouth piece.

1,886,376. MACHINE FOR AUTOMATICALLY OPENING SQUARE-BOTTOM PAPER BAGS. XAVER DAMBACHER, Lengerich in Westphalia, Germany, assignor to the Firm Windmoller & Holscher, G. m. b. H., Lengerich, Westphalia, Germany. Filed Mar. 8, 1932. Serial No. 597,540. 6 Claims. (Cl. 226—49.)



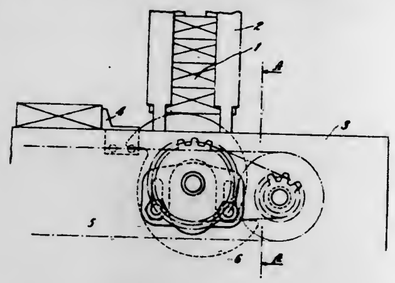
1. In a machine for automatically spreading folded square bottom paper bags, means for supporting a pile of bags in a flat condition, means to catch one bag after the other from the delivery end of the said pile, means for separating the side walls of the said bag lying close together, the said means comprising thin elastic fingers, means to introduce the said fingers into the bag in a direction parallel to the plane of the said walls, means to separate them after they have been introduced, a second set of spreading fingers arranged to enter and spread the open end of the said bag in a direction vertical to the spreading action of the said first fingers, a plunger arranged above the said paper bag when spread out at its open edge by the said sets of fingers, means to lower the said plunger into the opened edge of the said bag and close to the bottom of it, and means to return the plunger and fingers into their initial position leaving the paper bag in a spread condition.

1,886,377. PIPE, CIGAR, OR CIGARETTE HOLDER. GEORGE WASHINGTON DAVIS, Chicago, Ill., assignor of one-half to Norman E. Bensinger, Chicago, Ill. Filed Mar. 21, 1931. Serial No. 524,282. 5 Claims. (Cl. 131—12.)



1. A device of the class described, comprising a bored stem having a plate covering the outer end of its bore to form a baffle and located at a capillary distance from the stem to emit smoke and to prevent saliva from entering the bore of said stem and a sleeve on said stem overlapping edges of said plate to hold said plate.

1,886,378. PACKING MACHINERY. GEORGE DEARSLEY, Deptford, London, England. Filed Dec. 23, 1929, Serial No. 416,184, and in Great Britain Dec. 27, 1928. 5 Claim. (Cl. 214—8.5.)

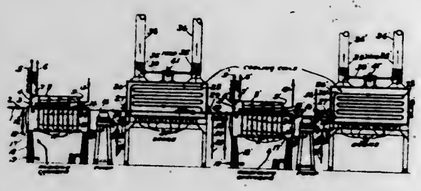


1. In apparatus for removing stacked articles from the bottom of a magazine, the combination with a support disposed beneath said magazine, a conveyer arranged to remove articles from said support, of means for lowering the articles one at a time from said magazine on said support into the path of said conveyer, and thereafter imparting an initial movement to the same away from said magazine in the direction of the movement of the conveyer.

1,886,379. PROCESS FOR THE PREPARATION OF A GLASSY DRYING SUBSTANCE FROM CEMENT WITH OR WITHOUT COLORS. HENRI MARTINUS DE LANGE, De Bilt, Netherlands, assignor to John Fillans Barr, Drogheda, Irish Free State, and Dirk de Lange, De Bilt, Netherlands. Filed Apr. 11, 1931, Serial No. 529,546, and in Denmark Nov. 15, 1930. 6 Claims. (Cl. 106—27.)

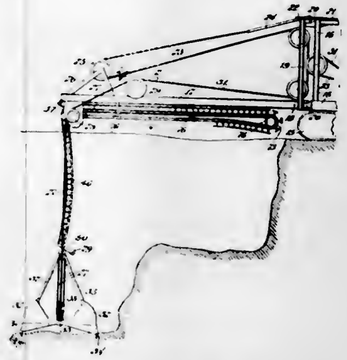
2. Process for the preparation of a material for mixture with cement consisting in slaking quick lime with a soap solution and mixing the dry material so obtained in a solution obtained by mixing calcium chloride, hydrochloric acid, aluminium and water.

1,886,380. METHOD OF OXIDIZING ASPHALTIC OILS. TOM H. DOWLEN, Los Angeles, Calif., assignor to Richfield Oil Company of California, Los Angeles, Calif., a Corporation of Delaware. Filed Oct. 30, 1929. Serial No. 403,644. 9 Claims. (Cl. 196—74.)



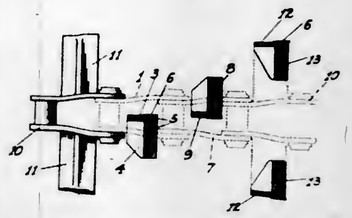
9. A process of oxidizing asphaltic oils, comprising, maintaining a supply of asphaltic oil in a plurality of containers at an elevated oxidizing temperature by the application of heat to each container and heat produced by an oxidizing reaction, continuously introducing a regulated supply of asphaltic oil into the first container, continuously passing regulated streams of air and steam through the supply of asphaltic oil in each container, continuously withdrawing the residual air, steam and volatile oil products from each container, continuously passing the oil from each container, from which the residual air, steam and volatile oil products have been separated, into separate cooling coils to extract the exothermic heat of the oxidizing reaction, continuously introducing the oil from the interstage cooling coil into the succeeding container and then into a final cooling coil, and discharging the finished product from the system.

1,886,381. EXCAVATING MACHINE. ROBERT REX DOWNIE, Beaver Falls, Pa. Filed Dec. 26, 1929. Serial No. 416,629. 41 Claims. (Cl. 212—42.)



1. In an excavating machine, the combination of a pivoted boom; a vertically-digging bucket carried thereby; a line for hoisting the boom; and an articulated pressure-transmitting column member connecting the boom and bucket and depending from the end of the boom when the bucket is in digging position; the column member being sufficiently flexible because of the articulations to be movable into a position wherein it is generally parallel to the longitudinal axis of the boom; and power-actuated means to move the column member longitudinally.

1,886,382. DIGGER CHAIN. LESTER G. DUNLAP, Stockton, Calif. Filed May 31, 1930, Serial No. 457,921. Renewed Apr. 18, 1932. 4 Claims. (Cl. 37—191.)

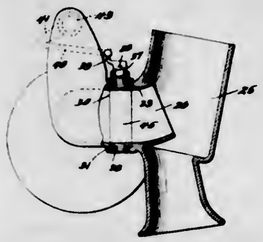


4. A digger chain comprising links, a digging unit depending therefrom, said unit including longitudinally spaced blades projecting laterally in opposite directions from the center of width of the chain, and arms upstanding from and rigid with the blades at their inner ends; the upper ends of said arms being formed with transversely diverging branches connected to the transversely spaced side elements of the corresponding links.

1,886,383. DIESEL ENGINE. HERBERT C. EDWARDS, Detroit, Mich., assignor to Packard Motor Car Company, Detroit, Mich., a Corporation of Michigan. Filed Jan. 28, 1931. Serial No. 511,867. 7 Claims. (Cl. 60—32.)

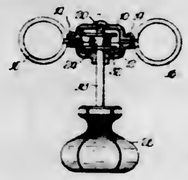
1. In a Diesel engine having a cylinder provided with a single port serving as an air inlet and exhaust gas outlet, the combination with a conduit communicating with and extending transversely of said port, and arranged to receive a supply of fresh air through the forward end and discharge exhaust gas through the rearward end thereof, of means associated with said conduit for imparting rotational movement to exhaust gas issuing from said port to facilitate expulsion of such gas from the rearward end of said conduit.

1,886,384. DIESEL ENGINE. HERBERT C. EDWARDS, Detroit, Mich., assignor to Packard Motor Car Company, Detroit, Mich., a Corporation of Michigan. Filed Jan. 28, 1931. Serial No. 511,868. 8 Claims. (Cl. 123—79.)



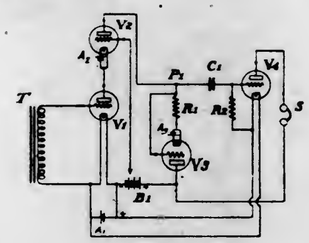
1. In a Diesel engine having a cylinder provided with a single port serving as an air inlet and exhaust gas outlet, the combination with a conduit communicating with and extending transversely of said port, and arranged to receive a supply of fresh air through the forward end and discharge exhaust gas through the rearward end thereof, of valve means for controlling said port in timed relation to the operation of said engine, and means for throttling the flow of air and exhaust gas through said port only.

1,886,385. AMUSEMENT DEVICE. ELISHA ELIVIRDY, Chicago, Ill. Filed Sept. 11, 1931. Serial No. 562,246. 1 Claim. (Cl. 46—14.)



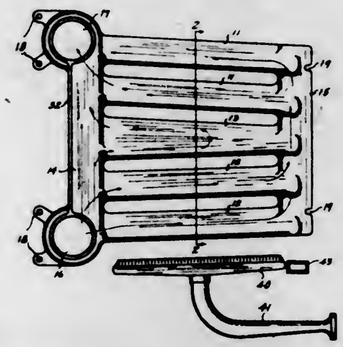
An amusement device comprising in combination, a separable casing formed of a top and bottom portion, projecting ears provided on the portions respectively and positioned in alignment for receiving securing means fastening the portions together, a shaft journalled in the casing and projecting through one wall thereof, a weighted member secured to the projecting end of the shaft, supporting rings attached to the casing by said securing means, and an operating cord wound on that portion of the shaft within the casing and extending through an aperture to the outside of the casing.

1,886,386. RADIO. OLIVER T. FRANCIS, Quantico, Va. Filed Nov. 17, 1928. Serial No. 320,170. 2 Claims. (Cl. 179—171.)



1. In an electric circuit, a vacuum tube having an input and an output circuit, a source of voltage for said output circuit, means for supplying impulses to said input circuit, said means comprising a second vacuum tube having an anode, a cathode and a control electrode, said anode and said cathode being connected in said input and said output circuit and means for varying the potential of said control electrode.

1,886,387. BOILER. ANDREW J. GALLAHER, St. Louis, Mo. Filed Feb. 27, 1928. Serial No. 257,394. 26 Claims. (Cl. 122—210.)



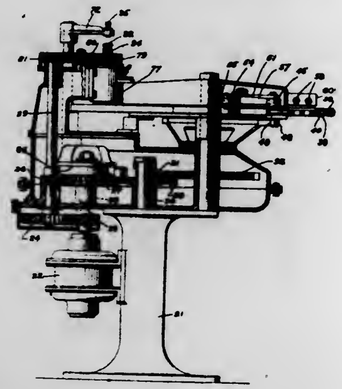
1. In a boiler section, a pair of tubes of opposite inclination, and a tube therebetween, having opposite portions corresponding substantially in trend to the respective inclinations of said pair of tubes.

16. In a boiler of sectional unit construction, an outside fluid containing section, forming a boiler wall and symmetrically formed about its transverse median and thereby adapted to be vertically inverted and used as an end section for either end of the boiler, said section having heat absorbing portions on one of its sides, and provided with vertically aligned fluid connections.

1,886,388. ARTICHOKE TRIMMING AND CORING MACHINE. GEORGE D. GARDNER, San Jose, Calif., assignor to Barron Gray Packing Company, San Jose, Calif., a Corporation of California. Filed May 31, 1930. Serial No. 458,491. 10 Claims. (Cl. 146—42.)

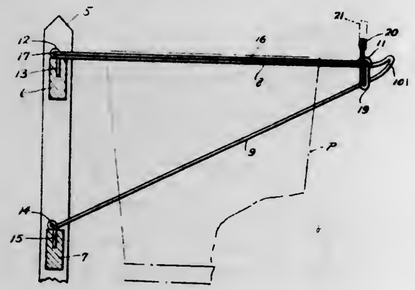
8. An apparatus for the described purpose comprising means for holding an artichoke and advancing it with a

step by step movement, means for cutting off the stem end of the artichoke at the base of the heart, a rotating knife for forming a groove in said cut stem end at the bases of



the outer leaves during a period of rest of the artichoke, and means for separating the heart from said outer leaves during the subsequent period of rest of said artichoke.

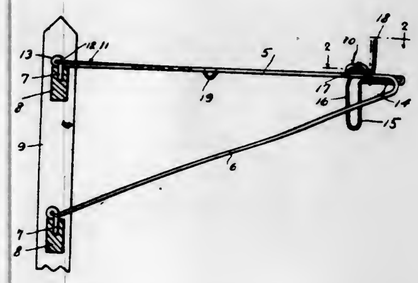
1,886,389. PANTS RACK. KENNETH C. GARNER, Hamlet, N. C. Filed May 15, 1931. Serial No. 537,720. 1 Claim. (Cl. 211—96.)



A bracket of the class described comprising in combination a pair of upper and lower vertically alined apertured supporting members, a bracket made from a single piece of wire to form an upper longitudinal arm, a lower inclined arm, and upper and lower longitudinally alined and downwardly projecting ends or pintles adapted to engage the apertures in said supporting members; said upper longitudinal arm being also provided adjacent its pintle with an eye, and remote from said eye with a second eye, and a rod provided adjacent one end with an eye engaging the first named eye, and at its other end provided with a laterally extending eye adapted to frictionally engage the second named eye on said upper longitudinal arm to yieldably retain said rod in coacting clamping relation with said upper arm, said rod at said last named end being also provided with a perpendicular handle portion.

1,886,390. PANTS RACK. KENNETH C. GARNER, Hamlet, N. C. Filed Mar. 1, 1932. Serial No. 596,123. 4 Claims. (Cl. 223—67.)

1. A bracket of the class described comprising in combination an arm, a rod loosely connected with the arm at a corresponding end of the arm, said arm remote from said end being provided with an eye, and said rod having a substantially U-shaped part extending laterally therefrom



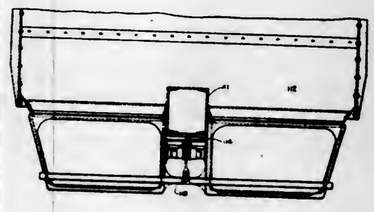
and adapted to be passed through said eye and engaged therewith for retaining said rod in clamping relation with respect to said arm.

1,886,391. PIPE BOWL. HENRI GAUVIN, Ottawa, Ontario, Canada. Filed Oct. 23, 1931. Serial No. 570,582. 4 Claims. (Cl. 131—12.)



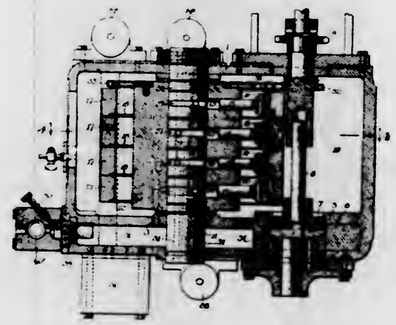
1. A removable insert for a pipe bowl comprising a bowl shaped shell formed with double walls in spaced relation, the air from within the space between said walls being exhausted and said space being sealed to provide a vacuum insulation for said bowl.

1,886,392. CAR CONSTRUCTION. GARTH G. GILPIN, Riverside, Ill., assignor to Union Metal Products Company, Chicago, Ill., a Corporation of Delaware. Original application filed Oct. 20, 1928, Serial No. 313,906. Divided and this application filed Feb. 1, 1930. Serial No. 425,259. 15 Claims. (Cl. 105—280.)



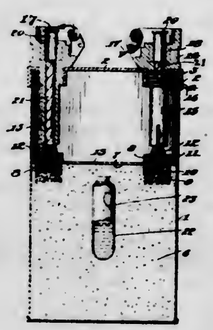
1. A cast metal panel forming part of the load retaining means of a railway car comprising a web portion having an integral, continuous lateral flange adjacent its perimeter provided with an integral continuous inturned reflange said inturned reflange being wider at the corners of the door than elsewhere.

1,886,393. PUMPING UNIT FOR HYDRAULIC POWER TRANSMISSION SYSTEMS. LOUIS E. GODFRIAUX, Madison, Wis., assignor to Gisholt Machine Company, Madison, Wis., a Corporation of Wisconsin. Filed Aug. 1, 1930. Serial No. 472,366. 14 Claims. (Cl. 103—5.)



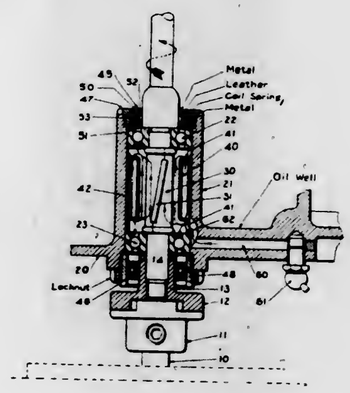
1. A pumping unit for a hydraulic power transmission system for lathes and like machines, comprising a box-like casing the lower portion whereof forms an oil sump, a low pressure oil pump communicating on its intake side with said sump, a fixed arbor mounted in said casing, a pair of rotary pumps mounted side by side on said arbor, the latter being formed with intake and discharge ducts for said rotary pumps, a flow line leading from the discharge side of said low pressure pump to the intake duct of one of said rotary pumps, and a flow line leading from the discharge duct of the other of said rotary pumps into said sump.

1,886,394. DENSE OPAQUE SMOKE AND IRRITATING FUME AND GAS PRODUCING CHEMICALS. BYRON C. GOSS, Cleveland, Ohio, assignor to The Lake Erie Chemical Company, a Corporation of Ohio. Filed Feb. 24, 1927. Serial No. 170,561. 8 Claims. (Cl. 167—47.)



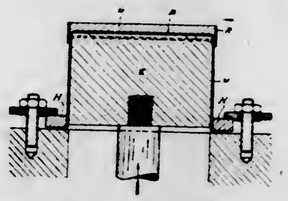
1. A disabling and irritating mixed gas and smoke generating composition comprising a mixture containing from about 12.5 percent to about 30 percent of chloracetophenone, from about 27.3 percent to about 52.5 percent of hexachlorethane, and also containing ammonium perchlorate, zinc dust, and zinc oxide.

1,886,395. SHAFT BEARING. WILLIAM C. GRAUL, Detroit, Mich., assignor, by mesne assignments, to Timken Silent Automatic Company, Detroit, Mich., a Corporation of Michigan. Filed July 24, 1930. Serial No. 470,299. 2 Claims. (Cl. 308—126.)



1. A shaft bearing assembly comprising of a journal member having spaced antifriction bearings therein for supporting said shaft, sealing means for the ends of said journal a lubricant pump in said journal and operable by said shaft, said pump comprising a blade carrying sleeve formed of two semicylinders secured together by longitudinally extending flanges folded together, said folded flanges constituting the said blades.

1,886,396. METHOD OF REENFORCING THIN-WALLED METAL ARTICLES. ADOLF HAINLEN, Geislingen-Steige, Germany. Original application filed Dec. 16, 1929, Serial No. 414,543, and in Germany June 15, 1929. Divided and this application filed May 15, 1931. Serial No. 537,727. 4 Claims. (Cl. 29—148.2.)

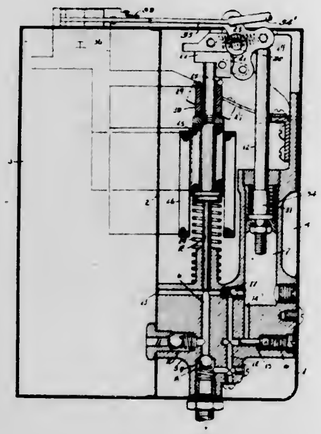


1. A method of preventing the formation of waves or bends in thin walled metal articles when reenforcing the same by casting a metal layer thereon, which consists in pressing or drawing that part to be reenforced by the cast on layer immediately after the casting operation and until the cast on layer has solidified.

1,886,397. PUMP FOR LUBRICATING SYSTEMS AND THE LIKE. THEODORE W. HALLERBERG, Battle Creek, Mich., assignor to Lubrication Devices Incorporated, Battle Creek, Mich. Filed May 18, 1929. Serial No. 362,541. 14 Claims. (Cl. 184—27.)

14. In a pump, the combination of a pump cylinder and coacting plunger, said cylinder being provided with an in-

let and discharge and with a relief passage connected to said discharge and controlled by the pump plunger, and



a control means for said pump plunger including a pressure controlled element operatively connected to the discharge.

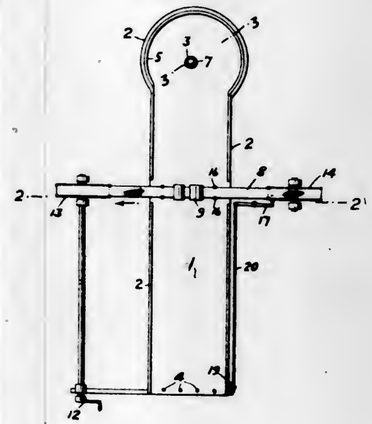
1,886,398. AUTOMATIC TRAIN PIPE COUPLING. ARTHUR C. HARRELL, Pensacola, Fla. Filed Aug. 13, 1931. Serial No. 556,883. 2 Claims. (Cl. 285—24.)



1. In an automatic train pipe coupling, a plurality of train pipes, a nonrotatable plate on the outer ends of the train pipes, a rotatable coupling head internally shouldered to receive the plate and permit the former to rotate about the latter, a fixed guide ring for holding the train pipes in alinement, means for locking the coupling head to the guide ring in normal uncoupled position, a plurality of hooks formed on the outer edge of the coupling head, movable therewith to contact with the corresponding hooks on the adjacent coupling head and allow the hooks to engage the locking means to release the coupling head, and means for rotating the coupling head whereby the forward movement of the same permits the non-rotatable plate and train pipes to contact and slide with the corresponding parts on the adjacent member to provide a tight connection between the train pipes.

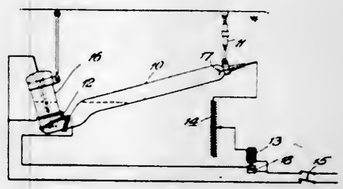
1,886,399. GAME APPARATUS. GEORGE W. HAUSE, Philadelphia, Pa. Filed Nov. 7, 1930. Serial No. 493,932. 5 Claims. (Cl. 273—32.)

1. A game apparatus comprising a ball-patb, an upstanding rim surrounding said ball-path, a cup adjacent one end of said ball-path, a carrier movable crosswise of said ball-path and forming a portion of the surface of



said ball-path, and a plurality of hazards mounted on said carrier and movable thereon so as to be presented in succession on the ball-path.

1,886,400. MERCURY VAPOR LAMP. MASON HULETT, New York, N. Y., assignor, by mesne assignments, to The Burdick Corporation, Milton, Wis., a Corporation of Delaware. Filed Feb. 20, 1923. Serial No. 620,190. 5 Claims. (Cl. 176—47.)

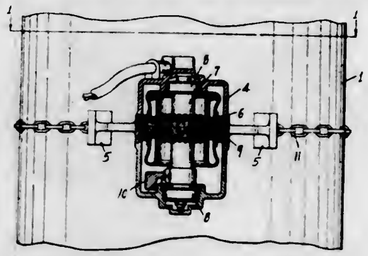


1. The combination with a vapor lamp having two electrodes one of which is mercury, of an electrically actuated heater for heating the mercury electrode and thereby causing the same to approach the other electrode to establish contact therewith, a circuit for supplying current to the heater and the lamp electrodes, a relay for opening the circuit to the heater when contact is established between the electrodes, a resistance in the circuit for controlling the voltage impressed between the electrodes, and a relay in the circuit acting automatically to increase the voltage impressed between the electrodes when the current flowing therebetween falls to a predetermined value.

1,886,401. APPARATUS FOR MOLDING PIPE OR CONDUITS. CORWILL JACKSON, Chicago, Ill. Filed July 5, 1928. Serial No. 290,356. 10 Claims. (Cl. 259—72.)

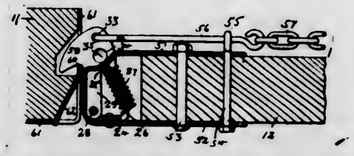
1. The combination of a motor casing provided with arms adapted to rest upon a form, at substantially spaced

points a motor within said casing comprising a rotor shaft provided with an unbalancing weight, and a form



embracing cable connected to said arms and adjustable to clamp a casing upon the form.

1,886,402. LOCK. RICHARD J. JOHNSON, Langdon, Minn., assignor of one-half to Walter Johnson, Langdon, Minn. Filed May 8, 1930. Serial No. 449,495. 4 Claims. (Cl. 292—223.)



1. In combination a door having a notch in its free edge, a U-shaped member fitting over the notched part of the door and having its limbs fastened to the inner and outer faces of the door with a part of said member covering the notch, the bight part of said member passing over a portion of the free edge of the door, a latch member having one end pivoted in an outer corner of the U-shaped member with its other end passing through a slot in the U-shaped member, a keeper engaging part on the latch member, a shoulder on an intermediate part of the inner edge of the latch member, a diagonally arranged projection extending from the shoulder, a spring having one end encircling the projection and bearing against the shoulder, means for supporting the opposite end of the spring from that limb of the U-shape which is opposite the limb through which the end of the latch member passes, said spring being diagonally arranged and tending to hold the latch member in latching position, a link connected with the projecting end of the latch member and an operating member connected to the link for moving the latch member to releasing position.

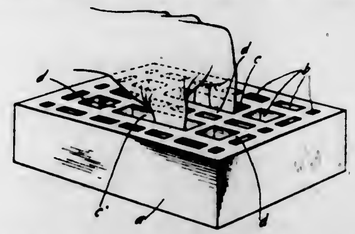
1,886,403. HEAT EXCHANGER. RUSSELL C. JONES, Bronxville, N. Y., assignor to The Griscom-Russell Company, New York, N. Y., a Corporation of Delaware. Filed Feb. 15, 1930. Serial No. 428,597. 7 Claims. (Cl. 257—248.)



1. In a heat exchanger, a unit comprising a pair of headers and tubes between the headers, said headers being connected independently of the tubes, said tubes being bowed and having fins thereon.

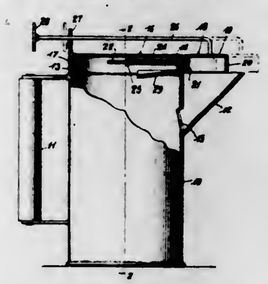
1,886,404. HAND GRIP BALANCED HOLLOW TILE. WILLIAM F. KIPPLE, Portland, Oreg. Filed Sept. 25, 1930. Serial No. 484,263. 2 Claims. (Cl. 72—41.)

1. A hollow tile comprising perimetric interior, longitudinal, and transverse intersecting web portions, the medial longitudinal web portions spaced close together and the intermediate longitudinal web portions spaced laterally from said medial portions a substantial distance, said transverse web portions being located relatively close



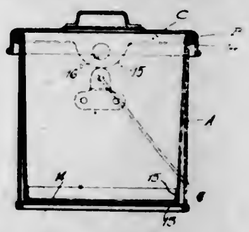
to the ends of the tile, whereby to provide two relatively large hand holds between said medial and intermediate longitudinal web courses, such hand holds being located one on each side the longitudinal medial line of the tile.

1,886,405. DRIPLESS SIRUP PITCHER. FRANK B. KNAUSS, Dillon, Kans. Filed Mar. 31, 1931. Serial No. 526,708. 7 Claims. (Cl. 65—13.)



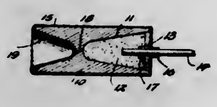
4. A device of the class described comprising a mounting body applicable to a pitcher, an element to remove surplus material from the edge of the spout of a pitcher, means maintaining said element retracted and located over the spout in contact with the closure and thus partially closing the spout, and means attached to said element and operable counter to said retracting means.

1,886,406. SANITARY GARBAGE CAN LINER. CHARLES D. KNIFFIN, Middletown, N. Y. Filed Jan. 31, 1930. Serial No. 424,930. 1 Claim. (Cl. 220—65.)



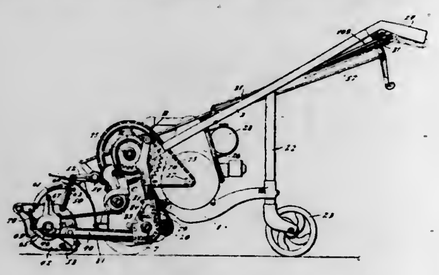
In a liner of the type adapted for insertion into garbage cans having beaded upper ends, a flexible tapered body having the upper portion thereof provided with a continuous relatively stiff outwardly and downwardly curved flange to closely embrace the bead of a can and thereby hold the body in place, the flange being provided with oppositely located depending apertured tabs formed integral therewith and adapted to be positioned exteriorly of the can along opposite sides thereof at a point below the top of the can.

1,886,407. **PYROTECHNIC DEVICE.** KOBY KOHN, New York, N. Y., assignor to Chatham Specialty Corporation, New York, N. Y., a Corporation of New York. Filed July 25, 1929, Serial No. 380,998. Renewed Apr. 6, 1932. 13 Claims. (Cl. 102—22.)



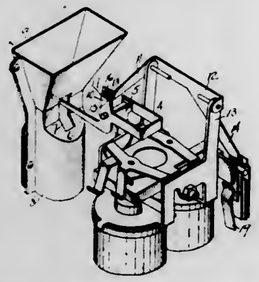
1. A firework comprising in combination, a frangible container, an explosive composition completely encased in said container, a gas tight covering of high tensile strength surrounding said container and a fuse extending through said container and covering.

1,886,408. **POWER LAWN MOWER.** SYLVANUS D. LOCKE, Bridgeport, and HENRY J. STEGEMAN, Fairfield, Conn., assignors to The Locke Steel Chain Company, Bridgeport, Conn., a Corporation of Connecticut. Filed Aug. 15, 1928. Serial No. 299,658. 59 Claims. (Cl. 56—26.)



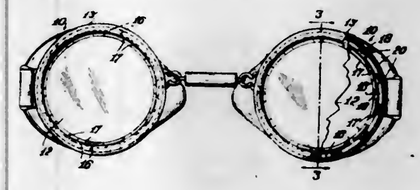
1. In a lawn mower, cutting means, a main frame, driving means, pivoted means for partially supporting the cutting means from the main frame, a spacing shoe lying back of the cutting means and wholly within the path of the cutting means for fixing the distance of the cutting means from the ground, and spring means tending to counterbalance the weight supported by said pivoted means.

1,886,409. **COIN CONTROLLED ACTUATING DEVICE.** GEORGE A. LONG, Hartford, Conn., assignor to The Gray Telephone Pay Station Company, Hartford, Conn., a Corporation of Connecticut. Filed Apr. 14, 1932. Serial No. 605,177. 5 Claims. (Cl. 194—9.)



1. A coin actuated device including a movably mounted switch actuating member, a movably mounted frame including a coin actuated finger, and a trip having an indented edge comprising a rest at the end thereof for said switch actuating member.

1,886,410. **GOGGLES.** ROBERT MALCOM, Chicago, Ill. Filed Apr. 2, 1931. Serial No. 527,143. 4 Claims. (Cl. 2—14.)



1. A goggle, the eye-cups whereof on the lens seating ends are provided with a plurality of projections arranged in different circumferential rows, with the projections of one row arranged in staggered relation with those of the other rows so as to provide off set air passages therebetween; and a lens holding ring adapted to encircle the lens and engage with the eye-cup and provided with a plurality of openings adapted to register with the air passages between said projections.

1,886,411. **ART OF REMOVING LEAD FROM FERROUS ARTICLES.** CHARLES L. MANTELL, Brooklyn, N. Y., assignor to Dudzeele Corporation of America, New York, N. Y., a Corporation of Delaware. Filed Mar. 29, 1929, Serial No. 351,131. Renewed Mar. 14, 1932. 13 Claims. (Cl. 75—18.)

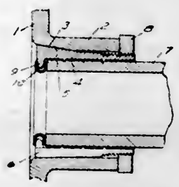
1. A deleading solution containing appreciable amounts of chlorides and hydrogen ions resulting from the use of a non-oxidizing mineral acid, with a small proportion of a nickel salt as a catalyst.

1,886,412. **DYEING AND PRINTING PROCESS.** JULES MARTIN dit GAUDIT, Paris, France. Filed July 10, 1930. Serial No. 467,133, and in France Aug. 2, 1929. 4 Claims. (Cl. 8—5.)

1. Process for dyeing or printing any fibres, which consists in applying on the said fibres a mixture comprising a dye-stuff usable in acid bath, water and 10 to 50% by volume of commercial formic acid in the cold state.

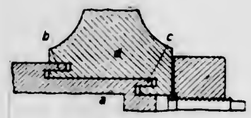
3. A mixture for dyeing or printing any fibres, comprising water, a dyestuff usable in acid bath and 10 to 50% by volume of commercial formic acid.

1,886,413. **CONDUIT FITTING.** GEORGE R. METCALF, Jr., Erie, Pa., assignor to Erie Malleable Iron Company, Erie, Pa., a Corporation of Pennsylvania. Filed Apr. 4, 1928. Serial No. 267,436. 8 Claims. (Cl. 247—25.)



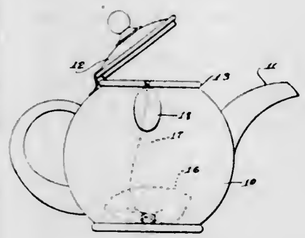
1. In a conduit fitting, the combination of a body having a conduit-receiving opening therein; a contractible sleeve in the opening having a slot terminating at its inner end, said sleeve and body having engaging wedging surfaces acting to contract the sleeve upon relative axial movement of the wedging surfaces, and said contractible sleeve being adapted to lock by its contraction the body with an inserted conduit; and a guard ring forming a continuous lead surface attached to the sleeve at its inner end having means providing for radial movement of the sleeve relatively to the guard as the sleeve is contracted, said means permitting the relative axial movement of the sleeve and body to effect the contraction of the sleeve through the wedging action of the wedging surfaces.

1,886,414. **DEVICE FOR FIXING DISKS TO A SHAFT.** ADOLF MEYER, Kusnacht, near Zurich, Switzerland, assignor to Aktiengesellschaft Brown, Boveri and Cie., Baden, Switzerland. Filed June 9, 1928, Serial No. 284,234, and in Germany June 20, 1927. 2 Claims. (Cl. 253—89.)



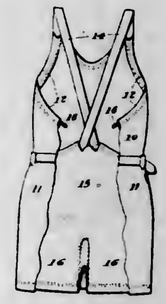
1. A device for fixing the rotor disks of high temperature gas turbines upon their shafts which includes a plurality of axially directed annular recesses and projections on the shaft, a corresponding plurality of annular projections and recesses on the hub of the rotor disk, the said projections being of a resilient nature, and means for forcing the said recesses and projections into mutual engagement and maintaining them in the engaged position.

1,886,415. **TEAPOT.** WILLIAM K. MITCHELL, Yonkers, N. Y. Filed Jan. 17, 1931. Serial No. 509,358. 1 Claim. (Cl. 53—8.)



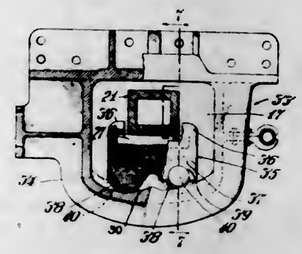
A teapot for use with a tea-bag having the usual string and tag on the free end of the string, comprising a body container with an open top and a rim defining the opening and for supporting the lid of the teapot, means on said rim for holding the string and tag of the tea-bag from falling into the body container when the lid is removed and during the pouring of the hot water into the container upon the tea-bag, said means comprising a slot in the rim of such depth and width as to receive and hold the string of a tea-bag freely insertable and removable through the slot, said tag engaging the rim to hold the string and tag from passing entirely through the slot when the tea-bag is in the body container.

1,886,416. **SWIMMING SUIT.** MAYER G. MONROE, Portland, Oreg., assignor to Jantzen Knitting Mills, Portland, Oreg. Filed Oct. 2, 1931. Serial No. 566,394. 6 Claims. (Cl. 2—67.)



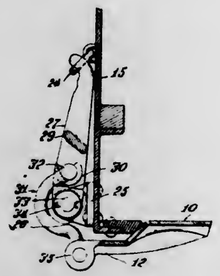
1. A swimming suit comprising a body member; a trunk member arranged within and attached to said body member at the front but free at the rear; shoulder straps attached to the front portion of said body member at the top thereof and to the rear top of said trunk member; and means for adjusting the top of said body member.

1,886,417. **SELF-CENTERING COUPLER CARRIER.** HENRY E. MUCHNIC, Atchison, Kans. Filed June 27, 1929. Serial No. 374,002. 1 Claim. (Cl. 213—21.)



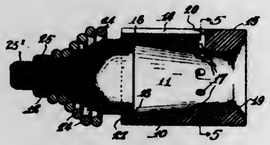
A coupler carrier comprising, in combination with a striking casting having an opening therethrough to receive a coupler-shank, the bottom surface of the opening being concaved on opposite sides of the vertical center; a lubricant holding coupler carrying block arranged in the opening and having upstanding walls and corner portions disposed above said walls to receive the coupler-shank therebetween, the inner faces of the end walls having sockets beneath the tops of the walls, the walls of the block also depending beneath the main bottom of the block and the depending portions of the side walls having sockets on their lower perimeters; coupler-shank bearing rollers seated in the sockets of the upstanding end walls; and rollers provided with tapered trunnions adapted to seat in the sockets of the depending side wall portions, with the relation between the size of said last mentioned rollers and the depth of said last mentioned sockets such that the block is wholly supported on the trunnions while the rollers ride on the concaved bottom surface of the striking casting.

1,886,418. DOORLATCH. HENRY E. MUCHNIC, Atchison, Kans., assignor to The Locomotive Finished Material Company, Atchison, Kans., a Corporation of Kansas. Filed June 20, 1931. Serial No. 545,715. 5 Claims. (Cl. 292—113.)



1. A door latch of the character described comprising a link adapted to be pivotally secured in place, and a pivotally mounted lever provided with a socketed portion removed from the pivot point and open at the outer side of the lever and adapted to receive the free end of said link, the relation between the fulcrum point of the lever and the ends of the link being such that the pivoted and socket-seated ends of the link will be disposed in a plane on the same side of the fulcrum point of the lever and disposed between said fulcrum point of the lever and the car side wall.

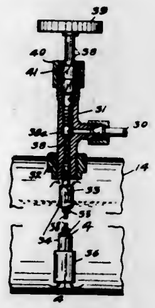
1,886,419. SLUG FOR CLEANING CONDENSER TUBES. WILLIAM F. OBERHUBER, Lansdowne, Pa., assignor to Franklin Development Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Feb. 9, 1929. Serial No. 338,675. 3 Claims. (Cl. 15—104.06.)



1. A composite slug having a hollow interior open at its rearward end and extending for a considerable portion of the length of the body and having a cylindrical surface for a portion of its length from its rearward end and a fluted cylindrical surface forward from the first cylindrical surface, the flutes being spaced circumferentially around the slug, the slug having passages into the flutes from the hollow interior and a piston scraper mounted upon a forwardly directed nose of the body.

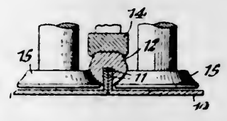
1,886,420. CARBURETING DEVICE FOR LIGHTING STOVES. WALTER OLSEN and SOPHUS RASMUSSEN, Albert Lea, Minn. Filed June 7, 1928. Serial No. 283,579. 8 Claims. (Cl. 158—81.)

1. The combination with a device using liquid vaporizing fuel having one or more main burners, a fuel tank adapted to contain fuel under air pressure and a vaporizing member connecting said fuel tank and burners, of an auxiliary burner for heating said vaporizing member, a conduit connecting said auxiliary burner and the top of said fuel tank, comprising a tube extending downwardly into the liquid fuel space in said tank and having a small opening at its lower end for communication with said fuel, a second tube surrounding said first mentioned tube and forming therewith an annular space, the upper end of said annular space being open and disposed in the air space in said fuel tank and the lower end of said annular space being closed, said annular space communi-



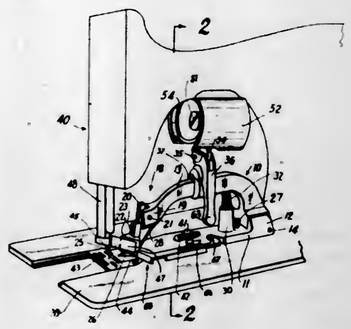
cating with the interior of the first mentioned tube near the lower end thereof, and a valve for controlling said first mentioned tube.

1,886,421. PIPE JOINT AND METHOD OF MAKING SAME. ALBERT G. PERKINS, Buffalo, N. Y. Filed Oct. 5, 1928. Serial No. 310,669. 7 Claims. (Cl. 29—148.2.)



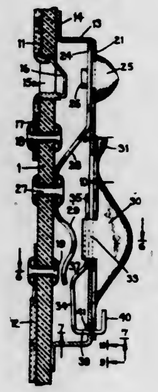
1. In a pipe joint, a pair of pipe-sections made of a relatively soft metallic material and each provided at its ends with annular coupling flanges, a split clamping ring having an annular groove in its inner side for engaging the adjoining flanges of the pipe-sections and pressed thereon to form a calked joint, and a packing seated in the bottom of the groove and having a projection thereon extending between the abutting ends of the clamping ring.

1,886,422. PINKING ATTACHMENT FOR SEWING MACHINES. MAX POPPER, Brooklyn, N. Y. Filed Feb. 19, 1932. Serial No. 594,015. 6 Claims. (Cl. 112—122.)



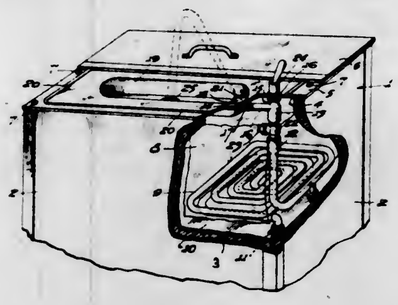
1. A pinking attachment for sewing machines comprising a base, a female cutting member fastened to the lower surface of the base, a cutter arm pivotally mounted on said base, a male cutting member pivotally mounted on said arm and adapted to be swung in and out of engagement with said female cutting member, and resilient means fastened to said cutter arm and acting against said male cutting member and causing a frictional pressure between the cutting edges of the male and female cutting members.

1,886,423. FLASH LIGHT SAFETY SWITCH. GOODRICH B. PRATT, Jersey City, N. J., assignor to Bond Electric Corporation, Jersey City, N. J., a Corporation of Delaware. Filed Apr. 16, 1930. Serial No. 444,662. 20 Claims. (Cl. 200—60.)



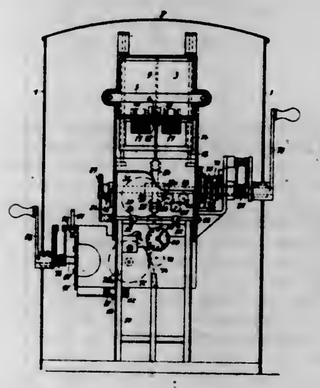
1. A device of the character described comprising a contact box, spaced switch terminals therein, a contact strip secured in the box intermediate its ends, the terminals lying adjacent the ends of the strip, a slide mounted on the box, means on the slide to depress one end of the strip, and means on the last named means to lock the slide against movement.

1,886,424. WATER COOLER. WILLIAM S. RAMSAY, Toledo, Ohio, assignor to The Allen Filter Company, Toledo, Ohio. Filed May 20, 1930. Serial No. 454,074. 2 Claims. (Cl. 62—147.)



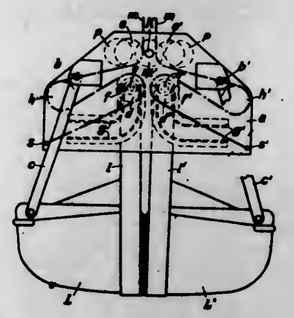
1. A water cooler comprising a cooler box open at its top, a removable cover member for closing said opening, said cover member having an elongated depression therein of substantial length and depth, an angle flow member formed in said well adjacent one end thereof, a water delivery and cooling pipe in said box connected to a source of water supply, a fitting in said box in alinement with said pipe and carried by said cover for connecting the water cooling and delivery pipe with said angle flow member, and means in said fitting for starting and stopping flow of water from the water cooling medium to the angle flow member.

1,886,425. COIN-OPERATED VENDING APPARATUS. LEO RAWITZKI, Berlin, Germany. Filed Mar. 6, 1930, Serial No. 433,629, and in Germany Mar. 7, 1929. 23 Claims. (Cl. 194—35.)



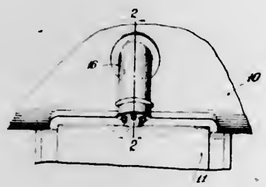
1. An automatic vending apparatus, comprising, in combination, coin-controlled means for releasing the article next to be delivered, as well as a check; a time marking device indicating upon said article the point of time of its delivery, means for receiving the check, another time marking device indicating upon said check the time of its delivery into the apparatus after the delivery of the said article therefrom, and a clock-work to operate said two time marking devices.

1,886,426. AUTOMATIC GRAB. HEINRICH REICHMANN, Duisburg-Ruhrort, Germany. Filed Feb. 25, 1931, Serial No. 518,178, and in Germany Feb. 28, 1930. 4 Claims. (Cl. 37—187.)



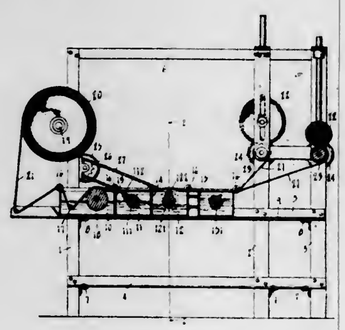
1. An automatic grab with a large span having a pulley box, grab buckets, connecting rods joining the grab buckets to the pulley box, lateral pressure bars rigidly secured to the buckets, transverse axles connecting the free ends of the pressure bars, these free ends projecting into the pulley box, cam grooves arranged in the pulley box, in which the ends of the pressure bars are guided, pulleys on the movable axles, pulleys in the pulley box, and ropes between the pulleys on the movable axle and the pulleys in the pulley box for opening and closing each bucket independently.

1,886,427. LOCOMOTIVE STEAM PIPE CASING. HARRY E. RICCIUS, Miles City, Mont. Filed Apr. 18, 1931. Serial No. 531,018. 4 Claims. (Cl. 285—30.)



1. A locomotive steam pipe casing adapted to be disposed intermediate of the smoke-box shell and the steam chest of a locomotive and comprising a single shell disposed through the length of the steam pipe and having a flanged upper end arranged flush with the smoke-box shell about the steam pipe opening therein and secured in air tight relation with the shell; an annular flat plate adapted to extend parallel with the flange at the lower end of the steam pipe and to be held in place by the fastening bolts which secure the steam pipe to the steam chest; the lower end of said shell seating on said plate and hermetically secured thereto in air-tight relation.

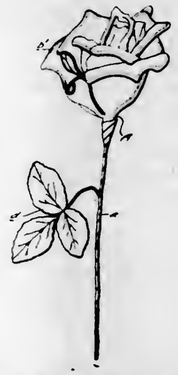
1,886,428. MACHINE FOR STAINING PAPER STRIPS. WADE E. SACKNER, Grand Rapids, Mich., assignor to Grand Rapids Fibre Cord Company, Grand Rapids, Mich. Filed May 11, 1931. Serial No. 536,488. 3 Claims. (Cl. 91—31.)



1. In a machine for making multi-colored paper strips, the combination of a suitable frame, tray tanks having suitable succeeding compartments, a guide and roll for submerging the tape to dampen the same, a revolving cam in each succeeding compartment having projecting felts, connections to drive the same to apply the color solution at intervals, a supporting spindle for the supply roll, a re-wind roll having means for driving the same at constant speed, and driving means for the said cams so that they act on the paper strip as it passes.

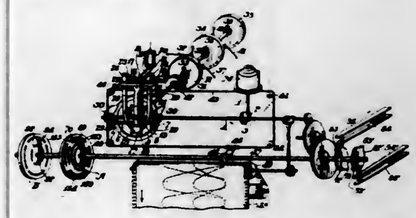
1,886,429. DEODORANT AND MOTH-PREVENTATIVE. ALVIN L. SABES, St. Louis, Mo., assignor to Puro Co., Inc., St. Louis, Mo., a Corporation of Missouri. Filed May 19, 1930. Serial No. 453,809. 1 Claim. (Cl. 41—13.)

An artificial flower simulating a stemmed rose in form, contour, color, and appearance, the same comprising a flexible metallic stem, a papier-mâché base mounted on the stem and having the petal formation of a rose, a fabric-wrapping of green color on the stem, and a coating of



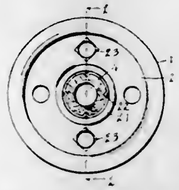
naphthalene adhering applied on and over the base, said coating being of a color for correspondingly imparting the desired rose color and appearance to the base.

1,886,430. METHOD AND SYSTEM FOR CONTROLLING REGENERATIVE FURNACES. WILLIAM R. SCHOFIELD, Jr., Philadelphia, Pa., assignor to Leeds & Northrup Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Mar. 13, 1931. Serial No. 522,259. 26 Claims. (Cl. 236—15.)



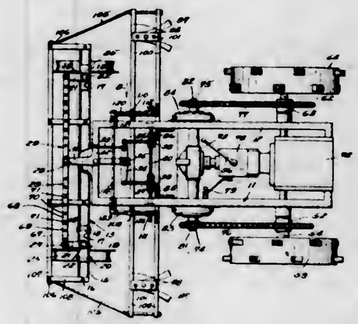
1. The method of controlling a regenerative furnace having regenerative chambers and valve mechanism for reversing the flow through said chambers which comprises measuring the temperature difference between said chambers, measuring the temperature of at least one of said chambers, and actuating said valve mechanism upon attainment of predetermined magnitude of either said temperature difference or said temperature.

1,886,431. PULLEY WHEEL FOR SASH PULLEYS. JOHN F. SEELBACH, Grand Rapids, Mich., assignor to Grand Rapids Hardware Co., Grand Rapids, Mich. Filed May 17, 1929. Serial No. 363,935. 1 Claim. (Cl. 64—17.)



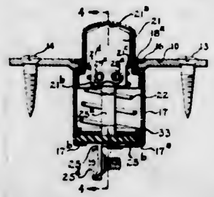
A pulley wheel for sash pulleys of sheet metal, comprising symmetrical halves conformed to form a groove and expanded to form a hub having cylindrical bushing-engaging sleeves, and a cylindrical wood bushing of right cylindrical form within the said hub projecting at each side and retained by indenting with angular V-shaped depressions the sheet metal wall of the said hub into the fiber of the wood at each end, the said indentations retaining said bushing centrally in place.

1,886,432. FARM IMPLEMENT. LESLIE D. SLOCUM, Oxnard, Calif. Filed July 15, 1929. Serial No. 378,843. 4 Claims. (Cl. 180—18.)



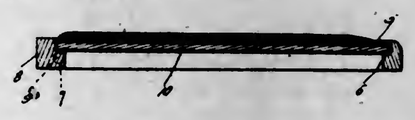
1. A farm implement of the character described, including: a frame; front wheels for said frame; steering knuckles holding said front wheels in operative position on said frame; a pair of rear wheels for said frame; a motor carried by said frame; a transmission for driving said rear wheels from said motor; a driver's seat; steering means cooperative with said steering knuckles for steering said front wheels, said steering means comprising a pair of vertically disposed hand levers swingable in a longitudinal plane in front of said driver's seat, and a pair of longitudinally movable foot pedals operatively connected to said hand levers; a brake for each of said rear wheels; and means, acting in consequence of the manipulation of said steering means to swing said front wheels, for applying the brake associated with the rear wheel on the side of the implement in the direction said front wheels are swung.

1,886,433. ELECTRIC SWITCH. WILLIAM C. TREGONING, Wauwatosa, Wis., assignor to Cutler-Hammer, Inc., Milwaukee, Wis., a Corporation of Delaware. Filed Feb. 27, 1931. Serial No. 518,677. 11 Claims. (Cl. 200—159.)



11. In an electric switch, in combination, a base comprising a flat punched plate of insulating material, said plate having two pairs of openings formed therein, one opening of each pair being circular and the other opening of each pair being rectangular, a pair of one piece combined contact and terminal members of identical form, each of said members having a flat base portion seated upon one face of said plate, rivets penetrating said circular openings in the plate and said base portions of said members and upset over the latter to rigidly secure the same in position, said members also having resilient contact portions extending upwardly through said rectangular openings and respectively biased toward each other, wiring terminal portions bent downwardly at substantially right angles to the respective base portions and tapped to receive the usual binding screws, a flat punched plate of insulating material interposed between the free ends of said contacts, a contactor carried by said last mentioned plate and movable therewith into and out of bridging relation to said contacts, spring means interposed between said base and said last mentioned plate to bias the latter and said contactor to a given extreme position, and a relatively thin disk of insulating material interposed between said base and one end of said spring to insure against contact of the latter with said rivets, said disk having a substantially rectangular central opening to facilitate assembly thereof with respect to the stationary contacts of the switch.

1,886,434. CHAIR SEAT. LEWIS S. VALENTINE, Reading, Mich. Filed June 26, 1931. Serial No. 547,123. 1 Claim. (Cl. 155—191.)



A seat of the class described comprising a U-shaped frame having a channel on the inner sides thereof, a panel slidable into the channel, the ends of the frame having bearing forming recesses in their inner faces located below the channel, a substantially L-shaped cross member having trunnions at the ends thereof and eccentrically arranged thereon for engaging the recesses, said cross member when in operative position having one arm extending under the rear edge of the panel, and its other arm located in rear of the rear edge of the panel and said cross member occupying a position wholly below the plane of the channel when turned to inoperative position.

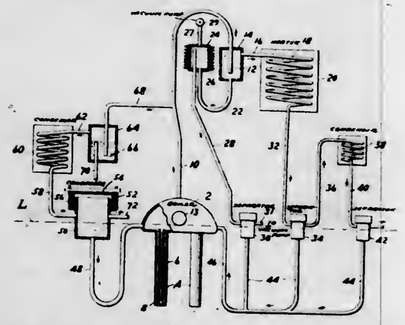
1,886,435. SIGNAL. ORVILLE L. VINCENT, Chicago, Ill., assignor, by mesne assignments, to Consolidated Signal Company, a Corporation of Illinois. Filed Oct. 10, 1927. Serial No. 225,313. 24 Claims. (Cl. 246—128.)



1. In a system of the character described, the combination of a track circuit, a relay in said circuit and controlled by a train affecting said track circuit, a normally inoperative barrier motor, a source of energy, a relay between said source of energy and motor normally disconnecting said motor and source of energy, said first named relay being operative by the train affecting said track circuit

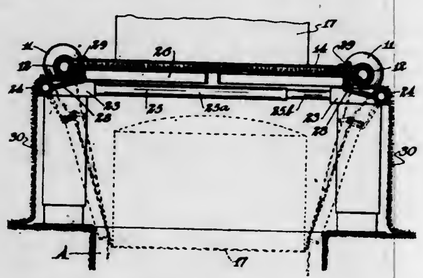
to control said second named relay whereby said source of energy is connected to said barrier motor for operating said barrier motor, and means operated by said motor for operating the same in either of two directions.

1,886,436. METHOD FOR TRANSFERRING HEAT. JUSTIN F. WAIT, New York, N. Y., assignor to Sun Oil Company, Philadelphia, Pa., a Corporation of New Jersey. Filed June 13, 1930. Serial No. 460,868. 11 Claims. (Cl. 257—241.)



1. The method which includes vaporizing a metal, removing entrained liquid metal from the vapors, effecting condensation of a part of the vapors by the absorption of heat therefrom, separating the condensate from the vapors and separating impurities from the condensate by flotation.

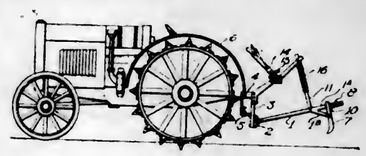
1,886,437. GRAVE COVERING AND SETTING. GEORGE H. WARTMAN, Eden Valley, Minn. Filed Oct. 12, 1931. Serial No. 568,282. 4 Claims. (Cl. 27—30.)



1. The combination with a casket lowering device adapted to be extended over an open grave, said device having rotatable side shafts and webbing straps extending between and wound on said shafts, of side supporting members running parallel to said shafts, wings pivotally mounted on said supporting members and normally projecting inwardly from said side supporting members below said straps, slotted brackets through which said webbing straps extend and means for connecting said wings with said brackets whereby as a casket supported by said straps is lowered into a grave, said wings will be swung downwardly by said straps.

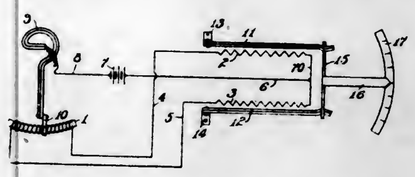
1,886,438. ANTIPACKING ATTACHMENT. GEORGE MELVILLE WEEKS, Kronau, Saskatchewan, Canada. Filed Feb. 28, 1931. Serial No. 519,057. 1 Claim. (Cl. 97—47.)

An antipacking attachment for use with heavy vehicles comprising an attaching bracket, a normally horizontal trailing arm hinged at its forward end in said bracket and forked vertically at its free end, an abutting stop on the top member of said forked end, a soil engaging tooth pivoting on the lower member of the forked end,



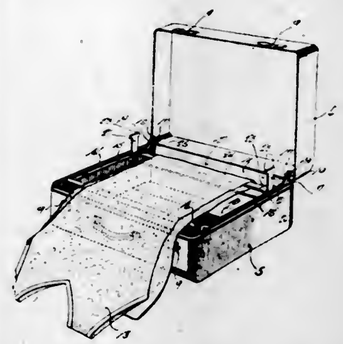
and a spring stretched between the top of said soil engaging tooth and the rear end of said top member of the forked end for normally holding said soil engaging tooth in contact with said stop.

1,886,439. CONTROL SYSTEM. MILTON H. WELLS, Wabash, Ind., assignor to Minneapolis-Honeywell Regulator Company, Minneapolis, Minn., a Corporation of Delaware. Filed Apr. 24, 1931, Serial No. 532,516. Renewed Mar. 28, 1932. 15 Claims. (Cl. 236—68.)



1. The combination with a source of electrical energy, of a pair of electrical heating units connected in parallel to one side of said source, a movable contactor connected to the other side of said source, a potentiometer positioned to be swept by said contactor and having its opposite ends connected to said heating units respectively, a heat responsive element disposed within the influence of each of said heating units, and means associated with said heat responsive elements and movable under the joint influence thereof.

1,886,440. HAND LUGGAGE. GEORGE HENRY WHEARY, Racine, Wis., assignor to Wheary Trunk Company, Racine, Wis., a Company of Wisconsin. Filed Feb. 18, 1931. Serial No. 516,587. 10 Claims. (Cl. 190—41.)



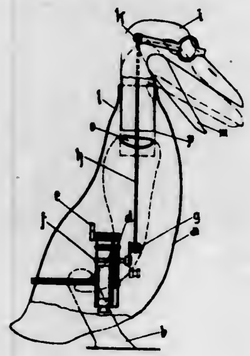
1. In a case type luggage including hingedly connected sections, a garment carrying frame comprising side arms having their outer ends connected by a transverse member

over which garments may be draped, means pivotally mounting the garment carrying frame for movement about an axis adjacent to and substantially parallel with the axis of the hinged connection of said sections, individual garment supports adapted to have garments draped thereover preparatory to being draped over the transverse member at the outer end of the garment supporting frame, and means carried by the frame adjacent its pivotal mounting for readily detachably mounting the individual garment supports in superimposed relation.

1,886,441. DYEING CELLULOSE ACETATE. JAMES STEVENSON WILSON and JOHN THOMAS, Grangemouth, Scotland, assignors to Scottish Dyes, Limited, Grangemouth, Scotland. Filed Nov. 21, 1929, Serial No. 408,921, and in Great Britain Nov. 27, 1928. 8 Claims. (Cl. 8—5.)

1. A process for dyeing cellulose acetate which consists in impregnating the aforesaid cellulose acetate with a vat dyestuff enolic ethereal salt by heating in an aqueous solution and developing the vat dyestuff.

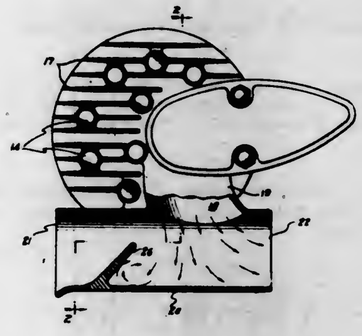
1,886,442. MECHANICALLY OPERATED TOY FIGURE. HEINRICH WIMMER, Nuremberg, Germany. Filed Feb. 3, 1932. Serial No. 590,681. 2 Claims. (Cl. 46—40.)



1. A mechanical toy figure in the form of a penguin, comprising in combination a body part having a head part movable upwardly and downwardly thereon, a motor in said body part having an eccentrically mounted rotating weight for imparting a gyratory motion to the figure, actuating means connected to the motor and the head part for imparting an upward and downward motion to said head part, wings pivoted to the body part and having means thereon arranged to co-operate with the head part for flapping the wings during the upward and downward movement of the head part and a lower beak part pivoted to the head part and resting under gravity on the body part so that when the head part is raised the lower beak part is inclined downwards and the beak appears to be open.

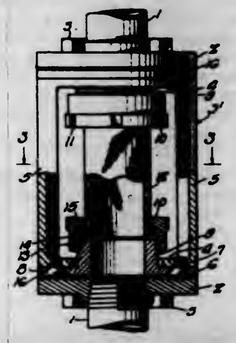
1,886,443. INTERNAL COMBUSTION ENGINE. LIONEL M. WOOLSON, Detroit, Mich., assignor to Packard Motor Car Company, Detroit, Mich., a Corporation of Michigan. Filed Mar. 28, 1930. Serial No. 439,799. 17 Claims. (Cl. 123—79.)

1. In an internal combustion engine having a port leading into the combustion space for the intake of air and expulsion of exhaust, a conduit extending transversely of the port and communicating therewith intermediate its ends, one end of the conduit serving as the combustion air intake and the other end as an exhaust gas outlet, and a deflector in the conduit intermediate the air inlet



end and the junction with the engine port forming a gradually constricted portion in said conduit, said portion being directed toward said port.

1,886,444. SIGHT FLOW GLASS. OSCAR H. WURSTER, Chicago, Ill. Filed Aug. 26, 1931. Serial No. 559,521. 8 Claims. (Cl. 116—117.)



1. In a sight flow glass, the combination with flanges adapted to be secured to the opposed ends of a pair of conduits, a rigid frame interposed between said flanges and secured thereto, said rigid frame having means for holding said flanges spaced from each other and for preventing their movement toward each other, a transparent conduit communicating with openings in said flanges, and means for securing said transparents conduit in place within said frame, comprising bosses forming a part of said flanges and extending toward each other, and packing glands provided with flexible packing material cooperating with said bosses and with said cylinder for holding said cylinder in communication with openings in said flanges.

1,886,445. CORRUGATED TRANSPARENT MATERIAL. FREDERIC A. DELANO, Washington, D. C. Filed Dec. 26, 1928. Serial No. 328,488. 4 Claims. (Cl. 88—60.)

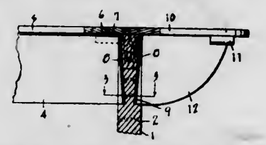
1. A body of transparent material having a flat plane surface on one side, and an irregular surface on the other side said irregular surface comprising a plurality

of small plane surfaces, arranged in groups of three, each group consisting of a surface parallel to said flat plane surface, and forming the thicknest portion of the material and being of sufficient width to permit vision



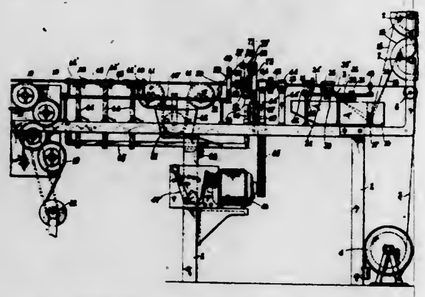
therethrough when an observer is relatively close but of insufficient width to permit vision when an observer is relatively distant and two surfaces arranged angularly thereto.

1,886,446. SERVICE TABLE. GEORGE FREDERICK REINHARD, Grand Rapids, Mich. Filed Apr. 6, 1931. Serial No. 527,897. 4 Claims. (Cl. 45—31.)



1. In a table, the combination of a plurality of pedestals, each comprising a horizontal bed piece and a centrally disposed upright, said pedestals having opposed vertical dove-tailed grooves at their upper ends, a top unit resting upon the bed pieces of an adjacent pair of pedestals, a central longitudinal rail provided with coupling members at its ends detachably engageable with said grooves, and an extension leaf provided with a central supporting web on its under side and a cross piece at its outer end in supporting engagement with said web, said web having a dove-tailed coupling member at its inner end detachably engageable with a groove of one of said pedestals whereby the leaf is supported with its inner end resting upon the bed piece of the pedestal and in abutting relation to the table top unit arranged thereon.

1,886,447. APPARATUS FOR MAKING STRANDS AND COVERED WIRES. EDWARD SLADE, New York, N. Y. Filed June 17, 1925, Serial No. 37,606. Renewed Mar. 26, 1932. 11 Claims. (Cl. 117—34.)

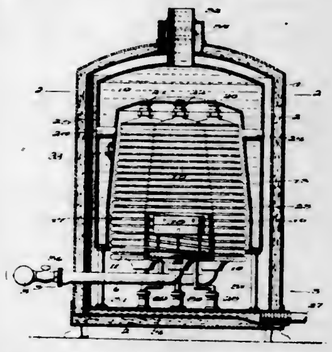


1. In a machine for applying a covering to a core, the combination of a core advancing means, means for loosely supplying a covering strip to the core, a folding and guiding die and supplemental means for angularly adjusting the covering strip approximate its point of application to the core, and means for rotating under tension a binding element around the core and loosely applied covering strip.

5. In an apparatus for applying a cover to a core, the combination of a rotatable member, a separately rotatable attachment mounted thereon, means for advancing a core through said member and inertia operated means supported by said rotatable member for preventing relative motion of said member and said attachment upon cessation of rotation of said member.

8. In a machine for making a fibrous-covered strand, means for feeding a covering strip over a moistening drum, means for folding said strip about a core and strip-lifting means adapted to lift said strip away from said moistening drum upon cessation of operation of the machine.

1,886,448. FURNACE. CALVIN SMITH and REUBEN J. SOUTHWICK, Somerville, N. J. Filed July 15, 1930. Serial No. 468,095. 5 Claims. (Cl. 122—169.)



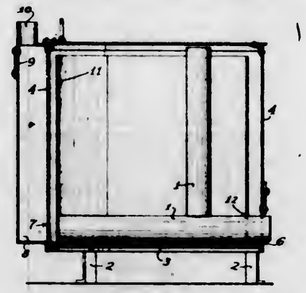
1. A water heater consisting of an outside casing, a water chamber having a unitary top and side portions, said side portions forming an elongated depending skirt portion spaced from the top and sides of said casing, and providing a dome shaped interior space open at the bottom, a burner located in said dome shaped space, a water coil located in said dome shaped space, said coil having its upper portion provided with a connection to said water chamber, a return water chamber located below said first named water chamber, burner and coil having a connection to a return water pipe, a conduit connecting said water coil to said return water chamber, and a plurality of conduits arranged to connect to the skirt portion of said water chamber first named on opposite sides to allow water to circulate from the return chamber to the lower portion of said skirt portion or vice versa and forming the supports for said first named water chamber.

1,886,449. PROCESS FOR THE PREPARATION OF N-METHYL-P-AMINOPHENOL SULPHATE. FRITZ SOMMER and MAX NASSAU, Charlottenburg-Berlin, Germany, assignors to Chemische Fabrik Grunau Landshoff & Meyer Aktiengesellschaft, Grunau, near Berlin, Germany. Filed Jan. 23, 1929, Serial No. 334,599, and in Germany Feb. 29, 1928. 1 Claim. (Cl. 260—128.)

A process for the preparation of N-methyl-p-aminophenol sulphate, in which p-aminophenol is dissolved in an aqueous caustic soda solution, into which formaldehyde solution is allowed to run while stirring all the time and activated aluminum is gradually added at the same time, whereupon after the reaction is complete the mass if filtered and the filtrate neutralized with sulphuric acid, so that after decolorizing and boiling down the solution pure N-methyl-p-aminophenol sulphate is crystallized out on cooling.

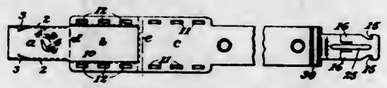
1,886,450. SAWDUST BURNER. CHARLES J. STARBUCK and FRED N. CARLSON, Sacramento, Calif. Filed Feb. 17, 1931. Serial No. 516,399. 1 Claim. (Cl. 126—225.)

The combination, in a sawdust burner, of two metallic containers,—one of which containers is an outside container, wedge-shaped at the front and circular-shaped at the back, having a cover to permit the removal of ashes and refueling, a draft hole with an adjustable cover adjacent to the bottom in front, and a flue hole adjacent to the bottom in the back opening into a smoke jacket, the said smoke jacket being attached to the back of the said outside container in a perpendicular position and having a check draft hole with an adjustable cover on the side and a smoke pipe connection at the top;—the other of which containers is an inside fuel container, open at the top, having a draft hole without a cover adjacent to the bottom in front similar to the said draft hole in the said outside container; the said inside fuel container being wedge-shaped at the front and circular-



shaped at the back to give to the fuel full access to the draft, and being of such a size and so placed inside of the said outside container as to bring the said draft holes to a point where they are directly opposite each other and to provide an air jacket over and around the said inside fuel container, the width of the said air jacket being sufficiently greater around the front than around the back of the said container as to force the draft upon leaving the top of the said container to pass around the front and around the sides of the said container before passing through the said flue hole; and draft-stakes for molding an open air passage or chimney hole through compact fuel between the said inside draft hole and the top of the said inside fuel container.

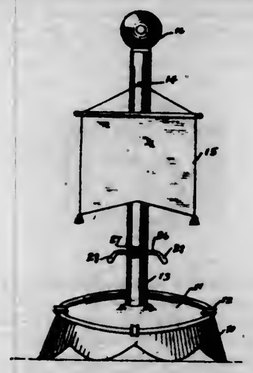
1,886,451. SEAL. THOMAS GEORGE STILES, Arlington, N. J., assignor to Container Seal Company, Inc., Arlington, N. J., a Corporation of New Jersey. Filed July 10, 1931. Serial No. 549,811. 5 Claims. (Cl. 292—319.)



1. A seal comprising a single metallic strip having a section at one end thereof bent backwardly upon an adjoining second section and the latter being bent backwardly upon an adjoining third section, means uniting said second and third sections at their marginal edges to form a housing enclosing the intermediate first section, which latter is provided with locking abutments adjacent its opposite edges, and the free end of the strip having spring tongues projecting from one side thereof for locking engagement with said abutments and also having a rib or boss intermediate of said tongues for holding the free end in spaced relation to the section carrying said abutments.

1,886,452. COMBINED ASHTRAY AND SIGNAL DEVICE. HENRY STORM, New York, N. Y. Filed Jan. 6, 1932. Serial No. 584,926. 5 Claims. (Cl. 116—2.)

1. In a device of the class described, the combination of an ashtray with an upright hollow member, a vertical rod disposed in the latter, substantially triangularly bent leaf-springs attached to the said rod and adapted to collapse and fold against the latter upon submersion of the said rod within the hollow member, flags attached



to the said leaf-springs, and means co-acting with said rod for release of the said springs and unfolding of the flags.

1,886,453. PRODUCTION PLANNING BOARD. EUGENE SEMPESI, Scarsdale, N. Y. Filed Oct. 26, 1929, Serial No. 402,630. Renewed Mar. 23, 1932. 8 Claims. (Cl. 129—16.)



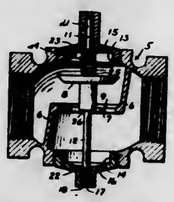
3. A visible file, comprising a body including side flanges having grooves therein, and top and bottom members both mounted in and removable from said grooves and each having a portion, edges of which are insertable into said grooves so that said members form closures for the ends of said frame.

6. A card-holding member for filing devices, including a flexible body having card-retaining lugs along one edge for frictionally holding a card in engagement with said member.

1,886,454. VALVE. JAMES N. SUTHERLAND, Berkeley, Calif. Filed Nov. 13, 1929, Serial No. 406,799. Renewed Aug. 17, 1932. 1 Claim. (Cl. 137—161.)

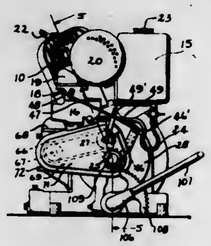
In a valve, a body providing a fluid passage, a ported partition across said passage, a valve plug for engagement with the port of said passage and reciprocable between port-closing and port-opening positions thereof, said valve plug having valve stem portions extending coaxially and oppositely therefrom, said body being provided with perforations coaxial with and at opposite sides of said valve plug, a member closing a said perforation and having a

hole formed therein in the axial line of said stem portions, corrugations in said hole, a fusible element cast in said hole and maintained therein by said corrugations, said fusible element engaging an immediately opposed said stem portion to dispose said valve plug in one of said positions thereof and to prevent its disposal in the other said posi-



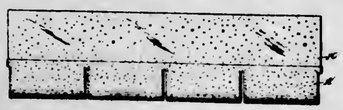
tion, a member engaging and sealing the other said perforation, and spring means operative between said last member and said valve plug to constantly urge the latter to assume the aforesaid other position thereof, said members being arranged for interchangeable mounting in said perforations whereby the valve may be maintained in either an open or a closed position by the fusible element.

1,886,455. INDUSTRIAL MOTOR OF THE INTERNAL COMBUSTION TYPE. JOHN R. THONGER, Milwaukee, Wis., assignor to Harley-Davidson Motor Co., Milwaukee, Wis., a Corporation. Filed Feb. 28, 1931. Serial No. 519,053. 11 Claims. (Cl. 123—195.)



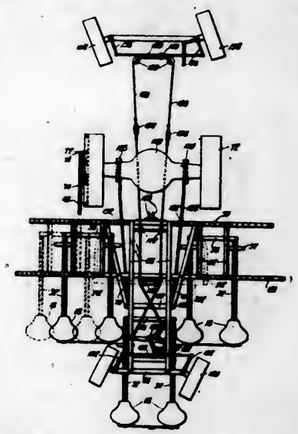
1. An internal combustion motor assembly comprising the combination of a tilted engine cylinder and crank case having a carburetor and a magneto in the space underneath and at the side of the overhanging portion of the cylinder, with the carburetor in close proximity to the cylinder inlet port and a fuel tank located in close proximity to the upper side of the cylinder with the top of the fuel tank substantially on a level with the top of the cylinder whereby all parts of the motor and its accessories may be contained within cubical space of less vertical dimension than the length of the cylinder and crank case while maintaining good gravity feed from tank to carburetor and minimum length of passage between the carburetor and the cylinder inlet.

1,886,456. METHOD OF MAKING ROOFING. JULES L. WETTLAUFER, Belmont, Mass., assignor, by mesne assignments, to The Patent and Licensing Corporation, Boston, Mass., a Corporation of Massachusetts. Filed July 5, 1929. Serial No. 375,996. 13 Claims. (Cl. 154—2.)



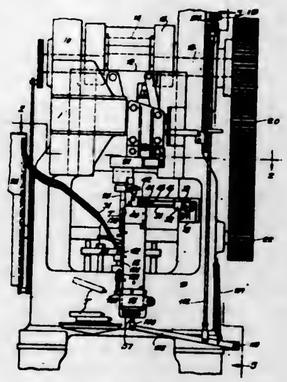
5. In the method of producing building units, the steps which comprise forming a mastic ribbon composed of bitumen and fiber, enfolding said ribbon around one edge of a strip of felted fibrous material and pressing the enfolded parts of the ribbon into engagement with the opposite faces of said strip.

1,886,457. TRANSPLANTING MACHINE. FRANK D. WINKLEY, Madison, Wis. Filed Apr. 20, 1928. Serial No. 271,482. 8 Claims. (Cl. 111—7.)



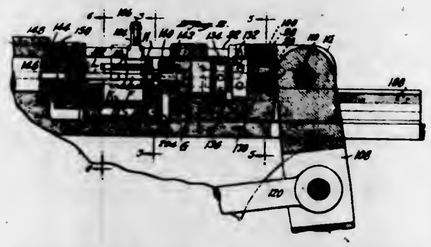
4. Transplanting equipment including a plurality of transplanting units arranged in echelon relationship and timing mechanism for said units; said timing mechanism including means compensating for the echelon arrangement to time all the units to time the deposit of the plants in transverse alignment.

1,886,458. UNLOADER FOR FORMING MACHINES. PAUL WITTE, New Milford, N. J., assignor to White Metals Manufacturing Company, Hoboken, N. J., a Corporation of New Jersey. Filed Apr. 21, 1932. Serial No. 606,599. 12 Claims. (Cl. 207—9.)



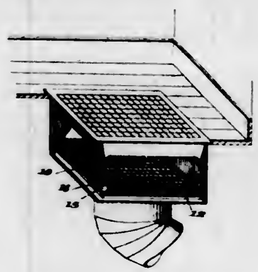
1. A press for making collapsible tubes of soft metal, comprising a laterally swinging arm carrying a plunger arranged to be reciprocated longitudinally, grippers adapted to grasp the neck on the extremity of a tube carried by the plunger punch, a carriage movable along stationary guides and supporting said grippers, means effective to cause the grippers to grasp said neck when the carriage and said plunger and arm reach predetermined positions, and means for moving said carriage relatively to said plunger to strip the tube therefrom.

1,886,459. AUTOMATIC MACHINE FOR MAKING TUBES. PAUL WITTE, New Milford, N. J., assignor to White Metals Manufacturing Company, Hoboken, N. J., a Corporation of New Jersey. Filed Apr. 21, 1932. Serial No. 606,600. 16 Claims. (Cl. 207—9.)



1. A machine for making collapsible tubes including a plunger on which the tubes are formed, means for automatically stripping the tubes from the plunger, transfer means synchronized with the movements of the plunger and constructed and arranged to receive and momentarily support each tube immediately as it is stripped from the plunger and a conveyor arranged to receive the tubes from said transfer means.

1,886,460. FILTER SCREEN. JAMES ERWIN ANDERSON, Nashville, Tenn. Filed Oct. 12, 1931. Serial No. 568,471. 5 Claims. (Cl. 183—49.)



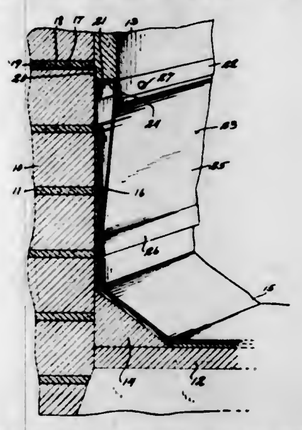
1. A filter device of the class described comprising a reticulated and dished body portion resiliently compressible along its boundary rim and an expansible and contractible frame secured to said body portion along said rim and adapted to mount said filter frame.

1,886,461. POCKET CIGAR LIGHTER. OTTO N. BERMAN, Forest Hills, N. Y., assignor to Standard Devices, Inc., New York, N. Y. Filed Dec. 13, 1928. Serial No. 325,678. 12 Claims. (Cl. 67—7.1.)



9. A lighter comprising a casing provided with an opening along one side, a wick in said opening, a wick snuffer slidably mounted in said casing for closing said opening, a finger piece slidably mounted in said casing and forming a corner of said casing and out of line with said snuffer, means operatively connecting said snuffer and finger piece to cause movement of said snuffer in one direction upon movement of the finger piece in the opposite direction, and means responsive to the operation of said means for igniting said wick.

1,886,462. REGLET AND FLASHING ON ROOFINGS. MILES EDWARD BEVER, Anaheim, Calif. Filed Dec. 6, 1930. Serial No. 500,630. 7 Claims. (Cl. 108—26.)



1. In combination, a reglet, said reglet comprising a body portion adapted to be embedded in a wall construction, a flash member secured to said reglet and extending in parallel relation to the outer face of the wall and in spaced relation thereto, a counter-flash member interposed between said flash member and the wall, and separate means for removably securing said counter-flash member to said flash member.

1,886,463. CATENARY HANGER. LELAND W. BIRCH, Mansfield, Ohio, assignor to The Ohio Brass Company, Mansfield, Ohio, a Corporation of New Jersey. Filed Dec. 2, 1931. Serial No. 578,486. 10 Claims. (Cl. 191—41.)



1. A trolley wire clamp comprising an elongated supporting member, a pair of jaws secured thereto, each jaw having means cooperating with each other to engage and grip a trolley wire, the said means being displaced relative to each other in a vertical direction to hold the wire with its vertical transverse axis angularly disposed relative to the vertical axis of the clamp and means to draw the jaws into engagement with the wire.

1,886,464. GOLF CLUB COVER. LACY LEE BRIGHT, New York, N. Y. Filed Nov. 30, 1929. Serial No. 410,688. 3 Claims. (Cl. 150—52.)

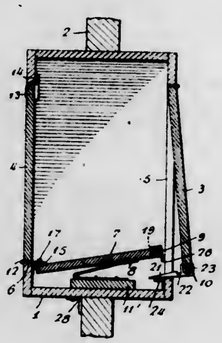
1. A case for an individual golf club which comprises a relatively long tubular portion for the shaft of the club

provided at one end with an enlarged hood-like pocket portion of relatively flexible material, said hood portion being provided with a lateral opening and a closure for the open-



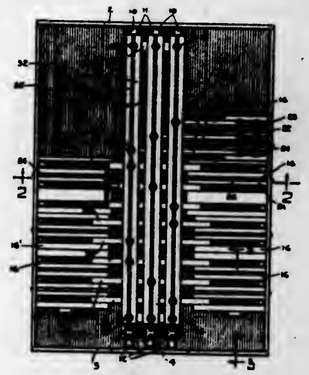
ing, said hood portion capable of being readily slipped off the head of the club to permit exhibition or examination of the same.

1,886,465. RECEPTACLE. COLIN CAMPBELL, Avon, N. J. Filed Feb. 26, 1929. Serial No. 342,898. 2 Claims. (Cl. 232—41.)



1. An automatically locked receptacle having a wall, a door for giving admission thereto in said wall and means for removing the contents thereof the edges of said door being entirely surrounded by said receptacle, an angle bar attached to the inside of the receptacle adjacent to and substantially flush with the bottom of the door opening, a platform in said receptacle movably secured at one end to enable the platform to move in one direction only under application of a weighted object, said platform being restrained against edgewise movement, spring means beneath said platform to normally hold it upward, an angle bar on the free end of the platform substantially coextensive with said first angle bar and supporting said platform therefrom in a horizontal position, and a latch on said admission door cooperating with said shelf angle bar to hold said admission door closed when an object exceeding the tension of said spring means is placed on said platform, said door in the closed position being entirely flush and concealed within the wall of the receptacle.

1,886,466. PANEL BOARD STRUCTURE. IRVING V. COLE, Newark, N. J. Filed Aug. 8, 1928. Serial No. 298,232. 2 Claims. (Cl. 175—369.)



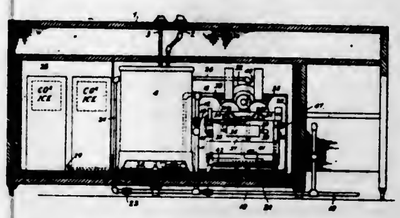
1. A panel board structure comprising a panel of artificial insulating material, bus bars mounted thereon, current carrying members attached to said bus bars and mounted on an insulating base, slots in said bus bars and bolts for securing said members passing through said slots.

1,886,467. PROTECTIVE SHIELD FOR HAIR WAVING. GRACE COMERFORD, Elmhurst, N. Y., assignor to The Nestle-Lemur Company, New York, N. Y., a Corporation of Ohio. Filed May 6, 1931. Serial No. 535,339. 13 Claims. (Cl. 132—36.1.)



13. A protector pad for a hair curling apparatus having clamping elements mounted on one end thereof, and means mounted on the other end thereof adapted to hold a curling rod with a strand of hair wrapped around it in a position substantially paralleling said pad.

1,886,468. APPARATUS FOR COOLING AND CARBONATING POTABLE LIQUIDS. HARRY S. CORNISH, New York, N. Y. Filed Mar. 21, 1928. Serial No. 263,226. 21 Claims. (Cl. 261—11.)



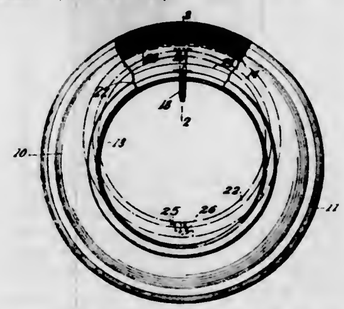
4. In an apparatus for cooling and charging liquids with CO_2 gas, the combination of a liquid cooling chamber containing CO_2 ice, a carbonator, a gas compression pump connected therewith, means for conveying the cooled liquid to the carbonator and means for conveying the CO_2 gas liberated in the cooling of the liquid to the compression pump.

1,886,469. CUTTING TOOL ALLOY. GEORGE R. COULS, Detroit, Mich. Filed Feb. 27, 1931. Serial No. 518,919. 1 Claim. (Cl. 75—1.)

An alloy comprising the following ingredients in substantially the following proportions:

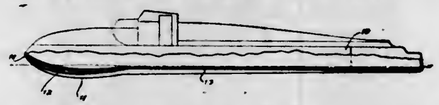
	Parts
Iron	26
Tungsten	21
Chromium	31.5
Cobalt	14
Vanadium	from 1 to 5
Copper	from 2 to 2.5

1,886,470. PNEUMATIC TIRE. PASQUALE DADDIO, New York, N. Y. Filed July 16, 1930. Serial No. 468,311. 2 Claims. (Cl. 152—18.)



1. The combination with a self-healing vehicle tire having a rim, a tire carcass and an inner tube open throughout its length at its inner circumference and cemented or otherwise attached to the interior of the carcass throughout its entire area, of a transversely split filler ring having opposed angled edges and adapted to be disposed in said inner tube and to engage the walls thereof to cover the opening therein to produce an air seal therewith and detachable securing means for the ends of the split ring.

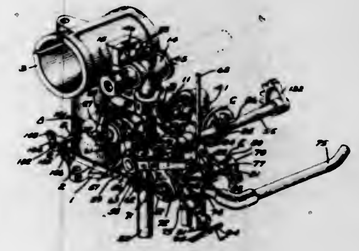
1,886,471. MARINE VESSEL. ROCHUS MAX ZU LYNAR PASSY-DE CHIMANG, Brooklyn, N. Y. Filed Jan. 20, 1932. Serial No. 587,657. 3 Claims. (Cl. 114—66.5.)



1. In a marine vessel of the class described, a hull deepest at its front, and having its greatest width of beam in close proximity thereto, an upwardly turned bow-portion, a concave bottom forming cleaver edges laterally at the forebody, and a tunnel, receding in depth but extending in width rearwardly, a short keel centrally arranged therein, and pontoons forming an integral unit with the hull, the said pontoons being of less length than the hull proper, terminating in pointed end-portions.

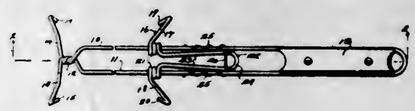
1,886,472. FUEL OIL BURNER CONTROL SYSTEM. HERBERT L. DELANEY, Berkeley, Calif., assignor to Bunting Iron Works, San Francisco, Calif., a Corporation of California. Filed Sept. 25, 1928. Serial No. 308,154. 13 Claims. (Cl. 158—45.5.)

2. A fuel oil burner control mechanism for controlling the oil and gas supply to a burner and pilot respectively, comprising a source of variable pressure, means responsive to pressure at said source for varying the oil and gas supply inversely with respect to each other and frictionally operated means for retarding the action of said first means until the pressure at said source has reached a predetermined value.



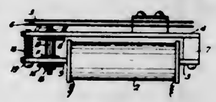
12. In combination, means responsive to a condition variation in a variable condition device, a valve, and a connection between said responsive means and said valve including a spring biased latch.

1,886,473. PAN LIFTER. JAMES A. DRIES, Emaus, Pa. Filed Apr. 12, 1932. Serial No. 604,766. 6 Claims. (Cl. 294—34.)



1. A pan lifting means comprising a handle, a pair of guide members carried by the handle, a fixed jaw formed with the forward end of said guide means, a movable jaw slidable on the guide means, and independent slidable locking means carried by the guide means to hold said latter jaw in adjusted position relative to the fixed jaw.

1,886,474. RELAY. JOHN ERICKSON, Chicago, Ill., assignor, by mesne assignments, to Associated Electric Laboratories, Inc., Chicago, Ill., a Corporation of Delaware. Filed Jan. 13, 1932. Serial No. 586,365. 6 Claims. (Cl. 175—336.)

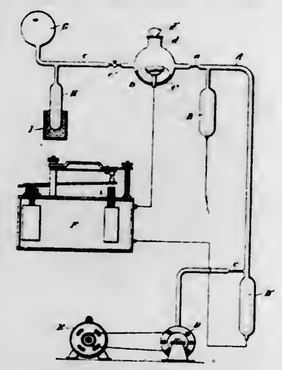


1. In a relay, a set of circuit controlling contact springs, an electromagnet, an armature controlled by said electromagnet, said armature movable endwise at right angles to the core of said electromagnet to actuate said contact springs.

1,886,475. PROCESS AND APPARATUS FOR MAKING VACUUM TUBES. JULES J. FLORIMONT, Paris, France, assignor to The Risler Corporation of America, Kansas City, Mo., a Corporation of Delaware. Filed June 28, 1927, Serial No. 202,129, and in France July 3, 1926. 4 Claims. (Cl. 176—2.)

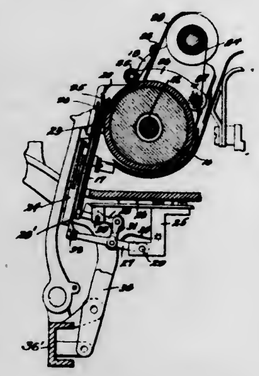
1. A process of making vacuum tubes consisting in heating the electrodes of a tube and causing electrical dis-

simultaneously vaporizing a mercury compound by the said electric current, and then passing the vapor through



the tube to remove occluded and residual gases from the said tube.

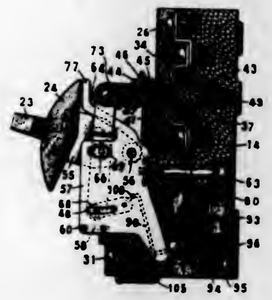
1,886,476. TYPEWRITING MACHINE. CARL GABRIELSON, Syracuse, N. Y., assignor to L C Smith & Corona Typewriters Inc., Syracuse, N. Y., a Corporation of New York. Filed Apr. 17, 1929. Serial No. 355,897. 9 Claims. (Cl. 197—135.)



1. In a typewriting machine, the combination with a platen, of a card holder adjacent the platen, means for imparting a line spacing movement of the card holder, a set of type bars provided with upper and lower case type, and means operated by movement of the card holder to a position for typing the upper line on a card for effecting relative movement between said type bar set and said platen to obtain upper case printing on the upper line of the card.

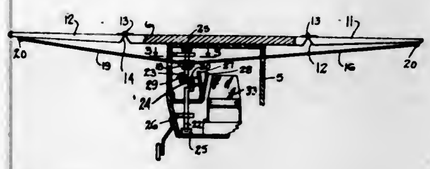
1,886,477. ELECTRIC SWITCH. BENJAMIN E. GETCHELL, Plainville, Conn., assignor to The Trumbull Electric Manufacturing Company, Plainville, Conn., a Corporation of Connecticut. Filed Mar. 23, 1931. Serial No. 524,652. 19 Claims. (Cl. 200—116.)

1. An electric switch including an insulating base having sets of stationary contacts, an insulating cross bar mounted between opposed contacts, switch plates carried by said cross bar for engagement with the stationary contacts, an operating lever supported by the base, a floating lever having means of connection to said cross bar and with said operating lever, a thermostatic device having a heater connected in circuit with at least some of said contacts, a latch lever connected to said floating



lever and a catch coacting with said latch lever to hold the same in latched position under normal load conditions, means of connection between said operating lever and said floating lever for manually actuating the movable switch plates independently of the thermostatic devices, said thermostatic devices being adapted to release the switch independently of said operating lever.

1,886,478. AEROPLANE CONSTRUCTION. ABELINO GONSALVES, Newark, N. J., assignor of one-half to Jose Gonsales Alvases, Newark, N. J. Filed Nov. 17, 1931. Serial No. 575,506. 1 Claim. (Cl. 244—17.)



In an aeroplane, a body, a main wing on the body, auxiliary wings hinged to said main wing, means in the body operable to impart a flapping movement to said auxiliary wings, said means including a vertical shaft having offset portions therein, a collar on the shaft, extensions on the collar, a wing operating rod connecting each extension with an auxiliary wing, handles, and connections between said handles and offset shaft portions whereby the shaft may be revolvably reciprocated.

1,886,479. GAME APPARATUS. WILLIAM T. GRENNAN, New York, N. Y., assignor of one-half to August G. Reinhardt, New York, N. Y. Filed July 14, 1931. Serial No. 550,663. 4 Claims. (Cl. 273—85.)

1. Game apparatus of the character described including a part comprising a plurality of members spaced apart

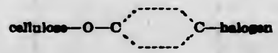
to form a grid-like playing field adapted to provide a non-rolling support for a play ball at many points along the length of said field, there being open spaces between



said members to permit striking such play ball upwardly from below the field, an enclosure surrounding the field and goal ball receptacles at opposite ends of the field.

1,886,480. DYESTUFFS CONTAINING CELLULOSE RESIDUES AND PROCESS OF MAKING SAME. ROBERT HALLER, Riehen, near Basel, and ALPHONSE HECKENDORN, Basel, Switzerland, assignors to Society of Chemical Industry in Basle, Basel, Switzerland. Filed Feb. 17, 1931, Serial No. 516,502, and in Switzerland Feb. 21, 1930. 10 Claims. (Cl. 260—27.)

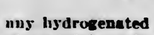
1. A process for the manufacture of colored compounds which contain residues of cellulose and residues of azo-dyestuffs of the benzene and naphthalene series, connected by a six membered carbon and nitrogen containing heterocyclic residue, which contains at least two and at most three nitrogen atoms, consisting in causing to react compounds of the general formula



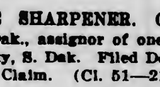
wherein both of the carbon atoms belong to a six membered carbon and nitrogen containing heterocyclic ring which contains at least two and at most three nitrogen atoms, on compounds of the benzene and naphthalene series which contain besides one primary amino group at least one OH-group or one amino group capable of forming azo-dyestuffs, and then in converting the condensation products thus obtained into azo-dyestuffs by diazotising and coupling with coupling components.

1,886,481. UNILATERALLY ACYLATED DIAMINES AND PROCESS OF MAKING SAME. MAX HARTMANN, HANS KAEGI, and HANS ISLER, Basel, Switzerland, assignors to the Firm of Society of Chemical Industry in Basle, Basel, Switzerland. Filed Dec. 16, 1927, Serial No. 240,618, and in Switzerland and Germany Nov. 7, 1927. 8 Claims. (Cl. 260—86.)

1. A process for the manufacture of unilaterally acylated diamines by causing a hetrocyclic compound of the formula

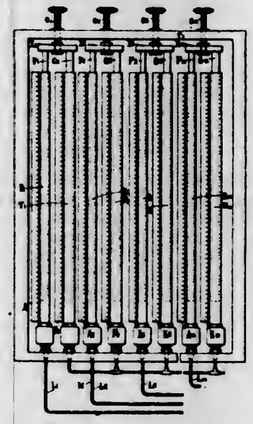


R meaning any hydrogenated or non-hydrogenated heterocyclic radical containing nitrogen in the heterocyclic nucleus, and X meaning OH, halogen or OR_1, R_1 being a monovalent alkyl radical, to react with an alkylene diamine of the formula



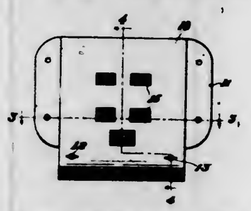
wherein A represents an alkylene radical containing at least two carbon atoms, R' and R'' stand for hydrogen or ethyl, both R'' may also stand for an alkylene chain to form a piperidine ring, which products form with acids salts soluble in water.

1,886,482. INDICATING AND CONTROLLING APPARATUS. BARRY HOCKEN, Fowey, England. Filed Nov. 21, 1927, Serial No. 234,837, and in Great Britain Nov. 30, 1926. 5 Claims. (Cl. 235—61.)



4. A totalizator apparatus comprising a series of liquid level indicating tubes representing risks, a liquid level indicating tube representing grand total, means for displacing liquid in any risk tube corresponding to the amount laid on said risk, and means for simultaneously displacing liquid in the grand total tube to add a corresponding amount to the grand total indication.

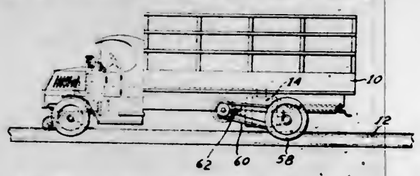
1,886,483. KNIFE SHARPENER. GEORGE P. HURST, Rapid City, S. Dak., assignor of one-half to William P. Baken, Rapid City, S. Dak. Filed Dec. 12, 1930. Serial No. 501,945. 1 Claim. (Cl. 51—214.)



A knife sharpener formed from a single blank of material bent to provide an attaching plate of U-shaped formation presenting the same with spaced parallel limbs, attaching ears of substantially V-formation struck inwardly from each of said limbs or the confronting sides thereof, sharpening elements having beveled attaching fins at the side and bottom edges thereof, the fins of the sharpening elements engaging in the V-shaped ears of the U-shaped attaching plate, a bolt and nut connection passing through the limbs of the plate at a point adjacent the connecting

portion thereof, and roller members carried by said bolt and disposed between the said plates to protect the sharpening edge of a knife when inserted between the sharpening elements.

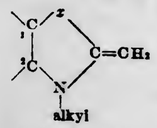
1,886,484. TOY ELECTRICAL ROAD VEHICLE. VIRGIL C. KLINE, Floral Park, N. Y. Filed May 31, 1930. Serial No. 458,821. 10 Claims. (Cl. 104—149.)



1. A toy electric vehicle and track comprising an arched roadway having relatively thin side edges and formed with a depression in its central portion, an electric conducting member supported within said depression, an electrically propelled vehicle, steering devices therefor including a vehicle guiding trolley normally situated in said depression and in contact with said conducting member, said trolley being removable from said depression at any point along the same.

1,886,485. PROCESS OF MAKING DYESTUFFS OF THE POLYMETHINE SERIES AND NEW INTERMEDIATE PRODUCTS THEREFOR. RICHARD KUHN, Zurich, and WALTER KERN, Sissach, Switzerland, assignors to the Firm: Society of Chemical Industry in Basle, Basel, Switzerland. Filed July 20, 1929, Serial No. 379,880, and in Switzerland July 28, 1928. 11 Claims. (Cl. 260—41.)

1. In the manufacture of dyestuffs of the polymethine series, the step which comprises condensing one molecular proportion of a methylene base of the general formula



wherein the pair of carbon atoms C_1 C_2 belongs to a benzene or a naphthalene nucleus, and ω stands for

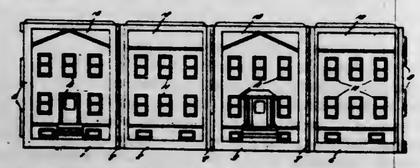
$$-CH=CH- \quad \text{or} \quad -S- \quad \text{or} \quad -CH_2- \quad \text{or} \quad =C\begin{matrix}\text{alkyl}\\\text{alkyl}\end{matrix}$$

in the presence of an acylating agent with one molecular proportion of a mineral acid salt of a derivative of formic acid of the general formula

$$HC\begin{matrix}\omega\\=NH\end{matrix}$$

wherein ω stands for halogen or NH_2 or $O-C_2H_5$ or $O-CO-CH_3$.

1,886,486. TOY MOLD. WOODWARD BRYANT LE GANGER, Boston, Mass. Filed Sept. 10, 1931. Serial No. 562,149. 6 Claims. (Cl. 46—37.)

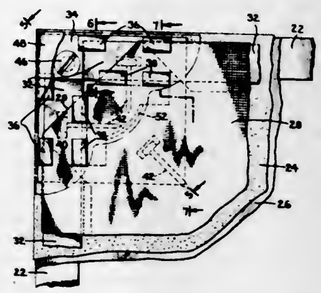


1. A mold comprising a plurality of hingedly connected sections of skeleton form and open at their top, and panels removably insertable in the sections through the open tops thereof, said panels having defined thereon representations of the physical features of a structure.

1,886,487. PROCESS FOR THE MANUFACTURE OF A MIXTURE OF HYDROCYANIC ACID WITH CYANOGEN CHLORIDE. HANS LEHRECKE, Frankfort-on-the-Main, Germany, assignor to Deutsche Gold & Silber Scheideanstalt, vormals Roessler, Frankfort-on-the-Main, Germany, a Corporation. Filed May 20, 1927, Serial No. 193,071, and in Germany May 22, 1926. 13 Claims. (Cl. 167—85.)

11. A process of manufacturing a liquid mixture of hydrocyanic acid and cyanogen chloride containing substantially less than 6 per cent of water which comprises passing chlorine into liquid concentrated hydrocyanic acid containing less than 6 per cent of water at a rate above 60 grams of chlorine per kilogram of hydrocyanic acid per hour while cooling the solution, and removing the hydrochloric adid formed by the reaction by bringing the reaction mixture into contact with weakly alkaline substances capable of combining with hydrochloric acid.

1,886,488. UPHOLSTERY COVER. PAUL M. LOCKWOOD, Short Hills, and EMANUEL SAMEL, Denville, N. J.; said Lockwood assignor to said Samel. Filed Nov. 8, 1930. Serial No. 494,264. 5 Claims. (Cl. 45—138.)



1. In a cover for automobile upholstery and the like, in combination, a sheet of cover fabric having a hem at each edge, a bar through each hem, and a fitting at each corner of the fabric for engaging two divergent bars to thereby hold all edges of the cover in operative position on the upholstery.

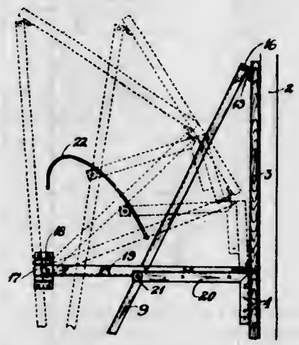
1,886,489. ELECTRIC CURRENT TESTER. LOUIS LUDWIG, Brooklyn, N. Y. Filed May 26, 1930. Serial No. 455,758. 5 Claims. (Cl. 175—183.)



1. In a device of the class described, an insulating casing, a neon lamp contained in said casing, a plurality of openings formed in the said casing through which the lamp

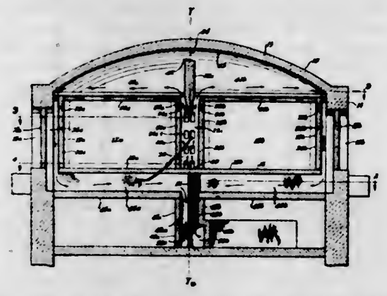
may be viewed, said openings covered with translucent materials of different degrees of transparency, a pair of pointed metal pins secured in the casing with their points extending outside thereof, and said pins electrically connected to the lamp.

1,886,490. OVERHEAD DOOR CONSTRUCTION. ELMER R. LYNCH, Vermilion County, Ind., assignor to Allith-Prouty Company, Danville, Ill., a Corporation of Delaware. Filed Jan. 4, 1930. Serial No. 418,445. 12 Claims. (Cl. 20—19.)



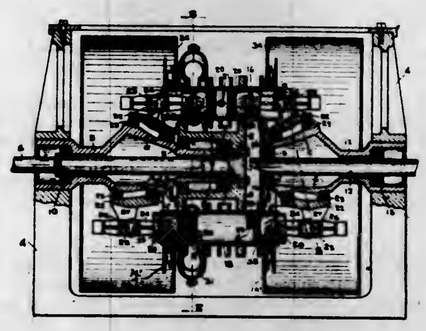
1. An overhead door construction including in combination a pair of swinging levers pivotally connected adjacent the top margin of a door, another pair of swinging levers pivotally connected to said door below the top margin thereof, said last mentioned levers being shorter than the first mentioned levers, counterbalance means connected to said door, and guide means engageable by the shorter levers to direct the door into substantially horizontal overhead position.

1,886,491. MUFFLE KILN. LEO W. MANION, Canton, Ohio. Filed Oct. 7, 1931. Serial No. 567,405. 9 Claims. (Cl. 25—144.)



1. A kiln including walls forming an outer chamber, walls forming two inner chambers, each inner chamber being located within the outer chamber and being spaced therefrom and from the other inner chamber, the walls forming the outer chamber including a bottom wall, curved side walls, and a top wall, and the walls forming each inner chamber including a segmental bottom wall, side walls including a curved wall and a substantially straight wall connected at their ends with each other, the curved wall of each inner chamber being spaced from opposite portions of the inner surface of the curved side walls of the outer chamber, and the substantially straight walls of the two inner chambers being spaced from each other and being located centrally with respect to the outer chamber, the top of each inner chamber being spaced below the top wall of the outer chamber and there being formed a circulating chamber therebetween, walls forming a downtake flue for each inner chamber, the upper end of each downtake flue communicating with the adjacent circulating chamber, and means for introducing a supply of heating medium between the spaced walls forming the outer and inner chambers at the lower ends thereof.

1,886,492. INTERNAL COMBUSTION ENGINE. VICTOR C. MATTSON, Loomis, Nebr. Filed Apr. 20, 1931. Serial No. 531,284. 4 Claims. (Cl. 123—43.)



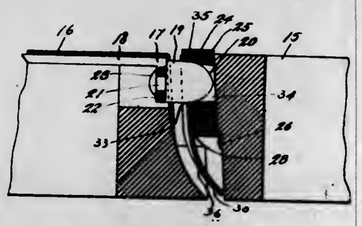
1. A gas engine comprising a frame, a sleeve rigid with and extending inwardly of the frame and having a rectilinear part and a cone-shaped part, a carrier-frame having a cylindrical ledge journalled on the rectilinear part of the sleeve, a shaft journalled in the sleeve and having a head-piece secured to the carrier-frame, a second sleeve rigid with and extending into the frame and having a cone-shaped part, a pair of bearing-rings each provided with coupling-members and journalled on a cone-shaped part of a sleeve, an intake pipe journalled in the second sleeve and having a partition disposed adjacent to the carrier-frame to provide a gas chamber in communication with said intake pipe, an exhaust pipe, a plurality of cylinders on the carrier-frame, each having a port communicating with the gas chamber, and a port communicating with the exhaust pipe, pistons arranged in pairs within the cylinders each piston having a rod engaging a coupling-member, and a plurality of spark-plugs each mounted in a cylinder between a pair of pistons for igniting gas to cause actuation of the coupling-members and bearing-rings to cause actuation of the carrier-frame and said shaft.

1,886,493. ADJUSTABLE HAT. JOHN A. MENDOSA, Manteca, Calif. Filed Feb. 11, 1932. Serial No. 592,259. 4 Claims. (Cl. 2—197.)



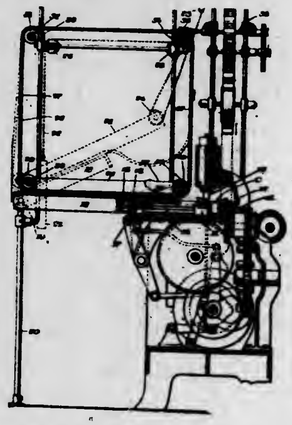
1. A hat having an adjustable band surrounding the lower part of the crown thereof and fixedly secured centrally of its ends to the crown, an adjustment buckle engaging the ends of the band, and means on the crown opposite the band securing means detachably engaging the buckle and holding the same down against the base of the crown.

1,886,494. FLOATING KEEPER FOR LOCK AND LATCH BOLTS. ERNEST R. MITCHELL, Philadelphia, Pa., assignor of two-fifths to Josef Cisar, Penfield, Pa., and one-fifth to Joshua Epstein and S. Fisher, Philadelphia, Pa. Filed July 14, 1927, Serial No. 205,680. Renewed May 31, 1930. 22 Claims. (Cl. 292—340.)



22. A lock and latch device for doors consisting of separate cooperating male and female members, one carried by the door and the other by the frame which serve as bearing members, one of the said members being supported only and directly by resilient means directly carried by its bearing member.

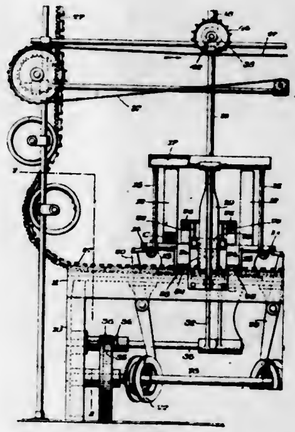
1,886,495. MATCH-STRIP FEEDING MECHANISM. MICHAEL PARIDON, Barberton, Ohio, assignor to The Diamond Match Company, Baltimore, Md., a Corporation of Maryland. Filed May 12, 1931. Serial No. 536,774. 6 Claims. (Cl. 93—2.)



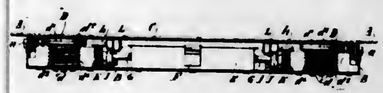
1. In match-strip feeding mechanism having a feed table for match strips, means including spaced members for feeding match strips along said table, and a plunger to which the match strips are delivered, a plurality of independent pressure members loosely depending in the path of the strips on the table adjacent the plunger, said pressure members arranged laterally of each other to exert relatively light pressure upon each succeeding strip at different points in the length of the strip.

1,886,496. PNEUMATIC-CONTROL MEANS FOR PAPER FEEDING AND FOLDING MECHANISMS. MICHAEL PARIDON, Barberton, Ohio, assignor to The Diamond Match Company, Baltimore, Md., a Corporation of Maryland. Filed May 12, 1931. Serial No. 536,775. 4 Claims. (Cl. 270—61.)

1. In combination with a cover conveyer, means including a reciprocating member for folding covers and inserting them in said conveyer, and mechanism including a feed member having a suction chamber and an exhaust conduit therefor for feeding covers to the path of the reciprocating member, a valve for controlling communication between the conduit and said chamber, said valve having a port therein constructed and arranged to effect in the operation of the valve the periodical opening and closing of the communication between the conduit and the chamber, and means for operating said valve in timed relation with the said folding and feeding members.

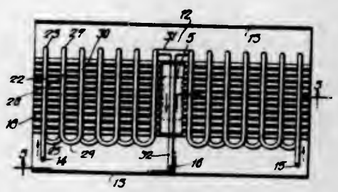


1,886,497. TREADLE-SWITCH. ROBERT J. PARSONS, Schenectady, N. Y., assignor to Consolidated Car-Heating Company, Albany, N. Y., a Corporation of New York. Filed Oct. 26, 1928. Serial No. 315,248. 7 Claims. (Cl. 200—86.)



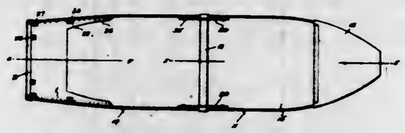
1. The combination with a movable treadle plate and an electric switch operated thereby, of a stop member positioned to be engaged by said treadle plate and movable to conform to the movements thereof, and abutment means for limiting movement of said stop member, said abutment means including means for deadening impacts of said stop member in both directions of its movement.

1,886,498. HEAT INTERCHANGER. GEORGE H. PHELPS, Warehouse Point, Conn., assignor to Metropolitan Engineering Company, Brooklyn, N. Y. Filed Mar. 6, 1930. Serial No. 433,529. 10 Claims. (Cl. 257—39.)



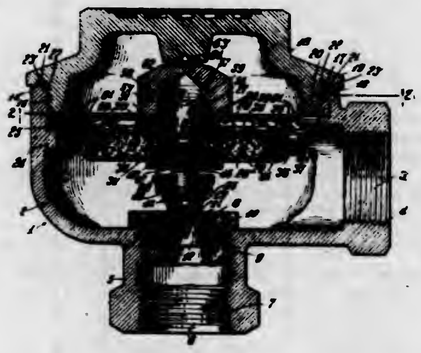
1. A heat interchanger including a corrugated radiating structure forming channels for the passage of a draft of air and recesses transverse to said channels to receive lengths of tubing and tubing for a heating medium passed alternately across the opposite sides of said radiating structure from one end thereof and received in said recesses.

1,886,499. FOLDING BOAT. RAYMOND W. POST, Van Nuys, Calif. Filed June 3, 1931. Serial No. 541,887. 3 Claims. (Cl. 9—2.)



1. In a folding boat of the class described, a pair of companion sections, each section embodying a flat bottom and hingedly mounted side walls adapted to swing into overlapping relation with the bottom when the sections are folded, and collapsible inflation bags at the front and rear of the boat to add to the buoyancy of the complete boat and to aid in maintaining the side walls in upright relationship when the side walls are distended to operative sailing position.

1,886,500. THERMOSTATIC TRAP. FERDINAND EDWARD SCHMIDT, Marshalltown, Iowa, assignor to C. A. Dunham Company, Marshalltown, Iowa, a Corporation of Iowa. Filed Aug. 7, 1930. Serial No. 473,712. 18 Claims. (Cl. 236—58.)



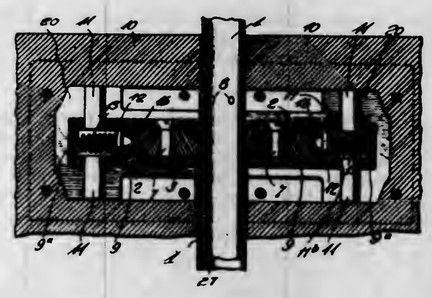
1. A thermostatic trap comprising a closed housing having an outlet passage in the bottom thereof, and having a constantly open inlet passage positioned out of alignment with the outlet, a valve seat in the outlet passage, a thrust-receiving member in the top of the housing in alignment with the valve seat, a thermostatic assembly comprising an expansible disk and a valve carried by the lower face thereof, and means for loosely suspending said assembly in the housing between the valve seat and thrust member but normally out of engagement with either.

1,886,501. TURNED SHOE. DAVID SCHREIBER, Vienna, Austria. Filed Feb. 8, 1930, Serial No. 426,913, and in Austria Feb. 8, 1929. 3 Claims. (Cl. 36—18.)

1. In a turned shoe, a sole made of material having the property of fusing and becoming homogeneously united to light material in contact therewith and having a fold at its outer edge whereby the outer edge of the sole is doubled in thickness, an upper having an inwardly turned edge bearing against the said fold, fastening means extending through the doubled fold of the sole and the inturned edge of the upper and securing them together, the said fold being homogeneously united to the sole so that said fold is integral with the sole and the bottom portion of the fastening means of the inturned edge of the upper is covered by the sole and protected thereby.



1,886,502. HARDWARE FOR REVOLVING DOORS. JOHN W. SHIELDS, Evansville, Ind., assignor to Fred O. WEBER, Evansville, Ind. Filed July 22, 1931. Serial No. 552,496. 10 Claims. (Cl. 20—18.)

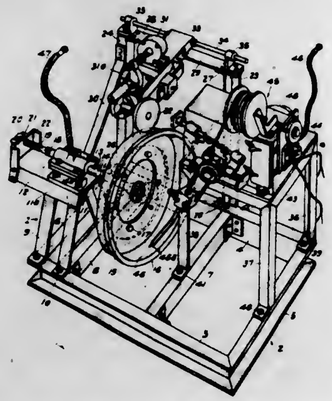


1. A revolving door structure including a plurality of radially disposed wings, a vertically disposed shaft member, and means for supporting said wings with respect to said shaft member comprising a disc member secured to said shaft member adjacent the top and bottom of said door structure, yoke members having arms extending on opposite sides of each of said disc members and pivoted at spaced intervals around said discs, sockets carried by said discs centrally thereof, wing carriers connected to the inner peripheries of said wings, said wing carriers being pivotally connected to the outer ends of said yokes remote from the connection of said yokes with said discs for movement independent of the yokes and having portions projecting inwardly of the discs to engage in said sockets and releasably hold the carriers against movement independent of the yokes during movement of the yokes about the pivots carried by the discs.

1,886,503. MACHINE FOR RECLAIMING WORN BRAKE DRUMS. HARRY K. SHOCKEY, San Diego, Calif. Filed Aug. 5, 1930. Serial No. 473,198. 4 Claims. (Cl. 219—8.)

1. In a device of the kind described, a frame, a substantially horizontal shaft journalled on said frame, means to secure a brake drum concentrically to an end of said shaft, to rotate therewith in a substantially vertical plane, screw threaded means operatively connected with said shaft to move it longitudinally when rotated, a driving wheel, means to support said driving wheel in driving contact with the exterior surface of the periphery of the drum secured to said shaft as aforesaid, means to rotate said driving wheel, said driving wheel being adapted to advance transversely with regard

to the periphery of the brake drum being operated upon, to accommodate axial movement of said drum caused by the screw threaded means aforesaid, and a relatively sta-

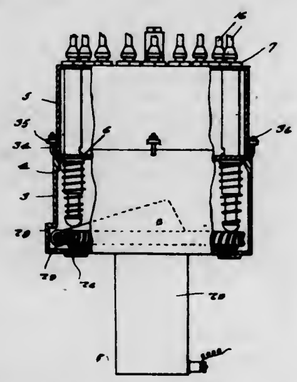


tionary auxiliary head having a delivery opening positioned to deposit a stream of molten metal upon the inner periphery of the brake drum being operated upon.

1,886,504. PURIFICATION OF CELLULOSE SOLUTIONS. JOHANN JOSEPH STOECKLY, Teltow-Seehof, and EBHARD WITTE, Lichterfelde-Berlin, Germany, assignors to American Glanzstoff Corporation, New York, N. Y. Filed Apr. 24, 1930, Serial No. 447,103, and in Germany Apr. 17, 1929. 4 Claims. (Cl. 260—100.)

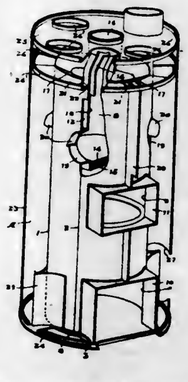
1. In a process for cleaning a cellulose solution, the steps of first filtering the solution, then treating a relatively small portion thereof with an organic liquid insoluble in the solution and with enough Turkey red oil to sufficiently emulsify the entire solution, emulsifying the solution and later mixing the portion so treated with the remainder of the solution.

1,886,505. LUBRICATING MECHANISM. MITCHELL B. WALKER, Greensboro, N. C. Filed Mar. 26, 1929. Serial No. 350,083. 1 Claim. (Cl. 184—27.)



In a lubricator, a reservoir adapted for the reception of a lubricant and being provided with a plurality of pumping units having longitudinally movable plungers extending out through the lower end of the reservoir, a casing suspended from the reservoir, means detachably connecting the casing to the lower portion of the reservoir, a rotatable element mounted within the lower portion of the casing and being carried thereby and having an arcuate cam for successive engagement with said plungers, a driving mechanism carried by said casing and having operative connection with said rotatable elements, said rotatable elements and said driving mechanism being removable with said casing.

1,886,506. HOT AIR FURNACE. ANDREW COATES WATSON, Toronto, Ontario, Canada. Filed Sept. 6, 1930. Serial No. 480,223. 7 Claims. (Cl. 126—106.)



1. In a hot air furnace, a sheet metal cylinder, a cylindrical casing spaced from and enclosing said cylinder and extending thereabove, a firepot within said cylinder, an air chamber arranged within the upper end of said cylinder, spaced flues leading upwardly and inwardly at the upper end of the flue space surrounding said air chamber, a baffle partition member extending between the top of said cylinder and the wall of said cylindrical casing and formed with openings adjacent said flues, a common flue connecting said spaced flues, and a closure member secured in the upper end of said cylindrical casing spaced from said partition and forming therewith and with said cylinder and cylindrical casing an air-receiving chamber enclosing said flues.

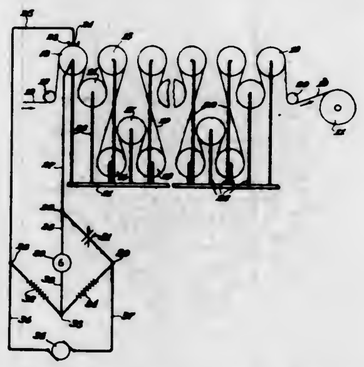
1,886,507. BOAT. GEORGE G. WEHR, Philadelphia, Pa. Filed July 14, 1928, Serial No. 292,669. Renewed Mar. 16, 1932. 6 Claims. (Cl. 114—66.5.)



3. A boat having an inverted U-shape concave bottom, the arcs of which increase both fore and aft from a point fore of midship, and having side chines extending from stern towards midship, presenting increasing angles of incidence to the water.

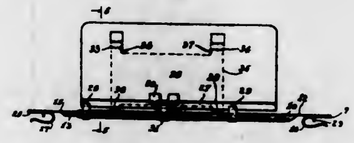
1,886,508. APPARATUS FOR INDICATING AND CONTROLLING WEB VARIATIONS. FREDERICK WIERK, New York, N. Y., assignor to Johnson & Wierk, Inc., New York, N. Y., a Corporation of New York. Filed Mar. 26, 1931. Serial No. 525,445. 2 Claims. (Cl. 92—38.)

1. The combination with an apparatus for continuously forming and advancing a web of material of substantially uniform characteristics, of electrical means responsive to variations in the dielectric strength of the web for indicating deviations of the web material from a condition of uniformity; said means comprising a Wheatstone bridge circuit having an electrical condenser in each of two



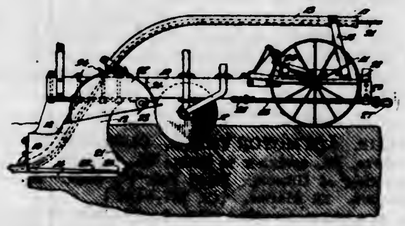
adjacent arms, one of said condensers being an adjustable condenser, the other having a pair of terminals arranged with the web between them.

1,886,509. ADJUSTABLE READING SUPPORT FOR CHAIRS. MARY C. WINE, New York, N. Y. Filed May 21, 1931. Serial No. 538,998. 10 Claims. (Cl. 45—82.)



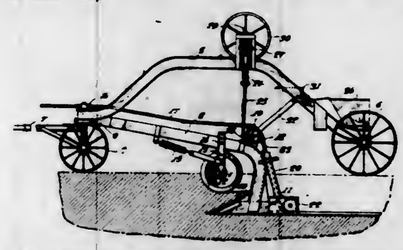
1. An attachment for a chair comprising a base having adjustable sections, an inclined book support movably carried on said sections, means for holding said support in the inclined position, and means including said first means for holding said sections adjusted.

1,886,510. CABLE LAYING PLOW. ROGER N. MURPHY, Rome, N. Y., assignor to General Cable Corporation, New York, N. Y., a Corporation of New Jersey. Filed Nov. 1, 1930. Serial No. 492,697. 7 Claims. (Cl. 111—5.)



1. In combination, a movable frame, a furrow cutting mechanism operated by movement of the frame and means for depositing within said furrow a length of cable previously laid along the ground.

1,886,511. CABLE LAYING PLOW. EDWARD C. GLEDHILL, Galion, Ohio, assignor to General Cable Corporation, New York, N. Y., a Corporation of New Jersey. Filed Nov. 25, 1930. Serial No. 498,002. 5 Claims. (Cl. 111—5.)



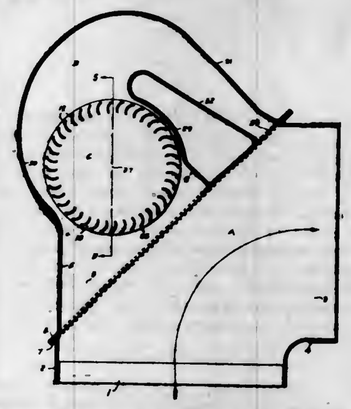
1. In combination, a furrow forming plow, means for adjusting the depth of operation of said plow, and means for depositing within the furrow formed thereby a length of cable previously laid along the ground including a pair of cable pick-up rollers and means for directing the cable from said rollers into said furrow.

1,886,512. TENSIONED AWNING ARM. J. OTTO ACKERMAN, Cleveland, Ohio, assignor to The Astrup Company, Cleveland, Ohio, a Corporation of Ohio. Filed Feb. 9, 1932. Serial No. 591,805. 10 Claims. (Cl. 156—44.)



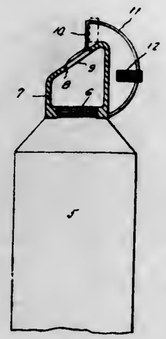
10. In an awning arm construction including a pair of folding awning arms having a hinge connection with each other, a cam member rotatably mounted on said hinge connection, means for holding the cam member against rotation relative to one of the arms, and tension means connected at one end to the periphery of the cam member and at the other end to the other arm.

1,886,513. ANGULAR-FLOW FAN. EDWARD L. ANDERSON, Grosse Ile, Mich., assignor to American Blower Corporation, Detroit, Mich., a Corporation of Delaware. Filed Jan. 2, 1931. Serial No. 506,057. 10 Claims. (Cl. 230—125.)



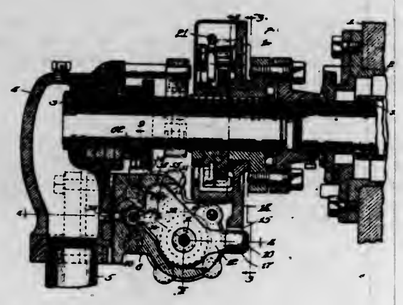
1. In combination, an angular line-flow air pipe, a by-pass, and means in the by-pass to extract air from one arm of the angular pipe and discharge it into one side of the other arm in the general direction of the line of flow therein.

1,886,514. COLLAPSIBLE TUBE CAP. MENTORE L. ANGELINI, Montgomery, Ala. Filed Mar. 7, 1932. Serial No. 597,891. 3 Claims. (Cl. 221—60.)



3. In a collapsible tube cap of the class described having a valve seat opening, a valve associated with the seat and being bevelled to open inwardly of the cap, and a stem rising outwardly from the valve and merging into an arcuate spring attached to the exterior of the cap.

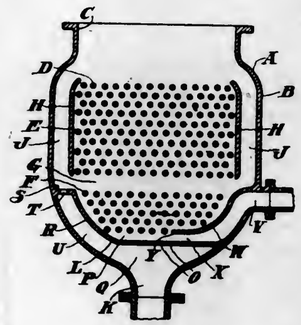
1,886,515. POWER HEAD FOR SOOT CLEANERS. FRED C. AREY, Oak Park, Ill., assignor to Vulcan Soot Cleaner Company, Du Bois, Pa., a Corporation of Delaware. Filed Sept. 4, 1930. Serial No. 479,646. 3 Claims. (Cl. 122—392.)



1. In an apparatus of the character described, a hollow head, a tubular cleaning element rotatable in said head and projecting therefrom at right angles thereto, mechanism surrounding said element to turn the same aad including a rocking member spaced apart from the head and projecting downwardly lengthwise of the head, an engine mounted on the head in the space between the head and the said rocking member and having a piston arranged to reciprocate in a direction transverse to the axis of said cleaning element, and an actuator fixed to and extending laterally from the side of the piston into driving relation to said rocking member.

1,886,516. CONDENSER. PAUL A. BANCEL, Montclair, N. J., assignor to Ingersoll-Rand Company, Jersey City, N. J., a Corporation of New Jersey. Filed May 18, 1929. Serial No. 364,193. 7 Claims. (Cl. 257—43.)

1. A condenser, comprising a casing having an inlet opening for steam and an outlet opening for condensate, cooling tubes in the casing divided into groups, passages in the casing for by-passing steam around one group of tubes to another group, a wall beneath the tubes having perforations to divide the condensate into streams



and arranged to form a conduit, and an opening in the wall to admit steam from a passage into the conduit for heating the condensate issuing from the perforations.

1,886,517. ELECTRIC SWITCH. HUGH W. BATCHELLER, Worcester, Mass. Filed Sept. 11, 1931. Serial No. 562,230. 3 Claims. (Cl. 200—154.)

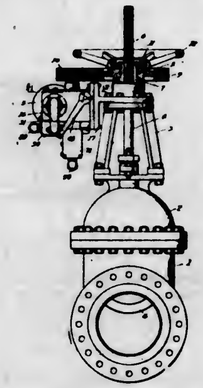


1. A push and pull switch comprising a casing including a head having in one end an open chamber, and a sleeve fixed to the opposite end of the head and projecting therefrom; a plurality of annular terminals fixed to and insulated from each other in the said chamber and having circular orifices whose margins constitute annular spaced apart contact surfaces concentric with each other and with the sleeves, each terminal having means for connection with a circuit wire; and a hand piece longitudinally movable in the sleeve and chamber and having a spring-pressed bridging conductor movable by the hand piece to contact either with two annular contact surfaces simultaneously, or with only one of said surfaces, one of said annular contact surfaces being contracted so that its diameter is smaller than that of any other contact surface, the arrangement being such that when the bridging conductor contacts with two annular surfaces, one of which is the contracted surface, removal of the hand piece by outward endward movement thereof is prevented.

1,886,518. AIR MOTOR VALVE. CLINTON H. BECKWITH, Geneva, Ill., assignor to Crane Co., Chicago, Ill., a Corporation of Illinois. Filed Feb. 16, 1931. Serial No. 516,094. 28 Claims. (Cl. 137—139.)

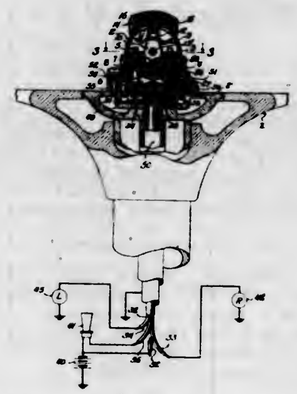
1. In a power operated valve, a valve body having a passage therethrough, a valve closure member within said body for closing said passage, a reversible fluid operated motor, transmission means operatively connecting said motor to said closure member, valve means for controlling the fluid supply for driving the motor in two directions, means responsive to the opening movement of said closure

member for operating said control means at a predetermined time to control operation of said motor in one direction and means responsive to resistance to movement of



said closure member in closing movements for operating said control means at a predetermined time to control operation of said motor in the other direction.

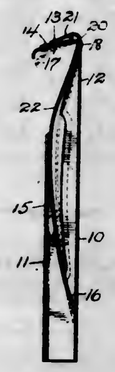
1,886,519. SWITCH FOR SIGNALING SYSTEMS FOR AUTOMOTIVE VEHICLES. BORNETT L. BOSSOFF, Racine, Wis. Filed Nov. 12, 1930. Serial No. 495,148. 7 Claims. (Cl. 200—4.)



1. In a signal switch, the combination of a movable contact member, and a stationary contact member, said stationary contact member, having a sleeve which can be engaged by said movable contact member and having a spring pressed plunger normally engaged by said movable contact member, when said movable contact member is moved towards said stationary contact member, said movable contact member being adapted for rocking motion a distance to engage said sleeve in the event that said plunger does not function.

1,886,520. RAZOR. ARTHUR J. BRIGGS, Syracuse, N. Y., assignor to Magazine Repeating Razor Company, New York, N. Y. Filed June 29, 1931. Serial No. 547,611. 4 Claims. (Cl. 30—12.)

1. A razor comprising a handle bent forwardly at the top to form one member of a blade clamp, and a spring metal member of substantially the same shape fitting into the handle and with a bent part to form the second member of the blade clamp, the handle and the spring metal member being joined together at the rear of the blade clamp, the spring member bearing on the handle with



a tendency to close the blade clamp and ears struck up on the forwardly bent part of the spring member to form a blade stop, the handle protecting all but the top of the spring member against pressure.

1,886,521. KNITTED FABRIC. PAUL W. BRISTOW, Wilmington, and HAROLD E. HOUSEMAN, Edge Moor, Del., assignors to Standard-Trump Bros. Machine Company, Wilmington, Del., a Corporation of Delaware. Original application filed Apr. 11, 1931, Serial No. 529,518. Divided and this application filed Oct. 14, 1931. Serial No. 568,676. 4 Claims. (Cl. 66—201.)

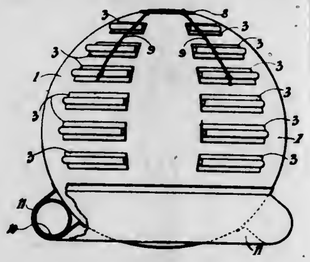


1. A knitted fabric including a body of interlinked courses and a wrap yarn; said wrap yarn extending in the general direction of the wales of the fabric and in certain places being both interengaged with the bases of main loops, the portion of wrap yarn so interengaged being substantially hidden by the main loops, and also forming loops lying with and plating the same main loops.

1,886,522. DIVING RAFT. RONALD BUCK, Manchester, England. Filed Aug. 26, 1931, Serial No. 559,355, and in Great Britain Apr. 1, 1931. 2 Claims. (Cl. 9—11.)

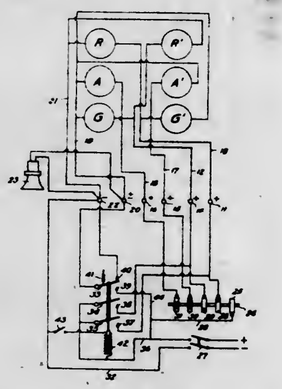
1. A diving raft comprising a casing having a rising part, an inflated bladder in the said casing, footholds of

soft material distributed over the rising part of the casing, hand ropes depending from the casing, water



buckets depending from the lower part of the casing and apertures in the buckets for automatically filling them from the water in which the raft floats.

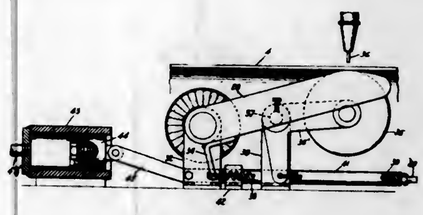
1,886,523. TRAFFIC SIGNAL CIRCUIT. DAVID HARLOW CALDERWOOD, Johnstown, N. Y. Filed Apr. 28, 1930. Serial No. 446,666. 3 Claims. (Cl. 177—337.)



1. In combination with a traffic signal having a plurality of sets of electrically energized clear and danger signals of which the positive terminals of the danger signals of one set are connected to the positive terminals of the clear signals of another set and the negative terminals of the clear signals and the negative terminals of the danger signals of different sets are respectively connected together, a time controlled switch interposed between the positive side of a supply source and said positive terminals to alternately energize the same, the negative terminals of the danger signals being connected in on the negative side of the supply source, a relay having a movable element connected to the negative terminals of the clear signals, and a pair of fixed contacts with either of which said movable element is engageable, one of the fixed contacts being connected in on the negative side of the supply source and the other being connected in on the positive side of the supply source and an audible signal connected between said movable element and the negative side of said supply source.

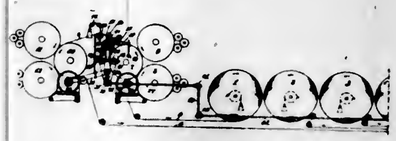
1,886,524. ELECTRIC ARC WELDING. VERNI J. CHAPMAN, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Dec. 13, 1929. Serial No. 413,848. 14 Claims. (Cl. 219—8.)

1. Apparatus for use in arc welding comprising means for engaging and oppositely magnetizing only those portions of the work on opposite sides of the seam to be welded in the immediate vicinity of the welding arc, means for supporting said means relatively to the work with the



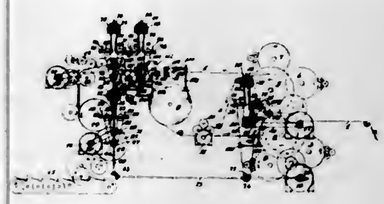
work engaging portions thereof in contact with the work and means for traversing the work and said magnetizing means relatively to one another.

1,886,525. ELECTRIC MOTOR DRIVE FOR WEB PRINTING, LONGITUDINAL FOLDING AND TRANSVERSE CUTTING MECHANISM. CALVERT B. COTTRELL, 3d, Westerly, R. I., assignor to C. B. Cottrell & Sons Company, Westerly, R. I., a Corporation of Delaware. Filed July 3, 1929. Serial No. 375,828. 8 Claims. (Cl. 93—34.)



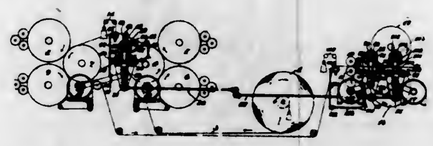
1. Web printing and longitudinal folding mechanisms and an electric motor drive therefor, including a source of current supply, a master motor for the printing mechanism and an auxiliary motor for the folding mechanism, and means for maintaining the auxiliary motor at a predetermined speed relative to the master motor.

1,886,526. ELECTRIC MOTOR DRIVE FOR WEB PRINTING, CUTTING AND FOLDING MECHANISM. CALVERT B. COTTRELL, 3d, Westerly, R. I., assignor to C. B. Cottrell & Sons Company, Westerly, R. I., a Corporation of Delaware. Filed July 3, 1929. Serial No. 375,829. 8 Claims. (Cl. 270—21.)



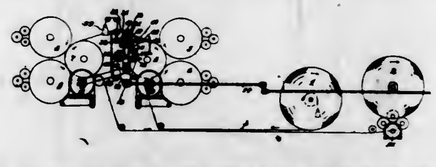
1. Web printing and folding mechanisms and an electric motor drive therefor including a source of electric power, a master motor for the printing mechanism and an auxiliary motor for the folding mechanism, and means for automatically maintaining the auxiliary motor at a predetermined speed relative to the master motor.

1,886,527. ELECTRIC MOTOR DRIVE FOR WEB PRINTING AND CUTTING MECHANISMS. CALVERT B. COTTRELL, 3d, Westerly, R. I., assignor to C. B. Cottrell & Sons Company, Westerly, R. I., a Corporation of Delaware. Filed July 3, 1929. Serial No. 375,830. 6 Claims. (Cl. 101—227.)



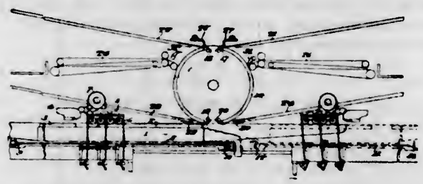
1. Web printing and cutting mechanism and an electric motor drive therefor, including a source of current supply, a master motor for the printing mechanism and an auxiliary motor for the cutting mechanism, and means for maintaining the auxiliary motor at a predetermined speed relative to the master motor.

1,886,528. ELECTRIC MOTOR DRIVE FOR WEB PRINTING MECHANISM. CALVERT B. COTTRELL, 3d, Westerly, R. I., assignor to C. B. Cottrell & Sons Company, Westerly, R. I., a Corporation of Delaware. Filed July 3, 1929. Serial No. 375,831. 7 Claims. (Cl. 101—178.)



1. A web printing press comprising two printing units and an electric motor drive therefor, including a source of current supply, master and auxiliary driving motors for the two printing units, and means for maintaining the auxiliary motor at a predetermined speed relative to its master motor.

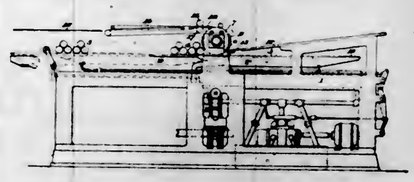
1,886,529. BED AND CYLINDER PRINTING PRESS. CALVERT B. COTTRELL, 3d, Westerly, R. I., assignor to C. B. Cottrell & Sons Company, Westerly, R. I., a Corporation of Delaware. Filed May 12, 1931. Serial No. 536,801. 22 Claims. (Cl. 101—278.)



1. In a bed and cylinder printing press, a reciprocating bed, an oscillating impression cylinder operable, on each stroke, to successively take, print and deliver two sheets, and two inking mechanisms, one operable on one stroke and the other operable on the opposite stroke of the bed.

1,886,530. BED AND CYLINDER PRINTING PRESS. CALVERT B. COTTRELL, 3d, Westerly, R. I., assignor to C. B. Cottrell & Sons Company, Westerly, R. I., a Corporation of Delaware. Filed May 15, 1931. Serial No. 537,614. 4 Claims. (Cl. 101—278.)

1. In a bed and cylinder printing press, a bed and its form reciprocating in a right line, an inking mechanism, an oscillating impression cylinder rotating substantially one and one-half revolutions on each of its strokes, means



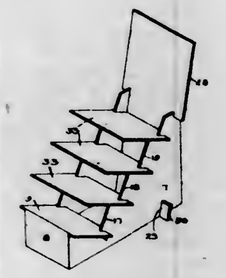
for feeding a sheet to the cylinder on its printing stroke, and means to take the printed sheet tail end first from the cylinder on is non-printing stroke.

1,886,531. METHOD AND DEVICE TO DIRECT THE SHOOTS OF YOUNG TREES. FRANZ DALCHOW, Nauen, near Berlin, Germany. Filed May 14, 1930, Serial No. 452,281, and in Germany May 14, 1929. 5 Claims. (Cl. 47—7.)



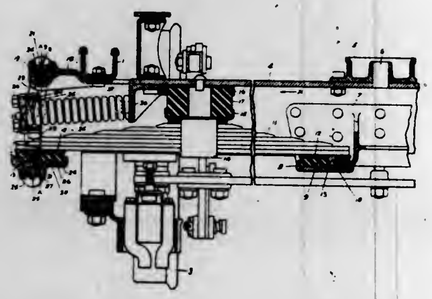
1. A method of directing the shoots of young trees consisting in cutting off the stem of the tree directly above the shoot and surrounding the stem adjacent the shoot to loosely support the shoot, and bracing said shoot to direct the same in the direction desired.

1,886,532. DISPLAY STAND. BRUCE J. DAVIDSON, Brooklyn, N. Y., assignor to National Biscuit Company, New York, N. Y., a Corporation of New Jersey. Filed Jan. 3, 1931. Serial No. 506,350. 10 Claims. (Cl. 211—156.)



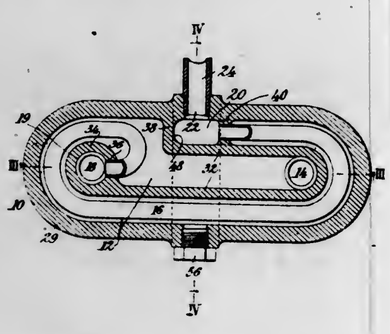
1. A display rack comprising two side panels and a front panel connected thereto, each side panel having upper and lower notches in its upper and lower edges and a rear panel disposed between the side panels and having pairs of upper and lower slots engaging and interlocking with the upper and lower notches in the side panels.

1,886,533. SWINGING LINK ARRANGEMENT FOR RAILWAY TRUCKS. LEWIS J. DAVIS, Cincinnati, Ohio, assignor to The Cincinnati Car Corporation, Cincinnati, Ohio, a Corporation of Ohio. Filed Mar. 16, 1931. Serial No. 522,945. 24 Claims. (Cl. 105—190.)



1. In a railway truck, a frame, a bolster, a swinging support on the frame for each end of the bolster, and means between the end of the bolster and the swinging support to retard the movement of the bolster.

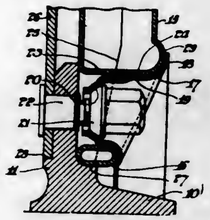
1,886,534. STEAM AND WATER MIXER. LOUIS J. DORNHOFER, Leonia, N. J., assignor of one-half to Harold A. Fales, Leonia, N. J. Filed Aug. 17, 1929. Serial No. 386,501. 8 Claims. (Cl. 261—10.)



1. A steam and water mixer for supplying a jet of heated water, comprising a mixing chamber, a steam channel opening into said mixing chamber, and a water pipe within said steam channel and also opening into said mixing chamber, the water in said pipe being preheated by said steam before entering said mixing chamber, and an outlet from said mixing chamber through which a stream of heated water passes, said mixer having a water receiving chamber, said water chamber and mixing chamber having openings for said water pipe facing in the same direction, said water pipe having its ends turned in the same direction and thereby adapted to be entered into said openings from one direction.

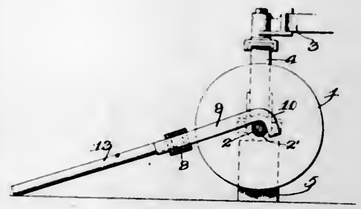
1,886,535. VEHICLE WHEEL NAVE CONSTRUCTION. CAROLUS L. EKSERGIAN, Detroit, Mich., assignor to Budd Wheel Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed May 29, 1930. Serial No. 457,093. 4 Claims. (Cl. 301—9.)

1. A vehicle wheel comprising, in combination, a hub, a flange on said hub, a wheel body having a hollow nave portion with an opening therethrough for the reception of a securing bolt and a clamp adapted to abut the wheel about said opening and having a portion adapted to enter said



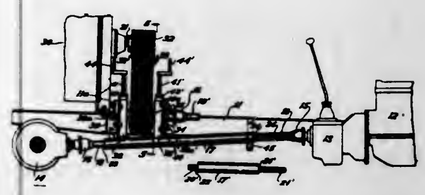
opening, said clamp being constricted adjacent the inner axial extremity of said portion to provide a seat for a securing nut within the hollow nave of the wheel.

1,886,536. TOOL REST. LAWRENCE M. ENDRES, Waunakee, Wis. Filed Aug. 16, 1930. Serial No. 475,832. 1 Claim. (Cl. 51—166.)



A tool mount for sharpening discs of farm implements comprising a block constituting a tool rest and support, the block including a centrally disposed body portion and pairs of laterally extending ears, the body portion having a centrally disposed bore, each pair of ears having openings therein parallel with and in the same horizontal plane as the bore, a forwardly extending supporting hook having a shank and a bill thereon for engaging the farm implements between a pair of the discs thereon, the shank being slidably received in the bore whereby the block can be moved toward and away from the discs, and rearwardly extending diverging ground engaging supporting legs received in the openings of the ears.

1,886,537. SELECTIVE POWER TRANSMISSION. WILLIAM M. EVANS and GRAYDON EVANS, near East Sparta, Ohio. Filed Feb. 4, 1932. Serial No. 590,916. 8 Claims. (Cl. 180—53.)



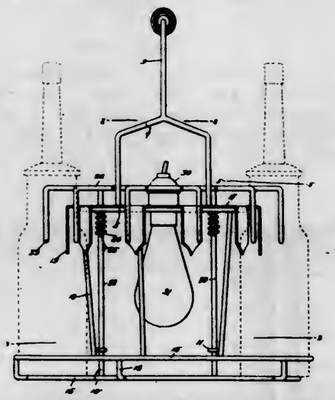
1. In a motor vehicle having power transmitting means, a drive shaft, means for detachably connecting the drive shaft to the power transmitting means, a power driven

apparatus having driving connections, means for adjusting the driving connections relative to the power transmitting means, an auxiliary drive shaft, and coupling means for providing a detachable longitudinally slidable driving connection between one end of the auxiliary shaft and the driving connections and between the other end and the power transmitting means.

1,886,538. METHOD OF PREPARING HEPTALDEHYDE. EMIL C. FANTO, Fairfield, Conn., assignor to McKesson & Robbins, Inc., Bridgeport, Conn., a Corporation of Maryland. Original application filed Apr. 24, 1929, Serial No. 357,885. Divided and this application filed June 10, 1930. Serial No. 460,300. 1 Claim. (Cl. 260—138.)

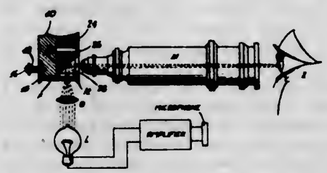
The method of preparing heptaldehyde comprising the steps of subjecting castor oil to destructive distillation under a pressure of substantially thirty to forty mm. of mercury, collecting the distillate produced at the temperatures below 300° C., subjecting said distillate to fractionation and collecting the fraction covering the range from 147° C. to 165° C.

1,886,539. DISPLAY RACK. HULDA M. FELDKAMP, Elkhart, Ind. Filed Mar. 30, 1931. Serial No. 526,369. 4 Claims. (Cl. 211—74.)



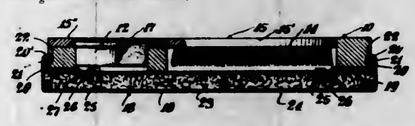
1. A rack structure of the class described including a ring, rods depending from the ring, an annular tray mounted about the lower ends of the rods, a plate on the ring, rods slidable through openings in the plate within the ring, spring pressed means for urging the second mentioned rods downwardly, and means on the rod above the plate for holding receptacles in the tray against accidental displacement.

1,886,540. FILM SOUND RECORDING. ROYAL E. GRANT, Yonkers, N. Y., assignor to Radio Corporation of America, a Corporation of Delaware. Filed Oct. 11, 1930. Serial No. 488,011. 7 Claims. (Cl. 274—5.)



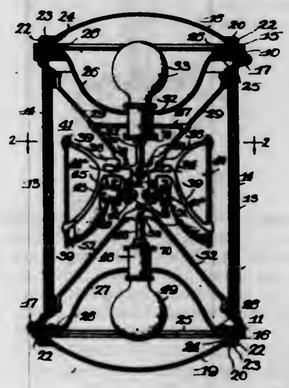
5. A photophonographic sound recording apparatus which includes a sound recording drum upon which the film upon which the sound is being recorded is adapted to be supported, a recording light, means for focusing an image of said light upon said film, reflecting means arranged within said drum for reflecting said image, and observing means for observing the image of said recording light upon said film.

1,886,541. SHOE POLISHING OUTFIT. ISAAC GRODSKY, Brooklyn, N. Y. Filed May 16, 1930. Serial No. 452,848. 1 Claim. (Cl. 15—231.)



A shoe polisher comprising in combination with an elongated rectangular rigid body having transverse grooves in its ends, of a resilient pad, a plate of spring metal on the upper surface of said pad, said plate having apertures near its ends and raised inturned beads at its end edges to engage the grooves in said body, hooks having heads set in said pad to extend through the plate apertures thereby to bind the plate to said pad, a textile polishing strip covering the lower surface and ends of said pad, said strip extending over the plate beads, and hooks fixed in the ends of said strips to engage in the plate apertures, whereby when the beads are forced into the grooves of said body they draw the strip taut.

1,886,542. LANTERN. GEORGE W. HAIRE, Chicago, Ill., assignor to King Luminaire Company, a Corporation of Illinois. Filed Mar. 16, 1931. Serial No. 522,875. 10 Claims. (Cl. 240—112.)

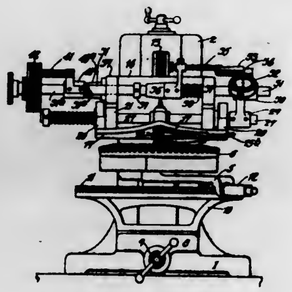


2. A lantern comprising a casing having a reflector adjacent one end thereof, glass panels in the sides of said casing, lamp supporting means in said casing, a lamp supported by said means in adjustable relation with respect to said reflector, a pair of supporting brackets adjustably secured to said supporting means, a reflector carried by each of said brackets, and a lamp socket for each of said reflectors, said sockets being adjustable on said brackets to permit of the adjustment of said lamps with reference to the respective reflectors.

1,886,543. APPARATUS FOR TESTING GEAR TEETH. GUSTOF L. HANSEN, Detroit, Mich., assignor to The Gear Grinding Machine Company, Detroit, Mich. Filed Feb. 17, 1928. Serial No. 254,924. 10 Claims. (Cl. 73—51.)

1. A machine for testing the contour of the teeth of a beveled gear comprising in combination a support for

the gear adapted to hold it with its axis in fixed position, a pivoted member adapted to engage a tooth of the gear, means for holding said member at an angle corresponding



to the bevel of the gear with its pivot at a right angle thereto, a measuring device and means for transmitting to the measuring device the movement of said member about its pivot as the gear is rotated.

1,886,544. MASSAGING DEVICE. PAUL L. HEMP, Winona, Minn. Filed Nov. 5, 1930. Serial No. 493,526. 2 Claims. (Cl. 128—59.)



1. A massaging device having in combination, a supporting head, a handle projecting therefrom, a pair of axles projecting from said head substantially at right angles to each other and substantially at right angles to the axis of said handle, spherical rollers of resilient material rotatably mounted on said axles, said rollers being of such size that the surfaces thereof are substantially in contact, whereby when said rollers are pressed and moved along the skin, a pinching action of the skin and flesh is effected.

1,886,545. BUCKLE. FRED HIRSH, New York, N. Y., assignor to Adjusta Company, New York, N. Y., a Corporation of New York. Filed Nov. 3, 1931. Serial No. 572,801. 2 Claims. (Cl. 24—186.)



1. An integral slide buckle stamped from a plate of sheet metal and having two end bars and a middle bar and two transverse slots between the bars narrow relative to their length, said middle bar being in a plane above and substantially parallel to the planes of the other bars and having on one of its edges a short tooth extending upwardly at an incline to terminate in a plane not substantially above the top of the bar.

1,886,546. GOVERNOR FOR FLUID MOTORS. JOHN R. HOFFMAN, Madison, Wis., assignor to Madison-Kipp Corporation, Madison, Wis., a Corporation of Wisconsin. Filed Oct. 10, 1931. Serial No. 568,151. 21 Claims. (Cl. 137—140.)



1. The combination of a casing adapted for the passage of fluid therethrough; a shaft mounted for rotation in said casing; and a valve mounted on said shaft for rotation therewith, said valve including a rubber portion stretchable by centrifugal force to control the flow of fluid through the casing.

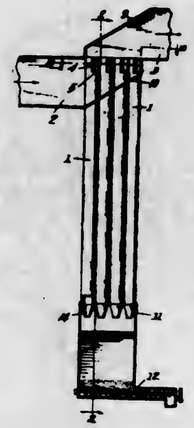
1,886,547. DESIGN FORMING APPARATUS FOR WOVEN FABRICS AND THE LIKE. JOSEF HOFFMANN, Oerlinghausen, Germany. Filed Mar. 5, 1930, Serial No. 433,286, and in Germany Mar. 9, 1929. 3 Claims. (Cl. 91—12.)

1. In a design colouring apparatus for fabrics, a series of movable colour-applying elements fitted relatively to each other to form a determined pattern design, a holder for the series, and means for effecting bodily movement of the holder, and thus of the arranged elements thereon, transversely of and longitudinally of a fabric to be treated.

1,886,548. MEANS FOR TREATING GASES. GEORGE H. HOENE, Glendale, and MARCEL A. LISSMAN, Los Angeles, Calif., assignors to International Precipitation Company, Los Angeles, Calif., a Corporation of California. Filed Apr. 22, 1929. Serial No. 356,921. 9 Claims. (Cl. 183—83.)

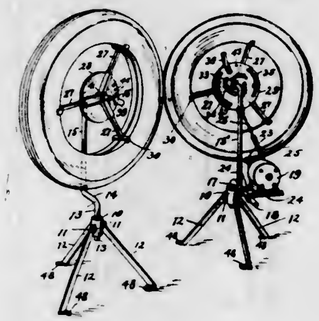
1. Means for separating suspended material from gases comprising a gas inlet header, a plurality of vertically extending separator tubes each provided at its upper portion with an inlet opening communicating with the inlet header and with means for directing the gas from the inlet header through said opening tangentially into the tube, a tubular deflector extending within each separator tube and forming an outlet passage for the gas, said tubular deflector separating said inlet opening from said

outlet passage, a material-receiving bin communicating with the lower end of all of said separator tubes to receive and accumulate separated material and means



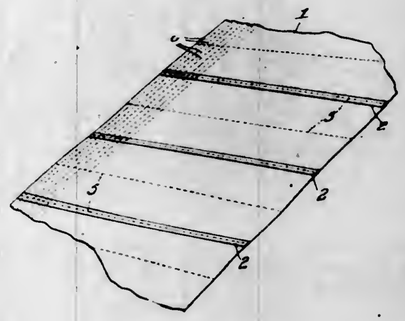
for controlling communication between the respective separator tubes and the material receiving bin to prevent circulation of gas between the tubes through said bin.

1,886,549. TIRE DISPLAY STAND. ROY C. HOWELL, Lakewood, and FRANK A. FLEMING, Cleveland, Ohio. Filed June 21, 1929. Serial No. 372,589. 5 Claims. (Cl. 211—20.)



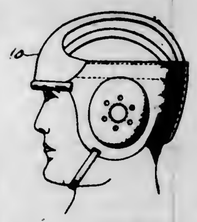
1. In a tire display stand, a spindle, a carrier mounted to rotate upon said spindle, whereby the tire may be turned through any desired angle, and tire gripping arms movable upon said carrier uniformly into tire gripping position, whereby the tire is centered with respect to said spindle, and means for locking the operating means in any one of a series of operative positions.

1,886,550. ART OF GUMMING PAPER. FERDINAND W. HUEMPFNER, Oak Park, Ill., assignor to Mid-States Gummed Paper Co., a Corporation of Illinois. Filed Nov. 13, 1930. Serial No. 495,516. 3 Claims. (Cl. 154—43.)



1. A process for gumming a paper web, comprising preliminarily gumming a strip of paper on both sides, securing the strip to the paper web by means of the adhesive on one side of said strip, and cutting said web to form a plurality of stripe, each of which is equipped with a portion of said first mentioned gummed strip.

1,886,551. HELMET. RALPH R. JONES, Evanston, Ill. Filed Sept. 28, 1931. Serial No. 565,651. 2 Claims. (Cl. 2—8.)

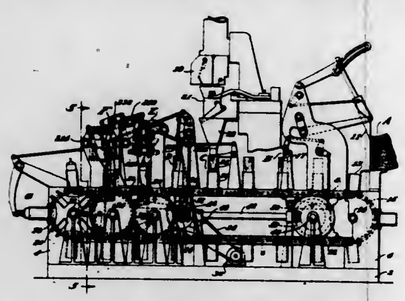


1. A helmet of the character described, including; an outer protective shell; a plurality of horizontal radial strap portions with their outer ends attached to the shell adjacent its periphery; and a sweat-band attached to the inner ends of said strap portions and permanently spaced thereby a sufficient distance from the shell to prevent contact between the band and the shell, said horizontal strap portion being of sufficient length to provide a free space between the sweat-band and the shell.

1,886,552. BAG CLOSING AND FASTENING MACHINE. WILLIAM A. JOPLIN, Norfolk Downs, Mass., assignor to Pneumatic Scale Corporation, Limited, Quincy, Mass., a Corporation of Massachusetts. Filed June 20, 1931. Serial No. 545,777. 18 Claims. (Cl. 93—6.)

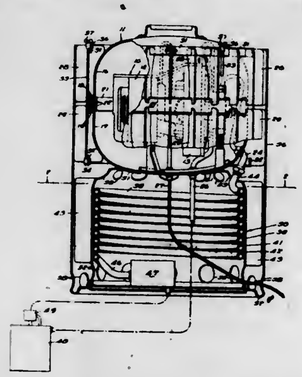
1. In a bag closing and fastening machine, in combination, means for operatively supporting a filled bag, means for engaging and rolling the upper portion of the

mouth of the bag to close the same, said means remaining in engagement with the mouth of the bag to retain control thereof during the entire rolling operation, and



means for moving a clamping member into engagement with the rolled portion of the bag to retain it in bag closing position.

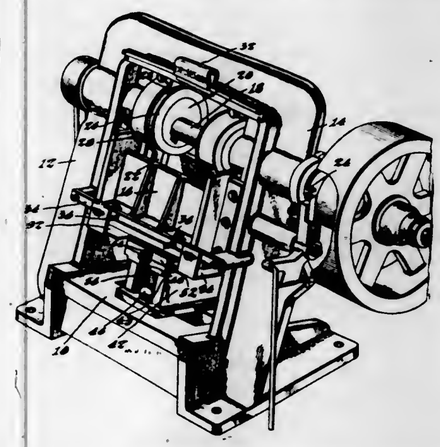
1,886,553. REFRIGERATING APPARATUS. ARTHUR J. KERCHER, Berkeley, Calif. Filed Feb. 17, 1930. Serial No. 429,087. 4 Claims. (Cl. 257—36.)



1. In a refrigerator, a condenser comprising a hollow metal member, a tube adapted to conduct refrigerant to be condensed and coiled within said member, said tube being in good heat conducting contact with said member and cooling fins disposed on the outer surface of said member and in good heat conducting contact with the same.

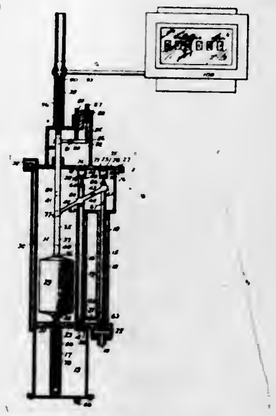
1,886,554. PERFORATING MACHINE. GEORGE KNIGHT, Brockton, Mass., assignor to Benjamin W. Freeman, Cincinnati, Ohio. Filed Jan. 14, 1924. Serial No. 686,153. 77 Claims. (Cl. 164—93.)

33. A perforating machine comprising a frame having fixed platen guides; a reciprocating platen movable in said guides; a fixed bed arranged in a plane substantially at right angles with the path of the platen, and extending under the latter, an anvil manually movable on the bed and provided with punches adapted to cooperate with the platen, the bed and anvil being provided with complemental guide elements, adapted and arranged to guide the anvil in a path parallel with the plane of the bed, and permit anvils of different widths to be used interchangeably with the bed, without change or adaptation of the guide elements, the frame, the bed, and the anvil being formed and arranged to provide spaces at the opposite sides of the anvil, and below the upper surface thereof for hands holding the work; the frame being provided with a fixed transverse rod, located above the path of the anvil, and downwardly facing hand guards detachably secured to the rod and overhanging said spaces, said guards being extended inward from their forward



ends, to protect the operator's fingers when the anvil is in different operative positions, and laterally adjustable on the rod, so that they may conform in position to anvils of different widths.

1,886,555. LIQUID METERING AND REGISTERING MECHANISM. PAUL KRAUSE, West Babylon, Long Island, N. Y., assignor of one-third to Harry Taylor and one-third to Rudolph H. Posner, West Babylon, Long Island, N. Y. Filed Mar. 12, 1930. Serial No. 435,062. 17 Claims. (Cl. 73—28.)

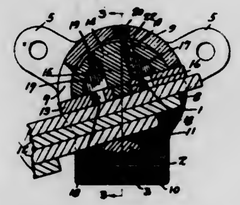


11. In a liquid metering mechanism, a float movable upwardly by the pressure of liquid admitted into said mechanism, means for controlling the admission and discharge of liquid into and from said mechanism, means for operatively connecting said controlling means to the float, and adjustable means yieldable in one direction for adjusting vertical pressure put upon the float by said liquid during the final part of the movement of the float, and thereby determining the quantity of liquid necessary to operate said controlling means, said yieldable means serving to limit the downward movement of the float.

1,886,556. PROCESS OF MAKING COLOR-PRINTING PLATES. JOHN M. KENNAN, Toronto, Ontario, Canada. Filed Mar. 26, 1931. Serial No. 525,609. 7 Claims. (Cl. 95—5.1.)

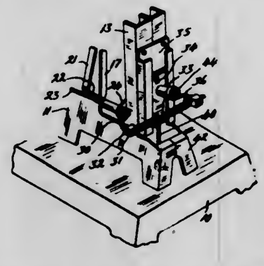
1. In a process of making color-printing plates the steps which consist in making ordinary "color-separation" negatives from an original representing the three primary printing colors red, yellow and blue; making positives from said negatives; superimposing a positive taken from the blue color separation negative on the yellow color separation negative to serve as a corrective "cut-out"; superimposing a positive taken from the blue color separation negative on the yellow color-separation negative to serve as a corrective "cut-out"; superimposing on a blue color-separation negative a positive taken from a color-separation negative representing light of a longer wave length; and, with a camera, producing a positive of each combination by light transmitted therethrough.

1,886,557. MEANS FOR MOUNTING VEHICLE FRAMES. JOHN B. KONETSKY, San Francisco, Calif. Filed June 19, 1929. Serial No. 372,067. 2 Claims. (Cl. 267—56.)



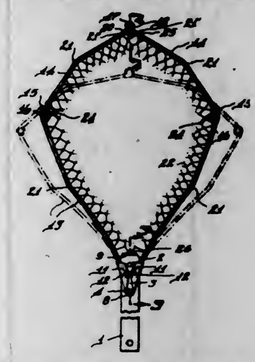
1. Mounting means for a leaf spring comprising a cylindrical bracket, having openings on opposite sides to allow the spring end to extend therethrough, and a bearing overlying the spring and revolvable in the bracket, the bearing comprising a hollow, substantially semi-cylindrical member, a central radial stud therein and a bearing plate fastened to the stud and slidably overlying the spring end.

1,886,558. TOASTER. FRANK KUHN and LAURENCE H. THOMAS, Detroit, Mich., assignors to American Electrical Heater Company, Detroit, Mich., a Corporation of Michigan. Filed July 8, 1929. Serial No. 376,690. 15 Claims. (Cl. 53—5.)



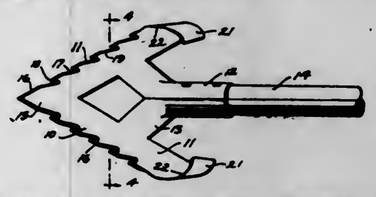
1. In a toaster, a toast holder, and means for moving said toast holder to toasting and non-toasting positions, said means including a yieldable member operable in one position to urge said toast holder to toasting position and operable in a second position to urge said toast holder to non-toasting position, means for moving said yieldable member to one of said positions, and means for slowly returning said yieldable member to the other of said positions.

1,886,559. FOLDING LANDING NET. CHARLES F. LARENBERG, Fond du Lac, Wis. Filed May 29, 1930. Serial No. 457,175. 3 Claims. (Cl. 43—12.)



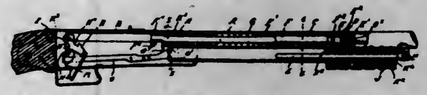
1. A landing net comprising a handle having a bracket pivotally mounted thereon, flanges formed on the sides of said bracket and bent over in a manner to receive pivot pins, a plurality of spring-like pivotally connected bow members pivotally attached to said pins, and a U shaped clip positioned at the pivotal connection, said flanges on said brackets and said U-shaped clip causing the resilience of said members to maintain said sections in a distended position.

1,886,560. WEEDING TOOL. JOHN E. LEE, Dallas, Tex., assignor, by direct and mesne assignments, to Wonder Hoe Company, Fort Worth, Tex., a Corporation of Texas. Filed June 19, 1931. Serial No. 545,460. 6 Claims. (Cl. 97—68.)



1. In a tool of the class described, a horizontally acting hoe having blades diverging at an angle substantially less than ninety degrees provided with cutting edges and spaced notches in said edges, each notch of the blades having a long side and a short side and ample portions of the cutting edges being provided between the notches, and a handle attached to the hoe.

1,886,561. GUN. CHARLES F. LEEFEVER, Plymouth, Mich., assignor to Daisy Manufacturing Company, Plymouth, Mich., a Corporation of Michigan. Filed Oct. 14, 1929. Serial No. 399,634. 9 Claims. (Cl. 124—10.)

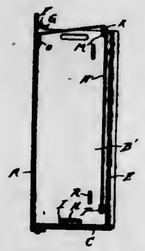


1. In a gun, the combination with a false barrel and a frame integral therewith, said false barrel having an air compression cylinder formed therein with a piston abutment at the forward end of said cylinder, of a plunger spring and abutment unit insertable into said frame and false barrel from the rear end thereof, a trigger, a sear and a pivot for said trigger and sear extending through said frame and forming an anchor for said spring abutment.

3. In an air gun, the combination with an air cylinder, of a plunger therefor comprising a headed member having

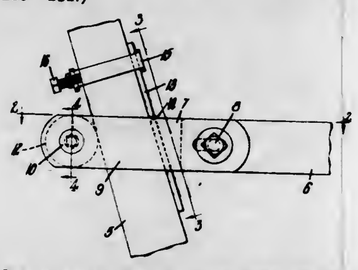
a tapered shank, a cup shaped packing sleeved upon said shank and bearing against said headed member and a washer pressed on said tapered shank to be fixed thereon, said washer bearing against said cupped packing and retaining the same upon said headed member.

1,886,562. TARGET. CHARLES F. LEFEVER, Plymouth, Mich., assignor to Daisy Manufacturing Company, Plymouth, Mich., a Corporation of Michigan. Filed Jan. 12, 1931. Serial No. 508,222. 4 Claims. (Cl. 124—15.)



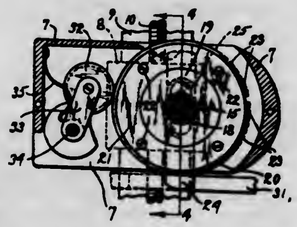
1. A renewable target comprising a collapsible frame, a target card engageable with said frame when in extended position and a curtain secured to said frame and depending from the upper end thereof in rear of said card.

1,886,563. LUG STRAP FOR LOOMS. HOMER F. LIVERMORE, Brookline, Mass., assignor to Guaranteed Parts, Inc., Allston, Mass., a Corporation of Massachusetts. Filed May 12, 1931. Serial No. 536,753. 3 Claims. (Cl. 139—151.)



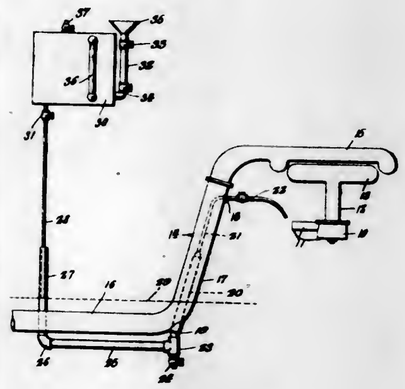
1. A lug strap of the character described having, in combination, a pair of side bars, a rigid spacer for said side bars, whereby the latter are positioned a predetermined distance apart, a flexible striker member mounted to rotate upon said spacer, and means to clamp the spacer and striker member between the side bars.

1,886,564. LUMBER STAMPING DEVICE. GUS LUNDEN, Colville, Wash. Filed Mar. 28, 1931. Serial No. 525,999. 5 Claims. (Cl. 101—5.)



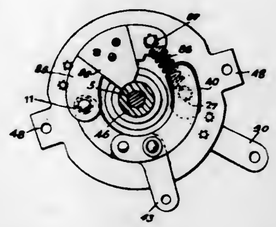
5. A lumber stamping device having in combination a casing, a rotary stamping element mounted within the casing with a portion of its periphery disposed exteriorly thereof, a locking dog for said element normally projecting exteriorly of the casing, and stop means for the dog whereby the rotary stamping element is locked in stationary position when said element has been caused to complete one revolution.

1,886,565. HUMIDIFIER FOR EXPLOSIVE ENGINES. GEORGE A. MACHIN, Sacramento, Calif. Filed May 21, 1930. Serial No. 454,404. 1 Claim. (Cl. 123—25.)



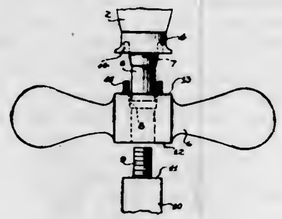
A humidifier for an internal combustion engine comprising a source of water supply, a conduit in the form of a U-shaped loop and having one arm adjacent the said source and the other arm disposed longitudinally within a vertical portion of the exhaust manifold of such engine to provide for heating and vaporizing of the water in said arm of the conduit, a valved discharge on the outer end of the conduit for delivering water vapor to the air intake of the carburetor of such engine, and means for governing the level of the water in that portion of the conduit within the exhaust manifold, consisting of a pipe leading in the adjacent arm of said conduit.

1,886,566. IGNITION TIMER. MARION MALLORY, Toledo, Ohio, assignor to The Mallory Research Company, a Corporation of Delaware. Filed Nov. 20, 1929. Serial No. 408,612. 19 Claims. (Cl. 123—117.)



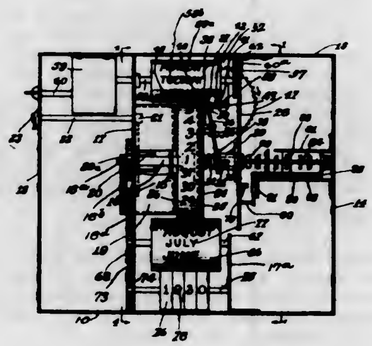
10. An ignition timer comprising a rotatable shaft, a cam shiftable with respect to the shaft to vary the times of ignition, a brake operable to retard said cam, and means connected with the throttle to increase the action of said brake as the throttle is opened.

1,886,567. SWORD. GEORGE L. MARRIS, Rochester, N. Y. Filed May 7, 1930. Serial No. 450,567. 4 Claims. (Cl. 30—9.)



4. A sword comprising a blade having a threaded tang and a shoulder at the base of the tang, a handle having a projecting portion internally threaded to receive the threaded tang, and having a shoulder at the base of the projecting portion, and a guard mounted on the said projecting portion of the handle and clamped between the shoulders of the blade and handle.

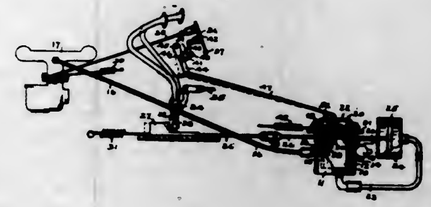
1,886,568. MECHANICAL CALENDAR. JOSEPH MAYER, New York, N. Y. Filed Sept. 8, 1930. Serial No. 480,335. 3 Claims. (Cl. 40—111.)



1. In a mechanical calendar, a drum having graduated thereon the days of the month, a drum having graduated thereon the days of the week, said first named drum having perforations thereon equal to the number of days of the longest month, means for rotating said first-named drum, a normally projecting locking pin adapted to be normally engaged in any one of the perforations in said first-named drum, a right angle projection on the end of said locking pin, a clock-actuated gear wheel, means cooperating with said gear and pin for releasing said pin from engagement with said first-named drum and means for jumping said drum from the 28th numeral to the 1st numeral, comprising a rotatable member having a plurality of fins of varying lengths peripherally mounted thereon at right-angles to the plane of rotation and a plurality of pins of varying lengths projecting from said drum adapted to engage said fins.

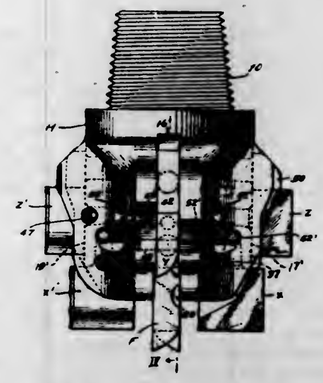
1,886,569. AUTOMATIC CLUTCH AND BRAKE CONTROL. VIRGIL H. MEDLOCK, near Bloomington, Ind. Filed Mar. 31, 1932. Serial No. 602,138. 10 Claims. (Cl. 192—.01.)

1. In a control system for an automobile having an engine intake, the combination of a clutch throw-out lever; a brake actuating lever; a throttle lever; a chamber; a movable member within the chamber adapted to be shifted in the chamber upon a difference in pressure existing in the chamber on each side of the member; a cam block adjacent said clutch and brake levers adapted to be shifted thereagainst to rock the levers; a rod connecting said block and said member; a valve having a communicating passageway with said chamber; a shiftable plug in said valve; a vacuum pipe line between said valve and said intake; a pair of levers pivotally connected with said plug member, said levers being pivotally interconnected whereby the rocking of one lever will normally rock the other lever; a stop carried by said connecting



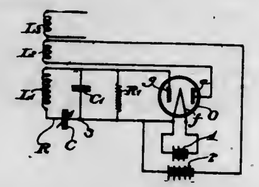
rod against which one of said plug levers may rock; and a rod connected to the other of said levers adapted to be shifted by said throttle lever; said valve having an air inlet port, and said valve plug being formed to provide communication between said vacuum line and said chamber, between said air inlet port and the chamber, and to close off said vacuum line and said port, upon selective shifting of said plug as determined by the travel of said throttle actuated rod and as modified by movement of said stop whereby the position of said cam block relative to said clutch and brake pedals may be controlled by the shifting of said throttle lever to affect the position of said valve plug.

1,886,570. WELL DRILLING TOOL. CLAUDE W. METZGER, Houston, Tex., assignor to Haynes Stellite Company, a Corporation of Indiana. Filed Dec. 13, 1927. Serial No. 239,729. 4 Claims. (Cl. 255—61.)



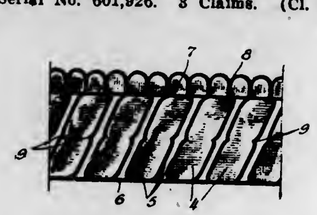
4. A well drilling tool comprising a head having an end face provided with intersecting slots in the surface thereof; a center bit secured in one of said slots and extending across said intersection; a pair of blades secured in another of said slots, one blade on each side of and spaced from said bit, and said blades having end cutting edges located at a greater radius from the center of the bit than the end cutting edges of said bit and located in a plane to the rear of the cutting edge of said bit.

1,886,571. RADIO RECEIVING SYSTEM. JOHN M. MILLER, Philadelphia, Pa., assignor to Atwater Kent Manufacturing Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed July 23, 1930. Serial No. 470,016. 10 Claims. (Cl. 250—20.)



1. In a heterodyne receiving system, a detector, means for impressing thereon signal-representing oscillations, a local oscillator comprising a vacuum tube having an output system coupled to its input system, inductance and a plurality of condensers, one of fixed capacity, all in series with each other in a loop in said input system, connections from the terminals of said condenser of fixed capacity to the input electrodes of said tube, means for varying the capacity of another of said condensers to vary the frequency of the locally generated oscillations, and means for impressing upon said detector a voltage produced by the locally generated oscillations and varying within narrow limits throughout the frequency range of the locally produced oscillations.

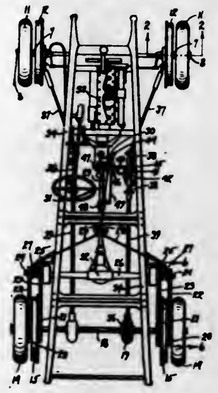
1,886,572. TRIMMING FOR DRESSES AND THE LIKE. JOHN MOSMANN, North Bergen, N. J. Filed Mar. 30, 1932. Serial No. 601,926. 3 Claims. (Cl. 41—34.)



3. As a new article of manufacture, a trimming comprising a body portion consisting of a plurality of spaced panels extending diagonally and transversely of said body portion, the edges of adjacent panels being provided with opposed indentations therein, and a scalloped edging extending along one longitudinal edge of said body portion, the latter being folded upon itself on a line coincident with said indentations to form another scalloped edge for the trimming opposite said scalloped edging.

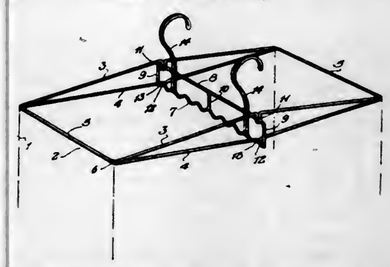
1,886,573. MOTOR VEHICLE CHASSIS. CHARLES S. NELSON, Sandpoint, Idaho. Filed Aug. 5, 1931. Serial No. 555,163. 2 Claims. (Cl. 105—215.)

2. A motor vehicle chassis having in combination a pair of hub members adapted to be revolubly mounted on the forward stub axles of the chassis, said hub members comprising a pair of drums eccentrically disposed in diametrically opposite relation, a ground engaging wheel revolubly mounted on one of said drums and a track engaging wheel revolubly mounted on the other drum, a rear axle, a pair of drums eccentrically disposed in diametrical relation on the end portions of said rear axle, a ground engaging wheel revolubly mounted on one of said drums and a track engaging wheel revolubly mounted on the other wheel of each pair, a driven shaft, sprocket and chain means whereby said driven shaft is arranged to rotate the wheels on the rear axle, clutch means whereby either the ground engaging wheels or the track engaging wheels are simultaneously rotated, a drive shaft for propelling the driven shaft, a gear formed on each of the forward hub members, a pair of gears fixed in spaced relation on the rear axle, a system of shafts connectedly mounted on either side of the chassis, a worm on both ends of both shaft systems, the worms on the forward ends of said shafts in mesh with the gears on the forward hub members and the worms on the rear ends of said shafts in mesh with the gears on the rear axle, clutch means interposed in the shaft system on one side of the chassis, sprocket and chain



means whereby the driving shaft is arranged to rotate said clutch means, lever means for shifting the clutch means whereby the clutch means imparts rotary movement to its system of shafts and whereby said shaft system imparts rotary movement to one of the forward hub members and to the rear axle, the rear axle adapted to impart rotary movement to the other shaft system thereby rotating the other forward hub member, and auxiliary clutch means whereby the driven and driving shafts are disconnected while the aforesaid shaft systems are in operation.

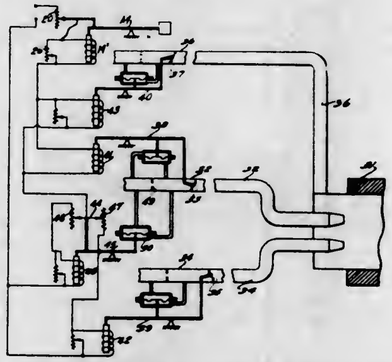
1,886,574. SPREADER AND HANGER FOR WARDROBE BAGS. WILLARD D. NORMANDY, Detroit, Mich., assignor to Lederer Manufacturing Company, a Corporation of Michigan. Filed Nov. 5, 1930. Serial No. 493,630. 2 Claims. (Cl. 312—6.)



1. A spreader and hanger for a wardrobe bag or the like embodying a main frame comprising upper and lower resilient frame bars at each side of the frame and a cross bar at each end of the frame, said side and end bars being rigidly connected at their ends to resist and limit spreading movement of the upper and lower side bars of each pair except to a degree permitted by their natural resiliency, the upper frame bars being provided centrally of their length with pivot eyes and the lower side frame bars with keeper loops, and a swinging hanger frame comprising an upper transverse bar pivoted in the eyes of the upper side frame bars, a lower transverse bar having looped portions for frictional binding engagement with the keeper loops of the lower side frame bars,

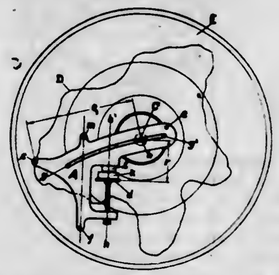
whereby to spread the side frame bars apart and to lock the hanger frame in spreading position at right angles to the main frame under the tension of the spread side frame bars, end bars rigidly connecting the ends of the upper and lower cross bars of the swinging frame, a stay rigidly connecting said upper and lower cross bars of the swinging frame intermediate their ends, and a suspending member rigidly connected with the upper and lower cross bars of the swinging frame.

1,886,575. MULTIPLE FLOW REGULATION. GEORGE K. O'CONNOR, Fairlawn, N. J., assignor to Smoot Engineering Corporation, New York, N. Y., a Corporation of Delaware. Filed Aug. 10, 1931. Serial No. 556,063. 11 Claims. (Cl. 158—119.)



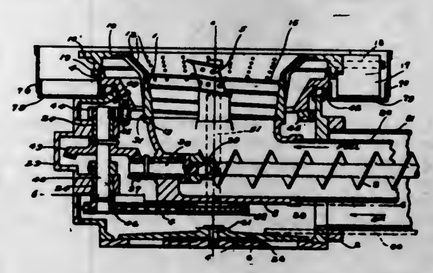
1. An electrical regulating system for maintaining the sum of linear functions of a plurality of flow quantities in proportion to a single flow quantity which comprises in combination an electrical circuit having a plurality of parallel branches, means for maintaining a predetermined total current through said circuit, a balancing device responsive to a force varying as the square of the total current through said circuit and to a force varying as the square of the single flow quantity for controlling said single quantity upon departure from balance of said forces, and a plurality of other balancing devices each associated with one of said other quantities and adapted to control the same in response to a force varying as the square thereof and to a force varying as the square of the current through one of said branches.

1,886,576. INTEGRATOR. LUDWIG OTT, Kempten, and HEINZ ADLER, Frankfort-on-the-Main, Germany, assignors to the Firm A. Ott, Kempten, Germany, a Partnership formed by Ludwig Ott and Hermann Ott. Filed May 21, 1931, Serial No. 539,090, and in Germany Nov. 27, 1930. 4 Claims. (Cl. 33—122.)



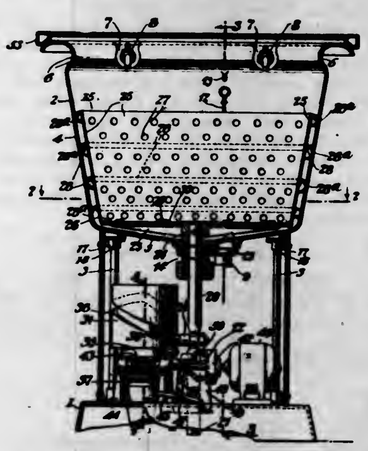
1. In an integrator for the evaluation of polar diagrams, in combination a follower, a fixed polar director, curved means on said follower for engaging slidably said fixed polar director, a stylus fixed to the said follower laterally of said means, and an integrating roller mounted on the said follower.

1,886,577. COAL BURNING APPARATUS. ADOLPH OUSDAHL, Seattle, Wash., assignor to Automatic Coal Burner Co., a Corporation of Washington. Filed Feb. 10, 1925, Serial No. 8,295. Renewed Dec. 1, 1930. 26 Claims. (Cl. 110—45.)



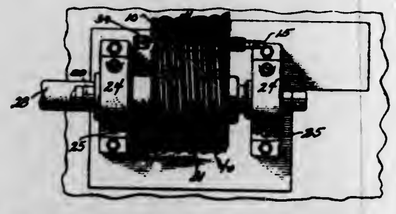
1. In coal burning apparatus, a cup, means for feeding fuel upward therethrough, an annular burner forming an upward extension of said cup, means for rotating said burner relative to said cup, said burner having apertures thereabout for the admission of air, and having a helical rib extending about its inner wall to a point above the lower limit of said apertures.

1,886,578. WASHING MACHINE. EMIL PEDRAZZO, West New York, N. J. Filed Apr. 10, 1930. Serial No. 443,074. 9 Claims. (Cl. 68—37.)



1. A washing machine comprising a water receptacle having downwardly converging inner side walls making a materially smaller angle with the vertical than with the horisontal; and a laundry receptacle mounted for vertical reciprocation within said water receptacle and having downwardly converging foraminous outer side walls of material depth opposed to said converging walls of the water receptacle and inclined similarly to them, whereby they will approach the opposed walls of the water receptacle upon the descent of the laundry receptacle, to force the water laterally inward through the foraminous walls and into the laundry receptacle, the bottom of said receptacle being foraminous also.

1,886,579. GRINDING MACHINE. THOMAS C. PEW, Ann Arbor, Mich., assignor to Hoover Steel Ball Company, Ann Arbor, Mich., a Corporation of Michigan. Filed Aug. 12, 1930. Serial No. 474,752. 11 Claims. (Cl. 51—79.)

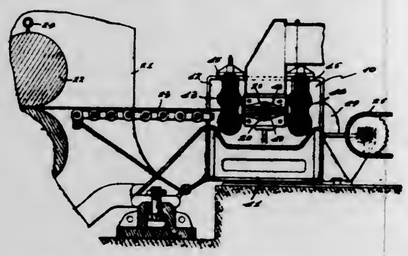


1. The method of manufacturing and mounting an externally grooved grinding machine mandrel or drum and thereby insuring accurate positioning and axial rotation thereof which comprises accurately grooving and forming said drum and the drum shaft with which it rotates from a single piece of stock so that they are integral with each other, securing journals to projecting ends of said drum shaft, supporting said journaled ends in bearings, regulating the end play of said drum and shaft by threading into said bearing a nut through which a journaled drum shaft end projects, said nut bearing against an annular formation on said shaft end, and coupling an axially rotating driving means to one of said projecting ends.

1,886,580. PROCESS OF DEHYDRATING GLAUBER SALT. JAMES B. PIERCE, Jr., Charleston, W. Va., assignor to Barium Reduction Corporation, Charleston, W. Va., a Corporation of Delaware. Original application filed Dec. 8, 1928, Serial No. 324,810. Divided and this application filed Sept. 15, 1931. Serial No. 562,995. 3 Claims. (Cl. 23—121.)

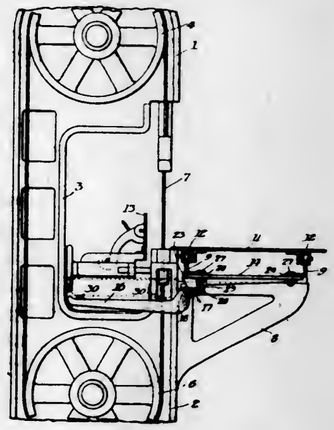
1. The method of dehydrating Glauber salt, which consists in mixing with sodium sulphate dekahydrate while in a liquid phase, a sufficient quantity of dehydrated sodium sulphate to convert the mass into a substantially solid phase condition corresponding substantially to damp sand, whereby the liquefaction of the mass when heated above 32° C. is substantially prevented and then continuously feeding said mixture into a furnace heated to a temperature approximately 600° C. while continuously removing the dehydrated salt so obtained from said furnace.

1,886,581. METHOD OF TREATING STEEL. FREDERICK W. PITTS, Detroit, Mich., assignor to Michigan Steel Corporation, Detroit, Mich., a Corporation of New Jersey. Filed Feb. 21, 1929. Serial No. 341,786. 2 Claims. (Cl. 148—4.)



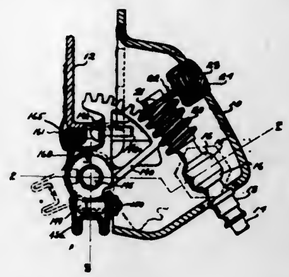
2. In the method of manufacturing sheets and the like, those steps which consist in passing the sheet in a substantially horizontal plane between a pair of headers, ejecting steam from said headers upon opposite sides of the sheet to clean the same, and passing the sheet through a pair of rolls for partially removing the condensate therefrom.

1,886,582. TRAY SUPPORT. FORTUNAT PONTON, Chicago, Ill., assignor to Vaughan Company, Chicago, Ill., a Corporation of Illinois. Filed Mar. 16, 1931. Serial No. 523,016. 10 Claims. (Cl. 146—88.)



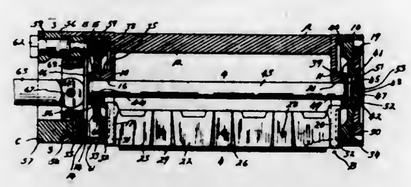
2. In a cutting machine of the class described, a cutting tool, a work table support adjacent said tool, a work table slidable on said support toward and from said tool and a tray support adapted to support a tray adjacent said tool, said tray support comprising a pair of arms pivotally connected, one of said arms being secured to said support, the other of said arms being movable into a position upon the other side of said tool from said work table.

1,886,583. WINDSHIELD OPERATOR. ALBERT T. POTTER, Detroit, Mich., assignor, by mesne assignments, to Ainsworth Manufacturing Corporation, Detroit, Mich., a Corporation of Michigan. Filed Oct. 6, 1928. Serial No. 310,712. 18 Claims. (Cl. 296—84.)



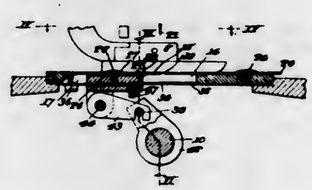
1. In a windshield operating device, a gear segment adapted to be secured to the movable windshield member and adapted to be rotated, a hub on said segment having a depending lug, said hub adapted to enter the windshield frame through a suitable opening and said frame adapted to be fixed thereto to prevent relative rotation of the hub and frame, and a vertically extending ear on said frame extending above the opening through which said hub is inserted and means for fixing said ear to the said segment.

1,886,584. HONE. MAURICE N. PRANGE, Detroit, Mich., assignor to Ellen May Prange, Detroit, Mich. Filed Nov. 7, 1927, Serial No. 231,730. Renewed July 21, 1932. 9 Claims. (Cl. 51—184.4.)



1. In a lapping tool, a cage, a stone holder carried by said cage, a stone within said holder, and means for clamping said stone within said holder at an angle to the median plane thereof, said means including a resilient plate arranged within the said holder and at one side of the said stone, and a threaded member carried by the said holder and engaging the said plate.

1,886,585. MACHINE FOR EXTRACTING THREADS FROM WOVEN FABRICS. EMIL PRAZAK, Elizabeth, N. J. Filed Apr. 2, 1931. Serial No. 527,821. 17 Claims. (Cl. 112—78.)



1. In a machine of the character described, a cutter plate having a slot therethrough, a fixed cutter blade adjustably positioned on the cutter plate, a carriage mounted to reciprocate in a right line, a cutter blade mounted thereon, spring means engaging the carriage for slidably holding its cutter blade with an upward pressure against the under side of the cutter plate, an oscillating cutter shaft, a crank pin on the shaft, and a swinging hook carried by the carriage for operatively connecting the shaft to the carriage.

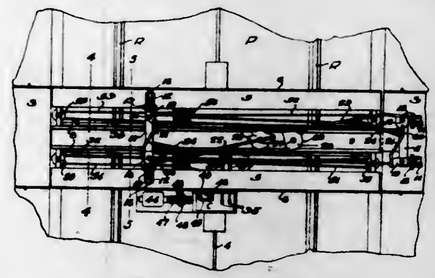
1,886,586. DRYING OIL. LANNING PARKE RANKIN, Dover, N. J., assignor to Hercules Powder Company, Wilmington, Del., a Corporation of Delaware. Filed Oct. 18, 1927. Serial No. 227,055. 10 Claims. (Cl. 134—56.)

1. The method of producing a drying oil, which includes polymerizing a pine derivative and subjecting the polymerized product to ozonization.

1,886,587. METHOD OF PREPARING XANTHATES OF TERPENE ALCOHOLS. LANNING PARKE RANKIN, Dover, N. J., assignor to Hercules Powder Company, Wilmington, Del., a Corporation of Delaware. Filed Jan. 9, 1930. Serial No. 419,751. 17 Claims. (Cl. 260—99.)

1. The method of preparing a xanthate of a terpene alcohol, which includes heating a terpene alcohol with an alkali metal at a temperature above the boiling point of the terpene alcohol and under a pressure such as to avoid substantial loss of the terpene alcohol prior to reaction thereof with the alkali metal and combining the alcoholate produced with carbon disulphide to form a xanthate.

1,886,588. TRANSFER TRUCK. ROYAL N. RIBLET, Spokane, Wash. Filed Feb. 29, 1932. Serial No. 595,873. 14 Claims. (Cl. 104—50.)



1. A vehicle-transfer apparatus comprising guiding means and a reciprocable member combined with said means, means for operating said member, propelling means pivotally mounted on said member for engagement with the vehicle, and mechanical actuating means responsive to the movement of said member for pivotally moving the propelling means alternately to active position and to inactive position.

1,886,589. FILM PACK. HERBERT CHARLES RICH, Bedford, and BERTRAM VINCENT STORR, Ilford, England, assignors to Ilford Limited, Ilford, Essex, England, a British Company. Filed Apr. 10, 1931, Serial No. 529,082, and in Great Britain Dec. 23, 1930. 20 Claims. (Cl. 95—22.)

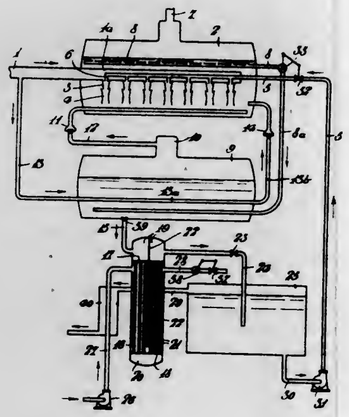


1. The combination with a film pack of the kind comprising a flat rectangular case to contain a number of superposed films, each of which is attached to a draw tab, and a partition dividing the case into a front exposure compartment having a window through which the films may be exposed, and a rear light-tight compartment, and having in the rear compartment of the case a plush-lined aperture through which the draw tabs protrude, of means to prevent the withdrawal of a film through the aperture by a pull on its draw tab in one direction but to permit of the complete withdrawal of a film through the aperture by a pull on its draw tab in another direction, and an internal lining for the case comprising a sheet of flexible material which is provided with a window registering with and of slightly smaller dimensions than the window in the exposure compartment of the case.

1,886,590. UTILIZATION OF EXCESS STEAM AND HOT GASES. CURT ROSENBLAD, Stockholm, Sweden. Filed Jan. 21, 1931, Serial No. 510,294, and in Sweden Jan. 27, 1930. 10 Claims. (Cl. 257—62.)

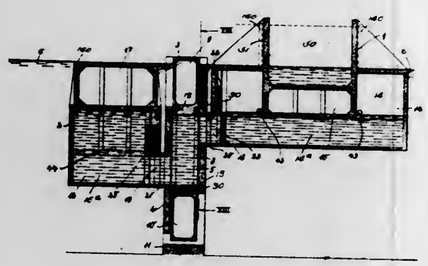
1. In a device for utilizing condensable and non-condensable hot gases containing impurities, for heating purposes, a jet condenser, a pipe for supplying a cooling

liquid to said condenser, a valve in said pipe means for adjusting said valve automatically to give the hot liquid formed in said condenser a temperature immediately below the boiling point thereof, a heat exchanger having two



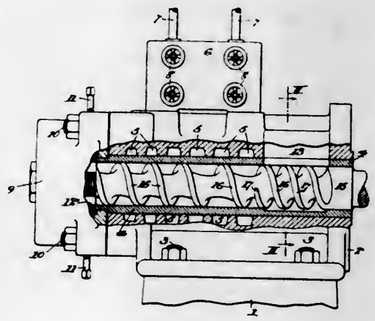
spaces separated by heat transmitting walls, a pipe for passing the hot liquid from said condenser through one of said spaces in said heat exchanger, and a pipe for passing a second, substantially pure medium through the other of said spaces.

1,886,591. SLUICE OR LOCK. LEOPOLD ROTHMUND, Stuttgart, Germany. Filed Oct. 23, 1929, Serial No. 401,773, and in Germany Nov. 1, 1928. 10 Claims. (Cl. 61—9.)



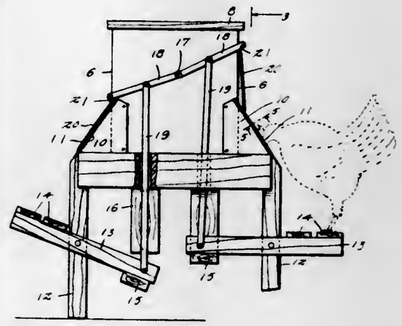
1. In a lock in combination, a water-filled basin, a high-walled floating trough, a body of water in the bottom portion of said trough, the top portion forming a displacing chamber, a ballast chamber below said trough, a floating reservoir alongside of said trough, a displacing chamber and a ballast chamber in said reservoir, the displacing chamber of said trough being, in head water position, above the water level, the displacing chamber of said reservoir below the water level in said basin.

1,886,592. STOCK SCREW FOR EXTRUDING MACHINES. VERNON E. ROYLE, Paterson, N. J. Filed June 1, 1929. Serial No. 367,750. 9 Claims. (Cl. 18—12.)



1. A stock screw for extruding machines, said screw having a plurality of portions provided with a single thread and a plurality of portions provided with a plural thread.

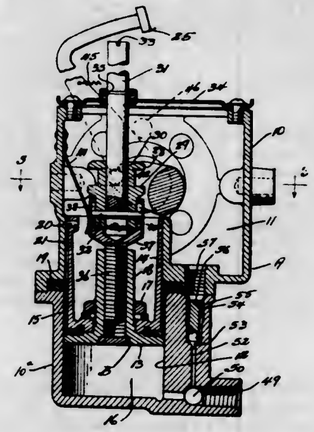
1,886,593. POULTRY FEEDER. ALVIN V. RUPPRECHT, Fayetteville, Ark. Filed Apr. 30, 1931. Serial No. 534,038. 1 Claim. (Cl. 119—55.)



In a poultry feeder, a feed hopper having a bottom and a side wall terminating at a point above the bottom to provide a feed outlet, the said bottom being projected beyond the said side wall to provide a trough bottom, a vertical wall extending along a longitudinal edge of the trough bottom forming a trough front wall, end walls for the trough having top edges extending at an inclination from the trough front wall to the said side wall of the hopper to a point a substantial distance above the bottom edge thereof, a cover for the trough comprising a plate of greater length than the trough and having its ends resting against the inclined top edges of the trough end walls, means for preventing longitudinal movement of said plate on the trough comprising a flange along the lower edge of the plate which terminates at each end short of the adjacent plate end and which positions between the said trough end walls, said flange resting upon the top edge of the front wall of the trough

when the plate is in trough covering position, and means operated by the weight of a fowl approaching the trough for sliding said cover plate upwardly along the inclined edge of the trough end walls.

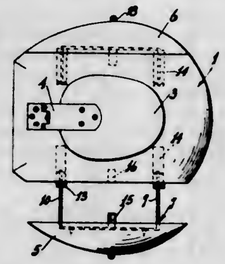
1,886,594. BRAKE. FREDERICK W. SAMPSON, Detroit, Mich., and JOHN W. TATTER, Chicago, Ill.; said Sampson assignor to Continental Motors Corporation, Detroit, Mich., a Corporation of Virginia, and said Tatter assignor to Lewis Differential Company, Chicago, Ill., a Corporation of Illinois. Filed Mar. 8, 1929. Serial No. 345,293. 10 Claims. (Cl. 60—54.6.)



1. In a fluid brake system, a master cylinder structure, a piston, a brake device, fluid pressure transmitting means intermediate the master cylinder structure and brake device, said master cylinder structure having a fluid reservoir, a conduit intermediate the reservoir and pressure transmitting means, a valve in said conduit and within the master cylinder structure, and means associated with said conduit and adapted for connection with a suction producing device whereby the system may be drained of fluids.

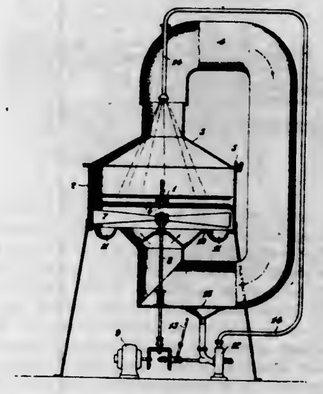
10. A master cylinder for brake systems comprising cooperating casing structures respectively provided with coaxial cylinders one of greater diameter than the other, a piston structure slidably engaging the walls of one of said cylinders and extending into the other, and a flexible sealing element intermediate the piston and said cylinder of greater diameter and adapted to stretch on piston movement.

1,886,595. BABY SANITARY TOILET SEAT. EDWIN G. SANDQUIST, Wilmington, Calif. Filed Apr. 9, 1932. Serial No. 604,195. 4 Claims. (Cl. 4—239.)



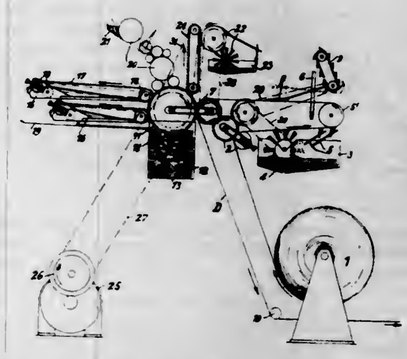
1. In a baby sanitary toilet seat having a central hole therein, a cover for said hole, a hinge attached to said cover, a pair of arm sections one on each side of the seat, a U shaped bracket attached to each of the arm sections, said brackets comprising a pair of depending arms, said seat having recesses to receive said arms, and means engaging said arms whereby they are held in vertical position.

1,886,596. APPARATUS FOR TREATING FILMS. MICHAEL SCHLÖMER, Cologne-Mülheim, Germany. Filed Apr. 16, 1930, Serial No. 444,860, and in Germany Apr. 23, 1929. 2 Claims. (Cl. 95—89.)



1. An apparatus for treating with reagents in the gaseous or liquid state films wound up with a space between the layers comprising a circular container provided with a gas-tightly closing lid, a film spool holder arranged within the container, closely arranged below the film spool holder in the container a propeller, means for rotating the propeller, a circular connection between the bottom and the lid of the container, said connection being formed by a tube of large cross-section, a pipe of small cross-section branched off from the lowest part of the circular connection between the bottom and the lid of the container, said branched pipe being introduced into the upper part of the container and terminating by a sprinkler and means for moving a liquid through said branched pipe.

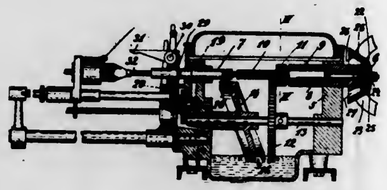
1,886,597. PRINTING DEVICE. WALTER SCHWABE, Zurich, Switzerland. Filed Oct. 3, 1929, Serial No. 397,058, and in Germany Oct. 12, 1928. 7 Claims. (Cl. 91—67.9.)



1. A method of imprinting a running web-shaped surface, comprising uniformly applying to the surface an initial colour in the form of a viscous colouring substance,

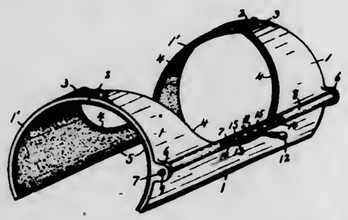
squeezing said colouring substance subsequently off the web in certain places thereof, and applying another non-miscible colouring substance, in the places where the previously applied colouring substance is squeezed off.

1,886,598. COP WINDING MACHINE. WALTER SCHWEITER, Horgen, near Zurich, Switzerland. Filed Dec. 3, 1930, Serial No. 499,795, and in Germany Jan. 28, 1930. 4 Claims. (Cl. 242—18.)



1. In the combination of a cop winding machine having a rotating and reciprocating spindle comprising a spindle shaft terminating in a pinion, a drive shaft for said spindle shaft coaxial therewith, a bearing for said spindle shaft formed in said drive shaft, coupling means between said drive shaft and spindle shaft for simultaneously allowing relative longitudinal motion between said shafts and enforcing the rotational movement of the drive shaft upon the spindle shaft, an auxiliary shaft adjacent said drive and spindle shafts, a gear mounted on said shaft engaging said pinion, and a cam also mounted on said shaft for reciprocating said spindle.

1,886,599. BRAKE TESTING DEVICE. HENRY A. SLINGERLAND, Syracuse, N. Y. Filed Dec. 10, 1927. Serial No. 239,126. 2 Claims. (Cl. 265—1.)

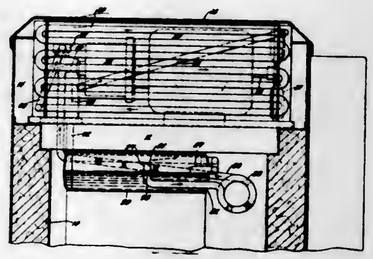


1. In a device for testing the brakes of motor vehicle wheels having resilient tires, a clamp having opposed jaws spring-pressed toward each other for frictionally engaging opposite sides of the tire, a guide mounted on one of the jaws, a plunger movable along the guide, a spring for holding the plunger in a normal position, means operable at will for moving the plunger against the action of said spring, and means for indicating the amount of movement of the plunger from its normal position.

1,886,600. METHOD OF PLASTICIZING UREA-FORMALDEHYDE CONDENSATION PRODUCTS. LEONARD SMIDTH, New York, N. Y., and RAY H. CRIST, Grantwood, N. J., assignors to Luco Products Corporation, Brooklyn, N. Y., a Corporation of Delaware. Filed Aug. 22, 1928. Serial No. 301,424. 5 Claims. (Cl. 18—55.)

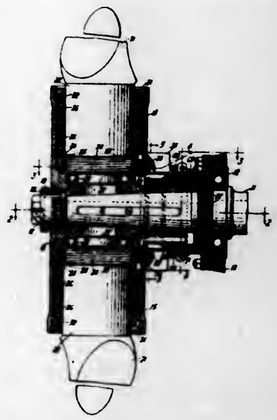
2. Plasticizing a previously cast solid urea-formaldehyde condensation product, after it has been dried and aged for removing the strains from the material, by subjecting it to a high temperature for a short time and shaping the product while in its plastic condition.

1,886,601. REFRIGERATOR. RUSSELL T. SMITH, Greenville, Mich., assignor to Gibson Refrigerator Company, Greenville, Mich., a Corporation of Michigan. Filed June 26, 1931. Serial No. 547,160. 1 Claim. (Cl. 62—115.)



In a refrigerator having a mounting board with a motor, compressor and condenser above and secured to said board, and an evaporator below and secured to said board, conduits connecting the compressor and condenser, the condenser and evaporator, and the evaporator and compressor, the conduit from the evaporator to the compressor having a vertically upstanding vapor receiving open part in the evaportor provided with an aperture in its side at substantially the normal liquid level therein, said conduit also being provided with a depending loop portion extending well below said level.

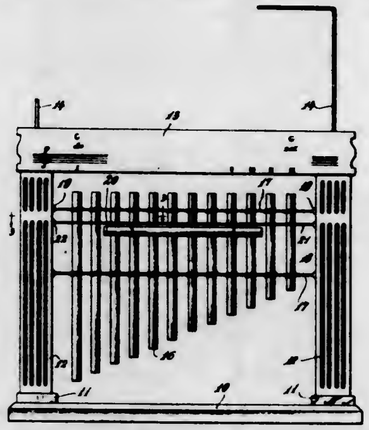
1,886,602. VARIABLE PITCH PROPELLER. SAMUEL B. SMITH, Rocky River, Ohio. Filed Jan. 16, 1931. Serial No. 509,148. 18 Claims. (Cl. 170—163.)



1. In a variable pitch propeller, a hub, a propeller blade mounted in said hub, gear means carried on said hub and connected with said blade, non-rotative gear means mounted adjacent said hub, means for moving said gear means relative to each other to cause them to engage whereby the pitch of the propeller blade can be varied and adjustable means in said first named gear means for positively controlling the limits of the pitch variation.

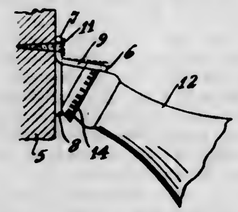
1,886,603. TUBULAR CHIMES. MAURICE ARNOLD STROTHOTTE, New York, N. Y. Filed Oct. 15, 1929. Serial No. 399,850. 2 Claims. (Cl. 84—403.)

2. In a musical instrument of the character described, the combination, with a plurality of parallel tubular chimes each capable of producing one of the tones of the diatonic major scale, of one or more parallel auxiliary tubular chimes of different tones in the musical scale, each a semitone distinct from that of either of the two adjacent



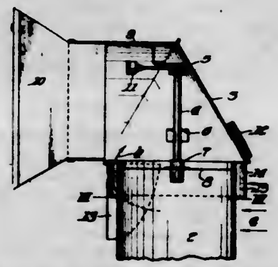
chimes in the tone sequence of the afore-said diatonic major scale; said auxiliary chimes being directed transversely of the afore-said plurality of tubular chimes.

1,886,604. BOTTLE OPENER. JOE L. TEAVER, Birmingham, Ala., assignor to Joe L. Teaver, Nicholas J. Peters, and C. N. Comati, a Copartnership. Filed Sept. 10, 1931. Serial No. 562,031. 2 Claims. (Cl. 65—46.)



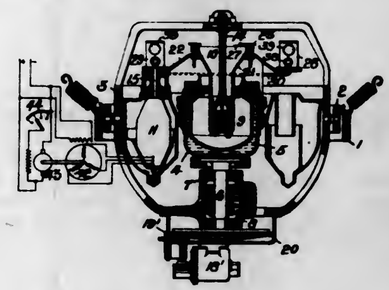
1. A bottle opener of the character described, formed of integral bent wire comprising a ball-like crown removing portion, and a base portion formed with eyes above the crown removing portion and with ends bent inward and downward to extend below the crown removing portion.

1,886,605. VENTILATOR. HARRY A. THOMAS, Pittsburgh, Pa. Filed May 3, 1929. Serial No. 360,141. 2 Claims. (Cl. 98—68.)



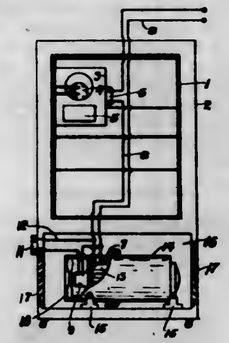
2. In combination with a cylindrical conduit, a rotatably mounted elbow-shaped coping having a laterally extending delivery pipe, and a vane, and provided with a vertically depending skirt annularly spaced around and extending below the top of the conduit, and having a supplemental vertical downwardly extending air collecting apron at one side portion of the coping skirt projecting downwardly beyond it.

1,886,606. CONSTANT PERIOD GYROCOMPASS. HERBERT H. THOMPSON, Mountain Lakes, N. J., and ERIC C. SPARLING, Garden City, N. Y., assignors, by mesne assignments, to Sperry Gyroscope Company, Inc., a Corporation of New York. Filed May 20, 1927. Serial No. 192,999. 7 Claims. (Cl. 33—226.)



4. In combination with a gyroscopic compass having a synchronous motor rotor drive, of means for keeping the period constant, comprising means for varying the speed of the supply generator for said motor in accordance with the latitude.

1,886,607. REFRIGERATING SYSTEM. HARRY R. VAN DEVENTER, New York, N. Y., assignor, by mesne assignments, to Frigidaire Corporation, Dayton, Ohio, a Corporation of Delaware. Filed Mar. 14, 1927. Serial No. 175,245. 8 Claims. (Cl. 62—4.)

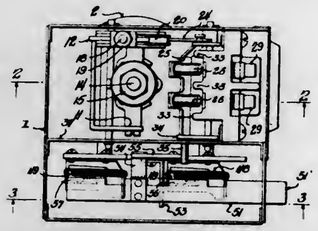


1. In an automatic refrigerating apparatus, in combination, a motor, a thermostat for controlling said motor, a compressor, auxiliary cooling means for said motor and compressor comprising a motor driven fan, a tubular casing housing said motor, compressor and auxiliary cooling means, and a second thermostat for controlling said auxiliary cooling means.

1,886,608. AUTOMATIC SWITCH. HERMON L. VAN VALKENBURG, Wauwatosa, Wis., assignor to Square D Company, Detroit, Mich. Filed May 14, 1931. Serial No. 537,250. 4 Claims. (Cl. 200—83.)

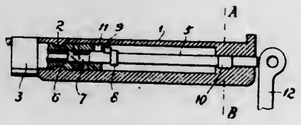
1. A control device comprising fluid condition responsive means; an electric switch normally operated by said

fluid condition responsive means; and a plurality of electrical overload devices, each acting independently, for



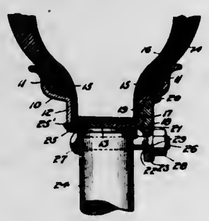
holding said switch open upon the occurrence of an electrical overload; and manual means for resetting said overload devices.

1,886,609. BREECH BOLT FOR AUTOMATIC FIREARMS. RUDOLF VON FROMMER, Budapest, Hungary. Filed Oct. 25, 1930, Serial No. 491,131, and in Hungary Nov. 9, 1929. 1 Claim. (Cl. 42—3.)



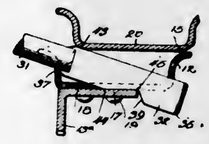
In an automatic fire arm of the kind having a straight-pull breech comprising a sleeve portion, and a block portion adapted to be rotated and displaced axially with respect to the sleeve portion, a firing pin around which the said block portion is rotatable, a spring adapted to press backwards said firing pin, means preventing said firing pin from rotation in the said sleeve portion, a hammer adapted to strike the rear end of the said firing pin, a projection and a retaining surface one of them being provided on the firing pin and the other on the block portion, the retaining surface having a cavity interrupting said retaining surface, said projection being adapted to penetrate into said cavity, the latter being arranged to be aligned with said projection only in the fully bolted position of the breech.

1,886,610. VEHICLE WHEEL. JAMES H. WAGENHORST, Jackson, Mich. Filed Aug. 2, 1924. Serial No. 729,685. 1 Claim. (Cl. 301—19.)



The combination of a wheel body and a plurality of securing bolts carried thereby near the periphery thereof, a demountable rim seated on the periphery of said wheel body and having a rim base and a portion projecting inwardly therefrom, said portion having a plurality of apertures formed therein, a plurality of securing lugs engaging the side of said portion and having riveting studs extending laterally into said apertures and upset, each of said lugs having a bolt hole adapted to receive the end of one of said securing bolts and an outer portion underlying and supporting the rim base at the adjacent side of the rim, and nuts screwed on the ends of said bolts and engaging said lugs to hold the demountable rim seated on the periphery of said wheel body.

1,886,611. RIM TOOL. JAMES H. WAGENHORST, Jackson, Mich. Filed Aug. 8, 1928. Serial No. 298,340. 2 Claims. (Cl. 157—1.)



1. A one-piece tool for collapsing a resilient transplit tire rim of the type having integral tire-retaining flanges and a plate secured to the rim base at one end thereof, bridging the split, and detachably secured to the rim base at its other end, comprising a cam of rectangular cross section adapted for insertion and rotation between said plate and the detachably associated end of the rim base, said cam being of substantially the same length as the width of said rim base, having flat parallel cheeks substantially equal in width to the height of the tire-retaining flanges of the rim and having straight parallel edges of lesser width square with the cheek surfaces, and a crank so integrally attached to the rear end of said cam with its arm or throw disposed in the plane of the broad axis of said cam that said cam may be inserted flatwise between said plate and the detachably associated end of the rim base may then be manually axially rotated through said crank to bring its parallel edges into square resting contact with the plate and said detachable end of the rim base, separating said rim ends radially and permitting lapping thereof, and may finally be employed, with said crank as an extension, as a lever fulcrumed upon said plate to effect subsequent lateral separation of said rim ends and complete collapse of said rim.

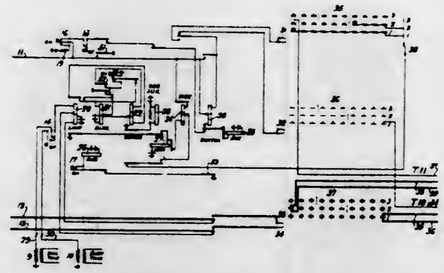
1,886,612. PROCESS OF MAKING MOTOR FUEL FROM LIGHT OIL. FRED W. WAGNER and FORREST L. MCINTIRE, Pittsburgh, Pa. Filed Mar. 5, 1930. Serial No. 433,497. 4 Claims. (Cl. 196—38.)

1. The process of making motor fuel from crude light oil obtained from coal, comprising washing it with the equivalent of about .4% by volume of 66° Bé. sulphuric acid, removing the sludge, neutralizing the oil, treating it with the equivalent of about .4% by volume of caustic soda solution containing 140 grams per litre, and distilling it under partial vacuum while maintaining its temperature below the decomposition temperature of gum-forming constituents and sulphur-containing hydrocarbons.

1,886,613. TELEPHONE SYSTEM. JOHN WICKS, Oak Park, Ill., assignor, by mesne assignments, to Associated Electric Laboratories, Inc., Chicago, Ill., a Corporation of Delaware. Filed Dec. 14, 1931. Serial No. 580,779. 7 Claims. (Cl. 179—18.)

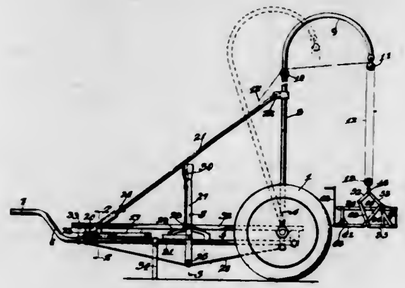
1. In a two-motion selector switch having its bank contacts divided into parallel rows and having a motion in one direction to select a contact row and a motion in another direction to select a set of contacts in a selected row, means for assigning all of said contact sets to groups of trunk lines, said trunk line groups being

equal in number to the rows of contacts, and means effective when the assignment is made so that the number of contact sets assigned to the several groups are unequal



for causing the selector to respond to the designation of a trunk line group by hunting for and extending connection to any idle contact set assigned to such group.

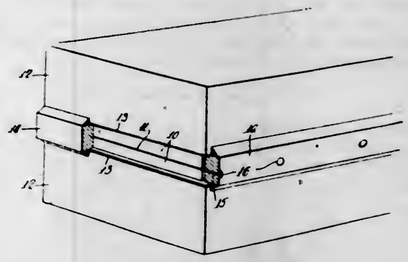
1,886,614. LIFTING AND CONVEYING DEVICE. AUGUST E. WOLKOW, Hartford, Wis. Filed July 11, 1930. Serial No. 467,245. 2 Claims. (Cl. 212—9.)



1. A lifting and conveying device including a body frame, traction means for supporting said body frame, a pivoted frame carried by the traction means, guide bars carried by the main frame, a cross bar having its ends slidably mounted beneath said guide bars with its ends turned upwardly, guide sleeves connected to said upwardly turned ends, brace rods having one end pivotally connected to the pivoted frame and the other end slidably mounted in said sleeves, stop members carried by the brace rods and arranged at predetermined points upon opposite sides of said sleeves for limiting the movement of the brace rods, manually actuated means having connection with the cross bar for adjusting said sleeves in the body frame, whereby to tilt the pivoted frame to either side of the vertical, and a clamping frame adjustably supported by the pivoted frame.

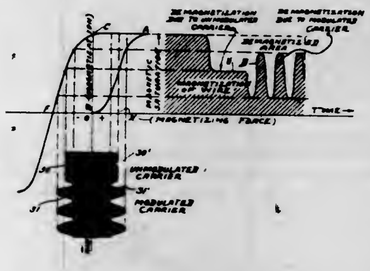
1,886,615. MANUFACTURE OF COMPOSITE METAL SHEETS. WALLACE C. JOHNSON, Morristown, N. J., assignor to The Plykrome Corporation, New York, N. Y., a Corporation of Delaware. Filed Apr. 1, 1932. Serial No. 602,422. 5 Claims. (Cl. 29—189.)

1. The process of making composite metal sheets or plates having corrosion resistant facings, which includes forming a stack in which a pair of corrosion resistant metal plates intended to form the facings of the sheets are sandwiched between a pair of iron or steel slabs, and each spaced from the adjacent slab by a thin layer of iron, welding bars around the edges of the slabs to hold said slabs together, said bars being spaced from the edges of the corrosion resistant plates to permit said



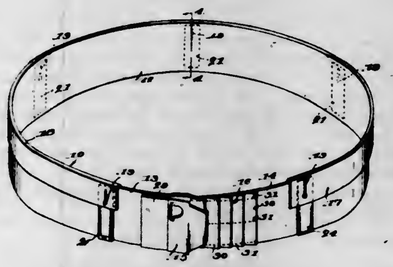
corrosion resistant plates to expand linearly with respect to said slabs, heating the stack, and rolling said stack down to the desired tuickness.

1,886,616. MAGNETIC SOUND RECORDING SYSTEM. JAMES G. ALVERSON, Los Angeles, Calif., assignor to Addison Investment Company, Los Angeles, Calif., a Corporation of California. Filed Mar. 30, 1931. Serial No. 526,325. 23 Claims. (Cl. 179—100.2.)



1. The method of magnetically recording sound on a paramagnetic element, that comprises first magnetizing the element to a saturated state, and then passing the saturated element through a high frequency magnetic field produced by a sound modulated high frequency carrier wave.

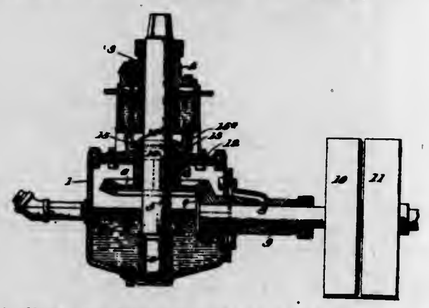
1,886,617. TROUSERS SUPPORT. ADMIRAL LEONADIS ANDREWS, Shawnee, Okla. Filed July 1, 1931. Serial No. 548,178. 2 Claims. (Cl. 241—9.)



1. In combination with a pair of trousers having a waistband, a belt secured to said waistband on the inside thereof and at the lower edge of said waistband, means

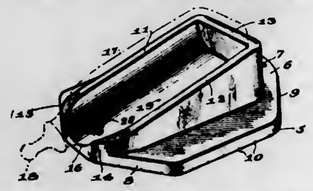
for securing the ends of said belt together comprising a buckle member carried by one end thereof and cooperating buckle engaging elements carried by the other end thereof, said buckle having spaced vertically extending portions and one end of said belt being bent outwardly back upon itself and having said end engaged between said portions, whereby said buckle will be prevented from contacting the body of the wearer.

1,886,618. SLINGER FOR DRIVE UNITS. MORTIMER R. ANSTICE, Rochester, N. Y., assignor to Josiah Anstice & Co., Inc., Rochester, N. Y. Filed Oct. 24, 1930. Serial No. 491,044. 1 Claim. (Cl. 286—5.)



A slinger for drive units having a rotating shaft comprising an elastic body having an opening through which the shaft is adapted to extend for holding said slinger in adjusted position by the elasticity of the body of the slinger, said slinger having upon its upper surface a gutter provided with oppositely disposed spouts.

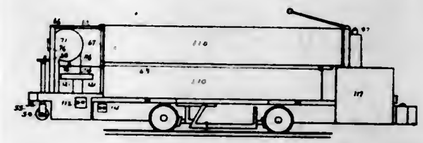
1,886,619. BOTTLE HOLDER FOR BABIES. ANTHONY ARNONE, New York, N. Y. Filed May 18, 1932. Serial No. 612,116. 1 Claim. (Cl. 248—65.)



A bottle holder for babies comprising a receptacle for receiving the bottle having a solid bottom wall curved at its sides, shallow side walls rising at opposite sides of the curved portions of the bottom wall and extending upwardly at the sides only of the contained bottle for freely receiving such bottle, said side walls converging at their forward ends, said bottom wall having a hump at its forward end to engage the breast of the bottle, a rear wall connecting the side and bottom walls against which the bottom of the bottle may be slid to locate the neck of the bottle with respect to the converging walls and hump, wide thin lateral base wings extending to relatively great distance beyond both side walls whereby to give the receptacle lateral stability and a thin rear base wing extending beyond the rear wall to increase the longitudinal stability of the device, said rear wall having an undercut portion to avoid the longitudinal tilting of the bottle out of the holder.

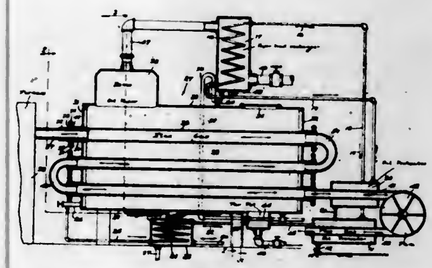
1,886,620. MINE TIMBERING MACHINE. RALPH R. ATKINSON, Princeton, Ind. Filed Feb. 17, 1932. Serial No. 593,567. 1 Claim. (Cl. 262—1.)

In a mine timbering machine, the combination of a self-propelled truck, a compartment on said truck adapted to carry mine timbers, a self-contained sawing unit mounted on one end of the truck and having sliding telescopic connection with said timber compartment, a vertically adjustable jack mounted on the opposite end



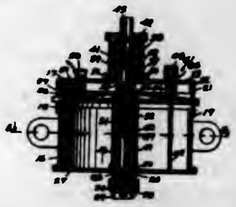
of said truck, a motor on said truck, mechanism driven by said motor for propelling the truck, mechanism driven by said motor for actuating said jack, and a separate motor on said sawing unit for actuating said saw.

1,886,621. CRACKING STILL AND PROCESS. WILLIAM L. BAGWILL, Long Beach, Calif. Filed May 9, 1928. Serial No. 276,394. 6 Claims. (Cl. 196—117.)



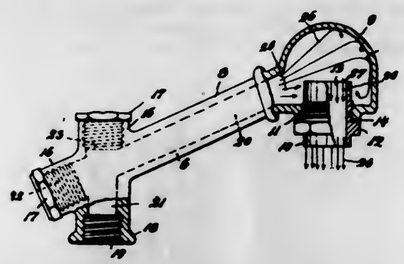
4. A still for cracking oil, having in combination a shell forming a still body of substantially ovate cross section, with flat sides and the apex at the bottom, continuous combustion passages extending through the body from end to end, means to flow oil along the bottom of the shell, out of contact with the flues, means to take off vapors from the top of the shell, a receptacle forming a tar pot connected to the base of the shell to receive the residual oil, means to heat the receptacle for vaporization of the oil, and means to draw off the residual oil from the said receptacle.

1,886,622. LOCOMOTIVE LUBRICATOR. ALBERT R. BAILEY, San Bernardino, Calif. Filed Sept. 25, 1930. Serial No. 484,387. 3 Claims. (Cl. 184—76.)



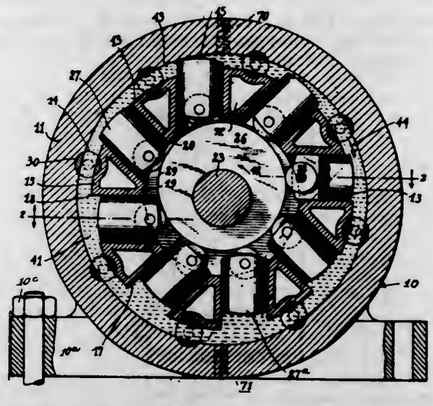
2. A lubricator comprising an oil reservoir having a top, a flange extending upwardly therefrom and provided with an outlet port, a cap removably secured to said flange, a valve seat in the bottom of the reservoir, a cylinder mounted on the cap, a valve stem extending slidably into said cylinder, a plunger reciprocable within said cylinder and engaging said stem, a valve carried by said stem, spring means normally holding said valve upon said seat, means for conducting fluid under pressure to said cylinder to move said plunger downwardly to open said valve, a sleeve extending upwards from the top of the reservoir and encircling said valve stem, and a skirt on said piston extending downwards and surrounding said sleeve.

1,886,623. LIQUID DISPENSING APPARATUS. WILLIAM A. BARNES, Toledo, Ohio, assignor to The Swartzbaugh Manufacturing Company, Toledo, Ohio, a Corporation. Filed July 22, 1931. Serial No. 552,525. 1 Claim. (Cl. 225—35.)



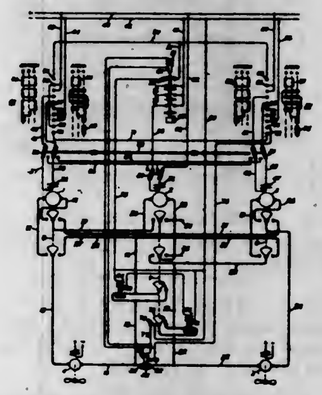
In liquid dispensing apparatus, a pump having an anti-splash discharge device comprising a body portion, passages in said body portion, an enlarged dome-shaped head on the body portion, a nozzle within said head and projecting therefrom, comprising a baffle portion, a threaded portion, and a nut portion and threads within the head adapted to engage the threaded portion of the nozzle to hold the same in liquid-tight engagement with the head, the dome-shaped head being adapted to deflect the stream of liquid forced therein and to permit expelling of the liquid from said head through the nozzle without splashing of the liquid.

1,886,624. ROTARY TRANSMISSION OR BRAKE. STEPHEN BARTON, Astoria, N. Y. Filed Jan. 28, 1930. Serial No. 422,757. 1 Claim. (Cl. 188—91.)



In a mechanism having a shaft, a ring therearound with a liquid channel therein and a plurality of substantially radial cylinders communicating with said channel, each cylinder having a piston; a cam on said shaft operating said pistons, said mechanism also having control means in said channel between each two cylinders, said channel and cylinders being of one integral body having throughgoing ventilating openings between each pair of cylinders, said cylinders and pistons inclining from a true radial direction rearwardly in relation to the direction of rotation of said shaft, and said pistons having similarly rearwardly declining convex bottoms operating in said channel.

1,886,625. POWER PLANT. ROYCE A. BEEKMAN, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed July 24, 1931. Serial No. 552,941. 7 Claims. (Cl. 172—8.)



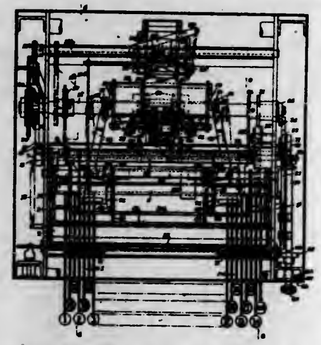
1. A power plant comprising a plurality of motors, a plurality of generators not a multiple of the number of said motors, means for reversing and varying the voltage of a number of said generators which is a multiple of the number of said motors, means for independently connecting to each of said motors at least one of said reversible variable voltage controlled generators and means for connecting all of said generators to said motors only when said reversible variable voltage controlled generators are operating with full field.

7. A power system comprising a plurality of motors, a plurality of generators greater in number than the number of said motors, reversible variable voltage controllers for a plurality of said generators equal in number to a multiple of said motors, selector switches for connecting all of said generators in an uncompleted series circuit with each other and said motors, a contactor for completing said series circuit, contactors for completing circuits between said reversible variable voltage controlled generators and said motors independently of said selector switches, means for closing said contactor for completing said series circuit and for exciting said generators not provided with reversible variable voltage control when said reversible variable voltage controllers are in a predetermined position and said selector switches are set for connecting said remaining generators in circuit with said motors and for deenergizing said contactor and removing excitation from said generators not provided with reversible variable voltage control when said controllers have moved from said predetermined position, and means for closing said contactors for completing circuits between said reversible variable voltage controlled generators and said motors when the excitation of said generators not provided with reversible variable voltage control has been reduced to zero.

1,886,626. TICKET ISSUING MACHINE. HORACE DRUMMOND BLACK, Uxbridge, England. Filed Oct. 30, 1929, Serial No. 403,570, and in Great Britain Nov. 14, 1928. 22 Claims. (Cl. 101—66.)

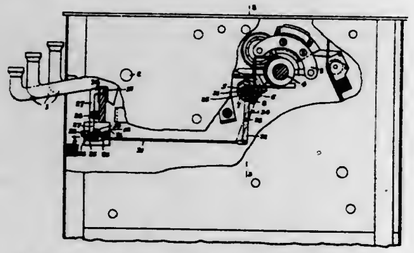
1. In a ticket printing and issuing machine, the combination of a rotatable printing cylinder, at least one type member provided with a plurality of type faces of different denominations movably mounted upon said cylinder setting mechanism operable to control the differential move-

ment of said type member relatively to the said printing cylinder as the same rotates, and manipulating means operable to actuate said setting mechanism to select one



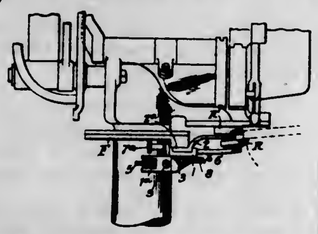
type face of the said member and cause a ticket to be printed and issued bearing an impression from the selected type face.

1,886,627. TICKET-ISSUING MACHINE. HORACE DRUMMOND BLACK, Uxbridge, England. Filed Oct. 30, 1929, Serial No. 403,571, and in Great Britain Dec. 3, 1928. 20 Claims. (Cl. 101—69.)



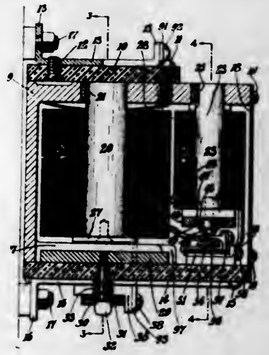
1. In a ticket printing and issuing machine the combination of a printing mechanism provided with a movable type member having a plurality of type faces, means for moving any selected type face into a position for printing upon a ticket, means for operating said mechanism to print a ticket and means operable from a remote control to lock said type member against alteration and simultaneously unlock the machine for operation or to lock the machine against operation and simultaneously unlock said type member.

1,886,628. GAUGE FOR SHOE NAILING MACHINES. HENRY D. BLAIR and HOWARD M. WEST, Johnson City, N. Y., assignors to Endicott Johnson Corporation, Endicott, N. Y., a Corporation of New York. Filed Sept. 25, 1930. Serial No. 484,432. 2 Claims. (Cl. 1—19.)



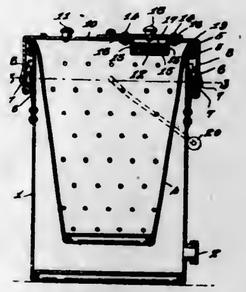
1. A roller work gauge for shoe nailing machines; comprising a bracket attachable to the frame of the nailing machine, an arm adjustably mounted on said bracket, a roller mounted on said arm, a bracket pivotally mounted on the first bracket, means for adjusting the second bracket on its pivot; an arm adjustably mounted on the said second bracket, a roller pivotally mounted on the end of said second arm, a screw for adjusting the second arm on the bracket, and a spring for holding said arm in contact with the screw; said rollers being unyieldably held in position during operation.

1,886,629. ELECTRICAL SWITCH ARRANGEMENT. ELI J. BLAKE, Buffalo, N. Y., assignor, by mesne assignments, to Simplex Equipment Company, Inc., New York, N. Y., a Corporation of Delaware. Filed Nov. 25, 1924. Serial No. 752,173. 32 Claims. (Cl. 200—98.)



1. In apparatus of the character described, in combination, a winding, a movable member of magnetic material adapted to be moved by said coil, a device adapted to be moved by said movable member, and means connecting said device to said movable member, said means including a device for limiting movement in one direction between said movable member and said first-mentioned device and spring means exerting a force greater than the force exerted by said movable member and opposing movement between said two parts in the other direction.

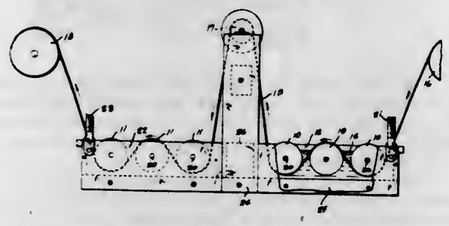
1,886,630. GARBAGE PAIL. AUGUSTUS C. BOUADETTE, Altoona, Pa. Filed Apr. 11, 1930. Serial No. 443,525. 1 Claim. (Cl. 220—87.)



A closure designed to be removably clamped on a garbage pail, said closure having an opening therethrough to afford a passage for garbage, a hingedly supported cover for the opening, said closure having a second opening, a deodorant container having an outwardly flanged mouth disposed opposite the opening, headed studs having their outer portions passed through the closure and the flange for securing the container on the closure, an apertured disc having round openings to receive therethrough the headed studs, a second apertured disc having oppositely directed arcuately arranged key-hole slots to receive the

studs through the enlarged passages thereof and allow said disc to be guided by the studs to bring its apertures into or out of alinement with the apertures in the first named disc, and an operating handle for the last-named outer disc.

1,886,631. CONTINUOUS ELECTRIC STRIP ANNEALING FURNACE. JOHN C. BRADLEY, Waterbury, Conn., assignor to The American Brass Company, Waterbury, Conn., a Corporation of Connecticut. Filed Feb. 15, 1930. Serial No. 428,688. 1 Claim. (Cl. 266—3.)



An annealing device for strip metal comprising a pair of liquid containers, a set of three rollers in each container, the two outer rollers of each set being electrical conducting rollers, means for passing the strip under the outer rollers and over the intermediate roller of each set, electrically conducting shafts for the rollers, a metallic bearing block for the rollers, means for connecting the leads from a source of current supply to the respective blocks to conduct current to the rollers to be transmitted by them directly to the strip, a non-metallic electrical conducting liquid in the containers to cover the contacting surfaces between the outer rollers and the strip, and a guide roller for the strip between the sets of rollers and located above them to remove the strip from the liquid as it passes from one set of rollers to the other.

1,886,632. METHOD FOR HANDLING COAL. FRANK C. BROEMAN, Cincinnati, Ohio. Filed May 14, 1929. Serial No. 363,052. 1 Claim. (Cl. 44—6.)

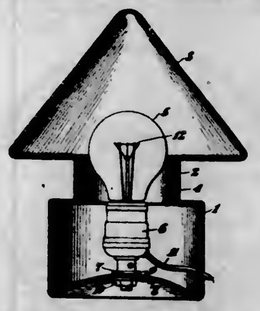
The method of treating coal and coke consisting of atomizing a light mineral oil of approximately 32 gravity having a flash point of approximately 350 degrees F., whereby to provide a fine mist or spray and then tumbling the coal or coke in the presence of the mist or spray, for a length of time sufficient to deposit on the pieces of coal or coke, an enveloping film of oil of such amount as will distribute approximately one gallon of oil over approximately one ton of coal or coke.

1,886,633. COAL AND COKE TREATED WITH OIL. FRANK C. BROEMAN, Cincinnati, Ohio. Filed July 14, 1930. Serial No. 467,980. 3 Claims. (Cl. 44—6.)

1. As a fuel, commercial coal or coke sprayed with a light mineral oil of approximately 32 to 34 gravity in the proportion of approximately one-third gallon to one gallon of oil to each ton of coal or coke.

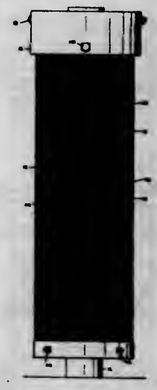
1,886,634. LAMP. CHARLES INNESS BROWN, Queens Village, N. Y. Filed July 29, 1930. Serial No. 471,443. 2 Claims. (Cl. 240—81.)

1. A lamp having a separable light diffusing glass base and shade, said base comprising a hollow body with substantially vertical side walls terminating at the upward ends in a substantially horizontal inwardly directed ledge having an upstanding flange protruding from the inner edge thereof, said shade comprising a hollow body having at its lower end an inwardly directed substantially horizontal portion adapted to form a support for said shade upon said ledge, an incandescent light positioned within said flange and being of smaller diameter than said flange, whereby said incandescent light transmits direct light to



substantially all interior surfaces of said walls and shade to give a substantially uniform glow to all visible parts of the lamp.

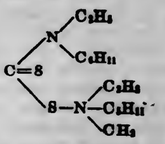
1,886,635. HOG GREASER. MILLARD K. BROWN, Eagle Grove, Iowa. Filed Aug. 5, 1929. Serial No. 383,461. 8 Claims. (Cl. 119—157.)



1. A hog greaser comprising a container adapted to receive a quantity of grease, means at elevation above at least a portion of a quantity of grease when in said container for supporting the container for universal lateral movement, and means adapted to cause grease to be discharged onto an external surface of said container when the container is moved laterally upon its support.

1,886,636. VULCANIZATION OF RUBBER. GIUSEPPE BRUNI and TULLIO GUIDO LEVI, Milan, Italy, assignors to Societa Italiana Pirelli, Milan, Italy. Filed Feb. 17, 1931, Serial No. 516,496, and in Italy Feb. 28, 1930. 6 Claims. (Cl. 18—53.)

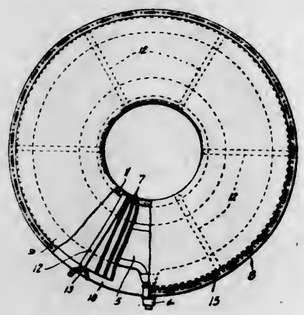
6. A process for vulcanising rubber and mixtures including rubber, which comprises employing as an accelerator the following compound:



1,886,637. PAD FOR INVALID CUSHIONS. HELEN M. BUCKLEY, Westport, Conn. Filed June 19, 1931. Serial No. 545,440. 3 Claims. (Cl. 5—327.)

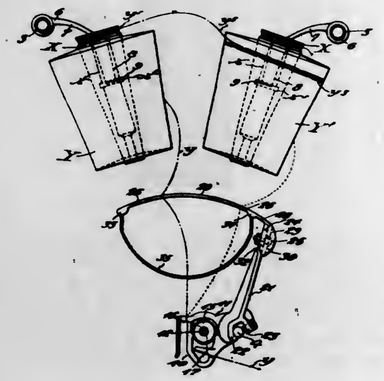
1. In a cushion, an inflatable core, a soft pad of the shape of said core applied to a side of the core, a cover,

tapes carried by the cover and adapted to be tied about the pad and core to secure the pad in place on the core,



and said cover adapted to enclose the core, pad and tapes when the cushion is in use.

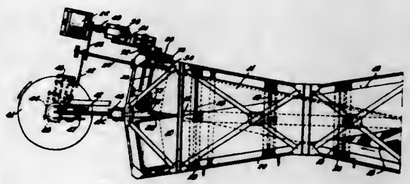
1,886,638. BALLOON-GUARD FOR CREELS OR THE LIKE. HUGH F. BURTON, Providence, R. I., assignor to Universal Winding Company, Boston, Mass., a Corporation of Massachusetts. Filed Aug. 31, 1928. Serial No. 303,280. 5 Claims. (Cl. 242—131.)



1. A device of the type specified comprising a member having a plurality of substantially circular guide-eyes of relatively large diameter as compared with the size of the strand drawing therethrough, said guide-eyes spaced at a distance apart and connected by a passageway, and a strand rest projecting laterally from said member below the guide-eyes.

2. In a creel, the combination of a plurality of supply-holders arranged to support magasined yarn packages with their axes converging, means for guiding the yarn at the point of convergence of the axes of the packages, and a balloon-guard arranged between the ends of the packages and the yarn-guiding means and provided with a plurality of substantially circular openings of relatively large diameter disposed with their centers substantially coincident with the axes of the packages and connected by a narrow passageway through which the yarn may pass as it shifts its position in delivering first from one package and then from the other in the series, the yarn being adapted to gyrate around the rim of the circular opening through which it draws whereby to quench its ballooning action.

1,886,639. METHOD AND APPARATUS FOR MAKING HOSE. CHARLES C. CADDEN, Akron, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y., a Corporation of New York. Filed July 26, 1929. Serial No. 381,318. 21 Claims. (Cl. 154—8.)

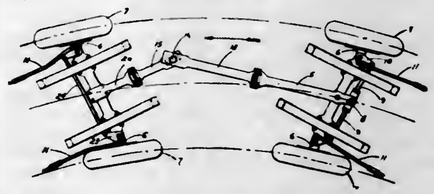


1. The method of making a hose which comprises distending a lining-tube by internal fluid pressure and wrapping fabric thereon while it is so held distended and while feeding the lining tube in a straight path inclusive of the wrapping position.

5. The method of making hose which comprises feeding a lining-tube longitudinally without substantial twisting thereof while feeding a strip of fabric onto the lining-tube and wrapping the single strip of fabric laterally of the fabric strip about the lining-tube in a plurality of superposed convolutions.

10. Apparatus of the character described comprising means for feeding work of cylindrical form longitudinally and rotating the same, said means including a pair of endless belts disposed at an angle to each other and adapted to embrace the work between them and backing means for holding the adjacent, work-contacting reaches of the belts against the work.

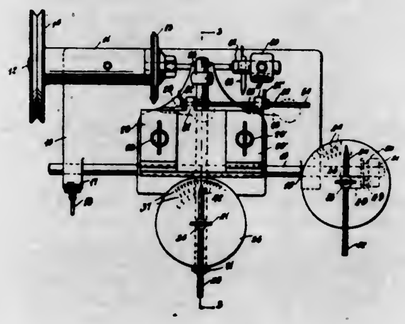
1,886,640. LAND VEHICLE TRAIN. LORN CAMPBELL, Jr., Cleveland, Ohio. Filed Apr. 27, 1929. Serial No. 358,567. 3 Claims. (Cl. 280—33.2.)



3. A land vehicle train including a plurality of vehicles each having stationary front and rear axles, wheel-carrying stub axles pivoted at the ends of the said axles, wheels rotatably mounted on the said stub axles, means directly connecting the steering knuckles and means for connecting the rear of one vehicle to the front of the following vehicle, said means including a rigid member projecting rearwardly from the rear axle of one vehicle, a rigid member projecting forwardly of the front axle of the following vehicle and pivoted to the knuckle connecting means, and means connecting the rearwardly and forwardly extending rigid members including a connecting linkage comprising a pair of links pivotally connected to the rigid members on horizontal pivots and to each other by a vertical pivot in a slot in one part and with spring means on either side of the vertical pivot permitting movement of the pivot in the slot.

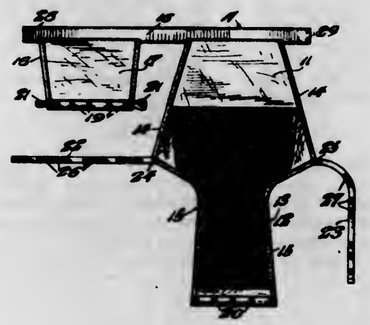
1,886,641. CODE CYLINDER KEY CUTTING AND DUPLICATING MACHINE. LUDGER J. CARON, Leominster, Mass., assignor to Leominster Tool Co., Inc., Leominster, Mass. Filed Mar. 27, 1930. Serial No. 439,522. 2 Claims. (Cl. 90—13.2.)

1. A machine of the class described, in combination with a cutter, a key holder, a rod extending therefrom at a right angle to the axis of the cutter, a sleeve through which the rod passes, an abutment means on the rod coacting with the sleeve, eccentric means operable to slide said sleeve comprising a shank having eccentric connection with the sleeve, a pointer carried by the shank, in combination with an index coacting with the pointer, a carriage



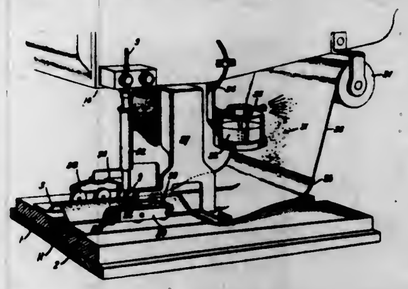
on which said holder is disposed, said carriage having a supporting portion for said index and having a recess below the supporting portion housing said sleeve, said rod slidably connecting the holder to the carriage, and means operable to move the carriage in a different direction from that in which the holder moves.

1,886,642. CATAMENIAL GARMENT. ANNA E. CASTLE, Beverly, N. J. Filed Apr. 9, 1930. Serial No. 442,736. 1 Claim. (Cl. 128—287.)



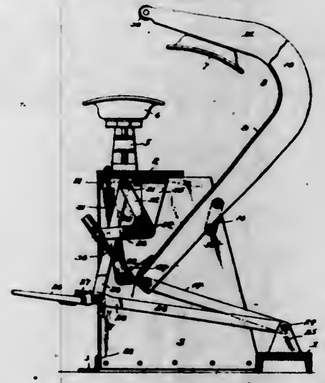
A garment of the character stated, comprising a relatively wide and substantially trapezoidal upper body portion merging into a relatively narrow and substantially rectangular lower body portion, a waist band at the upper narrow end of said upper body portion, a flap carried by the front portion of said waist band, detachable fastening devices on the bottom edges of said flap and said lower body portion, a water-proof sheet covering said lower body portion and the adjacent part of said upper body portion, loops carried by the lower corners of said flap, leg straps extending from the lower vertices of said upper body portion and adapted detachably to engage said loops whereby the vertices of said upper body portion will co-act with the adjacent portions of said lower body portion completely to encase the thighs of the wearer when the bottom edge of said lower portion is fastened to the bottom edge of said flap.

1,886,643. AUTOMATIC ARC WELDING APPARATUS. VERNI J. CHAPMAN, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Sept. 4, 1930, Serial No. 479,719. Renewed Apr. 30, 1932. 9 Claims. (Cl. 219—8.)



1. Welding apparatus comprising means for maintaining an arc, and means for feeding a sheet of shielding material in spaced relation to said arc to form an enclosure about it and the molten portions of the weld metal adjacent thereto.

1,886,644. GARMENT PRESSING MACHINE. CLARENCE M. CLARKE, Syracuse, N. Y., assignor to United States Hoffman Machinery Corporation, New York, N. Y., a Corporation of Delaware. Filed Dec. 8, 1926. Serial No. 153,397. 9 Claims. (Cl. 68—9.)

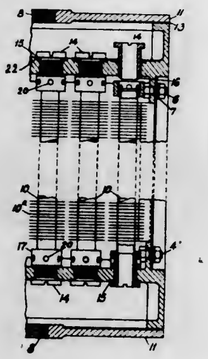


5. In a garment press the combination of a frame; a buck supported thereby; a head cooperative therewith; a head carrying frame having a downwardly extending member located to the rear of the buck; a link pivotally connected to the lower portion of said member, said link extending outwardly and rearwardly of said portion; a pivotal support for the outer end of said link; a second link relatively short as compared to the aforementioned link and pivotally attached to the downwardly extending member at a point above the lower link; a pivotal connection for the outer end of said short link; means for moving the lower end of the head carrying frame downwardly; and means acting to raise the frame.

1,886,645. HEATING DEVICE. RALPH P. CLARKSON, New Rochelle, N. Y., assignor to J. H. McCormick & Co., Williamsport, Pa., a Corporation of Pennsylvania. Filed Dec. 11, 1931. Serial No. 580,263. 5 Claims. (Cl. 257—154.)

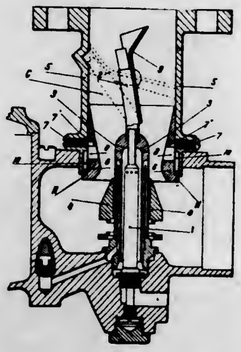
2. A heater device comprising two headers, threaded openings in opposing walls of said headers, means to space

said headers apart, a plurality of straight, axially parallel, thin-walled extended surface heater tubes of a uniform length less than the distance between said headers whereby to place said tubes between said headers without changing the spacing of said headers, and means operatively to connect said tubes to said headers whereby to permit the



flow of fluid from one header to another, said last named means comprising hollow screw members projecting through said threaded openings in opposing walls of said headers and nut members engaging said tubes adapted and arranged to coact with said hollow screw members, and means to permit expansion and contraction of said tubes.

1,886,646. CARBURETOR. CHARLES HENRI CLAUDEL, Veuxhaulles, France, assignor to Societe Anonyme La Cooperation Agricole & Industrielle, Veuxhaulles, France. Filed Nov. 9, 1928, Serial No. 318,158, and in France Sept. 25, 1928. 1 Claim. (Cl. 261—62.)

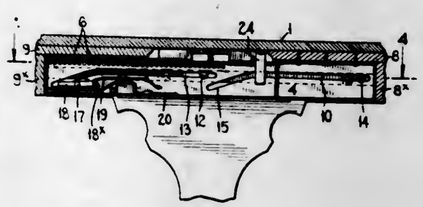


A carburetor for internal combustion motors, comprising in combination, a central diffusing system with cylindrical lower part, means for automatically varying, by any speed of the motor, the proportion of the quantity of air with reference to the quantity of liquid fuel, a Venturi ring free and distinct from said means disposed around said cylindrical lower part, slidable lengthwise in the motor suction conduit under the movable action of the suction prevailing in said conduit and letting between said ring and the cylindrical part of said central diffusing system an air flow space constant for any position of the ring, a member of general tapered form disposed around said cylindrical lower part and cooperating with said ring in lower position to reserve an air flow space smaller than the above mentioned space, and means to delay the lifting motion of said Venturi ring in such manner that the operating time of the smaller passage will be increased.

1,886,647. PROCESS OF MAKING NAPHTHENIC COMPOUNDS. STEWART P. COLEMAN, Houston, Tex., assignor to Standard Oil Development Company, a Corporation of Delaware. Filed Nov. 27, 1926. Serial No. 151,257. 4 Claims. (Cl. 260—108.)

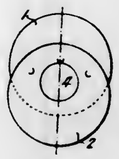
1. The process of recovering naphthenic compounds from petroleum oil comprising distilling the oil with alkali, taking off a lubricating fraction containing naphthenic compounds, adding alkali to the lubricating fraction, oxidizing the fraction only to an extent sufficient to insure the formation of alkali naphthenic compounds, and separating the resulting alkali naphthenic compounds from the oil.

1,886,648. SLIDE FOR EXTENSION TABLES. JOSEPH COOPER, New York, N. Y. Filed Nov. 6, 1930. Serial No. 493,777. 4 Claims. (Cl. 45—113.)



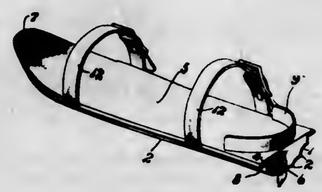
1. An automatic extension table comprising a centre leaf and leaves adapted to lie under the centre leaf a slide combination for the underleaves comprising a centre slide member, movable slide members adjacent the centre slide member, rack and pinion connections intermediate the movable slide members, cam surfaces carried by the movable slide members, stud carrying members having studs engaging said cam surfaces and permitting relative movement between the slides and said stud carrying members during a movement of an underlying leaf outwardly into the plane of the centre leaf, a member adapted to automatically lock together a slide and its co-acting stud carrying member, a movable switch device adapted to throw said locking member to inactive position, and means for actuating said switch device.

1,886,649. MANUFACTURE OF FUSED BIFOCAL LENSES. EDWARD CULVER, Crouch End, London, and ALFRED HENRY EMERSON, Finchley, London, England, assignors to United Kingdom Optical Company, Limited, London, England. Filed May 23, 1930, Serial No. 455,029, and in Great Britain Jan. 23, 1930. 2 Claims. (Cl. 88—54.)



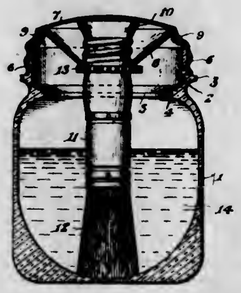
1. A method for the manufacture of a fused bifocal lens which comprises fusing on to a major lens a segment of substantially the same refractive index having an insert of a different refractive index, controlling the prism direction by suitably setting the angular relation between the axes of the main lens and the segment, providing guide marks at the boundary surface between the major lens and the segment and grinding till the guide marks disappear.

1,886,650. SKATE. WILLARD J. DAVIES and HENRY C. S. SCHNACK, Grandville, Mich. Filed Jan. 25, 1932. Serial No. 588,634. 4 Claims. (Cl. 208—167.)



1. A skate comprising, a runner member of concavo-convex form in cross section open at its upper side and having flanges at the upper edges of each side, a plate covering the open upper side of the runner member and having portions turned underneath said flanges of the runner member to secure the parts together, and straps carried by the skate adjacent the front and rear ends thereof.

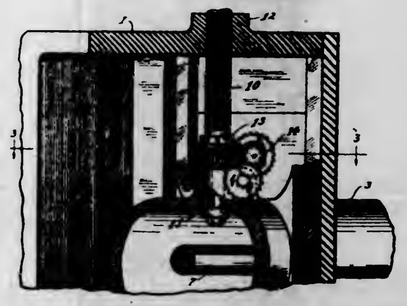
1,886,651. JAR COVER. NICK DE GEORGE, Mentor, Ohio. Filed May 5, 1930. Serial No. 450,016. 3 Claims. (Cl. 91—67.2.)



1. In a combined closure and applying element for jars of that type including a neck and containing adhesive material for application, the combination of an imperforate closure member for positioning in spaced relation above and for extension across the mouth of the jar, an annular collar depending from said member and having a portion thereof provided with means interengaging with the neck to detachably connect to the latter the said member in closure position, a tubular part secured at one end to the inner face of said member centrally of and depending from the latter, said part being threaded, and an applying member including a stem threaded at one end, said stem extending into said part and having its threads engaging with the threads of the latter for connecting said members together.

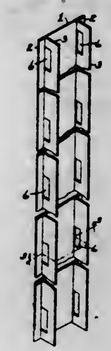
1,886,652. GRINDING MACHINE CONSTRUCTION. JACOB DE KONING, Grand Rapids, Mich., assignor to Gallmeyer & Livingston Company, Grand Rapids, Mich., a Corporation of Michigan. Filed Sept. 13, 1928. Serial No. 305,628. 4 Claims. (Cl. 74—40.)

1. In mechanism of the character described, a pair of slidably connected elements, a screw swivelled on one of said elements and threaded to the other of said elements, a gear rigid on said screw, a driving worm meshing with said gear for rotating said screw, a shaft directly connected to said driving worm, a hand wheel on said shaft for rotating the same, a sleeve surrounding said shaft and rotatable with respect thereto, a hand wheel on said sleeve



for manually operating the same and a train of gears connecting said sleeve and said shaft for rotating said shaft at an increased speed with respect to said sleeve hand wheel.

1,886,653. JAMB BEAD. HENRY F. DEUBNER, Detroit, Mich. Filed July 1, 1931. Serial No. 548,247. 1 Claim. (Cl. 189—46.)



A jamb bead for application to the frame of a door comprising a strip of metal folded upon itself along lines spaced within its edges, said folds extending longitudinally of the strip, said strip having parallel flanges bent at the intermediate portions of the folds, said flanges adapted to receive the frame of the door and said flanges being provided with openings, said openings being located at the inner edges of the folds and adapted to receive spacing blocks.

1,886,654. DISPLAY WINDOW CONSTRUCTION. CHARLES F. DINGMAN, Palmer, Mass. Filed Sept. 30, 1929, Serial No. 396,233. Renewed Mar. 24, 1932. 5 Claims. (Cl. 20—40.4.)

1. A show window construction for the purpose described comprising a transom member, or the like, for admitting rays of external light, a ceiling member spaced from the rear wall of the show case space, a reflector or other surface deflecting the rays of light from the transom member downward through the said space onto an

article of merchandise located within the show window space, whereby the light rays which fall onto the article of merchandise and are reflected outward through the

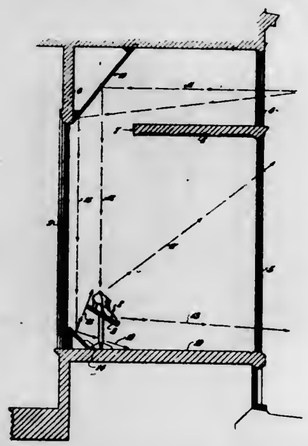
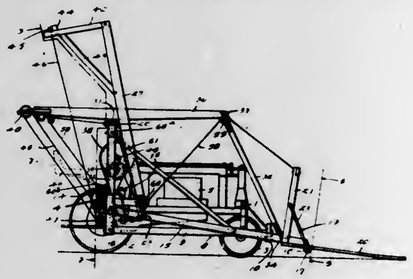


plate glass or the main show window for the purpose of offsetting the outside rays which reflect objects on the outer side of the show window.

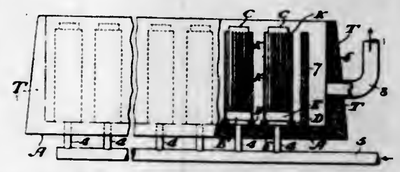
1,886,655. TRACTOR SUPPORTED AND OPERATED HAY SWEEP AND STACKER. FREDERICK C. DOODY, St. Onge, S. Dak., assignor of one-half to Thomas H. Lindley, Omaha, Nebr. Filed Aug. 6, 1931. Serial No. 555,566. 4 Claims. (Cl. 214—140.)



1. A hay sweep and stacker, comprising beams, first and second angularly related levers intersecting each other at points between their ends, means securing the beams to one end of said first lever, links securing the beams to one end of said second lever, a drum, means for rotatably supporting the drum, means for rotating the drum, guide sheaves secured to said supporting means and to the other end of said second lever, a cable terminally secured to the drum and to the other end of said first lever and passing about the sheaves, a fork mounted on the beams for movement into load gathering position when the beams are lowered and for movement into load discharging position when the beams are raised, and fork controlling means.

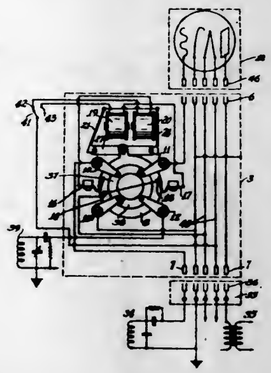
1,886,656. REFRIGERATING APPARATUS. LE ROY A. DROSSCHER, Willow Grove, Pa., assignor to C. H. Wheeler Manufacturing Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Feb. 27, 1931. Serial No. 518,679. 13 Claims. (Cl. 62—160.)

1. A receptacle for material to be refrigerated comprising a cam, a casing surrounding and spaced therefrom, and fins disposed within the space between said can and casing defining multiply connected passages for the cooling



medium, said casing extending below the bottom of said can to form a wall of a compartment for cooling medium communicating with said passages.

1,886,657. ELECTRON DISCHARGE TUBE ADAPTER. ROBERT D. DUNCAN, Jr., East Orange, and ARTHUR M. TROGNER, Maplewood, N. J., assignors to Wired Radio, Inc., New York, N. Y., a Corporation of Delaware. Filed Mar. 15, 1930. Serial No. 436,171. 3 Claims. (Cl. 250—16.)

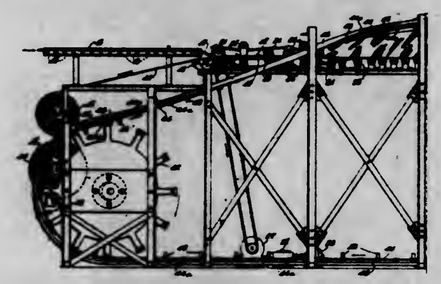


1. An electron discharge tube adapter comprising, an adapter for use between an electron discharge tube and supporting socket therefore comprising, an adapter structure having terminal pins for insertion in said socket in substitution for said electron tube and terminal pin receptacles for supporting said electron discharge tube, a switch in said adapter structure for controlling circuits to said tube, electromagnetic means in said adapted structure for actuating said switch, and connections from certain of said terminal pins to said electromagnetic means for supplying operating energy thereto from said socket.

1,886,658. METHOD AND APPARATUS FOR MAKING HOSE. WILLARD D. EAKIN, Hudson, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y., a Corporation of New York. Filed Jan. 9, 1930. Serial No. 419,573. 20 Claims. (Cl. 154—8.)

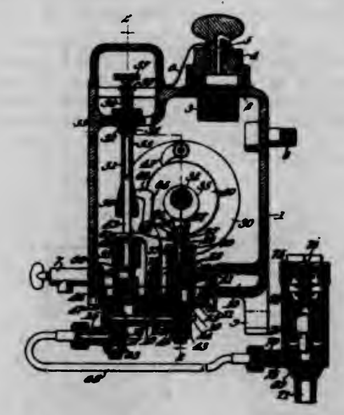
1. The method of making hose which comprises attaching a strip of hose-fabric to a hose-lining tube with its edge extending substantially in a directly longitudinal direction with relation to the tube and by progression lengthwise of the tube so wrapping the fabric strip about the tube in a plurality of integral, superposed convolutions, as measured from the longitudinal line of initial contact, as to cause respective elements of the fabric initially perpendicular to the axis of the tube to lie throughout substantially in a transverse plane in the wrapped structure.

18. Hose-making apparatus comprising means for longitudinally feeding a hose-lining tube without substantial rotation thereof, means adapted to grip the unapplied margin of a strip of hose-fabric having its other margin attached to the tube and to move forward therewith in a helical path about the tube, and additional means for



wrapping the last-applied margin of the strip onto the underlying structure after it has been released from the said gripping means.

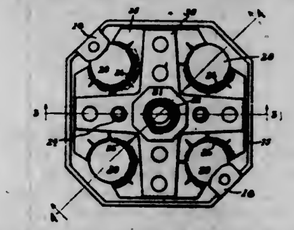
1,886,659. LUBRICATOR. FRANK WILLIAM EDWARDS, Chicago, Ill., and FORDYCE B. FARNSWORTH, Wadsworth, Ohio. Filed Sept. 10, 1928. Serial No. 304,862. 15 Claims. (Cl. 184—27.)



1. In a lubricator, a lubricant forcing cylinder, a forcing piston operating in said cylinder, means for operating said forcing piston, a control cylinder provided with a control piston, means providing a duct connecting said cylinders and to which said forcing cylinder supplies lubricant under pressure, means operable in response to movement of said control piston under the influence of pressures established in said duct by said forcing piston, including a lever arranged for variable adjustment relatively to said forcing piston for varying the effective stroke thereof, and a cam member movable in response to movement of said control piston and cooperating with said lever to vary the position thereof relatively to said forcing piston.

1,886,660. CONDUIT HOLDER. GUSTAVE R. ESPING, Cleveland, Ohio. Filed Mar. 5, 1930. Serial No. 433,249. 2 Claims. (Cl. 247—25.)

1. An outlet box having a plurality of pipe receiving openings in one wall thereof, a fixture stud mounted on said wall, a pipe holding member secured firmly to the fixture stud on the inside of said wall of said outlet box, said member including a plate of resilient metal, said plate having an opening corresponding with each said pipe receiving opening, each of said last mentioned openings being defined by a plurality of short, strong fingers projecting toward the center thereof, a pipe having a threaded portion extending through one of said pipe re-



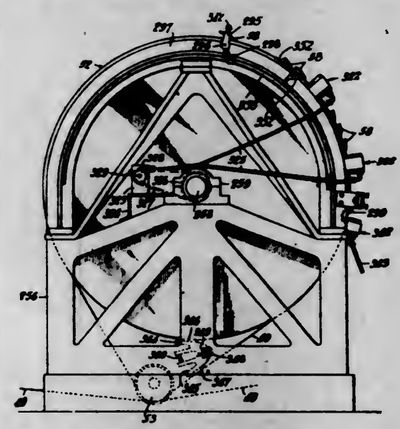
ceiving openings, said fingers being received into the threads of said pipe, and a lock nut on said pipe and engaging the outside of said box.

1,886,661. PLANT APPARATUS AND METHOD FOR MAKING METAL WOOL. CROSBY FIELD, Brooklyn, N. Y., assignor to Brillo Manufacturing Company, Inc., a Corporation of New York. Filed June 18, 1927. Serial No. 199,692. 18 Claims. (Cl. 29—4.5.)



1. An automatic plant for reducing wire to metal wool including a power driven traction rotor around which the wire is looped, a stationary wool cutting tool coacting with one part of the periphery of said rotor, a guide shield extending outward from said rotor from the vicinity of said tools, and an auxiliary cutting tool serving to remove undesirable material from the wire, said auxiliary cutter coacting with a part of said rotor beyond said shield, thereby to segregate the coarse scrap produced thereby from the steel wool produced by the wool cutting tools.

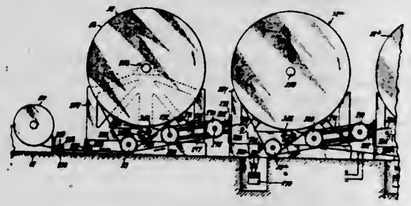
1,886,662. WIRE SHAVING MACHINE. CROSBY FIELD, Brooklyn, N. Y., assignor to Brillo Manufacturing Company, Inc., a Corporation of New York. Original application filed June 18, 1927, Serial No. 199,692. Divided and this application filed Aug. 3, 1928. Serial No. 297,314. 12 Claims. (Cl. 29—4.5.)



1. A machine for making steel wool, including two circular beds, around each of which a wire is conducted to form a multiplicity of loops, the wire extending from the

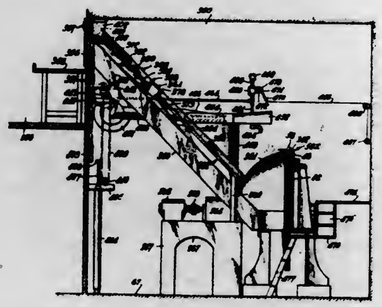
exit side of one bed to the entrance side of the other bed, a plurality of grooved shaving knives to produce a series of shavings from each loop of wire, mounted for active and inactive engagement with said wire and a planing knife associated with the first bed which is normally ineffective but which becomes effective to cut a ribbon-like shaving from each wrap when the grooved knives are in inactive engagement with said wire.

1,886,663. WIRE CUTTING MACHINE AND TENSION REGULATOR THEREFOR. CROSBY FIELD, Brooklyn, N. Y., assignor to Brillo Manufacturing Company, Inc., a Corporation of New York. Original application filed June 18, 1927, Serial No. 199,692. Divided and this application filed Aug. 3, 1928. Serial No. 297,315. 24 Claims. (Cl. 29—4.5.)



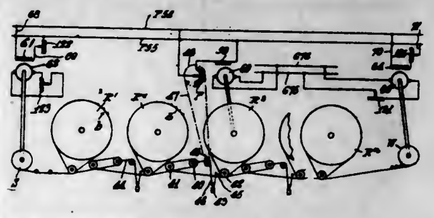
1. In a machine for making metal wool from wire, including tensioned supply means, traction means at the exit end of the machine and cutting machine units operating in series between the supply means and the traction means, simultaneously on different portions of the same length of wire speed regulating mechanism comprising separate motors for driving said cutting units, means for controlling the speed of the first unit and means controlled by variations of relative speeds of successive units to set the speed of each succeeding unit in accordance with the speed of the unit that precedes it.

1,886,664. CONVEYER AND STORAGE APPARATUS FOR METAL WOOL MACHINES. CROSBY FIELD, Brooklyn, N. Y., assignor to Brillo Manufacturing Company, Inc., a Corporation of New York. Original application filed June 18, 1927, Serial No. 199,692. Divided and this application filed Aug. 3, 1928. Serial No. 297,317. 20 Claims. (Cl. 29—4.5.)



1. In a machine for making metal wool, including a shaving unit, guide means for collecting the shavings from said unit, a chute extending from the collecting point and reciprocable conveying means to advance the collected wool along the chute from said pocket to an intermediate position in said chute, said conveying means being effective on a subsequent operation to advance the said wool from the intermediate position to the end of the chute.

1,886,665. MULTIPLE UNIT ELECTRIC DRIVE SYSTEM. CROSBY FIELD, Brooklyn, N. Y., assignor to Brillo Manufacturing Company, Inc., a Corporation of New York. Original application filed June 18, 1927, Serial No. 199,692. Divided and this application filed Aug. 3, 1928. Serial No. 297,319. 32 Claims. (Cl. 29—4.5.)



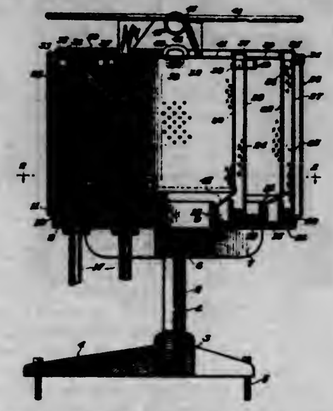
1. In an installation for making metal wool, including a supply reel, a series of rotatable units operating successively on the same length of wire to draw said wire through the machine from said reel, separate electric motors to rotate said units, each motor having an armature and a field, in combination with an electrical control system including connections and a source of current for feeding the armatures thereof in parallel, a distinct source of current and connections for energizing the fields thereof in parallel, and means for setting the entire group of motors out of operation upon overload on any one of said motors.

1,886,666. AUTOMATICALLY LUBRICATED AND CLEANED METAL WOOL MACHINE. CROSBY FIELD, Brooklyn, N. Y., assignor to Brillo Manufacturing Company, Inc., a Corporation of New York. Original application filed June 18, 1927, Serial No. 199,692. Divided and this application filed Aug. 3, 1928. Serial No. 297,321. 26 Claims. (Cl. 29—4.5.)

10. A machine for making metal wool from wire, including a series of grooving cutters, a cylindrical rotating cutter bed having parallel bed grooves in its periphery engaged by successive loops of the same wire, and cooperating grooved rotary guide means around which all of said loops are tensioned and guided for transfer from one groove of said bed to the next adjacent groove, in combination with elastic means for wiping the bed grooves at points where the wire and grooves are out of engagement.

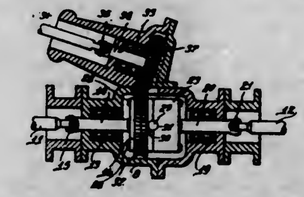
1,886,667. OIL BURNER. JOSEPH E. FOWLER, Worcester, Mass. Filed Sept. 1, 1931. Serial No. 560,607. 1 Claim. (Cl. 158—89.)

An oil burner comprising a fuel receiving base, means supplying the base with fuel, a plurality of nested cylinders forming combustion and air chambers mounted on the base and certain of said cylinders having perforations, perforated elements closing the air chambers at their upper ends, angularly disposed lips formed on certain of said cylinders and overlying the upper ends of the combus-



tion chambers, and lugs carried by said cylinders and engaging the lips and perforated elements for permitting said cylinders to be removed from the base in a single unit and to permit separation of the cylinders when desired.

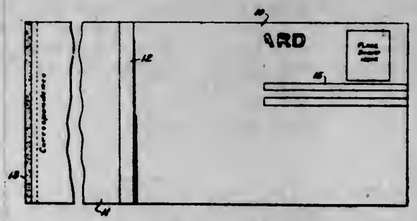
1,886,668. DIFFERENTIAL DRIVE MECHANISM. JACOB GABLI, Lincoln Park, Mich. Filed Dec. 14, 1931. Serial No. 580,789. 2 Claims. (Cl. 74—99.)



1. A differential driving mechanism for four wheel drive vehicles comprising a hollow casing, a pair of shafts co-axially supported in opposite ends of said casing and adapted to be connected to the front and rear axles respectively of a vehicle, cup-like members mounted on the inner ends of said shafts and bolted together to form a closed cylindrical casing, said cup-like members having corresponding recesses formed in their meeting edges which form circular openings when said members are bolted together, bevelled gears formed integral with said shafts, stub shafts projecting outwardly from the inner face of said gears, a spider mounted on said stub shafts and having radial arms received in said circular recesses, bevelled gears on said radial arms meshing with said first named bevelled gears, a ring gear mounted on said cylindrical casing, said hollow casing having an opening in its upper wall, a drive shaft supported adjacent said opening with its axis angularly inclined relative to the axis of said first named shafts, and a gear on said drive shaft meshing with said ring gear.

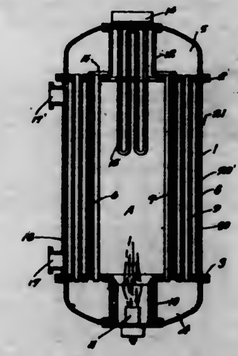
1,886,669. FOLDING POST CARD. PAUL E. GILLESPIE, St. Louis, Mo. Filed Oct. 30, 1929. Serial No. 403,630. 1 Claim. (Cl. 229—92.8.)

A souvenir post card embodying a sheet of relatively stiff material having a picture upon one face, a flap of the same height as the card, an adhesive strip secured to the outer face of the flap along the free transverse edge thereof for connecting the flap to one edge of the card and adapting the flap to be folded flat upon the outer face of the card to provide, together with the adjacent portion of the card, an inner message space of an appreciable area, a strip secured to the free edge of the flap



to seal the free edge of the flap to the face of the card to conceal the message space and provide, together with the card and flap, an address space having the same general appearance of the ordinary post card.

1,886,670. WATER HEATER. PAUL F. GOERTZ, Lockport, Ill. Filed Dec. 24, 1930. Serial No. 504,567. 3 Claims. (Cl. 122—7.)



1. A heater of the class described including, an annular water chamber and an annular steam chamber spaced therefrom, a shell having a hot gas inlet and outlet positioned between said chambers, a housing within the shell between the chambers, tubes extending from the water chamber to the steam chamber between the shell and housing, a second set of tubes within the housing and extending between the water chamber and steam chamber, and burner means to provide for heating of the second set of tubes when the flow of hot gas to said first set is interrupted.

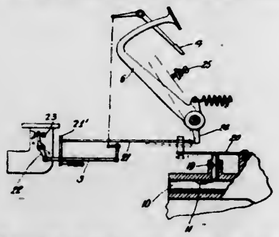
1,886,671. METALLIC BUNCH AND METHOD OF MAKING IT. JOHN W. GOTTSCHALK and SYLVESTER W. GRATER, Philadelphia, Pa.; said Grater assignor to said Gottschalk. Filed May 31, 1932. Serial No. 614,504. 4 Claims. (Cl. 15—208.)



3. A flexible and resilient metallic bunch, comprising a coreless metallic strand having an inherent tendency to form a helical coil, said strand being wound upon itself with juxtaposed strands interlocking with each other throughout its mass to form a flattened, flexible and re-

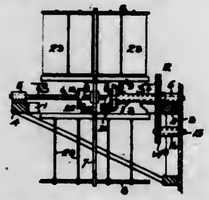
silient metallic bunch, with the outer strand portions circumferentially disposed around the inner strand portions.

1,886,672. AUTOMOBILE CONTROL. JOHN GOOD, Garden City, N. Y., assignor to Good Inventions Co., New York, N. Y., a Corporation of New York. Filed July 29, 1926. Serial No. 125,648. 5 Claims. (Cl. 74—107.)



1. In an automobile the combination with the engine and its change speed mechanism, of manually controlled fuel supply means for establishing a minimum limit to the engine speed when connected in high gear and automatic means for preventing the operation of the manual means to establish said limit on the engine speed when connected in lower gear and adapted to establish a higher minimum limit at such time.

1,886,673. AEROPLANE ATTACHMENT. JOHN GAOBLING, Detroit, Mich. Filed Oct. 7, 1931. Serial No. 567,450. 8 Claims. (Cl. 244—16.)



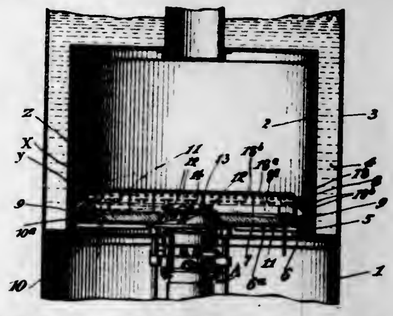
1. An aeroplane attachment comprising a frame adapted to be attached to the side of an aeroplane fuselage, a spindle mounted on said frame, a plate rotatable on said spindle, means for rotating said plate about said spindle, arms projecting from said plate adjacent its extremities, guides extending transversely through said plate and supported thereby adjacent the plate axis, blades each having one extremity supported by one of said arms and its other extremity by one of said guides, and means for turning all the blades through substantially 90° each time the plate has turned through 180°.

1,886,674. SHADE FIXTURE. STEWART HARTSHORN, Short Hills, N. J., assignor to Stewart Hartshorn Company, East Newark, N. J., a Corporation of New Jersey. Filed Feb. 5, 1932. Serial No. 591,004. 10 Claims. (Cl. 156—25.)



5. A roller shade comprising a roller having a longitudinal groove formed on its surface, said groove including a longitudinal portion of greater depth relatively to its remaining portion, a fabric having an inner end portion lying in said groove which provides a shoulder for alining said end portion on said roller, and a curved strip on said roller having an inwardly extending flange cooperating with said deep groove portion to clamp said fabric on said roller.

1,886,675. OIL BURNING FURNACE. FORREST A. HEATH, Upper Montclair, N. J. Filed Feb. 10, 1928, Serial No. 253,271. Renewed Mar. 12, 1930. 42 Claims. (Cl. 158—4.)



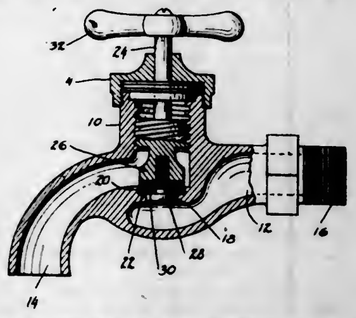
42. A fire box construction for oil burning furnaces of those types which are provided with centrifugally-acting distributing heads, including, a hearth extending around said distributing head at a considerable distance therefrom and including an upstanding portion having an inner surface which intersects the trajectory of fuel droplets at substantially right angles, and an inwardly upwardly inclined portion overhanging said inner surface.

1,886,676. FIXTURE TRAP AND DRAIN PIPE STOPPAGE PREVENTER. FREDERICK WILLIAM HEUACKER, Miami, Fla. Filed Sept. 30, 1931. Serial No. 566,119. 1 Claim. (Cl. 4—292.)



A stoppage preventer consisting of a body of pliable non-corrosive material having a central portion and arm portions radiating therefrom, said arm portions being pointed at their outer ends, the outer edge portions of the arms having prongs the points of which are disposed away from the points at the ends of the arms.

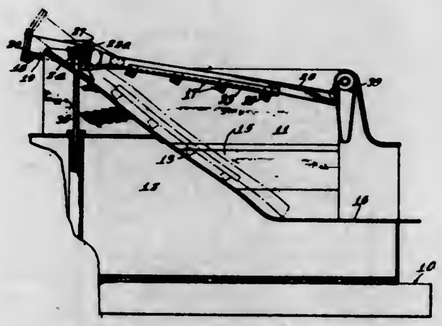
1,886,677. VALVE STRUCTURE. JAMES HIGGINS and JOHN L. SCHULTZ, Jackson, Mich. Filed Jan. 27, 1930. Serial No. 423,672. 1 Claim. (Cl. 251—27.)



A faucet comprising a fluid chamber having an inlet and an outlet passage, a stepped opening connecting said passages, a valve stem threaded into said chamber and

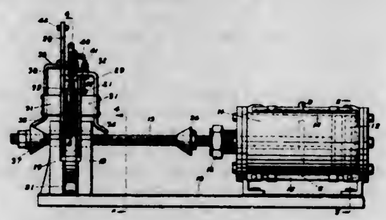
including an extension having a yieldable element secured to the bottom thereof adapted to seat upon the ledge formed by said stepped opening, and means for positioning said yieldable element in relation to said valve stem comprising a headed nut adapted to be threaded into said stem, the head of said nut completely filling the opening formed by the lower step.

1,886,678. LOCOMOTIVE TENDER. FRANCIS HOGG, Wesleyville, Pa., assignor to The Standard Stoker Company, Incorporated, a Corporation of Delaware. Filed Nov. 18, 1931. Serial No. 574,777. 20 Claims. (Cl. 105—238.)



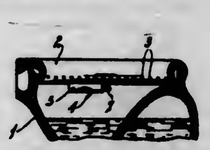
8. The combination with a locomotive tender having a fuel bin, of a pusher for moving the fuel to the forward end of the bin, said pusher being arranged to rest on the surface of the body of fuel in said bin and to move downwardly with it as the supply therein is depleted, and means imparting reciprocatory motion to said pusher.

1,886,679. SOLUTION FEED FOR BOILERS. VERNARD L. HOLLINGSWORTH, Indianapolis, Ind. Filed Apr. 12, 1930. Serial No. 443,894. 7 Claims. (Cl. 210—40.)



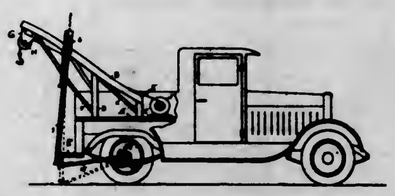
1. The combination with a steam boiler, its water supply system and a container for boiler compound, of a compound-feeder comprising a cylinder having a capacity largely in excess of a desired unit charge of compound, a piston mounted in said cylinder, an induction conduit leading from the compound container to each end of said cylinder, means for preventing flow through said conduit from the cylinder to the container, an eduction conduit leading from each end of said cylinder into the boiler water supply system, means for preventing flow in said last-mentioned conduit from the water supply system into the cylinder, means synchronized with the water supply system for moving said piston a relatively small fraction of its total stroke range per unit of water delivery into the water supply system, and means for automatically reversing the movement of said piston.

1,886,680. DEODORIZING DEVICE. CHARLES D. HOLMES, Long Beach, and HARVEY W. GAMBL, Los Angeles, Calif. Filed July 27, 1931. Serial No. 553,450. 3 Claims. (Cl. 4—231.)



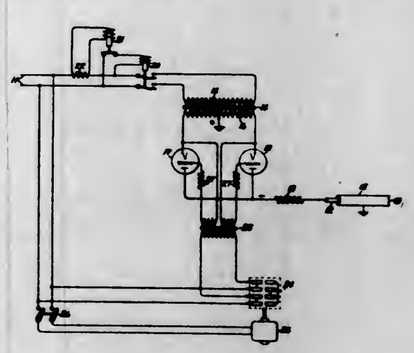
1. In a deodorizing device for mounting upon a toilet bowl, a resilient wire bent upon itself to form a pair of clamping legs extending in substantially the same direction, substantially parallel and resiliently urged toward each other, and a block of solid deodorant mounted upon one of said legs, the other of said legs being curved for insertion into a water opening in said bowl to clamp said deodorant to the surface of said bowl.

1,886,681. WRECKING-TRUCK. OSCAR S. HUBBARD, Farmland, Ind. Filed June 28, 1930. Serial No. 464,499. 8 Claims. (Cl. 212—145.)



1. In a wrecking-truck having a hoisting device, a hand lever fulcrumed on a fixed part of said hoisting device, a footed strut having its upper portion pivotally connected to said hand lever whereby when the hand lever is swung on its fulcrum the strut may be raised or lowered, and a stay member retained between the lower portion of the strut and the frame of the truck.

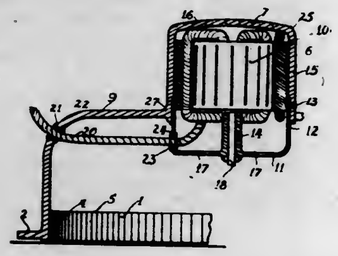
1,886,682. CABLE TESTING EQUIPMENT. HORACE S. HUBBARD, Pittsfield, Mass., assignor to General Electric Company, a Corporation of New York. Filed Mar. 24, 1932. Serial No. 600,918. 3 Claims. (Cl. 175—183.)



1. In an equipment for testing a cable comprising a plurality of insulated conductive elements, the combination of a source of alternating current, rectifying means for

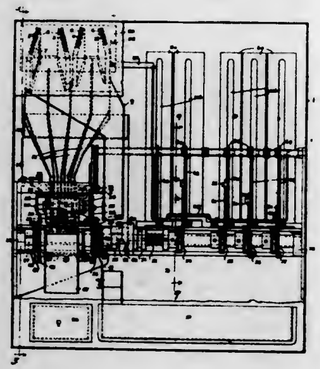
interconnecting said source and the elements of said cable including a vapor electric valve provided with a control grid, means for energising said grid from said source, and means for periodically reversing the polarity of the grid potential for supplying intermittent unidirectional impulses to the cable.

1,886,683. VENTILATING MEANS. HERMAN C. HUEGLIN, Chicago, Ill., assignor to Federal Merchandise Company, Chicago, Ill., a Corporation of Illinois. Original application filed June 30, 1928, Serial No. 289,573. Divided and this application filed Apr. 1, 1930. Serial No. 440,687. 1 Claim. (Cl. 172—36.)



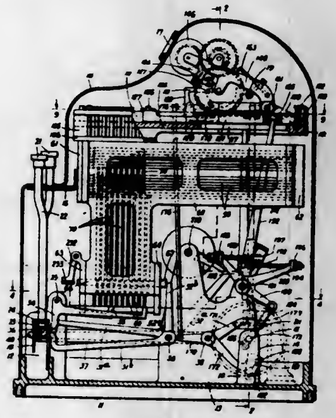
A single piece bracket for supporting an electric fan comprising, a cup-like casing in which the fan motor is mounted and by which the motor is enclosed, the closed end of said casing being perforated to provide for ventilation of the motor, integrally formed arms projecting radially from the open end of said casing, said arms being curved and terminating as parts of a cylinder the axis of which is concentric with the axis of said casing, a mounting cylinder joining the free ends of said arms and formed integral therewith, and a mounting annulus formed integral with said mounting cylinder and projecting radially therefrom, said bracket having rounded edges and smooth surfaces to facilitate cleaning the same.

1,886,684. MACHINE FOR DELIVERING CHANGE FOR COINS INSERTED THEREIN. ALFRED JAMES HUNT, Twyford, England, assignor to Harry Frank, London, England. Filed May 16, 1929, Serial No. 363,535, and in Great Britain June 1, 1928. 21 Claims. (Cl. 194—39.)



1. A machine of the type described comprising a pair of normally interengaging coaxial members, means operable through the medium of an inserted coin to rotate one of said members through an angle proportionate to the value of the inserted coin, means operable thereafter to rotate the other member through a corresponding angle, and means operable by said last mentioned means to deliver coins equal in sum value to the inserted coin or a recognised value of said coin.

1,886,685. CALCULATING MACHINE. HAROLD ISHERWOOD, London, England, assignor to The Autokal Syndicate Limited, London, England, a Company of Great Britain. Filed June 18, 1928, Serial No. 286,250, and in Great Britain July 6, 1927. 48 Claims. (Cl. 235—61.)

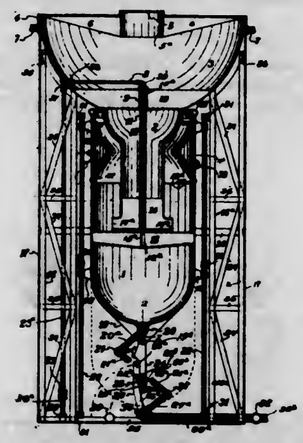


11. In a calculating machine for performing multiplication, the combination with a plurality of sets of movable elements, each set representing digits of a different denomination, of a single set of numeral keys for selectively moving said elements, means operated by successive actuation of said keys to feed in the digits of one factor for placing said set of keys in successive operative relation to the several sets of movable elements, and means operated by actuation of said keys to feed in the digits of the other factor for placing said set of keys in operative relation to the sets of movable elements.

34. In a calculating machine of the type in which stops are set up and felt for the purpose of obtaining and indicating an answer, the combination with a plurality of sets of stops, of a mechanism for selecting and positioning said stops, said mechanism consisting of a plurality of selector sections, each such section being allocated to a different denomination of digits, and means whereby each selector section is enabled to select and position a stop in each of two separate sets of stops to represent a partial product value.

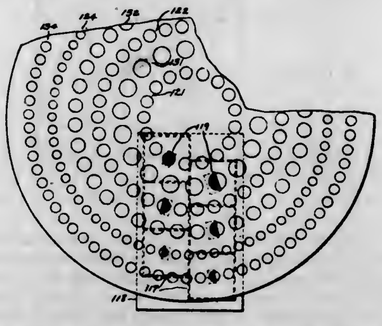
40. In a calculating machine for performing multiplication, the combination with a plurality of individually movable stops, of means for selecting and positioning certain of said stops to represent partial products, said stops being arranged in parallel rows, mechanism for accumulating the partial products thus represented, said mechanism including a plurality of members individually movable in the direction of the parallel rows of stops, said members being adapted to engage and feel the selected and positioned stops in the corresponding rows, and means whereby at least one of said members is shifted during movement thereof from a path defined by one of said rows to a path defined by another of said rows, whereby the distance through which said member moves is determined by stops in two separate rows.

1,886,686. MEANS FOR SEPARATING FLUIDS OF DIFFERENT SPECIFIC GRAVITIES. LONNIE M. JACKSON, Columbus, Ohio. Filed Dec. 4, 1930. Serial No. 500,117. 4 Claims. (Cl. 210—54.)



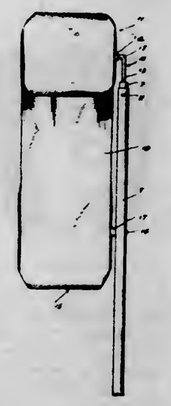
1. In a device for separating liquids, a tank, a vertically slidable tank in the first tank, an air-tight compartment associated with the second tank, the second tank being open at the top, means closing the top of the first tank and projecting into the open upper end of the second tank, means for admitting a liquid through the top of the first tank and through said closing means into the second tank, a passageway leading from the bottom of the second tank to the exterior of the first tank, means for closing said passageway when the second tank is in elevated position, means for opening said passageway when the second tank is in lowered position, and means for elevating liquids from the bottom of the first tank into the said second tank.

1,886,687. METHOD AND APPARATUS FOR THE PRODUCTION OF MUSIC. CHARLES T. JACOBS, Chatham, N. J., assignor to Miessner Inventions, Inc., a Corporation of New Jersey. Filed Mar. 28, 1931. Serial No. 526,092. 19 Claims. (Cl. 84—1.)



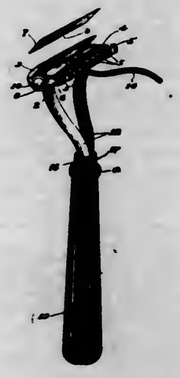
9. The method of relating the frequencies of twelve series of oscillations to provide substantially the musical intervals of an equally tempered scale, which consists in relating the frequencies of the first and second said series in the ratio of the integers 17 and 18, and of the third and fourth, of the fifth and sixth, of the seventh and eighth, of the ninth and tenth, and of the eleventh and twelfth in the same ratio; and in relating the frequencies of the first, third, fifth, seventh, ninth and eleventh said series, each to its successor substantially in the ratio of 49:55.

1,886,688. CLEANING AND POLISHING MOP. JACOB JACOBSEN, Chicago, Ill. Filed Nov. 28, 1931. Serial No. 577,811. 5 Claims. (Cl. 15—228.)



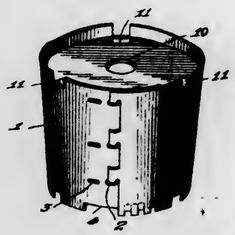
1. In a structure of the class described, a tubular handle, a bushing fixedly mounted in the outer end of said handle, a right angularly disposed bracket including a longitudinal shaft mounted in said bushing and a horisohtal shaft extending at right angles to the longitudinal axis of the handle, a reel frictionally mounted for rotation on said right-angularly disposed shaft, and a strip of fabric wound on said reel.

1,886,689. SAFETY RAZOR. BENNETT G. JANSSON, Kittery, Me., assignor, by mesne assignments, to Emerson Apparatus Company, Melrose Highlands, Mass., a Corporation of Rhode Island. Filed May 16, 1929. Serial No. 363,579. 2 Claims. (Cl. 30—12.)



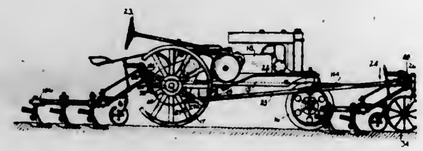
1. In a safety razor, the combination of a blade holder comprising a head having a blade supporting face and a cap pivoted thereto for clamping said blade on said face, a handle connected with said head, an arm extending from said cap for moving said cap into and out of blade clamping relationship to said head, said arm having a portion extending along the handle and said handle having a recess to receive the end portion of said arm, and a keeper embracing said handle and held against substantial movement axially of the handle but mounted thereon to turn about the axis of the handle to lock said arm in its blade clamping position and to unlock the same.

1,886,690. INDOOR PLANT STARTER. EARNEST JANSSEN, Herrin, Ill. Filed July 20, 1931. Serial No. 552,057. 3 Claims. (Cl. 47—37.)



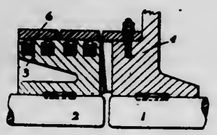
1. A plant starter comprising a strip provided at one end with a series of hooks having downwardly disposed bill ends and provided at its opposite end portion with a series of openings adapted to receive the hooks, said strip being provided at one end with a recess and having at its opposite end portion a series of tongues adapted to be bent under the edge of said recess.

1,886,691. CULTIVATOR. THEODORE W. JOHNSON, Moline, Ill., assignor to Deere & Company, Moline, Ill., a Corporation of Illinois. Filed Oct. 2, 1930, Serial No. 485,844. Renewed Apr. 2, 1932. 37 Claims. (Cl. 97—47.)



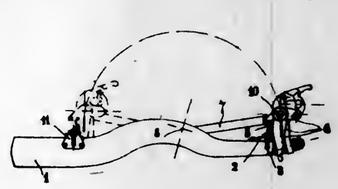
1. The combination with a tractor, of a tillage implement connected with said tractor and comprising an implement frame, a plurality of soil tilling rigs, substantially parallel link mechanism pivotally connecting each of said rigs with said implement frame to permit said rigs to rise and fall relatively to said frame with a substantially perpendicular movement, and castering gauge wheels associated with said rigs to determine the tilling depth thereof.

1,886,692. POWER TRANSMISSION MEANS. PIERRE KAPITZA and GEORGE VOLDEMAR LOMONOSSOFF, Cambridge, England. Filed May 22, 1929, Serial No. 365,190, and in Great Britain May 25, 1928. 2 Claims. (Cl. 192—40.)



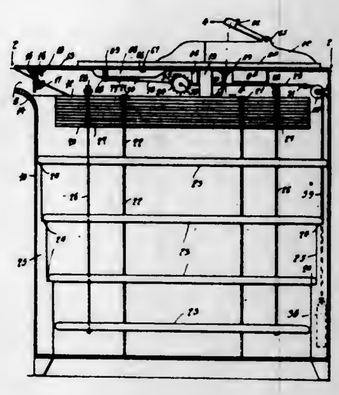
1. Friction clutch comprising a coiled spring band of electromagnetic material anchored to a clutch member, a second member with which said band can engage, slots in the surface of said second member, coils in said slots adapted when energized to cause said spring band to move radially towards said member, the direction of relative rotation of the parts when engaging being such as to tend frictionally to move the band radially away from the second member.

1,886,693. MEANS FOR COUPLING TWO VEHICLES. ADOLPHE KÉGRESSE, Courbevoie, France. Filed Oct. 11, 1930, Serial No. 488,106, and in France Oct. 17, 1929. 8 Claims. (Cl. 280—33.15.)



1. A device for coupling two vehicles, comprising a support pivoted on a horizontal axis on the frame of one of the vehicles, a coupling mechanism mounted on the swinging end of the support, and means for locking the support onto the frame in either one of two operative positions on opposite sides of the horizontal axis.

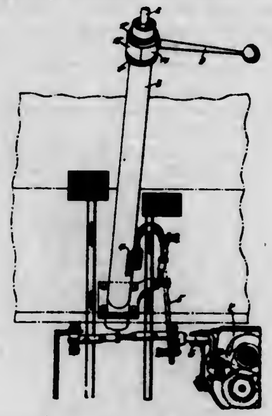
1,886,694. NEWSPAPER OR LIKE VENDING MACHINE. JAMES A. KELLY, Philadelphia, Pa. Filed Sept. 12, 1929. Serial No. 392,117. 8 Claims. (Cl. 312—57.)



1. A machine of the class described having a vertically movable feeding means, means to bodily move the feeding means horizontally, flexible means normally maintaining the feeding means elevated above feeding position, means to depress the flexible means and thereby move the feeding means to feeding position and impart feeding motion thereto as it is bodily moved, and means normally urging the feeding means to retracted position.

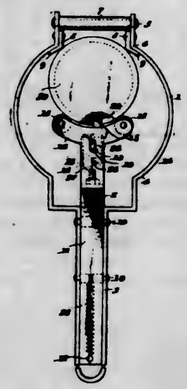
1,886,695. SPEED CHANGING MECHANISM. ELMER G. KESLING, Bloomfield, Mo. Filed Aug. 17, 1931. Serial No. 557,492. 30 Claims. (Cl. 74—39.)

1. In speed changing mechanism, a shaft supported for longitudinal and turning movements, a lever pivoted to said shaft for imparting said longitudinal and turning movements to said shaft, a support, and a fulcrum for and having pivotal connection with said lever mounted for longitudinal and turning movements on said support



and being moved with said lever and also being moved longitudinally when said lever is operated to turn said shaft.

1,886,696. PISTON CLEANING TOOL. JOHN KLEIN, Chicago, Ill. Filed Sept. 12, 1929. Serial No. 392,218. 7 Claims. (Cl. 15—104.01.)



1. A piston cleaning tool comprising a frame; a holder slidably mounted in said frame; a scraper blade mounted in said holder; and a guide member mounted on the holder and adjacent the blade adapted to cooperate with the blade for the scraping action, said guide member comprising a pair of T-shaped members having a roller mounted in each end of the upper part adapted to contact against the side of the piston.

1,886,697. ILLUMINATED DISPLAY. ALBERT KOEBEL, Irvington, N. J., assignor to The United States Printing and Lithograph Company, Brooklyn, N. Y., a Corporation of Ohio. Filed July 15, 1931. Serial No. 550,968. 1 Claim. (Cl. 40—132.)

In an illuminated display, the combination with a display panel having a transparent portion, of a collapsible light box constructed from a single piece of material comprising sides having free edges, a back flexibly connected to said sides, a top, and a bottom of less width than the width of said top, said top and bottom being flexibly connected to the back and at their forward edges being permanently and flexibly connected to said display panel, said top being scored midway in a plane paralleling said display panel so as to fold upon itself



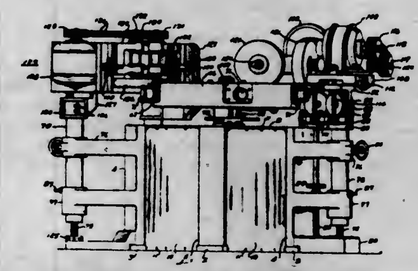
permitting the collapsible light box to be folded flat against said display panel, said top being formed with rearwardly projecting ears for attachment to a wall moulding.

1,886,698. MILK BOTTLE. GEORGE B. LAKE, New Brunswick, N. J. Filed Apr. 26, 1929. Serial No. 358,824. 2 Claims. (Cl. 229—4.5.)



1. A bottle comprising a body having a practically rigid bottom within one end thereof, a yieldable portion of reduced diameter at the other end of said body, a rigid tubular neck having an internal annular ledge at one end thereof, the opposite end of said neck having a peripheral groove therein, the reduced end of said body seated in said groove, and means for removably holding said reduced portion in its groove.

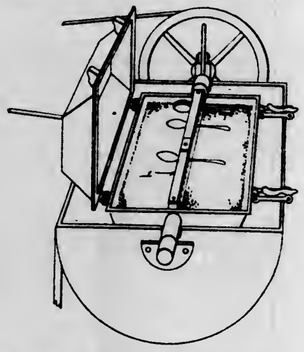
1,886,699. UNIVERSAL AUTOMATIC GRINDER, POLISHER, OR BUFFER. CARL B. LARSON, Maplewood, N. J., assignor to William C. Hammond, Kalamazoo, Mich. Filed Feb. 2, 1931. Serial No. 512,785. 13 Claims. (Cl. 51—108.)



8. In a machine of the class described, a casing, a member mounted thereon and arranged to be rotated with an intermittent motion, a standard disposed at the side of said casing, a vertical post carried by said standard, a fork member mounted on top of said post, a yoke member having a knuckle pivotally connected to said

fork member, manually operable means for adjusting said yoke member to any desired position about its pivotal connection with said fork member, and an operating wheel head pivotally mounted on said yoke member, screw rods threaded through said yoke member and engaging said operating wheel head for holding said operating wheel head in selected fixed position with respect to said yoke member, said operating wheel head having an operating wheel for contacting with work carried by said intermittently rotatable member.

1,886,700. HOLDER FOR HOLDING SILVERWARE WHILE THE SAME IS BEING POLISHED. KARL LEUCHNER, Cleveland, Ohio, assignor to Howard A. Lampman, Cleveland, Ohio. Filed Mar. 18, 1931. Serial No. 523,642. 1 Claim. (Cl. 29—90.)



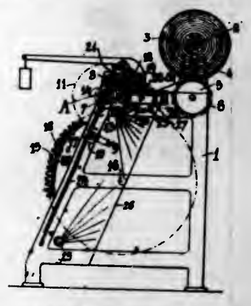
An article holder for a polishing or burnishing machine comprising a central strip having two rows of holes therein, arranged longitudinally of the strip with the holes in one row arranged opposite those in the other, pins passing through the holes and projecting from opposite sides of the strip, spaces on said sides of the strip at the ends thereof, a pair of closure strips having one end seated on a spacer, on one end of the device, a pivot pin passing through the closure strips, the said spacers, and the first-mentioned strip, pivotally connecting the closure strips to the first-mentioned strip, the free ends of the closure strips being beveled, a pair of beveled members seated on the spacers at the opposite end of the device and having their beveled portions overlapping the beveled ends of the closure strips, plates seated on the beveled members and overlapping the beveled ends of the closure strips, means for fastening the beveled members and the said plates in position, said means including a bolt and a nut, and detents carried by the last-mentioned spaces and engaging recesses in the free ends of the closure strip.

1,886,701. THERMOSTATIC GENERATOR AND CONTROL DEVICE. ALBERT J. LINDEMANN, WALTER C. LINDEMANN, and ADOLPH T. SCHMIDT, Milwaukee, Wis., assignors to A. J. Lindemann & Hoverson Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed Oct. 20, 1928. Serial No. 313,747. 13 Claims. (Cl. 158—42.4.)



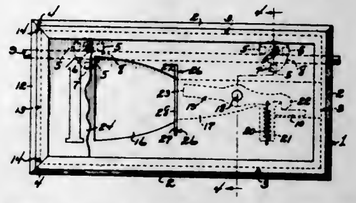
6. In a device of the character described, the combination with a vapor burner, of a vapor generator comprising a thermally responsive tube communicating therewith and positioned for being heated thereby, a valve controlled fuel supply inlet for said generator and means outside of and operatively connected with said generator for controlling said valve by the relative expansion between said generator and said means.

1,886,702. CONTROLLING DEVICE FOR LONG LENGTHS OF SPINNING MATERIAL HAVING AN APPRECIABLE WIDTH. PAUL LITTY, Leipzig, Germany. Filed Mar. 25, 1931, Serial No. 525,228, and in Germany May 16, 1930. 5 Claims. (Cl. 19—161.)



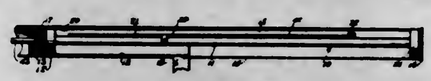
1. A controlling apparatus for separating equal lengths from fleece rolls, comprising in combination a frame, means for rotatably supporting the fleece roll, a drawing in roller engaging the fleece roll, a pulling roller engaging the fleece, means for intermittently rotating the pulling roller, supporting means cooperating with said pulling roller and engaging the fleece on the opposite side, a pair of continuously rotating separating rollers arranged beyond the pulling roller and engaging the fleece on both sides, and means for rotating the drawing in roller and the separating rollers in the suitable direction.

1,886,703. SAFETY LICENSE TAG HOLDER. AMAZON C. LOGAN, Tampa, Fla., assignor of one-fourth to Nick Brown and Lucille Brown, one-fourth to Addison Logan and Ruby R. Logan, one-fourth to Henry M. Cook and Ruth H. Cook, one-eighth to Hugh C. Logan, and one-eighth to Martha P. Logan, Tampa, Fla. Filed Feb. 23, 1932. Serial No. 594,703. 1 Claim. (Cl. 40—125.)



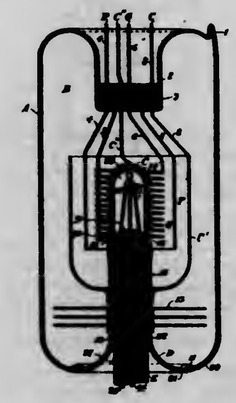
In a device for the purpose set forth, a rectangular body having two of its edges and one of its ends provided with an outstanding inwardly directed flange, a keeper in the body, a rectangular slide having a longitudinal groove on one of its faces, and an enlarged opening communicating with the groove, and said slide having one of its ends provided with an outstanding inwardly directed flange to receive therein a license plate, a pivotally supported spring influenced dog in the groove of the slide to engage with the keeper when the slide is moved into the body for locking the slide and license tag in the body and said tag, when the same is to be removed designed to be cut away in a line with the groove to permit access being obtained to the dog to swing the latter out of engagement with the keeper and to likewise permit the withdrawal of the slide from the body.

1,886,704. FIREARM. CRAWFORD C. LOOMIS, Ilion, N. Y., assignor to Remington Arms Company, Inc., a Corporation of Delaware. Filed July 6, 1929. Serial No. 376,821. 16 Claims. (Cl. 124—11.)



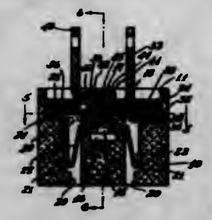
1. In an air gun, a barrel, a magazine tube adapted to contain a column of shot pellets, a spring and spring follower in said tube urging said shot pellets rearwardly, an opening in said tube for the transfer of pellets to said barrel, and a loading port located in the wall of said tube opposite the column of shot pellets but out of alignment with any one of such pellets.

1,886,705. INDIRECT ELECTRON EXCITATION FOR THERMIONIC VACUUM TUBES. ARSENE N. LUCIAN, Philadelphia, Pa. Filed Feb. 6, 1926. Serial No. 86,387. 10 Claims. (Cl. 250—27.5.)



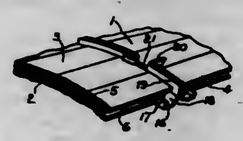
10. In a thermionic device an envelope and a hollow cathode, the surface of the cathode being corrugated, and a heater element for said cathode.

1,886,706. COMBINED PLUG AND FUSE. WILLIAM J. MACDONALD, Watertown, Mass., assignor to Harry M. Belcher, Newton, Mass. Filed Jan. 14, 1930. Serial No. 420,704. 12 Claims. (Cl. 200—115.5.)



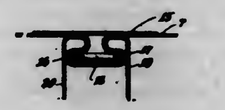
1. A plug of the kind described, comprising a body portion having a chamber therein, a fusible member located in said chamber, a disc of transparent insulating material closing said chamber, a second disc of insulating material over said first disc, said second disc having a sight opening therein to permit visual examination of said fuse, and a pair of contact prongs, one of said prongs being held on said body beneath said first insulating disc, and the other of said prongs being fixed to the top of said second disc.

1,886,707. WOODEN STAVE CULVERT. HAROLD NOLAN MACPHERSON, Vancouver, British Columbia, Canada. Filed July 31, 1931. Serial No. 554,836. 5 Claims. (Cl. 137—75.)



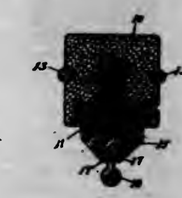
3. In a circular culvert, a plurality of adjoining wood staves having a substantially semi-circular tongue at one side edge and a corresponding groove on the other, said staves having a plane marginal portion on the inner and outer side of the tongue and groove, the plane of one of the marginal portions at the inner side of the tongue or groove being at an angle to that of the marginal portion at the outer side of the tongue or strip whereby the staves can be laid to two different radii and to provide a full surface contact between either the inner or the outer marginal portions of adjoining staves, whereby deformation of the culvert due to superposed load will tend to bring the outer marginal portions of adjoining staves into compression at the top and bottom of the culvert and to bring the inner marginal portions into compression at the sides of the culvert.

1,886,708. FASTENING DEVICE FOR AIRPLANE WING COVERS. ROSCOE I. MARKEY, Nassau County, N. Y., assignor to The Aviation Patent and Research Corporation, New York, N. Y., a Corporation of New York. Filed Jan. 14, 1932. Serial No. 586,497. 11 Claims. (Cl. 244—31.)



1. In an interiorly braced airplane part having a fabric skin, structurally formed slots in the bracing members means for maintaining said skin taut and insuring against slippage, said means comprising non-penetrating laterally expandible spring fastening devices superimposed upon said skin in said slots whereby the latter is secured to said interior bracing members.

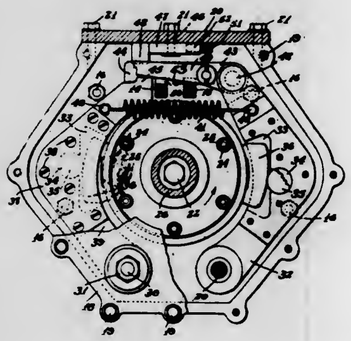
1,886,709. CONDUCTOR SUPPORT. CHARLES C. MARTIN, Fairfield, Iowa, assignor to The Louden Machinery Company, Fairfield, Iowa, a Corporation of Iowa. Filed Feb. 24, 1931. Serial No. 517,839. 4 Claims. (Cl. 191—40.)



1. The combination with a trolley-engaging conductor having an enlarged anchorage portion, a reduced web portion and a trolley-engaging portion, of means for supporting said conductor comprising a member having an opening to receive the enlarged anchorage portion and a slot leading to said opening to receive said web portion and having a screw-threaded opening leading to said an-

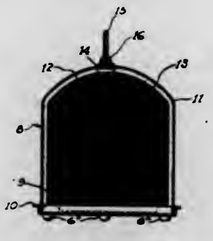
chorage receiving opening, an insulating supporting member provided with a screw-threaded member for screwing into said screw-threaded opening and engaging the anchorage portion of the conductor to clamp it in position, and means for securing said insulating supporting member to a support.

1,886,710. **REVERSE BRAKE DEVICE.** CARL A. MATSON, Lynnfield, Mass., assignor to The Matson Company, Concord, N. H., a Corporation of New Hampshire. Filed Feb. 18, 1929. Serial No. 340,668. 22 Claims. (Cl. 192—4.)



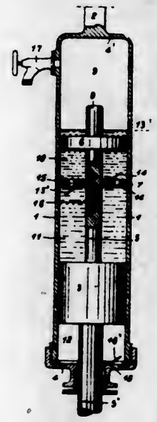
1. In a device of the kind described, the combination of a shaft, a member fixed thereto and rotatable therewith, a freely pivoted member partially surrounding the first said member and having a chamber formed therein, and a wedging device in said chamber normally operable to engage said rotatable member to prevent rotative movement thereof in one direction only.

1,886,711. **SANITARY FOOD PROTECTOR.** IDA MAE MCLEOD, Hobbema, Alberta, Canada. Filed Mar. 22, 1929. Serial No. 349,040. 1 Claim. (Cl. 45—71.)



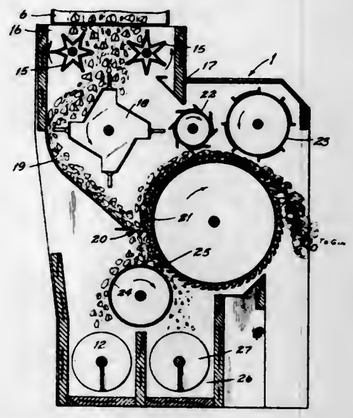
A sanitary food protector including a tray of rectangular form provided with an upstanding annular flange; a body including a lower frame of corresponding form for snug engagement on said tray and contact with the inner face of the flange thereof; said lower frame having its outer edge extended outwardly for engagement over the flange of said tray; said body including end frames extended upwardly from said lower frame; rigid connections between the upper portions of said end frames; screen members secured on the frame of said body to form the sides and top as well as the ends thereof; and a handle carried on the connection between said end frames.

1,886,712. **SUSPENSION APPARATUS FOR AEROPLANES AND OTHER VEHICLES.** GEORGES LOUIS RENÉ JEAN MESSIER, Montrouge, France. Filed June 13, 1929, Serial No. 370,622, and in France Sept. 14, 1928. 9 Claims. (Cl. 267—64.)



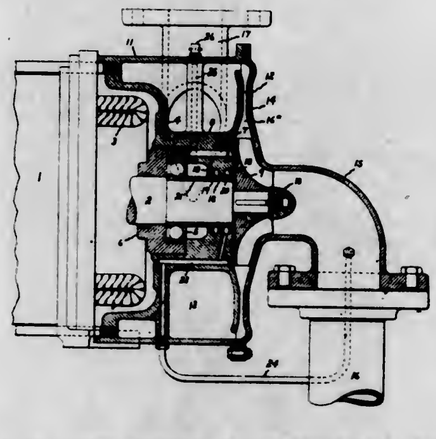
1. Pneumatic suspension apparatus for aeroplanes and other vehicles, comprising a cylinder, a first piston movable in this cylinder, a second piston connected to the first piston, a diaphragm secured within said cylinder and arranged between the two pistons, apertures of reduced section formed in this diaphragm, one of which at least is controlled by a non-return valve, a liquid always substantially filling the space between the two pistons, a layer of liquid upon one of the said pistons, and a cushion of compressed gas above the said layer of liquid.

1,886,713. **METHOD OF CLEANING COTTON.** JOHN E. MITCHELL, Dallas, Tex. Filed June 28, 1930. Serial No. 464,560. 6 Claims. (Cl. 19—36.)



1. In the art of cleaning cotton, the method which consists in subjecting bulk cotton to the action of a plurality of cleaning machines, each of which is adapted to remove the main body of cotton while providing a free discharge for small refuse, hulls, bolls and small lock cotton from the machine, dividing the discharged product from each machine into two streams, one of which contains the small refuse and the other the large hulls, lock cotton and bolls, subjecting the bolls in all of said latter streams to further treatment to open the same, and finally subjecting the products of all of said latter streams including the open bolls, to further treatment to recover the cotton therefrom.

1,886,714. **MOTOR DRIVEN FLUID PUMP.** SANFORD A. MOSS, Lynn, Mass., assignor to General Electric Company, a Corporation of New York. Filed Aug. 13, 1929. Serial No. 385,556. 4 Claims. (Cl. 103—87.)



1. In a pump structure, the combination of a motor comprising a head, a bearing in the head and a shaft supported in and projecting beyond said bearing, an impeller mounted on the projecting shaft end, a discharge scroll surrounding said bearing directly adjacent to and in front of said head whereby the head forms a side wall of the discharge scroll, and walls forming a conduit for conveying fluid being pumped from the impeller to said scroll.

1,886,715. **PRODUCTION OF RADIATORS.** THOMAS E. MURRAY, Jr., Brooklyn, N. Y., assignor, by mesne assignments, to American Radiator & Standard Sanitary Corporation, a Corporation of Delaware. Filed Oct. 8, 1928. Serial No. 310,959. 16 Claims. (Cl. 113—118.)

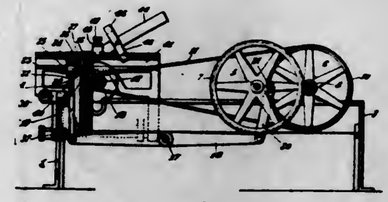


1. In the production of radiators of the type described, the method which consists in first forming a sheet of extended area into a shape which facilitates its application to the heating element, applying it thereto and thereafter reshaping it to form inside and outside flues.

1,886,716. **PROCESS AND COMPOSITION FOR IMPREGNATING WOOD.** HERMAN C. NIELSEN, Memphis, Tenn., assignor to National Wood Products Company, Detroit, Mich., a Corporation of Delaware. Filed Mar. 14, 1929. Serial No. 347,174. 11 Claims. (Cl. 99—12.)

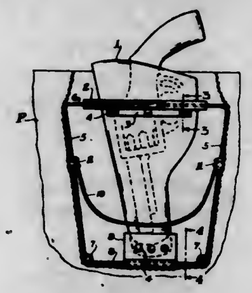
1. In the treatment of wood, the herein described process which comprises immersing the wood in a dry state in a liquor containing neutral mineral oil, mineral spirits, manganese drying oil, turpentine, rosin, dichlor benzol, formaldehyde and an alum, the mineral spirits and turpentine amounting to about 50–65% of the whole, the neutral mineral oil being about 10 to 17%, the manganese drying oil being about 8 to 11% and the other materials being in small but substantial amounts, the treatment being conducted at about 120 to 135° F., until the wood is sufficiently permeated with the mixture.

1,886,717. **MACHINE FOR SHARPENING MOWING MACHINE CUTTERS.** JAKOB NOSS, Thun, Switzerland. Filed May 12, 1931, Serial No. 536,851, and in Switzerland May 16, 1930. 10 Claims. (Cl. 51—56.)



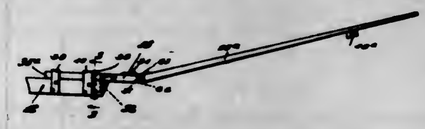
1. A machine for sharpening mower-cutters comprising in combination a frame, a grinding disc having a conical face mounted to rotate thereon, means for rotating the grinding disc and simultaneously reciprocating it in its own plane, and a holder for supporting a cutter against the said conical face whereof the conicity corresponds to the angle between the cutting edges of two adjacent teeth of the cutter.

1,886,718. **ATTACHMENT FOR PISTOL HOLSTERS.** PHILIP JORDAN NOEL, Bowling Green, Ky. Filed June 25, 1931. Serial No. 546,895. 6 Claims. (Cl. 224—1.)



1. A holster attachment comprising a tubular guide frame member, means reciprocable in said guide frame member adapted to engage opposite sides of a pocket, and means for forcing said reciprocable means outwardly with respect to the frame member.

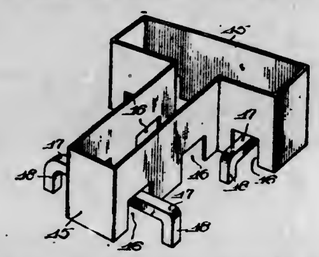
1,886,719. **GATE.** ALBERT J. OAKS, South Fork, Pa., and WALLACE E. OAKS, Steubenville, Ohio. Filed May 12, 1930. Serial No. 451,682. 1 Claim. (Cl. 39—92.)



In a crossing gate, a support, a body portion of a gate pivoted to the support, means for operating the body portion to upward and downward positions, a pivot pin mounted upon said body portion, a main gate arm mounted thereon, said gate arm extending outwardly a substantial

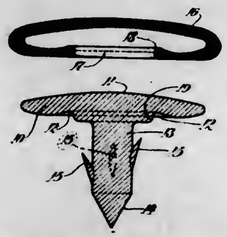
distance from said pin, stop means carried by said body portion, and spring means connected between said body portion and said gate arm for normally holding said arm against said stop means.

1,886,720. ROAD MARKER AND METHOD OF PLACING THE SAME IN A PAVEMENT. JAMES RAYMOND O'BRIEN, Chicago, Ill., assignor, by mesne assignments, to Rubber Products Corporation, Dover, Del. Filed Jan. 24, 1927. Serial No. 163,005. 7 Claims. (Cl. 94—1.5.)



2. The method of placing a road marker which consists in placing in a pavement an anchor, then placing a form in the pavement over the anchor, the said form having one or more recesses opening through the bottom thereof to receive the anchor, a portion of the anchor extending beyond the form, then filling in the pavement around the said form and over the projecting portion of the anchor, then removing the said form to provide a recess or pocket, the said anchor remaining in the pavement and extending in a direction across the recess or pocket, and then filling in the recess or pocket with a suitable material to form the body of the marker, the portion of the anchor in the said recess or pocket being embedded in the body of the marker element.

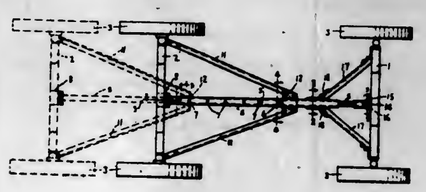
1,886,721. ROAD MARKER. JAMES RAYMOND O'BRIEN, Chicago, Ill., assignor, by mesne assignments, to Rubber Products Corporation, Dover, Del. Filed Aug. 10, 1928. Serial No. 298,716. 4 Claims. (Cl. 94—1.5.)



1. A road marker comprising a body portion adapted to rest against the surface of a pavement, means depending below the body for securing the same to the pavement, a hollow resilient cap removably secured to and housing said body, said cap having an opening in one side thereof adapted to be stretched and through which opening said securing means projects, the cap being enlarged along the peripheral edge of said opening and an annular recess in the lower face of said body portion for receiving said enlarged edge of the cap.

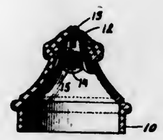
1,886,722. FARM WAGON. THEODORE H. OPPENHEIM, Coldwater, Ohio, assignor to The New Idea Spreader Company, Coldwater, Ohio, a Corporation of Ohio. Filed Jan. 30, 1931. Serial No. 512,314. 6 Claims. (Cl. 280—142.)

2. In a wagon of the character described, front and rear axles, an outer tubular telescopic member connected to one of said axles, an inner telescopic member rotatably connected to the other axle, braces between the outer tubular member and the axle to which it is connected, means lying wholly on the outside of said outer tubular



member for connecting the braces therewith at a point in the rear of the connection between said outer tubular member and the axle with which it is connected, and a pair of braces extending from the other axle and rotatably connected with said outer tubular member.

1,886,723. PERCOLATOR TOP. WILLIAM H. OVERTON, St. Louis, Mo. Filed May 13, 1931. Serial No. 537,137. 1 Claim. (Cl. 53—3.)



A percolator top comprising a bell-shaped member of glass provided at the center of its top with an opening, a screw passing through said opening, a deflector of sheet metal housed in the top of the body and connected with said screw, said bell-shaped member having lower outturned edges engaging the inner surface of the body whereby the intermediate portion of said bell-shaped member is spaced from the inner surface of the body.

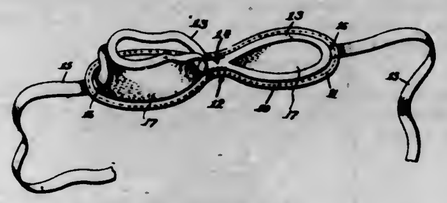
1,886,724. OPTICAL LENS. CHARLES T. PANKHURST, Ionia, Mich. Filed Mar. 28, 1930. Serial No. 439,788. 2 Claims. (Cl. 88—54.)



1. An optical lens having its edge rounded throughout, its front face highly polished throughout, its rear face highly polished throughout, said edge being smooth and highly polished to provide for the immediate passage of light rays through the lens from such edge, thereby eliminating dazzle, glare or diffusion when the light rays strike the edge of the lens.

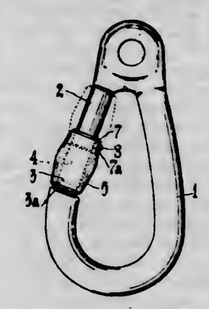
1,886,725. EYE SHIELD. LOUISE PEDERSEN, Barrington, Ill. Filed Sept. 23, 1931. Serial No. 564,533. 8 Claims. (Cl. 128—268.)

1. A flexible eye shield having a reduced portion intermediate its ends to fit over the bridge of the nose, perforated, rim like flexible frame members hingedly connected to said shield adjacent and on each side of the longitudinal center of the shield and adapted to extend over the eye



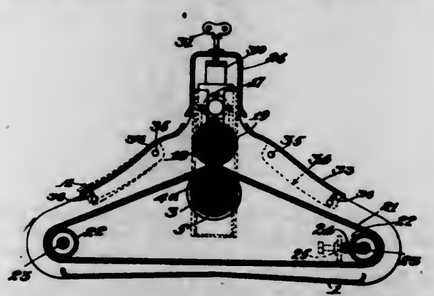
covering portions to the shield, to form therewith holders for removable pads, and means for securing together the free portions of the said frames and the said shield.

1,886,726. SLEEVE LOCK SLING HOOK. ALFRED ARMSTRONG EDWARD PENNEFATHER, Timaru, New Zealand. Filed Mar. 15, 1932, Serial No. 599,015, and in New Zealand Mar. 27, 1931. 2 Claims. (Cl. 24—238.)



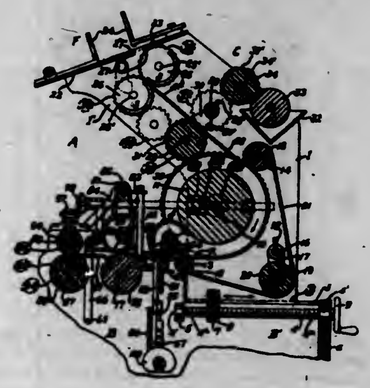
1. A hook of the class described including a rigid member opposed to the bill of the hook and spaced therefrom, a pin on the member, a sleeve slidably and rotatably mounted on the member and having a slot therein slidably receiving the pin, said sleeve having upper and lower recesses communicating with the upper end of the slot, the upper recess being engageable with the pin when said hook is in normal position and the lower recess when the hook is inverted, as and for the purpose set forth.

1,886,727. ELECTRIC SAFETY CLOTHES WRINGER. CLARENCE N. PERRY, Edgewater, Colo. Filed Sept. 9, 1931. Serial No. 561,937. 9 Claims. (Cl. 68—32.)



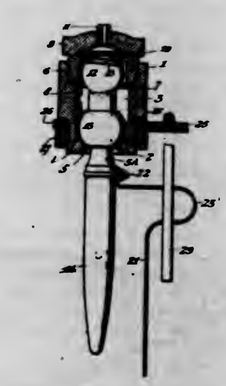
1. In a safety clothes wringer, the combination of a casing, a conveyor wringer mechanism in said casing, adjustable safety shields on said casing above said wringer mechanism, means on the sides of said casing and shields for holding said shields in adjusted positions, and brushing means on said casing and operating upon said conveyor wringer mechanism.

1,886,728. ENVELOPE-MAKING MACHINE. CHARLES F. PFLANZE, Webster Groves, Mo. Filed Feb. 5, 1931. Serial No. 513,502. 15 Claims. (Cl. 93—61.)



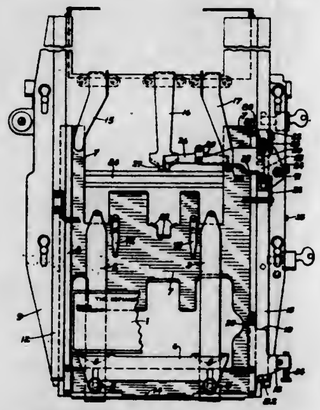
1. An envelope-making machine comprising blank-feeding mechanism, blank-folding mechanism, stop means for arresting movement of the envelope blanks to the blank-folding mechanism, and means for providing for the adjustment of one of said mechanisms toward and from said stop means to permit the machine to produce envelopes from blanks of different depths.

1,886,729. DEVICE FOR AUTOMATICALLY FEEDING AND CUTTING OFF A SUPPLY OF LUBRICATING OIL OR OTHER LIQUID. HARRY B. PFEIFFER, Denver, Colo. Filed June 20, 1930. Serial No. 462,591. 8 Claims. (Cl. 184—3.)



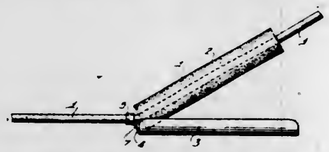
1. In a device of the character described, a chambered body adapted to connect with a liquid supply and having a valve seat and a valve thereon, a depending stem oscillatably mounted in the chamber for moving said valve from its seat, said stem having an outlet port, and a depending, parallel guide member secured at its upper end to said stem, and spaced therefrom.

1,886,730. PRINTING PRESS. EDGAR ELLSWORTH PHINNEY, West Orange, N. J., assignor to Defiance Manufacturing Corporation, Orange, N. J., a Corporation of New York. Filed Jan. 16, 1932. Serial No. 587,015. 1 Claim. (Cl. 101—97.)



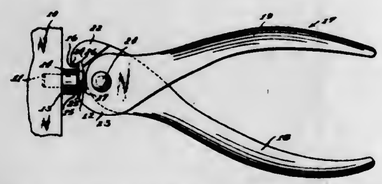
In a printing press; a spring paper grip, a yieldable member adapted to resist movement of said grip to active position, and a reciprocatory paper feed device normally restraining the yieldable member and adapted to free the same as the paper is fed to printing position.

1,886,731. HAIR CURLER. ROBERT T. PLATE, Detroit, Mich. Filed June 6, 1932. Serial No. 615,601. 5 Claims. (Cl. 132—48.)



1. A hair curler comprising a flexible wire, a concentric enlargement on said wire, and a semi-cylindrical retaining member adapted to receive said enlargement, said retaining member being secured to said wire adjacent the end of said enlargement whereby movement of said retaining member relative to said enlargement is accomplished by bending said wire.

1,886,732. BENDING PLIERS. SPRIGG POLAND, Winter Park, Fla. Filed Jan. 22, 1931. Serial No. 510,543. 1 Claim. (Cl. 81—10.)



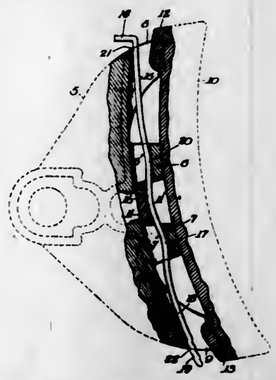
A pair of pliers having a long jaw and a short jaw, each jaw terminating in a substantially right angled notch so facing toward the other jaw that one wall of each notch is substantially parallel to the corresponding notch of the other jaw when said jaws are in work engaging position, the greater length of the longer jaw causing its notch to travel in an arc greater than but concentric with the notch of the short jaw whereby, a relatively great clamping action is produced, there being a reentrant recess formed in each jaw between its notch and its pivot, the recess in the long jaw forming a shoulder thereon which constitutes a fulcrum point against which the work may bear, said recesses affording a space for work between said jaws.

1,886,733. SANDING DRUM. ROBERT A. PONSELLE, New York, N. Y. Filed Dec. 29, 1927. Serial No. 243,285. 9 Claims. (Cl. 51—194.)



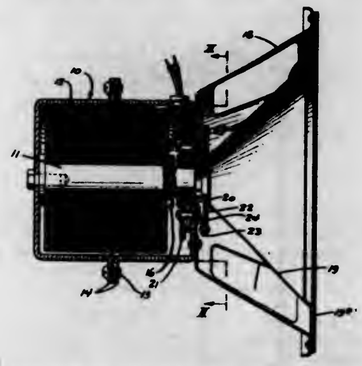
1. In a drum, a body having end walls and a cylindrical wall provided with an opening extending lengthwise of the drum axis and substantially from end to end of the drum, a plate of segmental form mounted within the drum on an axis lying between radial planes passing through the edges of said opening, and balanced to be swung by centrifugal force to close the opening, a gripping jaw carried by the body and cooperating with a portion thereof adjacent one side of the opening, a gripping jaw carried by the plate and cooperating with a portion thereof, the gripping jaw carried by the plate lying adjacent the first gripping jaw when the plate is in closing position, a pair of stops, one associated with each gripping jaw and a surface sheet extending around the drum and over the plate, this sheet having one end held by the jaw on the plate and the other end held by the jaw on the drum, one end of the sheet passing around the edge of the body at the side of the opening, and the other end of the sheet passing around one end of the plate.

1,886,784. BRAKE SHOE KEY. ALLAN L. PRENTICE, Cleveland, Ohio, assignor to The American Brake Shoe and Foundry Company, Wilmington, Del., a Corporation of Delaware. Filed Oct. 16, 1931. Serial No. 569,199. 3 Claims. (Cl. 188—243.)



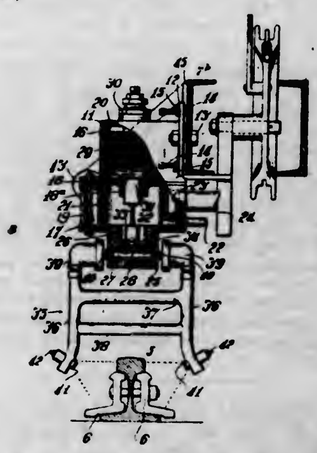
1. The combination with a brake shoe head and a brake shoe having interfitting attaching lugs provided with alined openings, of a key for securing the shoe snugly on the head and comprising a spring steel bar arranged in said openings and having at least two reversely bent portions between its ends to form bearings which engage the attaching lugs and place the key under tension in said lugs with the end portions of the key bearing against the head.

1,886,735. LOUD SPEAKER. EDWIN S. PRIDHAM, Oakland, Calif., assignor to The Magnavox Company, Oakland, Calif., a Corporation of Arizona. Filed Feb. 19, 1929. Serial No. 341,231. 12 Claims. (Cl. 174—115.5.)



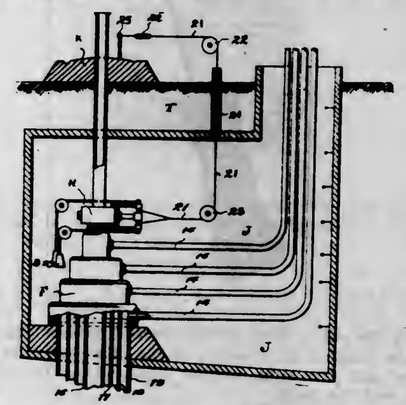
4. A loud speaker comprising a casing composed of magnetizable material, having an opening in one end wall, a field magnet within the casing fixed to the opposite end wall and projecting into said opening so as to leave an annular air gap, said casing being formed in endwise, separable sections, and detachably connected together, a field coil removably received in said casing and loosely surrounding the said field magnet, a movable coil disposed in said air gap, a sound-regenerating diaphragm secured to said movable coil, a support for the rim of said diaphragm, secured to the adjacent end wall of the casing, a spacing ring on the apertured end wall of the casing, having an opening to exactly fit the adjacent end of the field magnet and bring the two parts of the casing into position where the air gap is of uniform width throughout, and a unitary shiftable, flexible connection between the movable coil and the apertured end wall, for centering the said coil with relation to the spacing ring, whereby the coil can be secured to and centered upon said end wall independently of said support for the rim of the diaphragm.

1,886,736. RAIL JOINT OILER. HARRY W. PROTZELLER, East Chicago, Ind., assignor to O. F. Jordan Company, East Chicago, Ind., a Corporation of Indiana. Filed Feb. 28, 1927. Serial No. 170,293. 20 Claims. (Cl. 184—3.)



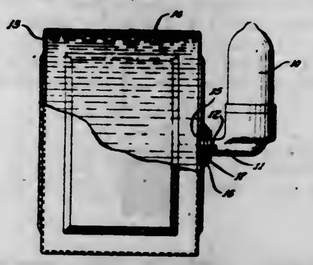
1. A rail joint oiler embodying therein a frame, a valve casing laterally supported thereon, a nozzle head including laterally spaced nozzle members operatively connected to said casing, and means providing for a lateral adjustment of the valve casing toward and away from said frame to locate the nozzle members with respect to the vertical median plane of the rail.

1,886,737. AUTOMATIC FIRE EXTINGUISHING VALVE FOR OIL WELLS. JUAN RAOU, Buenos Aires, Argentina. Filed May 8, 1929, Serial No. 361,813, and in Argentina Mar. 4, 1929. 1 Claim. (Cl. 137—162.)



A fire extinguishing device for oil well heads, comprising a slide valve, a seating for the same, a cable disposed so as to hold the said valve in its open position, a fusible part in said holding cable, and a counterweight attached to a cable running over a pulley and attached to said valve to close said valve when released by the rupture of the holding cable caused by the fusing of the said fusible part at a predetermined temperature, substantially as described.

1,886,738. CLEANING DEVICE. CHARLES E. REDFIELD, Chicago, Ill. Filed May 4, 1931. Serial No. 534,998. 2 Claims. (Cl. 141—1.)



1. A device for cleansing a radiator air vent comprising a body providing a container and having an opening formed in one wall thereof and provided with opposite corresponding wall portions capable of being manually compressed or flexed, and means mounted in said opening to connect said body and the air vent.

1,886,739. MOP HOLDER. GEORGE P. REGAN, Oakland, Calif., assignor to Parker-Regan Corporation, San Francisco, Calif., a Corporation of Nevada. Filed July 17, 1930. Serial No. 468,498. 3 Claims. (Cl. 15—120.)

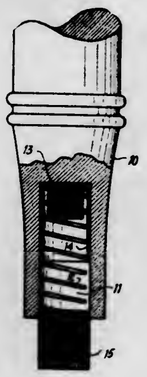
1. In a device of the character described a head member, a wire rod having a portion extending transversely of the head, said head having a flanged portion bent over the transverse portion of the rod and clinched to

secure the rod, said rod having a kink formed thereon and engaged by the clinched flange to secure the rod against turning movement and endwise movement with relation to the head, a return bend loop formed on each



end of the rod, a catch member carried by one loop, and an arm forming an extension of the other loop, the free end of said arm being movable into and out of engagement with the catch.

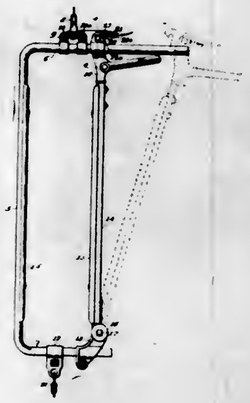
1,886,740. RESILIENT SUPPORT. DWIGHT D. RICHARDSON, West End, N. C. Filed Oct. 24, 1930. Serial No. 490,950. 3 Claims. (Cl. 45—137.)



1. A resilient support for articles adapted to be secured in a bore in the article, said resilient support comprising a coiled compression spring having resilient material moulded on the lower end thereof, and having resilient material on the inside and outside of the upper end thereof, said upper end being adapted to be secured in the deepest portion of said bore.

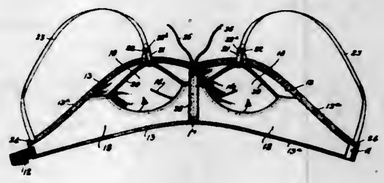
1,886,741. STANCHION. JESSE J. RICKEY, Cedar Rapids, Iowa, assignor to Hall Manufacturing Co., Cedar Rapids, Iowa. Filed May 31, 1927. Serial No. 195,230. 4 Claims. (Cl. 119—150.)

1. In a stanchion having a fixed side-bar with laterally extending upper and lower arms, and formed integrally of U-bar, a clip clamped to the upper arm and serving as a support for the fixed side-bar, a swing-bar carried pivotally by the lower arm, and provided with a head slidable along the upper arm, a latch pivoted over the U-bar channel and in said head, and adapted to hook on one of the clip bolts, a stop in said channel near the



outer end, and a depending lug forming a part of the latch, and adapted to engage said stop elastically as the swing-bar moves to the open position.

1,886,742. BRASSIÈRE. HAROLD D. ROSE, Valley Stream, N. Y., assignor to Model Brassiere Co. Inc., New York, N. Y., a Corporation of New York. Filed July 22, 1932. Serial No. 623,961. 2 Claims. (Cl. 2—42.)

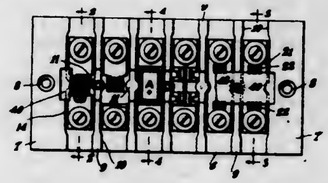


1. A brassière adapted to encircle the body of the wearer in the bust region, comprising an outer section of pliable material, fastening means for securing the same in place on the body of the wearer, bust supporting pouches, located upon the inside of the said outer section and extending in opposite directions, said pouches opening upwardly to receive the busts, and supporting devices each of which comprises a band whose ends are fastened to the upper edge of a pouch at a distance sufficient to enable said upper edge and said band to encircle the bust, a connecting piece uniting the central portion of said strap to the upper edge of the outer section, a shoulder strap, one end of which is secured to the upper edge of the brassière near its outermost end, and means for securing the other end thereof slidably to said connecting piece.

1,886,743. TERMINAL BLOCK. RAYMOND T. ROTH, New York, N. Y. Filed Mar. 1, 1927. Serial No. 171,791. 12 Claims. (Cl. 175—369.)

1. A terminal block of an integral mass of molded insulating material comprising a series of transverse partitions with recesses at the bottom of the spaces between

them and anchor devices molded in place between said partitions on each side of said recesses, and a plurality of different types of terminal connectors interchangeably



fitting between said partitions and adapted to be fastened in place by attachment to said anchor devices to form current carrying conductors over said recesses.

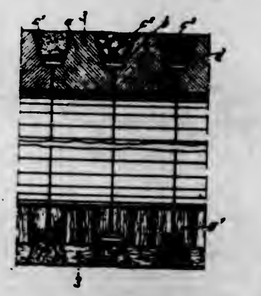
1,886,744. HEAT EXCHANGER. JOHN H. SCHACHT and DANIEL A. PALMITER, Sacramento, Calif. Filed Jan. 20, 1932. Serial No. 587,818. 3 Claims. (Cl. 257—136.)



2. A heat transfer unit consisting of a pair of spaced plates forming front and rear walls and connected at their edges, one of said plates having transversely extending portions bent toward the other plate and secured thereto to form a passageway, and nipples on opposite sides of said passageway, said plates being corrugated in a direction transverse the direction of flow of fluid through the unit, in combination with a housing for said unit having front and rear walls close to the convex sides of the corrugations and provided with an inlet adjacent one edge of the unit and an outlet adjacent the opposite edge of the unit and on the side of the unit opposite the inlet, said housing having corrugations on its front and back walls extending inwardly from said walls parallel to the corrugations of the unit and opposite the concave sides of said unit corrugations.

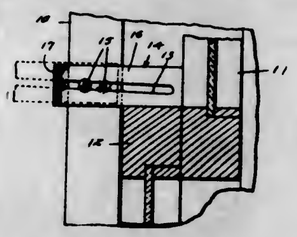
1,886,745. LINING FOR UNDERGROUND WORKS. HANNS SCHAEFER, Essen-Ruhr, Germany, assignor to the Firm: N. V. Montania, The Hague, Netherlands. Filed Nov. 9, 1928, Serial No. 318,205, and in Germany Jan. 27, 1928. 6 Claims. (Cl. 61—41.)

1. In a lining for underground works, in combination, a plurality of lining sections, each comprising a plurality of blocks, having rebates in their outer faces coacting with similar rebates in the faces of the corresponding blocks of the next section whereby a space of wedge-like cross section is constituted in the outer periphery of the lining, a pressure resisting medium inserted into such space, and an elastic insertion inserted between adjacent blocks of a lining section, the portion of the insertion disposed in the vicinity of the inner periphery of the



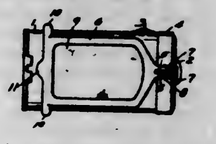
lining section having greater elasticity than the portion disposed in the vicinity of the outer periphery of such lining section.

1,886,746. WINDOW LOCK AND ANTIRATTLER. PETER SCHNEIDER, Oswego, N. Y. Filed Apr. 7, 1931. Serial No. 528,401. 2 Claims. (Cl. 292—145.)



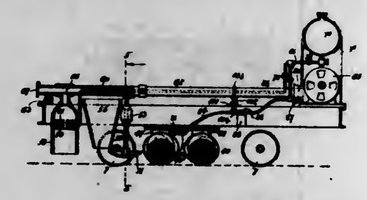
1. A window lock of the character described comprising an elongated plate member having an elongated opening therethrough disposed in angular relation to the upper and lower edges thereof, a handle integrally formed with one end of the plate, and means for slidably securing the plate on a window frame for movement into locking engagement with a horizontal edge portion of a slidable window whereby to hold the window against movement.

1,886,747. FOLDING MAGNIFIER ATTACHMENT. GEORGE T. SCHROEDER, New York, N. Y. Filed June 4, 1929. Serial No. 368,418. 3 Claims. (Cl. 88—39.)



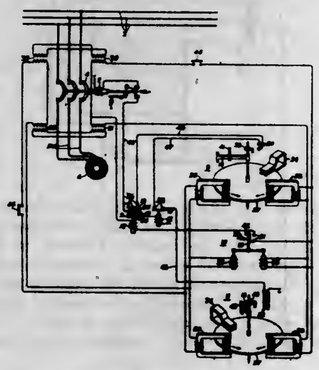
1. A portable magnifying and illuminating device comprising in combination, a casing, an electric light bulb mounted at one end of said casing, means for lighting said bulb at will, a pivot mounted on said casing at said end thereof, a frame of smaller dimensions than said casing hinged at one end to said pivot so that said frame will lie conformably within the outline of said casing in idle position and in extended active position will overlie said end of said casing and said bulb, a magnifying glass carried by said frame, and means for yieldingly holding said frame to said casing in the idle position.

1,886,748. PROCESS AND MACHINE FOR ROAD-MAKING. AUGUST E. SCHUTTE, Northboro, Mass. Filed Aug. 30, 1929. Serial No. 389,544. 8 Claims. (Cl. 94—39.)



1. In a road making machine comprising a wheeled vehicle having a rotary compression, wiping and leveling member for laying upon the roadbed material deposited thereon in front of said member, said member being operated to turn in a direction reverse to the turning of the wheels of said vehicle as the machine is progressively moved, the combination with said member of means cooperating with said member to make dense the material deposited upon the roadbed before its passage beneath said member as the machine is progressively moved.

1,886,749. CONTROL APPARATUS. HAROLD T. SEELEY, Lansdowne, Pa., assignor to General Electric Company, a Corporation of New York. Filed Feb. 16, 1932. Serial No. 593,249. 5 Claims. (Cl. 171—118.)



1. In combination, two alternating current circuits, means for controlling the interconnection of said circuits including control means operable to a predetermined position when energized, means connected to be energized from said circuits in accordance with the difference between the frequencies of the electromotive forces of the circuits, transfer means operable in one position to effect the energization of said control means and in another position to control the energization of said control means conjointly with said frequency difference means, the time lag of said control means being such that the control means remains in its energized position during the movement of the transfer means between its two positions and means for controlling the transfer means in accordance with the phase relation between the electromotive forces of the circuits.

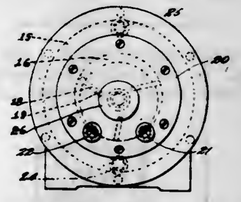
1,886,750. ADHESIVE MATERIAL CONTAINING CASEIN. GEORGE M. SHISLER, Bainbridge, N. Y., assignor, by mesne assignments, to The Casein Manufacturing Company of America, Inc., New York, N. Y., a Corporation of Delaware. Filed Apr. 27, 1928. Serial No. 273,488. 22 Claims. (Cl. 87—17.)

8. A dry glue base comprising casein, an amide thinning agent, and lime, such base giving a thin-flowing glue when mixed with water in the proportion of one part of casein with not over one and two-third parts of water, such thin-flowing adhesive being readily miscible with alcohol and acetone.

9. A glue comprising 100 parts of casein and about 15 to 100 parts of an amide dispersing agent, and a sufficient amount of water to dissolve substantially all of said casein.

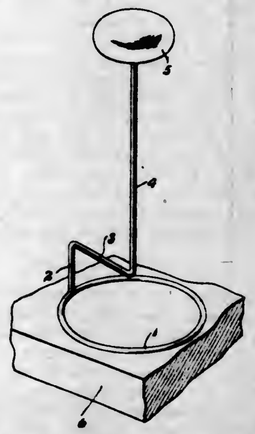
21. A glue base comprising two parts of casein and about one part of ammonium thiocyanate, which mixture, on mixing with water will practically all dissolve.

1,886,751. OIL PUMP. BERNARD SHREIBER, New York, N. Y., assignor to Meyer Gendel, New York, N. Y. Filed Feb. 11, 1931. Serial No. 515,116. 2 Claims. (Cl. 103—7.)



1. In an oil burning apparatus, a pump having a central chamber therein surrounded by an unbroken annular wall and having an oil jacket entirely surrounding the periphery of the central chamber concentric thereto to form an annular oil-heating chamber, a beater mounted excentrically in said chamber to provide a lunate oil space between the beater and the adjacent annular chamber wall, said beater having movable vanes constantly contacting with said annular chamber wall, said central chamber having inlet and outlet ports at one end extending axially of the beater and opening into respective ends of the lunate passage, said oil jacket also having inlet and outlet ports, and conduit means connecting the outlet port of the oil jacket and the inlet port of the central chamber.

1,886,752. STAND. WARREN H. STANBERRY, Grand Haven, Mich., assignor to Peerless Novelty Co., Grand Haven, Mich., a Corporation of Michigan. Filed Dec. 30, 1929. Serial No. 417,412. 4 Claims. (Cl. 211—33.)



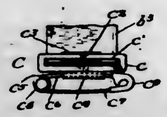
4. A hat holder comprising a base, a clamping member disposed in a radial plane of said base above the same and having its outer end integral with said base, a vertical standard extending upwardly from said member and disposed substantially centrally of said base, and a knob at the upper end of said standard, the area enclosed by said base being substantially greater than that of said knob to provide a stable support when said holder is placed on a surface in non-clamping relation.

1,886,753. ARMLET. IRWIN STEINBERGER, New York, N. Y., assignor to Steinberger Bros. Glove Corp., New York, N. Y., a Corporation of California. Filed Mar. 19, 1931. Serial No. 523,853. 7 Claims. (Cl. 2—170.)



1. An armlet for women's evening dress wear having a wrist end, the armlet being provided with an outwardly disposed tunnel at its wrist end, and an elastic member disposed in the tunnel and secured to the outer portion of the tunnel to form folds at the wrist end.

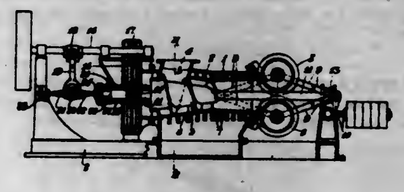
1,886,754. SUPPORTER FOR WEARING APPAREL. OTTO G. STOFFREGEN, Chicago, Ill. Filed Jan. 28, 1930. Serial No. 422,824. 1 Claim. (Cl. 24—76.)



A device for connecting a shoulder strap having a looped end to a garment, comprising an elongated flat plate of metal having a longitudinal slot for receiving the looped end of the strap, and a transverse slot leading to the longitudinal slot to permit the loop to be inserted into said longitudinal slot, a cylindrical shaped tongue connected to and projecting laterally from one side of the plate, a safety pin for attachment to the garment having a portion thereof extending through and connected pivotally to the tongue, and a member slidably mounted on the plate for closing the transverse slot.

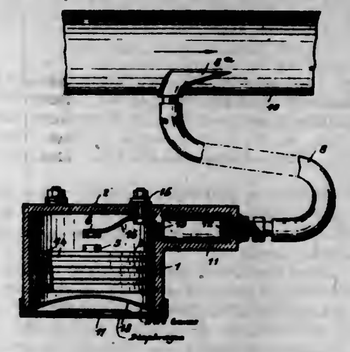
1,886,755. SCREW PRESS AND THE LIKE. JOHN STRINDLUND, Tofte I Hurum, Norway. Filed Mar. 22, 1929, Serial No. 349,049, and in Sweden Apr. 2, 1928. 7 Claims. (Cl. 100—48.)

1. In a machine of the character described, the combination of a frame, an inlet to said frame, an outlet from said frame, a conveyer screw rotatable in said frame and adapted continuously to convey material through said frame from said inlet to said outlet, means for rotating



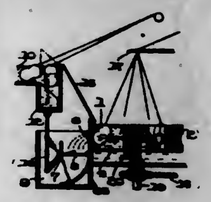
said screw, and means for imparting to said screw a positively controlled periodically varying rotational movement.

1,886,756. SWITCH. GEORGES SUDRE, Pantin, France. Filed Jan. 5, 1931, Serial No. 506,825, and in France Feb. 22, 1930. 5 Claims. (Cl. 200—82.)



1. A circuit-breaking device including a cylinder having a lower open end, a piston operative in the cylinder comprising a hollow body having an upstanding central stem, electrical contacts carried by the cylinder and directly operated in one direction by the stem of the piston, and a diaphragm closing the open end of the cylinder below the piston, said diaphragm responding to piston movements while maintaining a seal at the lower end of the cylinder.

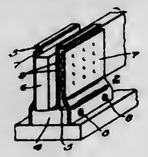
1,886,757. METHOD OF REPLENISHING A SUPPLY OF COCOONS AUTOMATICALLY. TORAO SUGIYAMA, JUSUKE USHIKI, and YAHEI OKABE, Mayebashi, Japan. Filed Apr. 7, 1931, Serial No. 528,444, and in Japan Oct. 29, 1930. 6 Claims. (Cl. 19—3.)



1. In combination, a cocoon reeling device including a liquid container having a liquid outlet, said container being adapted to receive a cocoon and the flow of liquid

through said outlet being controlled by the cocoon, cocoon replenishing means associated with said reeling device and actuated when the fiber is exhausted and free flow of liquid through said outlet is possible, means for receiving a plurality of cocoons arranged to be rotated whereby the cocoons are successively moved into register with said outlet.

1,886,758. ELECTRICAL CONTACTING DEVICE. PAUL G. SWANS, Pittsburgh, Pa. Filed Nov. 12, 1928. Serial No. 318,886. 2 Claims. (Cl. 200—166.)



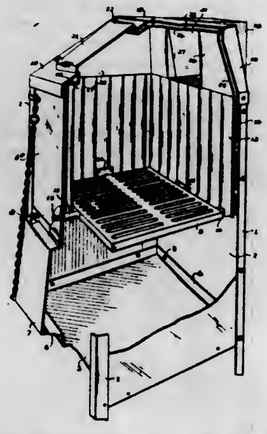
1. In a switch, the combination with a movable blade, and jaws adapted to frictionally engage said blade when in closed position, of leaf springs for urging said jaws into engagement with said blade, having high electrical resistance and a plurality of sharp points engaging said jaws.

1,886,759. OIL-RESISTING RUBBER ARTICLE AND METHOD OF MAKING THE SAME. BERT S. TAYLOR, Akron, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y., a Corporation of New York. Filed June 19, 1929. Serial No. 372,214. 11 Claims. (Cl. 91—68.)

1. The method of protecting surfaces which comprises coating said surfaces with a layer of a tough, heat-plastic rubber isomer, and subjecting the coating to the action of vulcanizing agents.

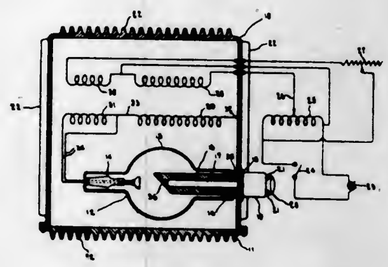
11. A fabric-reenforced rubber article protected by a firmly adherent coating of a tough, heat-plastic rubber isomer, the said coating containing chemically combined therewith the elements of selenium oxychloride, the proportion of said elements in the coating diminishing progressively inwardly from the surface thereof.

1,886,760. GARBAGE AND REFUSE INCINERATOR. MICHAEL J. TIERNEY, Rochester, N. Y. Filed Apr. 4, 1927. Serial No. 180,665. 8 Claims. (Cl. 110—18.)



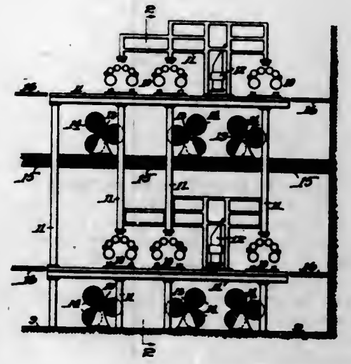
1. An incinerator comprising a casing, a single part movable grate in said casing dividing the latter into an ash pit and a fire pot, an asbestos lining on the inside of said casing about the fire pot, vertical liner walls entirely surrounding the fire pot and having their upper ends substantially in the same plane, and their lower ends below the grate but above the bottom of the ash pit, the vertical liner walls having corrugations, the high points of which abut the asbestos lining and the spaces between the corrugations providing air passages leading upwardly from the ash pit on the inner and the outer faces of the liner walls, and a top having a filling opening and a flue above the liner walls.

1,886,761. ANODE. JAMES S. THELEN, Chicago, Ill., assignor to General Electric X-Ray Corporation, Chicago, Ill., a Corporation of New York. Filed July 30, 1928. Serial No. 296,357. 2 Claims. (Cl. 250—84.)



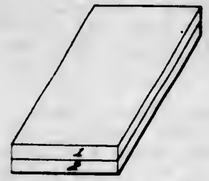
1. An X-ray apparatus comprising an X-ray tube having a threaded section, a tank disposed about said tube and having a threaded lug to engage the threaded portion of said tube, and a cooling element comprising a part of the anode of said tube and adapted to be removed from said tube through the walls of said tank.

1,886,762. PRINTING PRESS STRUCTURE. ISIDOR TORNBERG, Plainfield, N. J., assignor to Wood Newspaper Machinery Corporation, New York, N. Y., a Corporation of Virginia. Filed Jan. 4, 1930, Serial No. 418,490. Renewed Mar. 31, 1932. 3 Claims. (Cl. 270—5.)



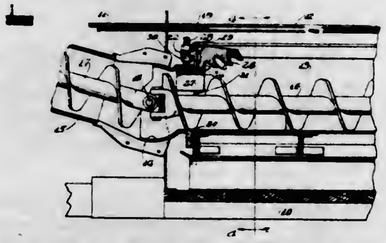
1. The combination with a web printing press and its frame, of an entirely separate independent structure out of contact with said frame and means on the structure for supporting a reel for carrying the web rolls for supplying said press with paper, whereby the vibrations of the reel will not be transmitted directly to the press.

1,886,763. CONFECTION. LOUIS F. TRETTIN, St. Louis, Mo., assignor of three-eighths to Hugh K. Wagner and one-eighth to Walter H. Nohl, St. Louis, Mo. Filed Apr. 4, 1930. Serial No. 441,462. 5 Claims. (Cl. 99—16.)



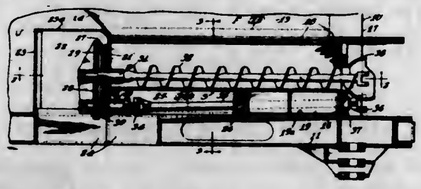
1. A confection comprising an ice and fudge containing glycerin.

1,886,764. STOKER CONVEYER. EDWIN ARCHER TURNER, New York, N. Y., assignor to The Standard Stoker Company, Incorporated, a Corporation of Delaware. Filed Mar. 5, 1930. Serial No. 433,486. 5 Claims. (Cl. 83—52.)



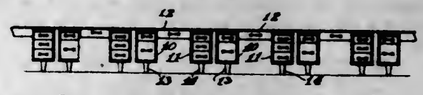
1. In a stoking device the combination of a trough communicating with a restricted passageway, a screw conveyer disposed therein having a floating forward end, a crushing abutment in said trough, the lower portions thereof extending forwardly into said restricted passageway and arched over said screw conveyer, and manually operated means without said trough for raising and lowering said crusher to regulate the opening formed between the crusher and fuel advancing means.

1,886,765. LOCOMOTIVE TENDER. EDWIN ARCHER TURNER, New York, N. Y., assignor to The Standard Stoker Company, Incorporated, a Corporation of Delaware. Filed Nov. 10, 1931. Serial No. 574,105. 6 Claims. (Cl. 105—234.)



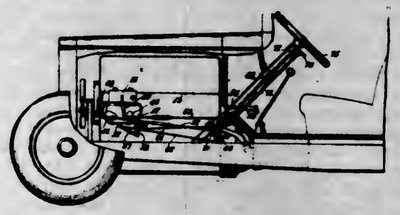
1. In combination in a tender, an underframe, fuel and water compartments above said underframe, means separating said compartments, including sloping partition walls and a stoker trough secured to said walls to form a water tight connection, said trough being spaced above and supported from said frame within said water compartment, a water tight compartment at the rear of said trough for housing gearing, and a second water tight compartment disposed between said trough and said frame, said last named water tight compartment extending longitudinally of the tender and at its rearward end communicating with the first named water tight compartment and at its forward end opening through the front wall of the tender, said underframe having an opening therethrough communicating with said first named water tight compartment and with the rearward end portion only of the second named water tight compartment.

1,886,766. DESK. CHARLES B. ULRICH, Jamestown, N. Y., assignor to Art Metal Construction Company, Jamestown, N. Y., a Corporation of Massachusetts. Filed Feb. 15, 1932. Serial No. 592,859. 8 Claims. (Cl. 45—6.)



1. In a sanitary desk construction adapting said desks for use end to end and back to back closely together in rows, a desk top, a pedestal secured to each end portion of said top, two legs supporting each pedestal a substantial distance from a floor for cleaning purposes under said pedestal, and a cross member secured to the bottom portion of each of said pedestals for each of its legs and extending longitudinally of the desk, each of said legs being secured to the mid-portion of one of said cross members, and said cross members for each of said pedestals being spaced substantial distances inwardly from the bottom front and rear edges of said pedestal, whereby when a plurality of said desks are placed end to end or back to back or both, substantial clearance spaces are provided between all adjacent legs of different ones of said desks for cleaning purposes under the corresponding pedestals.

1,886,767. BRAKE AND CLUTCH CONTROL FOR MOTOR VEHICLES. ANTHONY J. VASSELLI, Newark, N. J. Filed Apr. 21, 1931. Serial No. 531,731. 16 Claims. (Cl. 192—13.)



1. In a motor vehicle, a shaft driven by the motor, a worm freely rotatable on said shaft, a clutch keyed to slide on the shaft into and out of driving engagement with said worm, a lever to control said clutch, said lever being actuable from within the vehicle, a transverse spindle having a worm wheel thereon in mesh with said worm, a cam on said spindle, and means actuated by said cam to control the brakes of the vehicle.

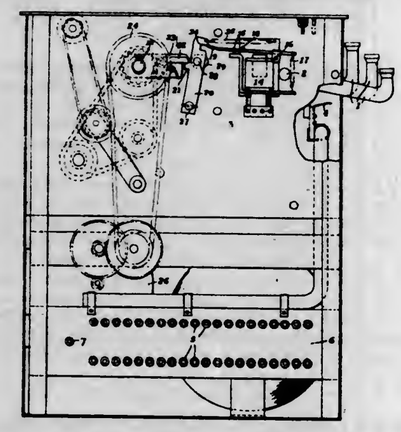
1,886,768. OUTLINING DEVICE. STEWART M. WATSON, Jackson, Mich. Filed Feb. 25, 1929. Serial No. 342,646. 3 Claims. (Cl. 33—42.)



3. A profiling device for the face comprising a body portion adapted to be held by the hand of the operator

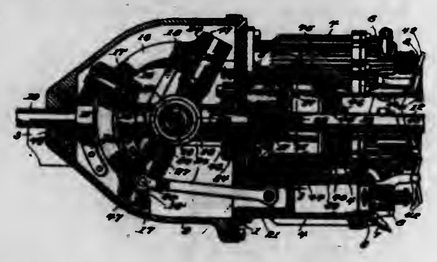
having a bearing surface, a marking member passing through said body and projecting from said surface, and a tracing rod extending oppositely from said surface and perpendicular thereto in axial alinement with said marking member.

1,886,769. TICKET ISSUING MACHINE. CHRISTOPHER FREDERICK WEBB, Middlesex, England, assignor of one-half to Horace Drummond Black, Middlesex, England. Filed Oct. 30, 1929, Serial No. 403,609, and in Great Britain Mar. 4, 1929. 15 Claims. (Cl. 101—66.)



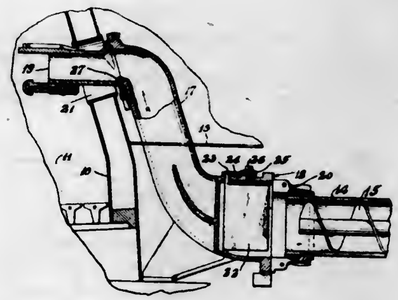
1. In a ticket printing and issuing machine the combination of a printing mechanism, a series of keys each operable to actuate means to effect an operation of said mechanism to print a ticket, a corresponding series of contact devices each operable to be closed solely by an actuation of one of said keys and each arranged in electrical circuit with a corresponding registering mechanism and a corresponding switch located at a remote control, all said switches being connected by a single return lead to corresponding elements of all of said contact devices, an electro-magnetically operated locking mechanism arranged in circuit with said return lead and arranged normally to lock said printing mechanism against operation and when energized to release said mechanism.

1,886,770. INTERNAL COMBUSTION ENGINE. ROBERT D. WEBB, Lakeland, Fla. Filed Aug. 12, 1930. Serial No. 474,815. 1 Claim. (Cl. 74—14.)



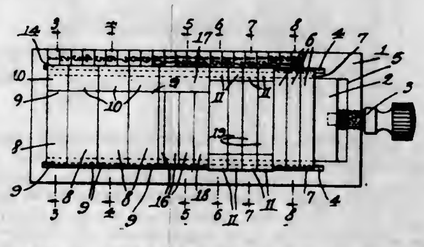
In an internal combustion engine, the combination of a rotatable head having opposed outwardly curved arms, a rocker member forming a dished spider centrally pivoted to one of the arms of the head and having peripherally arranged sleeve-like bearings disposed radially thereof and at right angles to its pivotal axis, a tubular member aligned with the axis of the head and stationarily supported, a rocker arm having an offset central hub pivotally connected to the tubular member, threaded socketed extensions on the ends of said rocker arm, pins engaged in said socketed extensions and swiveled in diametrically opposed sleeve-like bearings of the rocker member, a second head having curved arms, one arm thereof being connected with the pivotal connection of the rocker member with the first named head, and connecting rods for pistons pivotally associated with certain of said pins.

1,886,771. FORCE FEED STOKER. MARTIN L. WENRICH, Altoona, Pa., assignor to The Standard Stoker Company, Incorporated, a Corporation of Delaware. Filed Feb. 26, 1929. Serial No. 342,864. 2 Claims. (Cl. 110—101.)



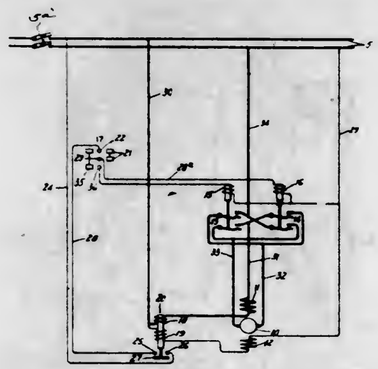
1. In combination, a locomotive backhead provided with a firedoor opening and having two openings through the backhead spaced apart horizontally at points below the upper portion of the firedoor opening, a horizontally disposed conveyer casing, a conveyer screw therein and terminating near the forward end of said casing, a chamber into which said horizontal casing opens at its forward end and to which it is connected, and a pair of short branch casings connected at their lower ends with said chamber and diverging upward and forward, the upper ends of said branch casings curving forward and having extensions projecting respectively through said two openings in the backwall and the lower ends of said branch casings curving rearwardly to said chamber to form a gradually curving continuation thereof, said screw constituting the sole means for advancing fuel through the named casings.

1,886,772. MATRIX ASSEMBLY FOR TYPESETTING MACHINES. HARRY E. WILLIAMS, Olean, N. Y. Filed Mar. 7, 1932. Serial No. 597,333. 5 Claims. (Cl. 199—47.)



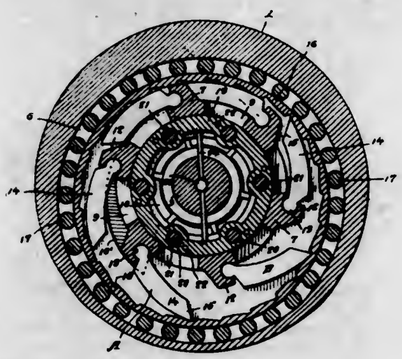
1. A matrix assembly including a stick having a slug receiving space, a filler slug in said space, means on the slug for engaging the stick to detachably support the slug, and a seat on said slug below the upper face thereof for engaging a portion of an undersize matrix slug when inserted into said space and supporting the matrix slug with its upper face substantially flush with the upper face of the filler slug.

1,886,773. MOTOR CONTROL SYSTEM. HARRY A. WINNE, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Feb. 24, 1930. Serial No. 430,465. 8 Claims. (Cl. 172—179.)



1. The combination with a motor provided with shunt and series field windings, of means operated in accordance with the total flux produced by said windings after the motor has been accelerated to a running speed for controlling said motor.

1,886,774. HYDRAULIC TRANSMISSION DEVICE. GEORGE EUGENE ZAHN, Freedom, Pa. Filed Dec. 27, 1930. Serial No. 505,152. 3 Claims. (Cl. 192—58.)

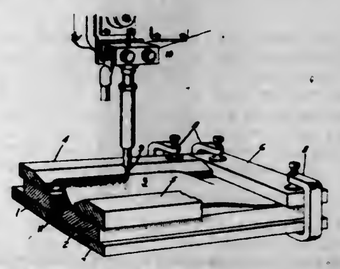


1. A fluid transmission including a fluid casing forming a part of a driven device and a power shaft extending into the casing concentrically thereof, said casing having an eccentrically located chamber in which the shaft is eccentrically located, a rotary element engaging the wall of said chamber and having spaced grooves, a drive element secured to the shaft, wings pivoted to the drive element to successively engage the grooves of the rotary element during the rotation of the drive element, a control valve to trap fluid between the walls of the chamber and a pair of the wings to build up varying pressures of fluid to cause rotation of the casing by the shaft through the rotary element at variable speeds, and automatic means associated with the valve for controlling the amount of pressure between said pair of wings to permit the casing to rotate at a slower rate of speed than the shaft when the load on the casing increases beyond a determined amount.

1,886,775. PLASTIC CELLULOSE COMPOUND. GEORGES EMMANUEL ZELGER, Montreuil, France, assignor, by mesne assignments, to Du Pont Film Manufacturing Corporation, Wilmington, Del., a Corporation of Delaware. Filed Feb. 6, 1925, Serial No. 7,242, and in France Dec. 29, 1924. 10 Claims. (Cl. 106—40.)

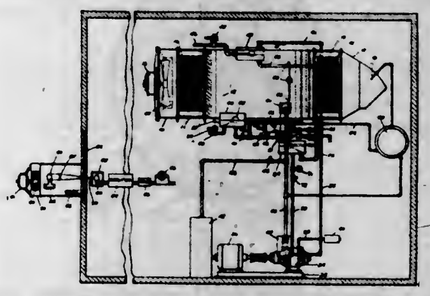
1. A composition of matter comprising an organic derivative of cellulose and the diethyl ester of the acid $C_6H_5PO(OH)_2$.

1,886,776. ARC WELDING. GERALD R. BROPHY, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Sept. 4, 1930. Serial No. 479,717. 10 Claims. (Cl. 219—10.)



1. The method of arc welding which comprises enclosing the part to be welded in a chamber having a wall of fluxing material, fusing said part by means of an arc enclosed in said chamber, and simultaneously destroying by the application of heat a part of said chamber wall to form a protective medium over the fused metal.

1,886,777. AIR CONDITIONING APPARATUS. SAMUEL M. ANDERSON, Sharon, Mass., assignor to B. F. Sturtevant Company, Boston, Mass., a Company. Filed Feb. 14, 1930. Serial No. 428,818. 7 Claims. (Cl. 261—115.)



1. Air conditioning apparatus comprising, in combination, a conditioning chamber having a water tube and an air nozzle cooperable to cause water from said tube to be projected in said chamber in an atomized state by air delivered from said nozzle, and a water supply apparatus for said tube having a head of water adjustable for making the discharge from said tube, either dependent or independent of air delivered from said nozzle.

1,886,778. LOOM REED. ISAAC ANDREWS, Spartanburg, S. C. Filed Dec. 13, 1930. Serial No. 502,223. 1 Claim. (Cl. 139—192.)

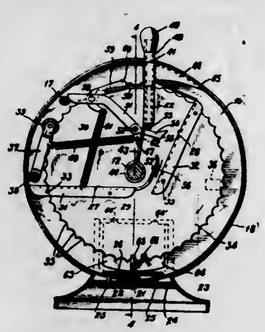
A loom reed comprising dents, ribs secured to the dents at opposite sides thereof and in spaced relation with the ends of the dents, a cushioning member wound around

the ribs and disposed between the dents, transversely disposed strips positioned at the sides of the dents between the ribs and the ends of the dents, solder disposed between the dents at the ends of the dents, the solder extending to a position to contact with the cush-



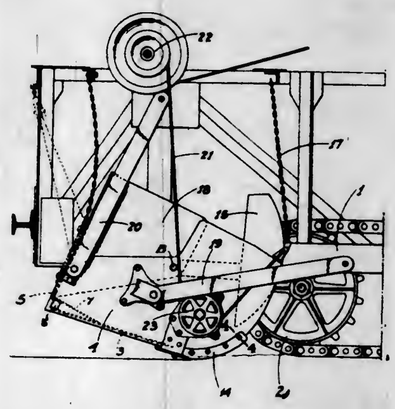
ioning member, backing strips secured to opposite sides of the dents and covering the side surfaces of the solder, said backing strips having cut out portions accommodating the ribs and transversely disposed strips, and means for securing the backing strips in position.

1,886,779. REGISTERING COIN BANK. LOUIS V. ARONSON, Newark, N. J. Filed Nov. 26, 1930. Serial No. 498,466. 6 Claims. (Cl. 235—100.)



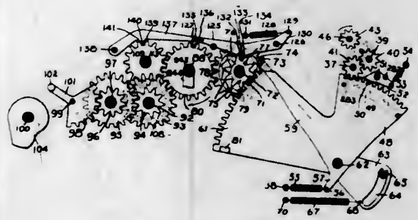
1. A registering coin bank comprising spaced plates, a stud substantially centrally arranged and securing said plates together, a rim about said plates provided with a coin deposit slot and a slot leading therefrom, a registering wheel disposed relatively close to one of said plates and journaled on said stud, partition members secured to the other plate and extending therefrom to the registering wheel, said partition members providing a coin chamber and a passage leading thereto, a coin-moving lever provided on said stud and extending into alinement with said slots, said lever having a coin chute portion to register with the first mentioned slot, and mechanism to actuate said registering wheel including an operating lever having a coin-arresting portion extending through the first mentioned lever, and a cam on the said portion engageable by the coin to actuate the second mentioned lever, the first mentioned lever having sufficient movement in the second mentioned slot to register the coin with said passage.

1,886,780. SCRAPER BOWL CONSTRUCTION. CHARLES E. BALL, Chicago, Ill., assignor to Ball Wagon Grader Co., a Corporation. Filed June 27, 1931. Serial No. 547,806. 3 Claims. (Cl. 37—118.)



2. A scraper bowl having a bottom plate, a cross beam on and above the plate at its rear end, and a plate sloping downwardly and forwardly from the top of the beam to a junction with the bottom plate ahead of the beam.

1,886,781. MULTIPLYING MECHANISM FOR CALCULATING MACHINES. CHARLES BOWER COLLINS, San Francisco, Calif. Filed June 19, 1929. Serial No. 372,114. 4 Claims. (Cl. 235—138.)



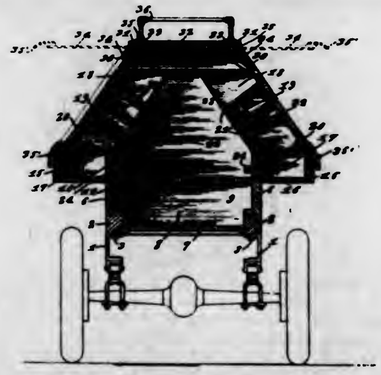
1. In a calculating machine, mechanism for carrying a plurality of tens from a lower to a higher order numeral wheel of the register, comprising a carry member adapted to be moved one step upon each revolution of the lower order numeral wheel and to be restored into normal position after an accumulating operation has been performed and thereby advancing the higher order numeral wheel an equivalent number of steps.

1,886,782. TRUCK. FRANK J. BENTZ, Miami, Fla. Filed Apr. 21, 1931. Serial No. 531,793. 1 Claim. (Cl. 296—24.)

A truck body comprising, vertical end walls, partition walls located between the end walls, and forming compartments, said compartments being arranged in inclined tiers and being open at their outer ends, a top plate disposed upon the end walls and located above the compartments and provided at its edges with downwardly dis-

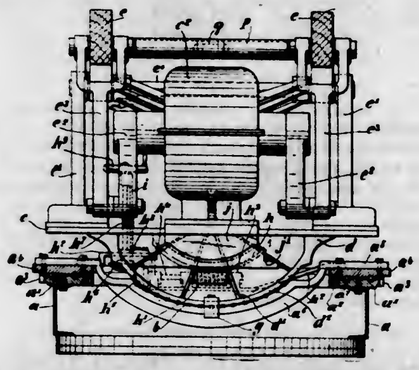
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posed flanges, closure panels adapted to lie over the outer ends of the compartments and provided at their upper edges with angularly disposed portions adapted to engage



behind said flanges, said panels being adapted to swing away from the compartments and slide under the top plate.

1,886,783. LEVELING MECHANISM FOR FIRE LADDERS. CHARLES BOHLEN, Jr., New York, N. Y., assignor to International Motor Company, New York, N. Y., a Corporation of Delaware. Filed Sept. 5, 1929. Serial No. 390,504. 7 Claims. (Cl. 228—14.)



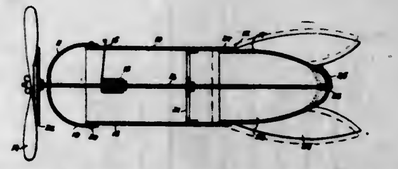
6. A fire ladder operating means comprising a turntable, a ladder support carried by the turntable, a ladder on the support, means on the support to elevate the ladder, and means to vary the inclination of the support with respect to the turntable.

1,886,784. CHAIN. WILLI BOPPENHAUSEN, Pforzheim, Germany, assignor to Andreas Daub A.-G., Pforzheim, Germany, a Corporation of Germany. Filed Mar. 22, 1932, Serial No. 600,541, and in Germany July 10, 1931. 3 Claims. (Cl. 59—83.)



1. A chain of the character described comprising a plurality of links, each link of the chain passing through two links immediately preceding, each link having a peripheral recess to receive a portion of a link which does not pass through it but which abuts it.

1,886,785. TOY. MAX BORDEN, New York, N. Y. Filed Mar. 23, 1932. Serial No. 600,621. 10 Claims. (Cl. 46—14.)



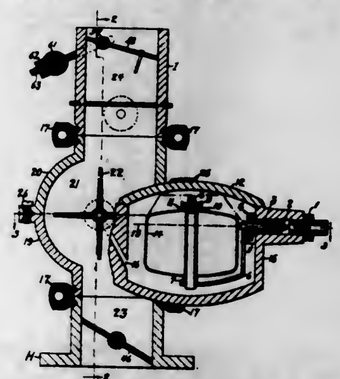
1. A toy, comprising a hollow body closed at the front end and open at the other end, a shaft extending through said body projecting from both ends and rotatively supported, a propeller fixed on the front end of the shaft, a cord secured at one end upon said shaft and extending through a lateral opening in said hollow body, and a tail mounted upon the rear end of the shaft and partially extending into the open rear of said hollow body.

1,886,786. ELECTRIC CABLE. ISAAC BRANTHWAITE, Passaic, N. J., assignor to The Okonite-Callender Cable Company, Incorporated, Paterson, N. J., a Corporation of New Jersey. Filed Oct. 24, 1931. Serial No. 570,868. 2 Claims. (Cl. 173—266.)



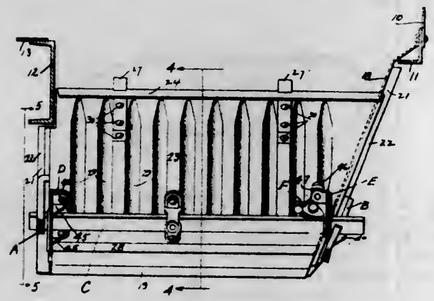
1. Electric cable construction comprising a conductor provided with a central passageway, a crepe paper filler for said passageway, a permeable impregnated crepe paper insulating envelope about the conductor, an exterior metallic sheath, and crepe paper intermediate the metallic sheath and said insulating envelope.

1,886,787. CARBURETOR FOR INTERNAL COMBUSTION ENGINES. VICENTE BURAGLIA, Bogota, Colombia. Filed Nov. 14, 1931, Serial No. 575,123, and in Colombia May 20, 1931. 5 Claims. (Cl. 261—62.)



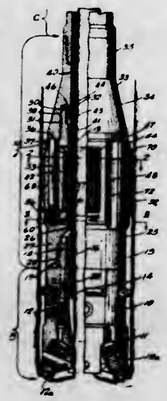
1. A horizontal, revolving main jet for carburetors, comprising a bored spindle on which a butterfly is fixedly mounted, the wings of such butterfly having a number of irregularly placed holes, and said butterfly rotating together with the spindle.

1,886,788. CAR DOOR AND LOCKING MEANS THEREFOR. ARGYLE CAMPBELL, Chicago, Ill., assignor to Enterprise Railway Equipment Company, Chicago, Ill., a Corporation of Illinois. Filed Jan. 25, 1926. Serial No. 83,470. 6 Claims. (Cl. 105—308.)



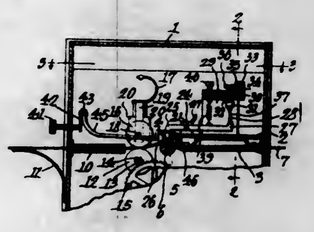
1. In a car, the combination with the car structure; of a dumping opening; a dump door adapted to close said opening; locking means including a beam member carried by the door and a shouldered member carried by the car structure and co-operable with said beam member to lock the door, said members being movable relatively to each other; a projecting part on the shouldered member adapted to serve as a fulcrum for an actuating tool for inducing relative movement between said beam and shouldered member, said projecting part being disposed intermediate the beam member and the car structure when the door is closed.

1,886,789. WELL REAMER CONSTRUCTION. ANTHONY E. CARLSON, Los Angeles, Calif. Original application filed July 24, 1931, Serial No. 552,818. Divided and this application filed Jan. 22, 1932. Serial No. 588,056. 10 Claims. (Cl. 255—73.)



1. A reamer of the character described, including: a body comprising a tubular wall adapted to be connected into a rotary drilling member, there being openings through said wall; an inner tube adapted to pass within the bore of said tubular wall in a manner to close the inner ends of said openings, thereby transforming said openings into outwardly opening recesses; and roller reaming cutters rotatably mounted in said recesses.

1,886,790. CIRCUIT BREAKER. MARCELLO CENTORRINO, New York, N. Y. Filed Jan. 6, 1928, Serial No. 244,895. Renewed July 15, 1930. 4 Claims. (Cl. 178—115.)



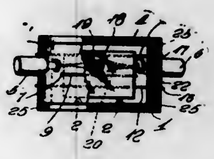
2. A device for teaching telegraphy including a transmitting lever actuated by a thin tape bearing perforations corresponding to characters of a telegraphic code, said lever having anti-friction trunnions mounted in anti-friction bearings, one end of said lever being adapted to close or open an electric circuit when the lever is actuated by the tape.

1,886,791. MULTIPLE COIL SPRING WASHER. EUGENE D. COWLIN, Massillon, Ohio, assignor to The Reliance Manufacturing Company, Massillon, Ohio, a Corporation of Ohio. Filed June 24, 1931. Serial No. 546,549. 4 Claims. (Cl. 151—36.)



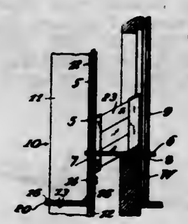
4. A spring washer comprising two convolutions of generally helical formation, each of said convolutions terminating in a washer end and being distorted from a true helical formation by a crimp the plane of which has a clearly defined line of flexion and which is substantially aligned with the washer end on the other convolution, each of said two convolutions having a connecting portion of accentuated pitch extending from its crimp toward the other convolution, and each of said two convolutions being further distorted from generally helical formation by bending its washer-end.

1,886,792. PIEZO ELECTRIC CRYSTAL APPARATUS. ALFRED CROSSLEY, Washington, D. C., assignor, by mesne assignments, to Wired Radio, Inc., New York, N. Y., a Corporation of Delaware. Filed Nov. 24, 1928. Serial No. 321,694. 9 Claims. (Cl. 171—327.)



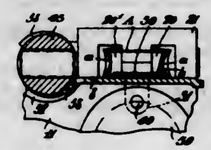
1. Pieso electric crystal apparatus comprising an insulated housing, means for supporting a piezo electric crystal element within said housing, a plurality of textile cords extending laterally and laced through the side walls of the housing for maintaining a piezo electric crystal element in position, and means including flexible stranded or laminated conductors for establishing electrical contact with the faces of the piezo electric crystal element.

1,886,793. CHUTE STRUCTURE. FREDERIC A. DAVIDSON, Bayside, N. Y., assignor to American Safety Device Co., New York, N. Y., a Corporation of New York. Filed Feb. 2, 1931. Serial No. 512,831. 8 Claims. (Cl. 193—34.)



1. In combination with spaced parallel supports, chute sections for débris and the like arranged in aligned superimposed relation and each having an open side, adjustable means in removable connection with the sections for retaining the same in aligned superimposed relation with each other, and additional adjustable means on the walls of each chute section and at the open side thereof for retaining a removable closure panel upon the open side of each chute section to form a continuous closed channel for receiving the débris.

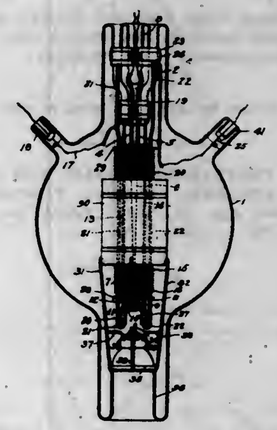
1,886,794. MATCH BOX INVERTING MEANS. PAUL WILHELM DIETMANN, Jonkoping, Sweden. Filed Sept. 22, 1930, Serial No. 488,739, and in Sweden Aug. 12, 1930. 9 Claims. (Cl. 198—33.)



1. In a device for arranging match box shells which are provided with an inner lap at that side where the material of the shell is jointed and which are supplied to said device in such a way that some shells will have their laps directed to one side and the other shells to the opposite side, the combination of a feeling member, means for yieldingly introducing said feeling member into the shells adjacent one of their flat sides so as to be stopped or not to be stopped according to the direction of the laps of the shells by a part of the lap which is unsymmetrical with respect to the middle plane of the shell that is parallel to the flat sides thereof, a turning device for receiving one shell at a time and capable of turning it half a revolution, means to successively move the shells to and from said turning device, and means controlled by the feeling member, due to its movement in dependence of the position of the shells, for operating said turning device.

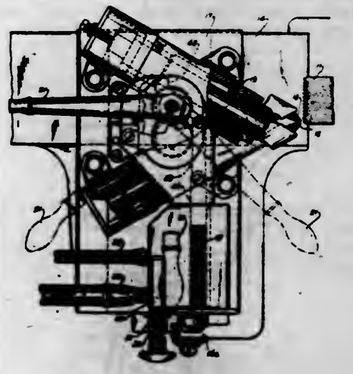
1,886,795. ELECTRIC DISCHARGE TUBE. POPKO REINDER DIJKSTERHUIS, Eindhoven, Netherlands, assignor to N. V. Philips' Gloeilampenfabrieken, Eindhoven, Netherlands. Filed Dec. 11, 1924, Serial No. 755,274, and in the Netherlands Jan. 15, 1924. Renewed Nov. 10, 1930. 8 Claims. (Cl. 250—27.5.)

6. In a discharge tube having a cathode, plate and double grid, a plurality of rod supports secured at one end upon which one grid is supported, a plurality of rod supports secured at one end upon which the other grid is supported, the free end of each supporting rod of



one set of supports being bent so that the end is in alignment with one of the supports of the other grid, and quartz tubes securing the two ends together.

1,886,796. DRESSING ATTACHMENT FOR SCREW THREAD GRINDERS. ALDEN M. DRAKE and NORMAN J. CROWEY, West Hartford, Conn., assignors to Pratt & Whitney Company, Hartford, Conn., a Corporation of New Jersey. Filed Mar. 4, 1932. Serial No. 596,786. 6 Claims. (Cl. 125—11.)



1. A wheel dressing device comprising in combination, a base adapted to be mounted adjacent a wheel to be dressed, a slide thereon, a dresser carrying members movably mounted thereon, means to move said slide to position said dressers for successive operations on said wheel, a plurality of means to limit the movement of said slide in one direction, and means to successively move said limiting means into operative position.

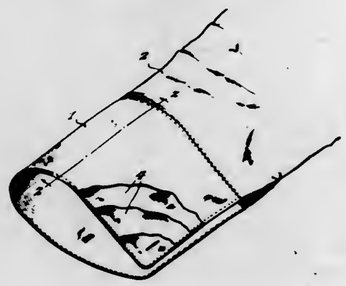
1,886,797. NAPHTHALIMIDE DYESTUFFS AND PROCESS OF PREPARING THEM. WILHELM ECKERT, Frankfort-on-the-Main-Hochst, Germany, assignor to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed May 7, 1929, Serial No. 361,255, and in Germany May 18, 1928. 8 Claims. (Cl. 260—124.)

1. The process which comprises causing a halogen-sulfonaphthalic acid anhydride compound to react with a compound of the following general formula:

$$R—NH_2$$

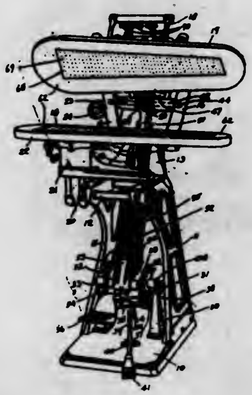
wherein R stands for hydrogen, aryl or alkyl.

1,886,798. PRESTARCHED LINING FOR CUFFS AND OTHER APPAREL. MAUD I. FLETCHER, Douglas, Ariz. Filed Apr. 21, 1930. Serial No. 446,120. 2 Claims. (Cl. 2—123.)



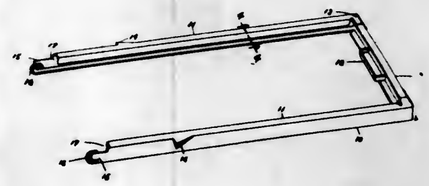
1. The method of forming cuffs and collars consisting of cutting a lining from a rough dried fabric impregnated with a starch soluble in water, forming a sheath of unstarched fabric, disposing the lining within the sheath and stitching marginal portions of the sheath and lining, moistening the finished article, and ironing the same.

1,886,799. PRESSING MACHINE. HARRY D. FORSE, Anderson, Ind. Filed Nov. 12, 1928. Serial No. 318,774. 5 Claims. (Cl. 68—9.)



1. In a pressing machine of the character described, the combination of an actuating rod, a crank shaft including a crank portion connected thereto, a segmental spacer rigid with the shaft, a lever, and a flexible connection between said spacer and said lever and having peripheral contact with the spacer whereby lever movement secures shaft movement.

1,886,800. TRAY GUIDE FOR FILING CABINETS. STANLEY B. FREIBERG, Cincinnati, Ohio. Original application filed Dec. 12, 1928, Serial No. 325,589. Divided and this application filed Mar. 17, 1930. Serial No. 436,867. 10 Claims. (Cl. 45—77.)



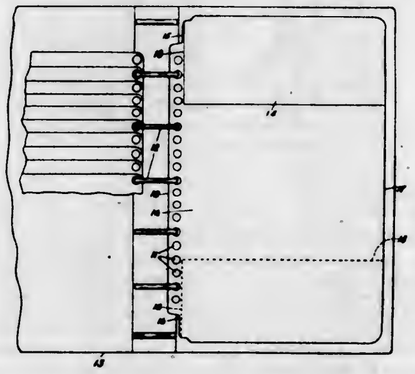
1. In combination, a cabinet having inner abutments adjacent the front, spaced supports in the cabinet, U-shaped guide members slidable one each on said supports and having lugs thereon for contacting the abutments for preventing normal movement of the guide members past said abutments, and trays each slidably and releasably supported by one of the guide members and pivotally suspended thereby exteriorly of the cabinet when withdrawn from their positions in the cabinet the arms of each U-shaped guide member being movable toward one another in a common plane to permit removal of the guide by movement of said lugs past said cabinet abutments.

1,886,801. TEMPORARY INDEX STRUCTURE. STANLEY B. FREIBERG, Cincinnati, Ohio, assignor to The International Visible Systems Corporation, Cincinnati, Ohio, a Corporation of Ohio. Filed Dec. 16, 1930. Serial No. 502,690. 2 Claims. (Cl. 35—10.)



1. As a new article of manufacture a binder for memorandum sheets and indexing means therefor, the binder having a back of hard molded substance, the back including means for retention of the sheets and which back has a glazed surface for resisting soil and wear, said back being provided with a roughened area integral with the glazed surface and bounded adjacent its edges by an extending protective wall adapted to preclude contact of foreign objects with the roughened area and accidental erasure of uncovered characters temporarily written upon the roughened area.

1,886,802. DIVISION SHEET. STANLEY B. FREIBERG, Cincinnati, Ohio, assignor to The International Visible Systems Corporation, Cincinnati, Ohio, a Corporation of Ohio. Filed Dec. 16, 1930. Serial No. 502,691. 3 Claims. (Cl. 129—1.)



3. A division sheet having a row of perforations along an edge, the corners of said edge being cut away to provide a tab-like formation along said edge, and filler material carried by the sheet and extending across the sheet from said tab-like formation and being substantially co-extensive with the end portions of the sheet adjacent said cut away corners thereof.

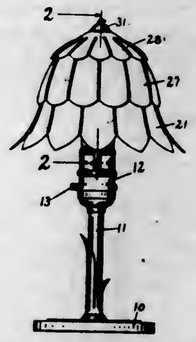
1,886,803. TUBULAR VESSEL AND METHOD OF MANUFACTURE. JEAN V. GIESLER, Knoxville, Tenn., assignor to The Fulton Syphon Company, Knoxville, Tenn., a Corporation of Delaware. Filed Feb. 4, 1929. Serial No. 337,463. 4 Claims. (Cl. 113—120.)



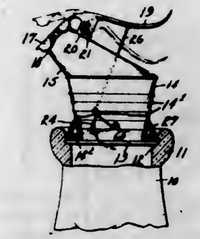
1. The method of closing a bellows tube to form a strong hermetic seal between a head and the lateral flexible wall of the completed tube which includes the steps of forming a head with an upstanding flange of thinner material than the body of said head and with an adjacent groove, positioning said head in the end of the tube, bending the end of the tube around the upstanding flange, and flowing solder into said groove to seal the joint between the end of the tube and the head.

1,886,804. LAMP. HUBERT M. GREIST and HARRY F. THURBER, New Haven, Conn., assignors to Greist Manufacturing Company, New Haven, Conn. Filed Feb. 26, 1931. Serial No. 518,364. 6 Claims. (Cl. 240—109.)

1. A lamp shade comprising a shade section having a series of openings spaced from the lower edge thereof to provide a lower solid portion and an upper perforate portion, and a second shade section mounted above the first and in spaced relation therewith, said second shade section receiving light upon its under surface through the openings in the first section, said second shade section covering the perforate portion of the first section but exposing to view the solid portion of the first section.

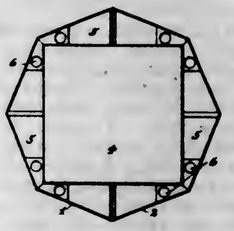


1,886,805. BOTTLE CLOSURE WITH MEANS FOR REMOVING THE PAPER COVERS. ROBERT HAGEBUSCH, Brooklyn, N. Y. Filed Apr. 10, 1931. Serial No. 529,200. 2 Claims. (Cl. 215—63.)



1. A bottle closure, comprising a tapered tubular body open at both ends adapted to be inserted into the mouth of said bottle, spring actuated closing means for the outer end of said tubular body, means for operating said closing means, a series of parallel annular projections on said tapered tubular body and resilient means slidably mounted on said tapered tubular portion for engaging the neck portion of said bottle, said resilient means cooperating with said parallel annular projections to firmly and tightly hold said tubular body in place.

1,886,806. TABLE STRUCTURE. WILLIAM HANLEY, East Orange, N. J., assignor to Ferguson Brothers Manufacturing Company, Hoboken, N. J., a Corporation or New Jersey. Filed July 9, 1930. Serial No. 466,634. 8 Claims. (Cl. 273—136.)



2. A folding supplemental table top having two hinged members, a recess in one of said members, and a device

carried by one of said members for removably securing it to a smaller table top, said device being foldable to a position within said table top member when not in use.

1,886,807. HOSE COUPLING ASSEMBLING MACHINE. JOSEPH R. HEIDLOFF, Detroit, Mich., assignor to Hydraulic Brake Company, Los Angeles, Calif., a Corporation of California. Filed May 4, 1929. Serial No. 360,360. 18 Claims. (Cl. 29—88.2.)



1. In an apparatus for attaching a coupling member consisting of a sleeve and thimble to a hose comprising means for inserting the thimble in the hose and abutting the thimble against the sleeve, means for expanding the thimble to engage the hose with the sleeve, and means for interlocking the sleeve and thimble.

1,886,808. BIAS CONTROL IN TELEGRAPH COMMUNICATION. JOSEPH HERMAN, Westfield, N. J., assignor to American Telephone and Telegraph Company, a Corporation of New York. Filed Aug. 28, 1930. Serial No. 477,365. 8 Claims. (Cl. 178—51.)

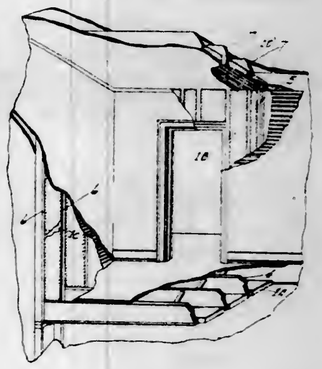


1. In a telegraph communication system comprising a vacuum tube at the receiving end, means for maintaining correct lengths of marking and spacing signals comprising a network in the input circuit of the vacuum tube, said network including an element for storage of energy and a path permitting leakage of said energy, and means controlled by the vacuum tube output current for rendering said leakage path ineffective during a portion of the time.

1,886,809. ARYLATED SAFRANINES AND PROCESS OF PREPARING THEM. FRITZ HESS, Frankfort-on-the-Main-Hochst, Germany, assignor to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Aug. 18, 1930. Serial No. 476,244, and in Germany Sept. 4, 1929. 13 Claims. (Cl. 260—29.)

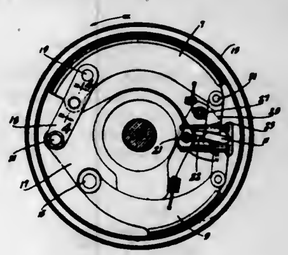
1. The process which comprises causing a metallic reducing agent of the group consisting of iron and zinc, while heating, to act upon a phenosafranine in the presence of an arylamine of the group consisting of primary amines of the benzene and naphthalene series and a hydrochloric acid salt of the same amine and heating the mixture thus obtained at a temperature of 180° C.–260° C.

1,886,810. CONSTRUCTION MATERIAL AND METHOD OF CONSTRUCTION. ROBERT HOLZ, Cincinnati, Ohio. Filed May 29, 1928. Serial No. 281,544. 7 Claims. (Cl. 20—4.)



1. In the building construction art, the step of insulating partitions within a building with insulating material, which consists in inserting flexible containers filled with loose insulating material in bulk into spaces between said partitions, said containers being preformed and of such size that they will approximately fit within the openings between the partitions, and deforming said containers and material where necessary on account of variations in size of the spaces.

1,886,811. BRAKE. LOUIS C. HUCK, New York, N. Y. Filed June 30, 1930. Serial No. 464,851. 15 Claims. (Cl. 188—78.)

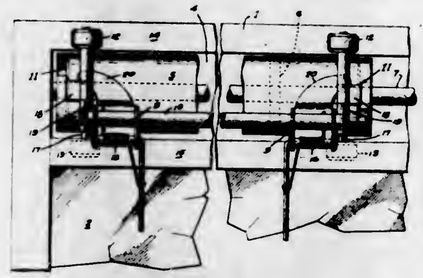


1. In a brake, a drum, shoes to engage the drum, a fixed support, a link pivoted to one of said shoes and to said support, the axis of said link being such that the high pressure point along the arc of the shoe lies in that drum radius which is at right angles to a diameter through the pivot between the link and the support for a predetermined assumed control coefficient of friction between the lining and the drum, floating brake applying means to spread adjacent ends of said shoes into contact with said drum.

1,886,812. COMBINED WINDSHIELD AND CLEANER STRUCTURE. HENRY HUEBER, Buffalo, and ERWIN C. HORTON, Hamburg, N. Y., assignors to Trico Products Corporation, Buffalo, N. Y. Filed Oct. 24, 1930. Serial No. 491,014. 8 Claims. (Cl. 15—253.)

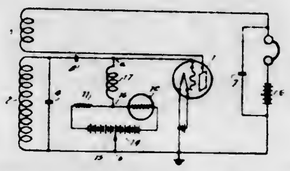
1. In combination with a windshield having a horizontal frame bar chambered for the reception of a cleaner motor, of a windshield cleaner comprising a motor arranged within the chamber of the frame bar to be housed

thereby, said frame bar having an open side adjacent the front face of the windshield glass, wiper means, and means operatively connecting the wiper means to the



motor through the open side of the frame bar whereby the wiper means are reciprocated over the front face of the windshield glass.

1,886,813. LIGHT CONTROL CIRCUIT. EDWARD O. HULBURT and WILLIAM H. CREW, Washington, D. C. Filed Dec. 23, 1927. Serial No. 242,266. 1 Claim. (Cl. 179—171.)



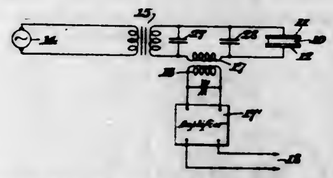
A light controlled circuit comprising an electron tube having grid, filament and plate electrodes, an input circuit interconnecting said grid and filament electrodes, an output circuit interconnecting said plate and filament electrodes, means interlinking said circuits, a light sensitive element, a resistance and a high potential source of energy constituting a looped branch of said input circuit and a choke coil connected to said looped branch and forming, together with the latter, a series-connection between the grid and filament electrodes of said input circuit, the respective elements of said light controlled circuit being so disposed in relation to one another that high frequency currents are excluded from said looped branch and variations in the intensity of light impinging upon said light-sensitive element are caused to control the grid bias of said electron tube.

1,886,814. PIEZO ELECTRIC CRYSTAL APPARATUS. AUGUST HUND, Bethesda, Md., assignor, by mesne assignments, to Wired Radio, Inc., New York, N. Y., a Corporation of Delaware. Original application filed Feb. 26, 1926. Serial No. 90,934. Divided and this application filed Aug. 16, 1927. Serial No. 213,407. 8 Claims. (Cl. 171—327.)



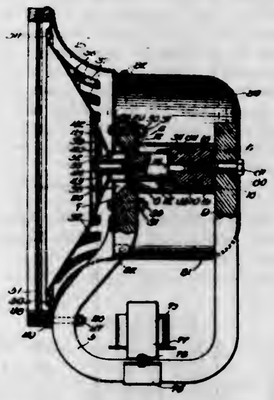
1. Piezo electric crystal apparatus comprising in combination a piezo electric plate, a pair of flat conductive members for supporting said piezo electric plate, and means for subjecting said plate to pressure or releasing pressure therefrom for shifting the operating frequency thereof, said means comprising a lever member pivotally mounted adjacent said flat conductive members.

1,886,815. METHOD AND APPARATUS FOR GENERATING ELECTRICAL OSCILLATIONS. AUGUST HUND, Bethesda, Md. Filed Mar. 5, 1929. Serial No. 344,563. 6 Claims. (Cl. 250—36.)



2. The method of generating high frequency oscillations which comprises subjecting a piezo electric crystal element, adapted to sustain oscillations at a beat frequency of its plurality of natural frequencies, to oscillations corresponding to said beat frequency and, deriving from said piezo electric crystal element electrical oscillations having a freuency corresponding to one of the natural frequencies of said piezo electric crystal element.

1,886,816. MAGNETIC SOUND REPRODUCER. PETER L. JENSEN, La Grange, Ill., assignor to Jensen Radio Manufacturing Co., Chicago, Ill., a Corporation of Illinois. Filed July 25, 1931. Serial No. 553,091. 14 Claims. (Cl. 179—115.5.)



4. A permanent magnet electro-dynamic reproducer including a permanent magnet and a transformer, said transformer being mounted upon said permanent magnet at the point of substantially zero potential.

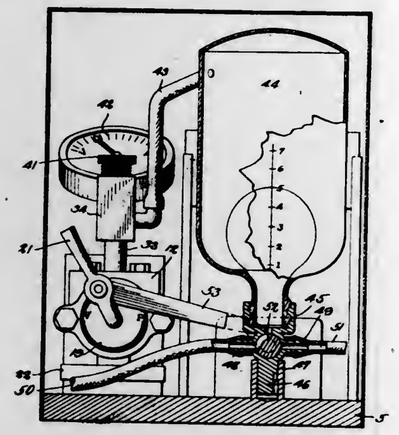
11. In a device of the class described, an outer pole-piece having an opening therein, an inner pole-piece extending into said opening with an annular space forming an air-gap between it and the outer pole piece and a shield positioned over the inner pole-piece to prevent the entrance of foreign particles to said air-gap.

1,886,817. DRY PLATE PROCESS PRINTING. CLARENCE L. JOHNSTON, Niagara Falls, N. Y., assignor to American Sales Book Company, Limited, Toronto, Ontario, Canada, a Corporation of Ontario, Canada. Filed Nov. 19, 1927. Serial No. 234,331. 20 Claims. (Cl. 41—41.5.)



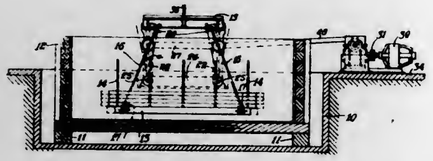
3. A printing plate having a thin layer of silver and an overlying thin layer of nickel.

1,886,818. BLOOD TRANSFUSION DEVICE. RALPH P. KIPP, Ossining, N. Y. Filed May 6, 1931. Serial No. 535,492. 4 Claims. (Cl. 128—214.)



1. A transfusion device comprising a base, a support mounted on the base, a measuring vessel mounted on the support, inlet and outlet tubes connected with the support, a valve for controlling the passage of liquid to and from the measuring vessel, a pump for creating a vacuum or pressure within the measuring vessel, a valve for controlling the passage of air to or from the measuring vessel to create a vacuum or pressure within the measuring vessel, and means for connecting the valves to operate simultaneously.

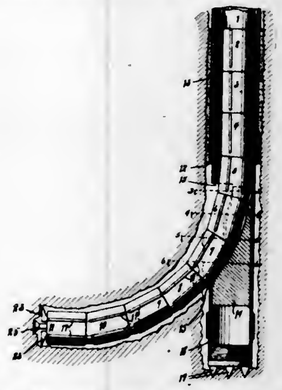
1,886,819. PICKLING APPARATUS. LÉIF LEE, Youngstown, Ohio. Filed Oct. 10, 1930. Serial No. 487,745. 10 Claims. (Cl. 266—7.)



5. In a pickling apparatus, a pair of guideways, said guideways being slotted, members adapted to operate in the slots of said guideways, a framework associated with said members, a material supporting tray suspended from said framework, and means for causing said members to operate in said slots and hence, through said framework, said tray to move in a path determined by said slots, said guideways having underlying supports, said supports resting on the shelf of an associated pit.

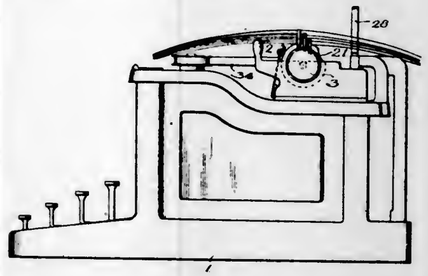
1,886,820. DRILLING TOOL FOR LATERAL AND ANGULAR DRILLING. ROBERT EDWARD LEE, Fort Worth, Tex. Filed Apr. 5, 1930. Serial No. 441,917. 3 Claims. (Cl. 255—1.)

1. A drilling shaft having a plurality of flexible units including locking units at the lower part and non-locking units at the upper part, a housing for guiding said units down in the well and provided with lateral openings in the lower part thereof, a plate for deflecting said locking units out of said housing and positioning the same for lateral or angular drilling, said units having longitudinal ribs on the periphery thereof and said deflecting plate having a longitudinal groove to receive one of said ribs



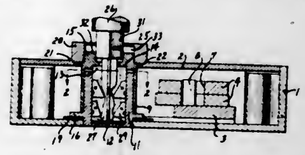
of each unit, and the other ribs serving to space the units from the walls of the channels made by the drilling shaft.

1,886,821. METHOD AND MEANS FOR TYPEWRITING LONG STRIPS OF PRINTED FORMS. EDWARD Z. LEWIS, Chicago, Ill., assignor to L C Smith & Corona Typewriters Inc., New York, N. Y., a Corporation of New York. Filed Aug. 25, 1928. Serial No. 302,110. 31 Claims. (Cl. 197—126.)



1. The combination with a typewriter, of a platen having means for clamping a plurality of sheets of paper against the same, at a predetermined distance from the ends of said sheets, means for securing a sheet of carbon paper adjacent said platen, whereby when said platen is rotated in the reverse direction from the normal one used during typing, said sheets of paper are folded over and looped around said carbon paper and carried down around said platen and to the rear to typing position.

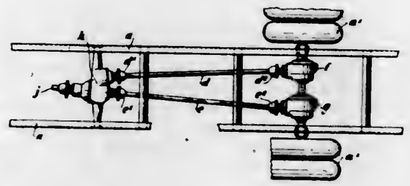
1,886,822. CYLINDER LOCK. ANDREW MAIN, Cleveland, Ohio, assignor to The Four-Way Lock Company, Cleveland, Ohio, a Corporation of Ohio. Filed Oct. 17, 1929. Serial No. 400,270. 10 Claims. (Cl. 70—46.)



5. Lock mechanism comprising associated cylinder and plug members, and a lock operating member sleeved upon

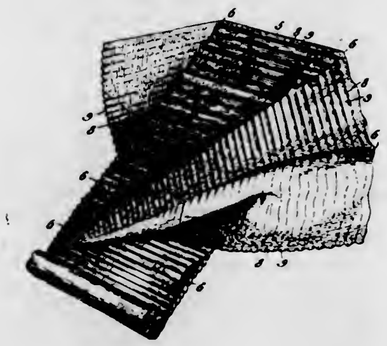
and rotatable around said cylinder, said plug member and lock operating member both being provided with means adapted for driving engagement with a key.

1,886,823. MULTIPLE TRANSMISSION SHAFT DRIVE FOR MOTOR VEHICLES. KEITH R. MANVILLE, Livingston Manor, N. J., assignor to International Motor Company, New York, N. Y., a Corporation of Delaware. Filed Feb. 14, 1930. Serial No. 428,305. 1 Claim. (Cl. 180—73.)



A vehicle comprising a plurality of driving wheels, an axle having a central downwardly offset portion, the extremities of the axle being hollow to receive jack shafts, means to journal the wheels upon the extremities of the axle, spaced final drive securing means at the extremities of and lying within the offset portion of the axle and concentric with the hollow extremities thereof, a power shaft angularly disposed on the frame with respect to the axis of the frame, independent final drives mounted upon the spaced securing means and lying within the offset, power apportioning means on the frame, a propeller shaft in line with the power shaft and driving one of the final drives from the apportioning means, and a second propeller shaft on the opposite side of the axis symmetric with the first and connecting the apportioning means with the other final drive.

1,886,824. CLEANING OR POLISHING FABRIC AND METHOD OF PRODUCING IT. EDWARD A. MCCORMICK, New Brunswick, N. J., assignor to Chicopee Manufacturing Corporation, New Brunswick, N. J., a Corporation of Massachusetts. Filed July 22, 1931. Serial No. 552,536. 5 Claims. (Cl. 15—208.)

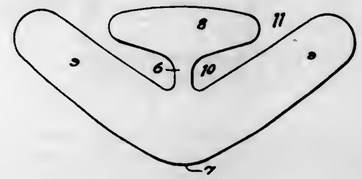


2. A cleaning or polishing fabric consisting of plicated cheese cloth having crosswise ranging ribs defined by corrugations.

1,886,825. PROCESS FOR RECOVERING CERTAIN METALS OF THE THIRD PERIODIC GROUP. FRANK G. MCCUTCHEON, East St. Louis, Ill., assignor to Oneida Community, Limited, Oneida, N. Y., a Corporation of New York. Original application filed Mar. 25, 1926, Serial No. 97,463. Divided and this application filed Feb. 8, 1932. Serial No. 591,758. 3 Claims. (Cl. 23—23.)

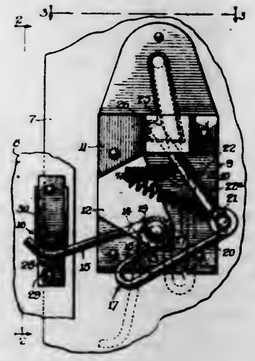
1. In a process of obtaining a metal of the third periodic group having a melting point below 200° C., from a starting material containing the said metal associated with lead, the steps which comprise melting said material, combining therewith a material soluble in sulphuric acid, and subjecting the mixture to the action of sulphuric acid to form a soluble sulphate of the said metal of the third periodic group.

1,886,826. COLLAR CARD FOR FLAT FORM LAUNDERED ATTACHED COLLAR SHIRTS. CHARLES M. MEAD, Los Angeles, Calif. Filed Sept. 15, 1930. Serial No. 481,851. 2 Claims. (Cl. 223—18.6.)



1. A device for holding in position the neck band ends and attached collar of a flat form laundered shirt, comprising a flat cardboard anchor having a terminally widened shank, an obtuse crown at one end, and an oval stock at the othe end of the shank and flat obtuse arm extensions of the crown, edg s of which are spaced from and extend beyond the stock when in flat form; so that when the arms are placed in the fold of the collar of a flat form laundered shirt, the shank may be bent and the stock folded down inside the neck band, and into practical parallelism with said crown and arms, thus to hold the collar ends in true position.

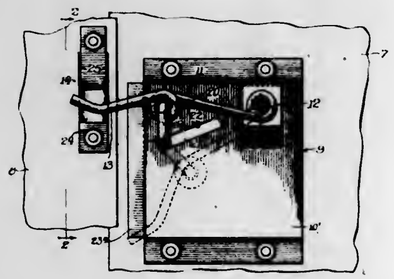
1,886,827. CLOSURE LATCH. NORTON A. MEARS, Chicago, Ill., assignor to Chicago Forging & Manufacturing Co., Chicago, Ill., a Corporation of Illinois. Filed Apr. 17, 1930. Serial No. 444,887. 10 Claims. (Cl. 292—229.)



1. A latch for a closure member, comprising in combination, an abutment projecting from means defining the opening closed by the closure member, a lever fulcrumed

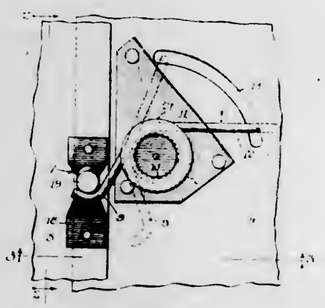
on the movable closure member for rotation in a plane parallel to the member, and a handle bar journaled at one end in said lever to rotate the same and guided at the other end in said movable member for substantially vertical reciprocatory motion.

1,886,828. CLOSURE LATCH. NORTON A. MEARS, Chicago, Ill., assignor to Chicago Forging & Manufacturing Co., Chicago, Ill., a Corporation of Illinois. Filed Apr. 17, 1930. Serial No. 444,888. 7 Claims. (Cl. 292—197.)



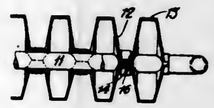
1. A device for securing a movable closure member comprising, an abutment projecting from means defining the opening closure of the member, a lever pivoted on the member and adapted to be swung into and out of engagement with said abutment, and a crank arm to swing said lever having one end journaled in said lever and the other end guided in the lever supporting member for rotational and bodily sliding movement radially from the point of support of said lever.

1,886,829. CLOSURE LATCH. NORTON A. MEARS, Chicago, Ill., assignor to Chicago Forging & Manufacturing Co., Chicago, Ill., a Corporation of Illinois. Filed Apr. 17, 1930. Serial No. 444,889. 3 Claims. (Cl. 292—.09.)



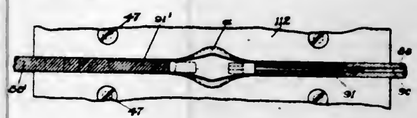
1. The combination with two members to be connected, of a latch for holding the members against relative movement, comprising, an abutment projecting from one member, a plate secured to the other member adjacent said abutment, a resilient lever fulcrumed on a projection of said plate for rotation into or out of engagement with said abutment, and means integral with said plate for securing said lever in disengaged position comprising an upstanding lug positioned to engage said lever, said upstanding lug having a notch in the edge parallel to the plate and a beveled side edge to cam said lever away from said plate to hold said lever in said notch by the tension of said lever.

1,886,830. MANUFACTURE OF RADIATORS. THOMAS E. MURRAY, Jr., Brooklyn, N. Y., assignor, by mesne assignments, to American Radiator & Standard Sanitary Corporation, a Corporation of Delaware. Filed Jan. 25, 1930. Serial No. 423,330. 11 Claims. (Cl. 219—10.)



1. The method of making radiators of the character described which comprises forming metal sheets into spaced corrugated sections and bending the edges of the corrugated sections at one side to form a series of recesses in longitudinal alinement, applying straps to the sheets at the sides opposite to the recesses, assembling two such sheets with their recesses facing each other and an elongated heating element between them extending longitudinally in said recesses, bringing the assembled parts together between electrodes bearing on opposite straps, passing a welding current between the electrodes and pressing them together so as to bring the recessed portions of the sheets into extended and intimate contact with the heating element and to fasten the parts together.

1,886,831. METHOD OF AND APPARATUS FOR PRESSING MATERIALS INTO MOLDS. WILLIAM S. MURRAY, Utica, N. Y., assignor to Oneida Community, Limited, Oneida, N. Y., a Corporation of New York. Filed May 18, 1929. Serial No. 364,129. 2 Claims. (Cl. 113—44.)

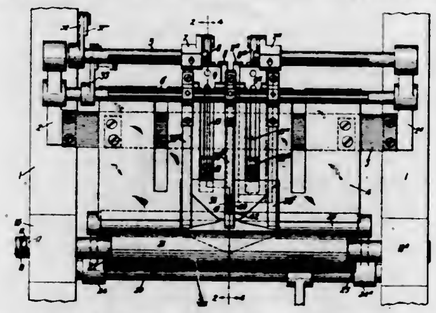


1. The method of expanding a hollow blank of ductile material into contact with the interior wall of a matrix, which in part fits the blank and in part is enlarged to allow the blank to expand therein, which comprises subjecting the interior of the blank to a fluid pressure sufficient to expand it radially, while subjecting the metal of the blank to an upsetting flowing pressure whereby metal from the unexpanded portions is supplied to the expanding portions of the blank, and supporting the walls of the unexpanded portions as far as the point of divergence of the expanding portion before and during the subjection of said metal to said upsetting pressure to prevent lateral collapse during application of the upsetting pressure.

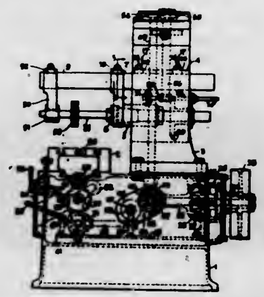
2. In combination, means for supplying to the interior of a blank fluid under pressure sufficient to expand the material of the blank, a plunger arranged to act against the end of the blank and to apply upsetting flowing pressure thereto, and a mandrel associated with the plunger and adapted to enter the blank as far as the point of divergence of the expanding portion, said mandrel entering the blank before contact of the plunger to support internally the unexpanded portions of the blank.

1,886,832. FOLDING MECHANISM. ABRAHAM NOVICK, Flushing, N. Y., assignor to F. L. Smithe Machine Co., Inc., New York, N. Y., a Corporation of New York. Filed Nov. 10, 1927. Serial No. 232,272. 9 Claims. (Cl. 93—62.)

1. In an envelope-making machine, means for folding an end flap of a blank comprising means in the form of rolls acting to feed the blanks and to fold them, a stop against which the blank is fed by said feed rolls, a stationary guide receiving the blank from the feed rolls and directing it crease foremost between said folding rolls, means for moving said stop to move the blank along said guide into the bite of said folding rolls, and a member positioned above said blank when the latter is received by said stop, and means for bringing same down forcibly against said blank to cause it to bend along a crease line thereof.



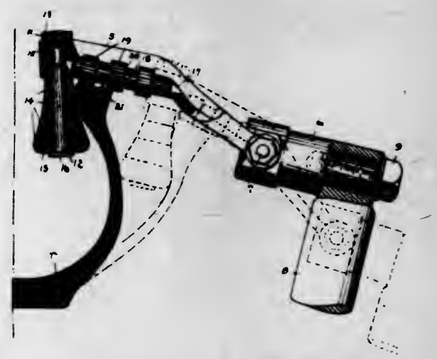
1,886,833. MACHINE TOOL STRUCTURE. FRED A. PARSONS, Milwaukee, Wis., assignor to Kearney & Trecker Corporation, West Allis, Wis. Filed Nov. 8, 1928. Serial No. 317,924. 11 Claims. (Cl. 90—16.)



1. In a machine tool, the combination of a base, a table reciprocably supported therefrom, a head uprising from said base adjacent a longitudinal edge of said table, a carrier supported from said head for vertical movement relative thereto, a spindle carrying sleeve supported from said carrier for bodily vertical movement therewith and for adjustment relative thereto in a direction transverse to the movement of said table for an end thereof to project in the direction of said table, an overarm supported from said carrier above said spindle and adjustable relative to said carrier in a path parallel with the adjustment of said spindle carrying sleeve, and a member connecting said overarm and sleeve adjacent said projecting end of said sleeve, whereby the projecting end of said sleeve is provided with a supplementary support movable as a unit therewith in a plurality of mutually transverse paths.

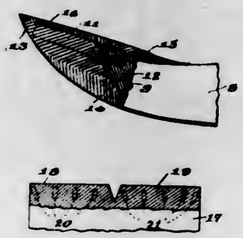
5. In a milling machine the combination of a reciprocable work table, a support uprising adjacent a longitudinal edge of said table, a sleeve supported from said support for adjustment relative thereto for an end thereof to project beyond said support in the direction of said table, a spindle journaled in said sleeve, an overarm device supported from said support to project therefrom in the direction of said table, and means directly supporting the projecting end of said sleeve from the projecting portion of said overarm device, said means being alternatively clampable to fix the position of adjustment of said sleeve relative to said device and releasable to permit of said relative adjustment.

1,886,834. TIRE SPREADING MACHINE. WILLIAM G. PRENTICE, Indianapolis, Ind., and FRANK B. COPELAND, Ashland, Ohio, assignors to The Elite Manufacturing Company, Ashland, Ohio, a Corporation of Ohio. Filed June 19, 1931. Serial No. 545,450. 4 Claims. (Cl. 154—9.)



1. In a tire spreading machine, means to rotatably support a tire and means to spread said tire, said last mentioned means including pivotally mounted levers, rods mounted within said levers and longitudinally adjustable with respect thereto, brackets hinged to the top end of said rods and axially rotatable with respect thereto, and a cone-shaped hook member angularly related with respect to and connected with said brackets.

1,886,835. METAL TREATING PROCESS. GUY PUNNELL, Angleton, Tex. Filed June 15, 1931. Serial No. 544,656. 3 Claims. (Cl. 76—108.)

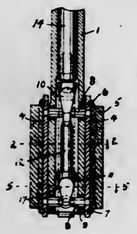


1. A method of the character described, comprising first securely fastening an end of an insert to an edge of a metal article by the application of molten metal applied by autogenous welding, and then after the insert is fastened in position, completely surrounding the same by applying molten metal on all sides of the insert in successive steps and by autogenous welding to build up a metal extension on the article having the insert entirely enclosed and embedded within the same.

3. A method of the character described for building up first and second portions of a fish tail bit while arranging inserts within said portions, comprising securing ends of the inserts to the ends of said portions of the fish tail bit by applying molten metal to said ends of the inserts and the ends of said portions and thereby securing the inserts in such positions that the inserts of one portion of the bit are irregularly arranged with

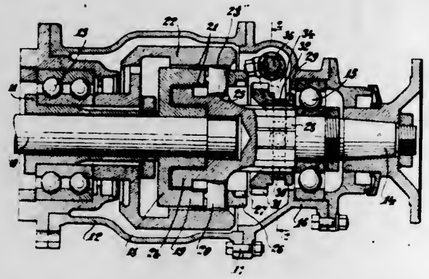
regard to the inserts of the other portion of the bit, and successively applying masses of molten metal to the bit to build up a metal extension on said portions of the bit having the inserts entirely enclosed and embedded within the extension.

1,886,836. LAPPING MACHINE. OTTO R. RELLER and CLARENCE W. HALLENE, Moline, Ill., assignors to Moline Tool Company, Moline, Ill. Filed Mar. 31, 1932. Serial No. 602,166. 6 Claims. (Cl. 51—184.3.)



1. In a lapping machine, a tubular support for honing elements, an expansion element held in said support so as to have a limited clearance therefrom, and provided on its sides with plane surfaces, shoes carried by said support, connections between said shoes and said expansion element bearing against said planes, and means for actuating said expansion element.

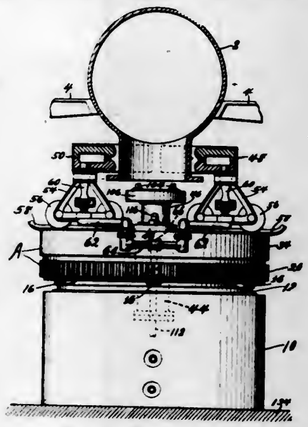
1,886,837. LOCKING MECHANISM FOR POWER APPORTIONING DEVICES. AZOR D. ROBBINS, Highland Park, N. J., assignor to International Motor Company, New York, N. Y., a Corporation of Delaware. Filed Dec. 2, 1931. Serial No. 578,441. 1 Claim. (Cl. 74—7.)



In combination with concentric radially spaced driven members, a driving member spaced radially therebetween, means to apportion power between the driven members, a clutch slidable axially on one of the driven members, and interengaging teeth on the clutch and the driving member.

1,886,838. WELDING MACHINE. CHARLES L. ROWLAND, deceased, Carbondale, Pa., by Kathryn E. Rowland, executrix, Carbondale, Pa., and Edward A. De Laney, executor, Carbondale, Pa., assignor to American Welding Company, Carbondale, Pa., a Corporation of Delaware. Original application filed Jan. 27, 1926. Serial No. 84,134. Divided and this application filed Apr. 29, 1930. Serial No. 448,253. 21 Claims. (Cl. 78—82.)

2. In a heating apparatus, in combination, a work holder to support hollow work, means for heating the work comprising an exterior furnace equipment surrounding the work, an interior furnace equipment within the work, and transmission devices to effect, with respect to the exterior and interior furnace equipments as one



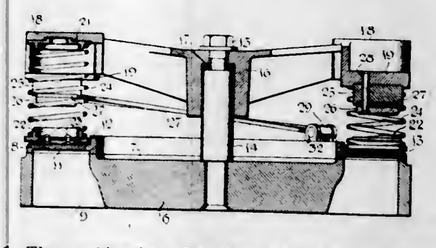
element and the work holder as another element, and during the heating action of said furnace equipments a relative rotating movement one with relation to the other.

1,886,839. PADDED LINK FOR ENDLESS TRACTOR CHAINS. EDWARD J. SCHECKEL, Brookfield, Ill. Filed Feb. 26, 1930. Serial No. 431,564. 4 Claims. (Cl. 305—10.)



1. A chain link of the kind described, comprising a box-like body open at its bottom, reinforcing rods within said box arranged in several layers spaced at different heights, the rods of adjacent layers arranged at right angles to each other, means engaging the ends of the rods to prevent their removal, a rubber member vulcanized in place, filling said box and having a ground contact portion projecting out through the open bottom of the box, and flexible reinforcing members arranged within the body of the rubber member and extending vertically therethrough.

1,886,840. VALVE. KURT SCHOENE, Hamburg, Germany. Filed Dec. 27, 1928. Serial No. 328,795. 5 Claims. (Cl. 251—144.)



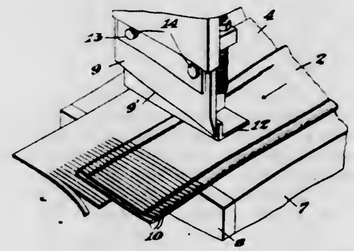
1. The combination of a valve seat; a spider mounted above the same; a plurality of guide blades each supported at one end on the spider; an annular thrust and guide member; hinged connections between each of said blades and said member; an annular valve rotatably mounted on said member and interposed between the member and said seat; and springs reacting between said spider and said annular thrust member.

1,886,841. FAN FOR FURNACE HOT AIR PIPES. ALVA L. SEARLES, Grand Rapids, Mich. Filed Dec. 12, 1930. Serial No. 501,798. 2 Claims. (Cl. 98—101.)



1. In combination with an air pipe having a discharge vent with a surrounding member having keepers at opposite sides respectively of said vent; a removable grid having a tongue removably extending into the keeper on one of said sides of the surrounding member and a button removably engaging in a keeper on the other side of said member and turnable to a position securing the grid to said member and reversely to a position releasing the grid, the grid having a strap mounted at its ends on the inner side of the grid at the opposite sides respectively of said vent; an electric motor having a shaft axially transverse to the grid; a fan carried by said shaft, the motor and fan being mounted on the strap between the same and the grid; air-deflecting vanes turnably mounted at their ends on the grid between the same and the motor and having means for turning the vanes together to different air-deflecting positions.

1,886,842. RUBBER BAND PACKAGE AND METHOD OF MAKING SAME. KENNETH R. SHAW, Easthampton, Mass., assignor to Easthampton Rubber Thread Co., Easthampton, Mass., a Corporation of Massachusetts. Original application filed May 5, 1930. Serial No. 449,815. Divided and this application filed Jan. 16, 1931. Serial No. 509,230. 8 Claims. (Cl. 164—17.)



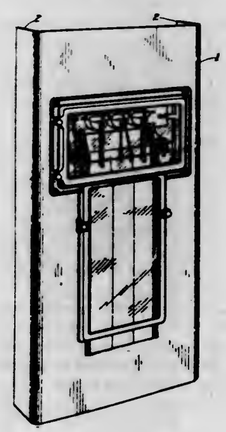
1. That improvement in methods of making rubber band packages which consists in adhesively fastening a rubber tube to a backing strip of sheet material, and then cutting said tube into bands.

1,886,843. BEET TOPPER. FRED A. SHERMAN, Ashland, Nebr. Filed Mar. 18, 1931. Serial No. 523,450. 6 Claims. (Cl. 55—107.)



1. A beet topper, comprising a frame, a pair of spaced frame bars adjustably mounted upon the frame and adapted to be swung toward and from each other at their forward ends, a pair of shoes pivotally mounted upon the forward ends of said bars for trailing therebeneath, and cutting means carried beneath the frame between said shoes.

1,886,844. BOILER METER RECORDER. ALBERT F. SPITZGLASS, Chicago, Ill., assignor to Republic Flow Meters Company, Chicago, Ill., a Corporation of Illinois. Filed Jan. 10, 1929. Serial No. 331,468. 21 Claims. (Cl. 234—1.)

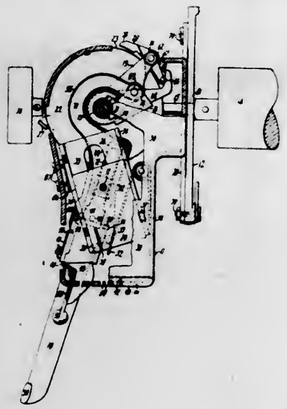


1. In combination a panel, a strip chart recorder casing mounted on said panel with the front thereof substantially flush with the front of said panel, a door with a transparent portion therein for closing the front of said casing, said door being cut away at its bottom edge to allow the chart to pass from said casing, and a guide for the chart adapted to fit against said door adjacent said cut-away part and against the panel to provide therewith a housing for a portion of said chart.

1,886,845. TYPEWRITING MACHINE. BURNHAM C. STICKNEY, Hillside, N. J., assignor to Underwood Elliott Fisher Company, New York, N. Y., a Corporation of Delaware. Filed Nov. 7, 1929. Serial No. 405,307. 67 Claims. (Cl. 197—114.)

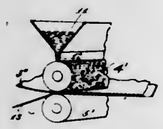
36. In a line-spacing mechanism, the combination of a line-spacing wheel, a train of driving devices therefor, including a lever, said lever having a supporting member

which is fixed relatively to the framework during the line-spacing operation, said supporting member being adjustable relatively to said lever, to afford variation in the



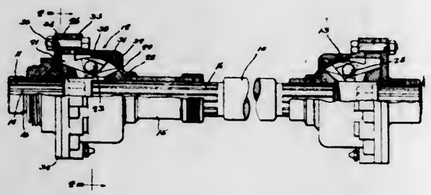
measurement in the line-spacing unit, and independently-adjustable means for use in determining the number of units to be included in the line-space operation.

1,886,846. PROCESS FOR PRODUCING DESIGNS AND PATTERNS. FREDERICK D. TAYLOR, Cranston, R. I.; Frederick C. Taylor administrator of said Frederick D. Taylor, deceased. Filed Jan. 18, 1930. Serial No. 421,716. 2 Claims. (Cl. 101—121.)



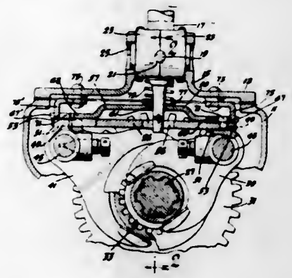
1. The process of printing fabric, consisting in applying a lace or other pattern to a piece of fabric and then passing an inked engraved printing roller over the lace so that the colored matter on the roller will contact with the fabric in the open spaces of the lace.

1,886,847. UNIVERSAL JOINT. PERRY L. TENNEY and HARRY E. FIDLER, Muncie, Ind., assignors to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Filed Apr. 2, 1927. Serial No. 180,573. 10 Claims. (Cl. 64—91.)



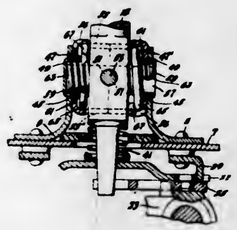
1. A universal joint comprising in part a member having an interrupted gear or multiple slotted engaging portion, and arms projecting from said gear or multiple slotted engaging portion.

1,886,848. GEAR SHIFT MECHANISM. PERRY L. TENNEY, Muncie, Ind., assignor to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Filed Oct. 19, 1931. Serial No. 569,747. 8 Claims. (Cl. 74—39.)



1. In change speed mechanism, a housing, shift forks, a shift lever, a second lever operably related to the shift lever, each end of the second lever associated with one of the shift forks, means to restrain the second lever from transverse movement, and means to anchor one end only of the second lever from longitudinal movement by a transverse movement of the shift lever, whereby longitudinal movement of the shift lever may produce arcuate movement of the second lever about its anchored end and a consequent longitudinal movement of the shift fork associated with the movable end of the second lever.

1,886,849. SHIFTER LEVER MOUNTING. PERRY L. TENNEY and LE ROY F. LE GROS, Muncie, Ind., assignors to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Filed Nov. 2, 1931. Serial No. 572,600. 12 Claims. (Cl. 74—39.)

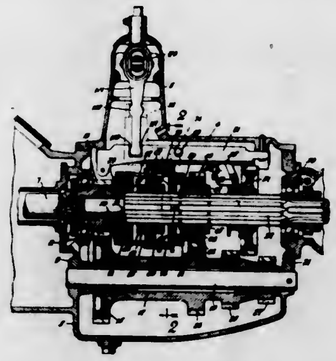


1. In combination, a housing, a lever, opposed cups, said cups being positioned in coaxial relation, the bottoms of said cups being remote from each other and in contact with the walls of said housing, and means to rotatably mount said lever relative to said cups, said lever and cups being rotatable together relative to said housing in a direction at right angles to the rotation of the lever relative to the cups.

1,886,850. SYNCHRONIZING TRANSMISSION. PERRY L. TENNEY, Muncie, Ind., assignor to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Original application filed July 17, 1929, Serial No. 378,910. Divided and this application filed Nov. 7, 1931. Serial No. 573,587. 4 Claims. (Cl. 74—57.)

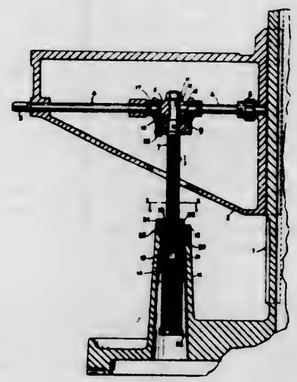
1. In variable speed gear transmission mechanism, the combination of a low speed train devoid of synchronizing devices and a higher speed train associated with synchronizing devices, both trains including shiftable coupling elements; a shifter slide connected to the shiftable element of the low speed train, a shifter slide connected to the shiftable element of the higher speed train, said last named slide having an arm rigidly fixed thereto; a

shift lever, means whereby the shift lever may be interlocked with said arm, and means whereby the shift lever may be interlocked with the shifter slide that is con-



nected to the low speed train at a point further from the fulcrum of said shift lever than the point of connection of the latter with said arm.

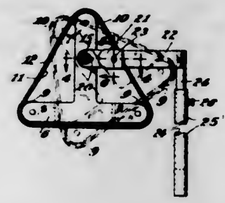
1,886,851. TELESCOPIC SCREW. THEODORE TRECKER, Milwaukee, Wis., assignor to Kearney & Trecker Corporation, West Allis, Wis. Filed May 24, 1928. Serial No. 280,166. 3 Claims. (Cl. 90—11.)



1. In a machine tool having relatively movable supports and a telescopic screw for movement of said supports, said screw having co-axial inner and outer relatively rotatable and axially movable members, the combination of a first stop for limiting the axial movement of one of said members relative to the other, and a second stop for limiting the axial movement of said other member relative to one of said supports, each of said stops including contact portions relatively rotatable into a position of mutually opposed thrust transverse to the axis of rotation, whereby to avoid substantially all thrust between the stop portions in the direction of said axis.

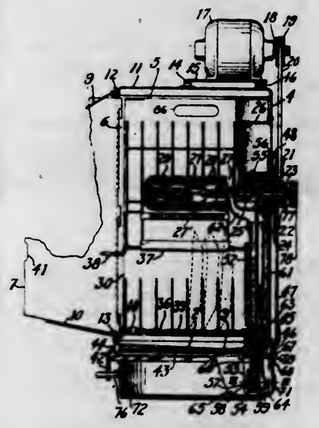
1,886,852. WINDOW CLEANING DEVICE. GEORGE H. TRUDA, Montclair, N. J., and JOHANNA M. WILDE, New York, N. Y. Filed Dec. 3, 1930. Serial No. 499,658. 5 Claims. (Cl. 15—103.)

1. A window cleaning device comprising an adjustable handle, a T-shaped frame in connection therewith, having rollers at the free ends of said frame, an endless cleaning element mounted on the rollers of said frame and assuming a polygonal form thereon, and means for adjustably



mounting said frame upon one end of the handle whereby one of the faces of the cleaning element may be disposed in position for engagement with the window glass.

1,886,853. UTENSIL CLEANSING APPARATUS. WILLARD L. VAN NESS, Toledo, Ohio. Filed Feb. 2, 1925. Serial No. 6,252. 18 Claims. (Cl. 15—74.)

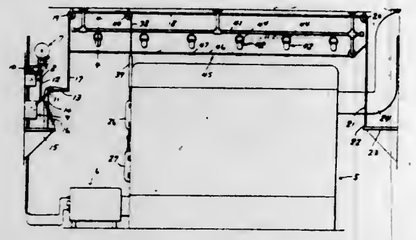


3. A washer comprising a housing adapted to receive articles to be washed, a reservoir centrally below the housing having a plurality of compartments therein adapted to contain liquid and an opening for each compartment, liquid delivery means including a liquid pump, said means embodying a hollow member shiftable downwardly into and upwardly out of said reservoir through one of said openings for rendering the pump effective for withdrawing liquid from the reservoir and projecting it upon articles in the housing, said reservoir being movably mounted enabling angular shifting thereof when the shiftable member is away from liquid withdrawing position, and manually operable means for effecting said angular shifting of said reservoir to be in position to receive the shiftable member in a selected one of the compartments for withdrawal of liquid from said compartment.

1,886,854. AUTOMATIC ALARM AND BURNER CONTROL. HENRY C. VOGT, New Brunswick, N. J. Filed Feb. 26, 1932. Serial No. 595,413. 2 Claims. (Cl. 158—42.1.)

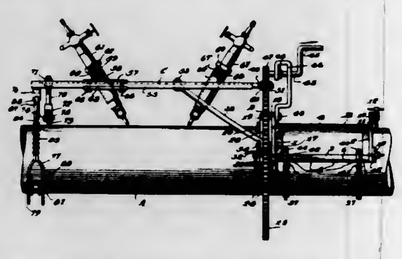
2. In a structural arrangement of the class described, a furnace provided with a plurality of hingedly mounted doors on its frontal portion, flexible spring members mounted on said furnace and having terminal knobs in co-operative contact with the adjacent edge portions of

the doors, said spring members being operated when any one of the doors is blown open under excessive internal explosive pressure in the furnace, a switch equipped audi-



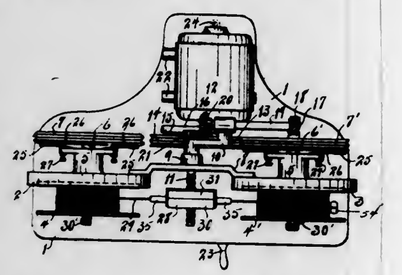
ble alarm device, a control latch therefor, a chain connected with said latch, and a flexible operating connection between the chain and said flexible members.

1,886,855. PIPE CUTTING MACHINE. NOAH E. WAGNER, Tulsa, Okla. Filed May 23, 1930. Serial No. 455,059. 7 Claims. (Cl. 266—23.)



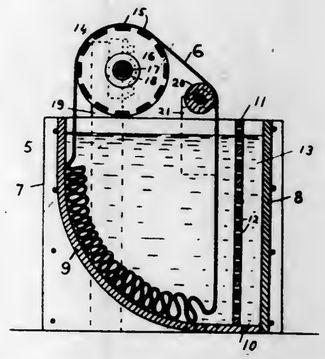
1. A machine for cutting pipe comprising a member rotatably mounted relative to the pipe, an arm having one end connected to and rotatable with the member, means carried by the arm adjacent the opposite end and engageable with the pipe during the rotation of the arm relative to the pipe for positioning the end of the arm relative to the pipe, and cutting torches carried by the arm.

1,886,856. MECHANISM FOR TRAVERSING A RECORDING MEDIUM. HAROLD L. WARWICK, Fort Worth, Tex. Filed Dec. 15, 1931. Serial No. 581,199. 6 Claims. (Cl. 179—100.2.)



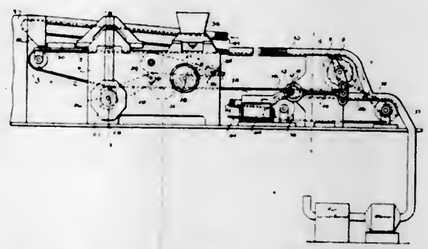
1. In a mechanism for traversing a recording medium consisting of a base for revolubly supporting two reels provided with axles keyed thereto, each of said axles provided with a friction pulley rigidly attached thereto, a motor slidably mounted on said base and provided with a drive pulley and an idler driven thereby, said drive pulley adapted to contact with and drive one of said friction pulleys and said idler adapted to engage and drive the other friction pulley, a reciprocating recording head disposed between said reels and adapted to permit said medium to pass therethrough, means for actuating said recording head, and means for sliding said motor on said base for driving said reels intermittently.

1,886,857. PROCESS OF DYEING. JOHN WATTERS, Utica, N. Y. Filed Sept. 2, 1930. Serial No. 479,205. 7 Claims. (Cl. 8—5.)



1. The process of dyeing with indanthrene and similar vat dyes developed by oxidation which consists in subjecting the goods to be dyed to loose, continuous motion including repeated submergence in the following named baths and repeated temporary elevation therefrom into the air for inspection, viz: to a preliminary bath of water, caustic soda and hydrosulphite, there being an excess of caustic soda and of hydrosulphite over the amount required for keeping the dye in solution, then adding to this bath the said dye material in dissolved form and subjecting the goods to said dye liquor until the dye is absorbed by the goods, the excess of hydrosulphite supplied during said preliminary bath operating during this treatment of the goods by the dye bath to prevent oxidation of the indanthrene dye while the goods are temporarily exposed to the atmosphere, and then adding to the dye bath a material adapted to bring about oxidation and final development of the dye while the goods are subjected to this bath.

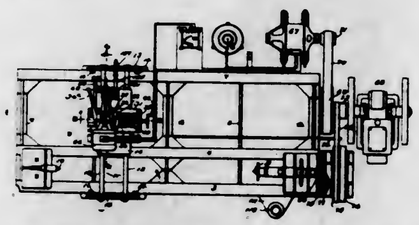
1,886,858. METHOD OF PRODUCING CANDY CENTERS AND TO CANDY CENTER MAKING MACHINE EMPLOYING SUCH METHOD. THEODORE WERNER and CHARLES WERNER, Rochester, N. Y., assignors to John Werner & Sons, Inc., Rochester, N. Y., a Corporation of New York. Filed May 31, 1930. Serial No. 458,089. 19 Claims. (Cl. 107—3.)



12. The method of molding in starch-like material which consists in spreading a layer of the material on suitable support, in forcing mold-forming elements into a portion of said layer in a direction towards said support

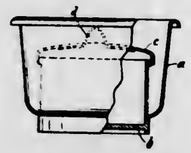
to form mold recesses, and in temporarily confining said portion against movement in directions laterally with respect to the direction of the movement of the mold forming elements during the mold forming operation.

1,886,859. MACHINE FOR SHARPENING DISKS AND THE LIKE. CHARLTON D. WRIGHT, Davenport, Iowa. Filed Sept. 22, 1928. Serial No. 307,604. 7 Claims. (Cl. 51—104.)



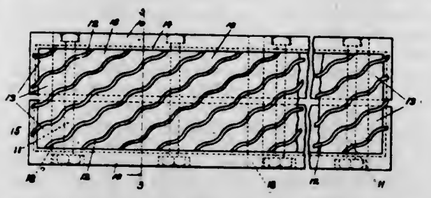
1. In a disk sharpener, the combination of a supporting frame, means thereon for rotatably supporting the disk to be sharpened, a carriage movable on the frame to and from the disk, a frame mounted on the carriage to rock about an axis parallel with the axis of the disk, and also about an axis extending transversely of the axis of the disk, disk guiding devices mounted on said rocking frame and adapted to engage the peripheral edge of the disk at circumferentially separated points, and a disk sharpening tool carried by the carriage and adapted to act on the edge of the disk between said guiding devices.

1,886,860. SHAVING UTENSIL. CARL ZICKMANTEL, Berlin, Germany. Filed June 19, 1928, Serial No. 286,516, and in Germany July 23, 1927. 7 Claims. (Cl. 45—136.)



4. A telescopic or collapsible shaving utensil comprising a plurality of permanently connected substantially concentric parts having cooperating threads whereby they are collapsible the one into the other to a selected extent, one of said parts comprising a soap container, and the other comprising a mixing chamber.

1,886,861. BED PLATE. ALBERT J. ALLISON, Dayton, Ohio, assignor, by mesne assignments, to Simonds Worden White Company, a Corporation of Ohio. Filed Sept. 17, 1928. Serial No. 306,360. 9 Claims. (Cl. 92—22.)



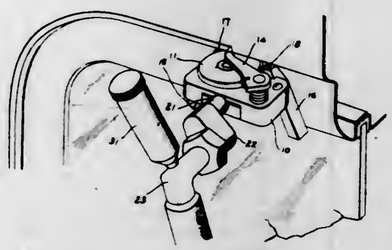
1. A bed plate comprising a box consisting of two parts, bolts for drawing said parts together, bars standing on edge in said box, spacers separating the bars, said bars and spacers being secured in the box by drawing the two parts of the box together to clamp the same therein, the bars being further secured by interlocking with the walls of the box.

1,886,862. ANIMAL TRAP. VERNON BAILEY, Washington, D. C. Filed Apr. 26, 1932. Serial No. 607,554. 3 Claims. (Cl. 43—87.)



1. A trap including in combination with a support equipped with two posts a noose part and a pan part, adapted to be assembled and released one from the other, the noose part consisting of a spring in the form of a bow and a noose in the form of a bow-string having a running knot in its extent, the noose part being adapted to be applied in collapsed form and with the ends of the bow adjacent the pan part, upon the posts of the support, and the pan part including a frame adapted to be secured to the support and a pan pivoted to the frame and including two arms, one arm underlying the ends of the spring of the noose part and the other arm extending at an interval from the face of the support.

1,886,863. PAINTING INSTRUMENT. EARL M. BARDEN, Detroit, Mich., assignor to Packard Motor Car Company, Detroit, Mich., a Corporation of Michigan. Filed July 17, 1930. Serial No. 468,510. 10 Claims. (Cl. 91—62.6.)

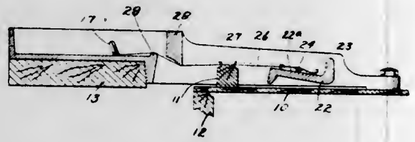


1. In combination with a painting instrument adapted for painting a ridged work surface and comprising fluid holding and fluid distributing means, a guide for engaging the ridge in the work surface, and additional guiding means for engaging the ridge portion of the work surface comprising angularly extending spring pressed plungers, said plungers being arranged one in advance of another behind said guide.

1,886,864. PIANO. WILLIAM G. BETZ, Hammond, Ind. Filed May 6, 1931. Serial No. 535,846. 7 Claims. (Cl. 84—187.)

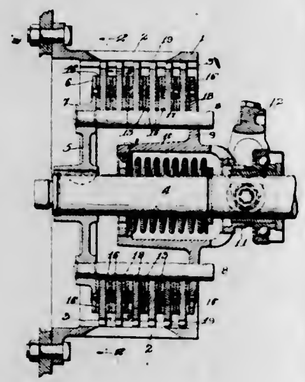
3. In a piano, a sounding board, a bridge secured thereto, a string plate having a hitch pin section and a tuning pin section, one of said sections having a slanting sur-

face, strings tensioned between hitch pins and tuning pins carried by the hitch pin section and tuning pin section



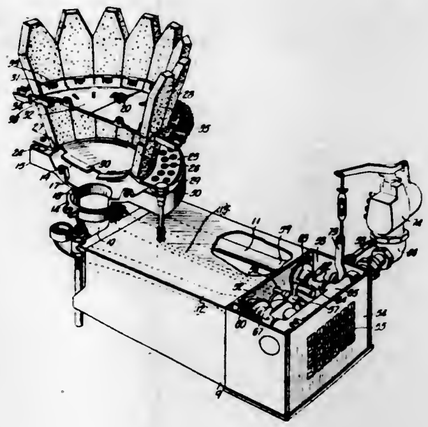
respectively, and a bar adjustable along the slanting surface and adapted to engage the strings to raise or lower the strings with respect to the bridge.

1,886,865. MULTIPLE DISK CLUTCH. LEO A. BIXBY, Milwaukee, Wis., assignor to Unit Corporation of America, Milwaukee, Wis. Filed May 17, 1930. Serial No. 453,239. 1 Claim. (Cl. 192—113.)



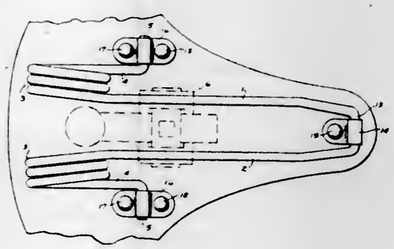
A neat dissipating clutch comprising a housing having an annular outer wall provided with an annular row of closely arranged slots extending substantially the full width of the outer wall, said slots having the opposite side walls thereof oppositely inclined defining flared heat outlets leading toward the outer face of the annular wall of the housing, inwardly directed tapered ribs formed on the inner face of the annular wall between the slots, relatively thin driven disks arranged within the housing, relatively thick driving disks removably mounted within the housing and positioned between the relatively thin driven disks and adapted to cooperate therewith, the relatively thick disks extending beyond the relatively thin disks and having a plurality of peripheral teeth received between the ribs of the outer annular wall and extending toward the slots, said thick disks having a predetermined mass sufficient to absorb the heat of friction between the driving and driven disks and to carry and dissipate the heat through the slots in the outer wall of the housing, the relatively thin disks having lateral bent portions in circumferential spaced relation, as for the purpose specified.

1,886,866. GAS BURNER. GEORGE W. BLAKESLEY, Kansas City, Mo. Filed Aug. 16, 1929. Serial No. 386,469. 21 Claims. (Cl. 158—113.)



10. In a device of the character described including a fire bowl, a bracket, and a deflector having a slot to receive the bracket for slidably supporting the same.

1,886,867. CYCLE SADDLE. JOHN W. BRANDT, Elyria, Ohio. Filed Sept. 19, 1930. Serial No. 482,997. 14 Claims. (Cl. 208—15.)

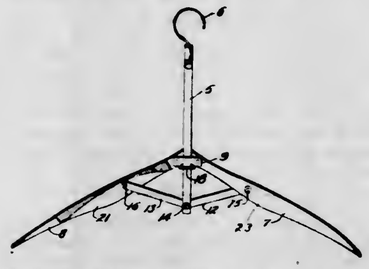


1. In a cycle saddle, the combination of a cycle seat, a support therefor comprising a loop having a long arm and a short arm and an intermediately disposed yieldable element joining the two arms, a yieldable connector for the free ends of each of said arms joining its associated arm to the underside of the cycle seat, the connector for the longer arm being disposed substantially forwardly of the connector for the shorter arm, said yieldable element disposed substantially rearwardly of both said connectors, said seat, said shorter arm and said longer arm being in successive superposed relation, said seat being uppermost and said short arm being intermediate said seat and an underlying portion of the longer arm, said longer arm adapted for mounting on a saddle post and supporting the other parts of the cycle saddle thereon, said arms forming substantially the sole support for said saddle on said post.

1,886,868. PROCESS OF HEATING BRINE. GEORGE B. BURNHAM, Reno, Nev., assignor to Burnham Chemical Company, Westend, Calif., a Corporation of Nevada. Filed Oct. 4, 1927. Serial No. 224,030. 6 Claims. (Cl. 23—41.)

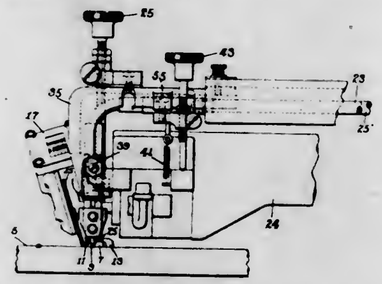
1. A process of heating brine comprising exposing to the action of the sun's rays brine beneath a sheet of material arranged to exclude the atmosphere and separated from the brine, said exposure being for a sufficient time to cause crystallization of a salt from said brine.

1,886,869. COLLAPSIBLE GARMENT HANGER. BLAND B. BUTTON, Chicago, Ill. Filed Mar. 19, 1931. Serial No. 523,679. 9 Claims. (Cl. 223—63.)



1. A garment hanger comprising a bar provided with means for engaging a hanger support, and a pair of collapsible stretcher arms supported on said bar and provided at their inner ends with means affording pivotal and sliding connection with the bar, the inner ends of said arms being shaped to move into abutting engagement with the sides of the bar when the arms are in the extended position.

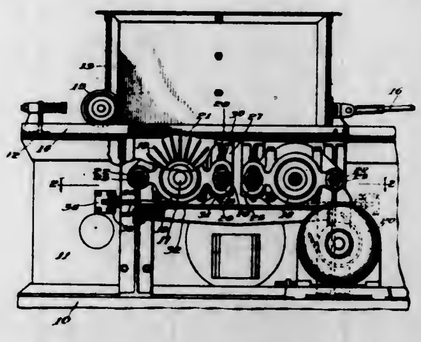
1,886,870. EDGE FINISHING MACHINE. JOHN B. COFFEY, Boston, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Nov. 13, 1931. Serial No. 574,828. 11 Claims. (Cl. 69—17.)



1. A machine of the class described having, in combination, a support for a piece of leather, an intensely hot shrinking tool, means for causing the leather to be subjected along an edge thereof to the action of the tool, two electric terminals, and means for detachably fastening the ends of the tool respectively one to each terminal, the tool, the terminal and the fastening means being all composed of the same heat-resistant alloy.

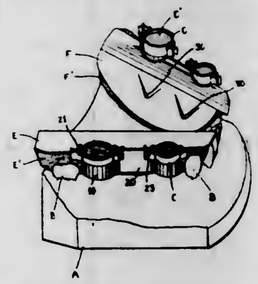
1,886,871. DEFIBERIZING MACHINE. EDWARD P. CORCORAN and WALTER B. HADLEY, Chicago, Ill., assignors to John L. Kellogg, Chicago, Ill. Filed Jan. 20, 1931. Serial No. 510,051. 3 Claims. (Cl. 83—75.)

1. A defiberizing machine comprising a table, upright supports for the table, a brush bearing housing pivotally mounted on the upright supports, a brush having a shaft rotatably mounted in the housing, and means for adjusting the position of the housing relatively to the table, said means comprising a cross bar secured to the upright



supports, an apertured bracket secured to a fixed part of the machine, a wedge member movable on said cross bar contacting the brush bearing housing and means on the wedge member cooperating with the bracket for retaining the wedge in adjusted position.

1,886,872. DENTAL IMPRESSION DEVICE. JOHN M. CRAIGO, Hartford, Conn. Filed Nov. 9, 1929. Serial No. 406,024. 9 Claims. (Cl. 32—6.)



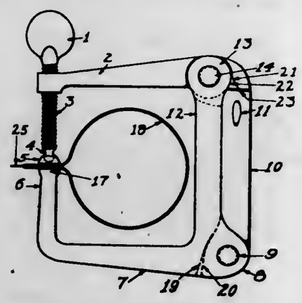
1. In the art of dentistry, an article of manufacture comprising a metal tube having a plurality of spaced apart score lines extending longitudinally from one end of the tube and only partially through said tube, said tube having a circumferential line of weakness.

3. In the art of dentistry, a tube adapted to fit about an individual tooth and in which an impression is adapted to be taken, a part connected to the upper end of said tube, and a baffle plate having a portion adapted to cooperate with said part for locating said baffle plate with respect to said tube.

1,886,873. METHOD OF PREPARING GRAY CAST IRON OF IMPROVED CHARACTERISTICS. EDWIN L. CROSBY and ALBERT E. RHOADS, Detroit, Mich., assignors to Detroit Electric Furnace Company, Detroit, Mich., a Corporation of Michigan. Filed Sept. 8, 1930. Serial No. 480,618. 3 Claims. (Cl. 75—22.5.)

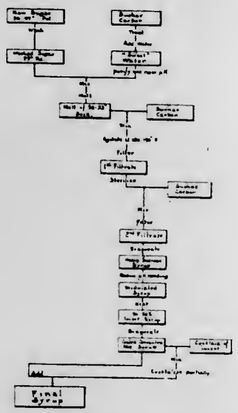
1. In the method of preparing gray cast iron of improved characteristics, the steps which comprise superheating by means of an electrically developed heat to a temperature of from 2800 to 3100° F. a molten mass having the composition of white iron, simultaneously agitating said molten mass during continued superheating until substantially all of the carbon present is dissolved in the iron and graphitizing to form gray cast iron.

1,886,874. QUICK ACTING CLAMP. NICHOLAS A. DRAIM, Silver Spring, Md. Filed Aug. 3, 1931. Serial No. 554,800. 4 Claims. (Cl. 29—89.)



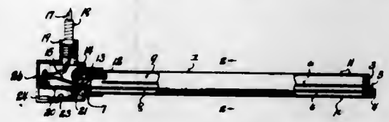
1. A clamp comprising two arms and a pivot for one arm so supported from the other arm that the two arms may assume a position directly opposed to each other extending in the same direction from the pivot the pivoted arm having an extension beyond the pivot constituting a lever, a locking bar constituting a strut abutment pivoted to the support for the pivot first mentioned at such a distance from the first named pivot as to be capable of swinging entirely out of the range of movement of the extension of the first named pivoted arm and also of swinging into engagement with said extension to limit the swing of said first mentioned arm to a position substantially parallel to the pivot carrying arm and adjustable means carried by the free end of one of the arms for producing pressure between said arms.

1,886,875. PROCESS OF PREPARING INVERT SUGARS. EUGENE N. EHRHART, New Orleans, La., and LEONARD WICKENDEN, Manhasset, N. Y., assignors to John J. Naugle, Greenwich, Conn. Filed Sept. 27, 1929. Serial No. 395,526. 12 Claims. (Cl. 127—41.)



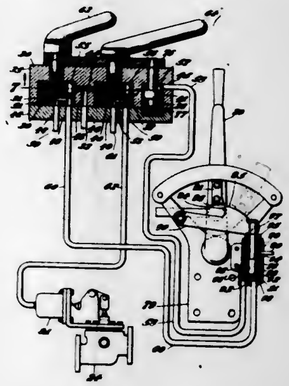
1. The method of preparing invert sugar, which comprises the steps of dissolving raw sucrose sugar in water treating the same with an agent capable of liberating nascent oxygen, purifying the sucrose sugar melt so obtained by treating the same with a vegetable decolorizing carbon, directly inverting substantially all of the sucrose content of the sucrose sugar melt so obtained, concentrating the invert sugar syrup so obtained thereafter adding seed crystals of invert sugar to the resulting concentrated invert sugar syrup and thereafter thinning the resulting invert sugar crystals with concentrated invert sugar syrup.

1,886,876. SAFETY PILOT LIGHT. FRANK A. GAUGER, Milwaukee, Wis., assignor to Milwaukee Gas Specialty Company, a Corporation of Wisconsin. Filed Dec. 22, 1927. Serial No. 241,826. 2 Claims. (Cl. 158—117.1.)



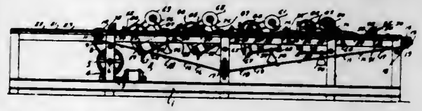
1. A safety pilot burner for use with a main burner, said safety pilot burner comprising a tubular body portion having a longitudinally extending partition dividing said body portion into an air inlet portion and a mixing portion communicating at one end and having an air inlet opening and a mixture outlet opening adjacent the other end and in approximately the same zone as said air inlet opening, a fuel nozzle opening into said mixing portion, means for operating a fuel control for the main burner, and thermostatic means carried by said body portion for controlling said first mentioned means, said tubular body portion forming a part of said thermostatic means.

1,886,877. CONTROL MECHANISM FOR ENGINES. NEVIL GREENWELL, Bethlehem, Pa., assignor to Bethlehem Steel Company, a Corporation of Pennsylvania. Filed May 7, 1930. Serial No. 450,430. 41 Claims. (Cl. 105—48.)



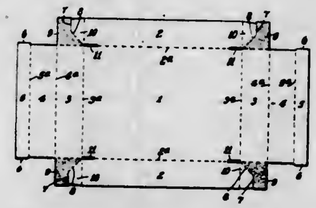
1. In a propulsion system, a main engine, an auxiliary engine, control means for said main engine, operating means for said auxiliary engine, means normally preventing the operation of said last mentioned means, and means for limiting the operation of said control means and for rendering said preventive means inoperative.

1,886,878. ABRADING MACHINE. WILLIAM C. GROB, Toledo, Ohio. Filed Feb. 23, 1926, Serial No. 89,939. Renewed Sept. 26, 1932. 22 Claims. (Cl. 51—76.)



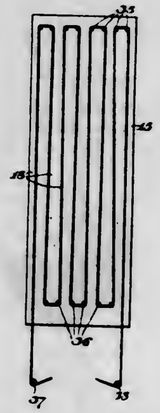
1. An abrading machine comprising a traveling support for work including flights, an abrading element, and means for throwing the abrading element out of operable position, such means being engaged by a work support which is exposed when work is not being fed through the machine.

1,886,879. COLLAPSIBLE PAPER BOX. RALPH A. GROSS, Lititz, Pa., assignor, by mesne assignments, to Simplex Paper Box Corporation, Lititz, Pa., a Corporation of Pennsylvania. Filed Jan. 11, 1929. Serial No. 331,842. 2 Claims. (Cl. 229—34.)



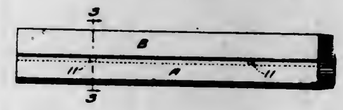
1. A knockdown box comprising a blank having a main body, integral side flaps and end flaps, and infolding corner sections, integral with the adjacent side and end flaps, and diagonally creased to fold upon themselves and upon the adjacent end flaps, at least one of said side flaps being provided at each end with a horizontal rectangular locking slot adjacent to the junction with the main body and extending inwardly from the end flap, and each end flap being provided with a coextensive interior end flap to fold upon the adjacent infolding corner portions, and provided at its outer edge with a locking flap to engage the main body in the erected position, each of said locking flaps being provided at at least one end thereof, with a rectangular locking projection of a length equal to the length of the slot and of a cross section substantially equal to the cross section of one of said slots, and completely fitting the same without distorting any portion of the side flap containing said slot, and being provided at its opposite end with locking means for interlocking with a part connected with the opposite side flap.

1,886,880. ELECTRIC HEATING UNIT. RENÉ G. HARE, Ardmore, Pa. Original application filed Feb. 26, 1929, Serial No. 342,759. Divided and this application filed Jan. 14, 1930. Serial No. 420,673. 3 Claims. (Cl. 219—10.)



1. An electric heating unit comprising three thin flat rigid sheets of insulating material cemented to each other, a resistance wire extending back and forth between two of said sheets and held in place by the cement which holds said sheets together, the intermediate sheet of the heating unit being shorter than the outer sheets to provide a pocket therebetween, lead-in wires, a device for securing said lead-in wires cemented in place in the pocket aforesaid, the ends of the resistance wire being secured to the ends of the lead-in wires, and the end portions of the wires being imbedded in the cement by which the device for securing the lead-in wires is held in place.

1,886,881. LOCKING SHEET METAL STRUCTURE. EBER J. HATMAN, Parkersburg, W. Va. Filed Mar. 10, 1932. Serial No. 597,929. 7 Claims. (Cl. 126—309.)



1. A locking stovepipe section having two mating edge portions, one edge being folded upon itself to form three thicknesses of material, two of which are on the inside of the pipe, the innermost fold having a portion extending outwardly toward the periphery of the pipe to form a longitudinal locking shoulder spaced from the adjacent folded edge of the two outside folds, the innermost fold having a recess therein, the other mating edge portion having a complementary longitudinal locking shoulder and an extension beyond the shoulder, with a boss on said extension, the two locking shoulders being adapted to engage each other and the boss being adapted to project into the recess when the said shoulder extension is located between the said innermost and intermediate folds.

1,886,882. HOLDER FOR PANTS. GEORG HUBER, Langnau, Switzerland. Filed Aug. 13, 1930, Serial No. 474,975, and in Switzerland July 1, 1929. 2 Claims. (Cl. 24—73.)

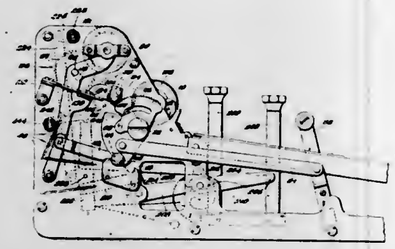


1. A holder for pants, comprising a flexible celluloid plate provided with means for sewing directly onto the inner side of the trousers and having a holding tongue directed towards the body of the wearer for accommodating the loops of the pants stamped out of the middle portion of the plate forming a bulge, said tongue being further formed to provide a channel-like loop holding space on one side of said bulge and an insertion space on the other side thereof, said tongue lying partly in the stamped out hole and being flexible and so shaped as not to hurt the body of the wearer.

1,886,883. CALCULATING MACHINE. WALTER S. JOHNSON, Providence, R. I. Filed Apr. 23, 1921, Serial No. 463,870. Renewed Mar. 30, 1932. 5 Claims. (Cl. 235—82.)

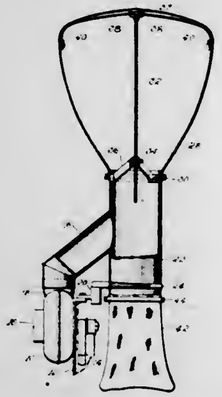
1. A calculating machine having, in combination, computing mechanism including number wheels, totalizing mechanism including number wheels, a normally inoperative gear train including a driving gear adapted to connect the computing mechanism with the totalizing mechanism to transfer a subtotal, driving means normally disconnected from the driving gear and a manually operated transfer member having provision for first operating the gear train to connect the computing mechanism and the totalizing mechanism and to place the driving means and the driving gear into operative relationship and thereafter to actuate the driving means, the driving means

and the driving gear being associated in a manner to clear the computing wheels and to rotate the totalizing mechanism to an extent determined by the reading of the computing mechanism.



2. A calculating machine having, in combination, computing mechanism including number wheels, totalizing mechanism including number wheels, and means for transferring a sub-total from the computing mechanism to the totalizing mechanism including gears fixed to the number wheels of each mechanism, an idler gear constantly in mesh with one of said gears, a driving gear constantly in mesh with the second of said gears, and means for moving the idler gear into and out of mesh with the driving gear, an operating member, a rotatable shaft upon which the driving gear is loosely mounted, an arm fixed to the shaft, a pin fixed to the gear, and means actuated by the operating member for moving the shaft to position the arm in the path of the pin and to thereafter rotate the shaft to perform the transferring operation.

1,886,884. DUST SEPARATOR. JOHN L. JONES, Weymouth, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Jan. 24, 1930. Serial No. 423,174. 5 Claims. (Cl. 183—54.)



2. A dust separator comprising an upright conduit having an opening in its wall, an inclined conduit for receiving at its lower end a stream of dust-laden air and adapted at its upper end to deliver the dust-laden air upwardly into said upright conduit through said opening, an inverted collapsible bag detachably secured to the upper end of said upright conduit and having its opening positioned to receive the dust-laden air from the upper end of said upright conduit for screening dust from the dust-laden air, and a bag detachably secured to the lower end of said upright conduit for retaining the dust which falls from the interior of the first-mentioned bag through said upright conduit when the first-mentioned bag collapses.

1,886,885. PROCESS FOR THE SEPARATION OF ALCOHOLS AND PHENOLS FROM MIXTURES. ANTOINE ADOLPHE KAUFMANN, Geneva, Switzerland. Filed July 29, 1930, Serial No. 471,601, and in Germany Aug. 7, 1929. 10 Claims. (Cl. 260—153.)

1. A process for the separation of alcohols and phenols from mixtures consisting in treating the mixtures containing monohydric alcohols and phenols in question with neutral volatile, alkyl esters of inorganic acids, belonging to the periodic group including boron, removing by distillation the non-alcoholic and non-phenolic constituents, decomposing the residual esters, the alcohols and phenols being thereby obtained.

1,886,886. METHOD OF AND APPARATUS FOR THE RECOVERY OF MATTER FROM WELLS. KIRKLAND KELLEY, Houston, Tex., and SAMUEL J. PERKINS, Sulphur, La. Filed Jan. 23, 1931. Serial No. 510,613. 13 Claims. (Cl. 166—21.)



1. The method of recovering matter from a well, which consists in passing a fluid heavier than said matter substantially through said matter but not in contact therewith, forcing said fluid into contact with the lower portion of said matter, and skimming off said matter while it is in the well.

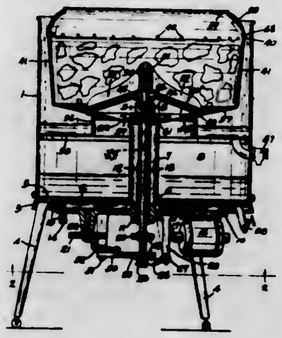
1,886,887. HAIR CURLER. MICHAEL H. KEILHAMER and MARY E. KEILHAMER, Anacortes, Wash. Filed Nov. 4, 1931. Serial No. 572,964. 2 Claims. (Cl. 132—41.)



1. A hair curler having in combination a hollow cylindrical body open at both ends and having a plurality of apertures distributed over its surface, a loop clasp member having its ends pivotally connected to one end portion of the body at diametrically opposite points, said clasp member arranged to longitudinally embrace the

body in spaced apart relation therefrom in the closed position, securing means for the clasp, and said clasp adapted to be swung in a complete circle longitudinally around the body.

1,886,888. LAUNDRY MACHINE. JAMES B. KIRBY, West Richfield, Ohio. Filed Feb. 27, 1928, Serial No. 257,282. Renewed June 4, 1931. 13 Claims. (Cl. 68—15.)



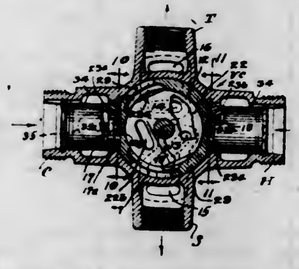
1. In a domestic laundry machine, in combination, a container for the clothes, a clothes washing element therein, upright shaft means connectable with said container and connected to said washing element, a bearing supporting the shaft means, a motor, gearing connections between said motor and shaft means, whereby either said washing element is agitated or said container revolved, a single member on which are mounted said bearing, motor, and gearing connections, a supporting frame separate from said member, and means yieldingly and flexibly supporting said frame relatively to said member.

6. In a portable combined washing machine and centrifuge, a rotatable container for clothing and liquid, an outer casing surrounding said container and having a liquid-discharge outlet in its lower part, means for closing said discharge outlet so as to preserve the liquid ejected from said container, means for yieldingly and flexibly supporting said container relative to said casing, mechanism for rotating said container for extracting purposes, and mechanism for agitating the contents of said container for washing purposes.

13. In a combined washing and extracting machine, in combination a casing, a container located in said casing and having its exterior defined by a surface of revolution about a vertical axis, an oscillatable dasher located inside said container and coaxial therewith, an upright shaft journaled in said casing coaxial with said dasher and container, means for selectively oscillating and rotating said shaft, means operatively connecting said shaft to said dasher and means independent of any axial movement of said shaft for compelling said container to accompany said shaft upon continuous rotation thereof, while leaving said container stationary during oscillatory movements of said shaft subtending less than a complete revolution.

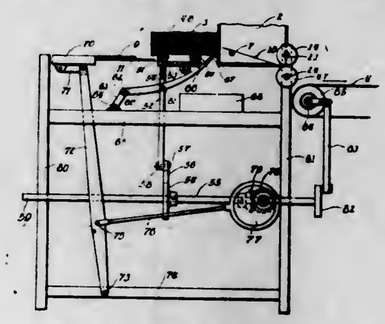
1,886,889. MIXING AND DIVERTING VALVE. FRED H. KRUPP, South Gate, Calif., assignor, by direct and mesne assignments, of three-fourths to George Alexander MacDonald, Los Angeles, Calif., and one-fourth to Le Roy R. Finke, Huntington Park, Calif. Filed July 17, 1930. Serial No. 468,504. 4 Claims. (Cl. 277—7.)

1. Valve structure of the class described comprising a valve casing having a substantially cylindrical seat and at least two independent intake passages communicating with the circumferential portion of said seat at different points thereon, said casing also having at least two independent outlet passages communicating with said seat, a hollow substantially cylindrical valve mounted for oscillation in said seat, the interior of said valve constituting a mixing chamber, said valve having a plurality of laterally extending ports therethrough by which



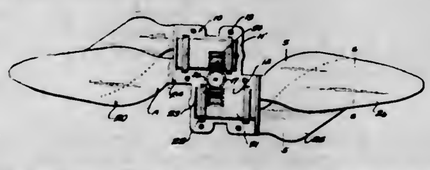
the passage of fluid from either of said intake passages may be controlled and the mixture varied as desired, said valve also having an outlet port in one end thereof adapted to deliver any desired mixture of said fluids to either of said outlet passages.

1,886,890. INSERTING MACHINE. FRED A. LOBLEY, Elkhart, Ind., assignor, by mesne assignments, to Dr. Miles Laboratories, Inc., Elkhart, Ind., a Corporation of Indiana. Filed Aug. 23, 1930. Serial No. 477,262. 37 Claims. (Cl. 270—79.)



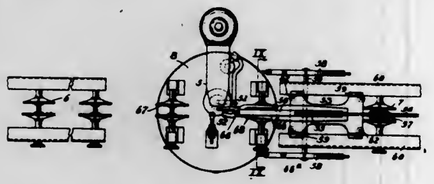
1. An inserting machine, having a receptacle for holding a plurality of inserts, means for successively removing said inserts from the receptacle, a receptacle for holding a plurality of books or the like, and automatically actuated means operating at an angle with respect to the path of movement of said first named means for successively inserting inserts from said first receptacle into said books.

1,886,891. PROPELLER. FREDERICK J. MARTENS and CLINTON O. THOMPSON, Milwaukee, Wis. Filed July 21, 1930. Serial No. 469,531. 2 Claims. (Cl. 170—171.)



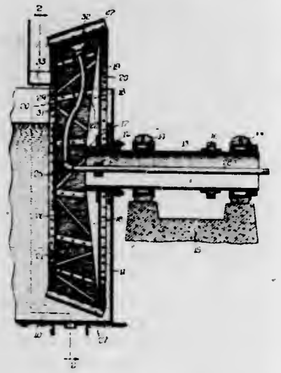
1. A propeller blade comprising a disc-shaped flange, body portions projecting from one face of the flange at opposite sides thereof, and a single connecting tip, said body portions partially overlying one another through their entire lengths.

1,886,892. MECHANISM FOR RIVETING COLUMNS, BEAMS, ETC. CHARLES D. MARSHALL, Pittsburgh, Pa., assignor to McClintic-Marshall Corporation, Bethlehem, Pa., a Corporation of Pennsylvania. Filed Nov. 30, 1926. Serial No. 151,658. 12 Claims. (Cl. 78—49.)



2. In mechanism for riveting structural metallic members as beams, columns, and the like, a horizontal rotatable support, an upstanding riveter mounted adjacent its lower end on the support and having a work-receiving opening in one side thereof, rivet-upsetting means carried by the riveter adjacent said opening, work supporting means on the support adjacent the riveter, power means for transversely moving the riveter on the rotatable support, and means for moving the riveter in a vertical plane relative to the support.

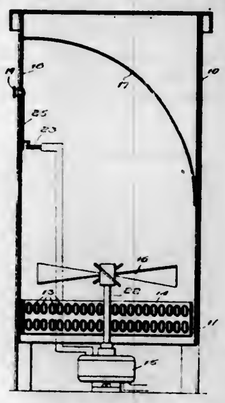
1,886,893. STRAINER. JOSEPH S. MOHR, Chicago, Ill., assignor to John Mohr & Sons, Chicago, Ill., a Corporation of Illinois. Filed Apr. 8, 1932. Serial No. 603,982. 14 Claims. (Cl. 210—199.)



1. In a strainer, the combination of a tank adapted to contain the liquid to be strained, a hollow strainer having a screen periphery located to immerse the lower portion of such screen in the liquid of said tank, means to rotate said strainer, means to deliver the strained liquid from the interior of said strainer, a receptacle, the top portion of said screen above the liquid level in said tank sloping toward said receptacle in a direction transverse to the direction of rotation of said strainer, and means to dislodge matter adhering to the outer surface of the top portion of said screen to allow such freed material to pass down said inclined screen surface into said receptacle.

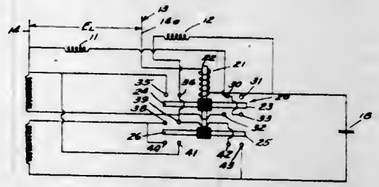
1,886,894. HEATING APPLIANCE. ARTHUR B. MODINE, Racine, Wis., assignor to Modine Manufacturing Company, Racine, Wis., a Corporation of Wisconsin. Filed Oct. 15, 1928. Serial No. 312,588. 8 Claims. (Cl. 257—137.)

2. A heating device comprising a casing and a radiator unit having a predetermined normal capacity, means for normally circulating air through said casing at said capacity, a damper, and circulating means operable to increase said capacity, said circulating means comprising



a fan positioned to impinge air currents upon the surface of said unit, and means connecting said damper and fan for controlling the operation of said fan.

1,886,895. METHOD OF STARTING CONDENSER TYPE MOTORS. THOMAS G. MYERS, Los Angeles, Calif., assignor to United States Electrical Manufacturing Company, Los Angeles, Calif., a Corporation of California. Filed Oct. 7, 1929. Serial No. 397,782. 1 Claim. (Cl. 172—278.)



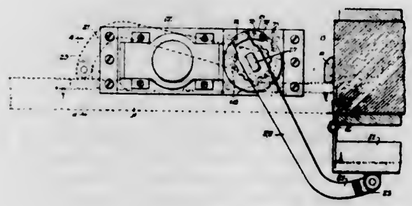
In a condenser type motor, the combination of: a stationary member; a rotatable member; a main winding on one of said members, said main winding being formed in groups; a teaser winding on one of said members, said teaser winding being formed in groups; means for connecting in parallel certain groups of said main winding and connecting in series certain groups of said teaser winding when starting said motor; and means for connecting in series at least a portion of the groups of said main winding previously connected in parallel, and connecting in parallel certain of said groups of said teaser winding formerly connected in series, when said motor comes up to speed.

1,886,896. CAN POSITIONING AND FEEDING MACHINE. ADOLF H. NELSON, San Francisco, Calif. Filed July 21, 1930. Serial No. 469,383. 14 Claims. (Cl. 198—29.)



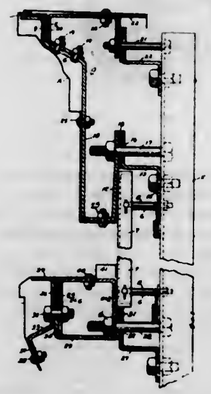
1. In a machine of the character described, a hopper into which cans are adapted to be dumped, means for removing the cans therefrom, a horizontally disposed conveyor adapted to receive the cans removed from the hopper, means co-operating with the conveyor whereby the cans are arranged thereon either in a horizontal position with their longitudinal axis parallel to the direction of travel of the conveyor or in a position where the cans stand vertically on the conveyor, deflecting means adjacent the end of the conveyor whereby the vertically positioned cans are removed, a runway to receive the cans removed, and means in the runway for turning the cans to a horizontal position.

1,886,897. DOOR CLOSING AND CHECKING DEVICE. LEWIS C. NORTON, Chicago, Ill., assignor to Norton Lasier Company, Chicago, Ill., a Corporation of Illinois. Filed Apr. 11, 1929. Serial No. 354,410. 5 Claims. (Cl. 16—55.)



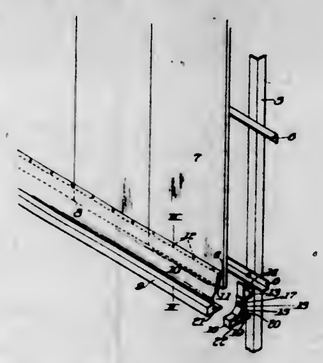
1. An overhead door check comprising a casing having a bearing in the top wall thereof, a fluid cylinder mounted in said casing having a bearing in its top spaced below said first named bearing, a spindle mounted in said bearings and connected for operation with a piston in said cylinder and having a gear fixed thereto between said bearings, said gear being connected for operation with the movement of a door by means of a spindle projecting below the lower wall of said casing.

1,886,898. OUTDOOR ADVERTISING BULLETIN. GEORGE D. OVERHOLTZ, Fair Oaks, Pa., assignor to McClintic-Marshall Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Apr. 21, 1930. Serial No. 445,945. 6 Claims. (Cl. 40—125.)



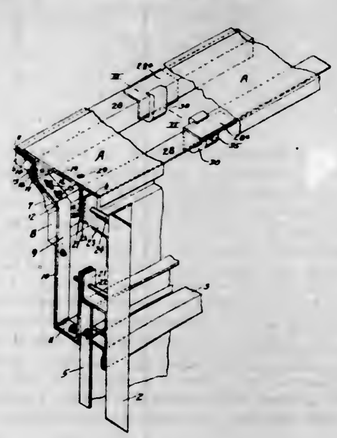
1. In an outdoor advertising structure, the combination with a supporting framing, panel sections, top and bottom molding mountings, hollow metal moldings on said mountings, one of said mountings including a pivotally supported bracket structure positioned within a molding adjacent said panels and adapted to be swung to permit a removal of the panels.

1,886,899. OUTDOOR ADVERTISING STRUCTURE. GEORGE D. OVERHOLTZ, Fair Oaks, Pa., assignor to McClintic-Marshall Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Apr. 24, 1930. Serial No. 446,860. 4 Claims. (Cl. 40—125.)



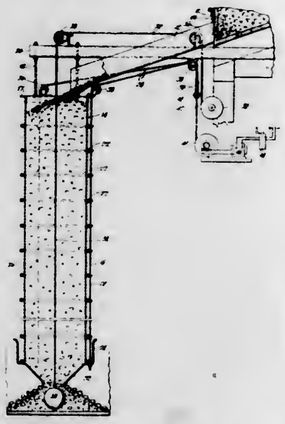
1. In an outdoor advertising structure including a framing, the combination with a poster panel and a bottom hollow metal molding therefor overlapping the panel, of means for spacing the upper portion of the molding away from the face of the panel, and means for securing the molding to the framing.

1,886,900. OUTDOOR ADVERTISING STRUCTURE. GEORGE D. OVERHOLTZ, Fair Oaks, Pa., assignor to McClintic-Marshall Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed June 16, 1930. Serial No. 461,270. 11 Claims. (Cl. 40—125.)



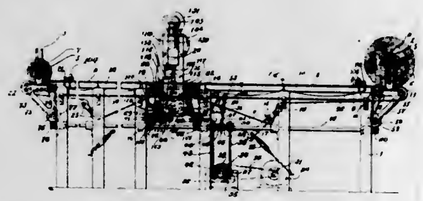
1. In an outdoor advertising structure, the combination with a support framing, of a hollow metal molding, a mounting therefor supported from the framing including a main bracket member, a supplemental bracket member secured to the main bracket member and slightly spaced therefrom, and a longitudinally extending reinforcing member for the molding disposed within the molding and having a part inserted between said brackets.

1,886,901. FLEXIBLE LOWERING APPARATUS. FRANK PARDEE, Hasleton, Pa., assignor to Anthracite Separator Company, Hazleton, Pa., a Corporation of Pennsylvania. Filed July 9, 1932. Serial No. 621,602. 8 Claims. (Cl. 193—26.)



1. Lowering apparatus comprising a flexible fabric element adapted to confine a mass of coal or like lump material flowing from a higher to a lower elevation, means supporting the upper end of said fabric element, means for successively collapsing separate sections of the fabric element and means for controlling the outflow of material from the lower end thereof.

1,886,902. CLOTH MATCHING AND MEASURING MACHINE. MARTIN E. POPKIN, Baltimore, Md. Filed Dec. 8, 1927. Serial No. 238,711. 4 Claims. (Cl. 33—128.)

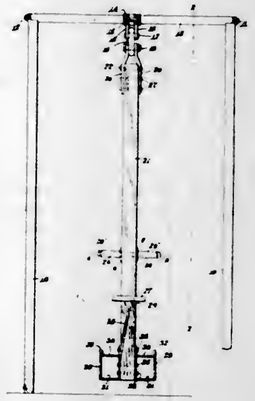


4. In a cloth measuring machine, an endless conveyor, let-off means at one end of the conveyor for supporting a roll of cloth, means adjacent the roll for marking the cloth at the will of the operator, means for indicating the distance moved by the conveyor and hence the length of cloth measured, means spaced from the marker by a predetermined unit permitting the operator to mark the cloth, the marks being spaced at predetermined intervals independently of the indicating means, and means for taking up the cloth as it is measured, said take-up and let-off means comprising a roll shaft at each end of the machine, vertically sliding bearings for the roll shaft, pulleys supporting the rolls and means for driving the pulleys, said pulleys which support the rolls engaging the conveyor from beneath the latter at points beneath the rolls.

1,886,903. TREATMENT OF MATTE. OLIVER C. RALSTON and CHARLES R. KUZELL, Clarkdale, Ariz., assignors to United Verde Copper Company, Clarkdale, Ariz., a Corporation of Delaware. Filed Sept. 25, 1929 Serial No. 395,182. 12 Claims. (Cl. 75—62.)

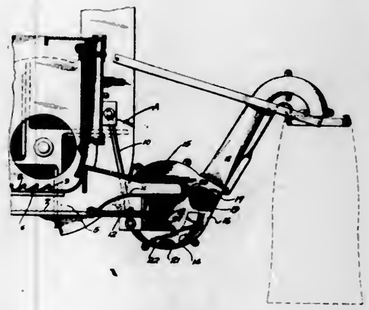
1. The method of forming reactive matte which comprises incorporating free iron in copper matte.

1,886,904. SWING. HERBERT S. RICE, Saugus, Mass. Filed Sept. 12, 1930. Serial No. 481,524. 6 Claims. (Cl. 155—62.)



6. A swing comprising a support, a single unitary member pivotally connected thereto and depending therefrom, two oppositely disposed saddle seats, a triangular metal supporting strap having a horizontal portion secured at the center thereof to said member and provided with portions inclined downwardly and secured at their lower ends to said member, said seats being secured to the opposite ends of said horizontal portion.

1,886,905. CONVEYER FOR CORN HUSKERS. AUGUST ROSENTHAL, West Allis, Wis., assignor to Rosenthal Manufacturing Company, West Allis, Wis. Filed June 20, 1930. Serial No. 462,572. 5 Claims. (Cl. 302—37.)

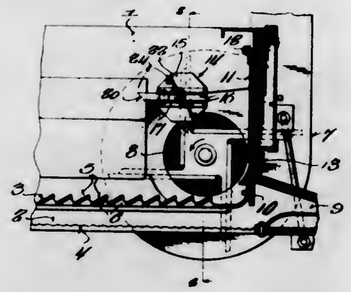


1. In a device of the class described, a shaker trough provided with a discharge head, a blower having a casing provided with a receiving inlet, a cup carried by the casing housing said inlet for receiving material from the discharge head irrespective of the position thereof, and a flexible stripping carried by a part of said discharge head extending over and into the cup for beating down any delivered material bouncing in said cup.

1,886,906. STACKER ATTACHMENT FOR CORN HUSKERS. AUGUST ROSENTHAL, Wauwatosa, Wis., assignor to Rosenthal Manufacturing Company, West Allis, Wis. Filed Dec. 5, 1930. Serial No. 500,257. 6 Claims. (Cl. 302—8.)

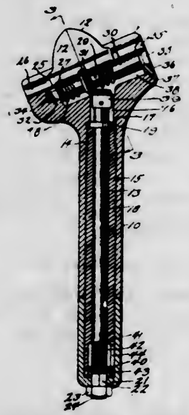
1. In a corn husking machine having a conveyor and a blower positioned at one side of said conveyor, said blower

having an opening for receiving material from the conveyor, a rotary beater positioned adjacent and above said



opening and comprising longitudinal blades, certain of which are angularly disposed with relation to the axis of said beater.

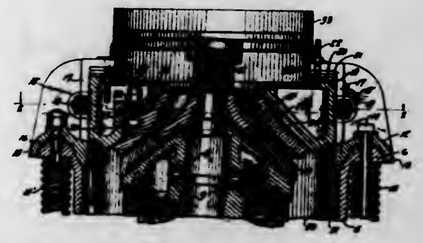
1,886,907. WRENCH. CHARLES RUGGER, Sioux City, Iowa. Filed Apr. 25, 1931. Serial No. 532,744. 5 Claims. (Cl. 81—163.)



1. In a wrench, a tubular handle, a wrench head formed on one end thereof, a jaw slidably mounted in said wrench head, a spreader including a worm geared to said jaw and a bevel gear, a sleeve threaded into said tubular handle, the handle being provided at the end of said sleeve with a reduced bore smaller than the diameter of the sleeve and with a cavity larger than said reduced bore defined between the end of the sleeve and said reduced bore, a shaft journalled in said sleeve and provided with a collar received in said cavity and constituting an end bearing for the shaft, a bevel gear on the shaft meshing with said bevel gear on the spreader.

1,886,908. CRUSHING MILL CONCAVE HOLDING MEANS. HARVEY H. RUMPEL, Milwaukee, Wis., assignor to Smith Engineering Works, Milwaukee, Wis., a Corporation of Wisconsin. Filed Oct. 9, 1928. Serial No. 311,346. 7 Claims. (Cl. 83—10.)

1. In a crusher mill having a gyratory crusher head, a concave holding means therefor, comprising a support extending around the crusher head and having a concave portion provided with recesses and openings, a concave crushing member extending around the head and intimately engaging the support and having projecting portions which extend into the recesses and adjacent the openings, and bolts connected to the projecting portions and extending through the openings for firmly attaching



the concave member to the support, the extension of the lugs relieving the bolts of rotary strain of the concave member.

1,886,909. HAIR HEATING EQUIPMENT. PETER SANTURELLO, Columbus, Ohio. Filed Apr. 28, 1931. Serial No. 533,469. 15 Claims. (Cl. 132—33.)



1. A hair waving or curling device comprising a mandrel upon which the hair is adapted to be wound, said mandrel comprising a stem and a plurality of laterally extending fingers, said stem and said fingers being formed in two parts, and a wedge member for expanding said mandrel by partially separating said parts.

1,886,910. CARBURETOR. LESTER C. SCHMIDT, Kenosha, Wis., assignor of one-half to Kenosha Die & Stamping Works, Kenosha, Wis., a Corporation of Wisconsin. Filed Feb. 4, 1931. Serial No. 513,330. 2 Claims. (Cl. 261—39.)

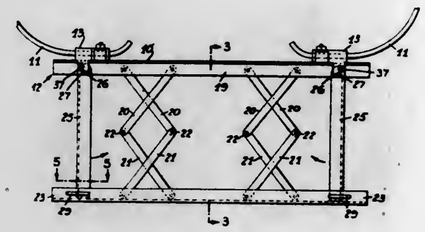


1. An attachment for carburetors including a valve controlled inlet, a valve having a stem provided with a head, a cylinder receiving the head, means forming communication with the cylinder upon opposite sides of the head, a coil spring on the valve stem between the head and one end of the cylinder, and a thermostatic element for controlling communication with said cylinder upon one side of the head.

1,886,911. COMBINED COLLAPSIBLE LUGGAGE CARRIER AND BUMPER. JOSEPH SCHULMAN, Brooklyn, N. Y. Filed Feb. 24, 1932. Serial No. 594,819. 6 Claims. (Cl. 293—55.)

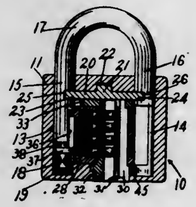
1. A combined luggage carrier and rear bumper adapted to be attached to the usual rear bumper or bumperettes

of a motor vehicle and comprising two substantially parallel, longitudinal members, lazy tongs connecting said



members, by which one of said members may be extended with respect to the other, and foldable means for retaining the extendible member in extended position.

1,886,912. PADLOCK. JOHN H. SHAW, New Haven, Conn., assignor to Sargent & Company, New Haven, Conn. Filed June 20, 1930. Serial No. 462,626. 8 Claims. (Cl. 70—108.)



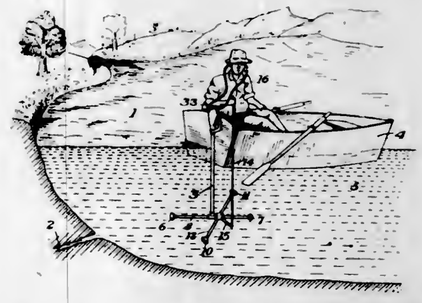
1. In a padlock, a casing having an opening therein, a key operated mechanism and a bolt mounted between the opposite ends of said opening, and a transverse cut in said casing at one end of the opening, the distance between the bottom of the transverse cut and the opposite end of the opening being at least equal to the length of the key operated means.

1,886,913. AUTOMOBILE BUMPER. WILLIAM F. SILL, St. Louis, and CARL W. PIPPIN, Pine Lawn, Mo. Filed Feb. 24, 1930. Serial No. 430,712. 2 Claims. (Cl. 293—55.)



1. A pneumatic bumper of the class described, comprising a curvilinear metal backing, a resilient hollow casing closed at each end by a resilient solid rubber integral with said casing, means for holding said resilient solid rubber to said metal backing, means for attaching said metal backing to the chassis of an automobile both fore and aft.

1,886,914. LOCATING LEAKS IN RESERVOIRS. LOUIS B. SLICHTER, Madison, Wis., assignor to Mason, Slichter & Gauld, Inc., Madison, Wis., a Corporation of Wisconsin. Filed Nov. 20, 1928. Serial No. 320,666. 7 Claims. (Cl. 181—0.5.)

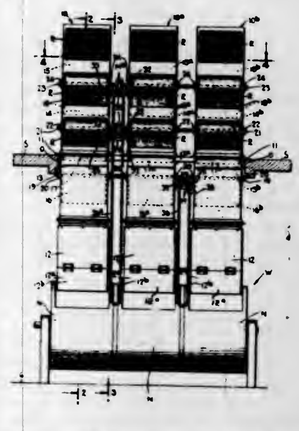


1. The method of locating leaks in reservoirs, which comprises receiving the aqueous sound waves in the water of the reservoir in a plurality of subaqueous receiver units, and determining by such received sound the location of the leak.

1,886,915. PROCESS FOR THE PRODUCTION OF COLLOIDAL WHITE LEAD—BASIC LEAD CARBONATE—FROM LEAD OXIDE. ERNST STELZER, Essen-Ruhr, Germany, assignor to the Firm Th. Goldschmidt A.-G., Essen-Ruhr, Germany. Filed Sept. 13, 1928, Serial No. 305,876, and in Germany Sept. 15, 1927. 2 Claims. (Cl. 23—71.)

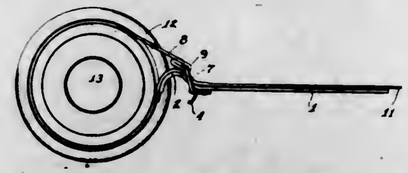
1. A process of converting lead oxid directly into colloidally dispersed white lead in a topochemical reaction which comprises suspending the lead oxid in water containing a small concentration of ammonia and passing CO_2 gas into said suspension.

1,886,916. HOPPER CONSTRUCTION FOR LAUNDRIES, ETC. JULIUS STOBCH, New York, N. Y. Filed Jan. 26, 1932. Serial No. 588,920. 3 Claims. (Cl. 214—1.)



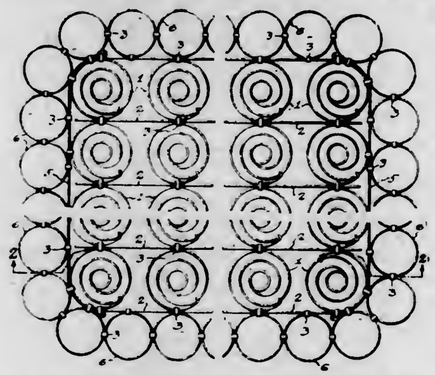
1. In a hopper construction of the character described, drop shutters forming separate compartments in said hopper, a shaft supporting each shutter for swinging movement extending through the hopper, said shaft being spaced from one side of the hopper, a ramp extending from the said hopper side in a plane above said shaft and aligning with the shutter when in closed position, and means extending below said ramp for shielding the shaft against accidental contact with clothes placed in the adjoining compartment.

1,886,917. KITCHEN UTENSIL. OCTAVE J. ST. PIERRE, Chicago, Ill. Filed May 6, 1931. Serial No. 535,425. 1 Claim. (Cl. 81—3.1.)



An article clamp comprising a lever having a handle portion and a short curved end portion, the curved portion extending from one side, then crossing the lever and extending thereabove, a buckle straddling said curved portion and pivotally secured on the side of the lever opposite the convex face of said portion to abut said convex face to thereby provide means to clamp an article-securing strap, the strap being secured at one end on said buckle with its free portion passing between said buckle and said convex face when the strap is positioned encircling an article, the lever being moved to tighten the strap with the convex face forming a rolling fulcrum in the clamping operation.

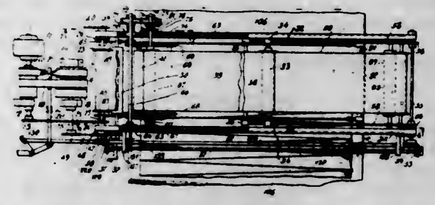
1,886,918. SPRING CONSTRUCTION. GEORGE SUNLEY, Jackson, Mich., assignor to Reynolds Spring Company, Jackson, Mich., a Corporation of Michigan. Filed June 12, 1930. Serial No. 460,581. 2 Claims. (Cl. 5—248.)



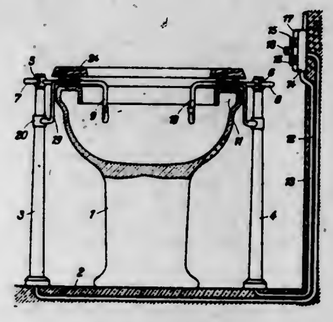
1. A spring structure comprising a series of interconnected elongated helical springs of the hour glass type, upper and lower flexible metal border frame structures enclosing and attached to said springs, cylindrical springs mounted outside of said frame structures and having certain points attached to said frame structures, said cylindrical springs also being attached to each other, the points of attachment of said cylindrical springs to said frame structures and to each other being the only points of attachment of said cylindrical springs to the other parts of the spring structure.

1,886,919. LAPPING MACHINE. FREDRICK C. STURGIS, Irvington, N. J. Filed Oct. 6, 1930. Serial No. 486,665. 18 Claims. (Cl. 19—168.)

1. In a lapping machine, the combination of a belt for receiving the fleece, a second belt for distributing the fleece, means for traversing said receiving belt over said distributing belt to transfer the fleece directly thereto, means for traversing said distributing belt relatively to said receiving belt, and means responsive to the traversing movement of said distributing belt for advancing the same continuously in one direction for laying the fleece in zig-zag fashion to form a web.

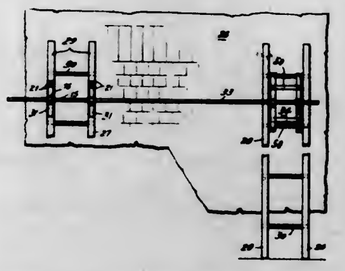


1,886,920. WATER CLOSET DOUCHE. KURT THOMAS, Berlin, Germany. Filed Oct. 31, 1929, Serial No. 403,814, and in Germany Nov. 3, 1928. 7 Claims. (Cl. 4—7.)



2. In a device of the character described, the combination with a seat, of a cleansing fluid douche, and a drying fluid douche dirigible relatively to said cleansing fluid douche.

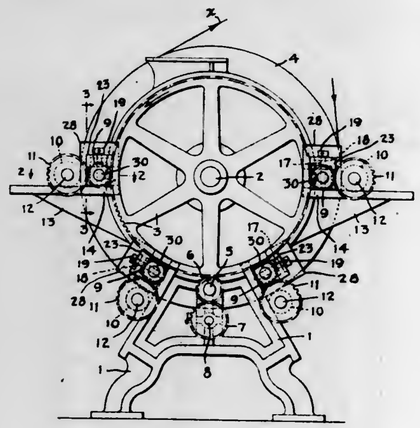
1,886,921. SCAFFOLDING SUPPORT. ROBERT J. TOBIN, Hollis, N. Y., assignor to Tilo Roofing Company, Inc., New York, N. Y., a Corporation of Delaware. Filed July 11, 1930. Serial No. 467,151. 1 Claim. (Cl. 304—34.)



In scaffolding, a plurality of inclined ladders, a support on the upper side of each ladder, each support comprising spaced brackets, each bracket comprising a first strip having an inclined portion and a vertical portion connected by a bend under said portions, a second strip having a horizontal portion and an outer upward bend providing an upstanding portion and an inwardly projecting portion, said first strip having the top of said vertical portion secured to the horizontal portion between the ends thereof,

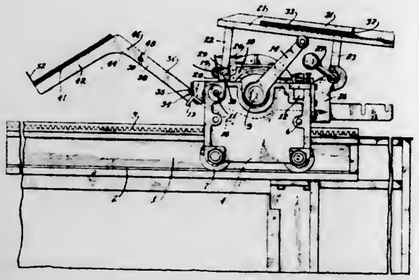
said second strip having its inner end secured to said inclined portion, said inclined portions having means at their upper ends for suspension from said ladders, each support having cross members connecting the brackets thereof to prevent turning of the brackets under load, and a plank extending from one of said supports to the other and resting on both horizontal and in both outer upward bends of each support.

1,886,922. **STILL ADJUSTMENT FOR PATTERN FITTING FOR MULTIPLE PRINTING MACHINES.** LEONARD I. TUTTLE, Buchanan, N. Y. Filed Dec. 18, 1929. Serial No. 414,886. 11 Claims. (Cl. 101—248.)



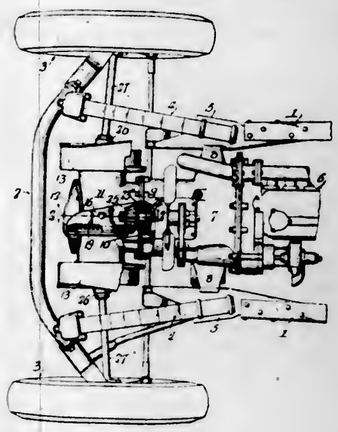
1. An adjusting means for multicolor printing machines comprising a pinion and means for shifting the same bodily perpendicularly relatively to its axis.

1,886,923. **WORK SUPPORTING ATTACHMENT FOR PROOF PRESSES.** EDWARD O. VANDERCOOK, DAVID D. VANDERCOOK, and FREDERICK R. VANDERCOOK, Evanston, Ill., assignors to Vandercook & Sons, a Co-partnership consisting of Robert O. Vandercook, Edward O. Vandercook, David D. Vandercook, and Frederick R. Vandercook, Evanston, Ill. Filed June 1, 1931. Serial No. 541,208. 11 Claims. (Cl. 271—61.)



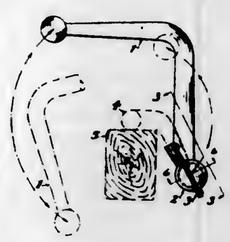
1. The combination with a press of the type described, of a table mounted on the press carriage for supporting stock to be printed, a plate forming an extension to the feed board of the press, and a delivery plate extending from said feed board extension for receiving the printed sheet.

1,886,924. **DRIVING GEAR ARRANGEMENT FOR AUTOMOBILES.** CORNELIUS W. VAN RANST, Auburn, Ind., assignor, by mesne assignments, to Manning & Co., Chicago, Ill., a Corporation of Illinois. Filed Mar. 9, 1929. Serial No. 345,794. 1 Claim. (Cl. 180—42.)



A front drive automobile embodying therein a differential casing and a transmission casing, said casings being secured together in end to end engagement, gearing in said differential casing including a hypoid ring gear, a rigid non-jointed horizontally disposed driven shaft in the transmission casing arranged with its axis above that of said ring gear and having a part extending into the differential casing, an antifriction bearing for said shaft supported in the engaging ends of said casings and a hypoid pinion fixed to that part of said shaft within the differential casing and meshing with the ring gear in a plane between the horizontal plane through the axis of such ring gear and its top peripheral portion.

1,886,925. **ATTACHMENT TO MAKE A RIGHT-HAND BOLT RIFLE A LEFT-HAND BOLT RIFLE OR A LEFT-HAND BOLT RIFLE A RIGHT-HAND BOLT RIFLE.** HERBERT E. WALE, Bremerton, Wash. Filed Apr. 30, 1931. Serial No. 533,914. 3 Claims. (Cl. 42—16.)



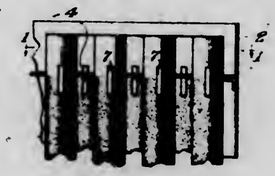
1. A bolt handle attachment adapted to be secured to the handle of the chamber closing bolt of a bolt action rifle, consisting of clamped means adapted to frictionally engage a bolt handle, an upwardly extending portion, a curved portion, and a normally downwardly extending portion, forming one continuous operating handle so disposed so as to partially encircle the stock of the gun to which it is secured.

1,886,926. **MEAT PACKING CONVEYER.** CHARLES TAYLOR WALTER, Chicago, Ill., assignor to Swift and Company, Chicago, Ill., a Corporation of Illinois. Filed Jan. 5, 1931. Serial No. 506,652; 2 Claims. (Cl. 198—196.)



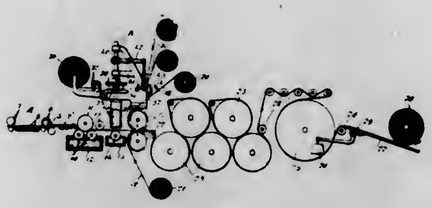
1. An endless belt type of conveyer comprising a plurality of parallel members, each member being formed of a continuous piece of flat material and bent at intervals to provide parallel grooves, the extremities of each member being disposed in horizontal alignment with each other and substantially in the horizontal plane of the upper surfaces of the respective members to form rigid, projecting, flat supporting portions for the members, the grooves of said members aligning when the members are assembled and the grooves running in the direction of motion of the conveyer, and parallel endless sprocket chains connecting said members on the undersides thereof below the horizontal plane of said supporting portions.

1,886,927. **AIR FILTER.** CHARLES W. WILLIAMS, Louisville, Ky. Filed Sept. 9, 1927, Serial No. 218,387. Renewed Jan. 16, 1931. 6 Claims. (Cl. 183—21.)



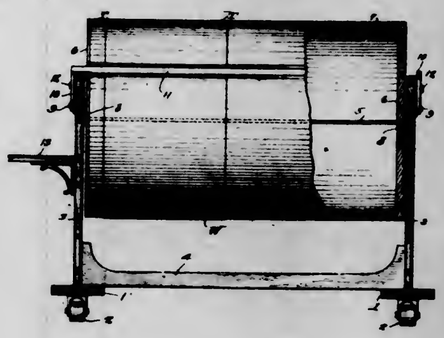
1. A filter element having its exterior surface coated with a binder of liquid bakelite and wood flour adapted to roughen the surface so as to retain a coating of viscous liquid.

1,886,928. **APPARATUS FOR PRODUCING LAMINATED SHEETS.** JULIUS WYAS, Watertown, Mass., assignor to New England Spun Silk Corporation, New York, N. Y., a Corporation of Massachusetts. Filed Mar. 26, 1930. Serial No. 438,939. 1 Claim. (Cl. 154—37.)



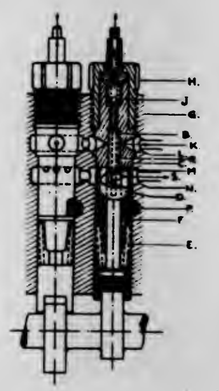
In an apparatus for producing a laminated sheet, a mechanism for forming a sliver of fibrous material, means to apply an adhesive and a waterproofing composition to said sliver, means to deposit confetti upon a surface of said sliver following the application of the adhesive thereto, and means to attach a layer of another material to said surface.

1,886,929. **ROTARY EASEL.** JOHN M. ABBOTT, Greeley, Colo. Filed Nov. 21, 1929. Serial No. 408,905. 2 Claims. (Cl. 33—78.)



1. A rotary easel including a work-holding drum mounted for rotation, a support therefor, and a ruler pivotally connected to the support and movable into or out of engagement with the drum, the axis of movement of the ruler being above the axis of rotation of the drum and back of the vertical plane occupied by said drum.

1,886,930. **INJECTION PUMP FOR DIESEL ENGINES.** STANLEY ALDER, Roker, Sunderland, England. Filed Oct. 20, 1930, Serial No. 490,069, and in Great Britain Oct. 22, 1929. 4 Claims. (Cl. 103—41.)



1. A fuel injection pump comprising a pump housing, a pump chamber in said housing, a pump inlet communicating with said pump chamber, a sleeve in said housing, an inclined edge on said sleeve, a plunger adapted to reciprocate in said sleeve and in said pump chamber, a central bore in said plunger, said bore opening at one end into said pump chamber, a pump by-pass in said pump housing, a plurality of release apertures in said plunger communicating with said bore on the one hand and said pump outlet on the other hand, said apertures being arranged along a helix corresponding with said inclined edge and adapted to cooperate with said inclined edge to effect the fuel release, and means for effecting relative rotation up to 360° between said plunger and sleeve.

1,886,931. VITAMIN FRUIT COMPOSITION. ELLIOT RITCHIE ALEXANDER, Orlando, Fla., assignor, by mesne assignments, to The Vitamin Company of America, a Corporation of Florida. Filed Aug. 1, 1930. Serial No. 472,489. 15 Claims. (Cl. 99—11.)

1. Process of preserving a concentrated vitamin extract which comprises incorporating the extract into a vitamin-preserving acidic fruit mass.

1,886,932. AIRPLANE. IVAN ANDERSSON, East Hartford, Conn. Filed Apr. 11, 1931. Serial No. 529,517. 10 Claims. (Cl. 244—29.)

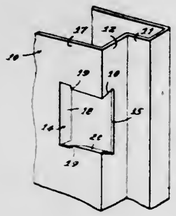


1. In an airplane having ailerons and elevators and a lever for operating said ailerons and elevators, means to enable said elevators to be operated as ailerons by said lever but operated as elevators by said lever independently of the ailerons.

1,886,933. METHOD OF PRODUCING CONCRETE. PAUL ASKENASY, Karlsruhe, Germany. Filed Nov. 20, 1930, Serial No. 497,057, and in Germany Nov. 28, 1928. 5 Claims. (Cl. 106—24.)

1. A method of producing concrete capable of resisting sea-water and other equivalent solutions, consisting in adding to cement mixtures with the usual filling materals employed coal-dust-ash derived from the combustion of pulverulent coal.

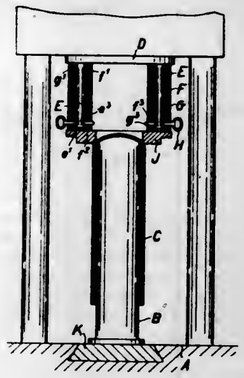
1,886,934. DOOR BUMPER. SETH B. ATWOOD, Rockford, Ill. Filed Aug. 4, 1931. Serial No. 555,106. 9 Claims. (Cl. 296—28.)



1. In a device of the class described, a steel pillar providing a door jamb thereon, the pillar having a bumper receiving socket provided directly therein opening from the door jamb and the adjoining side wall of the pillar, the side wall of said pillar being formed to provide an inwardly projecting back wall for the socket and inwardly projecting lugs at the top and bottom of the socket.

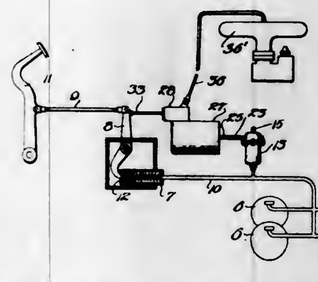
1,886,935. DRAWING PRESS. KARL BÖHLE, Essen, Germany, assignor to Fried. Krupp Aktiengesellschaft, Essen-on-the-Ruhr, Germany. Filed Jan. 12, 1931, Serial No. 508,229, and in Germany Jan. 22, 1930. 7 Claims. (Cl. 205—7.)

1. A large vertical machine press for the drawing of hollow bodies, comprising two vertically disposed cooperable members, one of said members adapted to receive the hollow body to be drawn, means for relatively reciprocating



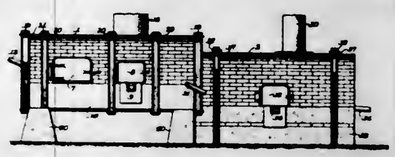
said members, a drawing die, and means for mounting said die on one of said members so that it can be adjusted in the direction of said reciprocation.

1,886,936. FLUID PRESSURE OPERATED BRAKE MECHANISM. HERBERT C. BOWEN, Royal Oak, Mich., assignor to Hydraulic Brake Company, Detroit, Mich., a Corporation of California. Filed Aug. 18, 1928. Serial No. 300,407. 12 Claims. (Cl. 188—152.)



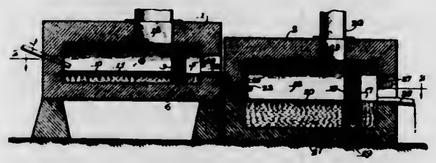
12. The combination in a fluid operated system of a main pressure means, a secondary pressure means, a control means on said main pressure means, disengageable from said secondary pressure means upon a partial operation of the main pressure means whereby the said secondary pressure means is completely operated.

1,886,937. FURNACE CONSTRUCTION. ROY CUMING BRETT, Cleveland Heights, Ohio, assignor to The Eagle-Picher Lead Company, Chicago, Ill., a Corporation of Ohio. Filed Dec. 20, 1930. Serial No. 503,649. 9 Claims. (Cl. 266—37.)



9. A furnace construction for reducing lead alloy and impure lead and reclaiming the lead, comprising a pair of furnaces connected in series and providing a step by step separation of the lead, a bridge wall for dividing the interior of each of said furnaces into two compartments, one compartment in each of said furnaces adapted to receive the impure lead, and the other compartment for receiving the lead refined in said first mentioned compartment, said bridge walls being provided with an opening permitting the transfer of the relatively pure lead to said refining chambers but preventing transfer of any collected impurities thereto, means for heating the surface of the body of impure lead in the compartments initially receiving the same for reducing and separating the lead from its impurities, and a discharge for said impurities.

1,886,938. PROCESS OF RECLAIMING LEAD. ROY CUMING BRETT, Cleveland Heights, Ohio, and JAMES E. DOYLE, Webb City, Mo., assignors to The Eagle-Picher Lead Company, Chicago, Ill., a Corporation of Ohio. Filed Jan. 26, 1931. Serial No. 511,138. 8 Claims. (Cl. 75—15.)



1. The process of separating lead from lead oxides containing antimony and other metals, comprising the steps of melting said oxides over a lead bath whereby to oxidize said antimony to form, with lead oxides, an antimoniate slag, maintaining said bath and oxides in a quiescent state and continuously removing the relatively pure lead and the antimoniate slag by gravity.

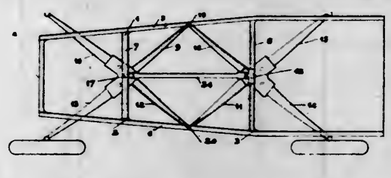
1,886,939. OPTICAL APPARATUS. ALEXANDER S. CAMERON, Chicago, Ill., assignor to William J. Cameron, Chicago, Ill. Filed May 21, 1928. Serial No. 279,278. 6 Claims. (Cl. 88—20.)



1. A color changing device for optical instruments comprising a light source, a rotatable tube axially alined with said light source, spaced transverse walls associated with said tube and having alined light apertures of relatively different diameters, a disk having free peripheral rotation between said walls and with its axis below the axis of said tube, and a plurality of differently colored segments carried by said disk and adapted to be successively moved past said light apertures through the rotative action of said tube.

1,886,940. NONWARPING CHASSIS FOR AUTOMOBILE VEHICLES AND THE LIKE. NÉMORIN LAURENT CAUSAN, Suresnes, France. Filed Apr. 22, 1930, Serial No. 446,353, and in France Oct. 17, 1929. 3 Claims. (Cl. 280—106.5.)

1. A non-warping automobile and other vehicle chassis comprising a chassis proper having transverse members and longitudinal members and a lozenge shaped frame having its lateral apices secured to the longitudinal members of the chassis frame and its front and rear apices arranged under and connected to the centers of said transverse members, each such apex and each such transverse member being provided, the one with a socket portion and

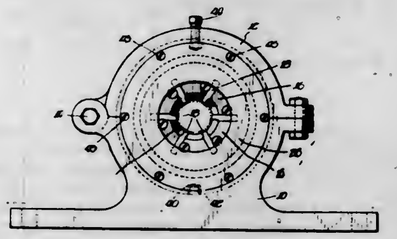


the other with a ball portion, forming ball joints therebetween and suspension springs attached at their inner ends to said front and rear apex portions of said lozenge shaped frame, said suspension springs being substantially in line with the side portions of said lozenge shaped frame.

1,886,941. METHOD OF MAKING CRYSTALLINE DEXTROSE. GEORGE E. CORSON and ARTHUR P. BRYANT, Clinton, Iowa, assignors to Clinton Corn Syrup Refining Company, Clinton, Iowa, a Corporation of Iowa. Filed Nov. 30, 1927. Serial No. 236,876. 20 Claims. (Cl. 127—58.)

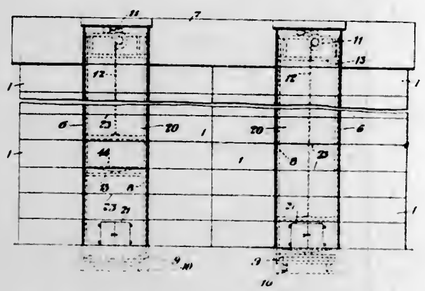
1. A method of making hydrate crystalline dextrose comprising concentrating to a density between 35° and 40° Bé. a starch-converted dextrose solution, completing the concentration at a temperature substantially below 160° F., raising the temperature of the solution to about 160° F., and thereafter quickly cooling the solution to a temperature productive of supersaturation favorable to the rapid growth of hydrous crystals, the cooling being conducted rapidly enough to avoid the danger of the growth of anhydrous crystals and also avoiding any apparent formation of crystals of any kind during the cooling, seeding the solution with crystalline dextrose after said cooling, maintaining the solution quiescent at temperatures below 95° F. until a desired amount of a uniform mass of plate-like hydrate dextrose crystals is formed, and thereafter centrifuging the solution to separate the crystals from the hydrol.

1,886,942. CUTTER. FRANK CZEMBA, Duluth, Minn. Filed Feb. 14, 1929. Serial No. 339,857. 4 Claims. (Cl. 29—97.)



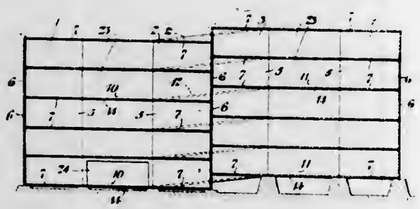
2. A cutter assemblage comprising, in combination a casing including two hinged parts one of which may be moved relatively to the other, a liner mounted within the casing and provided with projections, a disk mounted in the casing and spaced from the liner, and a cutter head carried by the casing, said cutter head being located between the liner and disk and provided with openings for receiving the projections, whereby said cutter head is adapted to have engagement with the projections for limiting movement thereof.

1,886,943. GARAGE. FERNAND E. D'HUMY, Scarsdale, N. Y., assignor to Ramp Buildings Corporation, New York, N. Y., a Corporation of Delaware. Filed Mar. 21, 1930. Serial No. 437,817. 6 Claims. (Cl. 189—1.)



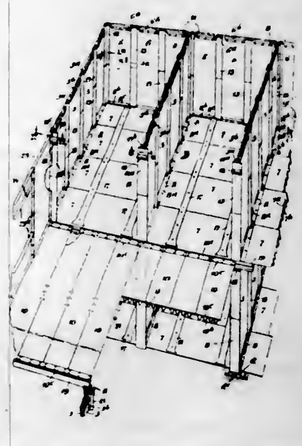
1. A self-supporting knockdown garage structure comprising opposed laterally spaced banks of compartments each of a size to accommodate an automobile, the banks defining a corridor space therebetween, the compartments of the banks having constantly open inner entrance ends opening into the corridor space and each bank comprising superposed horizontal rows of the compartments, and each compartment formed independently of a set of previously fabricated panels shaped and assembled to define the top, bottom, sides and one end wall thereof, the bottom panels forming the floors of the building and the end panels and outermost side-forming panels forming the outer side walls of the building; joining means detachably holding the panels of each compartment erected, the lower rows of compartments supporting the weight of the upper rows of compartments and their contents; and a roof supported by the banks, and covering the corridor space.

1,886,944. BUILDING. FERNAND E. D'HUMY, Scarsdale, N. Y., assignor to Ramp Buildings Corporation, New York, N. Y., a Corporation of Delaware. Filed Apr. 30, 1930. Serial No. 448,555. 7 Claims. (Cl. 20—1.13.)



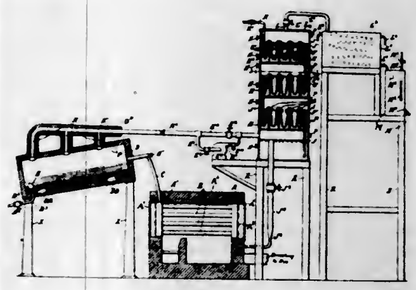
1. A multi-story cellular garage structure comprising two units closely arranged with their inner vertical walls forming the center line of the structure, each unit embodying two parallel sets of super-imposed steel storage compartments opening inwardly into a space between said sets each horizontal row of compartments forming one story of the structure, and the horizontal and vertical walls of the compartments forming the horizontal floors and the vertical internal and external structural members of the garage; horizontal structures extending across the space between said two sets of compartments and tying the two sets together and forming a driveway for each story of each unit; and transverse structural members extending across the center line of the garage structure and connecting the driveways of one unit with the driveways of the other unit to rigidly secure the two units together, said transverse members serving as cross-connecting driveways.

1,886,945. BUILDING. FERNAND E. D'HUMY, Scarsdale, N. Y., assignor to Ramp Buildings Corporation, New York, N. Y., a Corporation of Delaware. Filed June 19, 1930. Serial No. 462,240. 18 Claims. (Cl. 189—1.)



1. A garage structure comprising a number of independently fabricated panels shaped and assembled to form vertical walls for superposed automobile housings; vertical seam strips for anchoring together said panels, each strip having a vertical longitudinal slot; hook-like flanges carried by opposed vertical edges of said panels and anchored to the seam strips through the slots thereof; means forming upwardly opening channels carried by the said panels and extending along the upper edges thereof; panels forming the floors and ceilings of said housings; and depending flanges carried by opposite edges of said latter panels and engaging in said channels for mutually supporting the floor and ceiling panels and the vertical wall panels, the joints formed by said engaging flanges and channels serving to laterally strengthen the structure, and the seam strips forming columns vertically stiffening the vertical wall panels.

1,886,946. APPARATUS FOR TREATING PETROLEUM. CARBON P. DUBBS, Wilmette, Ill., assignor to Universal Oil Products Company, Chicago, Ill., a Corporation of South Dakota. Original application filed June 21, 1919, Serial No. 305,793. Divided and application filed Sept. 6, 1921, Serial No. 498,887. Again divided and this application filed July 1, 1925, Serial No. 40,804. Renewed Aug. 19, 1929. 2 Claims. (Cl. 196—107.)

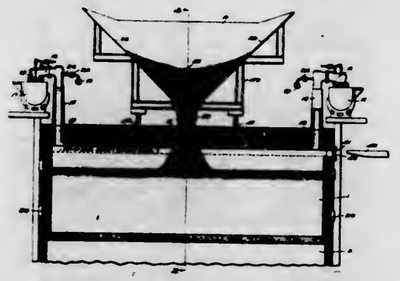


2. In an apparatus for cracking hydrocarbon oil, comprising a furnace having a heating coil disposed therein, a plurality of enlarged chambers disposed outside of said furnace, a common header in communication with said chambers, a transfer line connecting said coil with said header, means positioned in said header for selectively directing oil from the coil to any one of said enlarged chambers, a vapor header in communication with each of said chambers, a vapor transfer line connected to said header, dephlegmating means in communication with said transfer line, means positioned in said vapor header for establishing direct communication from any one of said chambers to said dephlegmating means, a pump interposed in said vapor transfer line, and means for bypassing said pump, means for introducing charging oil to the dephlegmating means, means for supplying unvaporized charging oil and reflux condensate from the dephlegmating means to the heating coil, and means for maintaining a superatmospheric pressure on the oil undergoing treatment in the apparatus.

1,886,947. DYE AND DYEING. DAVID ALEXANDER WHYTE FAIRWEATHER, Grangemouth, and JOHN THOMAS, Kingarth, Polmont, Scotland, assignors to Imperial Chemical Industries Ltd., a Corporation of Great Britain. Filed Dec. 9, 1930, Serial No. 501,160, and in Great Britain Dec. 9, 1929. 18 Claims. (Cl. 8—5.)

1. Process for the development of enolic leuco-ester salts of dyestuffs in the presence of a ferric salt characterized by the addition of an agent capable of influencing the reversible reaction which the ferric salt undergoes during the development, said agent being a salt of the class consisting of ferrous salts and salts of weak acids capable of forming double salts with said ferric salts.

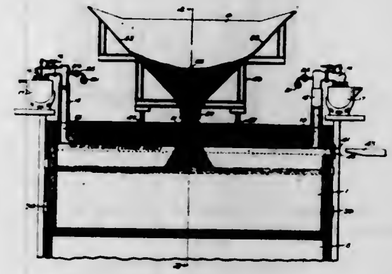
1,886,948. METHOD OF CHARGING COKE OVENS. ROBERT M. FOLSOM, Reading, Mass., assignor to New England Fuel and Transportation Company, trustees. Filed May 4, 1927. Serial No. 188,764. 12 Claims. (Cl. 202—36.)



1. The method of charging a horizontally elongated retort coke oven with coal which comprises delivering pulverized coal to the oven at the top thereof through coal conducting means in the oven roof while the walls of the oven are hot enough to evolve gas from the coal with such rapidity that substantially as it enters the oven the coal distributes by gravity from beneath said coal conducting means to approximately a uniform height throughout the length of the oven.

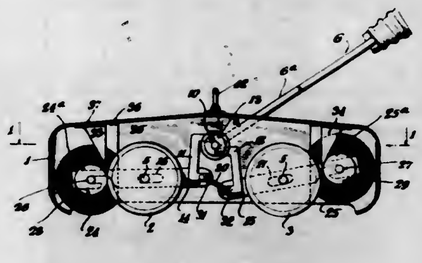
1,886,949. APPARATUS FOR PRODUCING GAS AND COKE. ROBERT M. FOLSOM, Reading, Mass., assignor to New England Fuel and Transportation Company, trustees. Original application filed May 4, 1927, Serial No. 188,764. Divided and this application filed July 2, 1928. Serial No. 289,726. 2 Claims. (Cl. 202—263.)

1. A narrow, horizontally elongated, high-chambered, retort coke oven of the horizontally pushed type for producing coke and gas from pulverized coal, having an oven chamber which is tapered in horizontal planes from one end of the oven to the other, said oven having a charging opening in its roof at about the middle point of its length, said opening being substantially as wide as the top of the oven chamber but being materially elongated in the direction of the length of the oven, the effective cross-sectional area of said opening in horizontal



planes being relatively small as compared to the cross-sectional area of the oven chamber in horizontal planes, gas offtakes communicating with the upper part of said oven above the coal space therein at opposite sides respectively of said charging opening, and means for delivering coal to said opening to the full coal conducting capacity of the latter.

1,886,950. SWEEPER. JEANNETTE FRENCH, New York, N. Y., assignor to Unique Manufacturing Company, Inc., New York, N. Y., a Corporation of Delaware. Filed Oct. 20, 1931. Serial No. 569,866. 11 Claims. (Cl. 15—41.)

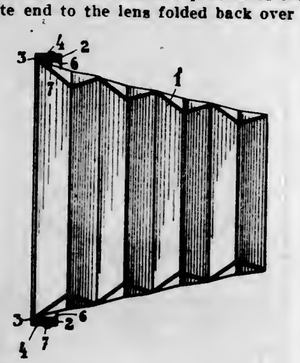


1. In a surface treating machine, in combination, a casing, traction members, treating devices having different characteristics, a pivotal handle, and means connecting said treating devices with said handle whereby the swinging of said handle in one direction or the other serves selectively to connect one or the other of said treating devices with said traction members for operation.

1,886,951. PHOTOGRAPHIC BELLOWS CAMERA FOR ROLL FILMS. FRIEDRICH GUTERMUTH, Frankfort-on-the-Main, Germany, assignor to the Firm Carl Neithold A.-G., Frankfort-on-the-Main, Germany. Filed Feb. 28, 1929, Serial No. 343,477, and in Germany Mar. 15, 1928. 2 Claims. (Cl. 95—39.)

1. In a photographic bellows camera the combination of a frame having cheeks extending substantially parallel

to the axis of the bellows, and of a portion of the bellows at the opposite end to the lens folded back over the rear



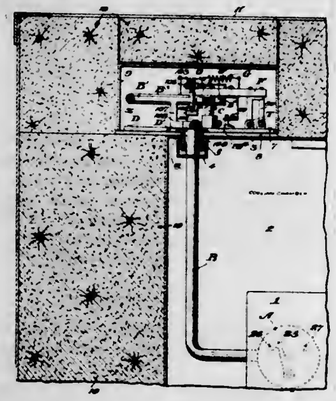
end of the bellows parallel to the axis of the bellows fastened on the inner surface of said cheeks.

1,886,952. POWER TOOL. WALTER L. HODEAUX, Palm Beach, Fla. Filed Jan. 5, 1931. Serial No. 506,781. 5 Claims. (Cl. 74—7.)



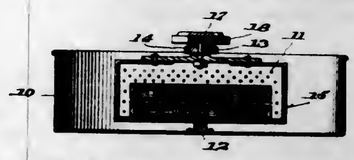
1. In a power operated tool, a casing having a motor housing at its rear provided with an internal shoulder and a hollow head at its front, tool holding means in said head, a motor in said housing, a shaft for transmitting motion to the tool holding means rotatably mounted and aligned with the shaft of said motor, a plate bearing against and detachably secured to said shoulder and provided with an annular seat, a bearing for the front end of the motor shaft fitted in said seat, and gearing connecting adjacent ends of said shafts including pinions rotatably carried by said plate.

1,886,953. MEANS FOR AUTOMATICALLY DEFROSTING REFRIGERATING UNITS. CHARLES T. HOFFMAN, Washington, D. C., assignor of one-half to Emory L. Groff, Washington, D. C. Filed Sept. 21, 1929. Serial No. 394,209. 29 Claims. (Cl. 62—4.)



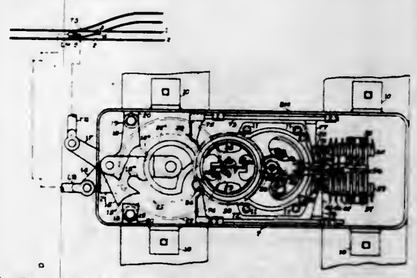
1. In an apparatus for automatically defrosting refrigerating units the combination with a switch, for automatically opening and closing the circuit to the refrigerator motor, an ice following and contacting member, a thermostatically operated circuit closer carried by said ice contacting and following member and having low and high temperature contacts, and a thermostat operating at a temperature above or below the set temperature of said low contact and included in an electrical circuit with said low temperature contact, whereby at unusual low temperatures the circuit to the low temperature contact will be automatically opened.

1,886,954. HONEY EXTRACTOR. EARL W. HOPE, Medina, Ohio, assignor to The A. I. Root Company, Medina, Ohio, a Corporation. Filed Sept. 23, 1929. Serial No. 394,625. 2 Claims. (Cl. 210—65.)



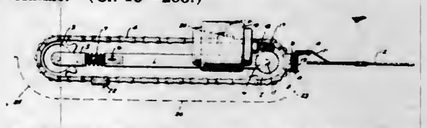
1. A centrifugal honey extractor, comprising a circular open pan having a bar secured diametrically across its top and having a bearing centrally located on its bottom, a second bearing in said bar in alinement with said first-mentioned bearing, a horizontal rectangular open topped basket of perforated material to receive a honey comb, a strap passed around said basket at its middle, stub shafts carried by said strap and engaging said bearings, and manual means to rotate the upper one of said shafts.

1,886,955. SWITCH MACHINE FOR RAILROADS. WINTHROP K. HOWE, Rochester, N. Y., assignor to General Railway Signal Company, Rochester, N. Y. Filed Dec. 21, 1929. Serial No. 415,762. 16 Claims. (Cl. 246—242.)



1. In combination with a railroad track switch, a power operated switch machine having an electrically driven motor, an electro-magnetic brake released by the application of electrical potential to said motor, and means for manually operating said switch machine, which means, when utilized, disengages said motor and said brake from said switch machine.

1,886,956. WINDSHIELD CLEANER. HENRY HUEBER, Buffalo, N. Y., assignor to Trico Products Corporation, Buffalo, N. Y. Filed Aug. 3, 1929. Serial No. 383,192. 7 Claims. (Cl. 15—253.)



1. A windshield cleaner comprising a support, spaced sprockets thereon, a chain passing over and engaging said sprockets, a wiper carriage incorporated in the chain

make-up and movable about the sprockets, a wiper moving arm on the carriage, a drive for the chain, a reversing mechanism for the drive to reciprocate the wiper, and a pair of trips spaced along the chain for alternately actuating the reversing mechanism after the wiper carriage has begun its travel about the respective sprockets whereby the wiper will traverse a straight path terminating in arcs.

1,886,957. METHOD AND APPARATUS FOR DEPHLEGMATION. LYMAN C. HUFF, Chicago, Ill., assignor to Universal Oil Products Company, Chicago, Ill., a Corporation of South Dakota. Filed Mar. 10, 1926. Serial No. 93,557. 7 Claims. (Cl. 196—139.)



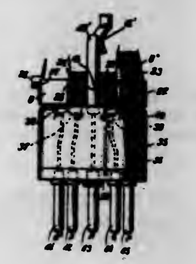
7. A method of dephlegmation in an oil cracking process to separate lighter from heavier fractions, comprising introducing hydrocarbon vapors to the lower portion of a dephlegmating zone to pass through a series of spaced compartments provided with vertical conduits of restricted cross sectional area to cause said vapors to condense while ascending therethrough, introducing a liquid cooling medium to the upper portion of said dephlegmating zone to contact and commingle with said ascending vapors, and imparting a swirling action to said vapors within said conduits by their introduction thereto from said compartments through lateral openings of restricted cross section disposed thereon.

1,886,958. SCALE SCOOP. EDWARD ITTEM, Brooklyn, N. Y. Filed Sept. 29, 1931. Serial No. 565,745. 3 Claims. (Cl. 265—27.)



1. A scale scoop consisting of a sheet metal shell having a horizontal flat stability base for resting on the scoop supporting member of a scale, said base being surrounded on all sides with upwardly extending walls in continuation of and merging with the edges of said base and with each other to form the scoop, each of the oppositely disposed upwardly extending end walls being elongated and outwardly inclined to define a pouring spout, oppositely disposed walls being so proportioned as to counterbalance one another so that the centre of gravity of the scoop will be such that said scoop will be stable at all times when placed in a substantially horizontal position irrespective of the nature and amount of the scoop load.

1,886,959. MULTIPLE CONTACT PLUG. VIVION A. JOHNSON, Greenwood, Miss., assignor to Supreme Instruments Corporation, Greenwood, Miss. Filed Feb. 21, 1930. Serial No. 430,431. 12 Claims. (Cl. 173—344.)



1. A plug comprising an insulating body portion, a chamber within said body portion, a spring contact within said chamber, a plurality of contact prongs projecting from one end of said plug, an aperture in said end in alinement with said spring contact, an adapter for said plug comprising a body member, a plurality of sockets in one end of said body member receiving said contact prongs, an upper contact prong on the said end of said body member passing through said aperture and contacting with said spring contact, a plurality of contact prongs projecting from the opposite end of said adapter, one of said latter contact prongs connected to said upper contact prong, each of the remaining of said latter contact prongs being connected to one of said sockets.

10. An audion tube adapter having a body member, a plurality of contact prongs in one end of said body member, and a plurality of sockets and a contact prong in the other end of said body member.

1,886,960. BLASTING METHOD AND APPARATUS. CHARLES E. KARSTROM, Barrington, Ill., assignor to Safety Mining Company, Chicago, Ill., a Corporation. Filed Oct. 7, 1929. Serial No. 397,888. 2 Claims. (Cl. 102—7.)

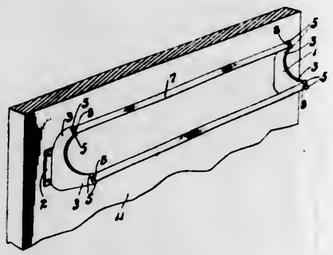


2. The method of blasting which comprises discharging a blasting means in the presence of a chemical compound consisting of a quantity of a hygroscopic material sufficient to substantially allay the dust caused by the discharge and a quantity of a coloring substance sufficient to impart a distinctive marking to the material brought down by the blast.

1,886,961. SHOE RACK. JOSEPH J. KNAPE, Grand Rapids, Mich., assignor to Knape & Vogt Manufacturing Company, Grand Rapids, Mich., a Corporation of Michigan. Filed Sept. 3, 1929. Serial No. 390,130. 4 Claims. (Cl. 211—35.)

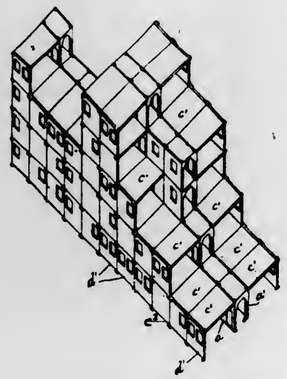
4. A rack of the character described comprising, two spaced end members having alined slots therethrough, and

a bar notched at either end and adapted to have its notched portions resting in said slots in the respective



end members, said bar being of such size as to pass through said slots but having its ends bent at right angles to prevent withdrawal from said slots.

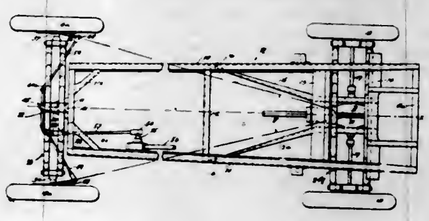
1,886,962. BUILDING CONSTRUCTION. HEINRICH LA ROCHE, Zollikerberg, Switzerland. Filed Jan. 24, 1930, Serial No. 423,145, and in Germany Feb. 2, 1929. 7 Claims. (Cl. 189—1.)



1. A fabricated building comprising assembled standardized elements constituting when erected main blocks open at two opposite sides and constructed to be adjoined to one another vertically and breadthwise, said main blocks incorporating corridor cells stayed at their upper corners and supporting the building against lateral pressure and room cells adjoined to the corridor cells, said elements comprising rectangular frames having apertured corner lugs of which a number are brought into register on assembly of a number of elements in edge to edge relation, and tie-bolts engaging registering lugs so that the interconnected elements function as links for supporting other elements.

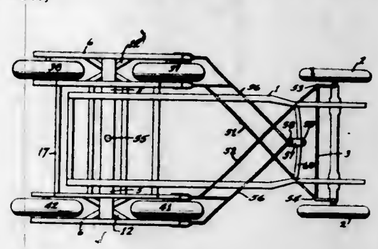
1,886,963. STEERING GEAR. OSCAR F. LUNDELIUS and JOHN R. DILLON, Los Angeles, Calif., assignors to Lundelius & Eccleston Motors Corporation, Las Vegas, Nev., a Corporation of Delaware. Filed Jan. 9, 1929. Serial No. 331,228. 20 Claims. (Cl. 280—95.)

1. Steering mechanism for spring supported vehicles wherein the wheels and their steering knuckles are connected to the vehicle frame through vertically spaced springs arranged transversely of the longitudinal axis of the vehicle, embodying a steering arm pivotally mounted on the frame substantially midway vertically between the springs and adapted to swing horizontally, a pair of independently movable tie rods extending diagonally between said springs and connected for universal relative movement with one each of the steering knuckles and with said steering arm, the vertical planes of said tie rods diagonally intersecting the normal axial center line of the wheels, and the points of connection of said tie



rods with the steering arm and steering knuckles being at opposite sides of said center line, and means for actuating the steering arm to control the wheel movement.

1,886,964. FOUR WHEEL ATTACHMENT FOR TRUCKS. BYRON MARKHAM, Martinez, Calif. Filed Mar. 17, 1930. Serial No. 436,573. 3 Claims. (Cl. 280—80.)



1. A four-wheel attachment comprising a frame having supporting wheels, a beam extending transversely across the frame and having recesses therein, bolts carried by the frame and being received in the recesses, sleeves encircling the bolts and disposed in the recesses for allowing vertical movement of the beam, and springs disposed between the frame and the beam for yieldingly supporting the latter.

1,886,965. SALT WATER BARRIERS FOR CANALS. WILLIAM M. MEACHAM, Seattle, Wash. Filed Apr. 24, 1928. Serial No. 272,467. 8 Claims. (Cl. 61—8.)

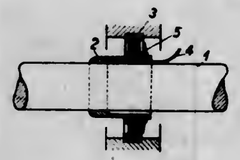


8. As a means for preventing salt water working upward in a fresh water channel, a discharge spillway, a sump located above said spillway, and a wall cutting off said spillway from the water above the spillway, said wall having discharge passages extending lengthwise thereunder below the bottom level of the channel, and of sufficient area relative to the spillway discharge area to thereby insure a slow rate of flow through said flow openings.

1,886,966. ROLLER BEARING FOR HOT SHAFTS. ADOLF MEYER, Kusnacht near Zurich, Switzerland, assignor to Aktiengesellschaft Brown Boveri & Cie, Baden, Switzerland, a Joint Stock Company of Switzerland. Filed Apr. 8, 1930, Serial No. 441,194, and in Germany Aug. 31, 1929. 4 Claims. (Cl. 308—77.)

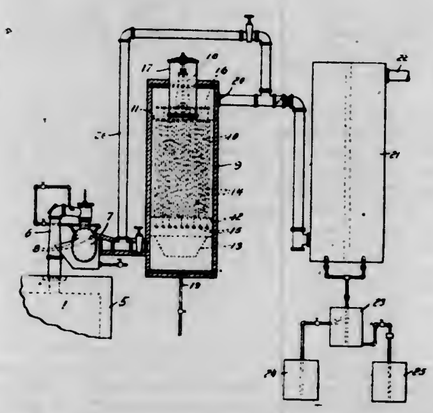
1. The combination with a rotatable shaft, of an anti-friction supporting bearing therefor, comprising a sleeve

surrounding the said shaft and affixed thereto at the opposite ends of the sleeve, an internal bearing race affixed to the outer circumference of the sleeve intermediate the ends thereof, the internal diameter of the said sleeve between the ends thereof being greater than the diameter



of the shaft to permit independent expansions and contractions of the said sleeve and shaft, and means disposed to permit the flow of cooling fluid into contact with the said sleeve at points adjacent the affixation of the said race thereto.

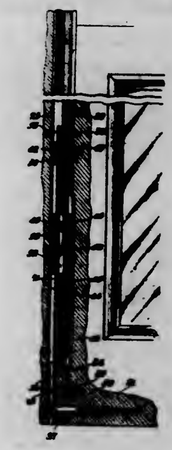
1,886,967. METHOD OF PREPARING CREOSOTING COMPOSITIONS. STUART PARMELEE MILLER, Englewood, N. J., assignor to The Barrett Company, New York, N. Y., a Corporation of New Jersey. Filed Dec. 18, 1928. Serial No. 326,778. 7 Claims. (Cl. 183—114.)



1. The improved method of producing tarry oils yielding not more than 5% distillate on distillation up to 210° C. in the by-product recovery system of coal distillation plants, which comprises cooling the coal distillation gases to a temperature not lower than 200° C., passing the gases at this temperature through an electrical precipitator, effecting partial but incomplete separation of suspended constituents from such gases in the precipitator and subsequently cooling the gases to separate therefrom a tarry oil of low free carbon content and yielding on distillation not more than 5% distillate upon distillation up to 210° C.

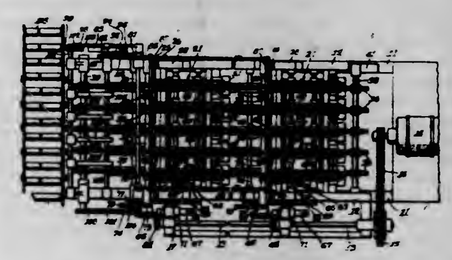
1,886,968. DUPLEX SAFETY WINDOW. ROBERT MONSCH, Union City, N. J., and FRANK H. HIBBARD, Jr., Long Island City, N. Y. Filed July 17, 1930. Serial No. 468,580. 11 Claims. (Cl. 20—49.)

1. A window comprising in combination with a wooden window frame having plain stiles provided with rails, and inner and outer sashes, of metal plates extending over the entire length of said stiles between said rails, in reaching grooved flanges on both edges of said plates, metal strips on the lateral edges of said sashes, blocks, respectively upper and lower, slidably engaged by said flanges, links con-



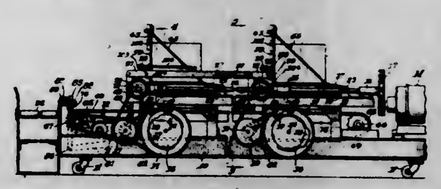
necting said blocks, and screws passed pivotally through said lower blocks and strips directly into the lower portions of said sashes.

1,886,969. SHINGLE MIXING MACHINE. ALBERT E. F. MOONE, Chicago, Ill. Filed Mar. 31, 1930. Serial No. 440,608. 22 Claims. (Cl. 270—58.)



1. In a machine of the class described, a plurality of supports each adapted to hold a stack of like shingles, a carrier, means for removing a shingle from each stack and to deposit it upon the carrier, and means to remove the individual shingles upon the carrier and to pile them in an assorted stack.

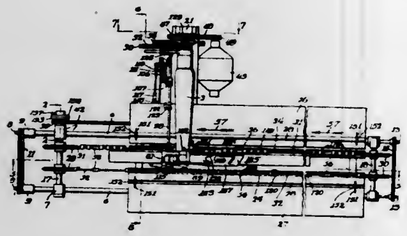
1,886,970. SHINGLE MIXING MACHINE. ALBERT E. F. MOONE, Chicago, Ill., assignor to The Lehon Company, a Corporation of Illinois. Filed Apr. 1, 1931. Serial No. 526,988. 6 Claims. (Cl. 270—52.)



1. In a shingle mixing machine, a plurality of tables, a stop gate and an ejector cooperating with each table to force sheets of material stacked thereon out and under

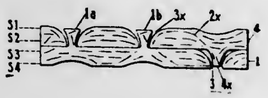
the stop gate, means for independently raising and lowering the ejector and the stop gate associated with the several tables to predetermined heights in a predetermined sequence, and means for carrying the shingles away after they have been forced out from under the gate.

1,886,971. CARTON STAPLING MACHINE. WALTER F. NEWHOUSE, Benton Harbor, Mich., assignor to Saranac Automatic Machine Corporation, Benton Harbor, Mich., a Corporation of Delaware. Filed July 29, 1929. Serial No. 382,023. 33 Claims. (Cl. 1—11.)



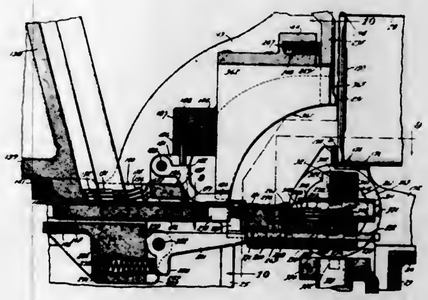
1. A machine for making cartons or hollow containers, said carton or container being polygonal in cross section and having overlapping side wall portions stapled together, comprising stapling mechanism for inserting staples successively in said overlapping portions, blank feeding means for feeding the blanks from which the cartons or containers are made, in partially folded condition, whereby the blanks are given a uniform continuous feeding motion, while receiving the staples, without changing said motion between blanks, guiding means for holding said overlapping side wall portions in proper lapping relation to receive the staples from said mechanism, means preventing any lateral displacement of the blanks while passing through the machine, and instrumentalities for operating said mechanism and said blank feeding means in properly timed relation to cause the successive insertion of staples through said overlapping side wall portions.

1,886,972. PRODUCTION OF PLASTIC SHEETS AND THE PRODUCT THEREOF. DANIEL D. PAYNE, Leominster, Mass., assignor to Du Pont Viscoloid Company, Wilmington, Del., a Corporation of Delaware. Filed Nov. 8, 1928. Serial No. 317,996. 3 Claims. (Cl. 18—61.)



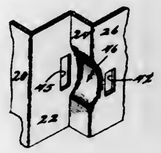
1. In the production of decorative plastic, pigmenting the composition with corpuscular pigment, forming the composition into a plastic sheet, locally displacing portions of the sheet to thereby scar the plastic and orient the corpuscular pigment particles, and hardening the plastic with the scars and orientation preserved.

1,886,973. KEY ASSEMBLING MACHINE. WILLIAM PECHY, Elizabeth, N. J., assignor to American Can Company, New York, N. Y., a Corporation of New Jersey. Filed Apr. 9, 1931. Serial No. 528,734. 16 Claims. (Cl. 113—1.)



1. A key attaching machine, comprising in combination, a can conveyor for receiving and holding a can in key receiving position, means for positioning a key on said can, and means for bending a portion of the key for securing said positioned key on said held can.

1,886,974. DOOR PILLAR AND THE LIKE. IRA D. PERRY, Chicago, Ill., assignor to Edna L. Meyer, Rockford, Ill. Filed Sept. 16, 1931. Serial No. 563,062. 5 Claims. (Cl. 296—28.)

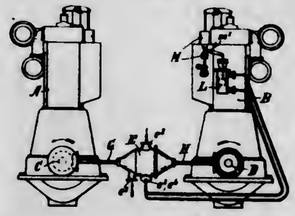


1. A pillar for an automobile body comprising a sheet metal member bent to provide a rabbet portion of angular cross-section, and inwardly and outwardly projecting flange portions extending from opposite sides of the rabbet portion substantially at right angles to each other, the rabbet portion comprising a ledge substantially at right angles to the inwardly projecting flange and facing in the direction of door closing movement, and a back wall substantially at right angles to the outwardly projecting flange, the ledge being imperforate but formed to provide a transverse depression adapted to receive a bumper block extending across the ledge, one of the walls of said pillar adjacent the ledge having an opening provided therein in a predetermined relation to the end of the depression to permit fastening the bumper block to the pillar by means on the end of the bumper block entering the opening.

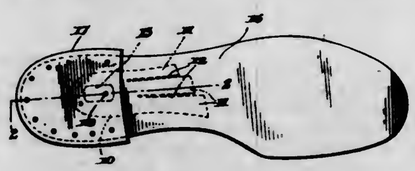
1,886,975. SYNCHRONIZING TWO INTERNAL COMBUSTION ENGINES. WILHELM PROFITLICH, Kiel-Gaarden, Germany. Filed Sept. 8, 1930, Serial No. 480,219, and in Germany Sept. 27, 1929. 3 Claims. (Cl. 60—97.)

1. In combination with a power plant comprising two internal combustion engines, crank shafts in said engines, means for synchronizing said engines comprising

an equalizing gear connected between said crank shafts, a governing device for modifying the relative speeds of said engines, and hydraulic pressure means for operating said governing device controlled by said equalizing gear to maintain a synchronous relationship between said engines.

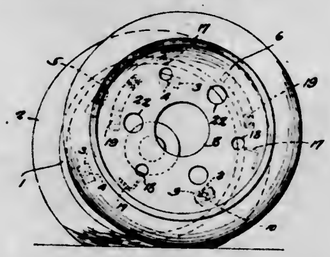


1,886,976. ARCH SUPPORT FOR BOOTS AND SHOES. JOHN ALBERT REID, Fredericton, New Brunswick, Canada, assignor to The Hartt Boot and Shoe Company Limited, Fredericton, New Brunswick, Canada. Filed Jan. 12, 1929. Serial No. 332,205. 5 Claims. (Cl. 36—76.)



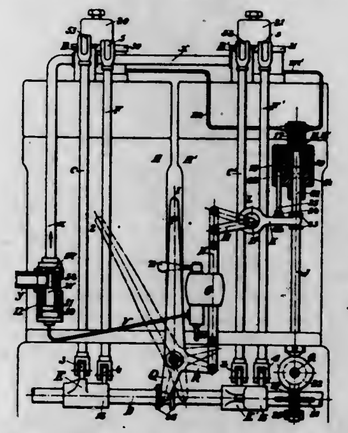
2. In a shoe the combination with the heel, the outsole and the insole thereof, of an arch support comprising an elongated metal plate in the form of a shank positioned between the insole and the outsole and having its front end divided into longitudinally extending non-diverging tongue-like portions by longitudinally disposed slots, the tongues terminating rearwardly of the metatarsal arch, the rear end of the plate overlying the heel and anchored thereupon by a nail extending through the heel, outersole and innersole, and the tongue like portions freely overlying the sole, the rear end of the plate being provided with an orifice positioned adjacent the breast of the heel.

1,886,977. AUXILIARY WHEEL. JOHN B. RODGERS, Little Rock, Ark. Filed June 1, 1931. Serial No. 541,404. 3 Claims. (Cl. 301—38.)



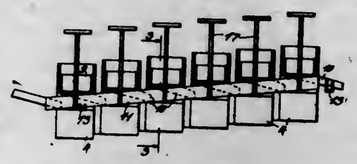
1. In a device of the class described, main and auxiliary wheels, the main wheel having a plurality of circumferentially spaced brackets provided with openings, the auxiliary wheel having a pivot element which may be inserted into the opening of any bracket to effect a detachable pivotal connection between the wheels, with the wheels in eccentric relation, the auxiliary wheel having a latch which engages another of the brackets, as the auxiliary wheel rolls on the ground, and as the auxiliary wheel moves toward concentric relation with respect to the main wheel, to lock the wheels together.

1,886,978. INTERNAL COMBUSTION ENGINE. JACQUES RUBINSTEIN, Cologne-Mulheim, VICTOR HEIDELBERG, Bensberg, near Cologne, EMIL UHLHORN, Cologne, and WILHELM DAHNERS, Cologne-Mulheim, Germany. Filed Mar. 23, 1923, Serial No. 627,209, and in Germany June 22, 1922. 14 Claims. (Cl. 60—16.)



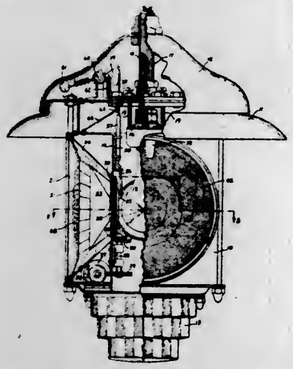
1. An internal combustion engine of the fuel injection type having, in combination, a plunger fuel pump, means for reciprocating said plunger of said pump in timed relation to the engine speed, mechanisms for admitting compressed air to a cylinder of said engine for starting the latter and rendering said pump inoperative to inject fuel into said cylinder including a control member for said pump and a control member for the starting-air admitting mechanism, said starting-air admitting mechanism including an admission valve operated in timed relation to the engine speed, a supply valve for the starting-air supplied said admission valve, and a control valve for said supply valve, said control valve being operatively positively actuated by said control member for said starting-air admitting mechanism, and means automatically locking one of said control members in selected position when the other of said control members is moved to a selected position.

1,886,979. FLOTATION METHOD. JOSEPH P. RUTH, Jr., Denver, Colo. Filed Jan. 26, 1931. Serial No. 511,448. 2 Claims. (Cl. 209—166.)



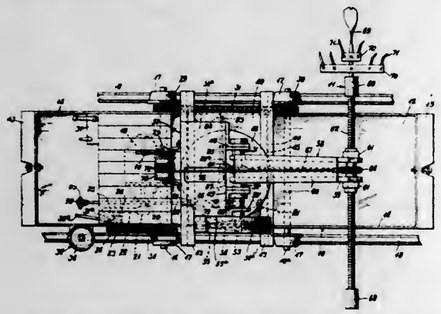
1. The method of operating a series connected group of flotation machines so as to obtain the maximum efficiency when the pulp available is less than that required for the capacity corresponding to maximum efficiency which consists in returning tailings from the last cell of the series to the intake conduit of the first cell in such amount that the returned tailings and the original pulp supply will equal the amount necessary for maximum efficiency.

1,886,980. SIGNAL. ROBERT J. RUTHS, Baltimore, Md. Filed May 10, 1932. Serial No. 610,404. 10 Claims. (Cl. 116—63.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)



1. In a signal, in combination, a plurality of compartments, a source of illumination common to all compartments, means for varying the color of the light rays emanating from the source, means for actuating the color varying means, means producing a clear light that moves progressively around the periphery of each compartment, and a prime mover.

1,886,981. HITCH DRILL. THOMAS SCHULL, Clinton, Ind., assignor to Ben H. Schull, Clinton, Ind. Filed Sept. 1, 1931. Serial No. 560,616. 4 Claims. (Cl. 255—51.)

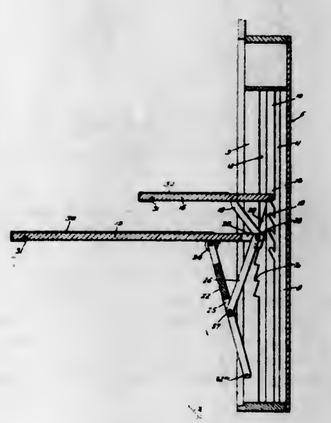


1. In a machine for drilling hitch holes, a drilling assembly comprising a frame rotatably mounted upon a base so as to be rotatable in a horizontal plane, a motor secured to said frame, a boom having an end supported by said frame and having a rotatable drill shaft journaled in its end remote from said frame, said boom extending outwardly from said frame and being pivotally connected to said frame for pivotal movement in a vertical plane, means to raise and lower said boom, said drill shaft being positioned transversely of said boom and power transmitting means between said motor and said drill shaft for rotating the latter.

1,886,982. PROCESS OF PRODUCING CEMENTS FOR TEETH. OTTO SIMON, Berlin, Germany. Filed May 25, 1929, Serial No. 366,090, and in Germany May 26, 1928. 1 Claim. (Cl. 106—6.)

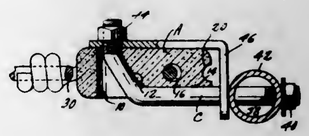
An improved dental cement comprising a mixture of a known cement from the group consisting of silica cements and phosphate cements and a substance from the group consisting of sulpho-ricinates and sulphonated castor oil.

1,886,983. IRONING BOARD AND CLOSET CONSTRUCTION. ELOI SOUCIE, Missoula, Mont. Filed Dec. 21, 1931. Serial No. 582,437. 3 Claims. (Cl. 68—10.)



1. In a structure of the class described, in combination, an open front closet formed with opposed vertical guideways along its opposite sides, an ironing board, a pair of duplicate cleats pivotally connected to the inner end of said board and movable in said guideways, said guideways, being fashioned with stops with which said cleats are adjustably and releasably engageable, a prop having its lower end fixedly pivoted in the closet and its upper end slidably contacting the underside of the inner end portion of the board, and a link pivotally connected to the inner end of the board and intermediate portion of the prop for automatically setting the prop.

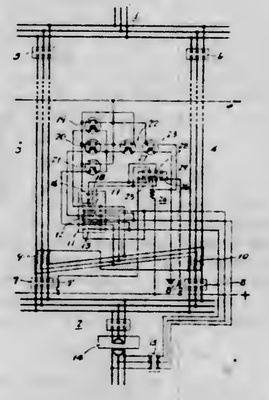
1,886,984. INSULATOR STRUCTURE. HARRY C. STATON, Burlington, Iowa. Filed June 20, 1928. Serial No. 286,755. 2 Claims. (Cl. 173—366.)



2. An insulator comprising a body portion having an opening therein, an anchoring rod having a shank and an angularly extending portion received in said opening and a substantially L-shaped brace having its ends receiving the shank and the angularly extending portions of said anchoring rod and preventing it from straightening out.

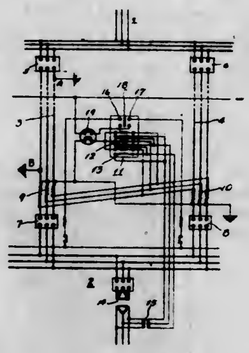
1,886,985. PROTECTIVE RELAY SYSTEM. SHIZUO SUNAIBI, Hiroshima-Shi, Japan. Filed Aug. 22, 1928, Serial No. 301,404, and in Japan Sept. 18, 1927. 5 Claims. (Cl. 175—294.)

1. A protective system adapted for use in a grounded neutral system including a high resistance to ground or a non-grounded system, a double-circuit transmission system of such a nature that the faulty ground current is often lower than the load current in the circuit, means for interrupting said two circuits at the power station end, respectively, a directional power relay for controlling said interrupting means and comprising current elements energized in accordance with the unbalance between said



two circuits and potential elements energized in accordance with the normal phase voltages of the power station, and a change-over relay operated in accordance with a ground current for reversing the connection of said interrupting means with the contacts of said directional power relay.

1,886,986. PROTECTIVE RELAY SYSTEM. SHIZUO SUNAIBI, Hiroshima-Shi, Japan. Filed Aug. 22, 1928, Serial No. 301,405, and in Japan Dec. 13, 1927. 4 Claims. (Cl. 175—294.)



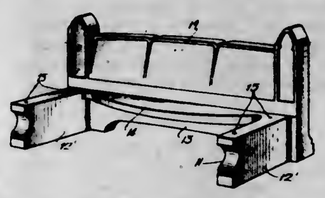
1. In a protective relay system adapted for use in a grounded neutral system including a high resistance to ground or a non-grounded system, a power station, a circuit interrupter having a tripping coil for cutting out said line from the power station end, a directional power relay for controlling the circuit of said tripping coil of said interrupter, said relay comprising a contact-carrying movable armature which is actuated in one direction, in accordance with the ground current when said line is grounded, so as to prepare the tripping circuit, and is actuated in the opposite direction in response to load current in said line, and a current relay energized by said ground current for completing said tripping circuit.

1,886,987. HAND OPERATING MEANS FOR POWER OPERATED RAILWAY TRAFFIC CONTROLLING DEVICES. HERBERT B. TAYLOR, Rochester, N. Y., assignor to General Railway Signal Company, Rochester, N. Y. Filed July 31, 1931. Serial No. 554,275. 7 Claims. (Cl. 246—240.)



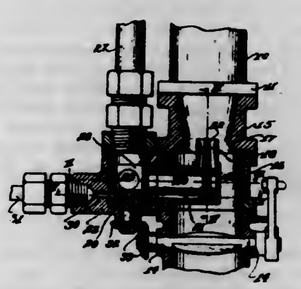
1. In combination, a drive shaft, a fixed clutch member on the drive shaft, a relatively rotatable clutch member on the drive shaft, a driven member connected to the rotatable clutch member, and a bifurcated operating member pivoted to the rotatable clutch member and movable to operatively interconnect the two clutch members.

1,886,988. STONE BENCH OR SETTEE. HILARIUS THELEN, Maspeth, N. Y. Filed Dec. 24, 1931. Serial No. 583,112. 1 Claim. (Cl. 155—196.)



A bench or settee comprising a base section, and a seat section both cast of art stone, said base section including a pair of spaced legs and a bridge piece connecting said legs and integral therewith, a horizontal flange extending from said bridge piece between said legs, the top of which is disposed on the same plane as the top of said legs, said seat section resting upon said legs and said flange, and a dowel connection between said legs and said seat section.

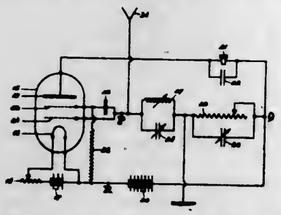
1,886,989. SUPERCHARGING APPARATUS. JOHN T. TRUMBLE, Lansing, Mich. Filed Aug. 29, 1928. Serial No. 302,741. 5 Claims. (Cl. 123—119.)



1. A supercharger connection for internal combustion engines comprising a Venturi member positioned between the carburetor and intake manifold of the engine, an

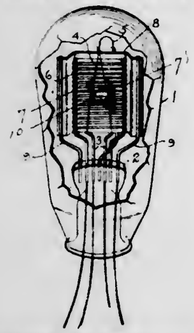
injector nozzle therein, passaged means leading to said nozzle and adapted to receive the discharge from said supercharger, a separate fuel passage from said carburetor to said nozzle and a valve controlling said discharge and said fuel passage.

1,886,990. RECEIVING SYSTEM. BALTHASAR VAN DER POL, Eindhoven, the Netherlands, assignor to N. V. Philips' Gloeilampenfabrieken, Eindhoven, the Netherlands. Filed Jan. 15, 1925, Serial No. 2,512, and in the Netherlands Feb. 29, 1924. 16 Claims. (Cl. 250—27.)



4. In combination in a circuit including a space discharge tube provided with a cathode, anode, grid and auxiliary electrode, means for maintaining the electrode positive with respect to the cathode whereby a negative resistance characteristic is imparted to the output circuit of the tube, a source of modulated high frequency energy coupled to the grid, an oscillatory circuit connected to the auxiliary electrode and resonant to said high frequency and an impedance connected to said oscillatory circuit of such a magnitude that the total resistance of said output circuit is substantially zero both for said high frequency and the modulation frequency.

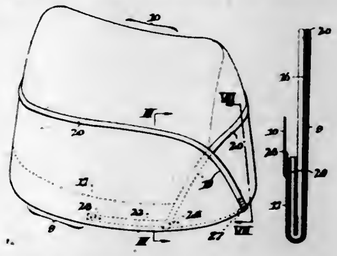
1,886,991. FILAMENT SUPPORT. JOHN S. VAN HORNE, Franklin, Ohio, assignor to Radio Corporation of America, a Corporation of Delaware. Filed Mar. 29, 1926. Serial No. 98,166. 8 Claims. (Cl. 250—27.5.)



1. In a thermionic valve, the combination with a filament, a grid element surrounding the filament, and a plate element extending on opposite sides of the grid element, of an auxiliary support for the filament with which the filament engages at a midlength point, said support extending transversely through the grid element and abutting upon the plate element at opposite sides of the grid element.

1,886,992. CAP. HARRY WAGENFELD, Philadelphia, Pa., assignor to Keystone Adjustable Cap Corporation, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Jan. 23, 1932. Serial No. 588,246. 4 Claims. (Cl. 2—197.)

1. A cap or the like consisting of an expansible exterior stiff yet flexible head band embodying a lower comparatively-narrow upturned edge and also having its free ends slidably confined together, means to maintain said free ends in slidable coaction, and a crown of inverted pocket-formation the depending skirt portion whereof dimensionally conforms substantially to that of the lower



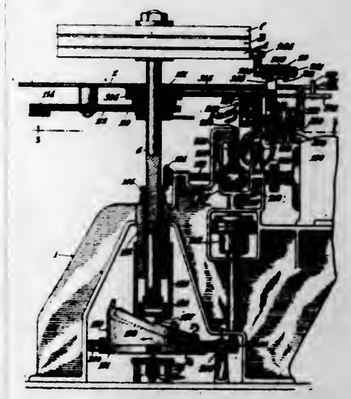
upturned edge of the head band in expanded position and is coextensively secured thereto with the exception of a minor length at one end to accommodate expansion and contraction, whereby a placket formation at the back of the cap results when said band contracts.

1,886,993. PACKING AND PROCESS OF MANUFACTURE. HERBERT STANLEY WALKER, Mamaroneck, N. Y., assignor to The Allpax Company, Inc., Mamaroneck, N. Y., a Corporation of New York. Filed July 23, 1928. Serial No. 294,643. 4 Claims. (Cl. 106—8.)



1. A composite, loose, substantially dry, rod and shaft packing having substantially 98% of its mass formed of soft metal fragments, yieldable fibre and lubricant, and having substantially 2% of said mass formed of unvulcanized rubber acting primarily as a binder instead of a space filler.

1,886,994. GRINDING MACHINE. CHARLES V. WALTER, Bronxville, N. Y. Filed Aug. 28, 1929. Serial No. 388,888. 9 Claims. (Cl. 51—106.)

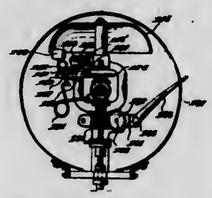


1. In a disk beveling machine, a grinding wheel, a disk holder, means for feeding a disk to said holder, means for moving said holder so as to move the edge of said disk into grinding engagement with said wheel, means for rotating said disk while in engagement with said wheel, and means for releasing said disk from said holder after the grinding operation is completed.

1,886,995. PRODUCTION OF DYEINGS AND PRINTS ON MIXED FABRICS. HEINRICH WERDENBERG, Neu-Allschwil near Basel, Switzerland, assignor to the Firm of Durant & Huguenin S. A., Basel, Switzerland. Filed Mar. 12, 1931, Serial No. 522,155, and in Germany Mar. 17, 1930. 3 Claims. (Cl. 8—5.)

1. A process for producing dyeings and prints on mixed fabrics containing cellulose ester fibre and a cotton fibre by means of gallocyanine dyestuffs, which consists in bringing a gallocyanine dyestuff in form of its leuco compound onto the fabric, subjecting the same to a steaming operation, necessary for the fixation of the dyestuff on the cellulose ester fibre, and then after-treating the fabric with a suitable chromium compound to produce fixation of the dyestuff on the cotton fibre.

1,886,996. FLUID METER. HARRY G. WEYMOUTH, Pittsburgh, and EARL M. KREIDLER, Wilkinsburg, Pa., assignors to Pittsburgh Equitable Meter Company, Pittsburgh, Pa. Filed Jan. 24, 1928. Serial No. 249,062. 2 Claims. (Cl. 235—128.)



1. In a register for liquids having a casing, a bracket therein, a substantially vertical drive shaft journaled in said bracket and driven by a liquid meter, an indicator shaft and an indicator carried thereby, and means to reset said indicator shaft and indicator, the combination with a cam mounted on said drive shaft having an abrupt shoulder, a pivoted clapper bracket having a clapper thereon, a bell adapted to be hit by said clapper, an arm pivoted in a recess in said clapper bracket, one end of said arm projecting beyond its pivot and engageable with a stop portion on said bracket, a spring biasing said arm against said stop portion, and a spring biasing said bracket against a stop, whereby during resetting of said indicator said arm is moved by said cam and said bracket remains stationary and the bell is not hit by said clapper.

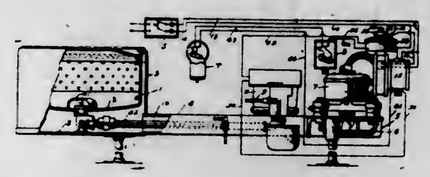
1,886,997. ELECTRIC CONDENSER. RICHARD A. WILKINS, Beverly, Mass., assignor to Industrial Development Corporation, Salem, Mass., a Corporation of Maine. Filed May 18, 1929. Serial No. 364,162. 20 Claims. (Cl. 175—11.)



1. An electric condenser comprising microscopically perforated conductive sheets separated by a dielectric substance, the microscopic perforations of said sheets being mostly diagonal.

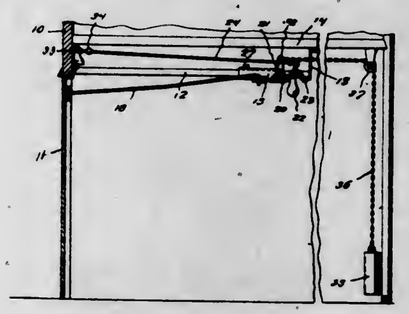
1,886,998. FUEL AND AIR CONTROL. WALTER W. WILLIAMS, Bloomington, Ill. Filed June 18, 1928. Serial No. 286,314. 1 Claim. (Cl. 158—28.)

A domestic liquid fuel burner having a combustion chamber with a pilot light burning therein, a normally inactive electrically operated fuel feed means leading therefrom, a draft pipe connected with a normally inactive motor driven fan adapted to feed air to the chamber, a motor circuit, a control circuit, a thermostatically operated fuel feed valve in the fuel feeding means including a heating element in the control circuit and an independent adjustable thermostatically operated switch in the motor circuit including an electric heating element in the control circuit, an expansible and contractible member responsive



thereto to adjustably operate said motor switch, said heating elements connected in series in the control circuit and adapted upon closing the control circuit to cause fuel to be fed to the combustion chamber and cause air to be fed to the combustion chamber in accordance with the adjustment of the motor switch.

1,886,999. DOOR CONTROL MECHANISM. AMANDA EDSEN WILSON, Glen Ellyn, Ill. Filed Aug. 6, 1931. Serial No. 555,573. 2 Claims. (Cl. 292—138.)

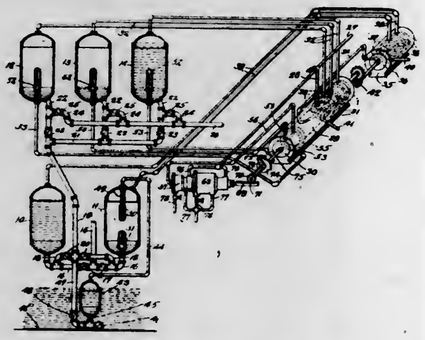


1. A door locking device comprising in combination with a door, a bar having its front end fastened adjacent and above the door, a bracket supporting the rear end of the bar, a sleeve-like latch slidably disposed on the bar and having an integral laterally projecting lug, a link pivoted at one end to the door and at the opposite end to said lug, a beveled bolt integral with and projecting laterally from the rear end of said latch, a further beveled bolt integral with and projecting upwardly from the front end of said latch, a latch lever pivoted on a side of the bar near the rear end of the latter to automatically engage the laterally projecting bolt when the door is closed, a further latch lever pivoted above the front end of the bar to automatically engage the upwardly projecting bolt when the door is opened, and means to disengage the latch levers from said bolts.

1,887,000. AUTOMATIC HIGH PRESSURE BOILER FEED SYSTEM. FRANK M. WOOTON and ALBERT L. DAVIS, Baltimore, Md. Filed Apr. 14, 1931. Serial No. 529,918. 5 Claims. (Cl. 122—456.)

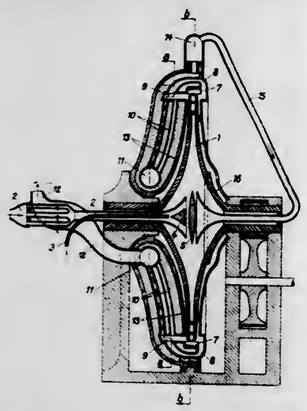
1. In a boiler feed system, a pair of primary condensate receiving tanks, a series of secondary tanks, piping connections between the primary and secondary tanks arranged to conduct water from the primary to the secondary tanks, a condensate supply pipe opening into the primary tanks, a boiler feed pipe connected to the secondary tanks to receive water therefrom, steam pres-

sure lines each connected to a respective tank, valve means controlling the flow of steam through the steam pipes and arranged to cause alternate supply to and exhaust from the primary tanks in succession and to cause



supply to and full exhaustion from the secondary tanks in succession, and means for actuating valve means and controlled to operate upon the emptying of each secondary tank.

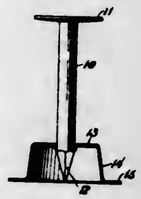
1,887,001. COMBINED GAS AND STEAM TURBINE. GUSTAF VIKTOR ZETTERBERG, Or, Sweden. Filed Sept. 15, 1930, Serial No. 482,140, and in Sweden Nov. 29, 1929. 1 Claim. (Cl. 60—42.)



A turbine with combined gas and steam drive, comprising in combination a hollow impeller, a hollow shaft of said impeller, a supply pipe for fuel and a supply pipe for air in said hollow shaft, an ignition cone for igniting the fuel combusting in the impeller, a steam generator surrounding said impeller communicating with said hollow shaft of said impeller, so that the steam is admixed in the impeller with the gases from combustion, a pipe for discharging the gas from the impeller ending in said steam generator and an axially arranged heat exchanging apparatus for preheating the fuel and the air.

1,887,002. SPACING FASTENER. WILLIAM H. F. ZIEDRICH, San Bruno, Calif. Filed June 2, 1928. Serial No. 282,431. 3 Claims. (Cl. 72—118.)

1. A spacing fastener of the class described comprising, in combination, a sheet metal, substantially cup-shaped button member of relatively soft metal presenting an annular base flange and a relatively large head portion; and a furring nail penetrating the head portion of the button, and co-operating with the punctured projections of the button head to hold the button and nail assembled so that the point of the nail does not project beyond



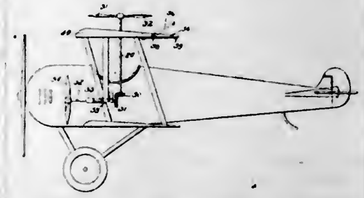
the plane of the base of the button member, whereby the button member may be pushed under the strands of a reenforcing wire and the nail point will not tear the building paper on the sheathing.

1,887,003. EAR CLEANER. GEORGE ADAMS, Maplecrest, N. Y. Filed Apr. 22, 1931. Serial No. 532,059. 7 Claims. (Cl. 128—304.)



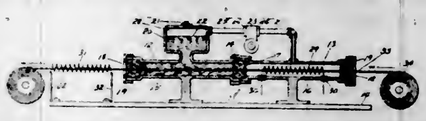
5. An ear cleaner comprising a strand bent to form a plurality of U-shaped arms arranged in pairs, the arms of each pair being disposed in opposed relation to each other and projecting from opposite sides of the arms of another pair.

1,887,004. PROPELLER FOR AIRCRAFT. ALEXANDER ALTIERI, Philadelphia, Pa. Filed Sept. 1, 1931. Serial No. 560,539. 3 Claims. (Cl. 244—15.)



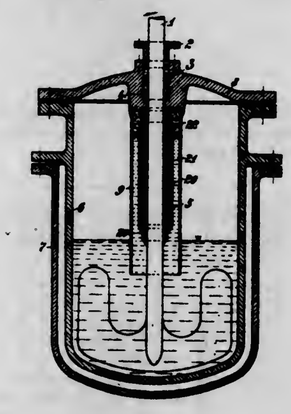
1. The combination with an aircraft embodying oppositely extending wings and ailerons carried by said wings, lifter propellers carried by said wings, and means extending from each aileron to an oppositely positioned lifting propeller for retarding the action of said propeller.

1,887,005. APPARATUS FOR INSULATING COILS. VINCENT G. APPLE, Dayton, Ohio. Filed Apr. 19, 1929. Serial No. 356,586. 2 Claims. (Cl. 91—55.)



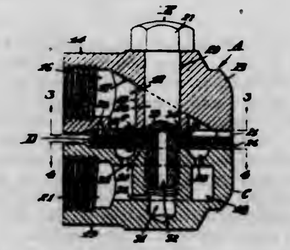
1. For impregnating the porous insulating covering on a conducting wire with liquid insulation, apparatus comprising, a receptacle divided into two closed chambers, a pump adapted to maintain vacuum in the first said chamber and pressure in the second said chamber the second said chamber containing a supply of the said liquid, and means to draw the said wire through a snug fitting opening into the vacuum chamber, through a second snug fitting opening from the vacuum to the pressure chamber and through a third snug fitting opening from the pressure chamber.

1,887,006. PACKING FOR THE STUFFING-BOXES AND COVERS OR LIDS OF APPARATUS AND MACHINES SUBJECTED TO A HIGH GAS-PRESSURE. WALTER BAENSCH, Berlin, Germany, assignor to Schering-Kahlbaum A. G., Berlin, Germany. Filed Jan. 23, 1928, Serial No. 248,952, and in Germany Jan. 24, 1927. 5 Claims. (Cl. 286—9.)



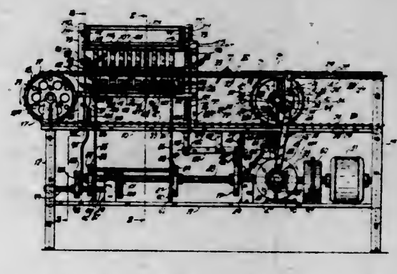
1. A stuffing box for apparatus and machines subjected to the high pressure of a gas intended to act upon a liquid also enclosed in the respective apparatus or machine, comprising in combination with the stuffing box proper, a tube extending from the stuffing box proper down into the respective liquid and being filled with the same so as to have a part of it inserted between the stuffing box proper and the gas.

1,887,007. OIL BURNER. AUGUST BEHRSIN, Huntington Park, Calif. Filed Jan. 14, 1931. Serial No. 508,600. 7 Claims. (Cl. 299—140.)



2. In an oil burner, a burner head having an oil chamber and a steam chamber, a septum between said chambers, said burner head having oil and steam discharge orifices leading respectively from above and below said septum and having passages leading from said steam chamber and communicating with said oil chamber and arranged to direct steam from said oil chamber through said oil discharge orifice from rearward of the inner margin thereof.

1,887,008. STACKING MACHINE. BORIS BOSOSLOWSKY, Ferguson, Mo., assignor to The Universal Match Corporation, St. Louis, Mo., a Corporation of Delaware. Filed Mar. 28, 1929. Serial No. 350,787. 6 Claims. (Cl. 226—4.)



4. In a match-book stacking machine, a floor-plate, a plurality of spaced partitions upstanding from the floor plate providing a series of receiving-members, a plurality of stacking-chutes each adapted for communication with one of the receiving-members, means for shifting a match-book from each of the receiving-members into a corresponding chute, and means including pairs of opposing doors for preventing retrograde movement of the shifted match-books from the chutes into the receiving-members, said doors being swingably mounted in pairs, each pair opposite one of said partitions.

1,887,009. INTERNAL GRIPPING DEVICE. JOSEPH A. BUTTRESS, South Pasadena, Calif., assignor of one-half to George Parker, Jackson, Miss. Filed Aug. 3, 1931. Serial No. 554,667. 16 Claims. (Cl. 81—72.)

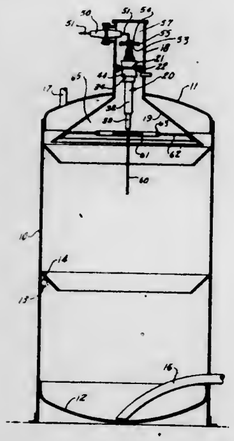


1. An expanding tool embodying: a mandrel of polygonal cross-section; and a radially expanding body mounted on said mandrel, said body comprising a plurality of rockers corresponding to the number of faces on said mandrel, each rocker having a bearing member which projects inwardly from an intermediate portion of said roller and engages a corresponding mandrel face, the outer faces of said rockers being formed so that they cooperate to provide a substantially cylindrical engaging surface.

1,887,010. INSULATOR BUSHING FOR ELECTRICAL PETROLEUM DEHYDRATORS. JOHN M. CAGE, Los Angeles, Calif., assignor, by mesne assignments, to Electric Separation Company, Limited, New York, N. Y., a Corporation of Delaware. Filed Feb. 11, 1930. Serial No. 427,637. 2 Claims. (Cl. 173—318.)

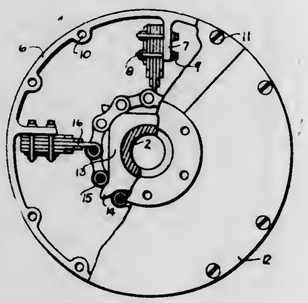
2. In combination in an electrical petroleum dehydrator involving a treater tank, vertical walls defining a compartment opening into the upper end of said treater tank, an insulator bushing connected near its center portion, and forming a barrier, in the lower portion of said com-

partment, said compartment adapted to contain insulating oil above said bushing, said bushing involving annularly spaced dielectric tubes, and the annular spaces between said tubes being closed at the end of the bushing extending downwardly in the tank but open at the end of



the bushing extending upwardly into said compartment, whereby oil in said compartment may circulate into and out of said annular spaces, and an electrical conductor passing through said insulating oil containing compartment and said insulator bushing to reach the interior of the tank.

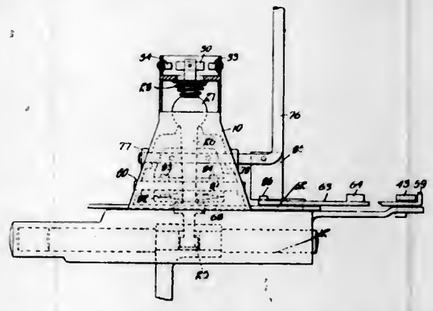
1,887,011. SHOCK ABSORBING COUPLING. RICHARD H. CARR, Chicago, Ill., and WALTER C. TROUT, Lufkin, Tex. Filed Sept. 2, 1930. Serial No. 479,232. 5 Claims. (Cl. 64—26.)



1. A shock absorbing coupling of the character noted including a rotatable member, a sprocket wheel thereon, a sprocket chain encircling said wheel, a second rotatable member, a supporting plate thereon, and resilient arms on said plate connected at their inner ends to said chain.

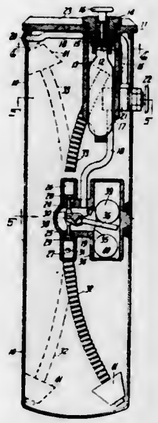
1,887,012. GEAR SHIFT. FOREST S. CARTWRIGHT, Indianapolis, Ind., assignor to Cartwright Automatic Gear Shift Corporation, Indianapolis, Ind., a Corporation of Indiana. Filed June 27, 1930. Serial No. 464,399. 10 Claims. (Cl. 74—81.)

1. In a gear shifting mechanism, a pair of gear shifting rods having yokes thereon, a gear shifting lever pivoted at one end and having its other end engageable with one of the said yokes, a housing, a plate mounted to slide in said housing said plate having a hole therethrough through which the gear shifting lever extends, and means



on the plate for shifting the end of the said gear shifting lever to cause it to engage in one of the said yokes, substantially as set forth.

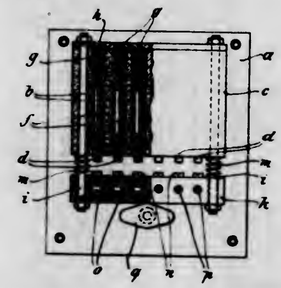
1,887,013. FIRE EXTINGUISHER. JAMES L. COFFIELD, Dayton, Ohio. Filed Oct. 13, 1930. Serial No. 488,301. 8 Claims. (Cl. 169—31.)



5. In a fire extinguisher, a container for fire extinguishing liquid, a valve casing mounted in said container and having inlet ports, valves for said ports, gravity operated means to operate said valves in accordance with the position of said container, flexible tubes connected with the respective inlet ports and each extending to a point near one end of said container, an outlet conduit leading from said valve casing to the exterior of said casing, a support for an air capsule mounted in said container near one end thereof and close to one side thereof and having its inner surface so shaped that it will deflect the end portion of the adjacent flexible tube when the latter moves toward said side of said container, and means for opening said cartridge.

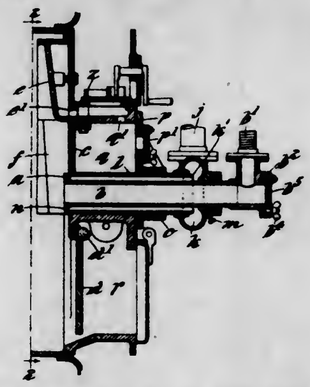
6. In a fire extinguisher, a container for fire extinguishing liquid, a valve housing, means for conducting the liquid from the opposite ends of said container to said valve housing, valves for controlling the direction of flow of liquid through said valve housing, a lever connected with said valves, gravity means mounted for free movement with relation to said lever and arranged to operate said lever and valves when said container is tilted, means for conducting the liquid from said valve housing to the outside of said container, and means for creating pressure in said container for expelling the liquid.

1,887,014. SPARKING PLUG CONTROLLING DEVICE FOR INTERNAL COMBUSTION ENGINES. AUGUST DURST, Freiburg, Germany. Filed Aug. 27, 1930, Serial No. 478,155, and in Germany Sept. 14, 1929. 2 Claims. (Cl. 175—183.)



1. A sparking plug controlling device for internal combustion engines, comprising in combination with a block of insulating material having bores, illuminating lamps inserted one in each of said bores, slidable contacts one in each bore and projecting therefrom adapted to support said illuminating lamps, springs one in each of said bores adapted to press said lamps against said slidable contacts, guide rods extending one on each side beyond the end of said block parallel to said lamps, a switch element guided on said rods, counter contacts on said switch element one opposite each of said contacts each adapted to be connected to a sparking plug, a switching device adapted to shift said switch element on said rods so that said contacts bear against said counter contacts and switch in said lamps, and a spring on each of said rods adapted to push said switch element away from said block and to break the contact between said contacts and said counter contacts.

1,887,015. MEANS FOR THE COMBUSTION OF PULVERIZED FUEL. EDWARD WILLIAM GREEN, GEORGE RODHAM UNTHANK, and DAVID DUNN, London, England, assignors to The Buell Combustion Company Limited, London, England. Filed Mar. 18, 1929, Serial No. 347,755, and in Great Britain Apr. 13, 1928. 5 Claims. (Cl. 110—28.)



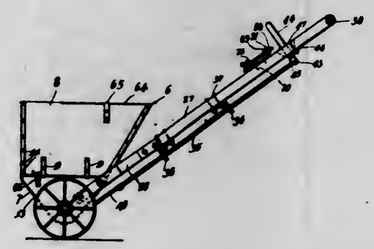
1. An improved burner for air borne pulverised fuel having in combination a combustion chamber, a furnace front comprising a front wall and a perforated rear wall spaced therefrom, a main tube carried by said front penetrating said walls, a central tube in said main tube leaving an annular passage about said central tube, a whirl chamber located externally of said combustion chamber and carrying said central tube and adapted and arranged to deliver a whirling stream of air to said annular passage, a deflector on the free end of the central tube within the combustion chamber, means for supplying air to the space between said walls, means for supplying air to the central tube and means for supplying air borne pulverized fuel to the said whirl chamber.

1,887,016. SECRET LOCKING DEVICE. CARL J. HAGSTROM and GOTTHARD E. HAGSTROM, Glen Cove, N. Y. Filed Apr. 11, 1930. Serial No. 443,276. 12 Claims. (Cl. 70—47.)



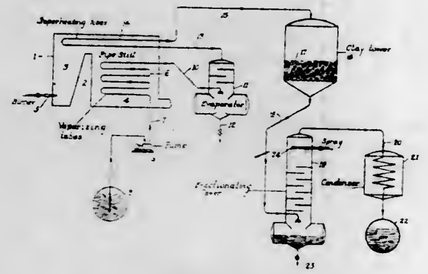
1. A locking device adapted to act between a door and a jamb, said locking device including a casing, a strike, interengaging means therefor, actuating means for the interengaging means, said actuating means having key operated tumbler means registering with the clearance space between the door and the jamb, and movably operative along the plane thereof, said tumbler means being disposed wholly within said casing, said casing having a key guiding slot along the said plane and in registry with said tumbler means.

1,887,017. SPREADER FOR FERTILIZERS, SEEDS, AND THE LIKE. ERNEST L. HALLBERG and HERL J. RYAN, Palms Station, Calif. Filed Sept. 19, 1930. Serial No. 482,920. 4 Claims. (Cl. 275—2.)



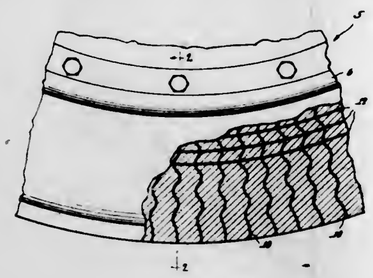
1. A spreader of the character described comprising a hopper provided with a single discharge slot of width sufficient to permit material in said hopper to fall freely therethrough by gravity extending from side to side in its bottom, wheels to carry the hopper, an agitator having approximately flat members arranged in a circle above the slot, said flat members positioned to rotate edgewise through the material in the hopper, and means operably connecting the wheels with the agitator, said flat members being positioned to move past said slot closely adjacent to said slot whereby they partially close said slot to restrict the flow of material therethrough.

1,887,018. **PROCESS OF TREATING HYDROCARBON OILS.** AUDLEY E. HARNSBERGER, Chicago, Ill., assignor to The Pure Oil Company, Chicago, Ill., a Corporation of Ohio. Filed Sept. 30, 1929. Serial No. 396,066. 4 Claims. (Cl. 196—96.)



1. The method of removing gum-forming and color-imparting bodies from vapor phase cracked unsaturated low boiling hydrocarbon oils, which consists in the steps of vaporizing a moving stream of such oils by subjecting such oils to relatively low vaporizing temperatures without causing cracking, then passing the oils and vapors into a separating zone to remove unvaporized higher boiling oils from the desired vapors, removing the vapors from the separating zone and subjecting the same to higher vaporizing temperatures than those prevailing in said first mentioned vaporizing zone, whereby to superheat said vapors, then bringing the superheated vapors while at an elevated temperature into contact with a polymerizing adsorbent, and fractionating the vapors following contact with said adsorbent under reduced pressures to remove from the treated vapors oils of high boiling point and undesirable polymerized compounds.

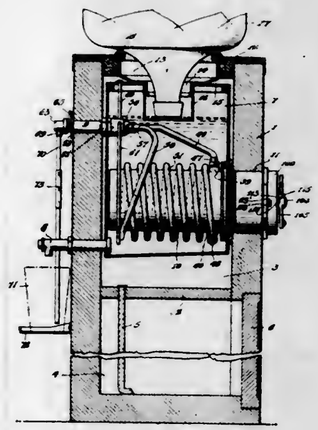
1,887,019. **RESILIENT TIRE.** JAMES D. HART, Staten Island, N. Y. Filed Sept. 28. 1931. Serial No. 565,680. 3 Claims. (Cl. 152—1.)



1. A solid elastic tire having two tread portions separated by a circumferential groove, and reinforcing means embedded in the tire and comprising spaced, transverse members extending from one tread to the other, and spaced circular members interwoven with the transverse members, said transverse members being waved in the plane of the tire.

1,887,020. **WATER COOLER.** LOUIS W. HASSENSALL, Toledo, Ohio. Filed Sept. 17, 1931. Serial No. 563,400. 14 Claims. (Cl. 62—91.5.)

1. In a water cooler, a casing having a water chamber therein and formed with a side opening, a container for a cooling medium disposed transversely in said water chamber and having an outer shell having its outer portion engaged through the side opening of the casing, a head closing the inner end of the outer shell, said shell having circumferentially spaced side openings, tubes leading from the side openings for conducting cooling gas through water in the water chamber and one being formed



into a coil, an inner shell rotatably received in the outer shell and provided with circumferentially spaced ports and circumferentially spaced external passages selectively moved into registry with the side openings of the outer shell by rotating the inner shell, a removable closure for the outer end of the outer shell, and means carried by said closure to turn the inner shell to adjusted positions.

1,887,021. **IMPROVEMENT IN REPRODUCING SOUND FROM RECORDS TRACKED BY A STYLUS.** WILLIAM ARMSTRONG HENDERSON, Nunhead, London, England. Filed Oct. 4, 1930, Serial No. 487,259, and in Great Britain Oct. 5, 1929. 6 Claims. (Cl. 274—1.)

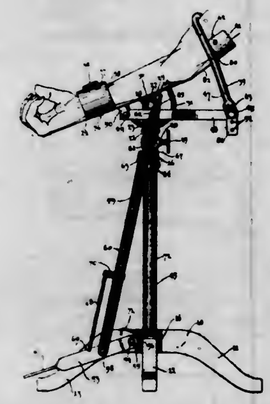


1. In sound reproducing apparatus in which sound is reproduced by tracking a record with a needle a reservoir for lubricating oil and a restricted passage leading from said reservoir to the point of the needle.

1,887,022. **SURGICAL DEVICE.** MALCOLM E. HOFFMAN, Minneapolis, and AMBROSE L. HOFFMAN, St. Paul, Minn. Filed Nov. 2, 1929. Serial No. 404,286. 9 Claims. (Cl. 128—327.)

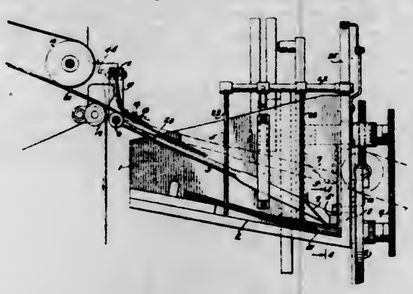
5. In combination, a support for the arm of a patient, a band attached to said support adapted to encircle said arm, a lever pivoted to said support and connected to the end of said band to tension the same, a base, a treadle

pivoted to said base, an extensible standard mounted on said base and carrying said support, an extensible link connecting said lever and treadle, a spring for moving said



lever upwardly, a separate spring for independently moving said treadle upwardly, and individual stops for limiting the upward movement of said lever and treadle.

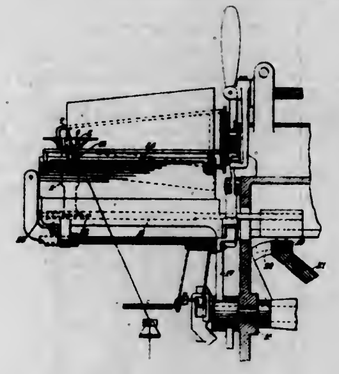
1,887,023. **BAG STACKING APPARATUS.** PAUL HUNZIKER, Hamilton Beach, N. Y., assignor to Potdevin Machine Company, Brooklyn, N. Y., a Corporation of New York. Filed Dec. 3, 1930. Serial No. 499,637. 9 Claims. (Cl. 271—86.)



1. Bag stacking apparatus comprising in combination a receiver for the bags, delivery means for delivering bags to the receiver, guiding means for directing the bags into the receiver, and means for gradually elevating the guiding means with respect to the delivery means as the stack builds.

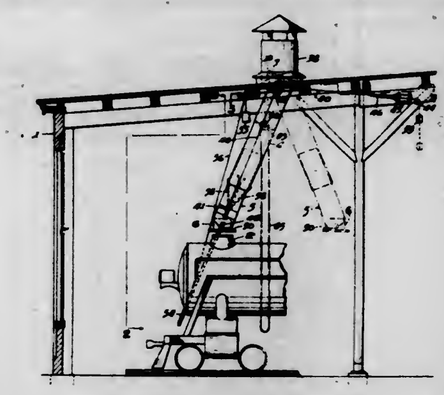
1,887,024. **THREAD GUIDE.** ROBERT T. JOYNER, LESLIE B. BOWLES, and GEORGE C. FREED, Hickory, Tenn., assignors, by mesne assignments, to Du Pont Rayon Company, New York, N. Y., a Corporation of Delaware. Filed Aug. 30, 1928. Serial No. 302,908. 16 Claims. (Cl. 242—157.)

1. A device adapted to guide a thread onto a rotating member of a thread winding machine comprising a body member, guide means disposed in the upper end thereof and adapted to ride on the thread wound on said rotating



member and wing-shaped means designed and constructed to lay down any loosely wound threads engaged by said device.

1,887,025. **EXHAUST APPARATUS FOR LOCOMOTIVE ROUNDHOUSES.** LOOMIS L. KELLY, deceased, Roanoke, Va., by William M. Brodie, administrator, Blacksburg, Va. Filed Mar. 6, 1931. Serial No. 520,743. 35 Claims. (Cl. 104—52.)



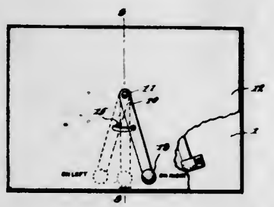
1. In an exhaust apparatus for a locomotive roundhouse, a conduit comprising upper and lower telescopically associated ducts, the upper duct being pivotally mounted adjacent the roof of the roundhouse and having a recessed portion, a motor disposed within said recessed portion, and a fan operatively connected to said motor and disposed within said conduit.

1,887,026. **POLISHING.** FREDERICK LACH, East Orange, N. J., assignor to Du Pont Viscoloid Company, Wilmington, Del., a Corporation of Delaware. Filed Feb. 11, 1930. Serial No. 427,657. 4 Claims. (Cl. 51—273.)

1. In the polishing of articles, the method which comprises: tumbling the articles in the presence of an abrasive, carriers for the abrasive, and a heated mixture of an adher-

ent for associating the abrasive and the carriers, and a liquid carrier for the adherent, such tumbling being continued until the polishing is substantially completed, and then cooling the mass and continuing the tumbling for a short time with the mass cooled.

1,887,027. DOUBLE BREAK-DOUBLE THROW ELECTRICAL SWITCH AND SINGLE BREAK-DOUBLE THROW SWITCH. GLENN C. LAWTON, Phoenix Ariz. Filed Aug. 17, 1931. Serial No. 557,098. 3 Claims. (Cl. 200—16.)



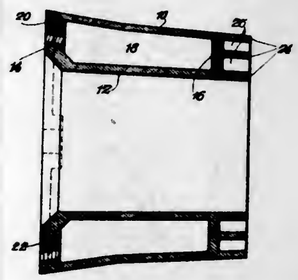
1. A switch of the class described comprising a base, contact clips carried upon said base and electrically connected to a suitable source of electrical supply and distribution, a plurality of switch arms pivotally mounted upon said base, means for connecting said arms together whereby said arms will be caused to move in unison, a housing for said base, and a control lever associated with said switch arms for swinging the said switch arms from the exterior of said housing.

1,887,028. SANITARY COMBING AND MAKE-UP JACKET. NORMA K. LEMKE and ZELMA C. PLASS, Chicago, Ill. Filed Dec. 22, 1930. Serial No. 503,948. 1 Claim. (Cl. 2—50.)



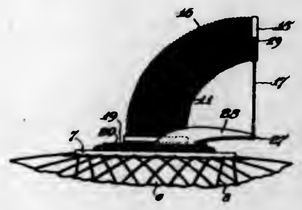
In a jacket designed to be used a single time to protect the body from combings, cosmetics or the like, a sheet of inexpensive paper like material substantially in the form of a rectangle, an opening in the center of said sheet constructed and arranged so that the same may be placed about the neck of a person and folded to provide front and back folded portions, the front folded portion being cut from the neck portion to the bottom of said folded portion to provide two front portions, a plurality of slits in one of said front portions, the slits being aligned one beneath the other and each slit being of shorter length than the one above it, a downwardly tapering lip die-slit in the other front portion and adapted to be inserted in said slits whereby the front portions may be locked together.

1,887,029. FIN NOSED TUYÈRE. ROY H. LEDBETTER, Fairfield, Ala. Filed Nov. 12, 1928. Serial No. 318,757. 5 Claims. (Cl. 122—6.6.)



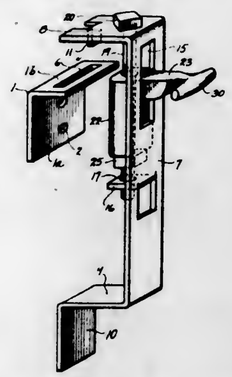
1. A blast furnace tuyère comprising a metallic body having a cooling chamber formed therein and having a nose portion comprising a plurality of fins with open spaces between them extending beyond the end of the cooling chamber.

1,887,030. GUIDING MEANS FOR PARACHUTES. ALBERT A. LONGAKER, Trenton, N. J. Filed Sept. 17, 1930. Serial No. 482,393. 10 Claims. (Cl. 244—21.)



1. In a parachute, a body for preventing rapid descent, an air spout having a vertical inlet from below the body and a lateral outlet above the body and means for angularly regulating the direction of outlet of the spout with respect to the body.

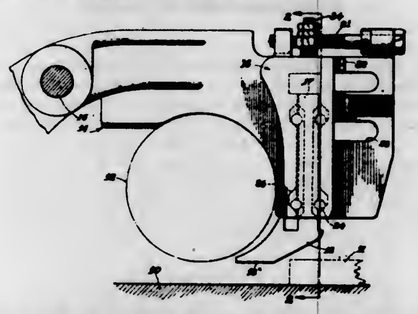
1,887,031. RADIATOR SUPPORTING HANGER. CLYDE L. LYON, Everett, Wash. Filed May 8, 1931. Serial No. 535,900. 3 Claims. (Cl. 248—17.)



1. A radiator hanger comprising a bracket portion adapted for fixed attachment to a supporting wall and having a hanger supporting flange formed with a longitudinal slot

and a hanger having an inwardly turned upper end portion adapted to seat upon said flange and formed with a downturned lip projecting into the slot to prevent displacement on the hanger, and permitting of lateral adjustment of the hanger said hanger having an inwardly offset foot at its lower end engaging the wall, an arm mounted by the hanger to extend outwardly therefrom for mounting a radiator, and a bolt mounted in the hanger and supporting the arm and operable to adjust the arm vertically.

1,887,032. CHIP BREAKER FOR MOLDING MACHINES AND THE LIKE. THEODORE C. MANN, Beloit, Wis., assignor to Mattison Machine Works, Rockford, Ill., a Corporation of Illinois. Filed July 6, 1931. Serial No. 548,843. 4 Claims. (Cl. 144—244.)



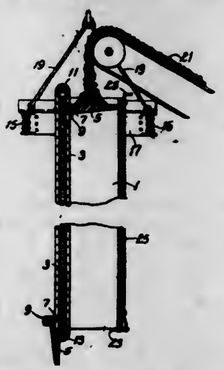
2. A chip breaker of the character described comprising a support providing a housing, said housing having one removable side wall, a plurality of shoes each having a shank extending into said housing, said shanks having grooves formed in opposed faces thereof and extending longitudinally thereof and said removable wall and the opposed wall of said housing having recesses therein facing the grooves in said shanks, anti-friction members in said grooves extending into said recesses to guide the shanks for movement relatively to said housing, and spring means acting between the housing and said shanks to press said shoes outwardly of said housing.

1,887,033. ATHLETIC STANDARD. DAVID W. MERRIMAN, Beaver Falls, Pa. Filed Sept. 19, 1930. Serial No. 483,107. 3 Claims. (Cl. 272—59.)



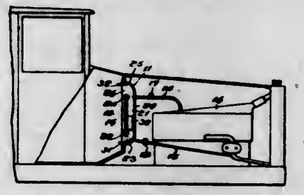
1. A standard comprising, in combination, a base; an upright fixed to the base; said upright having a longitudinal groove in one face; a stick slidable in the groove; readily removable means on the upright to retain the stick in the groove; means secured to the outside face of the stick and projecting at right angles to provide a support for a cross-bar; the stick-retaining means providing a longitudinal slot through which the cross-bar supporting means extends; and flexible means secured to the stick and detachably securable to the upright to effect longitudinal adjustment of the stick relative to the upright.

1,887,034. APPARATUS FOR CHARGING RETORTS. CORBAN MINTNER, St. Louis, Mo., assignor to St. Louis & O'Fallon Coal Company, St. Louis, Mo., a Corporation of Missouri. Filed Mar. 16, 1931. Serial No. 522,965. 8 Claims. (Cl. 214—35.)



1. Charging means for carbonizing retorts comprising a basket, a bottom for said basket, and means for moving said bottom vertically within said basket, substantially from the top to the bottom thereof.

1,887,035. VEHICLE HEATER AND HEAT CONTROL DEVICE. ARTHUR B. MODINE, Racine, Wis., assignor to Modine Manufacturing Company, Racine, Wis., a Corporation of Wisconsin. Filed Apr. 16, 1930. Serial No. 444,698. 12 Claims. (Cl. 257—136.)

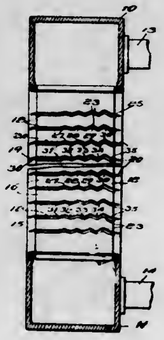


4. In a vehicle heater, the combination of a heat exchange device and a wall having a recess, the wall providing an element of the body of said vehicle, said heat exchange device and said wall being arranged relatively to each other to provide a space at opposed ends and at one side of said device for the circulation of air, and said heat exchange device being supported by said element of said body and providing means for heating air by radiation and providing an element of means for circulating air through the space between said heat exchange device and wall, and means for preventing the circulation of air through said space.

1,887,036. RADIATOR FIN. ARTHUR B. MODINE, Racine, Wis., assignor to Modine Manufacturing Company, Racine, Wis., a Corporation of Wisconsin. Filed June 21, 1930. Serial No. 462,821. 6 Claims. (Cl. 257—130.)

1. A heat radiating fin comprised of a relatively narrow strip of material having an aperture provided therein

through which a tube of a radiator is adapted to be passed to associate the fin and tube, said fin having a series of parallel variating air engaging means, arranged longi-

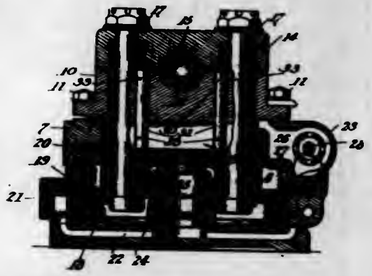


tudinally of said fin and transversely to the travel of air passing over said fin, providing for engaging air with variating intensity.

1,887,037. PROCESS OF REFINING NICKEL BEARING MATERIALS. ROBERT LEE PEEK, Toronto, Ontario, and CARL ALEXANDER KNITTEL, Port Colborne, Ontario, Canada, assignors to The International Nickel Company, Inc., New York, N. Y., a Corporation of Delaware. Filed Aug. 15, 1930. Serial No. 475,446. 6 Claims. (Cl. 204—15.)

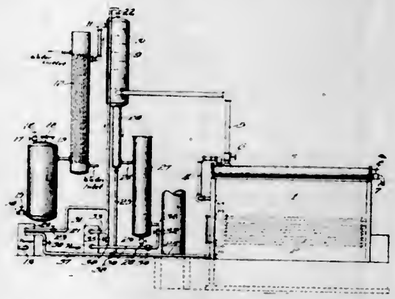
1. The improvement in the art of treating a nickel-bearing solution contaminated with copper and iron which comprises adding to such a nickel-bearing solution low temperature, gas reduced metal powder consisting principally of nickel in an amount sufficient to effect cementation of dissolved copper and to effect a reduction of the hydrogen ion concentration to such an extent that ion dissolved in said solution will be precipitated directly as hydroxide solely by aeration of the solution and that the pH valve of the solution is greater than 5.6 whereby a purified nickel solution is produced and the precipitation of iron as hydroxide sets acid free in solution to restore the hydrogen ion concentration therein to approximately its normal value appropriate for the electrodeposition of nickel.

1,887,038. DRILL SHARPENER. GUSTAV C. PEARSON, Denver, Colo., assignor to Gardner-Denver Company, Denver, Colo., a Corporation of Delaware. Filed Aug. 6, 1930. Serial No. 473,437. 11 Claims. (Cl. 76—5.)



1. In metal working apparatus, the combination with a cylinder member having an upper head and a piston operating in the cylinder member, of a fixed die overlying the cylinder member, a movable die overlying the fixed die and movable toward and from the same, a piston rod connection between the piston and movable die, and a stem interposed between the piston and movable die for movement therewith and having a passageway that opens into the cylinder member for receiving fluid therefrom, said passageway directing fluid against one of the dies to clean the same.

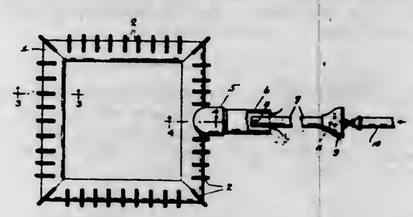
1,887,039. APPARATUS FOR CONVERTING HYDROCARBONS. ROBERT T. POLLOCK, Boston, Mass., assignor to Universal Oil Products Company, Chicago, Ill., a Corporation of South Dakota. Original application filed Nov. 25, 1919, Serial No. 339,782. Divided and this application filed May 26, 1924. Serial No. 715,835. 5 Claims. (Cl. 196—48.)



1. In an apparatus of the character described, the combination with a still, of a reflux condenser, a charging pump, means for delivering oil from the charging pump into the upper portion of the reflux condenser, connections between the vapor spaces of the still and the lower portion of said reflux condenser, connections from the lower portion of the reflux condenser to the still, a tank for receiving a portion of the reflux condensate and charging oil from the reflux condenser, means for passing reflux condensate and charging oil from the reflux condenser to said tank and means for pumping regulated quantities of said condensate and charging oil from said tank to the reflux condenser.

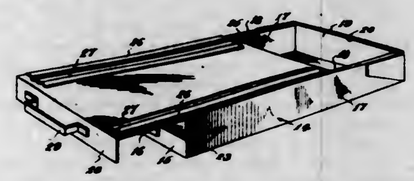
1,887,040. GAS BURNER. EARL RAGON, Dickinson, N. Dak. Filed Feb. 17, 1931. Serial No. 516,479. 1 Claim. (Cl. 158—104.)

A burner for the firebox of a furnace comprising a frame of rectangular shape and each member thereof being formed of tubular stock, a plurality of small burner tubes connected with the top of each member of the frame and in communication with the interior thereof and extending upwardly and outwardly to direct the flames against the walls of the firebox, each burner tube being formed of a single piece of tubing of the same diameter throughout,



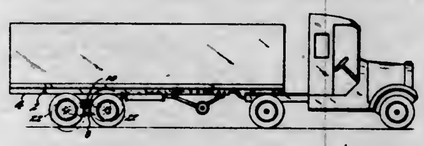
a coupling fastened to the front of one of the members of the frame, a large pipe threaded in the coupling, a small pipe extending into the outer end of the large pipe, and spaced therefrom and means for introducing a mixture of air and gas into the outer end of the small pipe.

1,887,041. ASH CARRIER. EARL T. REMY, Crestline, Ohio. Filed Nov. 18, 1930. Serial No. 496,477. 3 Claims. (Cl. 126—243.)



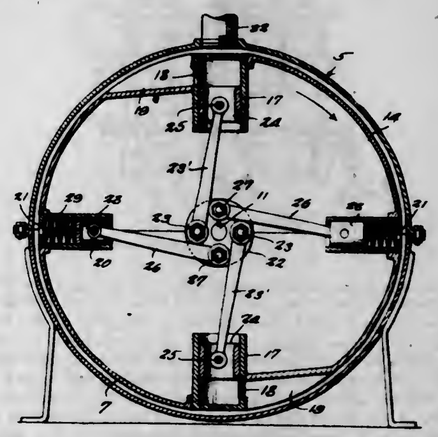
1. An ash carrier comprising an open top container adapted to be inserted in the ash pit of a coal burning furnace, a lid for closing the top of the container when filled, a track on the container, corrugated Z-shaped reinforcing guide flanges on the lid for slidably engaging the track, coacting overlapping front walls on the lid and container each of less height than the depth of the container and adapted to coact in forming a closure for the front of the container when the lid is applied, and handles on said front walls.

1,887,042. HEAVY DUTY HIGH SPEED TRAILER. CHARLES A. ROGERS, Albion, Pa. Filed Sept. 13, 1930. Serial No. 481,646. 3 Claims. (Cl. 280—124.)



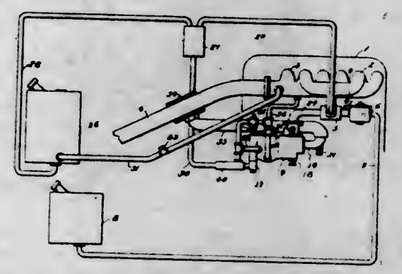
1. In a vehicle having a frame, means to support said frame, said means including a transverse shaft connected to said vehicle frame, longitudinally extending beams mounted one on each end of said transverse shaft and adapted to rock thereon in a vertical plane, outwardly extending stub shafts on each of the ends of said longitudinal beams, and forwardly and rearwardly aligned wheels on said stub shafts of each beam, inwardly extending rigid struts on each of said longitudinal beams, the inner ends of said inwardly extending struts engaging the transverse shaft substantially at the center thereof and the outer ends of each of said struts engaging an end of one of said longitudinal beams at the stub axle, a housing mounted on said transverse shaft intermediate each longitudinal beam and its respective struts, said housing being rotatable relative to said shaft and supporting the vehicle frame.

1,887,043. ROTARY STEAM ENGINE. DAVID ROSS, Hot Springs, Ark. Filed June 17, 1930. Serial No. 461,778. 2 Claims. (Cl. 253—82.)



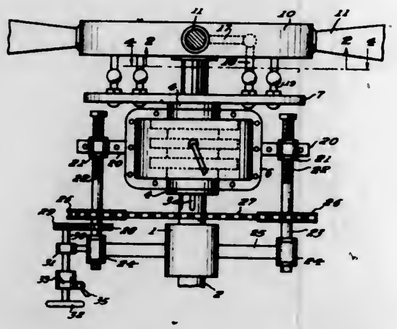
1. A rotary steam engine comprising a casing, a shaft extending into the casing, a hollow rotor mounted on the shaft and operating within the casing, steam chambers disposed at opposite sides of the rotor and having openings establishing communication between the interior of the rotor and space between the casing and rotor, sleeve valves operating within the steam chambers and through which steam passes to the openings, cylinders arranged within the rotor, pistons operating in the cylinders, coiled springs within the cylinders and engaging the pistons to normally urge the pistons inwardly, a disk mounted on the shaft, connecting rods connecting the sleeve valves and pistons to the disk to rotate the shaft when steam is directed to the interior of the rotor, and said pistons acting to govern the movements of the sleeve.

1,887,044. FUEL HEATER AND VAPORIZER. JAMES C. RYAN and WILLIAM W. SMITH, Miami, Fla. Filed Dec. 3, 1929. Serial No. 411,865. 1 Claim. (Cl. 123—122.)



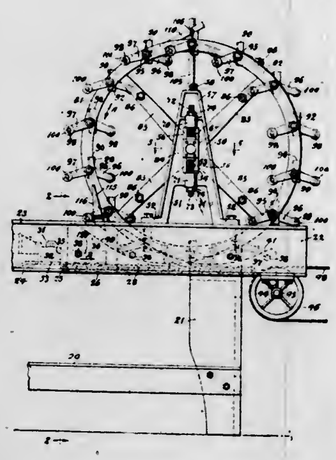
The combination with an internal combustion engine, of a carburetor therefor, said carburetor having a chamber surrounding the bowl thereof, a fuel supply pipe for the bowl, means for conducting heated air to the mixing chamber of the carburetor, a drum surrounding the supply pipe, means for conducting exhaust gases from the exhaust manifold of the engine to the drum, and from the exhaust manifold to the chamber, and means for controlling the passage of exhaust gases to the drum and said chamber.

1,887,045. PROPELLER. AUGUST SCHWARZ, Chicago, Ill. Filed Oct. 20, 1930. Serial No. 489,916. 8 Claims. (Cl. 170—163.)



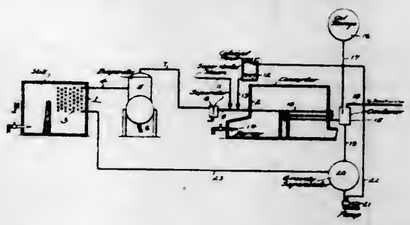
1. In a propeller of the class described having a plurality of blades rotatably supported in a frame, which is rigidly mounted on a solid shaft having a plurality of keyways therein, a sleeve slidable on said propeller shaft, but prevented from rotary movement relative to said shaft, a bearing adapted to receive said sleeve, cooperating means on said sleeve and in said bearing for permitting rotary movement of the keyed-together shaft and sleeve relative to the bearing, but preventing axial movement of the sleeve relative to the bearing, a pair of levers for each propeller blade, each pair of levers pivotally joined together, the other end of one of said levers being rigidly fastened to the corresponding propeller blade, the free end of the other lever of each pair pivotally connected with the sleeve, and means for axially moving the bearing and the sleeve on the solid propeller shaft and and thereby adjust the angularity of the propeller blades.

1,887,046. CUTTING AND BLOCK FORMING MACHINE FOR PLASTIC SUBSTANCES. ALBERT SHARP and GEORGE SHARP, Bayonne, N. J. Filed Mar. 28, 1930. Serial No. 439,707. 1 Claim. (Cl. 131—14.)



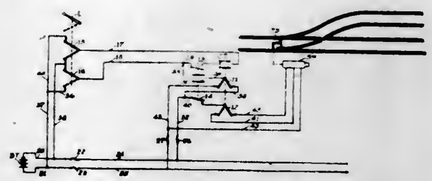
In a cutting and block forming machine of the character described the combination of a rotatable cutter frame comprising a pair of supporting wheels rotating together, a plurality of knife holders pivoted to and between said wheels, a knife blade supported in each holder, the parts of each knife holder disposed to normally maintain its knife blade in a vertical plane by gravity, an adjuster arm supported adjacent to one of said wheels to contact with one side of any of said holders and an adjusted bracket supported adjacent to the other wheel to contact with the other side of any of the holders, the said adjuster arm and adjuster bracket functioning to locate said knife blades in vertical planes.

1,887,047. METHOD OF CONVERTING OIL. CLYDE L. SMITH and CORNELIUS B. WATSON, Chicago, Ill., assignors to The Pure Oil Company, Chicago, Ill., a Corporation of Ohio. Filed Mar. 22, 1928. Serial No. 263,904. 1 Claim. (Cl. 196—52.)



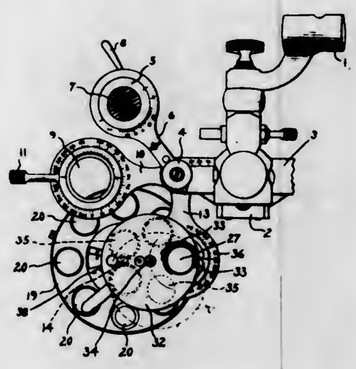
The method of converting high boiling point hydrocarbon oils into oils having lower boiling points, which comprises subjecting a continuously flowing stream of such high boiling point oil to temperatures sufficiently high to effect vaporization thereof without substantial cracking, continuously introducing into said vapors a finely divided solid catalytic material for movement in unison with said vapors, continuously passing the vapors together with the catalytic material at high velocity in a stream of restricted cross-sectional area through an elongated cracking zone wherein said vapors are heated to a temperature in excess of 1000° F. while in the presence of said catalytic material, arresting conversion reactions in the oil vapors discharged from said cracking zone by bringing said vapors into direct contact with a body of cooling oil, whereby a portion of said vapors is condensed, separating from the mixture of condensed vapors and cooling oil the catalytic materials, and separately returning to the system for passage therethrough the mixture of liquid oils and said catalyst.

1,887,048. TRAFFIC CONTROLLING SYSTEM FOR RAILROADS. JAMES E. STEPHENSON, Rochester, N. Y., assignor to General Railway Signal Company, Rochester, N. Y. Filed Feb. 20, 1931. Serial No. 517,251. 7 Claims. (Cl. 246—3.)



4. In combination, a controlled device, a battery source, a control circuit, a control lever having contacts for reversing the direction of current flow in said control circuit, a control relay included in said control circuit, means closing said control circuit only after said control lever has been moved to a new position and only until said control relay is responsive to such control, means operating said controlled device in accordance with said control relay, and means preventing operation of said controlled device while said control circuit is energized.

1,887,049. DEVICE FOR TESTING THE EYE. EDGAR D. TILLYER, Southbridge, Mass., ELMORE A. FORSHNEY, New York, N. Y., and IVAN S. NOTT, Toronto, Ontario, Canada, assignors to American Optical Company, Southbridge, Mass., a Voluntary Association of Massachusetts. Filed Oct. 31, 1927. Serial No. 230,095. 8 Claims. (Cl. 88—22.)



1. In a device for testing the eye, a member having a sight opening, an eye cup surrounding the sight opening and having a bounding edge the transverse plane of which is normal to the line of sight of the instrument whereby by sighting across the line of the bounding edge the surface of the patient's eye may be placed tangent to the line of said bounding edge to give a fixed determined position of test, movable lens carrying means, and a lens in the lens carrying means adapted to be moved into or out of line with the sight opening and having as one of the elements determining its power its distance from the bounding edge of the eye cup.

1,887,050. EXTRACTION OF ORGANIC SUBSTANCES. KARL VIERLING, Ludwigshafen-on-the-Rhine, Germany, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Filed May 8, 1930, Serial No. 450,867, and in Germany May 6, 1929. 5 Claims. (Cl. 127—44.)

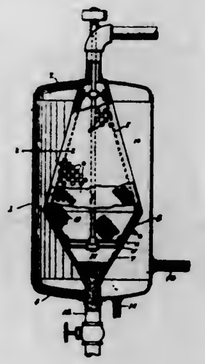
1. The process for the extraction of sucrose from vegetable materials containing the same which comprises treating the said materials with liquid ammonia at superatmospheric pressure.

1,887,051. TREATMENT OF HYDROCARBON OILS. HAROLD C. WEBER, Milton, Mass., assignor to Universal Oil Products Company, Chicago, Ill., a Corporation of South Dakota. Filed Nov. 3, 1930. Serial No. 493,246. 8 Claims. (Cl. 204—31.)

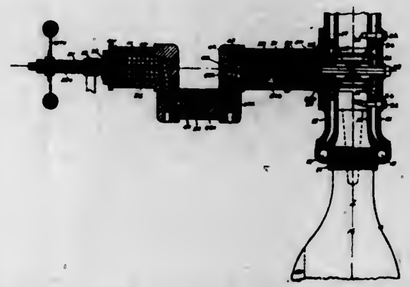
1. A process for the hydrogenation of hydrocarbons comprising passing an electric current through a mixture containing the said hydrocarbons and a substance capable of conducting the electric current, the said substance being characterized by ability to react with the electrodes between which the current is flowing to form finely divided solid secondary products insoluble in the hydrocarbons which act catalytically to promote the hydrogenation of said hydrocarbons.

1,887,052. FILTER. OLIVER B. WENDELN, Nederland, Tex., assignor to The Pure Oil Company, Chicago, Ill., a Corporation of Ohio. Filed Mar. 12, 1929. Serial No. 346,345. 2 Claims. (Cl. 183—72.)

1. In a filter of the class described, a casing formed to include a substantially closed chamber, a rigid walled screen unit of conical form arranged within said chamber, said unit being formed to include a perforate outer metallic shell, a perforate plate arranged in engagement with the inner walls of said shell, a fine wire mesh screen engaging with the inner surface of said plate, means for introducing commingled oil vapor and finely divided clay into said screen unit to permit of the passage of the oil vapor through the perforate walls of the screen unit into said chamber, said perforate walls serving to obstruct the passage of the clay therethrough, a vapor outlet leading from said chamber and a clay outlet leading from the interior of the screen unit.



1,887,053. PROPELLER AND ENGINE JOINTLY FOR AEROPLANES. ROBERT YATES, Passaic, N. J. Filed Dec. 29, 1931. Serial No. 583,666. 3 Claims. (Cl. 170—163.)

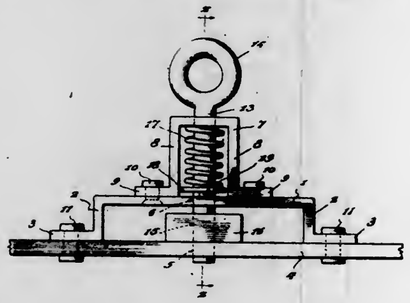


1. In a tortuous engine and propeller shaft having a channel through the center for lubricating purposes, means for conveying a positive continuous pressure and movement from one body to another through the shaft and channel, by having the channel filled with metallic balls, and a lubricating fluid flowing freely between and around the balls.

1,887,054. TRAILER COUPLER. AUSTIN T. WOOD, Paint Rock, Tex. Filed Aug. 14, 1931. Serial No. 557,169. 1 Claim. (Cl. 280—33.15.)

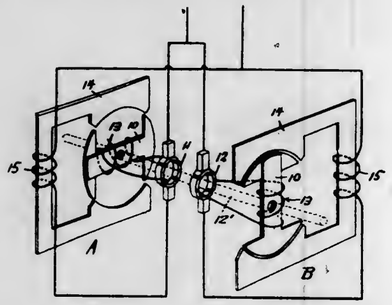
A coupling for a trailer tongue comprising an elongated longitudinally disposed yoke having its opposite ends provided with lateral attaching feet adapted to be secured upon a portion of a vehicle and extend transversely thereof, a vertical bracket of the same width as the yoke rising from the intermediate portion of the yoke and provided with lateral attached feet resting on and secured to the upper face of the yoke, the yoke and bracket being provided with vertically alined openings, a

vertical plunger slidably mounted through the openings in the bracket and yoke and having its upper end provided with an eye and its lower portion extended downwardly to engage through a tongue and seat in an opening formed in the portion of a vehicle upon which the yoke is secured, a washer fitted about the plunger above said yoke, a key



extending through said plunger and supporting said washer, and a spring surrounding the plunger and housed within the bracket, one end of the spring bearing against the upper end of the bracket and the other end of the spring bearing against the washer to yieldingly resist upward movement of the plunger to releasing position.

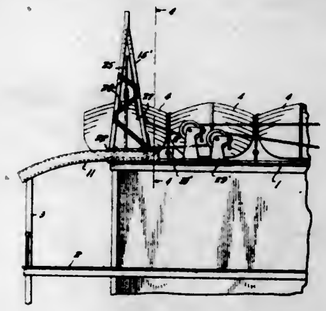
1,887,055. ELECTRIC MACHINE. GERALD CRAFT HENNESSY, Washington, D. C. Filed Mar. 26, 1926. Serial No. 97,631. 2 Claims. (Cl. 172—275.)



2. An electric machine comprising a plurality of armature magnets mounted on a shaft, field magnets associated with said armature magnets to form a plurality of couples, each couple consisting of one armature magnet co-operating with only one field magnet, the magnetic circuit of the armature magnet of each couple being separate from the magnetic circuit of the armature magnet or magnets of the other couple or couples, means to cyclically change the direction of current in the armature magnets, the direction of current being changed in the armature magnet of one couple without affecting the direction of current in the armature magnet or magnets of the other couple or couples.

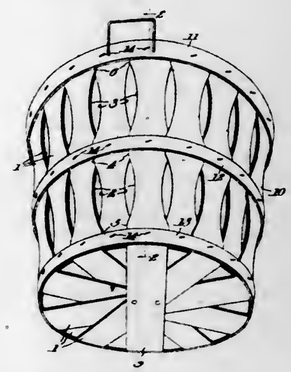
1,887,056. LAUNCHING MACHINE. CHARLES HUNT, Washington, D. C. Filed Aug. 3, 1932. Serial No. 627,367. 7 Claims. (Cl. 9—22.)

1. A mechanism for launching a life boat from either side of a ship comprising boat carriages for supporting the boat, pairs of davits for raising, holding, and lowering the boat, said davits being mounted upon separate davit carriages, trackways for said boat carriages and said davit carriages, a rotatable drum for each davit carriage, a cable wound upon each drum the ends thereof being secured to a davit carriage, and means for actuat-



ing a pair of said drums so as to move a pair of davits and the boat carriages to either side of the ship in order to position the boat for launching.

1,887,057. VENTILATED BASKET. OLIVER MATTHEW JAMES, Dayton, Tenn., assignor to Dayton Veneer & Lumber Mills, Dayton, Tenn., a Corporation of Tennessee. Filed Dec. 28, 1931. Serial No. 583,588. 4 Claims. (Cl. 217—122.)

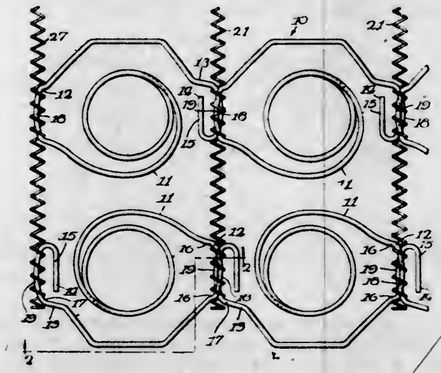


1. A ventilated basket, formed of a web comprising a plurality of similar stave members forming the basket bottom and sides, hoops encompassing said stave members to hold the same in basket-forming assembly, and fastening means passing through said hoops and stave members to hold the same in assembled relation, the adjacent edges of the side forming portions of said stave members being cut away to provide ventilating openings intermediate said hoops and those portions of the edges of the stave members underneath said hoops being in contact, whereby engagement of said fastening means with said stave members is ensured regardless of the arrangement of the fastening means relatively to the hoops.

1,887,058. SPRING ASSEMBLY. FRANCIS KARR, Holland, Mich. Filed Dec. 21, 1927. Serial No. 241,529. 4 Claims. (Cl. 5—269.)

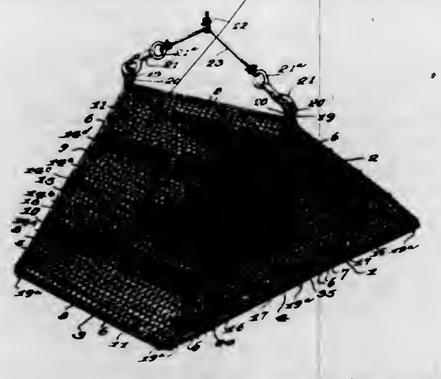
1. In a spring assembly, a plurality of spiral springs arranged in adjacent rows each spring having its terminal coil provided with a curved offset portion having a

shoulder at each side thereof, the offset portions of the coils of one row over-lapping those of an adjacent row, and a helical closely embracing said curved portions and hold-



ing them permanently in over-lapping relation, and engaging said shoulders, thereby preventing rotation of the corresponding springs.

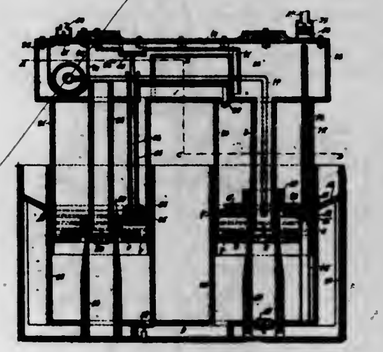
1,887,059. CRUSTACEAN TRAP. CHARLES KRAUS and ALBERT J. CUSICK, New Orleans, La. Filed July 3, 1930. Serial No. 465,722. 14 Claims. (Cl. 43—105.)



1. A trap comprising a body including a rectangular shaped bottom member, rectangular shaped side members, and triangular shaped end members, said body being triangular shape in cross-section and the side members being inclined toward each other, one of said sloping side members being provided with an opening and a vertically swinging trap door at the said opening, and means for yieldingly maintaining said trap door in closed position extending substantially coextensive with said side member.

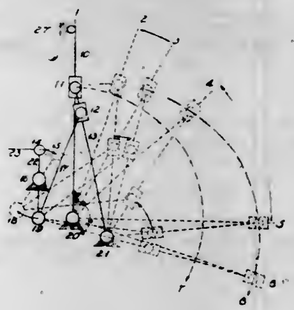
1,887,060. HYDROPNEUMATIC SUSPENSION AND SHOCK-ABSORBING DEVICE FOR VEHICLES. PIERRE LACROIX, Bauce-Flawinne, Belgium. Filed July 16, 1931, Serial No. 553,147, and in Belgium Oct. 4, 1930. 5 Claims. (Cl. 267—64.)

1. A hydro-pneumatic suspension device, comprising two pairs of telescopic cylinders in substantially vertical arrangement, connecting conduits between the upper cylinders and the lower cylinders respectively and securing passages in a unilateral direction, a common chamber connecting the upper cylinders and having two compartments, a valve controlled conduit connecting the compartments, tubular elements standing up from the bottom of the lower cylinders, annular discs surrounding said tubular elements and fixed within the upper cylinders, said discs forming throttling means for the liquid passing



between the tubular members and the discs respectively, means for supplying air under pressure to the upper cylinders, and a receiver surrounding the lower cylinders for the purpose set forth.

1,887,061. AUTOMATIC CARBURETOR CHOKE MECHANISM. CHARLES WIGHT MACMILLAN, Cambridge, Mass. Filed Sept. 6, 1930. Serial No. 480,205. 9 Claims. (Cl. 123—179.)

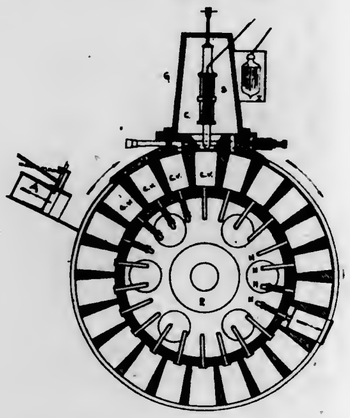


1. An automatic carburetor choke mechanism operating in conjunction with a throttle valve control to which it is attached and a movable thermostat-controlled piece with which it comes in contact, thereby correctly regulating the choke valve of a carburetor.

1,887,062. VACUUM SOLDERING MACHINE. SALVADOR MORASSO, Saladillo, Rosario de Santa Fe, Argentina, assignor to Compania Swift de la Plata Sociedad Anonima, Buenos Aires, Argentina. Filed Sept. 22, 1930, Serial No. 483,699, and in Argentina May 12, 1930. 6 Claims. (Cl. 113—82.)

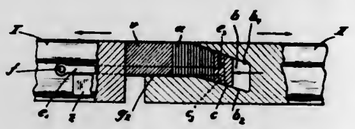
1. A vacuum soldering machine comprising a carrier having a plurality of spaced sockets adapted to receive cans, a shoe arranged to close several of said sockets hermetically, said shoe having a soldering chamber therein positioned to communicate with one of said sockets, a soldering device arranged to operate within said solder-

ing chamber, means to exhaust said soldering chamber, means holding a supply of solder wire, means to feed said solder wire intermittently into said soldering cham-



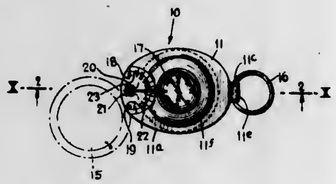
ber for coaction with said soldering device, and means to actuate said carrier intermittently to register said sockets successively with said soldering chamber.

1,887,063. RAIL JOINT. KARL NAST, Stuttgart, Germany. Filed Jan. 28, 1932, Serial No. 589,341, and in Germany July 8, 1931. 20 Claims. (Cl. 238—228.)



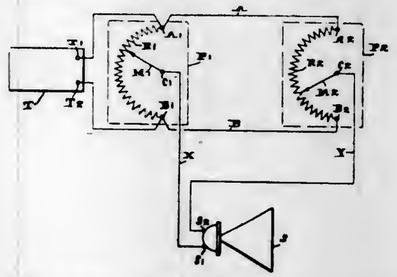
1. A rail joint comprising filling plates for the gap, and means for varying the number of plates in the gap in conformity with its width.

1,887,064. COMBINATION SUN WATCH DIAL AND COMPASS. HERMAN NEUWIRTH, New York, N Y. Filed June 27, 1931. Serial No. 547,237. 2 Claims. (Cl. 33—62.)



1. In a device of the class described, the combination with a housing, of a supporting member at one end of said housing, a boss rising from the top side of said housing, a compass seated within a depression in the top side of said boss, and a sun watch mounted on the top side of said housing in juxtaposition to said boss and compass, said sun watch having a portion of its dial overlapping an adjacent wall portion of the boss to dispose the center of the arc of the said dial portion in substantially close proximity to an adjacent side of said compass.

1,887,065. INTENSITY CONTROLLING SYSTEM FOR RECEIVERS. LAURENCE O. PAINTER, St. Paul, Minn., assignor to Program Service Company, St. Paul, Minn., a Corporation of Delaware. Filed July 26, 1930. Serial No. 470,823. 3 Claims. (Cl. 179—1.)



1. In an intensity controlling system for receivers such as loud speaking telephones or televisors, a source of sound or image carrying current, a receiver, a pair of physically separated independently controllable electrical intensity controlling devices each having an impedance element, a connection between one of the terminals of said source of current and one of the terminals of each of said impedance elements, and a connection between the second terminal of said source of current and the other terminal of each of said impedance elements, and connections between said receiver and said intensity controlling devices whereby potential impressed upon said receiver may be varied or made zero by manipulation of either of said intensity controlling devices.

1,887,066. TIE FOR MATTRESSES, CUSHIONS, ETC. ARTHUR D. PATCHEN, Waterbury, Conn., assignor to Scovill Manufacturing Company, Waterbury, Conn., a Corporation of Connecticut. Filed Nov. 17, 1931. Serial No. 575,575. 3 Claims. (Cl. 24—102.)



1. A mattress or cushion tie comprising a pair of buttons and an intervening substantially inextensible metal chain of a length conforming with the thickness of the mattress or cushion to be tied, one of said buttons being connected at one end of said tie by means of a pair of snap fastener elements comprising a socket and stud of which the former is a part of the button and the latter a part of the link at one end of the chain, the socket being sufficiently flexible to permit the button to be snapped over and into an engaging relation with an element of the chain at one end of the tie after the tie has been drawn through the mattress or cushion, but of such form and strength as to prevent separation when subjected to the stresses incident to normal service.

1,887,067. PIANO TRUCK. SVEN JOHAN PEHRSSON, Elyria, Ohio, assignor to The Colson Company, Elyria, Ohio, a Corporation of Ohio. Filed Oct. 2, 1929. Serial No. 396,680. 5 Claims. (Cl. 280—35.)

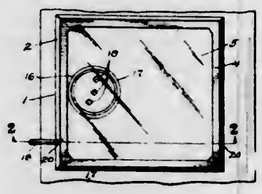
1. In a wheeled truck for pianos, a central head, comprising upper and lower portions, a plurality of arms

pivoted at spaced points to the head between said portions and extending laterally therefrom, the arms each comprising a telescoping internal element telescoped within a tubular element, means for locking the telescoping



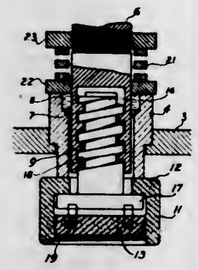
elements in telescopingly adjusted positions, a supporting wheel for each of the arms adapted to roll upon the floor, and each arm being provided with a piano supporting foot.

1,887,068. GAME DEVICE. HENRY K. RENZ, Columbus, Ohio, assignor to The Superior Confection Company, Columbus, Ohio, a Corporation of Ohio. Filed Dec. 17, 1930. Serial No. 502,966. 4 Claims. (Cl. 273—145.)



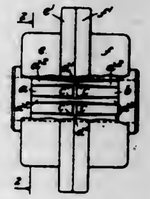
1. In a dice shaking device, a casing having a transparent top, a container so positioned below said top and adapted to confine one or more dice therein, a shaker plate arranged below said container and forming a bottom therefor, a resilient support for said plate, a plunger member slidably positioned and having its ends projecting through the side walls of said casing, a cam member upon said plate, and means formed with said plunger for engaging said cam whereby the plate is forced to one side and when free therefrom will be reciprocated to tumble said dice by the action of said resilient support.

1,887,069. ELECTRIC POWER RECTIFIER ANODE. OSKAR SEITZ, Baden, Switzerland. Filed Mar. 25, 1931, Serial No. 525,225, and in Germany Mar. 24, 1930. 7 Claims. (Cl. 250—27.5.)



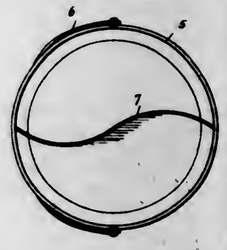
1. An anode structure for electric power rectifiers of the metallic vapor type comprising an insulator, a metallic anode stem extending through said insulator, an anode head of graphite divided into two portions connected by screw threads, a connector having a screw thread engaging the thread in said anode stem to connect said anode head therewith, a locking pin engaging the thread of said anode stem and of said connector to prevent relative rotation therebetween, pins inter-connecting said anode head and said connector to prevent relative rotation therebetween, a spring inter-connecting said insulator and said anode stem to place said anode head under compressive stress, and a nut threadedly engaging said anode stem to vary the compression on said spring.

1,887,070. FLEXIBLE SHAFT COUPLING. GEORGE STEELE, SKEVINGTON DICKINSON COWLISHAW, and JOHN BUCKLEY CAPEY, Hanley, Stoke-on-Trent, England. Filed July 30, 1931, Serial No. 553,974, and in Great Britain Aug. 8, 1930. 6 Claims. (Cl. 64—96.)



1. In a flexible shaft coupling, a pair of mutually opposed discs formed with axially extending straight sided grooves of uniform width throughout the effective length of said grooves, and spring blades substantially fitting said grooves by the ends of said blades and having sides converging from said ends towards the mid-lengths of said blades.

1,887,071. WINDOW CLEANER'S PAIL. CARL F. STIEL, St. Paul, Minn. Filed May 17, 1930. Serial No. 453,287. 1 Claim. (Cl. 220—22.)

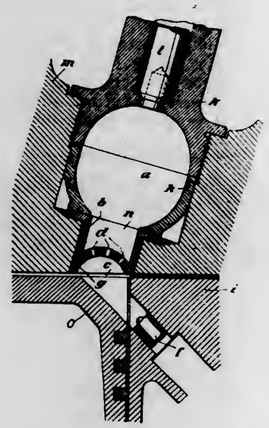


In a structure of the class described, a pail body open at the upper end thereof, and a partition extending entirely across the central portion of the pail to divide the same into a pair of separate compartments, said partition being of ogee formation causing each compartment to have a major section provided with outwardly curving walls and a minor section, the major section of said compartment is adapted for the reception of window cleaning implements.

1,887,072. INTERNAL COMBUSTION ENGINE. HEINZ SUDER and MAX GOTH, Munich, Germany, assignors to Sueddeutsche Bremsen-Aktiengesellschaft, Munich, Germany. Filed Sept. 22, 1931, Serial No. 564,366, and in Germany Jan. 31, 1931. 2 Claims. (Cl. 123—132.)

1. In an internal combustion engine, a working cylinder, an ignition chamber at the head thereof and having

an opening directed toward said cylinder, means in the side of the cylinder for projecting fuel toward said opening, and a perforated fuel deflecting wall or screen at said

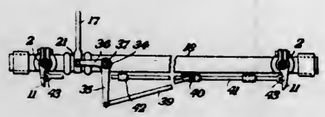


opening having the form of a segment of a spherical shell the concave surface of which is directed toward the cylinder.

1,887,073. METHOD OF FLAVORING IN CANNING, PRESERVING, AND BOTTLING OPERATIONS. GERHART S. SUPPIGER, Belleville, Ill., assignor to Scientific Tablet Company, Belleville, Ill., a Corporation of Illinois. Filed Jan. 2, 1931. Serial No. 506,079. 3 Claims. (Cl. 99—8.)

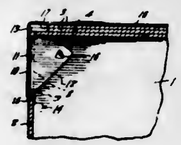
1. In the process of packing food products in containers in which the containers are filled in sequence with the food product partially in solid and partially in liquid state, and in which the contents of the container are subjected to agitation in the canning process subsequent to being filled, that improvement which consists in adding to the container a flavoring in the form of a compacted body having a low solution factor in the liquid in the container, and thereafter sealing the container before any substantial dissolution of the flavoring body.

1,887,074. LAMP CONTROL FOR VEHICLES. JULIAN SEYMOUR TRITTON, Surbiton, England. Original application filed Sept. 3, 1931, Serial No. 561,025, and in Great Britain Sept. 17, 1930. Divided and this application filed May 9, 1932. Serial No. 610,227. 19 Claims. (Cl. 240—62.)



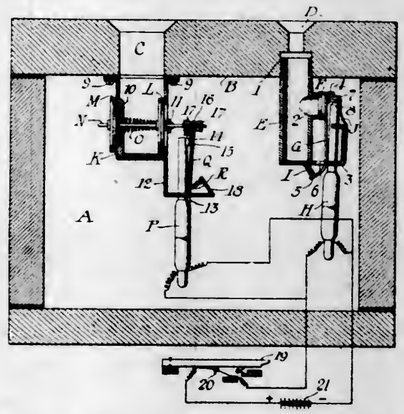
1. Swivelling apparatus for vehicle head lamps disposed on either side of the vehicle with restoring means for returning the lamps to initial position, the vehicle including steering mechanism, comprising in combination with projecting arms, one for each lamp, a reciprocating rod, guides for mounting the said rod to reciprocate rectilineally between the lamps with its ends freely engaging the projecting arms on the said lamps, a pivotal crank lever having a plurality of arms, a link for connecting one arm of the said lever to the said rod, and connecting means for connecting another arm of said lever to the steering mechanism of the vehicle.

1,887,075. CONTAINER. GEORGE A. WALTER, Ithaca, N. Y. Filed Nov. 27, 1931. Serial No. 577,609. 4 Claims. (Cl. 229—7.)



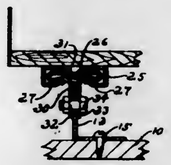
1. A container comprising side portions and end portions, flaps extending from each portion adapted to be folded to close the container, the flaps extending from said side portions having a cut-away portion at one end, a spout at the top of one side portion projecting slightly above the folded end flaps and in the cut-away portion to enable easy opening of said spout.

1,887,076. DIRECT ELECTRIC ACTION FOR PIPE ORGANS. SAMUEL RUSSELL WARREN, Brattleboro, Vt., assignor to Estey Organ Company, Brattleboro, Vt., a Corporation of Vermont. Filed Dec. 24, 1931. Serial No. 583,092. 7 Claims. (Cl. 84—339.)



4. A valve casing having an air port, in combination with an electromagnet; an armature; a pallet for closing the casing port operatively connected to move with said armature; a light spring acting on said armature to maintain the pallet closed; and an auxiliary quick acting spring normally separated from said armature and pallet but tensioned by said armature when it is completely moved by the magnet whereby it acts to move the armature the instant the magnet is deenergized.

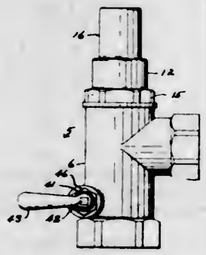
1,887,077. ADJUSTABLE SEAT. FRED J. WESTROPE, Detroit, Mich., assignor to The Murray Corporation of America, a Corporation of Delaware. Filed Nov. 12, 1928. Serial No. 318,663. 4 Claims. (Cl. 155—14.)



3. A sliding connection for a movable seat and a fixed support comprising a longitudinally extending hollow T-shaped member having a longitudinally extending groove

in the cross bar portion thereof, a channel substantially encompassing said cross bar and having a raised longitudinal ridge in its bottom bearing in the groove in said T-shaped member and having inturned side flanges with inwardly offset rounded edges bearing against the sides of said T-shaped member opposite said longitudinal bead.

1,887,078. VALVE. ABRAM W. WHEATON, Maplewood, N. J., assignor to A. W. Wheaton Brass Works, Newark, N. J., a Corporation of New Jersey. Filed Jan. 23, 1930. Serial No. 422,804. 2 Claims. (Cl. 251—143.)



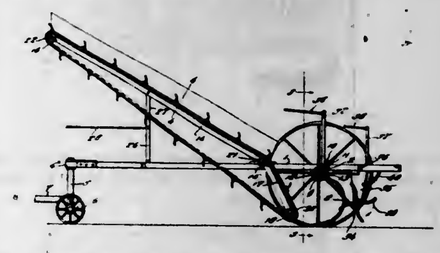
2. A valve of the class described comprising, a casing having a bonnet attached thereto, said casing having inlet and outlet openings, a valve seat provided within said casing intermediate said openings, a plunger having a check piston portion movable within said bonnet and a valve disk portion movable within said casing to and from said valve seat for respectively closing and opening said valve, said check piston portion and said valve disk portion being substantially spaced from one another, whereby said plunger is centrally guided within said casing, a compression spring contained within said bonnet and engaging said check piston portion for effecting the closing of said valve, a cam contained within said casing and engaging said plunger therewithin, said cam being operable to effect the opening of said valve against the tension of said spring, a check valve carried by said check piston portion, said check valve operating to enable the ready and quick opening of said valve while operating to check the closing movement thereof, said bonnet having longitudinal grooves in its interior surface for cooperating with said check piston portion, the part of said longitudinal grooves passed over by said check piston portion, during the final stages of the closing movement of said valve disk portion, being progressively constricted to effect a smooth and quiet seating of said valve disk portion without chattering.

1,887,079. METHOD OF MANUFACTURING STAPLE-DRIVING PUNCHES. GERHARD WINTER, Vienna, Austria. Filed May 4, 1931, Serial No. 534,973, and in Austria May 10, 1930. 7 Claims. (Cl. 76—101.)



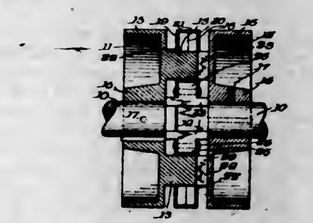
1. The method of manufacturing a device for driving wire staples which consists in forming a punch having a cylindrical upper portion and a flat lower portion, cutting a notch in the outer end of the said flat portion, inserting said punch in a hollow sleeve having a cylindrical upper portion and a flat lower portion, the width of the flat lower portion being greater than the diameter of said cylindrical upper portion, and widening said notch laterally to flare the extreme end of the flat lower portion of the punch, for the purpose of assembling said punch within the hollow sleeve, and of preventing the removal of the punch from the sleeve.

1,887,080. ROLLING AND LOADING HAYRAKE. JOHN BAGGIOLINI, Soledad, Calif. Filed Jan. 23, 1931. Serial No. 510,794. 3 Claims. (Cl. 56—356.)



1. A combined hay rake and loader capable of use as a trailer for a hay wagon and including in combination a wheel supported frame, a rake including a plurality of tines mounted transversely of the frame adjacent the rear end thereof and having its tines capable of swinging movement about a horizontal axis, a cleaning roller for the tines mounted rearwardly thereof transversely of the frame, pivotally mounted means for supporting the roller and including means for moving the roller into and out of operative position with respect to the tines, an endless conveyor rockably mounted adjacent one end thereof in advance of said rake, said conveyor at said one end provided with a downwardly and rearwardly inclined extension, and means engageable with the wheel supported frame and the frame of said conveyor for supporting the latter at an angle to the perpendicular.

1,887,081. COUPLING. MARC A. BURTTELL, Mishawaka, Ind., assignor to Dodge Manufacturing Corporation, Mishawaka, Ind., a Corporation of Delaware. Filed Jan. 2, 1932. Serial No. 584,340. 15 Claims. (Cl. 64—191.)

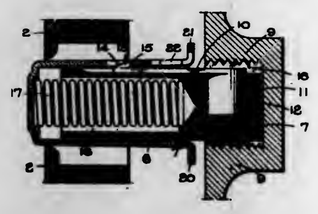


1. A coupling element for the type of coupling described comprising in combination a pair of circular sheet metal plates having an integral continuous flanged rim, recesses in said plates for receiving driving and driven elements, said plates having webs of substantial depth for withstanding the forces transmitted by the coupling, and fastening means for holding said plates together.

1,887,082. SAFETY APPLIANCE FOR ELECTRICALLY HEATED APPARATUS. WALTER HENRY BULPITT, Birmingham, England. Filed Dec. 28, 1931, Serial No. 582,749, and in Great Britain June 5, 1931. 8 Claims. (Cl. 200—142.)

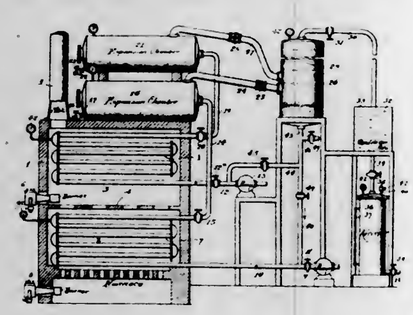
1. Safety appliance for electrically heated apparatus comprising in combination two main members slidably associated together, one of said main members having a cup-like recess, a catch having a portion located and normally soldered in said recess, a spring tending to slide

said main members apart, and means on the catch operating to prevent relative endwise movement of the two main members under pressure of said spring, said catch



being movable, when the solder melts, into a position permitting relative endwise movement of said main members under pressure of the spring.

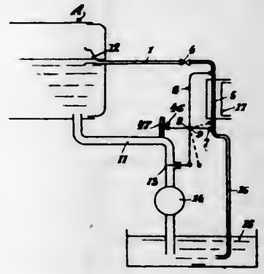
1,887,083. PROCESS AND APPARATUS FOR CRACKING OIL. GUSTAV EGLOFF, Chicago, Ill., assignor to Universal Oil Products Company, Chicago, Ill., a Corporation of South Dakota. Filed Dec. 9, 1920, Serial No. 429,818. Renewed Nov. 23, 1928. 6 Claims. (Cl. 196—58.)



1. A process for producing a cracked blended low boiling point oil, consisting in simultaneously subjecting a gas oil and a fuel oil to independent cracking treatments under relatively higher and lower conditions of temperature and pressure respectively, in completely preventing commingling of liquid constituents of said oils, in uniting the vapors evolved from the oils while at a high temperature, in subjecting the united vapors to dephlegmating and condensing actions, and in uniting reflux condensate separated from the vapors during the dephlegmating action with the gas oil undergoing treatment in the process.

1,887,084. WATER LEVEL EXPANSION REGULATOR FOR USE IN CONNECTION WITH BOILERS OR THE LIKE. MARCEL EHLINGER, Mulhouse, France, assignor to Societe Alsacienne de Constructions Mecaniques, Mulhouse, France. Filed Sept. 8, 1930, Serial No. 480,593, and in France Oct. 17, 1929. 10 Claims. (Cl. 122—451.1.)

6. In the combination of a receptacle adapted to contain a liquid in contact with its vapour with control means for automatically regulating the supply of liquid to said receptacle by the liquid level, control means including a metallic surface, means for circulating in contact with at least one face of said surface a mixture formed by a portion of the vapour and liquid contained in said receptacle and such that the proportions of vapour and liquid which form the mixture vary with the liquid level in the receptacle, the opposite face of said surface being in contact with a medium at a temperature different from that of said mixture when in contact with said first named face, whereby said metallic surface is subjected to changes



in dimensions owing to thermal expansion and contraction, and means responsive to said changes in dimensions of the metallic surface to vary the supply of liquid.

1,887,085. CENTER PUNCH CONSTRUCTION. LOUIS B. EHRLICH, Toledo, Ohio. Filed June 27, 1930. Serial No. 464,247. 3 Claims. (Cl. 81—1.)

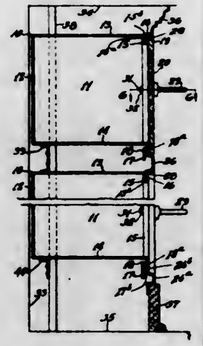


1. In combination, a tool carrying member having a shank portion; an impact member in the form of a coiled element having its convolutions in normally close contact with one another, a portion of said element being secured to the shank portion of said member whereby the tool receives the impact resulting from the striking action of the convolutions against one another when the element is tensioned and released, and the space enclosed by the coiled element except for limited portions at the end thereof being unoccupied so the body of the element may be distorted to a substantial degree from the line of a blow to be delivered or for storage in a shorter space.

1,887,086. NICHES EMPLOYED IN CREMATORIUMS. EDWARD E. ERICKSON, Portland Oreg. Filed Nov. 21, 1931. Serial No. 576,591. 1 Claim. (Cl. 312—107.)

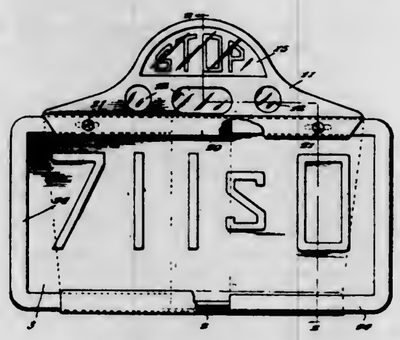
A construction of the class described, comprising a frame, consisting of vertical and transverse bars having having lateral flanges, a plurality of compartments, each compartment having the front edges of the tops and sides bent inwardly and thence outwardly to form grooves and the front edge of the bottom bent downwardly and reverse-

ly bent and downwardly again to form a grooved flange, the flanges on the side of the compartments interfitting and interlocking with the lateral flanges on the vertical



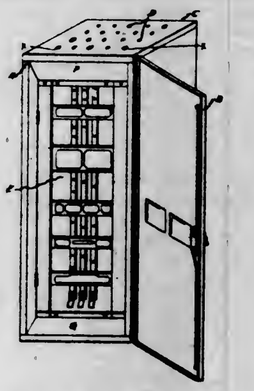
standards, and the flanges on the tops and bottoms of the compartments interfitting and interlocking with the lateral flanges on the transverse bars.

1.887,087. LICENSE PLATE HOLDER AND SIGNAL LIGHT. JOHN FRISNER, Denville, N. J. Filed Dec. 29, 1931. Serial No. 583,751. 1 Claim. (Cl. 40—125.)



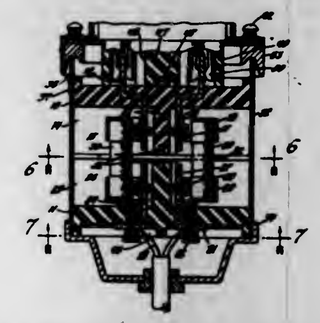
A device of the class described comprising a back plate having its side edges converging downwardly and its lower end provided with a terminal horizontal guide flange, an upper guide flange spaced vertically from the lower flange and provided with openings, coacting substantially rectangular end frames, slidably mounted in said guide flanges and adapted to receive a license plate, the combined length of the end frames being greater than the width of the back plate and said end frames being each provided with a marginal flange on three sides thereof to receive the license plate, one of the flanges of each end frame at the top thereof being provided with a horizontal slot, clamping bolts extending through the openings in the upper guide flange, and horizontal slots in the flanges of the end frames and through alined openings in the license plate and back plate, nuts engaging the inner ends of the clamping bolts and springs interposed between the nuts and said back plate for holding the end frames carrying the license plate in adjusted position with respect to said back plate.

1,887,088. PANEL BOARD CABINET. HARRISON J. L. FRANK, Hamtramck, Mich., assignor to Bull Dog Electric Products Company, Hamtramck, Mich., a Corporation of West Virginia. Filed May 31, 1929. Serial No. 367,472. 1 Claim. (Cl. 247—10.)



In combination, a sheet metal cabinet having ends whose planes are horizontal and sides whose planes are vertical, a panel board therein, disposed in spaced relation to the ends and sides thereof, and secured thereto by means passing thru the cabinet back, sheet metal side plates covering the spaces between the panel board sides and the cabinet sides and hingedly secured to the cabinet sides so as to swing on vertical axes, from and against the panel board, and removably disposed sheet metal end plates in front of the side plates and covering the spaces between the panel board ends and the cabinet ends and overlapping the side plates, the end plates being provided with means secured thereto and projecting forwardly therefrom and accessible from the front of the cabinet to serve as handles whereby the end plates may be manipulated, and also serving to secure the end plates in place in the end spaces.

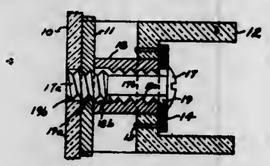
1,887,089. SELECTIVE FUSE PLUG SHELL. HARRISON J. L. FRANK, Highland Park, Mich., assignor to Bull Dog Electric Products Company, Hamtramck, Mich., a Corporation of West Virginia. Filed Feb. 14, 1930. Serial No. 428,291. 18 Claims. (Cl. 200—115.5.)



1. In a fused plug adapted for operative connection with a bus bar structure a central space-enclosing cap provided with means for detachably engaging the bus bar structure, thereby to hold the plug in place, a peripherally recessed, intermediate section of insulating material, pairs of relatively spaced contact members in the recesses of said intermediate section, each being provided with a fuse clip, one of each pair of said contact members terminating in a binding post located at one end of said intermediate

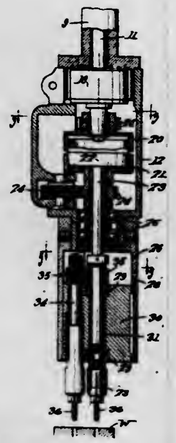
section, the other one of each pair of said contact members being terminally formed as a plug contact which projects into and is surrounded and protected by the central space enclosed by said cap, a second cap positioned on the opposite end of said intermediate section from that engaged by the first mentioned cap, longitudinally extending rods for holding the parts in assembled relation, and a rotatably mounted shell of insulating material surrounding said intermediate section and having an aperture adapted to be registered with a selected one of the recesses of said intermediate section to afford access thereto for inspection or replacement of a fuse therein positioned.

1,887,090. CONNECTING DEVICE. HARRISON J. L. FRANK, Highland Park, Mich., assignor to Bull Dog Electric Products Company, Detroit, Mich., a Corporation of West Virginia. Filed May 5, 1930. Serial No. 449,706. 5 Claims. (Cl. 173—324.)



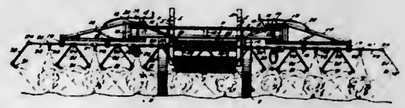
1. In combination with an immovably mounted bus bar, a unit adapted to be mounted on said bus bar and having a part to be electrically connected to said bus bar, said unit comprising an electrically conducting part, a screw bolt projecting therethru, and having a manipulating head on the side thereof most remote from the bus bar and having an electrically conducting bushing on the bolt on the side of the part nearest the bus bar, said bushing being long enough to engage the bar and the part to electrically connect them when the unit is mounted on the bar and the bolt threaded into the bus bar, the bolt and the bushing having cooperating formations serving to hold them together and on the part, so that neither can free itself from the part as the unit is being mounted, the formations permitting the bushing to slide on the bolt.

1,887,091. MULTISPINDLE TAPPER. ALBERT J. GIFFORD, Worcester, Mass., assignor to Leland-Gifford Company, Worcester, Mass., a Corporation of Massachusetts. Filed Dec. 16, 1930. Serial No. 502,746. 2 Claims. (Cl. 10—180.)



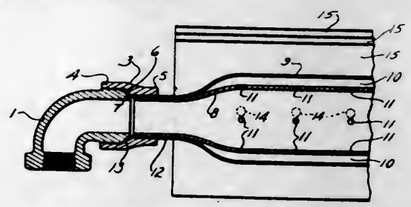
1. In a tapping machine, the combination with a tapping spindle and means for rotating it, of a driving box containing a part of said means, a casing carried by the box, a head in the casing movable axially, said head having openings therethrough including a central one for said spindle, a side spindle fixedly mounted on the head in one of the other openings and gearing in the casing and on the head for driving the side spindle from the first named spindle.

1,887,092. AGRICULTURAL DEVICE. HOWARD B. GLASE, Danielsville, Pa. Filed Mar. 9, 1932. Serial No. 597,825. 4 Claims. (Cl. 299—89.)



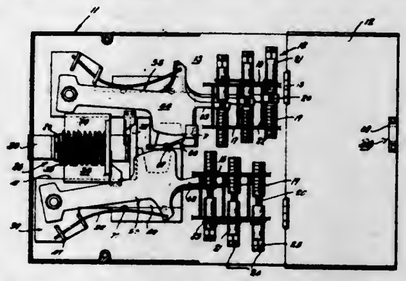
1. An agricultural spray machine comprising a carriage, a main spray head support mounted on the carriage transversely thereof, an extension spray head support attached to each end of the main support by a hinge having a vertical pintle, said extension supports lying in the same vertical plane when extended, the pintle in the hinge at one end being spaced from the supports a distance to permit one extension support to lie parallel to the main support when folded thereon, the pintle in the hinge at the other end being spaced a greater distance from the support to permit the other extension support to lie parallel to both the main and the extension supports when folded.

1,887,093. RADIATOR. LEWIS D. HARNETT and CORTLAND N. O'DAY, Columbus, Ohio, assignors to The Buckeye Blower Company, Columbus, Ohio, a Corporation of Ohio. Filed Nov. 2, 1931. Serial No. 572,590. 15 Claims. (Cl. 257—146.)



2. In a radiator, in combination with an inlet and an outlet fitting, a pair of pipes, one within the other and spaced therefrom, the ends of the outer pipe being reduced to contact with the ends of the inner pipe and the inner pipe having holes leading into the space between the pipes, and a nipple connecting each of the contacting ends of the pipes to one of the fittings, the nipple and the fitting having inclined surfaces between which the end of the outer pipe is gripped.

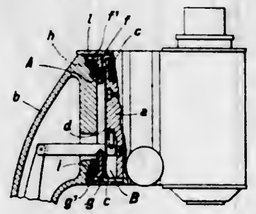
1,887,094. ADJUSTABLE LOCK. DANIEL HAVILAND, Los Angeles, Calif. Filed Apr. 10, 1931. Serial No. 529,093. 32 Claims. (Cl. 70—70.)



1. In a lock, a tumbler having a finger and a barrier having means to prevent or to permit passage of the finger

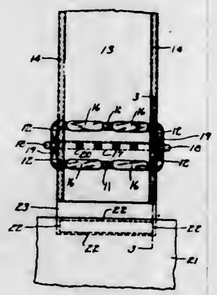
in reference to the barrier, a mounting for the tumbler and the barrier to permit a relative movement of translation, means to adjust the barrier independently of the position of the tumbler to position the means to permit passage of the finger at two extreme limits and at any intermediate point between such limits, said tumbler being mounted to align the finger with the means of the barrier permitting passage of the finger and the tumbler.

1,887,095. DEVICE FOR FINE FOCUSING OF MICROSCOPE TUBES. HELMUT HEMSCHEIDT, Jena Germany, assignor to the Firm of Carl Zeiss, Jena, Germany. Filed May 7, 1931, Serial No. 535,636, and in Germany May 22, 1930. 8 Claims. (Cl. 88—39.)



1. A miacroscope comprising a stand having plane guiding surfaces, a tube, a slide fixed to the tube, the slide being displaceable between the guiding surfaces, pins disposed between the guiding surfaces and the slide, the pins being arranged in groups, the pins of each group lying next to each other, intermediate pieces being disposed between the different groups, these intermediate pieces being fixed to one of the said parts for guiding the tube, the guiding surfaces of at least one side of the said slide being adjustable perpendicularly to the moving direction of the slide, and screws for adjusting the guiding surfaces, these screws being easily accessible from outside.

1,887,096. SLIDE BUCKLE. ROBERT J. HODGE, West Haven, Conn., assignor to American Buckle Company, West Haven, Conn., a Corporation. Filed Feb. 17, 1932. Serial No. 593,505. 1 Claim. (Cl. 24—196.)

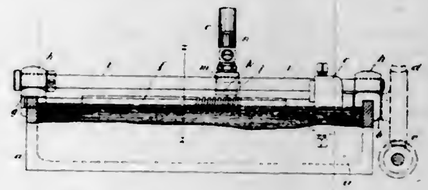


In a slide-buckle, the combination with a substantially-rectangular frame having two parallel side-bars having inner gripping-edges and two parallel end-bars, the former being substantially straight and having their ends shaped to form clearance notches having sharp rectangular corners set back of the inner gripping-edges of the said side-bars; of a slide having ripping-edges mounted upon the said end-bars for sliding movement thereupon, and an overall strap having thickened edges which, when the buckle is threaded, enter the respective clearance-notches in the frame and permit the faces of the strap between its said edges to lie smoothly between the gripping inner edges of the side-bars and the gripping-edges of the slide as they may be brought into play by the draft upon the strap.

1,887,097. METHOD OF REFINING ROSIN. IRVIN W. HUMPHREY, Wharton, N. J., assignor to Hercules Powder Company, Wilmington, Del., a Corporation of Delaware. Filed Sept. 12, 1930. Serial No. 481,000. 8 Claims. (Cl. 87—2.)

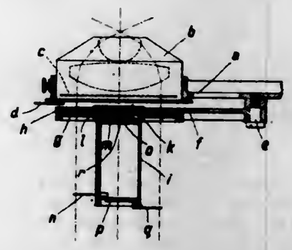
1. The method of refining rosin which includes admixing of anhydrous metallic chloride capable of removing color bodies from rosin with a solution of rosin in a suitable solvent, heating the mixture at a temperature below that which will cause the formation of any substantial amount of rosin oil, separating the rosin solution from the precipitate formed and separating the rosin from its solvent.

1,887,098. APPARATUS FOR HARDENING THE FLANKS OF SPINDLE AND WORM THREADS. FRIEDRICH KLOPP, Wald, Germany. Filed Mar. 6, 1930, Serial No. 433,777, and in Germany Mar. 12, 1929. 1 Claim. (Cl. 266—4.)



An apparatus for hardening the flanks of the screw threads of spindles, worms and the like, comprising in combination a quenching tank, bearings in said tank adapted to hold and rotate the work of which the flanks of the screw threads are to be hardened, a guide axle extending along said tank parallel to said bearings, an autogenous burner loosely mounted on said axle, and a fitted block on said burner adapted to engage in the screw thread of the work and to automatically feed said burner along said axle owing to the rotation of the work.

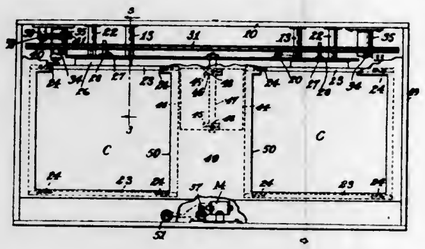
1,887,099. DEVICE PROVIDING DIFFERENTLY COLORED ILLUMINATION FOR MICROSCOPIC OBJECTS. PAUL KRAFT, Jena, Germany, assignor to the Firm Carl Zeiss, Jena, Germany. Filed Mar. 20, 1931, Serial No. 524,108, and in Germany Mar. 24, 1930. 2 Claims. (Cl. 88—40.)



1. A device providing differently colored illumination for microscopic objects, comprising a condenser, a diaphragm with adjustable aperture connected to the condenser, a color filter disposed in the exterior part of the condenser aperture, a color filter of different color provided in the central part of the condenser, two diaphragms with adjustable aperture disposed in front of the central

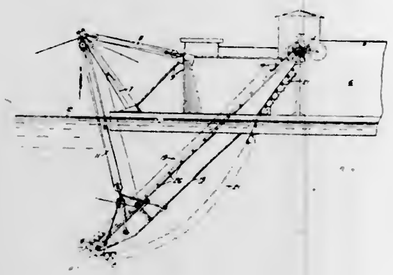
color filter, and a dispersing filter inserted between the last said two diaphragms and directly in front of that of these two diaphragms which faces the central color filter.

1,887,100. DISPLAY DEVICE. JOSEPH W. LITTMAN, New York, N. Y. Filed June 3, 1931. Serial No. 542,248. 21 Claims (Cl. 40—36.)



1. In a display device, a support to expand in a horizontal plane, a member associated in spaced relation with the support and arranged with a continuous guideway, display cards movably supported on said member in the guideway, and means interposed between the support and the member arranged with the guideway to engage and transport the cards along the guideway.

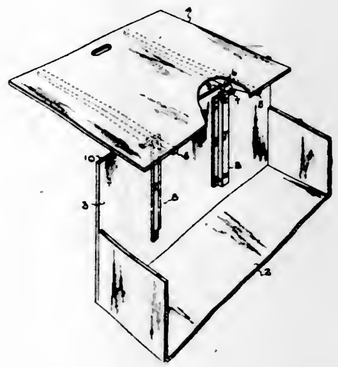
1,887,101. DREDGE. WALTER B. MACAULAY, Oakland, Calif. assignor to Yuba Manufacturing Company, San Francisco, Calif., a Corporation of California. Filed Aug. 2, 1930. Serial No. 472,562. 6 Claims. (Cl. 37—69.)



1. A dredge comprising a ladder, side plates on said ladder, and diaphragms spanning said plates and inclined to the longitudinal axis of said ladder.

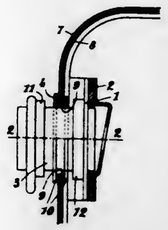
1,887,102. FILING CABINET. JOSEPH ROUS MATHIE, Bwana M'Kubwa, Northern Rhodesia, Union of South Africa. Filed Aug. 15, 1930, Serial No. 475,570, and in the Union of South Africa Aug. 20, 1929. 1 Claim. (Cl. 45—51.)

The combination of a vertical filing drawer for documents of a table adapted to be stowed away within the drawer at the front end thereof, guides on the inside of the front wall of the drawer, lugs extending from the underside of the table and having means at their ends engaging in said guides to constrain the table for a vertical sliding movement and a tilting movement to bring it to a horizontal position and extending from the front of the drawer to serve as a support for documents which are being filed, said table in its horizontal position resting on the top edge of the drawer front, and



stops on said guides for so limiting the vertical sliding movement of the means that the table is held in a horizontal position by said stops and by its contact with the top edge of the drawer front.

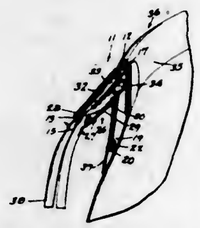
1,887,103. MEANS FOR ATTACHING LENSES TO CAMERAS. ANDRÉ NOËL MERLE, Vincennes, France, assignor to Pathe Cinema, Anciens Etablissements Pathe Freres, Paris, France. Filed Mar. 15, 1932, Serial No. 598,912, and in France Apr. 24, 1931. 3 Claims. (Cl. 95—11.)



1. In a camera, a box provided with an opening, a lens adapted to extend freely through said opening, and means slidingly mounted on said lens and connected with said box and adapted to cover the space between said lens and said opening, whereby light is prevented from entering said box through said opening.

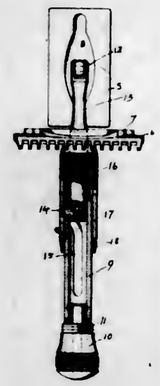
1,887,104. NECKTIE FASTENER. LEE ROY ROBERTS, Los Angeles, Calif. assignor of twenty per cent to Clarence B. Roberts, twenty per cent to Andrew B. Watson, and twenty per cent to Louis M. Henertz, Los Angeles, Calif. Filed Jan. 28, 1932. Serial No. 589,423. 9 Claims. (Cl. 2—150.)

1. A necktie fastener having a ring structure, wings connected thereto at the upper end to extend partly around the neckband of a collar, a pair of resilient pins having sharpened points extending downwardly from the wings and on opposite sides of the ring, said pins being adapted to engage the underside of the points of a collar, said ring being adapted for threading the two ends of a neck-



tie therethrough, means to press against the underside of the tie, and an ornamental panel secured on the front of the ring and covering a portion of the tie.

1,887,105. RAZOR. SAMUEL SEGAL, New York, N. Y., assignor to Segal Safety Razor Corporation, a Corporation of New York. Filed Apr. 21, 1931. Serial No. 531,695. 4 Claims. (Cl. 30—12.)



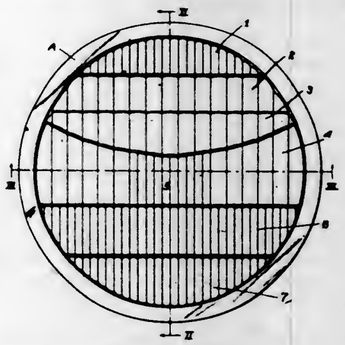
1. A razor comprising a tube, a sleeve shiftable along said tube, a clamping plate connected to said sleeve, a guard connected to said tube, a knob rotatably mounted by said tube and formed with screw threads and said sleeve being formed with screw threads for cooperation with said knob threads.

1,887,106. UNIVERSAL JOINT. DEARELL D. SHIERK, Portland, Oreg., assignor to Mabel L. Hamilton, Portland, Oreg. Filed Dec. 18, 1930. Serial No. 503,223. 3 Claims. (Cl. 64—103.)



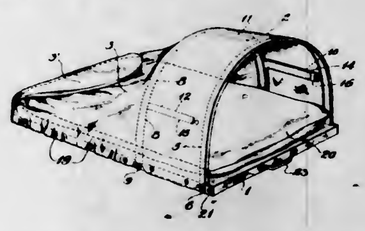
1. In a device of the class described, the combination of a socket member split longitudinally and adapted for being secured together by threaded members, slots disposed upon the inner surface of the socket member; a shaft having a ball, the ball of which is adapted for engagement within the socket member and to precisely fit the same; bearing blocks adjustably disposed within the ball, having a reacting element disposed therebetween for normally distending the same; frusta-conical sockets disposed within the bearing blocks, frusta-conical stub shafts adjustably disposed within the frusta-conical sockets, and heads terminating the outer ends of the frusta-conical shafts and adapted for fitting the slots disposed upon the inner surface of the socket members.

1,887,107. LAMP LENS. MAURICE A. SMITH, Jeannette, Pa., assignor to McKee Glass Company, Jeannette, Pa., a Corporation of Pennsylvania. Filed Oct. 1, 1931. Serial No. 566,262. 1 Claim. (Cl. 240—41.4.)



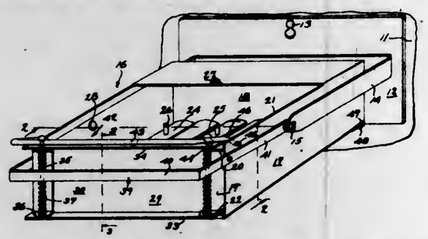
A headlight lens provided with a horizontal prism disposed across the mid portion of the lens, three superposed horizontally-extending prisms above the first-named prism, and two superposed horizontal prisms below the first-named prism, the two uppermost prisms and the lowermost prism being so constructed as to form the lower portion of a beam of light, the central portion of the first-named prism being so thickened as to produce a second portion of the beam of light, the remaining portions of the first-named prism and the prism immediate above the same being so constructed as to form a third and upper portion of the beam, and the prism immediately below the mid prism being of such angularity as to produce a field of illumination whose vertical spread is such that it will completely overlie, in a vertical direction, the composite pattern produced on a screen by the light rays which emerge from the other prisms.

1,887,108. ANIMAL SHELTER. MAUD H. STEESE, New York, N. Y. Filed Jan. 24, 1930. Serial No. 422,973. 3 Claims. (Cl. 119—19.)



1. An animal shelter comprising a bottom member, a flexible cover therefor, securing means on said bottom member and on said cover cooperating with each other to removably secure the cover to the bottom member, a plurality of flexible stays removably secured in said cover to retain a portion thereof in erect position with respect to the bottom member to provide a hood or canopy effect, the remainder of the cover being free to collapse with respect to the bottom member.

1,887,109. NAIL ALIGNING DEVICE. ALEXIS TANALIAS, Los Angeles, Calif. Filed Aug. 13, 1931. Serial No. 556,808. 9 Claims. (Cl. 1—49.7.)



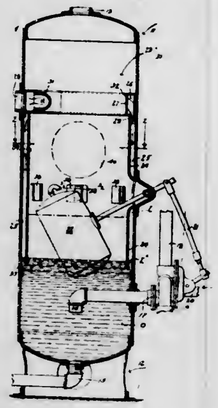
1. A nail aligning device comprising a box structure pivotally mounted and having a plurality of slots along the bottom, such slots being open at one end, a handle to oscillate said box, a closure for said open ends of the slots, an auxiliary handle to operate said closure, and means to open the closure on release of the auxiliary handle, the agitation of the box being adapted to cause the points and shanks of the nails to extend downwardly through the slots.

1,887,110. CURTAIN-ROD THREADING DEVICE. EDWARD YUENGEL, Newark, N. J. Filed Mar. 14, 1931. Serial No. 522,560. 2 Claims. (Cl. 223—38.)



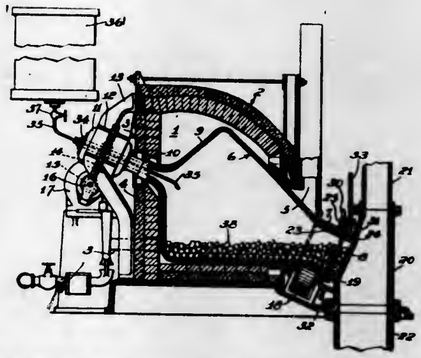
1. A curtain rod threading tip adapted for partial insertion in a sheet-metal curtain rod of the flat type wherein the longitudinal edges of said rod are spaced from one another, said threading tip comprising a body having a portion adapted to fit in the open end of said rod and having another portion with a rounded end, and said threading tip having a shoulder located at the junction of the two portions, said shoulder having a height substantially the same as the thickness of the metal of said rod.

1,887,111. GAS TRAP. ERNEST H. ADAMS, Long Beach, Calif., assignor to Trumble Gas Trap Company, a Copartnership consisting of Francis M. Townsend, A. J. Gutzler, and Milon J. Trumble. Filed Dec. 10, 1930. Serial No. 501,255. 4 Claims. (Cl. 183—2.7.)



1. An oil gas separator embodying; an outer shell forming a settling chamber; a skirt forming with said shell an annular separating chamber; means for delivering an oil gas mixture into said separating chamber; means for controllably discharging oil and gas from said settling chamber so as to maintain a body of oil in said settling chamber which extends above the lower edge of said skirt; and a baffle ring on the inner surface of said shell below the lower edge of said skirt for directing oil from said separating chamber across the top of the body of oil in said settling chamber.

1,887,112. METHOD OF CRACKING AND GASIFYING HYDROCARBONS. JOHN H. ANDERSON, Detroit, Mich. Filed Dec. 6, 1928. Serial No. 324,228. 1 Claim. (Cl. 48—211.)



The method of obtaining gaseous products from heavier hydrocarbons which consists in continuously feeding the latter into the larger end of a hollow conical retort tilted upon its side with the lowermost line of its side wall in horizontal position and containing a loose mass of metal bodies, heating the retort externally, rotating the retort axially and tumbling said bodies transversely while restraining them from longitudinal travel, generating and drawing off the gases, and continuously and automatically discharging the residue from the opposite end of the retort.

1,887,113. MEANS FOR ATTACHING TILE FACINGS TO WALLS. HENRY BARTELS, Chicago, Ill. Filed Nov. 9, 1931. Serial No. 573,842. 5 Claims. (Cl. 72—18.)



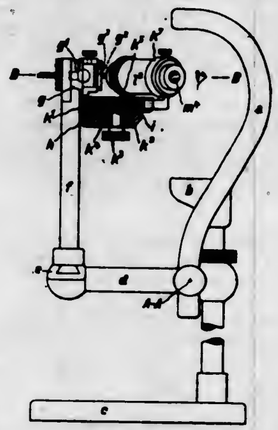
3. A tile facing for plaster walls comprising an apertured supporting and reinforcing structure, disposed adjacent the surface of the wall, means carried by said reinforcing structure for holding said structure spaced from the wall, said means embodying an element secured to, projecting from and extending along the rear face of said structure for a substantial distance, means for securing the structure in position, a plastic material covering said supporting structure and embedding the same, the said element also operating to prevent sagging of the plastic material, and tile secured in position over said structure, by the said plastic material.

1,887,114. EXTENSION TABLE. BENNIE BENSON, Jamestown, N. Y. Filed July 2, 1930. Serial No. 465,313. 11 Claims. (Cl. 45—118.)



1. A table having a rail supported top, movable leaves, slides secured to and supporting said leaves, a sprocket engaging adjacent of said slides for producing reverse directional motion, means preventing disengagement of said slides with said sprocket and rollers carried by said means, said rollers being adapted to reduce the frictional contact of said slides with said means.

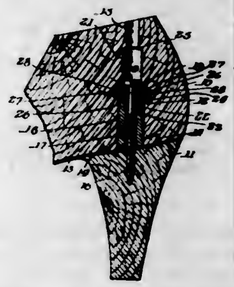
1,887,115. INSTRUMENT FOR THE EXAMINATION OF THE REACTION OF THE EYE PUPILS WHEN DIFFERENT PARTS OF THE RETINA ARE ILLUMINATED. GEORG BRAUN, Prague, Csechoslovakia, assignor to the Firm Carl Zeiss, Jena, Germany. Filed Apr. 11, 1932, Serial No. 604,605, and in Germany Apr. 23, 1931. 5 Claims. (Cl. 88—20.)



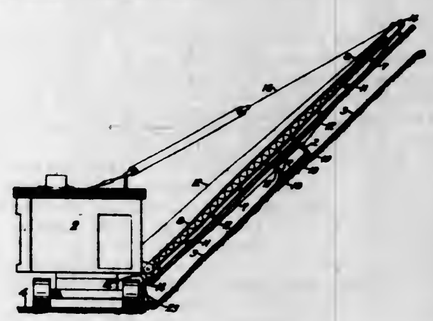
1. An instrument of the examination of the reaction of the eye pupils when different parts of the retina are illuminated, comprising a head and chin rest, a mark for adjusting the viewing direction of the eye to be examined, this mark being adjustably connected to the head and chin rest, an illumination device connected to the head and chin rest, the optical axis of the illumination device intersecting the viewing direction of the eye to be examined approximately in the entrance pupil of this eye, a circular guide whose centre coincides with the point of intersection of the optical axis of the illumination device and the viewing direction, the illumination device being displaceable in the said guide, and a narrow diaphragm provided in the illumination device and adapted to be imaged on the far-point ball of the eye to be examined.

1,887,116. SHOE LAST. ELMER BROBERG, Rockford, Ill., assignor to Elco Tool & Screw Corporation, Rockford, Ill., a Corporation of Illinois. Filed May 18, 1931. Serial No. 538,056. 3 Claims. (Cl. 12—133.)

1. A shoe last comprising, in combination, a body to which a heel is adapted to be detachably connected, means to detachably connect said body to the heel including a bushing with a transverse notch in its periphery, said body having a bore adapted to receive said bushing, a headed screw, the body of which is slidably received in said bushing with its head slidably positioned in said bore, a spring tending to move said screw to a retracted position, said body having a second bore extending transversely of and intersecting said first mentioned bore, and a screw entered in said second bore and movable into engagement with the notch in the bushing to lock the bushing against longitudinal movement relative to said body.



1,887,117. SLOPER MECHANISM. WILLIAM C. COLLEY, Berkeley, Calif. Filed Oct. 4, 1930. Serial No. 486,409. 5 Claims. (Cl. 37—116.)



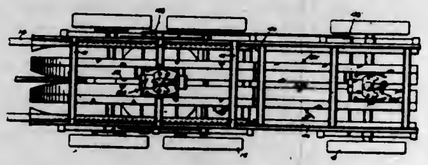
1. A sloper mechanism comprising a carriage, a plurality of scarifier teeth projecting from the lower forward portion of the carriage, and a plurality of scraper blades projecting from the bottom of the carriage, said blades being arranged on the forward and rear portions of the carriage so that the rear blades project lower than the forward blades.

1,887,118. COMBINATION TRAILER AND SEMI-TRAILER. EDWARD B. COLLINGE, Los Angeles, Calif. Filed Dec. 3, 1928. Serial No. 323,503. 42 Claims. (Cl. 280—33.1.)

1. A tractor and semi-trailer organization embodying: a tractor member; a trailer member having front wheels which are movable relative to the rear wheels of said trailer; power means interposed between said tractor member and said trailer member for effecting relative movement between the rear wheels of said trailer and the rear wheels of said tractor; and means for holding the front wheels of said trailer in a substantially fixed position relative to the rear wheels of said tractor during the operation of said power means.

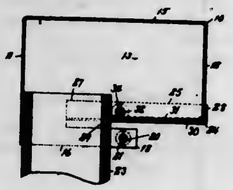
31. For use in combination with an organization of the class described, a dial locking unit embodying: a pair of vertical pins; a track embodying horizontal guide members spaced apart to receive said pins; and engag-

ing plates pivotally mounted upon said horizontal guide members between said pins, said engaging plates having inner curved edges provided with a plurality of notches



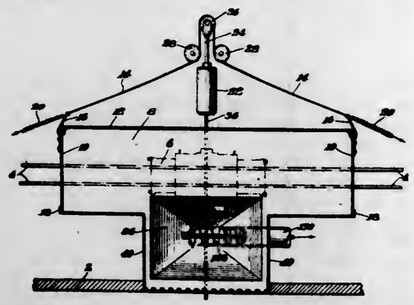
adapted to co-operatively surround either one of said pins when it is moved toward said plates and into engagement with the inner surfaces of said notches.

1,887,119. VENT-CAP FOR VENT-PIPES, ETC. EDWARD S. CORNELL, Jr., Watertown, Conn., assignor to The Chase Companies, Inc., Waterbury, Conn., a Corporation. Filed Oct. 10, 1930. Serial No. 487,897. 2 Claims. (Cl. 220—44.)



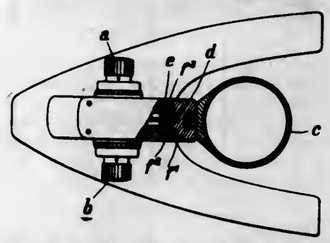
1. As a new article of manufacture, a vent-cap having a vent-pipe-receiving portion and an offset portion laterally projecting from the said vent-pipe-receiving portion; a pair of resilient clamping-arms integrally formed at the lower end of the said vent-receiving portion and each having a screw-receiving terminal located beneath the said offset portion of the vent-cap in a plane below the lower edge of the latter; screw-means extending between the terminals of the said resilient clamping-arms for binding the same upon a vent-pipe; and a detachable screen-frame having an upstanding flange engaging the outer surface of the offset portion of the vent-cap and interposed between the same and the complementary screw-receiving terminals of the said resilient clamping-arms.

1,887,120. CAR UNLOADING TIPPLE. RAYMOND E. DALY, Chicago, Ill., assignor to American Maize-Products Company, a Corporation of Maine. Filed Apr. 16, 1931. Serial No. 530,513. 11 Claims. (Cl. 214—45.)



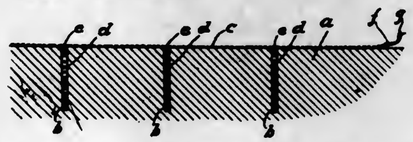
1. In combination with a car unloading tipple, a closed dumping chamber having a wall provided with openings, a hopper into which the load is dumped, means for removing the material from the hopper while preventing the entry of air into the chamber through the hopper, a door for permitting the car to pass into the chamber and adapted to be closed when the car is within the chamber, and yieldable closures for said openings adapted to relieve abnormal gas pressures within the chamber.

1,887,121. SLIDE GUIDE FOR THE FINE ADJUSTMENT OF MICROSCOPES. PAUL DIETZEL, Jena, Germany, assignor to the Firm of Carl Zeiss, Jena, Germany. Filed Dec. 26, 1929, Serial No. 416,633, and in Germany Feb. 21, 1929. 1 Claim. Cl. 308—3.)



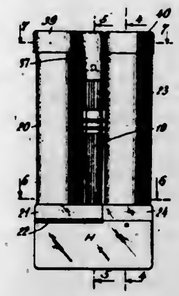
Slide guide for the fine adjustment of microscopes, comprising two systems of guiding surfaces that slide upon one another, of two surfaces sliding upon one another at least one being chromium plated.

1,887,122. CONNECTER FOR CORDEAU BICKFORD. BERT J. DUFFY, Pittsburgh, Pa., assignor to Hercules Powder Company, Wilmington, Del., a Corporation of Delaware. Filed Jan. 20, 1931. Serial No. 509,909. 2 Claims. (Cl. 102—8.)



2. In combination, a length of cordeau Bickford, a second length of cordeau Bickford extending at an angle to said first length and positioned with an end adjacent to said first length, a unitary member having a body portion bent about said first length of cordeau Bickford and extensions from opposite sides of the body bent oppositely in overlapping relation about the end portion of said second length of cordeau Bickford and adapted to secure the ends together.

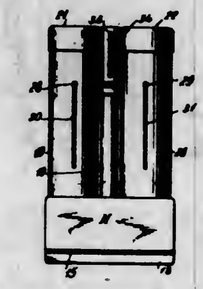
1,887,123. RAZOR KIT. GERHARD FLINTERMANN, West Orange, N. J. Filed June 15, 1931. Serial No. 544,364. 14 Claims. (Cl. 132—80.)



1. In a toilet kit of the character described, in combination with a safety razor having a cutting head and an elongated handle extending away from said head, a

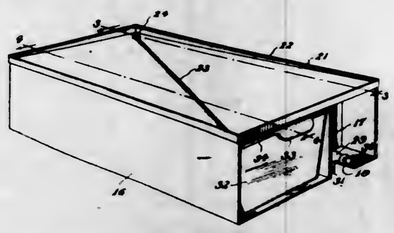
housing for the razor head, said housing having an opening therein through which the razor head may be inserted and withdrawn in a direction parallel to the razor handle with the razor handle protruding outwardly from the housing through said opening and means for locking the head within the housing comprising at least one closure member movably secured to the housing adjacent the opening and movable into a position across the opening at one side of the razor handle.

1,887,124. RAZOR KIT. GERHARD FLINTERMANN, West Orange, N. J. Filed June 22, 1931. Serial No. 545,894. 15 Claims. (Cl. 132—80.)



1. In a shaving kit, in combination with a safety razor of the type having a transverse cutting head and an elongated handle extending away from said head, a housing for the razor head, said housing having an opening in one wall thereof through which the handle of the razor protrudes and a larger opening in the opposite wall thereof through which the razor head may be withdrawn, a closure for said larger opening and at least one shaving accessory container communicating with said housing and accessible through said larger opening.

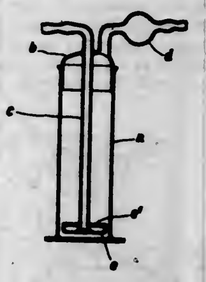
1,887,125. HYDRATOR. RUSSELL J. GREEN, Enid, Okla. Filed July 14, 1931. Serial No. 550,799. 5 Claims. (Cl. 62—103.)



1. In an electric refrigerator, a casing disposed beneath the unit of the refrigerator, a vegetable tray in said casing, a defrosting water tank in said casing, there being a slot in the bottom of said casing, said tank being of less length than the casing, a drain faucet carried by said tank and registering with said slot, a tray forming a closure for the top of the casing, and a drain pipe carried by the tray projecting into said tank and anchoring the tank against displacement from the casing.

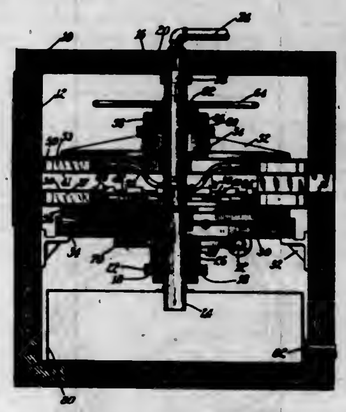
1,887,126. DISTRIBUTOR FOR EXTRACTION APPARATUS. MAX GROSSMANN, Jena, Germany, assignor to the Firm of Jenaer Glaswerk Schott & Gen., Jena, Germany. Filed May 28, 1930, Serial No. 456,611, and in Germany June 8, 1929. 2 Claims. (Cl. 23—292.)

1. Distributor for extraction apparatus, comprising a shallow vessel, a lid intimately connected with the said vessel, the lid being a filter of glass or similar material, and a tube of the same material as the filter, the tube



going down to the bottom of the vessel and being fused to the filter, that part of the tube which is inside the said vessel being provided with apertures.

1,887,127. REFRIGERATING APPARATUS. BICKNELL HALL, Gloucester, Mass., assignor to Frosted Foods Company, Inc., Dover, Del., a Corporation of Delaware. Filed Nov. 6, 1929. Serial No. 405,249. 37 Claims. (Cl. 62—114.)

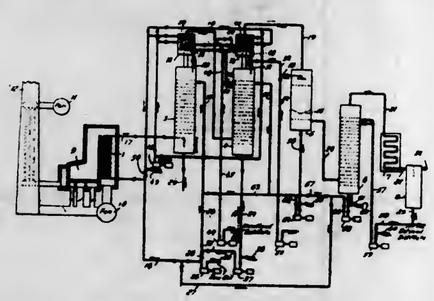


1. Refrigerating apparatus comprising heat-conductive members relatively movable to engage between them a product to be chilled and then movable with the product to carry the same through an endless path, whereby the product may be delivered to and removed from the heat-conductive members in substantially the same location.

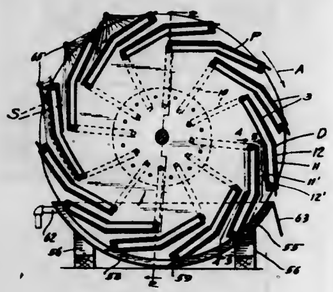
1,887,128. ART OF CRACKING HYDROCARBONS. EUGENE C. HEUTHEL, Chicago, Ill., and HARRY L. PELZER, Highland, Ind., assignors, by mesne assignments, to the Gray Processes Corporation, Newark, N. J., a Corporation of Delaware. Filed Sept. 14, 1928, Serial No. 305,902. 4 Claims. (Cl. 196—96.)

1. In the combined vapor phase cracking of oil to produce gasoline and refining of the thus produced gasoline by passage through an adsorptive catalyst in vapor phase, the improvement which comprises concurrently conducting a plurality of vapor phase cracking operations, subjecting the raw gasoline-containing vapors from one of these vapor phase cracking operations successively to a scrubbing operation for separation of tar, to a fractionating operation for condensation of constituents higher boiling than gasoline and then to a refining operation in which the vapors are passed through the adsorptive catalyst and condensing refined gasoline from the refined

vapors escaping from the refining operation, condensing the raw gasoline-containing vapors from another of these vapor phase cracking operations to form a raw gasoline-containing condensate, passing this raw gasoline-containing condensate in indirect heat exchange with the vapors escaping from the said scrubbing operation and introducing the thus preheated raw gasoline-containing condensate into direct contact with the vapors in the said fractionating operation, whereby this raw gasoline-containing condensate is revaporized in the said fractionating operation and the resulting vapors are passed through the adsorptive catalyst in the said refining operation and these refined vapors are condensed with the gasoline-containing vapors from the first separately mentioned vapor phase cracking operation.

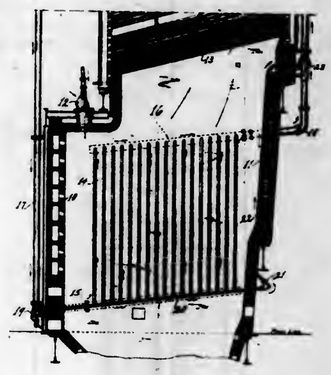


1,887,129. CONTINUOUS FILTERING APPARATUS. HOMER C. HIRSCH, El Paso, Tex. Filed Jan. 13, 1930. Serial No. 420,514. 4 Claims. (Cl. 210—200.)



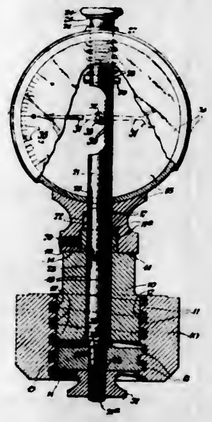
1. A continuous filtering apparatus comprising a rotatably mounted drum, a plurality of filter leaves extending longitudinally of said drum and inclined inwardly from the periphery of the drum and rearwardly with respect to the direction of rotation thereof and overlapping one another, each of said filter leaves being provided with filter medium extending over the outer face thereof and over that outer portion of the inner face which overlaps the inner portions of the next preceding leaf and with an impervious wall extending over the remainder of the inner face thereof, a sludge receptacle mounted beneath said drum in such position that said leaves successively enter and leave said receptacle upon each rotation of said drum, conduit means communicating with the interior of the respective filter leaves and extending inwardly toward the center of the drum, and rotary valve means associated with the inner ends of said conduits for controlling application of vacuum to said conduits when the corresponding leaves are in position within said receptacle, and application of pressure to said conduits when the corresponding leaves are at a position outside said receptacle.

1,887,130. TUBE FOR FURNACES. JAMES C. HOBBS, Painesville, Ohio. Filed Oct. 20, 1926, Serial No. 142,796. Renewed Apr. 5, 1932. 3 Claims. (Cl. 122—235.)



1. In a steam and water circulating system, a horizontally arranged tube having its upper portion exposed to a source of heat, and deflecting vanes in the tube constructed to cause the water in the tube to rotate, said vanes being spaced from the wall of the tube at said upper portion.

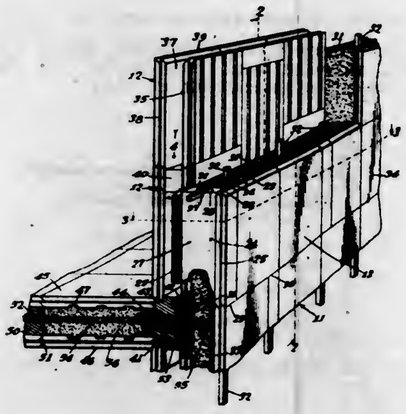
1,887,131. SCREW THREAD GAUGE. WILLIAM E. HOKE, Baltimore, Md., assignor to Dardelet Threadlock Corporation, New York, N. Y., a Corporation of Delaware. Filed Apr. 10, 1930. Serial No. 443,064. 12 Claims. (Cl. 33—199.)



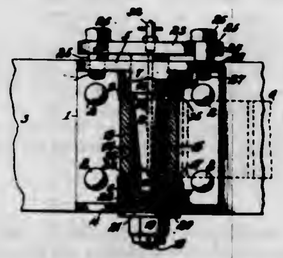
1. A screw thread gauge comprising a member having a helical diameter-gauging surface extending therearound, and spring-urged means for displacing an internally threaded member being tested axially of its thread and of said helical gauging surface to seat the crest of the thread of said member on said gauging surface.

1,887,132. BUILDING CONSTRUCTION. WILLIAM H. HOUGHTON, Los Angeles, Calif. Filed Mar. 20, 1929. Serial No. 348,466. 7 Claims. (Cl. 72—30.)

1. A building construction having a wall with three distinct and separate vertical structures formed with an outer panel structure, an inner panel structure, and a central panel structure, there being blocks connecting between the outer and the center structures and terminating at said structures and additional blocks between the inner and center structures and terminating at said structures, thereby providing spaces between the blocks, and a composition filling between the outer and center panel structures.



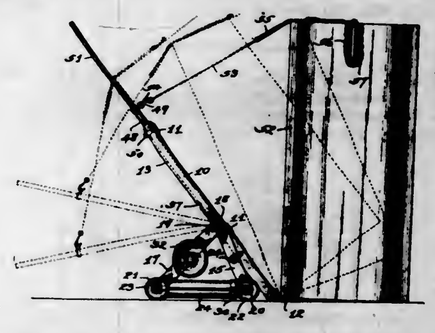
1,887,133. AUTOMATICALLY ADJUSTABLE CONNECTION FOR SHACKLE BOLTS. FRANCIS F. JAMES, Philadelphia, Pa., assignor, by mesne assignments, to Trayer Bolt Company, Inc., Elmira, N. Y., a Corporation of New York. Filed July 20, 1928, Serial No. 294,154. Renewed Apr. 5, 1932. 13 Claims. (Cl. 267—54.)



1. In an automatically adjustable connection for shackle bolts, the combination with a spring having an eye, of a shackle bolt arranged in the eye of the spring and spaced bearings located at opposite sides of the spring for receiving the shackle bolt, said shackle bolt having smooth end portions to slidably fit the spaced bearings and also provided with a central cone portion and said adjustable connection being provided with a tapered opening receiving the cone portion of the shackle bolt and cooperating therewith to form a cone bearing, and tensioning means for urging the shackle bolt in one direction to maintain the cone portion of the shackle bolt in tight engagement with the walls of the tapered opening to take up the wear.

1,887,134. TRUCK FOR HANDLING ROLLS OF NEWSPRINT PAPER. THOMAS JOHANCEN, Linthicum Heights, and EDWARD E. KEHOE, deceased, Baltimore, Md., by Catherine Kehoe, administratrix, Baltimore, Md., assignors to The Monomelt Company, a Corporation of Minnesota. Filed Oct. 17, 1930, Serial No. 489,472. Renewed July 19, 1932. 9 Claims. (Cl. 214—65.4.)

1. In a truck of the character described the combination with a bed, of link-means connected to the bed by one end and having roller means at the opposite end to rest upon the floor, another link-means also with one end connected to the bed and the other end engaging roller-means also on the floor and means extending between the two roller-means for permitting them to spread apart and allow the link means to lower the bed.

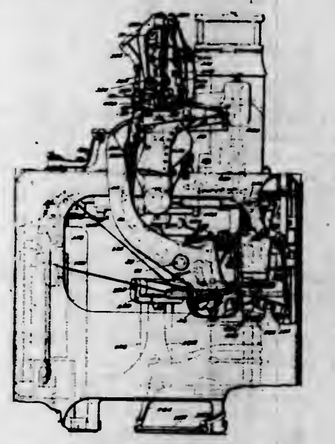


1,887,135. GLASS TILE. JOHN HANS KNAUER, New York, N. Y., assignor to Rene G. Le Brosi, New York, N. Y. Filed Mar. 18, 1931. Serial No. 523,547. 11 Claims. (Cl. 49—86.)



1. The method of fabricating a reinforced cast glass tile, which consists in casting a part thereof provided with a recess; placing a precut piece of metallic reinforcement in said recess; filling said recess with heated glass over said reinforcement; applying welding temperature and welding pressure to the inserted glass; and annealing the completed reinforced cast glass tile.

1,887,136. AUTOMATIC SHOE MACHINE. ALFRED R. MORRILL, Beverly, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Nov. 23, 1927. Serial No. 235,369. 27 Claims. (Cl. 112—47.)



1. A shoe sewing machine having, in combination, stitch forming devices including a hook needle, a feed point, a frame on which the needle and feed point are mounted,

means for moving the frame forward and backward in the line of feed, and means for moving the feed point with relation to the frame forward and backward in the line of feed, the backward movement of the frame taking place during the forward movement of the feed point.

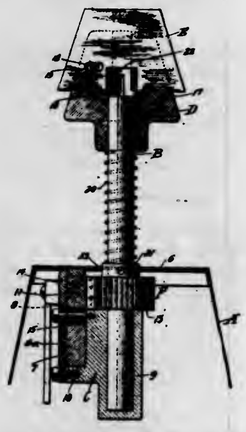
1,887,137. DRIVE CHAIN. FRANK L. MORSE, Ithaca, N. Y., assignor to Morse Chain Company, Ithaca, N. Y., a Corporation of New York. Filed Sept. 26, 1927. Serial No. 221,898. 1 Claim. (Cl. 74—32.)



In an oscillating joint for chains. the combination of two pintle members having surfaces adapted to turn one on the other with sliding friction about a substantially common center of rotation, the curvature of one surface differing slightly from the curvature of the other surface to provide a tapering space therebetween.

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1 887,138. PAN CLEANING MACHINE. ALRID BERTRAND PEFFER, Philadelphia, Pa., assignor to Imperial Machine Company, Philadelphia, Pa., a Partnership composed of Alrid Bertrand Peffer and Emil Schwartz. Filed Apr. 1, 1930. Serial No. 440,667. 4 Claims. (Cl. 15—93.)



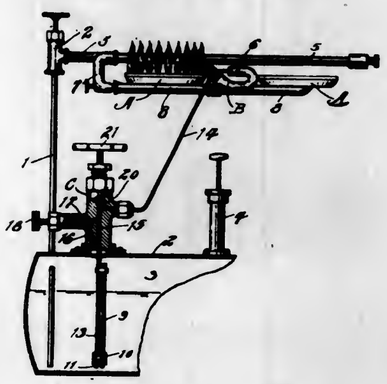
3. In a cup cake pan cleaning machine the combination of a row of rotatable spindles, a head carried by each spindle to rotate therewith, and a cleaning member slidably mounted in each head and projecting from the head to engage the pan being cleaned at both sides.

1,887,139. FLOWER HOLDER. DWIGHT D. RICHARDSON, West End, N. C. Filed June 25, 1930. Serial No. 463,589. 3 Claims. (Cl. 47—41.)



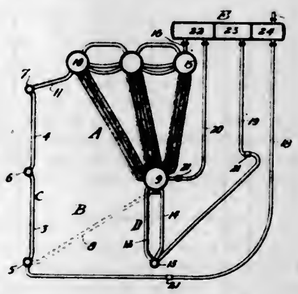
1. A flower holder comprising a box member, a lid member for said box member of sheet material, a moisture retaining structure in said box member, perforations in said box member for the reception of flowers, vegetation and the like, said perforations being in a form to indicate a letter of the alphabet.

1,887,140. HYDROCARBON BURNER. FRANK V. RISINGER, Lakewood, Ohio. Filed Oct. 28, 1929. Serial No. 403,060. 8 Claims. (Cl. 158—81.)



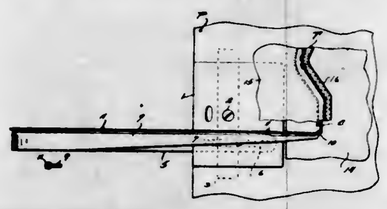
1. In hydrocarbon fuel burning apparatus, in combination, a fuel burner, a fuel supply conduit for the burner, an atomizer for supplying carbureted fuel to said conduit for substantially instant ignition and comprising an air supply conduit, a mixing chamber into which said air supply conduit leads, a hydrocarbon and air delivery conduit leading from the mixing chamber and communicating with the fuel supply conduit leading to the burner, means for supplying air under pressure to the said air supply conduit so that the air will take up a certain amount of the hydrocarbon at the mixing chamber and so that the said mixed air and hydrocarbon will be delivered in thoroughly atomized condition to the burner, and means for supplying auxiliary air to the combined air and hydrocarbon mixture supplied to the fuel supply conduit aforesaid and at the same pressure as the air is supplied to said air supply conduit.

1,887,141. BOILER INSTALLATION. WALTER SIEGERIST, Bayside, N. Y., assignor to International Combustion Engineering Corporation, New York, N. Y., a Corporation of Delaware. Filed Mar. 5, 1929. Serial No. 344,259. 4 Claims. (Cl. 122—235.)



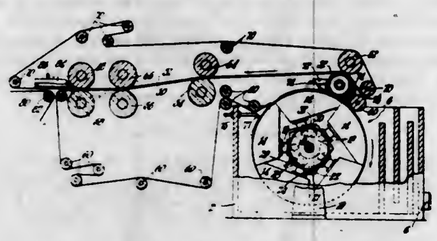
1. The combination with a water tube boiler of a combustion chamber therefor having a wall defined by upright boiler tubes connected into the boiler circulation, a steam separator, a connection for leading steam from the boiler to the separator, and means for discharging moisture from the separator into the boiler comprising downcomers outside the boiler circulation for leading the moisture to the upright boiler tubes.

1,887,142. ATTACHMENT FOR SEWING MACHINES. CLARA MABEL SMITH, Brockton, Mass. Filed Oct. 6, 1928. Serial No. 310,814. 1 Claim. (Cl. 112—139.)



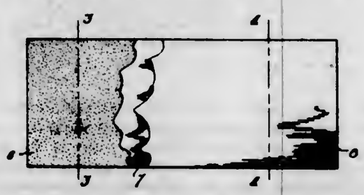
A corder attachment for a sewing machine comprising a plate adapted to loosely and slidably engage the machine, means for clamping the plate in adjusted position on the machine, a cording member, said cording member having one end thereof longitudinally slotted and positioned beneath said plate whereby to prevent interference with the passage of material over the plate, and means for securing said cording member in adjusted position on said plate, said securing means extending through said slotted end of said member.

1,887,143. PAPER MAKING APPARATUS. WILLIAM A. N. SPENCER and WILBERT A. SPENCER, Lee, Mass. Filed Apr. 5, 1930, Serial No. 441,806. Renewed Mar. 31, 1932. (21 Claims. (Cl. 92—43.)



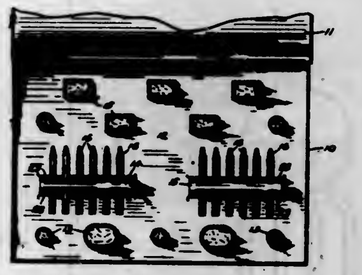
1. In an apparatus for making separate sheets of deckle edge paper comprising, a drum having separate platens carried by a central rotatable hub, the said hub and platens having intercommunicating passageways and a flange non-rotatable relative to said hub having a chamber with which the passageways of the hub may register.

1,887,144. REAR VIEW MIRROR FOR AUTOMOBILES. JOHN WILCZYNSKI, Buffalo, N. Y. Filed Oct. 6, 1931. Serial No. 567,258. 3 Claims. (Cl. 88—1.)



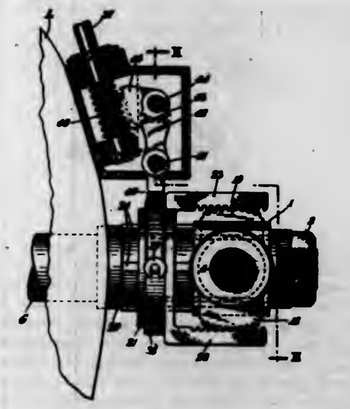
1. A mirror for subduing the reflection of intense light comprising a colored glass plate having a roughened rear surface, and a reflective coating applied to said roughened surface.

1,887,145. HOLDING DEVICE. HUGO A. ALLENDORF, Sandusky, Ohio, assignor to The American Crayon Company, Sandusky, Ohio, a Corporation of Ohio. Filed Nov. 27, 1929. Serial No. 410,184. 7 Claims. (Cl. 41.4.)



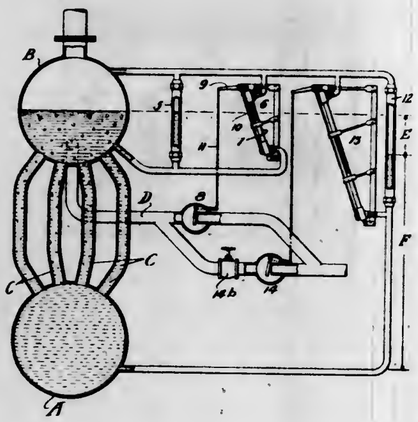
1. A holder for rod-like members, comprising spaced walls connected together at one set of ends, and tiltable at different angles with respect to each other, said walls having apertures therein, the edges of which, in one position of said walls, allow free insertion and removal of one of said rod-like members, and in another position of said walls, operate to engage said rod-like member to hold the same against accidental removal; and means for holding said walls in clamping position, said means including a support having spaced slits for accommodating the ends of said walls.

1,887,146. ADJUSTABLE PROPELLER. DE WITT C. CONKLING, Long Island, N. Y. Filed Jan. 22, 1931. Serial No. 510,423. 20 Claims. (Cl. 170—163.)



1. An adjustable propeller mechanism for vehicles, said mechanism including a plurality of propeller blades arranged to project radially in different directions from the propeller shaft of the vehicle and independently connected with said shaft to rotate upon axes transverse of said propeller shaft, operating means extending from said blades to another portion of the vehicle by which to rotate said blades in unison upon their respective axes for changing the pitch of said blades at the will of the operator, and resilient means connected with said blades operable to hold said blades under tension when said blades are moved by said operating means.

1,887,147. REGULATING SYSTEM FOR HIGH CAPACITY BOILERS. WILLIAM L. DE BAUFRE, Orange, N. J., assignor to International Combustion Engineering Corporation, New York, N. Y., a Corporation of Delaware. Filed Jan. 28, 1929. Serial No. 335,448. 15 Claims. (Cl. 122—451.)



13. The method of controlling the water level in a boiler by regulating the water supply thereto, which comprises controlling a supply of water in accordance with the weight of water in substantially the entire boiler and concurrently controlling a supply of water substantially in accordance with the weight of water in the steam drum.

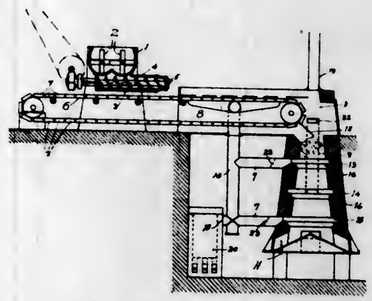
1,887,148. AEROPLANE PROPULSION. CARL DE GANAHL, Garden City, N. Y. Filed May 2, 1930. Serial No. 449,232. 3 Claims. (Cl. 244—18.)



1. An aeroplane comprising wings having main body portions and nose portions particularly connected to said main body portions and adapted to rock about an axis transverse to the chord of said wings, said main body portions and said nose portions defining longitudinal conduits for gases under pressure, said nose portions having upper and lower surfaces overlapping the surfaces of said main body portions, whereby a relatively narrow slot adjacent either the upper or lower surface of said wings may be formed by rocking said nose portions.

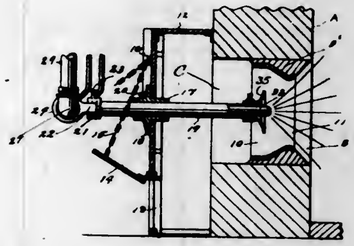
1,887,149. APPARATUS FOR CONTINUOUSLY PRODUCING BRIQUETTES. NILS FLODIN and GASTON CORNELIUS, Stockholm, Sweden. Filed June 2, 1927, Serial No. 196,046, and in Sweden Aug. 30, 1926. 7 Claims. (Cl. 44—13.)

1. An apparatus for continuously producing and drying briquettes, comprising means for mixing and forming a mass into a plurality of separated ribbon-like bodies, a vertical shaft for drying said bodies, a conveyor for conveying said bodies from said mixing and forming means to the said shaft, a hood surrounding the said conveyor, and means for introducing currents of heated fluids into said hood and said shaft for preheating and prehardening and drying the said bodies.



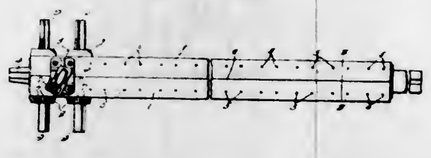
6. An apparatus for continuously producing and drying briquettes, comprising means for mixing and forming a mass into a plurality of separated ribbon-like bodies and effective to cause said bodies to break by gravity into briquette units, a vertical shaft for drying the briquettes, said shaft being divided into a plurality of zones provided with peripheral recessed channels in the wall of the shaft, a conveyor for conveying the briquettes from the said mixing and forming means to the said shaft, a hood surrounding the said conveyor, means for introducing currents of heated fluids into said hood for preheating and prehardening said briquettes, means for introducing currents of heated fluids into the said recesses of lower and upper zones of said shaft for drying the briquettes, means for removing gases and vapors from the recess of a zone intermediate said lower and upper zones, and means for removing the dried briquettes from the bottom of the shaft and comprising chutes arranged to feed the dried briquettes to rotatable members provided with pockets to receive and discharge the dried briquettes from the shaft.

1,887,150. FUEL BURNER DEVICE. ROSS H. FORNEY, Dallas, Tex., assignor to Forney Combustion Engineering Company, Dallas, Tex., a Corporation of Texas. Filed Apr. 1, 1929. Serial No. 351,712. 3 Claims. (Cl. 158—2.)



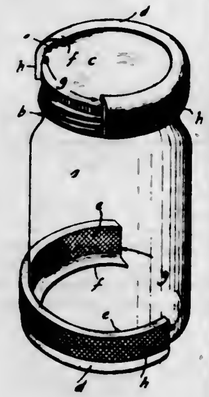
2. In a fuel burner device, an upright air box having a front wall and a damper controlled air inlet, said box being constructed to be mounted in front of the fire opening of a furnace so that its front wall is spaced a substantial distance from the furnace wall, a flanged collar mounted in the front wall of the air box, a sleeve adjustably mounted in the collar and extending through the box into the furnace, an air deflector on the inner end of the sleeve, and a burner tube adjustable in the sleeve and having a nozzle coacting with the air deflector.

1,887,151. WASHER LOG. WILLIAM A. FYE, State College, Pa., assignor to McLanahan & Stone Corporation, Hollidaysburg, Pa., a Corporation of Pennsylvania. Filed Jan. 18, 1932. Serial No. 587,394. 4 Claims. (Cl. 259—103.)



1. A washer log having aligned openings extending therethrough, paddle bases mounted on opposite sides of said log and having openings aligned with the openings in said log, paddles mounted in the bases, and bolts extending through the aligned openings in the log and bases for securing pairs of the bases to said log.

1,887,152. FRUIT JAR OPENER AND HOLDER. THEODORE J. GMEISLER, Portland, Oreg. Filed June 16, 1932. Serial No. 617,504. 2 Claims. (Cl. 81—31.)



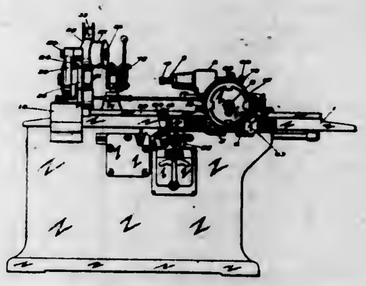
1. A jar opener comprising a split annular, relatively broad body made entirely of resilient material such as rubber, or rubber substitute, normally preserving its annular form, but distortable by direct hand pressure; the body provided with an interior flange-like means for governing and aiding the proper placing of the opener on a jar-cover, said means adapted not to interfere with or prevent expanding the annular body to a larger form, or substantial distortion thereof, by hand pressure, to a smaller, or from a circular to a more elongated form.

1,887,153. FURNACE. HENRY P. GROHN, Scranton, Pa., assignor to McClave-Brooks Company, Scranton, Pa., a Corporation of Pennsylvania. Filed May 6, 1926. Serial No. 107,299. 4 Claims. (Cl. 110—40.)

1. In a furnace, a sprocket wheel having enlarged notches, a plurality of rods, teeth on the sprocket wheel to engage the rods, links mounted thereon to form a chain grate, each link engaging two adjacent rods by means of a pair of open slot seats, the relation between the parts of the chain engaging in the notches of the sprocket wheel and the size and shape of the notches, being such that two longitudinally adjacent links can be drawn toward each other without being forced outwardly by contact with the sprocket wheel, so that two rods in a pair of seats in a link laterally of said two longitudinally adjacent links, can be drawn together sufficiently to permit said lateral link to be removed from or placed on the two rods.



1,887,154. GRINDING MACHINE. WALDO J. GUILD and ALFRED P. BURNS, Worcester, Mass., assignors to The Heald Machine Company, Worcester, Mass., a Corporation of Massachusetts. Filed Apr. 3, 1928. Serial No. 267,009. 10 Claims. (Cl. 51—39.)

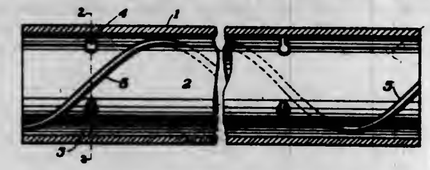


1. In a grinding machine, the combination with a plurality of workholding and rotating rolls, of a driving roll that is skewed with respect to the axis of the other rolls, whereby to give said workpiece a longitudinal thrust, means to back up the workpiece to hold it stationary against said thrust, and a grinding wheel having a reciprocatory traverse relative to the work, said work being thus held in rigid longitudinal position, without the necessity of any flanges on the rollers, against the tractive effect of the traversing grinding wheel.

1,887,155. TUBULAR HEATER. AUDLEY E. HARNSBERGER, Chicago, Ill., assignor to Gyro Process Company, Detroit, Mich., a Corporation of Michigan. Filed May 9, 1930. Serial No. 451,021. 4 Claims. (Cl. 196—110.)

3. A core for oil vapor cracking tubes, comprising a straight elongated cylindrical body of substantially uni-

form diameter throughout its length and adapted to be stationarily positioned in a tube, a rod wrapped helically around the outer surface of said body and permanently



secured in fixed relationship therewith by welding, and a plurality of spacing lugs projecting radially from said body and disposed between the windings of said rod.

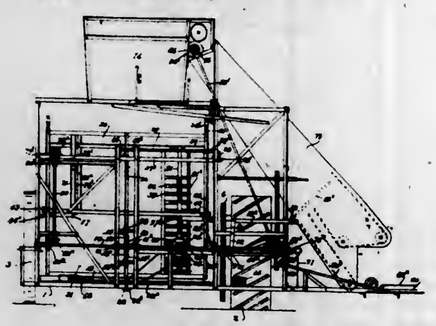
1,887,156. INSECTICIDE AND PROCESS OF MAKING THE SAME. ERIC T. HESSLE, Lockport, Ill., assignor to Mid-West Chemical Company, Chicago, Ill., a Corporation of Illinois. Filed May 8, 1929. Serial No. 361,548. 3 Claims. (Cl. 167—33.)

3. The process of preparing an oil mixture containing cyclic hydrocarbons having sulphur in the ring and open chain hydrocarbon sulphides, which comprises adding from 5% to 10% of molecular sulphur to oil containing cyclic hydrocarbon-sulphur compounds, heating the mixture to 200° to 250° C. with indirect heat, cooling to crystallise out the dissolved sulphur and recovering the liquid mixture substantially free from molecular sulphur but relatively high in combined sulphur.

1,887,157. METHOD OF REFINING ROSIN. IRVIN W. HUMPHREY, Wharton, N. J., assignor to Hercules Powder Company, Wilmington, Del., a Corporation of Delaware. Filed Jan. 14, 1928. Serial No. 246,903. 30 Claims. (Cl. 87—2.)

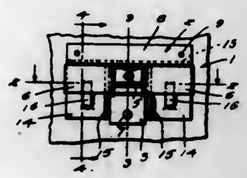
1. The method of refining rosin which includes subjecting rosin to treatment with formaldehyde and ammonia and finally to distillation.

1,887,158. HARVESTING MACHINE. WILLIAM L. M. JONES, Winnipeg, Manitoba, Canada. Filed July 3, 1931, Serial No. 548,572, and in Canada July 2, 1931. 23 Claims. (Cl. 56—182.)



1. In a harvesting machine, an upstanding cylindrical grain receiving casing having rear outwardly swingable gates, stationary rear going tracks located at the sides of the casing and supporting the same for forward and back movement, a rotatably mounted platform underlying the casing in its forward position on the tracks, means for moving the casing rearwardly on the tracks and for subsequently returning the same to its original position, means for automatically opening the gates as the casing approaches its rear position and for closing the gates as it subsequently moves forwardly and means for rotating the platform.

1,887,159. ARTICLE HANGER. PETER L. KNIGHT, Wilmington, N. C. Filed Sept. 22, 1931. Serial No. 564,393. 8 Claims. (Cl. 40—145.1.)



6. A hanger, comprising a wall attached portion consisting of a substantially T-shaped plate having a center portion and wing portions, the area of the center portion lying between the wing portions being pressed to lie in a plane oblique to the plane of the wings and having an aperture for the extension of a fastener therethrough, and an article attached portion comprising two spaced flat portions connected together for attachment to an article and held in spaced relation to the article for frictional engagement between said wings and the adjacent wall.

1,887,160. TRACING CHART. CHARLES LORBER, Louisville, Ky. Filed Dec. 22, 1931. Serial No. 582,625. 5 Claims. (Cl. 35—8.)



1. The combination with a tracing chart having characters to be traced shown thereon; of an envelope formed throughout of tracing paper snugly fitting said chart and open at at least one edge to permit insertion and withdrawal of the chart, said tracing paper being transparent to permit the characters on the chart to be plainly visible therethrough.

1,887,161. TRACING CHART. CHARLES LORBER, Louisville, Ky. Filed Aug. 12, 1931. Serial No. 556,689. 3 Claims. (Cl. 35—8.)



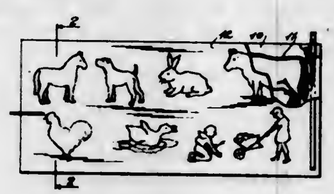
1. In a device of the kind described, a relatively thick rectangular base member having guide grooves in its upper surface presenting a series of alphabetic and other characters, a relatively thin and transparent tracing sheet resting on said base member, and a pair of clips respectively pivoted to a respective corner of the base member and extending along opposite edge portions of the tracing sheet to hold the same on the base member.

1,887,162. METHOD AND MEANS FOR PACKAGING BISCUIT DOUGH. CHARLES LORBER, Louisville, Ky. Filed Jan. 25, 1932. Serial No. 588,776. 3 Claims. (Cl. 99—8.)



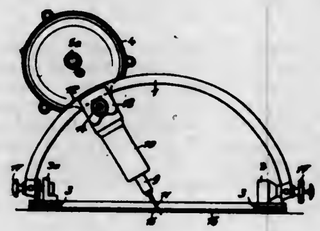
1. That method of packaging uncooked biscuits which consists in stacking the biscuits in a carton having its upper end open to the air before the biscuits have risen, the stacked biscuits being of considerably less height than the carton, permitting the biscuits to partially rise in the carton, hermetically closing the upper end of the carton before the biscuits have risen to the top thereof, and permitting further rising of the biscuits in the carton.

1,887,163. TRACING CHART. CHARLES LORBER, Louisville, Ky. Filed Feb. 8, 1932. Serial No. 590,758. 3 Claims. (Cl. 35—8.)



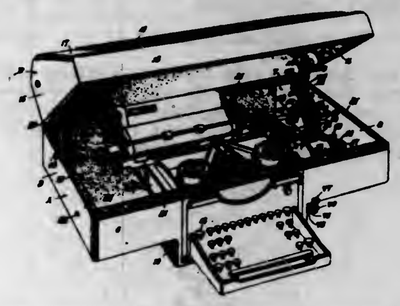
1. A tracing chart having colored grooves formed in its surface indicating matter to be traced and adapted to receive the point of a tracing implement, the color of said grooves being distinct from the color of the surface in which they are formed.

1,887,164. CUTTING DEVICE. JOHANNES MIERITZ, Berlin, Germany. Filed Dec. 5, 1930, Serial No. 500,358, and in Germany July 3, 1929. 9 Claims. (Cl. 164—75.)



1. A cutting device, comprising, in combination with a frame; an electromotor located in said frame and comprising a stationary armature and a rotary stator; a reciprocable rod; a ram knife at the free end of said rod; and means for converting the rotary motion of said stator into reciprocating motion and for transmitting this motion to the said rod and knife.

1,887,165. TYPEWRITER CABINET. LEWIS C. MYERS, Freeport, N. Y., assignor to Royal Typewriter Company, Inc., New York, N. Y., a Corporation of New York. Filed May 7, 1929. Serial No. 361,189. 3 Claims. (Cl. 197—186.)



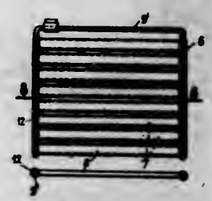
1. The combination with a typewriter encasing cabinet including a box and a hinged cover, of power operated means located within the cabinet for swinging said cover towards and from said box including a worm gear, a crank arm fixed to rotate with said gear, a motor, driving connections between the gear and the motor including a driven shaft, a flexible coupling between the motor and the driven shaft, a brake associated with said shaft, a worm fixed to the shaft and meshing with said gear, a link connecting said crank arm and cover and control means for the power-operated means operable from the exterior of the cabinet.

1,887,166. MANUFACTURE OF KNIT GOODS. OTTO NUBER, Reutlingen, Germany. Filed Jan. 27, 1930, Serial No. 423,773, and in Germany Jan. 26, 1929. 5 Claims. (Cl. 66—95.)



1. Method of manufacturing run-proof fabric which consists in causing a plain course to be formed by two-part superimposed needles, transferring the needle loops from a lower grooved needle to an upper looping needle, transferring the sinker loops of the said course, by means of covering needles, on the emptied lower grooved needles and knocking the mesh loops held by the upper looping needles over the covered sinker loops, the nooses formed from the sinker loops remaining as needle loops in the lower grooved needles.

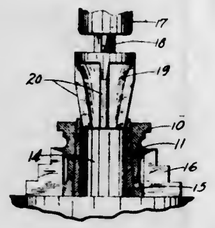
1,887,167. ELECTRIC ACCUMULATOR. ADOLFO POUCHAIN, Turin, Italy. Filed Dec. 17, 1927, Serial No. 240,809, and in Germany Dec. 20, 1926. 4 Claims. (Cl. 136—31.)



1. A negative electrode for electric accumulators, comprising a thin metal plate, a separate conducting frame

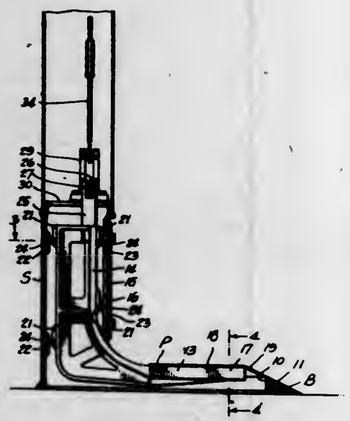
having only three sides, said frame having two sides engaged and conductively connected with two opposite edges of said plate and a third side substantially entirely spaced apart from an intermediate edge of said plate, and means on said third side of said frame for connecting said electrode with an external circuit.

1,887,168. METHOD FOR MAKING BUSHING LINERS. GEORGE RAUERSTRAUCH, Cleveland, Ohio, assignor to The Cleveland Rock Drill Company, Cleveland, Ohio, a Corporation of Ohio. Filed Aug. 29, 1930. Serial No. 478,653. 5 Claims. (Cl. 29—149.5.)



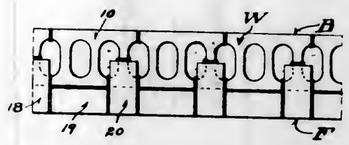
1. The method of making bushings which comprises disposing a liner having a tapered outer surface within a tubular shell having a bore with a taper corresponding to the taper of said shell, said bore being flared near its smaller end and expanding the adjacent end of said liner to conform to the flare in the shell.

1,887,169. WEIGHING SCALE. CLIFFORD O. ROSS, Los Angeles, Calif. Filed Feb. 19, 1931. Serial No. 517,075. 11 Claims. (Cl. 265—68.)



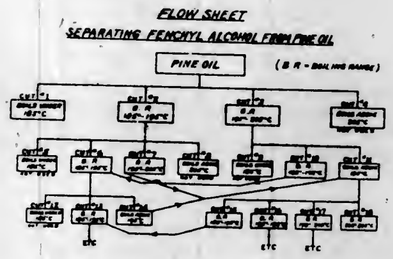
1. A weighing scale having a base, and a platform on the base, the base and platform having sloping sides, with the sides of the platform forming continuations of the sides of the base when the platform is unloaded and coacting to define inclined approaches to the top of the platform extending at a relatively acute angle from and with respect to a surface on which the base is supported.

1,887,170. BUILDING BLOCK. LESTER E. SCHWALBE, Wauwatosa, Wis. Filed Oct. 3, 1931. Serial No. 566,623. 3 Claims. (Cl. 72—41.)



1. A building block comprising front and rear body portions, transverse webs connecting the front and rear body portions, one of the webs and one of the body portions being cut away to provide a brick receiving seat.

1,887,171. CRYSTALLINE FENCHYL ALCOHOL AND METHOD OF SEPARATING THE SAME FROM PINE OIL. LEE T. SMITH, Kenvil, N. J., assignor to Hercules Powder Company, Wilmington, Del., a Corporation of Delaware. Filed Aug. 11, 1927. Serial No. 212,301. 9 Claims. (Cl. 260—153.)

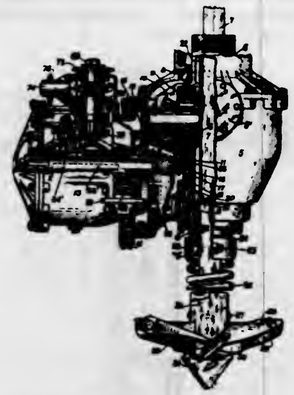


1. The method of separating fenchyl alcohol from pine oil, which includes fractionating pine oil to obtain a cut rich in fenchyl alcohol, dehydrating tertiary alcohols present in the cut to effect their conversion to hydrocarbons and water without substantial dehydration of fenchyl alcohol, fractionating off hydrocarbons and water, refrigerating the residue to effect crystallization of fenchyl alcohol and separating crystalline fenchyl alcohol.

1,887,172. COMBINED EARTH BORING MACHINE AND DERRICK APPARATUS. TEMPLE CLIFFORD SMITH, Westfield, and JOHN BEVERIDGE SPOWART, Newark, N. J., assignors to American Telephone and Telegraph Company, a Corporation of New York. Filed July 2, 1932. Serial No. 620,694. 24 Claims. (Cl. 255—22.)

1. In a combined earth boring machine and derrick apparatus, a casing, an extensible derrick mounted thereon,

a carrier rotatably mounted in the casing, a shank vertically movable in the carrier, an auger carried by said shank,



means for rotating said shank to operate said auger, and means whereby the rotation of said carrier will elevate and lower said derrick.

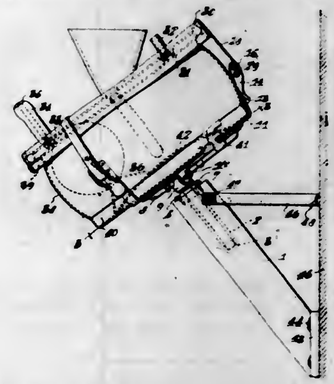
1,887,173. HANDLE FOR VACUUM CLEANERS. BERNARD JACQUES TAMARIN, Philadelphia, Pa. Filed Jan. 26, 1926. Serial No. 83,918. 1 Claim. (Cl. 173—367.)



In an electrically operated vacuum cleaner, a hollow handle, a spring rewind reel device for the reception of the electric cord of the vacuum cleaner and secured to and communicating with the end of said handle adjacent said cleaner, a hollow hand grip at the other end of said handle and communicating with the interior thereof and provided with a laterally positioned outlet spaced from the free end of the hand grip and inclined rearwardly, a thumb operated member movably supported by said hand grip, a spring controlled brake device for said reel and a connection between the brake device and said member whereby the hand of the operator may manipulate said hand grip and said member and the other hand of the operator control the travel of the electric cord through said outlet.

1,887,174. CREAM SEPARATOR WASHER. STERLING WELLS, Schaller, Iowa. Filed Apr. 4, 1932. Serial No. 603,153. 5 Claims. (Cl. 141—1.)

1. In a washer, a support having shaft bearings, the axes of which lie at an angle approximately fifty degrees to the horizontal, a shaft rotatable in said bearings, a spider having a hub secured on said shaft and receiving the bowl of a cream separator thereon, a flanged cover fitting over the mouth of the separator bowl and having a bowl sealing ring, toggle straps and levers secured to said spider and engaging said cover to hold the cover on the bowl and the bowl on the spider securely, a handle projecting from the top face of said cover by which the assemblage may be rotated or oscillated on the axis of

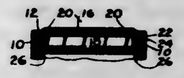


said shaft, said cover having a central water hole and a funnel extending upwardly therefrom with its mouth edge held at an angle of approximately forty degrees to the face of the cover, an air vent tube carried by the cover and located adjacent the low side of the funnel, and a flexible U-shaped member mounted on the under side of the cover to project into the bowl.

1,887,175. COMPOSITION FOR BAKING PURPOSES. EINAR WOXVOLD, Chicago, Ill., assignor to American Maize Products Company, a Corporation of Maine. Filed Nov. 1, 1928. Serial No. 316,620. 4 Claims. (Cl. 99—10.)

1. As an article of manufacture, thin, shell-like particles of a homogeneous body comprising dextrose and acid calcium lactate, the proportions of the latter being such that a 5% solution of the material has a pH of 6.1 to 8.1.

1,887,176. CAGE FOR ANTIFRICTION BEARINGS. OTTO W. YOUNG, East Orange, N. J., assignor to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Filed Apr. 8, 1929. Serial No. 352 166. 3 Claims. (Cl. 308—217.)

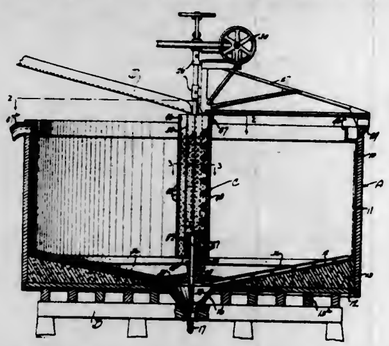


1. In a roller cage, a pair of end rings, cross connections holding the rings spaced apart, a series of rollers between the end rings, the cross connections guiding the rollers, roller retaining projections extruded from the material at one edge of each ring and extending inwardly between adjacent rollers, the projections being wider opposite the edge of the ring and narrower away from the edge to present converging retaining edges to the rollers; substantially as described.

1,887,177. FEED DISTRIBUTOR FOR SETTLING TANKS. CLEMENT L. ADAMS, Gay, Mich. Filed Mar. 28, 1930. Serial No. 439,836. 6 Claims. (Cl. 210—55.)

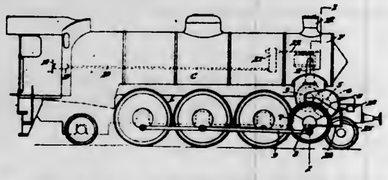
1. In a feed distributing device for settling tanks the combination of a settling tank, a vertical distributing receptacle centrally mounted in the tank having lateral discharge apertures opening into the tank throughout the major height of the tank compartment, and means for

initially feeding liquid material into the distributing receptacle throughout the major height thereof in a non-eddy producing relation, said means carried at the upper



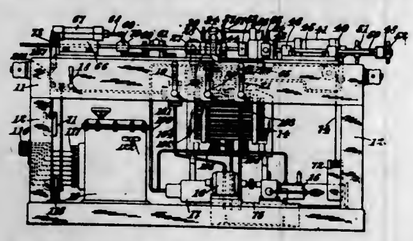
end of the receptacle comprising a conical concentrating feed having an upper open end and a pointed and perforated lower end projecting into the receptacle.

1,887,178. TURBINE LOCOMOTIVE. GIUSEPPE BELLUZZO, Rome, Italy, assignor to Società Italiana Ernesto Breda per Costrusioni Meccaniche, Milan, Italy. Filed Feb. 11, 1931, Serial No. 515,127, and in Italy Feb. 25, 1930. 4 Claims. (Cl. 105—38.)



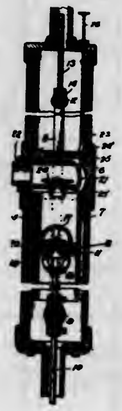
1. A locomotive with a single steam turbine, comprising a rotor with a number of wheels adapted respectively to control the forward motion and the backward motion of the locomotive by operating the respective admission valves, characterized by the feature that said turbine is placed transversely on the front of the engine, inside the smoke-box of the boiler, the casing of the turbine providing a saddle for supporting said smoke-box, said turbine casing being mounted and secured to the side frames of the locomotive and being provided with a spur wheel reduction gearing, with at least one countershaft driving, by means of connecting rods, one pair of the coupled driving wheels.

1,887,179. ELECTRIC UPSETTING MACHINE. GIUSEPPE BENEDETTO, Novara, Italy, assignor to Omes Holding Company Limited, London, England, a British Company. Filed Mar. 26, 1931, Serial No. 525,538, and in Great Britain Nov. 28, 1930. 12 Claims. (Cl. 219—3.)



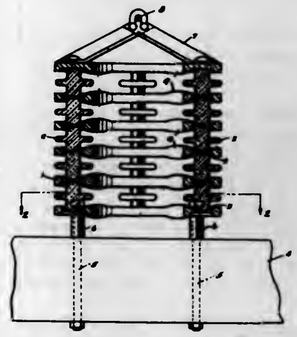
1. In an electric upsetting machine the combination of a main work-holding vice for clamping the work securely therein, an anvil, a plurality of auxiliary vice jaws for engaging the work between the main vice and the anvil, means for bringing the anvil and vice jaws nearer together to effect an upsetting operation and means for withdrawing the auxiliary jaws from engagement with the work during said upsetting operation.

1,887,180. PUMP CONSTRUCTION. ARNOLD BOHNENBLUST, Riley, Kans. Filed June 2, 1930. Serial No. 458,958. 2 Claims. (Cl. 103—167.)



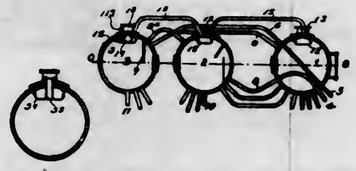
1. In a pump construction, a body portion comprising cylinders, a coupling for connecting the adjacent ends of the cylinders, said coupling having openings to permit liquid to pass vertically therethrough, a pipe extending into the coupling to direct liquid laterally from the body portion, pipes connected with the ends of the body portion, an inner cylinder connected to the coupling and communicating with the body portion, a pump rod extending into the pipe at the lower end of the body portion, a valved piston operating in the inner cylinder, and means for connecting the valved piston to the pump rod to operate the valved piston as the pump rod is operated.

1,887,181. TRANSMISSION INSULATOR. WILLIAM S. CONE, Oakland, Calif. Filed June 25, 1927. Serial No. 201,513. 4 Claims. (Cl. 173—318.)



1. An upstanding insulator comprising a plurality of conductor rings arranged one above the other and providing an opened vertical passageway through the insulator, insulating members spaced from each other and spacing each ring from adjacent rings, and a wire carrying member supported by the top conducting member.

1,887,182. MULTIPLE STEAM DRUM ROLLER. JAY GOULD COUTANT, New York, N. Y. Filed Oct. 11, 1930, Serial No. 488,028, and in France Oct. 14, 1929. 5 Claims. (Cl. 122—235.)



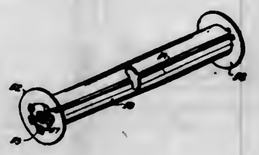
1. A steam boiler of the class having a system of water tubes exposed to furnace heat and a plurality of elevated steam-and-water drums all delivering to a common final outlet and each receiving steam and water from and supplying water to the tube system and each such drum having both its inlet and its outlet connections distributed along its length whereby to secure transverse flow and substantially to avoid longitudinal flow within the drum so to minimize the steam velocity within each drum; and said boiler characterized by the particular combination of said steam-and-water drums and said water tube system wherein the steam connections extending from the tube system to the respective drums are arranged or apportioned to distribute to the respective drums the steam generated in the tube system at rates by weight approximately proportional to the volumes of the steam spaces of the respective drums and the steam outlets from the respective drums are adapted to deliver steam therefrom at rates also approximately proportional to the respective steam spaces whereby there will be maintained within all of said drums transverse flow of steam from inlets to outlets at approximately equal and therefore uniformly minimum velocities.

1,887,183. COAL BINDER AND METHOD OF APPLYING THE SAME. JOHN A. ERICKSON, Jackson, Mich., assignor to Viking Manufacturing Company, a Copartnership consisting of Berry N. Beaman, Robert Lake, and John A. Erickson, Jackson, Mich. Filed June 25, 1932. Serial No. 619,273. 14 Claims. (Cl. 44—26.)

1. A coal briquette comprising, coal particles, hydraulic cement, and a hygroscopic salt.

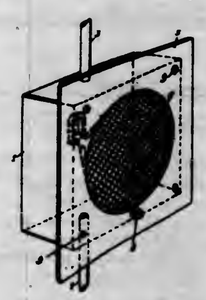
13. A method of agglomerating fuel fines comprising moistening said fines with a solution of a deliquescent salt, adding sufficient hyraulic cement to bind said fuel particles, said solution being applied in quantity sufficient to hydrolize said cement and in salt concentration merely sufficient to accelerate the setting of said cement binder.

1,887,184. RIBBON SPOOL FOR PRINTING MACHINES. HENRY C. OSBORN, Cleveland, Ohio, assignor, by mesne assignments, to Multigraph Company, Wilmington, Del., a Corporation of Delaware. Filed Nov. 14, 1929. Serial No. 407,049. 14 Claims. (Cl. 242—70.)



1. A spool having an axial opening, said opening being carried by a readily displaceable portion of the spool head, the displacement of which leaves an available opening of different dimension.

1,887,185. SOUND REPRODUCER. EDWIN JAY QUINBY, Yonkers, N. Y., assignor to Radio Corporation of America, a Corporation of Delaware. Filed Feb. 20, 1929. Serial No. 341,337. 9 Claims. (Cl. 181—31.)



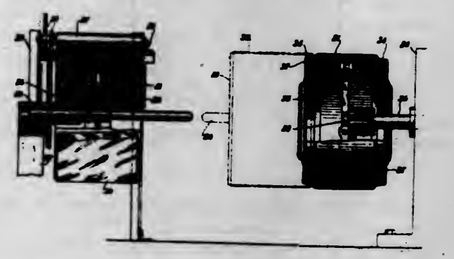
1. A housing for a sound reproducer comprising a box-like member adapted to be positioned within a wall, a detachable cover plate secured to said box-like member and covering an entire side thereof, an opening in said cover plate, and a sound reproducer fastened to the inside of said cover plate adjacent said opening.

1,887,186. ONE-PIECE METAL FOUNTAIN PEN. WALTER H. PEARCE, Churchville, Pa., assignor to The Brown Instrument Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Jan. 24, 1931. Serial No. 510,952. 5 Claims. (Cl. 120—43.)



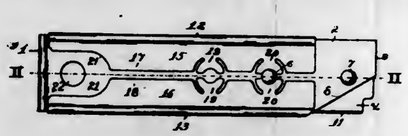
1. A pen for recorders having a bucket, a point joining the upper portion of said bucket at an angle, means whereby the pen may be supported from a pen arm with the bucket substantially upright in all arm positions, capillary means extending from said point downward into said bucket and leading to said point, said pen consisting of one piece of material.

1,887,187. APPARATUS FOR BUILDING TIRE CARCASSES. FRED B. PFEIFFER, Akron, Ohio, assignor to Seiberling Rubber Company, Barberton, Ohio, a Corporation of Delaware. Filed Aug. 7, 1929. Serial No. 384,027. 7 Claims. (Cl. 154—10.)



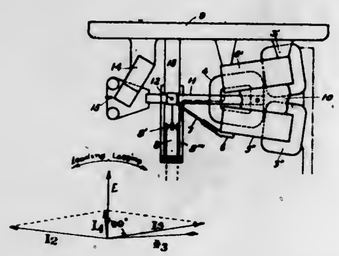
1. Pneumatic-tire building apparatus comprising a rotary carcass-building form, a band-building drum, and means for demountably supporting said drum in band-transferring relation to said form.

1,887,188. KNIFE. HERBERT L. ROSS, Oakland, Calif. Filed June 30, 1931. Serial No. 547,925. 4 Claims. (Cl. 30—10.)



1. A knife including a sheath composed of a strip of sheet material folded back upon itself with two of its edges in proximity and provided with resilient detents, a blade holder slidable in said sheath and composed of a piece of sheet material folded back upon itself, a tit on one of the sides of said holder projecting through holes in the opposite side and engageable with said detents, and a blade in said holder engaging said tit.

1,887,189. FREQUENCY RELAY. VALDEMAR STERNER, Vasteras, Sweden, assignor to Allmanna Svenska Elektriska Aktiebolaget, Vasteras, Sweden, a Corporation of Sweden. Filed Dec. 21, 1927, Serial No. 241,578, and in Sweden Apr. 1, 1927. 3 Claims. (Cl. 175—320.)



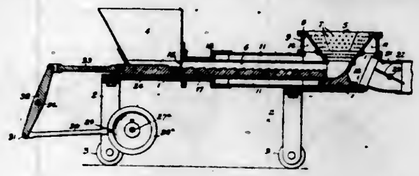
3. A frequency relay comprising an inductance coil and a capacity in parallel, a winding traversed by the resultant current passing through said inductance and capacity, a winding subjected to a voltage proportional to that acting on said inductance and capacity, one of said two windings being movable with respect to the other, and magnetic means counteracting the said motion, said magnetic means varying in strength with the voltage.

1,887,190. MANUFACTURE OF GOODS FROM AQUEOUS DISPERSIONS OF OR CONTAINING RUBBER AND SIMILAR RESINS. DOUGLAS FRANK TWISS and EDWARD ARTHUR MURPHY, Birmingham, England, assignors to Dunlop Rubber Company Limited, a British Company. Filed Sept. 29, 1928, Serial No. 309,353, and in Great Britain Oct. 5, 1927. 12 Claims. (Cl. 18—54.)

1. The method of forming continuous lengths of rubber which comprises extruding an aqueous rubber dispersion directly into a dehydrating fluid comprising a fused salt.

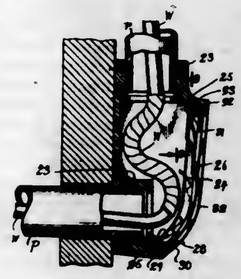
1,887,191. MECHANICAL STOKER. GEORGE E. WHITNEY, Bridgeport, Conn., assignor, by mesne assignments, to Whitney Stoker Corporation. Filed June 22, 1929. Serial No. 372,811. 9 Claims. (Cl. 110—46.)

1. In an underfeed furnace, a hopper, a perforated firepot, a tubular passageway leading from the hopper to the firepot, a single fuel feed plunger within said passageway and hopper, said plunger being provided with shoulders having faces arranged transversely of the plunger which faces are adapted to engage the fuel and are spaced apart by distances that decrease from the



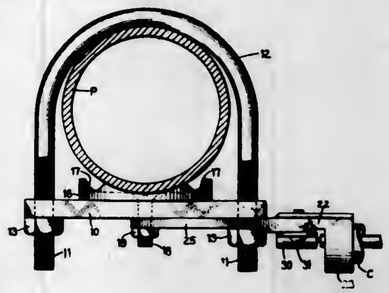
end of the plunger near the hopper to the end of the plunger near the firepot, and means for reciprocating said plunger.

1,887,192. CONDUIT BOX. HOBART D. BETTS, Jr., Elizabeth, N. J., assignor to The Thomas & Betts Co., Elizabeth, N. J., a Corporation of New Jersey. Filed May 24, 1929. Serial No. 365,619. 5 Claims. (Cl. 247—31.)



1. In a box having an opening and one portion of the box having a compound curvature forming a curved end to the box and a downwardly curved top at one end of the box, a protruding ledge at the curved portion defining a deep locking seat opening outwardly, a lid having a similarly compounded rounded portion, a tip which fits into the deep seat and having limited pivotal movement therein, and anchorage means spaced from the rounded portion of the box and lid to secure the lid on the box and render effective the locking seat.

1,887,193. GROUNDING FITTING. STEPHEN N. BUCHANAN, Elizabeth, N. J., assignor to The Thomas & Betts Co., Elizabeth, N. J., a Corporation of New Jersey. Filed Nov. 22, 1930. Serial No. 497,421. 6 Claims. (Cl. 247—1.)



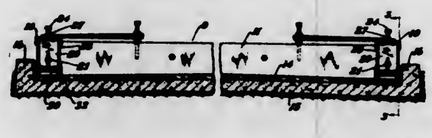
1. A grounding fitting comprising a supporting member, clamping means to secure a large diameter grounded conductor thereto, a seat member, bolting means at the center of the supporting member and passing through the seat member to fix the latter thereto, an anchorage member having means to secure a protective covering for a wiring system thereto, at least one pair of radially spaced holes in the anchorage member, and means including the bolting means at the center of the support extending through a pair of radially spaced holes to secure the anchorage member and seat member to the supporting member.

1,887,194. POWDER PUFF AND METHOD OF MAKING THE SAME. ARTHUR B. CHARROIN, San Diego, Calif. Filed Aug. 12, 1930. Serial No. 474,726. 7 Claims. (Cl. 132—78.5.)



1. In a powder puff, a bottom member, a top member secured by its entire marginal portions to said bottom member, said top member provided with a substantially centered slit therein whereby said members may be forced through said slit and cause the adjacent or inner sides of said top and bottom to be exposed, a pair of straps secured between said bottom and top members arranged to extend over said slit, and means securing the inner one of said straps to the margins of said slit so as to close the same.

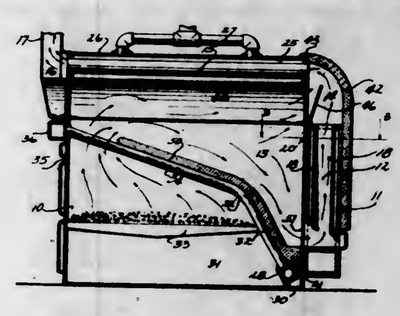
1,887,195. MEANS FOR SURFACING SAND AND THE LIKE. NICK DE JOY, Canton, Ohio; Henry A. Schrants, administrator of said Nick De Joy, deceased, assignor to The Metropolitan Paving Brick Company, Canton, Ohio, a Corporation of Ohio. Filed Mar. 28, 1930. Serial No. 439,812. 3 Claims. (Cl. 94—39.)



1. A sand surfacer for use on a road bed having a sand covering, the surfacer including laterally spaced rollers, and a sand surfacing bar supported on the rollers and extending laterally of the road bed, each roller having a sharp periphery extending below the surfacing bar and adapted for penetrating the sand covering and rolling on the road bed.

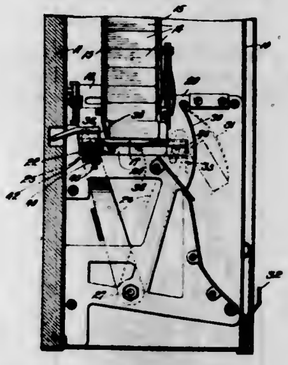
1,887,196. WATER HEATER. JOHN D. DESMOND, Milwaukee, Wis. Filed July 28, 1930. Serial No. 469,949. 4 Claims. (Cl. 122—76.)

1. The combination of a combustion chamber enclosed by a front wall, chambered unitary cast metal side and back walls, and an arched chambered cap, said cast metal walls each constituting a water containing jacket for the sides, back and top of the combustion chamber, respectively, and having abutting surfaces ported for water circulation; a grate constituting the bottom of the combustion chamber and a bridge wall arch extending from below the rear margin of the grate upwardly and forwardly to sub-divide the space between the side walls into combustion and flame chambers; a water passage connecting the side wall chambers at the base of the bridge wall arch, and a series of pipes extending therefrom upwardly and forwardly along the under surface of said arch and having their upper ends in communication with the upper portions of the side wall chambers, said back wall having a transverse open channel in its inner face below its water chamber at the base of the bridge wall arch and having



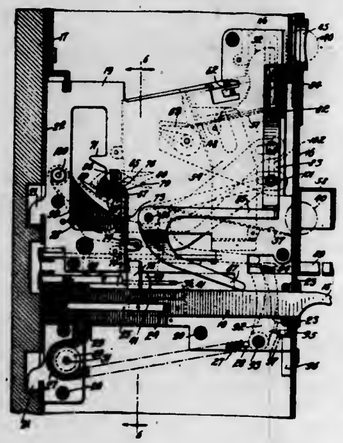
flues extending therefrom vertically through the water receiving cavity, whereby the flame and products of combustion may be directed from the fuel upwardly along the under surface of the arch and downwardly along the upper surface thereof to said rear wall cross channel for delivery through the jacket cavity in the rear wall from approximately the level of the grate.

1,887,197. VENDING MACHINE. HARVEY GILES, Brooklyn, N. Y., assignor to Collier Advertising Service, Inc., New York, N. Y., a Corporation of Delaware. Original application filed Aug. 30, 1929, Serial No. 389,357, Patent No. 1,861,212, dated May 31, 1932. Divided and this application filed Mar. 25, 1931. Serial No. 525,076. 4 Claims. (Cl. 312—67.)



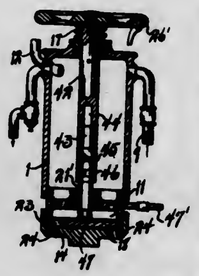
1. A vending machine of the character described having in combination, a vertically arranged hopper for containing a pile of the articles to be vended, and an article delivery means comprising, a reciprocating slide mounted to reciprocate forward and backward under the hopper, means for reciprocating the slide, two fingers pivotally mounted on the slide and consisting of an upright portion adapted to be positioned to the rear of the lowermost article of the hopper when the slide is in its rearmost position and a tail portion extending rearwardly from the upright portion and adapted to contact with the lowermost article in the hopper on the rearward movement of the slide after delivering an article, and means for raising the fingers when the slide is in its rearmost position, said slide having provision whereby the positions of the fingers may be interchanged.

1,887,198. VENDING MACHINE. HARVEY GILES, Brooklyn, N. Y., assignor to Collier Advertising Service, Inc., New York, N. Y., a Corporation of Delaware. Original application filed Aug. 30, 1929, Serial No. 389,357. Divided and this application filed Mar. 25, 1931. Serial No. 525,077. 7 Claims. (Cl. 194—1.)



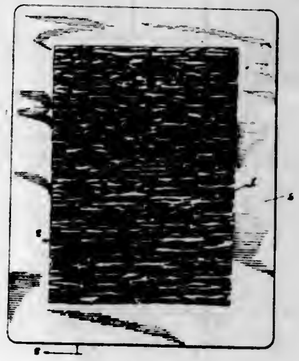
4. In a coin-controlled mechanism for operating the article delivery means of a vending machine of the character described, coin-controlled means for actuating the article delivery means including a slidingly mounted plunger adapted to be manipulated, means including a coin passage for conveying a coin to the coin-controlled means, a movable section in the passage, a guard for shutting off the passage, said guard having a part adapted to contact with and move the movable section of the passage, and a lever arranged to be actuated by the plunger for moving the guard to shut off the coin passage.

1,887,199. LUBRICATOR FOR MOTOR VEHICLES AND THE LIKE. EARNEST O. GILLAM, Fort Worth, Tex. Aug. 31, 1928. Serial No. 303,218. 3 Claims. (Cl. 184—7.)



1. A lubricator comprising a casing having a main compression chamber associated therewith, a supplemental compression chamber separated from said main chamber by a stationary partition wall, means for opening and closing communication between said chambers, selective devices cooperating with said supplemental chamber consisting of a cap forming the bottom of said supplemental chamber and provided with a plurality of perforations, a disk rotatable in said supplemental chamber and in contact with said cap closing said perforations and provided with an elongated perforation adapted to register with one of said perforations and each perforation in succession, means for rotating said disk and pipes connected in said perforations for distributing the lubricant.

1,887,200. MAT. LESLIE T. HAND, Brooklyn, N. Y. Filed Mar. 4, 1931. Serial No. 520,001. 2 Claims. (Cl. 154—49.)

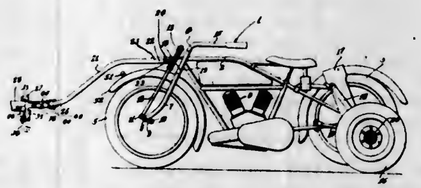


1. The combination, in a composite mat, of two superimposed sheets of paper having uneven surfaces, and an intermediate filling of cementitious material, said mat having a compacted marginal portion that is stiffened by the presence of the cementitious filling.

1,887,201. MANUFACTURE OF GOODS OF RUBBER OR SIMILAR MATERIAL. CECIL HAYES, Streetly, and EVELYN WILLIAM MADGE and FREDERICK HENRY LANE, Birmingham, England, assignors to Dunlop Rubber Company Limited, Birmingham, England, a British Company. Filed Mar. 6, 1930, Serial No. 433,804, and in Great Britain Mar. 8, 1929. 9 Claims. (Cl. 18—50.)

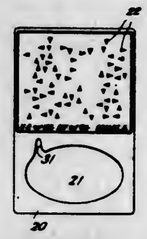
8. A process of making a gel of latex which comprises adding to a concentrated preserved latex a small quantity of a sensitizing agent and formaldehyde in excess of that required to combine with the free ammonia in said latex, said excess equal to 3/10ths of 1% of said latex, and permitting said latex to stand until a gel is formed.

1,887,202. TOW-BAR FOR CYCLES. ALBERT LAURANCE HESS, Los Angeles, Calif., assignor to Cycletow Corporation, Ltd., Los Angeles, Calif., a Corporation of California. Original application filed July 13, 1929, Serial No. 378,096. Divided and this application filed Mar. 17, 1931. Serial No. 523,239. 5 Claims. (Cl. 208—27.)



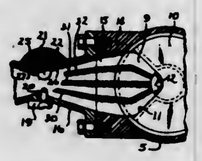
1. In a bicycle construction, a tow bar for connecting said bicycle to a towing vehicle comprising, a bar, means rigidly securing one end of said bar to the upper portion of the front wheel steering fork assembly of said bicycle to cause lateral movement of said bar to correspondingly turn the front wheel assembly, but permitting vertical movement of said bar relative to said assembly, means for securing the other end of said bar to the towing vehicle, and a pair of rear auxiliary wheels constructed for lowering to the ground for maintaining the bicycle upright while being towed.

1,887,203. PLAYING CARDS. HAMPTON W. HOKE, New York, N. Y. Filed Apr. 11, 1930, Serial No. 443,283. Renewed Aug. 19, 1932. 9 Claims. (Cl. 273—152.)



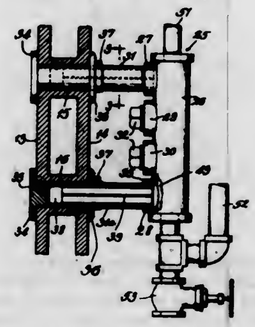
1. The combination with a deck of imperforate playing cards, each having its back surface divided into field-areas and background areas, of an index sheet adapted to be positioned on said cards and having indices indicative of card allotment and so related to one of said areas on each card that one of said indices is rendered optically active in association with such one area to indicate card allotment when the index sheet is positioned on the card provided with said such one area.

1,887,204. CHARGE CONTROLLING DEVICE FOR INTERNAL COMBUSTION ENGINES. FINN T. IRGENS, Wauwatosa, Wis., assignor to Outboard Motors Corporation, Milwaukee, Wis., a Corporation of Michigan. Filed Mar. 14, 1931. Serial No. 522,746. 9 Claims. (Cl. 123—73.)



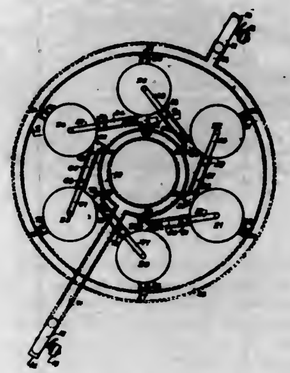
1. In an internal combustion engine, the combination with a charge forming device and charge admission valve, of a manifold passage extending from said device to said valve and longitudinally subdivided to provide a plurality of passages individually under the control of said valve.

1,887,205. HEATER ELEMENT. THOMAS H. IRELAND, Rockville Center, N. Y. Filed Nov. 24, 1931. Serial No. 577,016. 10 Claims. (Cl. 122—20.)



2. A heating element of the class described comprising an elongated, tubular body, one end of said body being closed by a comparatively thick wall, an outwardly extending flange at the closed end of said body for retaining said body against movement in one direction with respect to a support, and other means mounted on said body for retaining the same against movement relatively to a support in the opposite direction.

1,887,206. MEANS FOR BURNING BRICK. NOAH B. KENDRICK, Mount Holly, N. C. Filed Apr. 12, 1932. Serial No. 604,758. 8 Claims. (Cl. 25—135.)



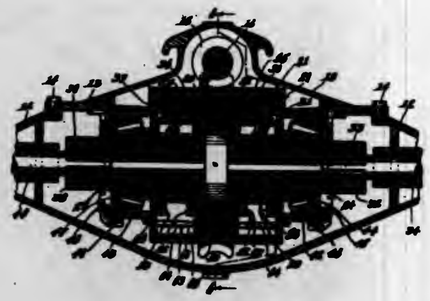
1. Ceramic burning apparatus comprising a plurality of kilns arranged in a circle, a circular draft duct arranged on one side of the kilns, a circular cooling duct arranged on the other side of the kilns, means connecting the bottom of each of the kilns with both the draft duct and the cooling duct, gates in said connecting ducts located between the kiln and the respective ducts, a duct leading from the connecting duct of one kiln to the top of another kiln whereby the draft on a burning kiln can be conducted through the top of and downwardly thru another non-burning kiln to pre-heat the ceramic objects in the non-burning kiln.

1,887,207. DOUBLING AND TWISTING MACHINE. FREDERICK KLEIN, College Point, N. Y., assignor to Sipp-Eastwood Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Mar. 16, 1931. Serial No. 523,027. 18 Claims. (Cl. 117—23.)



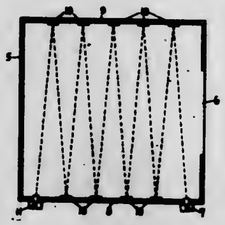
1. In combination, with supporting structure, a rotary carrier revolvible therein, yarn-core elements freely revolvible in the carrier and arranged in planetary relation thereto, and a non-rotating driver having a contact surface extending around the axis of the carrier and with which said elements peripherally contact and free to shift relatively to the carrier axis transversely thereof.

1,887,208. DIFFERENTIAL POWER TRANSMISSION MECHANISM. OTIS E. LAW, Brookfield, Ill., assignor, by direct and mesne assignments, to Allen Free-Wheeling Corporation, Chicago, Ill., a Corporation of Illinois. Filed Dec. 18, 1930. Serial No. 503,152. 8 Claims. (Cl. 74—7.)



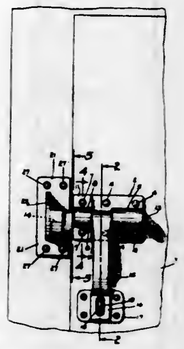
1. Differential drive mechanism for motor vehicles, comprising a left driving member having a cam surface, a right driving member having a cam surface, a left driven member operatively associated with said left driving member, a right driven member operatively associated with said right driving member, a left engaging member operable by means of said cam surface on said left driving member interposed between said left driving member and said left driven member, a right engaging member operable by means of said cam surface on said right driving member interposed between said right driving member and said right driven member, means for causing engagement and disengagement of said engaging means for differential rotational speeds between said driven members, spring means for normally urging said engaging members into engaging position, and engaging devices mounted on said driven members and said engaging members for retracting the latter upon equalization in speed.

1,887,209. ELEVATOR SYSTEM. WILLIAM BATES LUCAS, East Orange, N. J., assignor to Otis Elevator Company, New York, N. Y., a Corporation of New Jersey. Filed May 6, 1930. Serial No. 450,193. 7 Claims. (Cl. 187—29.)



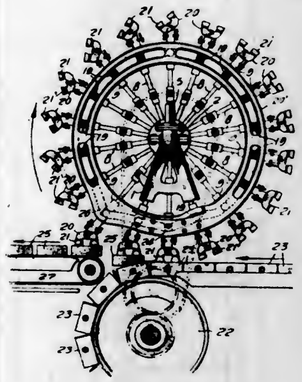
1. In an elevator system; an elevator car; a source of light mounted upon a wall of said car and arranged to cast a beam of light across to an opposite wall; a plurality of mirrors arranged upon the walls of said car to transmit said light beam back and forth across the car, said light source and said mirrors being so arranged that a passenger within the car obstructs said beam at at least one of its paths, a photo-electric device mounted upon said car so that said light beam falls upon said device after being reflected back and forth by said mirrors, switching mechanism having contacts in a circuit affecting the operation of said car, and means responsive to the operation of said photo-electric device to cause the operation of said switching mechanism.

1,887,210. REFRIGERATOR DOORLOCK. JOSEPH MILLER, Minneapolis, Minn. Filed Apr. 15, 1931. Serial No. 530,305. 4 Claims. (Cl. 292—241.)



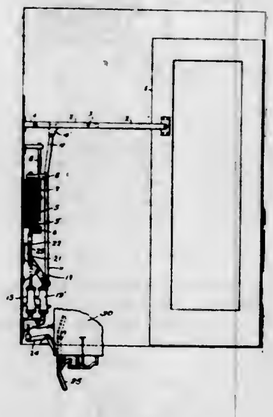
1. A refrigerator door lock comprising, a rock shaft provided at one end with a crank pin, a support including spaced-apart bearings, adapted to receive said shaft, an operating handle secured to the rock shaft, a keeper comprising an outwardly projecting web having an aperture therein adapted to receive a locking member, and an offset cam on said web adapted to be engaged by said crank pin whereby the door may be forced onto its seat by manipulation of said handle, said cam also functioning to retain the crank in door-locking position.

1,887,211. BLOCK HANDLING DEVICE. CHARLES G. MORTIMER, Glen Ridge, N. J., assignor to Structural Gypsum Corporation, Linden, N. J., a Corporation of Delaware. Filed Feb. 20, 1931. Serial No. 517,164. 5 Claims. (Cl. 198—25.)



1. A block handling machine comprising a rotary carrier having radial telescopic arms, a fixed camway, a cam element carried by each arm, the said cam elements riding in the camway to extend and retract said arms and pick-up cups at the ends of said arms, means to create a vacuum within the cups, and a slide valve, movable transversely of said arms to permit the establishment of a vacuum in said cups and to relieve the same.

1,887,212. PNEUMATIC DOOR OPERATING MECHANISM. CLIFFORD NORTON, South Orange, N. J., assignor, by mesne assignments, to Otis Elevator Company, a Corporation of New Jersey. Original application filed July 7, 1923, Serial No. 650,044. Divided and this application filed Mar. 12, 1928. Serial No. 261,010. 3 Claims. (Cl. 187—52.)



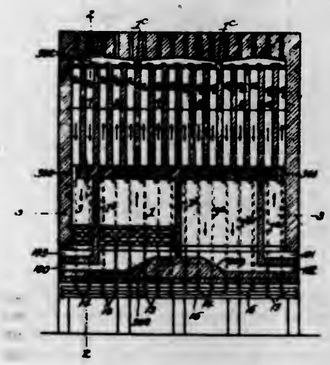
1. In an elevator system, the combination with manually operable self-closing elevator shaft door operating means, of an elevator car and a motor driven power unit adapted to operate through said shaft door operating means to open said door.

1,887,213. GAUGE COCK. GEORGE W. OSBORN, Cleveland, Ohio, assignor to The Reliance Gauge Column Company, Cleveland, Ohio, a Corporation of Ohio. Filed Nov. 6, 1931. Serial No. 573,420. 10 Claims. (Cl. 137—102.)



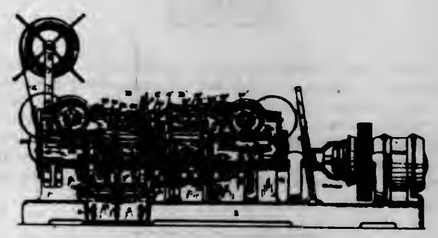
1. In a valve mechanism, the combination of a plurality of valves adapted to be opened and closed one at a time in the normal operation of the mechanism; and an actuating device for each valve, the said actuating devices being formed and arranged so that the actuating devices of valves adjacent to each other mutually engage when one of the valves is opened to limit its opening movement and hold the other adjacent valve closed.

1,887,214. REGENERATIVE COKE OVEN. CARL OTTO, Bochum, Germany. Filed Feb. 17, 1925. Serial No. 9,787. 1 Claim. (Cl. 202—142.)



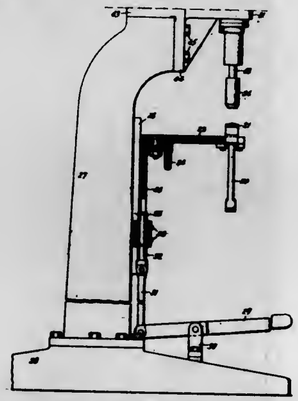
A regenerative coke oven battery comprising a series of alternate horizontally elongated coking chambers and heating walls therefor arranged side by side in a row, each of said heating walls comprising vertical combustion flues arranged in exterior groups and interior groups, each exterior group consisting of two flues, and the flues of each exterior group being less in number than the flues of the neighboring interior group, means for communicably connecting the flues of each exterior group to the flues of the neighboring interior group at their upper end, and exterior and interior regenerators arranged in rows below and lengthwise of the oven chambers and communicably connected to the flues of said exterior and interior groups, respectively.

1,887,215. SPRING FORMING AND ASSEMBLING MACHINE. DAVID T. OWEN, Cleveland, Ohio, assignor to The Owen Automatic Spring Machinery Company, Cleveland, Ohio, a Corporation of Ohio. Filed Sept. 20, 1929. Serial No. 393,919. 88 Claims. (Cl. 140—11.)



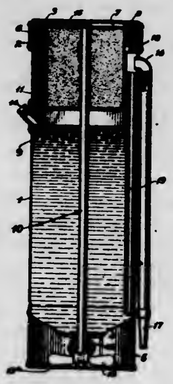
1. In an apparatus for producing spring structures, corresponding spring holding and spring uniting devices situated opposite each other, and means for operating said devices in unison to join the opposite ends of a coiled spring to the corresponding ends of other coiled springs.

1,887,216. ASSEMBLY MACHINE. GEORGE DWIGHT REYNOLDS, Ann Arbor, Mich., assignor to Bausch Machine Tool Company, a Corporation of Massachusetts. Filed July 26, 1929. Serial No. 381,175. 18 Claims. (Cl. 81—57.)



17. In apparatus for setting up securing members simultaneously to the same degree of tightness a rotatable spindle, two spindles in juxtaposed parallelism, and means for transmitting the rotation of said first spindle differentially to said two spindles.

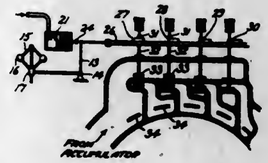
1,887,217. FIRE EXTINGUISHER. WALTER R. ROLLO, Utica, N. Y., assignor to American La France and Foamite Corporation, Utica, N. Y., a Corporation of Delaware. Filed Aug. 19, 1929. Serial No. 386,810. 9 Claims. (Cl. 169—82.)



1. In a fire extinguisher, the combination of a liquid container, a powder compartment therein adapted to hold dry foam making ingredients normally out of contact with the liquid, and means for setting the extinguisher in action including an external operating handle, connections therefrom to the interior of the container and means associated therewith for coincidently introducing the powder to and mixing the same with the liquid.

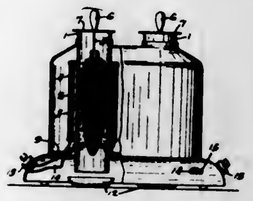
1,887,218. STEAM PLANT. JOHANNES RUTHS, Djursholm, Sweden, assignor to Ruths Accumulator Aktiebolag, Stockholm, Sweden, a Corporation of Sweden. Filed Jan. 23, 1928, Serial No. 248,918, and in Germany Jan. 28, 1927. 8 Claims. (Cl. 60—94.5.)

1. A steam plant comprising, in combination, a steam generator, a motor, means to conduct steam from said generator to said motor, an accumulator, a passage for conducting steam from said accumulator to said motor, valve mechanism in said passage, a governor responsive to speed of the motor, means whereby said governor controls said valve mechanism including a member moved by



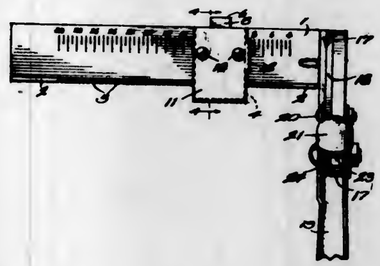
the governor and means variable in accordance with different pressures in the accumulator to provide different limitations of movement of said member for different pressures in the accumulator, said last mentioned means operating to decrease the maximum possible opening of said valve mechanism as the accumulator pressure increases.

1,887,219. ELECTRICAL COOKING APPARATUS. EMIL STRANSZKY, Warren, Pa., assignor to Gerrit Van Daam, Buffalo, N. Y. Filed Dec. 5, 1928. Serial No. 323,991. 11 Claims. (Cl. 219—35.)



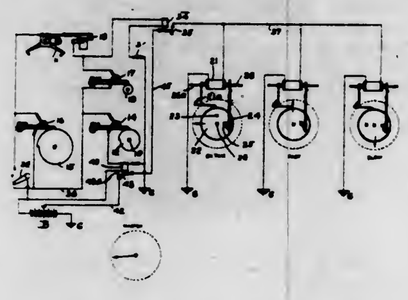
1. A cooking device comprising a hollow metal tube having a foraminous wall, a naked resistance wire supported in embracing relation about that wall, means insulating said wire from said wall, and an axial spit removably held in said tube.

1,887,220. GAUGE. WILLIAM F. STUCKEMAN, Chicago, Ill., assignor to H. B. Rouse & Company, Chicago, Ill., a Corporation of Illinois. Filed July 18, 1929. Serial No. 379,282. 7 Claims. (Cl. 33—169.)



1. In a gauge, the combination with a gauge bar having serrations therein to constitute it a rack; of a block slidable upon the gauge bar; a detent on said block movable transversely of the block and gauge bar, said detent being in the form of a bar bent upon itself, two of the sides of the bar receiving therebetween the gauge bar and block to maintain the block in contact with the gauge bar; and a tooth on the detent interengaging with the rack in one position of the detent.

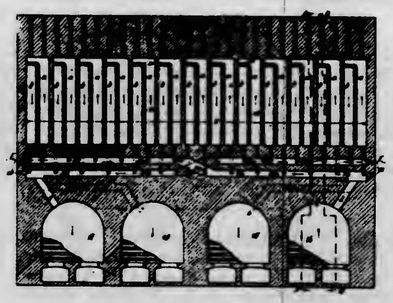
1,887,221. SYNCHRONIZED CLOCK SYSTEM AND SECONDARY CLOCKS THEREFOR. FELIX THOMAS, New York, N. Y., assignor to International Time Recording Company of New York, Endicott, N. Y., a Corporation of New York. Filed May 2, 1929. Serial No. 359,752. 12 Claims. (Cl. 58—24.)



1. A secondary clock for use in synchronized impulse type clock systems comprising an impulse magnet and dual devices operated thereby, one set of devices effecting impulse advance of the clock parts and the other set of devices effecting mechanical restraint of advance of the clock parts beyond a predetermined point of time and being displaced from said restraining position by increased energization of the impulse magnet.

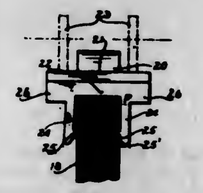
3. A synchronized clock system including a master clock, a single line circuit extending to all the secondary clocks from the master clock, means in the master clock for sending out over the same common line circuit to the secondary clocks, normal impulses and more rapidly recurring stepping up impulses and including provisions for sending out certain current impulses at one voltage and another impulse at another and higher voltage, and means in the secondary clock adapted to mechanically restrain the said clock against impulse advance under certain chronological conditions of the clock and until increased voltage is sent to the secondary from the master clock whereupon said restraint against impulse advance is removed.

1,887,222. COKE OVEN. FRIEDRICH TOTZEK, Essen-Stoppenberg, Germany, assignor, by mesne assignments, to The Koppers Company of Delaware, Pittsburgh, Pa., a Corporation of Delaware. Filed Dec. 12, 1928, Serial No. 325,615, and in Germany Dec. 12, 1927. 10 Claims. (Cl. 202—144.)



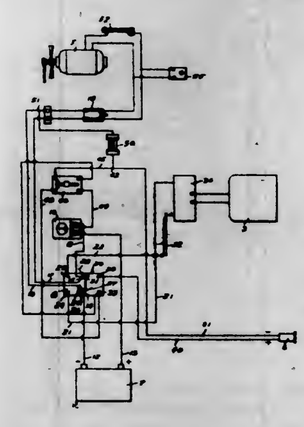
1. A coke oven battery comprising, a series of alternate horizontal coking chambers and heating walls therefor arranged laterally of each other in a row, each of said heating walls comprising a row of combustion flues; regenerators extending longitudinally of the battery and substantially at right angles to said coking chambers and said heating walls; a pair of canals extending in a generally horizontal direction below each of said coking chambers parallel therewith and above said regenerators, each of the canals being formed in two substantially horizontal portions arranged at different levels with a sloping conduit connecting the said portions, the sloping conduits of the canals of a pair crossing each other and a wall separating them, each of the canals of a pair communicating with some of the combustion flues of one of said heating walls and the lower horizontal portion of each of the canals communicating with one of the regenerators below such portion.

1,887,223. SWITCH ACTUATING MECHANISM. PHILIPP VANNINI, Zug, Switzerland, assignor to Landis & Gyr, A.-G., a Limited Joint Stock Company of Switzerland. Filed Aug. 14, 1929, Serial No. 385,744, and in Switzerland Aug. 23, 1928. 5 Claims. (Cl. 200—35.)



1. Switch actuating mechanism for time-controlled switches and the like including in combination a driven disc having a plurality of symmetrically arranged clip-receiving, peripheral recesses and a switch-actuating clip fitting within the recess and engaging the sides of the disc.

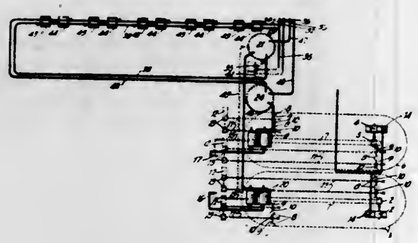
1,887,224. ELECTRIC ICE CREAM DELIVERY TRUCK. CHARLES A. WARD, New Rochelle, and OSCAR E. H. FROELICH, Queens Village, N. Y., assignors to Ward Motor Vehicle Company, Mount Vernon, N. Y., a Corporation of New York. Filed July 2, 1928. Serial No. 289,945. 10 Claims. (Cl. 62—117.)



1. In a vehicle, the combination of an electric motor for driving the vehicle, a mechanical refrigerator, an electric motor for operating the refrigerator, a source of

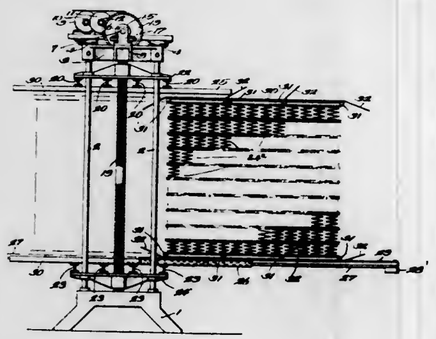
electric current, and electrical connections for supplying current to said motors from said source comprising conductors for supplying current to said refrigerator motor when said source of current is out of operation.

1,887,225. PULPING AND SHREDDING SYSTEM. GEORGE STANFORD WITHAM, Jr., Hudson Falls, N. Y. Filed Sept. 1, 1927. Serial No. 216,921. 28 Claims. (Cl. 92—20.)



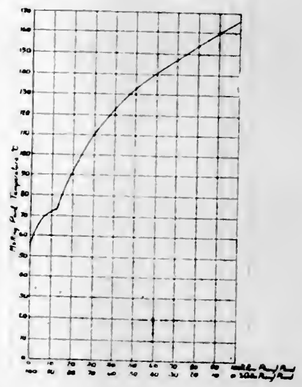
1. The process of preparing paper stock from two or more fibrous materials which comprises separately shredding the materials, separately hydrating by agitation in water without effecting extensive changes in the physical structures of the fibers thereof, segregating from the hydrating materials the fibers, and particles up to a predetermined size, and thereafter blending the segregated portions.

1,887,226. BALING PRESS. WILLIAM E. WUNDERLICH, Muncie, Ind., assignor to The Moore Company, Muncie, Ind., a Corporation of Indiana. Filed May 28, 1930. Serial No. 456,562. 3 Claims. (Cl. 100—8.)



1. A baling press embodying two relatively movable clamping jaws each jaw including a plurality of spaced apart longitudinal beams assembled at their ends by a yoke, the faces of the beams of each jaw opposed to the faces of the beams of the other jaw having secured thereto transverely thereof a plurality of spaced apart transverse beams, said transverse beams being substantially longer than the distance between the two most widely separated longitudinal beams of each jaw and projecting beyond the longitudinal beams at each side of the press, and a single rotatable screw shaft passing through each yoke at each end of the press.

1,887,227. METHOD OF SEPARATING PHENYLPHENOLS. EDGAR C. BRITTON and FRED BRYNER, Midland, Mich., assignors to The Dow Chemical Company, Midland, Mich., a Corporation of Michigan. Filed Dec. 5, 1929. Serial No. 411,762. 9 Claims. (Cl. 260—154.)



1. In a method of separating ortho- and para-phenylphenols the step which consists of heating a mixture of said compounds with an alkaline earth base in the presence of water to form alkaline-earth compounds thereof having relatively different solubilities.

1,887,228. PREPARATION OF MONO-ALKYL AROMATIC AMINES. EDGAR C. BRITTON and HAROLD R. SLAGH, Midland, Mich., assignors to The Dow Chemical Company, Midland, Mich., a Corporation of Michigan. Filed Nov. 11, 1931. Serial No. 574,354. 17 Claims. (Cl. 260—128.)

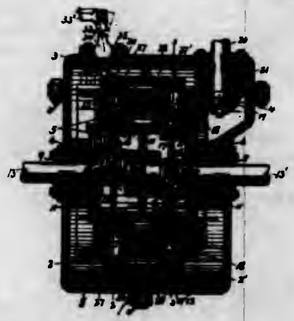
1. A method for preparing a secondary arylamine having the general formula, aryl-NH.R, wherein R represents a residue selected from the group consisting of alkyl and aralkyl residues, which comprises reacting, at a temperature below 100° C., an arylamine salt, having the general formula

$$[\text{Aryl—NH—}]^{M}_{n}$$

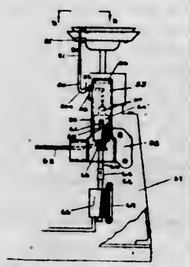
wherein M represents a metal selected from the group consisting of calcium, magnesium, aluminum, and the alkali metals and n represents the valance exhibited by M, with a halohydrocarbon having the general formula, R—X, wherein X represents a halogen group which is attached to an alkyl residue and R represents a residue selected from the group consisting of alkyl and aralkyl residues.

1,887,229. HYDRAULIC POWER TRANSMISSION. CLARENCE RAY BUTTON and MAYNARD E. ESTY, Canandaigua, N. Y., assignors of one-third to Stephen L. Van Voorhis, Canandaigua, N. Y. Filed June 15, 1929. Serial No. 371,174. 6 Claims. (Cl. 192—60.)

4. In a hydraulic power transmission mechanism, a liquid-containing housing, a rotor journaled in the housing and provided with two sets of radial piston chambers and an oil chamber, pistons movable in said chambers, a pair of crank shafts journaled in the housing coaxially with the rotor, means connecting each crank shaft with a respective set of pistons, and restricted passages connecting the outer end portion of each piston chamber with said oil chamber substantially as and for the purpose set forth.

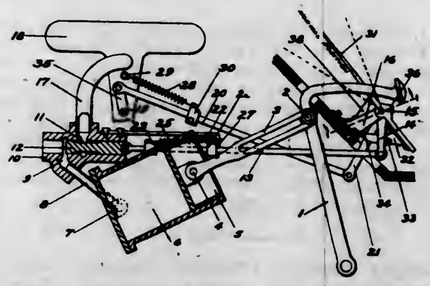


1,887,230. IGNITION DEVICE FOR FUEL BURNERS. CARL B. CHANDLER, Havana, Ill. Filed Apr. 18, 1925. Serial No. 24,042. 8 Claims. (Cl. 158—28.)



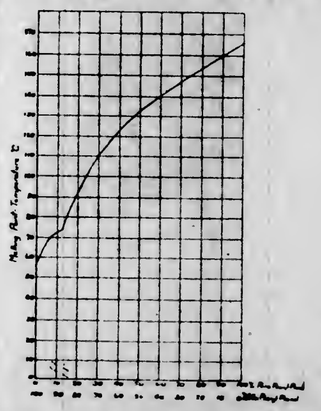
5. In combination, with an oil burner, of electrically power driven means for discharging a fuel mixture into a zone of ignition, a combustion chamber, spark ignition mechanism and means comprising mechanism automatically controlled by the operation of the burner for advancing and withdrawing said spark ignition mechanism from the zone of ignition.

1,887,231. CONTROL MECHANISM FOR MOTOR CARS. RAY G. COATES, Pasadena, Calif. Filed Sept. 10, 1930. Serial No. 480,962. 4 Claims. (Cl. 192—.01.)



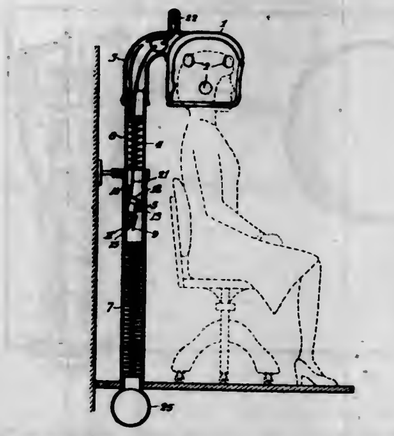
1. The combination of a clutch controlling member, a clutch motor operatively connected to said member, a throttle connected to an intake manifold, a pedal capable of being moved in opposite directions from a normal intermediate position and adapted to automatically return to said normal position when released, a connection between said pedal and said throttle, said pedal being adapted to move said throttle by movements of said pedal on one side of said normal position of said pedal, a control element for said clutch motor, a connection between said control element and said pedal, said pedal being adapted to govern said control element by movements of said pedal on the other side of said normal position of said pedal.

1,887,232. METHOD OF SEPARATING ORTHO- AND PARA-PHENYLPHENOLS. GERALD H. COLEMAN, Midland, Mich., assignor to The Dow Chemical Company, Midland, Mich., a Corporation of Michigan. Filed Dec. 5, 1929. Serial No. 411,716. 5 Claims. (Cl. 260—154.)



1. In a method of separating ortho- and para-phenylphenols from a mixture containing said compounds, the step which consists in crystallising para-phenylphenol from a solution of the above mentioned phenylphenols in an admixture of an organic solvent selected from the group consisting of benzene, chlorobenzene, cyclohexane, tetrahydronaphthalene, ether, ethyl, acetate, chloroform, carbon tetrachloride, ethylene dichloride, acetic acid, and mixtures thereof, with a liquid aliphatic hydrocarbon solvent.

1,887,233. HAIR DRYING APPARATUS. GUS CONDOS, Chicago, Ill. Filed May 31, 1930. Serial No. 458,046. 4 Claims. (Cl. 34—26.)



4. In hair-drying apparatus, the combination of a helmet, means for supplying air to the helmet, electric means for heating the air, means whereby the helmet is

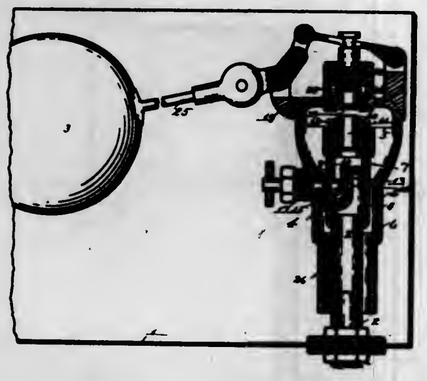
adjustable vertically, and switch means operated automatically by the up and down movement of the helmet, thereby to automatically open and close the circuit of said heating means.

1,887,234. HIGH CHAIR. PHILIP A. COPENHAVER, Chicago, Ill. Filed Oct. 18, 1928. Serial No. 313,210. 5 Claims. (Cl. 155—171.)



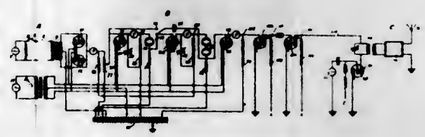
1. A high chair for an infant, comprising a seat, supporting legs for the seat, a rigid, board-like rest for the infant's feet positioned beneath the front part of the seat and having the back portion thereof connected pivotally to the front supporting legs, and means applied to the front portion of the rest for supporting said rest at the proper angle for use by the infant, said means including a spring operative to permit the rest to be depressed by the infant's feet and used as an exerciser.

1,887,235. VALVE MECHANISM. LOUIS A. CORNELIUS, Grand Rapids, Mich., assignor to Wolverine Brass Works, Grand Rapids, Mich., a Corporation of Michigan. Filed June 11, 1930. Serial No. 460,376. 1 Claim. (Cl. 137—104.)



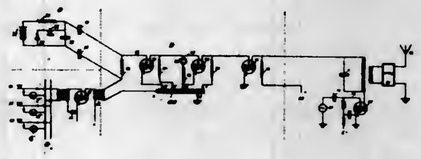
Valve mechanism for flushing tanks, comprising spaced inner and outer tubular bodies integrally united intermediate their ends by a connecting portion, the inner body having a partition integral therewith and extending longitudinally thereof in which is formed an opening, a valve mounted in the connecting portion of the bodies for closing the opening in the partition to regulate the flow through the inner body, a removable valve seat at the top of the inner body, a cover closing the top of the outer body and formed with a cylindrical portion, and a float-controlled valve in the said cylindrical portion of the cover for closing the top of the inner body.

1,887,236. KEYING. JAMES L. FINCH, Port Jefferson, N. Y., assignor to Radio Corporation of America, a Corporation of Delaware. Filed May 21, 1929. Serial No. 364,830. 25 Claims. (Cl. 250—8.)



1. In combination, an electron discharge device; a source of anode potential therefor; means for varying the anode potential in accordance with input energy supplied to said discharge device; a device conductive solely upon the application of a potential of predetermined value thereto coupled to the anode circuit of said electron device; another electron discharge device coupled to said conductive device; another device, conductive solely upon the application of predetermined values of potential applied thereto coupled to the anode circuit of said last mentioned electron discharge device and means responsive to the changes in current through said last mentioned conductive device for affecting a working current in response to the input energy applied to said first mentioned electron discharge device.

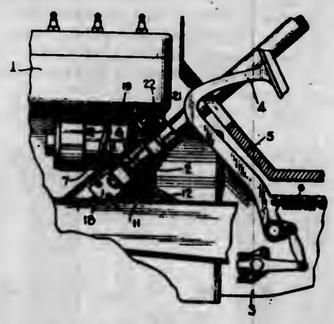
1,887,237. SIGNALING SYSTEM. JAMES L. FINCH, Rocky Point, N. Y., assignor to Radio Corporation of America, a Corporation of Delaware. Filed May 31, 1929. Serial No. 367,199. 8 Claims. (Cl. 250—8.)



1. In a multiplex signaling system means for generating a plurality of signal waves, means for modulating each signal wave in accordance with a signal to be transmitted on each wave, means for combining the modulated waves so as to form a composite wave, and means comprising a glow discharge device and an electron discharge device for transmitting energy of a constant and higher frequency than any of the waves forming the composite wave intermittently at intervals corresponding to the algebraic amplitude of the composite wave.

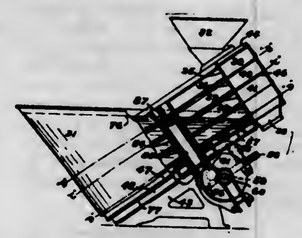
1,887,238. ENGINE STARTING SYSTEM. JOHN GOOD, Garden City, N. Y., assignor to Automatic Motor Stop and Start, Inc., New York, N. Y., a Corporation of New York. Filed Apr. 24, 1928. Serial No. 272,559. 5 Claims. (Cl. 200—59.)

1. In an automobile the combination of a clutch lever, a starter switch adapted for operation by an abnormal declutching movement thereof, spring means normally maintaining said switch in its open position and a bumper device limiting normal declutching movement of the clutch



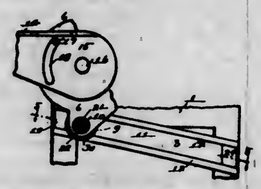
lever and including means rendered active by continued movement of said lever to diminish the resistance opposed by said device.

1,887,239. QUALITY GRADER. OSWALD H. HANSEN, Cedarburg, Wis., assignor to Hansen Canning Machinery Corporation, Cedarburg, Wis., a Corporation of Wisconsin. Filed June 7, 1928. Serial No. 283,500. 16 Claims. (Cl. 209—173.)



1. In combination, a movable pocket, means for delivering peas into said pocket while in motion, means for admitting liquid upwardly through said pocket while in motion to separate the floating peas from the sinkers, and stationary means for segregating said pocket into upper and lower divisions to prevent commingling of the separated materials.

1,887,240. THEATER CHAIR. WALTER M. HANSON, Grand Rapids, Mich., assignor to American Seating Company, Grand Rapids, Mich., a Corporation of New Jersey. Filed Feb. 19, 1930. Ser. No. 429,551. 6 Claims. (Cl. 155—85.)

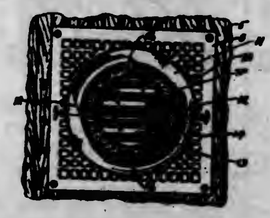


1. A chair comprising: spaced upright side frames having on their inner sides ways extending forwardly and rearwardly; a back mounted on the frames swingably about a horizontal axis; link members connected at their rear ends pivotally about a horizontal axis to the back below the mounting thereof and having rolls turnably mounted on their front ends and rolling along the ways; a seat carried by the link members, the rolls of the opposite link members being connected by an axle comprising aligned portions relatively movable axially.

1,887,241. PROCESS FOR PRODUCING FIBER OR PULP. HENRY STINSON HOOPER, Old Town, Me., assignor to Penobscot Chemical Fibre Company, a Corporation of Maine. Filed Feb. 10, 1931. Serial No. 514,913. 10 Claims. (Cl. 92—13.)

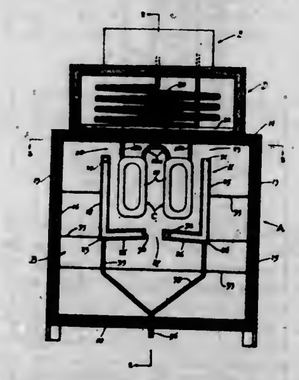
1. The process of producing fiber or pulp from wood which consists of first cooking wood chips in a sodium carbonate solution at a temperature of about 330° F. for about ½ to 1 hour, while permitting the escape of CO_2 formed, then adding a stronger solution containing sodium hydroxide and maintaining this charge at a temperature of about 340° F. for 2 to 4 hours.

1,887,242. AIR PURIFIER FOR FURNACES. MARVIN S. MARTINSON, Goodhue, Minn. Filed Mar. 11, 1929. Serial No. 346,034. 1 Claim. (Cl. 261—107.)



An air purifying device for heating apparatus having an upwardly opening circular hot-air outlet, said device comprising a circular ring-like reservoir opening upwardly and adapted to be removably suspended concentrically of and snugly fitting within said heater outlet, a plurality of wicks arranged parallel to each other and in chordwise relation to the opening of said reservoir and across said opening, bracing means stiffening said wicks each throughout its span, the ends of said wicks adapted to be suspended and submerged in said reservoir.

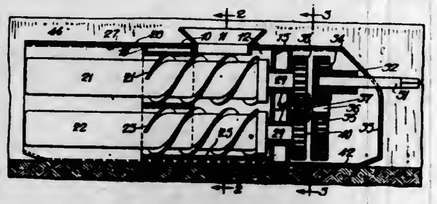
1,887,243. REFRIGERATOR. CHARLES A. MOORE, Edina, Minn. Filed Mar. 19, 1930. Serial No. 437,011. 2 Claims. (Cl. 62—101.)



1. In a refrigerator, a cabinet providing a chamber for provisions and having a door lending access to the chamber, a tank containing a refrigerating liquid superimposing the cabinet, a coil in the tank for a circulating refrigerating medium, means superimposing the tank for supplying such medium to the coil, said coil being arranged to provide a clear vertical space between it and a side wall of said tank, a refrigerating element in the provision chamber comprising a conduit for the circulation of the refrigerating liquid therethrough, a feed terminal and a return terminal extending along the bottom of the tank and communicating from end to end thereof with the interior of the tank, the feed terminal being disposed be-

neath the coil and the return terminal disposed in said vertical space adjacent said side wall of the tank, the conduit of the refrigerating element communicating with the feed terminal and with the return terminal.

1,887,244. CONDUIT FORMING APPARATUS AND PROCESS. JOHN F. MURRAY, Brooklyn, N. Y., assignor to Metropolitan Device Corporation, a Corporation of New York. Filed Aug. 17, 1928. Serial No. 300,257. 10 Claims. (Cl. 25—32.)



3. Apparatus of the type described which comprises a longitudinally movable mold having a feed chamber for plastic material in advance of said mold, a plurality of cylindrical passageways from said feed chamber to said mold, cores centered one in each of said passageways, means for continuously rotating said cores, and means reacting against said core for continuously feeding plastic material into said mold upon the rotation of said core, said apparatus having supporting skids which offer a substantially constant frictional resistance to its longitudinal movement.

1,887,245. STORAGE DEVICE. THOMAS E. MURRAY, Brooklyn, N. Y.; Joseph Bradley Murray, Thomas E. Murray, jr., and John F. Murray, executors of said Thomas E. Murray, deceased, assignors to Metropolitan Engineering Company, a Corporation of New York. Filed Apr. 25, 1928. Serial No. 272,577. 1 Claim. (Cl. 214—16.1.)

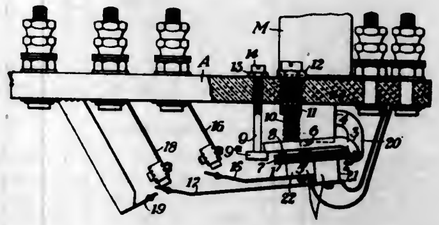


In an apparatus of the character described, a pair of spaced chains, a series of storage cages between said chains, cross-members bridging the space between said chains, said cages being suspended from said cross-members with freedom for pivotal movement about the axes thereof, and guide wheels and driving means for said chains, an enclosing structure for the apparatus having a doorway centered with said chains, the latter having certain links adapted to be detached when loading or unloading automobiles and means for engaging the chain and sustaining its load when such links are detached.

1,887,246. PROCESS FOR REFINING AND DISCOLORING OF RAW SULPHATE SOFT SOAP. EVALD PYHÄLÄ, Oulunkyla, Uusimaa, Finland, assignor to O. Y. Methods Ltd., Viipuri, Finland, a Corporation of Finland. Filed Sept. 8, 1931, Serial No. 561,700, and in Finland Aug. 5, 1931. 6 Claims. (Cl. 87—16.)

1. A process for refining and discoloring of raw sulphate soft soap, comprising treating a solution of raw soap, or a solution of e. g. 50% strength, produced by redissolving of the raw soft soap, preferably in boiling condition with about ½% of peroxides, for instance hydrogen peroxide of 30% strength, calculated on the quantity of raw soap, mixing constantly and subsequently salting the reaction solution, tapping of the bottom water, washing of the soap with a small quantity of water, salting and then tapping the washing water from the separated soap refined and discolored.

1,887,247. ELECTRICAL RELAY. NOBLE C. SHAW, Swissvale, Pa., assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed Dec. 5, 1930. Serial No. 500,293. 1 Claim. (Cl. 200—104.)



A relay comprising an operating electro-magnet, an armature biased by gravity to a fully retracted position and movable to an intermediate position against the force of gravity when said magnet is supplied with current of a relatively low value, means including a spring for preventing the further movement of said armature to its fully attracted position unless said magnet is supplied with current of a relatively high value, a first contact closed when said armature occupies its intermediate position, and a second contact closed when said armature occupies its fully attracted position.

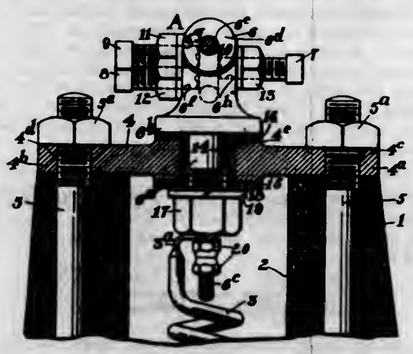
1,887,248. METHOD OF ROLLING STRIP METAL. BARTON R. SHOVER, Pittsburgh, Pa. Filed Sept. 23, 1926. Serial No. 137,330. 6 Claims. (Cl. 80—60.)



6. The method of rolling strip metal, comprising passing a strip singly through a succession of roll passes, doubling and matching the rolled strip, reeling the doubled and matched strip in a single coil, heating the reeled doubled and matched strip, and subsequently passing the heated doubled and matched strip directly from the reel through the same succession of unaltered roll passes, thereby reducing the thickness of the rerolled strip to a fraction of its original thickness depending upon the number of strips doubled and matched for rerolling.

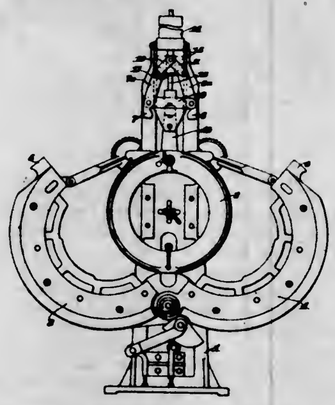
1,887,249. RAILWAY BOOTLEG. MILLS ROGER SNYDER, Savannah, Ga., assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed Aug. 20, 1929. Serial No. 387,126. 8 Claims. (Cl. 247—1.)

1. A bootleg for connecting an electric conductor with a rail connector, comprising a housing projecting upwardly from the ground and enclosing said conductor, a top plate attached to said housing, a terminal structure extending through but insulated from said top plate and clamped to said top plate and provided with an opening to receive the rail connector and with means for electrical connection with the upper end of said conductor, and a set screw extending into said opening for engaging said rail



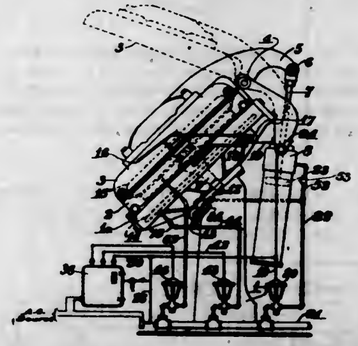
connector to secure said rail connector to said structure and to insure good electrical contact between said structure and said rail connector.

1,887,250. APPARATUS FOR THE VULCANIZATION OF RUBBER TIRES AND TUBES. JOHN R. STRICKLEN and SAMUEL A. FRAINE, Akron, Ohio, assignors to Taylor Instrument Companies, Rochester, N. Y., a Corporation of New York. Filed Jan. 3, 1930. Serial No. 418,233. 5 Claims. (Cl. 18—19.)



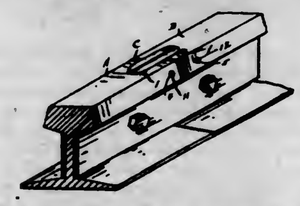
4. In apparatus of the character described, the combination with a treater chamber composed of two complementary parts movable toward and away from one another and normally open to receive the material to be treated, of means for interlocking the complementary parts in closed position, comprising abutments on the complementary parts relatively close to the contact faces thereof, mechanism movable as a unit into and out of interlocking engagement with said abutments, including a bar, clamping levers supported intermediate their ends on the bar to define relatively short clamping jaws and relatively long power levers, respectively, a rod axially movable in a vertical direction independently of the bar, two levers pivotally connected to said power levers and the rod, respectively, to define a toggle joint, means for maintaining the bar substantially at right angle to the rod and means for operating the rod, including means for reciprocating it between an upper and a lower position and means operative to initiate the downward movement by allowing it to drop by gravity and to positively move it after it has reached its gravity position.

1,887,251. APPARATUS FOR VULCANIZING RUBBER TIRES, TUBES, AND THE LIKE. JOHN R. STRICKLEN and SAMUEL A. FRAINE, Akron, Ohio, assignors to Taylor Instrument Companies, Rochester, N. Y., a Corporation of New York. Filed Aug. 12, 1931. Serial No. 556,508. 11 Claims. (Cl. 18—17.)



1. The combination with a tube vulcaniser having a mold divided into sections, at least one of which sections is movable, means for controlling the closing of said mold including a cylinder and a piston, said piston being operatively connected to at least one of said sections, a breech lock for locking said mold closed, means for actuating said breech lock including a cylinder and a piston, and a fluid pressure operated diaphragm for bringing said mold sections into registration, of a pressure regulating system including a conduit connected to one end of each of said cylinders, a single motor valve for admitting fluid pressure into said cylinders through said conduit to hold said mold in open position and to hold said breech lock unlatched, a second conduit connected with said diaphragm and with the other end of said breech lock cylinder, a single motor valve for admitting fluid pressure into the said last-mentioned conduit, a third conduit connectible to the tube to be vulcanised, a third motor valve admitting fluid pressure to said third conduit for inflating said tube, a source of fluid pressure connectible to all of said conduits through said valves, and means for controlling the sequence and duration of the operation of said valves.

1,887,252. RAILROAD RAIL JOINT BRIDGE. THOMAS S. THOMAS, Malad, Idaho. Filed June 22, 1931. Serial No. 545,976. 3 Claims. (Cl. 238—219.)

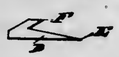


1. In a rail joint bridge the combination of a set of complementary blocks carried in elongated openings in the top side of the ends of each rail said blocks bridging the joint of the rails; and means to hold each of said blocks in fixed longitudinal relation to one end of the abutting rails.

1,887,253. GLAZIER'S NAIL. FRANK H. WASHKO, Bedford, Ohio. Filed July 28, 1930. Serial No. 471,396. 1 Claim. (Cl. 85—15.)

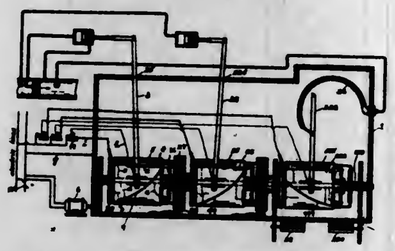
A glazier's nail for securing the overlapping edges of glass panes in a green house roof to the roof bars, comprising, a sheet metal body having a longitudinal edge

applied to the transverse edge of said pane, said edge terminating in a point having the outer edge inclined outwardly, said body having a narrow flat upper transverse face adjacent to said longitudinal edge positioned to receive the blow of a hammer, said body being pro-



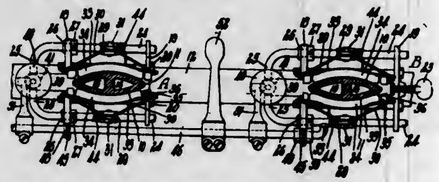
vided with an outwardly and downwardly inclined point, shorter than said longitudinal edge and positioned to prevent the tilting of said nail outwardly when driven, said inclined point having outwardly inclined upper and lower edges and a short outer vertical edge connecting the same.

1,887,254. MEASURING APPARATUS. ARCHER E. YOUNG, Pittsburgh, Pa. Filed Oct. 20, 1931. Serial No. 570,024. 4 Claims. (Cl. 73—167.)



1. In apparatus for making summation of the value of a variable through prolonged intervals of time, a constantly moving member, a second movable member, braking means, and means for imposing alternately upon the constantly moving member the burden either of the movement of the second movable member or of the braking means.

1,887,255. APPARATUS FOR DRYING AND STRETCHING STOCKINGS. FRED A. BATCHELDER, North Cambridge, Mass. Filed Mar. 12, 1930. Serial No. 435,177. 6 Claims. (Cl. 223—17.)



1. An apparatus for drying and stretching stockings having, in combination, a form provided with a heating medium therein, a frame adjustably mounted upon said form, rock shafts mounted upon said frame upon opposite sides of said form, an arm fast to each of said shafts, flexible stocking clamping means upon said arms, a plunger slidably mounted upon said frame and positioned beside and parallel to the form, said plunger being operatively connected to both of said rock shafts, and a handle positioned at the upper end of said plunger in close proximity to said form and adapted to be engaged by the hand of the operator in pulling a stocking downwardly upon the form, whereby the plunger is actuated to force the stocking clamping means into contact with said stocking.

1,887,256. PROCESS FOR TREATING EDIBLE NUTS. CAREY K. BIZZELL, Elisabeth, N. J., and JAMES EUSTACE BIZZELL, Brooklyn, N. Y. Filed Mar. 15, 1932. Serial No. 599,060. 4 Claims. (Cl. 146—219.)

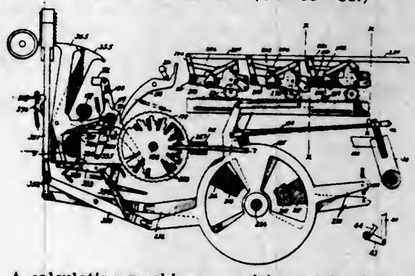
1. In a process of removing skins from nut meats, the steps comprising preparing a hot aqueous solution of substantially 6 ounces per gallon of an alkaline reagent of the group comprising the carbonates, bicarbonates and hydroxides of sodium, potassium, ammonium, calcium, magnesium and the like, immersing the nut kernels in the said solution and for a time period of substantially one to seven minutes to permit reaction with the fatty materials of the skins but without permitting reaction upon the meat of the kernels, thereafter simultaneously removing the products of reaction and the skins, and neutralizing the so treated kernels by means of dilute acids of the group comprising acetic, malic, citric, tartaric, phosphoric, and hydrochloric acids.

1,887,257. EXPANDER SPRING FOR PISTON RINGS. EDWARD G. BUCHMANN, East St. Louis, Ill. Filed Apr. 23, 1932. Serial No. 607,106. 10 Claims. (Cl. 74—104.)



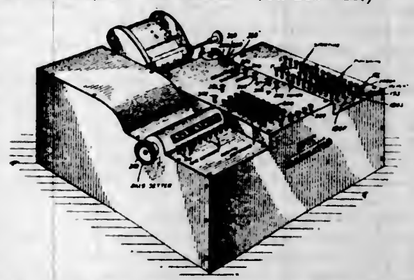
1. An expander spring for piston rings, having an oil channel extending along one side thereof and oil ports in the spring communicating with said channel.

1,887,258. CALCULATING MACHINE. MICHELE GUGLIELMO DE SIMONE, Stapleton, N. Y., assignor to George B. Agnew, New York, N. Y. Filed June 12, 1926. Serial No. 115,660. 28 Claims. (Cl. 235—58.)



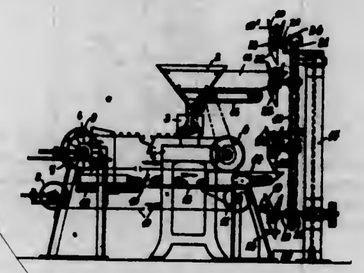
1. A calculating machine comprising mechanism including sets of keys for mechanically performing a computation, means including a set of keys for deriving a function of the result of said mechanically performed computation, one or more sets of separately accumulating totalizers for accumulating respectively said results of successive mechanically performed computations and successively derived corresponding said functions, and means for optionally actuating or non-actuating said totalizers respectively to thereby at will accumulate substantially simultaneously both or either the respective computation results and the respective corresponding functions.

1,887,259. CALCULATING MACHINE. MICHELE GUGLIELMO DE SIMONE, Stapleton, N. Y., assignor to George B. Agnew, New York, N. Y. Filed Nov. 18, 1926. Serial No. 149,031. 12 Claims. (Cl. 235—60.)



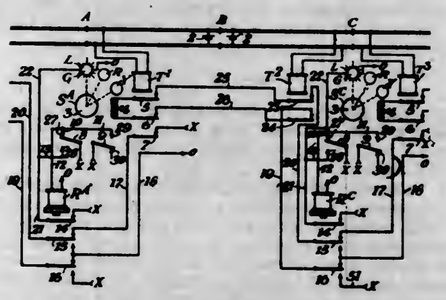
1. A calculating machine comprising mechanism including sets of keys for mechanically performing a computation, means including a set of keys for deriving a function of the result of said mechanically performed computation, a plurality of totalisers, mechanism for controlling the operation of said totalisers for accumulating respectively the results of successive mechanically performed computations and successively derived corresponding functions, and mechanism associated with said controlling mechanism for selectively introducing values into said totalisers.

1,887,260. LEAD PENCIL AND LIKE POLISHING MACHINE. FRIEDRICH EBERHARDT and CHRISTIAN ROEDER, Nuremberg, Germany. Filed Nov. 10, 1930, Serial No. 494,818, and in Germany July 28, 1930. 4 Claims. (Cl. 198—20.)



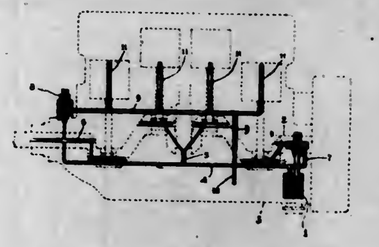
1. In a lead pencil and like polishing machine, a device for receiving the pencils from and returning them to the polishing apparatus, comprising a pair of guide-ways arranged in different vertical planes and at different levels, one for feeding pencils to and the other for delivering pencils from the polishing apparatus, each guide-way comprising a pair of spaced angular members, an endless traveling conveying element moving in a vertical plane and along a rectangular path in front of and at right angles to said guide-ways, and weight-balanced hoppers suspended pivotally from said conveying element, each hopper comprising a pair of upwardly diverging wings arranged at right angles to said angular guide members and shorter than the space between said members, and said conveying element adapted to pass the hoppers up through the delivery guide-way for taking pencils therefrom, and down through the feed guide-way for depositing the pencils on the latter.

1,887,261. RAILWAY TRAFFIC CONTROLLING APPARATUS. CHARLES W. FAILOR, Forest Hills, Pa., assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed Nov. 24, 1931. Serial No. 577,065. 8 Claims. (Cl. 246—41.)



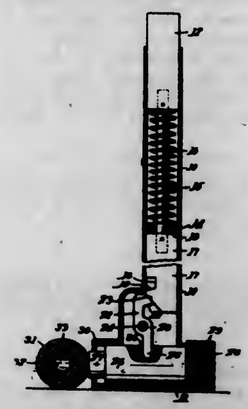
1. Railway signaling apparatus comprising in combination, an electric lamp, a first circuit for energising said lamp, a mechanism including a winding for causing said lamp to display one indication when said winding is energised and another indication when said winding is de-energised, means governed by traffic conditions for at times energising said winding, a slow pick-up relay, a first contact controlled by said mechanism for energising said slow pick-up relay when said winding is energised, a second contact controlled by said mechanism for energising said first circuit when said winding is deenergised, and a second circuit for energising said lamp governed by said slow pick-up relay.

1,887,262. ENGINE OILING SYSTEM. JOHN GOOD, Garden City, N. Y., assignor to Good Inventions Co., New York, N. Y., a Corporation of New York. Filed Apr. 10, 1925. Serial No. 22,110. 3 Claims. (Cl. 184—6.)



1. In an engine lubricating system, the combination with the oil pump, oil circuit and overflow valve, of a restriction opposing the return flow of the oil from said valve to the pump, said restriction being pre-determined to produce an excessive back pressure on the system and a corresponding oil delivery to the wear surfaces when the oil is cold and viscous, and a negligible back pressure when the oil is warm.

1,887,263. IMPELLING DEVICE FOR GAMES. SAMUEL A. GRAVES and NELSON MUELAR, Worcester, Mass. Filed Dec. 2, 1930. Serial No. 499,524. 7 Claims. (Cl. 273—129.)

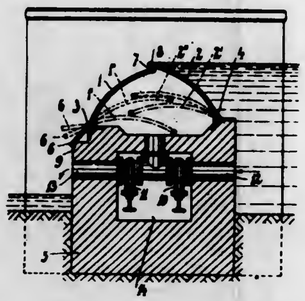


1. In an impelling device for the purpose described, the combination of a plunger for delivering a blow, a spring behind the plunger for forcing the plunger forward, means for holding the plunger in position for delivering a blow, hand-operated means by which the plunger is forced back to compress the spring and then, by the same movement of the operating means, released to deliver the blow and means for resetting the plunger when the hand-operated means is withdrawn to normal position.

1,887,264. PROCESS OF REDUCING ORES AND OBTAINING NEW PRODUCTS THEREOF, SEPARATING THE PRODUCTS AND THE PURIFICATION OF THE SEPARATED PRODUCTS. JAMES B. GRENAGLE, Baltimore, Md., assignor, by mesne assignments, to William W. Varney, Baltimore, Md. Filed Aug. 20, 1929. Serial No. 387,268. 3 Claims. (Cl. 204—15.)

1. The reduction of metal bearing ores consisting of co-mingling therewith sodium-bisulphate, passing a current of electricity through the co-mingled mass for a sufficient time to substantially disintegrate the ore permitting a separation of the ore content then reducing the separated content.

1,887,265. WEIR SHUTTER. FRANTIŠEK JERMÁŠ, Opava, Czechoslovakia. Filed June 27, 1930, Serial No. 464,403, and in Czechoslovakia Apr. 26, 1930. 2 Claims. (Cl. 61—26.)



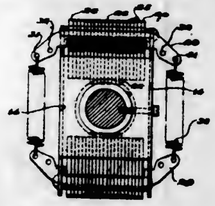
1. A hydrostatic weir shutter comprising a substructure having a well and a channel which opens at the bottom of the well and communicates with the high as well as with the low water, valves for closing either communication, two arcuate leaves, equally long and symmetrical hinged, at points situated on the same level, to opposite sides of the structure and overlapping across the well, the leaf at the low water side being adapted, in its lowermost position, to rest with its free end against the bottom of the well and cover the channel orifice, and anti-friction rollers connected to the free ends of both leaves as guide and thrust elements, the leaf at the high water side being adapted to bear with its free end against the outer surface of the companion leaf in the lower position of the shutter and with its inner surface against the free end of the companion leaf in the upper position thereof.

1,887,266. EXTENSIBLE TABLE. AUGUST KARLSON, Warren, Pa. Filed Dec. 11, 1931. Serial No. 580,330. 7 Claims. (Cl. 45—112.)



1. A folding table comprising a frame; a top having end leaves movable horizontally toward and from each other on said frame, and a center leaf movable vertically into and out of a position between the end leaves; interlocking means arranged on the opposing edges of said end and center leaves; and means for lifting said center leaf into and out of its operative position between said end leaves including a lifting member movable horizontally and vertically and adapted to engage the underside of said center leaf and having cam surfaces adapted to engage said frame, outward coupling means for moving said lifting member outwardly and causing said cam surfaces to ride up on said frame and lift the center leaf upon moving one of said end leaves outwardly; and inward coupling means for moving said lifting member inwardly and causing said cam surfaces to run down said frame and lower the center leaf upon moving the respective end leaf inwardly.

1,887,267. CENTRIFUGAL SWITCH FOR MOTORS. CARLTON L. KENNEDY, Braintree, Mass., assignor to The Holtzer-Cabot Electric Company, Roxbury, Mass., a Corporation of Massachusetts. Filed June 3, 1931. Serial No. 541,802. 12 Claims. (Cl. 200—80.)



1. A centrifugal switch mechanism for a motor having, in combination, a rotatable frame, and weights carried by the frame, each comprising a plurality of laminations of dissimilar materials including some laminations of wear resisting material.

1,887,268. AUTOMATIC IGNITION CONTROL FOR EXPLOSIVE ENGINES. LELAND G. KNAPP, Chicago, Ill., assignor to Montgomery Ward & Company, Inc., Chicago, Ill., a Corporation of Illinois. Filed Apr. 3, 1928. Serial No. 267,095. 10 Claims. (Cl. 64—90.5.)

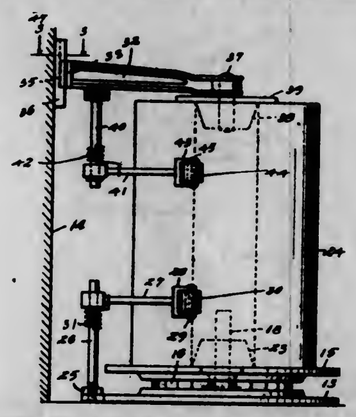


1. In a controlling mechanism of the class described, the combination with the shaft of a magneto, of a supporting gear associated with said shaft, a bushing fixed to said shaft and on which said supporting gear is mounted to permit relative movement between the bushing and said gear, connections for effecting rotation of said supporting gear and the magneto shaft in unison, and means for shifting the position of said bushing with respect to said supporting gear to cary the rotative relation of the shaft to said supporting gear, said means comprising a lever pivotally supported on said supporting gear and connected to said bushing, and thereby to vary the timing of the spark generated by the magneto, said gear being adapted for engagement with a driven gear of an engine.

1,887,269. SUPPORT AND DISPLAY RACK FOR ROLL MATERIAL. ROBERT H. KNITTLE, Port Carbon, Pa. Filed Oct. 16, 1930. Serial No. 489,154. 4 Claims. (Cl. 242—55.2.)

1. A material roll support comprising a base unit having a top and a bottom plate, a vertical pin member carried by said bottom plate, a vertically disposed centrally apertured cone body arranged centrally upon the upper plate and having said pin extended therethrough, anti-friction element interposed between said plates, said bottom plate having a portion extended beyond the upper plate, a post supported by and vertically disposed on said extended portion, a roller carrying arm oscillatably mounted in horizontal position upon said post for the engagement of a body on said upper plate, a top unit comprising an arm,

means for securing one end of said arm to a fixed support, a pivot pin carried at the other end of said last arm in vertical alignment with said first mentioned pin, a post secured at one end to said last arm for extension downwardly therefrom when the said arm is in operative position, and a spring pressed roller carrying arm oscillatably supported in horizontal position upon said last post for engaging a body disposed between said pins.

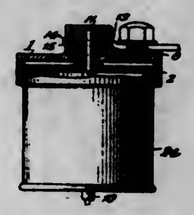


1,887,270. SHIPPING AND DISPLAY PACKAGE FOR BIRTHDAY CAKE CANDLE HOLDERS. ANTHONY W. KAMG, Brooklyn, N. Y., assignor, by direct and mesne assignments, of one-half to Cypress Novelty Corporation, a Corporation of New York, and one-half to N. D. Q. Specialty Corporation, a Corporation of New York. Filed June 13, 1930. Serial No. 460,914. 7 Claims. (Cl. 206—44.)



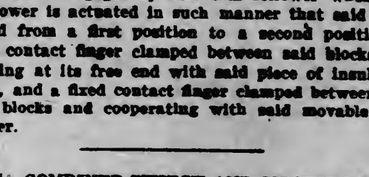
5. A container comprising a rectangular casing having a transparent top surrounding a supporting body, said supporting body having two tiers, the upper of said tiers having circular holes therein and the lower of said tiers having slots forming yielding tongues under and in alignment with each of said circular holes.

1,887,271. TRUNKING RISER CONNECTER. WILLIAM H. B. LAVARACK, Pine Bush, N. Y., assignor to Railroad Accessories Corporation, New York, N. Y., a Corporation of New York. Filed Mar. 15, 1929. Serial No. 347,341. 4 Claims. (Cl. 173—262.)



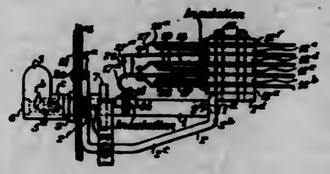
1. As an article of manufacture, a metallic body adapted to be attached to a horisontal surface formed with a cavity for receiving soldering metal forming a pool and an orifice connecting with the cavity for receiving a conductor to be electrically connected to the body and means for rigidly positively securing the conductor to the body.

1,887,272. TRUNKING RISER CONNECTER. FREDERICK C. LAVARACK, Montclair, N. J., and WILLIAM H. B. LAVARACK, Pine Bush, N. Y., assignors to Railroad Accessories Corporation, New York, N. Y., a Corporation of New York. Filed Apr. 5, 1929. Serial No. 352,675. 3 Claims. (Cl. 173—263.)



1. As a connecter for electrical conductors, in combination; an electrical conducting plate formed with two adjacent, parallel, substantially semi-circular grooves positioned so close together that wires laid therein will nearly touch each other; a wire laid in each groove; a third wire positioned above and between the first two wires and touching each; a plate positioned above the third wire and means securing the second named plate to the first named plate, said first mentioned plate formed with an orifice through which said third wire extends.

1,887,273. CIRCUIT CONTROLLER. LLOYD V. LEWIS, Edgewood, Pa., assigner to The Union Switch & Signal Company, Swissvale, Pa., a Corperation of Pennsylvania. Filed Aug. 15, 1930. Serial No. 475,440. 8 Claims. (Cl. 200—1.)

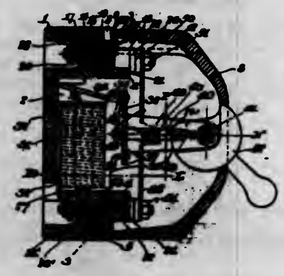


1. A circuit controller comprising a supporting bracket, a manually operable shaft journaled in said bracket, a cam secured to said shaft, a cam follower pivoted to rotate about an axis parallel to said shaft and cooperating with said cam in such manner that rotation of said shaft from a predetermined position actuates said cam follower, an extension on said bracket extending parallel to the axis of said shaft, a plurality of superposed blocks of insulating material secured to said extension, a flexible strip clamped between two of said blocks, a piece of insulating material attached to the free end of said strip and arranged to be engaged by said cam follower when said cam follower is actuated in such manner that said piece is moved from a first position to a second position, a movable contact finger clamped between said blocks and cooperating at its free end with said piece of insulating material, and a fixed contact finger clamped between two of said blocks and cooperating with said movable contact finger.

1,887,274. COMBINED SWITCH AND CIRCUIT BREAKER. WALTER S. MAYER, Philadelphia, Pa. Filed Aug. 19, 1925. Serial No. 51,102. 12 Claims. (Cl. 200—89.)

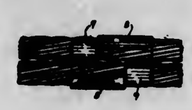
1. A switch and circuit breaker comprising a plurality of spaced contacts, switching mechanism normally biased away from both said contacts and including a rectilinearly movable blade adapted for bridging said contacts, means

for moving said blade toward said contacts and including a toggle positioned adjacent to a section of said blade intermediate the ends thereof when the latter is in closed



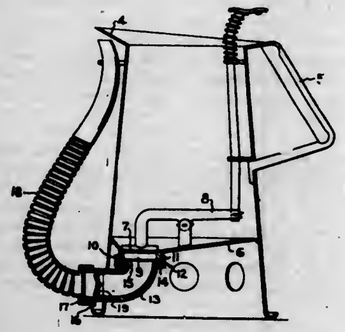
position, and a current responsive device for breaking said toggle and releasing said blade upon the flow of an abnormal current.

1,887,275. CABLE FASTENING MEANS. ELMER MENEFEE, Zanesville, Ohio, assignor to James R. Kearney Corporation, St. Louis, Mo., a Corporation of Missouri. Filed Nov. 5, 1930. Serial No. 493,544. 14 Claims. (Cl. 24—115.)



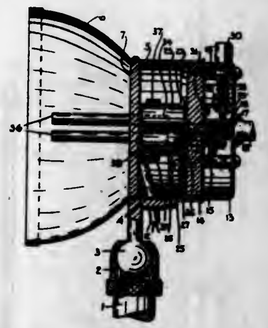
10. A connector for cables and the like, including a pair of laterally adjacent semi-tubular members disposed in staggered relation and joined along a portion of their length, said members having projecting wall portions adapted to be bent about paired cables disposed on opposite sides of said portions.

1,887,276. FLUID MEASURE. RICHARD B. MUNDAY, Dayton, Ohio, assignor, by mesne assignments, to The Cincinnati Ball Crank Co., Cincinnati, Ohio, a Corporation of Ohio. Filed Oct. 26, 1931. Serial No. 571,172. 1 Claim. (Cl. 221—16.)



A liquid measure having in combination a side wall, a bottom horizontally secured within said side wall, an outlet in said bottom, a transparent elbow removably secured to said bottom and extending through the side wall of said measure and a flexible hose removably secured to the outer end of said elbow.

1,887,277. ARC LAMP. FOCSANEANU ALEXANDER, New York, N. Y., assignor to Argco Tube and Television Corporation, a Corporation of Delaware. Filed Apr. 30, 1928. Serial No. 273,809. 5 Claims. (Cl. 176—103.)



1. In an apparatus of the kind described, comprising a shell part, consisting of a reflector bowl and a cylindrical part connected thereto, a transverse insulating plate partitioning said bowl and cylindrical part, adjustable supporting means for said shell fixed to said cylindrical part, rearwardly disposed terminal sleeves for an electric circuit mounted on said plate, an operative part detachably and operatively connectable to said shell part, consisting of a cylindrical cover arranged to insertably register in said cylindrical part and close the rear end thereof, a transverse insulating plate partitioning said cover into front and rear compartments, stationary electrode holders mounted on said cover plate extending forwardly therefrom in said cover front compartment, swinging electrode holders mounted on said cover plate opposite said stationary electrode holders and extending forwardly therefrom in said cover front compartment, electrodes mounted in said stationary holders and said swinging holders, extending forwardly through apertures in said shell insulating plate into said reflector bowl part, spring restrained means in said cover rear compartment normally holding said swinging electrodes in substantially parallel, non-contacting relation to said stationary electrodes, means on said cover operable against said spring restraint to swingably contact said swinging electrodes with said stationary electrodes, and contact lugs in said cover front compartment mounted on said cover insulating plate, extending forwardly therefrom, arranged to seat in said terminal sleeves and make detachable, mechanical and electrical contact, to electrically energize said electrodes while said contact is maintained.

1,887,278. HAND PROTECTOR FOR GOLFERS. LOUIS AUSTER, New York, N. Y. Filed Feb. 4, 1931. Serial No. 513,418. 2 Claims. (Cl. 2—20.)



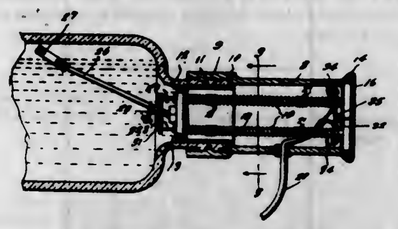
1. In a hand and finger protector for golfers, the combination with a main flat flexible protector strip, of a second flexible securing strip attached to the main strip except where the finger loops are to be located and covering the entire area of the main strip and having slits formed in it at spaced intervals to provide spaced finger loops therein, leaving the main strip altogether unbroken.

1,887,279. PULLEY. LOUIS C. BENDIT, Kansas City, Mo. Filed Oct. 24, 1929. Serial No. 402,245. 9 Claims. (Cl. 64—18.)



1. In a pulley including a wheel having a smooth rim, a series of cylindrical reinforcing members fixed to the rim in spaced relation forming peripheral bosses on the rim, and a groove-forming strip fixed to the wheel rim having V-shaped depressed portions extending between the reinforcing members to the wheel rim and fixed to the rim, the side walls of the strip forming the depressions engaging the reinforcing members, whereby stresses on the strip walls may be transmitted through the reinforcing members to the wheel.

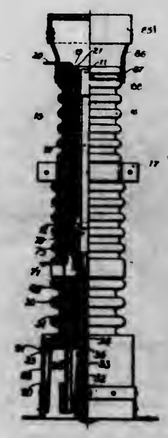
1,887,280. BOTTLE HEATING ATTACHMENT. EUGENE BIANCALANA, Brooklyn, N. Y. Filed Mar. 31, 1932. Serial No. 602,327. 4 Claims. (Cl. 219—38.)



1. A nursing bottle comprising in combination, a nipple, and a heating unit interposed between the nipple and the bottle.

1,887,281. FUSE. ERNST BLOMQUIST, Lombard, Ill. Original application filed Mar. 25, 1929, Serial No. 349,877. Divided and this application filed May 12, 1930. Serial No. 451,722. 14 Claims. (Cl. 200—129.)

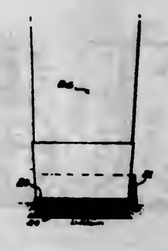
1. A fuse holder comprising a grounded metallic tubular member, grounded spring clips within the member, a fuse holding insulator insertable through said tubular member, a fuse receiving chuck mounted at one end of the insulator, a handle mounted at the other end thereof, and a metallic plate interposed between the handle



and the insulator, said plate resting upon and being removably supported by the spring clips when the fuse holding insulator is inserted through the tubular member.

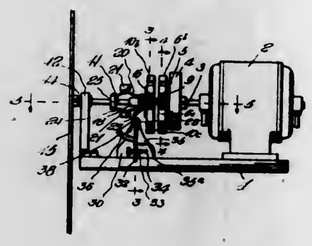
1,887,282. [WITHDRAWN.]

1,887,283. FURNITURE SUPPORT. FRANK BRABSON, Newark, N. J. Filed Dec. 18, 1928. Serial No. 326,859. 1 Claim. (Cl. 45—137.)



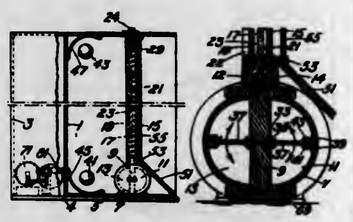
In a furniture support, a floor covering and a furniture engaging and locating rest comprising a body plate adapted to be set under the leg of an article of furniture, said plate having furniture leg locating upstanding extensions defining a part of the boundary of the plate shaped to receive a leg therebeside for free vertical movement, and permitting lateral projection of the leg beyond the plate at opposite parts, said plate having penetrating projections thereon to penetrate said floor covering, said plate having a bottom face of an extent to rest upon the major part of the area of the said floor covering within the boundary of the rest and recessed about the bases of said projections to form an encircling space permitting upward displacement of the material of the floor covering due to the entry of the projections, so that it may be later pressed back to tend to close the depression caused by entry of the projections.

1,887,284. METHOD AND APPARATUS FOR PRODUCING AND MAINTAINING ROTARY MOTION OF CONSTANT SPEED. JAMES W. BRADY, Jr., Brunswick, Ga., assignor of one-third to Millard Reese, Brunswick, Ga. Filed Jan. 26, 1931. Serial No. 511,408. 5 Claims. (Cl. 172—284.)



1. A system for operating rotatable mechanism at constant speed comprising a freely rotatable driven shaft, a positively operated driving shaft, a multiple pole magnet carried by each of said shafts in juxtaposed positions, a centrifugally operated device connected with the multiple pole magnet on said freely rotatable driven shaft and adapted to automatically change the spacial relation of said multiple pole magnets for withdrawing the magnet on said freely rotatable driven shaft out of the immediate field of the magnet on said driving shaft, a bearing surface formed on the rear of the magnet on said driven shaft and adjustable means for frictionally engaging the bearing surface on said last mentioned magnet for governing the rotation of said driven shaft at constant speed.

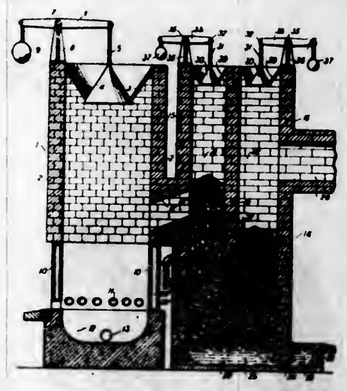
1,887,285. PRODUCTION OF COLORED EFFECTS BY LIGHTING. PERCY BURRELL, Watford, Herts, and JOHN ALLEN BOOTHROYD, Rickmansworth, Herts, England. Filed Aug. 5, 1931, Serial No. 555,876, and in Great Britain Feb. 19, 1931. 7 Claims. (Cl. 40—132.)



1. Display apparatus, comprising a plurality of hollow compartments through which the light from one source may pass, said compartments, the walls of which are constructed of material being positioned one behind the other to form a compound screen, a reservoir for each compartment containing colored liquid, the liquid contained in each reservoir being of a different color, pumping means for each reservoir and adapted to force the liquid from each reservoir to its respective compartment to color the screen, and means for cyclicly operating the pumping means.

1,887,286. APPARATUS FOR TREATING METALLIC ORES. EVANS W. BUSKETT, Joplin, Mo. Filed Jan. 27, 1930. Serial No. 423,686. 6 Claims. (Cl. 266—17.)

1. Apparatus of the character described including a chamber having an inlet for volatilized metal products, and including a branch leading downwardly from said inlet and an upwardly extending discharge branch, a collecting basin connecting said branches and having a lateral outlet at its bottom, and a reservoir exterior to the conduit



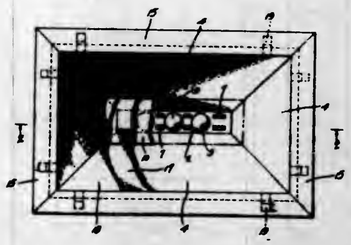
communicating with the basin through the outlet thereof and including means for maintaining a liquid level in the basin below the top of the basin.

1,887,287. SHOCK ABSORBING MECHANISM. RALPH H. CHURCHILL, Chicago, Ill. Filed Sept. 30, 1929. Serial No. 396,025. 8 Claims. (Cl. 280—104.)



1. In combination with a vehicle frame and two axles associated therewith, springs by which said axles are connected to the frame and shock absorbing mechanism comprising a dashpot device movably mounted on the frame and including a casing with a member movable relative thereto, together with linkage connecting the casing to one of the axles, and linkage connecting said movable member with the other axle whereby the recoil movement of one axle is transmitted through the shock absorbing device to the other axle.

1,887,288. DRAFTSMAN'S TABLE. CARL F. CLAUSEN, Grayslake, Ill. Filed Mar. 29, 1930. Serial No. 440,135. 2 Claims. (Cl. 35—12.)

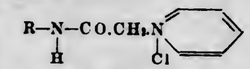


1. A tracing table of the class described, said tracing table including a supported diaphanous flat top portion, said top portion comprising a relatively rigid diaphanous

plate having a tough resilient diaphanous layer superimposed on the upper surface thereof for receiving pointed instruments whereby a sheet of paper may be secured on the upper surface of said top portion, said table being provided with a depending lamp supporting member extending underneath said glass plate, and a diaphanous heat deflecting member secured to said lamp supporting member, said heat deflecting member and said plate being spaced apart from each other for permitting air to move between the plate and the heat deflecting member.

1,887,289. MANUFACTURE OF STRONGLY BASIC AZO-DYESTUFFS. ACHILLE CONZETTI, Basel, Switzerland, assignor to the Firm J. R. Geigy S. A., Basel, Switzerland. Filed July 28, 1928, Serial No. 296,103, and in Germany Aug. 6, 1927. 2 Claims. (Cl. 260—42.)

1. A process for the manufacture of strongly basic azo-dyestuffs, consisting in treating aminated sulpho-free monoazodyes produced from a diazotised benzene compound coupled with a component selected from the group consisting of beta-naphthol, alpha-naphthylamine and phenylmethylpyrazolone, successively with chloracetylchloride and pyridine to convert them into basic dyestuffs containing the group

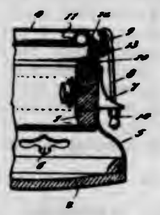


wherein R represents a radical of the benzene or naphthalene series.

1,887,290. BLASTING CAP. WILLARD DE C. CRATER, Succasunna, N. J., assignor to Hercules Powder Company, Wilmington, Del., a Corporation of Delaware. Filed Sept. 30, 1930. Serial No. 485,557. 17 Claims. (Cl. 52—4.)

1. In a blasting cap a charge including crystallized nitromaltose.

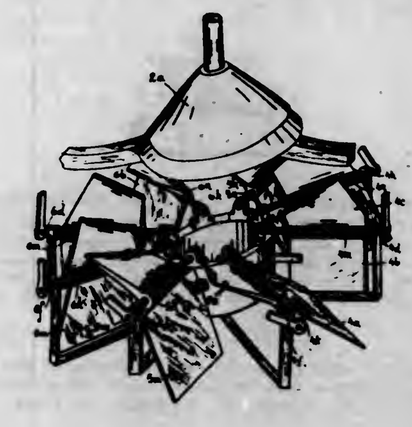
1,887,291. BANJO. DAVID L. DAY, Groton, Conn., assignor to Bacon Banjo Company, Inc., Groton, Conn., a Corporation of Connecticut. Filed May 20, 1931. Serial No. 538,805. 1 Claim. (Cl. 84—269.)



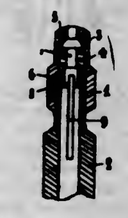
In a banjo, the combination with a rim, a head, and means for stretching the head around the rim, of a head-supporting member consisting of an annular web having its main body encircling the upper portion of the rim and having a transverse concave portion extending inwardly and upwardly over the rim with its upper inner edge rolled downwardly and inwardly to form an annular head-engaging bead carried solely by the concave upwardly extending portion, and a rod snugly housed in said bead.

1,887,292. DEVICE FOR DISTRIBUTING THE CHARGE IN AN OVEN. ALBERT DE SAINT HUBERT, Brussels, Belgium. Filed May 8, 1930. Serial No. 450,819. 1 Claim. (Cl. 214—18.)

In an oven, served by a cage having a movable base for the lading, fixed diaphragms suitably inclined so as to direct the portions of the charge towards the parts to be covered, and movable shutters pivoted on axes in alignment with the upper edges of the said diaphragms, in order to vary at will the amount of material delivered on to the said diaphragms.



1,887,293. VALVE CAP FOR PNEUMATIC TIRES. CHARLES DUNOIS, Champigny, France. Filed Apr. 5, 1929, Serial No. 352,720, and in France July 25, 1928. 1 Claim. (Cl. 152—12.)



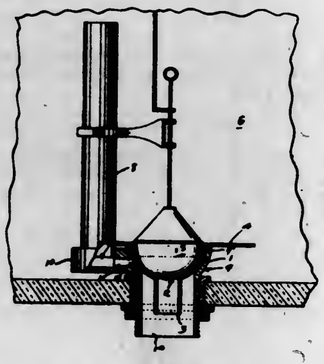
In combination with an inflating valve body having a valve stem therein, a closure for said inflating valve body, comprising a hollow cap having a smooth periphery, and adapted to be threaded upon the valve body, an inner shoulder within said hollow cap, near the upper end thereof, a packing ring resting against said shoulder, a reciprocable valve member having integral stem portions protruding from opposite sides thereof, one of said stem portions extending through the said packing ring to a point wholly within the upper confines of the hollow cap, a spring abutting the valve member and surrounding the other of said stem portions, said spring urging the valve member against the said packing ring, a centering member within said hollow cap having an integral disc portion serving as a lower abutment for the spring and having a hollow cylindrical extension within which one of the above mentioned stem portions and the stem of the inflating valve are adapted to be guided, to depress the valve stem in the inflating valve body, and a second packing ring within said hollow cap adjacent said collar and adapted to abut the end of the inflating valve body.

1,887,294. HOLDER FOR METAL WOOL OR THE LIKE. CROSBY FIELD, Brooklyn, and CLINTON L. CAMPBELL, Port Richmond, N. Y., assignors to Brillo Manufacturing Company, Inc., a Corporation of New York. Filed Apr. 10, 1928. Serial No. 268,873. 3 Claims. (Cl. 15—209.)



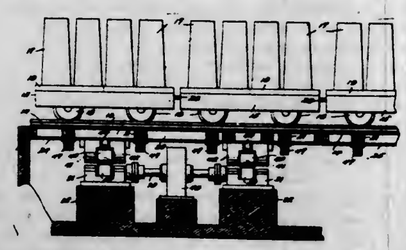
2. A holder for a wad of cleaning material including a relatively thin body having a relatively long, narrow groove in one face thereof, and an elongated handle on the opposite face, formed as a strengthening element, opposed with respect to and parallel with said groove, and wad attaching means arranged wholly within said groove.

1,887,295. SILENCER FOR WATER-CLOSET TANKS. JOSEPH FREED, San Francisco, Calif. Filed July 2, 1928. Serial No. 289,646. 2 Claims. (Cl. 4—56.)



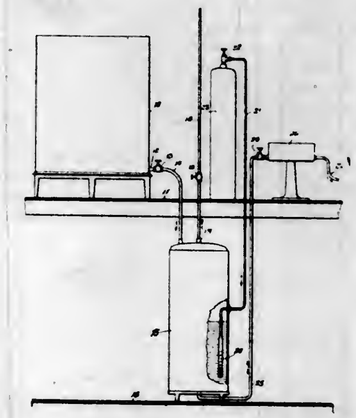
2. A silencer for a water-closet tank, the overflow pipe of which has a side opening adjacent to the usual flush valve seat, said silencer comprising a semi-spherical, concavo-convex ball valve seat adapted to extend into said usual valve seat; and an outwardly extending baffle flange on the upper edge of the second valve seat being disposed in substantially parallel spaced relation above the bottom of the tank to limit the water flow above said valve seat.

1,887,296. PRODUCTION OF SOUND INGOTS. ANDREW G. EGLER, Youngstown, Ohio. Filed Aug. 15, 1932, Serial No. 628,904, and in Canada Nov. 19, 1928. 9 Claims. (Cl. 22—216.)



1. A method of producing sound steel ingots comprising pouring the metal in the mold, repeatedly jarring the metal from the beginning of pouring with a vertical heavy, sluggish blow and at a regulated velocity and speed of jarring that will cause rising of substantially all of the slag to the top of the mold.

1,887,297. APPARATUS FOR AND METHOD OF STERILIZING. CHARLES FRANK, Brooklyn, N. Y. Filed Apr. 5, 1929. Serial No. 352,875. 2 Claims. (Cl. 127—12.)



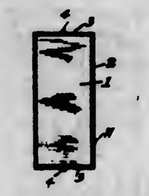
1. An apparatus for sterilizing a liquid by carbon dioxide gas under pressure comprising a sterilizing chamber having a liquid inlet at the top and a liquid outlet at the bottom, a liquid supply tank positioned above said chamber, a pipe leading from near the bottom of said tank to said liquid inlet, a valve interposed in said pipe for regulating the flow of liquid therethrough, a vent positioned at the top of said chamber for venting the used gas, a vent pipe leading from said vent, said vent pipe being provided with a valve for regulating the flow through said vent pipe, means including a foraminous pipe for discharging carbon dioxide gas under pressure into said chamber, said foraminous pipe being positioned near the bottom of said chamber whereby the gas will pass through the liquid in said chamber before it reaches said vent, a filter positioned approximately at the same level as said liquid supply tank, and a pipe leading from said outlet to said filter, said pipe being provided with a valve for controlling the flow of liquid into said filter.

1,887,298. TOILET ACCESSORY. WILLIAM FRIEDMAN, New York, N. Y. Filed Nov. 7, 1930. Serial No. 493,968. 3 Claims. (Cl. 215—12.)



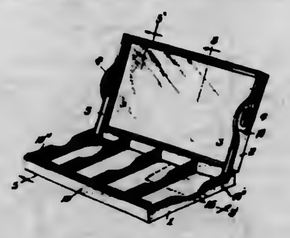
1. A toilet accessory comprising a container having depressions therein, a cover means pivoted to said container, said cover having resilient tabs and burrs, said burrs being resiliently held in said depressions by the resiliency of said tabs.

1,887,299. TOILET ACCESSORY. WILLIAM FRIEDMAN, New York, N. Y. Filed July 2, 1931. Serial No. 548,286. 5 Claims. (Cl. 132—82.)



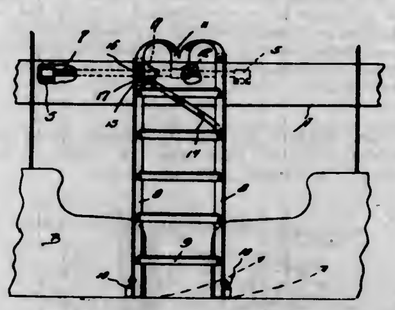
1. A toilet accessory comprising a container and a closure, said container having an opening therein for passage of a cosmetic therethrough, said opening being closed by a relative rotation of container and closure, and said cosmetic being operated through said opening when uncovered independent of the uncovering operation.

1,887,300. DISPLAY BOX. IRVING GOLDSTEIN, Brooklyn, N. Y. Filed Jan. 25, 1930. Serial No. 423,382. 3 Claims. (Cl. 206—44.)



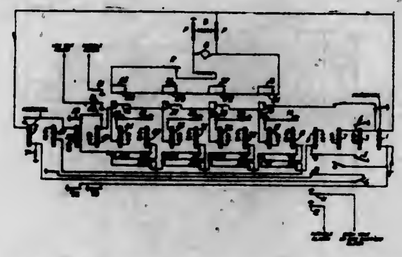
1. A display box, comprising a body having end members formed with notches extending from the outer edge inwardly and an upstanding member at the front and rear spaced inwardly, and a removable lid having walls, the front and rear walls fitting over the respective front and rear upstanding members of the body, the end walls of said lid having depending portions fitting into said notches, each of said end walls having an aperture positioned partly in the depending portions.

1,887,301. BERTH LADDER FOR SLEEPING CARS. WILLIAM S. GORDON, San Antonio, Tex., assignor of one-fourth to Mack Atkins and one-fourth to Benjamin A. Green, Mound Bayou, Miss. Filed Mar. 25, 1931. Serial No. 525,287. 6 Claims. (Cl. 228—48.)



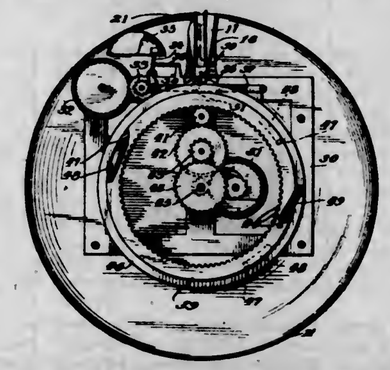
6. In combination a pivotally and slidably mounted support, a ladder including a pair of legs pivoted in relatively spaced relation at one end to said support, rungs pivotally connecting said legs, and releasable means for securing said legs in spaced parallelism.

1,887,302. RELAY CIRCUIT. KENNETH W. GRATHILL, Villa Park, Ill., assignor, by mesne assignments, to Associated Electric Laboratories, Inc., Chicago, Ill., a Corporation of Delaware. Original application filed Sept. 5, 1929, Serial No. 390,474, now Patent No. 1,805,140, dated May 12, 1931. Divided and this application filed Oct. 27, 1930. Serial No. 491,354. 4 Claims. (Cl. 175—320.)



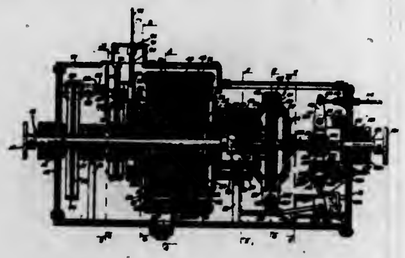
1. In a relay system, a plurality of pairs of relays, a chain circuit for the first relays of said pairs, a locking circuit individual to each first relay, means for intermittently closing said chain circuit, each of said first relays energizing responsive to a closure of said chain circuit and having means operated thereby to complete its individual locking circuit and to extend said chain circuit to the next first relay, a chain circuit for the second relays of said pairs, means for intermittently closing said second chain circuit, each of said second relays energizing responsive to a closure of said second chain circuit and having means operated thereupon to open the locking circuit of the associated first relay of the pair to release that relay, and means operated by the release of each first relay to extend said second chain circuit to the next of said second relays.

1,887,303. REMINDER CLOCK. EDWARD GROSSMAN, Chicago, Ill. Filed Feb. 21, 1931. Serial No. 517,463. 4 Claims. (Cl. 161—6.)



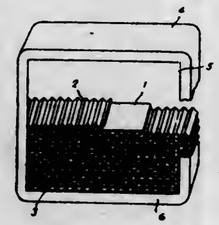
1. In a reminder clock, an enclosing casing, time and alarm mechanisms disposed in said casing, controlling means for the alarm including a pair of ring members resiliently connected with each other to normally move as a unit, a spring detent normally held in contact with one of said ring members for holding the alarm in inoperative position, said last mentioned ring member having a peripheral lug, means for engaging said lug at certain predetermined times to cause said ring member to move to a position where it will release the said spring detent, thereby causing the sounding of the alarm, said last mentioned means being in the form of information bearing tabs disposed on the front of the clock casing at points which will correspond with the time when it is desired to have the alarm sounded.

1,887,304. TRANSMISSION. JOHN R. HANSON, Los Angeles, Calif., assignor of one-fourth to T. T. Word, Houston, Tex. Filed June 14, 1929. Serial No. 371,073. 13 Claims. (Cl. 74—34.)



1. In a transmission, a drive shaft, a driven shaft, driving connections between said shafts including a plurality of transmission systems of the planetary type, each having as elements a spur gear, a series of pinion gears and a ring gear, interconnected means to control the rotation of a plurality of elements of a plurality of said planetary systems, whereby the driven shaft may be rotated at a predetermined low speed and again at a predetermined high speed, said means being adapted to allow graduated speed between rest and the low speed and between the low speed and the high speed.

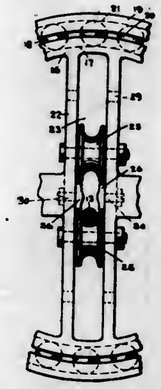
1,887,305. DEVICE FOR USE IN ASSOCIATION WITH GASES OR GAS-LIQUID MIXTURES, AS A FLAME OR EXPLOSION TRAP, A MIXER, A FLOW CONTROLLER, A SILENCER, OR A COOLER. WILLIAM HELMORE and ANDREW SWAN, South Farnborough, England. Filed Oct. 1, 1930, Serial No. 485,804, and in Great Britain Oct. 1, 1929. 3 Claims. (Cl. 123—142.)



2. A device of the character set forth, comprising a plurality of plates bent into zig-zag or corrugated form and a plurality of flat plates, the former plates being layered alternately with the latter plates and forming with the latter narrow passages, the angles or bends of each zig-zag or corrugated plate which are directed toward the zig-zag or corrugated plates on the opposite sides of same being directly opposed to angles or bends of the latter plates with a flat plate therebetween to prevent the application of bending moments to the flat plates and to provide rigid points of reaction for said angles or bends.

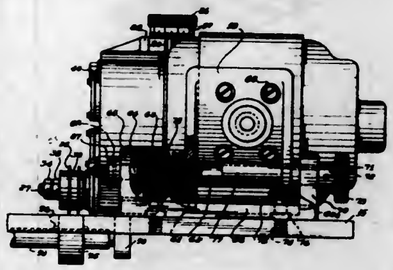
1,887,306. REVOLVING SHEAVE FAIRLEAD. FRED H. HUFF, Louisville, Nebr. Filed Dec. 27, 1929. Serial No. 416,879. 3 Claims. (Cl. 254—190.)

1. In a revolving sheave fairlead, a frame having a circular aperture, a radially slotted wheel mounted to permit rotation in the circular aperture of the frame, a pair of rotatably mounted grooved sheaves disposed closely adjacent each other in the slot of said wheel, said grooves



opening upon each other, and a pair of opposed side-plates disposed in said slot between the sheaves and secured to the frame.

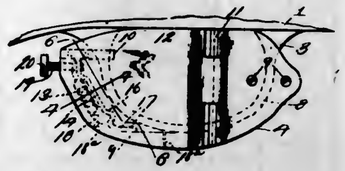
1,887,307. SCORING AND TRIMMING MACHINE. CLIFFORD E. IVES, Wilmette, Ill., assignor to United States Gypsum Company, Chicago, Ill., a Corporation of Illinois. Filed Oct. 16, 1930. Serial No. 489,049. 17 Claims. (Cl. 92—70.)



1. A scoring saw comprising a disc having a rounded outer edge and peripheral substantially radially extending lugs formed therein to provide teeth around the edge of said saw, said saw being self-sharpening upon reversal so as to present the opposite cutting edges of the teeth to the sheet to be scored.

2. In a scoring device, a motor, a shaft rotatably associated with said motor and adapted to be rotated thereby, a trimming knife and a scoring saw secured to said shaft, and means for moving a strip of material adjacent said shaft so as to be operated on by said knife and saw.

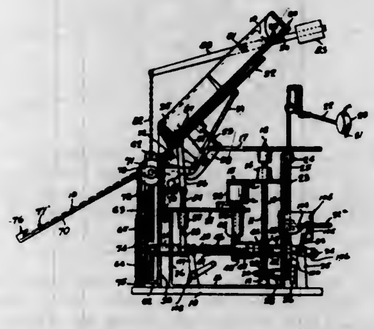
1,887,308. TRIGGER GUARD. GEORGE LEROY JESSUP, Woodland, Calif. Filed Dec. 16, 1931. Serial No. 581,447. 10 Claims. (Cl. 42—70.)



1. A safety device for trigger guards, said device comprising a member carried by the guard and closing opposite

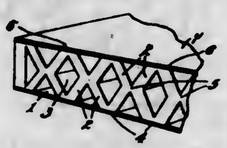
sides of the opening therethrough, hinged closures carried by said device at opposite sides of the guard and means whereby said closures may be released and forced to open position.

1,887,309. DISK CHANGER AND REVERSER FOR AUTOMATIC MUSICAL INSTRUMENTS. LEO T. KINCANNON, Shorewood, Wis., assignor to Electra Corporation, Chicago, Ill., a Corporation of Illinois. Filed Aug. 24, 1929. Serial No. 388,204. 8 Claims. (Cl. 274—10.)



1. In an apparatus of the class described, a rotating table upon which the disks to played are positioned, a magazine for sustaining a stack of disks, an escapement device for releasing disks singly from the magazine, a disk transferrer mounted to vibrate between the table and the magazine and adapted to remove a disk from the table and discharge it and to receive a disk released by the escapement device and position the disk upon the table, a disk reversing device for receiving the discharge disk and placing it in reversed order on the stack in the magazine and means for operating the said devices.

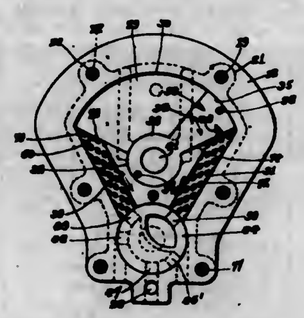
1,887,310. CUSHION STRUCTURE. JOHN H. KING and JOSEPH A. ALLISON, Indianapolis, Ind. Filed Aug. 20, 1930. Serial No. 476,556. 4 Claims. (Cl. 155—179.)



1. A cushion structure comprising a base, a plurality of substantially diamond shaped parallel ribs formed of soft rubber mounted on said base and each having a diamond shaped opening extending throughout the length thereof to form a hollow rib structure, the corners of adjacent ribs contacting with one another to thereby prevent lateral sway, and a cover member for said ribs.

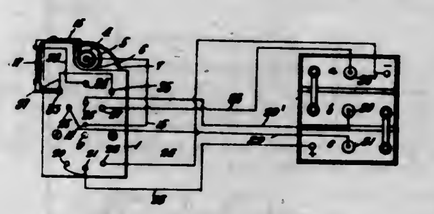
1,887,311. PUMP. ELTON D. KOHR, York, Pa. Filed Feb. 9, 1931. Serial No. 514,632. 10 Claims. (Cl. 261—28.)

1. A pump comprising a receiving chamber for liquid and air and having an air intake, said chamber including an arcuate top wall, a bottom wall, a front wall and a rear wall, said air intake being in said front wall, a pair of channels opening into said chamber through said bottom wall and each providing alternately a liquid inlet and a combined air and liquid outlet, an oscillatory combined suction and discharge element within said chamber for alternately drawing into opposite sides of the chamber air through said intake and liquid through said channels and for alternately discharging from opposite sides of said chamber a body of air and liquid through said channels, said element including a body part travelling against said



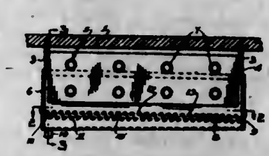
top wall, and an oscillatory valve for alternately controlling the intake of liquid to opposite sides of said chamber and for alternately controlling the discharge from opposite sides of said chamber of a body of air and liquid.

1,887,312. BATTERY WATER LEVEL INDICATOR. CHARLES E. KRUEGER, St. Paul, Minn. Filed May 17, 1929. Serial No. 363,786. 1 Claim. (Cl. 136—182.)



In combination with a battery of three cells which are electrically connected in series, said battery having two terminals, each cell having a body of electrolyte and a contact member extending into the electrolyte, a lamp, a resistor and unitary means for separately electrically connecting the lamp and resistor in series across one terminal of the battery and the contact member in the end cell remote from said terminal, for separately electrically connecting the lamp and resistor in series across the other terminal of the battery and the contact member in the end cell remote from said other terminal, and for separately electrically connecting the lamp without the resistor across the contact member in the middle cell and one of the terminals of the battery.

1,887,313. REFRIGERATED SHOW CASE. LESTER U. LARKIN, Atlanta, Ga. Filed Feb. 26, 1931. Serial No. 518,535. 3 Claims. (Cl. 62—103.)



1. In a refrigerated showcase, a refrigerating coil in the refrigerating chamber of said showcase in combination with a drip pan beneath said coil, said drip pan

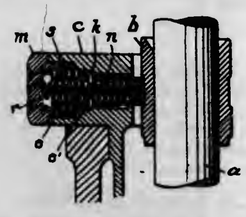
comprising spaced parallel members defining substantially vertical passages, the lower edge of each member being formed as a trough, and the upper edge of each member being inclined downwardly to a point intersecting a vertical plane passing through the trough of said adjacent member whereby condensate dripping upon the inclined upper edges of said members is shed into the troughs at the bottom edges of said members.

1,887,314. HANGER BRACKET FOR SUITCASES. ABRAHAM LEVINE, Elizabeth, N. J., assignor to Presto Lock Corporation, New York, N. Y., a Corporation of New York. Filed Apr. 12, 1928. Serial No. 269,352. 4 Claims. (Cl. 312—172.)



4. A hanger supporting device comprising an element having a laterally elongated hanger trunnion receiving opening, a portion of said element serving for the purpose of attaching the device, said element being provided with ends and a flat bottom portion on which the trunnion may rest in sliding contact said end ends being bent into substantially the same horizontal plane to form a top plate portion, the terminal portions of said ends underlying one, the other to provide an opening for receiving the trunnion therethrough.

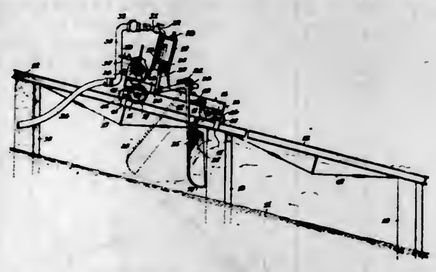
1,887,315. ELASTIC BEARING FOR SEPARATORS. HANS OLOF LINDGREN, Appelviken, Sweden, assignor to The De Laval Separator Company, New York, N. Y., a Corporation of New Jersey. Filed Mar. 9, 1929, Serial No. 345,663, and in Sweden Mar. 15, 1928. 2 Claims. (Cl. 308—143.)



1. An elastic bearing structure for centrifuges comprising an annular bearing adapted to surround the shaft of the centrifuge, a series of relatively weak compression springs extending along different radii of the bearing and in continuous operative engagement therewith and adapted to yieldingly resist bearing displacements of relatively small amplitude, a series of relatively strong springs also arranged along different radii of the bearing and means to hold each strong spring in compression but out of operative relation with the bearing during said relatively small displacements thereof and until the displacement exceeds a predetermined amplitude and to then allow that strong spring, which is in line of displacement of the bearing, to, by reason of its being held in compression, offer a sudden substantially increased resistance to displacement beyond said predetermined amplitude.

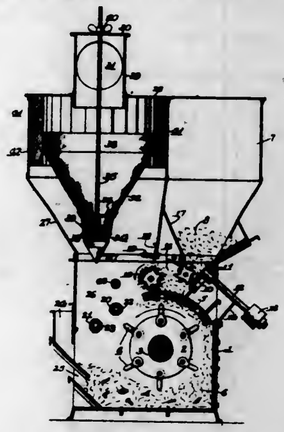
1,887,316. WAVE MOTOR. JOHN A. LOCKFAW, Wilmington, N. C. Filed Aug. 20, 1931. Serial No. 558,397. 1 Claim. (Cl. 230—63.)

In a wave motor, a stationary supporting structure positioned on a beach and which inclines downwardly toward the body of water whose waves roll in on the beach, a car which travels on said structure in the direction of the inclination thereof, air pressure developing means on said car which is operated by the motion and force of the waves, driven means including an air motor on said car connected with and operated by said air pressure developing



means to move the car into different positions in relation to said structure so as to change the position of the air pressure developing means in relation to the body of water, and means to hold the car in the different positions.

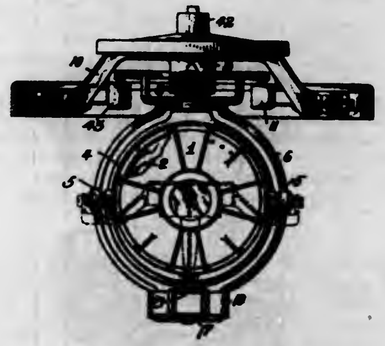
1,887,317. METHOD OF TREATING FLUIDAL MATTER. HENRY G. LYKKEN, Minneapolis, Minn. Original application filed July 2, 1925, Serial No. 41,166. Divided and this application filed Apr. 17, 1930. Serial No. 445,078. 6 Claims. (Cl. 83—11.)



1. A method of feeding fuel comprising creating a pulverizing zone and an entraining space adjacent thereto, reducing material within said pulverizing zone, creating an induced stream of air through said entraining space in a manner to cause it to by-pass said pulverizing zone, and causing said air stream to entrain pulverized material particles by projecting a stream of said particles across said entraining space and transversely with respect to said air stream, said particles being projected from said pulverizing zone by centrifugal force.

1,887,318. FOLLOW-UP SYSTEM FOR GYROCOMPASSES. JOSEPH N. MAHONEY, Brooklyn, N. Y., assignor, by mesne assignments, to Sperry Gyroscope Company, Inc., Brooklyn, N. Y., a Corporation of New York. Filed Jan. 3, 1929. Serial No. 330,114. 1 Claim. (Cl. 33—226.)

In a follow-up system for gyro-compasses and the like having a sensitive and follow-up element, an actuator comprising a variable transformer having the primary winding thereof mounted on the follow-up element, means for supplying the same with alternating current, a magnetic core fixed to said element and forming a stationary path for the magnetic lines of force, a pair of opposed coils mounted on said sensitive element in the path of



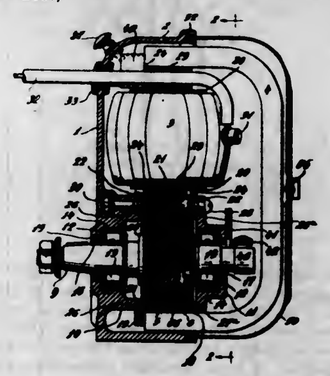
said lines of force, and means differentially actuated therefrom for driving the follow-up system in either direction to maintain the same in a predetermined relation to the sensitive element.

1,887,319. SHOE. JOHN MARINO, Newburyport, Mass. Filed Dec. 1, 1931. Serial No. 578,346. 1 Claim. (Cl. 36—18.)



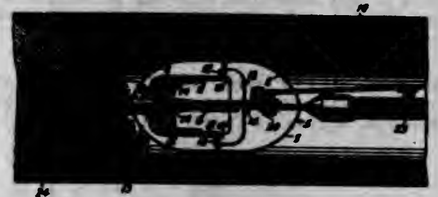
A turned shoe having a sole with a channel leading in from the edge thereof and a channel inwardly of the first mentioned channel, said channels having their opposed ends spaced from each other by a neck portion of the sole, the first mentioned channel being adapted to receive the edge of the upper and the second mentioned channel being adapted to receive the end portions of stitching and said stitching being adapted to pass through the neck portion and through the upper, the inner edge of the first mentioned channel being enlarged to provide space for receiving the edge fold of the upper, the transverse breadth of the first mentioned channel being equal to the thickness of the upper.

1,887,320. MAGNETO. JOHN F. MARTIN, Springfield, Mass., assignor to American Bosch Magneto Corporation, Springfield, Mass., a Corporation of New York. Filed Aug. 16, 1930. Serial No. 475,700. 14 Claims. (Cl. 171—209.)



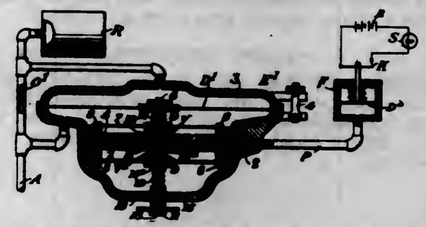
4. In a magneto, a stator structure comprising a coil having a core, one end of the core terminating in a pole shoe, means providing a magnetic by-pass at one side of the coil, said means also terminating in a pole shoe, and supporting rings attached to each side of said pole shoes.

1,887,321. CLEAN-OUT FOR PIPES. RANDOLF A. MIKALSEN, Brooklyn, N. Y. Filed Aug. 28, 1931. Serial No. 559,970. 16 Claims. (Cl. 15—104.20.)



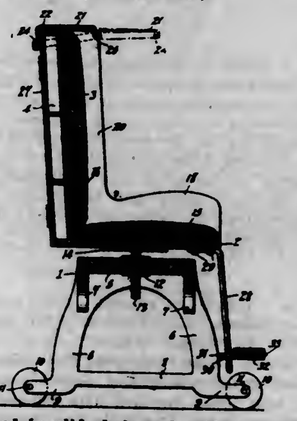
1. In a device of the class described, a body member having a projection for engaging an obstruction at its forward end, jaws movably mounted on the body member, means movable relatively to the projection for holding the jaws at the rear of the forward edge of the body member, means for moving the jaws forwardly for engaging the obstruction at the front of the body member, and means for releasing the first mentioned means.

1,887,322. VALVE FOR CONTROLLING FLUID PRESSURE. LEWIS L. NETTLETON, Edgewood, Pa. Filed Sept. 29, 1928. Serial No. 309,217. 3 Claims. (Cl. 137—139.)



1. In combination, a fixed member, a valve stem, a plurality of stretched elastic strips each having one end attached to said stem and the other end fixed with respect to said member, a pipe, a source of fluid pressure, two valves controlled by said stem one of which connects said source with said pipe and the other of which connects said pipe with atmosphere, and means for operating said stem to vary the relative openings of said two valves.

1,887,323. INVALID CHAIR AND CABINET. LEON PERRON, Brooklyn, N. Y. Filed Oct. 20, 1931. Serial No. 570,011. 2 Claims. (Cl. 155—188.)



1. A combined invalid chair and cabinet comprising a support, a seat structure mounted on the support and

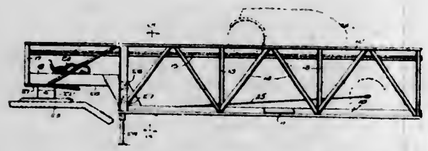
merging into a back, means co-acting with the back for producing an article receiving cabinet, a canopy adapted to extend over the upper part of the chair when in one position, a bow pivotally connected with the upper part of the chair and also connected with the canopy for maintaining the canopy taut when the bow is in one position, said bow being adapted to be swung to the rear so as to overlap part of the cabinet for locking the same closed.

1,887,324. MEANS FOR IDENTIFYING BULLETS. GIUSEPPE POCOROBA, Newark, N. J. Filed Jan. 24, 1930. Serial No. 422,974. 9 Claims. (Cl. 40—2.2.)



1. In a bullet, a slug having embedded therein an element bearing identification indicia; said element comprising an elongated metallic strip rolled into a spiral.

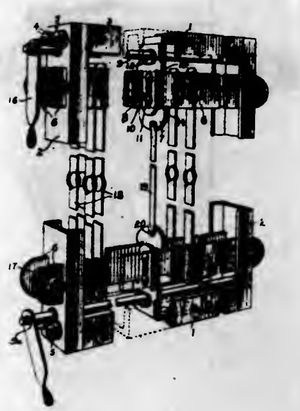
1,887,325. TRAILER. GEORGE D. PRATT and HENRY C. GUILLAUME, Chicago, Ill., assignors to Gerald L. Daniels and Raymond Daniels, Chicago, Ill. Filed May 21, 1930. Serial No. 454,422. 3 Claims. (Cl. 280—33.)



1. In a device of the character described, in combination, a conveyance having a platform, a framework located adjacent the opposite edges of the platform, said framework providing a track having a portion which is elevated relatively to the platform and having a portion thereof inclined toward said platform to thereby provide means for elevating and supporting one end of a vehicle conveyed along said track, and means for releasably securing the vehicle at various positions with respect to the track.

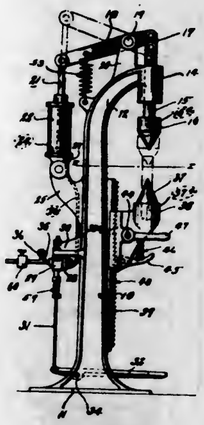
1,887,326. HEDDLE FRAME FOR LOOMS. RALPH RAGAN, Atlanta, Ga. Filed May 24, 1930. Serial No. 455,414. 19 Claims. (Cl. 139—92.)

1. A heddle frame comprising end rails and side rails, all formed of tapered channel section metal, the ends of the end rails being provided with tongues tapered to fit the channels of the side rails and being provided with shoulders abutting against the edges of the channels of the side rails, dowels inter-engaging the side rails and the ends of the end rails, pins extending transversely through the channel sides of the end rails, and eye bolts mounted



on said pins and extending through the side rails and provided with nuts on the outside of the side rails for drawing the side rails and end rails together.

1,887,327. APPARATUS FOR TESTING PIPE NIPPLES. JOHN M. READEY, St. Louis, Mo., assignor to John M. Readey, Inc., St. Louis, Mo., a Corporation of Delaware. Filed Nov. 11, 1929. Serial No. 406,341. 7 Claims. (Cl. 265—14.)

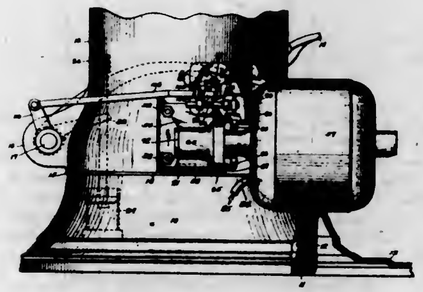


1. An apparatus for testing blank nipples comprising a pair of opposed cone members adapted to receive therebetween a blank nipple, one of said cone members being stationary and the other movable axially relatively thereto, a plunger extending axially from the base of said movable cone member, a lever pivotally connected at one end to said plunger for actuating the latter and said movable cone member, and a fluid pressure means for actuating said lever and moving said movable cone member toward said

stationary cone member, thereby subjecting the nipple held between said cone members to a pressure which is calculated to cause distortion of a blank nipple having an imperfect weld and to have no effect on a blank nipple having a perfect weld.

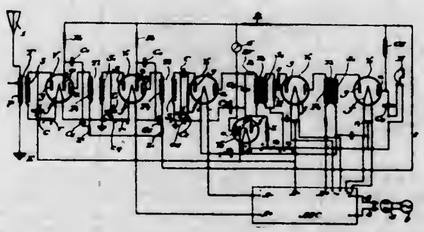
6. In an apparatus for testing blank nipples and the like, the combination with a pair of coaxially aligned cone members, one of which is stationary and the other movable axially relatively thereto, of a support, a plunger movably mounted in said support and carrying said movable cone member, and means arranged on said support below said movable cone member for supporting said stationary cone member said means being adjustable on said support to vary the position of said stationary cone member coaxially relatively to said movable cone member.

1,887,328. DENTAL CHAIR. PERCY RUSSELL, Swarthmore, Pa., assignor, by mesne assignments, to Ritter Dental Manufacturing Company, Inc., Rochester, N. Y., a Corporation of Delaware. Filed Feb. 13, 1928. Serial No. 254,148. 12 Claims. (Cl. 138—9.)



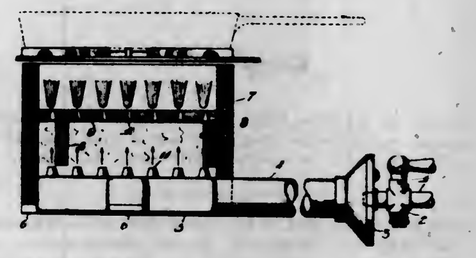
1. In a dental chair in combination, a base, a chair jack disposed in the base, a power cylinder, conduits connecting the cylinder with the jack, check and relief valves disposed in the conduits, a supplemental conduit communicating with the hydraulic system formed of the power cylinder and conduits, and leading to a point on the base for subsequent conducting engagement with an auxiliary power source.

1,887,329. AMPLIFICATION CONTROL SYSTEM. OTTO H. SCHADE, Philadelphia, Pa., assignor to Atwater Kent Manufacturing Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Mar. 22, 1928. Serial No. 263,643. 8 Claims. (Cl. 250—20.)



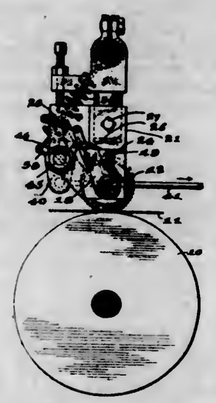
1. The method of controlling the amplification of one or more thermionic tubes of the shielding anode type which comprises rectifying amplified alternating signal energy, and effecting variation of the voltage applied to the shielding anode electrodes thereof by the rectified, amplified energy.

1,887,330. GAS BURNER. WILLIAM S. SHAW, Boyne City, Mich. Filed Nov. 15, 1929. Serial No. 407,307. 18 Claims. (Cl. 158—99.)



1. The combination with a gas burner plate having gas outlet orifices, of a tubular casing of heat insulating material, a perforated plate adapted to fit inside said casing against the inner side thereof and means to sustain said perforated plate a distance above said burner plate to form a mixing chamber.

1,887,331. PERFORATOR. WESLEY P. SHOMAKER, Richmond, Va. Filed Aug. 26, 1931. Serial No. 559,582. 7 Claims. (Cl. 164—99.)

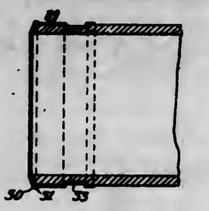


3. In a perforator, a perforating disc, means for continuously rotating the disc, means for retracting the disc out of operative position, releasable means normally acting on said retracting means to maintain the disc in projected position for operation, and trip means operable upon said releasable means for actuating the latter to release the retracting means; whereby said disc may be retracted.

1,887,332. PIPE-END PROTECTOR. PETER J. SHRUM, Monaca Heights, Pa., assignor to Pittsburgh Screw and Bolt Corporation, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed May 10, 1930. Serial No. 451,283. 8 Claims. (Cl. 137—91.)

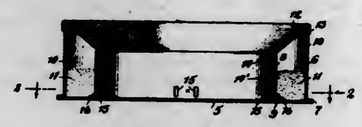
5. A protector for the ends of threadless pipe comprising a longitudinally split annular member adapted to

be sprung over the end of a pipe, and having a circumferential rib on the inner surface thereof adapted to engage a coupling groove in said pipe for holding said protector



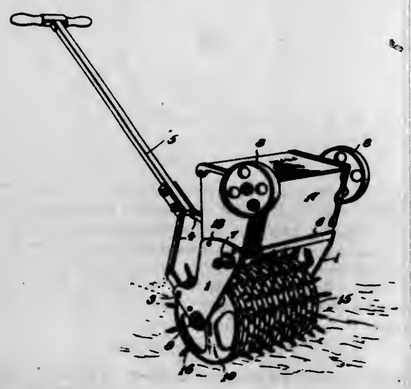
thereto, an annular flange at one end of said annular member for protecting the outer end of said pipe and a wall joining said circumferential rib with said flange.

1,887,333. BOX FOR FACE POWDER AND SIMILAR MATERIAL. ARTHUR L. SMITH, Maplewood, N. J. Filed Mar. 9, 1932. Serial No. 597,840. 4 Claims. (Cl. 132—82.)



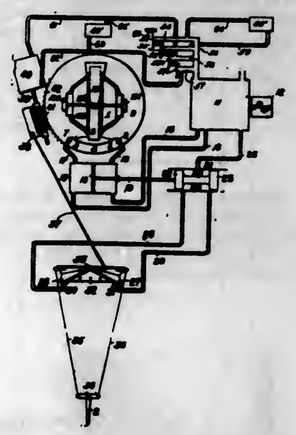
1. A box for powder and similar materials having a base and a peripheral enclosing wall extending upwardly from the base, an enclosing wall disposed within the first mentioned wall and spaced therefrom, the first mentioned wall extending upwardly from the base at a distance greater than the distance at which the second mentioned wall extends above the base, and a member covering the space between the two walls which extends upwardly and outwardly from the second mentioned wall to the first mentioned wall the member being secured to the second mentioned wall and having a depending flange engaging the outer side of the first mentioned wall.

1,887,334. CULTIVATOR. JOHN J. SPAETH, Salina, Kans., assignor to The F. Wyatt Manufacturing Company, Salina, Kans., a Corporation of Kansas. Filed May 14, 1931. Serial No. 537,457. 5 Claims. (Cl. 111—11.)



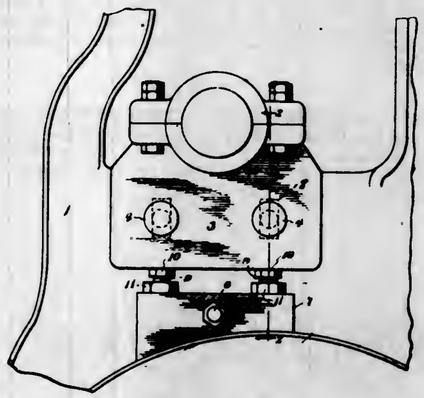
1. A tilling implement including a cultivating roller which consists of a plurality of rotatable wheels arranged side by side, the center wheel being provided on each side with a lateral lug to be engaged by spokes of an adjacent wheel to impart rotation to the former.

1,887,335. AUTOMATIC PILOT FOR AIRCRAFT. LAWRENCE B. SPERRY, deceased, Garden City, N. Y., by Winifred A. Sperry and Bank of America, Co-executors, New York, N. Y. Continuation of application Serial No. 628,781, filed Mar. 30, 1923. This application filed Nov. 9, 1929, Serial No. 405,989. Renewed Feb. 17, 1932. 11 Claims. (Cl. 244—29.)



1. In a control system for aircraft, a pressure source, means connected with said source for actuating a control surface, means connected with said source for controlling said actuating means responsive to pressure changes, a gyroscope for differentially effecting pressure changes in said latter means, and means for altering the relation between the gyroscope and pressure source for effecting changes in course through the gyroscope.

1,887,336. SHAFT BEARING. EARNEST S. SPEARMAN, Pelzer, S. C., assignor to Bahan Textile Machinery Company, Greenville, S. C., a Corporation of South Carolina. Filed Dec. 31, 1929. Serial No. 417,769. 3 Claims. (Cl. 308—59.)



1. As a new article of manufacture, a portable bearing adjuster for looms comprising a base for attachment to a support wholly beneath a bearing of the loom and independent of said bearing, spaced vertically disposed adjusting screws threaded in the base and adapted to bear against the lower portion of said bearing, and lock nuts threaded on the screws for engagement with the upper face of the base for holding the bearing in adjusted position.

1,887,337. TOY GLIDER. CHESTER A. SPOTZ, Stamford, Conn. Filed Sept. 12, 1930. Serial No. 481,489. 14 Claims. (Cl. 46—50.)



14. A toy glider including a body member a wing mounted on the body member to have swinging movement up and down thereon, means for exerting a yieldable pressure on the wing including an elastic member extending across the wing and means securing said elastic member to said body member for adjustment in the direction of the length of the glider to increase or decrease the pressure on the wing.

1,887,338. PAMPHLET AND BOOK COVER. BRADFORD E. STEPHENS, Needham, Mass. Filed Dec. 31, 1930. Serial No. 505,681. 2 Claims. (Cl. 281—29.)



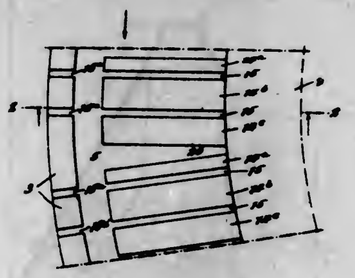
1. A protective cover for periodicals or the like, comprising a folded sheet having integral back and side portions, means to secure the periodical to the back portion and the side portions folding to closed position at opposite sides of the periodical, and each of said side portions having integral peripheral flanges bent inwardly thereof, the flanges of the respective portions meeting in edge-to-edge relation when the sides are folded together, thereby to enclose the contents of the cover.

1,887,339. ELECTRICAL STEEL. CARL J. STROBLE, Tarentum, Pa., assignor to Allegheny Steel Company, Brackenridge, Pa., a Corporation of Pennsylvania. Filed Oct. 9, 1929. Serial No. 398,565. 10 Claims. (Cl. 148—12.)

1. In a method of the character disclosed for improving the characteristics of magnetic steels, passing a steel sheet through a furnace and simultaneously subjecting said sheet to the differential gripping action of feed and discharge rolls operating at different effective speeds, so that said sheet will be subjected to a stretching tension while in the furnace for improving the magnetic quality thereof.

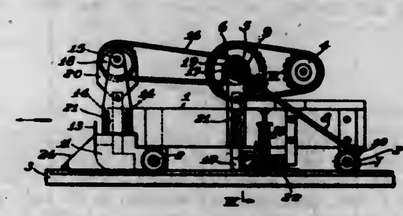
1,887,340. NEEDLE DIAL FOR KNITTING MACHINES. HARRY SWINGLEHURST, Orange, N. J., assignor to Scott & Williams, Incorporated, New York, N. Y., a Corporation of Massachusetts. Filed Feb. 17, 1932. Serial No. 593,576. 15 Claims. (Cl. 66—115.)

12. A dial for knitting machines having groups of spaced parallel slots, the slots of adjacent groups being angularly disposed, rectangular walls of different thicknesses mounted in said slots with the walls in each group of slots parallel and angularly disposed to the walls in adjacent groups of slots and the walls in each group of



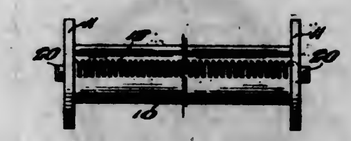
slots forming spaced parallel grooves angularly disposed to the grooves formed by the walls in adjacent groups of slots.

1,887,341. METHOD OF AND MACHINERY FOR FORMING PAVEMENTS. WILLIAM M. VENABLE, Pittsburgh, Pa., assignor to Blaw-Knox Company, Blawnox, Pa., a Corporation of New Jersey. Filed Feb. 7, 1928. Serial No. 252,528. 6 Claims. (Cl. 94—49.)



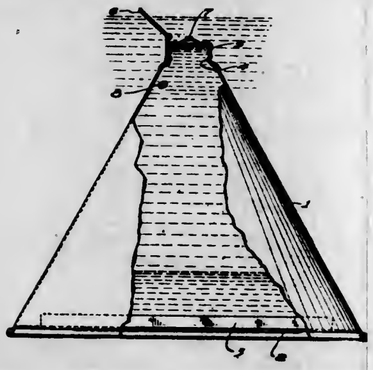
1. The method herein described of spreading forward supplies of concrete heaped upon the sub-grade of a road and bringing the worked-upon body to desired contour, which consists in subjecting the mass step by step, and over successive longitudinally overlapping relatively narrow transversely fractional areas to vertical pressure and at the same time restraining it to rearward of such areas from upward flow.

1,887,342. TUFT YARN SPOOL AND METHOD OF MAKING THE SAME. ROBERT E. VICKERMAN, Philadelphia, Pa. Filed Jan. 26, 1931. Serial No. 511,171. 1 Claim. (Cl. 242—125.)



As a new article of manufacture a spool formed from a metal blank having a row of teeth along one edge spaced to receive and anchor wrap threads respectively between them and rolled into a tube with the meeting edges superposed, one of said edge portions being bent to provide a longitudinally disposed groove opposite said teeth, and heads respectively on the ends of said tube.

1,887,343. OIL LIBERATOR. WILLIAM O. WETMORE, Washington, D. C. Filed Feb. 3, 1930. Serial No. 425,619. 5 Claims. (Cl. 221—67.)



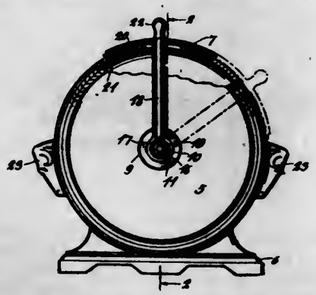
1. A device for liberating oil in bodies of water, comprising a frusto-conical container, a screw cap on the upper end having a small opening therein, and a water inlet opening in the side of the container a short distance below the top.

1,887,344. LOCKING VALVE FOR GAS BURNERS. CHARLES E. WISE, Philadelphia, Pa. Filed Jan. 30, 1930. Serial No. 424,504. 5 Claims. (Cl. 251—165.)



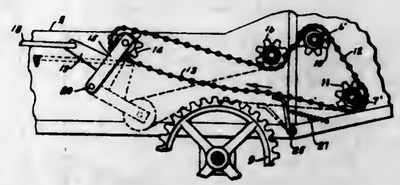
1. A locking valve for gas burners including a body, a barrel mounted on said body, a clutch element carried thereby, an inwardly projecting flange beyond said clutch element, a valve plug rotatably mounted in the body and having a clutch element at its outer end, a handle, a post carried by said handle, a clutch element at the inner end of said handle for co-operation with the clutch element on the valve plug, a sleeve secured to said post with its inner end projecting into the barrel, a clutch element carried by the inner end of said sleeve for co-operation with the clutch element on the barrel, and means to normally force the post and component parts outward to hold the valve plug and post clutch elements out of engagement and to hold the sleeve and barrel clutch element in engagement.

1,887,345. MALTED MILK CONTAINER. ADOLPH COORS, Golden, Colo. Filed Aug. 6, 1931. Serial No. 555,469. 2 Claims. (Cl. 65—59.)



1. A device for dispensing malted milk or the like, comprising a container having a cylindrical body portion and convex ends, the cylindrical portion having a base on one side and an opening diametrically opposite the base, one of the ends having a central opening and an eccentric opening, a plate located over the central opening, said plate having a central threaded projection which projects through the central opening in the end and which is provided with a nut for holding the plate in place, the plate having a pivot pin projecting from its outer surface and a short pin projecting from its inner surface in position to engage in the eccentric opening, a cover for the opening in the top of the container, the inner surface of the cover having a curvature substantially the same as that of the outside of the cylindrical portion, an arm secured to one side of the cover and extending over the end of the container to the pivot pin, the end of the arm having a bearing for the reception of the pivot pin, means acting on the cover to move it towards closed position, and a stop carried by the cover and extending into the opening for limiting its movement in both directions.

1,887,346. CHAIN LIFTER FOR IMPLEMENTS. CALVIN R. DAVIS, Rockford, Ill., assignor to J. I. Case Company, Racine, Wis., a Corporation. Filed Oct. 9, 1931. Serial No. 567,836. 5 Claims. (Cl. 74—21.)



1. The combination with a sprocket-and-chain system, of a chain lifter comprising a member having a lip at its free end thereon for supporting a chain, means for pivotally connecting said member to an implement and the like, and a yielding means connecting the member to an implement for swinging the member upwardly to disengage a chain from a sprocket and whereby said chain will be supported and maintained in disengagement with said sprocket.

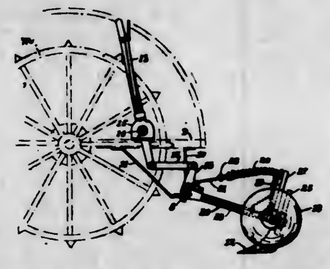
1,887,347. REAGENT FEEDER. THOMAS ARNOLD EVANS, Sombrerete, Mexico. Filed Mar. 21, 1931. Serial No. 524,405. 2 Claims. (Cl. 221—97.)



1. A device of the class described, comprising, in combination, a tank for containing a chemical, an inclined guide extending from the bottom of the tank to the top thereof, a cup slidably connected with the guide, means for reciprocating the cup along the guide and an adjustable plunger secured to the upper end of the guide and

so positioned that its lower end will project downwardly into the cup when the latter is in its uppermost position whereby a quantity of liquid proportional to the depth to which the plunger extends into the cup will be displaced.

1,887,348. TRACK PULVERIZER FOR TRACTORS. HENRY W. FREEMAN, Valley, Nebr. Filed June 22, 1932. Serial No. 618,721. 9 Claims. (Cl. 97—47.)

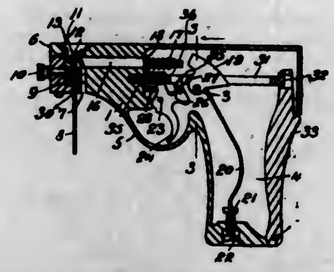


1. In a ground pulverizer for the depressed tracks of tractor wheels, a shaft at the rear of the tractor and attached thereto, a pair of yokes rearwardly of and having forwardly extending links pivotally connected with said shaft, spring controlled lifting-bars connecting the yokes with said shaft, a pair of plows carried by the yokes and having beams pivotally connected with said shaft, discs arranged in pairs at the sides of the plows and carried by said yokes, and a movable hand lever on the tractor for moving the shaft in an arc for moving said plows and discs in a vertical plane.

1,887,349. DRYING AGENT AND PROCESS OF MANUFACTURING SAME. WILLIAM A. HAMMOND, Yellow Springs, Ohio. Filed Apr. 30, 1931. Serial No. 534,148. 5 Claims. (Cl. 252—2.5.)

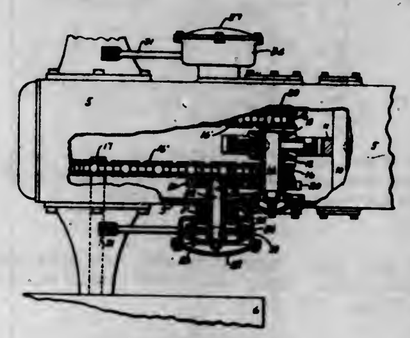
2. The process of manufacturing a drying agent which consists in heating hydrated calcium sulphate at approximately 220° to 250° C. for a length of time sufficient to effect practically complete dehydration.

1,887,350. SAW SET. CHARLES K. HARRIS, Kansas City, Mo. Filed July 12, 1930. Serial No. 467,512. 4 Claims. (Cl. 76—69.)



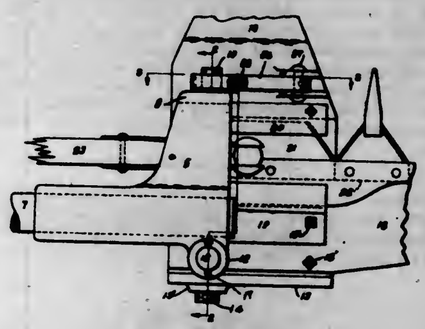
1. In a saw set, the combination with a support having a fixed jaw and a handhold, an anvil on said jaw, a tooth setting plunger co-operating with said anvil, and means including a trigger disposed forwardly of said handhold in position for being engaged and retracted by a finger of the hand holding the handhold for actuating said plunger for setting a saw tooth, of a movable jaw movable independently of said trigger to and from a position in which it is adapted to clamp a saw blade against said fixed jaw with a tooth of the saw in the path of said plunger, and means operable independently of said trigger for forcing said movable jaw to the clamping position.

1,887,351. TRACTOR. ROBERT O. HENDRICKSON, Racine, Wis., assignor to J. I. Case Company, Racine, Wis., a Corporation. Continuation of application Serial No. 534,551, filed May 2, 1931. This application filed Feb. 15, 1932. Serial No. 593,052. 4 Claims. (Cl. 180—17.)



1. In a tractor including a differential and a shaft driven thereby, a spur-gear mounted on the differential shaft, a brake-wheel positioned exteriorly of the tractor, a casing enclosing the wheel, a shaft supporting the wheel and extending into the tractor, a gear on the inner end of said shaft engaging the spur-gear and driven thereby, a brake-band surrounding the brake-wheel, and a treadle on the casing to which the band is connected whereby the band may be adjusted to prevent actuation of the wheel and the rotatable parts associated therewith.

1,887,352. MOWER. EDWIN F. HUDDLE, Rockford, Ill., assignor to J. I. Case Company, Racine, Wis., a Corporation. Filed Oct. 9, 1931. Serial No. 567,848. 8 Claims. (Cl. 56—273.)

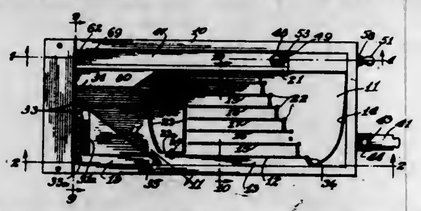


1. In a mower, a shoe support having bearings at its opposite ends, a shoe pivotally mounted on said bearings for vertical adjustment, and means for releasing the shoe from one of said bearings whereby it may be pivoted in a horizontal direction about the opposite bearing on said shoe support.

1,887,353. GAME. THOMAS S. HUTCHISON, Chicago, Ill. Filed Mar. 16, 1932. Serial No. 599,147. 20 Claims. (Cl. 273—119.)

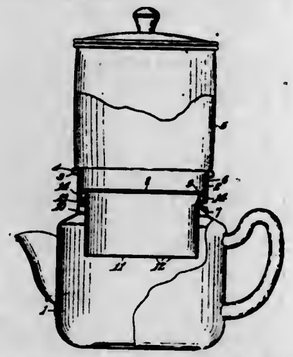
17. In a game, the combination of a casing having a floor inclined downwardly from front to rear of said casing, spherical counters for movement on said floor, scoring runways and a counter projecting runway on said floor, an operating runway, an operating sphere in said operating runway, a member for movement longitudinally of said operating runway for operating said operating

sphere, impact transferring devices extending from the rear end of said operating runway to the rear end of said projecting runway, a movable gate across the outlet



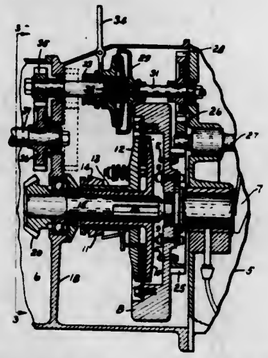
ends of said scoring runways, an arm carried by and extending from said gate, and a bar extending through said casing and movable to operate said arm.

1,887,354. DRIP COFFEE MAKER. CHARLES KAPNER, Bellaire, Ohio. Filed June 2, 1931. Serial No. 541,603. 5 Claims. (Cl. 53—3.)



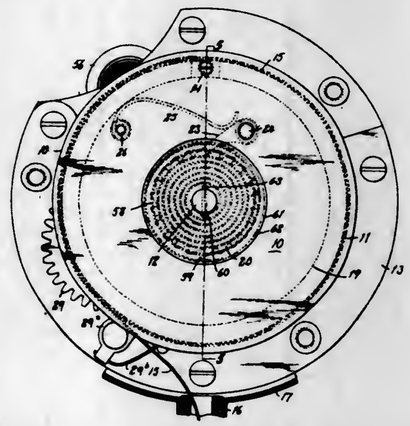
1. In a drip coffee maker, a pot having a neck provided with an internal annular bead, a water reservoir adapted to seat upon said pot above said bead, and a coffee container suspended within said pot with its walls occupying spaced relation to said bead, said container having a rim roll for seating upon said bead, the under side of said roll having an irregular seating surface providing avenues for drainage past said bead for overflowing water of ebullition.

1,887,355. TRACTOR. FRANK N. G. KRANICK, Racine, Wis., assignor to J. I. Case Company, Racine, Wis., a Corporation. Filed Oct. 9, 1931. Serial No. 567,857. 10 Claims. (Cl. 74—7.)



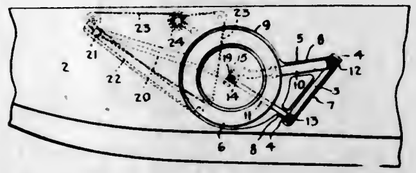
1. In a tractor having a crank-casing and a transmission-casing, clutch mechanism between said casings, a cam-shaft extending forwardly in relation to the clutch and having a gear, a counter-shaft adjacent the cam-shaft and having a gear thereon engaged and driven by said cam-shaft gear, a power-shaft driving-gear on the counter-shaft, a power-shaft extending rearwardly in longitudinal relation to the transmission casing and having a gear engaging and driven by said counter-shaft gear, and means for actuating the cam-shaft to rotate said power-shaft through said interengaging gears.

1,887,356. CLOCK. JACOB F. LANGBEIN, Hamden, Conn., assignor to The New Haven Clock Company, New Haven, Conn., a Corporation. Filed Apr. 14, 1930. Serial No. 448,977. 3 Claims. (Cl. 58—46.)



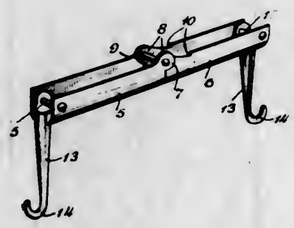
1. In a clock, the combination with a time-train and a driving spring therefor, of a winding-member provided with means for connecting it with said driving spring to wind the same, said winding-member including a drum carrying a pull-cord whereby rotation may be imparted to it to wind said spring as said cord is unwound from said drum, said drum provided with a recess housing a return-spring, said return-spring connected at its opposite ends with said drum and with a fixed part and adapted to be wound when said drum is rotated by said cord and to rotate said drum to rewind said cord when said cord is released.

1,887,357. RETRACTABLE LANDING GEAR. GROVER LOENING, New York, N. Y., assignor to Grover Loening Aircraft Company, Inc., Garden City, N. Y., a Corporation of New York. Filed Jan. 3, 1931. Serial No. 506,333. 7 Claims. (Cl. 244—2.)



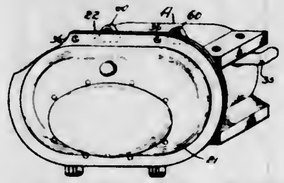
1. A retractable landing gear comprising wheel-carrying frames hinged on longitudinally inclined axes, wheel-supports, swivel connections between said wheel supports and frames so constructed that the wheels keep approximately vertical positions, and means for operating the gear to retract the wheels in a motion that transports the wheels in a fore or aft direction at the same time that it carries them upward and inward for retraction or downward and outward for protraction.

1,887,358. FOLDABLE HANDLE. EUGENE LUCKSOSTEN, Weehawken, N. J. Filed Apr. 20, 1931. Serial No. 531,481. 1 Claim. (Cl. 224—57.)



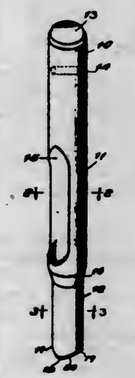
A foldable handle comprising a grip consisting of pivotally connected sections of channeled formation foldable one upon the other with their longitudinal edges in engagement and extensible to longitudinally aligned positions, each section having opposed lugs at its inner end abutting the lugs of the other section and said lugs having detents interengaged with each other to frictionally maintain the sections in folded position, one of said sections having notches in the edges thereof adjacent the pivotal connection of said sections, a hook member pivoted to each section adjacent its outer end and also being of channeled formation and a separate pivot for each hook member extending through the same and adjacent portions of the associated section, each hook member being suspended from its section in perpendicular relation thereto and further being movable about its pivot to a nested position within its section.

1,887,359. SANITARY DOUCHE AND INTERNAL BATH. ANGELO MARUBIO, Chicago, Ill. Filed Dec. 4, 1931. Serial No. 578,880. 1 Claim. (Cl. 128—229.)



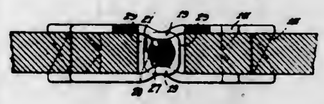
A sanitary douche apparatus comprising in combination with a casing open at one side and adapted to be mounted in fixed position with said open side exposed, a pipe fitting construction mounted in the casing consisting of pipe inleads for hot and cold water making junction with each other for common discharge with independent valves controlling the inleads respectively, and a third valve controlling the common discharge; said pipe fitting construction being mounted on the inner wall of the casing with the inleads extending out through said wall for connection respectively outside the casing with hot and cold water supply pipes; the discharge being arranged for hose connection leading to a douche nozzle, and the casing being interiorly dimensioned for storing a substantial length of hose therein about said unitary pipe fitting structure, and having a displaceable closure for the open side, the closure of the casing having mounted on its inner side a liquid-proof container for medicinal substance, said container having at opposite sides nipples adapting it to be interposed in the discharge hose for impregnating the water delivered to the douche, said container consisting of relatively stiff head and base plates, and a collapsible bellows member connecting said stiff plates, the nipples for connection with the inleading and douche-connecting hose being mounted in the head and base plates respectively.

1,887,360. PUNCH. JOHN C. OLSEN, Chicago, Ill., assignor to Flexible Steel Lacing Company, Chicago, Ill., a Corporation of Illinois. Filed Apr. 17, 1931. Serial No. 530,753. 4 Claims. (Cl. 164—124.)



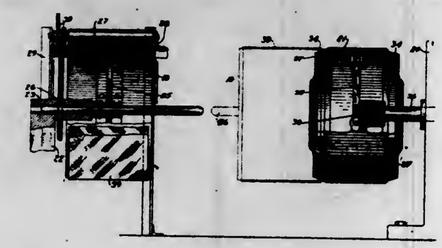
2. A punch for leather, canvas and similar materials comprising: a head and intermediate hollow section; and a terminal hollow tubular section, said terminal section being of uniform size and cross section throughout and provided with an active cutting edge beveled in longitudinal section, said edge being so formed as to present a plurality of substantially uniformly circumferentially disposed ogee curves, as viewed in side elevation.

1,887,361. FASTENING FOR BELTS AND THE LIKE. JOHN C. OLSEN, Chicago, Ill., assignor to Flexible Steel Lacing Company, Chicago, Ill., a Corporation of Illinois. Filed Nov. 11, 1931. Serial No. 574,240. 10 Claims. (Cl. 24—33.)



10. In a fastening for belts ends, the combination with two sets of interfitting loops adapted to be secured, respectively, to the ends of a belt, the loops being formed with flat apexes and spaced parallel sections adjacent thereto so that, when the loops are alined, the same define a substantially rectangular opening, viewed endwise of the loops; of a rocker hinge pin removably seated within said loops, said pin comprising two elements, one of which has a longitudinally extending, fulcrum ridge centrally located on its inner side and the other an opposed longitudinally extending concave bearing face cooperating with said ridge to provide a rocking bearing therebetween, each of said elements being provided on its outer side with flat bearing seats engaging the flat apexes of the respective sets of loops and one of said elements being of such over-all dimension, in a direction perpendicular to said parallel sections of the loop, as to relatively snugly fit therebetween.

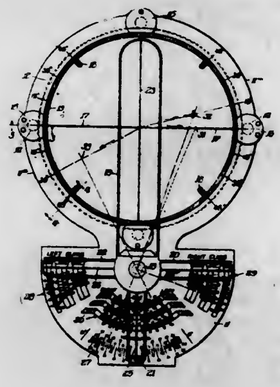
1,887,362. METHOD OF BUILDING TIRE CARCASSES. FRED B. PHILIPPE, Akron, Ohio, assignor to Seiberling Rubber Company, Barberton, Ohio, a Corporation of Delaware. Original application filed Aug. 7, 1929, Serial No. 384,027. Divided and this application filed Oct. 29, 1930. Serial No. 491,947. 5 Claims. (Cl. 154—14.)



1. The method of building pneumatic tire carcasses which comprises building a rubberized fabric band in transversely-flat, circular shape and predetermined length, aligning it while in its original shape and length with a carcass-building form of larger diameter, and stretching and transferring it onto said form.

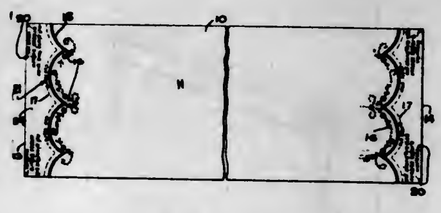
4. The method of building pneumatic tires which comprises bias-cutting, from a roll of the material interwound with a liner, successive individual-ply lengths of tacky, rubberized carcass fabric across the width of a wide strip of the straight-laid fabric, of a transverse dimension to form the width of the ply, then, without intermediate storage in a liner, sizing the individual-ply lengths on a circular former and building them thereon into an endless band while they retain substantially their original tackiness, and incorporating said band in a tire carcass.

1,887,363. ANTIAIRCRAFT SIGHT. WILLIAM T. RICKARDS, Chicago, Ill. Filed Mar. 21, 1932. Serial No. 600,102. 7 Claims. (Cl. 33—53.)



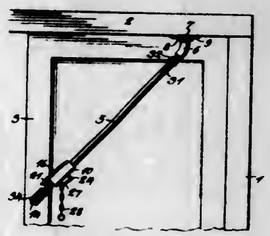
3. A rear gun sight for use against moving targets, comprising a normally vertical filament adjustable relative to the vertical, a second normally horizontal filament adjustable relative to the horizontal, the two filaments intersecting as viewed axially of the gun, a fixed scale graduated in terms of target speed, and a pointer moving with the first filament and adapted to traverse the scale whereby to alter the location of the point of intersection of the filaments to accord with the target speed to effect proper lead.

1,887,364. ART NEEDLE WORK. ALBERT H. SHILLMAN, Baltimore, Md. Filed July 12, 1932. Serial No. 622,077. 8 Claims. (Cl. 41—17.)



6. A method of preparing a pillow case or tubing for subsequent embroidery work thereon which consists in fabricating the pillow case in such manner as to provide the ends of the top and bottom panels thereof with coincident, straight edges, in respectively applying to the opposite outer surfaces of said top and bottom panels stamped designs adapted to be subsequently embroidered, said stamped designs being longitudinally offset relatively to each other, the stamped design so applied to one of said panels being of sufficiently heavy imprint to be visible upon the inner surface of said panel, and in applying to the other of said panels stamped directions for facilitating the removal of a portion thereof to thereby expose to view the design visible upon the surface of the heavily imprinted panel.

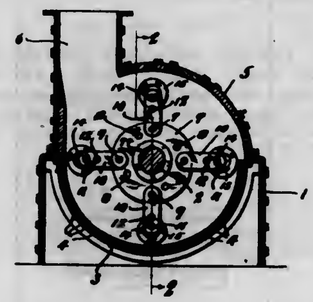
1,887,365. DOOR STOP. WALTER E. WEGNER, Denver, Colo. Filed June 4, 1932. Serial No. 615,403. 5 Claims. (Cl. 292—263.)



1. In combination with a door frame and a door hingedly connected therewith, means for holding the door in open position, comprising, in combination, two telescopically connected members, one end of one of the members being pivotally connected with the door frame and one end of the other member being connected with the door, gripping means carried by one of the members for preventing the two members from collapsing while permitting them to extend, means for moving the gripping means to inoperative position, means for latching the gripping means in inoperative position while the door is moved to closed position and means for releasing the latching device when the door reaches closed position.

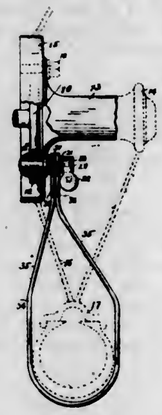
1,887,366. PULVERIZER. ARTHUR F. WILLIAMS, St. Louis, Mo., assignor to Williams Patent Crusher and Pulverizer Company, St. Louis, Mo., a Corporation of Missouri. Refiling of abandoned application Serial No. 362,678, filed May 13, 1929. This application filed April 14, 1932. Serial No. 605,168. 5 Claims. (Cl. 83—11.)

1. In a pulverizer, a casing, and a rotor mounted for operation within said casing, said rotor comprising a main shaft, a plurality of disks fixed to said main shaft, a radially adjustable shaft fixed in said disks, a plurality of pivotally connected arms mounted on said disk shaft, a



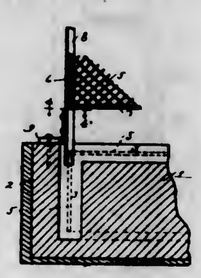
radially adjustable shaft carried by said arms, and a plurality of loosely mounted rings on said last mentioned shaft.

1,887,367. SPARE WHEEL AND TIRE LOCK. SOLOMON WISE, Cincinnati, Ohio. Filed Mar. 14, 1928. Serial No. 261,544. 5 Claims. (Cl. 70—90.)



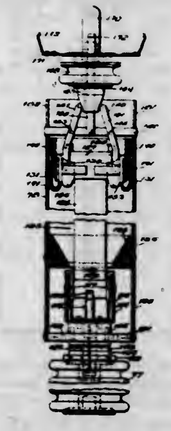
1. A locking device for a spare wheel and tire comprising a lock body in two parts rotatable relative to each other, tongues on each of said parts having plane sides and plane interspaced faces, and a lug on the face of one of said tongues approaching the face of the other tongue, and adapted to be uncovered by a movement thereof, locking means to prevent the relative movement of said parts, a cap nut attached to a car body, and having shoulders against which said plane sides of said tongues may abut, and having a perforated tongue adapted to lie between said interspaced faces and perforated to receive said lug on said lock whereby said lock in locking position may be fastened upon said cap nut at right angles to the axis thereof, said lock being of such size as to strike a projection on said wheel to prevent the complete rotation of said lock, and a U-shaped member adapted to pass around a tire on the rim of said wheel, rings on the legs of said U-shaped member adapted to pass over said cap nut, whereby when said lock is in locking position on said cap nut, said rings may not be removed therefrom.

1,887,368. PROCESS FOR MOLDING ASPHALTIC COMPOSITIONS AND MOLD THEREFOR. EDWARD E. EBCH, Grand Rapids, Mich., assignor of one-fourth to Orlo W. Judkins, one-fourth to Bert Johnson, and one-fourth to George Langlands, Grand Rapids, Mich. Filed Aug. 27, 1931. Serial No. 559,699. 4 Claims. (Cl. 18—47.5.)



1. The process for making a body composed of asphalt which includes forming a mold of sand, melting the asphalt, and pouring the same into the mold.

1,887,369. FUSE. ERNST BLOMQUIST, Lombard, Ill. Filed Aug. 30, 1930. Serial No. 478,883. 33 Claims. (Cl. 200—120.)



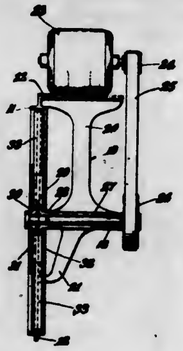
1. A fuse holder comprising a supporting insulated base, a tubular casing removably supported on said base, a fuse clip in said casing for receiving one end of a fuse, a fuse holding member for gripping the other end of the fuse and inserting it into the tubular casing, spring contacts engaging the fuse holding member, and means associated with the casing and with the fuse holding member for fixing the radial position of the member in the casing.

1,887,370. PULLEY-DRIVEN DISK FAN. GEORGE DE BOTHEZAT, New York, N. Y. Filed June 30, 1928. Serial No. 289,534. 4 Claims. (Cl. 230—273.)

1. A heavy duty fan unit comprising a disk pressure fan, a rotating motor therefor, the axes of the shaft and motor being out of line with each other, driving connections between the motor and the fan disposed at one side only of the plane of rotation of the fan, and a one-piece casting providing a support for said fan, said moter and said connections, said casting comprising a fan shaft

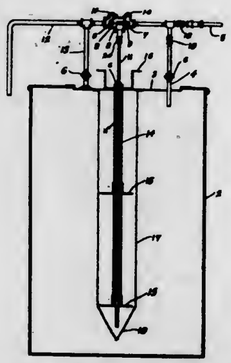
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bearing, a motor seat, and supporting arms for said bearing, said arms constituting the sole support of said bearing and all of them being disposed at the same side of



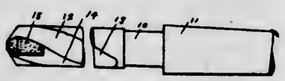
the plane of rotation of the fan as said driving connections, said motor seat being interposed between said motor and the air currents generated by said fan.

1,887,371. SOAP SUDSING APPARATUS. PHILIP C. DOYLE, Cleveland, Ohio, assignor to The Standard Oil Company, Cleveland, Ohio, a Corporation of Ohio. Filed Feb. 14, 1931. Serial No. 515,753. 3 Claims. (Cl. 299—84.)



2. In apparatus of the character described, a container, a cover-closure therefor, agitating means in said container operable from said closure, a suction-pipe extending through said closure and within said agitating means to near the bottom of the container, a connection on said closure for supplying water in contact with the top of the contents of the container, and a fluid-operated ejector on said closure in communication with said suction-pipe for withdrawing the resultant solution from the bottom of the container.

1,887,372. CUTTING AND FORMING TOOLS, IMPLEMENTS, AND THE LIKE. JOSEPH V. EMMONS, Shaker Heights, Ohio, assignor to The Cleveland Twist Drill Company, Cleveland, Ohio, a Corporation of Ohio. Filed Dec. 22, 1928. Serial No. 327,888. 11 Claims. (Cl. 77—70.)



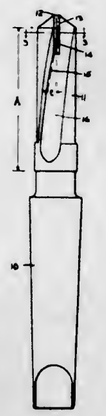
1. As an article of manufacture, a composite metallic structure having a rigid supporting part of hardened steel, and a wearing part of hard non-ferrous metallic composition, said parts having materially different coefficients of thermal expansion, and a layer of ductile material between adjacent surfaces of said parts and united thereto and bonding the same together against rupture during relative movement resulting from differences in thermal expansion and contraction.

1,887,373. REAMER AND THE LIKE. JOSEPH V. EMMONS, Shaker Heights Village, and CHRISTIAN KUCHENBROD, Cleveland Heights, Ohio, assignors to The Cleveland Twist Drill Company, Cleveland, Ohio, a Corporation of Ohio. Filed Mar. 14, 1929. Serial No. 346,873. 4 Claims. (Cl. 77—72.)



1. As an article of manufacture, a rotatable tool having a body of rigid, hardened steel and a blade of rigid, hard non-ferrous metal, the coefficients of thermal expansion of which are materially different, and means for securing the blade to the body to permit relative movement resulting from differences in thermal expansion without rupture, said securing means including a metallic layer of yielding material to which the body and blade are automatically united.

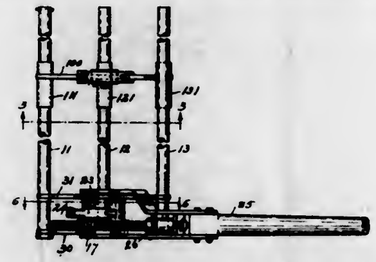
1,887,374. DRILL. JOSEPH V. EMMONS, Shaker Heights Village, Ohio, assignor to The Cleveland Twist Drill Company, Cleveland, Ohio, a Corporation of Ohio. Filed Apr. 10, 1929. Serial No. 353,968. 10 Claims. (Cl. 77—70.)



10. A rotary metal cutting drill of great strength and rigidity having an operating portion formed with two helical flutes and intermediate lands, said flutes having a width of less than 68 degrees of the circumference and a depth so that the web thickness of the drill at a section one-half diameter from the point is more than 20 per cent of the diameter of the drill, said flutes and lands having a helix angle of between minus 10 degrees and plus 22 degree, and said operating portion having primary cutting edges of hard non-ferrous material.

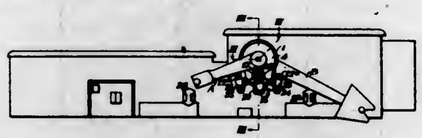
1,887,375. WIRE SPLICING MACHINE. ALBERT WEAVER HIGHTOWER, Fresno, Calif. Filed May 28, 1930. Serial No. 456,602. 1 Claim. (Cl. 140—119.)

A device for splicing wire consisting of a base, rods positioned parallel to each other and adapted as slideways, said rods being rigidly attached at one end to said base, a ratchet wheel rotatingly mounted on said base, a face of said ratchet wheel being on a plane at an approximate right angle to said rods, a clamp attached to the center portion of the ratchet wheel and adapted to be rotated therewith, a second clamp slidingly attached



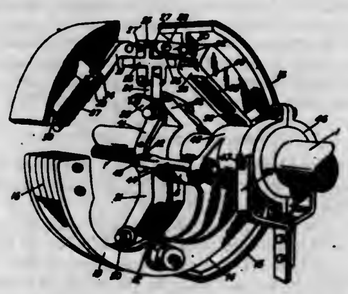
to said rods, the two clamps being positioned so that the opening in the jaws is aligned and adapted to hold either end of a tubular member, said tubular member being adapted to hold two overlapping wires within said tubular member, means adapted to rotate said ratchet wheel and to twist the overlapping wires within the tube and with the tubular member.

1,887,376. RAILWAY SWITCH OPERATING APPARATUS. GLENN V. JEFFERSON and EDWIN G. LITTLE, Wilkinsburg, Pa., assignors to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed Jan. 5, 1932. Serial No. 584,818. 7 Claims. (Cl. 246—240.)



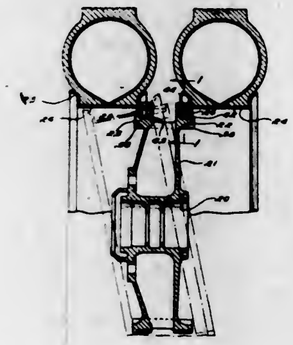
1. In combination, two levers each rotatable between two extreme positions, one of said levers being provided with two spaced notches, a dog adapted to enter one or the other of said notches according as said one lever occupies one or the other of its extreme positions when said other lever occupies its one extreme position, a padlock, and means including said padlock for at times preventing withdrawal of said dog from said notch.

1,887,377. CLUTCH. JOHN D. MCEWEN, Torrance, Calif., assignor to International-Stacey Corporation, Columbus, Ohio, a Corporation of Ohio. Filed Aug. 22, 1931. Serial No. 558,771. 1 Claim. (Cl. 192—75.)



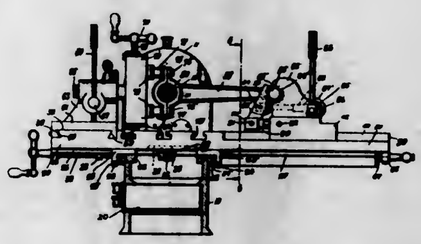
Clutch structure comprising a drum, a pair of pivotally mounted shoes, counterweights connected to said shoes, toggle lever mechanism for operating said shoes, and resilient means for transmitting pressure from said toggle lever mechanism to said shoes.

1,887,378. WHEEL AND WRENCH THEREFOR. EMIL A. NELSON, St. Clair Shores, Mich. Filed June 6, 1930, Serial No. 459,600. Renewed Aug. 25, 1932. 9 Claims. (Cl. 301—12.)



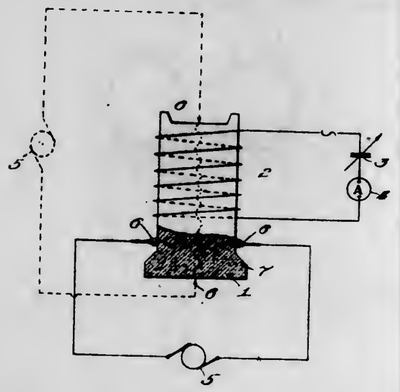
8. A dual wheel and rim assembly comprising a wheel body having axially inner and outer rim mounting portions, inboard and outboard rims having rib seats adapted to be mounted on said portions respectively, and means for allowing the inboard rim to be mounted on the inner rim mounting portion by first tilting and hooking an arc part thereof and of the rib seat over the wheel body axially inwardly of the outer rim mounting portion, and then reverting the rim to the plane of the wheel and to a position of concentricity to the inner rim mounting portion, said means including circumferentially directed spaces in the wheel body which constitute an interruption thereof.

1,887,379. WORKHOLDER FOR BORING MACHINES. THOMAS H. ORR, Okmulgee, Okla. Filed May 13, 1930. Serial No. 452,004. 1 Claim. (Cl. 77—62.)



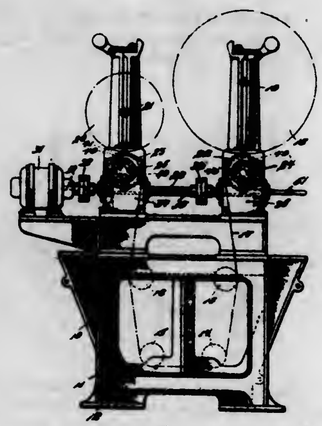
A connecting rod holder for a boring machine comprising a base, means on the base for holding the crank-shaft end of a connecting rod, and means on the base for holding the pin carrying piston end of the connecting rod, said second-named means including a block provided with parallel members having notches for receiving the said pin of the connecting rod, a rod slidably adjustable into and out of the block, a laterally extending shaft carried by said rod, vertical clamping arms pivoted on said shaft, means connecting the arms for unitary movement thereof, a cam shaft carried by said notched members, means for rocking the cam shaft, and a link connected to the cam shaft and said arms connecting means for moving the arms toward and away from said notches.

1,887,390. PROCESS OF AND APPARATUS FOR STANDARDIZING MAGNETIC CORES. WLADIMIR J. POLYDOROFF, Chicago, Ill., assignor to Johnson Laboratories, Inc., Chicago, Ill., a Corporation of Illinois. Filed June 27, 1931. Serial No. 547,379. 10 Claims. (Cl. 175—21.)



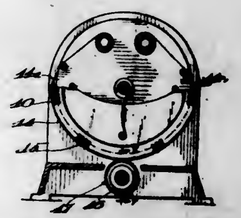
1. The process of standardizing a magnetic core containing insulated finely-divided particles which consists in passing an electrical discharge through a path within said core until the desired standardization is effected.

1,887,391. DYE JIG. RICHARD E. RUSDEN, Providence, R. I., assignor to The Textile-Finishing Machinery Company, a Corporation of Rhode Island. Filed Nov. 14, 1931. Serial No. 574,999. 3 Claims. (Cl. 8—19.)



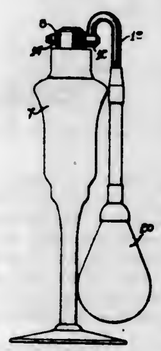
1. In a dye jig, a tank, a pair of parallel feed roll shafts associated therewith, feed rolls on said shafts, a drive shaft at right angles to said shafts, worms on said drive shaft at spaced points and a worm gear on each feed roll shaft meshing with a worm on said drive shaft, and clutch means interposed in each of said roll shafts for controlling the operation of the said shafts, a lever for the clutch in each shaft, and a link connecting said levers for simultaneous operation.

1,887,392. DUPLICATING MACHINE. LLOYD A. TUPPER, Chicago, Ill., assignor to Chicago Manifold Products Company, Chicago, Ill., a Partnership composed of Lloyd A. Tupper and David H. Jones. Filed Feb. 26, 1932. Serial No. 595,290. 17 Claims. (Cl. 101—244.)



1. An equalizing unit for duplicating machine drums having a plurality of spaced type ribs on the periphery thereof, said unit comprising means mountable upon said type ribs adjacent one end of the drum periphery, and type-pressure equalizing elements applicable to said means.

1,887,383. ATOMIZER. FREDERIC A. VUILLEMENOT, Toledo, Ohio, assignor to The De Vilbiss Company, Toledo, Ohio, a Corporation of Ohio. Filed Apr. 7, 1930. Serial No. 442,047. 5 Claims. (Cl. 299—88.)

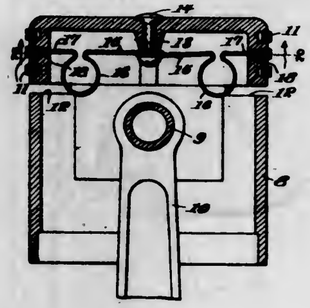


1. In an atomizer, a stopper having a liquid passageway terminating in a nozzle, a rotary valve having an air duct operatively associated with said liquid passageway and rotatable to open or close the liquid passageway, a tube and an air-compressing bulb connected with said air duct and so disposed that the weight thereof tends to rotate the valve to closed position, and means for rigidly supporting the stopper in such a position that the bulb may swing freely to its lowermost position.

1,887,384. PISTON ATTACHMENT. ANTHONY WELIKES, Rochester, N. Y. Filed Oct. 7, 1931. Serial No. 567,479. 2 Claims. (Cl. 74—108.)

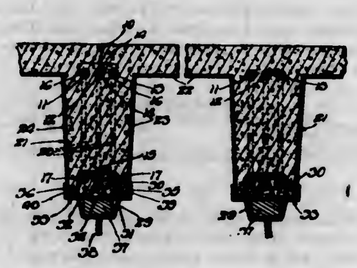
1. A piston having ring grooves, and split rings in said grooves, and being also provided with openings that communicate with one or more of the grooves, a rivet member passed through the head at the center of the piston, oppositely directed flat metal plates having their inner ends fixed on the rivet, each of said plates, adjacent to its outer end, having a rounded portion, to afford the said plate

with a resilient element, which is expansible to force the free end of the plate away from the fixed portion thereof, and the free end of each of the plates having reduced



tongues to pass through the openings in the piston to enter the grooves and contact with the split rings in said grooves.

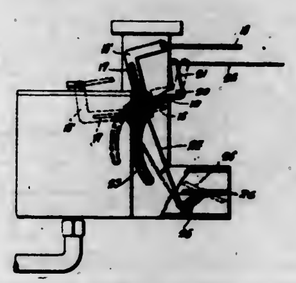
1,887,385. CONCRETE FORM CONSTRUCTIONS. CHANCE F. WERTS, Oak Park, Ill. Filed June 22, 1929. Serial No. 373,008. 1 Claim. (Cl. 25—131.5.)



Means for supporting a concrete beam form from reenforcing members adapted to be embedded in concrete molded in said form, said form including spaced portions extended toward each other at the lower end of the form, comprising a trough member adapted to receive said spaced portions, a member including limb portions disposed in said trough member and abutting said spaced portions, said last-mentioned member including a substantially U-shaped portion and said U-shaped portion including a bight portion projecting upwardly from the trough member and abutting one of the reenforcing members, a plank below the trough member, and a flexible member wrapped about the reenforcing members, said flexible member extending between said spaced portions and said limb portions, and through said trough member, and having free end portions intertwisted about said plank, whereupon by severing said intertwisted portions said plank, trough and beam form may be removed and the severed ends of said flexible member may be employed to secure ceiling lath thereto.

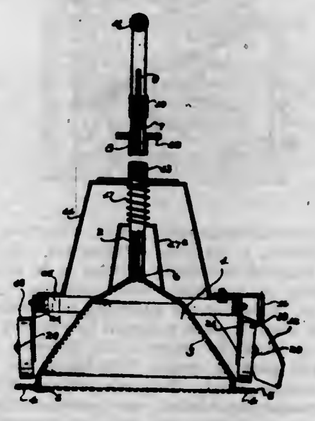
1,887,386. CARBURETOR. CLAUDE O. WESTOVER, Orlando, Fla. Filed July 14, 1930. Serial No. 467,877. 1 Claim. (Cl. 261—52.)

The combination with a carburetor, of a choke valve therefor, a throttle valve for said carburetor, an inverted substantially L-shaped throttle lever having a slotted long arm provided with a hook terminal connected with the axis of said throttle valve, an operating link connected with the short arm of said lever, an arcuate-shaped member pivoted for movement and having a slot, a crank on the



choke valve, a link pivoted to the crank and having a rightangularly bent end passed through the slot in the arcuate-shaped member and said lever, and an actuator rod connected with said arcuate-shaped member for moving the same.

1,887,387. HOT CAP APPLIER FOR PLANTS. WILLIAM D. WRIGHT, Brockport, N. Y. Filed Oct. 8, 1930. Serial No. 487,199. 17 Claims. (Cl. 47—57.)

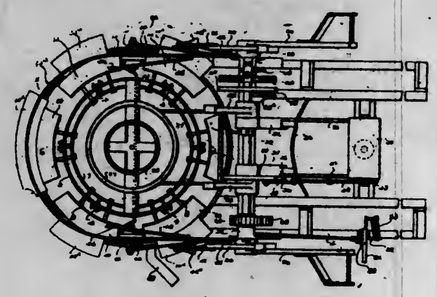


1. The combination with a shaft, and a plow arranged eccentrically to the axis of the shaft, so that when the shaft is turned about its axis the plow will throw dirt inwardly toward the axis of the shaft, of a hot cap applier for applying a hot cap in line with the shaft so that a flange edge on the latter may be covered by the plow on the turning of the shaft.

1,887,388. FRUIT PACKER. WILLIAM D. WRIGHT, Brockport, N. Y. Filed Jan. 28, 1931. Serial No. 511,890. 18 Claims. (Cl. 226—17.)

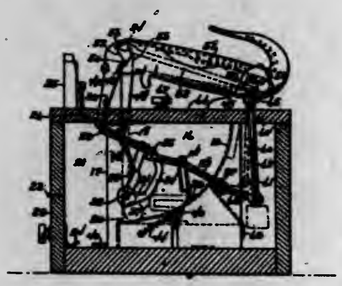
1. The combination with a facing plate support, and a confining means for building a column of fruit on a facing plate on the support, of mechanism for raising and lowering the confining means comprising a pivotally mounted arm having connection with the confining means, a rock shaft, an arm on the rock shaft, a toggle connecting said arm with the pivotally mounted arm, and a device for

breaking the toggle after the confining means has moved to its non-confining position; an uprighting means for the supporting plate and an inverted receptacle thereon, and



a lost motion connection between the uprighting means and the rock shaft operating the uprighting means while the confining means is in non-confining position.

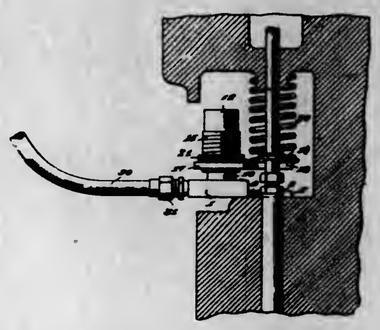
1,887,389. ARTICLE DISPENSING DEVICE. ERI F. ADAMS, Fort Lauderdale, Fla. Filed Sept. 15, 1930. Serial No. 482,121. 6 Claims. (Cl. 312—76.)



1. In an article dispensing device, a housing having an opening therein, a partition dividing the housing into a magazine adapted to contain articles to be delivered and a dispensing compartment, said partition terminating short of the bottom of the magazine to provide an opening, a rock shaft, a closure carried by the rock shaft and normally arranged to prevent the passage of articles through said opening, means included in the closure to transfer articles singly from the magazine to the dispensing compartment when the closure is operated, an elevator movable within the dispensing compartment to receive a single article and elevate the same, a member mounted for pivotal movement upon the outside of the housing and having its free end movable into and out of the housing opening, movable gripping means at the free end of said member to grip an elevated article and remove the same from the dispensing compartment, a slotted arm on the rock shaft and operable in an anti-clockwise direction to move the closure, operate the elevator and move the pivotally mounted member, and means controlled by the operating member to operate the gripping means.

1,887,390. HYDRAULIC VALVE LIFTER. MERTON S. ANTHONY, Adams, and ERNEST H. WILSON, Pittsfield, Mass. Filed May 17, 1930. Serial No. 453,332. 1 Claim. (Cl. 29—96.3.)

A valve lifting device comprising a tubular member having a supporting base portion, a tubular barrel, open at both ends, slidably fitting the tubular member, an externally threaded cylinder vertically movable with respect to the said tubular barrel, the tubular member having a bore communicating with the cylinder, means for supplying fluid under pressure to the bore of the tubular member and thereby effect upward movement of the cylinder, a valve stem engaging member threadedly mounted on said cylinder for vertical movement and extending



laterally from the said cylinder, the said tubular member having a groove extending vertically thereof, the said barrel having a slot registering with the groove, and a pin projecting inwardly from the wall of the cylinder and engaging in the said slot and groove to hold the parts against relative rotation and limit the movement thereof with respect to each other.

1,887,391. DEVICE FOR PLATTING AND MEASURING CURVES. JEAN ARAS, Duluth, Minn. Filed May 8, 1931. Serial No. 536,042. 4 Claims. (Cl. 33—177.)



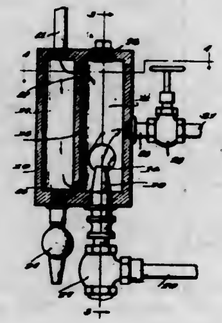
2. An adjustable ruler of the character described including a flexible strip, end members rigid with the ends of said strip, said members comprising right-angled forms, an indicating bar, means pivotally securing one end member to one end of said bar, a slide mounted for movement on the other end of the bar, and a set screw pivotally securing the other end member to said slide, said set screw also serving to adjustably secure the slide on the bar.

1,887,392. SURGICAL APPARATUS. JOSEPH B. BACON, Macomb, Ill. Original application filed July 6, 1931, Serial No. 549,021, now Patent No. 1,868,234. Divided and this application filed May 31, 1932. Serial No. 614,544. 4 Claims. (Cl. 128—2.)



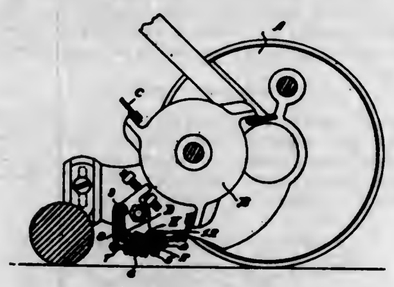
1. A diagnostic instrument, including; a flexible member having sufficient length and adapted for insertion through the large intestine into the small intestine; a stretchable member mounted on the end of said flexible member; an air tube leading from said stretchable member to the outer end of the flexible member; and means for forcing air through said air tube into said stretchable member.

1,887,393. SIGHT FEED DEVICE. FRED LEE BADGETT, Chickasha, Okla.; Billie B. Badgett administratrix of the estate of said Fred L. Badgett, deceased. Filed June 17, 1930. Serial No. 461,778. 5 Claims. (Cl. 184—96.)



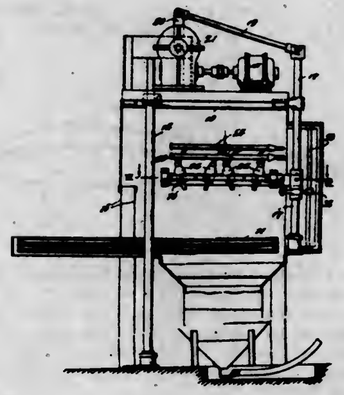
1. A sight feed device for stem lubricators and the like comprising a hollow body, a vertical partition dividing the interior of said body into compartments, said partition having an opening in each of its upper and lower end portions to establish communication between the said compartments, means for admitting steam into the upper end portion of one of said compartments to heat the body and to form a body of water in both compartments by condensation, a lubricant outlet in a side wall of the other of the said compartments substantially in the plane of the level of the water therein, means for discharging a lubricant upwardly of the said other compartment and through the water therein for subsequent discharge from said outlet and aligned sight windows in opposite side walls of the said other compartment and below the level of the water therein.

1,887,394. LAWN MOWER SHARPENER. CARL BAILEY, Indianapolis, Ind. Filed Aug. 19, 1931. Serial No. 558,131. 1 Claim. (Cl. 76—82.1.)



A sharpener for a lawn mower, comprising a pair of clamps, each being substantially V-shape in cross section and having a relatively long arm and a short arm, there being an eye formed on said short arm and tongues on said long arm, a hook plate cooperating with each of said clamps and having an eye formed at one end thereof, the opposite end being curved to provide a hook, a coil spring having its ends received by said eyes for securing said clamps to the stationary blade of the mower, and a sharpening element secured to said tongues and positioned for arrangement in the path of the knife blades of the mower.

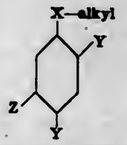
1,887,395. SAND BLAST APPARATUS. CLARENCE E. BILLINGS, New Haven, and DONALD S. SAMMIS, Stratford, Conn., assignors to The New Haven Sand Blast Company, New Haven, Conn., a Corporation of Connecticut. Filed May 29, 1930. Serial No. 457,360. 3 Claims. (Cl. 51—15.)



1. In a sand blasting machine, a rotatable table, an arm pivoted beyond the circumference of said table adapted to oscillate above said table, and nozzles carried along the length of said arm, in combination with means for changing the direction in which said nozzles point at the extremes of each oscillation.

1,887,396. AROMATIC HALOGEN-METHYL COMPOUND AND A PROCESS OF PREPARING IT. ARNOLD BRUNNER, Frankfort-on-the-Main-Hochst, Germany, assignor to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Apr. 26, 1930, Serial No. 447,760, and in Germany Apr. 7, 1928. 5 Claims. (Cl. 260—150.)

1. As new products, the compounds of the following probable formula:



wherein X stands for oxygen or sulfur, one Y represents CH_3-halogen and the other Y a radical of the group consisting of CH_3-halogen, nitro, chlorine and alkyl, Z stands for hydrogen or, in case both of the Y's stand for CH_3 halogen, Z stands for halogen.

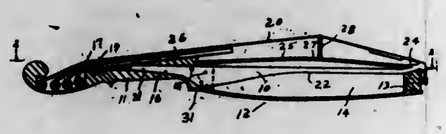
1,887,397. LAMP SHADE. POMPEO CAPOCCI, Cranston, R. I. Filed Dec. 4, 1931. Serial No. 579,027. 6 Claims. (Cl. 240—10.)



1. A lamp shade of the kind described comprising a pair of panels matched and shaped similarly to each other and of ornamental configuration, and fasteners

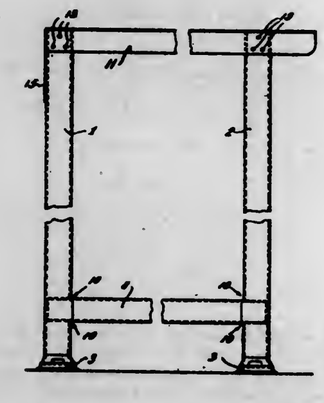
uniting the panels marginally thereof, the panels being normally flat and extended upon the introduction of an electric light bulb therebetween, the said panels having openings for accommodating the lamp bulb for the support of the shade thereby.

1,887,398. VIOLIN. EMERY H. CHASE, Addison, N. Y. Filed Sept. 16, 1931. Serial No. 563,190. 7 Claims. (Cl. 84—276.)



1. In a violin, a bar extending through the air chamber from the tail block to the neck at the juncture of said neck and violin body, said bar extending through said neck to the violin nut, said bar being enlarged at the point of juncture of the violin neck and body, and diminishing gradually in cross section in both directions from said juncture.

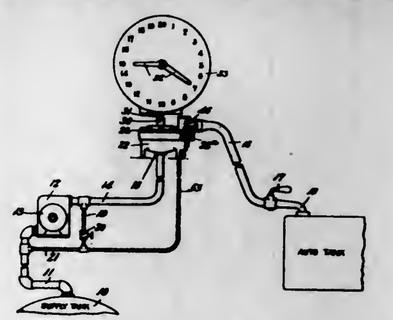
1,887,399. SUPPORT FOR BENCHES AND THE LIKE. WILLIAM F. COSTELLO, New Britain, Conn., assignor to The New Britain Machine Company, New Britain, Conn., a Corporation of Connecticut. Filed May 4, 1931. Serial No. 534,909. 9 Claims. (Cl. 45—31.)



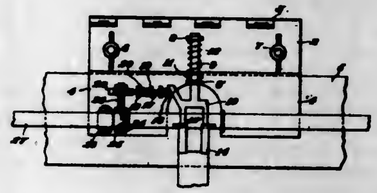
1. A bench leg entirely of sheet metal construction comprising a sheet metal upright of tubular cross section, and a hollow flaring foot comprising a piece of expanded sheet metal having a hub with a cross section conforming to that of the lower end of said upright, a flaring web circumjacent to said hub, and a peripheral flange surrounding said web and defining the bearing surface of said foot, said hub and lower end of said upright being welded together to provide an integral structure having a smooth continuous surface free from recesses and dirt-collecting irregularities.

1,887,400. METER COMPENSATING DEVICE. JAMES M. DAYTON, Torrington, Conn. Filed Oct. 10, 1930. Serial No. 487,867. 8 Claims. (Cl. 73—167.)

1. A liquid measuring apparatus including a pump system to deliver liquid at a substantially constant pressure and having an inlet and an outlet, a fluid volume metering device connected to said outlet and having unmetered leakage losses and including a discharge means for providing a by-pass from said outlet to said discharge, and further means for providing a return passage from said discharge to said inlet.

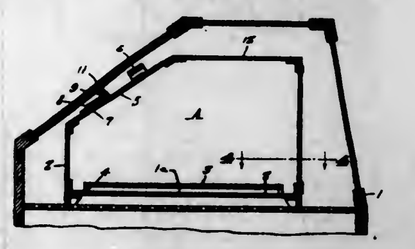


1,887,401. TAPE WRITER ATTACHMENT FOR TYPEWRITING MACHINES. JOB K. DENTON and JACKSON G. LANCASTER, Maryville, Tenn. Filed Dec. 22, 1930. Serial No. 504,173. 5 Claims. (Cl. 197—127.)



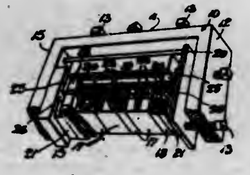
1. A tape writer attachment for a typewriting machine having a vibrating ribbon guide and a roller, comprising a support adapted to be applied to the roller of the typewriting machine, a spring pressed actuator mounted upon the support and operatively engageable with the ribbon guide of the typewriting machine, said actuator having an outstanding inclined arm, a spring pressed rod slidably engaged by said arm, rollers journaled upon the support and adapted to receive a tape between them and means carried by one of the rollers for engagement with said rod.

1,887,402. CONTAINER FOR USE WITH REFRIGERATORS AND DISPLAY COUNTERS. CHARLES DOMM, Detroit, Mich., assignor of one-fourth to Louis J. Gilchrist, Detroit, Mich. Filed Nov. 15, 1930. Serial No. 495,979. 1 Claim. (Cl. 62—1.)



A container of the character described comprising a casing having a forwardly inclined upper front portion with an opening therein, a lid removably fitted in the opening and having a row of spaced substantially elongated apertures, guide eyes mounted externally on the lid in spaced alignment with each other at one side of the apertures, a bar slidably and swingingly fitted in the eyes and having right angular spaced extensions, and bumpers on the extensions and engageable over and from the apertures on manual manipulation of the bar for the closing and opening of said apertures.

1,887,403. VENTED STAMP MOLD. RICHARD EVANS, Highland Park, Ill. Filed Sept. 25, 1929. Serial No. 395,157. 7 Claims. (Cl. 18—42.)



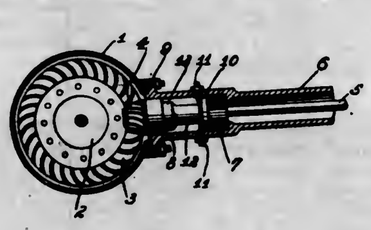
6. In the art of making stamps from plastic material, a type body having an intaglio character recess; said body including a wall about said recess having vents formed therein, the inner ends of said vents being removed from the inner end of said recess, and means associated with said vents providing channels communicating with said vents.

1,887,404. ANTISKID DEVICE. ARTHUR G. FITZ GERALD, West Newton, Mass. Filed Feb. 9, 1929. Serial No. 338,760. 2 Claims. (Cl. 152—14.)



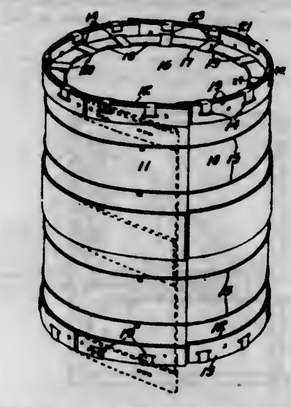
1. An anti-skid device blank comprising a rectangular member having rectangular wings extending from the opposite sides near one end, the similar wings extended from the same sides near the other end and between said wings laterally extended tongues forked at their ends to provide teeth.

1,887,405. AUTOMOBILE DEVICE. BENNIE D. FOGLE, Springfield, S. C. Filed Jan. 26, 1931. Serial No. 511,425. 3 Claims. (Cl. 29—84.)



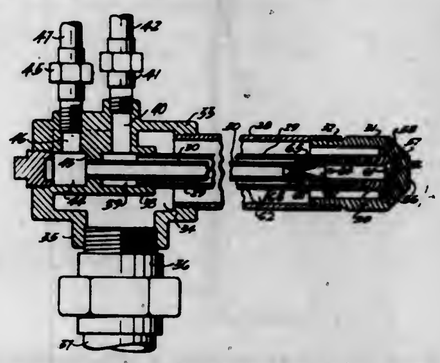
1. An automobile device comprising a spacing member to be positioned on the drive shaft between front and rear bearings therefor to retain a bearing lock sleeve of one of said bearings from canting during the assembling of the drive shaft and its bearings in the drive shaft housing and prior to securing the bearing lock sleeve in place.

1,887,406. KNOCK-DOWN HOGSHEAD. WILLIAM BLADEN FORRMAN, Elizabeth City, N. C. Filed Jan. 11, 1932. Serial No. 586,085. 3 Claims. (Cl. 217—44.)



1. A knock-down hogshead or container comprising semi-cylindrical panels, spaced circumferential slots adjacent the curved ends thereof, circular heads and detachable clips secured at one end to said head, the free ends of said clips passing through said slots for retaining said head in said panels and further bent upwards and over said panels serving to re-enforce the ends thereof, substantially as set forth.

1,887,407. COMBINATION GAS AND OIL BURNER. ROSS H. FORNEY, Dallas, Tex., assignor to Forney Combustion Engineering Company, Dallas, Tex., a Corporation of Texas. Filed Feb. 3, 1930. Serial No. 425,651. 15 Claims. (Cl. 158—11.)

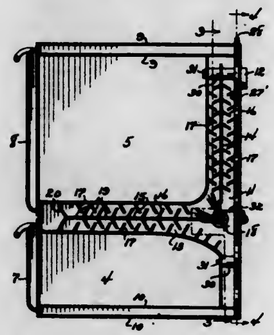


1. In a combination burner, a steam conductor, a pair of fuel conductors arranged one within the other, all of said conductors being coaxially disposed, each conductor having an individual inlet, and a burner tip connected with the fuel conductors and having separate discharge outlets therefrom for each fuel conductor.

1,887,408. COMBINED FUMELESS AND VENTILATED OVEN AND BROILER. OTTO C. GOEHRING, Elmhurst, N. Y. Filed June 20, 1931. Serial No. 545,783. 1 Claim. (Cl. 126—39.)

A stove comprising a supporting structure, an oven on said structure, a broiler on said structure and located below the oven, vertical and horizontal communicative chambers for the oven and broiler with the horizontal chamber located between the oven and the broiler, vertical and horizontal partitions supported in the chambers

with their adjacent ends relatively spaced and arranged at right angles to each other, baffles on the partitions and walls of the chambers, a burner mounted in the intersection of the chambers for oscillatory movement, and shields on said burner and arranged at right angles to each



other to engage the adjacent ends of the partitions during one position of the burner for directing heat from the burner about the oven and one of said shields adapted to engage the horizontal partition during another position of the burner for directing the heat about the broiler.

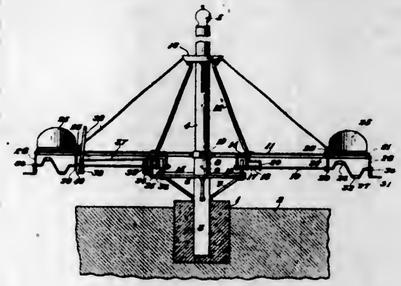
1,887,409. HARROW TOOTH. SOREN HANSEN, Berwyn, Alberta, Canada. Filed Oct. 19, 1931, Serial No. 569,773, and in Canada Apr. 7, 1931. 1 Claim. (Cl. 55—95.)



A tooth for harrows comprising a screw threaded head portion stepped therefrom, a shank portion, a blade portion on the shank formed with one surface concave and the opposite surface convex, said surfaces merging into a substantially curved lower edge, the convexed portion of the lower edge being beveled to provide on the front face of the same a sharpened lower beveled edge.

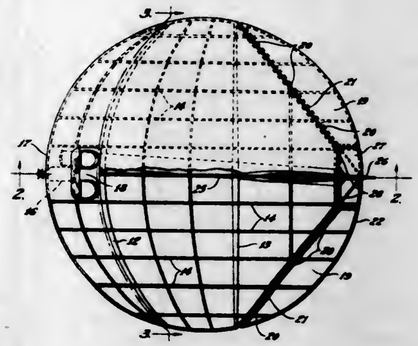
1,887,410. KIDDIE PROPELLED MERRY-GO-ROUND. ALBERT C. HOLT, Mangham, La. Filed Nov. 14, 1930. Serial No. 495,758. 1 Claim. (Cl. 272—33.)

A merry-go-round comprising a circular disc, mounted at a fixed position, a post passing centrally through the disc, a brake band circumscribing the periphery of the disc, a sleeve journaled upon the post, spokes radiating from the sleeve, brackets carried by the spokes and disposed above the disc, rollers journaled in the brackets and bearing upon the upper surfaces of the disc, shafts journaled below the spokes and having pedal cranks, interengaging clutch members carried by the shafts and the axles of the rollers, a brake lever pivoted to one of the brackets and having a shoe



adapted to engage the brake band, a second lever journaled in the vicinity of the outer end of one of the shafts and a rod operatively connecting said levers together.

1,887,411. AIRCRAFT CONSTRUCTION. RICHARD B. JOHNSON, Chicago, Ill. Filed Aug. 12, 1931. Serial No. 556,654. 1 Claim. (Cl. 244—12.)

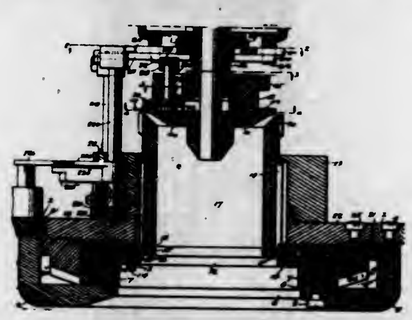


A heavier-than-air craft including a wing structure whose aspect ratio is about one to one, and control elements for the craft, the surfaces of said control elements being arranged substantially within the boundaries of the wing structure, said structure being substantially circular in plan view, and convex on the bottom side thereof to provide dihedral, said control elements including elevator-ailerons hingedly connected to the body of said craft and extending as chords of a circle on opposite sides of the fore and aft diameter of said body.

1,887,412. METHOD OF BLEACHING VEGETABLE FIBROUS SUBSTANCES. ERICH KAYSER, Frankfort-on-the-Main Griesheim, Germany, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Filed Nov. 22, 1929, Serial No. 409,179, and in Germany Mar. 1, 1928. 1 Claim. (Cl. 8—2.)

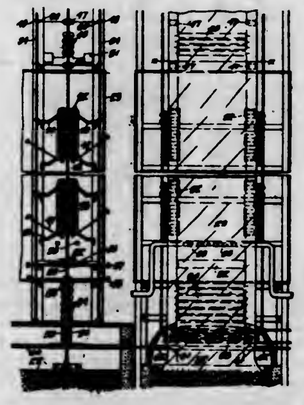
In the method of bleaching vegetable fibrous substances, especially wood cellulose, in which method the raw material is treated in form of a paste-board sheet and in countercurrent with bleaching solutions of successively increasing concentration of available chlorine, the improvement which comprises adapting the temperature of the respective bleaching solutions inversely to the chlorine content of said bleaching solutions.

1,887,413. KNITTING MACHINE. WALTER LARKIN, Norristown, Pa., assignor to Fidelity Machine Company, Wilmington, Del., a Corporation of Delaware. Original application filed Apr. 6, 1927, Serial No. 181,507. Divided and this application filed Oct. 2, 1930. Serial No. 485,977. 7 Claims. (Cl. 66—25.)



1. In a circular rib knitting machine, the combination, with the dial cam of said machine which includes a needle switch, of an actuating element for said switch normally disconnected from said switch, means for operatively interlocking said switch and said actuating element throughout a predetermined angle of a cycle of relative rotation between the said cam and the said switch-actuating element, and means for operating said actuating element to operate the switch relative to the cam during the said period of interlock between the switch and the actuating element therefor.

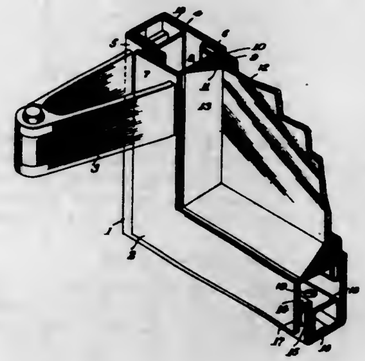
1,887,414. SHEET GLASS DRAWING APPARATUS. EDMOND L. LE ROY, Bridgeton, N. J. Filed Dec. 27, 1930. Serial No. 505,164. 15 Claims. (Cl. 49—17.)



1. In a glass making machine having means for pulling glass vertically out of a mass of molten glass, a plurality of wooden blocks resiliently held against the side of the glass to coat the glass with soot, and a plurality of rollers positioned to engage said glass to polish off the soot deposited by the said blocks, said rollers being driven at a relatively high rate of speed, substantially as set forth.

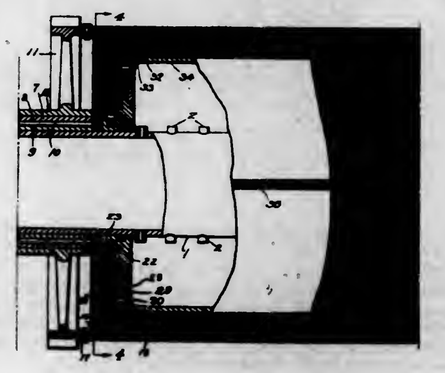
1,887,415. CASEMENT WINDOW. DONALD A. LOBELL, Baltimore, Md. Filed Oct. 23, 1931. Serial No. 570,701. 1 Claim. (Cl. 189—69.)

A casement window comprising a frame of channeled construction providing inner and outer walls, a sash hinged to the frame and of angle iron construction providing a pair of walls arranged at right angles to each other, one of said walls bent angularly to form a flange, a sealing element carried by the flange and projecting beyond opposite faces of the respective wall of said flange to engage the inner wall of the frame when the sash is in a closed position to provide an inner seal, a strip mounted in the frame and having an angularly disposed yieldable portion



disposed over the outer wall of the frame to be engaged by the other wall of the sash when the latter is in a closed position to provide an outer seal, said strip bent to engage inner faces of angularly related walls of the frame and an attaching medium removably secured in the frame, and of substantially U-shape in cross section engaging and forcing the strip against the inner faces of the angularly related walls of the frame.

1,887,416. SPRAYING DEVICE. ROBERT K. MATLACK, Milltown, N. J. Filed Sept. 9, 1930. Serial No. 480,760. 6 Claims. (Cl. 91—45.)



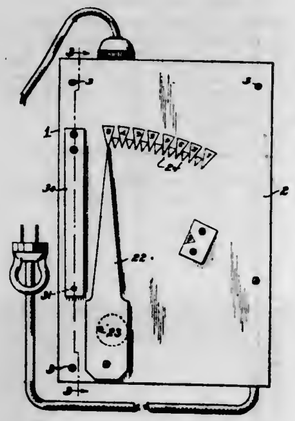
1. In a spraying device for coating paper or the like, means for supplying compressed gaseous matter to said device, means for expanding said matter to obtain uniform pressure thereof, means for carrying the material to be sprayed, means for directing an even stream of said matter against said carrying means to project said material in a finely divided state on to the article to be coated and means for moving said directing means toward and away from said carrying means.

1,887,417. ROTARY PUMP AND FAN. HUBERT MAWSON, Liverpool, England, assignor to Drysdale and Company, Limited, Glasgow, Scotland. Filed June 10, 1932, Serial No. 616,551, and in Great Britain Aug. 31, 1931. 2 Claims. (Cl. 103—89.)



1. In an axial flow pump or fan, a rotor constituted as a compound screw, slipless, of radially constant pitch at entrance and of radially varying pitch at exit, producing absolute exit velocities of the fluid equal in magnitude at all radii and whirl velocities which vary inversely as the radii.

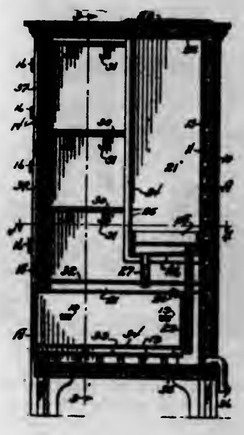
1,887,418. AUTOMATIC TIMING DEVICE. WALTER S. MCGUIRE, Shadyside, Ohio, assignor of one-third to Charles Wells Rodefer, Shadyside, Ohio. Filed Apr. 15, 1931. Serial No. 530,417. 5 Claims. (Cl. 95—73.)



1. An automatic timing device including a housing and an electric circuit leading to and operating on an electric printing lamp, an electric motor in said housing, a fan rotated by said motor to provide a retarder thereto, a manually controlled circuit breaker in the housing and electrically connected to the circuit for controlling the illumination of the lamp, and means for operating the circuit breaker from the motor.

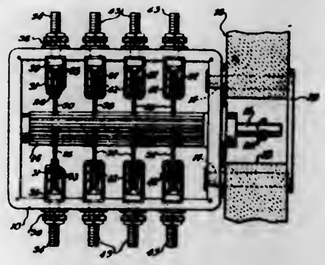
1,887,419. REFRIGERATOR. BENJAMIN AUGUSTUS MICHEL, New Orleans, La. Filed Oct. 12, 1931. Serial No. 568,478. 4 Claims. (Cl. 62—51.)

1. A refrigerator of the kind described comprising a body having an insulating lining, an ice container arranged therein and having a perforated front and a forwardly inclined bottom, a removable ice rack within the container, a plurality of drawers slidably fitted within the body in its lowermost portion and each having an opening at its rear next to the bottom thereof, a perforated false bottom in each drawer, a reticulated rack within the body above the drawers, a drain spout leading from the



container at the lowermost point of the body and directly over each drawer, and air circulating tubes arranged rearwardly of the drawers and opening into the container.

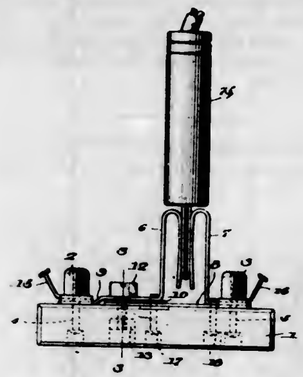
1,887,420. ELECTRIC SWITCH. THOMAS J. NEWMAN, Canton, Ohio. Filed Apr. 8, 1930. Serial No. 441,866. 7 Claims. (Cl. 200—15.)



1. A switch for the control of meter testing circuits having potential wires and current wires, comprising the following instrumentalities: current terminals and potential terminals adapted for connection to an instrument to be tested, fixed and movable elements arranged in sets with a common operating device geared to the movable elements in all the respective sets, said fixed and movable elements being relatively so constructed and arranged that the circuits of the potential terminals will be automatically opened before the circuits of the current terminals are opened, and the circuits of the current terminals will be automatically closed before the circuits of the potential terminals are closed in the rotation of the operating device forward and backward, respectively.

1,887,421. TESTING DEVICE. THOMAS J. NEWMAN, Canton, Ohio. Filed Dec. 11, 1930. Serial No. 501,721. 8 Claims. (Cl. 200—2.)

1. Testing apparatus comprising an insulating support, test terminals mounted on said support, means cooperating with said test terminals to connect a test circuit thereto, a pair of overlapping conducting strips connected to but extending away from the test terminals, and means separate and away from the test terminal adapted to se-



cure said strips together, to by-pass or shunt out the test terminals without interfering with the connection thereto of the test circuit.

1,887,422. PENCIL SHARPENER. CHARLES B. OULTON, Attleboro, Mass., assignor to Plastic-Craft Novelty Company, Inc., a Corporation of Rhode Island. Filed Aug. 17, 1932. Serial No. 629,201. 8 Claims. (Cl. 120—87.)



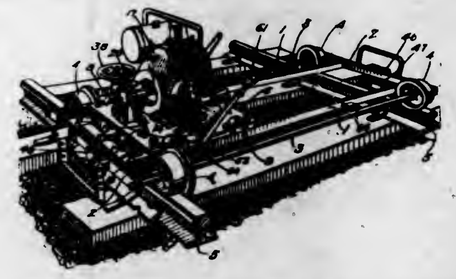
1. A pencil sharpener comprising a cylindrical member having a socket in each end and a combined sharpening blade and clasp carried by the cylindrical member and respectively extending into the end sockets.

1,887,423. TANK FLANGE COUPLING. ARTHUR L. PARKER, Cleveland, Ohio. Filed Jan. 2, 1929. Serial No. 329,738. 1 Claim. (Cl. 285—50.)



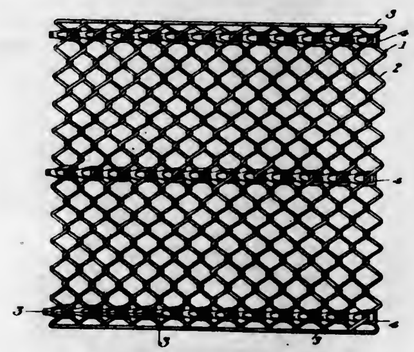
In a flange coupling for a tank having a relatively thin and elastically deformable wall, a sleeve having a large end flange located inside the tank and bearing against the said wall with the sleeve located in an aperture of said wall, the wall-engaging surface of said flange being adapted to elastically deform the wall as the parts are drawn tight during assembly, a washer of greater diameter than said flange located around said sleeve outside the tank wall and having a recess for receiving said end flange below the plane of the upper end of said washer and providing a substantially mating surface opposite said wall-engaging surface whereby to provide a large area of engagement between said flange and the tank wall, and a connection member for engaging both said sleeve and washer for pulling said flange relatively toward and into said washer and holding said flange and washer engaged with the elastically deformed portion of said wall, so that the flange is located below the original surface of said wall whereby to permit full drainage of liquid from said tank through said sleeve.

1,887,424. MILLING MACHINE. HENRY PERAZZOLI, Philadelphia, Pa. Filed Nov. 19, 1931. Serial No. 576,138. 8 Claims. (Cl. 90—12.)



1. A milling machine for railway track work, comprising a frame supported by traction wheels arranged for travel on said track, a carriage mounted on the frame and movable transversely with respect to the track rails, a rotatable platform supported by said carriage, a rotatable cutting tool carried by the said platform, the said platform permitting said cutting tool to be placed normal to either of the opposite track rails, means carried by the carriage for guiding the cutting tool to conform to the contour of the track rail, and means for advancing the cutting tool carried by the carriage into contact with said track rail.

1,887,425. REENFORCEMENT FOR CONVEYER BELTS. CLARENCE E. PINK, Cambridge, Md. Filed Feb. 20, 1932. Serial No. 594,360. 6 Claims. (Cl. 198—193.)



1. A conveyer belt comprising a plurality of spirally formed and interwoven wires providing a flexible belt fabric, and flexible reenforcements having the wires woven therethrough and extending longitudinally of the belt fabric.

1,887,426. SECURING SNAP FASTENER. BION C. PLACE, Detroit, Mich., assignor of one-half to George E. Gagnier, Detroit, Mich. Filed June 16, 1930. Serial No. 461,526. 12 Claims. (Cl. 24—208.)



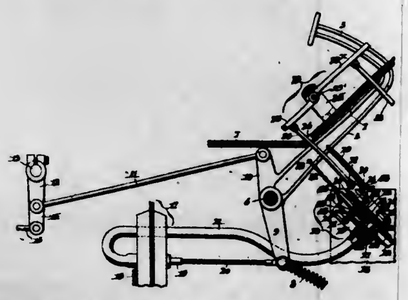
1. In combination, material ready to be attached to a supporting structure, a snap fastener having a head and resilient holding elements projecting away therefrom, and a staple having legs and a securing portion connecting said legs, said portion being interlocked with the head of said fastener disposed so as to abut against said material opposite said portion and said legs being driven in said material.

1,887,427. WHEELED DEVICE. RAPHAEL PORCELLO, Richmond Hill, N. Y. Filed Apr. 6, 1932. Serial No. 603,600. 5 Claims. (Cl. 305—11.)



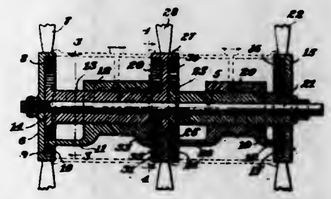
4. A wheeled device for vehicles comprising a support adapted to be secured to the vehicle, said support consisting of a pair of spaced parallel plates, and bridge means joining said plates into a unit, said support having a pair of aligned axial apertures therethrough, and a pair of aligned axial slots therethrough concentric with said axial apertures, and extending 90° from the bottom of said support, an L-shaped axle, the shorter arm of said L-shaped axle being pivotally mounted in said axial aperture and the longer arm of said axle projecting through said concentric axial slot, spring means secured to said longer arm and to said bridging means of said support, tending to hold said longer arm of said axle adjacent the bottom of said slot, a wheel member rotatably supported on the end of said longer arm of said L-shaped axle, said wheel member comprising a pair of spaced parallel plates, small axle members securing said plates together adjacent said periphery, and a plurality of small wheels mounted on said small axle member.

1,887,428. VEHICLE BRAKING SYSTEM. GEORGE R. POWELL, Rosemont, Pa. Filed Aug. 2, 1928. Serial No. 296,884. 6 Claims. (Cl. 188—152.)



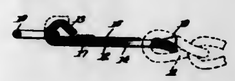
1. In braking mechanism for vehicles including a power actuator and an operatively-connected master pedal-lever, the combination of a control device interposed between the actuator and a source of power, said control device embodying a casing capable of axial movement and having a vacuum port, a piston valve normally closing the vacuum port and having a flexible connection to the master pedal-lever, and means whereby the casing aforesaid may be axially moved relative to the piston valve to effect operation relative to the piston valve to effect operation of the actuator with attendant differential applications of braking pressure.

1,887,429. PROPELLER CONSTRUCTION. JOE W. PRICE, Canon, Colo. Filed Sept. 2, 1931. Serial No. 560,842. 1 Claim. (Cl. 170—165.)



In a propeller construction, a motor drive shaft, a series of spaced propellers having internally gear toothed hubs mounted upon said shaft, means fixing the hub of one propeller to said shaft, sleeve-like shafts formed with the hubs of the remaining propellers and encircling said drive shaft, gears formed on the sleeve-like shafts, stationary housings receiving the sleeve-like shafts, and pinions supported by said housings and meshing with the internally gear toothed hubs and the gears on the sleeve-like shafts.

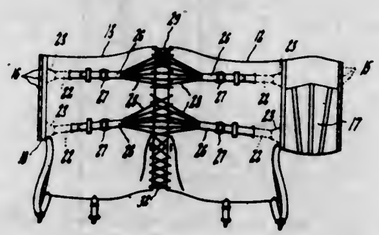
1,887,430. CHAIN CONNECTION. VIRGILE PROVOST, Cohoes, N. Y. Filed Oct. 22, 1931. Serial No. 570,464. 15 Claims. (Cl. 24—236.)



1. A chain tie plate having an eye, the rear wall of which is at an abrupt angle to the plate.

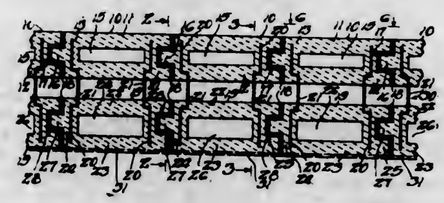
1,887,431. APPAREL GARMENT. ROSE B. QUINE, Newton, Mass. Filed July 12, 1932. Serial No. 622,133. 2 Claims. (Cl. 2—39.)

1. An apparel garment comprising a sectional back-laced body-embracing band, flexible tabs having end portions attached to the band sections adjacent the rear edges thereof, and free ends extending toward said rear edges and provided with eyelets, said tabs being within the band on a middle zone thereof, and formed and arranged to bear on the sacro-iliac region, a lower adjuster adapted to tension said tabs and cause pressure thereof on said region, and to contract the middle zone of the band, said adjuster including a pair of anchored outer straps having outer ends located within, and fixed to, the band sections at the middle zone of the band, and free ends extending through slits in said middle zone, and along the outer surface of the band toward the rear edges thereof, a pair of free inner straps having buckles engaging the anchored straps to maintain a tensioned condition of said adjuster, and a plurality of looped flexible tapes composed of end portions fixed to the inner straps and neck portions connecting the end portions and extending through the tab eyelets, and through eyelets in the rear edges of the body sections, the arrangement being such that when tensioning strain is exerted on the outer straps the tabs are tensioned and caused to exert pressure on the sacro-iliac region, and contract the middle zone of the band, and an upper adjuster whose elements are duplicates of those of the lower adjuster, the anchored outer straps of the upper adjuster having outer ends located within, and fixed to, the band sections at the upper zone of the band, and extending through slits in said upper zone, the neck portions of the



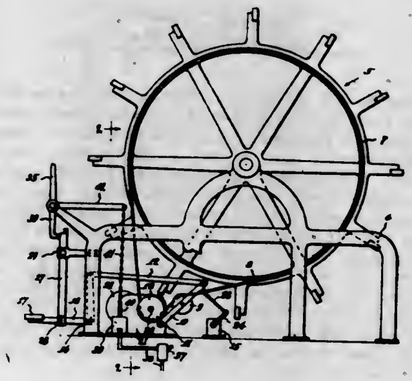
tapes of the upper adjuster extending through eyelets in the band sections, so that the upper adjuster is adapted to contact the upper zone of the band, the location of the fixed ends of the anchored straps of the two adjusters within the band sections, and the slits in said sections through which said straps extend, contributing to the external smoothness of the adjusted garment.

1,887,432. BUILDING UNIT. HENRY R. REEDER and WILLIAM SCOTT, Chicago Ill. Filed Sept. 15, 1930. Serial No. 482,065. 4 Claims. (Cl. 72—44.)



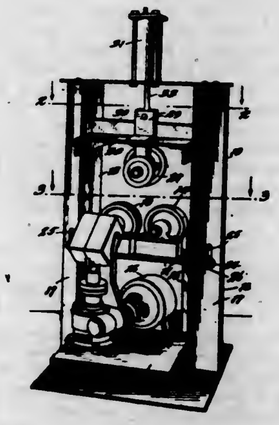
1. A building unit comprising spaced apart sections defining an air chamber therebetween, each of said sections having an air chamber defined interiorly thereof, a tongue in one end portion of each of said sections, each of said sections having a groove formed therein in the end portion thereof opposite said tongue, the tongue of one section being adapted in assembled position to be fitted into the groove of the next adjacent corresponding section, and means for securing said sections together in spaced apart relation to define said first-named air chamber therebetween, said means including strap members embedded in said sections and each of said strap members including an offset portion extended across said first-named air chamber and having its ends embedded in said sections, and the portions of said straps members at opposite sides of said offset portions having perforations therein through which the material composing the said sections is adapted to extend.

1,887,433. WARPING MACHINE DRIVE AND CONTROL THEREFOR. JULIUS RUHREN, West New York, N. J. Filed Oct. 5, 1931. Serial No. 567,008. 8 Claims. (Cl. 74—107.)



1. A warping machine, driving means for said machine, means including a treadle control for rendering said driving means effective and ineffective to drive said machine, and means for holding said treadle control in effective position, and remote control means for releasing said holding means.

1,887,434. TUBE ACTUATING MACHINE. DONALD STUART SAMMIS, Stratford, Conn., assignor to The New Haven Sand Blast Company, New Haven, Conn., a Corporation of Connecticut. Filed Nov. 18, 1929. Serial No. 408,067. 6 Claims. (Cl. 153—60.)



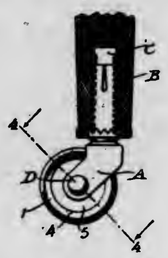
1. In apparatus for revolving and advancing tubes, a driving roller having its axis at an angle of less than 90° to that of the tube to be revolved and advanced, a motor operatively associated with said driving roller, and means for simultaneously adjusting the positions of said roller and said motor with respect to the tube.

1,887,435. METHOD OF CLOSING AND SEALING AN OPENING IN A METAL CONTAINER. FLECK W. SAMPLE, Chicago, Ill., assignor to American Flange & Manufacturing Company, Chicago, Ill., a Corporation of Illinois. Filed Nov. 7, 1931. Serial No. 573,694. 4 Claims. (Cl. 113—121.)



1. The method of closing and sealing an opening in the wall of a container defined by an annular flange extending from said container wall, which comprises mounting a preformed cap, having a substantially vertical side wall, over the free end of said flange with said side wall passing freely along the side of said flange, and moving the lower portion of said side wall of said cap toward said flange by applying only radial pressure to said lower portion of said side wall, said movement being translated into axial movement of the cap as a whole without change in direction of said applied pressure and without substantial axially-applied pressure upon the container wall, and uniformly contracting the circumference of said lower portion of said cap side wall into engagement with said flange.

1,887,436. CASTER ROLLER. WILLIAM F. SCHACHT and SIM E. SCHACHT, Huntington, Ind. Filed Feb. 5, 1930. Serial No. 426,081. 1 Claim. (Cl. 16—45.)

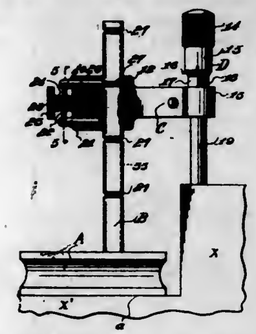


For a caster, a roller comprising a solid molded body of compressible rubber having a small axial bore and preformed shallow cylindrical recesses in its sides at opposite ends of the bore and of substantially less diameter than the body; metal washers of substantial thickness seated in and completely filling the said recesses, and having axial openings registering with the bore; and a tubular bushing closely fitted in and extending through the bore of the body and through the openings in the washers the ends of the bushing being flanged over the edges of the openings in the washers to hold the central portion of the body tightly compressed between the washers and around the core.

1,887,437. MICROMETER. JOSEPH G. SCHOTTHOEFER, Peoria, Ill. Filed Mar. 3, 1927. Serial No. 172,435. 11 Claims. (Cl. 33—170.)

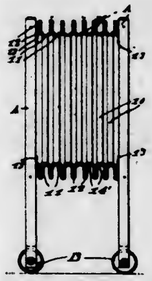
1. In a micrometer gauge for use in setting fly cutters or the like, a supporting base open from its top to its bottom adjacent one end to accommodate a fly cutter projecting from a boring shaft and also having one of its surfaces formed with a recess to permit the base to rest upon the boring shaft from which said cutter projects, a post or standard which extends from the opposite side of the base, the base and post or standard being wholly upon the same side of the axis of the shaft, and a member to support a micrometer head from said post or standard in position to engage the end of the said fly cutter.

5. In a micrometer gauge, a supporting base, a post or standard extending therefrom, a supporting member for a micrometer head, having a sleeve through which the post or standard extends, a pair of connected fastening elements carried by the sleeve and adapted respectively to engage the post or standard at different places in the



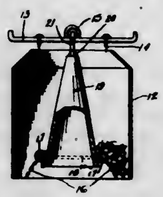
length of the post or standard and means operative to move said fastening elements in substantially parallel planes into or out of fastening relation with said post or standard.

1,887,438. COLLAPSIBLE BED OR CRIB. MYRTLE E. SEYFERTH, Murphysboro, Ill. Filed June 15, 1931. Serial No. 544,654. 1 Claim. (Cl. 5—99.)



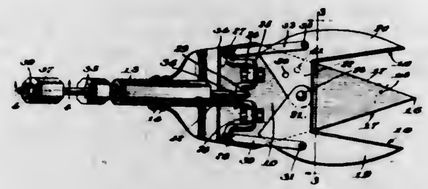
In a structure of the kind described, corner posts, vertical guard bars arranged between the posts, coupling plates secured to opposite ends of the bars, upper and lower series of outwardly breaking hinges pivotally fitted with the coupling plates, means connecting the upper and lower serfes of hinges with the posts, channeled top and bottom rails respectively receiving in their channels the upper and lower series of hinges and coupling plates when extended to lie in the same plane with each other, and means detachably connecting the top and bottom rails with the posts.

1,887,439. DRYING BASKET. NICOLA STRAMAGLIA, Chicago, Ill. Filed Oct. 2, 1929. Serial No. 396,856. 11 Claims. (Cl. 68—11.)



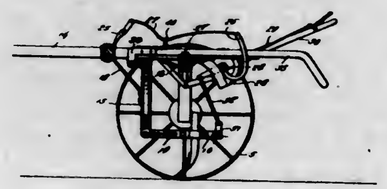
1. In a laundry apparatus, a basket having an open bottom, flexible means attached to said basket adjacent said bottom, a member adapted to be disposed within said basket and to be releasably engaged therein by said flexible means and when therein co-operating with said flexible means to provide a bottom for, and to retain articles in, said basket, and means providing releasable engagement between said flexible means and said member and which may be released from engagement with said member by raising the basket independently of said member, thus permitting the articles to fall from the basket through said bottom thereof thus opened.

1,887,440. CUTTING DEVICE. SVERRE R. SVENDSGAARD, Marshfield, Oreg. Filed Feb. 5, 1932. Serial No. 591,149. 5 Claims. (Cl. 30—11.)



1. A cutting device comprising a base member having a stationary blade projecting therefrom, the opposite sides of the blade being provided with a knife edge, a pair of movable blades located upon the opposite sides of the stationary blade and having inwardly projecting lugs, a common pivot for the lugs carried by the stationary blade, means for oscillating the movable blades into operative relation with the knife edge of the stationary blade, and a spring for returning the movable blades to an inoperative position.

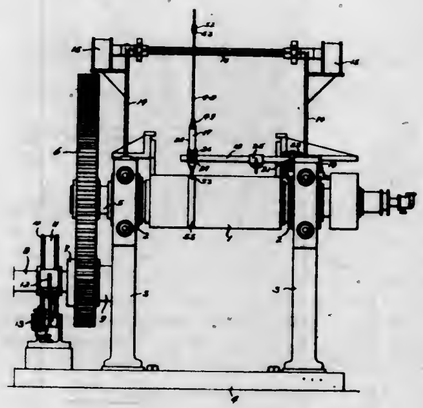
1,887,441. COTTON BUNCHING MACHINE. MILUS SUTTON, Elko, Ga. Filed Dec. 29, 1930. Serial No. 505,415. 3 Claims. (Cl. 97—23.)



1. A cotton bunching machine comprising a frame, wheels supporting the frame, a cultivator gang swingably mounted on the frame, means for adjusting the gang, steering means for the wheels, means for securing the steering means against operation, and said last-mentioned means for securing the steering means against operation being operated by the said gang operating means.

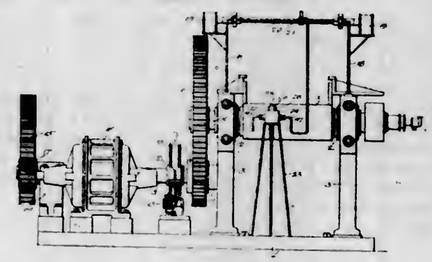
1,887,442. ROLL TRAVEL TESTING APPARATUS. JOHN EXTON THROPP, Trenton, N. J. Filed Dec. 18, 1930. Serial No. 503,804. 6 Claims. (Cl. 234—1.)

1. The combination with a machine having control means and rotatable rolls, of means for measuring the travel of a roll after said machine has been rendered inoperative, said measuring means comprising marking means disposed adjacent said roll, means urging said marking means in cooperative relation with said roll to mark



the same, and means controlled mechanically by said control means for rendering said urging means ineffective until said control means is operated.

1,887,443. ROLL TRAVEL TESTING APPARATUS. JOSEPH W. THROPP, Trenton, N. J. Filed Nov. 7, 1930. Serial No. 494,121. 4 Claims. (Cl. 234—1.)

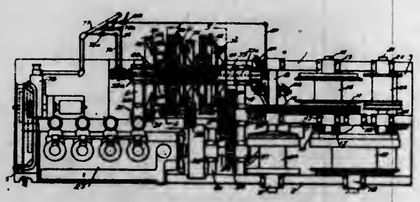


1. Means for measuring the travel of a machine part after said machine has been rendered inoperative comprising a portable electrically operable marking device adapted for disposition adjacent said part, and a portable switch adapted for mounting on and control by a control element of said machine for rendering said marking device effective to mark said part simultaneously with the rendering inoperative of said machine.

1,887,444. LOGGING ENGINE. HARRY LEON TURNEY, Portland, Oreg., assignor to Patents & Royalties Corporation, a Corporation of California. Filed Oct. 20, 1928. Serial No. 313,731. 3 Claims. (Cl. 254—185.)

1. In a logging engine, the combination of a frame of greater length than width; drums mounted crosswise of the frame; a speed changing mechanism comprising a shaft extending lengthwise of the frame; a motor mounted with its driving shaft lengthwise of the frame the motor and speed changing device being within the frame and alongside each other; an intermediate shaft between the

motor and the speed changing shaft driven from the motor and communicating the movement to the speed changing shaft, said shafts being overlapping; a gear connection between the intermediate shaft and the speed

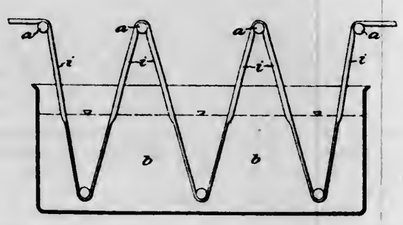


changing shaft of different ratios; means for throwing in and out the driving connections through the different gears to change the speed; and a driving connection between the speed changing shaft and the drums.

1,887,445. PROCESS FOR THE PRODUCTION OF TRIALKALI PHOSPHATES. CONWAY, BARON VON GIRSEWALD, HANS WEIDMANN, and GERHARD ROESNER, Frankfort-on-the-Main, Germany, assignors to American Lurgi Corporation, New York, N. Y., a Corporation of New York. Filed Mar. 25, 1931, Serial No. 525,326, and in Germany Ang. 19, 1930. 7 Claims. (Cl. 23—106.)

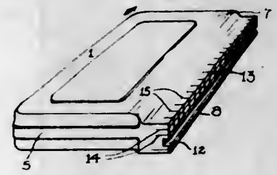
1. Process for the production of trialkali phosphates which comprises causing a metal-phosphorus compound to combine in a state of fusion with an alkali metal compound having an alkaline reaction, in presence of oxygen, one at least of the reaction components being introduced in the solid state and one at least of the components being in all cases, brought into reaction with the other in small quantities only at a time.

1,887,446. PROCESS FOR PREPARING TUBULAR BODIES FROM CELLULOSE. JULIUS VOSS, Wiesbaden-Biebrich, Germany, assignor, by mesne assignments, to The Visking Corporation, Chicago, Ill., a Corporation of Virginia. Filed Sept. 5, 1928, Serial No. 304,149, and in Germany Sept. 15, 1927. 1 Claim. (Cl. 18—57.)



In the process for preparing a seamless tubular body from cellulose, the new step which comprises conducting the tubular body through a bath, while gas accumulates therein, in such manner that the tubular body runs alternately inside and outside of the bath, the distance the tubular body travels on the outside of the bath in each instance being at least approximately as long as the distance it travels inside the bath between its travels outside the bath.

1,887,447. CLEANING DEVICE. LEE O. BALINGER, Lakewood, Ohio, assignor of one-third to William J. Wesseler, East Cleveland, Ohio. Filed Sept. 17, 1932. Serial No. 633,635. 23 Claims. (Cl. 15—126.)



1. An article of the character described, having in combination an elastic body member associated with a fluid supply and an elongated squeegee comprising a valve element supported thereon.

1,887,448. CONTAINER. GROVER F. BEHRINGER, Defiance, Ohio, assignor to The American Steel Package Company, Defiance, Ohio, a Corporation of Ohio. Filed Apr. 24, 1929. Serial No. 357,673. 10 Claims. (Cl. 220—39.)



1. A container comprising side and end walls, an annular device having a flange secured to one wall of said container and formed internally with screw threads, a closure device threaded into said annular device, and means interposed between the side walls of said annular device and said closure device for automatically locking the latter in position and against turning in the reverse direction, said closure device being formed with a chamber open at its upper end and threaded internally and formed in its bottom portion with a weakened wall to define a section which may be removed.

1,887,449. CONTAINER. GROVER F. BEHRINGER, Defiance, Ohio, assignor to The American Steel Package Company, Defiance, Ohio, a Corporation of Ohio. Filed Sept. 24, 1929. Serial No. 394,841. 10 Claims. (Cl. 220—39.)

1. A shipping container comprising side walls and end walls, one of said walls having a filling opening, means for substantially permanently closing said opening, one of said walls being formed of metal and having a weakened portion defining a removable, non-replaceable section forming an emptying opening when removed, and reinforcing means surrounding said weakened portion, said reinforcing means comprising a ring having a circumferential flange over which the metal surrounding said weakened portion is folded, the inner wall of said ring being provided with screw threads.

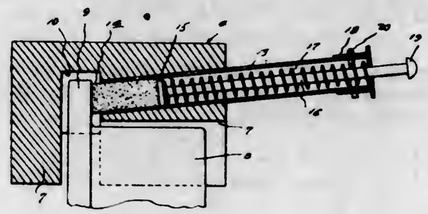
2. A shipping container comprising a body portion and head portions therefor, one of said portions being formed

of sheet metal and having a weakened wall defining a removable, non-replaceable section forming an emptying opening for the container when removed, and a ring secured to the sheet metal portion surrounding said weakened wall, the end wall of the ring bridging the weakened portion throughout its length.



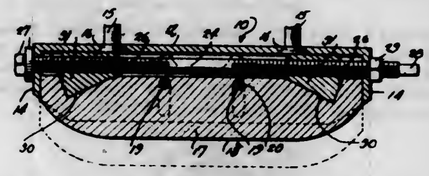
9. A shipping container comprising a body portion and head portions therefor, one of said portions consisting of a sheet metal wall, a bung ring threaded internally for removably receiving a threaded plug and provided at one end with a circumferential flange secured to the inner face of said sheet metal wall, that portion of the wall within said flange being scored and adapted to be broken out to permit access to said container and insertion of a plug into said ring.

1,887,450. WHEEL FLANGE LUBRICATOR. WILLIAM B. CASEY, Lake Forest Park, Wash., assignor of one-sixth to Fred E. Casey and one-sixth to Henry T. Ivers, Seattle, Wash. Filed Aug. 5, 1930. Serial No. 473,191. 1 Claim. (Cl. 184—3.)



A device for lubricating the flange of a car wheel comprising an elongated block having its body part formed with an arcuate wheel tread receiving recess, an arcuate counter groove therein opening out into the inner and closed end of the recess, said groove receiving a portion of the flange of the wheel, a resilient horizontally arranged supporting bar having a part extending over one end of the upper face of the block with the extremity of the bar pivotally connected to the block an appreciable distance from the sand end thereof, said block having an opening therein sloping downwardly from the outer wall of the block through the outer wall of the groove and located at the center of the block, a rectangular casing having one end located in the opening with its inner end flush with the outer wall of said groove and its outer end projecting from the block, a block of grease slidably arranged in the casing and a spring plunger carried by the casing for pressing the block against the flange of the wheel.

1,887,451. ADJUSTABLE SNOWPLOW SHOE. ALEXANDER J. DOMBROWSKI, Neshkoro, Wis. Filed July 12, 1932. Serial No. 622,124. 8 Claims. (Cl. 37—41.)

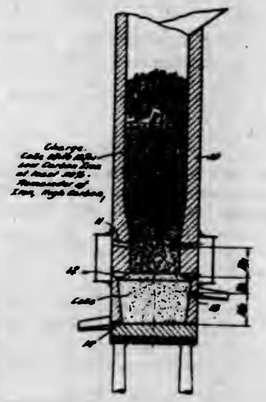


1. In an adjustable snow plow shoe, a backing, a ground engaging shoe adjustable therein and means for adjusting the shoe relative to the backing including a screw shaft, cam blocks thereon and cam faces on the shoe engageable by the blocks to effect movements of the shoe outwardly of the backing.

1,887,452. PROCESS FOR THE CONVERSION OF METALLIC ORES. HENRY EDWARDS, Caversham, Reading, ORVILLE JOHN PARKER, Eastcheap, London, and ROBERT ARNOT, London, England, assignors to Ancolex Limited, London, England. Filed Sept. 8, 1931, Serial No. 561,814, and in Great Britain Sept. 18, 1930. 8 Claims. (Cl. 75—17.)

1. The process of reducing metal bearing materials in which the charge contains water, consisting in heating the pulverized material admixed with sufficient carbonaceous material to effect the reduction thereof and an alkaline earth metal carbide sufficient to decompose the water present in the charge, maintaining the temperature below that at which fusion of the reduction product takes place until the desired reduction is completed and separating the reduced metallic values from the product.

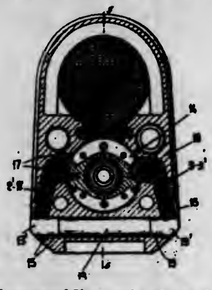
1,887,453. METHOD OF PRODUCING CAST-IRON OF HIGH QUALITIES OF STRENGTH IN A CUPOLA FURNACE. KARL EMMEL, Mulheim-Ruhr, Germany. Filed Mar. 6, 1928, Serial No. 259,609, and in Germany Mar. 15, 1927. 2 Claims. (Cl. 75—27.)



1. The method of operating a cupola furnace in the production of cast iron which consists in introducing into the furnace chamber a charge of iron and coke, at least 50% of the iron so introduced being in the form of steel or wrought iron of low carbon content and the coke comprising not more than about 13% of the total charge, submitting the charge, after ignition of the coke, to the action of an air blast under water gauge pressure of between 400 and 800 mm. to effect smelting of the metallic

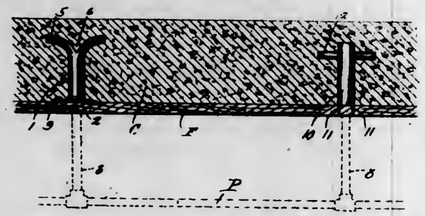
charge, whereby a molten metal of relatively low carbon content but extremely high temperature is produced, and thereafter passing this superheated metal through a body of coke to increase the carbon content thereof.

1,887,454. IGNITION MAGNETO. GIUSEPPE FOSSATI, Monza, Italy, assignor to Fabbrica Italiana Magneti Marelli Societa Anonima, Milan, Italy, a Corporation of Italy. Filed July 30, 1930, Serial No. 471,821, and in Italy Sept. 5, 1929. 14 Claims. (Cl. 171—209.)



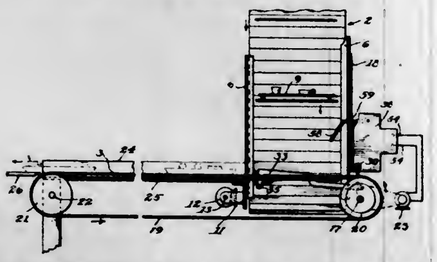
1. A method for providing pole shoes in the field structure for ignition magnetoes, consisting in providing a pile of superimposed sheets of magnetic metal, connecting them by connecting members, locating said pile in a die and casting therein the magneto body, and after casting removing the excess of said pile and said connecting members.

1,887,455. ANCHOR FOR HANGERS. EDWIN WALTER HELBERG, Chicago, Ill. Filed May 22, 1929. Serial No. 365,172. 3 Claims. (Cl. 72—105.)



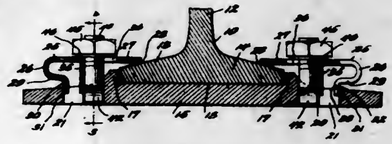
1. A device of the class described including a single length of pipe for engaging and supporting a hanger inserted into one end, and anchoring means separate from the pipe for closing the other end thereof against the admission of poured concrete.

1,887,456. SAFETY STOP FOR CONVEYERS. MARVIN A. LE GETTE, Brooklyn, N. Y. Filed Jan. 24, 1930. Serial No. 423,216. 5 Claims. (Cl. 198—232.)



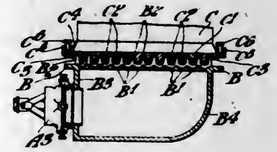
5. In combination with a plurality of conveyers arranged in series and electrical driving means therefor, a single switch for the electric circuit, means for opening said switch, said means including a separate arm cooperating with each conveyer.

1,887,457. RAIL FASTENER. JOHN A. MCGREW, Albany, N. Y. Filed July 1, 1931. Serial No. 548,193. 8 Claims. (Cl. 238—349.)



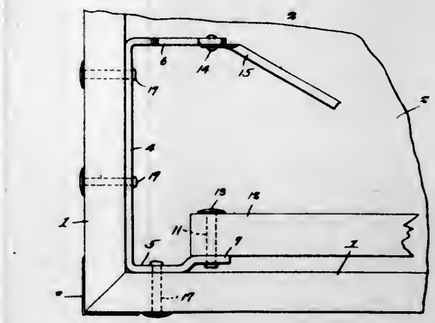
1. A rail fastener for securing a rail to a tie plate or the like, comprising in combination, a spring clip having a horizontal arm, a vertical arm, an intermediate U-shaped bend, and a vertical tongue depending from said horizontal arm, said horizontal arm adapted to bear upon the rail base, said vertical arm adapted to engage a portion of said tie plate, and flexing and securing means associated with said horizontal arm and said tongue.

1,887,458. LIQUID FUEL BURNING APPARATUS. LEWIS MOTLEY, Staines, England. Original application filed Jan. 28, 1930, Serial No. 424,018, and in Great Britain May 17, 1929. Divided and this application filed Nov. 29, 1930. Serial No. 499,091. 6 Claims. (Cl. 126—40.)



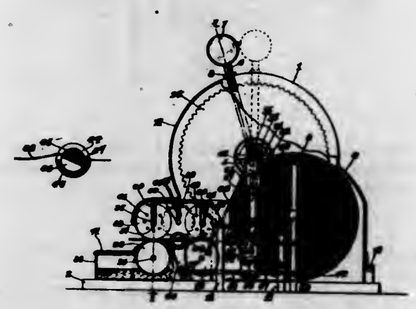
1. A liquid fuel or gas burning apparatus, comprising a hot plate having flame holes and upward projections and a utensil having a base provided with downward projections, each of the downward projections of the utensil when the utensil is on the hot plate being co-axial with a corresponding flame hole in the hot plate and forming an annular flange space above the flame hole.

1,887,459. CORNER BRACKET. ASHBY G. MURDOCK, Petersburg, Va. Filed Apr. 8, 1931. Serial No. 528,659. 1 Claim. (Cl. 45—11.)



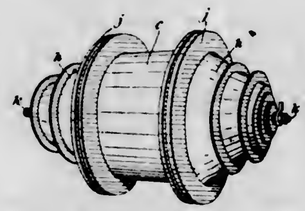
The combination with a table frame, of a bracket fitted snugly in the angle of the frame and secured thereto for holding the frame together at said angle, said bracket including a metal strip of uniform width bent to provide a base for attachment to one side of the frame and parallel arms formed by the end portions of the strip, separate means for attaching the base and one arm to two sides of the frame respectively, said attached arm having its free end offset inwardly from the side of the frame to which the arm is attached, separate pivot devices in said offset portion and in the other arm respectively, a leg mounted on the pivot on the offset portion and between the arms, a brace mounted on the other pivot device, said brace being attached to the leg, the bracket, leg and brace being connected together independently of the frame.

1,887,460. ADHESIVE TAPE DISPENSING MACHINE. JOHN H. NELSON, Madison, Wis. Filed June 20, 1929. Serial No. 372,489. 1 Claim. (Cl. 164—43.)



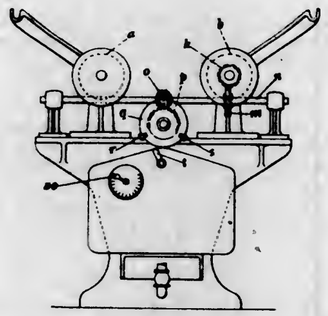
A tape dispensing machine comprising, means for rotatably mounting a roll of tape, mechanism for feeding the tape from the roll and ejecting the same from the machine, and a cutter mechanism to cut the tape, said cutting mechanism including a stationary hollow cylinder formed with a recess, a solid cylinder rotatably mounted within the hollow cylinder and formed with a recess oppositely disposed with respect to the recess in the hollow cylinder, said recesses overlapping each other in order that the tape may be passed transversely through the cylinders, a pair of spaced blades within the recess in the solid cylinder for the passage of the tape therebetween, and means operatively connecting the crank with the solid cylinder to provide for the rotation of the latter.

1,887,461. LIGHTNING OR SURGE ABSORBER. ERIC DOUGLAS TOBIAS NORRIS, Hollinwood, England, assignor to Ferranti Inc., New York, N. Y. Filed Oct. 19, 1929, Serial No. 400,956, and in Great Britain Dec. 6, 1928. 4 Claims. (Cl. 175—356.)



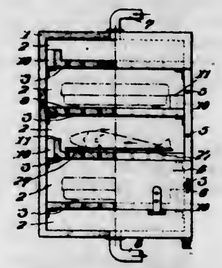
1. A lightning or surge absorber of the type embodying a winding for connection in series with the line subject to the surges or lightning waves associated with a metallic element including an insulated thin sheet of electrically conducting material inserted between the line winding and the said associated metallic element and serving to eliminate or reduce eddy currents in said metallic element.

1,887,462. DYE JIGGER. WILLIAM JOHN NORTON, Salford, Manchester, England, assignor to Sir James Farmer Norton & Company Limited, Manchester, England, a British Company. Filed July 20, 1931, Serial No. 552,059, and in Great Britain Mar. 27, 1931. 6 Claims. (Cl. 242—55.)



5. In combination, two driven rollers on to and from which a material is wound, two direct current electric motors driving said driven rollers, the armatures of the motors being arranged in series in an electric circuit whereby an automatic speed balancing action according to weight of roller is obtained.

1,887,463. REFRIGERATOR OF COLD BRINE SHOWER SYSTEM. ZENPEI OGURA, Tobata-Shi, Fukuoka-Ken, Japan. Filed Aug. 14, 1931, Serial No. 557,184. and in Japan Aug. 29, 1930. 2 Claims. (Cl. 62—104.)



1. A refrigerator of cold brine shower type comprising a refrigerating chamber having an inlet at the top and an outlet at the bottom of cold brine, superposed partition trays arranged horizontally in the refrigerating chamber and provided with a number of small perforations for allowing cold brine shower and openings for delivering superfluous cold brine from one partition tray to the next lower partition tray and preventing the cold brine flowing downwards from an upper partition tray on the next lower partition tray from directly passing into the overflow openings of the last mentioned partition tray the greater part of the cold brine coming down from an upper partition tray being received in the next lower partition tray.

1,887,464. PRODUCTION OF WALL PROTECTIVE MEANS. ERNÖ PICK, Budapest, Hungary, assignor to Picklin Baustoff G. m. b. H., Berlin, Germany. Filed July 8, 1930, Serial No. 466,601, and in Germany July 26, 1929. 2 Claims. (Cl. 154—2.)

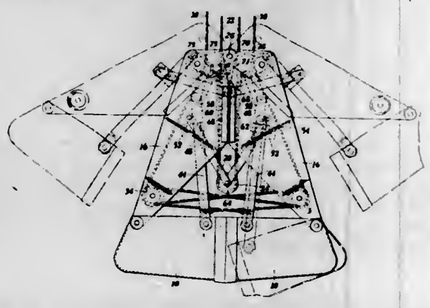
1. A method of producing a wall protecting means of impregnated smooth-faced textile fabric to be imbedded in the wall plaster, which method consists in providing

from both sides and in the entire length of the fabric, truncated widenings of its meshes, in order to increase the strength and filling said widened meshes with a com-



position consisting of the following ingredients namely glue, black carbolic acid, potassium dichromate, waterglass, caoutchouc and rock lime.

1,887,465. GRAB BUCKET. SYDNEY HERBERT PRIESTMAN, Hull, England. Filed July 31, 1930, Serial No. 472,067, and in Great Britain Aug. 20, 1929. 14 Claims. (Cl. 37—188.)



13. A grab bucket comprising in combination a link system, two opposed jaws pivoted to said link system about axes situated near the outer ends of said jaws, means for moving the jaws towards and away from one another, and means for maintaining the jaws in a load-retaining position, said means being releasable to permit the jaws to swing down freely about the axes aforesaid under the influence of gravity independently of the means for moving the jaws towards and away from one another.

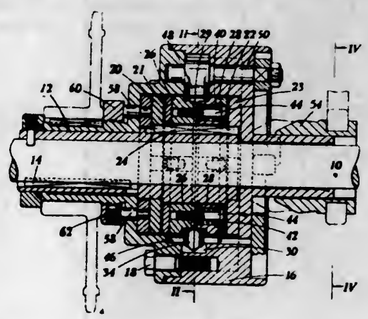
1,887,466. PRESS FASTENER. VOJTECH PUC, Prague, Czechoslovakia. Filed Jan. 9, 1931, Serial No. 507,664, and in Germany Feb. 3, 1930. 3 Claims. (Cl. 24—218.)



1. A press fastener comprising a lower element formed of a disc raised at the centre and a spherical member at the centre of the disc, and an upper element comprising a disc raised at the centre, a hollow rivet at the centre of the disc adapted to pass through the material to which the upper element is attached, a spring having limbs mounted at the base of the hollow rivet and a disc raised at the centre with a central hole, the hollow rivet passing first through the material and then through the hole in the disc, and being beaded over the edge of the hole.

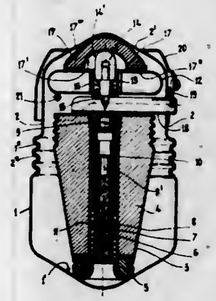
1,887,467. CLUTCH. ALFRED RENSHAW, Didsbury, Manchester, England, assignor to The Renold & Coventry Chain Company Limited, London, England, a British Company. Filed Mar. 16, 1932, Serial No. 599,300, and in Great Britain June 10, 1931. 8 Claims. (Cl. 192—70.)

1. A clutch comprising in combination a driving member, a driven member, two clutch plates one carried by the driving member and the other carried by the driven member, a jointed-link chain carried by one of said members and extending circumferentially around said members, means for applying endwise force to said chain, and wedg-



ing means co-operating with said chain to press said clutch-plates together by a wedging action consequent on the application of force to the chain.

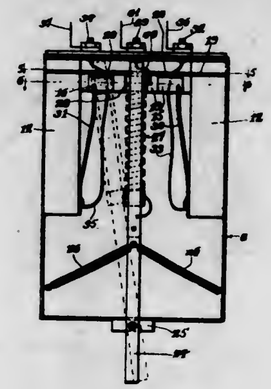
1,887,468. IMPACT IGNITION DEVICE AND BOMB OR THE LIKE. GREGORIO SCAGLIA, Turin, Italy, assignor to Societa Italiana Ernesto Breda per Costruzioni Meccaniche, Milan, Italy. Filed May 2, 1932, Serial No. 608,821, and in Germany May 18, 1931. 12 Claims. (Cl. 102—29.4.)



1. An impact ignition device for bombs and the like comprising in a jacket having concave inwardly facing ends, a body slidably abutting on one of said jacket ends, a head telescoping with said body and having a rim lying within said jacket at a small distance therefrom, a member loosely located intermediate said head and the adjacent concave jacket end, said member having a convex surface engaging the last named jacket end and a concave recess facing said head, a stud extending from said head in said recess of said member, means operative on said body and head to hold said body and said head with said cooperating member in contact with respective adjacent jacket ends, and a cooperating striker and primer in said body and head.

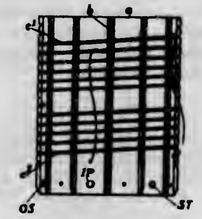
1,887,469. DIRECTION INDICATOR. ALBERT ROMAINE TALLMAN, Nashville, Tenn., assignor of one-half to James W. Warner, jr., Nashville, Tenn. Filed Sept. 26, 1930. Serial No. 484,650. 5 Claims. (Cl. 200—116.)

1. In a switch for selectively closing a plurality of normally open circuits, each having a pair of spaced contacts, a pivoted circuit closing element manually movable to selective positions to engage the spaced contacts of a selected circuit, a latch plate having a notch adjacent the spaced contacts of each circuit, and spring means for drawing the circuit closing element into engagement with a selected notch upon the engagement of the element with the spaced contacts adjacent to the selected notch, said circuit closing element including means for automatically moving the same out of engagement with the notch after



a predetermined period, said spring means operating to move the circuit closing element to circuit opening position upon the release of the element from the notch.

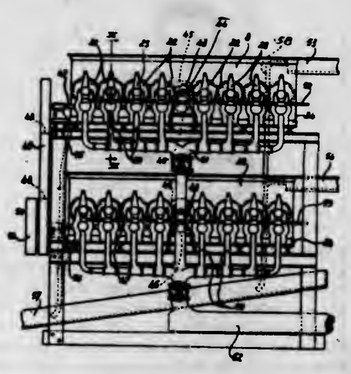
1,887,470. ELECTROMAGNETIC COUPLING DEVICE OR ELECTRICAL TRANSFORMER. FREDSAICK WILLIAM TWORT, Camberley, England. Filed Sept. 27, 1928, Serial No. 308,844, and in Great Britain Oct. 4, 1927. 4 Claims. (Cl. 175—359.)



1. An electro-magnetic coupling device comprising a substantially cylindrical former of insulating material, a tubular secondary winding wound helically upon said former in two halves, the terminal points of said winding being free ends of the two adjacent or central turns, and a primary winding of fewer turns than said secondary winding and disposed symmetrically within the outermost pairs of turns of said secondary winding.

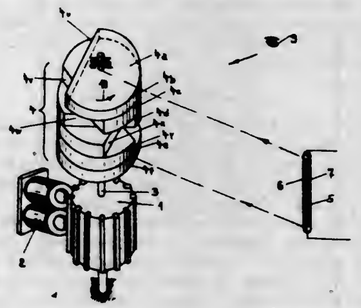
1,887,471. FILTERING APPARATUS. JEAN BAPTISTE VERNAY, Villeurbanne, France. Filed Jan. 3, 1930, Serial No. 418,287, and in France Jan. 10, 1929. 4 Claims. (Cl. 210—196.)

2. A filtering apparatus comprising a tank adapted to contain the mixture to be treated; a plurality of rotating filtering cells disposed therein, said cells having their axes substantially horizontal; a hollow driving shaft for each cell; means to tightly connect said cell with said shaft; an individual distributing gear for each cell adapted to connect the same alternately with a low-pressure line and with a source of fluid under pressure, said distributing gear being connected with said cell through the axial bore of said shaft; a toothed wheel keyed on said shaft, the wheels of a number of cells meshing together;



means to rotate one wheel of each group of wheels meshing together; and means whereby each wheel drives the corresponding distributing gear.

1,887,472. PICTURE SCANNING AND ASSEMBLING DEVICE FOR TELEVISION AND PICTURE TRANSMISSION. FRANZ VON OKOLICSANYI, Berlin-Wilmersdorf, and GUSTAV WIKKENHAUSER, Berlin-Halensee, Germany, assignors to Telehor Aktien-Gesellschaft, Berlin-Charlottenburg, Germany. Filed Sept. 17, 1930, Serial No. 482,612, and in Germany Aug. 5, 1930. 2 Claims. (Cl. 178—6.)



1. An apparatus for television reception and the reception of electrically transmitted pictures comprising in combination a linear source of light intended to be controlled by the received currents and a rotary system of mirrors, the number of which corresponds to the number of the picture lines, the said mirrors being arranged next to one another along an axis of rotation and distributed at equal angular distances from one another over the range of rotation, the linear source of light being arranged to lie parallel to the said axis of rotation and to produce its image in the system of mirrors direct without the interposition of any optical system, and the minimum length of the individual mirrors being equal to the length of the picture lines.

1,887,473. SHOULDER PROTECTOR. GLENN S. WARNER, Palo Alto, Calif. Filed Apr. 8, 1932. Serial No. 604,061. 2 Claims. (Cl. 2—2.)



1. A shoulder protector including an inverted U-shaped body member adapted to fit over the shoulder between the shoulder joint and neck and having its legs extending downwardly in front of and behind the body, a second inverted U-shaped member of stiff material normally overlying the shoulder joint and having its legs overlapping the legs of the first member, pivots connecting the lower ends of the legs of the second member to the legs of the first member for free pivotal movement of the second member toward and from the neck, means for securing the first member on the body, and a strap connecting said members and having one end fixed to the upper face of the upper portion of the first member adjacent its inner edge and having its other end fixed to the upper face of the upper portion of the second member intermediate its inner and outer edges.

1,887,474. PROCESS FOR CONVERTING LIQUID SOAP INTO A RAPIDLY SOLUBLE HANDY FORM. ADOLF WELTER, Crefeld, Germany. Filed Apr. 22, 1929, Serial No. 357,342, and in Germany Nov. 20, 1928. 8 Claims. (Cl. 87—16.)

1. A process for producing soap in the form of fine, rapidly soluble threads, consisting in atomizing molten soap from liquid olive oil of 60 to 62% fatty acid content and in directly pressing the resulting dry soap particles into fine threads by extrusion through fin nozzles of 0.4 to 1.5 mm. diameter and passing air over the threads to make them brittle.

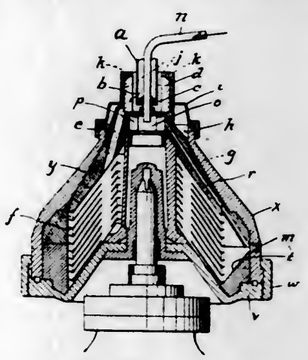
1,887,475. SYNTHESIS OF AMMONIA. WALTER WETTSTEIN, Monthey, Switzerland, assignor to Society of Chemical Industry in Basle, Basel, Switzerland. Filed May 21, 1931, Serial No. 539,144, and in Switzerland July 1, 1930. 5 Claims. (Cl. 23—199.)

3. In the manufacture of ammonia by synthesis from its elements under pressure, the improvement which consists in conducting a mixture of hydrogen and nitrogen over an iron catalyst in which has been incorporated, in addition to promoters, a small proportion of a compound of the element arsenic.

5. In the manufacture of ammonia by synthesis from its elements under pressure, the improvement which consists in conducting a mixture of hydrogen and nitrogen over an iron catalyst in which has been incorporated, in addition to promoters, a small proportion of a compound of the element phosphorus.

1,887,476. CENTRIFUGAL SEPARATOR. HANS OLOF LINDGREN, Appelviken, Sweden, assignor to The De Laval Separator Company, New York, N. Y., a Corporation of New Jersey. Filed Sept. 18, 1930, Serial No. 482,659, and in Sweden Sept. 28, 1929. 15 Claims. (Cl. 233—15.)

1. A centrifugal separator comprising a bowl body, a lining element within and contacting with, and having a neck extending above, the bowl body and forming therewith a bowl hood, a feed chamber for the mixture to be separated formed in the neck of the lining element, and



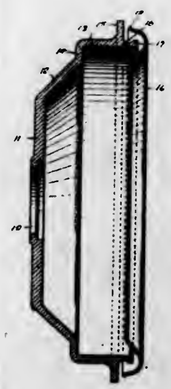
channels connecting the feed chamber with the separator space of the bowl, said lining element and channels being in fixed relation with the bowl body during operation.

1,887,477. PILE FABRIC. NELSON SLATER, Webster, Mass., assignor to S. Slater & Sons, Inc., Webster, Mass., a Corporation of Massachusetts. Filed Jan. 12, 1929. Serial No. 332,090. 3 Claims. (Cl. 154—49.)



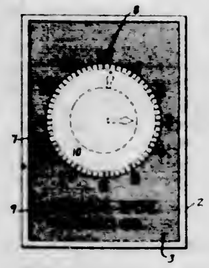
3. An improved pile fabric comprising a base, and a mass of fibers substantially all of which project through said base so as to protrude on both sides thereof, said fibers projecting further on one side than on the other and the shorter protruding ends being anchored to said base by means of a coating of cement.

1,887,478. BRAKE DRUM AND SHIELD ASSEMBLY. JOHN Y. BLAZEK, Cleveland, Ohio, assignor to Lempco Products, Inc., Maple Heights, Ohio, a Corporation of Ohio. Filed Apr. 8, 1931. Serial No. 528,587. 2 Claims. (Cl. 188—218.)



1. A brake drum and shield assembly including, a cup-shaped drum member and a shield member having a peripheral groove into which the edge of said cup-shaped drum member extends and forming therewith a tortuous opening from inside to outside of said drum member, said drum being provided adjacent to but spaced from its edge with an upstanding projection extending outward of the periphery of said shield member and the extreme edge of said drum member being turned backwardly and outwardly to form said projection.

1,887,479. ILLUMINATED CLOCK. ARDE BULOVA, New York, N. Y., assignor to Bulova Watch Company, Inc., New York, N. Y., a Corporation of New York. Filed Aug. 6, 1930. Serial No. 473,326. 2 Claims. (Cl. 58—50.)



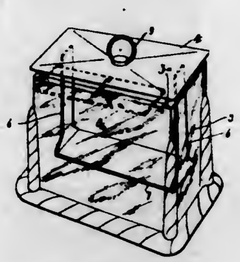
1. An illuminated clock of the kind described having a plurality of light-intercepting indicator discs one behind the other, each of said discs having a light aperture forming an indicator, the central area of the disc in the rear being adapted to permit the passage of light to the light aperture forming the indicator of the disc in front.

1,887,480. YARD BROOM. JOHN H. HORSTMAN, Dayton, Ohio, assignor, by mesne assignments, to The American Fork & Hoe Company, Cleveland, Ohio, a Corporation of Ohio. Filed Nov. 12, 1928. Serial No. 318,612. 6 Claims. (Cl. 55—114.)



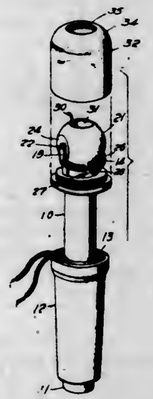
4. In a rake, a handle, a substantially flat thin sheet metal head supported on the handle, said head comprising a pair of sheet metal plate portions rigidly secured together in mutually superposed relation and terminating in a transversely extending forward edge, a plurality of thin elongated flat resilient tines fixed at one end to the head and extending by their free ends forwardly from said edge, the handle extending rearwardly from the head, said tines being laterally spaced from each other, each of said tines being immovably secured by its fixed end, flatwise between said plate portions, interlocking means projecting inwardly from at least one of said plate portions positively interlocking each tine fixed end with said plate portion to substantially prevent movements of said tine relative to said plate portion and to prevent lateral shifting of the free ends of the tines, the said fixed tine end being substantially entirely encased between the said head plate portions, and covered thereby.

1,887,481. SANITARY CONTAINER. GOTTFRIED NICKEL, Long Beach, Calif., assignor of one-half to Siegfried J. Dietzmann, Los Angeles, Calif. Filed July 1, 1931. Serial No. 548,109. 1 Claim. (Cl. 215—1.)



In a device of the class described, a container with an open top side, a cover adapted to close said top side, brackets extending downwardly into the container from the underside of the cover and being of a flat form adapted to evenly stack and guide biscuits and the like between the flat upright brackets, a tray near the bottom of the container supported by the brackets, and a handle member on the cover.

1,887,482. HAIR CURLING APPARATUS. ARTHUR PFORTNER, Rosedale, N. Y., assignor to Ideal Permanent Wave Products, Inc., Rosedale, Long Island, N. Y., a Corporation of New York. Filed Mar. 27, 1931. Serial No. 525,675. 9 Claims. (Cl. 132—36.)

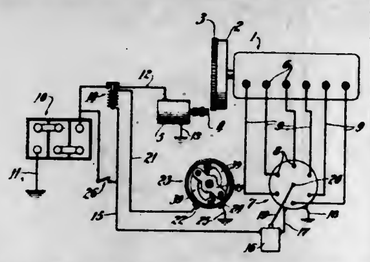


1. In a hair curling device, a heater tube comprising a hair engaging section and a spring guided valving element at its opposite end.

1,887,483. AUTOMATIC MEANS FOR STARTING ENGINES. HERBERT H. TRAIL, Vancouver, British Columbia, Canada, assignor to Motor Devices, Inc., Chicago, Ill., a Corporation of Illinois. Filed May 10, 1929. Serial No. 361,858. 6 Claims. (Cl. 290—37.)

1. In combination with the starting motor circuit of a vehicle engine, including an electromagnetic switch for

opening and closing said circuit, a device for controlling the action of said switch and operating at a relatively low



engine speed for energising said switch to close said circuit and at a relatively higher engine speed for deenergising said switch to open said circuit.

1,887,484. EXPLOSION-RELEASE MECHANISM FOR WINDOWS. HOWARD T. WALTON, Collingswood, N. J., assignor to David Lupton's Sons Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Sept. 21, 1929. Serial No. 394,338. 16 Claims. (Cl. 189—71.)



1. A window with a laterally projectible sash suspended by pivots above the transverse median thereof, and a weighted latch member afforded pivotal bearing on the sash lower rail adapted to engage a stationary contiguous projection with capacity to yield under explosive-pressure imposed on said sash from the inside.

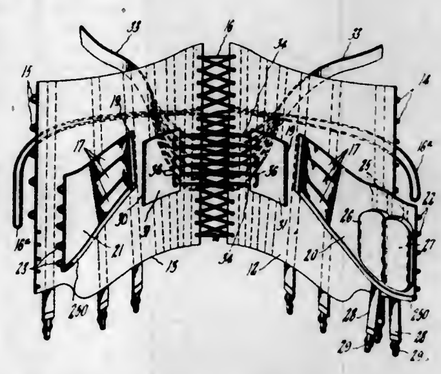
1,887,485. CONTAINER. GROVER F. BEHRINGER, Defiance, Ohio, assignor to The American Steel Package Company, Defiance, Ohio, a Corporation of Ohio. Filed Jan. 16, 1930. Serial No. 421,299. 22 Claims. (Cl. 220—39.)

1. A container having an opening formed in one of its walls, a threaded bushing for said opening having a flange at one end, said wall being shaped to fit said flange and interlock therewith to prevent turning of said ring, and a sealing device for closing the opening through said bushing, said device having its peripheral portion secured between said flange and the adjacent portions of said container wall.



21. A container having a filling opening and an emptying opening, means for substantially permanently closing said filling opening, a pair of related members disposed concentrically to said emptying opening, one of said members comprising a ring having a flange and the other member having a wall engaging one end of said ring and closing the opening therethrough and marginal portions engaging one face of said flange, the metal of the wall surrounding said emptying opening being interlocked to said flange and having portions securing said marginal portions of said closing member to said flange.

1,887,486. APPAREL GARMENT. ROSE B. QUINE, Newton, Mass. Filed Apr. 5, 1932. Serial No. 603,407. 3 Claims. (Cl. 2—26.)



1. An apparel garment comprising a sectional back laced body-embracing band, and a sacro-iliac supporter including flexible tabs having fixed ends attached to the intermediate portion of the band sections, and free ends extending toward said rear edges, said tab being within the band and formed and arranged to bear on the sacro-iliac region, flexible tapes engaged with the free ends of said tabs and extending therefrom through eyelets in the rear portions of the band sections to the exterior of the band, means for pulling said tapes in directions required to tension the tabs and cause supporting pressure thereof on the sacro-iliac region, and means for releasably maintaining said pressure.

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THE
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Reissues	9—No.	18,652 to No.	18,660, inclusive.
Designs	50—No.	86,281 to No.	86,330, inclusive.
Patents	719—No.	1,887,487 to No.	1,888,205, inclusive.
Total	987		

Adjudicated Patents

(D. C. N. Y.) Douglas patent, No. 1,804,166, for food product and its method of manufacture, claim 5 *Held* not infringed. *General Foods Corporation* v. *Seeman Bros.*, 60 F.(2d) 622.

(D. C. Del.) Borst patent, No. 1,896,897, for sewage treatment, claims 1–7 *Held* not infringed. *Borst* v. *Simplex Ejector & Aerator Corporation*, 60 F.(2d) 659.

(C. C. A. N. J.) Gore patent, No. 1,482,977, for fiber rope, claim 4 *Held* not infringed. *Lawson* v. *Whitlock Cordage Co.*, 60 F.(2d) 362.

(D. C. Conn.) Haft patent, No. 1,512,888 for lighting set, claims 1 and 2 *Held* valid and infringed. *Noma Electric Corporation* v. *M. Goldman & Co.*, 60 F.(2d) 579.

(D. C. N. J.) Ferry patent, No. 1,593,445 for method of installing mushroom piling, *Held* valid and infringed. *James Ferry Co.* v. *Atlantic Const. Co.*, 60 F.(2d) 564.

(D. C. Conn.) Gilmore patent, No. 1,609,165, for hood latch, claims 11 and 12 *Held* invalid. *Chicago Forging & Mfg. Co.* v. *Bassick Co.*, 60 F.(2d) 581.

(D. C. N. Y.) Horgan patent, No. 1,629,870, for press, *Held* invalid. *United Shoe Machinery Corporation* v. *E. H. Ferree Co.*, 60 F.(2d) 567.

(C. C. A. Minn.) Hudson patent, No. 1,639,294, for sprayer *Held* invalid. *H. D. Hudson Mfg. Co.* v *Standard Oil Co. (Indiana)*, 60 F.(2d) 377.

(D. C. Conn.) Gilmore patent, No. 1,661,891, for hood latch, claims 18, 19, and 20 *Held* invalid. *Chicago Forging & Mfg. Co.* v. *Bassick Co.*, 60 F.(2d) 581.

(C. C. A. Minn.) Ellis patent, No. 1,725,787, for building construction, claims 1–4 *Held* invalid for lack of invention and claims 6 to 16 *Held* invalid as not disclosed in application as orignally filed. *Insulite Co.* v. *Reserve Supply Co.*, 60 F.(2) 432.

Interference Notice

U. S. PATENT OFFICE, *Washington, Oct. 31, 1932.*

Harry Harris, his assigns or legal representatives, take notice:

An interference having been declared by this Office between the application of the Brown Shoe Company, Inc., 1600 Washington Avenue, St. Louis, Mo., for registration of a trade-mark and trade-mark registered November 23, 1915, No. 107,421, to Harry Harris, 800–802 Penn Avenue, Pittsburgh, Pa., and a notice of such declaration sent by registered mail to said Harris at the said address having been returned by the post office as undeliverable, notice is hereby given that unless said Harris, his assigns or legal representatives, shall enter an appearance therein within 30 days from the first publication of this order the interference will be proceeded with as in case of default. This notice will be published in the OFFICIAL GAZETTE for three consecutive weeks.

WM. A. KINNAN,
First Assistant Commissioner.

Notice of Cancellation

U. S. PATENT OFFICE, *Washington, October 15, 1932.*

National Eggoscope Corpor., its assigns or legal representatives, take notice:

A cancellation proceeding having been instituted by this Office upon the application of Cecil Starke Hassell, of 2028 S. W. 24th Terrace, Miami, Fla., to effect the cancellation of the trade-mark registration of the National Eggoscope Corpor., of 18–19 Hudson Street, New York, N. Y., No. 198,600, dated January 6, 1925, and the notice of such proceeding sent by registered mail to the said National Eggoscope Corpor. at the said address having been returned by the post-office as undeliverable, notice is hereby given that unless said National Eggoscope Corpor., its assigns or legal representatives, shall enter an appearance therein within 30 days from the first publication of this order the cancellation will be proceeded with as in case of default. This notice will be published in the OFFICIAL GAZETTE for three consecutive weeks.

WM. A. KINNAN,
First Assistant Commissioner.

Condition of Applications Under Examination at Close of Business October 29, 1932

(Total number of applications awaiting action, excluding Trade-Mark Division, 65,227; Trade-Mark Division, 984. Oldest new case, May 2, 1932; oldest amended, Apr. 30, 1932.)

Room No.	Divisions, Examiners, and Subjects of Inventions	Oldest new application and oldest action by applicant awaiting office action: New	Amended	No. of applications awaiting action
6624	1. LOEFFLER, F. A., Closure Operators; Fences; Gates; Tillage; Handling Implements	Aug. 6	Sept. 2	268
6708	2. HERRMANN, D. (Act.), Fishing and Trapping; Dairy; Animal Husbandry; Presses; Tobacco; Velocipedes.	July 1	June 20	830
4093	3. LINDSEY, A., Heating; Metal Founding; Metallurgy; Metal Treatment; Electric Furnaces	July 19	Aug. 6	662
7063	4. MERRITT, A. D., Conveyers; Hoists; Handling Apparatus; Excavating	July 20	Sept. 6	331
3628	5. MACNAB, J. F., Harvesters; Music; Acoustics; Sound Recording; Knotters	July 12	July 11	292
4896C	6. LEWERS, A. M., Carbon Chemistry	May 3	May 3	1,089
5725	7. JARBOE, C. G., Optics; Photography	June 11	June 15	1,322
7514	8. ADAMS, F. L., Beds; Chairs; Kitchen and Table Articles; Racks and Cabinets	July 5	July 14	830
4624	9. ADAMS, R. E., Pumps; Fluid and Fluid-Current Motors	July 29	Aug. 19	612
6612	10. HUNTER, O. F., Land Vehicles—Animal Draft Appliances, Bodies and Tops	June 2	June 2	737
5087B	11. BENHAM, E. V., Boots, Shoes, and Leggins; Button, Eyelet, and Rivet Setting; Harness; Leather Manufactures; Nailing and Stapling; Whip Apparatus.	July 5	July 12	600
7701	12. HENRY, C. C., Machine Elements	July 13	July 26	425
5096	13. BORLIK, F. J., Gear Cutting, Milling, and Planing; Metal Drawing; Metal Forging and Welding; Metal Rolling; Metal Working; Needle and Pin Making; Turning; Boring and Drilling.	June 20	June 29	980
5097	14. BRUMBAUGH, N. J., Farriery; Metal Bending; Metal Tools and Implements, Making; Sheet Metal Ware, Making; Wire Fabrics; Wire Working; Metal Working, Blanks and Processes.	July 15	July 27	678
4897	15. WORRELL, L. W., Glass; Plastic Block and Earthenware Apparatus; Plastics	June 3	June 3	1,651
5612	16. SPENCER, C. J., Telegraphy; Telephony	July 14	July 14	750
5701	17. ARMSTRONG, H. (Act.), Label Pasting and Paper Hanging; Ornamentation; Paper Manufactures; Printing; Type Casting; Sheet-Material Associating or Folding; Sheet or Web Feeding; Type Setting.	May 7	May 9	1,371
4612	18. PORTER, M. E., Motors, Expansible-Chamber Type; Power Plants; Speed-Responsive Devices	July 9	July 12	579
4096	19. KENNEDY, A. R., Furnaces and Stoves; Heating Systems; Fuel Burners	Apr. 30	May 2	1,790
6613	20. GROVE, S. D., Miscellaneous Hardware; Closure Fastenors; Locks and Latches; Safes; Undertaking	July 25	July 25	473
7733	21. THOMPSON, T. J., Textiles; Cloth Finishing	June 20	June 21	839
5724	22. RINGLE, D. (Act.), Aeronautics; Firearms, Ordnance, and Explosive Devices; Air Guns, Catapults, and Targets; Boats and Buoys; Ships; Marine Propulsion.	July 30	Aug. 4	430
7892	23. GROESBECK, W. D., Coin Handling; Recorders; Registers	May 11	May 7	821
5083	24. DURAS, C. O., Apparel; Apparel Apparatus; Garment Supporters; Sewing Machines	Aug. 1	Aug. 18	532
5709	25. BLAKELY, C. F., Agitating; Butchering; Classifying Solids; Centrifugal-Bowl Separators; Mills; Threshing; Vegetable and Meat Cutters and Comminutors.	May 23	May 24	1,323
5893	26. ADAMS, W. M. (Act.), Electricity, Generation; Motive Power	May 19	May 19	864
5708	27. CLARK, W. N. (Act.), Brushing, Scrubbing, and Cleaning; Washing Apparatus	July 6	July 8	744
4628	28. BENSON, A. R., Internal-Combustion Engines	May 4	May 4	1,327
5082	29. MORRIS, B. N., Woodworking; Tools; Compound Tools; Furniture; Metal Working, Assembling.	May 3	May 3	739
4074	30. SHIPMAN, J. L., Automatic Temperature and Humidity Regulation, Illuminating Burners; Illumination; Thermostats and Humidostats.	June 30	June 24	764
4716	31. HOLMES, W. N., Gas, Heating and Illuminating; Mineral Oils	May 23	May 23	1,452
4086	32. BARTHOLOMEW, J. A., Gas and Liquid Contact Apparatus; Heat Exchange; Gas Separation	July 18	July 23	676
6096	33. WYMAN, W. I., Bridges; Masonry and Concrete Structures; Metallic Building Structures; Roads and Pavements; Roofs; Wooden Buildings.	May 2	Apr. 30	2,152
6625	34. SAPERSTEIN, S. (Act.), Electricity, Transmission to Vehicles; Pneumatic Dispatch; Railways, Rolling Stock, Switches, and Signals; Store Service; Vehicle Fenders; Track Sanders.	June 2	June 1	815
3600	35. REYNOLDS, E. C., Buckles, Buttons, Clasps, Etc.; Card and Sign Exhibiting; Signals; Toilet	Sept. 6	Sept. 14	287
7624	35. McFAYDEN, A. D. (Act.), Automatic Weighers; Geometrical and Measuring Instruments; Force Measuring.	May 2	May 11	1,522
5889	37. WEAVER, M. E., Electricity, Circuit Makers and Breakers	June 8	June 16	955
7510	38. KRAFFT, C. F., Earth Boring; Hydraulic and Earth Engineering; Mining, Quarrying, and Ice Harvesting; Stoneworking; Wells.	Sept. 6	Sept. 7	106
4874	39. WHITNEY, F. J. (Act.), Fluid-Pressure Regulators; Multiple Valves; Valves; Water Distribution	May 2	May 4	1,310
7880	40. OBERLIN, J. J., Receptacles	June 6	June 6	2,157
6082	41. WHITNEY, M. L., Land Vehicles, Wheels, and Axles: Resilient Tires and Wheels; Wheel Substitutes; Railway Draft Appliances; Spring Devices.	July 30	Aug. 29	452
5882	42. CUTTING, H. O., Electric Signaling	May 7	May 2	1,265
4886B	43. KLINGE, E. F., Baths, Closets, Sinks, and Spittoons; Sewerage; Electricity, Medical and Surgical; Medicines; Surgery; Dentistry; Artificial Body Members.	May 31	May 31	1,496
4087B	44. SHAFFER, C. H., Dispensing; Filling and Closing Portable Receptacles; Refrigeration	May 3	May 3	1,676
7097	45. HILL, H. D., Pulleys and Shafting; Lubrication; Bearings and Guides	July 21	July 21	839
4613	46. TAYLOR, M., Evaporators; Fluid Sprinkling; Fire Extinguishers; Boilers	July 5	July 6	529
7600	47. BARKER, H., Clutches and Power Stops; Brakes; Motors	June 1	June 1	1,856
5731	48. ROEPKE, O. B., Electricity, General Applications	June 14	June 14	644
7725	49. SHEFFIELD, E. L., Check-Controlled Apparatus; Domestic Cooking Vessels; Ventilation; Driers; Liquid Separation or Purification.	May 9	May 9	1,412
4701	50. BLAKE, C. L., Plastic and Liquid Coating Compositions; Coating	May 4	May 4	2,060
5628	51. BACKUS, C. D., Radiant Energy	June 18	June 18	1,068
7709	52. KNOTTS, M. K., Supports; Chucks; Joint Packing; Pipe and Rod Joints or Couplings; Tool-Handle Fastenings.	July 30	Aug. 3	629
6897	53. PECK, M. K., Books; Manifolding; Printed Matter; Stationery, Educational Appliances; Paper Files and Binders; Tents, Canopies, Umbrellas, and Canes; Curtains, Shades, and Screens.	Aug. 13	Aug. 22	383
5874	54. WAITE, W. E., Electric Lamps; Vapor Electric Devices; Space Discharge Tubes; Light Sensitive Circuits.	May 19	May 19	1,060
5887	55. BOWEN, S. T.—Bread, Pastry, and Confection Making; Cutlery	Aug. 5	Aug. 6	342
	55. BOWEN, S. T.—Designs	Oct. 8	Oct. 19	347
4725	56. PORTER, F. J., Electrochemistry; Laminated Fabrics; Paper Making; Substance Preparation	May 11	May 11	1,334
3623	57. NICOLSON, G. D. C., Cutting and Punching; Bolt, Nut, Rivet, Nail, Screw, Chain, and Horse-Shoe Making; Driven and Screw Fastenings; Jewelry; Nut and Bolt Locks.	June 29	June 27	652
5605	58. DOWELL, E. F., Abrading; Typewriting	May 5	May 5	1,248
4709	59. RICHARD, V. I., Chemistry; Alcohol; Fertilizers; Cement and Lime; Hides, Skins, and Leather; Fuel.	May 2	May 2	1,649
5896	60. GLASS, R. L., Electricity, Heating, and Welding; Batteries; Resistances and Rheostats; Prime Mover Dynamo Plants.	May 14	May 14	1,404
6724	61. PARKS, G. E., Elevators; Winding and Reeling; Pushing and Pulling; Fire Escapes; Ladders; Scaffolds; Horology; Time-Controlling Apparatus.	May 21	May 26	1,213
7525	62. COCHRAN, W. W., Toys; Amusement Devices; Baggage, Package and Article Carriers; Bottles and Jars; Deposit and Collection Receptacles.	June 7	June 7	1,451
4688	63. WINKELSTEIN, A. H., Bleaching and Dyeing; Explosive, Pyrotechnic, and Match Compositions; Preserving; Sugar, Starch, and Carbohydrates.	May 13	May 13	1,370
4708	64. NASH, P. N., Acetylene; Distillation; Gas Mixers; Oils, Fats, and Glue	July 26	Aug. 3	423
5624	65. McDERMOTT, F. P., Electricity, Conductors; Conduits and Housings; Repeaters; Relays; Wave Transmission.	May 5	May 9	1,511
2099B	Trade-Marks, Labels, and Prints: F. A. RICHMOND—Trade-Marks	Oct. 3	Oct. 14	867
	Trade-Marks, Labels, and Prints: F. A. RICHMOND—Labels and Prints	Oct. 4	Oct. 14	117

DECISIONS IN PATENT AND TRADE-MARK CASES

Decisions of the Board of Appeals

Ex parte Jones

Decided April 29, 1933

Patentability—Process—Prior Apparatus Patents.

Claims for a process *Held* patentable over certain prior art on the ground that while the apparatus shown in the prior patents cited might be used or modified to carry out the process the patents do not disclose the process nor would the process necessarily result when the devices of the patents are operated as intended.

[This application has resulted in Patent No. 1,873,597, issued August 23, 1932.]

Application for Patent filed May 18, 1928, Serial No. 278,742. Separation of Oil from Mixtures Thereof with Water.

Messrs. Kenyon & Kenyon and *Mr. Maurice A. Crews* for applicant.

Before Kinnan, First Assistant Commissioner, and Ruckman and Clift, Examiners in Chief.

Ruckman, *Examiner in Chief:*

This is an appeal from the final rejection by the Primary Examiner of claims 1 to 7, inclusive, 9, 10, and 13 to 16, inclusive.

Claims 1 and 7 are illustrative and read as follows:

1. In the separation of mixtures of immiscible liquids in which one liquid is present in fine particles, the steps comprising mechanically coalescing particles of one liquid from a continuous body of the liquid immiscible with the first liquid by passing the mixture through unobstructed passages of such small transverse dimension that the smallest particles of the first liquid to be removed from the mixture will contact with the walls of the passage and be caused to coalesce with other bodies of the first liquid, and separating coalesced bodies of the first liquid by difference of specific gravity.

7. Apparatus for the separation of mixtures of immiscible liquids comprising a liquid chamber having a mixture inlet and an outlet for one constituent of the mixture, means in said chamber between said inlet and said outlet providing a plurality of unobstructed passages of such small transverse dimension that the smallest particles of another constituent to be removed will contact with the walls of one of said passages and be caused to coalesce with others of said particles, means for withdrawing agglomerated particles of the other constituent from within the chamber from points at one end of said passages.

The references relied upon are: MacArthur, 1,591,852, July 6, 1926; Comyn, 1,645,093, Oct. 11, 1927; Morison (Br.), 243,428, of 1925.

The invention relates to the separation of oil from mixtures thereof with water. The purpose of appellant's invention is the removal of oil from ballast water which it is desired to throw overboard but which, if discharged without purification, results in serious harbor pollution. As stated on page 3 of the specification:

An important feature of my invention resides in passing the oil-containing water through spaces so narrow that dispersed particles of oil will be caused by impact or by contact under various pressures to coalesce and form globules or other bodies of oil that are readily separable from the water and readily removable therefrom by gravity.

Claims 1 to 6 are drawn to the process while the remainder of the appealed claims are apparatus claims. The Examiner rejected all of the claims on the British patent to "Morison taken alone or in connection with Comyn."

The patent to Morison discloses an apparatus for separating oil from bilge water before discharging the water overboard from the ship. He provides a series of superposed trays 7 between which the mixture of water and oil passes. The specification of this patent (page 3, lines 31–42) describes the separation of the oil from the water in these trays as follows:

In operation the oily water or other liquid to be treated passes into the chamber A through the opening 4, into the casing 1 past the wall 6 and so through the bounded channels between the superimposed trays. The oil, in the passage of the liquid through such channels, separating itself from the water and rising to the roof of each channel is discharged through the openings 18 in the end wall 19 into the oil collecting compartment 20.

Appellant contends that the trays 7 of Morison are merely settling trays and that he does not teach appellant's principle of passing the oil and water between—

plates spaced so closely together that no oil particle can pass between them without contacting the plates and coalescing with other oil particles thereof.

This contention of appellant that Morison does not disclose his process is well taken. Nor is it thought that appellant's process claims are fairly anticipated by Morison in connection with Comyn. According to this patent the mixture impinges against the nonvertical or sloping surface *h* in the separation chamber and some of the oil globules will adhere to the surface and coalesce to form larger globules that rise upward through the passage *i*. This operation is repeated by passing the mixture through similar separation chambers *g'* and *g²* until the most of the oil is removed. While this patent discloses the principle of the coalescing of the smaller globules into larger ones, it is accomplished in a different way. Comyn does not disclose the passage of the oily water through unobstructed passages of such small transverse dimension that the smallest particles of the oil must contact with the walls of the passage. It is believed that appellant is entitled to the allowance of the process claims 1 to 6.

In the rejection of the apparatus claims the Examiner further cited the patent to MacArthur. Said patent shows rings 32 spaced so closely together that the oil will be prevented from passing therebetween although the water will pass through. In other words, they are in the nature of an oil filter. In answer to appellant's contention that the trays of Morison are too far apart and the rings of MacArthur are too close together to meet the apparatus claims, the Examiner takes the position that the difference in this respect between appellant's device and those of the references is merely one of degree and that at best the claims are indefinite as to the spacing of appellant's plates. This position of the Examiner is believed to be sound. The difference between appellant's apparatus and method claims with respect to the question of patentability is that while the apparatuses of the references might be used or modified to carry out appellant's process,

the patents do not disclose said process nor would the process necessarily result when the devices of said patents are operated as intended (*Carnegie Steel Company, Ltd.*, v. *Cambria Iron Company*, 90 O. G. 1866, 185 U. S. 403; *In re Moulton and Jones*, 1913 C. D. 412, 40 App. D. C. 160; *Ex parte Wilson*, 1926 C. D. 27). The latter decision states:

It is well settled that a process is not unpatentable merely because of the existence in the prior art of a structure which is capable of carrying out that process; but it is unpatentable if this prior art discloses the process or if the process must necessarily result when the device of the prior art is operated in the manner in which it was intended. See Ex parte Moulton and Jones, 191 O. G. 588; 40 App. D. C. 160, and the cases therein cited.

The decision of the Examiner is reversed as to claims 1 to 6 and is affirmed as to the remainder of the appealed claims.

U. S. Court of Customs and Patent Appeals

NELSON v. BERRY ET AL.

No. 2,923. Decided June 20, 1932

1. APPEALS—SUSPENSION.

Where in a multi-party interference one of the losing parties appeals to the Court of Customs and Patent Appeals and the other files a bill in equity in the Federal Court, *Held* that a motion of the latter that the appeal be suspended pending the final determination of the suit should be denied.

2. SAME—SAME—COMITY.

"In so far as the matter of comity be concerned, this court is in full sympathy with the rule announced in the cases referred to and it is our purpose in all instances to comply with same. However, in applying this rule the courts are not at liberty to disregard rights which the law assures to litigants themselves.

3. INTERFERENCE—PRIORITY—DILIGENCE.

Record reviewed and *Held* to establish that priority was properly awarded to B. on the ground that while N. was the first to conceive the invention he was the last to reduce it to practice and was lacking in diligence in reducing it to practice from the time that B. entered the field.

APPEAL from the Patent Office. Affirmed.

Messrs. Ramsey & Kent, Mr. Frank J. Kent, and *Mr. Charles S. Grindle* for Nelson.

Mr. Melville Church, Messrs. Richey & Watts, Mr. I. M. Bosworth, Mr. Donald A. Gardiner, Mr. Verne A. Trask, Mr. G. B. Schley, and *Mr. Harold F. McNenny* for Berry et al.

GARRETT, *J.*:

Except as hereinafter related, Jardine, whose name appears in the caption in the relation of an appellee, is not a party to the appeal before us, and the issue upon the merits of the four interferences involved is solely between Nelson and Berry.

A series of interferences were declared by the proper tribunals of the United States Patent Office between respective applications of different parties for patents, the subject matter of which, generally stated, was alleged improvements in pistons composed in part of aluminum alloy.

In two of these interferences, viz., Nos. 53,856 and 55,250, Jardine was a party along with Nelson and Berry. In Nos. 53,856 and 53,857, there seems to have been originally another party by the name of Breer, and in No. 55,250 a caption in the record indicates that at one time there was a party by the name of Welty involved.

Breer and Welty were eliminated in early proceedings and neither were parties to the controversy decided by the Board of Appeals in the four decisions from which appeals were taken to this court. For the purpose of the trial the several appeals were consolidated, a single record made up and single briefs filed by the respective attorneys for Nelson and Berry.

In both the cases in which Jardine was a party, his relation was that of junior, Berry being the senior party and Nelson an intermediate party.

From the decisions of the Board of Appeals adverse to him, Jardine did not appeal to this court, although he seems to have given notice of appeal in interference No. 55,250. Since he did not perfect same he cannot be regarded as a party to the appeal before us.

However, Jardine has sought to become a party before this court to the extent of being permitted to enter a motion to stay further proceedings in this court as to interferences Nos. 53,856 and 55,250, pending a determination of certain issues stated to be involved in an equity suit alleged to be—

pending and ready for trial in the [U. S. District Court for the] Eastern District of Michigan, Southern Division,

the style of which is *The Cleveland Trust Company* v. *Nelson et al.* It is claimed that said suit is an equity proceeding under section 4915 R. S.—

involving the same issues as the appeals on interferences Nos. 53,856 and 55,250.

It is further stated that the Cleveland Trust Company is the assignee of the two Jardine applications involved in said interferences.

The said motion was physically filed in the office of the clerk of this court and brought to the court's attention on March 4, 1932, after the case had been set for hearing for March 11, 1932.

Both of the actual parties in interest, Nelson on March 7th and Berry on March 10th, filed written objection to the said motion by Jardine and both vigorously contest his right to enter such motion, or have same considered, principally upon the ground that Jardine is not a party to the proceedings before this court.

When the cause came on for hearing the court granted Jardine's attorney permission to argue in behalf of his motion and, after argument by the respective attorneys for the other parties, announced that same would be taken under consideration to be later determined. The cause was then argued upon the merits by counsel for Nelson and Berry, respectively.

The said motion to stay demands our first attention, since, if it be one proper to be granted, the result would be a stay of proceedings here upon interferences Nos. 53,856 and 55,250, and we should proceed to final determination of only interferences Nos. 53,857 and 55,252.

In the brief filed by counsel for Jardine upon the contested motion there is what we understand is agreed to be a transcript or reproduction of the pleadings, motions and certain orders of the court in the equity suit aforementioned. These include an order overruling a motion by Berry and his assignee to dismiss the suit on the ground that section 4915, Revised Statutes, is unconstitutional and void because the proceeding under it is neither a "case" nor a "controversy" in the constitutional sense. Hence it was argued that the United States district court might not take jurisdiction. Other jurisdictional questions seem to have been subsequently raised which are to be relied upon at final hearing before that court.

The original bill in equity of the Cleveland Trust Company is stated in the brief for Jardine, upon the motion here under consideration, to have been filed September 11, 1930, following the decisions of the Board of Appeals on August 21, 1930. Nelson gave notice of his appeals to this court on September 23, 1930, and thereafter perfected them. So, whatever of jurisdiction the United States district court of the Southern Division of Michigan may have had, attached before Nelson's appeal brought the issue to us.

It is accordingly argued that comity between courts requires that the court first acquiring jurisdiction should retain it until disposition of the cause and the court subsequently acquiring jurisdiction should stay its hand pending such disposition to avoid interference or conflict between the courts, *Sharon* v. *Terry et al.*, 36 Fed. 337, and numerous other cases being cited.

Also argument for Jardine's motion is predicated upon the relation between appeals to this court and suits in equity, it being possible for courts in the latter kind of suits to consider and determine certain questions which by the limitations of the statute this court is not at liberty to adjudicate in an interference proceeding. Another argument is based upon allegations relating to jurisdictional questions, such as whether the jurisdiction of the court in an equity proceeding is exclusive of, or concurrent with, our own. It is insisted that, applying the rule of comity, the United States district court under the circumstances of this controversy should be permitted first to pass upon that question.

In so far as the matter of comity be concerned, this court is in full sympathy with the rule announced in the cases referred to and it is our purpose in all instances to comply with same. However, in applying this rule the courts are not at liberty to disregard rights which the law assures to litigants themselves.

In the instant case it must not be overlooked that the only issue before us is the question of priority between Nelson and Berry. Nothing which we may decide can affect the rights of Jardine or his assignee in the equity proceeding. That suit primarily involves priority, or whatever other questions proper to be there adjudicated, between Jardine and the other parties. Incidentally, Nelson sets up a counter claim and prays the district court to adjudge priority to him against Berry as well as against Jardine, but this course, we assume, was dictated by caution. Berry, of course, seeks no affirmative relief in the equity proceeding having won in the Patent Office, but in an amended and supplemental reply he challenges the jurisdiction of the district court, under the facts appearing, to grant Nelson's claims against himself (Berry).

Whether the district court will find itself able to consider the prayer of Nelson for relief against Berry, under the circumstances of the case, does not seem to be an essential or proper matter for an expression of opinion by us.

There is a suggestion before us that the statute is not altogether clear that a losing party in an interference case has the right to proceed in equity. Section 4915, Revised Statutes, apparently relates primarily to ex parte cases where a patent has been refused, but expressions in the section about "opposing party" and "adverse parties" indicate that the right to go into equity is not confined to such ex parte controversies.

We do not find it necessary or proper to pass upon this question. There is no contention here that we do not have jurisdiction. The only contention is that as a matter of comity we should temporarily stay proceedings. Whether Nelson might have proceeded in equity is immaterial to the present issue. It seems clear from the language of section 4911, Revised Statutes, that Berry might have forced action in equity had he chosen so to do, but Nelson appealed here and here Berry meets him.

Both are before us insisting that we shall exercise the jurisdiction which the statute vests in this court, and pass upon the only question involved—that of priority between them, leaving Jardine, of course, to his remedy in the tribunal which he elected to enter.

Under all the circumstances existing, it seems to us they have the legal right to demand that of this court; that it is our duty to proceed to a decision and that in so doing we are not trespassing upon the jurisdiction of the United States District Court of Michigan, nor violating any rule of comity.

Jardine's motion to stay is dismissed and we proceed to a decision upon the merits in all four of the interferences before us on appeal.

Interference No. 53,856 was treated as the principal interference by the tribunals of the Patent Office and by the parties in the hearing before us.

The single count of said interference reads:

In a piston, a head, a separate sectional skirt of aluminum alloy, and steel struts extending transversely of the piston pin bearings uniting the sections to each other and to the head, said struts having their opposite ends buried in the respective skirt sections, substantially as set forth.

Berry was awarded the date of September 28, 1921, for conception and given the filing date of his application, March 20, 1922, for reduction to practice. Nelson was awarded April 8, 1921, for conception and given his filing date of June 5, 1923, for reduction to practice.

Nelson was, therefore, the first to conceive and the last to reduce to practice. Under such circumstances, it was incumbent upon him to show diligence from the time just prior to Berry's entrance

into the field, September 28, 1921, until his (Nelson's) filing date of June 5, 1923.

The Board of Appeals said:

> • • • With the exception of the last few weeks, Nelson was doing nothing throughout this period that involved the invention defined in the count. After the sketch of April 8, 1921, the first documentary evidence produced by Nelson pertaining to the invention in issue is the blue print forming his Exhibit No. 86. This print is dated May 3, 1923. During the period that Berry entered the field and reduced to practice Nelson's activities were devoted to other types of piston which he had elected to develop in preference to the type defined in the count. That work was not for the purpose of enabling him to secure a reduction to practice of the invention in issue. Such reduction to practice evidently could have been secured at any time after April 8, 1921, either by building and testing the piston shown in the Exhibit No. 45 sketch or by filing an application clearly enough Nelson was lacking in due diligence.

The record in this case covering all the interferences is quite a voluminous one, there being more than 1,200 pages of printed testimony and a large number of exhibits, such as drawings, blue prints, shell casts, pistons of various types, molds, photographs, etc. The examination of the record has naturally required much time and care. In his opinion the Examiner of Interferences reviewed the testimony quite fully and this review was approved by the Board in its decision.

We think it ample and satisfactory and it does not appear necessary to lengthen unduly this opinion by our setting out another review of same. The contentions of Nelson's brief, restated in the oral argument, have been carefully studied in connection with the appropriate parts of the record.

We find nothing which, in our opinion, would justify a reversal of the concurring decisions of the tribunals of the Patent Office.

What has been said supra applies also to the decisions in the other cases. Nothing would be added to the opinion by a recital of the counts.

We find no error in the decisions of the Board of Appeals and each of them is affirmed.

Affirmed.

U. S. Court of Customs and Patent Appeals

IN RE BATCHER

No. 2969. Decided June 20, 1932

PATENTABILITY—VARIABLE CONDENSERS.

Claims for a variable condenser *Held* unpatentable over the prior art.

APPEAL from the Patent Office. Affirmed.

Mr. Walter H. Pumphrey and *Mr. John B. Brady* for Batcher.

Mr. T. A. Hostetler and *Mr. Howard S. Miller* for the Commissioner of Patents.

GARRETT, *J.*:

The claimed invention involved in this appeal from a decision of the Board of Appeals of the United States Patent Office, affirming a decision of the Examiner rejecting all the claims, relates to variable condensers designed particularly for use in radio receiving sets.

In a structural sense the novelty is alleged to lie in the shape given the condenser plates. Two sets of plates are employed, one of which is fixed and the other of which is movable in and out of interleaved relation with the fixed set, so as to change the capacity of the condenser as required.

It is claimed, and conceded by the tribunals of the Patent Office, that the plates are so dimensioned that a change in capacity is produced by a movement of the plates, which capacity is expressed by a differential law set forth in the claims in a certain mathematical equation.

The said equation is set forth in each of the claims but its repetition here is not essential to an understanding of the legal principles upon which the case is decided and same is, therefore, omitted.

There is no serious dispute about the facts.

In the title of the application appellant designates the invention as "new and useful improvements in straight line frequency condensers." It appears that, as a result of the particular shaping of appellant's plates, whenever the condenser is used to tune an electrical circuit including inductance, if angular rotation of condenser be plotted against resulting frequency of the tuned circuit, as shown in a figure of the drawings, the curve plots as a straight line. Hence the "straight line frequency condenser" name.

The references cited are: Wireless World, April, 1914, pages 20–23. The Electrician, February 6, 1914, pages 740 and 741. Principles of Radio Communication (Morecroft), pages 793 and 794.

We reproduce from the brief of the Solicitor for the Patent Office (omitting the citations to record pages) the statement of the pertinent disclosures of the aforesaid references:

> The Wireless World publication discloses several variable condensers with "a square law." In Fig. 3a a set of rotor plates of semicircular outline is arranged to interleave with a set of stator plates of peculiar shape as shown so as to obtain capacity variation in accordance with the desired "square law." Knowing the desired law of variation of capacity, the mathematical expressions are deduced from which the necessary shape of plates is determined.
>
> The Electrician publication shows in Fig. 3 the form of condenser also shown in Fig. 3a discussed in the preceding paragraph, and gives the mathematical expressions for plate shapes to make the capacity variation conform to the desired law.
>
> The Morecroft publication shows in Fig. 12 a variable condenser having semicircular stator plates and interleaved rotor plates, with the rotor plates shaped, in accordance with mathematical expressions therein deduced so that the condenser capacity varies, with angular movement, according to a desired law. With a condenser as shown used for tuning a circuit, if angular rotation of the condenser be plotted against resulting wave length, in meters, of the tuned circuit the curve plots as a straight line, as shown by the full line in Fig. 18. Because of this such a condenser has come to be called a "straight-line wave-length condenser."

It was the opinion of the tribunals of the Patent Office that appellant's results were obtained simply by making a mathematical computation and shaping the plates in accordance therewith, and that under the doctrine announced by the Court of Appeals of the District of Columbia in *In re Nyman* 58 App. D. C. 186, 375 O. G. 719, 26 F. (2d) 558, this did not involve invention, in view of the teachings of the prior art.

Appellant argues that:

> • • • patentable invention is commonly recognized where the only structural difference over the art consists in re-shaping, as, for example, a bullet or projectile, by which it is given increased flight and penetrating power; the hull of a vessel, by which its speed is greatly increased; the wings of an airplane, by which lifting power, speed and stabilization of the plane are increased; a drill, auger or other boring tool, by which its rate of cutting is greatly increased, and so on ad infinitum.

Hirschy Co. v. *Wisconsin-Minnesota Gas Co.*, etc., 18 F.(2d) 347, wherein a slight change in a clothes wringer was held by the Fourth Division of the U. S. District Court of Minnesota to involve patentable invention, is cited, and also the *Barbed Wire Patent* case, 143 U. S. 275. The Hirschy Co. case itself made different citations, one of them being *Diamond Rubber Co.* v. *Consolidated Rubber Tire Co.*, 220 U. S. 428, 166 O. G. 251, wherein a slight change in the metal rim used on automobile wheels was held patentable.

Appellant also presents as a part of his argument an elaborate opinion by Dr. John H. Morecroft, professor of electrical engineering of Columbia University, in which the latter sets forth his reasons for believing that the Examiner's conclusion that appellant's straight line frequency condenser was an obvious development is erroneous.

Three errors are alleged and argued by appellant, viz., that the Board of Appeals:

> First— • • • assumed the condenser of appellant, Batcher, to be Duddell's condenser of the prior art.
>
> Second— • • • in assuming Batcher's invention to consist in converting Duddell's wave length condenser scale, by mathematical calculation, into a frequency scale.
>
> Third— • • • the Board evidently and erroneously assumed that changing the scale from wave length to frequency converted Duddell's condenser into Batcher's.

Upon these allegations of error there are elaborate arguments as to the "variable radio condenser," the "law of capacity variation," "why variable condensers are used in the radio art," etc., the arguments being illustrated and elucidated at many points by mathematical computations unnecessary to be here repeated.

Appellant's own argument and the opinion of Dr. Morecroft adopted as a part of the former's brief, challenges with some vigor, not to say asperity, the assertion or presumption as to the expertness in this art of the tribunals of the Patent Office who passed upon the issues there.

We shall only say as to this that the presumption applies, and that when an appeal is taken to this court, the judges of which are not supposed to be, and do not profess to be, experts in the realm of mechanics, the burden rests upon the party appealing to make it clear that the findings of fact by such tribunals are manifestly wrong. Appellant does not convince us that such is the case, nor are we convinced that the doctrine announced in *In re Nyman*, supra, is either erroneous or inapplicable to the instant case.

It may be here said as to the first error alleged by appellant, supra, that we do not understand the opinion of the Board of Appeals to be in effect that appellant's condenser is the condenser of Duddell. Upon the contrary, the opinion, fairly construed, recognizes the fact, as indeed is stated in appellant's argument, that

> one is calibrated in terms of wave length and the other in terms of frequency.

We think there is nothing in the opinion of the Board, when same is properly construed, that is inconsistent with appellant's description of the differences between his straight line *frequency* condenser and the straight line *wave length* condenser of the prior art.

What the tribunals of the Patent Office held, in effect, was that there was no invention in forming plates to a shape or dimension determined by a mathematical formula known to persons skilled in the art, by which capacity should be expressed in terms of frequency rather than in terms of wave length.

The cases wherein slight changes were held to involve invention cited by appellant, supra, did not involve questions such as are involved in this case.

The Nyman case, supra, had to do with claims relating, in large part, to the very art here involved there the court said:

> Appellant • • • contends that the scale in his condenser is arranged according to frequency, instead of wave length, and in a manner which discloses a patentable improvement over the prior art. This is said to be accomplished by a different curvature of the movable plates, so calculated that equal changes in frequency will be obtained by equal adjustments of the dial, thereby eliminating the crowding upon the dial which is said to be characteristic of the straight line wave length condenser, and enabling a "listener in," with uniform ease and accuracy, to "tune in" broadcastnig stations over the entire broadcasting range.
>
> It is noted by the Commissioner that it has become the custom to classify broadcasting stations according to frequency or oscillation per unit of time, instead of wave lengths in meters, as formerly; that this has necessitated a recalibration of condensers and a redesigning and remarking of them accordingly. And the Commissioner finds that the applicant discloses no more than such mathematical calculations and reshaping of the condenser plates as to obtain the variation of capacity which is required in connection with variations in frequency, and which permits of a uniform marking on the dial or scale. The Commissioner adds:
>
> "It being old to shape the overlapping plates of a condenser so the movements of the movable member equal distances, which are indicated by equally spaced markings throughout the scale, will vary the capacity in accordance with uniform variations in wave length, it is deemed clear there was involved no inventive concept to shape the overlapping parts of the condenser plates according to a mathematical calculation based upon the unit of frequency, rather than wave length, so these plate movements of uniform distances, which are indicated, as before, at equally spaced markings on the scale, will vary the capacity according to uniform variations in frequency. Except for this change in the shape of the plates to vary the capacity according to a new basic unit, the structure of the condenser does not differ from that disclosed in the references."
>
> In our opinion the Commissioner's conclusion is correct. The relation of wave length and frequency of oscillations is so elemental in the art that the adaptation of a scale from one method of designation to the other is merely a matter of calculation, and does not rise to the dignity of invention.

There are some statements in the brief of appellant which induces the belief that he misinterpreted the meaning in which the word "scale" was used by the court in the Nyman case, supra. It is manifest that, as there used, it was not meant to have the meaning simply of marks and numbers on a dial. It was obviously used in a broader sense, as comprehending a condenser scale with uniformly spaced frequencies requiring correlation of condenser plate shapes with scale markings. In other words, as stated in the brief of the Solicitor for the Patent Office:

> • • • the court was dealing with plate shapes as well as "scales", considered as mere numbers on a dial.

We agree with the tribunals of the Patent Office that the reasoning of the court in the Nyman case,

supra, is applicable here, and it meets with our approval.

The decision of the Board of Appeals is affirmed. Affirmed.

Adverse Decisions in Interference

In interferences involving the indicated claims of the following patents final decisions have been rendered that the respective patentees were not the first inventors with respect to the claims listed:

Pat. 1,766,155, Felix Troyk, Cushioned carton, decided September 29, 1932, claim 1.

Pat. 1,786,909, G. P. Jackson, K. Toensfeldt, and H. Steele, Economizer, decided October 17, 1932, claims 1, 2, 3, 5, 7, 10, and 11.

Pat. 1,793,967, Willi Schultze, Method of refining natural and artificial resin, decided September 14, 1932, claim 1.

Pat. 1,818,034, J. K. Bond, Circulatory system for refrigerated counters, decided October 15, 1932, claims 1, 2, 3, and 4.

Pat. 1,837,474, G. K. Newell, Back up whistle and application valve, decided October 15, 1932, claims 1 and 2.

Pat. 1,860,418, R. H. Hummert, Underscreen window operator, decided October 18, 1932, claims 1 and 2.

Disclaimers

1,383,035.—*Charles Reuben Short*, Detroit, Mich. BEARING-SHIM. Patent dated June 28, 1921. Disclaimer filed October 18, 1932, by the assignee, *General Motors Corporation*.

Hereby enters this disclaimer to all of claims 1, 5, and 9 and to that portion of claim 2 which covers a babbitt faced shim in which the free ends of the U-shaped spacing portion are not connected to the babbitt facing portion by embedment.

1,733,795.—*J Birchard Green*, Chicago, Ill. ROD FOR USE IN ARC WELDING OR CUTTING. Patent dated October 29, 1929. Disclaimer filed October 15, 1932, by the patentee and the assignee, *Franklin M. Worden*.

Hereby disclaim from the scope of claim 2 of said patent all methods of welding wherein the amount of aluminum oxide introduced into the welding arc is insufficient to substantially increase the arc voltage drop.

1,812,432.—*Philip d'Huc Dressler*, Cleveland, Ohio. METHOD OF PREPARING FUEL. Patent dated June 30, 1931. Disclaimer filed October 18, 1932, by the assignee, *Swindell Dressler Corporation*.

Hereby enters this disclaimer to the part of the claim in said specification which is in the following words to wit:

"1. The method of preparing fuel which consists in passing a stream of plastic blocks of oil wet fine coal through a chamber in which they are heated and in which they are subjected to an oxidizing action.

"2. The method of preparing fuel which consists in passing a stream of plastic blocks of oil wet fine coal through a chamber in which they are heated and are subjected to an oxidizing action and changing the arrangement of the blocks in said stream while they are being subjected to said oxidizing action."

Trade-Marks Canceled

203,791. Hosiery. Carson Pirie Scott & Co., Chicago, Ill. Registered September 22, 1925. Canceled October 21, 1932.

209,995. Butter, bread, ice cream, eggs, canned fruit. Mutual Creamery Company, also doing business as The Mutual Stores, Oakland, Calif. Registered March 9, 1926. Canceled October 21, 1932.

219,377. Polish. William J. Snyder, doing business as W. J. Snyder Manufacturing Company, Pittsburgh, Pa. Registered October 19, 1926. Canceled October 12, 1932.

254,086. Certain named canned foods, butter, eggs, bread, ice cream, spices, coffee. Mutual Stores, Inc., Oakland, Calif. Registered March 12, 1929. Canceled October 21, 1932.

257,718. Radiator-cleaning compound. The Radi-Flush Co., Kansas City, Mo. Registered June 18, 1929. Canceled October 26, 1932.

265,814. Certain named precious-metal ware. The Stieff Company, Baltimore, Md., and Richmond, Va. Registered January 7, 1930. Canceled October 21, 1932.

282,783. Sacramental Kosher Wine. Julius L. Horowitz, doing business as Mizrach Wine Company, New York, N. Y. Registered April 28, 1931. Canceled October 21, 1932.

291,475. Beverages, and syrups, extracts, and concentrates used in making same. Bon Ton Beverages, Inc., Chicago, Ill. Registered February 9, 1932. Canceled October 21, 1932.

TRADE-MARKS

OFFICIAL GAZETTE, NOVEMBER 15, 1932

[VOL. 424. No. 3]

The following trade-marks are published in compliance with section 6 of the act of February 20, 1905, as amended March 2, 1907. Notice of opposition must be filed within thirty days of this publication.

Marks applied for "under the ten-year proviso" are registrable under the provision in clause (b) of section 5 of said act as amended February 18, 1911.

As provided by section 1 of said act, a fee of ten dollars must accompany each notice of opposition.

CLASS 1

Raw or Partly-Prepared Materials

Ser. No. 319,558. WINDSOR COAL COMPANY, Kansas City, Mo. Filed Sept. 29, 1931.



No claim is made to the word "Coal" or to the words "The Economy Fuel", except as in combination with the trade-mark as shown.

For Coal.

Claims use since July 8, 1931.

Ser. No. 328,211. ASSOCIATED SEED GROWERS, INCORPORATED, New Haven, Conn. Filed June 22, 1932.

ASGROW

For Garden and Field Seeds, Bulbs, and Plants.

Claims use since Apr. 1, 1929.

Ser. No. 330,863. THE PACIFIC LUMBER COMPANY, San Francisco, Calif. Filed Oct. 1, 1932.

DRY-O-LIT

For Poultry Litter.

Claims use since Sept. 6, 1932.

Ser. No. 330,953. A. HOLLANDER & SON, INC., Newark, N. J. Filed Oct. 5, 1932.



For Fur Skins.

Claims use since May, 1932.

CLASS 2

Receptacles

Ser. No. 311,996. CORRUGATED CONTAINER COMPANY, Philadelphia, Pa. Filed Mar. 11, 1931.

BEATSWOOD!

..plus!

For Corrugated Boxes.

Claims use since Feb. 3, 1931.

Ser. No. 326,260. KNOTHE BROTHERS COMPANY, INC., New York, N. Y. Filed Apr. 19, 1932.

NIGHT LIFE

For Empty Paper Board Boxes Used in the Sale of Clothing.

Claims use since Oct. 22, 1931.

CLASS 3

Baggage, Animal Equipments, Portfolios, and Pocketbooks

Ser. No. 329,911. JOHN WANAMAKER PHILADELPHIA, Philadelphia, Pa. Filed Aug. 27, 1932.

REDLEAF

For Articles Made Wholly or Partly of Leather—Namely, Ladies' Handbags, Suit Cases, Travelling Bags, Fitted Cases, Hat Boxes, Purses, Folios, Wallets, Bill Folds, Dressing Cases, Brief Cases, Key Cases, Pass Cases, Empty Manicure Cases, Card Cases, Powder and Vanity Cases, Memorandum Cases, Letter Cases; Novelty Cases, Such as Those Holding Brushes, Coat Hangers, and Travelling Accessories; Travelling Clock Cases, and Travelling Slipper Cases.

Claims use since 1925 upon Ladies' Handbags, Suit Cases. Hat Boxes, Fitted Cases, and Travelling Bags; and since 1927 upon the remaining goods listed.

CLASS 4

Abrasive, Detergent, and Polishing Materials

Ser. No. 318,197. DEUTSCHE GOLD- & SILBER-SCHEIDEANSTALT, Frankfort-on-the-Main, Germany. Filed Aug. 20, 1931.

DEGUSSA

For Soaps, Steel Wool, Washing Compounds, Glass and Metal Polish, Shoe Polish Preparations for the Polishing and Conserving of Leathers; and Abrasive Materials in All Forms, Such as Bars, Discs, Wheels, Hones, Powders, Granules, etc.; and Preparations for the Removal of Stains.

Claims use since Sept. 24, 1930.

Ser. No. 327,330. ABRASIVE PRODUCTS COMPANY, Lansdowne, Pa. Filed May 23, 1932.

CYCLONE BLAST

No claim being made to the word "Blast" apart from the mark shown in the drawing.

For Granulated Abrasive Materials, Particularly Granulated Aluminum Oxide Sold in Bulk.

Claims use since Mar. 26, 1931.

Ser. No. 328,073. PLYMOUTH PRODUCTS COMPANY, Syracuse, N. Y. Filed June 17, 1932.

PLYMOUTH

For Soap.

Claims use since Jan. 1, 1932.

Ser. No. 329,258. THE DRACKETT CHEMICAL COMPANY, Cincinnati, Ohio. Filed Aug. 1, 1932.

Windex

For Liquid Cleaner for Glass and Vitreous Surfaces.

Claims use since July 22, 1932.

Ser. No. 329,307. GLEAM PRODUCTS CORPORATION, New York, N. Y. Filed Aug. 3, 1932.

LUSTRO

For Polishing Powder for Polishing and Cleaning Metals, Glass, Porcelain, Enamel, Tile, Woodwork, Painted Surfaces, and the Like.

Claims use since July 19, 1932.

Ser. No. 329,615. ELMER RICHARDS COMPANY, Chicago, Ill. Filed Aug. 17, 1932.

cartet

For Dry Cleaning Solvent.

Claims use since July 1, 1922.

Ser. No. 330,511. GENERAL DYESTUFF CORPORATION, New York, N. Y. Filed Sept. 20, 1932.

CORIPOL

For Oil for Finishing Leather.

Claims use since Jan. 1, 1912.

Ser. No. 331,003. NORTON PIKE COMPANY, Pike, N. H. Filed Oct. 6, 1932.

WHITE MOUNTAIN

For Scythe Stones, Whetstones, and Abrasive Stones for Knife Sharpening, Cutting, Polishing and Abrading Purposes.

Claims use since 1868.

CLASS 6

Chemicals, Medicines, and Pharmaceutical Preparations

Ser. No. 320,202. NORDMARK-WERKE G. M. B. H., Hamburg, Germany. Filed Oct. 19, 1931.

NORDMARK

For Medicinal Preparations for Use in the Treatment of Diseases of the Liver, Diseases of the Blood, Skin Diseases, Consumptive Diseases, Nervous Diseases, Rheumatism, Infectious Diseases, Gastric Diseases, Heart Diseases, Pulmonary Diseases, and Insomnia.

Claims use since Dec. 13, 1927.

Ser. No. 322,866. CHIN YUK SUN, New York, N. Y. Filed Jan. 9, 1932.



The portrait is that of applicant. The words "Salve" and "Trade-Mark" and all of the Chinese wording appearing in the drawing, with the exception of the Chinese characters constituting the name of the applicant, are not claimed apart from the other features of the mark. A translation of the Chinese characters and the words "Dor Bo You" is as follows: The Chinese characters in the cross which appears on the representation of the Chinese boys are the Chinese equivalents of the word "Trade-Mark." The Chinese characters above my portrait constitute my name "Chin Yuk Sun", while those immediately below my portrait are the equivalent of the English words "Something New". "Dor Bo You" is Chinese for "Something Good", and the Chinese characters below the name "Dor Bo You", reading from left to right, mean the following, namely, "50c a Tube", "Good Salve" and "For internal and external use", respectively.

For Salve for Use in Relieving the Discomforts of Toothache and Pain That is Due to Exposure to Cold, as Well as for Use in Treating Simple Coughs When Due to Colds and for Minor or Simple Irritations of the Skin and Nonvenomous Insect Bites, as Well as for Use in Relieving the Discomforts of Head Colds.

Claims use since Nov. 24, 1931.

Ser. No. 323,807. SAMUEL S. KLEIN, doing business as Villon and Villon, Perfumer, Brooklyn, N. Y. Filed Feb. 16, 1932.



For Perfumes, Toilet Waters, Sachets, Bath Salts, Cold Creams, Vanishing Cream, Cleansing Cream, Honey and Almond Lotion, and Smelling Salts.

Claims use since Sept. 2, 1931.

Ser. No. 325,085. ASSOCIATED MOTION PICTURE MAKE-UP ARTISTS, INC., LTD., Los Angeles, Calif. Filed Mar. 14, 1932.



The lining in the drawing is used for shading purposes only.

For Cosmetics—Namely, Almond Cream, Hand Cream, Acne Cream, Deodorant Cream, Bleach Cream, Astringent Cream, Sunburn Cream, Anti-Exposure Cream, Lasting Youth Cream, Cold Cream, Powder Base Cream.

Claims use since Dec. 10, 1931.

Ser. No. 325,499. SEMMES CORPORATION, Detroit, Mich. Filed Mar. 24, 1932.

DAYSOL

For Medicinal Water Containing Calcium, Sodium, Potassium, and Magnesium Salts, for Use by Addition to Bath Water, and Indicated in the Treatment and Relief of Rheumatism, Muscular Aches and the Like.

Claims use since Dec. 10, 1931.

Ser. No. 327,821. MARTHA MATILDA HARPER, INC., Rochester, N. Y. Filed June 8, 1932.

HARPER METHOD



The words "Harper Method" are disclaimed apart from the trade-mark as shown.

For Lemon Cream, Cold Cream, Cleansing Cream Normal, Stimulating Cream, Solid Foundation Cream, a Liquid Foundation Cream, Astringents, Acne or Pimple Lotions or Cream, Face Powder, Skin Lotion, Talcum Powder, Deodorant, Liquid Nail Polish, Nail Polish Remover (a Liquid Used for Removing Artificial Polish from the Nails), Manicure Oil, Facial Pack, Perfume, Toilet Water, Hair Tonic, Hair Ointment, Hair Tonique for Gray and White Hair, Hair Tonique for Oily Hair, Powdered Shampoo, Liquid Shampoo, Dry Shampoo, a Soapless Shampoo Preparation, Liquid Brilliantine, Sulphur Ointment, Lemon Rinse, Muscle Oil, Bluing, Pore Paste, Camomile Rinse, Hair Rinses, Antiseptic Oils, Minute Mix Sta-Wave, Sta-Wave (a Mucilaginous Paste for the Hair) Cleansing Cream Liquifying Tissue Cream, Cream Remover (a Thin Transparent Liquid Designed to Remove Oily Film and Cosmetics from the Skin of the Human Body), Skin Tonic and Freshener, Liquid Cleansing Cream.

Claims use since Mar. 10, 1932.

Ser. No. 329,486. WINTHROP CHEMICAL COMPANY, INC., New York, N. Y. Filed Aug. 11, 1932.

THYRACTIN

For Thyroid Extract Preparation for Treatment of Goiter, Obesity, Kindred Ailments.

Claims use since July 28, 1932.

Ser. No. 329,697. ROBERT M. KING, doing business as The Foot-King Co., Minneapolis, Minn. Filed Aug. 18, 1932.

FOOT-KING

For Medicinal Ointment for Diseases of the Foot—Namely, Athlete's Foot or Ringworm.

Claims use since June 10, 1932.

Ser. No. 329,775. TRIX PERFUMERS, New York, N. Y. Filed Aug. 23, 1932.

TRIX

For Astringents, Astringent Cerates, Bleach Creams, Beauty Creams, Cold Creams, Cleansing Creams, Obesity Creams, Refreshing Creams, Obesity Astringents, Dry Rouges, Liquid Rouges, Face Bleaches, Face Packs, Skin Whitener, in Liquid and Solid Form, Eyebrow and Eyelash Grower, Eye Drops, Eyebrow Pencils, Chemical Preparations Suitable for the Darkening of Eyelashes and Eyebrows, Hand Lotions, Skin Lotions, After Shaving Lotions, Pomades, Face Powders, Talcum Powders, Sachets, Body Powders, Hair Salves, Hair Elixirs, Dandruff Preparations, Hair Tonics, Hair Oils, Shampoos, Hair Dyes, Hair Waving Fluid, Bath Salts, Smelling Salts, Lip Sticks, Incense, Tooth Powders, Mouth Washes, Dentifrices, Depilatories, Tooth Pastes, Nail Powders, Nail Polishes, Nail Creams, Nail Bleaches, Witch Hazel, Peroxide, Petroleum Jellies, Witch Hazel Salves, Camphor Creams, Foot Powders, Corn Salves, Deodorants, Disinfectants, Bayrum, Perfumes, Toilet Waters, Chemical Preparations Suitable for the Removal of Nail Polish, Chemical Preparations Suitable for the Removal of Cuticle, Muscle Oil, Cuticle Oil, Healing Salve and Chemical Preparations for Removal of Nicotine Stains.

Claims use since Jan. 15, 1926.

Ser. No. 329,812. MACON WARE, doing business as Knox Chemical Company, East Falls Church, Va. Filed Aug. 24, 1932.

KNOX SORBO-RUB

No claim is made to the word "Rub" apart from the mark as shown.

For Rubbing Liniment.

Claims use since Aug. 17, 1932.

Ser. No. 329,921. BECK, KOLLER & COMPANY, INC., Detroit, Mich. Filed Aug. 29, 1932.



No claim is made to the words "World Wide Distribution" apart from the mark as shown.

For Synthetic Resins, Plastic Synthetic Resins and Ester Gums.

Claims use since Oct. 8, 1931.

Ser. No. 329,922. BECK, KOLLER & COMPANY, INC., Detroit, Mich. Filed Aug. 29, 1932.

BECK-O-LAC

No claim is made to the term "Lac" apart from the mark as shown.

For Synthetic Resins.

Claims use since Sept. 29, 1928.

Ser. No. 329,926. BECK, KOLLER & COMPANY, INC., Detroit, Mich. Filed Aug. 29, 1932.

BECKOLLOID

For Synthetic Resins, Plastic Synthetic Resins and Ester Gums.

Claims use since Aug. 1, 1927.

Ser. No. 329,929. BECK, KOLLER & COMPANY, INC., Detroit, Mich. Filed Aug. 29, 1932.

ESTER SYNTHE-COPAL GUM

No claim is made to the words "Ester Gum" and "Copal" apart from the mark as shown.

For Ester Gums.

Claims use since Mar. 16, 1914.

Ser. No. 330,119. CARDER & CARTER, New Orleans, La. Filed Sept. 6, 1932.

NO-O-DO

For Moisture and Odor Absorbent Chemical Compound to be Placed in Refrigerators and the Like.

Claims use since Apr. 1, 1932.

Ser. No. 330,291. CAPITAL CHEMICAL DRUG COMPANY, INC., Montgomery, Ala. Filed Sept. 13, 1932.



For a Preparation for Improving and Beautifying the Hair and for Relieving Itching and Dandruff.

Claims use since 1928.

Ser. No. 330,306. RITTER CHEMICAL COMPANY, INC., Amsterdam, N. Y. Filed Sept. 13, 1932.

NOVOIL

For Sulphonated Fats and Oils for Treating Leather.

Claims use since September, 1929.

Ser. No. 330,360. HENRI BENDEL, INC., New York, N. Y. Filed Sept. 15, 1932.

Zita

For Cosmetics—Namely, Perfumes, Toilet Waters, Face Creams, Powders, Bath Salts, and Rouge.

Claims use since July 1, 1932.

Ser. No. 330,389. THE WILLIAM A. WEBSTER CO., Memphis, Tenn. Filed Sept. 15, 1932.

CHUMMY

For Tooth Paste.

Claims use since Apr. 4, 1932.

Ser. No. 330,395. CAMPANA CORPORATION, Batavia, Ill. Filed Sept. 16, 1932.



Applicant is the owner of trade-mark registration No. 234,573 for the words "Italian Balm" granted under the provisions of the 10-year proviso. The lining indicates a bluish-green color which is an essential feature of the mark.

For Lotion for the Skin.
Claims use since Feb. 10, 1932.

Ser. No. 330,425. INDIAN LAKE MEDICINE CO., Fort Wayne, Ind. Filed Sept. 17, 1932.

SOL-VITA

For General Tonic.
Claims use since June 1, 1932.

Ser. No. 330,436. JOHN WYETH & BROTHER INCORPORATED, Wilmington, Del., and Philadelphia, Pa. Filed Sept. 17, 1932.

WYOVIN

For Tonic, Stimulant Reconstructive for the Treatment of Disorders Resulting from Exhausted Condition of the System.
Claims use since Aug. 19, 1932.

Ser. No. 330,742. CONADWEL LABORATORIES, INC., New York, N. Y. Filed Sept. 28, 1932.

SUNVIRO

For Reconstructive Tonic.
Claims use since Sept. 19, 1932.

Ser. No. 330 821. LEDERLE LABORATORIES, INC., New York, N. Y. Filed Sept. 30, 1932.

TERPAL

For Pharmaceutical Preparation for the Prevention of Colds.
Claims use since Feb. 4, 1932.

Ser. No. 330,854. THE MATHIESON ALKALI WORKS, INC., New York, N. Y. Filed Oct. 1, 1932.

CCH

For Technical Grade Calcium Hypochlorite.
Claims use since July 25, 1932.

Ser. No. 330,928. MENDEL R. MENDELSOHN, doing business as The Mendum Laboratories, Newark, N. J. Filed Oct. 4, 1932.

MENDUM

For Internal Medicine for Relieving the Discomforts of Gas.
Claims use since Aug. 5, 1932.

CLASS 10

Fertilizers

Ser. No. 318,326. SWANN CHEMICAL COMPANY, Birmingham, Ala. Filed Aug. 22, 1931.



No claim is made to the words "Muscle Shoals Fertilizer" apart from the distinctive display of the mark as shown.
For Fertilizer.
Claims use since July 28, 1931.

Ser. No. 326,000. SHELL CHEMICAL COMPANY, San Francisco, Calif. Filed Apr. 11, 1932.

SHELL

For Salts of Ammonia for Fertilizer.
Claims use since Sept. 29, 1931.

CARNEGIE LIBRARY OF ATLA

CLASS 12

Construction Materials

Ser. No. 316,567. The PARAFFINE COMPANIES, INC., San Francisco, Calif. Filed July 2, 1931.

PABCOTITE PABCOTITE

For Building Paper for Thermal and/or Acoustical Insulation, Lining Paper for Buildings and Freight Cars, Waterproofing Paper for Use in Building and Other Construction Work, and a Protective Covering Sheet for Concrete Floors, All of which Comprise a Sheet of Fibrous Materials which May or May Not Be Coated and/or Saturated in Whole or in Part with a Bituminous or Asphaltic Compound.
Claims use since Aug. 20, 1930.

Ser. No. 325,481. FRANK A. NILES LUMBER CO. INC., New York, N. Y. Filed Mar. 25, 1932.



No claim is made to the representation of the log or to the wording thereon apart from the mark shown in the drawing, said mark consisting of the monogram or initials "F-A-N."
For Lumber.
Claims use since May, 1929.

Ser. No. 330,112. WOOD CONVERSION COMPANY, Cloquet, Minn. Filed Sept. 8, 1932.

TUFFLEX

For Building Paper.
Claims use since Feb. 26, 1931.

Ser. No. 330,394. CAMBRIDGE CEMENT STONE COMPANY, Brighton, Mass. Filed Sept. 16, 1932.

COLOTEX

For Cast Stone.
Claims use since Sept. 8, 1932.

Ser. No. 330,491. THE PARAFFINE COMPANIES, INC., San Francisco, Calif. Filed Sept. 19, 1932.

VITALIZED

For Prepared Roofing and Shingles Which Comprise Sheets of Fibrous Material Which May or May Not Be Coated and/or Saturated in Whole or in Part with a Bituminous or Asphaltic Compound.
Claims use since July 15, 1932.

CLASS 13

Hardware and Plumbing and Steam-Fitting Supplies

Ser. No. 318,205. DEUTSCHE GOLD- & SILVER-SCHEIDEANSTALT, Frankfort-on-the-Main, Germany. Filed Aug. 20, 1931.

DEGUSSA

For Nails for Horse Shoes, Chains, Hand and Mechanically Operated Bells, Metallic Washers; Metal Trimmings for Draperies and Upholsteries—Namely, Curtain Rods, Curtain Rings, Metal Curtain Hooks, and Hold-Backs.
Claims use since Sept. 24, 1930.

Ser. No. 330,970. SALTZER & WENNSIER, INC., Brooklyn, N. Y. Filed Oct. 5, 1932.

XITAIR

For Radiator Valves.
Claims use since Sept. 15, 1932.

CLASS 15

Oils and Greases

Ser. No. 319,376. SUN OIL COMPANY, Philadelphia, Pa. Filed Sept. 24, 1931.

GAS SUNOCO OILS

The words "Gas" and "Oils" are disclaimed apart from the mark as shown.

For Gasoline, Motor Oil, Transmission Lubricant, Pressure Gun Lubricant, Steering-gear Lubricant, Motor Cup Grease, Universal Grease, and Water Pump Grease.

Claims use since November, 1928.

Ser. No. 329,694. WHITE STAR REFINING COMPANY, Detroit, Mich. Filed Aug. 19, 1932.

WHITE STAR "40"

Applicant does not claim herein the numeral "40." apart from the mark as shown.

For Motor Lubricating Oil.

Claims use since May, 1932.

CLASS 16

Paints and Painters' Materials

Ser. No. 329,706. FEDERAL RESEARCH CORPORATION, Woodland, Ill. Filed Aug. 20, 1932.

HOMAX

For Finishes for Floor and Other Surfaces—Namely, a Liquid Wax Which Dries Without Polishing.

Claims use since Apr. 8, 1931.

Ser. No. 330,226. GLISSENITE CORPORATION, Duluth, Minn. Filed Sept. 10, 1932.

Glissenite

For Polish for Cleaning, Waxing, and Polishing Automobiles.

Claims use since Aug. 27, 1932.

CLASS 17

Tobacco Products

Ser. No. 330,515. LEWIS-LEIDERSDORF CO., Milwaukee, Wis. Filed Sept. 20, 1932.

LEWIS-LEIDERSDORF CO.

SHOREWOOD

For Cigars.

Claims use since June 28, 1932.

Ser. No. 330,993. JOSE ESCALANTE & CO., Chicago, Ill. Filed Oct. 6, 1932.

PALACE COURT

For Cigars.

Claims use since 1911.

CLASS 19

Vehicles, Not Including Engines

Ser. No. 325,698. THOMPSON PRODUCTS, INCORPORATED, Detroit, Mich. Filed Mar. 31, 1932.

RubbeRod

For Joints for Vehicle Drag Links, Tie Rods, and Shock Absorber Links.

Claims use since January, 1930.

CLASS 20

Linoleum and Oiled Cloth

Ser. No. 328,877. SLOANE-BLABON CORPORATION, Trenton, N. J., and Nicetown, Philadelphia, Pa. Filed July 18, 1932.

PANALIN

For Linoleum Wall Covering.

Claims use since May 31, 1932.

Ser. No. 328,878. SLOANE-BLABON CORPORATION, Trenton, N. J., and Nicetown, Philadelphia, Pa. Filed July 18, 1932.

S-B

For Linoleum, Felt Base Floor Coverings, and Linoleum Lining Felt.

Claims use since May 28, 1932.

Ser. No. 328,879. SLOANE-BLABON CORPORATION, Trenton, N. J., and Nicetown, Philadelphia, Pa. Filed July 18, 1932.

SERVICE BOND

No claim is made to registration under the statute of the word "Service" apart from the association shown in the drawing.

For Felt Base Floor Covering.

Claims use since June 8, 1932.

CLASS 21

Electrical Apparatus, Machines, and Supplies

Ser. No. 328,933. THE CONE ELECTRIC PRODUCTS CORPORATION, Philadelphia, Pa. Filed July 21, 1932.

CODE

For Electrical Service Fittings—Namely, Switch Boxes, Boxes for Housing Meters, Entrance Outdoor Boxes for Housing Meters, Transformer Boxes, Branch Circuit Cabinets, Combination Range Cabinets, Meter Test Switches, Meter Switches, Meter Connection Blocks, and Fuse Boxes.

Claims use since Apr. 21, 1931.

Ser. No. 329,630. FAIRBANKS, MORSE & CO., Chicago, Ill. Filed Aug. 18, 1932.

F M

For Generators, Motors, Domestic Lighting Plants, and Magnetos.

Claims use since May 18, 1920, on generators, motors and domestic lighting plants, since Jan. 2, 1929 on magnetos.

Ser. No. 330,294. MAXWELL G. DUMAS, Pittsburgh, Pa. Filed Sept. 13, 1932.

RITE-WATTS 110 VOLTS 650 WATTS PAT. PEND. PITTSBURGH, PA.

Apart from the mark shown in the drawing, applicant disclaims the words "110 Volts", "650 Watts", "Pat. Pend." and "Pittsburgh, Pa."

For Electrical Broiler.

Claims use since June 1, 1932.

Ser. No. 330,473. THE FITZGERALD MANUFACTURING CO., Torrington, Conn. Filed Sept. 19, 1932.

Star-Rite

FEATHERWEIGHT

No claim is made to the word "Featherweight" apart from the mark shown.

For Electric Sadirons.

Claims use since June 10, 1932.

Ser. No. 330,475. THE GAMEWELL COMPANY, Newton and Newton Upper Falls, Mass. Filed Sept. 19, 1932. Under 10-year proviso.

GAMEWELL

For Electrical Fire Alarm Systems, Electrical Police Signaling Systems, and Electrical Telephone Systems, and Parts of Such Systems.
Claims use since 1881.

CLASS 22

Games, Toys, and Sporting Goods

Ser. No. 327,628. DONALD F. DUNCAN, INC., Chicago, Ill. Filed June 1, 1932.

O-BOY DUNCAN WHISTLING YO-YO

The word "Whistling" is disclaimed except in the association shown on the drawing.
For Bandelore Toy Spinning Tops.
Claims use since Apr. 1, 1932.

Ser. No. 330,548. MUNICIPAL SERVICE CORP., LTD., Los Angeles, Calif. Filed Sept. 21, 1932.

"HUDDLE"

For Football Game Played with a Board and Pieces.
Claims use since Feb. 1, 1932.

Ser. No. 330,924. DONALD F. DUNCAN, INC., Chicago, Ill. Filed Oct. 4, 1932.

YO-YO

For Bandelore Toy Spinning Tops.
Claims use since Jan. 1, 1928.

Ser. No. 330,968. RUSSELL PLAYING CARD COMPANY, Jersey City, N. J. Filed Oct. 5, 1932.

Torchlight

For Playing Cards.
Claims use since Sept. 29, 1932.

Ser. No. 330,969. RUSSELL PLAYING CARD COMPANY, Jersey City, N. J. Filed Oct. 5, 1932.

TWENTY GRAND

For Playing Cards.
Claims use since Sept. 29, 1932.

Ser. No. 331,200. WILLIAM M. ROSS, doing business as University Distributing Company, Boston, Mass. Filed Oct. 12, 1932.

Jig of the Week

For Puzzles.
Claims use since Sept. 23, 1932.

CLASS 23

Cutlery, Machinery, and Tools, and Parts Thereof

Ser. No. 310,915. ELECTROFOAM CORPORATION, LTD., Pasadena, Calif. Filed Feb. 10, 1931.

ELEC-TRO-FOAM

For Lather, Foam, and Emulsion Forming Machines, Operating by Beating or Mixing.
Claims use since Oct. 25, 1930.

Ser. No. 318,218. DEUTSCHE GOLD- & SILBER-SCHEIDEANSTALT, Frankfort-on-the-Main, Germany. Filed Aug. 20, 1931.

DEGUSSA

For Apparatus for Extinguishing Fire—Namely, Portable Hand Fire Extinguishers, Glass Fire Extinguishers, Automatic and Manual Fire Extinguishing Systems; Chemical Fire Extinguishers, Engine and Hand Drawn; Bleaching Machinery or Apparatus, Printing Machines, Printing Levers, Machine Needles, Ball Bearings, Crushers, Grain Grinders, Grinding and Milling Machines, and Knife Erasers.
Claims use since Sept. 24, 1930.

Ser. No. 329,735. CALIFORNIA CONSUMERS COMPANY, Los Angeles, Calif. Filed Aug. 22, 1932.

ICE-TOR

Applicant disclaims the word "Ice" apart from the mark as shown in the drawing.
For Ice Vending Machines and Automatic Ice Vending Machines.
Claims use since July 9, 1932.

Ser. No. 330,085. CAMERON MACHINE COMPANY, Brooklyn, N. Y. Filed Sept. 1, 1932.

CAMACHINE

For Machines and Parts Thereof and Therefor, for Slitting, Rewinding, Cutting, and Perforating Flexible Materials.
Claims use since Apr. 27, 1932.

Ser. No. 330,588. WHITE SEWING MACHINE CORPORATION, Cleveland, Ohio. Filed Sept. 22, 1932.

UNIVERSAL

For Sewing Machines.
Claims use since July 7, 1932.

Ser. No. 330,599. ALEXANDER KAPLAN, doing business as Jockey Razor Blade Co., New York, N. Y. Filed Sept. 23, 1932.

JOCKEY

For Safety Razor Blades.
Claims use since Sept. 12, 1932.

Ser. No. 330,898. PLOUGH, INC., Memphis, Tenn. Filed Oct. 3, 1932.

Silkie

For Razor Blades.
Claims use since Feb. 2, 1932.

Ser. No. 330,902. SPARTAN SAW WORKS, Springfield, Mass. Filed Oct. 3, 1932.

FLEXARD

For Metal Cutting Saws and Particularly Hack Saw Blades.
Claims use since Sept. 26, 1932.

CLASS 24

Laundry Appliances and Machines

Ser. No. 329,613. ELMER RICHARDS COMPANY, Chicago, Ill. Filed Aug. 15, 1932.

cartet

For Dry Cleaning Apparatus—to wit: Laundry Stills, Dry Cleaning, Clean and Dirty Fluid Tanks, Reserve Tanks, Condensers, Coolers, Sump Tanks, Extractors, Washers, Laundry and Spotting Tables, and Laundry Dry Rooms.
Claims use since Mar. 18, 1932.

CLASS 26

Measuring and Scientific Appliances

Ser. No. 318,220. DEUTSCHE GOLD- & SILBER-SCHEIDEANSTALT, Frankfort-on-the-Main, Germany. Filed Aug. 20, 1931.

DEGUSSA

For Drawing Instruments, Laboratory Fittings Comprising Laboratory Glassware and Porcelain Ware and Laboratory Racks, Clamps and Supports.
Claims use since Sept. 24, 1930.

Ser. No. 330,403. GENERAL ELECTRIC X-RAY CORPORATION, Chicago, Ill. Filed Sept. 16, 1932.

RAYSPEED

For Cassettes Holding Photographic Films for X-Ray Pictures.
Claims use since Aug. 25, 1932.

Ser. No. 330,619. COLUMBIA PROTEKTOSITE CO., INC., Carlstadt, N. J. Filed Sept. 24, 1932.



For Sun Glasses, Snow Glasses, Leather Goggles, and Eye Protectors.
Claims use since July 22, 1932.

CLASS 31

Filters and Refrigerators

Ser. No. 326,925. BARKER BROS. INCORPORATED, Los Angeles, Calif. Filed May 9, 1932.

INVINCIBLE

For Refrigerators.
Claims use since Feb. 21, 1932.

CLASS 32

Furniture and Upholstery

Ser. No. 329,967. THE MCKAY COMPANY, Pittsburgh, Pa. Filed Aug. 29, 1932.

"SPRINGKRAFT"

The lining on the drawing indicates the color red.
For Chairs, Stools, Tables, Gliders, and Swings for Household and Office Use.
Claims use since Apr. 1, 1932.

Ser. No. 330,827. ONEIDACRAFT, INC., Oneida, N. Y. Filed Sept. 30, 1932.

TELISTAND

For Combination Telephone Stands and Bookholders.
Claims use since July 1, 1932.

CLASS 34

Heating, Lighting, and Ventilating Apparatus, Not Including Electrical Apparatus

Ser. No. 318,227. DEUTSCHE GOLD- & SILBER-SCHEIDEANSTALT, Frankfort-on-the-Main, Germany. Filed Aug. 20, 1931.

DEGUSSA

For Gas and Oil Lighting Apparatus, Gas, Oil, Water, Steam, and Coal Heating and Cooking Apparatus, Ventilating Apparatus—Namely, Dampers, Fans, Blowers, Louvers, Ranges, Building Ventilators, Cowl Exhaust, Industrial, Roof, Window, Wind Operated Car and Vessel Ventilators, Candlesticks, Wicks, and Smoke Stacks.
Claims use since Sept. 24, 1930.

CLASS 35

Belting, Hose, Machinery Packing, and Nonmetallic Tires

Ser. No. 330,601. MCCLAREN RUBBER COMPANY, Charlotte, N. C. Filed Sept. 23, 1932.

Air-Glide

For Rubber and Fabric Vehicle Tires and Rubber Inner Tubes.
Claims use since Aug. 1, 1932.

Ser. No. 330,668. THE PHARIS TIRE AND RUBBER COMPANY, Newark, Ohio. Filed Sept. 26, 1932.

PHARIS SCOUT

No claim is made to the word "Scout" apart from the mark as shown.
For Pneumatic Rubber Tires for Bicycles and other vehicles.
Claims use since Sept. 1, 1932.

Ser. No. 331,080. THE GOODYEAR TIRE & RUBBER COMPANY, Akron, Ohio. Filed Oct. 8, 1932.

GOODYEAR

For Brake Lining.
Claims use since May 24, 1932.

CLASS 37

Paper and Stationery

Ser. No. 309,643. OTTO GRIMMER, doing business as Charles Grimmer & Son, New York, N. Y. Filed Jan. 6, 1931.



For Wall Paper.
Claims use since June, 1914.

CLASS 38

Prints and Publications

Ser. No. 326,692. JOHN F. RIDER PUBLICATIONS, New York, N. Y. Filed May 2, 1932.

SERVICE

For Monthly Digest of Radio and Allied Maintenance.
Claims use since Aug. 1, 1931.

Ser. No. 328,236. SAMUEL WHITTEMORE BOGGS, Chevy Chase, Md. Filed June 23, 1932.

TELE-TIME

The word "Time" which constitutes a part of the mark "Tele-Time" is disclaimed apart from the mark shown.
For Printed Horological Charts.
Claims use since Feb. 5, 1932.

Ser. No. 330,428. HERBERT F. MARTIN, Great Neck, N. Y. Filed Sept. 17, 1932.

SQUIRRLY

For Comic Newspaper Strips.
Claims use since Aug. 1, 1928.

CLASS 39

Clothing

Ser. No. 318,465. SOCIÉTÉ ANONYME DES BAS OCCULTA, Lyon, France. Filed Aug. 26, 1931.

MODULA

For Underwear of Knitted, Netted, and Textile Fabrics for Men, Women, and Children; Corsets; Knitted and Netted Stockings for Men, Women, and Children; Fabric and Leather Gloves; Girdles and Brassières.
Claims use since Mar. 12, 1931.

Ser. No. 321,269. BROWN SHOE COMPANY, INC., St. Louis, Mo. Filed Nov. 19, 1931.

"THE RIVIERA PAJAMA SANDAL"

No claim is made to the words "Pajama Sandal" apart from the mark as shown in the drawing.
For Shoes Made of Leather, Cloth, Canvas, or Combinations Thereof.
Claims use since Oct. 29, 1931.

Ser. No. 324,342. CLARK'S DOLLAR STORES, INC., Los Angeles, Calif. Filed Feb. 20, 1932.



For Women's Wearing Apparel—Namely, Wash Dresses, Silk Dresses, and Hosiery.
Claims use since Jan. 27, 1932.

Ser. No. 328,554. WILLIAM GERLICH & SONS, INC., Brooklyn, N. Y. Filed July 5, 1932.

SUEDETTES

For Sock Linings for the Inside of Shoes.
Claims use since Apr. 15, 1932.

Ser. No. 328,580. GREENHILL & DANIEL, INC., Brooklyn, N. Y. Filed July 6, 1932.

A GENUINE ZEPHA-KNIT

No claim is made to the words "A Genuine" and "Knit" apart from the mark shown on the drawing.
For Knitted Bathing Suits, Knitted Sweaters, Knitted Dresses and Skirts.
Claims use since Jan. 4, 1932.

Ser. No. 328,817. LOUIS MEYERS & SON, INCORPORATED, New York, N. Y. Filed July 15, 1932.

KIDTWIN

Applicant disclaims any right to the exclusive use of the descriptive word "Kid."
For Leather Gloves.
Claims use since June 13, 1932.

Ser. No. 329,663. WITTENBERG SHIMBERG CORP., New York, N. Y. Filed Aug. 18, 1932.

Wittshire

For Women's, Girls', Juniors', Misses', and Ladies' Coats.
Claims use since Jan. 1, 1932.

Ser. No. 330,046. MCCLINTOCK-FIELD CO., INC., Ashland, Ky. Filed Sept. 1, 1932.

KENTUCKY BELLE

For Women's, Misses', and Children's Dresses, Pajamas, Smocks, and Wash Frocks.
Claims use since Apr. 2, 1932.

Ser. No. 330,337. CHICAGO MAIL ORDER COMPANY, Chicago, Ill. Filed Sept. 14, 1932.

STYLE CLAD

For Men's and Boys' Hats and Caps.
Claims use since Apr. 6, 1932.

Ser. No. 330,498. WELLS-LAMONT-SMITH CORPORATION, Minneapolis, Minn. Filed Sept. 19, 1932.

BALTIMORE & OHIO R·R

For Work Gloves of Fabric and Combined Fabric and Leather.
Claims use since Aug. 15, 1932.

Ser. No. 330,597. GORDON BRASSIERE CO. INC., New York, N. Y. Filed Sept. 23, 1932.

Gordonex

For Brassières.
Claims use since Aug. 25, 1932.

Ser. No. 330,624. GORDON-EAST COAST COMPANY, Moundsville, W. Va. Filed Sept. 24, 1932.

THIRTY-NINER

For Boys' Shirts.
Claims use since June 25, 1932.

Ser. No. 330,673. WELLS-LAMONT-SMITH CORPORATION, Minneapolis, Minn. Filed Sept. 26, 1932.

Burlington Route

For Work Gloves of Fabric and Combined Fabric and Leather.
Claims use since Aug. 15, 1932.

Ser. No. 331,091. RICE-STIX DRY GOODS CO., St. Louis, Mo. Filed Oct. 8, 1932.

Baby Winifred

For Infants' Wear—Namely, Infants' Dresses and Petticoats.
Claims use since Sept. 27, 1932.

CLASS 42

Knitted, Netted, and Textile Fabrics

Ser. No. 320,187. DRY-ZERO CORPORATION, Chicago, Ill. Filed Oct. 19, 1931.

POMPADOUR

For Ceiba Fiber Quilted Bed Comforters.
Claims use since Sept. 28, 1931.

Ser. No. 328,898. X-OTIC INCORPORATED, New York, N. Y. Filed July 19, 1932.



For Fillers for Diaper Holding Garments, Made of Textile Fabric.
Claims use since July 11, 1932.

Ser. No. 329,005. WANSKUCK COMPANY, Providence, R. I., and New York, N. Y. Filed July 22, 1932.



The figure in the drawing is fanciful.
For Woolen and Worsted Fabrics in the Piece.
Claims use since Dec. 30, 1930.

Ser. No. 330,555. STERN & STERN TEXTILE IMPORTERS, INC., New York, N. Y. Filed Sept. 21, 1932.

REALALON LACE

No claim is made to the word "Lace" apart from the association shown in the drawing.
For Alencon Lace in the Piece.
Claims use since Sept. 1, 1932.

Ser. No. 330,617. AURORA COTTON MILLS, Aurora, Ill. Filed Sept. 24, 1932.

COZY HOME

For Textile Sheetings, Pillow Tubings, Sheets, and Pillow Cases.
Claims use since Aug. 1, 1925.

Ser. No. 330,759. LOUIS ROESSEL & CO., INC., Hazleton, Pa., and New York, N. Y. Filed Sept. 28, 1932.

FURRO

For Silk Goods in the Piece.
Claims use since May 17, 1932.

Ser. No. 330,994. GOLD DUST CORPORATION, New York, N. Y. Filed Oct. 6, 1932.

SILVER DUST

For Towels and Toweling of Textile Fabrics.
Claims use since June 14, 1932.

Ser. No. 331,219. DACOTAH COTTON MILLS, INC., Lexington, N. C. Filed Oct. 13, 1932.



For Cotton Piece Goods of the Type Used in the Making of Clothing and Draperies.
Claims use since Jan. 1, 1932.

CLASS 43

Thread and Yarn

Ser. No. 329,843. R. F. & J. ALEXANDER AND COMPANY, LIMITED, Neilston, Scotland. Filed Aug. 26, 1932. Under 10-year proviso.



For Sewing Cotton Thread in Balls.
Claims use since 1836.

Ser. No. 329,844. R. F. & J. ALEXANDER AND COMPANY, LIMITED. Neilston, Scotland. Filed Aug. 26, 1932. Under 10-year proviso.

20
Alexanders'
GLASGOW

For Sewing Cotton Thread in Balls.
Claims use since 1836.

CLASS 44

Dental, Medical, and Surgical Appliances

Ser. No. 318,218. DEUTSCHE GOLD- & SILBER-SCHEIDEANSTALT, Frankfort-on-the-Main, Germany. Filed Aug. 20, 1931.

DEGUSSA

For Surgical Plasters, Adhesive Tape, Plasters, Bandages, Manicure Outfits, Paste for the Impressions of casts for Dental Purposes, Preparations for the Filling of Teeth, Protective and Restoring Apparatus for Use in Connection with Poisonous Gases; Artificial Limbs, Eyes, and Teeth; Syringes, Hot Water Bottles, Finger Cots, Prophylactic Articles for the Prevention of Diseases.
Claims use since Sept. 24, 1930.

Ser. No. 324,869. BEAUTYBATH, INC., Newark, N. J. Filed Mar. 8, 1932.

"Beautybath"

For Electric Blankets and Heating Pads for Therapeutic and for General Heating Purposes.
Claims use since Jan. 9, 1932.

Ser. No. 328,753. LAFOREST D. CLINKENBEARD, doing business as Lee's Beauty Shop, Sioux City, Iowa. Filed July 13, 1932.

Parisian Oil

The lining on the drawing represents the color blue. The exclusive right to the words "Parisian Oil" is disclaimed apart from the mark as shown on the drawing.
For Hair Waving Pads.
Claims use since Jan. 1, 1932.

CLASS 45

Beverages, Nonalcoholic

Ser. No. 330,410. PRIMA COMPANY, Chicago, Ill. Filed Sept. 16, 1932.

Prima Cola

No claim is made to the word "Cola" apart from the mark as shown in the drawing.
For Nonalcoholic, Maltless Beverages Sold as Soft Drinks, and Syrups, Concentrates, and Extracts for Making the Same.
Claims use since July 15, 1932.

CLASS 46

Foods and Ingredients of Foods

Ser. No. 304,907. BEAU IDEAL FOOD CO., Boston and East Boston, Mass. Filed Aug. 22, 1930.

Beau Ideal

For Chicken a la King, Chicken Mexican, Potato Salad, Chicken Lobster, Macaroni, Chicken with Paprika, Curried Chicken, Chicken for Pate, Lobster a la Newburg, Mexican Spaghetti with Mushrooms, Creamed Spaghetti with Mushrooms, Rosette Mushrooms, and Lobster Salad.
Claims use since July 12, 1930.

Ser. No. 316,605. THE H. H. MEYER PACKING COMPANY, Cincinnati, Ohio. Filed July 8, 1931.

GOLDEN CORN



For Shoulders, Dried Beef, Sausage, Lard, Bacon, and Other Meat Specialties—Namely, Cottage Butts, Jowl Butts, Ham, Dry Salt, Extra, Picnic, Luncheon Meat, Pig Feet, and Dry Salt Belly.
Claims use since Jan. 18, 1923.

Ser. No. 323,758. VAL-RAY FOOD PRODUCTS COMPANY, Spokane, Wash. Filed Feb. 2, 1932.



The drawing is lined to indicate the colors orange and purple as used on the labels. No claim is made herein for the words "Food Products" apart from the mark as shown in the drawing.
For Catsup, Pickles, Peanut Butter, Malt Syrup, Condensed Milk, Milk, Coffee, Apple Butter, Cucumber Relish, Corn Relish; Canned String Beans, Peas, Corn, Spinach, Asparagus, Wax Beans and Tomatoes; Canned Peaches, Apricots, Pears and Cherries; Canned Strawberries, Raspberries, Loganberries, Blackberries; and Cider Vinegar.
Claims use since Jan. 11, 1932.

Ser. No. 324,509. BERNARD FIRG, Brooklyn, N. Y. Filed Feb. 26, 1932.

YEASTOMALT

The words "Yeast" and "Malt" are disclaimed apart from the mark as shown.
For Food Product, Consisting of Chocolate, Malt, Yeast, Cane Sugar, and Other Ingredients for Use in Producing Food Beverages.
Claims use since May 14, 1930.

Ser. No. 325,091. ORRIN O. EATON, Watsonville, Calif. Filed Mar. 14, 1932.

EATKRISP

For Fresh Lettuce.
Claims use since Mar. 1, 1932.

Ser. No. 328,000. WILLIAM SAMUEL BROWN, doing business as Louisiana Yeast-Bran Products Company, New Orleans, La. Filed June 15, 1932.

YEAST BRAN
2 in 1

Applicant hereby disclaims the words "Yeast Bran" apart from the mark shown in the drawing.
For Cereal Breakfast Food.
Claims use since May 1, 1930.

Ser. No. 329,286. H. J. HEINZ COMPANY, Pittsburgh, Pa. Filed Aug. 2, 1932.

CUMATO

For Sauces or Relishes for Use with Meats, Fish, Eggs, Vegetable Salads, and Other Foods, also Intended to be Used in the Preparation of Thousand Island Dressing.
Claims use since July 15, 1932.

Ser. No. 329,350. KESSLER FOODS, Brooklyn, N. Y. Filed Aug. 5, 1932.

Kessler's
MIL-KE-CHOC

No claim is made to the word "Mil-Ke", except as shown in the drawing.
For Chocolate Malt Syrup.
Claims use since Dec. 5, 1931.

Ser. No. 329,569. LONG ISLAND MACARONI CO. INC., Long Island City, N. Y. Filed Aug. 13, 1932.



The portrait forming a part of the mark is that of Joseph V. Marchese, son of the president of the applicant corporation. All the words, except "Servmor", are disclaimed, apart from the mark as shown in the drawing.

For Macaroni, Spaghetti.

Claims use since June 4, 1932.

Ser. No. 329,734. ALL NATIONS BAKERS, INC., New York, N. Y. Filed Aug. 22, 1932.



No claim is made to the representation of the goods or any wording appearing in the drawing, with exception of the applicant's name, except in the association shown. No claim is made to the representation of the label except as shown on the drawing.

For Sweet Biscuits.

Claims use since Mar. 10, 1931.

Ser. No. 330,009. CALIFORNIA FRUIT EXCHANGE, Sacramento, Calif. Filed Aug. 31, 1932.



The drawing is lined for red, yellow, light blue, and dark blue.

For Fresh Fruits—Namely, Fresh Apples, Apricots, Cherries, Peaches, Plums, Pears, Grapes, Persimmons, Pomegranates, Figs, Quinces, Nectarines, Olives and Prunes.

Claims use since May, 1901.

Ser. No. 330,108. SWIFT AND COMPANY, Chicago, Ill. Filed Sept. 8, 1932.

skate

For Ice Cream and Sherbet.

Claims use since Aug. 9, 1932.

Ser. No. 330,110. VALENTINE'S MEAT-JUICE COMPANY, Richmond, Va. Filed Sept. 3, 1932.

BAL-RA

For Dog Food.

Claims use since June, 1928.

Ser. No. 330,207. OELERICH & BERRY COMPANY, doing business as Oelerich & Berry Co., Chicago, Ill. Filed Sept. 9, 1932.

KO-KA-MA

For Table Syrup.

Claims use since Feb. 1, 1908.

Ser. No. 330,216. VIMCO PRODUCTS COMPANY, Carnegie, Pa. Filed Sept. 9, 1932.

VIMCO

The lining shown on the drawing is used for shading purposes only.

For Spaghetti, Noodles, and Macaroni.

Claims use since July 1, 1932.

Ser. No. 330,229. LEEF, SOMMER CO., New York, N. Y. Filed Sept. 10, 1932.

LESCO BRAND

Applicant disclaims the word "Brand" separate and apart from the mark as shown in the drawing.

For Fresh Vegetables such as Tomatoes, Celery, Cantaloupes, Honey-dew Melons, Carrots, and Beets.

Claims use since May 1, 1932.

Ser. No. 330,378. OLYMPIA CANNING COMPANY, Olympia, Wash. Filed Sept. 15, 1932.

SILVER WAVE

For Canned Fruits.

Claims use since Mar. 26, 1932.

Ser. No. 330,407. MITCHELL BAKERY, Independence, Kans. Filed Sept. 16, 1932.

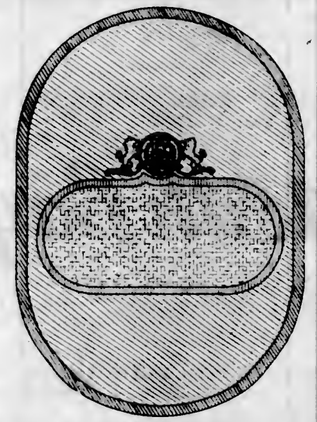


The silhouette portrait is purely fanciful.

For Cookies and Cakes.

Claims use since July, 1928.

Ser. No. 330,542. FANNING BREAD AND BUTTER PICKLE COMPANY, INC., New York, N. Y. Filed Sept. 21, 1932.



The lining on the drawing is intended to denote the colors red, yellow, and green. The lining on the outer border however, is representative of shading and does not indicate color.

For Pickles.

Claims use since July 1, 1929.

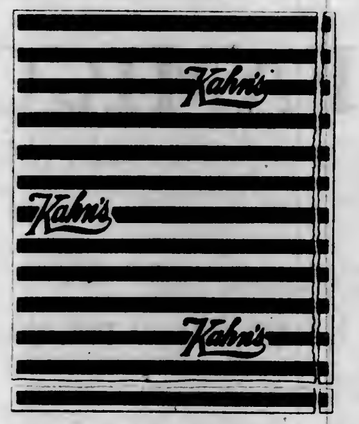
Ser. No. 330,569. H. L. CAPLAN & CO. INC., doing business as Belvedere Coffee & Tea Co., Baltimore, Md. Filed Sept. 22, 1932.

7th HEAVEN

For Roasted Coffee.

Claims use since Aug. 22, 1932.

Ser. No. 330,659. THE E. KAHN'S SONS COMPANY, Cincinnati, Ohio. Filed Sept. 26, 1932.



For Meat and Meat Products—Namely, Bacon, Selected Bacon, Canadian Style Bacon, Dried Beef, Cottage Style

Butt, Ham, Smoked Cooked Boneless Ham, Cooked Boneless Ham, Cooked Ham, Cooked Trimmed Ham, Skinned Ham, Picnic, Sausage, Shoulder, Skinned Shoulder, and Smoked Beef Tongue.
Claims use since Jan. 1, 1932.

Ser. No. 330,717. WESCO FOODS COMPANY, Cincinnati, Ohio. Filed Sept. 27, 1932.

North Bay

For Canned Salmon.
Claims use since Aug. 15, 1932.

Ser. No. 330,790. KIMBELL MILLING COMPANY, INC., doing business as Texas Milling Co., Fort Worth, Tex. Filed Sept. 29, 1932.

Texaco

For Wheat Flour.
Claims use since July 1, 1932.

Ser. No. 330,829. PILLSBURY FLOUR MILLS COMPANY, Minneapolis, Minn. Filed Sept. 30, 1932.

DIA-STATED

For Wheat Flour.
Claims use since July 30, 1932.

Ser. No. 330,983. F. & M. IMPORTING CO. INC., doing business as Famico Company, Los Angeles, Calif. Filed Oct. 4, 1932.

FAMICO

For Canned Fish, Canned Fruits, Canned Vegetables, Alimentary Pastes, Olives, Edible Oils, Candy, Chocolate, Tomato Paste, Spaghetti, Macaroni.
Claims use since July 22, 1932.

Ser. No. 331,135. ANIMAL FOODS COMPANY, San Jose, Calif. Filed Oct. 11, 1932.

LET THE DOG BE THE JUDGE

For Dog Food.
Claims use since May 15, 1932.

Ser. No. 331,147. B. W. DOYLE, doing business as Doyle Packing Company, Los Angeles, Calif. Filed Oct. 11, 1932.

Strongheart

For Dog and Cat Food.
Claims use since July 18, 1932.

Ser. No. 331,151. FELTON CHEMICAL COMPANY, INC., Brooklyn, N. Y. Filed Oct. 11, 1932.

SOLV-O-HOL

For Natural and Synthetic Food Flavoring Extracts.
Claims use since Nov. 1, 1928.

Ser. No. 331,152. HAWAIIAN PINEAPPLE COMPANY, LTD., Honolulu, Territory of Hawaii, and San Francisco, Calif. Filed Oct. 11, 1932.

PINE-HEART

For Canned Pineapple.
Claims use since May 13, 1932.

CLASS 50

Merchandise Not Otherwise Classified

Ser. No. 329,829. CENTRAL IMPORT COMPANY, Chicago, Ill. Filed Aug. 25, 1932.

Transflex
MADE IN GERMANY

Applicant hereby disclaims the words "Made in Germany" which appear on the drawing apart from the mark shown.
For Gelatine Sheets.
Claims use since Jan. 1, 1926.

Ser. No. 330,774. BERTH, LEVI & CO. INC., New York, N. Y. Filed Sept. 29, 1932.

BLADDERETTES

For Sausage Casings.
Claims use since 1926.

Ser. No. 331,045. THE FELTERS COMPANY, Boston, Mass. Filed Oct. 7, 1932.

QUILTON

For Felt.
Claims use since Apr. 22, 1932.

TRADE-MARK REGISTRATIONS GRANTED

[ACT OF FEBRUARY 20, 1905]

NOVEMBER 15, 1932

298,905. MOTION PICTURE PHOTOPLAYS. COLUMBIA PICTURES CORPORATION, New York, N. Y.
Filed July 3, 1932. Serial No. 328,682. PUBLISHED SEPTEMBER 6, 1932. Class 26.

298,906. MOTION PICTURE FILMS SHOWING SKETCHES, DRAWINGS, AND PHOTOGRAPHS. JULIAN OLLENDORFF, Brooklyn, N. Y.
Filed July 28, 1932. Serial No. 329,072. PUBLISHED SEPTEMBER 6, 1932. Class 26.

298,907. VACUUM PUMPS. CENTRAL SCIENTIFIC COMPANY, Chicago, Ill.
Filed July 25, 1932. Serial No. 329,041. PUBLISHED SEPTEMBER 6, 1932. Class 23.

298,908. CARPET SWEEPERS. BISSELL CARPET SWEEPER CO., Grand Rapids, Mich.
Filed July 18, 1932. Serial No. 328,863. PUBLISHED SEPTEMBER 6, 1932. Class 23.

298,909. HEATING EQUIPMENT — NAMELY OIL BURNERS. OIL-ELECTRIC ENGINEERING CORP., Bethlehem, Pa.
Filed June 8, 1932. Serial No. 327,833. PUBLISHED SEPTEMBER 6, 1932. Class 34.

298,910. PRINTING INK. ACME PRINTING INK COMPANY, Chicago, Ill.
Filed July 15, 1932. Serial No. 328,806. PUBLISHED SEPTEMBER 6, 1932. Class 11.

298,911. CONTAINER CLOSURES. CROWN CORK & SEAL COMPANY, INC., Baltimore, Md.
Filed July 14, 1932. Serial No. 328,780. PUBLISHED SEPTEMBER 6, 1932. Class 50.

298,912. RAZOR BLADES. AMERICAN SAFETY RAZOR CORPORATION, Brooklyn, N. Y.
Filed July 13, 1932. Serial No. 328,749. PUBLISHED SEPTEMBER 6, 1932. Class 28.

298,913. SAFETY RAZORS. COOPER PRODUCTS CORPORATION, New York, N. Y.
Filed July 12, 1932. Serial No. 328,723. PUBLISHED SEPTEMBER 6, 1932. Class 28.

298,914. FLY PAPER. JACQUES G. GOLDERER, New York, N. Y.
Filed July 7, 1932. Serial No. 328,604. PUBLISHED SEPTEMBER 6, 1932. Class 50.

298,915. METAL WORKING MACHINERY—NAMELY, CHAMFERING, BURNISHING, BORING, DRILLING, BURRING, MILLING AND ROUNDING MACHINES; CHUCKS, JIGS, FIXTURES, DIES, AND SPECIAL MACHINERY. OSCAR M. POOCK, doing business as City Machine and Tool Works, Dayton, Ohio.
Filed June 11, 1932. Serial No. 327,919. PUBLISHED SEPTEMBER 6, 1932. Class 23.

298,916. CRIB SHEETS MADE OF RUBBER AND RUBBER AND FABRIC. UNITED STATES RUBBER COMPANY, New York, N. Y.
Filed June 10, 1932. Serial No. 327,894. PUBLISHED SEPTEMBER 6, 1932. Class 50.

298,917. RUBBER INK. THE NAUGATUCK CHEMICAL COMPANY, New York, N. Y.
Filed June 10, 1932. Serial No. 327,882. PUBLISHED SEPTEMBER 6, 1932. Class 11.

298,918. WRENCHES, HEXAGONAL WRENCHES, TAP WRENCHES, SOCKET WRENCHES, RATCHET WRENCHES, AND PARTS THEREOF, SOCKETS AND PARTS THEREOF. CHARLES E. LITTLE, Melrose, Mass.
Filed June 4, 1932. Serial No. 327,781. PUBLISHED SEPTEMBER 6, 1932. Class 28.

298,919. FIELD, GARDEN, AND LAWN SEED. T. W. WOOD & SONS, Richmond, Va.
Filed March 25, 1932. Serial No. 325,496. PUBLISHED SEPTEMBER 6, 1932. Class 1.

298,920. CYLINDER BLOCKS, CYLINDER HEADS, PISTONS, ETC. CHRYSLER CORPORATION, Highland Park, Mich.
Filed June 10, 1931. Serial No. 315,681. PUBLISHED SEPTEMBER 6, 1932. Class 23.

298,921. VALVES—NAMELY, AIR VALVES FOR STEAM RADIATORS. HOFFMAN SPECIALTY COMPANY, Waterbury, Conn.
Filed July 11, 1931. Serial No. 316,841. PUBLISHED SEPTEMBER 6, 1932. Class 13.

298,922. PERIODICAL PUBLICATION. MEYER BOTH COMPANY, Chicago, Ill., and New York, N. Y.
Filed July 11, 1931. Serial No. 316,865. PUBLISHED SEPTEMBER 6, 1932. Class 38.

298,923. MARMALADE. FRANK COOPER LIMITED, Oxford, England.
Filed May 28, 1931. Serial No. 315,136. PUBLISHED AUGUST 30, 1932. Class 46.

298,924. PICKLES. MATSUSHITA SHOTEN LTD., Osaka City, Japan.
Filed January 6, 1931. Serial No. 309,648. PUBLISHED AUGUST 30, 1932. Class 46.

298,925. COFFEE. ROSAURA L. VIUDA DE FERNANDEZ, Jalapa, Vera Cruz, Mexico.
Filed July 9, 1931. Serial No. 316,769. PUBLISHED AUGUST 16, 1932. Class 46.

298,926. NONALCOHOLIC, MALTLESS EXTRACTS, FLAVORS, AND SYRUPS FOR MAKING SOFT DRINKS. W. BURTON & CO., INC., Brooklyn, N. Y.
Filed July 9, 1931. Serial No. 316,764. PUBLISHED SEPTEMBER 6, 1932. Class 45.

298,927. SNAILS, FRANKFURTER SAUSAGES, FOIE GRAS AU NATUREL, GOOSE LIVER, PATE DE FOIS GRAS, ALL OF WHICH ARE CONTAINED IN CANS OR GLASS RECEPTACLES. CERECA COMPANY, INCORPORATED, New York, N. Y.
Filed June 8, 1931. Serial No. 315,528. PUBLISHED AUGUST 30, 1932. Class 46.

298,928. CERTAIN NAMED PAINT PRODUCTS. FERDINAND SICHEL, KOMMANDITGESELLSCHAFT, Hanover-Limmer, Germany.
Filed October 8, 1930. Serial No. 306,875. PUBLISHED AUGUST 23, 1932. Class 16.

298,929. SPOONS, CAKE TURNERS, CAN OPENERS, ETC. THE A. & J. MANUFACTURING CO., Binghamton, N. Y., assignor to A. & J. Kitchen Tool Co., Chicago, Ill., a Corporation of Illinois.
Filed July 3, 1930. Serial No. 303,080. PUBLISHED SEPTEMBER 6, 1932. Class 28.

298,930. FRESH GRAPES. ARROW PACKING COMPANY, Exeter, Calif.
Filed February 3, 1930. Serial No. 295,501. PUBLISHED AUGUST 30, 1932. Class 46.

298,931. TOY VEHICLES. THE AMERICAN-NATIONAL COMPANY, doing business as The Gendron Wheel Company and The Toledo Metal Wheel Company, Toledo, Ohio.
Filed June 27, 1932. Serial No. 328,819. PUBLISHED SEPTEMBER 6, 1932. Class 22.

298,932. TOASTED TORTILLAS. VELASCO & CALZADA, San Antonio, Tex.
Filed June 20, 1932. Serial No. 328,147. PUBLISHED SEPTEMBER 6, 1932. Class 46.

298,933. MINERAL SPRING WATER. ROSE CUNEO, doing business as Lily Mineral Water Works, Union City, N. J.
Filed May 31, 1932. Serial No. 327,581. PUBLISHED SEPTEMBER 6, 1932. Class 45.

298,934. WHEAT FLOUR. EMPIRE STATE FLOUR MILLS, Buffalo and New York, N. Y.
Filed May 21, 1932. Serial No. 327,308. PUBLISHED SEPTEMBER 6, 1932. Class 46.

298,935. CLEANING AND SCOURING POWDERS, SOAPS, ETC. LOUIS W. ZELLER, doing business as Zeller Products Company, New York, N. Y.
Filed June 2, 1932. Serial No. 327,668. PUBLISHED AUGUST 23, 1932. Class 4.

298,936. PLATE GLASS AND GLASS FOR MIRRORS. LES COMPAGNIES REUNIES DES GLACES & VERRES SPECIAUX DU NORD DE LA FRANCE, Boussois-Sur-Sambre (Nord), France.
Filed June 8, 1932. Serial No. 327,824. PUBLISHED AUGUST 23, 1932. Class 33.

298,937. AQUARIUMS AND PORTABLE CONSERVATORIES. TROPIC-ARIUM, INC., Cleveland, Ohio.
Filed May 6, 1932. Serial No. 326,837. PUBLISHED SEPTEMBER 6, 1932. Class 2.

298,938. BITUMINOUS ENAMEL. JOSHUA TETLEY & SON, LIMITED, Leeds, England.
Filed June 8, 1932. Serial No. 327,839. PUBLISHED AUGUST 30, 1932. Class 16.

298,939. AUTOMOTIVE GLASS, SHATTER-PROOF GLASS, PLATE GLASS, AND AUTOMOTIVE REPLACEMENT GLASS—NAMELY, SINGLE AND DOUBLE STRENGTH WINDOW GLASS, CRYSTAL SHEET GLASS, POLISHED PLATE GLASS, SHATTERPROOF SHEET GLASS, AND SHATTERPROOF PLATE GLASS BOTH PLAIN AND COLORED. SERVICE GLASS COMPANY, Evansville, Ind.
Filed June 16, 1932. Serial No. 328,040. PUBLISHED AUGUST 23, 1932. Class 33.

298,940. ABRASIVE PREPARATION USED BY DENTISTS. THE L. D. CAULK COMPANY, Milford, Del.
Filed June 17, 1932. Serial No. 328,056. PUBLISHED AUGUST 30, 1932. Class 4.

298,941. SURGICAL INSTRUMENTS. DEWITT & HERZ, INC., New York, N. Y.
Filed June 18, 1932. Serial No. 328,089. PUBLISHED AUGUST 30, 1932. Class 44.

298,942. CERTAIN NAMED PAINT PRODUCTS. KNAPP & COOKE, Euclid, Ohio.
Filed June 21, 1932. Serial No. 328,175. PUBLISHED AUGUST 30, 1932. Class 16.

298,943. LEAD PENCILS, COLORED PENCILS, ETC. J. S. STAEDTLER, INC., New York, N. Y.
Filed June 21, 1932. Serial No. 328,191. PUBLISHED SEPTEMBER 6, 1932. Class 37.

298,944. SURGICAL INSTRUMENTS. DEWITT & HERZ, INC., New York, N. Y.
Filed June 29, 1932. Serial No. 328,392. PUBLISHED AUGUST 23, 1932. Class 44.

298,945. POLISHING PREPARATION FOR HARD SURFACE FLOOR COVERING. ARMSTRONG CORK COMPANY, Lancaster, Pa.
Filed July 6, 1932. Serial No. 328,572. PUBLISHED AUGUST 23, 1932. Class 16.

298,946. SEED CORN. T. W. WOOD & SONS, Richmond, Va.
Filed March 25, 1932. Serial No. 325,495. PUBLISHED SEPTEMBER 6, 1932. Class 1.

298,947. PRINTED LESSONS, WORK SHEETS, EXAMINATION PAPERS, AND PRINTED INSTRUCTION SHEETS. WALTER H. CANDLER, doing business as The Candler System Co., Chicago, Ill.
Filed March 21, 1932. Serial No. 325,319. PUBLISHED JUNE 7, 1932. Class 38.

298,948. LOOM-TEMPLES AND PARTS THEREOF AND FOR PARTS OF LOOMS. DRAPER CORPORATION, Portland, Me., and Hopedale, Mass.
Filed July 29, 1932. Serial No. 329,180. PUBLISHED SEPTEMBER 6, 1932. Class 23.

298,949. RAZOR BLADES. DARWIN & MILNER, INC., Cleveland, Ohio.
Filed July 28, 1932. Serial No. 329,139. PUBLISHED SEPTEMBER 6, 1932. Class 23.

298,950. SERIES OF DIFFERENT MOTION PICTURE FILMS. PRINCIPAL DISTRIBUTING CORP., New York, N. Y.
Filed July 11, 1932. Serial No. 328,703. PUBLISHED SEPTEMBER 6, 1932. Class 26.

298,951. SANITARY PADS. DIANA MANUFACTURING COMPANY, Green Bay, Wis.
Filed June 24, 1932. Serial No. 328,265. PUBLISHED AUGUST 9, 1932. Class 44.

298,952. WEEKLY PUBLICATION. EVANS PUBLISHING CORPORATION, Dover, Del.
Filed July 28, 1932. Serial No. 329,141. PUBLISHED SEPTEMBER 6, 1932. Class 38.

298,953. WAXED GLASSINE WRAPPING AND LINING PAPER. RIEGEL PAPER CORPORATION, Riegelsville, N. J., and New York, N. Y.
Filed August 1, 1932. Serial No. 329,265. PUBLISHED SEPTEMBER 6, 1932. Class 37.

298,954. DENTISTS' ARTICULATING PAPER. THE L. D. CAULK COMPANY, Milford, Del.
Filed July 25, 1932. Serial No. 329,042. PUBLISHED AUGUST 30, 1932. Class 44.

298,955. CLOTHES WRINGERS AND PARTS THEREOF. GENERAL ELECTRIC COMPANY, Schenectady, N. Y.
Filed July 22, 1932. Serial No. 328,986. PUBLISHED AUGUST 30, 1932. Class 24.

298,956. DRY CLEANING FLUID. BADSILL OIL CO. INC., Philadelphia, Pa.
Filed July 16, 1932. Serial No. 328,847. PUBLISHED AUGUST 30, 1932. Class 4.

298,957. ADHESIVE PRODUCTS, AND PARTICULARLY ADHESIVE PASTES, GLUES, MUCILAGES, DEXTRINES, SIZINGS, AND PADDING COMPOSITIONS IN DRY, LIQUID, OR PASTE FORM. NATIONAL ADHESIVES CORPORATION, New York, N. Y.
Filed July 13, 1932. Serial No. 328,758. PUBLISHED SEPTEMBER 6, 1932. Class 5.

298,958. METAL POLISH. H. & H. ZBINDEN, Brooklyn, N. Y.
Filed July 8, 1932. Serial No. 328,653. PUBLISHED AUGUST 23, 1932. Class 4.

298,959. STAVE BASKETS. EVANSVILLE BASKET AND CRATE COMPANY, Evansville, Ind.
Filed July 8, 1932. Serial No. 328,634. PUBLISHED SEPTEMBER 6, 1932. Class 2.

298,960. RAYON YARN. THE VISCOSE COMPANY, Marcus Hook, Pa.
Filed July 16, 1932. Serial No. 328,854. PUBLISHED AUGUST 23, 1932. Class 48.

298,961. FROZEN CONFECTION. SAMUEL BUCHER, Milwaukee, Wis.
Filed July 1, 1932. Serial No. 328,476. PUBLISHED AUGUST 30, 1932. Class 46.

298,962. CAKES, BISCUITS, CRACKERS, CANDIES, AND CHOCOLATES. MANUFACTURE DIJONNAISE DES BISCUITS PERNOT, SOCIETE ANONYME, Dijon, France.
Filed June 30, 1932. Serial No. 328,448. PUBLISHED AUGUST 30, 1932. Class 46.

298,963. RUBBER STAMPS AND HECTOGRAPHS. THE CLASSROOM TEACHER, INC., Chicago, Ill.
Filed May 16, 1932. Serial No. 327,181. PUBLISHED SEPTEMBER 6, 1932. Class 37.

298,964. RUBBER STAMPS AND HECTOGRAPHS. THE CLASSROOM TEACHER, INC., Chicago, Ill.
Filed May 16, 1932. Serial No. 327,130. PUBLISHED SEPTEMBER 6, 1932. Class 37.

298,965. RUBBER STAMPS AND HECTOGRAPHS. THE CLASSROOM TEACHER, INC., Chicago, Ill.
Filed May 12, 1932. Serial No. 327,005. PUBLISHED SEPTEMBER 6, 1932. Class 37.

298,966. ENAMELS AND UNDERCOATS. S. C. JOHNSON & SON, Racine, Wis.
Filed May 2, 1932. Serial No. 326,683. PUBLISHED AUGUST 23, 1932. Class 16.

298,967. ENAMELS. S. C. JOHNSON & SON, Racine, Wis.
Filed May 2, 1932. Serial No. 326,682. PUBLISHED AUGUST 23, 1932. Class 16.

298,968. CLEANSER AND POLISH FOR METALS, GLASS, ETC. FANNIE BLUM, doing business as Fanna Polishine Co., Brooklyn, N. Y.
Filed April 4, 1932. Serial No. 325,778. PUBLISHED AUGUST 23, 1932. Class 4.

298,969. LIQUID SOAPS AND CLEANERS. ALTON F. CURRAN, doing business as A. F. Curran Co., Malden, Mass., assignor to The Curran Corporation, Malden, Mass., a Corporation of Massachusetts.
Filed March 21, 1932. Serial No. 325,322. PUBLISHED AUGUST 23, 1932. Class 4.

298,970. CERTAIN PAINT PRODUCTS. DIRIGO LTD. A/S., Oslo, Norway.
Filed March 16, 1932. Serial No. 325,163. PUBLISHED AUGUST 30, 1932. Class 16.

298,971. PERIODICAL PUBLICATION. THE NEW YORK STATE SOCIETY OF PROFESSIONAL ENGINEERS, INC., New York, N. Y.
Filed May 27, 1932. Serial No. 327,521. PUBLISHED SEPTEMBER 6, 1932. Class 38.

298,972. METAL CANISTERS. THE ENTERPRISE ALUMINUM COMPANY, Massillon, Ohio.
Filed April 15, 1932. Serial No. 326,188. PUBLISHED SEPTEMBER 6, 1932. Class 2.

298,973. SCREW DRIVERS. DURO METAL PRODUCTS COMPANY, Chicago, Ill.
Filed July 14, 1932. Serial No. 328,782. PUBLISHED SEPTEMBER 6, 1932. Class 23.

298,974. PUMPS AND PARTS THEREOF. CONLON CORPORATION, Cicero, Ill.
Filed July 28, 1932. Serial No. 329,138. PUBLISHED SEPTEMBER 6, 1932. Class 23.

298,975. SENSITIZED PHOTOGRAPHIC PAPERS, PLATES, FILMS, ROLL FILMS, PORTRAIT FILMS, STUDIO FILMS, PLAN FILMS, PACK FILMS, RADIOFILMS, CINEMATOGRAPHIC FILMS, CAMERAS AND PARTS THEREFOR, DEVELOPING APPARATUS, CINEMATOGRAPHIC CAMERAS, AND PROJECTORS. GEVAERT PHOTO-PRODUCTEN, NAAMLOOZE VENNOOTSCHAP (SOCIÉTÉ ANONYME PHOTO-PRODUITS GEVAERT), Oude-God, near Antwerp, Belgium.
Filed July 27, 1932. Serial No. 329,115. PUBLISHED SEPTEMBER 6, 1932. Class 26.

298,976. FILES AND RASPS. NICHOLSON FILE COMPANY, Providence, R. I.
Filed July 28, 1932. Serial No. 329,150. PUBLISHED SEPTEMBER 6, 1932. Class 23.

298,977. FILES AND RASPS. NICHOLSON FILE COMPANY, Providence, R. I.
Filed July 28, 1932. Serial No. 329,151. PUBLISHED SEPTEMBER 6, 1932. Class 23.

298,978. CIGAR HOLDERS, CIGARETTE HOLDERS, AND PIPES. KAUFMANN BROS. & BONDY, INC., West New York, N. J.
Filed July 20, 1932. Serial No. 328,907. PUBLISHED SEPTEMBER 6, 1932. Class 8.

298,979. LEATHERS. HITEMAN LEATHER COMPANY, INC., West Winfield, N. Y.
Filed July 14, 1932. Serial No. 328,789. PUBLISHED SEPTEMBER 6, 1932. Class 1.

298,980. FERTILIZER. O. M. SCOTT AND SONS COMPANY, Marysville, Ohio.
Filed July 1, 1932. Serial No. 328,508. PUBLISHED SEPTEMBER 6, 1932. Class 10.

298,981. COAL. HARBOR COAL CO. INC., New York, N. Y.
Filed June 20, 1932. Serial No. 328,123. PUBLISHED AUGUST 30, 1932. Class 1.

298,982. ROSIN. CONTINENTAL TURPENTINE & ROSIN CORPORATION, INC., Laurel, Miss.
Filed June 20, 1932. Serial No. 328,117. PUBLISHED SEPTEMBER 6, 1932. Class 1.

298,983. PREPARATION FOR USE AS A MILD LAXATIVE AND TREATMENT FOR SOUR STOMACH. J. W. HAUTMAN, Minneapolis, Minn.
Filed April 27, 1932. Serial No. 326,541. PUBLISHED JULY 12, 1932. Class 6.

298,984. WOOLEN FABRICS IN THE PIECE. AMERICAN WOOLEN COMPANY, Boston, Mass., and New York, N. Y.
Filed April 16, 1932. Serial No. 326,173. PUBLISHED MAY 24, 1932. Class 42.

298,985. TOY ANIMALS, BIRDS, HUMAN FIGURES, DOLLS, TOY FRUITS, AND TOY CLOCKS MADE OF INDIA RUBBER HAVING SPONGE LIKE OR MOSS-LIKE APPEARANCE. "SEMPERIT" OESTERREICHISH-AMERIKANISCHE GUMMIWERKE AKTIENGESELLSCHAFT, Vienna, Austria.
Filed September 8, 1931. Serial No. 318,722. PUBLISHED SEPTEMBER 6, 1932. Class 22.

298,986. TABLE BOARD GAME PLAYED WITH PIECES. JAMES W. STREETON, New York, N. Y.
Filed August 31, 1931. Serial No. 318,605. PUBLISHED SEPTEMBER 6, 1932. Class 22.

298,987. SURGEONS' GLOVES MADE OF RUBBER. THE B. F. GOODRICH COMPANY, doing business as Miller Rubber Company Inc., New York, N. Y., and Akron, Ohio.
Filed August 1, 1931. Serial No. 317,553. PUBLISHED AUGUST 23, 1932. Class 44.

298,988. COTTON THREAD. STANDARD-COOSA-THATCHER COMPANY, Chattanooga, Tenn.
Filed May 14, 1932. Serial No. 327,122. PUBLISHED SEPTEMBER 6, 1932. Class 48.

298,989. FRESH CORN. BURT VAUGHN FLANNERY, Darlington, Md.
Filed May 6, 1932. Serial No. 326,811. PUBLISHED AUGUST 30, 1932. Class 46.

298,990. LIVE AND DRESSED DUCKS. CARMAN RIVER DUCK FARM, Brookhaven, N. Y.
Filed May 4, 1932. Serial No. 326,737. PUBLISHED JULY 12, 1932. Class 46.

298,991. TABLE TOPS AND CHAIR SEATS OF A COMPOSITION MATERIAL. W. F. WHITNEY COMPANY, South Ashburnham, Mass.
Filed April 13, 1932. Serial No. 326,066. PUBLISHED SEPTEMBER 6, 1932. Class 32.

298,992. FREEZING TRAYS FOR ELECTRIC REFRIGERATORS. NORGE CORPORATION, Detroit, Mich.
Filed August 4, 1932. Serial No. 329,336. PUBLISHED SEPTEMBER 6, 1932. Class 31.

298,993. NONALCOHOLIC MALTLESS BEVERAGES SOLD AS SOFT DRINKS AND SYRUPS FOR MAKING THE SAME. PINEAPPLE REFRESHMENTS BOTTLING CORPORATION, Miami, Fla.
Filed July 26, 1932. Serial No. 329,095. PUBLISHED SEPTEMBER 6, 1932. Class 45.

298,994. NON-ALCOHOLIC NON-CEREAL, MALTLESS BEVERAGES SOLD AS SOFT DRINKS AND SIRUPS AND EXTRACTS FOR MAKING THE SAME. YACHT CLUB BOTTLING WORKS, INC., Centredale, R. I.
Filed July 16, 1932. Serial No. 328,858. PUBLISHED SEPTEMBER 6, 1932. Class 45.

298,995. CANDY. MARS, INCORPORATED, Chicago, Ill.
Filed July 8, 1932. Serial No. 328,714. PUBLISHED SEPTEMBER 6, 1932. Class 46.

298,996. BUTTER. SCHREIBER BROTHERS, INCORPORATED, Baltimore, Md.
Filed July 18, 1932. Serial No. 328,761. PUBLISHED SEPTEMBER 6, 1932. Class 46.

298,997. TABLE-BOARD GAME PLAYED WITH BALLS OVER AN OBSTRUCTED COURSE. HEALTH DEVELOPING APPARATUS CO., INC., New York, N. Y.
Filed July 11, 1932. Serial No. 328,690. PUBLISHED SEPTEMBER 6, 1932. Class 22.

298,998. CAKES. FELICE NEBBIA, doing business as Nebbia Pastry Co., San Francisco, Calif.
Filed July 8, 1932. Serial No. 328,643. PUBLISHED SEPTEMBER 6, 1932. Class 46.

298,999. CANDY. BUNTE BROTHERS, Chicago, Ill.
Filed July 6, 1932. Serial No. 328,575. PUBLISHED SEPTEMBER 6, 1932. Class 46.

299,000. BREAKFAST FOODS IN FLAKE FORM MADE PRINCIPALLY FROM OATS. PURITY OATS COMPANY, doing business as Oat Snaps Company, Keokuk, Iowa.
Filed July 5, 1932. Serial No. 328,566. PUBLISHED SEPTEMBER 6, 1932. Class 46.

299,001. MIXTURE OF EGG MATERIAL AND OTHER SUBSTANCES SUITABLE FOR USE AS AN INGREDIENT IN MAKING CAKES AND OTHER FOOD PRODUCTS. STANDARD BRANDS INCORPORATED, New York, N. Y.
Filed June 25, 1932. Serial No. 328,315. PUBLISHED AUGUST 30, 1932. Class 46.

299,002. MIXTURE OF EGG MATERIAL AND OTHER SUBSTANCES SUITABLE FOR USE AS AN INGREDIENT IN MAKING CAKES AND OTHER FOOD PRODUCTS. STANDARD BRANDS INCORPORATED, New York, N. Y.
Filed June 25, 1932. Serial No. 328,314. PUBLISHED AUGUST 30, 1932. Class 46.

299,003. MALT SYRUP. BIRK BROS. MALT PRODUCTS, INC., Chicago, Ill.
Filed June 14, 1932. Serial No. 327,971. PUBLISHED AUGUST 30, 1932. Class 46.

299,004. BILLIARD CLOTH IN THE PIECE. H. WAGNER & ADLER CO., New York, N. Y.
Filed June 11, 1932. Serial No. 327,925. PUBLISHED AUGUST 2, 1932. Class 42.

299,005. POTATO CHIPS. FOOD DISPLAY MACHINE CORPORATION, Chicago, Ill.
Filed June 11, 1932. Serial No. 327,907. PUBLISHED AUGUST 30, 1932. Class 46.

299,006. WOOLEN TEXTILE FABRICS IN THE PIECE. THE PRINTZ-BIEDERMAN COMPANY, Cleveland, Ohio.
Filed June 6, 1932. Serial No. 327,771. PUBLISHED AUGUST 9, 1932. Class 42.

299,007. CANDIES OF ALL KINDS. DILLING & COMPANY, Indianapolis, Ind.
Filed May 24, 1932. Serial No. 327,390. PUBLISHED AUGUST 30, 1932. Class 46.

299,008. SHAVING CREAM. LEWIS WALTER GILLETTE, doing business as Gillette Shaving Cream Co., Pittsburgh, Pa.
Filed July 18, 1931. Serial No. 317,082. PUBLISHED AUGUST 23, 1932. Class 4.

299,009. COFFEE SUBSTITUTE COMPOSED OF CEREALS, FRUITS, AND VEGETABLES. WILBUR A. GARDNER, doing business as J. R. Neff Co. and also The Wilbur Gardner Company, Glendale, Calif.
Filed July 18, 1931. Serial No. 317,081. PUBLISHED AUGUST 30, 1932. Class 46.

299,010. RYE BREAD. S. ROSEN, doing business as New York Baking Co., Chicago, Ill.
Filed January 2, 1932. Serial No. 322,654. PUBLISHED APRIL 26, 1932. Class 46.

299,011. CORD, TWINE, AND ROPE MADE OF FIBER. SISAL PRODUCTS CORPORATION, New York, N. Y.
Filed December 9, 1931. Serial No. 321,971. PUBLISHED MARCH 29, 1932. Class 7.

299,012. COOKIES, SMALL CAKES, AND CRACKERS. NUTT BROS., Los Angeles, Calif.
Filed August 7, 1931. Serial No. 317,866. PUBLISHED SEPTEMBER 22, 1932. Class 46.

299,013. COTTON PIECE GOODS AND COTTON CURTAINS. UNITED TEXTILE COMPANY, New York, N. Y.
Filed November 27, 1931. Serial No. 321,552. PUBLISHED MARCH 22, 1932. Class 42.

299,014. FOODS DERIVING FROM PORK—NAMELY, SAUSAGES, HAM, MORTADELAS, LARD, BACON. PRODUCTOS SELECTOS DEL CERDO, S. A., Manlleu, Province of Barcelona, Spain.
Filed February 26, 1931. Serial No. 311,486. PUBLISHED SEPTEMBER 1, 1931. Class 46.

299,015. FRUIT JUICES SOLD AS SOFT DRINKS. CALIFORNIA PACKING CORPORATION, San Francisco, Calif.
Filed October 28, 1930. Serial No. 307,256. PUBLISHED JUNE 28, 1932. Class 45.

299,016. CARD GAMES. CHARLES E. PHILLIPS, Chicago, Ill.
Filed May 13, 1932. Serial No. 327,067. PUBLISHED SEPTEMBER 6, 1932. Class 22.

299,017. NON-INTOXICATING MALT BEVERAGE CONTAINING NOT MORE THAN ONE-HALF OF ONE PER CENT ALCOHOL BY VOLUME. THE BAUCKMANN CO., Cincinnati, Ohio.
Filed May 10, 1932. Serial No. 326,933. PUBLISHED AUGUST 2, 1932. Class 48.

299,018. WHEAT FLOUR AND SELF-RISING FLOUR. KROGER GROCERY & BAKING CO., Louisville, Ky., and Cincinnati, Ohio.
Filed April 25, 1932. Serial No. 326,482. PUBLISHED SEPTEMBER 6, 1932. Class 46.

299,019. PRESERVED FOODS—NAMELY, CAVIAR AND OLIVES IN JARS. MORRIS COHEN, New York, N. Y.
Filed February 25, 1932. Serial No. 324,458. PUBLISHED AUGUST 30, 1932. Class 46.

299,020. CANNED FRUITS, CANNED VEGETABLES, CATSUP, PICKLES AND OLIVES, AND PORK AND BEANS, CANNED FISH, CANNED FRUITS FOR SALAD. KING DOBBS & COMPANY, Chattanooga, Tenn.
Filed November 21, 1931. Serial No. 321,384. PUBLISHED AUGUST 30, 1932. Class 46.

299,021. MALT BEVERAGES CONTAINING LESS THAN ONE-HALF OF ONE PER CENT ALCOHOL BY VOLUME. LEGE-ON-AIRE BEVERAGE COMPANY, Minneapolis, Minn.
Filed November 20, 1931. Serial No. 321,349. PUBLISHED SEPTEMBER 6, 1932. Class 48.

299,022. POULTRY FEEDS. THE OHIO FARM BUREAU SERVICE COMPANY, Columbus, Ohio.
Filed October 5, 1931. Serial No. 319,735. PUBLISHED SEPTEMBER 6, 1932. Class 46.

299,023. POULTRY FEEDS. THE OHIO FARM BUREAU SERVICE COMPANY, Columbus, Ohio.
Filed October 5, 1931. Serial No. 319,734. PUBLISHED SEPTEMBER 6, 1932. Class 46.

299,024. POULTRY FEEDS. THE OHIO FARM BUREAU SERVICE COMPANY, Columbus, Ohio.
Filed October 5, 1931. Serial No. 319,732. PUBLISHED SEPTEMBER 6, 1932. Class 46.

299,025. WOMEN'S AND CHILDREN'S DRESSES, SUITS, PAJAMAS, OVERALLS, AND SMOCKS. JOSEPH S. COHEN AND SONS CO. INC., New York, N. Y.
Filed July 9, 1931. Serial No. 316,767. PUBLISHED SEPTEMBER 15, 1931. Class 39.

[ACT OF MARCH 19, 1920, SEC. 1 (b)]
THESE REGISTRATIONS ARE NOT SUBJECT TO OPPOSITION

299,026. (CLASS 15. OILS AND GREASES.) THE CANFIELD OIL COMPANY, Cleveland, Ohio. Filed Sept. 14, 1932. Serial No. 330,384.

VALVE EASE

For Lubricating Oils and Greases.
Claims use since Aug. 24, 1931.

299,027. (CLASS 35. BELTING, HOSE, MACHINERY PACKING, AND NONMETALLIC TIRES.) VICTOR MANUFACTURING & GASKET COMPANY, Chicago, Ill. Filed Aug. 17, 1932. Serial No. 329,611.

METALBAG

For Gaskets.
Claims use since Mar. 1, 1931.

299,028. (CLASS 2. RECEPTACLES.) MILLETT CORPORATION, New York, N. Y. Filed Mar. 28, 1932. Serial No. 325,612.

NETPAC

For Net Bags Reinforced with Paper for Shipping Vegetables.
Claims use since Sept. 1, 1931.

299,029. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) GOOD DISTRIBUTORS, INC., Philadelphia, Pa. Filed Oct. 26, 1931. Serial No. 320,463.

"PLENTI-HOT"

For Prepared Horse-Radish.
Claims use since Sept. 24, 1931.

299,030. (CLASS 12. CONSTRUCTION MATERIALS.) OREGON-WASHINGTON PLYWOOD CO., Portland, Oreg. Filed Oct. 15, 1931. Serial No. 320,103.

LOCK-TITE

For Plywood.
Claims use since Aug. 20, 1931.

299,031. (CLASS 12. CONSTRUCTION MATERIALS.) THE CROSSLEY CO., doing business as Albany Door Co., Portland, Oreg. Filed Aug. 6, 1931. Serial No. 317,707.

Virginia Crossley

For Doors.
Claims use since June 1, 1931.

299,032. (CLASS 42. KNITTED, NETTED, AND TEXTILE FABRICS.) SIDNEY BLUMENTHAL & CO. INC., New York, N. Y. Filed May 29, 1931. Serial No. 315,185.

Krumplekloth

For Pile Fabrics in the Piece.
Claims use since May 20, 1931.

299,033. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) THE STACY WILLIAMS CO. INC., Birmingham, Ala. Filed July 15, 1930. Serial No. 303,516.

"a meal for every meal"

THE STACY WILLIAMS DISTRIBUTORS CO.

For Corn Meal.
Claims use since June 1, 1924.

299,034. (CLASS 39. CLOTHING.) ROMAN STRIPE MILLS, INC., Easton, Pa. Filed Mar. 4, 1930. Serial No. 296,823.

INSIDE OUT

For Hosiery.
Claims use since Feb. 20, 1930.

299,035. (CLASS 39. CLOTHING.) ROMAN STRIPE MILLS, INC., Easton, Pa. Filed Mar. 4, 1930. Serial No. 296,822.

OUTSIDE IN

For Hosiery.
Claims use since Feb. 20, 1930.

299,036. (CLASS 24. LAUNDRY APPLIANCES AND MACHINES.) THE MEADOWS MANUFACTURING CO., Bloomington, Ill. Filed July 5, 1929. Serial No. 286,645.

SELECT-A-SPEED

For Clothes Washing Machines.
Claims use since Feb. 2, 1929.

TRADE-MARK REGISTRATIONS RENEWED

39,044. VARNISHES. Registered October 14, 1902. THE AMERICAN VARNISH COMPANY, Chicago, Ill., a Corporation of Illinois. Renewed October 14, 1932.

39,046. CERTAIN NAMED LUBRICANTS. Registered October 14, 1902. THE IRONSIDES COMPANY, Columbus, Ohio, a Corporation of Ohio. Renewed October 14, 1932.

39,262. CARPET SWEEPERS. Registered November 11, 1902. BISSELL CARPET SWEEPER CO. Renewed November 11, 1932, to Bissell Carpet Sweeper Company, Grand Rapids, Mich., a Corporation of Michigan, assignee.

39,416. TOY CARPET SWEEPERS. Registered December 9, 1902. BISSELL CARPET SWEEPER CO. Renewed December 9, 1932, to Bissell Carpet Sweeper Company, Grand Rapids, Mich., a Corporation of Michigan, assignee.

39,578. MEDICINE FOR CERTAIN NAMED DISEASES. Registered December 30, 1902. THE SWIFT SPECIFIC Co. Renewed December 30, 1932, to S. S. S. Co., Atlanta, Ga., a Corporation of Georgia, by change of name.

39,743. COLD CREAM. Registered February 3, 1903. RICHARD HUDNUT. Renewed February 3, 1933, to Richard Hudnut, New York, N. Y., a Corporation of New York, assignee.

39,744. PERFUMES. Registered February 3, 1903. RICHARD HUDNUT. Renewed February 3, 1933, to Richard Hudnut, New York, N. Y., a Corporation of New York, assignee.

39,745. PERFUMES. Registered February 3, 1903. RICHARD HUDNUT. Renewed February 3, 1933, to Richard Hudnut, New York, N. Y., a Corporation of New York, assignee.

39,748. PERFUMES. Registered February 3, 1903. RICHARD HUDNUT. Renewed February 3, 1933, to Richard Hudnut, New York, N. Y., a Corporation of New York, assignee.

39,899. EMBROIDERY-THREADS. Registered March 10, 1903. T. BUETTNER & Co. Renewed March 10, 1933, to T. Buettner & Co. Inc., Chicago, Ill., a Corporation of Illinois, assignee.

40,019. DYSPEPSIA TABLETS. Registered March 31, 1903. UNITED DRUG COMPANY, Jersey City, N. J., and Boston, Mass. Renewed March 31, 1933, to United Drug Company, Boston, Mass., a Corporation of Delaware, assignee by mesne assignments.

40,048. TONIC AND BLOOD PURIFIER. Registered April 7, 1903. ADA LORETTA SMITH, New York, N. Y. Renewed April 7, 1933, to Ada Flint Smith, Albany, N. Y.

40,050. MEDICINE FOR CERTAIN NAMED DISEASES. Registered April 7, 1903. THE SWIFT SPECIFIC Co. Renewed April 7, 1933, to S. S. S. Co., Atlanta, Ga., a Corporation of Georgia, by change of name.

86,777. A MALT PREPARATION. Registered June 4, 1912. BIRK BROS. BREWING CO. Renewed June 4, 1932, to Birk Bros. Inc., Chicago, Ill., a Corporation of Illinois, by change of name.

88,617. CERTAIN NAMED KNIVES, WEAPONS, SHEARS, RAZORS, SCISSORS, AND FORKS. Registered October 8, 1912. E. M. DICKINSON LIMITED, Sheffield, England, a Corporation of Great Britain. Renewed October 8, 1932.

88,664. ANTISEPTICS AND GERMICIDES. Registered October 15, 1912. LAURENCE E. CASH, New York, N. Y., and Chicago, Ill. Renewed October 15, 1932, to Abraham Parodney, doing business as New York Drug Concern, New York, N. Y., assignee.

88,668. HAT-BRUSHES AND CLOTHES BRUSHES. Registered October 15, 1912. J. C. DOWD & Co. Renewed October 15, 1932, to J. C. Dowd & Co., Inc., New York, N. Y., a Corporation of New York, assignee.

88,852. SHOES MADE OF LEATHER. Registered October 29, 1912. CRAWFORD & BOWDLE. Renewed October 29, 1932, to Crawford Shoe Co., Lima, Ohio, a Corporation of Ohio, assignee.

88,859. CERTAIN FRAMES NOT INCLUDING PRECIOUS METAL, FOR MIRRORS AND PICTURES. Registered October 29, 1912. J. C. DOWD & Co. Renewed October 29, 1932, to J. C. Dowd & Co., Inc., New York, N. Y., a Corporation of New York, assignee.

88,959. CIGARS. Registered October 29, 1912. SANCHEZ & HAYA Co. Renewed October 29, 1932, to Gradiaz, Annis & Co., Inc., Tampa, Fla., a Corporation of New York, assignee by mesne assignments.

89,179. LABEL-PASTES. Registered November 19, 1912. ERNECKE & SALMSTEIN CO., Chicago, Ill., a Corporation of Illinois. Renewed November 19, 1932.

89,477. FERTILIZERS. Registered December 17, 1912. LISTER AGRICULTURAL CHEMICAL WORKS, Newark, N. J., and New York, N. Y. Renewed December 17, 1932, to The American Agricultural Chemical Company, New York, N. Y., a Corporation of Delaware, successor.

89,694. GASOLENE-ENGINES. Registered December 31, 1912. PALMER BROTHERS. Renewed December 31, 1932, to Palmer Bros., Engines Inc., Cos Cob, Conn., a Corporation of Connecticut, assignee.

89,793. CORDAGE. Registered January 14, 1913. AMERICAN MANUFACTURING COMPANY, Boston, Mass. Renewed January 14, 1933, to American Manufacturing Company, Brooklyn, N. Y., a Corporation of Massachusetts.

89,794. CORDAGE. Registered January 14, 1913. AMERICAN MANUFACTURING COMPANY, Boston, Mass. Renewed January 14, 1933, to American Manufacturing Company, Brooklyn, N. Y., a Corporation of Massachusetts.

89,973. LATH-YARN. Registered January 28, 1913. AMERICAN MANUFACTURING COMPANY, Boston, Mass. Renewed January 28, 1933, to American Manufacturing Company, Brooklyn, N. Y., a Corporation of Massachusetts.

90,033. A LIQUID PREPARATION FOR CLEANING WHITE BUCKSKIN AND CANVAS SHOES. Registered January 28, 1913. A. A. MAILLETT COMPANY. Renewed January 28, 1933, to Samuel M. Abrams, New York, N. Y., assignee by mesne assignments.

90,116. PERFUMES AND SACHET-POWDERS. Registered February 4, 1913. RICHARD HUDNUT, New York, N. Y., a Corporation of New York. Renewed February 4, 1933.

90,234. FODDER-CORN SEEDS. Registered February 11, 1913. NORTHRUP, KING & Co., Minneapolis, Minn., a Corporation of Minnesota. Renewed February 11, 1933.

90,324. HOSIERY. Registered February 18, 1913. GOTHAM SILK MFG. CO. Renewed February 18, 1933, to Gotham Silk Hosiery Company, Inc., New York, N. Y., a Corporation of Delaware, assignee by mesne assignments.

90,329. LUBRICATING OILS AND GREASES. Registered February 18, 1913. GEORGE A. HAWS. Renewed February 18, 1933, to Panhard Oil Corporation, New York, N. Y., a Corporation of Delaware, assignee by mesne assignments.

90,331. WORK SHIRTS, COATS, AND OVERALLS. Registered February 18, 1913. HILKER WIECHERS MANF. Co., Racine, Wis. Renewed February 18, 1933, to John Rissman & Son, Inc., Chicago, Ill., a Corporation of Illinois, assignee.

90,334. WRITING-PAPER AND ENVELOPES. Registered February 18, 1913. GEORGE B. HURD & Co. Renewed February 18, 1933, to George B. Hurd & Co., Inc., New York, N. Y., a Corporation of New York, assignee.

CARNEGIE LIBRARY OF ATLA

90,367. OAT-SEEDS. Registered February 18, 1913. NORTHRUP, KING & Co., Minneapolis, Minn., a Corporation of Minnesota. Renewed February 18, 1933.

90,435. TWINE AND CORD. Registered February 25, 1913. THE A. H. HART Co. Renewed February 25, 1933, to Barbour Flax Spinning Company, Paterson, N. J., a Corporation of New Jersey, successor.

90,440. CANNED SALMON. Registered February 25, 1913. IRVING PACKING COMPANY, Seattle, Wash., and Karheen, Alaska. Renewed February 25, 1933, to R. C. Williams & Company, Inc., New York, N. Y., a Corporation of New York, assignee by mesne assignments.

90,560. SILK PIECE GOODS. Registered March 4, 1913. M. C. MIGEL & Co. Renewed March 4, 1933, to H. R. Mallinson & Co., Inc., New York, N. Y., a Corporation of Delaware, assignee by mesne assignments.

90,728. FODDER-CORN SEEDS. Registered March 18, 1913. NORTHRUP, KING & Co., Minneapolis, Minn., a Corporation of Minnesota. Renewed March 18, 1933.

90,793. COLLARS AND CUFFS. Registered March 25, 1913. CLUETT, PEABODY & Co. Renewed March 25, 1933, to Cluett, Peabody & Co., Inc., Troy, N. Y., a Corporation of New York, assignee.

90,804. WRITING AND PRINTING PAPER. Registered March 25, 1913. MAX GREENEBAUM, New York, N. Y. Renewed March 25, 1933, to American Writing Paper Company, Inc., Holyoke, Mass., a Corporation of Delaware, assignee by mesne assignments.

90,825. RAWHIDE BELTING. Registered March 25, 1913. MISSOURI BELTING COMPANY, St. Louis, Mo., a Corporation of Missouri. Renewed March 25, 1933.

90,861. MEDICINAL SUBSTANCES IN HERMETICALLY-SEALED CONTAINERS. Registered March 25, 1913. HENRY S. WELLCOME, London, England. Renewed March 25, 1933, to Burroughs Wellcome & Co. (U. S. A.) Inc., New York, N. Y., a Corporation of New York, assignee by mesne assignments.

90,952. WRITING AND PRINTING PAPER. Registered April 8, 1913. AMERICAN WRITING PAPER COMPANY. Renewed April 8, 1933, to American Writing Paper Company, Inc., Holyoke, Mass., a Corporation of Delaware, assignee.

90,968. LEATHER BELTING. Registered April 8, 1913. CHICAGO BELTING Co. Renewed April 8, 1933, to Chicago Belting Company, Chicago, Ill., a Corporation of Delaware, assignee.

90,977. WHEAT-FLOUR. Registered April 8, 1913. FISHER FLOURING MILLS COMPANY, Seattle, Wash. Renewed April 8, 1933, to Fisher Flouring Mills Co., Harbor Island, Seattle, Wash., a Corporation of Washington.

91,053. AMMONIUM VALERIANATE, FORMATES COMPOUND, GLYCEROPHOSPHATES, MUCIN, AND A PINE-TAR COMPOUND. Registered April 8, 1913. HENRY S. WELLCOME, London, England. Renewed April 8, 1933, to Burroughs Wellcome & Co. (U. S. A.) Inc., New York, N. Y., a Corporation of New York, assignee by mesne assignments.

LABELS

REGISTERED NOVEMBER 15, 1932

41,404.—*Title:* THE ACME TASTEFULLY SERVED FOOD TASTES BETTER. For Utensils for Paring, Slicing, Mincing, or Shredding Vegetables, Etc. ACME METAL GOODS MFG. CO., Newark, N. J. Published August 9, 1932.

41,405.—*Title:* COUNTRY KIST. For Canned Peas. BLUE EARTH CANNING COMPANY, Blue Earth, Minn. Published June 25, 1932.

41,406.—*Title:* CAMPANA'S ITALIAN BALM. For Face and Hand Lotion. CAMPANA CORPORATION, Batavia, Ill. Published July 8, 1932.

41,407.—*Title:* KING COLE. For Ice Cream. ESKIMO PIE CORPORATION, New York, N. Y. Published May 1, 1932.

41,408.—*Title:* LADY SLIPPER SHOE LOTION. For Shoe Lotion. E. E. FAIRCHILD CORPORATION, Rochester, N. Y. Published September 30, 1931.

41,409.—*Title:* GREY CRAFT MODELS. For Models. GREY IRON CASTING COMPANY, Mount Joy, Pa. Published August 30, 1932.

41,410.—*Title:* JERMÊNE. For Antiseptic and Germicide. HACHMEISTER-LIND COMPANY, McKees Rocks, Pa. Published June 17, 1932.

41,411.—*Title:* OLD ENGLISH BRAND. For Malted Milk. CALVIN R. JOHNSON, New York, N. Y. Published August 1, 1932.

41,412.—*Title:* TASTE-TESTED MUSTARD. For Mustard. THEODORE O. MORATH, St. Louis, Mo. Published October 21, 1932.

41,413.—*Title:* THE MATTRESS OF 1000 SPRINGS. For Spring-Filled Mattresses. NACHMAN-SPRINGFILLED CORPORATION, Chicago, Ill. Published August 13, 1932.

41,414.—*Title:* SHREDDED WHEAT. For Shredded Wheat. NATIONAL BISCUIT COMPANY, New York and Niagara Falls, N. Y., and Oakland, Calif. Published September 15, 1932.

41,415.—*Title:* PET PHYSICIAN BIRD FOOD. For Bird Foods. PET PHYSICIAN, Baltimore, Md. Published August 15, 1932.

41,416.—*Title:* THE VAN HEUSEN COLLARITE SHIRT THE NEW HORTON. For Shirts. PHILLIPS-JONES CORPORATION, New York, N. Y. Published October 6, 1932.

41,417.—*Title:* REEFER'S INJECT-O PREVENTS AND KILLS MOTHS INSIDE UPHOLSTERED FURNITURE. For Liquid Insecticide for the Prevention and Killing of Moths, Etc. REEFER'S NO-MOTH, INC., New York, N. Y. Published April 5, 1932.

41,418.—*Title:* STERLING. For Malt Extract. STERLING PRODUCTS COMPANY, Evansville, Ind. Published October 10, 1932.

41,419.—*Title:* WINK. For Hand Lotion. HELEN WINKLER, Saginaw, Mich. Published September 1, 1932.

PRINTS

REGISTERED NOVEMBER 15, 1932

13,960.—*Title:* RADIO LOG OF FIFTY FAVORITE FEATURES. For Radios. ADONIS B. CLARKE, Chicago, Ill. Published April 11, 1932.

13,961.—*Title:* KEEP THEM GAINING THROUGH THESE YEARS OF STRAIN. For Wheat Breakfast Food. THE CREAM OF WHEAT CORPORATION, Minneapolis, Minn. Published October 15, 1932.

13,962.—*Title:* BISCUITS NOW EASIEST THING A BRIDE CAN MAKE! For Biscuit Flour. GENERAL MILLS, INC., Minneapolis, Minn. Published September 16, 1932.

13,963.—*Title:* A MARVELOUS, NEW FOOD INVENTION! For Biscuit Flour. GENERAL MILLS, INC., Minneapolis, Minn. Published September 9, 1932.

13,964.—*Title:* NO. 1122-E. For Dental Cream. THE KOLYNOS COMPANY, New Haven, Conn. Published August 12, 1932.

13,965.—*Title:* CORN ON THE COB WITHOUT THE COB. For Canned Corn. MINNESOTA VALLEY CANNING COMPANY, Le Sueur, Minn. Published September 1, 1932.

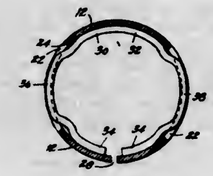
REISSUES

NOVEMBER 15, 1932

18,652. CASTING READILY OXIDIZABLE METALS. WILLIAM W. SMITH, Buffalo, N. Y., assignor to The Dow Chemical Company, Midland, Mich., a Corporation of Michigan. Original No. 1,761,498, dated June 3, 1930, Serial No. 271,113, filed Apr. 18, 1928. Application for reissue filed Apr. 4, 1932. Serial No. 603,195. 6 Claims. (Cl. 22—188.)

1. A mold containing pulverized carbon, pulverized soapstone, a temporary liquid binder and having magnesium oxide on the portions thereof with which the metal contacts.

18,653. PISTON AND SKIRT EXPANDING RING THEREFOR. HAROLD F. PHILLIPS, Belmont, Mass. Original No. 1,806,416, dated May 19, 1931, Serial No. 452,936, filed May 16, 1930. Application for reissue filed Feb. 10, 1932. Serial No. 592,155. 22 Claims. (Cl. 74—108.)



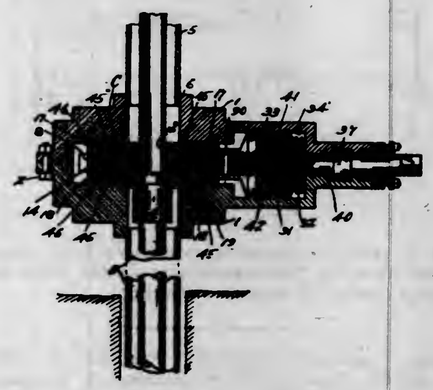
1. A piston having a slotted skirt, wrist pin bosses, and other parts essential to the construction thereof, in combination with an expansion ring which is located concentrically within the piston at the skirt thereof and has opposed sections that bear outwardly upon the inner face of and holds said skirt resiliently expanded and other opposed sections that lie between and project circumferentially beyond said first opposed sections and which engages on the top and bottom sides thereof parts of the piston that constitute abutments by which said ring is retained in position against displacement axially of the piston.

18,654. PENETRATION METHOD OF ROAD CONSTRUCTION. EDWIN C. WALLACE, West Newton, Mass., assignor to Warren Brothers Company, Cambridge, Mass., a Corporation of West Virginia. Original No. 1,740,718, dated Dec. 24, 1929, Serial No. 300,958, filed Aug. 20, 1928. Application for reissue filed Nov. 30, 1931. Serial No. 578,194. 10 Claims. (Cl. 94—18.)

1. The method of surfacing roads which consists in providing, upon a previously prepared foundation, a course of oil-coated stone, and, thereafter prior to its ultimate compression, applying to said course, in situ a coating of bituminous cement.

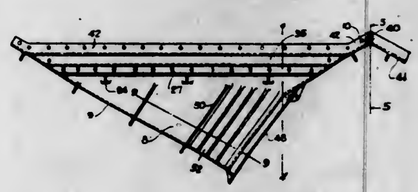
18,655. BLOW-OUT PREVENTER. BERTEL M. JENSEN, Huntington Beach, Calif., assignor to W. D. Shaffer, Brea, Calif. Original No. 1,812,297, dated June 30, 1931, Serial No. 142,915, filed Oct. 20, 1926. Application for reissue filed Feb. 19, 1932. Serial No. 594,079½. 20 Claims. (Cl. 251—62.)

1. A safety gate valve, for preventing blow-outs in high pressure wells, including a shell inclosing oppositely disposed gates provided with packing means covering their adjacent faces; said packing means having lateral leaves on the top and the bottom of the gates and seating on adjacent faces in the shell.



15. A gate valve structure including a shell and opposed gates therein, concentric, coaxial screw members connected to respective gates, and means for effecting concurrent, reverse axial motion of the screw members to shift the gates.

18,656. CAST METAL HOPPER FOR RAILWAY CARS. PAUL W. KIEFER, New York, N. Y., assignor of one-half to Edwin P. Moses, White Plains, N. Y. Original No. 1,841,450, dated Jan. 19, 1932, Serial No. 423,814, filed Jan. 27, 1930. Application for reissue filed Aug. 6, 1932. Serial No. 627,803. 17 Claims. (Cl. 105—249.)

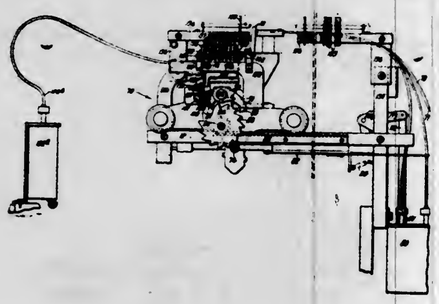


1. In a railway car, the combination of a center sill having a substantially horizontal portion, and a unitary metal hopper comprising an inside wall provided with spaced apart supporting brackets resting upon said horizontal portion.

18,657. COMBINED TYPEWRITING AND CARD PERFORATING MACHINE. JESSE A. B. SMITH, Stamford, Conn., assignor to Underwood Elliott Fisher Company, New York, N. Y., a Corporation of Delaware. Original No. 1,680,818, dated Aug. 14, 1928, Serial No. 103,220, filed Apr. 20, 1926. Reissue No. 17,634, dated Apr. 1, 1930, Serial No. 335,728, filed Jan. 28, 1929. This application for reissue filed Mar. 4, 1931. Serial No. 520,125. 125 Claims. (Cl. 164—113.)

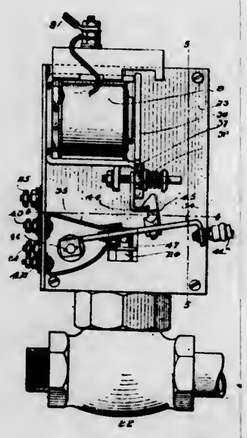
125. A letter-feeding typewriter-carriage, a punching mechanism including a step-by-step feeding carriage, a tabulating mechanism for the typewriter-carriage, another

tabulating mechanism for the punching-machine carriage, a tabulating key controlling both of said tabulating mechanisme, and connections effective in the tabulating opera-



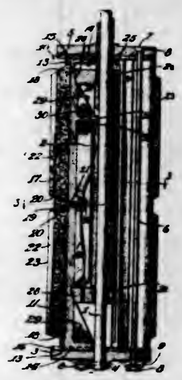
tion to cause the typewriter-carriage to have traveled farther than the punching-machine carriage when both carriages rest at the same denomination.

18,658. SAFETY CONTROL FOR FLUID FUEL VALVES. FRANK C. TAYLOR, Rochester, N. Y., assignor to Automatic Products Company, Milwaukee, Wis., a Corporation of Wisconsin. Original No. 1,559,018, dated Oct. 27, 1925, Serial No. 33,309, filed May 27, 1925. Application for reissue filed Sept. 17, 1932. Serial No. 633,696. 9 Claims. (Cl. 137—139.)



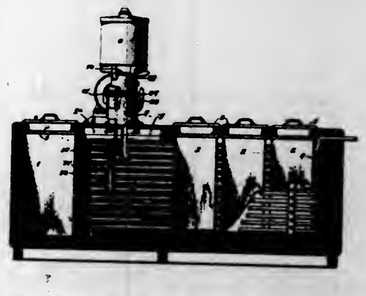
1. The combination with a valve, of means for moving the valve in one direction, detaining means for holding said valve moving means against action, and an electric magnet arranged to hold the detaining means in detaining relation to the valve moving means.

18,659. TOOL. HENRY STRAND and BYRON DE KALB JACKSON, Cleveland, Ohio, assignors, by mesne assignments, to Automotive Maintenance Machinery Company, Chicago, Ill., a Corporation of Illinois. Original No. 1,715,255, dated May 28, 1929, Serial No. 63,485, filed Oct. 19, 1925. Application for reissue filed Dec. 22, 1930. Serial No. 504,189. 27 Claims. (Cl. 51—184.3.)



1. In combination, a grinding tool including a drive shaft, grinding elements carried by the shaft adapted for radial movement with respect to the shaft, a sleeve slidable upon the shaft, means whereby with longitudinal movement of the sleeve in one direction the same will impart outward movement to the grinding elements, and means for imparting intermittent longitudinal movement to the sleeve.

18,660. ICE CREAM FREEZING SYSTEM. CHARLES TAYLOR, Beloit, Wis., assignor, by mesne assignments, to Louis A. M. Phelan, Chicago, Ill. Original No. 1,760,217, dated May 27, 1930, Serial No. 145,426, filed Nov. 1, 1926. Application for reissue filed May 27, 1932. Serial No. 614,272. 17 Claims. (Cl. 62—114.)

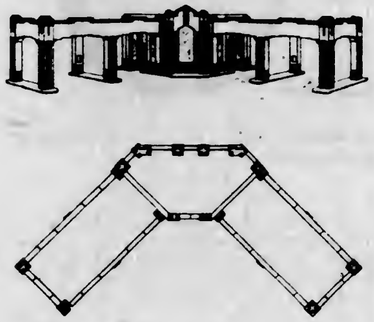


1. An ice cream freezing system comprising a cabinet including a brine container, means for cooling the brine in said container to ice cream hardening temperatures, an ice cream hardening compartment cooled by said brine, a freezer mounted on said cabinet above the level of the brine in said container, means for delivering brine from said contaier to said freezer, means for shutting off the flow of brine to the freezer, and means for draining the brine from said freezer back into said container.

DESIGNS

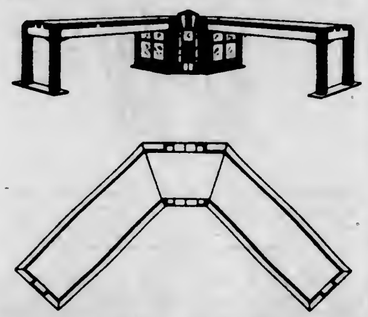
NOVEMBER 15, 1932

88,281. SERVICE STATION. RALPH N. ALDRICH, San Francisco, Calif., assignor to Standard Stations, Inc., San Francisco, Calif., a Corporation of Delaware. Filed Feb. 15, 1932. Serial No. 42,871. Term of patent 14 years.



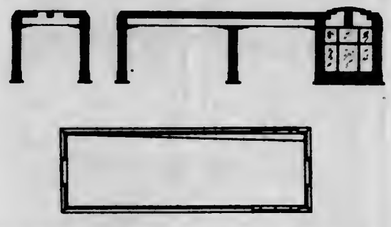
The ornamental design for a service station, as shown and described.

88,282. SERVICE STATION. RALPH N. ALDRICH, San Francisco, Calif., assignor to Standard Stations, Inc., San Francisco, Calif., a Corporation of Delaware. Filed Feb. 15, 1932. Serial No. 42,872. Term of patent 14 years.



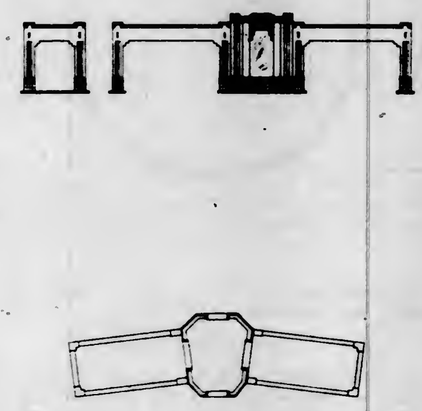
The ornamental design for a service station, as shown and described.

88,283. SERVICE STATION. RALPH N. ALDRICH, San Francisco, Calif., assignor to Standard Stations, Inc., San Francisco, Calif., a Corporation of Delaware. Filed Feb. 15, 1932. Serial No. 42,873. Term of patent 14 years.



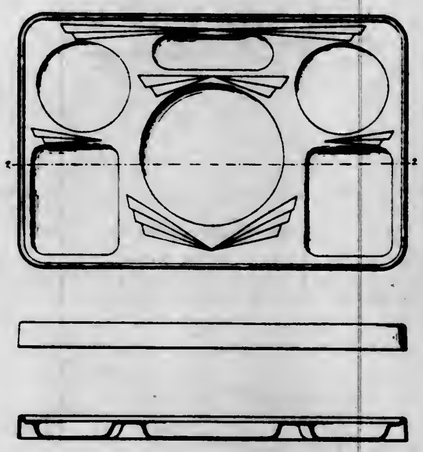
The ornamental design for a service station, as shown and described.

88,284. SERVICE STATION. RALPH N. ALDRICH, San Francisco, Calif., assignor to Standard Stations, Inc., San Francisco, Calif., a Corporation of Delaware. Filed Feb. 15, 1932. Serial No. 42,874. Term of patent 14 years.



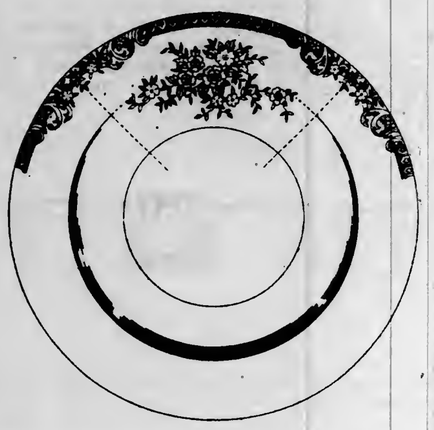
The ornamental design for a service station, as shown and described.

88,285. COMBINATION SERVICE TRAY AND PLATE. JOHN BLENKER, Neenah, Wis. Filed Feb. 15, 1932. Serial No. 42,877. Term of patent 14 years.



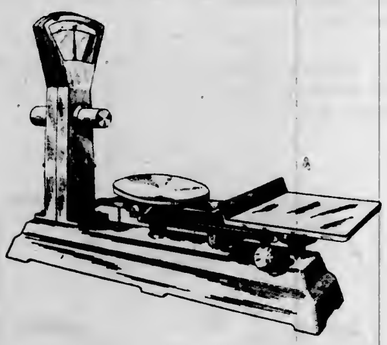
The ornamental design for a combination service tray and plate as shown.

88,286. PLATE OR SIMILAR ARTICLE. YUKIO BUMA, New York, N. Y., assignor to Morimura Bros. Inc., New York, N. Y., a Corporation of Japan. Filed Mar. 31, 1932. Serial No. 43,348. Term of patent 7 years.



The ornamental design for a plate or similar article, as shown and described.

88,287. WEIGHING SCALE. THOMAS B. FLANAGAN, Columbus, Ohio, assignor to The Exact Weight Scale Company, Columbus, Ohio, a Corporation of Ohio. Filed Dec. 1, 1930. Serial No. 37,857. Term of patent 14 years.



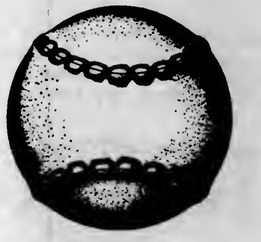
The ornamental design for a weighing scale, as shown.

88,288. COLLAPSIBLE TUBE SUPPORT. STANLEY E. GUNNISON, New York, N. Y. Filed Aug. 11, 1932. Serial No. 44,575, Term of patent 14 years.



The ornamental design for a collapsible tube support as shown.

88,289. BALL. EDWARD H. HAWES, Natick, Mass., assignor to H. Harwood & Sons, Inc., Natick, Mass., a Corporation of Massachusetts. Filed May 27, 1932. Serial No. 43,912. Term of patent 7 years.



The ornamental design for a ball or similar article substantially as shown and described.

88,290. CORNER PLATE FOR A BURIAL CASKET. ROB P. HENDERSON, Springfield, Ohio, assignor to The Springfield Metallic Casket Company, Springfield, Ohio, a Corporation of Ohio. Filed Sept. 17, 1932. Serial No. 44,972. Term of patent 3½ years.



The ornamental design for a corner plate for a burial casket, as shown.

88,291. CORNER PLATE FOR A BURIAL CASKET. ROB P. HENDERSON, Springfield, Ohio, assignor to The Springfield Metallic Casket Company, Springfield, Ohio, a Corporation of Ohio. Filed Sept. 17, 1932. Serial No. 44,973. Term of patent 3½ years.



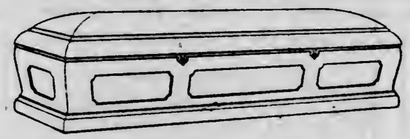
The ornamental design for a corner plate for a burial casket, as shown.

88,292. CORNER PLATE FOR A BURIAL CASKET. ROB P. HENDERSON, Springfield, Ohio, assignor to The Springfield Metallic Casket Company, Springfield, Ohio, a Corporation of Ohio. Filed Sept. 17, 1932. Serial No. 44,974. Term of patent 3½ years.



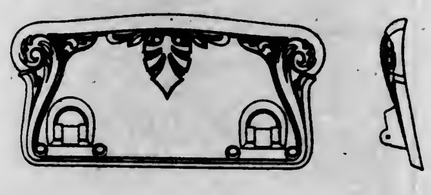
The ornamental design for a corner plate for a burial casket, as shown.

88,293. BURIAL CASKET. ROB P. HENDERSON, Springfield, Ohio, assignor to The Springfield Metallic Casket Company, Springfield, Ohio, a Corporation of Ohio. Filed Sept. 17, 1932. Serial No. 44,977. Term of patent 7 years.



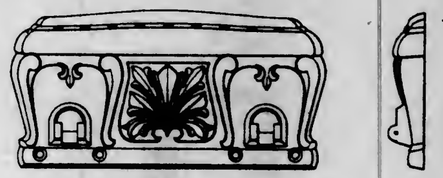
The ornamental design for a burial casket, as shown.

88,294. HANDLE PLATE FOR A BURIAL CASKET. ROB P. HENDERSON, Springfield, Ohio, assignor to The Springfield Metallic Casket Company, Springfield, Ohio, a Corporation of Ohio. Filed Sept. 17, 1932. Serial No. 44,978. Term of patent 3½ years.



The ornamental design for a handle plate for a burial casket, as shown.

88,295. HANDLE PLATE FOR A BURIAL CASKET. ROB P. HENDERSON, Springfield, Ohio, assignor to The Springfield Metallic Casket Company, Springfield, Ohio, a Corporation of Ohio. Filed Sept. 17, 1932. Serial No. 44,979. Term of patent 3½ years.



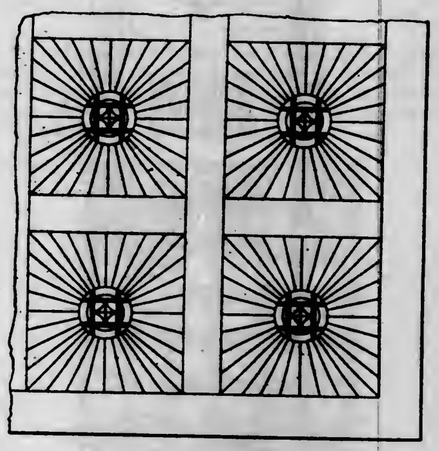
The ornamental design for a handle plate for a burial casket, as shown.

88,296. HANDLE PLATE FOR A BURIAL CASKET. ROB P. HENDERSON, Springfield, Ohio, assignor to The Springfield Metallic Casket Company, Springfield, Ohio, a Corporation of Ohio. Filed Sept. 17, 1932. Serial No. 44,980. Term of patent 3½ years.



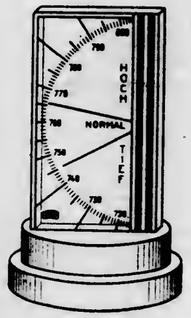
The ornamental design for a handle plate for a burial casket, as shown.

88,297. BED QUILT OR SIMILAR ARTICLE. PEARL B. HOWARD, Biloxi, Miss. Filed Sept. 8, 1932. Serial No. 44,775. Term of patent 3½ years.



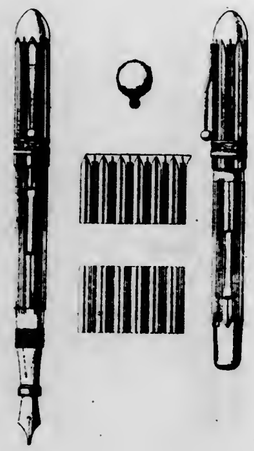
The ornamental design for a bed quilt or similar article, as shown and described.

88,298. TABLE BAROMETER. HEINRICH JACOB, Friedenau, near Berlin, Germany, assignor to the Firm Zeiss Ikon Aktiengesellschaft Goerzwerk, Zehlendorf, near Berlin, Germany. Filed Aug. 31, 1932, Serial No. 44,722, and in Germany May 14, 1932. Term of patent 7 years.



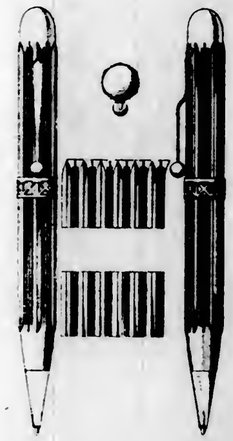
The ornamental design for a table barometer, as shown and described.

88,299. FOUNTAIN PEN. DAVID KAHN, Woodcliff, N. J., assignor to David Kahn, Inc., North Bergen, N. J., a Corporation of New Jersey. Filed Sept. 7, 1932. Serial No. 44,765. Term of patent 14 years.



The ornamental design for a fountain pen substantially as shown.

88,300. PENCIL. DAVID KAHN, Woodcliff, N. J., assignor to David Kahn, Inc., North Bergen, N. J., a Corporation of New Jersey. Filed Sept. 7, 1932. Serial No. 44,766. Term of patent 14 years.



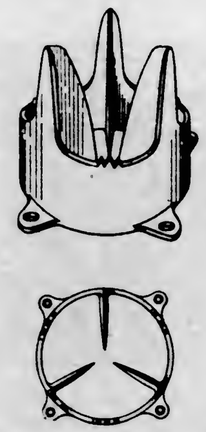
The ornamental design for a pencil substantially as shown.

88,301. RADIATOR CAP. GLEN A. JOHNSON, Connersville, Ind., assignor to Stant Manufacturing Co., Connersville, Ind., a Corporation of Indiana. Filed Sept. 12, 1932. Serial No. 44,810. Term of patent 7 years.



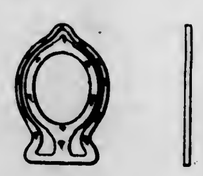
The ornamental design for a radiator cap as shown.

88,302. CHRISTMAS TREE HOLDER. LEONIDAS L. LANDIS and EARL G. SAUER, Lima, Ohio. Filed Oct. 5, 1931. Serial No. 41,809. Term of patent 3½ years.



The ornamental design for a Christmas tree holder, as shown.

88,303. BILL FRAME. JOHN L. LOCKLIN, Lawrence, N. Y. Filed Feb. 8, 1932. Serial No. 42,765. Term of patent 3½ years.



The ornamental design for a bill frame as shown.

88,304. TEXTILE FABRIC OR THE LIKE. JULIA LUKAS, New York, N. Y. Filed Oct. 15, 1932. Serial No. 45,869. Term of patent 3½ years.



The ornamental design for a textile fabric or the like substantially as shown and described.

88,305. PADLOCK. FRIEDRICH WILHELM LÜLING, Volmarstein-on-the-Ruhr, Germany. Filed Aug. 23, 1932, Serial No. 44,671, and in Germany July 13, 1932. Term of patent 14 years.



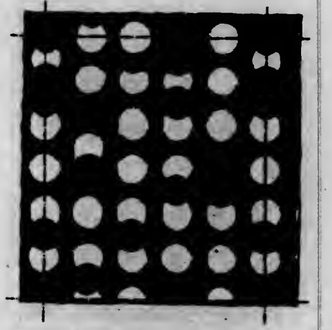
The ornamental design for a padlock as shown.

88,306. TEXTILE FABRIC OR THE LIKE. GEORGES MEDROS, Bronxville, N. Y., assignor to Combler & Co. Inc., New York, N. Y., a Corporation of Delaware. Filed Oct. 4, 1932. Serial No. 45,204. Term of patent 3½ years.



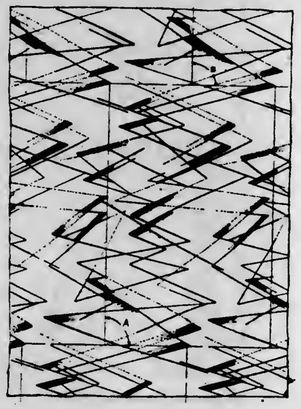
The ornamental design for a textile fabric or the like substantially as shown and described.

88,307. TEXTILE FABRIC OR THE LIKE. GEORGES MEDROS, Bronxville, N. Y., assignor to Combler & Co. Inc., New York, N. Y., a Corporation of Delaware. Filed Oct. 4, 1932. Serial No. 45,206. Term of patent 3½ years.



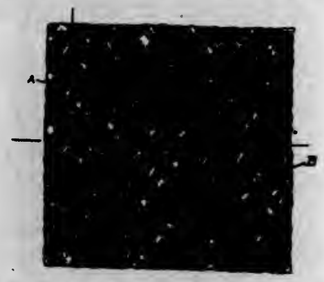
The ornamental design for a textile fabric or the like substantially as shown and described.

88,308. TEXTILE FABRIC. GEORGES MEGROS, Bronxville, N. Y., assignor to The United Piece Dye Works, Lodi, N. J., a Corporation of New Jersey. Filed Oct. 12, 1932. Serial No. 45,324. Term of patent 3½ years.



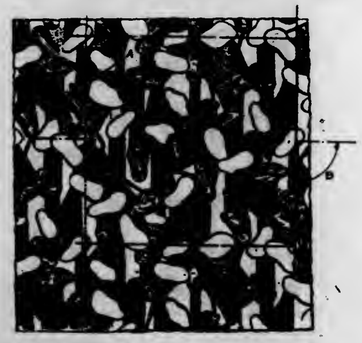
The ornamental design for a textile fabric, substantially as shown and described.

88,309. TEXTILE FABRIC. GEORGES MEGROS, Bronxville, N. Y., assignor to The United Piece Dye Works, Lodi, N. J., a Corporation of New Jersey. Filed Oct. 12, 1932. Serial No. 45,325. Term of patent 3½ years.



The ornamental design for a textile fabric, substantially as shown and described.

88,310. TEXTILE FABRIC OR THE LIKE. ELIZABETH MERRY, New York, N. Y., assignor to Combier & Co. Inc., New York, N. Y., a Corporation of Delaware. Filed Oct. 11, 1932. Serial No. 45,304. Term of patent 3½ years.



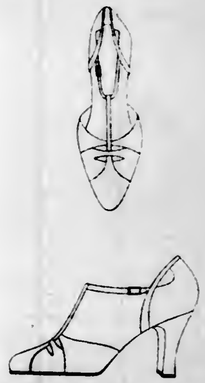
The ornamental design for a textile fabric or the like substantially as shown and described.

88,311. TEXTILE FABRIC OR THE LIKE. ELIZABETH MERRY, New York, N. Y., assignor to Combier & Co. Inc., New York, N. Y., a Corporation of Delaware. Filed Oct. 12, 1932. Serial No. 45,318. Term of patent 3½ years.



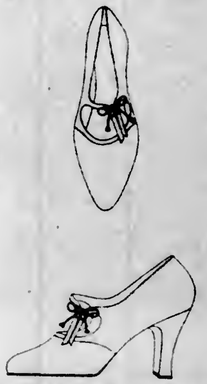
The ornamental design for a textile fabric or the like substantially as shown and described.

88,312. SHOE. CHARLES MILLER, New York, N. Y. Filed Aug. 25, 1932. Serial No. 44,693. Term of patent 3½ years.



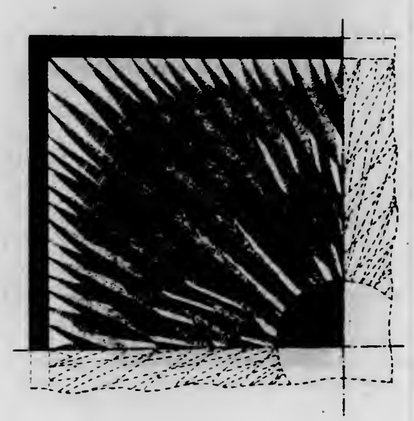
The ornamental design for a shoe, as shown.

88,313. SHOE. CHARLES MILLER, New York, N. Y. Filed July 22, 1932. Serial No. 44,416. Term of patent 3½ years.



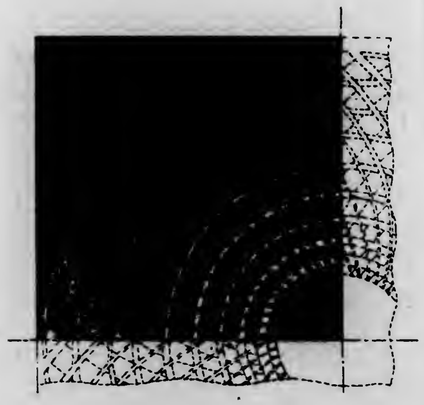
The ornamental design for a shoe, as shown.

88,314. TEXTILE FABRIC OR SIMILAR ARTICLE. HERMAN S. MURRAY, Woodmere, N. Y., assignor to William Willheim Co., Inc., New York, N. Y. Filed Oct. 14, 1932. Serial No. 45,328. Term of patent 3½ years.



The ornamental design for a textile fabric or similar article as shown and described.

88,315. TEXTILE FABRIC OR SIMILAR ARTICLE. HERMAN S. MURRAY, Woodmere, N. Y., assignor to William Willheim Co., Inc., New York, N. Y. Filed Oct. 14, 1932. Serial No. 45,329. Term of patent 3½ years.



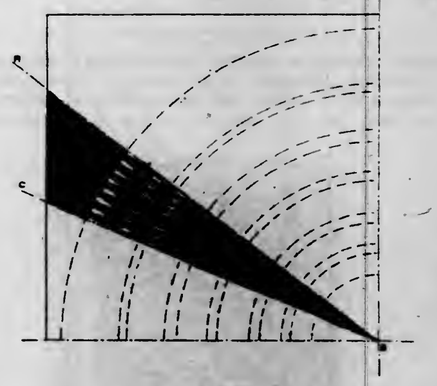
The ornamental design for a textile fabric or similar article as shown and described.

88,316. TEXTILE FABRIC OR SIMILAR ARTICLE. HERMAN S. MURRAY, Woodmere, N. Y., assignor to William Willheim Co., Inc., New York, N. Y. Filed Oct. 14, 1932. Serial No. 45,330. Term of patent 3½ years.



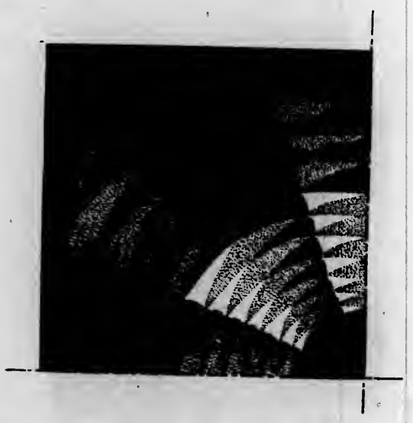
The ornamental design for a textile fabric or similar article as shown and described.

88,317. TEXTILE FABRIC OR SIMILAR ARTICLE. HERMAN S. MURRAY, Woodmere, N. Y., assignor to William Willheim Co., Inc., New York, N. Y. Filed Oct. 14, 1932. Serial No. 45,331. Term of patent 3½ years.



The ornamental design for a textile fabric or similar article as shown and described.

88,318. TEXTILE FABRIC OR SIMILAR ARTICLE. HERMAN S. MURRAY, Woodmere, N. Y., assignor to William Willheim Co., Inc., New York, N. Y. Filed Oct. 14, 1932. Serial No. 45,333. Term of patent 3½ years.



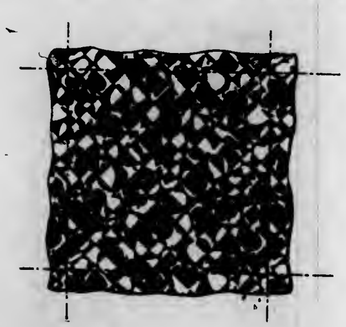
The ornamental design for a textile fabric or similar article as shown and described.

88,319. TEXTILE FABRIC OR SIMILAR ARTICLE. PAUL REIMAN, New York, N. Y., assignor to William Willheim Co., Inc., New York, N. Y. Filed Oct. 14, 1932. Serial No. 45,334. Term of patent 3½ years.



The ornamental design for a textile fabric or similar article as shown and described.

88,320. TEXTILE FABRIC OR SIMILAR ARTICLE. FREDERICK ROSENBERG, Kew Gardens, N. Y., assignor to William Willheim Co., Inc., New York, N. Y. Filed Oct. 14, 1932. Serial No. 45,335. Term of patent 3½ years.



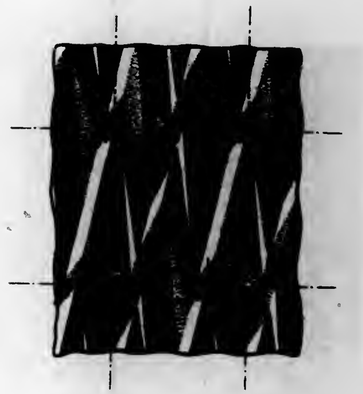
The ornamental design for a textile fabric or similar article as shown and described.

88,321. TEXTILE FABRIC OR SIMILAR ARTICLE. FREDERICK ROSENBERG, Kew Gardens, N. Y., assignor to William Willheim Co., Inc.. New York, N. Y. Filed Oct. 14, 1932. Serial No. 45,336. Term of patent 3½ years.



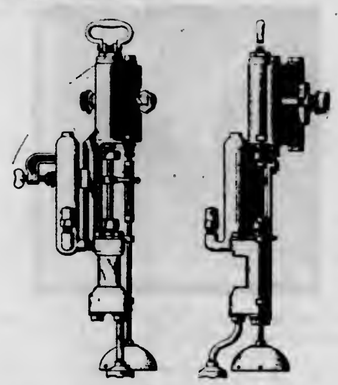
The ornamental design for a textile fabric or similar article as shown and described.

88,322. TEXTILE FABRIC OR SIMILAR ARTICLE. FREDERICK ROSENBERG, Kew Gardens, N. Y., assignor to William Willheim Co., Inc.. New York, N. Y. Filed Oct. 14, 1932. Serial No. 45,337. Term of patent 3½ years.



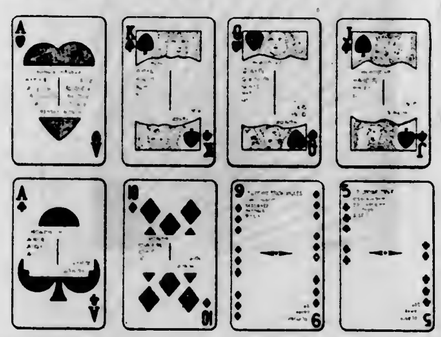
The ornamental design for a textile fabric or similar article as shown and described.

88,323. SPRAY PUMP. AUGUSTUS M. SANBORN, Porterville, Calif. Filed May 5, 1931. Serial No. 39,726. Term of patent 14 years.



The ornamental design for a spray pump, as shown.

88,324. DECK OF PLAYING CARDS. GEORGE W. SHAFFER, Tulsa, Okla. Filed Aug. 8, 1932. Serial No. 44,541. Term of patent 14 years.



The ornamental design for a deck of playing cards as shown and described.

88,325. BOTTLE. FERNAND B. TOURTOIS, New York, N. Y., assignor to Coty, Inc., New York, N. Y., a Corporation of Delaware. Filed Sept. 1, 1932. Serial No. 44,737. Term of patent 14 years.



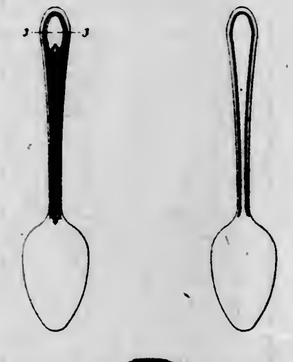
The ornamental design for a bottle as shown.

88,326. CARPET. IGNATIUS J. VETTER, New York, N. Y., assignor to Bigelow Sanford Carpet Co., Inc., a Corporation of Massachusetts. Filed Sept. 30, 1932. Serial No. 45,177. Term of patent 7 years.



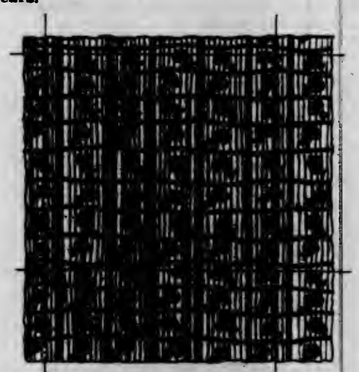
The ornamental design for a carpet substantially as shown and described.

88,327. SPOON OR SIMILAR ARTICLE. WILLIAM S. WARREN, Meriden, Conn., assignor to R. Wallace & Sons Manufacturing Company, Wallingford, Conn., a Corporation. Filed Sept. 27, 1932. Serial No. 45,081. Term of patent 14 years.



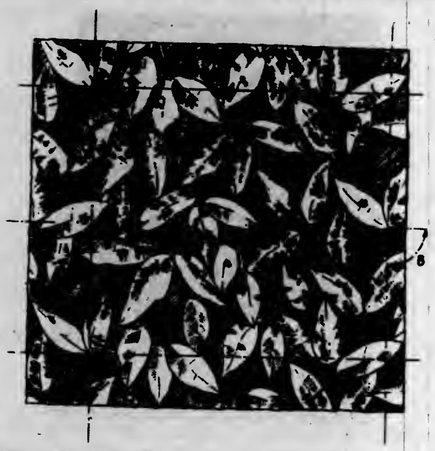
The ornamental design for a spoon or similar article as shown.

88,328. TEXTILE FABRIC OR THE LIKE. EVELYN WAX, Briarwood, Long Island, N. Y., assignor to Combier & Co. Inc., New York, N. Y., a Corporation of Delaware. Filed Oct. 11, 1932. Serial No. 45,299. Term of patent 3½ years.



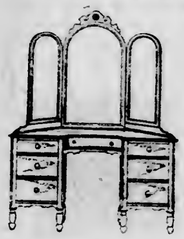
The ornamental design for a textile fabric or the like substantially as shown and described.

88,329. TEXTILE FABRIC OR THE LIKE. IRENE A. WEITZ, Brooklyn, N. Y., assignor to Combier & Co. Inc., New York, N. Y., a Corporation of Delaware. Filed Oct. 12, 1932. Serial No. 45,317. Term of patent 3½ years.



The ornamental design for a textile fabric or the like substantially as shown and described.

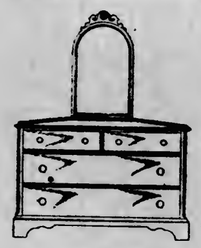
88,330. CORNER VANITY DRESSER. MELVILLE M. WHEELER, Nashville, Tenn. Filed July 14, 1932. Serial No. 44,329. Term of patent 14 years.





The ornamental design of a corner vanity dresser, as shown.

88,331. CORNER DRESSER. MELVILLE M. WHEELER, Nashville, Tenn. Filed July 14, 1932. Serial No. 44,334. Term of patent 14 years.



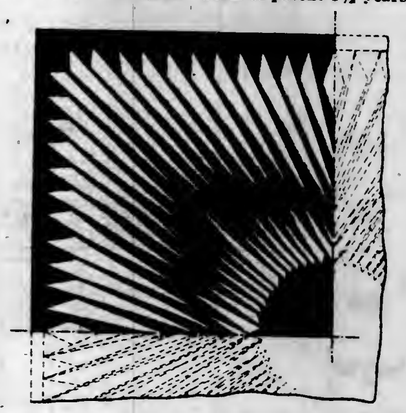
The ornamental design for a corner dresser, as shown.

88,332. TEXTILE FABRIC OR SIMILAR ARTICLE. WILLIAM WILLHEIM, New York, N. Y. Filed Oct. 14, 1932. Serial No. 45,341. Term of patent 3½ years.



The ornamental design for a textile fabric or similar article as shown and described.

88,333. TEXTILE FABRIC OR SIMILAR ARTICLE. WILLIAM WILLHEIM, New York, N. Y. Filed Oct. 14, 1932. Serial No. 45,342. Term of patent 3½ years.



The ornamental design for a textile fabric or similar article as shown and described.

88,334. TEXTILE FABRIC OR SIMILAR ARTICLE. WILLIAM WILLHEIM, New York, N. Y. Filed Oct. 14, 1932. Serial No. 45,343. Term of patent 3½ years.



The ornamental design for a textile fabric or similar article as shown and described.

88,335. BADGE. DARRELL C. CRAIN, Washington, D. C. Filed July 23, 1932. Serial No. 44,432. Term of patent 7 years.



The ornamental design for a badge, as shown

88,336. RANGE. HENRY LANGE, Quincy, Ill., assignor to Quincy Stove Manufacturing Co., Quincy, Ill. Filed Sept. 22, 1932. Serial No. 45,015. Term of patent 14 years.



The ornamental design for a range as shown and described.

88,337. HANDLE FOR AN ELECTRIC PLUG. AUGUSTINE H. MASSEY, Stratford, Conn., assignor to Columbia Phonograph Company, Inc., Bridgeport, Conn., a Corporation of New York. Filed Oct. 1, 1932. Serial No. 45,186. Term of patent 3½ years.





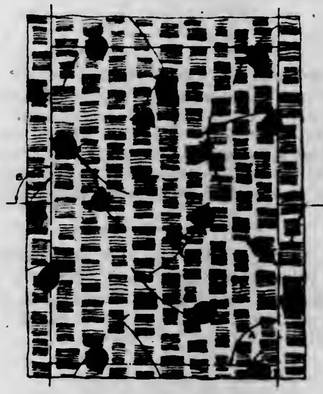
The ornamental design for a handle for an electric plug, substantially as shown.

88,338. TEXTILE FABRIC OR THE LIKE. IRENE A. WEITZ, Brooklyn, N. Y., assignor to Combier & Co. Inc., New York, N. Y., a Corporation of Delaware. Filed Oct. 11, 1932. Serial No. 45,294. Term of patent 3½ years.



The ornamental design for a textile fabric or the like substantially as shown and described.

88,339. TEXTILE FABRIC OR THE LIKE. IRENE A. WEITZ, Brooklyn, N. Y., assignor to Combier & Co. Inc., New York, N. Y., a Corporation of Delaware. Filed Oct. 11, 1932. Serial No. 45,296. Term of patent 3½ years.



The ornamental design for a textile fabric or the like substantially as shown and described.

PATENTS

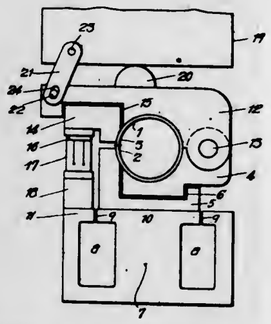
GRANTED NOVEMBER 15, 1932

1,887,487. HOISTING DEVICE. HOBART S. GEER, Corona, N. Y., assignor to American Safety Device Co., New York, N. Y., a Corporation of New York. Filed Nov. 9, 1931. Serial No 573,807. 5 Claims. (Cl. 254—146.)



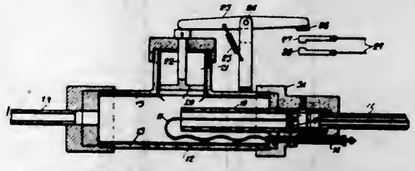
1. A hoisting device comprising a rotatably mounted drum, a pivoted operating lever for said drum, a member pivotally mounted on said lever co-operating with the drum to rotate the latter in the movement of said lever in one direction, and a fixed stop engaged by said member upon movement of the lever to an extreme position to hold said member out of operative engagement with the drum.

1,887,488. WELDING APPARATUS AND METHOD. LE ROY H. HOFFER, Brooklyn, N. Y., assignor to Metropolitan Engineering Company, Brooklyn, N. Y., a Corporation of New York. Filed June 18, 1929. Serial No 371,755. 8 Claims. (Cl. 219—4.)



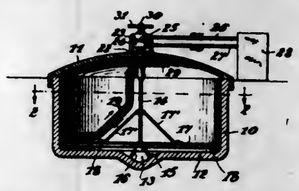
1. Apparatus of the type described which comprises a secondary for generating a low potential current, a fixed electrode of narrow width mounted on and connected to one terminal of said secondary, a fixed form insulated from said secondary and forming with said fixed electrode a fixed form section, and a movable form section complementary to said fixed section and having a narrow electrode spaced from said fixed electrode when said movable electrode is brought to closed position, said narrow electrode being insulated from said movable form section and means making an electrical connection between said narrow electrode of said movable form section and a terminal of said secondary upon closing.

1,887,489. ELECTRIC FUSE SWITCH. LE ROY H. HOFFER, Brooklyn, N. Y., assignor to Metropolitan Device Corporation, Brooklyn, N. Y. Filed Mar. 20, 1930. Serial No. 437,321. 4 Claims. (Cl. 200—127.)



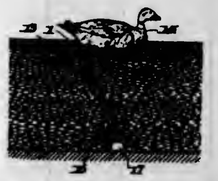
1. Apparatus of the type described which comprises an enclosure, a fuse within said enclosure, a member movable by pressure generated within said enclosure by the blowing of said fuse, an electric circuit switch moved to closed position by said moving member, and means to return said member to original position after said generation of pressure.

1,887,490. METHOD OF AND APPARATUS FOR THE TREATMENT OF SLUDGE, SEWAGE, AND THE LIKE. KARL IMHOFF, Essen, Germany. Filed Mar. 14, 1932. Serial No. 598,619. 6 Claims. (Cl. 210—2.)



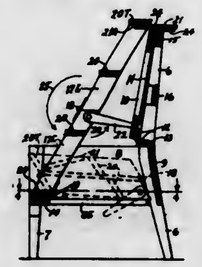
1. In a sewage or digesting tank, the improvement comprising a centrally disposed rotary shaft in the tank, a circumferential stirrer on the shaft and submerged in the tank for agitating the bottom of the sewage mass therein, heating tubes extending from the shaft onto the stirrer and carried thereon, and conduit means at the upper part of the shaft for conducting hot fluids through said tubes.

1,887,491. DECOY HOBBLE. DAVID L. JOHNSON, Ocean City, Md. Filed Feb. 21, 1929. Serial No. 341,672. 3 Claims. (Cl 119—109.)



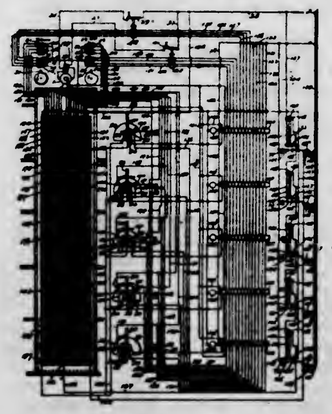
1. A hobble for setting out live decoys for wild-fowl comprising a flexible, non-abrasive strap, a snap-clasp with male and female members on the strap, one member of the clasp at one extremity of the strap, the opposite member at a point lengthwise of the strap to form a loop of fixed circumference adapted snugly to encircle the leg of the decoy when the clasp is closed, a loop at the other end of the strap, a ring in said loop adapted to receive the hook of a swiveled snap-hook attached to a tethering line, the strap and ring having a total length to permit free movement of the decoy while attached to the leg and detached from the snap-hook and anchor line.

1,887,492. COMBINATION CHAIR AND STEPLADDER. GUSTAF LUNDSTROM, St. Paul, Minn. Filed May 11, 1931. Serial No. 536,356. 2 Claims. (Cl. 155—42.)



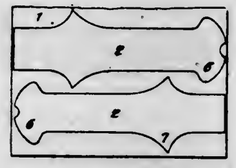
1. In a chair having an upright back, a seat frame extending forwardly therefrom and a seat hinged to said frame to swing upwardly and rearwardly against the chair back; said seat frame comprising a quadrangular inclosure normally closed by said hinged seat; a step-ladder comprising sections hinged together in end to end relation to fold one upon the other, one end of one section of the ladder hingedly secured in the lower front part of the seat frame, said ladder adapted to be raised on the latter hinges and its sections alined in an inclined plane toward the back of the chair, and means at the free upper end of the ladder to removably engage the upper end of the chair back.

1,887,493. AUTOMATIC ELEVATOR AND GATE CONTROL SYSTEM. WILLIAM C. MILES, New York, N. Y., assignor to Elevator Supplies Company, Inc., Hoboken, N. J., a Corporation of New Jersey. Filed Mar. 28, 1923. Serial No. 628,253. 47 Claims. (Cl. 187—29.)



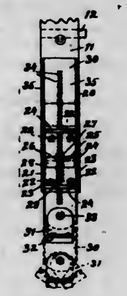
1. In an elevator control apparatus, a car, operating means for the car, controlling devices for the operating means, said controlling devices being adapted for simultaneous operation and having means adapted to thereafter cooperate therewith to stop the car at predetermined selected floors in succession, releasable devices for the various floors controlled by the controlling devices, and released when the car reaches the respected selected floors, said releasable devices when released preventing the movement of the car, and manually controlled means for restoring the releasable devices to reestablish the movement of the car to the next selected floor.

1,887,494. MAKING AXLE HOUSINGS. THOMAS E. MURRAY, Jr., Brooklyn, N. Y., assignor to Metropolitan Engineering Company, a Corporation of New York. Filed Feb. 28, 1927. Serial No. 170,177. 1 Claim. (Cl. 29—153.1.)



In the making of axle housings and the like, from blanks having an intermediate portion with lateral projections therefrom and end portions also with lateral projections, the method which includes cutting out from a sheet two half lengths of such a blank, positioned so that said half lengths lie alongside of each other in the sheet with their several projections overlapping laterally, bending such blanks into segments of the length of the housing and welding two such segments along their longitudinal edges, and forming the laterally projecting portions of the ends into integral transverse flanges.

1,887,495. ADJUSTABLE LADDER. WILLIAM J. CARTER, Jr., Akron, Ohio. Filed Nov. 23, 1931. Serial No. 576,759. 5 Claims. (Cl. 228—63.)

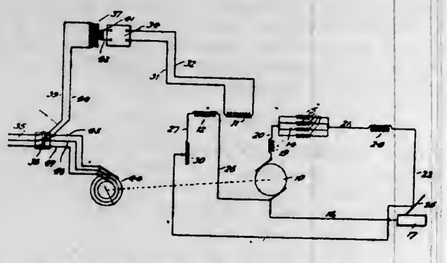


2. A foot attachment for ladders comprising a bracket plate formed for attachment to a ladder rail and provided with a pawl having a blade, a foot, and a stem on said foot, slidable on the bracket plate and consisting of a three-sided sheet-metal channel embracing the pawl blade and having a row of ratchet teeth struck out of its intermediate web portion, and a plain flanking pawl-rest portion, for engagement with the pawl.

1,887,496. WELDING APPARATUS. ALEXANDER CHURCHWARD, New York, N. Y., assignor to Wilson Welder & Metals Company, Inc., Hoboken, N. J., a Corporation of New York. Filed Apr. 17, 1930. Serial No. 444,920. 3 Claims. (Cl. 219—8.)

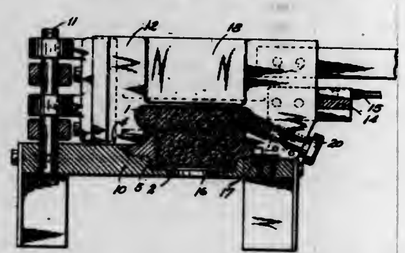
1. In a welding apparatus, a direct current welding generator having separately excited field windings and bucking series field windings; and means for supplying a uni-

directional exciting current to said separately excited field windings comprising a source of current, and a rectifying device connected to said source and to said sepa-



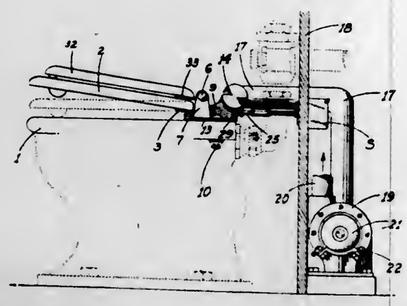
rately excited field windings, said rectifying device checking flow of current opposite to the normal flow of current in said separately excited field windings.

1,887,497. MOLD. JOHN W. COLLINS, Detroit, Mich., assignor to Aluminum Company of America, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Oct. 18, 1929. Serial No. 400,497. 3 Claims. (Cl. 22—126.)



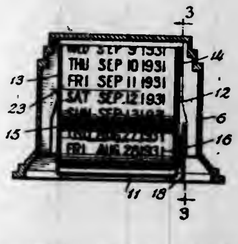
1. A mold comprising base, a recessed supporting member positioned on the base, and a green sand core associated therewith, the core having a print extending into the recess to maintain the fixed relative position of the base, the core, print and members.

1,887,498. TOILET VENTILATOR. WILLIAM J. CONNORS, San Jose, Calif., assignor to Sani-Toil Trust Association, Washoe County, Nev., a Common-Law Trust. Filed Jan. 2, 1932. Serial No. 584,394. 5 Claims. (Cl. 4—213.)



2. A toilet ventilating apparatus comprising a hollow body adapted to be mounted on the bowl of the toilet at the back, said body forming a suction passage to communicate with the bowl, means to create a tendency to vacuum in the passage including an electric motor, the bowl having a seat resting at its back end on the body, hinge means connecting the seat to the body, and including a vertical flange below the hinge axis extending transversely of and behind the seat, horizontal rods mounted in connection with the body in transversely spaced relation and engaging the flange, springs associated with the rods to push the same forwardly and thus raise the seat, a switch for the motor, and an extension on the rear end of one of the rods engaging the switch to close the same when the seat is depressed against the resistance of the springs, and the flange and rods are moved rearwardly.

1,887,499. CALENDAR. GEORGE H. CORRELL, Brooklyn, and DAVID R. SCHNAARS, New Hyde Park, N. Y. Filed Sept. 24, 1931. Serial No. 564,782. 2 Claims. (Cl. 40—117.)

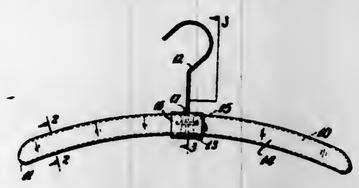


1. A calendar comprising a casing having a sight opening, a mounting insertable into said casing and including a frame having a base and side members, a spring tongue on one side member frictionally engaging said casing to retain said mounting therein, strip feed and take-up rollers supported between said side members, a second spring tongue formed on the other of said side members and having means engaging said rollers to rotatably support the same, and means carried by said mounting for rotating said rollers.

1,887,500. WELDING-ROD, ETC. DONALD K. CRAMPTON, Marion, and HENRY L. BUSCHOFF, Yalesville, Conn., assignors to The Chase Companies, Incorporated, Waterbury, Conn., a Corporation. Filed Apr. 26, 1932. Serial No. 607,666. 7 Claims. (Cl. 219—8.)

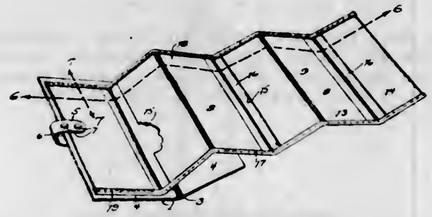
1. A welding-rod or the like composed of an alloy including copper, zinc, and a fume-suppressing element in the form of beryllium; the sum of the copper and zinc contents being at least 80%, and the beryllium being present in an amount between .002% and .2% inclusive.

1,887,501. DRESS HANGER HENRY A. ENRICH, New York, N. Y. Filed Feb. 14, 1931. Serial No. 515,749. 7 Claims. (Cl. 223—64.)



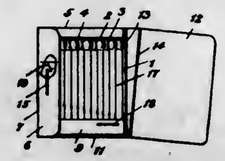
1. A dress hanger, comprising a hanger bar, a hook on the center of said bar for supporting said bar, tubular covering members with closed ends engaged on the ends of said bar with their inner ends in the vicinity of the center of said bar, a metallic strip, tongues on said strip piercing into the covering members for holding the inner ends of said coverings and said metallic strip engaging around the center of said bar to reinforce it and to cover the ends of said tubular members.

1,887,502. RECEPTACLE. BARNETT EPSTEIN, New York, N. Y. Filed Sept. 4, 1930. Serial No. 479,599. 2 Claims. (Cl. 150—28.)



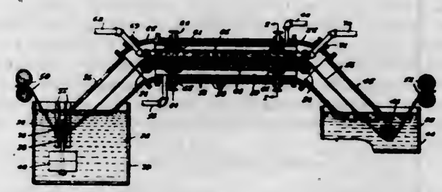
1. A receptacle comprising a folded cover blank and a folder therein comprising a plurality of pocket units each consisting of a blank sheet of paper creased along predetermined lines to provide a plurality of sections in parallel relation to form pockets, and binder strips securing the edge portions of the sheets together and further attached to said cover.

1,887,503. MATCH PACKAGE. BENJAMIN H. FREEDMAN, New York, N. Y., assignor to Hudson Holding Corporation, New York, N. Y., a Corporation of Delaware. Filed Dec. 23, 1930. Serial No. 504,245. 4 Claims. (Cl. 206—29.)



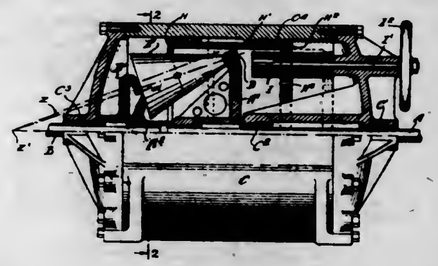
1. A match book provided with a covering having a body portion, a pair of securing flaps, a match strip having parts extending beneath said securing flaps and means extending through said laps and through the parts of the match strip that extend beneath the flaps to hold said match strip in position, a cover member having its ends tucked beneath one of the securing flaps, and an upstanding wall adjacent one edge of the covering and adjacent the heads of the matches in the strip.

1,887,504. MANUFACTURE OF FINE EDGED BLADES. THOMAS H. FROST, Cambridge, Mass. Filed Jan. 18, 1931. Serial No. 508,505. 9 Claims. (Cl. 148—16.)



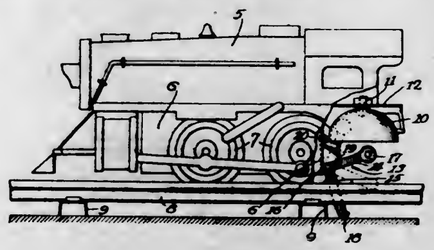
1. The method of making blade strip for use in the manufacture of fine edged blades, which consists in subjecting a strip of ferrous nitridable alloy to the action of ammonia, heating a marginal portion of the strip, and simultaneously maintaining an intermediate portion thereof at a temperature below that at which nitriding will take place.

1,887,505. VARIABLE SPEED TRANSMISSION. GEORGE H. GIBSON, Upper Montclair, N. J. Filed June 17. 1931. Serial No. 545,009. 12 Claims. (Cl. 74—84.)



1. A variable speed transmission comprising driving and driven elements rotatable about a common axis, a shaft journalled in one of said elements and inclined to the said axis and in rolling engagement with the other of said elements, a conical member having its side remote from said axis substantially parallel with the latter, a connection between said member and shaft compelling said member to rotate with said shaft but permitting said member to move relatively to said shaft toward and away from said axis and a track encircling the path of movement of said member and along which said member rolls, said track being adjustable to vary the ratio between the angular speed of said shaft about said axis and its angular speed about its own axis.

1,887,506. TOY VEHICLE. WILLIAM F. HAFNER, Chicago, Ill., assignor to Hafner Manufacturing Company, Chicago, Ill., a Corporation of Illinois. Filed June 12, 1931. Serial No. 543,855. 6 Claims. (Cl. 46—47.)

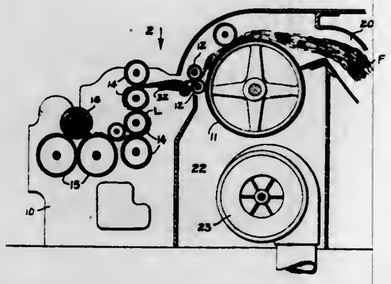


1. In a toy vehicle, the combination of a bell mounted on the vehicle, a clapper for rining said bell, said clapper comprising a bell crank having means at the end of one arm for striking said bell, said bell crank being pivoted to the vehicle on an axis extending transversely of the direction of travel of the vehicle and having its other arm extending downwardly so as to engage obstructions in its path of travel, whereby the clapper is actuated as an incident to the travel of the vehicle.

1,887,507. SPLIT LAP PREVENTER. WADE H. HAMES, Gadsden, Ala., assignor to Whitin Machine Works, Whitinsville, Mass., a Corporation of Massachusetts. Filed July 30, 1931. Serial No. 554,066. 4 Claims. (Cl. 19—155.)

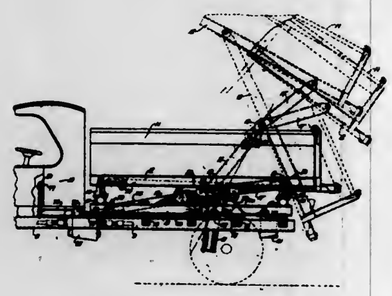
1. In a cotton picker and lapper, in combination, stripper rolls, calender rolls, and devices mounted between said

stripper rolls and said calender rolls effective to prevent splitting of the lap, said devices comprising a plurality of laterally spaced parallel fingers, a freely pivoted support for all of said fingers, and means acting on and through said support and thereby effective to move the free ends of said fingers yieldingly and collectively toward



the under surface of the upper calender roll, thereby pressing the lap against said upper roll along laterally spaced lines and producing grooves or corrugations in the under surface of the lap, the pressure of the fingers against the lap being substantially uniform and independent of variations in lap thickness.

1,887,508. TELESCOPIC HOIST. JULIUS P. HEIL, Milwaukee, and GEORGE L. LANDRY, West Allis, Wis., assignors to The Heil Co., Milwaukee, Wis., a Corporation of Wisconsin. Filed Nov. 29, 1929. Serial No. 410,456. 11 Claims. (Cl. 298—11.)



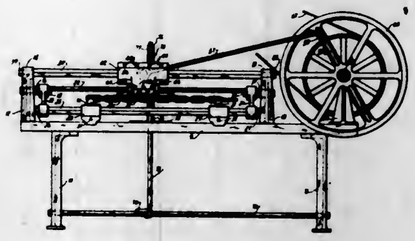
1. An elevating and tilting work instrumentality, comprising a lower frame, an upper frame tiltably connected to and bodily movable vertically from the lower frame, said frame members having inner upper and lower roller ways, an upper diagonally extending lever arm fixedly pivotally connected at its lower end to the rear end of the lower frame and at its upper forward end having rollers which enter the upper roller ways, a lower diagonally extending lever arm fixedly pivotally connected at its upper rear end to the rear end of the upper frame member and at its forward end having rollers which enter the lower roller ways, a transverse shaft carried by the upper lever arm, said lower lever arm being formed in two parts which overlap each other and are journaled on the transverse shaft, adjustable means for limiting the pivotal movement of the lever arm parts with relation to each other in one direction, a hoist carried by the lower frame member and having a movable part which is pivotally connected directly to the transverse shaft, and means controlling the operation of the hoist.

1,887,509. APPLIANCE FOR AIRPLANE LAUNCHING TRACKS. ERNST HEINKEL, Warnemunde, Germany. Filed Apr. 19, 1930, Serial No. 445,773, and in Germany Apr. 18, 1929. Renewed May 23, 1932. 4 Claims. (Cl. 244—2.)



1. In a substructure for flying machines of the water plane type provided with floats, a base frame comprising transverse struts and a longitudinal supporting strut and adapted to support the plane upon a launching carriage, a T-shaped shoe provided at the front end of said longitudinal supporting strut and slidably engaging in a grooved guide member of the launching carriage.

1,887,510. METHOD AND MEANS FOR REFLUTING TEXTILE ROLLS. CURTIS E. HONEYCUTT and JOHN L. ALEXANDER, Gastonia, N. C. Filed Mar. 28, 1931. Serial No. 526,090. 6 Claims. (Cl. 80—1.)



2. In a machine for refluting textile rolls having a suitable support and a pivoted work holding device mounted on said support and a slide fixed on said support, a cutting tool mounted for reciprocation on said slide, means for imparting reciprocation to said cutting tool, said cutting tool comprising a plurality of rotatable cutting and displacing members, and means for holding a roll in the path of said reciprocating cutting tool.

5. That process of forming new flutes on worn textile rolls which comprises providing a plurality of rolling cutting members disposed in alinement one behind the other, causing said rolling and cutting members to move back and forth in the old grooves in the textile roll a plurality of times while the rolling and cutting members are under pressure to displace the metal in the roll to form new flutes projecting radially outward farther than the old flutes.

1,887,511. HAND BAG. SAMUEL MAKSIK, Brooklyn, N. Y., assignor to Michel, Maksik & Feldman, Inc., New York, N. Y., a Corporation of New York. Filed June 29, 1931. Serial No. 547,496. 2 Claims. (Cl. 150—29.)

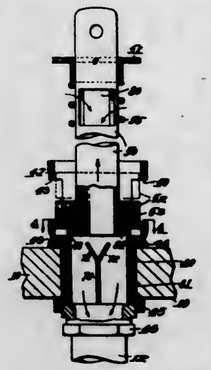
1. A hand bag comprising a frame having upstanding flanges forming a channel opening outwardly of the frame,

a body portion of soft pliable material having an outer pocket on at least one side, and a flap secured to the upper edge of said body portion and hanging down to



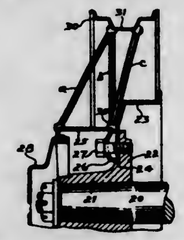
cover the pocket, the connected upper edges of the flap and body portion being folded over the outer flange of the frame and secured in said channel.

1,887,512. FLUSH TANK. PHILIP E. MEANEY, Worcester, Mass., assignor to David E. Sherin, Worcester, Mass. Filed May 25, 1931. Serial No. 539,759. 5 Claims. (Cl. 4—52.)



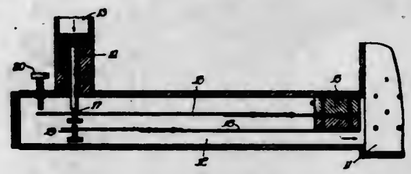
2. In a flush tank, an outlet valve having a discharge passage, and a partition member mounted in said passage and extending diametrically across said passage and lengthwise in the line of flow, said partition member having offset lugs along its upper edge, and said partition member and offset lugs substantially eliminating noise when the tank is emptied through said valve.

1,887,513. WIRE WHEEL. EMIL A. NELSON, Detroit, Mich., assignor to Motor Wheel Corporation, a Corporation of Michigan. Filed Mar. 15, 1930. Serial No. 436,228. 4 Claims. (Cl. 301—6.)



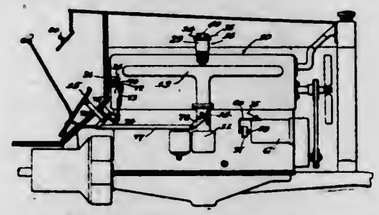
1. In combination, a rotatable hub, a brake drum secured thereto for equal rotation therewith, a wire wheel secured to said hub for equal rotation therewith and comprising a hub shell, a rim and spokes interconnecting the two, the inner ends of at least a part of said spokes being welded to said hub shell adjacent the inner end thereof and being provided with enlarged heads at their points of connection with said hub shell, said heads being faced off on the inner end of said shell in a plane normal to the axis of said shell, and means for clamping said faced off sides against said brake drum.

1,887,514. EMERGENCY CONTROL FOR OIL BURNERS. HOWARD I. PLATT, Lansing, Mich., assignor to Motor Wheel Corporation, Lansing, Mich., a Corporation of Michigan. Filed Dec. 31, 1930. Serial No. 505,774. 5 Claims. (Cl. 158—42.4.)



4. An emergency control for fluid fuel burners comprising, in combination with a burner, a fuel supply therefor, and a fuel inlet valve, of temperature actuated means to actuate said valve in a closing direction including a thermostat subject to the heat of the burner and acting under normal conditions to supply more or less fuel as the heat decreases or increases within a predetermined range, and an emergency thermostat subject to the heat of the burner and so disposed with respect to said valve as to remain inoperative under normal or high temperatures and to close the valve at a temperature below a predetermined minimum.

1,887,515. ELECTRICALLY OPERATED AIR ADMISSION VALVE FOR INTERNAL COMBUSTION ENGINES. WILLIAM ROSS PULKINGHORN, Los Angeles, Calif., assignor of one-half to Joseph S. Davis, Los Angeles, Calif. Filed Oct. 14, 1931. Serial No. 568,703. 5 Claims. (Cl. 123—97.)

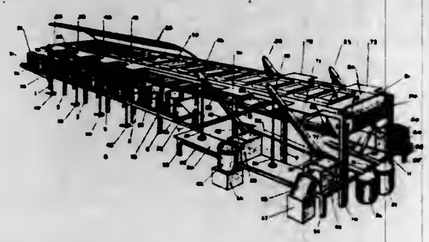


1. The combination with an internal combustion engine having an intake manifold, a carburetor provided with an accelerator throttle valve, and an accelerator pedal connected therewith, of a valve arranged to admit air into the engine, electrically operated means for actuating said valve, a switch interconnected with the accelerator pedal arranged to close the circuit to said electrically operated valve actuating means when said accelerator pedal is in raised position, and a governor adapted to complete the circuit through said valve actuating means upon closing of the throttle valve when the engine is rotating faster than idling speed, whereupon said valve will be opened and admit air into the engine.

1,887,516. MEANS FOR SEPARATING AND PACKING EGGS. RICHARD W. REGENSBURGER, Chicago, Ill., assignor, by mesne assignments, to Industrial Patents Corporation, Chicago, Ill., a Corporation of Delaware. Filed Feb. 24, 1931. Serial No. 517,780. 1 Claim. (Cl. 146—2.)

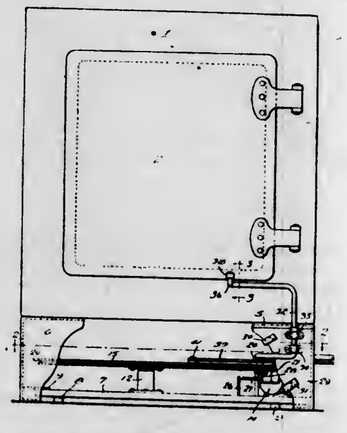
A device for separating yolks from the whites of eggs, comprising a framework, an endless belt conveyor disposed

in the horizontal plane, both levels being accessible, the upper level being adapted to convey loaded egg cup trays and the lower level being adapted to return empty egg cup trays, said framework being provided at one end with a plurality of egg breaking stations, each of said egg breaking stations comprising a tray rest adjacent the upper level of the conveyor and means associated therewith, for opening the shells of eggs, an open front hood above the upper level of the conveyor at the breaking sta-



tion end of the device, an inclined roller conveyor adjacent the breakers' stations for delivery of whole eggs to operators at said breakers' stations, said inclined roller conveyor being secured to said framework and disposed sufficiently below the lower level of said conveyor to permit free access to said lower conveyor, a plurality of separating stations at the other end of said device, each of said separating stations comprising a tray rest adjacent the upper level of said conveyor and separating means at each of said separating stations.

1,887,517. DOOR OSCILLATING DEVICE. EDGAR W. REUTENER, Cleveland, Ohio, assignor to The Wm. A. Howe Company, Cleveland, Ohio, a Corporation of Ohio. Filed Feb. 5, 1932. Serial No. 591,102. 6 Claims. (Cl. 268—65.)

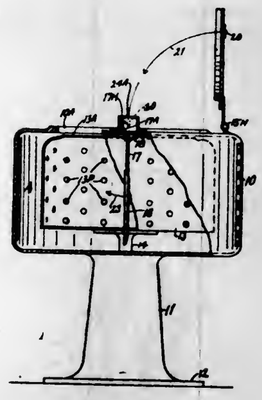


1. A door oscillating member for use with a refrigerator comprising a base member and means for securing the same between the legs of a refrigerator, a disk rotatably mounted on said base member, a motor operatively connected with said disk, a supporting member adapted to be secured to one leg of the refrigerator, an angular link pivotally secured to said supporting member and having one end adapted for connection with the refrigerator door and means operatively connecting the other end of said link with said disk whereby the rotary movement of said disk will impart an oscillatory movement to the refrigerator door.

1,887,518. BITUMEN ROAD COMPOSITION AND METHOD OF FORMING THE SAME. SAMUEL S. SADTLER, Springfield Township, Montgomery County, Pa., assignor to Amiesite Asphalt Company of America, Philadelphia, Pa., a Corporation of New Jersey. Filed Dec. 16, 1926. Serial No. 155,848. 9 Claims. (Cl. 106—31.)

1. The method of forming bitumen road compositions, which comprises taking a stone aggregate, coating the aggregate with a bituminous liquefier containing an oil soluble fatty acid capable of combining with hydrated lime to form a soap which is water insoluble, and thereafter adding a normally solid bitumen binder in a heated liquid state and lime.

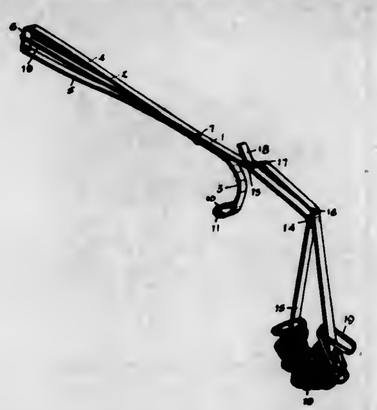
1,887,519. SAFETY DEVICE FOR LAUNDRY EXTRACTORS. SAMUEL A. SANGSLAND, St. Paul, Minn. Filed Oct. 23, 1931. Serial No. 570,676. 1 Claim. (Cl. 210—63.)



A safety device for extractors having a rotary cylinder mounted concentric within a stationary upright casing, said cylinder and casing provided with registering upper openings, and a lid hinged to the casing for closing its aperture; a depending vane-arm journaled to the casing near its opening and normally suspended vertically between adjacent walls of the casing and cylinder, a fixed lock arm on said lid comprising a bar protruding radially from the side of the lid, and positioned to lie in a horizontal plane over said journaled part of the vane-arm, when closed, said vane-arm comprising further an integral upper arm extending at an incline above its journal and thence bent to form an open hook directed toward and over said lock-arm of the lid but out of the path of the latter when the cylinder is stationary, said vane arm adapted to be swung in a vertical plane by air currents between the cylinder and said casing and simultaneously move said upper arm over the said lock-arm of the lid, and a guard housing mounted on said casing over the upper vane-arm and provided with an aperture in its top for said lock-arm of the lid to pass freely through to its lowered position.

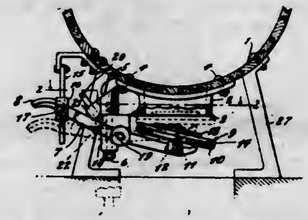
1,887,520. TOY GUN. FRANK S. SAXTON, Blissfield, Mich. Filed Oct. 9, 1931. Serial No. 567,774. 2 Claims. (Cl. 124—14.)

1. In a toy gun for shooting elastic bands, the toy gun formed of a bent elastic strip and having a barrel part, a trigger part fixedly connected to the barrel part, and a handle part, the handle part having a lip elastically pressed against a portion of the top of the barrel part, the barrel part elastically removable from said lip when the trigger part is drawn towards the handle part, the barrel part having an end portion for engaging one end of the band and the lip adapted to elastically engage and frictionally hold the other end of the band against the



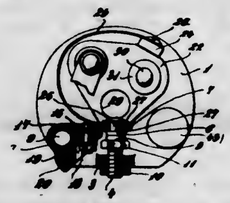
said portion of the top of the barrel part until the barrel part is drawn from the said lip by pressure of the trigger.

1,887,521. VALVE MECHANISM. LE ROY CHOATE SCHENCK, Moline, Ill., assignor to Troy Laundry Machinery Company, Inc., New York, N. Y., a Corporation of Delaware. Filed Oct. 30, 1928. Serial No. 315,963. 5 Claims. (Cl. 137—21.)



1. In a dump valve mechanism, a valve seat, a valve disc, and means for supporting the disc in operating position, said last mentioned means comprising a member mounted movably so that the disc can be removed from cooperating position with respect to the seat, and means for locking said member in the operating position.

1,887,522. MAGNETO INTERRUPTER. WOLFGANG E. SCHWARZMAN, Longmeadow Mass., assignor to American Bosch Magneto Corporation, Springfield, Mass., a Corporation of New York. Filed Feb. 25, 1930. Serial No. 431,106. 2 Claims. (Cl. 200—30.)



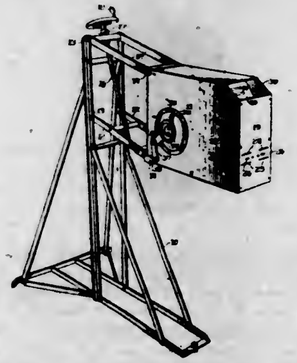
1. A circuit interrupter comprising a supporting member of electrically conductive material having a perforated projection, a fixed contact held by said projection in circuit with said member, a contact piece secured to said member, insulation separating said piece and said member to keep said piece out of electrical connection therewith, said piece having a projection and said member a journal, a block of insulation pivoted on said journal, a metal plate bearing a cooperating contact affixed to said block, and a spring attached to said plate and the projection on the contact piece and normally actuating the plate to keep said contacts in engagement with each other.

1,887,523. SIGN ILLUMINATION. EMIL S. SCHENKEL, New York, N. Y. Filed Aug. 19, 1932. Serial No. 629,432. 9 Claims. (Cl. 40—132.)



1. In an illuminated sign, in combination with a light source, a pair of sign elements carrying graphic representations, said sign elements comprising spaced translucent surfaces, one surface defining the characters by an opaque printed stencil being positioned adjacent the light source, the other carrying printed characters in substantial registry therewith, leaving the remainder of the surfaces substantially unmodified for simultaneously viewing the characters of both surfaces.

1,887,524. HEADLIGHT-TESTER. ALBERT R. SQUYER, Springfield, Ill., assignor to Weaver Manufacturing Company, Springfield, Ill., a Corporation of Illinois. Filed Feb. 14, 1930. Serial No. 428,258. 16 Claims. (Cl. 88—14.)

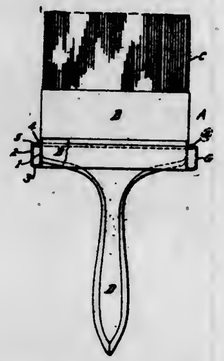


1. In a headlight-tester, the combination of a box having spaced slits through the wall thereof adjacent to the lamp to be tested, a mirror in said box to reflect the bands of light entering the box through said slits, a screen, having index marks spaced apart the same distance as said slits, located in, and visible from the outside of, said box to receive the reflected light-bands from said mirror, and means to rockingly adjust said mirror to vary the position of the light-bands on said screen.

1,887,525. GUARD FOR PAINTBRUSHES. JOSEPH SPIEGELHALTER, Jr., St. Louis, Mo. Filed June 26, 1931. Serial No. 547,040. 1 Claim. (Cl. 15—248.)

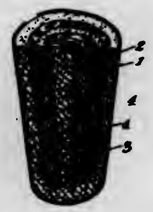
In combination with a paint brush having bristles and a handle portion, a guard mounted thereon so as to form an obstruction to the flow of paint down the handle portion, said guard having parallel sides and rounded ends, and being channel shaped in cross section with an inturned lip

formed around the outer wall of the guard to prevent the accidental spilling of the paint from the guard when the brush is laid flat, said lip having limited cutaway portions in its rounded ends to form restricted openings so as to permit paint being conveniently poured from said guard, said guard having the inner wall of the channel



of greater width than the outer wall and set into the handle with the inner face of the inner wall flush with the surface of the handle whereby the said inner wall extends beyond the outer wall toward the bristles of the brush and whereby to provide an unobstructed surface for the travel of paint into the guard.

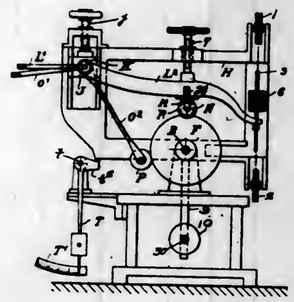
1,887,526. MEDICAL TAMPON. JOSEPH M. SPIELBERG and ABRAHAM GOODSTEIN, Brooklyn, N. Y. Filed Nov. 2, 1931. Serial No. 572,604. 7 Claims. (Cl. 128—270.)



1. A tampon, comprising an absorbent matrix, a first thimble composed of material disintegrable under body conditions at least in part surrounding the said matrix and holding the same in compression, a second thimble composed of material disintegrable under body conditions facing in the same direction as the first said thimble, telescopically overlaying the said first thimble and manually detachable therefrom, the space between said first and second thimbles forming a capsule for the retention of medicament, the head of the said first thimble forming the floor of the said capsule.

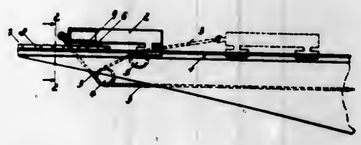
1,887,527. TESTING MACHINE. MOSES SPINDEL, Innsbruck, Austria. Filed Dec. 21, 1926, Serial No. 156,116, and in Austria June 21, 1924. 2 Claims. (Cl. 73—51.)

2. A testing machine of the character described comprising a rotatable shaft, a test element mounted on said shaft for rotation therewith, a frame pivoted for rocking movement on an axis coincident with the axis of said shaft, a lever having a pivotal connection at one end with said frame and extending across said shaft, means weighting the other end of said lever to urge the same towards said shaft, a bracket mounted on said lever for rotatable adjustment about an axis at substantially right angles to the axis of rotation of the test element, means for mounting a rotatable test piece on said bracket with its own axis of rotation in a plane parallel to the axis of rotation of the test element, a pendulum dynamometer resisting rotation of the frame under the influenec of the tendency of the test piece to rotate with the test



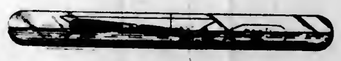
element about the axis of the latter, means for indicating the rotation of the lever about its pivot resulting from wear on the test piece and on the test element, and separate means for indicating the wear on the test element produced by engagement of the test piece therewith.

1,887,528. AIRPLANE LAUNCHING TRACK. WILHELM STEIN, Karlsruhe, Germany, assignor to Ernst Heinkel, Warnemunde, Germany. Filed July 19, 1929, Serial No. 379,388, and in Germany July 23, 1928. Renewed May 23, 1932. 10 Claims. (Cl. 244—2.)



1. In combination with a launching track for flying machines, and a starting carriage mounted on said track for movement therealong, means operable to impart movement to said starting carriage in a direction along said track to effect launching of a flying machine mounted on said carriage, and means whereby the same means first mentioned is effective to retard the launching movement of said carriage as the latter approaches the end of its launching movement.

1,887,529. LIGATURE PACKAGE. EDWARD THEMAK, New York, N. Y., assignor to Geck Laboratories, Inc., New York, N. Y., a Corporation of New York. Filed Aug. 5, 1930. Serial No. 473,167. 6 Claims. (Cl. 206—63.3.)



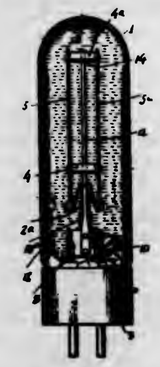
1. A holder for a surgical ligature comprising a long, narrow, thin strip having spaced ligature receiving notches and a data tab projecting beyond one of said notches to provide a data receiving area projecting beyond a ligature coiled in said notches, one notch lying between and in alignment with the other notch and the data tab, substantially as described.

1,887,530. BOOK OR BINDER COVER AND METHOD OF MAKING THE SAME. CLARENCE D. TRUSSELL, Poughkeepsie, N. Y., assignor to Trussell Manufacturing Company, Poughkeepsie, N. Y., a Corporation of New York. Filed Aug. 2, 1930. Serial No. 472,515. 10 Claims. (Cl. 281—37.)



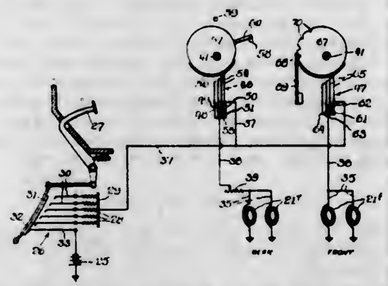
1. A cover for a book or binder, said cover having its marginal side and end portions gradually curved inwardly from its body portion to its edge, such curved portions being extended around the corners.

1,887,531. PHOTOVOLTAIC CELL. SAMUEL WEIN, New York, N. Y., assignor to Radiovision Corporation, New York, N. Y., a Corporation of New York. Filed July 31, 1928. Serial No. 296,510. 7 Claims. (Cl. 136—89.)



1. A photo voltaic cell comprising two metal electrodes, equally spaced, a wire grid interposed between the two metal electrodes, said wire grid and two metal electrodes in contact with an electrolyte in a sealed transparent glass envelope.

1,887,532. VEHICLE BRAKING SYSTEM. JOHN WHYTE, Beloit, Wis., assignor to Warner Electric Brake Corportion, South Beloit, Ill., a Corporation of Illinois. Filed Jan. 15, 1931. Serial No. 508,844. 15 Claims. (Cl. 188—158.)



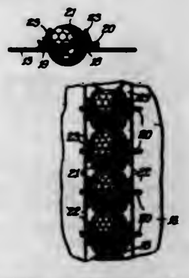
1. An electric braking system for an automotive vehicle combining a plurality of friction brakes one for each front and rear wheel of the vehicle including an electromagnet, a primary rheostat controllable by the vehicle driver to apply energising current to all of said electromagnets and to regulate the intensity of such current, an auxiliary brake control member movable by the vehicle driver into a plurality of predetermined positions, two resistance elements respectively interposed in circuits common to the front and rear brake magnets and acting when said member is in one position to limit the current intensity in the respective magnets, the relative resistances of said elements being proportioned to establish a predetermined ratio of current distribution between the front and rear wheel brakes, and a second pair of resistance elements adapted, upon movement of said member to another of said positions, to be interposed respectively in said front and rear brake circuits and in parallel with the respective first mentioned elements, the resistances of said last mentioned elements being so proportioned as to decrease the proportion of total current distributed to said front brake magnets.

1,887,533. APPARATUS FOR DEVELOPING HEAT BY ELECTRICITY. ARTHUR SHALER WILLIAMS, Ithaca, N. Y. Filed Aug. 8, 1930. Serial No. 473,889. 9 Claims. (Cl. 219—40.)



1. In apparatus for developing heat by electricity, a steam heater having a heating chamber adapted to hold water, electric means therein for heating the water and developing steam, and catalytic means including inner and outer cylinders for forming a cylindrical passage for the steam for reuniting the hydrogen and oxygen which may be separated in the heater by electrolysis, said inner catalytic cylinder being connected in series with the electrical circuit to the water.

1,887,534. LUMINOUS SIGN. EDWARD S. WOLD, Chicago, Ill. Filed Nov. 24, 1930. Serial No. 497,643. 10 Claims. (Cl. 40—133.)

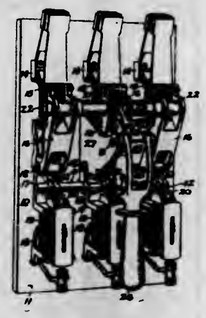


1. A sign comprising a plate provided with an opening conforming to the letter or character to be displayed, light transmitting beads positioned in said opening, the

thickness of each bead conforming substantially to the width of said opening, and individual cotter pins passing through each bead and bridged transversely across said opening for supporting said beads in position.

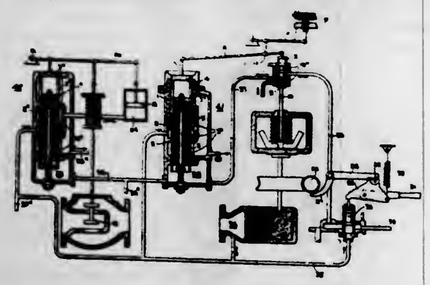
3. A sign comprising a plate provided with an opening conforming to the letter or character to be displayed, light transmitting beads positioned in said opening, the thickness of each bead conforming substantially to the width of said opening, means for supporting each bead extending therethrough and transversely across said opening, and individual reflectors located on the rear side of and in close proximity to said beads to reflect outwardly through the beads those light rays which are incident on the beads externally of the sign.

1,887,535. ELECTRIC SWITCH. WINFIELD A. ATWOOD, Yeadon, Pa., assignor to General Electric Company, a Corporation of New York. Filed Mar. 28, 1930. Serial No 439,837. 6 Claims. (Cl. 200—107.)



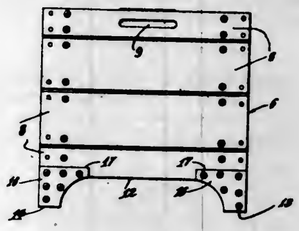
1. A multiple-unit circuit breaker construction including a plurality of single-pole units and a single toggle operating mechanism, each pole unit including a movable contact biased to circuit opening position, fault responsive means for collapsing the toggle of said mechanism on the occurrence of an abnormal condition in the circuit through a pole unit, and means for interconnecting the contacts and said mechanism including a rod on which said contacts are mounted the toggle of said mechanism being directly connected to said rod.

1,887,536. FLUID PRESSURE GOVERNING MECHANISM. KARL BAUMANN, Barnfield, Urmston, and JOHN ERNEST JOLLEY, Stretford, Manchester, England, assignors to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed July 18, 1930, Serial No. 468,916, and in Great Britain Aug. 26, 1929. 2 Claims. (Cl. 137—148.)



1. A governing mechanism for the admission valve or valves of a prime mover comprising the combination of means providing an enclosed space for a regulating fluid pressure, a pilot valve for controlling said pressure, speed-responsive means for actuating the pilot valve, a fluid pressure relay for resetting the pilot valve when the regulating fluid pressure acquires the value called for by the speed-responsive means comprising an operating piston connected to the pilot valve, a pilot valve for the operating piston and means responsive to the regulating fluid pressure for controlling the last-mentioned pilot valve, and means responsive to said regulating fluid pressure for controlling the admission valve or valves.

1,887,537. HAY PRESS. FRANK C. BERRY, Downey, Calif. Filed Feb. 21, 1931. Serial No. 517,401. 1 Claim. (Cl. 100—24.)



In a division-block for a baler press, a body portion having substantially the size and configuration of the compressing chamber to which it is to be applied and provided upon its lower edge with an inwardly projecting arched opening extending through the major portion of the length of said edge to permit fine particles of the baled material to pass through the block.

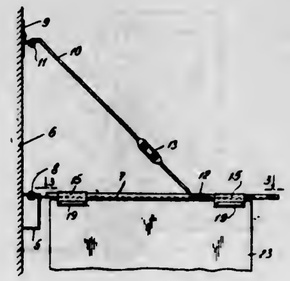
1,887,538. COUPLING. WILLIAM L. BOND, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Apr. 21, 1928. Serial No. 271,829. 2 Claims. (Cl. 64—96.)



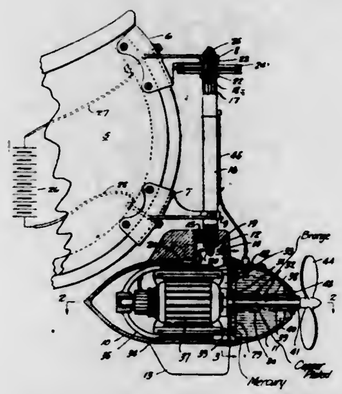
1. The combination with a pair of rotatable shafts, of a coupling means therefor including a pair of washers flexible in a direction along the rotational axes of said shafts, spacing means attached to said washers at a plurality of points spaced from one another, and means including a pair of flexible strips for mechanically connecting one of said shafts to one of said washers and means including a pair of flexible strips for mechanically connecting the other of said shafts to the other of said washers at a plurality of points intermediate said spacing means.

1,887,539. FILING DEVICE. JAMES B. BROWN, Detroit, Mich. Filed Oct. 4, 1929. Serial No. 397,231. 2 Claims. (Cl. 211—48.)

1. In a filing device for drawings and the like, an arm comprising a channel member adapted to be pivotally mounted on a support for angular movement in a horizontal plane, and to project therefrom, said channel member having a pair of flanges spaced apart and projecting upwardly therefrom, a hanger having a cooperating downwardly projecting flange to slidingly engage either of said flanges on the channel member, clips for removably securing a sheet to the hanger whereby the sheet is suspended from the arm, the said downwardly projecting flange of the hanger and the clips being arranged to permit ready removal of the hanger from the flanges of the arm.



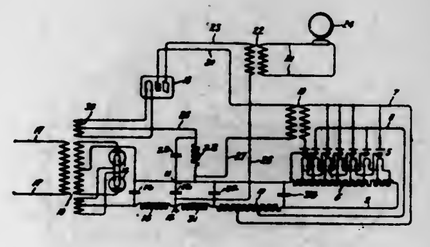
1,887,540. SEALING MEANS FOR SUBMERSIBLE MOTORS. CONRAD ROBERT BUCHET, Long Beach, Calif., assignor to Adjusto Equipment Company, Los Angeles, Calif., a corporation of California. Filed Jan. 12, 1931. Serial No. 508,299. 3 Claims. (Cl 115—18.)



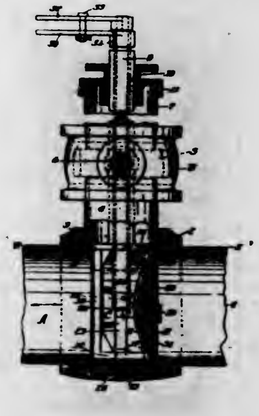
1. A submersible propeller and motor unit for boats comprising a housing, a plate dividing said housing to form fore and aft chambers; a motor in said fore section, a bearing extending across said aft section, said bearing having openings for communication of its bore with said aft chamber, said aft chamber having an opening at its stern for passage therethrough of said bearing, a propeller shaft journalled in said bearing, mercury in said aft section, and a riser tube communicating with said aft section and extending upwardly.

1,887,541. ELECTRICAL SIGNAL AMPLIFYING APPARATUS. WENDELL L. CARLSON and DONALD WILSON, Schenectady, N. Y., assignors to General Electric Company, a Corporation of New York Filed July 6, 1928. Serial No. 290 803. 8 Claims. (Cl. 179—171.)

1. In an amplifying apparatus, a pair of high voltage supply terminals, a voltage divider resistor connected across said terminals, a cathode supply circuit connected in shunt with at least a portion of said resistor, and an output electric discharge device having an anode circuit connected with said supply terminals independently of said resistor whereby the anode current for said device flows directly from said terminals without passing through said resistor and the cathode supply circuit.



1,887,542. PIPE LINE STOPPER. UHEL U. CARR, Monongahela, Pa., assignor of one-half to Major R. McKinley, Monongahela, Pa. Filed Dec. 12, 1930. Serial No. 501,851. 5 Claims. (Cl. 137—76.)

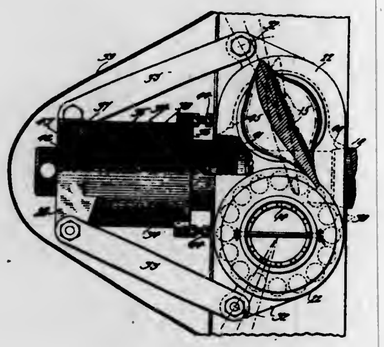


1. A device of the character described including a body for insertion through an opening formed in a pipe, an elongated hollow stem, a pair of pivotally mounted diaphragm members carried by the body, means for moving said members into open and closed positions including a pair of rotatable members disposed and operable in the stem, and means for pivotally connecting each diaphragm member with a rotatable member.

1,887,543. VARIABLE PITCH PROPELLER. ROLAND CHILTON, Keyport, N. J., assignor, by mesne assignments, to Aeromarine Plane & Motor Company, Inc., Keyport, N. J., a Corporation of New York. Filed Feb. 15, 1929. Serial No. 340,214. 10 Claims. (Cl. 170—162.)

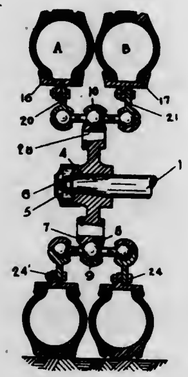
1. In a variable pitch propeller the combination of a hub, blades mounted in said hub for rotational movement about their axes, thrust bearing means comprising races

having pockets with inclined faces, rolling members engaged with said inclined faces and adapted to co-act therewith in a manner as to generate a rotational move-



ment of the blades from the centrifugal forces thereof, and a yieldable means tending to oppose said rotational movement.

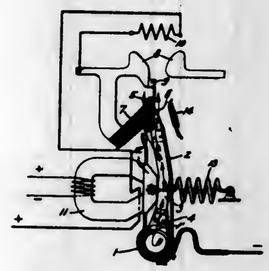
1,887,544. WHEEL. AMBROSE CODD, Spokane, Wash. Filed Mar. 30, 1931. Serial No. 526,206. 6 Claims. (Cl. 301—36.)



4. The combination with a wheel and a series of transversely arranged rocking links fulcrumed thereon, of a pair of rim-rings and spaced hemi-spherical bearing heads on the inner periphery of said rim-rings, spherical heads on the ends of said links seated in the bearing heads, removable bearing caps attached to said bearing heads to form sockets for the spherical heads, a rim rigidly mounted on each rim-ring, and tires mounted on said rims.

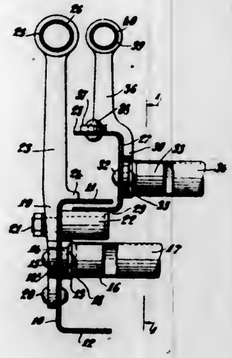
1,887,545. ELECTRICAL SWITCHING APPARATUS. ALFRED COHN, Charlottenburg, and WILHELM HERDEN, Hermsdorf, Germany, assignors to General Electric Company, a Corporation of New York. Filed Apr. 1, 1930, Serial No. 440,836, and in Germany June 29, 1929. 5 Claims. (Cl. 200—148.)

1. High speed switching apparatus for power currents comprising fixed and movable conducting parts, means guiding a cooling fluid through the movable conducting parts to carry away heat therefrom, means for directing said cooling fluid across the arc formed upon opening of



the switch, and means for restricting the flow of the cooling fluid and thereby increasing the velocity thereof across the arc when the switch is in its open circuit position.

1,887,546. METALLIC TRUSSED AERIAL LADDER. ROBERT F. COWELL, Teaneck, N. J., assignor to International Motor Company, New York, N. Y., a Corporation of Delaware. Filed June 17, 1931. Serial No. 544,991. 1 Claim. (Cl. 228—18.)

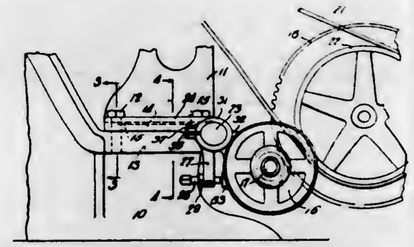


A metallic ladder construction comprising a bed ladder having channel beams with flanges turned inwardly, bed ladder truss rods, truss rod posts secured to the channels and lying substantially in the plane of the outer sides of the channels, said truss rods being secured to the truss rod posts, a fly ladder carried by the bed ladder and formed with channel beams having flanges turned outwardly, the lower flanges of the fly ladder beams lying between the flanges of the bed ladder beams, and truss rods carried by the fly ladder beams.

1,887,547. MOTOR DRIVE UNIT. ABE LINCOLN CUSHMAN, Concord, N. H. Filed Mar. 8, 1930. Serial No. 434,413. 5 Claims. (Cl. 74—7.)

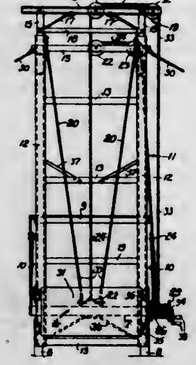
1. A motor drive unit comprising a motor having a casing and an armature shaft projecting beyond one side of the casing, a gear on the projecting part of the armature shaft for engagement with a gear to be driven, a supporting bracket having a horisontal arm for attachment to the frame of a machine and a depending arm, a bearing on the supporting bracket and a complementary bearing

member carried by the motor casing for supporting the motor for pivotal adjustment on the supporting bracket, an abutment member carried by the motor casing and



an adjusting screw carried by the depending arm of the bracket and cooperating with the abutment member to control the pivotal adjustment of the motor.

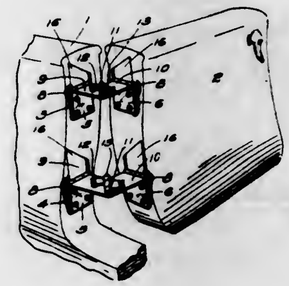
1,887,548. HOIST. FREDRICK DARTSUP, New Orleans, La. Filed Oct. 14, 1931. Serial No. 568,701. 3 Claims. (Cl. 187—11.)



1. A hoist comprising stationary tubes and movable tubes, said movable tubes telescopic in said stationary tubes, the stationary tubes secured together by braces and the movable tubes secured together by braces, elevating rods secured to said movable tubes hingedly, a U bolt, the lower free ends of said elevating rods being secured in spaced relationship in said U bolt, to which is secured a cable, a top support securing said stationary tubes together, pulleys operatively positioned on said top support, said cable passing over said pulleys, a drum secured to said stationary tubes, said cable passing over said drum, and means for securing the free ends of said elevating rods to said stationary tubes when said movable tubes are in their extended position, plates selectively positioned over the jointure between said stationary and movable tubes.

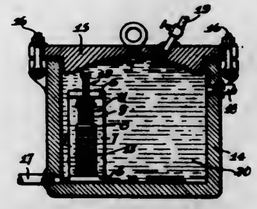
1,887,549. HINGE. WILLIAM A. ERVIN, Oakland, Calif. Filed Nov. 27, 1929. Serial No. 410,099. 4 Claims. (Cl. 16—163.)

1. In combination, a hinge, comprising a pair of attachable body plates, hingedly connected to an angular hinge, said angular hinge being provided with equalisers, said equalizers consisting of inward extensions of the angular hinge plates adapted to provide uniform action of the hinge members during the initial opening and final



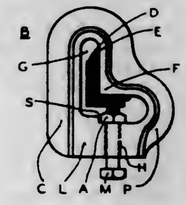
closing movement of a door by cooperation with the door frame, and to prevent rattling of said hinge members when said door is closed.

1,887,550. PROCESS FOR MAKING COMPOSITE GLASS. EARL L. FIX and MAURICE L. MACHT, New Kensington, Pa., assignors to Duplate Corporation, a Corporation of Delaware. Filed Mar. 7, 1930. Serial No. 433,945. 5 Claims. (Cl. 49—81.)



1. A method of making composite articles which comprises superposing sheets of glass and a reinforcing material adapted to be adhesively united, applying a mechanical pressure to the article with its edges exposed, submerging the article in a liquid and applying heat and pressure to the liquid while maintaining the mechanical pressure.

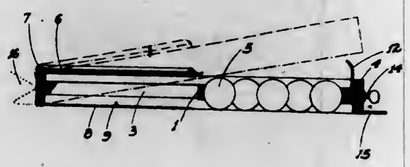
1,887,551. CLAMP FOR ANGLES AND THE LIKE. BERT G. GOBLE, Tulsa, Okla., assignor to W. A. Quigley. Filed Apr. 1, 1929. Serial No. 351,659. 2 Claims. (Cl. 287—103.)



1. A clamp consisting of a body member having a closed L-shaped opening therethrough; said body member also having a hole therethrough extending into said opening

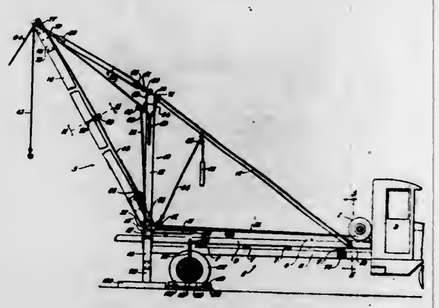
near one end thereof, a single shoulder adjacent the hole, a bolt adapted to loosely pass through the hole and nut means adapted to be threaded onto the bolt and have one of its edges in contact with said shoulder.

1,887,552. SPOTTING RACK FOR POOL BALLS. CHARLES H. GUNN, Burlingame, Calif. Filed Mar. 16, 1931. Serial No. 522,844. 5 Claims. (Cl. 273—22.)



1. A ball spotting rack comprising a ball positioning and retaining rack, a frame in which said rack is slidably mounted for guided and limited movement, and supporting means for the rack and balls mounted on the frame at one end thereof.

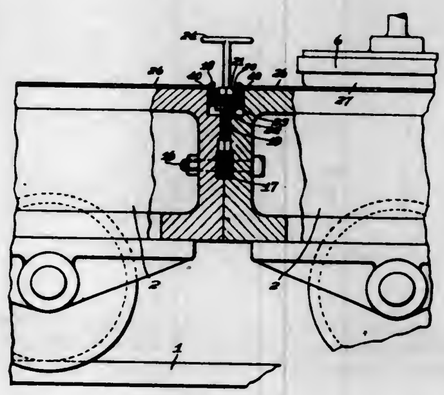
1,887,553. HOISTING DEVICE. OSMUND C. HAMRE, Springfield, Mass. Filed Feb. 21, 1931. Serial No. 517,379. 11 Claims. (Cl. 212—59.)



1. In combination, a portable hoisting apparatus, a wheel supported truck platform, a double winding drum thereon, a tiltable triangular-shaped main frame, means for retaining the same on the truck platform, comprising hook bolts secured to said frame and to the truck platform, foot braces pivotally secured to the main frame, means for laterally retaining the main frame in an upright position, comprising a pair of stay braces each having an end pivotally secured to said frame and an opposite end removably secured to a side of said truck platform, a boom member pivotally connected to the base part of the said main frame and to the truck platform for vertical and lateral movements, a hoisting cable connected to one of the drums and supported and guided on the boom, a boom supporting cable connected to the main frame and the other drum.

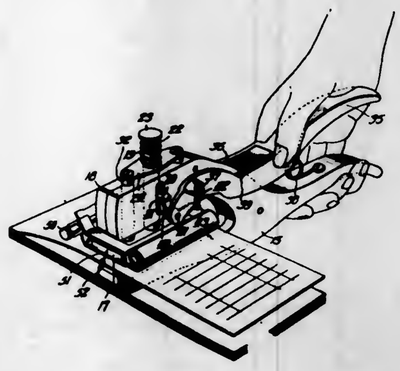
1,887,554. PLATE GLASS POLISHING APPARATUS. HALBERT K. HITCHCOCK, Pittsburgh, Pa., assignor to Pittsburgh Plate Glass Company, a Company of Pennsylvania. Filed Feb. 11, 1930. Serial No. 427,584. 3 Claims. (Cl. 51—110.)

1. In combination in apparatus for polishing plate glass, a series of polishing machines each having a rotatable frame provided with a set of polishing runners, tables forming a continuous train mounted for movement beneath the runners and adapted to carry on their upper



faces and sheets of glass to be polished, two of such tables having at their abutting ends a transverse recess, and a scraping device seated in such recess.

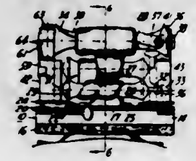
1,887,555. DEVICE FOR RECORDING SALES TRANSACTIONS. JOHN E. JOHNSON, Chicago, Ill., assignor to Addretok Co., Chicago, Ill., a Corporation of Delaware. Filed Feb. 15, 1929, Serial No. 340 066. Renewed Mar. 26, 1932. 4 Claims. (Cl. 101—318.)



1. A device of the character described comprising in combination a platen adapted to receive a plurality of record sheets and interleaved carbon sheets, a supporting handle projecting therefrom, an impression head movably supported opposite said platen and having means for removably holding a printing plate, an operating handle associated with said supporting handle and arranged relative thereto so that the two handles may be grasped together in a single hand, resilient means adapted to be energized by the operating handle for moving said impression head, a trip automatically actuated upon further movement of said operating handle for releasing said resilient means to cause the latter to impart a rapid movement to said impression head independently of the operating handle to deliver a percussive blow to the record sheets upon said platen to imprint said printing plate thereon, a spring for automatically raising the impression

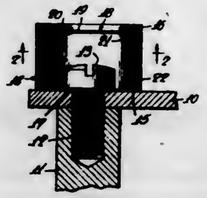
head above the platen immediately after impression, and a carbon paper feeding device associated with said impression head and operative to present fresh carbon paper for said impression head.

1,887,556. HAIR WAVING APPARATUS AND METHOD. RALPH M. KEELE, San Francisco, Calif., assignor to United States Appliance Corporation, San Francisco, Calif., a Corporation of California. Filed May 28, 1932. Serial No. 612,950. 15 Claims. (Cl. 132—33.)



1. In a method of waving a strand of hair, the steps of coiling the strand about a waving form with the end of the coil extending through a part in the strand, coiling the remainder of the strand upon another waving form, then applying heat to the coiled hair while the hair is maintained under tension upon the forms.

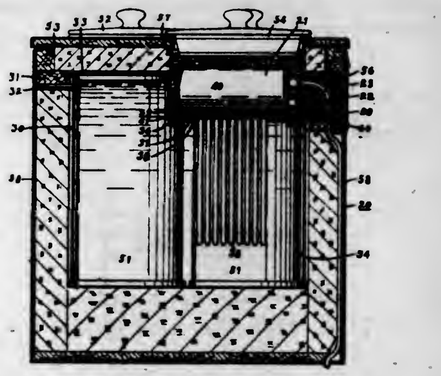
1,887,557. SEAL. FRANK KEIDEL, Elmhurst, N. Y., assignor to The International Seal and Knot Protector Co., New York, N. Y., a Corporation of New York. Filed June 29, 1931. Serial No. 547,679. 1 Claim. (Cl. 292—307.)



A sealing device of the class described, consisting of a pair of cup-like members having end and peripheral walls of thin sheet metal, the diameter of the peripheral wall of one of said members being slightly less than that of the other member thereby permitting telescoping and snug frictional engagement of the said members, the peripheral wall of the inner member being provided with a continuous peripherally uninterrupted edge portion adapted to directly abut the end wall of the outer member without distortion when they are in sealing relationship, and one of said members having an annular weakened line closely adjacent to the intersection of the peripheral wall and the end wall and adapted to break upon the application of pressure tending to collapse the seal or separate said members from telescoping relationship.

1,887,558. REFRIGERATING APPARATUS. JESSE G. KING, Dayton, Ohio, assignor to Frigidaire Corporation, Dayton, Ohio, a Corporation of Delaware. Filed Oct. 31, 1928. Serial No. 316,278 3 Claims. (Cl. 62—95.)

1. A refrigerating apparatus comprising a closed tank for liquid to be cooled, said tank having an opening, a plate for closing said opening, refrigerant evaporating means removable from said tank through said opening, said evaporating means comprising a refrigerant header on one side of said plate and ducts on the other side of said plate extending into said tank and connected to said header.

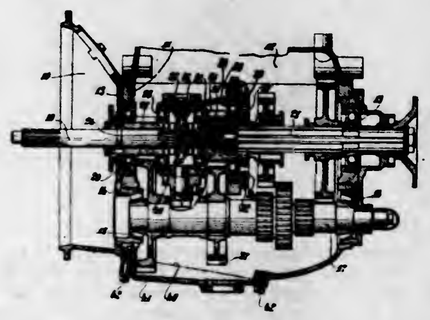


1,887,559. BRUSH FOR ELECTRICAL APPARATUS. FREDRICK S. MARCELLUS, Scotia, N. Y., assignor to General Electric Company, a Corporation of New York. Filed May 27, 1931. Serial No. 540,392. 8 Claims. (Cl. 171—325.)



1. A brush for electrical apparatus having a face thereof provided with an amalgam having an excess of mercury.

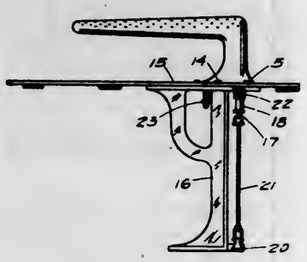
1,887,560. BEARING SUPPORT FOR TRANSMISSIONS. JOSEPH L. MATTHEWS, New Brunswick, N. J., assignor to International Motor Company, New York, N. Y., a Corporation of Delaware. Filed May 9, 1931. Serial No. 536,209. 1 Claim. (Cl. 74—59.)



In combination with a transmission housing and a bracket secured therein, a flanged sleeve carried removably by the bracket, means to secure the sleeve in the

bracket with the flange thereof against the bracket, a plurality of spaced shoulders formed in the sleeve and facing in one direction to position aligned bearings and a shoulder spaced from the first shoulders and facing in the opposite direction, said sleeve being formed with an aperture to receive a transmission gear.

1,887,561. SLEEVE STEAMER. SAMUEL L. MCVEY, San Jose, Calif. Filed Apr. 15, 1930, Serial No. 444,432. Renewed May 3, 1932. 2 Claims. (Cl. 223—17.)



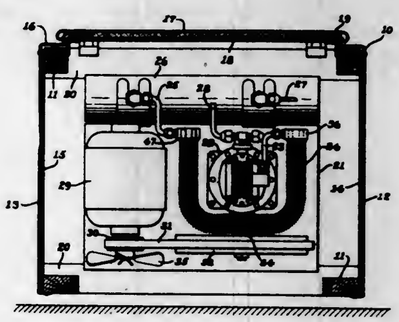
1. A sleeve steamer comprising a tapered hollow arm provided with a wall therein whereby said arm is longitudinally divided into two chambers of semi-circular cross-section, the outside surface of said arm being of substantially circular cross-section, a standard and a foot integral with said arm and continuing at substantially right angles to said arm, said dividing wall continuing downward in said standard thence closing off one chamber from the other, a steam connection communicating with the inner and lower of said chambers, a valve communicating with the inner and lower chamber and with the other chamber, and a multiplicity of ports in the outer wall of said other chamber.

1,887,562. COTTON THRESHING CYLINDER. JOHN E. MITCHELL, Dallas, Tex. Filed Nov. 6, 1930. Serial No. 493,764. 5 Claims. (Cl. 19—97.)



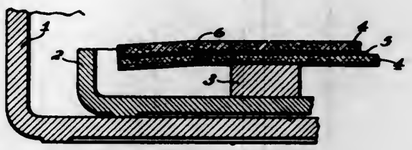
1 A cotton threshing cylinder comprising a shaft, a series of flat-sided spiders mounted thereon, a series of independent spike-bars mounted on flat sides of said spiders to form the outer wall of the cylinder, each of said spike-bars having a flat peripheral portion and an inwardly-directed straight side member forming a shield, the inner end of which terminates near, but below the plane of the flat portion of an adjacent spike-bar, and a row of radial spikes secured in said peripheral portion.

1,887,563. REFRIGERATING APPARATUS. DUANE R. NEAL, Dayton, Ohio, assignor to Frigidaire Corporation, Dayton, Ohio, a Corporation of Delaware. Filed Feb. 28, 1929. Serial No. 343,498. 6 Claims. (Cl. 62—115.)



1. In refrigerating apparatus, a compressor, a fan spaced from said compressor, a substantially U-shaped condenser having the base of the U located between said fan and said compressor.

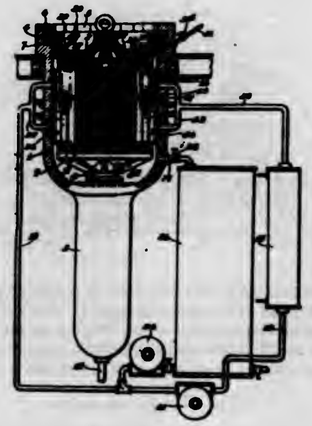
1,887,564. PROCESS FOR SEVERING COMPOSITE GLASS. JAMES H. SHEETS, Brackenridge, Pa., assignor to Duplate Corporation, a Corporation of Delaware. Filed Mar. 7, 1930. Serial No. 433,943. 2 Claims. (Cl. 49—48.)



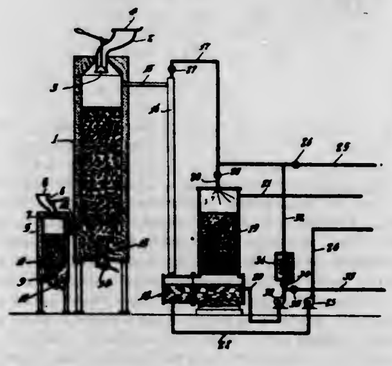
1. A process of severing a composite sheet comprising sheets of glass secured to the opposite faces of a sheet of pyroxylin plastic, which consists in cracking the glass sheets along the desired line of severance, supporting the plate so that the action of gravity upon the plate tends to spread the crack in one of said glass sheets, and exposing the plate so supported to the action of a solvent for the plastic heated to a point where it softens the plastic.

1,887,565. PROCESS FOR MAKING COMPOSITE GLASS. JAMES H. SHEETS, Brackenridge, Pa., assignor to Duplate Corporation, a Corporation of Delaware. Filed Mar. 7, 1930. Serial No. 433,944. 1 Claim. (Cl. 49—81.)

A process of compositing a series of sets of sheets, each comprising a pair of glass sheets with an interposed sheet of pyroxylin plastic and layers of cement, which consists in superposing such sheets in a stack one above the other in a pressure chamber with their edges exposed, exhausting the air from the chamber and applying pressure to the stack of sheets so as to press the opposing surfaces thereof tightly together, then admitting heated liquid to the chamber to soften the plastic sheets slightly while the pressure on said sheets is maintained, and finally applying pressure to said liquid to increase the pressure between the opposing surfaces of the sheets.

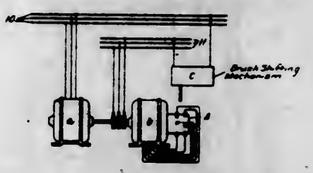


1,887,566. PROCESS FOR PRODUCING ALUMINUM CHLORIDE. WILLIAM H. SHIFFLER and WARD P. ANDERSON, Berkeley, Calif., assignors to Standard Oil Company of California, San Francisco, Calif., a Corporation of Delaware. Filed May 23, 1928. Serial No. 279,949. 3 Claims. (Cl. 23—95.)



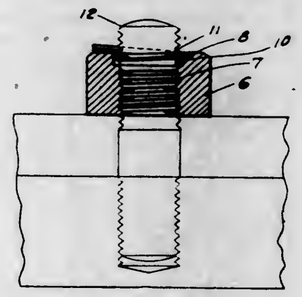
1. The method of chlorinating coke containing alumina comprising, introducing a coke containing alumina into a reaction chamber, maintaining a bed of said coke in said reaction chamber, continuously introducing gases containing chlorine and oxygen sufficient to maintain reaction temperature in said reaction chamber, passing said gases through the bed of coke in said chamber, continuously discharging gases and vaporised products of reaction from the upper portion of said chamber, discharging ash and spent coke from the bottom portion of said reaction chamber, and continuously removing condensible products from the gases and vaporized products of reaction.

1,887,567. BRUSH RIGGING MECHANISM FOR SCHERBIUS SETS AND LIKE CASCADES FOR CONNECTING TWO POWER SYSTEMS. REGINALD G. STANDERWICK, Marblehead, Mass., assignor to General Electric Company, a Corporation of New York. Filed July 1, 1931. Serial No. 548,190. 5 Claims. (Cl. 172—281.)



1. In a frequency changer installation for transferring energy between two electric power systems, the combination with two power lines and a commutator type dynamo-electric machine having movable brush rigging mechanism, of a motor for moving the brush rigging mechanism, speed responsive means for controlling the motor, and frequency responsive means for actuating the speed responsive means.

1,887,568. NUT LOCK. GEORGE G. STANFORD, Oakland, Calif. Filed July 26, 1930. Serial No. 470,867. 3 Claims. (Cl. 151—30.)



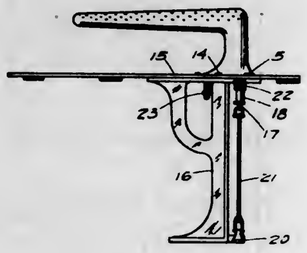
1. A nut lock, in combination, a helix of spring wire, one end thereof being formed into a radial extension, said helix being of such diameter as to permit screwing onto a threaded member and in frictional engagement therewith and of a pitch substantially equal to the pitch of the threads of said threaded member, and, a nut provided with a counterbore of such diameter as to freely receive said helix, and substantially prevent expansion thereof, the depth of said counterbore being substantially equal to the length of said helix minus said radial extension said helix frictionally cooperating with said threads and with the bottom of said counterbore.

1,887,569. CASING FOR ELECTRICAL APPARATUS. ZOLTAN O. ST. PALLEY, Pittsfield, Mass., assignor to General Electric Company, a Corporation of New York. Filed May 25, 1931. Serial No. 539,755. 5 Claims. (Cl. 257—191.)

1. The combination with electrical apparatus, of an enclosing casing containing a cooling liquid in which said apparatus is immersed, said casing having separable upper and lower sections, an external heat radiator with upper and lower connection to said lower casing section, said

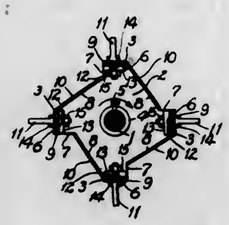
bracket with the flange thereof against the bracket, a plurality of spaced shoulders formed in the sleeve and facing in one direction to position aligned bearings and a shoulder spaced from the first shoulders and facing in the opposite direction, said sleeve being formed with an aperture to receive a transmission gear.

1,887,561. SLEEVE STEAMER. SAMUEL L. MCVEY, San Jose, Calif. Filed Apr. 15, 1930, Serial No. 444,432. Renewed May 3, 1932. 2 Claims. (Cl. 223—17.)



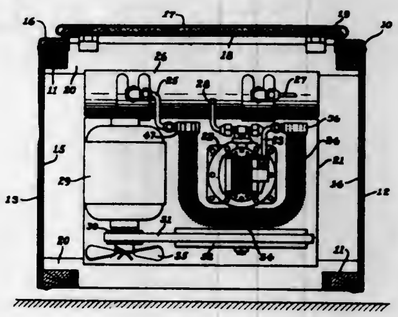
1. A sleeve steamer comprising a tapered hollow arm provided with a wall therein whereby said arm is longitudinally divided into two chambers of semi-circular cross-section, the outside surface of said arm being of substantially circular cross-section, a standard and a foot integral with said arm and continuing at substantially right angles to said arm, said dividing wall continuing downward in said standard thence closing off one chamber from the other, a steam connection communicating with the inner and lower of said chambers, a valve communicating with the inner and lower chamber and with the other chamber, and a multiplicity of ports in the outer wall of said other chamber.

1,887,562. COTTON THRESHING CYLINDER. JOHN E. MITCHELL, Dallas, Tex. Filed Nov. 6, 1930. Serial No. 493,764. 5 Claims. (Cl. 19—97.)



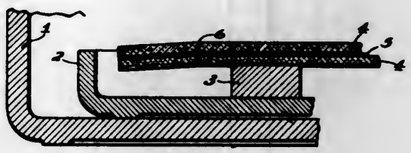
1 A cotton threshing cylinder comprising a shaft, a series of flat-sided spiders mounted thereon, a series of independent spike-bars mounted on flat sides of said spiders to form the outer wall of the cylinder, each of said spike-bars having a flat peripheral portion and an inwardly-directed straight side member forming a shield, the inner end of which terminates near, but below the plane of the flat portion of an adjacent spike-bar, and a row of radial spikes secured in said peripheral portion.

1,887,563. REFRIGERATING APPARATUS. DUANE R. NEAL, Dayton, Ohio, assignor to Frigidaire Corporation, Dayton, Ohio, a Corporation of Delaware. Filed Feb. 28, 1929. Serial No. 343,498. 6 Claims. (Cl. 62—115.)



1. In refrigerating apparatus, a compressor, a fan spaced from said compressor, a substantially U-shaped condenser having the base of the U located between said fan and said compressor.

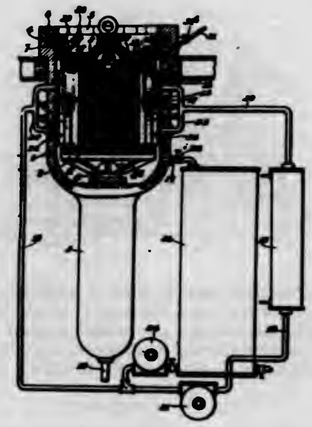
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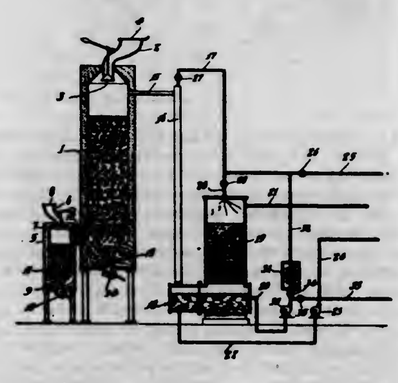
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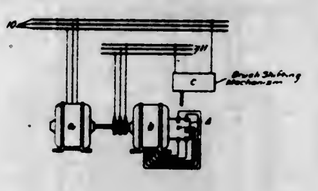
pressure on said sheets is maintained, and finally applying pressure to said liquid to increase the pressure between the opposing surfaces of the sheets.

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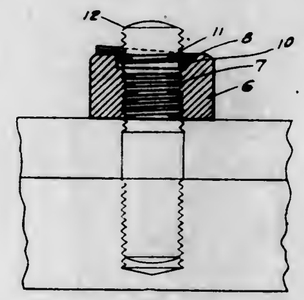
1. The method of chlorinating coke containing alumina comprising, introducing a coke containing alumina into a reaction chamber, maintaining a bed of said coke in said reaction chamber, continuously introducing gases containing chlorine and oxygen sufficient to maintain reaction temperature in said reaction chamber, passing said gases through the bed of coke in said chamber, continuously discharging gases and vaporized products of reaction from the upper portion of said chamber, discharging ash and spent coke from the bottom portion of said reaction chamber, and continuously removing condensible products from the gases and vaporized products of reaction.

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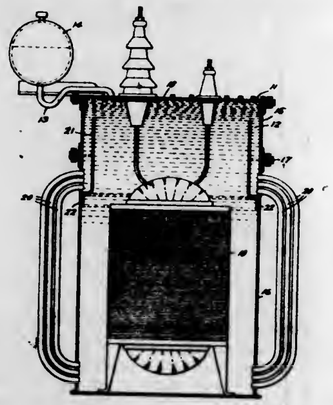


1. A nut lock, in combination, a helix of spring wire, one end thereof being formed into a radial extension, said helix being of such diameter as to permit screwing onto a threaded member and in frictional engagement therewith and of a pitch substantially equal to the pitch of the threads of said threaded member, and, a nut provided with a counterbore of such diameter as to freely receive said helix, and substantially prevent expansion thereof, the depth of said counterbore being substantially equal to the length of said helix minus said radial extension said helix frictionally cooperating with said threads and with the bottom of said counterbore.

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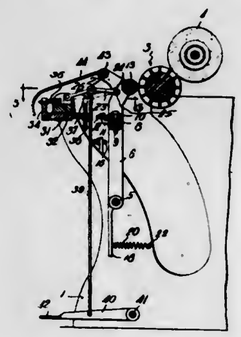
1. The combination with electrical apparatus, of an enclosing casing containing a cooling liquid in which said apparatus is immersed, said casing having separable upper and lower sections, an external heat radiator with upper and lower connection to said lower casing section, said

upper connection being below said upper casing section, said liquid filling said lower casing section and at least the lower part of said upper casing section, and means for



diverting liquid flowing from said apparatus to said radiator into the part of said upper casing section near the upper part of said liquid.

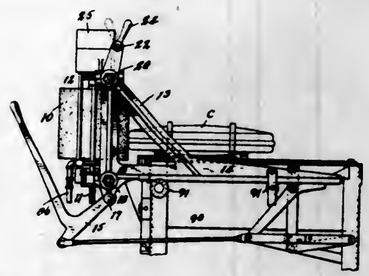
1,887,570. LEATHER SHAVING MACHINE. FRANK WAYLAND, Salem, Mass. Filed Aug. 9, 1929. Serial No. 384,635. 18 Claims. (Cl. 149—16.)



1. A leather shaving machine comprising a rotating cutter, a feed roll support arranged to swing toward and from the cutter about an axis below the cutter, a hard surfaced feed roll mounted upon the support above said axis, the feed roll being normally spaced from the cutter, and roll controlling means operative to move the feed roll toward the cutter and to lock the support rigidly in position with the feed roll in operative relation to the cutter whereby to prevent the feed roll from yielding away from the cutter during the shaving operation, said roll controlling means comprising a fixed abutment, and movable means reacting directly against the abutment, and also against the support at a point above said axis and closely adjacent to the feed roll.

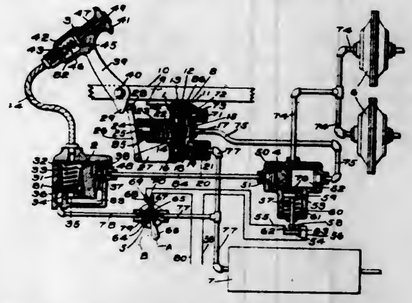
1,887,571. BRUSHING DEVICE FOR CAR CUSHION CLEANING MACHINES. ELLSWORTH M. WILSON, Montclair, N. J., assignor to Wilson-Imperial Company, Newark, N. J., a Corporation of Delaware. Filed Sept. 8, 1926. Serial No. 133,309. 30 Claims. (Cl. 15—21.)

1. In a machine for brushing car cushions and the like, the combination of a fixed support, of a vertically disposed long skeleton frame, mounted on the fixed support for movement in a direction perpendicular to its plane, said frame including a plurality of parallel horisontally extending rods, a brush carriage slidably mounted on the rods for movement in the plane of the frame and including an upper transmission casing and a lower casing, a brush



positioned between the casings, a vertically extending brush shaft for the brush journalled on opposite sides of the brush in said casings and a flexible shaft operatively connected to the lower end of the brush shaft to rotate the same in all shifted positions of the carriage.

1,887,572. FLUID PRESSURE BRAKING APPARATUS FOR VEHICLES. HARRY J. WINTER, London, England, assignor to The Westinghouse Air Brake Company, Wilmerding, Pa., a Corporation of Pennsylvania. Filed Dec. 2, 1930, Serial No. 499,501, and in Great Britain Dec. 2, 1929. 4 Claims. (Cl. 303—19.)



1. In a fluid pressure brake, the combination with a brake cylinder, a brake valve device for supplying fluid under pressure to said brake cylinder and for venting fluid under pressure from said brake cylinder to the atmosphere, and an emergency valve device operative upon a reduction in fluid pressure to supply fluid under pressure to said brake cylinder, of a pedal device for controlling the operation of said brake valve device, and valve means associated with said pedal device for controlling the operation of said emergency valve device, said valve means comprising a valve, a spring acting on said valve, and a plunger engaging said spring and normally subject to the pressure of an operator's foot for seating said valve, said valve being operative automatically upon relief of foot pressure on said plunger for reducing the pressure on said emergency valve device.

1,887,573. RADIO TOGGLE SWITCH. ROBERT H. BENTLEY, Hartford, Conn., assignor to The Arrow-Hart & Hegeman Electric Company, Hartford, Conn., a Corporation of Connecticut. Filed July 20, 1931. Serial No. 552,043. 3 Claims. (Cl. 200—67.)

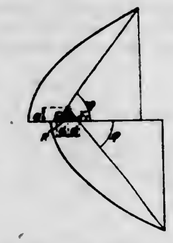
3. In a snap switch a hollow insulating casing, an oscillatable switch member pivotally mounted in the bottom of said casing and engageable with stationary switch contacts, a rod engaging with said switching member,

a coil spring surrounding said rod and engaging therewith and with said switching member, in combination with actuating means comprising an insulating member engageable with said rod and a metallic member secured to



said insulating member and having arms engageable by a manual switch operating device, and a rivet secured to said metallic member and rotatable in a bearing hold in said casing.

1,887,574. NONDAZZLING HEADLIGHT FOR AUTOMOBILES AND THE LIKE. DITLEV BERG, Hellerup, near Copenhagen, Denmark. Filed Jan. 30, 1932, Serial No. 589,944, and in Denmark Jan. 30, 1931. 1 Claim. (Cl. 240—41.35.)



In headlights for automobiles, other vehicles and the like, the combination with a light source of a parabolic reflector formed by two half paraboloids of rotation with coincident axes and bounded by a common horizontal plane, the focus of the lower one of said half paraboloids being displaced somewhat in the forward direction relatively to the focus of the upper one and in the direction of the axes, the light-emitting parts of said light source being disposed in such a manner that they will be situated above the said horisontal plane and also inside of two mutually opposed single cone surfaces having each for its vertex the focal point of the corresponding half paraboloid and having for their generatrices the following curves: for the cone surface with vertex at the rear focal point F the reflector curve situated in the plane perpendicular to the axis halfways between the focal points F and F_1 and being otherwise determined by having for the given distance d and angle ϕ, respectively, half the distance between the focal points and the angle between the axis of the upper half paraboloid and radius vector to the circle forming the front edge of the same half paraboloid, and for the cone surface with vertex at the front focal point F_1 the reflector curve situated in the plane perpendicular to the axis, halfways between the focal points F and F_1, and otherwise determined by having for the given distance d and angle ϕ, respectively, half the distance between the focal points and the angle between the axis of the lower half paraboloid and radius vector to the circle forming the front-edge of the same half paraboloid, the running point of the said reflector curve in a rectangular system of co-ordinates with axes X and Y being determined by the expressions:

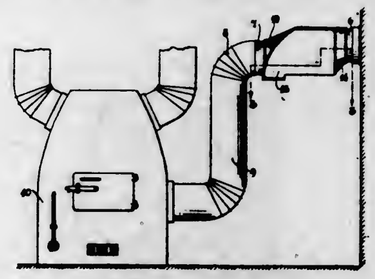
$$x = d \cdot \frac{\sin\phi \cdot \sin\theta \left(\cos^2\theta + \frac{1}{1+\cos\phi} \right)}{\sin^2\theta + \cos\phi \cdot \cos^2\theta}$$

and

$$y = d \cdot \frac{\sin\phi \cdot \cos^2\theta}{\sin^2\phi + \cos\phi \cdot \cos^2\theta}$$

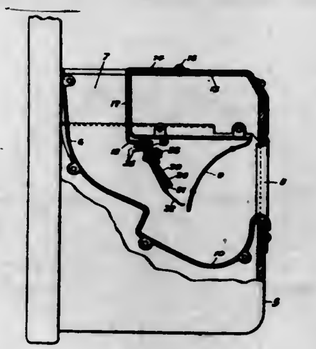
where θ is varying from zero to $\pm\infty$.

1,887,575. DRAFT HOOD. KARL BOHN, Maspeth, N. Y. Filed Oct. 24, 1929, Serial No. 402,292. Renewed Aug. 22, 1932. 5 Claims. (Cl. 126—307.)



1. A device of the class described comprising in combination, a tubular portion adapted to communicate with a chimney, a second tubular portion adapted to communicate with a fire chamber of a furnace, and a frusto-pyramidal body arranged between said tubular portions, a pair of exit channels arranged laterally of said second tubular portion and communicating with the larger end of said frusto-pyramidal body, a pair of plates forming a wedge-shaped baffle, the apex of which points toward the first-mentioned tubular portion and is on a diameter thereof, a pair of curved baffle plates having abutting ends and being at their other ends attached respectively to the separated ends of said first-named plates.

1,887,576. TELEPHONE PAY STATION APPARATUS. HOWARD M. BOLLINGER, Washington, D. C., assignor to American Telephone and Telegraph Company, a Corporation of New York. Filed Feb. 9, 1932. Serial No. 591,896. 12 Claims. (Cl. 179—6.3.)

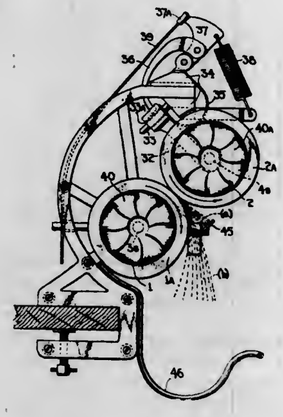


1. In a coin collecting device, a coin control magnet, a return coin chute having an exit opening, and means to unbalance the coin control magnet upon the insertion of articles in said chute through said opening.

1,887,577. METHOD OF AND APPARATUS FOR CREATING METALLIC SPRAY. THEO EUSTACE BRIDGES, Auckland, New Zealand. Filed Mar. 8, 1929, Serial No. 345,489, and in New Zealand Mar. 22, 1928. 14 Claims. (Cl. 83—91.)

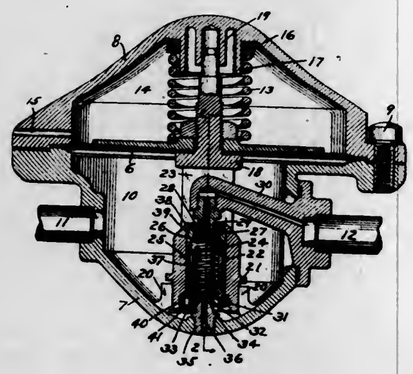
1. A method of creating a metallic spray comprising the rotation at a high speed and in a regular form of a mass of the metal to be sprayed, and the rapid arcing and shorting of electric current at high amperage between a point or points on the surface of the revolving mass of metal and an electric conductor or contact in intermittent make and break electrical contact with the latter.

4. Means for the purpose specified, comprising a rotatable disc of the metal to be sprayed; means for placing the particles comprising said disc under centrifugal stress, an electric contact or conductor placed in intermittent



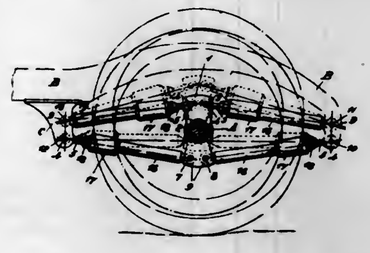
make and break contact with a portion of the surface of the disc; and means for passing electric current at high amperage to and between said rotating disc and the said intermittently contacting electric contact or conductor.

1,887,578. FLUID PRESSURE REGULATING VALVE DEVICE. RANKIN J. BUSH, Jeannette, Pa., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa., a Corporation of Pennsylvania. Filed Aug. 13, 1930. Serial No. 475,021. 2 Claims. (Cl. 50—23.)



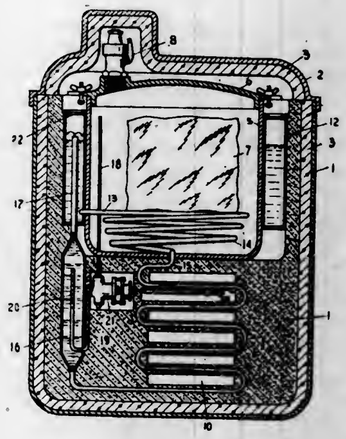
1. A fluid pressure regulator comprising a chamber having a flexible diaphragm therein, an inlet passage and an outlet connected to said chamber, said inlet passage being provided with a valve seat, a vent port leading from the chamber to the atmosphere and having a valve seat spaced from and facing said inlet valve seat, both of said valve seats being disposed along the longitudinal center line of said chamber, a stem carried by the diaphragm and enclosing the inlet valve seat, and a pair of oppositely disposed valves mounted in a bore of said stem, one valve being movable in one direction by said stem away from one valve seat, and the other valve being movable by said stem in the opposite direction away from the other valve seat.

1,887,579. ELASTIC VEHICLE SUSPENSION WITH SHOCK COMPENSATION. AUGUSTO CAROZZI, Rome, Italy. Filed Jan. 13, 1930. Serial No. 420,585. 1 Claim. (Cl. 267—20.)



A spring suspension for motor vehicles, including in combination with the frame of the vehicle, an axle, arms extending from the frame forwardly and rearwardly of the axle, a support loose on the axle extending above and below the same, spring arm members arranged in pairs rearwardly and forwardly of the axle and having the respective ends pivotally connected to the support and adjacent arms and cooperating with the support to form triangles forwardly and rearwardly of the axle.

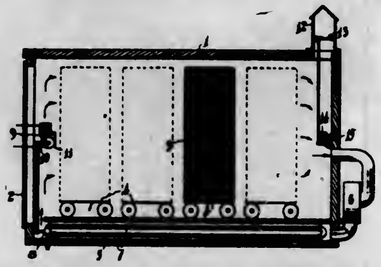
1,887,580. METHOD AND APPARATUS FOR REFRIGERATION. LLOYD G. COPEMAN, Flint, Mich., assignor to Copeman Laboratories Company, Flint, Mich., a Corporation of Michigan. Filed Apr. 1, 1931. Serial No. 526,848. 9 Claims. (Cl. 62—91.5.)



1. A refrigerating system comprising, a container for solid CO_2, means providing a cyclic path for refrigerant, means utilizing gas power derived from the evaporating CO_2 for circulating the refrigerant in its path, and thermostatically controlled means for governing the flow of refrigerant in its path.

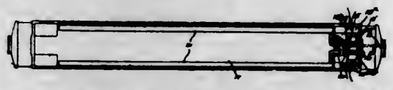
1,887,581. APPARATUS AND METHOD OF PROCESSING AND DRYING LUMBER AND SIMILAR MATERIAL. HENRY WARRINGTON COWAN, Toronto, Ontario, Canada. Filed Dec. 31, 1930. Serial No. 505,844. 2 Claims. (Cl. 34—24.)

1. A process of drying lumber and similar material which consists in enclosing the material in a kiln forming part of a normally closed circulating system; circulating air through the kiln at a temperature slightly greater than that of the material until the mass of the material has attained substantially the temperature of the air; raising the temperature of the air in a plurality of stages as the mass of the material reaches substantially the temperature of the preceding stage until a predetermined maximum has been reached and substantially without venting the circulating medium, and continuing the



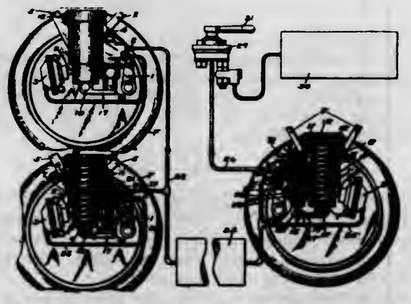
circulation of said medium until there is substantially no temperature gradient within the kiln between the ends thereof, then discharging moisture-laden air from said kiln while permitting dry air to enter and thus cool the circulating medium, and reheating the circulating medium to said predetermined temperature and continuing said alternate discharging and heating until the material is sufficiently dry.

1,887,582. AIR CONDITIONING METHOD AND APPARATUS FOR PASSENGER CARS. JESSE H. DAVIS, Baltimore, Md., assignor to B. F. Sturtevant Company, Hyde Park, Boston, Mass., a Corporation of Massachusetts. Filed Oct. 19, 1929. Serial No. 400,930. 26 Claims. (Cl. 62—117.)



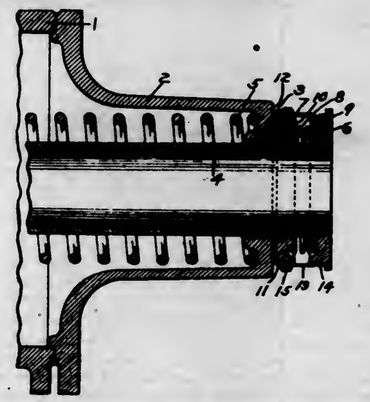
1. The method of conditioning air for a passenger car train which consists in chilling a cooling fluid in a master car and conducting said fluid by means of conduits from the master car to the passenger cars in the train, shunting the fluid from said conduits to a cooler in each passenger car in the train, and drawing the air to be cooled over said cooler and discharging said cooled air into the car.

1,887,583. AIRPLANE BRAKE. SIDNEY G. DOWN, Edgewood, Pa., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa., a Corporation of Pennsylvania. Filed Nov. 13, 1928. Serial No. 319,187. 15 Claims. (Cl. 244—2.)



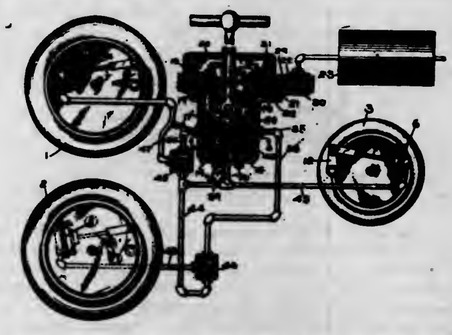
1. The combination with a rear landing wheel and front landing wheels for an airplane, of a fluid pressure brake device associated with each landing wheel, and valve means for individually varying the pressure of fluid on each device in proportion to the load on the corresponding wheel, the valve means on the rear wheel being operative to supply fluid to the front wheel brake devices only upon engagement of the rear wheel with the ground.

1,887,584. BRAKE CYLINDER DEVICE. SIDNEY G. DOWN, Edgewood, Pa., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa., a Corporation of Pennsylvania. Filed Oct. 16, 1929. Serial No. 399,915. 5 Claims. (Cl. 303—88.)



1. The combination with a brake cylinder for a fluid pressure brake system having a non-pressure head and a piston rod extending through an opening in said head, of a member carried by said rod exteriorly of the cylinder and a packing ring secured to said member and adapted to engage the end wall of said non-pressure head to prevent foreign matter from entering said cylinder through said opening.

1,887,585. AIRPLANE BRAKE. SIDNEY G. DOWN, Edgewood, Pa., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa., a Corporation of Pennsylvania. Filed Feb. 19, 1930. Serial No. 429,610. 4 Claims. (Cl. 303—6.)



1. In a fluid pressure brake apparatus for an airplane, the combination with brake chambers at the front landing wheels and the rear landing wheel, admission of fluid under pressure to which operates to apply the brakes, of valve means for controlling the supply of fluid under pressure to said brake chambers, valve means for controlling communication through which fluid under pressure is supplied to said brake chambers and having one position in which fluid under pressure is simultaneously supplied to both the front wheel brake chambers and to the rear wheel brake chamber, and another position in

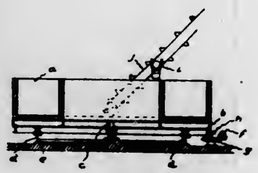
which fluid under pressure is supplied only to the front wheel brake chambers, a pipe through which fluid under pressure is simultaneously supplied to all brake chambers, and double check valves for controlling communication from said pipe to the front wheel brake chambers.

1,887,586. AUTOMATIC SLACK ADJUSTER FOR BRAKES. AXEL RUDOLF KONRAD DJURSON and BERT HENRY BROWALL, Malmo, Sweden, assignors to Svenska Aktiebolaget Bromsregulator, Malmo, Sweden, a Corporation of Sweden. Filed Oct. 29, 1928, Serial No. 315,800, and in Germany Nov. 5, 1927. 19 Claims. (Cl. 188—202.)



1. In an automatic slack adjuster for brakes on railway vehicles and the like, a rod mounted in the brake rigging and comprising two parts having a nut-and-screw connection between them, one part of which connection is rotatable in relation to the other; a rotatable member forming part of the slack adjuster; transmission means combined with the brake structure and adapted to rotate said rotatable member during the reciprocation of the brake piston; a releasable clutch positioned between the rotatable part of the nut-and-screw connection and the rotatable member forming part of the slack adjuster, said clutch acting in both directions of rotation; and means coacting with said clutch for effecting engagement of the same at a certain point in the braking movement.

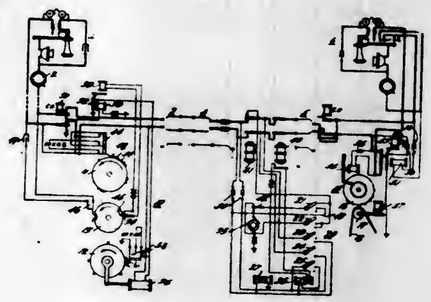
1,887,587. PROCESS FOR CONTINUOUS BLEACHING OF FIBROUS MATERIALS. EMIL EKEBERG, Konga, Sweden. Filed Aug. 27, 1930, Serial No. 478,250, and in Sweden Sept. 6, 1929. 2 Claims. (Cl. 8—2.)



1. The method of bleaching paper pulp and the like which comprises mixing a continuous stream of pulp with a continuous stream of bleaching liquor, continuously discharging the mixture on to a support, continuously advancing said support together with the mixture and with the fibers and bleaching liquor therein entirely at rest relatively to each other, and continuously discharging the bleached pulp from said support.

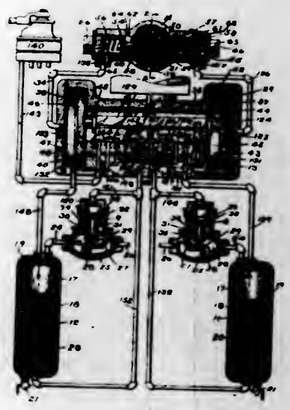
1,887,588. TELEPHONE SYSTEM. ARTHUR B. ELKINS, Houston, Tex., assignor of one-half to James M. Newman, Houston, Tex. Filed Oct. 23, 1931. Serial No. 570,738. 18 Claims. (Cl. 179—5.5.)

1. A telephone exchange system comprising calling and called lines, means for interconnecting said lines, a recorder associated with the substation telephone on each of said lines, means individual to each of said calling lines for automatically actuating the recorder associated with a called line in accordance with the designation of the



calling line when a call has been extended to said called line and means in the exchange for operating said actuating means.

1,887,589. AIR PURIFYING APPARATUS. CLYDE C. FARMER, Pittsburgh, Pa., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa., a Corporation of Pennsylvania. Filed Sept. 29, 1928. Serial No. 309,258. 47 Claims. (Cl. 183—40.)

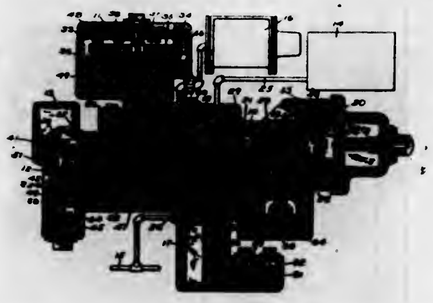


1. An air purifying apparatus including in combination, a reservoir, a compressor for supplying fluid into said reservoir, a plurality of filters, and means controlled by said compressor for alternately forcing fluid from said reservoir through said filters.

1,887,590. FLUID PRESSURE BRAKE. CLYDE C. FARMER, Pittsburgh, Pa., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa., a Corporation of Pennsylvania. Filed Nov. 14, 1931. Serial No. 575,029. 9 Claims. (Cl. 303—35.)

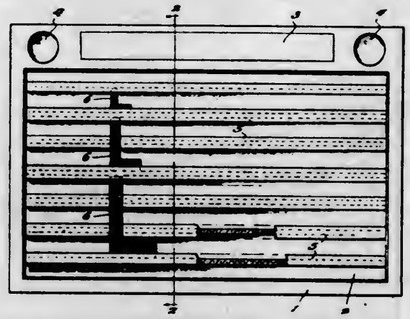
1. In a fluid pressure brake, the combination with a brake pipe, of a triple valve device operated upon a reduction in brake pipe pressure for effecting a service application of the brakes, means operative upon movement

of said triple valve device in effecting a service application of the brakes for venting fluid from the brake pipe to effect local quick service action, and valve means opera-



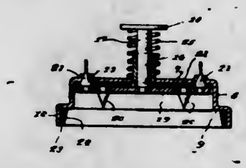
tive upon an increase in brake pipe pressure for rendering pipe.

1,887,591. SIGN. FRANK FUGITA, El Reno Okla. Filed Feb. 8, 1932. Serial No. 591,683. 1 Claim. (Cl. 40—140.)



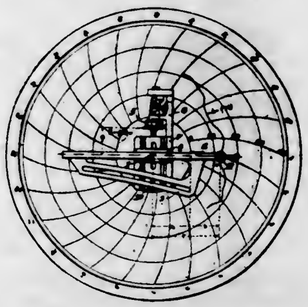
A sign comprising a frame formed of similar front and rear members arranged face to face and having top, bottom and side portions, a sheet of light transmitting material having its margins interposed between and permanently secured to the frame members, and cleats of light transmitting material secured to and extending across the front face of the sheet between the side portions of the front frame and disposed in spaced parallel relation to each other, said cleats being provided with retaining flanges adapted to engage display characters.

1,887,592. RECEPTACLE PERFORATOR AND CLOSURE. EARL B. GOODFELLOW, Arlington, N. J. Filed Jan. 12, 1931. Serial No. 508,298. 8 Claims. (Cl. 220—51.)



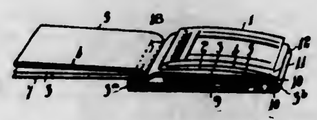
1. A device of the character described comprising a body portion having depending flange adapted to fit over the top portion of a receptacle, resilient means presenting a beveled inner face fitting between said flange and said receptacle and adapted to seal the former to the latter, said top portion of said receptacle presenting a normally closed opening, spring-pressed spurs reciprocatorily borne by said body portion and adapted to perforate the top of said receptacle and means adapted to close the opening in said top portion of said body portion after the perforating operation.

1,887,593. MECHANICAL INTEGRATING INSTRUMENT. EUGENE GUMAN, Medias, Rumania. Filed Mar. 12, 1930, Serial No. 435,307, and in Rumania Mar. 19, 1929. 7 Claims. (Cl. 235—61.)



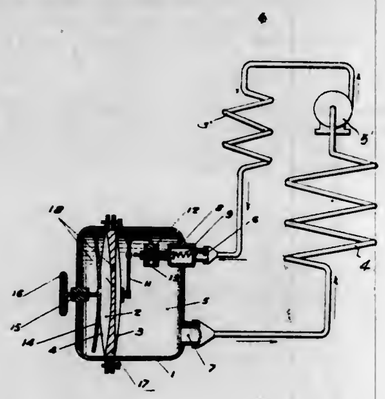
1. A mechanical integrating instrument for integrating a function of a plotted function comprising the combination with a centering pivot of a tracing arm rotatable and slidable on said centering pivot, a tracing member on said tracing arm, a measuring wheel supporting member rotatable and slidable on said centering pivot, a measuring wheel spindle having a measuring wheel thereon journalled in said supporting member guiding means on said supporting member in engagement with said tracing arm for maintaining the supporting member with the axis of the measuring wheel spindle in fixed angular relationship to a straight line intersecting the tracing member and the axis of the centering pivot, said guiding means being adapted to allow said supporting member and tracing arm to slide relatively to one another on the centering pivot in a radial direction and guiding means for controlling the radial displacement of the measuring wheel supporting member comprising a slotted guide on the tracing arm and a pin on the supporting member in engagement with the slot in said guide, said slot having the shape of a curve representing the relation between the plotted function and the function thereof to be integrated.

1,887,594. MANIFOLDING SALES BOOK. LOUIS HUFFMAN, Toronto, Ontario, Canada, assignor to Toronto Type Foundry Company, Limited, Toronto, Canada. Filed Nov. 2, 1931. Serial No. 572,518. 20 Claims. (Cl. 282—22.)



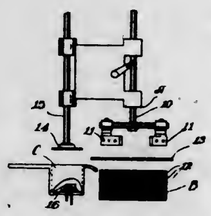
1. In a sales book a manifolding unit comprising a record sheet of translucent paper provided with a stub for binding in the book; a record sheet connected at one end to the outer end of the said translucent sheet; an original record sheet connected to the other end of the said record sheet, the three sheets normally lying in superimposed relationship; a carbon sheet having its upper face carbonized, positioned beneath the first mentioned record sheet; and a carbon sheet, positioned above the second mentioned record sheet, and having its under face carbonised.

1,887,595. PRESSURE REGULATING DEVICE. GEORGES VICTOR ISNARD, Toulon, France. Filed Jan. 3, 1930, Serial No. 413,353, and in France Jan. 14, 1929. 4 Claims. (Cl. 236—92.)



1. A pressure-responsive device comprising a fluid filled piping including a chamber, a fluidtight box filled with a gas not liable to condense, two diaphragms enclosing said box one of which has its periphery secured in an invariable manner to the chamber walls so as to close in an air-tight manner the bottom of the chamber, adjustable means acting on the second diaphragm for controlling the pressure in the box and means controlled by the deformation of the first diaphragm under the differential action of the pressures in the box and in the chamber.

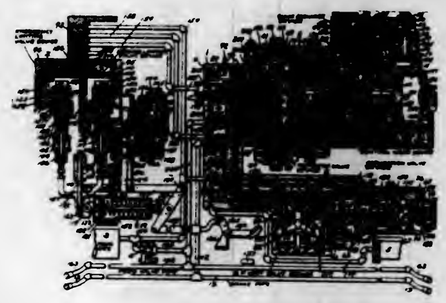
1,887,596. AUTOMATIC STOP. GEORGE J. KATZ, St. Paul, Minn. Filed June 24, 1929. Serial No. 373,081. 11 Claims. (Cl. 192—125.)



3. An automatic electric stop for envelope folding machines, including, a movable spring circuit closing pin, a folding plate adapted to carry said pin and electric circuit means operable by the grounding of said pin to form a circuit to release the operating clutch of the envelope folding machine and stop the same.

1,887,597. FLUID PRESSURE BRAKE. JOSEPH C. McCUNE, Edgewood, Pa., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa., a Corporation of Pennsylvania. Filed Sept. 24, 1929. Serial No. 394,807. 21 Claims. (Cl. 303—30.)

1. In a fluid pressure brake, the combination with a brake pipe, of a valve mechanism operative to effect an application of the brakes and a release of the brakes and a controlling valve device subject to the opposing pressures of the brake pipe and a chamber for controlling the operation of said valve mechanism, said valve mechanism being

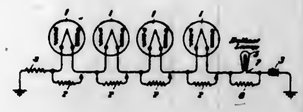


operative in effecting an application of the brakes to vent fluid under pressure from said chamber to the atmosphere.

1,887,598. CHASSIS OF A MOTOR VEHICLE. JOHN F. McMURTRIE, Bethlehem, P., assignor of one-half to William W. Hopkins, Springfield, Mass. Filed Apr. 17, 1928. Serial No. 270,640. 9 Claims. (Cl. 267—48.)

1. In combination with the chassis of a motor vehicle, a spring having one end pivotally connected to the chassis frame, and axle on which the spring is mounted, a shackle lever, pivotally connected to the chassis at one end and to the free end of the spring at its other end, means connected to the shackle lever and connected to the brake bands, whereby the elongation effects of the spring due to road unevenness may be utilized for normally maintaining the brake pressure equal and irrespective of the changes in the wheel base of the vehicle.

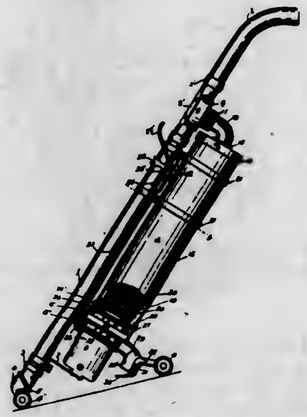
1,887,599. CONSTANT CURRENT REGULATION. HARRY NYQUIST, Millburn, N. J., assignor to American Telephone and Telegraph Company, a Corporation of New York. Filed Sept. 18, 1928. Serial No. 306,680. 4 Claims. (Cl. 171—229.)



1. Means for obtaining a current flow of constant magnitude comprising in combination, a ballast resistor having a voltage-current characteristic of approximately constant negative slope between certain voltage limits, and in shunt

with said resistor a fixed resistance having a voltage-current characteristic of positive slope equal in magnitude to said negative slope.

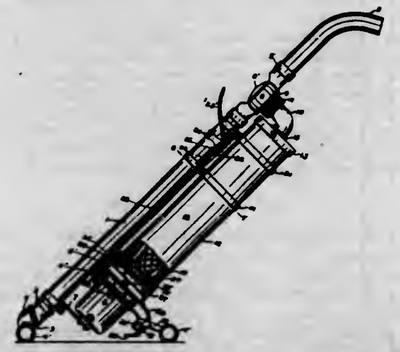
1,887,600. AIRWAY SUCTION CLEANER. DANIEL BENSON REPLOGLE, Berkeley, Calif., assignor, by direct and mesne assignments, to The Commerce Guardian Trust & Savings Bank, trustee, Toledo, Ohio. Filed Feb. 3, 1928. Serial No. 251,641. 8 Claims. (Cl. 15—16.)



3. In a suction cleaning device, a motor, a motor driven fan, a fan-case having a downwardly directed exhaust port, a supporting bracket and deflector plate hinged on a common axis to said fan case, and said supporting bracket arranged to support the device in a working position and the deflector plate curved to direct the exhaust air from the fan-case against the said motor.

4. In a suction cleaning device, a motor, a motor driven fan, a fan case having a downwardly directed exhaust port, and a supporting bracket and deflector plate hinged to the exhaust portion of said fan case from a common axis.

1,887,601. DUST COLLECTING APPARATUS FOR SUCTION CLEANERS. DANIEL BENSON REPLOGLE, Berkeley, Calif., assignor, by direct and mesne assignments, to The Commerce Guardian Trust & Savings Bank, trustee, Toledo, Ohio. Original application filed Feb. 3, 1928, Serial No. 251,641. Divided and this application filed July 15, 1931. Serial No. 551,023. 4 Claims. (Cl. 183—37.)



1. In a suction cleaner having a suction handle adapted for attachment to dust collecting tools, a suction producing means, and a dust collecting cylindrical body operatively connected at opposite ends to the suction handle and to the suction producing means; the improvement which comprises a filtering paper envelope coiled within and conforming in shape to said cylindrical body, and a mat of openwork material coiled with said paper body to space apart the folds of said envelope.

1,887,602. METAL COMPOUND OF AZO-DYESTUFFS AND PROCESS OF MAKING SAME. FRITZ STRAUB, Basel, and HERMANN SCHNEIDER and HEINRICH BERNHARD, Riehen, near Basel, Switzerland, assignors to Society of Chemical Industry in Basle, Basel, Switzerland. Filed Sept. 10, 1928, Serial No. 305,135, and in Switzerland Sept. 17, 1927. 12 Claims. (Cl. 260—12.)

1. A process for the manufacture of metal compounds of azo-dyestuffs, consisting in treating a mixture of different azo-dyestuffs, each containing lake-forming groups, with metal compounds of metals which are at least bivalent, and which are further capable of forming complex compounds.

1,887,603. PROCESS FOR THE PRODUCTION OF METAL COMPOUNDS OF AZO-DYESTUFFS ON ANIMAL FIBERS. FRITZ STRAUB, Basel, and HERMANN SCHNEIDER and HEINRICH BERNHARD, Riehen, near Basel, Switzerland, assignors to the Firm Society of Chemical Industry in Basle, Basel, Switzerland. Original application filed Sept. 10, 1928, Serial No. 305,135, and in Switzerland Sept. 17, 1927. Divided and this application filed June 23, 1931. Serial No. 546,420. 4 Claims. (Cl. 8—5.)

1. A process for the manufacture of metal compounds azo-dyestuffs on animal fibers, consisting in causing orthohydroxy-azo-dyestuffs and metal compounds of orthohydroxy-azo-dyestuffs of metals which are at least bivalent, and which are capable of forming complex compounds, to react on each other in presence of animal fibers.

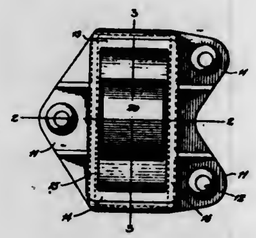
1,887,604. APPARATUS FOR FORMING CONCRETE PILES. RENZO TADA, Tokyo-Fu, Japan, assignor to Toyo Kompuresoru Kabushiki Kaisha (The Oriental Compressol Co. Ltd.), Tokyo, Japan, a Corporation of Japan. Filed Jan. 19, 1931, Serial No. 509,820, and in Japan Feb. 24, 1930. 1 Claim. (Cl. 61—57.)



Apparatus for forming concrete piles having an outer tube, an inner tube, a sleeve spaced apart from and arranged around the lower part of the inner tube and provided with an annular top closure and a truncated hollow bottom, a ring attached on the outer surface of the inner tube and adapted to come into contact with the closure

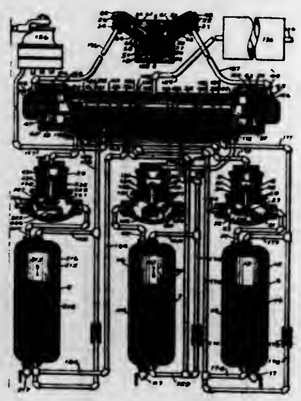
to limit the upward movement of the inner tube relative to the sleeve, and hollow semi-conical bottom members pivoted on the lower end of the inner tube and adapted to automatically open the lower end of the inner tube during the upward motion of the inner tube and to close the lower end at the completion of the downward motion of the inner tube by cooperation with the inner surface of the truncated bottom of the sleeve.

1,887,605. ANTIFRICTION ROLLER SIDE BEARING FOR RAILROAD CARS. JOHN J. TATUM, Baltimore, Md. Filed July 2, 1929. Serial No. 375,551. 8 Claims. (Cl. 308—226.)



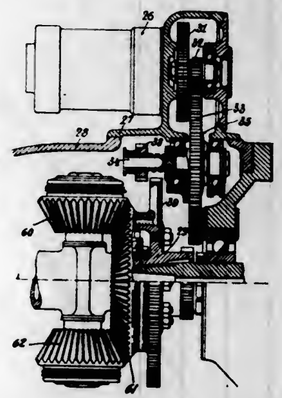
1. In an anti-friction side bearing for cars, a housing open at top and bottom and having side and end walls, the lower portions of the side walls being uniformly spaced and the upper portion of said side walls converging toward each other.

1,887,606. AIR PURIFIER. THOMAS H. THOMAS, deceased, Edgewood, Pa., by Mable M. Thomas, executrix, Edgewood, Pa., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa., a Corporation of Pennsylvania. Filed Mar. 8, 1930. Serial No. 434,438. 9 Claims. (Cl. 183—40.)



1. In a fluid purifying system, the combination with a plurality of filtering devices, of means for periodically employing one of said devices to filter fluid, means for periodically cleaning said device by fluid purified by another of said devices, and means for periodically retaining the cleaned device inoperative after the same has been cleaned, said means operating in timed relation and in a predetermined cyclic order.

1,887,607. SPEED REDUCING OR INCREASING DEVICE FOR INTERNAL COMBUSTION ENGINES. CHARLES RAYMOND WASBIGH, Rueil, France, assignor to Henri et Maurice Farman, Billancourt, France. Filed Sept. 19, 1928, Serial No. 307,007, and in France Oct. 8, 1927. 1 Claim. (Cl. 74—7.)



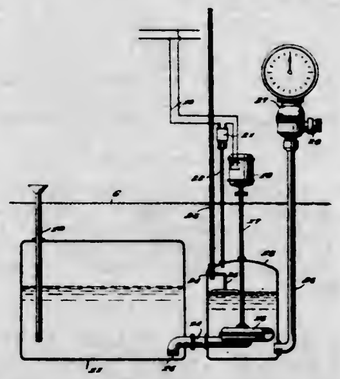
In an aircraft, the combination of an engine having a crank case and a crankshaft extending in said crank case and out of said crank case at least on one side of said crank case, a casing secured to said engine on said side of said crank case and in which projects the end of said crankshaft, said casing being provided with an aperture, a propeller shaft having one end extending in said casing, an epicyclic speed reducing gear in said casing between the engine crank shaft and the propeller shaft, a starter gear wheel rigidly connected to the driving sun wheel of said epicyclic gear and disposed in said casing opposite said aperture, a hollow support with an open side adapted to fit with said open side over said aperture of said casing and to be detachably connected with said casing, a countershaft carried by said support and situated within said casing opposite said aperture, a starting motor carried by said support, intermediate gear wheels in said support and said casing between said starting motor and said countershaft, a screw provided on said countershaft, and a pinion mounted on said screw for rotary movement therewith and longitudinal movement thereon adapted to be brought into and out of engagement with said starter gear wheel.

1,887,608. PROCESS FOR OBTAINING HYDROCYANIC ACID FROM GASES CONTAINING THE SAME. WALTER WETTSTEIN, Monthey, Switzerland, assignor to Society of Chemical Industry in Basle, Basel, Switzerland. Filed May 21, 1931, Serial No. 539,143, and in Switzerland June 3, 1930. 7 Claims. (Cl. 23—155.)

1. Process for the production of hydrocyanic acid in concentrated form from gases containing hydrocyanic acid, consisting in washing gases containing hydrocyanic acid with organic carboxylic acid esters, and isolating the hydrocyanic acid from the solutions thus obtained.

1,887,609. LIQUID DISPENSING SYSTEM. HARRY G. WEYMOUTH, Pittsburgh, Pa., assignor to Pittsburgh Equitable Meter Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Nov. 1, 1929. Serial No. 404,040. 4 Claims. (Cl. 221—95.)

1. A liquid dispensing system comprising a closed delivery and fluid separating tank containing liquid and gaseous fluid under pressure, a liquid dispensing pipe connected to said tank beneath the liquid level and supplied with liquid under pressure in said tank, a meter connected to said dispensing pipe, a pump within said tank to pump liquid and gaseous fluid into said tank, to maintain a sufficient pressure to cause flow through said dispensing



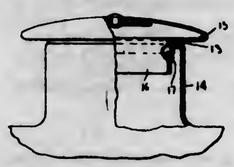
pipe, and automatically operating mechanism to discharge excess gaseous fluid from said tank independently of said dispensing pipe.

1,887,610. CENTRIFUGAL FRICTION CLUTCH. KLAS AUGUST WIDEGREN and EMIL HENRIK WIDEGREN, Hierserud, Sweden. Filed July 11, 1929, Serial No. 377,521, and in Sweden July 11, 1928. 2 Claims. (Cl. 192—58.)



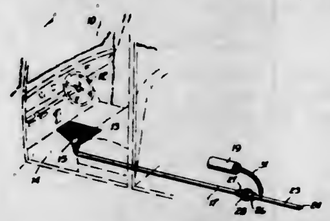
1. In a centrifugal friction clutch the combination of at least two rings encircling a shaft and being centrally fixed to the same at a distance from one another, said shaft being in its working position horisontal, a casing with a single unobstructed chamber enclosing the rings, said casing being rotatable and supplied with a motion transmitting means, a granular matter located in the said casing and resting loosely in the same, said matter under the action of the centrifugal force being pressed against the surfaces of the casing and the rings and thus at a certain rotation speed connecting the casing and the rings so that they are brought to rotate together.

1,887,611. CLOSURE SECURING MEANS. EDWARD H. WITTENBERG, La Crosse, Wis., assignor to Northern Engraving Company, La Crosse, Wis., a Corporation of Wisconsin. Filed July 10, 1930. Serial No. 467,007. 2 Claims. (Cl. 220—60.)



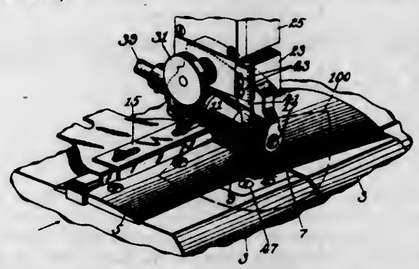
1. The combination, with a member to be closed, of a closure for said member comprising a skirt thereon adapted to fit into said member, and a series of spring tongues each formed integrally with one wall of an apertured portion of said skirt and extending across said apertured portion, said apertured portion being of larger area than the area of the tongue to provide an open space on each side thereof, said tongue being adapted to yieldably engage said member to hold said closure in position.

1,887,612. VENTILATING DEVICE FOR VEHICLES. JOSÉ AGUSTIN YANIZ Y DIAZ, Habana, Cuba. Filed Dec. 18, 1930. Serial No. 503,111. 3 Claims. (Cl. 98—2.)



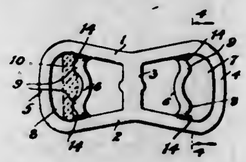
1. In a motor vehicle having an exhaust pipe, a ventilating device comprising a conduit having an inlet opening in the vehicle compartment to be ventilated, the outlet end of said conduit being nested within the outlet end of said exhaust pipe and projecting slightly beyond the end of the exhaust pipe, whereby the discharge of exhaust gases out of the exhaust pipe will create an outward draft in said conduit.

1,887,613. SKIVING MACHINE. GEORGE R. ALLEN, St. Louis, Mo., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Mar. 17, 1931. Serial No. 523,311. 9 Claims. (Cl. 69—9.5.)



1. A machine of the class described having, in combination, a skiving knife, and means for engaging a piece of work and feeding it to the knife, said means comprising a combined pressing and feeding roll for engaging an edge of the work, and said roll being tapered concavely from one end to the other, and a stationary member located near the smaller end of the roll for engaging the work at a locality spaced from the edge of the work.

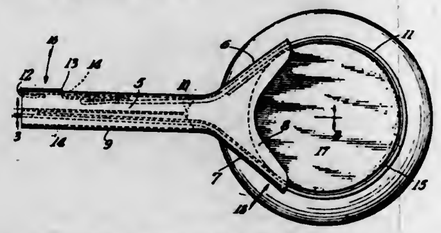
1,887,614. BUCKLE. LOUIS ALTERSON, New York, N. Y. Filed July 26, 1932. Serial No. 624,686. 2 Claims. (Cl. 24—198.)



2. A buckle having a frame formed with side members and an end member, a cross member extending between the side members and adapted to permanently receive one end

of a strap, a curved cross member connecting the side members and spaced from the end member, the space between the end member and the curved cross member constituting a strap passage that is curved and contracted at its ends so that the longitudinal edges of a strap passed through said passage will be gripped in said curved and contracted portions, and spaced projections on the curved cross member adapted to directly impinge against the strap passed through the passage to direct the edge portions of said strap into the curved and contracted portions of said passage.

1,887,615. CAP WRENCH. LOUIS E. BALTZLEY, Glen Ridge, N. J. Filed July 7, 1931. Serial No. 549,213. 10 Claims. (Cl. 81—3.1.)



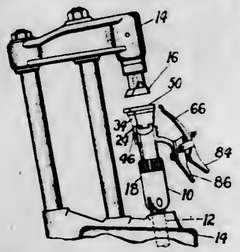
1. A cap wrench, comprising a holder having convergent side walls, an article gripping strap having a loop portion engaged at opposite sides with said convergent side walls, said strap being secured in the holder at one of said convergent side walls and being free for self-adjusting movements over the other of said convergent side walls and reversible anchorage means enabling the securing of the strap interchangeably at either side of the loop.

1,887,616. FASTENER. JOSEPH BERGE, Montclair, N. J. Filed June 20, 1930. Serial No. 462,451. 10 Claims. (Cl. 151—32.)



5. A fastener of the type adapted to bear against a surface when in locking position, having a slot of substantially uniform width and triangular configuration intersecting a bearing surface of said fastener.

1,887,617. HEEL-SEAT FORMING MACHINE FOR OFF-THE-LAST WORK. EARL A. BESSOM, Marblehead, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Apr. 27, 1929. Serial No. 358,655. 25 Claims. (Cl. 12—31.5.)

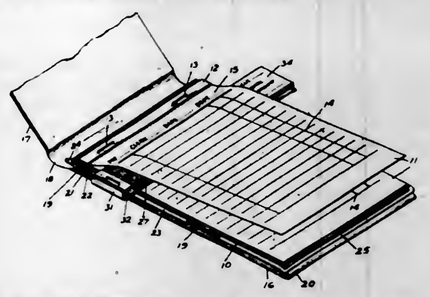


1. A heel-seat forming machine having, in combination, a heel-seat forming die and a jack mounted for relative movement to form the heel-seat portion of a shoe for the reception of a wood heel, said jack comprising a plate constructed and arranged to support a limited area on the inside of the shoe corresponding to the area to which pressure is applied by the die, said plate corresponding in width substantially to the lateral width of the inside of the shoe to prevent lateral movement of the shoe relatively to the jack, and a member mounted for movement with the jack and for movement toward and away from the rear end of the plate and constructed and arranged to engage the shoe to clamp it against the plate and prevent rearward movement of the shoe relatively to the jack.

1,887,618. THERMOPHORIC MIXTURE. THOMAS P. BELL, Yonkers, N. Y., assignor to Thermophor Mfg. Company, Inc., a Corporation of Delaware. Filed Oct. 20, 1931. Serial No. 570,045. 4 Claims. (Cl. 252—1.)

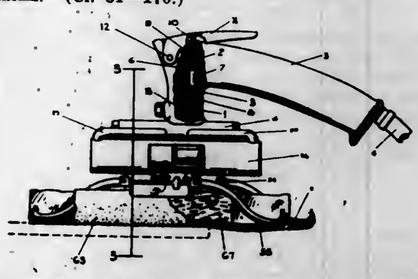
4. A thermophoric mixture including $Na_2SO_4(10H_2O)$ and Na_2SO_4.

1,887,619. MANIFOLDING DEVICE. EDWARD KIRBY BOTTLE, Elmira, N. Y., assignor to American Sales Book Company, Limited, Toronto, Canada, a Corporation of Ontario, Canada. Filed Apr. 22, 1930. Serial No. 446,211. 20 Claims. (Cl. 282—8.)



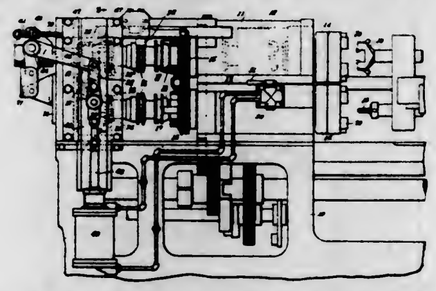
1. In a manifolding device, in combination, a plurality of pads of record leaves, supporting means for supporting said pads with the record leaves thereof in overlapping manifolding relation, said supporting means including a supporting device providing for movement of one of said pads to different manifolding positions with reference to another pad, covers for enclosing said pads and a false back attached to one of said covers and cooperating with one cover to form a storage or filing space for the reception of the inscribed leaves of one pad.

1,887,620. SANDER. SHERRY V. BOWLBY, Wichita, Kans. Filed Oct. 2, 1930. Serial No. 485,852. 2 Claims. (Cl. 51—170.)



1. A sanding machine comprising a head, a pair of power pistons carried by the head, a pivoted cross-bar connecting the pistons, sand-paper holders actuated by the pistons to reciprocate in alternate directions, said sand-paper holders comprising plates having pivoted fingers at their respective ends and flexible connections between the ends of the fingers in spaced relation to the plates.

1,887,621. CHUCKING MECHANISM. ROBERT S. BROWN, New Britain, Conn., assignor, by mesne assignments, to The New Britain-Gridley Machine Company, New Britain, Conn., a Corporation of Connecticut. Filed May 10, 1928, Serial No. 276,590. Renewed Mar. 3, 1932. 43 Claims. (Cl. 29—38.)

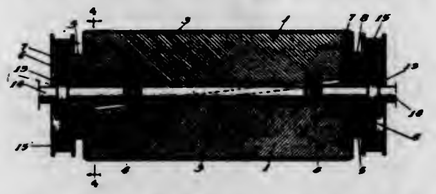


1. In a chuck operating mechanism, a chuck carrier, a chuck mounted thereon, a chuck operating rod extending through said chuck carrier, a spring normally forcing said rod in one direction, and relatively movable members adapted to engage respectively said chuck carrier and said rod for forcing said rod in an opposite direction against said spring.

18. A machine comprising in combination, a base, an indexing spindle carrier therein, a plurality of spindles rotatable therein, rotating means for said spindles, a chuck on each spindle, chuck operating rods extending through said spindles, springs forcing said rods individually in one direction, means mounted in a direction parallel to the axis about which said carrier is indexed adjacent the carrier and supported by said base having members engaging respectively a spindle and rod in each indexed position of the carrier and adapted to be disengaged from said spindle during indexing of said carrier whereby indexing movement is permitted, and means to relatively move said members to force said rod in a direction against said spring.

1,887,622. [WITHDRAWN.]

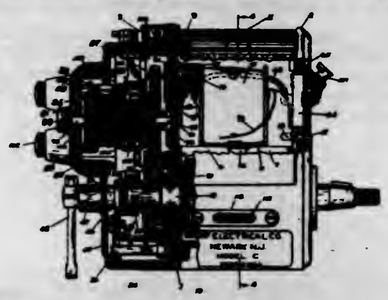
1,887,623. SURFACING ROLL. CHARLES H. DRIVER, Racine, Wis. Filed Feb. 28, 1931. Serial No. 519,103. 7 Claims. (Cl. 51—194.)



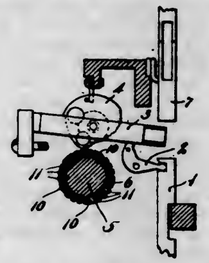
1. A surfacing roll, comprising a roll formed by segmental sections, jaws formed by said segmental sections to fasten a surfacing sheet to the roll, and an inner and an outer bracket pivoted to each other and arranged upon each end of the roll to connect said segmental sections together to tilt relative to each other upon the axis of the roll.

1,887,624. MAGNETO ELECTRIC GENERATOR. LE ROY S. DUNHAM, East Orange, and ARTHUR F. ROBERTSON, Belleville, N. J., assignors to Splitdorf Electrical Company, Newark, N. J., a Corporation of New Jersey. Filed Nov. 4, 1930. Serial No. 493,280. 26 Claims. (Cl. 171—209.)

1. In a magneto electric generator having a frame structure carrying two sets of pole pieces, a magnet associated with one set and a stationary current-generating coil having a core associated with the other set, and a rotor carrying inductors for distributing the magnetic flux from the magnet pole pieces to the coil pole pieces, further characterized in that; the frame structure has portions simulating end plates cast integral with the base, said portions being joined by an integral arch structure which completely encloses the generating coil and acts as a positioning means for the magnet.

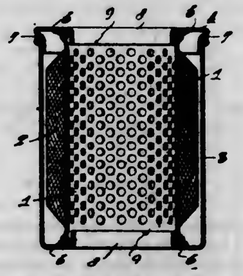


1,887,625. ROLLER FOR LINE SLUG MACHINES. GEORGE H. ESSELEIN, Concord, Mass., assignor to Stowe & Woodward Company, Newton Upper Falls, Mass., a Corporation of Massachusetts. Filed Feb. 28, 1931. Serial No. 519,071. 3 Claims. (Cl. 199—25.)



1. A roller for line slug machines having a plurality of projections in the nature of rubber suitably spaced apart and extending substantially radially of the roller, each projection having its outer edge arcuate with relation to the axis of the roller, said arcuate portions being the only portions available for cooperation with the cam of the machine.

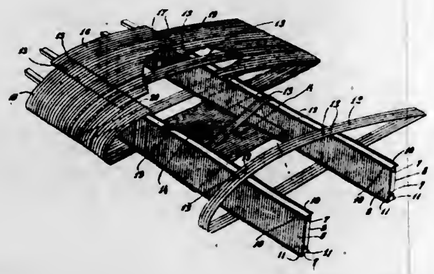
1,887,626. HERMETIC CONTAINER. RICHARD ELSSNER and RALPH H. CARTER, Johnson City, Tenn., assignors to American Glanzstoff Corporation, New York, N. Y., a Corporation of Delaware. Filed Sept. 4, 1931. Serial No. 561,120. 6 Claims. (Cl. 206—46.)



1. In a container, in combination, a cylindrical wall portion, an inturned projection at one end thereof, a gasket associated with the said projection, a cover por-

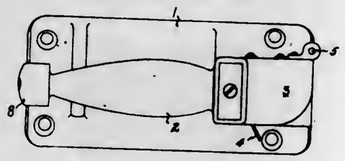
tion, said cover portion being open-centered and channel-shaped, and adapted to engage the other end of the cylindrical wall portion forming a fluid tight seal therewith.

1,887,627. METHOD AND MEANS OF FABRICATING STRUCTURES OF METAL AND NONMETALLIC MATERIALS. SALO CYRUS FINGER, Far Rockaway, N. Y. Filed May 26, 1931. Serial No. 540,104. 3 Claims. (Cl. 244—31.)



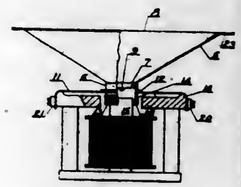
1. An airplane wing constructed of metal, embodying front and rear spars, each having parallel longitudinal members of a rectangular cross section connected by corrugated web-forming members, said web-forming members being shaped to provide laterally projecting flanges constituting their longitudinal edges and forming jointure making surfaces, chord members associated with said surfaces, center forming skin sections spanning said spars in superimposed engagement with said chord members and common means for uniting said center forming sections and said chord members to the jointure making surfaces of said spars, to produce a girder-like structure of which the center-forming skin sections constitute the web and the spars and chord members the longitudinals and internal bracing respectively.

1,887,628. SWITCH AND OPERATING MECHANISM. PARIS R. FORMAN, Rahway, N. J., assignor to National Pneumatic Company, New York, N. Y., a Corporation of West Virginia. Original application filed Oct. 22, 1930, Serial No. 490,459. Divided and this application filed May 8, 1931. Serial No. 535,975. 12 Claims. (Cl. 200—5.)



1. A control device of the type described, comprising a switch having two movable switch blades, separate means for operating said switch blades in one direction independently in a predetermined sequence only, and additional means for simultaneously operating both of said switch blades in the opposite direction.

1,887,629. SOUND REPRODUCING APPARATUS. WILLIAM T. FORSE and FRANK A. MITCHELL, London, England, assignors to Columbia Phonograph Company, Inc., Bridgeport, Conn., a Corporation of New York. Filed July 15, 1929, Serial No. 378,297, and in Great Britain July 23, 1928. 14 Claims. (Cl. 181—31.)



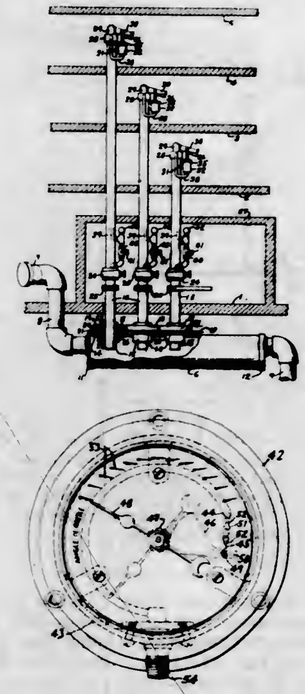
1. In a sound reproducing device including a conical diaphragm, a relatively rigid tubular projection secured at one of its ends to the convex side of the diaphragm and enclosing the apex thereof, flexible supporting means for said tubular projection, and said supporting means secured to said projection in spaced relation to said diaphragm.

1,887,630. METHOD AND DEVICE FOR THE PRODUCTION OF PILES OF CONCRETE AND THE LIKE. EDGARD FRANKIGNOUL, Brussels, Belgium, assignor to Compagnie Internationale des Pieux Armes Frankignoul, Societe Anonyme, Liege, Belgium. Original application filed Nov. 15, 1927, Serial No. 233,445, and in Belgium Nov. 30, 1926. Divided and this application filed Oct. 6, 1931. Serial No. 567,170. 4 Claims. (Cl. 61—57.)



1. Device for the driving and construction of piles of concrete and like materials moulded in the soil comprising a driving point, a hollow column whose lower end serves as a rammer and which is constricted interiorly near its bottom said column resting during the driving work with its lower end upon the driving point and furnished at its upper end with an anvil which receives the impact of a hammer, a tube which during the driving work engages with its lower end upon the driving point and is subjected at its top end to the action of the anvil, a space forming a storage space for concrete provided interiorly of the column forming the rammer, means serving for the introduction of concrete into the column and means for causing the falling of part of the concrete contained in the column underneath the rammer while the latter is being raised.

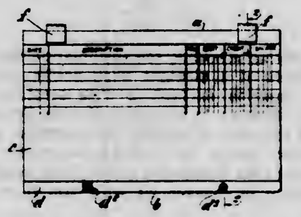
1,887,631. STANDPIPE SYSTEM. FREDERICK W. FROST, Amityville, N. Y. Filed Aug. 2, 1928. Serial No. 296,898. 10 Claims. (Cl. 169—16.)



5. As a new article of manufacture, a standpipe gage comprising an indicator movable in response to variations in fluid pressure, and a fixed dial bearing a plurality of index lines arranged to be swept by said indicator, each of said lines lying at a different vertical angle when the gage is in position.

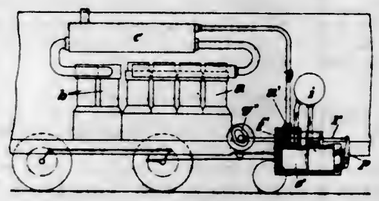
9. In apparatus of the class described, a standpipe having a pivoted nozzle, fluid-pressure operated means for moving said nozzle about its pivot, means for controlling said first-named means, and means responsive to pressure in said first-named means for visually indicating the angular position of the nozzle.

1,887,632. VISIBLE INDEX CARD. ROLAND A. FURLONG, Rochester, N. Y., assignor to The Yawman & Erbe Manufacturing Company, Rochester, N. Y., a Corporation of New York. Filed June 27, 1930. Serial No. 464,166. 7 Claims. (Cl. 129—16.7.)



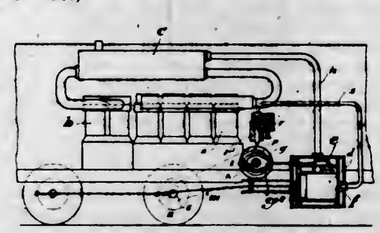
1. A visible index card consisting of three sheet sections adapted to be folded to overlie one another, the uppermost sheet section being of less length than the sheet section thereunder, and the last-named sheet section having a signal window exposed to view beneath the lower edge of the overlying sheet section.

1,887,633. INTERNAL COMBUSTION LOCOMOTIVE. JOSEF GEIGER, Augsburg, Germany, assignor to Maschinenfabrik Augsburg-Nurnberg A.-G., Augsburg, Germany, a Corporation. Filed Mar. 13, 1926, Serial No. 94,516, and in Germany Mar. 16, 1925. 8 Claims. (Cl. 60—14.)



8. In a locomotive constructed for cooperatively combined air motor and Diesel engine operation, the method which comprises introducing highly heated compressed air into the air motor with expansion therein to effect work, exhausting expanded air from the air motor operation at a residual temperature above normal atmospheric temperatures, introducing exhaust air having such a residual temperature from the air motor operation into the Diesel engine with resultant recompression therein to a compression pressure not substantially exceeding 15 atmospheres and injecting fuel into such recompressed air with resulting self-ignition and combustion to effect work.

1,887,634. INTERNAL COMBUSTION LOCOMOTIVE. JOSEF GEIGER, Augsburg, Germany, assignor to the Firm Maschinenfabrik Augsburg-Nuernberg, Aktiengesellschaft, Augsburg, Germany, a Corporation of Germany. Filed Oct. 17, 1927. Serial No. 226,666. 5 Claims. (Cl. 60—19.)

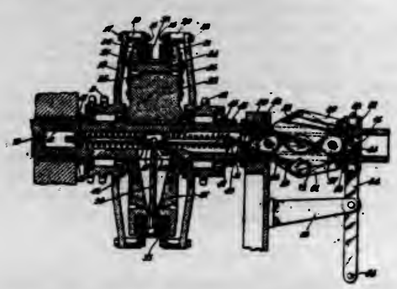


1. A combined air motor and internal combustion engine of the character described, comprising a cylinder, a piston therein, said cylinder having an intake passage and an exhaust passage, means for supplying compressed air to said intake passage for air motor operation therein on each alternate working stroke, means for supplying fuel to said cylinder for internal combustion engine operation therein on each alternate working stroke intermediate air motor working strokes, and a single control valve for governing the admission of compressed air to said cylinder for the air motor operation, the exhausting of expanded air from the driving cylinder resulting from said air motor operation, and the exhausting of products of combustion from the driving cylinder resulting from said internal combustion engine.

2. In a locomotive constructed for cooperatively combined air motor and Diesel engine operation in a working cylinder, the method which comprises preheating compressed air, introducing the preheated compressed air into the cylinder for air motor expansion therein to effect work, coordinating the preheating of the air and the expansion thereof in the air motor operation with the compression pressure to be attained during the Diesel operation so that expanded air from the air motor operation has a residual temperature above normal atmospheric temperatures, controlling the exhaust cut off of the air motor operation so as to leave a predetermined amount of ex-

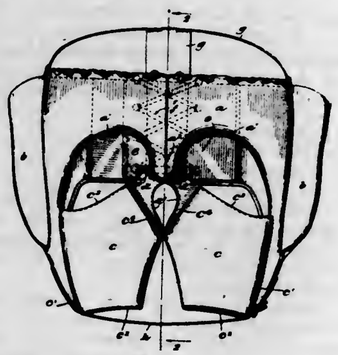
panded air having such residual temperature within said cylinder with resultant recompression thereof to the said compression pressure to attain an ignition compression temperature in excess of the compression temperature normally resulting from such a compression pressure, and injecting fuel into such recompressed air with resulting self-ignition and combustion to produce a Diesel operation and effect work, the self-ignition being thereby attained in the Diesel operation without the employment of unduly high compression pressures.

1,887,635. FRICTION CLUTCH. HEWITT A. GEHRES and HAROLD F. SHEPHERD, Mount Vernon, Ohio, assignors to Cooper-Bessemer Corporation, Mount Vernon, Ohio, a Corporation of Ohio. Filed Dec. 4, 1929. Serial No. 411,453. 8 Claims. (Cl. 192—21.)



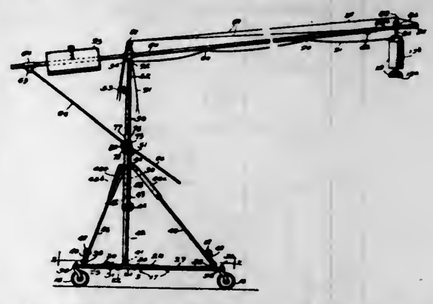
1. The combination of a bored rotatable shaft, an inner clutch member rotatable therewith and longitudinally slidable with respect thereto, and provided with a radial aperture, an outer clutch member loosely surrounding said inner clutch member and provided with an aperture in alinement with said radial aperture of said inner clutch member, a lever pivoted in the aperture of said inner clutch member and having an end bearing in the aperture of said outer clutch member and having its other end projecting into the bore of said shaft, and motion communicating means for said lever, located within said bore.

1,887,636. BOXING MASK. WILLIAM D. HAMBY, Morton, Pa. Filed Aug. 6, 1931. Serial No. 555,522. 2 Claims. (Cl. 2—3.)



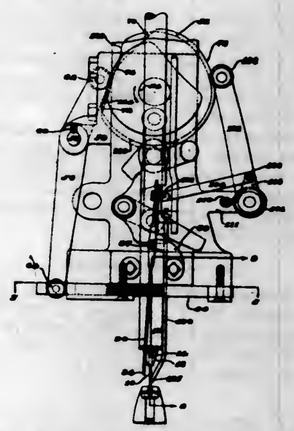
1. A boxing mask having a body portion extending over the forehead, downwardly over the nose, and down over the sides of the head, open ear pads connected to the body portion at opposite sides thereof, and separate cheek pads secured flexibly to the body portion adjacent the downwardly extending portion for the nose and to the ear pads and spaced from the body portion to form openings for the eyes.

1,887,637. METHOD FOR COLLECTING SOUND. EDMUND H. HANSEN, Hollywood, Calif. Filed Aug. 18, 1830. Serial No. 475,964. 2 Claims. (Cl. 179—100.1.)



1. The method of collecting sound with a sound-translating device from a given setting where the sounds to be translated emanate in close succession from various sources located at different portions of the setting, which consists in moving the sound-translating device back and forth and about in a succession of movements from one portion of the setting to another where the sound to be collected is successively about to emanate and immediately before the emission of the sound to be collected, while maintaining the translating device, during the collecting, substantially close to the sources respectively where the sound to be collected emanates.

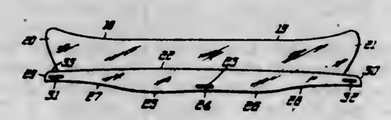
1,887,638. SEWING MACHINE. GEORGE T. HART, Jr., West Lynn, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Dec. 12, 1930. Serial No. 501,847. 9 Claims. (Cl. 112—84.)



1. In a sewing machine, the combination with the other sewing devices of a straight hook needle provided with a thread engaging surface, a shoe receiving horn, an opening in the horn in line with the needle axis for the passage of the thread and for the reception of the point of the needle, means for rotating the needle on its axis at the limit of its downward stroke, and means for holding the thread in engagement with said thread engaging surface.

1,887,639. SHIRT. ANNIE L. HERTZBERG, Oakland, Calif. Filed Feb. 27, 1932. Serial No. 595,492. 3 Claims. (Cl. 2—127.)

1. In combination with a shirt having a low cut V neck, and provided with a neck band comparatively high at the back with a buttonhole located adjacent the upper edge; a collar comprising a collar portion and a neck band portion, said neck band portion being comparatively



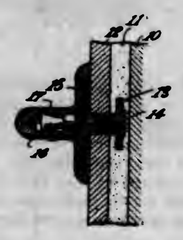
high at the center with a buttonhole located adjacent the bottom and continuing by compound curves into broad portions to prevent creep and continuing into comparatively narrow tabs extending beyond the collar portion.

1,887,640. DRILL. GEORGE F. HICKMAN, Newark, N. J., assignor to Gouverneur G. Brown. Filed June 11, 1930. Serial No. 460,844. 1 Claim. (Cl. 255—64.)



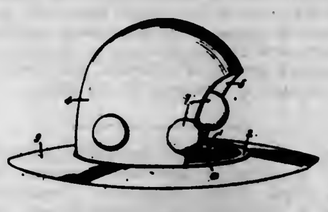
A drill bit comprising a body member having integral teeth at one end and an integral hollow extension at the other end forming a socket for fitting said bit on a shank end, said socket being sufficiently deep to have a substantial sleeve engagement on the shank, said socket and shank being shaped to provide an interlocking, non-rotary connection, said extension having oppositely disposed side openings and internal grooves in the socket walls between said openings, said grooves being adapted to coincide with grooves on the sides of the shank, and a hairpin having a bight portion and leg portions adapted to be inserted laterally through a side opening whereby the legs fit the coinciding grooves, the bight portion enters one opening and the free ends of the legs may be bent inwardly in the other openings against the shank surface.

1,887,641. WALL FIXTURE SUPPORT. JOSEPH A. HONOGHE, Jersey City, N. J. Filed Oct. 11, 1929. Serial No. 398,857. 2 Claims. (Cl. 72—101.)



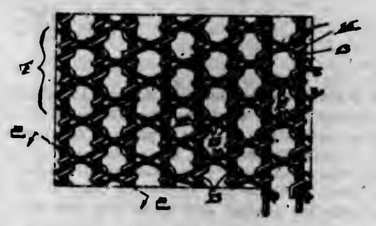
1. A wall fixture support comprising a stud having one end embedded in a wall and the other end extending outwardly beyond the front face of the wall and having means for attaching a wall fixture thereto, and a tie member embedded in the wall attached to the inner end of the stud and projecting beyond the sides of the stud.

1,887,642. GAME. CHARLES A. HOWLAND, Schenectady, N. Y. Filed Feb. 5, 1931. Serial No. 513,641. 11 Claims. (Cl. 273—34.)



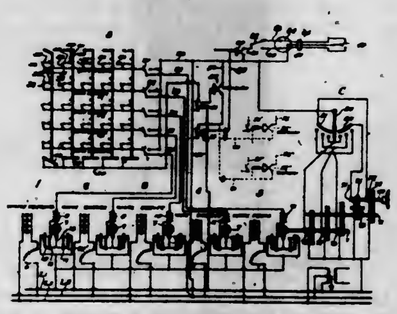
9. In combination, a ring adapted to be supported in fixed relation to a flat surface, an annular wall rotatively mounted on said ring, said wall being provided with an opening through which a ball may be rolled, and means forming projections at the side edges of said opening adapted to be struck by a ball for rotating the wall.

1,887,643. LACE BRAID AND METHOD OF MANUFACTURING SAME. OTTO EUGENE HUBER, Reading, Pa., assignor to Narrow Fabric Company, West Reading, Pa., a Corporation of Pennsylvania. Filed Apr. 2, 1932. Serial No. 602,606. 8 Claims. (Cl. 96—25.)



3. An elastic lace-braid fabric comprising in combination, longitudinally extending elastic strands, transversely extending elastic strands inter-lace-braided therewith, and one or more inelastic binder yarns on said longitudinally extending strands adapted to join certain of said inter-lace-braided longitudinally and transversely extending elastic strands against movement relative to each other.

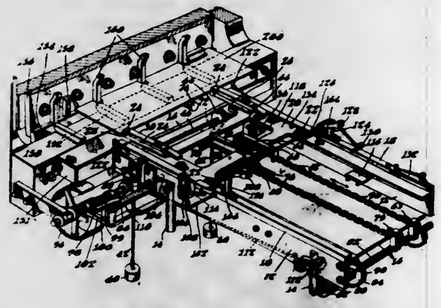
1,887,644. CONTROL PANEL. GEORGE W. HYSER, Minneapolis, Minn. Filed Dec. 17, 1928. Serial No. 326,427. 18 Claims. (Cl. 175—312.)



1. In a lighting system, a plurality of lights, dimmers for controlling the intensity of illumination of the lights, a common operating shaft and individual electromagnetic

clutch means for controlling the establishment of a driving connection from the shaft to the respective dimmers, means for pre-selecting a number of groups of dimmers for individual group operation, all of the dimmers being selectable for each of the groups, means for causing the electromagnetic means to simultaneously establish a driving connection to all the dimmers of any desired one of the preselected groups of dimmers, and means for controlling the rate of operation of the shaft.

1,887,645. MACHINE FOR FEEDING SHEET MATERIAL. WILLIAM H. JOHNSON, Arlington, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Jan. 9, 1928. Serial No. 245,439. 23 Claims. (Cl. 164—48.)



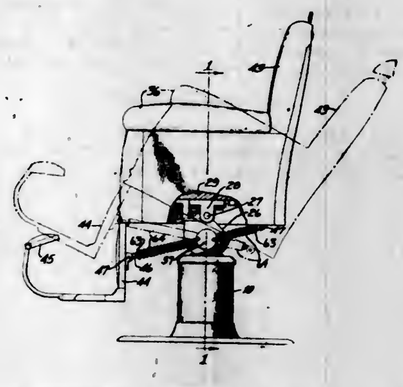
1. A plate chopping machine having, in combination, a reciprocatory blade, work-gauging means positioned rearwardly of said blade to abut a plate to be operated upon, means for holding the plate, means for causing said plate-holding means to exert a continuous advancing pressure on the plate to cause the advancing edge of the plate to bear alternately against said blade and said work-gauging means, and means automatically operable at a predetermined point in the advance of the plate to effect retraction of the plate-holding means, thereby retracting the remnant of the plate.

1,887,646. INSECTPROOF SCREEN MEANS FOR WINDOWS OR DOORS. LESLIE CHARLES JOHNSTON, Sydney, New South Wales, Australia. Filed Oct. 22, 1931, Serial No. 570,324, and in Australia Oct. 27, 1930. 4 Claims. (Cl. 156—39.)



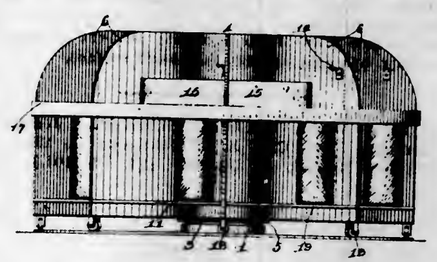
1. Insect proof screen means for windows or doors comprising a framing associable with a window or door and which includes recessed cambered means carrying cambered rack bars within the recessed portion of said cambered means, a roller to which one end of the screen sheeting is attached, means associated with the window or door to which the other end of the screen sheeting is attached, a spur pinion on each end of the roller adapted to mesh with the said rack bars, and spring tensioning means for said screen sheeting.

1,887,647. CHAIR. ROBERT ERNEST KOCHS and ARTHUR R. SCHWARZKOPF, Chicago, Ill., assignors to Theo. A. Kochs Company, Chicago, Ill., a Corporation of Illinois. Filed Dec. 11, 1929. Serial No. 413,173. 5 Claims. (Cl. 155—26.)



1. In combination, a chair-seat adapted to tilt about a horizontal axis, means movable about an axis non-concentric with respect to the axis of the chair-seat and connected to the chair-seat on opposite sides of its horizontal axis for locking and supporting the chair-seat in desired tilted position, means for elevating the chair-seat, and an actuating member operatively connected to both the elevating means and locking means.

1,887,648. LAUNDRY BREAKING TABLE. FRANK A. C. KRUEGER, Milwaukee, Wis. Filed Nov. 22, 1930. Serial No. 497,562. 4 Claims. (Cl. 211—10.)



1. A laundry breaking table comprising a central pedestal, a plurality of spaced radial partitions carried by said pedestal to form individual stalls, sorting shelves in each of said stalls, rollers carried by the outer ends of said partitions for supporting the same, an annular depending flange carried by the bottom of the pedestal, and means mounted on the floor and engaging said flange to rotatably anchor the table on the floor.

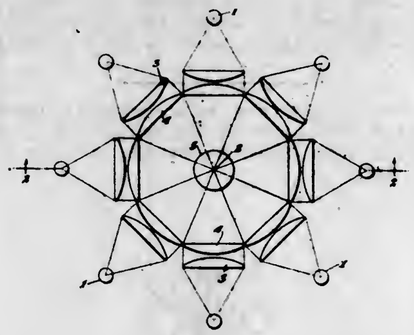
1,887,649. NUT TAPPING MACHINE. KARL KUMPMANN, Sr., Ludenscheid, Germany. Filed June 4, 1929, Serial No. 368,313, and in Germany Mar. 20, 1929. 8 Claims. (Cl. 10—129.)

1. A nut tapping machine, comprising in combination a cutter head adapted to rotate and reciprocate having a central bore with downwardly curved and enlarged portion at its rear end, a cutter shaft in and projecting from the front end of said bore, a tool on the front end of said shaft, a centering device pivotally mounted in front of said cutter head adapted to guide the portion of said shaft projecting from said cutter head and to successively shift the finished nuts onto said shaft at the forward



movement of the cutter head to form a string of nuts on said shaft, a spring controlled plate oscillatably mounted in the enlarged portion of said cutter head bore tangentially to the string of nuts on said shaft, the lower edge of said plate adapted to press against the upper surface of the first nut of the string of nuts and to eject said first nut from said cutter shaft during the movement of said cutter head.

1,887,650. LIGHT CONTROLLING APPARATUS. CHESTER W. LARNER and SYDNEY J. SANFORD, Philadelphia, Pa. Filed May 27, 1926. Serial No. 111,949. 18 Claims. (Cl. 88—24.)



11. In combination, a plurality of light sources, a common member having a plurality of reflecting surfaces of predetermined shape, and each surface cooperating with only one light source, means comprising condensing lenses, shielding devices and a central lens associated with each of said sources whereby the light from each source impinges only upon its cooperating reflecting surface and substantially covers the same, whereby the beams of light reflected from each of said surfaces are combined into a single beam of substantially parallel rays and of substantially uniform intensity throughout.

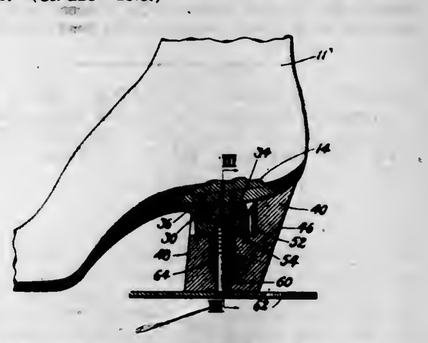
1,887,651. ABSORBER FOR AIR COOLED REFRIGERATORS. ALVAR LENNING, New York, N. Y., assignor to Electrolux Servel Corporation, New York, N. Y., a Corporation of Delaware. Original application filed Nov. 15, 1927, Serial No. 233,866, Patent No. 1,836,719, dated Dec. 15, 1931. Divided and this application filed Jan. 26, 1929. Serial No. 335,222. 14 Claims. (Cl. 257—245.)

1. An absorber for a refrigerator adapted to be cooled by air comprising a shell, means for introducing vaporous refrigerant and liquid absorption fluid into said shell, a series of discs in said shell in contact with the inner surface of said shell and adapted to be contacted by said refrigerant and absorption fluid, and a series of



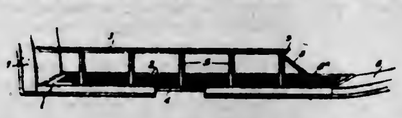
plates surrounding said shell arranged in parallel to form a series of parallel air passages past the absorber and means for closing two sides of said passages.

1,887,652. GARMENT DISPLAY DEVICE. JOHN W. LONEY, Brockton, Mass., assignor to U. A. Miller Treeing Machine Company, Portland, Me., a Corporation of Maine. Filed Jan. 9, 1929. Serial No. 331,259. 33 Claims. (Cl. 223—18.3.)



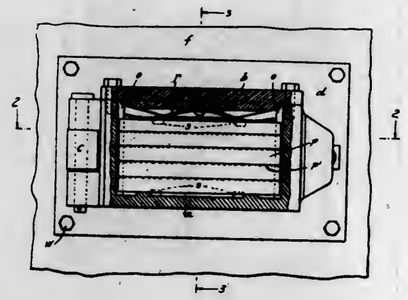
1. A supporting device for a hosiery display form having a cup-shaped upper surface adapted to underlie the heel portion of the form, and a movably mounted adjustable block for securing said supporting device with its upper surface closely in engagement with the heel end only of said display form over the stocking thereon without injury to the stocking.

1,887,653. RUNNING BOARD LUGGAGE HOLDER. HARRY LONSCHEIN, New York, N. Y. Filed Apr. 29, 1931. Serial No. 533,592. 2 Claims. (Cl. 280—164.)



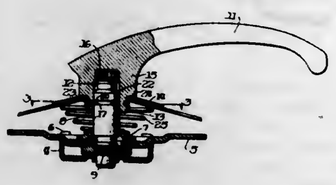
1. In a running board luggage holder, a strip rigidly carried thereby, an inverted U-shaped channel piece, and links connecting said strip with said channel piece, the ends of said links projecting into the channel and between the side walls thereof and pivotally held therebetween.

1,887,654. FURNACE OBSERVATION WINDOW. HERBERT GEORGE BASIL MAHON, Gosforth, Newcastle-upon-Tyne, England. Filed Nov. 13, 1930, Serial No. 495,877, and in Great Britain Nov. 22, 1929. 17 Claims. (Cl. 126—200.)



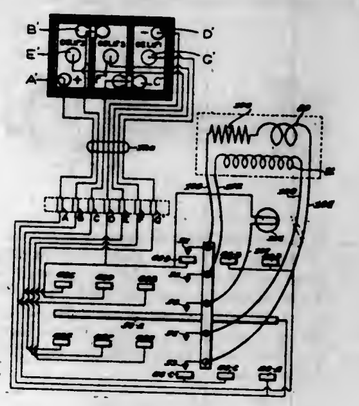
1. A furnace observation window comprising a box surrounding an opening in the furnace, a transparent plate supported by the box, and means for retaining the plate in assembly with the box, said means comprising beveled surfaces upon the box and inappreciably overhanging the edge portions of the plate on its side exposed to the furnace fire so that substantially the entire surface of the plate is uniformly exposed to the heat of the furnace.

1,887,655. DOORLOCK OPERATOR. ROLLO MARPLE, Jackson, Mich., assignor to Hancock Manufacturing Co., Jackson, Mich., a Corporation of Michigan. Filed Mar. 14, 1930. Serial No. 435,684. 1 Claim. (Cl. 292—353.)



The combination of a door lock operator comprising, a shaft having an annular groove, a handle non-rotatably mounted on said shaft, an annular wall projecting inwardly from said handle beyond said annular groove with a shoulder formed between said annular wall and said handle and an external circumferential groove communicating over a portion of the circumference with said groove on the shaft when the handle is in position thereon, a detent in said outer groove projecting into said groove in the shaft, an escutcheon plate having an inturned flange slidable over said annular wall, and a coiled spring bearing against said escutcheon plate to yieldably hold said plate against said shoulder with said flange in position over said detent.

1,887,656. BATTERY TESTING INSTRUMENT. LAWRENCE MYERS, Chicago, Ill. Filed Aug. 27, 1928. Serial No. 302,386. 4 Claims. (Cl. 136—182.)



1. In a battery testing device, the combination of a multicell storage battery, an electrode depending into each of the cells of said battery, an ammeter, open circuits between each of said electrodes, the opposite pole of the cell adjacent the one containing the electrode, and said ammeter, and switch means selectively to close said circuits.

1,887,657. VALVE FOR WIND MUSICAL INSTRUMENTS. WILLIAM W. NELSON, Brookline, Mass. Filed June 2, 1932. Serial No. 614,933. 1 Claim. (Cl. 84—392.)

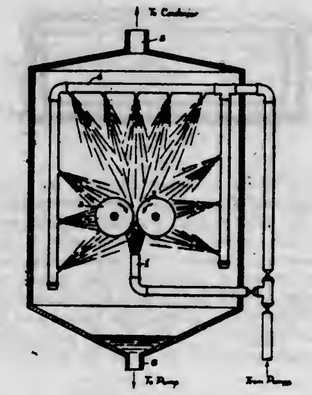


In a wind musical instrument of the type specified having a top tubing, valve casings with tops lying between said tubing and below the top edges thereof, valves within said casings, stems to the valves, and finger buttons borne by said stems, caps having threaded connection with the tops of the valve casings and provided with sockets formed in the tops thereof into which the finger buttons are received when depressed, and finger grips for turning said threaded caps forming the exterior of said sockets.

1,887,658. DECOMPOSITION OF LIQUID HYDROCARBONS. HOWARD S. NUTTING and HOWARD H. ROWLEY, Midland, Mich., assignors to The Dow Chemical Company, Midland, Mich., a Corporation of Michigan. Filed July 26, 1930. Serial No. 471,073. 3 Claims. (Cl. 204—31.)

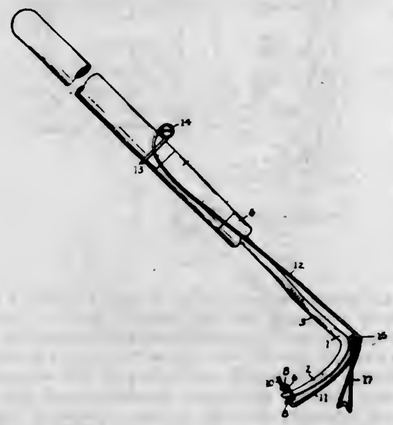
1. In a method of decomposing a hydrocarbon oil to produce a gaseous mixture rich in acetylene, the steps

which consist in spraying a stream of such oil into the field of an electric arc, and immediately thereafter con-



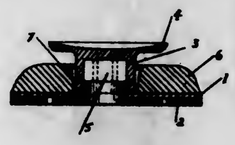
tacting the gases thereby formed with a finely subdivided spray of relatively cold oil, whereby decomposition or recombination of such gases is materially reduced.

1,887,659. RAKE CLEANER. WILLARD M. PAXSON, Dowagiac, Mich., assignor of one-half to Donald H. Miles, Cassopolis, Mich. Filed Apr. 23, 1931. Serial No. 532,267. 6 Claims. (Cl. 55—146.)



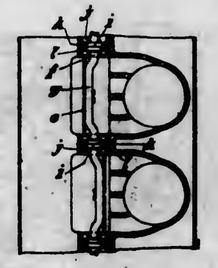
1. In a method of decomposing a hydrocarbon oil to handle, consisting of a single piece of resilient wire having a handle embracing loop, means connecting the ends of said loop, a stripper, said wire having a pair of arms diverging from said loop and being bent over the head of the rake and downwardly alongside of the teeth thereof and terminating in fingers loosely engaging said stripper, spacing means connecting the arms at said bends, and means carried by said spacing means for locking the arms to support the stripper in an inoperative position adjacent the head of the rake.

1,887,660. TRUSS PAD. ISAAC M. PHASS, Cincinnati, Ohio, assignor to The Ohio Truss Company, a Corporation of Ohio. Filed Aug. 5, 1931. Serial No. 555,173. 4 Claims. (Cl. 128—117.)



1. A truss pad comprising a base portion, a cushion formed on said base and having a centrally disposed opening, a head, a tube formed integrally with said head and connecting with said base through said opening and arranged to support said head flexibly and resiliently above said cushion.

1,887,661. INTERNAL COMBUSTION ENGINE. GUSTAV PIELSTICK, Augsburg, Germany, assignor to Maschinenfabrik Augsburg-Nürnberg A. G., Augsburg, Germany, a Corporation of Germany. Filed Oct. 30, 1930, Serial No. 492,156, and in Germany Nov. 29, 1929. 9 Claims. (Cl. 123—65.)



7. An internal combustion engine comprising a series of cylinders having piston controlled exhaust ports, and valves in the exhaust passages for controlling the escape of exhaust gases, said valves comprising connected rotatable units each having a hollow stem offset from an axial line adjacent the exhaust port location to provide a clear path for the exhaust flow when the valve is open, each unit terminating in a flange, the adjacent flanges being connected at points between cylinder locations.

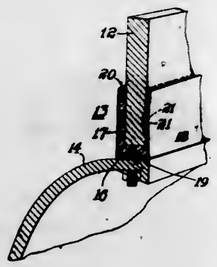
1,887,662. BUTYL PHENOL COMPOSITION. ROLAND R. READ, Baltimore, Md., assignor to Sharp & Dohme, Inc., Baltimore, Md., a Corporation of New Jersey. Filed Feb. 29, 1928. Serial No. 258,151. 4 Claims. (Cl. 260—154.)

1. A new butyl phenol composition containing a substantial amount of ortho-secondary butyl phenol and having a boiling point range between 220 and 265° C.

1,887,663. PLUMBING FIXTURE CLIP. HENRY M. REED, Jr., Louisville, Ky., assignor to Standard Sanitary Manufacturing Company, a Corporation of New Jersey. Filed Aug. 1, 1931. Serial No. 554,588. 7 Claims. (Cl. 72—0.5.)

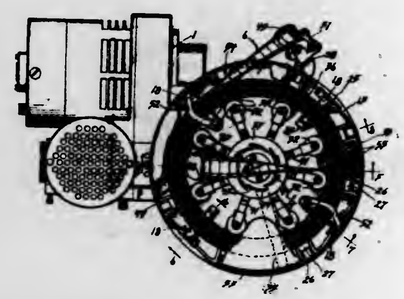
1. A clip for joining a sheet metal panel to a plumbing fixture, comprising a member secured to said plumbing

fixture and having vertically extending spaced legs adapted to receive the end of a sheet metal panel therebetween,



one of said legs being shaped to yieldingly hold the end of the panel against the other leg.

1,887,664. MOTION PICTURE PROJECTING MACHINE AND CONTINUOUS FILM FEED REEL THEREFOR. BRUNO STECHBART, Chicago, Ill., assignor to The Bell & Howell Company, Chicago, Ill., a Corporation of Illinois. Filed May 16, 1928. Serial No. 278,134. 4 Claims. (Cl. 88—18.7.)



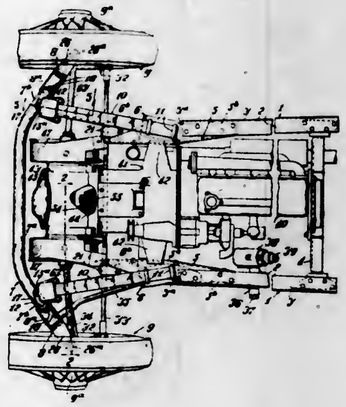
1. In a continuous strip feed reel the combination with a frame plate member of generally circular form, of a continuous strip feed reel drum carried on one face thereof in a plane corresponding thereto, a support bracket formation on said plate member and disposed intermediately thereof and extending outwardly from the other face thereof and provided with a transverse bore therethrough and transverse end slot at the outer end thereof, said frame plate member being provided with an intermediate strip passage opening therethrough communicating with the interior of said drum and being provided with a strip insertion and removal slot therethrough extending from the edge thereof to said opening, a guide roller carried by said frame plate on an axis corresponding with the plane thereof and disposed adjacent said opening for guiding a strip through and between said opening and the interior of a coil of the strip on said drum, a pair of parallel guide rollers carried by said plate member and disposed on the exterior of said coil and disposed obliquely to the plane of said plate for guiding the strip at the exterior of said coil, and a removable circular cup shaped closure member forming with said plate member an enclosure about said drum and being provided with a strip passage opening through the peripheral wall thereof for the passage of the strip therethrough between said second mentioned guide roller and the exterior of said coil.

1,887,665. REFRIGERATING CASKET. CHARLES H. J. TAUMAN, Oakland, Calif. Filed May 28, 1931. Serial No. 539,782. 2 Claims. (Cl. 27—11.)



1. A refrigerating casket comprising an outer casing provided with an interior water proof lining and a removable cover for said casing, a casket within said casing, said casket being exteriorly provided with a water proof covering, spacing elements for positioning said casket within said casing, a cover for said casket coextensive with the inside of said casing thereby coincidently forming a closure for the space between the casket and the casing, and handles secured to said casket and extending upwardly through apertures provided in the cover for said casket.

1,887,666. FRONT DRIVE AUTOMOBILE. CORNELIUS W. VAN RANST, Auburn, Ind., assignor, by mesne assignments, to Maaning & Co., Chicago, Ill., a Corporation of Illinois. Filed May 31, 1929. Serial No. 367,407. 11 Claims. (Cl. 280—106.5.)



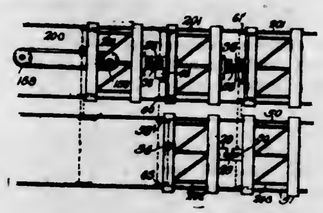
9. An automobile embodying therein an axle, a frame including a channel bar side member with top and bottom flanges facing in one direction and terminating short of said axle, a channel like extension having top and bottom flanges engaged with like flanges of said side member, a bracket disposed within and connecting said side member and extension together, a pair of coacting top and bottom leaf springs engaged at one end with like flanges of said extensions, means engaged with said extension flanges and portions of said bracket for securing said ends of the springs in place and means operatively connecting the other ends of said springs to said axle.

1,887,667. MEANS OF PARKING CARS IN GARAGES. HOLMAN K. WHEELER, Newton Center, Mass., assignor to Mechanical Transfer Car Corporation, St. Johnsbury, Vt., a Corporation of Vermont. Filed Apr. 2, 1929. Serial No. 351,858. 5 Claims. (Cl. 214—16.1.)

1. In a system for storing vehicles, having individual transfer cars, and a center aisle car, means for operating

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the coupling between adjacent cars by the position of the center aisle car, comprising a latch member positioned on one car and a holding element in the adjoining car, said latch member normally engaging said holding element, and



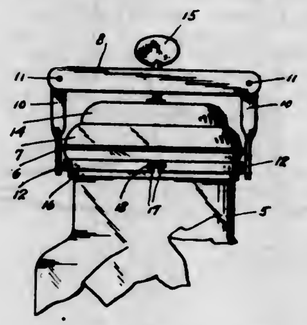
means to withdraw said holding element for the short interval in which said adjacent cars are separated, said means being operated by the movement of said center aisle car through a given position.

1,887,668. BUILDING FORM. GEORGE W. WILLIAMS, Burlingame, Calif. Filed Dec. 6, 1929. Serial No. 412,227. 16 Claims. (Cl. 72—48.)



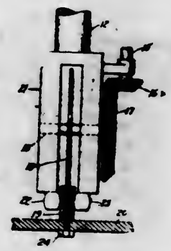
1. A building form comprising a member having two halves, each half having a flat portion and inclined ends, certain of said ends being longer than others, the longer ends of adjacent members extending parallel with respect to each other.

1,887,669. FRUIT JAR GLASS TIGHTENER. ADOLPH WITTWER, Harrisburg, Pa. Filed Mar. 30, 1932. Serial No. 602,022. 1 Claim. (Cl. 215—88.)



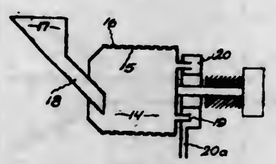
In a structure of the class described, a split band, means for holding the split band about the neck of a jar, said band being provided at opposite points with openings inclining upwardly and inwardly, a bar, straps pivoted on the ends of the bar and having their free ends provided with inwardly and upwardly inclined pins to engage in the openings, a thumb screw threaded through the bar, and a lid engaging member swiveled on the end of the thumb screw.

1,887,670. WELDING AND CUTTING MACHINE. LEO H. BENOIT, Revere, Mass., assignor to General Electric Company, a Corporation of New York. Filed Nov. 16, 1931. Serial No. 575,496. 3 Claims. (Cl. 266—23.)



1. A machine wherein the movement of a reproducing means is controlled by the movement of a tracer wheel relative to a templet comprising a grooved track constituting the templet, a tracer wheel arranged for operation on a horizontal axis with its periphery in the groove of said grooved track, and means for rotating said tracer wheel.

1,887,671. METHOD FOR IMPROVING PEAT FUELS AND THE LIKE. DAVID WERNER BERLIN, Rasunda, Sweden. Filed Jan. 28, 1930, Serial No. 424,115, and in Sweden Feb. 6, 1929. 2 Claims. (Cl. 44—33.)



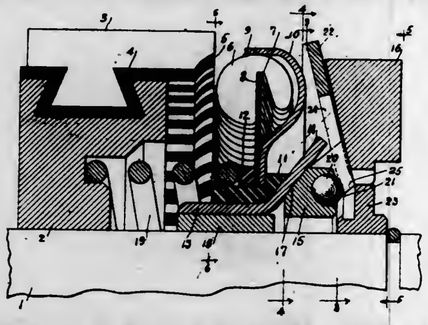
1. A method for improving peat or other inferior fuels, and for transforming them into similar products of superior quality comprising first subjecting the material to wet-carbonization by heat treatment, thereafter removing the main contents of water by centrifugation in a centrifugal machine having drum walls unpenetrable to water, then subjecting the mass pre-dried by the first centrifugation to a second centrifugation in a centrifugal machine having drum walls penetrable to water, and finally heating the mass resulting from the second stage of centrifugation for final drying.

2. A method for improving peat or other inferior fuels, and for transforming them into similar products of superior quality comprising first subjecting the material to wet-carbonization by heat treatment, thereafter dehydrating the wet-carbonized material by means of centrifugal separation in two stages succeeding each other, the first of such stages being a centrifugation of the mass against drum surfaces unpenetrable to water so that the solids are thrown out from the liquid, the second stage being a centrifugation of the pre-dried mass from the first stage against drum surfaces penetrable to water so that the liquid is thrown out from the solids, and finally heating the mass resulting from the second stage of centrifugation for final drying.

1,887,672. SHORT CIRCUITER FOR ELECTRIC MOTORS. ALWIN BORCHERS, Dayton, Ohio, assignor to The Brown-Brockmeyer Company, Dayton, Ohio, a Corporation of Ohio. Filed July 24, 1931, Serial No. 552,920, and in Canada, July 18, 1931. 15 Claims. (Cl. 172—279.)

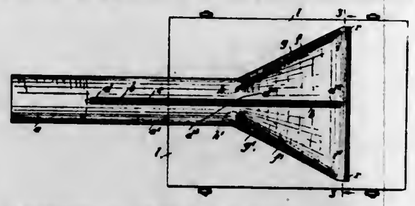
1. In a short circuiting mechanism, an armature shaft, an armature, a reciprocal support on said armature

shaft, a plurality of contact making segments mounted thereon, yielding means for supporting and aligning said segments, said segments being arranged around the yield-



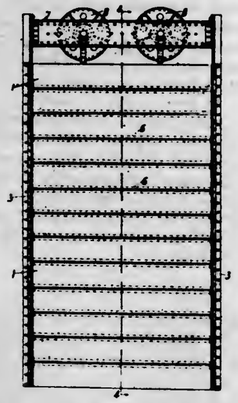
ing means, and weight means adapted to move said segments into contact making position and yielding means to resist the movement of said weight means.

1,887,673. ARRANGEMENT FOR TEASING AND LAYERING SPUN GLASS. ALBERT BORCHOLT and OTTO MEYER, Bergedorf, near Hamburg, Germany, assignors to Firm: Oscar Gossler, Hamburg, Germany. Filed Oct. 28, 1931, Serial No. 571,614, and in Germany May 12, 1931. 6 Claims. (Cl. 154—27.)



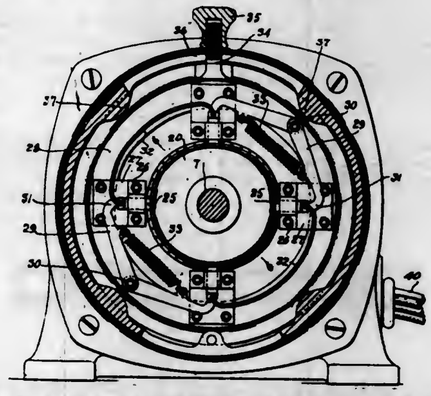
1. Apparatus for teasing and layering spun glass comprising a trestle-like frame, a ramp-shaped forward end to said frame and at least one conveyor associated with said frame for conveying the spun glass towards said forward end.

1,887,674. EMERGENCY SLUICE GATE. JOSEPH HARLING TURNER BORLAND, Kilmarnock, Scotland. Filed June 15, 1931, Serial No. 544,588, and in Great Britain July 23, 1930. 1 Claim. (Cl. 61—28.)



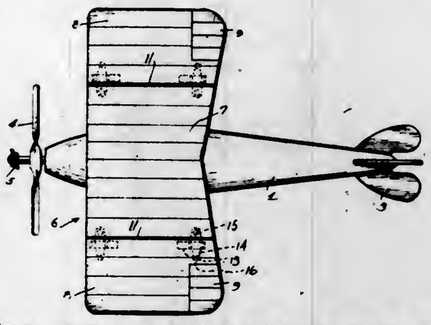
An emergency sluice gate for the purpose specified comprising a frame having end posts, a series of parallel axles perpendicular to said end posts and forming distance pieces rigidly interconnecting said end posts, a series of closely spaced rollers formed as hollow cylinders journalled on said axles, with clearance between adjoining rollers, said axles presenting shoulders abutting on said end posts, maintaining clearance between said rollers and said end posts, and staunching members parallel to said rollers and serving to seal the clearance between adjoining rollers, said rollers and staunching members forming in effect an uninterrupted closure, said frame, axles, rollers and staunching members constituting a self-contained portable unit.

1,887,675. VARIABLE SPEED MOTOR. STEFFEN A. BROWN and EDGAR W. BROCKMEYER, Dayton, Ohio, assignors to The Brown-Brockmeyer Company, Dayton, Ohio, a Corporation of Ohio. Filed Mar. 23, 1929. Serial No. 349,487. 3 Claims. (Cl. 171—324.)



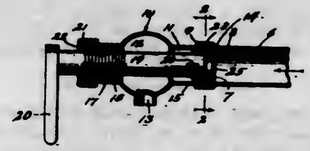
1. In a motor, in combination with an armature shaft and a commutator, a cage member supporting said shaft, said cage member having shoulders and a lug thereon, a brush supporting ring around said shaft between the shoulders and the lug, and a spring ring between the lug and the brush supporting ring to hold the brush supporting ring against the shoulders.

1,887,676. AEROPLANE CONSTRUCTION. JOSEPH S. BAYLKA, Du Bois, Pa. Filed Nov. 4, 1930. Serial No. 493,406. 1 Claim. (Cl. 244—12.)



In an aeroplane, a fuselage and a wing having outer end transversely hinged sections foldable inwardly to overlie an intermediate section, the hinges being located so that the outer ends of the wings substantially abut each other centrally of the fuselage, internal brace bars for the wings, and means for retaining the wing sections in extended alignment including a latch keeper exteriorly of the wing and having one end extending into an adjacent wing section to be anchored to an internal brace bar and a latch arm to be engaged by the latch keeper.

1,887,677. FAUCET AND THE LIKE. JOHN GAMBLE, Waukegan, Ill. Filed Mar. 2, 1932. Serial No. 596,385. 5 Claims. (Cl. 251—27.)

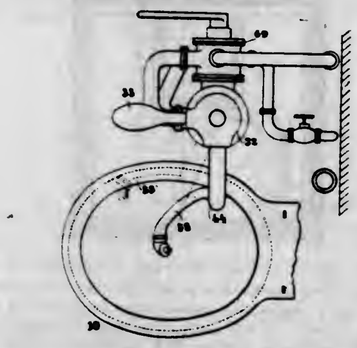


4. As a new article of manufacture, a faucet including a tubular liquid supply stem having at its delivery end an inturned flange with a central orifice, a circular flat-washer laid against the delivery side face of the flange and having a central liquid delivery opening, a valve stem coaxial with the openings of the washer and flange aforesaid and longitudinally movable in such coaxial relationship, a spun sheet metal thimble seated upon and carried by the inner end of the valve stem, said thimble having a circular portion seated on the end of the valve stem and a portion projecting beyond the same in the direction of the washer, said projecting portion constituting a central nipple having a slight taper of proper size to wedge into the central opening of the washer and said thimble also having an external ring or bead surrounding the nipple and facing towards the washer and separated from the nipple to provide a narrow backwardly extending groove, whereby when the stem is forced longitudinally towards the washer opening, the nipple wedges into the central opening of the washer and the ring or bead of the thimble is simultaneously forced against the face of the washer, whereby a double liquid sealing action is produced between said parts, substantially as described.

1,887,678. RESIN COMPOSITION SUITABLE FOR THE PRODUCTION OF FILMS. HENRY A. GARDNER, Washington, D. C. Filed Feb. 12, 1930. Serial No. 427,951. 4 Claims. (Cl. 134—26.)

1. A coating composition comprising a resin composition consisting essentially of a resinous material of the group consisting of rosin, glycerin ester resin, cumaron resin, and glycerin ester and aldehyde condensates, chlorinated diphenyl, and a drying oil.

1,887,679. SANITARY BOWL WITH HYDRAULIC DRIER. FERRUCCIO GUIDETTI, Elmhurst, and GIUSEPPE BONTEMPI, New York, N. Y., assignors to The Watairway Manufacturing Corporation, New York, N. Y., a Corporation of New York. Filed Oct. 9, 1930. Serial No. 487,410. 13 Claims. (Cl. 4—7.)



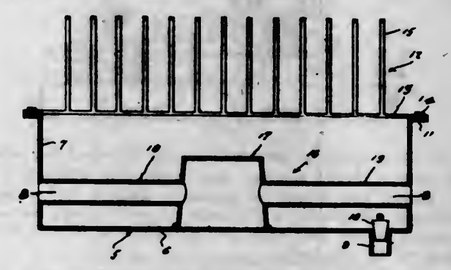
1. In apparatus of the class described, the combination with a bowl adapted to support a human body in a sitting posture, means for delivering air within said bowl against an exposed portion of the body of the occupant of the bowl, and a source of water supply, of an air pump actuated by the water available from said source of supply, for supplying air under pressure to said air delivering means.

1,887,680. BAG MAKING MACHINERY. HAROLD E. HALLMAN, Forest Hills, N. Y., assignor to International Paper Company, New York, N. Y., a Corporation of New York. Filed May 8, 1931. Serial No. 535,945. 8 Claims. (Cl. 93—18.)



1. A machine for making window bags, comprising a reel for delivering a relatively wide transparent web, a reel for delivering a relatively narrow opaque web, means for folding in the margins of the wider web, and means for feeding the two webs in unison and adhesively uniting margins of the narrower web with the inturned margins of the wider web, including rollers for engaging the borders of both webs and an intermediate roller gripping and feeding both webs.

1,887,681. WATERING TROUGH. WALTER ASA HARRIS, Washington, Pa. Filed Dec. 2, 1930. Serial No. 499,572. 2 Claims. (Cl. 119—73.)

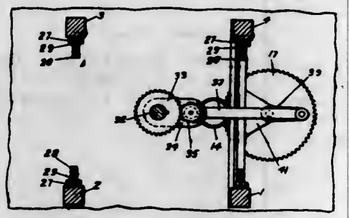


1. A heating device for a watering trough and the like, comprising a warm air circulator within the trough comprising an enlarged domelike hollow body secured upon the bottom thereof, and a plurality of relatively small air conducting tubes extending from the hollow body and in communication therewith at points intermediate the upper and lower ends of the hollow body, and extended through but not beyond the walls of the water trough, whereby upon applying heat to the bottom of the trough, preferably adjacent the location of said hollow body, warm air will be circulated through said tubes to heat water in the trough and the water will be additionally heated by conduction of the accompanying heated condition of the bottom of the trough, said body being formed and said tubes being attached thereto in the manner recited so as to provide that a substantially constant heating area will be in contact with the water in the trough according to its level therein.

1,887,682. VENEER MACHINE. ROBERT N. HARTSELL, Piqua, Ohio, assignor to Hartsell Industries, Inc., Piqua, Ohio, a Corporation of Ohio. Original application filed Jan. 26, 1931, Serial No. 511,238. Divided and this application filed Dec. 18, 1931. Serial No. 581,900. 12 Claims. (Cl. 144—209.)

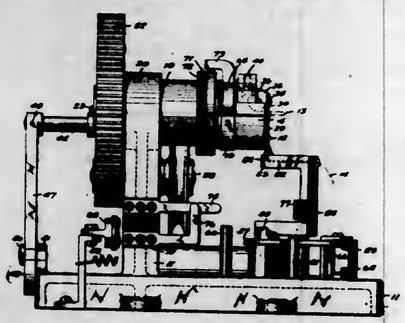
1. In a method of cutting veneer, holding a cone guide stationary with its axis in a vertical plane, causing a

work piece having a conical end to travel bodily about said axis at an angle thereto, the axis of said conical end coinciding with the axis of the guide, and simultaneously



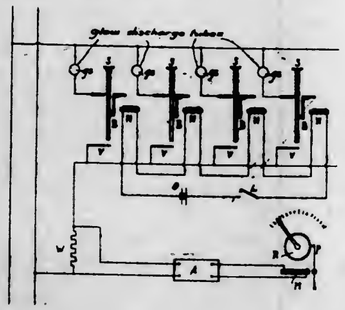
rotating said work piece on its own axis and cutting a veneer strip from the conical end of said work piece by a cutting means lying in the face of said cone.

1,887,683. WINDING MACHINE. RALPH M. HEINTZ, San Francisco, Calif., assignor, by mesne assignments, to Chicago Telephone Supply Company, Elkhart, Ind., a Corporation of Delaware. Filed Oct. 2, 1928. Serial No. 666,153. 23 Claims. (Cl. 242—1.)



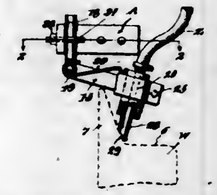
1. In a winding machine, means for revolving about an axis a curved member upon which the winding is to be placed, and means for gradually feeding this member forward, comprising a threaded element having an axis parallel to the first axis, and arranged to impart movement to the member.

1,887,684. BIDDING APPARATUS. MARTEN JOHANN HUIZINGA, Haarlem, Netherlands. Filed Feb. 11, 1926, Serial No. 87,713, and in the Netherlands Feb. 18, 1925. 6 Claims. (Cl. 177—337.)



1. An electric signalling system having a current limiting means, comprising a main circuit including a source of current, and a plurality of branch circuits connected in parallel across said main circuit, each branch circuit including in series, a glow discharge tube with which the current limiting means is connected in series, and a switch, the glow discharge tube being activated by the switch first operated, producing, independently of any mechanically moving part, a potential drop in the main circuit across the current limiting means to a value insufficient to activate any other of the glow discharge tubes.

1,887,685. FLANGE OILER. EAICH L. KAMOKEEIN, Hammond, Ind. Filed July 28, 1930. Serial No. 471,296. 2 Claims. (Cl. 184—3.)

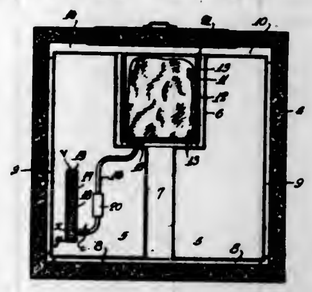


1. A car wheel flange oiler comprising a supporting bracket, including an attaching arm and a supporting arm, the supporting arm being provided with a horisontally extending slot, a vertically disposed supporting rod adjustable on the supporting arm, a U-shaped bolt engaging about the rod and having its legs extending through the slot, nuts on said legs for clamping the bolt in engagement with the rod, a shoe holder pivotally connected with the rod having a split bore, a shoe slidable in the bore, adjusting means extending through the split portion for clamping the shoe in the bore, a nipple detachably connected with the lower end of the shoe for engaging the flange of the wheel to be oiled, and spring means engaging the shoe holder normally urging the nipple toward the flange.

1,887,686. TREATMENT OF COFFEE. DANIEL JOSEPH KENNEDY, Vancouver, British Columbia, Canada. Filed Dec. 22, 1931. Serial No. 582,641. 7 Claims. (Cl. 99—11.)

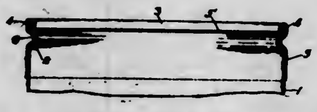
1. The treatment of coffee which consists of roasting it to substantially the point of maximum expansion and subjecting it to a burning flame for a few moments.

1,887,687. REFRIGERATING METHOD AND APPARATUS. DAVID H. KILLEFFER, Yonkers, N. Y., assignor to Dryice Equipment Corporation, New York, N. Y., a Corporation of Delaware. Filed Dec. 9, 1929. Serial No. 412,749. 15 Claims. (Cl. 62—91.5.)



3. A method of varying the rate of transfer of heat between a region maintained at a relatively constant temperature and a region the temperature of which is to be controlled thereby, which method includes interposing between said regions a double wall affording a relatively thin, small volume interspace, and varying the conductivity of the interspace by utilising changes of vapor pressure in a closed space above a body of liquid whose vapor pressure is sensitive to a change in temperature, located in heat transfer relation to the controlled-temperature region, to force liquid into and withdraw it from said interspace said closed space being of small volume and negligible heat storage capacity so that the heat absorbed or evolved to effect said changes of vapor pressure, is negligible as compared with the refrigerative heat transfer controlled thereby.

1,887,688. PAPER CONTAINER. LYDIA B. KOCH and JOSEPH BUCHINA, New York, N. Y., assignors, by direct and mesne assignments, to said Lydia B. Koch. Filed Dec. 19, 1929. Serial No. 415,207. 1 Claim. (Cl. 229—5.5.)



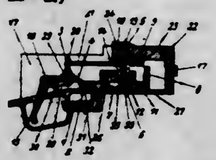
A paper container comprising a cylindrical body portion having the upper circumferential end terminating in an annular groove, having a weakened resilient upper edge, and a closure having the circumferential wall thereof cylindrical and provided with an annular projection or rim adapted when the closure is pressed home to fit into the groove of the body all around and be maintained therein by the resiliency of the edge of the groove and yet be capable of being withdrawn or closed down without affecting the resiliency of the weakened edge of the groove, the circumferential wall of the closure below the annular projection being provided with a cylindrical skirt adapted to engage the body portion below the annular groove.

1,887,689. AUTOMOBILE JACK. JOSEPH ALPHONSE LA GARDE, Seekonk, Mass. Filed Feb. 28, 1932. Serial No. 595,378. 7 Claims. (Cl. 254—94.)



1. In an automatic automobile jack, a portable base plate, a jack-stand translatably mounted thereon, and an inclined plane for the elevation of a wheel detachably engaged with the base plate.

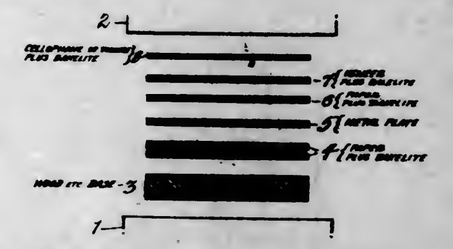
1,887,690. TRIGGER DEVICE FOR FIREARMS. AIMO JOHANNES LAHTI, Jyvaskyla, Finland. Filed Dec. 26, 1930, Serial No. 504,026, and in Finland July 5, 1930. 6 Claims. (Cl. 42—8.)



1. A controlling device for firearms comprising a trigger, a hammer retaining lever cooperating with said trigger and means cooperating with said lever and trigger for securing the hammer in uncocked position.

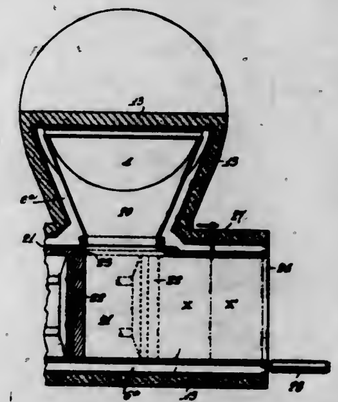
1,887,691. METHOD OF VENEERING. EMIL C. LOETSCHER, Dubuque, Iowa. Filed Oct. 8, 1931. Serial No. 567,748. 3 Claims. (Cl. 144—309.)

1. The method of making compound lumber having a surface that is dent proof under pressures corresponding to finger nail pressure and proof against burns from heat corresponding to the heat imparted from a lighted cigarette or match when laid thereon, consisting in impregnating the wood veneer in a manner to fill virtually



all of the cells thereof with phenolic condensation product, providing for the treated wood veneer a heat-dispersing backing, and subjecting the pack to heat and pressure to react the phenolic condensation product.

1,887,692. CARBON DIOXIDE ICE APPARATUS AND PROCESS. JAMES W. MARTIN, Jr., Yonkers, N. Y., assignor to Dryice Corporation of America, New York, N. Y., a Corporation of Delaware. Original application filed Dec. 6, 1926, Serial No. 152,754. Divided and this application filed Dec. 15, 1928. Serial No. 326,274. 10 Claims. (Cl. 62—121.)



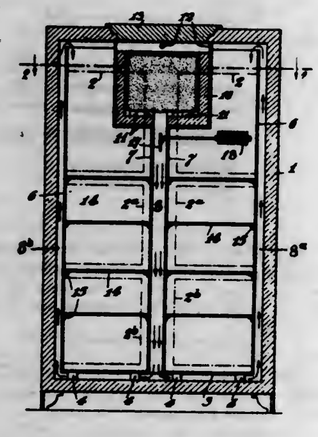
1. Means for supplying carbon dioxide snow, a mold into which said snow discharges, a reciprocatory plunger in the mold and a cut off between said carbon dioxide snow supplying means and said mold for closing the mold entrance opening and forming when closed a lateral wall of the mold during the compression stroke of the plunger.

2. Means for supplying carbon dioxide snow, a mold into which said snow discharges, a reciprocatory plunger in the mold, means for tamping the snow in the mold while the plunger is retracted, and a cut off for closing the mold entrance opening during the compression stroke of the plunger.

1,887,693. REFRIGERATING APPARATUS AND METHOD. JAMES W. MARTIN, Jr., Yonkers, N. Y., assignor to Dryice Equipment Corporation, New York, N. Y., a Corporation of Delaware. Original application filed June 15, 1926, Serial No. 116,103. Divided and this application filed Mar. 21, 1930. Serial No. 437,652. 8 Claims. (Cl. 62—91.5.)

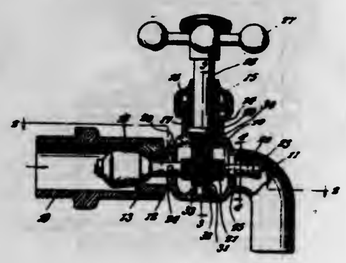
2. In combination, a receptacle comprising a chamber to be cooled, a container in the upper portion thereof enclosing solidified carbon dioxide protected by relatively

gas-tight paper or pasteboard wrapping, a downflow conduit from said container in heat exchange relation with said chamber, and an outlet conduit connected to said



downflow conduit and extending upwardly, said conduits cooperating to control circulation of generated carbon dioxide gas.

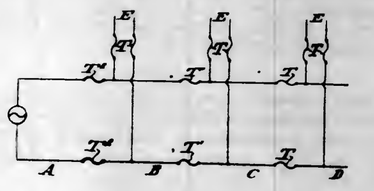
1,887,694. VALVE. FREDERICK M. MASKER, Plainfield, N. J. Filed Apr. 7, 1931. Serial No. 528,413. 5 Claims. (Cl. 251—42.)



3. A valve comprising a casing, a valve stem therein, said stem terminating in a reduced cylindrical extremity forming a guide, a notched guide lug in the casing removably receiving said guide, a spider on said stem remote from the guide lug forming a second guide for the stem, a rack on the stem between said guides, an actuating shaft, a pinion on the shaft meshing with the rack, and a valve on said stem closing in the direction of flow through the casing.

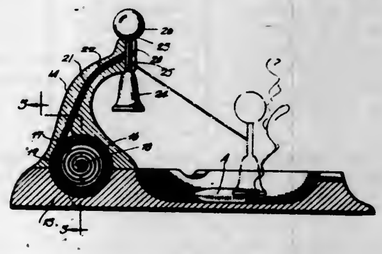
1,887,695. ELECTRICAL DISTRIBUTING SYSTEM. JOHN P. MEDLIN, Great Falls, Mont., assignor to Railway & Industrial Engineering Company, Greensburg, Pa., a Corporation of Pennsylvania. Original application filed June 13, 1929, Serial No. 370,709, and in Canada Aug. 5, 1929. Divided and this application filed Aug. 9, 1930. Serial No. 474,203. 1 Claim. (Cl. 175—294.)

A plurality of overload circuit breakers serially arranged along a transmission line, each of said breakers including an explosive device for actuating the breaker and an ignition wire for firing said explosive device, all of said ignition wires having such resistance that the continued passage of an abnormal current would actuate all of said breakers, and certain of said wires having a



greater mass than another of said wires, whereby the circuit breaker in which said wire of lighter mass is incorporated will be actuated in advance of the other breakers.

1,887,696. COMBINATION ASH TRAY AND CIGARETTE EXTINGUISHER. KARL MEYER, New York, N. Y. Filed Mar. 21, 1932. Serial No. 600,809. 1 Claim. (Cl. 131—51.)

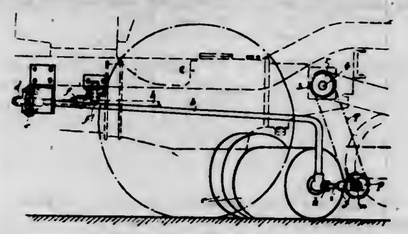


A smoker's article comprising in combination, an ash receptacle having a base, a pedestal rising from said base, a seat provided on said pedestal, said base having a recess therein, a reel journaled in said base and disposed within said recess, said pedestal having a passage leading from said recess and opening through said seat, a flexible element having one end fixed to said reel and freely extending through said passage, a tamper member fixed to the other end of said flexible element, and spring means acting upon said reel to wind said flexible element thereon and cause said tamper member to engage said seat.

1,887,697. ARRANGEMENT OF AUXILIARY BRUSHES FOR ROAD SWEEPING MACHINES. JEAN ALBERT PERONY, Saint-Ouen, France, assignor to Societe d'Outillage Mecanique et d'Usinage d'Artillerie, Saint-Ouen, France, a Limited Joint Stock Company of France. Filed Aug. 6, 1931, Serial No. 555,598, and in France Mar. 10, 1931. 4 Claims. (Cl. 15—82.)

2. A street sweeping machine having a vehicular frame and a source of power mounted thereon, an L-shaped supporting arm having journalled in one extremity thereof a substantially horizontal brush shaft, a brush mounted on said shaft, a cruciform pivotal coupling connecting the other extremity of said arm to said vehicular frame whereby said arm is capable of movement in both a horizontal and a vertical plane, means for driving said brush shaft from said source of power including a telescoping transmission shaft having resilient means interposed between the telescoping portions whereby the brush shaft and brush are normally urged outward to sweeping position and the driving transmission is maintained regardless of the movement of said brush shaft relatively to said source of power, and a supporting bracket swivelly

mounted on said frame in position to engage and support said arm when the latter is moved inward and upward to place said brush in inoperative position.



3. In a street sweeping machine, a brush, a shaft on which said brush is mounted, one end of said shaft projecting outwardly beyond the brush in position where it may encounter obstacles during the sweeping operation, and means for preventing injury to said shaft by contact with said obstacles comprising a disc rigidly secured to the outer end of said shaft, and a buffer ring rotatably mounted on the periphery of said disc.

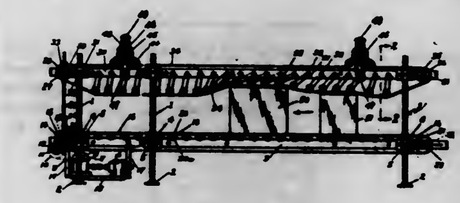
4. In a street sweeping machine, a brush, a shaft on which said brush is mounted, one end of said shaft projecting outwardly beyond the brush in position where it may encounter obstacles during the sweeping operation, a supporting arm in one extremity of which said brush shaft is journalled, the other extremity of said arm being connected to the body of said machine, and means for preventing injury to said brush shaft by contact with said obstacles comprising a substantially vertical roller carrying arm, a clamp for adjustably securing said arm to said supporting arm at a variable horizontal distance from said brush shaft, means for varying the vertical position of said roller carrying arm with respect to said clamp, a supporting yoke formed at the lower end of said roller carrying arm, a bracket, a shock absorbing roller rotatably mounted on said bracket, and means for securing said bracket to said yoke in a plurality of angular positions whereby the inclination of the axis of rotation of said roller may be varied.

1,887,698. DRILL. JOHN ANTON PERUSICK, Butte, Mont. Filed May 26, 1932. Serial No. 613,723. 2 Claims. (Cl. 255—75.)



1. In a drill, a stub shank and body portion, a tapered blade carried by the body portion, a longitudinally extending dove-tail rib on each side of the blade, a jaw having a dove-tail groove received on each rib and blade face, a socket in each face of the blade, a leaf spring anchored at one end in the socket with its other end normally projecting therefrom and each jaw having a depression therein defining an abutment shoulder to be engaged by the projecting end of the leaf spring to prevent complete removal of the jaw from the drill blade.

1,887,699. CONTAINER SEALING MACHINE. FORREST REID, Cincinnati, Ohio, assignor to The Procter & Gamble Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Mar. 30, 1931. Serial No. 526,445. 8 Claims. (Cl. 93—2.)



1. A sealing machine for containers having cooperating conveying and pressing belts, one of which is movable in substantially a fixed plane, and the other of which engages rollers which are supported on hinged frames which yield to permit the conveying belt to accommodate containers of substantially different dimensions, said rollers being of relatively small diameter and being spaced sufficiently closely so that a plurality of said rollers overlie each container during the sealing thereof.

1,887,700. STOPPER OR CLOSURE. THOMAS ARTHUR STEVENS, Wolverhampton, England. Filed July 6, 1929, Serial No. 376,908, and in Great Britain July 6, 1928. 2 Claims. (Cl. 220—40.)



1. A stopper or closure comprising a cap having internal projections on the side wall, a neck on the container, inclined shoulders on the external surface of the neck with openings between the shoulders through which the said projections pass to engage under the shoulders, a sealing washer located in the cap and adapted to be gripped between the inside of the cap and the seating on the neck of the container when the cap is turned to engage the projections under the inclined shoulders, a spring located between the sealing washer and the cap to maintain the sealing washer on the neck should the cap slack back and relieve its clamping grip on the washer, and stops on the inclined shoulders, at the inner end adjacent the said openings between the shoulders, over which the said projections on the cap have to be moved against the pressure of said spring, to engage or disengage the projections over the said stops on the shoulders.

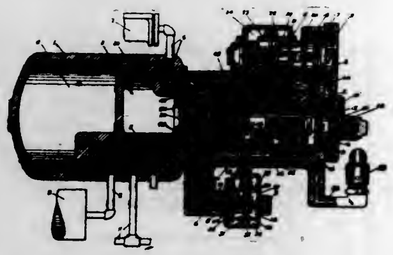
1,887,701. BUILDING TILE. HENRY B. STEVENS, Jacksonville, Fla., assignor to Dorothy A. Stevens, New York, N. Y. Filed May 1, 1930, Serial No. 449,033. Renewed Oct. 6, 1932. 2 Claims. (Cl. 72—41.)



2. A building tile comprising walls defining a plurality of voids, an upper wall of said tile having a hole therein located at the center of balance of the tile, the

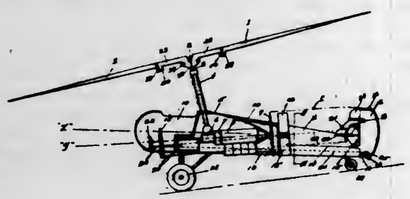
lower surface of said upper wall being unobstructed on each side of said hole for a distance substantially greater than the distance from the end of a man's middle finger to the terminal joint to permit the fingers to be inserted and flexed to contact said upper wall and support the tile by said flexed fingers.

1,887,702. MAINTAINING VALVE DEVICE. THOMAS H. THOMAS, deceased, Edgewood, Pa., by Mable M. Thomas, executrix, Edgewood, Pa., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa., a Corporation of Pennsylvania. Filed Oct. 15, 1929. Serial No. 399,775. 11 Claims. (Cl. 303—40.)



1. In a fluid pressure brake, the combination with a brake pipe and a brake cylinder, of a valve device operative by fluid under pressure supplied from one source upon a reduction in pressure in said brake pipe for supplying fluid under pressure to said brake cylinder to effect an application of the brakes, and means subject to the opposing pressures of said brake pipe and brake cylinder and also operative upon a reduction in brake pipe pressure for supplying fluid under pressure to said valve device.

1,887,703. HELICOPTER. SIDNEY P. VAUGHN, U. S. Navy, Ackerman, Miss. Filed June 2, 1930. Serial No. 456,988. 18 Claims. (Cl. 244—19.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)



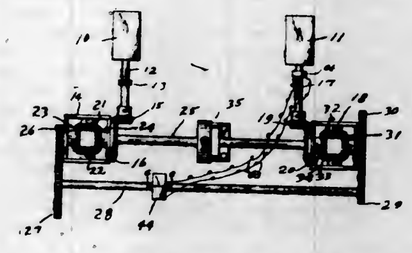
1. In a helicopter the combination of a body, a sustaining and propelling system comprising a motor attached to the body and driving a single sustaining air screw above the body and having a series of articulated blades adapted to attain a positive pitch when a torque is applied to drive the air screw and a negative pitch when the torque is removed, the axis of said air screw being forwardly inclined with reference to the longitudinal axis of the body so that the upward thrust will have a forward horizontal component, controllable means embodied in the tail unit for increasing or decreasing said forward inclination with reference to the direction of flight, means embodied in the tail unit for automatically neutralizing the torque of said air screw, and controllable means embodied in the tail unit for directional and lateral control, said plural means being disposed in the slip stream of a propeller driven by the motor driving the sustaining air screw.

1,887,704. FILLING BLOCK FOR HEAT EXCHANGE, REACTION, AND ABSORPTION APPARATUS. HUGO WILISCH, Konigswinter-on-the-Rhine, Germany. Filed Mar. 15, 1928, Serial No. 261,957, and in Germany Mar. 19, 1927. 8 Claims. (Cl. 261—94.)



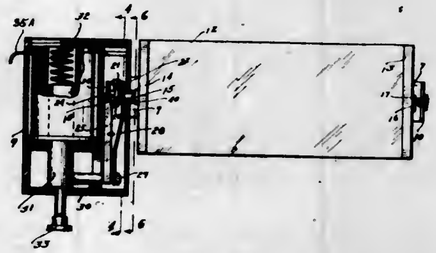
1. Packing for heat-exchange and other purposes, comprising substantially brick-shaped bodies, spaced parallel projecting ribs on opposite surfaces thereof, and substantially small projections and sockets on the outside of the adjacent brick-shaped bodies.

1,887,705. VARIABLE SPEED DEVICE. ROBERT H WORRALL, Washington, D. C. Filed Nov. 10, 1931. Serial No. 574,152. 5 Claims. (Cl. 74—34.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)



1. In an automatic variable speed transmission device from a power source to a load, a direct drive shaft and a low speed drive shaft, differential means at each end of one of said shafts, gear means connecting said differential means and the other of said shafts, means connecting one of said differentials to the power source and the other of said differentials to said load, and clutch means on one of said shafts for causing only one of said shafts to be allowed to operate.

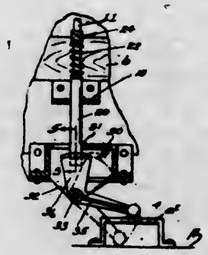
1,887,706. NONGLARING REVERSIBLE MIRROR. HENRY L. BETTMAN, Portland, Oreg. Filed Sept. 22, 1928. Serial No. 307,713. 3 Claims. (Cl. 45—97.)



1. In a device of the class described, the combination of a bracket, an outwardly extending journal bearing secured to the bracket to which a clamping plate is adjustably secured, a bracket arm having an elbow at each end secured to the clamping plate, a body element, one elbow of the bracket arm secured to said body element, the other end of the bracket arm having a bearing disposed therein,

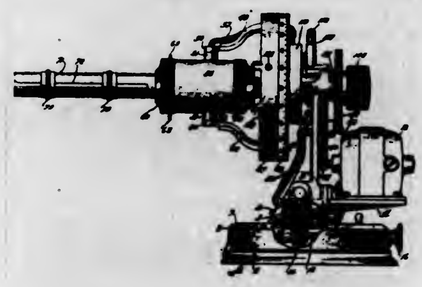
a silvered and a black mirror journaled within the body element and the bearing, locking means for maintaining the mirrors in normal position and automatic means for reversing the mirrors as the head lights are turned on.

1,887,707. CONTROLLER FOR LOCKS OF DEMOUNTABLE CONTAINERS. ALBERT H. BATES, Shaker Heights, and ROBERT H. MCBEAN, Berea, Ohio, assignors to Motor Terminals Company, Wilmington, Del., a Corporation of Delaware. Filed Feb. 13, 1931. Serial No. 515,515. 19 Claims. (Cl. 105—366.)



1. The combination with a container, mechanism for locking the same rendered active or idle automatically upon the deposit of a container on the support, according to a predetermined setting of a controlling device on the container.

1,887,708. INSTRUMENT AND METHOD FOR EXAMINING, TESTING AND EXERCISING THE EYES. ALEXANDER S. CAMERON, Chicago, Ill., assignor to William J. Cameron, Chicago, Ill. Filed Jan. 18, 1928. Serial No. 247,724. 29 Claims. (Cl. 88—20.)



5. A method which consists in projecting two images of differing color upon a screen, and bodily moving said images thereon in either fixed or changing mutual relation, while viewing said images through disassociating lenses of such color that each obscures one image while leaving the other visible, whereby each eye tends to follow independently of the other the image visible to it.

1,887,709. HYDRAULIC SHOCK ABSORBER. CHARLES H. CHAPIN, Chicago, Ill. Filed May 25, 1929. Serial No. 365,891. 7 Claims. (Cl. 188—89.)



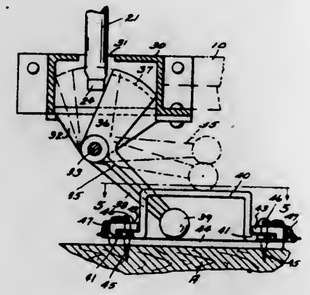
1. In a hydraulic shock absorber, a casing adapted to contain a fluid and a member movably mounted within said casing, there being a graduated clearance between the member and the wall of the casing, one of the two members mentioned being formed of a material having a high co-efficient of expansion and the other of a material having a low coefficient of expansion whereby the clearance between them is varied in response to temperature variations, and a dividing member positioned within the casing to provide a plurality of chambers therein, said dividing member being of a material having a high co-efficient of expansion.

1,887,710. FUR SCARF HANGER. GOLIAT DAVISON, St. Louis, Mo. Filed May 4, 1929. Serial No. 360,358. 8 Claims. (Cl. 223—61.)



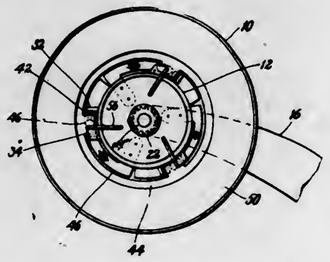
1. A hanger for a fur scarf provided with a snap fastener at one end, said hanger comprising a strip of material having a pair of longitudinally spaced openings thereon, said openings being adapted to successively receive the opposite ends of the snap fastener, and means independent of and above said openings for suspending said hanger from a support.

1,887,711. CONTROLLER FOR LOCKS OF DEMOUNTABLE CONTAINERS. BENJAMIN F. FITCH, Greenwich, Conn., assignor to Motor Terminals Company, Wilmington, Del., a Corporation of Delaware. Filed Feb. 11, 1931. Serial No. 515,081. 22 Claims. (Cl. 105—366.)



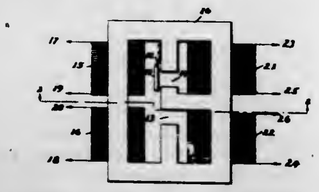
1. The combination of a container, a gravity lock therefor, a support for the container, a movable abutment carried by the support and adapted to coact with the lock and raise it to active position or be out of coaction, according to the position of the abutment.

1,887,712. REEL. GEORGE GODDU, Winchester, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed June 28, 1927. Serial No. 202,093. 17 Claims. (Cl. 242—68.)



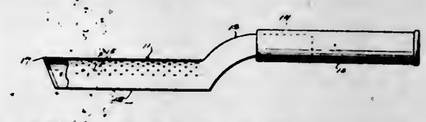
1. A reel comprising a hub mounted for rotary movement, a spool surrounding the hub and detachably secured to the hub and means hold the spool positively against rotary movement relatively to the hub and against movement in one direction axially of the hub and yieldingly against movement in the opposite direction axially of the hub.

1,887,713. ELECTROMECHANICAL COUPLING DEVICE. ROSS GUNN, Washington, D. C. Filed Jan. 21, 1932. Serial No. 587,915. 10 Claims. (Cl. 175—356.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)



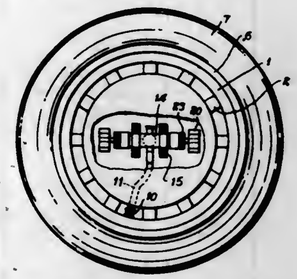
1. A coupling device comprising a magnetic core, a primary winding wound upon said core, two secondary windings wound upon said magnetic core and connected differentially, means for by-passing from the secondary coils a part of the flux created by electrical energy in the primary coil, and means for varying the amount of flux so by-passed from one of said secondary windings.

1,887,714. VEGETABLE GRATER. OMRI CLYDE HEMP, Staunton, Va. Filed May 22, 1930. Serial No. 454,760. 1 Claim. (Cl. 146—177.)



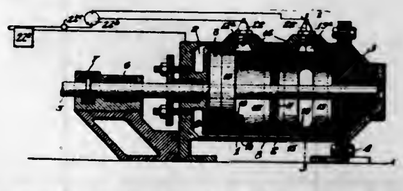
A grater of the character described comprising a handle, a concave body portion, means for securing said body portion in offset parallel relation to said handle, said means including a longitudinally curved stem arcuate in cross section, a plurality of grating members integrally formed with said body portion, a pair of shield members secured to said body portion and extending outwardly from said grating member, and a cutting edge positioned on the outer end of said body.

1,887,715. AUTOMOBILE TIRE PUMP. EDGAR A. HESTER, Pittsburgh, Pa. Filed Apr. 8, 1931. Serial No. 527,417. 7 Claims. (Cl. 230—34.)



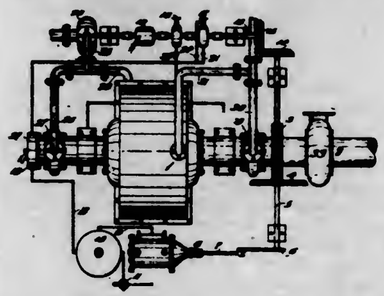
1. A tire pump for vehicle wheels comprising, a pump cylinder mounted centrally of the hub of the wheel, valved means connecting said cylinder with the inner tube of the wheel, a pair of pistons mounted in coaxial alinement in said cylinder, means normally urging said pistons toward each other, and means responsive to the speed of rotation of the wheel to cause said pistons to separate.

1,887,716. METHOD OF AND APPARATUS FOR FUEL CHARGING AND IGNITING. CHARLES N. KOCH, Kane, Pa. Filed July 14, 1922. Serial No. 574,879. 1 Claim. (Cl. 60—44.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)



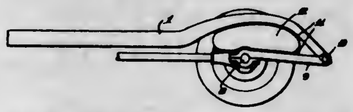
A combined charge forming and ignition device for producing a continuous flow of incandescent gas under high pressure comprising a casing having a plurality of intake and exhaust ports, a shaft journaled within the ends of the said casing, said shaft being hollow to permit circulation of a cooling medium therethrough, a rotary shell within the casing having a plurality of combustion chambers, with said shaft extending across each of said chambers in alignment with the flow of fuel from said intake ports each of said chambers having combined inlet and outlet openings, said openings being so related to each other and so related to the exhaust and inlet ports of the casing that the rotation of the shell will produce progressively a substantially continuous inlet and exhaust for said chambers and means whereby an ignition spark may be provided for each of the chambers at about the time its opening registers with an exhaust port of the casing.

1,887,717. COMBUSTION TURBINE. CHARLES N. KOCH, Kane, Pa. Filed Sept. 1, 1923. Serial No. 660,470. 6 Claims. (Cl. 60—41.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)



1. In a combustion turbine, a rotor drum having a combustion chamber centrally disposed within said drum with its axis coincident with the axis of revolution of the drum, the walls forming said chamber being separated from and connected by ribs to the drum to form annular passageways for a cooling medium to pass along the outer walls of the drum and chamber, the weight of said drum and chamber being equally disposed in all directions about said axis.

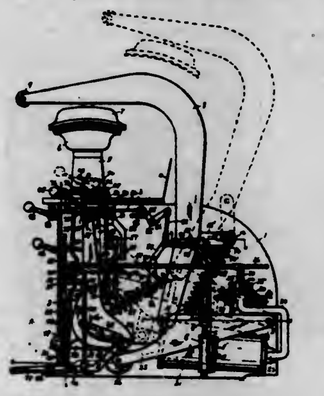
1,887,718. VEHICLE SUSPENSION. COY OSBETT, Boston, Mass. Filed Feb. 24, 1931. Serial No. 517,850. 1 Claim. (Cl. 280—124.)



In a vehicle spring suspension, the combination of a chassis having downwardly projecting end portions, a live-axle housing, longitudinally disposed radius rods, each having an end pivotally connected to one of said end portions of the chassis for movement in a vertical plane and the opposite end clamped to said axle housing and adapted to prevent rotation thereof, a pair of alined, flat, substantially oval shaped bearing plates at each side of the vehicle, secured to the chassis and running gear respectively, a shallow resilient pneumatic cushion disposed between and conforming to the size and shape of the bearing plates, said cushion being adapted to absorb road shocks transmitted to the vehicle running gear.

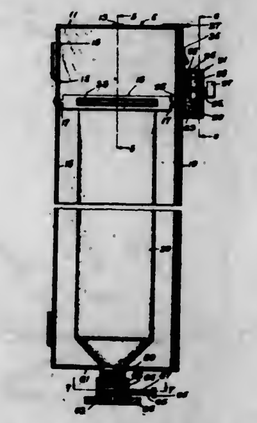
1,887,719. GARMENT OR IRONING PRESS. HERBERT E. PAGE, Syracuse, N. Y. Filed May 1, 1929. Serial No. 359,556. 9 Claims. (Cl. 68—9.)

1. A garment or ironing press comprising a frame, cooperative pressing elements, one of which is movable toward and from the other, an upright support for the movable element, horizontal supporting links for the upright support hinged to the frame and to the upright in planes one above the other, a cam arm pivotally mounted on the frame and in position to act upon a part integral with one of said links for moving said support to its pressing position, and means for operating the cam arm.



2. In a garment or ironing press having coacting pressing elements, fluid pressure operated means for operating the movable pressing element, a normally closed valve controlling the passage of the fluid to said means, means operable at will for opening said valve, and means actuated by the fluid pressure operated means for releasing the valve opening means to permit the closing of the valve before the movable pressing element reaches its pressing position.

1,887,720. TOOTH PASTE AND SHAVING CREAM TUBE HOLDER. IRVING G. ROBINSON, Norwalk, Conn. Filed Apr. 17, 1931. Serial No. 530,870. 10 Claims. (Cl. 221—60.)

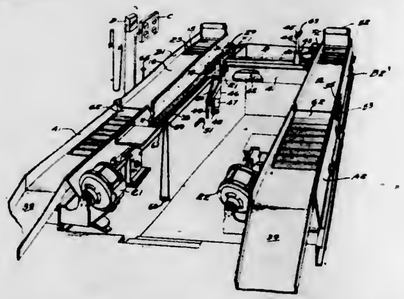


1. A paste tube dispenser comprising a casing, a collar slidably mounted in said casing adapted to receive the end of a paste tube, spring mechanism slidably mounted on said casing, gearing connecting said spring mechanism with said collar and a cut-off valve mounted on the neck of the paste tube.

1,887,721. BRAKE TESTING MACHINE. GORDON SAUNDERS, Whittier, Calif. Filed Sept. 15, 1927. Serial No. 219,728. 27 Claims. (Cl. 265—25.)

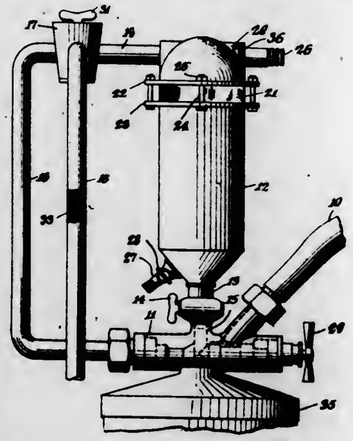
11. An apparatus for testing brakes of automobiles, comprising in combination, a support provided with means

for supporting and rotating a wheel of an automobile, power mechanism for driving the wheel supporting and rotating means, an indicator for indicating the action of the brake upon the wheel, wheel arresting means associated with said support and mounted for movement to and from its wheel arresting position, and means for positioning the wheel arresting means and adapted to be actuated by the movement of the automobile relative to said support.



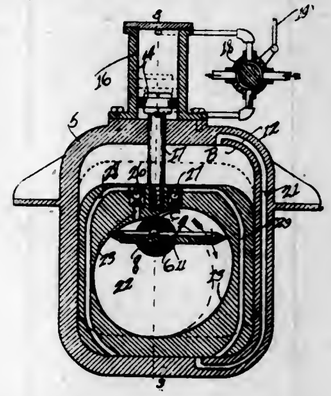
27. In a vehicle testing apparatus, a support for the rear wheels of the vehicle being tested, a carriage movable toward and from said support for supporting one of the front wheels of the vehicle, testing mechanism the operation of which tends to move the vehicle off said supports, means for holding the vehicle on one of said supports in testing position, including a release for releasing said holding means and means for actuating said release upon movement of the carriage toward said rear wheel support.

1,887,722. PIPE CLEANING APPARATUS. ERWIN SCHOENER and KARL FREISEIS, Brooklyn, N. Y. Filed Sept. 30, 1930. Serial No. 485,438. 1 Claim. (Cl. 225—12.)



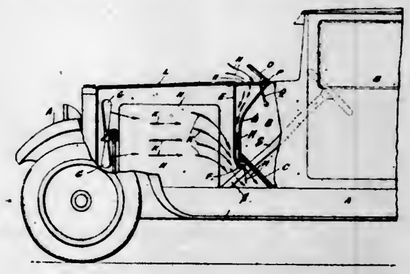
In an apparatus of the class described, a pipe line, a reservoir for the cleaning beads, an injector, a water supply for said injector, a valve controlled connection between said reservoir and said injector, a means for controlling said injector to draw the beads from their reservoir and circulating the same in said pipe line, a four-way-cock for controlling and regulating said circulation, a plurality of perforated dampers allowing the circulation of the cleaning medium, and preventing the waste of beads for collecting the same into a body within said pipe line to be circulated therein as such body, means for returning said body of beads into said reservoir, and means for discharging the waste water and residue of the cleaning process.

1,887,723. HYDRAULIC BRAKE. CHESTER R. SHARAR, Los Angeles, Calif. Filed Mar. 14, 1931. Serial No. 522,613. 1 Claim. (Cl. 188—90.)



In a device of the character described, a casting having a chamber formed therein, a piston-like slider positioned within said chamber and engaging the walls of said chamber, whereby when said slider is centrally positioned with respect to said chamber separate chambers will be formed on opposite sides of said slider, a piston secured to said slider whereby said slider may be moved, means for actuating said piston, a rotating shaft extending through said casting and said slider, a sliding vane carried by said shaft, a fluid positioned within said slider and adapted to be acted upon by said vane, a bypass connecting the top and bottom of said chamber whereby fluid in said chamber may be bypassed around said slider, passage ways formed in said slider, said passage-ways communicating with the chamber formed at one end of said slider, valves positioned in said passage ways, and means for maintaining said vane in a fixed position when said slider has been moved a predetermined position with relation to said shaft.

1,887,724. AUTOMOBILE DASHBOARD HEAT SHIELD. CHARLES A. SIEWECK, New York, N. Y. Filed Sept. 8, 1931. Serial No. 561,559. 2 Claims. (Cl. 180—90.)



1. In an automobile having an engine hood chamber and a radiator air circulating fan therein, a dashboard heat shield comprising a dashboard member, a conduit wall located in front of and substantially parallel with said dashboard member and spaced from the latter to form a relatively thin air blanket conduit between said chamber and the dashboard, said conduit being open at its ends, the lower end being shaped as a nozzle to discharge below the floor, said nozzle end being located within said hood chamber whereby said fan is utilized for creating suction to draw air down through said conduit.

1,887,725. SHOE. GEORGE F. WALSH, Los Angeles County, Calif. Filed July 11, 1929. Serial No. 377,364. 8 Claims. (Cl. 36—2.5.)

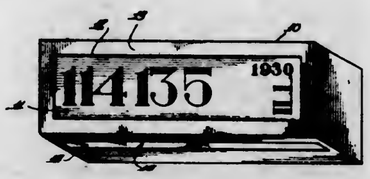


1. A shoe of the class described, having a pair of strips of reinforcing material attached to and covering the instep portion of the body of the shoe from a point approximately at the toe of the shoe to the top of the instep, a second pair of reinforcing strips flush with the instep strips extending from the top of the latter to the top of the shoe, and a third pair of reinforcing strips arranged in parallelism with said second pair of reinforcing strips, all of said strips being substantially flush with each other.

1,887,726. INSULATING PAPER. LOUIS WEBER, Chicago, Ill. Filed Feb. 14, 1930. Serial No. 428,492. 5 Claims. (Cl. 92—3.)

1. A heat insulating paper comprising interlaced slag wool and asbestos fibres, and a binder.

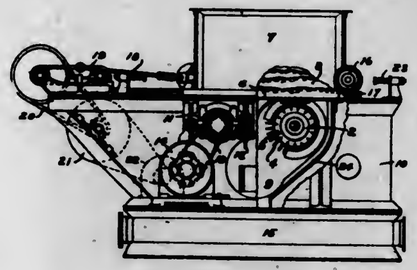
1,887,727. AUTOMOBILE LICENSE HOLDER. DENNIS T. ADAMS, Chicago, Ill. Filed July 15, 1931. Serial No. 550,839. 4 Claims. (Cl. 40—125.)



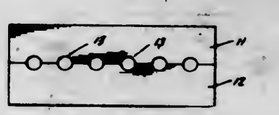
1. A license plate holder comprising a casing having an open front forming a window and a slot in one side adapted to receive a plurality of identification plates insertable through said slot into said casing, a closure for said slot, and means for forcing said plates after they are in the casing against the front of the casing, said means and closure being associated in such a manner as to enable the plates to be successively inserted and prevent the removal of the plates from the casing once they have been inserted.

1,887,728. DEFIBERIZING MACHINE. WILLIAM G. HAGMAIER, West Allis, and ERNEST C. SHAW, Milwaukee, Wis., assignors to Allis-Chalmers Manufacturing Company, Milwaukee, Wis., a Corporation of Delaware. Filed Feb. 27, 1930. Serial No. 431,698. 13 Claims. (Cl. 83—75.)

1. Apparatus for reducing fibrous bodies to a mass of separated fibrous particles, including a rotor comprising a plurality of spaced, resiliently flexible, disk-like supports disposed side by side with their general planes extending substantially perpendicular to the axis of said rotor, and a plurality of yieldable defiberising elements carried by each of said supports.

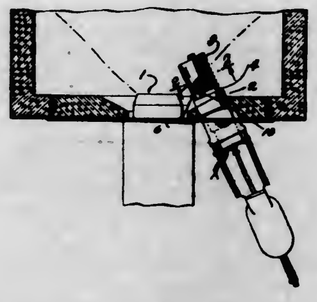


1,887,729. PROCESS OF MANUFACTURING TUNGSTEN CARBIDE. ORRIN F. MARVIN, Los Angeles, Calif., assignor to Mills Alloys, Inc., Los Angeles, Calif., a Corporation of Delaware. Filed Feb. 3, 1930. Serial No. 425,581. 5 Claims. (Cl. 22—200.)



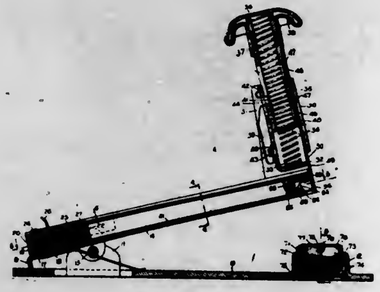
5. The process which comprises securing a molten mass of tungsten carbide, and casting it into a massive mold made from substantially pure copper.

1,887,730. IGNITION MECHANISM FOR OIL BURNERS. JAMES N. MACRAE and CALVIN P. PACKARD, Stamford, Conn., assignors to Petroleum Heat and Power Company, New York, N. Y., a Corporation of Delaware. Filed June 18, 1929. Serial No. 371,784. 1 Claim. (Cl. 175—115.)



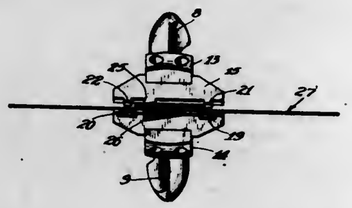
Ignition mechanism for oil burners comprising a core of insulating material, a heater carried thereby and comprising wire coiled about the same, an imperforate shield carried by said core, said shield extending across the end of the core and along the side of the heater adjacent the burner in the path of fuel issuing from the burner.

1,887,731. STAPLING MACHINE. LOU OBSTFELD, Brooklyn, and WILLIAM DRYPOLCHER, Valley Stream, N. Y., assignors, by mesne assignments, to said Lou Obstfeld and Abraham I. Obstfeld, New York, N. Y. Filed Dec. 6, 1929. Serial No. 412,251. 14 Claims. (Cl. 1—3.)



1. In a stapling machine, the combination of a staple-carrying arm for receiving and discharging the staples from the same end, a staple driver reciprocable on the arm, means for feeding the staples along the arm and into the path of the driver, and means disposed over the loading and delivery end of the arm to hold the staples in the driving position when closed and capable of only partial unresisted movement to open position when released.

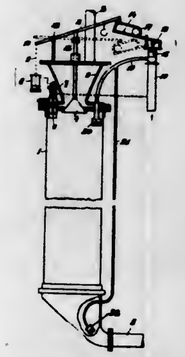
1,887,732. CUTTING AND FORMING DEVICE. ERNEST C. PAGEL, Chicago, and HOWARD C. PORTER, La Grange Park, Ill., assignors to Signode Steel Strapping Company, Chicago, Ill., a Corporation of Delaware. Filed July 7, 1930. Serial No. 466,052. 9 Claims. (Cl. 153—2.)



9. A device for forming and severing metal package-binder straps, comprising a pair of relatively movable jaws having cooperating cutting means for severing the strap and cooperating deforming means flanking the cutting means on each side for forming complementary deformations in the severed ends of the strap.

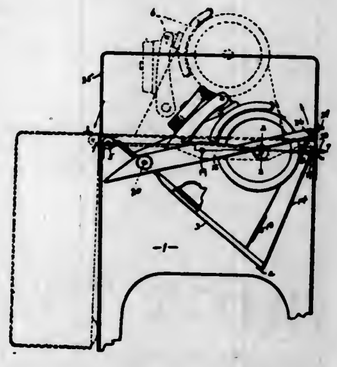
1,887,733. POWDERY MATERIAL FEED APPARATUS. IGNAZ SABLIK, Stramberg, Czechoslovakia. Filed Aug. 31, 1931, Serial No. 560,459, and in Czechoslovakia Apr. 7, 1931. 2 Claims. (Cl. 302—55.)

1. In a powdery material feed apparatus operated by compressed air, a cylindrically formed reservoir, a check member mounted at the upper end thereof, and which is closed by the pressure of the material, said check member controlling a controlling medium, a hopper mounted at the upper end of the reservoir, a feed pipe communicating with said hopper, a control cylinder, a piston traveling therein, a control slide operated by said check member for controlling said piston, a piston rod, a double lever secured thereto, another lever, another check member, on which the second mentioned lever is mounted, a compressed air feed pipe, in which the said check member is inserted, a sliding weight inserted in the last mentioned lever, a guide in which moves the sliding weight, a stem



to which the check member is secured, a pipe supplying compressed air to the top of the reservoir and another discharge valve controlling this supply.

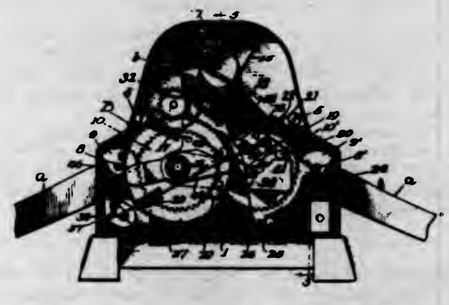
1,887,734. IRONING MACHINE. CHARLES C. SCHEELE, Syracuse, N. Y., assignor to Easy Washing Machine Corporation, Syracuse, N. Y., a Corporation of Delaware. Filed Aug. 15, 1930. Serial No. 475,408. 2 Claims. (Cl. 312—26.)



1. A container for an ironing machine comprising a main frame, a lever pivotally mounted on each side of the frame, a platform intermediate the levers and having one end pivotally mounted on the frame, a roller on one end of each of the levers, said rollers being in contact with the under surface of the platform, a cover for the frame adapted to be moved from a closed position over the frame to an open position outside and at the rear of the frame, and pivotal connections between the forward side of the cover and the ends of the levers opposite those which carry the rollers whereby movement of the cover from the closed position to the open position will move the levers about their pivots to carry the rollers across the under surface of the platform to move the latter about its pivot.

1,887,735. TIME SWITCH. ROBERT SCHLEMM, Chicago, Ill. Filed Jan. 14, 1928. Serial No. 246,897. 12 Claims. (Cl. 161—16.)

1. In apparatus of the type specified, the combination of an actuated member supported so as to be rotatable in opposite directions, power actuated means adapted for turning said member in one direction, and means comprising a single manually operable lever and a cam secured thereto so as to turn therewith, for turning said actuated member against the force of said power actuated means, and for subjecting said power actuated means to



and securing it under operating tension, time-controlled tripping means for freeing said power actuated means when under tension, and means for setting said tripping means which also comprises said manually operable lever and cam.

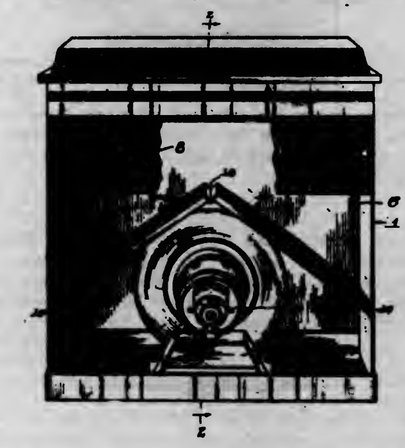
1,887,736. DEEP WELL PUMP. BERNARD H. SCOTT, Glendale, Calif., assignor to Rodless Pump Company, Los Angeles, Calif., a Corporation of Nevada. Filed Feb. 4, 1930. Serial No. 425,799. 3 Claims. (Cl. 103—46.)



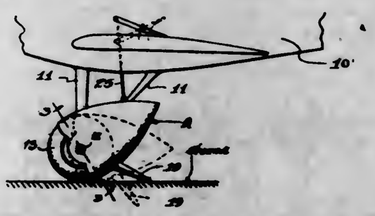
2. A rodless well pump including a cylinder, a piston in the cylinder, a valve working barrel connected with the cylinder, a valved hollow plunger in the working barrel connected with the piston, a means providing a passage for fluid from the working barrel past the cylinder, and a means to alternately apply fluid pressure to the opposed pressure faces of the piston and to alternately exhaust the pressure fluid from opposite ends of the cylinder into said passage, the ratio of the area of one pressure face of said piston to the sum of the areas of the other pressure face of said piston and of the pumping pressure face of the plunger and its valve being approximately the same as the ratio of the area of said other pressure face of the piston to the first mentioned area.

1,887,737. AIR FILTER FOR HEATING AND VENTILATING UNITS. WILFRED SHURTLEFF, Moline, Ill., assignor to The Herman Nelson Corporation, Moline, Ill., a Corporation of Illinois. Filed Apr. 16, 1925. Serial No. 23,523. 5 Claims. (Cl. 257—137.)

1. In a heating and ventilating unit of the character described, the combination with a housing having an inlet adjacent its bottom and an outlet adjacent its top; a fan in the bottom of said housing adapted to draw air from the adjacent opening and to discharge said air upwardly; of means in the upper end of said housing providing a heating chamber and a passageway, both of which extend from one side to the other of said housing, said passageway and heating chamber being open at the upper ends to discharge through the outlet in the upper portion of the housing and being open at the lower ends and disposed in spaced relation with respect to said fan; radiators disposed in said heating chamber and confined thereto; a filtering unit removably supported in said housing and comprising hinged frames arranged at an obtuse angle to each other to form an arch over said fan, the ends of said frames being supported against the opposite side walls of said housing, said filtering unit spanning the distance between the defining walls of the housing and entirely separating said fan from the heating chamber and passageway, whereby an increased area of filtering surface is provided for filtering all of the air prior to its passage through the heating chamber or passageway in the upper portion of said housing.

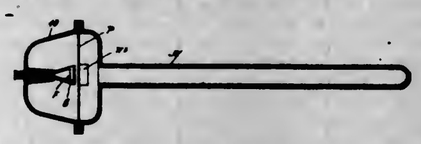


1,887,738. AIRPLANE. HARRY G. SMITH, Dearborn, Mich. Filed May 15, 1930. Serial No. 452,556. 18 Claims. (Cl. 244—2.)



1. A streamline shell for the landing gear of an airplane or the like, comprising a movable shell structure, and means engaging with the ground for automatically elevating said shell structure as the airplane approaches the ground.

1,887,739. ELECTROKINETOMETER. LEWIS M. MOTT-SMITH, Houston, Tex. Filed May 20, 1929. Serial No. 364,644. 4 Claims. (Cl. 250—27.5.)



1. A thermionic device embodying a tube including filament and plate elements, one of the elements being movable with relation to the other element, and a fluid enclosing chamber one side of which is formed by the movable element.

1,887,740. DOOR OR WINDOW SCREEN. ALOYS THURWANGER, Norwood, Ohio. Filed May 24, 1932. Serial No. 613,232. 18 Claims. (Cl. 156—14.)



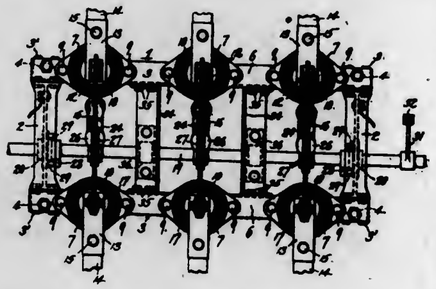
8. In a door or window screen, a frame comprising members of Z-shaped cross section with outlying flanges to lie close to the side and top exterior faces of the door or window frame, the webs and interiorly lying flanges forming rabbets, angle bars secured in the rabbets, and screen material secured in said rabbets around the corners of the angle bars.

1,887,741. FASTENING DEVICE. ARTHUR H. TROTTER, Syracuse, N. Y., assignor to Hookless Fastener Company, Meadville, Pa., a Corporation of Pennsylvania. Filed Nov. 22, 1927. Serial No. 235,023. 3 Claims. (Cl. 24—205.)



1. A fastening device comprising strips of resilient material, the strips lapping each other and each having a portion of its surface opposed to the other strip concave and the remaining portion toward the edge of the strip in the shape of a barb in cross section extending lengthwise of the strip, the barb of each strip being arranged to interlock with the barb of the other strip and the barb of each strip fitting the concave surface of the other strip and said strips being tensioned to press toward each other.

1,887,742. ELECTRIC POWER SWITCH. JOHN M. VAN SPLUNTER, Grand Rapids, Mich. Filed Nov. 14, 1930. Serial No. 495,609. 2 Claims. (Cl. 200—15.)

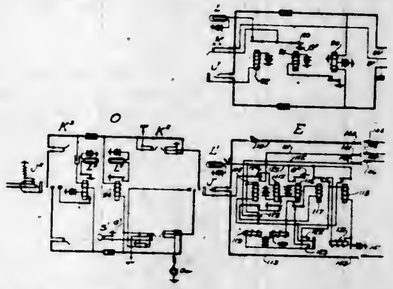


1. An electric power switch comprising a plurality of longitudinally-extending parallel metallic rail members, a plurality of metallic transverse members secured to said rail members to constitute therewith a rigid self-supporting frame, a plurality of sets of insulating posts mounted in alignment opposite each other on said rail members, contact members on the free ends of said insulating posts, contact blades pivotally mounted on the contact members carried by the posts mounted on one rail member for pivotal movement to establish and break contact with the corresponding contact members on the post carried by the opposite rail member, a shaft extending lengthwise of said rails, bearings mounted on said transverse members for journalling said shaft on said frame, insulating connections between said shaft and said blades for pivoting said blades between the closed and open positions upon angular movement of said shaft in said bearings, and means for detachably securing said frame as a unit to a support.

1,887,743. MANUFACTURE OF TRANSPARENT OR OPAQUE TOILET AND MEDICATED SOAPS. PAUL VILLAIN, Dulwich, London, England. Filed Apr. 16, 1929, Serial No. 355,660, and in Great Britain Apr. 26, 1928. 1 Claim. (Cl. 87—16.)

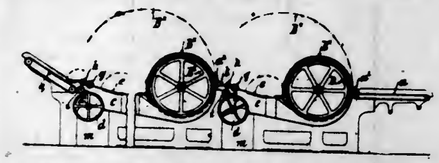
The manufacture of solid perfumed toilet soap by incorporating, in the process of saponification of the fat constituent with alkali, a composition of aromatic odour comprising terpenes, resins and floral wax homogeneously emulsified with a suitable emulsifying agent.

1,887,744. AUTOMATIC TELEPHONE SYSTEM. JOHN WICKS, Chicago, Ill., assignor, by mesne assignments, to Associated Electric Laboratories, Inc., Chicago, Ill., a Corporation of Delaware. Filed Dec. 20, 1919, Serial No. 346,323. Renewed June 2, 1927. 29 Claims. (Cl. 179—27.)



1. In a telephone system, a subscriber's line, automatic switches controllable thereover for completing telephone connections, means for making said line busy when calling, and means under the control of a party who has been called by the subscriber on said line for rendering said line non-busy before connecting therewith.

1,887,745. MACHINE FOR OPENING OR BREAKING UP COP-BOTTOMS, COTTON OR OTHER WASTE, OR LIKE FIBROUS MATERIALS. HENRY WILKINSON, Barrowshaw, Oldham, England, assignor to Platt Brothers and Company Limited, Oldham, England. Filed Oct. 14, 1931, Serial No. 568,766, and in Great Britain Jan. 12, 1931. 4 Claims. (Cl. 19—88.)



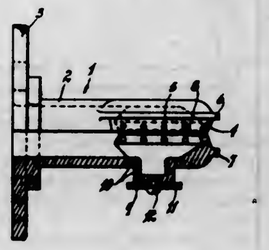
1. Apparatus for opening or breaking-up cop bottoms or other waste, comprising a plurality of breaking cylinders, and a single cage structure preceding a breaking cylinder, a feed trunk, a pressure roll, feed rollers, and a movable perforated grid, a frame-work structure permitting ready mounting of said single cage structure, detachable supports carried by said frame-work, driving mechanism for rotating said single cage structure, and operable means co-operating with and permitting rapid disconnection of said driving mechanism all whereby the single cage structure can be quickly released, lowered and withdrawn, and re-introduced to function with the devices described.

1,887,746. FLUID CONTROL FOR PNEUMATIC OIL LIFTS. JOHN A. ZUBLIN, Los Angeles, Calif. Filed Feb. 3, 1930. Serial No. 425,899. 10 Claims. (Cl. 103—232.)



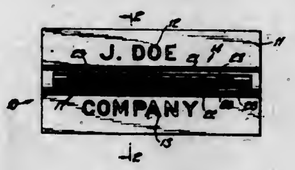
1. A pneumatic pumping device of the character described, including: a gas pipe adapted to form a submerged chamber in a body of liquid, said gas pipe having a liquid inlet at the lower end thereof; a stop valve at the lower end of said gas pipe in communication with said liquid inlet, and a slide valve communicating with said stop valve, said slide valve having a vertically slidable closure member; a production pipe extending down into said submerged chamber; a valve operating device on the lower end of said production pipe adapted for operating said stop valve and said slide valve; and accessible means for vertically moving said production pipe relative to said gas pipe to accomplish a desired operation of said vertically slidable closure member whereby to proportion the flow of liquid into said submerged chamber relative to the flow of gas through said production pipe.

1,887,747. DISTRIBUTOR HEAD. CLAUD H. BILLS and GLENN G. GRISWOLD, Los Angeles, Calif. Filed Apr. 10, 1931. Serial No. 529,050. 3 Claims. (Cl. 299—143.)



1. A distributor head comprising a unitary structure having a liquid chamber therein, said head having an arcuate face provided with a set of related converging ports to deliver a horizontal spray therefrom, and a second set of related ports under the first named set of ports arranged to discharge a spray downwardly and outwardly from said head.

1,887,748. ELECTRIC ILLUMINATING DEVICE. JOSEPH BLOCK, Brooklyn, N. Y. Filed Feb. 11, 1931. Serial No. 515,022. 2 Claims. (Cl. 40—130.)

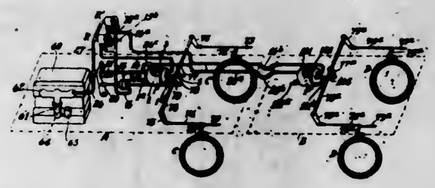


1. A display device comprising a support, a row of lamp sockets mounted thereon, lamps attached to said sockets, and an elongated lens superimposed over said row of lamps, said lens being of irregular shape in cross-section and longitudinally.

1,887,749. METHOD OF REBASING ARTIFICIAL DENTURES. FREDERICK U. BOWERS, San Francisco, and ALFRED T. LOCKWOOD, Fresno, Calif. Filed Oct. 15, 1929. Serial No. 399,759½. 4 Claims. (Cl. 32—4.)

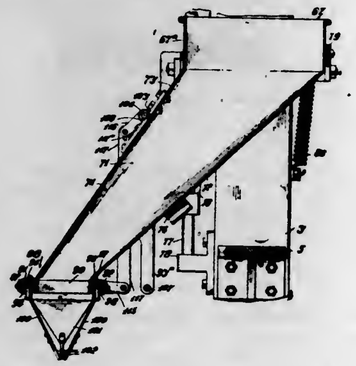
4. A method of rebasing artificial dentures which consists in applying a coating of plastic material to the palatal surface of the denture, covering the same with a sheet of pliable material treated with a substance for protecting the palate, taking an impression of the palate in the plastic material and treating the denture to harden and deodorise the plastic material.

1,887,750. BRAKE SYSTEM FOR AUTOMOTIVE VEHICLES. CALEB S. BRAGG, Palm Beach, Fla., and VICTOR W. KLIESRATH, Port Washington, N. Y., assignors to Bragg-Kliesrath Corporation, Long Island City, N. Y., a Corporation of New York. Filed June 20, 1928. Serial No. 286,804. 5 Claims. (Cl. 188—3.)



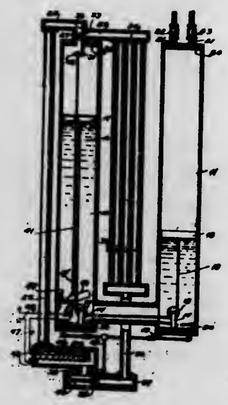
1. In a brake system for automotive vehicles provided with an internal combustion engine for propelling the same, having a throttle controlled suction passage, the combination with a plurality of power actuators, each comprising a cylinder closed at both ends, and a piston in said cylinder, independently operable brake mechanisms connected with said pistons, means for connecting each of said actuator cylinders on one side of the piston therein at all times with said suction passage, a single controlling valve mechanism for connecting each of said cylinders on the opposite side of said piston therein alternatively with said suction passage and with a source of higher fluid pressure, and an operator operated part for said controlling valve mechanism, of a pressure regulating valve for each actuator interposed between said controlling valve mechanism and the portion of the actuator cylinder connected therewith, for automatically disconnecting said portion of the cylinder from the source of higher pressure when said pressure regulating valves are subjected to a predetermined differential of fluid pressures, whereby said actuators may be operated substantially simultaneously to apply power to the brake mechanism connected with each actuator to a maximum extent determined by the pressure regulating valve therefor.

1,887,751. CARTON FILLING MACHINE. CHARLES C. COLVER, Oak Park, Ill., assignor to Triangle Packaging Company, Chicago, Ill., a Corporation of Illinois. Filed Apr. 23, 1930. Serial No. 446,441. 22 Claims. (Cl. 226—95.)



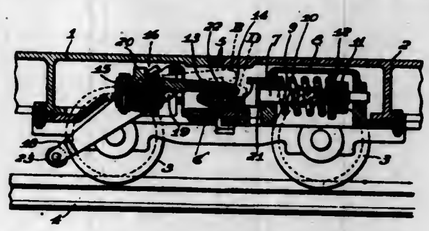
1. A carton filling machine embodying therein a spout, including a part removable to relieve pressure on the articles therein, means for feeding quantities of said articles with which the cartons are to be filled to said spout, means providing a support for said cartons, means providing a normally closed discharge end for the spout, means providing a relative movement between said support and spout end to bring them into operative relation for the passage of articles through said spout into said carton when said discharge end is opened and means for simultaneously opening said discharge end and said spout part to relieve the pressure on the articles in said spout as said articles are discharged through said open end.

1,887,752. PUMP FOR REFRIGERATING SYSTEMS. FREDERICK H. DU VERNET, Hamilton, Ontario, Canada. Filed Jan. 11, 1932. Serial No. 585,942. 9 Claims. (Cl. 230—83.)



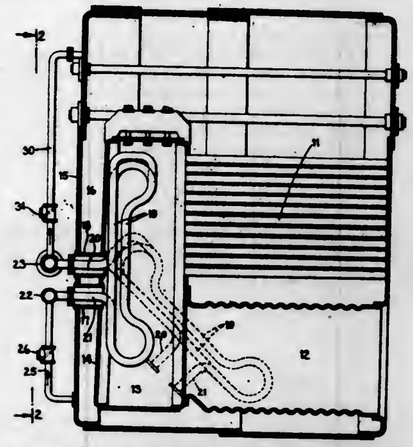
1. A pump of the kind described, including a pair of vertical pressure columns connected at their lower ends, a liquid piston partially filling said columns and their connection, means alternately to supply steam under pressure to the upper end of one of said columns and means to condense the supplied steam, and inlet and outlet valves at the upper end of the remaining column for connection to a refrigerator unit.

1,887,753. CAR COUPLING DEVICE. ALBERT E. EVANS, Pittsburgh, Pa., assignor to Pittsburgh Plate Glass Company, a Corporation of Pennsylvania. Filed Dec. 6, 1929. Serial No. 412,210. 2 Claims. (Cl. 218—75.)



1. A coupling device for a pair of abutting cars having unyielding engaging parts, comprising a hook secured to the end of one car, spring means under stress holding the hook against horizontal movement, a second hook secured to the end of the other car and facing oppositely to the first hook, such hook being mounted for both swinging and longitudinal movement, and means operated by the movement of the car for swinging said second hook so as to engage the first hook and then to move it longitudinally, moving the first hook longitudinally and placing said spring means under additional stress such as to prevent a relative movement of the cars under operating conditions.

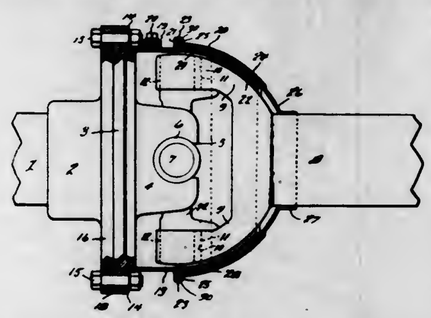
1,887,754. SUPERHEATER FOR MARINE BOILERS. EDWARD ARTHUR GEOGHEGAN, New York, N. Y., assignor to Supersteam Generator Company, New York, N. Y., a Corporation of Delaware. Filed Jan. 8, 1931, Serial No. 507,359, and in Great Britain June 2, 1930. 5 Claims. (Cl. 122—469.)



1. A superheater for a Scotch marine boiler, said boiler having a combustion chamber and a furnace leading thereinto, said superheater comprising a tube unit formed from one continuous length of tubing with a multiplicity of loops and tube portions connecting said loops with a saddle shaped configuration to provide for increased length of the tubing unit while still maintaining clearance for insertng the unit into the combustion chamber through the furnace of the boiler.

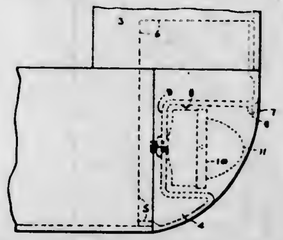
1,887,755. HOUSING FOR UNIVERSAL JOINTS. CATLIN GEROLD, Los Angeles, Calif. Filed June 4, 1930. Serial No. 459,138. 7 Claims. (Cl. 64—189.)

1. The combination, with a pair of shaft sections and means for uniting the same comprising a universal joint, of a housing enclosing the universal joint, the said housing comprising a housing member secured at one end to one of said shaft sections and having a radially outwardly extending flange at its opposite end, inner and outer concentric spherical housing sections, each of the last mentioned sections having a radially outwardly extending flange at its enlarged end, the outer portions of said housing-section flanges being united with the flange of the housing member, the flange on the inner housing section being interposed between the other two flanges, there being a



space provided between the spherical sections, and a third spherical section having its enlarged end of smaller diameter than the maximum diameters of the other sections and interposed between such sections, the last mentioned section having a reduced end secured to the other of said shaft sections, there being a chamber provided between the inner and outer spherical sections beyond the enlarged end of the intermediate section, and means for supplying lubricant by centrifugal action from said housing to said chamber.

1,887,756. RECESS LIGHT FOR MOTOR VEHICLES AND TRAILERS. WILLIAM S. GURTON, JOSEPH PLINT, and HERMAN NYBERG, Kitchener, Ontario, Canada, assignors to Dominion Truck Equipment Co. Limited, Kitchener, Ontario, Canada. Filed Feb. 12, 1931. Serial No. 515,307. 3 Claims. (Cl. 240—7.1.)



1. A vehicle body having in combination convergently disposed side and end bars of flanged construction, and a metal bracket having divergently disposed flange extensions formed to interfit the flange formation of said intersecting bars and rigidly secured thereto, said bracket having a lamp housed therein between its flange extensions visible from the end and side of the vehicle.

1,887,757. ALKYL ETHER OF HALOGENATED PARA-HYDROXYDIPHENYLS. ERNEST F. GEETHER, Midland, Mich., assignor to The Dow Chemical Company, Midland, Mich., a Corporation of Michigan. Original application filed Oct. 11, 1928, Serial No. 311,976. Divided and this application filed Dec. 6, 1929. Serial No. 412,292. 8 Claims. (Cl. 260—150.)

1. The method of making a derivative of 4-hydroxy-diphenyl, which comprises alkylating the hydroxyl group of a halogenated 4-hydroxy-diphenyl containing at least one halogen group.

5. As a new product, an alkyl ether of 3.4-halo-hydroxy-diphenyl.

1,887,758. APPARATUS FOR MAKING PRODUCTS FROM PLASTIC MATERIAL. FRANCIS W. HARNEY, Lockport, N. Y., assignor to The Upson Company, Lockport, N. Y., a Corporation of New York. Filed Mar. 11, 1931. Serial No. 521,772. 9 Claims. (Cl. 154—1.)



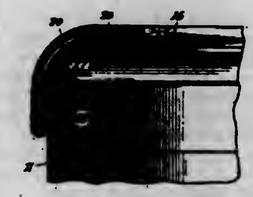
1. A machine for making products from plastic material, comprising spaced forming rolls, a hopper for supplying plastic material to the space between said rolls, and means associated with said hopper for blocking off supply of plastic material from said hopper to said space at an intermediate point in the length of said space.

1,887,759. METHOD FOR MAKING PRODUCTS FROM PLASTIC MATERIAL. FRANCIS W. HARNEY, Lockport, N. Y., assignor to The Upson Company, Lockport, N. Y., a Corporation of New York. Original application filed Mar. 11, 1931, Serial No. 521,772. Divided and this application filed May 6, 1932. Serial No. 609,640. 10 Claims. (Cl. 154—2.)



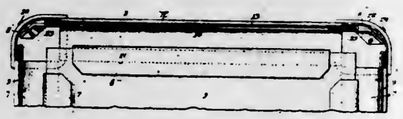
1. The method of making material comprising liner sheets and an intumescent filling between the liner sheets, which comprises introducing an intumescent filling into a part only of the space between liner sheets, providing a pressure-relieving cavity at an intermediate point in such space, and subjecting the liner sheets and filling to heat to cause said filling to intumesce.

1,887,760. FURNACE JACKET. GEORGE D. HAUSER, Utica, N. Y., assignor to Crane Co., Chicago, Ill., a Corporation of Illinois. Filed Nov. 21, 1929. Serial No. 408,744. 3 Claims. (Cl. 200—5.)



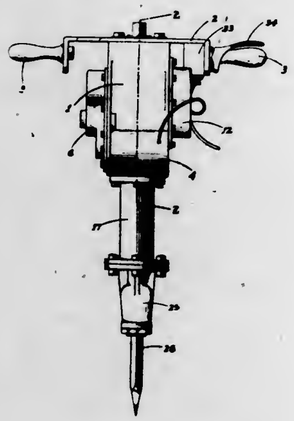
1. A furnace jacket comprising upright walls removably connected at their marginal edges by slip joints, a top wall composed of a plurality of inter-connected sections, and a ring removably embracing the upper margins of the upright wall sections and the perimeter of the top wall sections by slip joints whereby said walls are connected together into a unitary flexible structure.

1,887,761. FURNACE JACKET. GEORGE D. HAUSER, Chicago, Ill., assignor to Crane Co., Chicago, Ill., a Corporation of Illinois. Filed Nov. 21, 1929, Serial No. 408,745. Renewed Oct. 5, 1931. 7 Claims. (Cl. 220—4.)



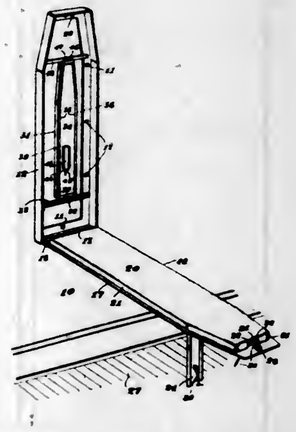
7. A furnace jacket comprising sheet metal top and upright walls, one or more of said walls being formed of sections slidably associated together to provide for adjustability in assembling and flexibility of the assembled structure, sheet metal corner strips of arcuate cross section provided along their longitudinal edges with outwardly opening grooves adapted to slidably receive the marginal edges of said walls, corner caps engaging adjacent corner strips at the upper corners of the jacket and means cooperating with said corner caps for securing said parts in assembled position.

1,887,762. PAVEMENT BREAKER. BENJAMIN W. HORTON, Modesto, Calif., assignor to Archibald M. McNeil, Modesto, Calif. Filed June 29, 1931. Serial No. 547,467. 2 Claims. (Cl. 125—33.)



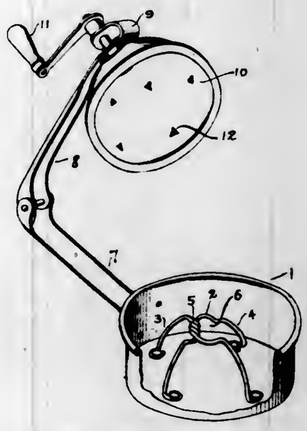
1. In a pavement breaking implement having a spring urged reciprocating hammer, a rotary element, and means between the hammer and element to move the hammer in one direction, a body in which the element is disposed, a shaft for the element journaled in and projecting from one side of the body, a motor housing formed with the body transversely thereof, a motor in the housing whose axis is parallel to the shaft, a pinion on the motor disposed outwardly of the side of the body opposite to that from which said shaft projects, a gear on the outer end of the shaft, and reduction gearing between said pinion and gear disposed outwardly of the body; said reduction gearing comprising a pinion meshing with the gear, a shaft on which said pinion is mounted disposed parallel to the axis of the motor and extending across and journaled in the body to and beyond the same side thereof as that on which the motor pinion is disposed, and gearing between the corresponding end of said pinion shaft and the motor pinion.

1,887,763. CABINET IRONING BOARD. OBEL JUVET, Ferndale, Wash. Original application filed Mar. 7, 1928, Serial No. 259,787. Divided and this application filed May 15, 1929. Serial No. 363,242. 2 Claims. (Cl. 68—10.)



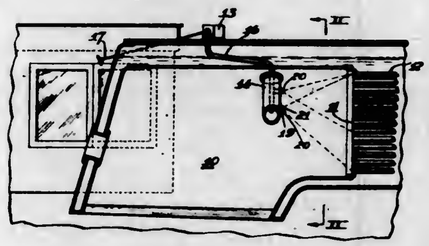
1. In combination, a cabinet attachable to a wall, an ironing board hingedly connected thereto and constituting a closure therefor, means for locking the cabinet and ironing board in closed relation, foldable support means connected to said ironing board for supporting the latter when in an open position, and means interconnecting said locking means and said support means for coincidentally releasing the locking means and unfolding the support means.

1,887,764. GRAPEFRUIT JUICE EXTRACTOR. ANDREW STEPHEN KNAPP, St. Louis, Mo., assignor to Knapp Monarch Company, Inc., a Corporation of Missouri. Filed July 3, 1930. Serial No. 465,721. 7 Claims. (Cl. 146—3.)



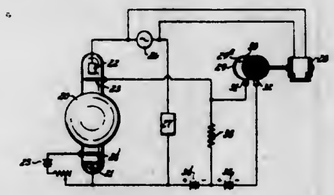
1. In a fruit juice extractor for fruit having a hard core, means for rotating said fruit, means for applying between the core and the skin a force to rupture the fruit carrying cells compricing a plurality of downwardly divergent wire loops so spaced as to permit the core to pass therethrough at their intersection, and means for applying pressure between said first means and said second means during the juice extracting operation.

1,887,765. FLUE CLEANER. JOHN H. KOHLER and AUGUST SCHNEIDER, Pittsburgh, Pa. Filed Feb. 24, 1930. Serial No. 430,581. 1 Claim. (Cl. 122—391.)



The combination with a locomotive boiler provided with a fire-box having a flue sheet at one end and a back-wall at the other end thereof, of a flue cleaner comprising steam-containing means disposed in said fire-box and connected with the live steam space of said boiler, said steam-containing means having nozzles disposed closer to said flue sheet than to said back-wall at a sufficient distance from said flue sheet and so directed that live steam issuing therefrom will impact against substantially all the flue sheet, and a water-jacket disposed within said fire-box and surrounding said steam-containing means, for the purposes set forth.

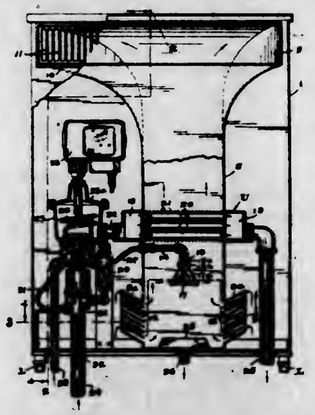
1,887,766. CONTROL FOR ELECTRON TUBES. JAMES D. LE VAN, Milwaukee, Wis., assignor to Cutler-Hammer, Inc., Milwaukee, Wis., a Corporation of Delaware. Filed Oct. 12, 1929. Serial No. 399,142. 12 Claims. (Cl. 250—27.)



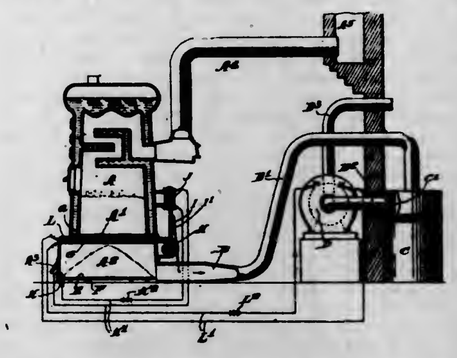
1. An electron discharge tube containing an ionisable gas and having associated with its anode a grid effective when supplied with a relatively low potential negative with respect to the cathode to prevent discharge between the main electrodes and to aid initiation of such discharge by producing a glow discharge between the grid and anode when said negative grid potential has a relatively high value.

1,887,767. AIR CONDITIONING APPARATUS (GRAVITY ACTUATED). CARROLL E. LEWIS, Minneapolis, Minn., assignor to Lewis Air Conditioners, Inc., Minneapolis, Minn., a Corporation of Delaware. Filed Aug. 14, 1930. Serial No. 475,177. 4 Claims. (Cl. 257—138.)

1. In air conditioning apparatus an upwardly extending flue having an air intake passage adjacent the lower end thereof and having a substantially horisontally disposed air discharge cowl diverging from the upper end of said flue, said air intake passage having a series of spaced divider plates adapted to cause entering air to be distributed substantially uniformly throughout the cross sectional area of the flue, a heating unit disposed transversely of the medial portion of the flue and having air passages extending therethrough, a water supply nozzle mounted adjacent said heating unit and directed longitudinally of said flue and a deflector plate associated with said discharge nozzle and adapted to deflect moisture transversely and substantially radially of said flue.



1,887,768. ASH REMOVING APPLIANCE FOR FURNACES. ANDREW J. MALONEY, Merion, Pa., assignor to The Philadelphia & Reading Coal & Iron Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Oct. 7, 1929. Serial No. 397,834. 2 Claims. (Cl. 126—242.)



1. In combination with a fire box and an ash pit located to receive ashes therefrom, a conduit for air and ashes connected to the ash pit, motor actuated means for creating a draft through the conduit and ash pit, resiliently supported means for receiving and supporting ashes in the ash pit, means for starting and stopping the motor actuated draft creating means including a controller actuated by the up and down movements of the resiliently supported ash receiving support, means for opening and closing the connection between the fire box and ash pit, and mechanism for actuating said last named means controlled by the controller.

1,887,769. PISTON SKIRT EXPANDING SPRINGS. CHARLES A. MARIEN, St. Louis, Mo., assignor to Ramsey Accessories Manufacturing Corporation, St. Louis, Mo., a Corporation of Missouri. Filed Jan. 25, 1932. Serial No. 588,563. 2 Claims. (Cl. 74—108.)

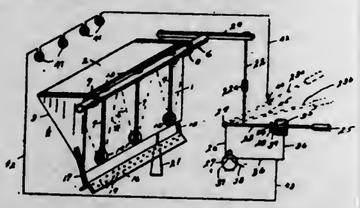
1. In combination with a piston having a longitudinally slotted skirt and an annular groove in the inner surface

of said skirt, a spring expanding element of substantially circular shape, and having oppositely disposed expanding



parts described by a common radius, disposed in said groove, and other intermediate parts lying within the circle describing said expanding parts.

1,887,770. AUTOMATIC CHICKEN FEEDER AND LIGHT CONTROL MECHANISM. ROSCOE R. MARRIOTT, Bingham, Utah. Filed Jan. 22, 1930. Serial No. 422,596. 8 Claims. (Cl. 119—56.)



1. In a device of the class described the combination of a hopper; outlet ports in the front of said hopper; a horizontal pipe mounted adjacent thereto; a weight controlled lever carried on the end of said pipe; a switch lever connected with said weight lever by an adjustable rod; a switch mounted adjacent a motor, said switch adapted to receive said switch lever between the ends thereof; a motor to control said switch; a pin controlled by said motor, said pin to be withdrawn from said switch to release the switch lever therefrom, when the motor is actuated; a time mechanism to introduce electric current into said motor at a predetermined period of time; another switch to engage said switch lever when it has been released from said first mentioned switch by the action of said motor; a series of lights connected with said last mentioned switch and with said time control mechanism so that when the switch lever is released from the first mentioned switch and comes into contact with the second mentioned switch the lights are turned on; arms on said horizontal pipe; closure plates on the end of said arms to control the outlet ports from said hopper; a pin to stop the switch lever from engaging with the second mentioned switch when desired; and a perforated spreader mounted under said hopper to distribute the feed over the floor.

1,887,771. ANT JAR. JOHN D. MARSH, Los Angeles, Calif., assignor of one-half to Don A. Henderson, Los Angeles, Calif. Filed May 5, 1931. Serial No. 535,123. 4 Claims. (Cl. 43—131.)



1. An ant jar to contain poison and consisting of a base with a central chamber for the poison, said base having an upwardly and inwardly inclined runway which runway also inclines downwardly and inwardly to the poison, whereby the ant can run up and over and down to the poison and then return, and a dome supported over said base and said runway to shelter said runway and protect said poison.

1,887,772. PREPARATION OF BENZYL-ALKYL ANILINE. LAWRENCE F. MARTIN and DONLAD E. MACQUEEN, Midland, Mich., assignors to The Dow Chemical Company, Midland, Mich., a Corporation of Michigan. Filed Apr. 1, 1929. Serial No. 351,824. 5 Claims. (Cl. 260—128.)

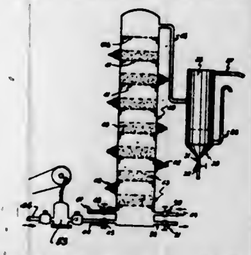
1. In a method of increasing the yield of a benzyl-alkyl aniline obtained by reacting a benzyl-halide with an N-alkyl aniline, the step which consists in gradually adding the former reactant to approximately its chemical equivalent of the latter as the reaction proceeds and at about the same rate as reaction occurs.

1,887,773. CLINOGRAPH. ROY P. MCLAUGHLIN, South Pasadena, Calif. Filed June 28, 1929. Serial No. 374,526. 17 Claims. (Cl. 234—1.)



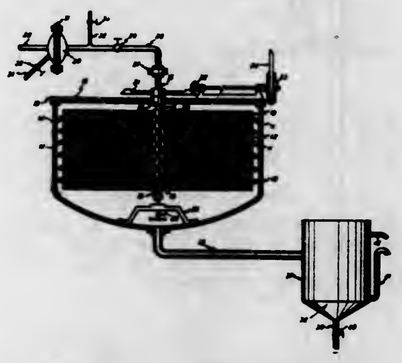
1. An apparatus for determining declination which embodies: a casing; gimbals mounted in said casing; pendulums supported by said gimbals; means for governing the movement of said pendulums in predetermined planes; stylus members associated with said governing means and adapted to move proportionately therewith in substantially parallel relation to the axis of said casing; and means engaged by said stylus members for receiving a record of the movement of said stylus members.

1,887,774. METHOD OF TREATING EMULSIONS. GOTTHOLD HARRY MEINZER, Los Angeles, Calif., assignor to L. Blake-Smith, San Francisco, Calif. Filed July 30, 1930. Serial No. 471,628. 23 Claims. (Cl. 196—3.)



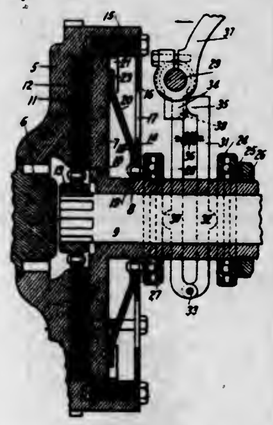
18. A method of breaking an oil and water emulsion by contacting said emulsion with granular solid substances having the property of resolving said emulsion into its oil and water constituents, comprising: establishing an incoherent mass of said granular substances; passing a pulsating stream of emulsion through said mass, whereby said emulsion is resolved into its oil and water constituents; separating entrained grains of said granular substances from said constituents, and parting said constituents.

1,887,775. METHOD OF MECHANICALLY TREATING EMULSIONS. GOTTHOLD HARRY MEINZER, Los Angeles, Calif., assignor to L. Blake-Smith, San Francisco, Calif. Filed July 30, 1930. Serial No. 471,629. 24 Claims. (Cl. 196—3.)



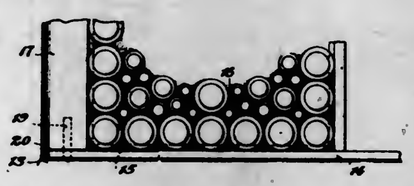
14. A method of resolving an oil and water emulsion, comprising: continuously passing said emulsion between the oppositely disposed surfaces of concrete solid masses coated with a material perferentially wetted by water and a material preferentially wetted by oil, said surfaces being maintained in relative movement, whereby said emulsion is resolved into its oil and water constituents, and parting said constituents; the perpendicular distance between said oppositely disposed surfaces being not to exceed $\frac{1}{10}$ inch.

1,887,776. CLUTCH. SAMUEL E. MORRAL, Morral, Ohio. Filed Sept. 23, 1929. Serial No. 394,469. 9 Claims. (Cl. 192—99.)



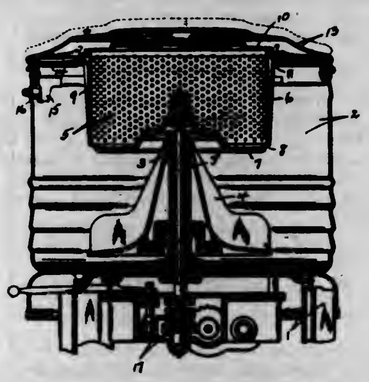
1. In a clutch comprising a driving shaft, a driven shaft, a front clutch member rigidly secured to said driving shaft, a rear clutch member slidably mounted on said driven shaft, and means for causing said rear clutch member to be pressed toward said front clutch member, abutments mounted about the axis of said rear clutch member, one of said abutments being held against axial movement with relation to said rear clutch member and said rear clutch member having axial movement with relation to the other of said abutments, an arm supported on one side of said driven shaft, extending transversely to said driven shaft and engaging one of said abutments, a second arm pivotally connected with the first mentioned arm at that end thereof remote from its support and engaging the other of said abutments, and means to actuate said second arm to impart movement to its abutment and to said rear clutch member.

1,887,777. WALL CONSTRUCTION UNIT AND WALL FORMED THEREFROM. JOHN P. MORRIS, Laredo, Tex. Filed Sept. 8, 1931. Serial No. 561,750. 11 Claims. (Cl. 72—33.)



1. A wall construction unit comprising a wooden log section approximating in length the thickness of a wall to be erected by superimposing a plurality of said units upon one another in parallel relation transversely of the wall, and an integral reduced extension at one end at least of said unit.

1,887,778. EXTRACTOR BASKET FOR WASHING MACHINES. JABEZ CURRY NELSON, Syracuse, N. Y., assignor to Easy Washing Machine Corporation, Syracuse, N. Y., a Corporation of Delaware. Filed May 6, 1931. Serial No. 535,544. 2 Claims. (Cl. 210—76.)

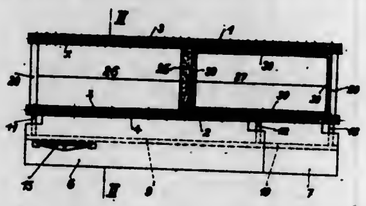


1. An extractor basket for a washing machine comprising an imperforate shell having a bottom portion and an upwardly and outwardly flaring side wall, said side wall having an internal annular shoulder adjacent said bottom and a liner of resilient perforated metal resting on said shoulder and maintained in position by its own resiliency.

1,887,779. HEATING APPARATUS WITH HEAT-STORAGE BODY. MARCEL NITSSCO, Vienna, Austria, assignor to Jean Lagarrigue, Paris, France. Filed Aug. 21, 1930, Serial No. 476,835, and in Austria Aug. 27, 1929. 6 Claims. (Cl. 107—63.)

1. Heating apparatus comprising two or more superimposed metallic heating blocks, each traversed by a sys-

tem of endless channels, a vaporizable liquid in said channels, the said blocks being mounted one above the other



by means of vertical tubes connecting said systems of channels to one another and supporting the blocks above one another.

1,887,780. PISTOL HOLSTER. PHILIP JORDAN NOEL, Bowling Green, Ky. Filed July 22, 1930. Serial No. 469,849. 1 Claim. (Cl. 224—2.)



A pistol holster comprising a substantially rectangular rigid plate adapted to conform in size and shape to seat in a hip pocket, a pistol holding pocket secured on one face of said plate and a pair of substantially C shaped springs each having a closed loop on each end, said springs secured to said plate one on each side of said pistol pocket and adjacent the top thereof by rivets passing through said end loops and said plate in such manner that said springs normally project beyond the side edges of said plate but may be pressed in toward said edges to permit withdrawal of the plate from a pocket.

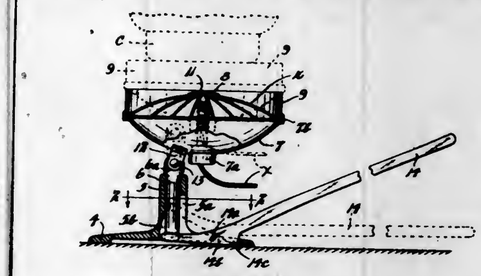
1,887,781. METHOD AND APPARATUS FOR REMOVING SEDIMENT FROM AUTOMOBILE COOLING SYSTEMS. HARRY L. PAHR, Yonkers, N. Y., assignor, by mesne assignments, to Automotive Accessories Company, Detroit, Mich., a Corporation of Michigan. Filed Sept. 6, 1930. Serial No. 480,071. 3 Claims. (Cl. 210—57.)



3. An apparatus for removing sediment from cooling systems of automobile engines comprising a pipe section interconnecting the automobile engine radiator and the engine and having an opening therein and a impermeable baffle curved up stream over the opening, and providing a pocket of quiet liquid above the opening there being no appreciable flow of liquid through the opening.

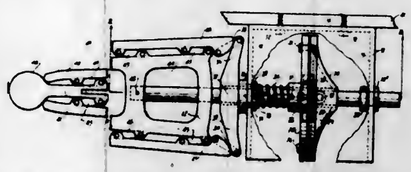
1,887,782. PORTABLE HEATER. AXEL M. PETERSON, Onamia, Minn. Filed Nov. 22, 1930. Serial No. 497,894. 6 Claims. (Cl. 219—38.)

1. In a heater of the class described, a base or support adapted to rest on the ground, a heater casing having an open outer side, said casing being connected with said base for limited rectilinear vertical movement relatively thereto, a heating element in said casing, said casing having an edge adapted to project upwardly and engage the lower portion of an automobile crank case and a handle fulcrumed in said support by which the support and casing may be shifted in any direction to position them below said crank case, said handle being further connected with



said casing to raise the same against the bottom of said crank case and of sufficient length to project outwardly towards the side of the automobile for convenient manipulation.

1,887,783. PNEUMATIC MEANS FOR OPERATING INSPECTING FORMS. MOSES EVERETT PIERSON, Charlotte, N. C. Filed Apr. 29, 1931. Serial No. 533,752. 1 Claim. (Cl. 223—19.)



In a hosiery inspecting form, laterally distendable members, a slidable member pivotally connected to said laterally distendable members, a shaft fixedly secured to said slidable member, a bracket, a tube rotatably mounted in said bracket, means for preventing sliding movement of said tube with relation to said bracket, said tube having oppositely opposed slots therein, a diaphragm base fixedly secured on said tube, a diaphragm in said diaphragm base, a collar secured to said diaphragm, said collar being slidably mounted on said tube, a pin penetrating said collar and said slots in said tube, a shaft slidably mounted in said tube, said pin also penetrating said shaft, means for connecting said shaft to said slidable member, means for admitting compressed air between said diaphragm base and said diaphragm, and means for exhausting the air from said diaphragm chamber.

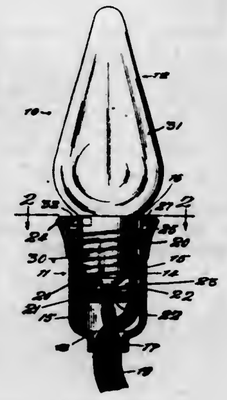
1,887,784. ELECTRIC OUTLET SOCKET. LOUIS PROPP, New York, N. Y., assignor to The M. Propp Co. Inc., New York, N. Y., a Corporation of New York. Filed Sept. 1, 1927. Serial No. 216,835. 3 Claims. (Cl. 173—338.)



1. An electric fitting, having an insulating base, a current carrying member comprising a spring contact terminal and a foot extension, said extension being bent to

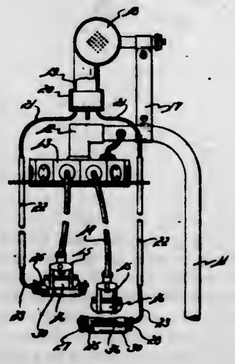
retain the terminal in an upstanding position on said base, means for fixing said extension to said base and spaced spring clips on opposite sides of said extension adapted to engage a conductor wire.

1,887,785. ELECTRICAL ILLUMINATING DEVICE. LOUIS PROPP, New York, N. Y., assignor to M. Propp Co., Inc., New York, N. Y., a Corporation of New York. Filed July 26, 1929. Serial No. 381,104. 2 Claims. (Cl. 176—31.)



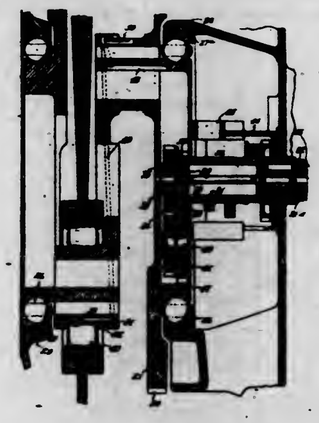
1. In combination, an electric lamp socket comprising an insulating tubular housing having an open mouth portion, a screw shell within said housing, a screw threaded lamp base receiving the shell fixed within said housing, the rim of said mouth portion being formed with a notch on the inner surface thereof, a lamp having a screw threaded base screwed to said shell, said base having a spring finger adjacent the bulb of said lamp adapted to snap into said notch upon screwing said lamp to said shell.

1,887,786. AIR COOLED HAIR WAVING DEVICE. BENJAMIN F. PRYOR, River Rouge, Mich. Filed Feb. 13, 1931. Serial No. 515,477. 5 Claims. (Cl. 132—30.)



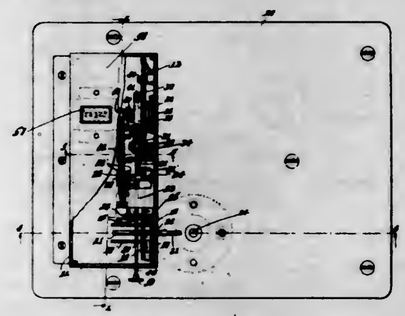
1. The method of cooling a hair waving prong consisting in delivering through the prong while in use a quantity of cooling fluid.

1,887,787. INTERNAL COMBUSTION ENGINE. HUGH M. ROCKWELL, Freeport, N. Y. Refile of application Serial No. 61,076, filed Oct. 7, 1925. This application filed May 31, 1930. Serial No. 458,755. 7 Claims. (Cl. 74—38.)



1. In an internal combustion engine, a crank case, a crank shaft having bearing surfaces of a diameter at least as great as the throw of the crank pin, a shaft mounted on said crank casing, a sleeve rotatably mounted on said shaft, a gear formed on the end of said shaft, a gear formed on said sleeve, a stud shaft projecting from said crank shaft, a double pinion mounted on said stud shaft, said pinion having one set of teeth in mesh with each of said gears.

1,887,788. COUNTING DEVICE. JACQUES ROUSSO, Los Angeles, Calif. Filed Jan. 16, 1929. Serial No. 332,849. 2 Claims. (Cl. 235—98.)

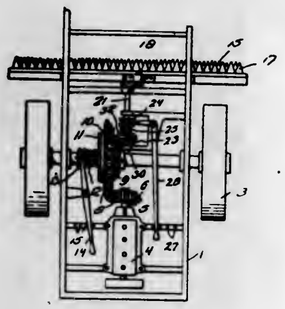


2. In a counting device of the character described, a supporting base, an upstanding housing on said supporting base, one wall of said housing constituting a face plate for locating articles, such as towels, and the like to be counted, in a pile on said supporting base, counting mechanism within said housing comprising a ratchet wheel, a rotatable actuator geared positively to actuate said counting mechanism, said rotatable actuator having radial arms successively projecting beyond the working face of said face plate wall of said housing.

1,887,789. POWER TRANSMISSION FOR MOWERS. CLARENCE E. RUSH, Grand Island, Nebr. Filed Dec. 15, 1931. Serial No. 581,261. 2 Claims. (Cl. 74—7.)

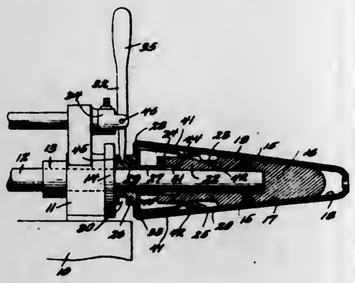
1. In combination, a frame, a shaft therein, a shaft at right angles to the first named shaft and carried by the

frame and equipped with a miter gear, a unit loosely mounted on the first shaft and comprising miter gears and a friction clutch member, one of the miter gears being meshed with the miter gear on the second shaft, a friction clutch member mounted on the first shaft to turn with and be capable of movement endwise of said shaft, said clutch member being spring pressed and operative



controlled, a third shaft carried by the frame, a miter gear loose on said third shaft and meshed with the other miter gear of the said unit on the first shaft and having fixed to it a friction clutch member, and a friction clutch member rotatable with and movable endwise of the third shaft, said friction clutch member being spring pressed and operative controlled.

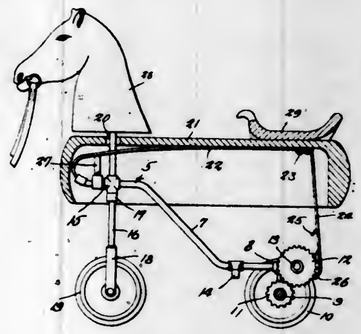
1,887,790. TUBE OR CONE HOLDING MANDREL. LAWRENCE B. STOGNER, Hartsville, S. C. Filed July 18, 1930. Serial No. 468,868. 11 Claims. (Cl. 242—46.3.)



8. In a winding machine, in combination, a rotatable spindle, a cop cone mandrel immovably secured thereon and adapted to engage a cone intermediate its ends, a sleeve slidable on said spindle adjacent the base of the mandrel, resilient gripping means supported by said sleeve adapted to engage the inner surface of a cone but normally sprung inward and means to extend said gripping means when the sleeve is moved in the direction of application of a cone onto said mandrel.

1,887,791. TOY. WILLIAM E. SPERRY, San Diego, Calif. Filed May 18, 1931. Serial No. 538,318. 4 Claims. (Cl. 208—36.)

1. A device of the class described comprising a frame, a body portion mounted for vertical movement on the frame, a rear axle, wheels secured to the axle, a pinion mounted on the axle to rotate therewith, a pinion mounted on the frame and meshing with the first mentioned pinion, and a yieldable bar connected with the body portion and extending to a position adjacent to the last mentioned

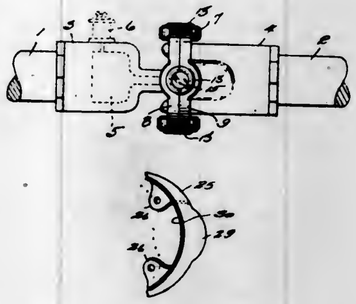


pinion to engage the last mentioned pinion to rotate the pinions as the yieldable bar moves downwardly, transmitting rotary movement to the wheels.

1,887,792. PROCESS FOR THE MANUFACTURE OF AMORPHOUS CARBON. JOSEPH VITAL GHISLAIN VAN DEN DRIESSCHE, Uccle-Brussels, Belgium. Filed Jan. 11, 1932, Serial No. 586,089, and in Belgium Jan. 16, 1931. 3 Claims. (Cl. 134—60.)

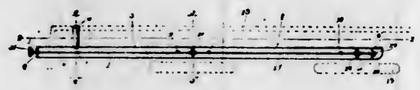
1. A process for manufacturing amorphous carbon and hydrogen, comprising the steps of causing water gas ($CO + H_2$) and steam to react upon calcium carbide, of heating to about 250° C. in an air tight retort and of separating the lime, carbon and hydrogen obtained.

1,887,793. MEANS FOR PREVENTING LEAKAGE OF OIL. VILLOS P. WILLIAMS, Baltimore, Md., assignor, by mesne assignments, to Estelle P. Williams, Baltimore, Md. Filed Apr. 19, 1930. Serial No. 445,707. 2 Claims. (Cl. 64—102.)



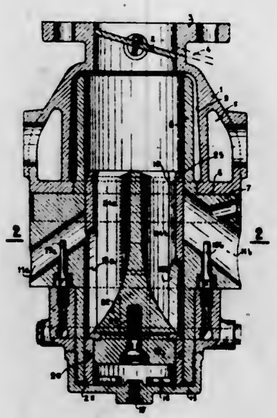
1. An oil seal for universal joints of the type wherein a ring is provided to retain the knuckle pins, comprising a relatively thin metallic band covering the peripheral surface of the ring and passing over the ends of the pins; the edges of the band being substantially coincident with the edges of the ring, and extensions formed on the band at either side of that portion where the band passes over the ends of the pins, said extensions bent down along the sides of the ring to provide ears for holding the band in place, and a packing strip beneath the band, the edges of the band being swaged down to form an inturned part engaging and holding the packing strip in place.

1,887,794. SAFETY GAS LIGHTER. WILLIAM W. WINGO, SAMUEL R. SMEDLEY, and POLK C. BABB, Poteau, Okla. Filed Oct. 8, 1931. Serial No. 567,718. 4 Claims. (Cl. 67—20.1.)



2. A safety lighter for gas burners comprising a support formed of a pair of flanges disposed at right angles to each other, a plurality of spaced sparker mechanism, an operating shaft common to the latter and rotatably carried by said support, each of said mechanisms having a rotatable element carried and bodily moving with said shaft, each of said mechanisms having the remaining elements thereof supported from one of the flanges in a direction at right angles to the axis of said shaft, and the said remaining elements including a spring pressed flint, said flints permanently bearing against the edges of said rotatable elements.

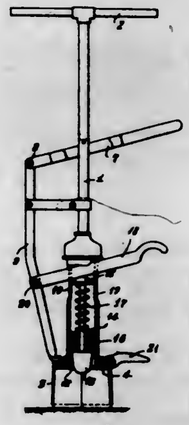
1,887,795. CARBURETOR. GEORGES BARIQUAND, Paris, France. Filed Jan. 28, 1930, Serial No. 422,925, and in France Feb. 21, 1929. 4 Claims. (Cl. 261—41.)



1. In a multiple jet carburetor, a slide valve arranged to rise by the suction of the motor, an air inlet aperture below the said valve to permit each rising in a regular movement, said valve having a channel leading to the outer air and also having a peripheral groove with which said channel communicates to keep constant the leakages along said valve, to dispense with effects of wear and to permit of machining said member with sufficient play.

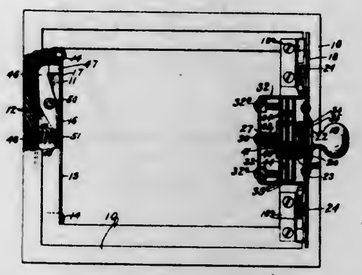
1,887,796. CLOD-CUTTER. KORNELIS BOSSE, Capelle, Netherlands. Filed Apr. 12, 1930, Serial No. 443,797, and in the Netherlands Apr. 17, 1929. 2 Claims. (Cl. 55—18.)

1. A clod cutter comprising a shaft having a tubular cutter at its lower end, an axially movable downwardly directed mandrel arranged in the cutter and an axially movable ejector in the cutter forming the upper side thereof and having a central opening through which the



mandrel is arranged to pass, and independently operable levers one for moving the ejector and the other for moving the mandrel.

1,887,797. PERMUTATION LOCK. MILON H. BOREIN, Chicago, Ill. Filed June 14, 1930. Serial No. 461,190. 2 Claims. (Cl. 70—53.)

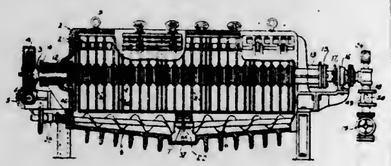


1. In a permutation lock, the combination of a closure-frame, a closure engaged with said closure-frame for closing it, a locking unit mounted on the closure and including a rotary plate having a straight edge and an arcuate edge, a keeper-plate mounted on the closure-frame and having a slot through which said arcuate edge is adapted to extend for locking engagement with the keeper-plate, and a supplemental locking device including a lever which is operable by said arcuate edge, said closure being provided with a keeper-element for engagement with said lever, and means to move said lever for unlocking said supplemental locking device when said arcuate edge is moved out of engagement with said lever.

1,887,798. ROTARY FILTER PRESS. GEORGE ROCK BRYANT, Lawrenceville, Ill., assignor to Henry Vogt Machine Company, Louisville, Ky., a Corporation of Kentucky. Filed Aug. 2, 1930. Serial No. 472,671. 7 Claims. (Cl. 210—201.)

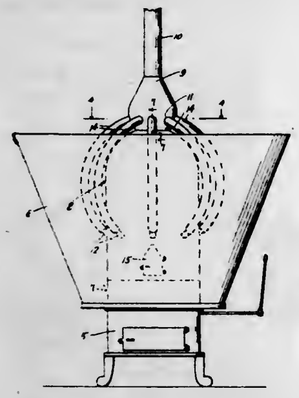
5. In a filter press, the combination of a casing having a horizontal cylindrical portion and a longitudinal

trough at its bottom sloping from its ends toward its center, with a discharge opening for solid matter near the center; a drain pipe entering the trough and extending downward into the solid matter discharge, for



draining the casing completely of liquid; filter plates of equal diameter in the casing above the trough; and a double screw conveyor in the trough for gathering to the discharge opening solid matter falling from the filter plates.

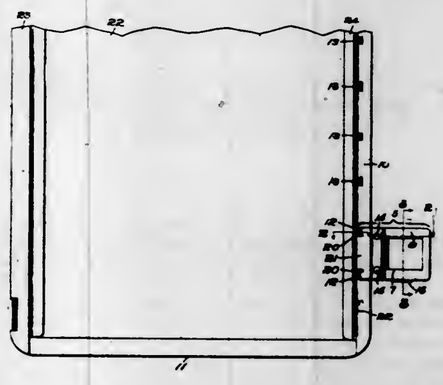
1,887,799. SAND DRIER. EDWARD HARMON CAMPBELL, Eccles, W. Va. Filed June 17, 1931. Serial No. 545,120. 2 Claims. (Cl. 34—34.)



1. A sand drier comprising a hopper, a stove arranged in the central portion of the hopper and having a dome-shaped upper end portion, a drum of comparatively small diameter communicating directly with the stove at the upper contracted end thereof and tapered upwardly to provide it with a reduced upper end, an uptake leading from said upper end of the drum, and outwardly curved tubes grouped about the stove and the drum and having their ends connected with the interiors of the stove and drum, said outwardly curved tubes being spaced apart.

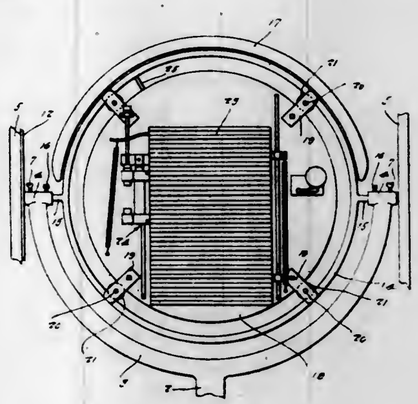
1,887,800. FILING LEAF AND LABEL-HOLDER THEREFOR. THEODORE R. CARLSON and VICTOR A. GRONBERG, Jamestown, N. Y., assignors to Postindex Company, Inc., Jamestown, N. Y., a Corporation of Massachusetts. Filed May 12, 1931. Serial No. 536,743. 3 Claims. (Cl. 40—102.)

1. In combination, a file panel having a margin provided with a series of pairs of openings leading from one face of said panel, said panel being provided with a shoulder parallel with said series of openings, and a label-holder adjustably mounted on said margin for movement lengthwise of the latter, said label holder comprising a pair of arms which embrace said margins, one of said arms having two tongues which are received in the openings of one pair and are receivable in openings of



other pairs, and an intermediate tongue which engages said shoulder and maintains said label-holder in parallelism with said panel.

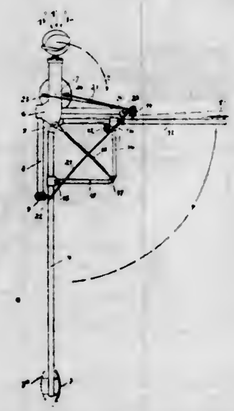
1,887,801. X-RAY APPARATUS. PAUL F. COLE, Springfield, Mo. Filed Oct. 13, 1931. Serial No. 568,592. 6 Claims. (Cl. 250—34.)



1. An X-ray apparatus comprising a support, an annular track mounted for swinging adjustment on the support, an apertured member mounted for rotary adjustment on the track, and a grid mounted on the member adjacent the aperture therein.

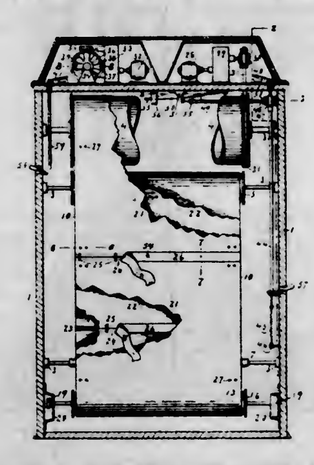
1,887,802. WIND MOTOR. LOUIS CONSTANTIN, Paris, and PAUL FORTIER-BEAULIEU, Roanne, France. Filed Mar. 12, 1931, Serial No. 522,048, and in France Mar. 14, 1930. 7 Claims. (Cl. 170—48.)

1. An orienting and effacing device for wind motors having a rotatable head carrying a wind motor which comprises in combination, an effacing blade, an arm for supporting said effacing blade, direct means for angularly connecting said blade supporting arm to said rotatable head, an orienting rudder consisting of a single substantially cylindrical surface having vertical generatrices, an arm for supporting said rudder pivotally mounted on said rotatable head, said cylindrical surface being disymmetrically disposed with respect to said last mentioned arm, a stop carried by said head adapted to prevent said last mentioned arm from making an angle of more than



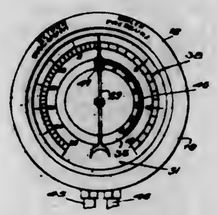
90 degrees with the blade supporting arm, two other arms articulated to each other and to said blade supporting and rudder carrying arms so as to form an articulated lozenge, and resilient means for normally maintaining said arms at right angles to each other.

1,887,803. MOVING CURTAIN MACHINE FOR EDUCATIONAL AND ADVERTISING PURPOSES. HENRY C. DENSLOW, Brooklyn, N. Y. Filed May 23, 1930. Serial No. 455,095. 16 Claims. (Cl. 40—32.)



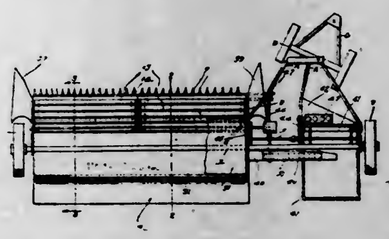
1. An exhibitor including in combination, a casing, a flanged roller journaled within the casing, an inner curtain supported upon and adapted to be driven by the roller, a display curtain overlying and removably secured to the inner curtain, a series of rollers comparatively remote from the driving roller and about which the associated curtains are adapted to pass in downward loops, roller means journaled within the casing, interposed between the driving roller and the remote rollers and about which the associated curtains are adapted to pass in upward loops, oppositely disposed axle bars within which the remote rollers are journaled to thereby form bodily movable frames, and retaining boxes secured to the casing and adapted to receive respective ends of axle bars in an arrangement adapted to permit bodily movement thereof within certain limits.

1,887,804. DIFFERENTIAL INDICATING GAUGE. GUY S. FARRA, Chicago, Ill., assignor, by mesne assignments, to Jas. P. Marsh Corporation, Chicago, Ill., a Corporation of Illinois. Filed Nov. 30, 1928. Serial No. 322,907. 5 Claims. (Cl. 73—109.)



5. In a gauge of the kind described, a dial plate, the face of said plate having two groups of graduations arranged to provide a pair of abutting segmental annular scales, the graduations comprising said scales being numbered outwardly in opposite directions from sero at their common point of abutment, one of said scales being so numbered as to indicate vacuum in inches and the other pressure in pounds, a pair of independently rotatable pointers having a common axis of rotation concentric with said scales, said pointers being separably connected with different parts of a conduit forming a fluid pressure system and rotatable in opposite directions from said common sero point, means operable to rotate said pointers in accordance with changing pressure conditions at the respective points of connection with said conduit, one of said pointers having a plate member fixedly attached thereto, said plate member having a group of graduations formed thereon to provide an annular scale concentric with said pointers and said first mentioned scales, said last mentioned scale having its graduations so positioned and numbered that the pointer independently movable relative thereto will indicate thereon the pressure differential at the two points in said conduit in terms of one of said systems of measurement.

1,887,805. HARVESTER. PATRICK HENRY FILBIN, Liberal, Kans. Filed May 23, 1930. Serial No. 455,115. 2 Claims. (Cl. 56—20.)



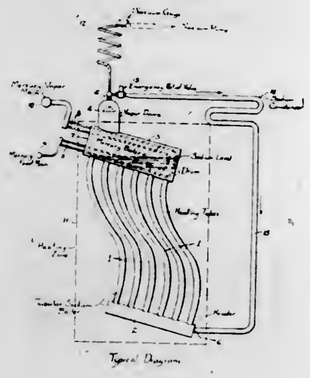
1. A harvester of the character described comprising, in combination, a mobile housing, a fixed platform disposed above the housing, a forwardly projecting pan pivotally connected for swinging movement in a vertical plane to the forward end portion of the housing, a cutter bar mounted on the forward end of the pan, and aprons operatively mounted on the pan, a pair of arms pivotally connected to the platform and extending forwardly therefrom, a reel rotatably supported on the arms, means for connecting the arms to the pan for swinging movement therewith, manually operable means for swinging the pan in a manner to adjust the forward end portion thereof with respect to the ground.

1,887,806. SAUSAGE CASING. STANLEY GALL, Cincinnati, Ohio. Filed Nov. 18, 1930. Serial No. 496,502. 1 Claim. (Cl. 17—45.)



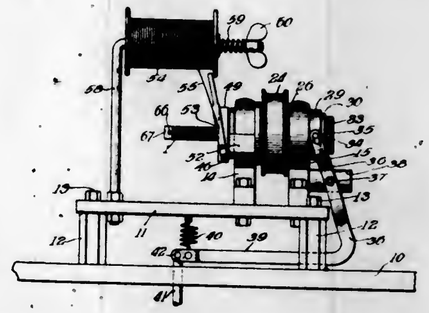
As a new article of manufacture, a sausage casing comprising a pair of relatively thick layers of material normally arranged in face to face contact, and a pair of relatively thin layers of material arranged above and below said thick layers, the marginal edges of one of said thin layers being folded over and under the adjacent edges of the thick layers, the corresponding marginal edges of the other thin layer being folded under and over the edges of the thick layers, and stitching securing all of said layers together through the folded edges, and said casing being turned inside out for use arranging the edges within the casing.

1,887,807. MERCURY VAPORIZING APPARATUS. JOHN J. GRIBBS, Midland, Mich., assignor to The Dow Chemical Company, Midland, Mich., a Corporation of Michigan. Filed Sept. 30, 1929. Serial No. 396,101. 2 Claims. (Cl. 122—33.)



2. In a mercury boiler, the combination of a bank of tubular members disposed in a generally vertical position, a header connecting the lower ends of said members, a transverse inclined vapor drum connecting the upper ends thereof, said tubular members, header and drum being adapted to contain a body of molten metal of low specific gravity, a vacuum pump connected to the vapor space of said drum, a condenser interposed between said drum and said pump, a pressure relief valve and means including a condenser to return vapors vented thereby to said header, means to heat said tubular members, a bundle of tubes inserted within said drum and means to supply mercury to said tubes and to remove mercury vapor therefrom.

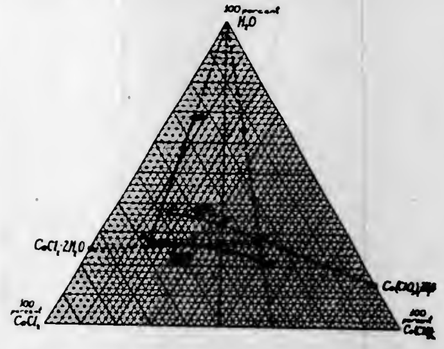
1,887,808. RHEOSTAT WINDING MACHINE. CHARLES HAVLISH, Elkhart, Ind., assignor to Chicago Telephone Supply Company, Elkhart, Ind., a Corporation of Delaware. Filed Aug. 1, 1924. Serial No. 729,479. 42 Claims. (Cl. 242—1.)



1. In combination a strip feeding chuck, a revolvable member, a clutch for clutching the chuck to the member, a thread cutting die at the end of the chuck, and means for supplying a wire to be wound automatically upon said strip issuing from the cutting die.

24. The method of mounting a strand on a supporting element which consists in rotating the element on its longitudinal axis, advancing the element axially to cut a plurality of grooves therein, and simultaneously guiding the strand into the said grooves as the element is advanced.

1,887,809. MANUFACTURE OF CALCIUM CHLORATE. SHELDON B. HEATH, Midland, Mich., assignor to The Dow Chemical Company, Midland, Mich., a Corporation of Michigan. Filed Jan. 30, 1930. Serial No. 424,498. 16 Claims. (Cl. 23—85.)

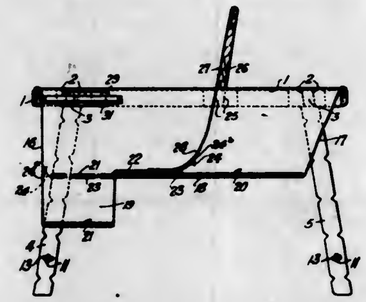


1. The process of separating calcium chlorate from a solution thereof containing calcium chloride which comprises crystallizing the former as $Ca(ClO_3)_2.2H_2O$ from such solution wherein the molecular ratio of chloride to chlorate is between 2/1 and 1/1.

1,887,810. COMBINED COT AND PLAY-CHAIR, PARTICULARLY ADAPTED FOR USE IN MOTOR CARS AND OTHER VEHICLES. WILLIAM CLARE HUGHES, Harrold, England, assignor of one-half to Charles Macan Rice, Medbourne, Leicestershire, England. Filed Feb. 7, 1930, Serial No. 426,637, and in Great Britain May 18, 1929. 6 Claims. (Cl. 5—98.)

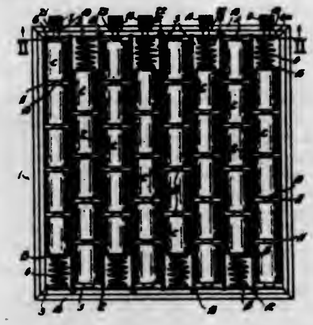
2. A cot convertible into a playchair comprising in combination, a frame, a flexible body suspended from and

below said frame and being fashioned at the front to form a well, a flap for covering the well, a backrest detachably



mounted on said frame to which the flap is attachable in well-exposing position, and supporting means for the head and foot of said frame.

1,887,811. BATTERY. WILLIAM GEORGE IKIN, Bororen, Queensland, Australia. Filed Oct. 27, 1931, Serial No. 571,405, and in Australia Nov. 3, 1930. 1 Claim. (Cl. 136—173.)

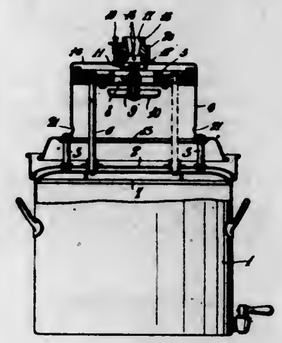


A battery comprising a container, detachable partitions therein forming compartments, a series of dry cells placed in end to end relationship to form rows in each compartment, bridging contact plates electrically connecting said rows, a coil spring between each bridging contact plate and one end of a row, said bridging plates formed with a projection and an indent, and the opposite sides of the container with grooves, said projection engaging a groove in one side and retained therein by the end of a partition engaging said indent, the other end of the partition being fitted in the opposite groove and terminal contact plates and terminals at the respective ends of the assembled cells.

1,887,812. VAT DYESTUFF. MAX ALBERT KUNZ, Mannheim, GEORG KRANNELEIN, Frankfort-Hochst-on-the-Main, KARL KOEBERLE, Ludwigshafen-on-the-Rhine, MARTIN CORELL, Frankfort-Hochst-on-the-Main, ERICH BERTHOLD, Ludwigshafen-on-the-Rhine, and HEINRICH VOLLMANN, Frankfort-Hochst-on-the-Main, Germany, assignors to General Aniline Works Inc., New York, N. Y., a Corporation of Delaware. Filed Apr. 16, 1929, Serial No. 355,654, and in Germany June 30, 1928. 13 Claims. (Cl. 260—61.)

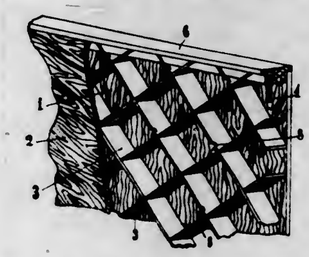
1. As new articles of manufacture, vat dyestuffs of the dibenzopyrenequinone series containing at least two of the halogens chlorine, bromine and iodine which dye cotton from violet to violet red vats strong yellow to orange shades with a reddish tinge, dissolve in concentrated sulphuric acid with a blue to violet coloration and are difficultly soluble in organic solvents of high boiling point.

1,887,813. WASHING MACHINE. PER GUSTAF LAGERBÄCK, deceased, Stockholm, Sweden, by Gösta Grönberg administrator, Stockholm, Sweden. Filed Dec. 11, 1930, Serial No. 501,709, and in Sweden Dec. 18, 1928. 4 Claims. (Cl. 68—37.)



1. A washing machine, comprising a vessel, a cover on said vessel, an agitator in said vessel, a motor cylinder secured to said cover, a piston movable up and down in said cylinder and supporting the agitator, means to alternately connect the working chamber of the cylinder with the atmosphere and to shut off such connection, and a housing on the cylinder provided with means for operatively connecting the working chamber of the motor cylinder with a vacuum conduit.

1,887,814. HOLLOW PANEL. JEAN LE GALL, Nanterre, France. Filed June 17, 1929, Serial No. 371,519, and in Germany June 25, 1928. 5 Claims. (Cl. 20—91.)



1. A hollow panel comprising a series of parallel strips having notches along one edge thereof, a second series of parallel strips having notches along one edge thereof, said strips of both series being adapted to be angularly assembled so that the respective notches on each series of strips will be juxtaposed, the strips of the second series being provided with additional notches along the other edge thereof, and a third series of strips parallel to said first mentioned series, having notches along one edge thereof adapted to be juxtaposed to the notches along the above mentioned other edge of the second series.

1,887,815. GARDEN FRAME. FRED MARSHALL, Burley-in-Wharfedale, England. Filed Oct. 21, 1931, Serial No. 570,239, and in Great Britain Oct. 22, 1930. 9 Claims. (Cl. 47—17.)

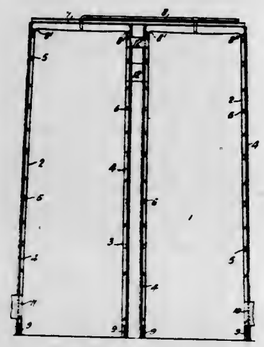
1. A greenhouse construction comprising a rectangular frame including pairs of parallel side and end bars, and

means on said side bars for supporting a plurality of panes of glass in a predetermined fixed relation to said



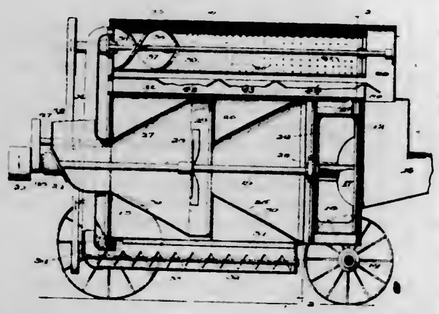
frame and in overlapped relation to each other, said panes having their overlapping edges spaced apart by said supporting means to afford ventilating openings.

1,887,816. SULPHURIC ACID CHAMBER. RICHARD THOMPSON MAUDSLEY, Quinton, Birmingham, England. Filed July 25, 1930, Serial No. 470,743, and in Great Britain Mar. 28, 1930. 8 Claims. (Cl. 23—284.)



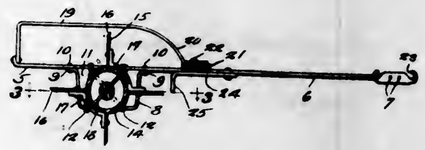
8. A duplex sulphuric acid chamber comprising chamber members having substantially parallel external walls opposing each other and separated by a relatively narrow gap, supporting framework for the members accommodated in said gap, and means for water-cooling said walls and the remaining external surfaces of the members.

1,887,817. CENTRIFUGAL THRESHING MACHINE. GEORGE S. MESSINGER, Tatamy, Pa. Filed June 11, 1928. Serial No. 284,601. 12 Claims. (Cl. 130—27.)



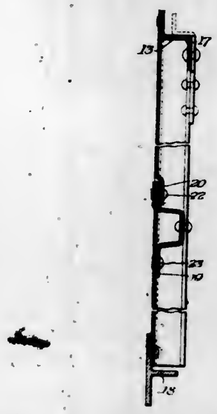
1. A threshing machine comprising a body having rotary vanes for beating the unthreshed grain and causing it to be carried in a whirling air stream through the separating means, a converging wall provided with perforations in its periphery through which the kernels are discharged, and an outlet for the straw through the apex of said wall.

1,887,818. STALK CUTTER. WILLIAM J. MICHALKA, Cameron, Tex. Filed Dec. 15, 1930. Serial No. 502,558. 1 Claim. (Cl. 55—61.)



In a stalk cutter, a frame comprising side bars, U-shaped hangers depending from the side bars, bearing blocks fitted within the U-shaped hangers and filling the space between the hangers and side bars, said bearing blocks having bearing openings, a cylindrical blade supporting member mounted between the bearing blocks, shafts extending into the ends of the cylindrical blade supporting member, bolts extending through the cylindrical blade supporting member and disposed at right angles with respect to each other, said bolts extending through the shafts securing the shafts against movement within the cylindrical blade supporting member, and said blades extending appreciable distances beyond the cylindrical blade supporting member to chop stalks over which the device is moved.

1,887,819. STEEL DOOR CONSTRUCTION. ROY A. NELSON, Chicago, Ill., assignor to Chicago Railway Equipment Company, Chicago, Ill., a Corporation of Illinois. Filed Aug. 19, 1927. Serial No. 214,000. 6 Claims. (Cl. 189—46.)

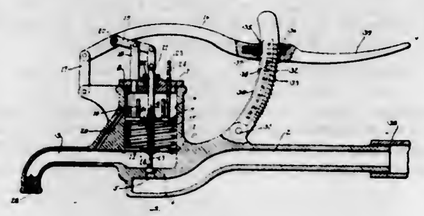


1. A railway car metal door comprising a plurality of panels one below the other with their edges overlapped, each of said panels consisting of a sheet substantially flat throughout its area, side framing members formed separately from said sheets and applied to the front and rear edges of the door and extending outwardly from the plane of said sheets, a reinforcing element formed separately from said sheets and members and extending between said framing members with its inner portion secured to at least one of said sheets and with the ends of its outer portion secured directly to the outer portions of said side framing members to form with the adjacent sheet a girder across said door with its chords tied to inner and outer portions respectively of said framing members.

1,887,820. SULPHONATED ISATOIC ACID ANHYDRIDE AND PROCESS OF MAKING SAME. ANTON OSSENBECK, Cologne-Mulheim-on-the-Rhine, WINFRID HENTRICH, Wiesdorf-on-the-Rhine, and ERNST TIETZE, Cologne-on-the-Rhine, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed June 11, 1929, Serial No. 370,154, and in Germany June 19, 1928. 6 Claims. (Cl. 260—28.)

1. Process which comprises reacting upon an isatoic acid anhydride with fuming sulphuric acid.

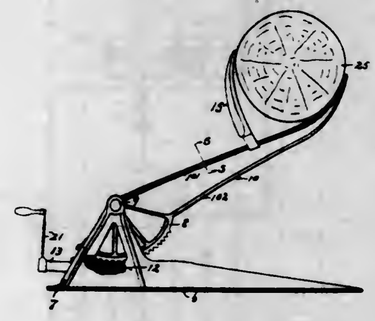
1,887,821. AUTOMATIC PRESSURE GAUGE. HARRY E. PLATT, Ottumwa, Iowa. Filed Jan. 21, 1929. Serial No. 333,987. 2 Claims. (Cl. 50—8.)



1. A device of the type described comprising a body portion having an inlet passageway and an outlet passageway, said body portion having a partitioning portion disposed between said inlet and outlet passageways, said partitioning portion having an opening therethrough, a valve member normally disposed in said opening and seating on said partitioning portion, said body portion being provided with a cylinder, a cylinder head removably connected with the body portion, an upper and a lower piston member movably disposed in said cylinder in spaced-apart relation, spring means disposed between said spaced-apart piston members, said upper piston member being provided with stop members for limiting the movement thereof, said body portion having a passageway for providing communication between the outlet passageway and said cylinder between the upper piston member and the cylinder head, said main valve being provided with a valve stem slidably extending through said lower piston member and fixedly connected with the upper piston member, a pair of actuating rods fixedly connected with said lower piston member and slidably extending through said upper piston member and the cylinder head, an actuating lever, link means operatively connecting said actuating lever with the body portion and the actuating rods, a notched indicating arm having one end movably connected with the body portion and extending through an opening in said actuating lever, said arm being provided with indicia opposite the notches, and means mounted on said lever for engaging the notches of said indicating arm.

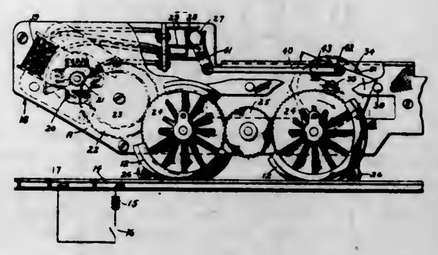
1,887,822. FRAMING JACK. DONALD P. QUINLIVAN, Fresno, Calif. Filed Nov. 13, 1929. Serial No. 406,874. 1 Claim. (Cl. 254—96.)

A framing jack adapted to hole a pole for framing consisting of an elongated base, an upright post near one end of said base, an arm pivotally attached to the post and extending approximately laterally with said base, said arm terminating at the pivotal end with a cog sector mounted concentric with said pivoted arm, said arm terminating at the other end with an upward curve, and having adjustable stop means attached thereto between the ends thereof, said stop means being curved and adapted with the end of the arm to grasp an approximately round object, the ends of the base and arm opposite the pivotal mounting being adapted to be positioned adjacent to each other, so that said base and arm can be positioned under



an object adjacent to the earth, and screw means adapted to cooperate with the cog sector to raise and lower said arm.

1,887,823. TOY. RONALD G. SMITH, Fairfield, Conn. Filed Dec. 24, 1930. Serial No. 504,518. 16 Claims. (Cl. 104—151.)

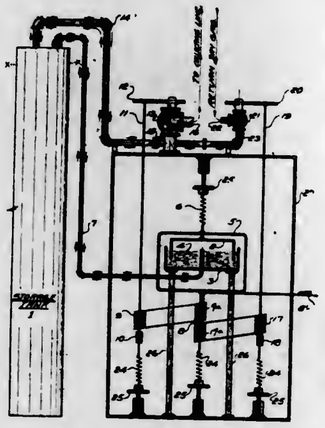


1. A toy locomotive having driving wheels; a driving couple to the driving wheels including a motor and means for reversing the direction of drive; an oscillating arm normally biased into either of two positions of rest; and a fly wheel on said oscillating arm in which energy is stored during travel of the locomotive for moving said oscillating arm from one to the other of its normally biased positions and for operating said drive reversing means.

1,887,824. APPARATUS FOR REGULATING PRESSURE IN TANKS. CHARLES J. SOYSTER and GORDON W. LAWN, Long Beach, Calif.; said Lawn assignor to said Soyster. Filed Jan. 10, 1930. Serial No. 419,827. 4 Claims. (Cl. 137—68.)

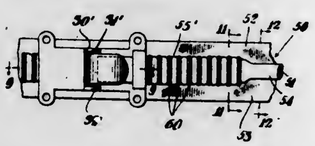
1. Pressure controlling apparatus comprising, a device movable by fluid pressure, an outlet valve, an inlet valve, means to regulate the position of said device, and electric

means responsive to the movement of said regulation means to control the position of said valves; said last mentioned means including an energized coil moving with



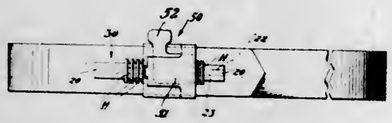
said device in two induction circuits, and means in each circuit connected to each valve to open one valve while holding the other closed and vice versa.

1,887,825. ADJUSTABLE FASTENING MEANS. NOEL STATHAM, Irvington-upon-Hudson, N. Y. Filed Mar. 16, 1929. Serial No. 347,472. 8 Claims. (Cl. 24—206.)



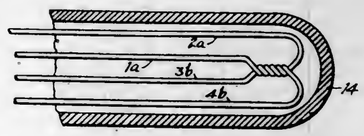
1. A supporting tape for metallic fasteners, stops, staples, and the like, comprising a cord and a substantially tubular integrally woven member surrounding the same and having a lateral woven web portion associated therewith and extending from each side thereof, said cord and surrounding woven member being central of said laterally extending woven web portions.

1,887,826. ADJUSTABLE FASTENING DEVICE. NOEL STATHAM, Irvington-upon-Hudson, N. Y. Filed Feb. 14, 1930. Serial No. 428,260. 12 Claims. (Cl. 24—206.)



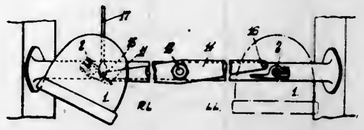
1. In an adjustable supporting or fastening device, a stop element comprising a main, substantially central connecting portion and clamping portions associated with said connecting portion, said clamping portions being parallel to each other but angularly disposed with respect to said connecting portion and lying in a substantially different plane from said connecting portion.

1,887,827. THERMOCOUPLE AND ITS ELECTRICAL CONNECTION. FRITZ FREDERICK UEHLING, Passaic, N. J. Filed Mar. 22, 1929. Serial No. 349,188. 5 Claims. (Cl. 73—32.)



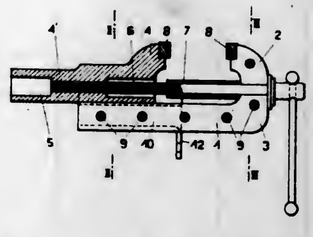
5. In a device of the class described, the combination with a multiplicity of wires of a given composition, of a multiplicity of wires of a different composition, an electrical connection through all of the wires at a point between their respective ends, and a multiplicity of circuits each including the electrical connection, and one end of one of the wires of one composition, and one end of one of the wires of the other composition.

1,887,828. LAMP CONTROL FOR VEHICLES. JULIAN SEYMOUR TRITTON, Calcutta, India. Filed Sept. 8, 1931, Serial No. 561,025, and in Great Britain Sept. 16, 1930. 9 Claims. (Cl. 240—62.)



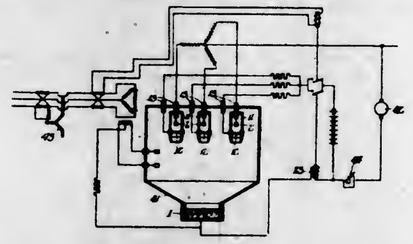
1. Swivelling apparatus for a pair of vehicle head lamps disposed one on each side of the vehicle with restoring means for returning the lamps to initial position, the vehicle including steering mechanism, comprising in combination with a pair of projecting arms one for each lamp, a single pivotal bar, means for mounting the bar between the lamps with the ends of the said bar freely engaging the said arms and connecting means for rotating the said bar from the steering mechanism of the vehicle in accordance with direction turned.

1,887,829. SCREW-VISE. HUGO VOGL, Prague, Czechoslovakia. Filed Jan. 29, 1931, Serial No. 512,118, and in Czechoslovakia Sept. 12, 1930. 2 Claims. (Cl. 81—33.)



1. In a screw-vise consisting of a lower slide with a stationary jaw and a threaded spindle and of a slidable jaw with upper guiding portion, the stationary jaw integral with the lower slide formed of a set of adjacent thin metal-sections connected together by rivet-bolts, said sections having a mutually coincident longitudinal profile of the whole piece, guiding and fastening end-plates having shoes and lugs serving at the same time for clamping the sections together by aid of common rivet-bolts.

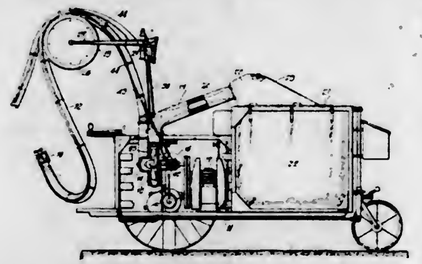
1,887,830. PROTECTION AND CONTROL OF RECTIFIERS. STEFAN WIDMER, Baden, Switzerland, assignor to Aktiengesellschaft Brown Boveri & Cie., Baden, Switzerland, a Joint Stock Company of Switzerland. Filed Mar. 17, 1928, Serial No. 262,514, and in Germany Mar. 28, 1927. 15 Claims. (Cl. 175—363.)



1. The method of protecting gaseous type rectifiers from the effects of short circuits on the direct current side under utilization of anode grids which comprises normally maintaining said grids at potentials at which current flows freely to the cathode from the anodes of positive potential and applying, in the event of a fault, to the grid means associated with the anode means of positive potential a potential that is negative with respect to the cathode.

12. The combination with a rectifier comprising a mercury cathode, a plurality of anodes cooperating with said cathode, and grid means interposed between said cathode and said anodes, of means responsive to abnormal current flow conditions between said anodes in the rectifier for applying to the grid means a potential negative with respect to the cathode.

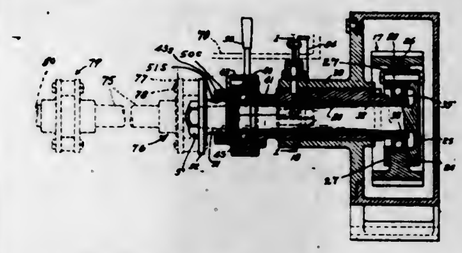
1,887,831. COTTON PICKER MACHINE. WALLACE R. WILLETT, New York, N. Y., and HARVEY E. BROWN, St. Louis, Mo., assignors to American Cotton Picker Corporation, St. Louis, Mo., a Corporation of Delaware. Filed Oct. 10, 1930. Serial No. 487,658. 13 Claims. (Cl. 56—13.)



1. In a cotton picker machine, a cotton receiver, a picker head, a conveyer tube having one end connected to said picker head and the other end delivering to said receiver, means for creating a current of air in said conveyer from said picker head to said receiver, an air outlet grid projecting upwardly of said receiver, and a venturi to project cotton from said conveyer tube at an angle against the lower side of said grid.

1,887,832. AUXILIARY POWER DEVICE. SAMUEL B. BROWN, Los Angeles, Calif. Filed Nov. 26, 1930. Serial No. 498,346. 4 Claims. (Cl. 74—7.)

1. In an auxiliary power device, two shafts, one a stationed shaft and the other an adjustable shaft, a main support upon which said shafts are rotatably mounted, means to adjust the position of the adjustable shaft toward and from the other shaft while maintaining said shafts in parallel spaced relation to each other, a driving gear mounted on the stationed shaft, a driven gear fixed

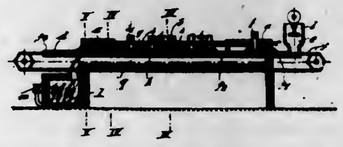


to said adjustable shaft, the aforesaid adjusting means serving to bring said gears into and out of mesh with each other, and a third shaft to be driven by said adjustable shaft.

1,887,833. IMPROVEMENT IN PHENOLIC CONDENSATION PRODUCTS AND PROCESS OF MAKING SAME. LAWRENCE BYCK, Tottenville, N. Y., assignor to Bakelite Corporation, New York, N. Y., a Corporation of Delaware. Filed Sept. 27, 1922. Serial No. 590,945. 12 Claims. (Cl. 260—4.)

1. Process of making a phenolic condensation product, comprising effecting a reaction between a phenol and a fatty oil in presence of a small proportion of an agent capable of promoting said reaction; and adding a methylene-containing hardening agent to the resulting composition.

1,887,834. APPARATUS FOR CARBONIZING SOLID FUEL. ARMAND CHABOT, Anderlues, Belgium. Filed Nov. 20, 1928, Serial No. 320,657, and in Belgium July 19, 1928. 8 Claims. (Cl. 202—108.)

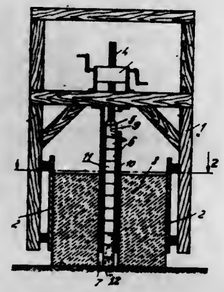


1. Apparatus for heating coal to produce agglomerate pieces of given size and shape comprising an endless chain of matrices having the size and shape of the agglomerate pieces of fuel to be produced, means to compress the fuel into said matrices, an oven of rectangular cross section divided longitudinally into an upper compartment and a lower compartment having a height equal to that of the matrices, means to frictionally translate said matrices through said lower compartment, means for heating said oven on all sides in the first part of its length and means for heating other parts of said oven on its bottom and a portion of its sides only.

1,887,835. MEANS FOR ERECTING BUILDING STRUCTURES. ARTUR DUCHHOLZ, Berlin-Spandau, Germany, assignor to Siemens-Bauunion G. m. b. H. Kommanditgesellschaft, Siemensstadt, near Berlin, Germany, a Corporation of Germany. Filed Dec. 11, 1930, Serial No. 501,565, and in Germany Dec. 20, 1929. 2 Claims. (Cl. 25—131.)

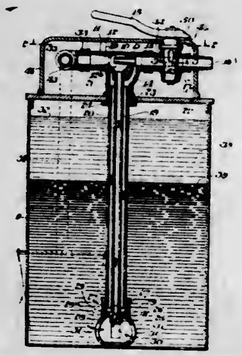
1. In a mold for casting building structures, a frame having form plates attached to it at opposite sides, a supporting column for said frame, composed of a variable number of individual supporting members, said column being positioned midway between two opposing form plates and resting on the foundation for the building struc-

ture, and means disposed on said supporting column for raising said frame, and a hollow guide, attached to said frame and containing a substantial portion of the upper



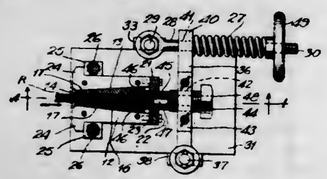
part of said column, for laterally supporting said column through the structure portion in the course of casting and setting.

1,887,836. SOAP-SUDSING APPARATUS. LEON FABER, Philadelphia, Pa., assignor to Faber Engineering Company, Philadelphia, Pa., a Corporation of Delaware. Filed Dec. 23, 1929. Serial No. 415,982. 8 Claims. (Cl. 299—84.)



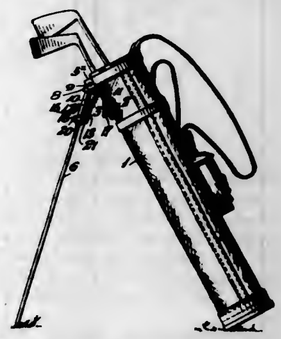
1. Soap-sudsing apparatus comprising a container for soap, an ejector comprising a casing and nozzle structure therein, a mixing chamber within said container and in communication therewith and disposed within said soap, a water conduit connecting the high pressure side of said nozzle and said chamber, means for discharging jets of water from said conduit into the soap exteriorly of said mixing chamber, and a soap-and-water mixture conduit connecting said chamber and the low pressure side of said nozzle.

1,887,837. CLOSING DIE FOR ROPE MAKING MACHINES. PETER FRANK, Wilkes-Barre, Pa., assignor to American Cable Company, Inc., a Corporation of Delaware. Filed Sept. 17, 1931. Serial No. 563,261. 8 Claims. (Cl. 117—50.)



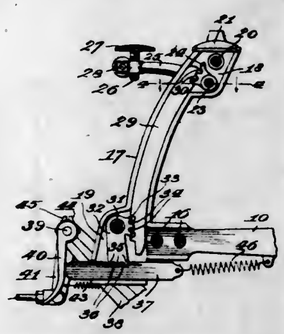
1. A closing die of the class described; comprising a plurality of die segments, a support in which said segments are mounted around the axis of formation of a rope, and actuating means to urge said die segments simultaneously toward the path of the rope to compress the rope under formation, said die segments and support respectively having co-operatively inclined surfaces adapted to cause radial approach of said segments toward the rope when moved longitudinally in one direction, and said actuating means comprising a spring connected with said segments.

1,887,838. GOLF BAG SUPPORT. WILLIAM H. GUNTHER, San Francisco, Calif. Filed May 13, 1930. Serial No. 451,937. 3 Claims. (Cl. 150—1.5.)



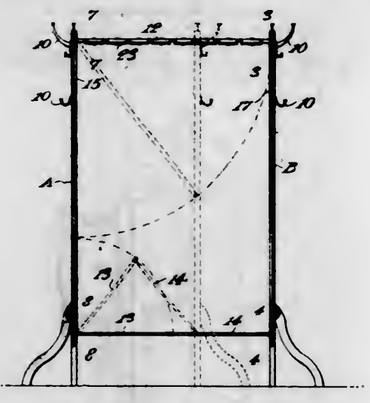
1. In a device of the character stated, a plurality of legs adapted to be hinged to a golf-bag, springs bearing on the upper portions of said legs, a lever engaging to and sliding upon the upper, inner portions of said legs and adapted, when pulled, to diverge said legs into operative position with respect to said bag, and means carried by the upper portion of said bag and adapted to engage said sliding lever to lock said legs in inoperative position with respect to said bag.

1,887,839. MOTOR VEHICLE CONTROL DEVICE. ALONZO LEWIS HALLIDAY, Ventura, Calif., assignor of one-half to Arthur L. Williams, Ventura, Calif. Filed Apr. 6, 1931. Serial No. 528,082. 9 Claims. (Cl. 74—81.)



1. The combination with an automobile brake pedal provided at its upper end with a foot rest and an internal combustion engine gaseous fuel flow control actuating means, including a contact member, of means including a pair of members mounted for sliding movement upon the brake pedal, one of which members is adapted to engage the contact member of the gaseous fuel flow control actuating means, a pedally actuated lever fulcrumed on the upper portion of the brake pedal for imparting movement to the other one of said sliding members, a foot plate adjustably mounted on said lever in front of the foot rest on said pedal and means for securing said foot plate in differently adjusted positions.

1,887,840. COSTUMER. HUGH J. HEALION, New York, N. Y. Filed Apr. 2, 1930, Serial No. 440,907. Renewed Mar. 30, 1932. 2 Claims. (Cl. 211—178.)



1. A sectional costumer which comprises a pair of sections adapted normally to lie close to each other, means for latching the sections in their closed abutting position, said sections having abutting grooves in their adjacent faces, a cross bar pivoted in the groove in one section and free to slide in the groove of the other section at the end thereof, means to latch the free end of the cross bar in a predetermined position in said groove, and foldable levers disposed in the grooves near the bottom of the grooves to expand when the sections are separated and hold the sections in their separated positions.

1,887,841. ZINC ALUMINUM MERCURY ANODE FOR ELECTRODEPOSITION OF ZINC. GEORGE B. HOGABOOM, New Britain, Conn., assignor to Hanson-Van Winkle-Munning Company, Matawan, N. J., a Corporation of New Jersey. Filed Feb. 20, 1931. Serial No. 517,306. 3 Claims. (Cl. 204—4.)

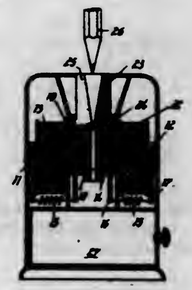
1. A zinc anode having aluminum and mercury contents in amounts less than 5% aluminum and less than 1% mercury.

1,887,842. ANTIRATTLE DEVICE FOR VEHICLE DOORS. WILLIAM C. HOLDEN, Ossining, N. Y. Filed July 17, 1931. Serial No. 551,866. 7 Claims. (Cl. 16—86.)



1. An anti-rattle device for the purpose described, comprising, in combination with a movable dovetail, a casing having an opening therein to receive said dovetail, and oppositely spaced compressive buffers pivotally mounted in said casing and adjacent said opening to normally resiliently hold said dovetail on both sides thereof upon movement thereof into and between said compressive buffers and means on said buffers for gripping said dovetail in a toggle like grip.

1,887,843. MACHINE FOR SHARPENING PENCILS. FRITZ LUDWIG, Berlin-Charlottenburg, Germany, assignor to Siemens-Schuckertwerke Aktiengesellschaft, Berlin-Siemensstadt, a Corporation of Germany. Filed Nov. 14, 1931, Serial No. 575,098, and in Germany Nov. 14, 1930. 4 Claims. (Cl. 120—96.)



1. In a machine for sharpening pencils, in combination a magnet core, magnet coils arranged on said core, an armature so supported as to be able to oscillate between the poles of said magnet core, elastic means fastened to the magnet armature and the stationary part of the magnet, a free wheel coupling fastened to said armature, a clamping device for the pencil fastened to one of the parts of said free wheel coupling, a knife suitable for sharpening the pencil, said knife being fastened to the stationary part of the magnet, elastic means fastened to said clamping device, said elastic means being suitable for acting upon said pencil and pressing same against the stationary knife, a casing surrounding the magnet iron, a support for said magnet iron and fastened to said casing.

1,887,844. SEALING DEVICE FOR CIGAR WRAPPING MACHINES. FRANCIS X. MALOCSAY, Saddle River, N. J., assignor to International Banding Machine Co., Inc., a Corporation of New York. Filed Apr. 1, 1930. Serial No. 440,746. 10 Claims. (Cl. 93—2.)

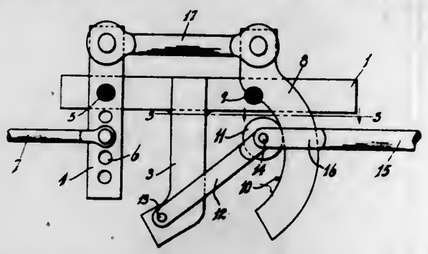


1. In a cigar wrapping machine for wrapping banded cigars, means for sealing sheets into tubular wrappers for said cigars by uniting together the longitudinal edge portions of said sheets by an application of heat and means for preventing bands on said cigars from receiving heat during the sealing operation.

1,887,845. BRAKE LINKAGE. WALTER HAMILTON MITCHELL, Long Beach, Calif. Filed May 12, 1931. Serial No. 536,786. 2 Claims. (Cl. 74—110.)

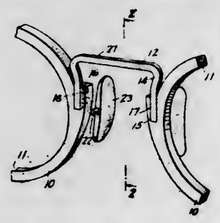
1. A brake linkage comprising a pair of spaced side plates, a lever pivotally mounted in said side plates, a brake pedal rod, means attaching said brake pedal rod to the lever, a cam plate, said cam plate being pivotally mounted between the side plates, means connecting said

lever and cam plate, a roller adapted to move upon said cam plate, a brake actuating rod, and means attaching said brake actuating rod to the roller, a bracket depending



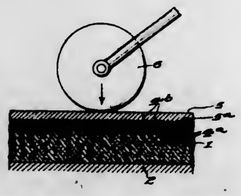
from the side plates, a bar, said roller being journaled in one end of said bar, and a pin extending thru the other end of said bar and into said bracket.

1,887,846. OPTICAL MOUNTING. EMANUEL PAPPERT, New York, N. Y. Filed May 1, 1929. Serial No. 359,469. 14 Claims. (Cl. 88—42.)



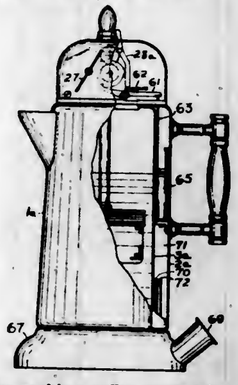
1. In an optical mounting, a pair of lens frames, each having a groove therein extending rearwardly from the front face thereof partway through the frame and provided with a rear face, sides and a bottom, a metallic bridge, ends on said bridge, each inserted into frictional engagemnt with the rear face, sides and bottom of one of said grooves, and securing means for said ends passing through the lens frame from the groove thereof to the rear face of the frame and secured to and terminating at the rear face of said bridge.

1,887,847. METHOD OF PERMANENTLY SECURING LINOLEUM TO NORMALLY DAMP CONCRETE SURFACES. ABRAM S. PEIPER, Philadelphia, Pa. Filed Feb. 25, 1932. Serial No. 595,118. 3 Claims. (Cl. 72—127.)



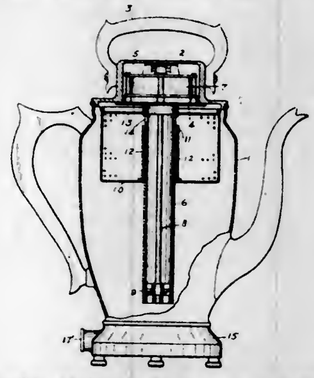
1. The method of covering the surface of a concrete or plaster wall, which is not impervious to moisture and which is normally damp, which consists in heating the surface of said wall to a temperature preferably substantially above 212° F. to expel the water from the interstices and pores at and adjacent said surface without effecting any deleterious result in the structural value of the wall so heated, then before said pores can refill with water, coating said surface while hot with a hot melted adhesive, which is a solid at atmospheric temperatures and is sufficiently fluid, when hot, to penetrate into and substantially fill the said pores and interstices and while the wall and adhesive are still hot, pressing a pliable sheet of covering material into firm contact with the adhesive-covered surface of said wall.

1,887,848. COFFEE BREWING DEVICE. JOHN ROYDEN PEIRCE, New York, N. Y. Filed Nov. 28, 1928. Serial No. 322,372. 6 Claims. (Cl. 53—3.)



1. A device for making coffee comprising an outer and an inner container, means for automatically effecting reciprocatory relative movement between said containers and thermostatic control means for automatically controlling said first named means.

1,887,849. COFFEE MAKING DEVICE. JOHN ROYDEN PEIRCE, New York, N. Y. Filed July 7, 1930. Serial No. 465,860. 3 Claims. (Cl. 53—3.)



1. In a coffee making device, a pot, a grounds container within the pot, a pump for raising water from the pot into the container, a timing device and a thermostat controlled by the temperature of the water in the pot for initiating the operation of said pump and said timing device, said timing device being adapted to stop the operation of the pump.

1,887,850. APPARATUS FOR TESTING AND MEASURING THE HARDNESS AND TOUGHNESS OF FRUITS AND VEGETABLES. VICTOR B. BONNEY and PAUL A. CLIFFORD, Washington, D. C., dedicated to the Government and the People of the United States of America. Filed Jan. 19, 1931. Serial No. 509,812. 1 Claim. (Cl. 265—15. (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 870 O. G. 757).

An apparatus for determining the hardness and toughness of fruit and vegetable specimens comprising a base,

a stationary upright rod supported by the base, a table movably attached to the rod, an arm attached to and extending horizontally from the table, a graduated scale supported by the free end of said arm; a pointer having a long and short arm pivotally attached to said table, the long arm of the pointer extending toward and close to said graduated scale; a metal arm extending horizontally from said table; an adjustable vertical plunger removably attached to said metal arm and having a flat

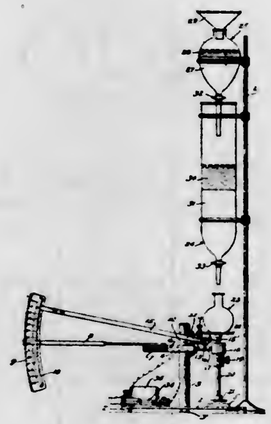
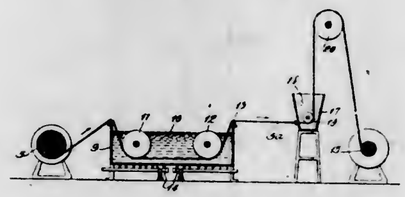


plate horizontally affixed to the upper end thereof and located immediately over the end of the short arm of the pointer; a specimen contacting member removably attached to the lower end of the plunger; means to supply added weight at a controlled and uniform rate to the upper plate; a buzzer and an electrical source and means to complete an electrical circuit through the buzzer and source when contact is established between the short arm of the pointer and the plate on the upper end of the plunger.

1,887,851. INSULATED CONDUCTOR AND THE METHOD OF APPLYING COLORED SURFACES THERETO. ANTHONY P. HINSKY, Brooklyn, N. Y., assignor to E. T. Trotter & Co., Brooklyn, N. Y., a Corporation of New York. Filed Feb. 11, 1932. Serial No. 592,349. 14 Claims. (Cl. 91—68.)



1. The process of treating the fibrous covering of an insulated electric conductor which comprises first applying a black, flame retarding saturant to said covering, then applying another substance having flame retarding characteristics upon the saturant, and then applying a color composition containing a wax base upon said substance so as to cover and mask the black saturant and commingle therewith.

1,887,852. RUBBER HEEL. HARRY HIRSCHFELD, Sea Cliff, N. Y. Filed July 8, 1931. Serial No. 549,532. 3 Claims. (Cl. 36—75.)



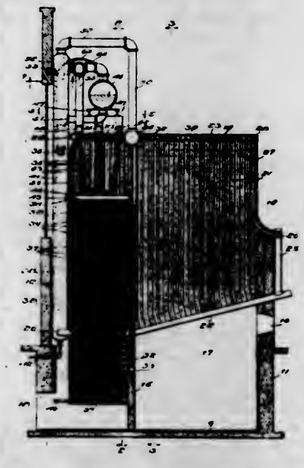
1. A rubber heel comprising a rubber body and a metal plate interior thereto, the said plate being arranged adjacent the rear edge of the heel and extending substantially parallel to the tread face and being generally of corrugated form with the peaks of the corrugations extending to said tread face of the heel.

1,887,853. PIPE CLEANER. FRANCIS E. JINNETT, Ventura, Calif. Filed Nov. 7, 1930. Serial No. 494,054. 4 Claims. (Cl. 15—104.04.)



1. In a pipe cleaning machine, a cutter head comprising a pair of arcuate sections hingedly joined adjacent one end of each, means for releasably connecting said sections at their other ends with said head in annular form, a plurality of scrapers carried by said head and extending inwards thereof, a lever rigid with each of said sections and extending outwards therefrom, said levers being in superimposed relationship when said sections are joined in annular form, a cap receivable upon said levers to lock them together, and handles carried by said cap and extending therefrom laterally with respect to said levers.

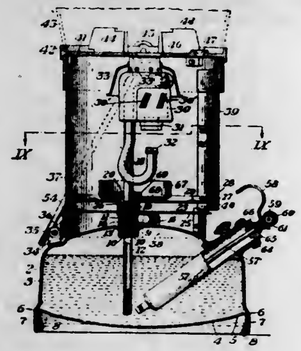
1,887,854. DRUMLESS BOILER. GEORGE LASKER, Chicago, Ill. Filed July 24, 1930. Serial No. 470,359. 4 Claims. (Cl. 122—235.)



1. A boiler comprising a plurality of interconnected tubes and headers, a static head drum positioned at an elevation above the boiler, a standpipe projecting above

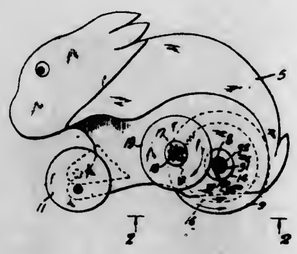
said boiler and drum, a conduit connecting the boiler and standpipe, said conduit being at a lower elevation than said drum, a conduit connecting the upper portion of said boiler with the upper end of said standpipe, a conduit connecting the upper end of said standpipe with the upper portion of said drum, and a conduit connecting the lower portion of said drum with said boiler.

1,887,855. FURNACE. HARRY E. LEETY and JOHN A. ECKERT, Pittsburgh, and AUSTIN W. PAGE, Penn Township, Allegheny County, Pa., assignors to P. Wall Manufacturing Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed May 11, 1926. Serial No. 108,283. 9 Claims. (Cl. 158—32.)



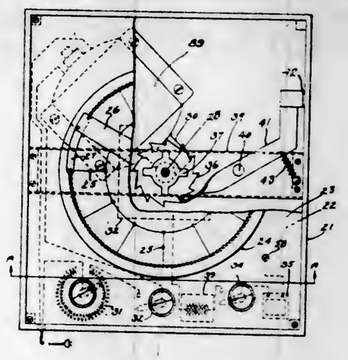
1. In a furnace, an enclosed fuel reservoir, a burner, fuel feeding connections between said burner and reservoir, a reinforced shield for said burner, and heat dissipating means carried by said connections intermediate said shield and reservoir for dissipating heat from said connections, said heat dissipating means being perforated, said heat dissipating means being positioned exteriorly of said reservoir.

1,887,856. MECHANICAL MOVEMENT FOR TOYS. BURTON P. MERWIN, Weston, Conn., assignor of one-half to The Weston Toy Company, Incorporated, Weston, Conn., a Corporation of Connecticut. Filed Feb. 2, 1932. Serial No. 590,393. 10 Claims. (Cl. 46—48.)



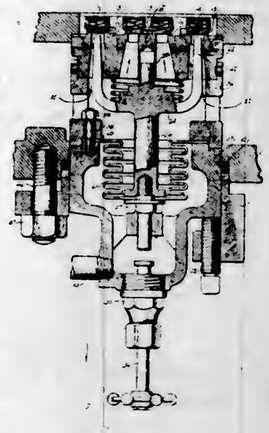
1. In a toy, a ground engaging wheel, an axle to which said wheel is secured, a shaft, a fly wheel secured to said shaft, a driving connection between the shaft and axle, and said driving connection including means whereby there is a positive drive from the axle to the shaft but whereby the shaft may continue to rotate in the same direction a limited amount independently of the axle.

1,887,857. METHOD AND APPARATUS FOR SOUNDING SELECTIVE RHYTHMS AND BEATS. WILLIAM OTTO MIESSNER, Deerfield, Ill. Filed Nov. 16, 1931. Serial No. 575,216. 22 Claims. (Cl. 84—484.)



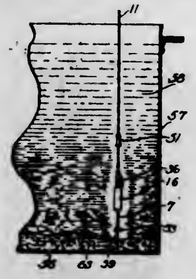
4. In a selective rhythm sounder, the combination of an electrically conductive surface; a spring contact adapted to bear against said surface; means for continuously moving said contact in a path over said surface; and means removably inserted between said contact and said surface for intermittently insulating said contact from said surface, whereby said contact is caused to touch said surface only at intervals corresponding to the intervals between the beginnings of the notes of a rhythm to be sounded.

1,887,858. UNLOADER VALVE FOR COMPRESSORS. ELLIS NATHAN, Easton, Pa., assignor to Pennsylvania Pump & Compressor Company, Easton, Pa., a Corporation of Pennsylvania. Filed Sept. 20, 1930. Serial No. 483,341. 5 Claims. (Cl. 137—153.)



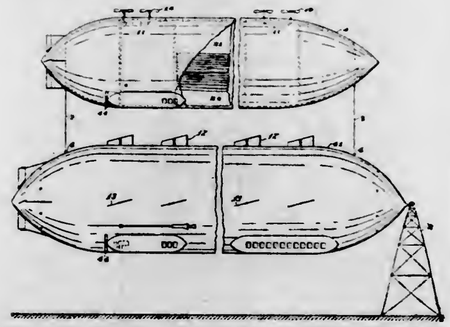
1. An unloader valve for compressors comprising in combination, a valve assembly, a support for retaining said assembly in position within a cylinder wall, a yoke member within said support having fingers extending through portions of said assembly, a guiding portion formed integrally with said yoke member having a portion engaging said assembly, and a member secured at the opposite end of said guiding portion engaging said support whereby said yoke member is guided relative to said support and assembly at axially aligned widely spaced positions.

1,887,859. OIL THIEF. OSCAR W. PEARCE, Los Angeles, Calif.. Filed Dec. 25, 1930. Serial No. 504,667. 4 Claims. (Cl. 137—18.)



1. A sample taking device, comprising a plunger, suspending means connected thereto, a barrel encircling said plunger and reciprocably mounted thereupon, a detent pivotally mounted on said barrel, means on said plunger engageable by said detent to hold said barrel elevated with respect to said plunger, and means slidable on said suspending means for releasing said detent, said detent being mounted for pivotal movement about an axis spaced further from said engageable means than the center of gravity of said detent in its extreme released position, whereby the detent is continually urged toward engaging position by gravity.

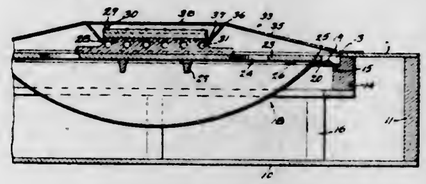
1,887,860. METHOD OF LAUNCHING AIRCRAFT. WILFRID V. N. POWELSON, New York, N. Y., and WARREN TRAVELL, San Bernardino, Calif. Original application filed Sept. 6, 1921, Serial No. 498,605. Divided and this application filed Mar. 17, 1931. Serial No. 523,247. 13 Claims. (Cl. 244—3.)



1. Apparatus for launching an airship of lighter-than-air type comprising means attachable to and detachable from said air ship for lifting and supporting it while getting under way, while loaded so that the airship and its load are heavier than the air which they displace.

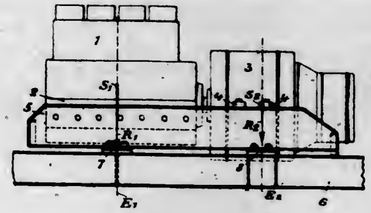
13. The art of launching into independent flight an aircraft which has means to maintain itself in air, as by lifting planes, when driven by its own forward propulsive force, but is statically so heavy that its weight hinders its rising from the ground; comprising the applying of diverse forces to said craft, including its own said forward-propulsive force and an externally derived force of predominantly vertical characteristic, said combined forces being applied simultaneously and temporarily during the elevating of the craft from ground level and its propulsion into independent self sustaining flight.

1,887,861. STRINGED MUSICAL INSTRUMENT. NATHAN W. SCHIRESON, Los Angeles, Calif., assignor to Schireson Bros., Los Angeles, Calif., a Copartnership composed of Nathan W. Schireson and Jacob Schireson. Filed Oct. 29, 1931. Serial No. 571,781. 8 Claims. (Cl. 84—294.)



1. A stringed instrument having a hollow body with an opening in its top, an upwardly concave member supported within the body, a bridge for supporting the strings of the instrument, and a sounding board supported at its edges upon said member upon which the bridge is mounted.

1,887,862. MOUNTING OF INTERNAL COMBUSTION POWER UNITS IN VEHICLES. OSCAR SIMMEN, Erlach, Switzerland, assignor to the Firm of Sulzer Freres Societe Anonyme, Winterthur, Switzerland. Filed Sept. 23, 1931, Serial No. 564,487, and in Switzerland Oct. 15, 1930. 1 Claim. (Cl. 248—14.2.)

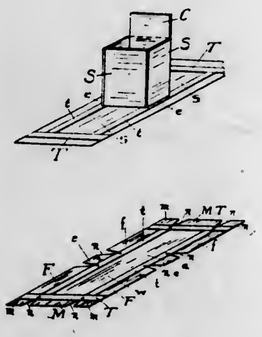


In a vehicle, an internal combustion engine, a transmission mechanism, a frame for rigidly connecting these elements together to form a unit, said frame being located bodily above the vehicle main-frame and comprising two parallel members, each of said members having two bearing points on its lowest side, a bearing point being in transverse alignment with one on the other member, the transverse vertical plane passing through the center of gravity of the engine passing through the two transversely aligned bearing points, and the transverse vertical plane passing through the center of gravity of the transmission passing through the remaining two bearing points, whereby unbalanced forces due to vibration of the two movable members are directly and entirely absorbed by the upper frame so as to leave the casings and the connection between the movable members free from all vibration-strains.

1,887,868. PROCESS FOR MAKING PULP. EARL P STEVENSON, Newton, Mass., assignor to Arthur D. Little Industrial Corporation, a Corporation of Delaware. Filed Nov. 15, 1929. Serial No. 407,567. 9 Claims. (Cl. 92—14.)

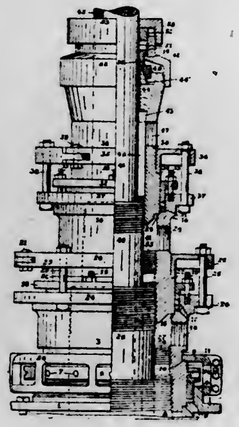
1. A process for the manufacture of pulp from hard wood which consists in digesting the hard wood under heat and pressure in the presence of water and an insoluble carbonate, whereby a substantially neutral condition of the liquor is maintained.

1,887,864. WRAPPED BOX. JOHN S. STOKES, Huntingdon Valley, Pa., assignor to Stokes and Smith Company, Summerdale, Pa., a Corporation of Pennsylvania. Filed Mar. 22, 1930. Serial No. 438,229. 34 Claims. (Cl. 93—2.)



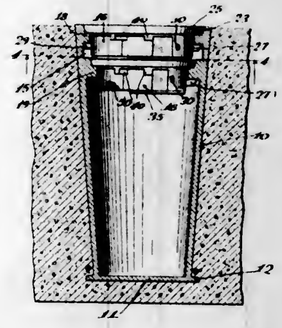
1. The method of forming a closed box from a plurality of separate box-forming elements, one of which is adapted to form cover structure and adjacent wall structure, which comprises moving the elements to box-forming position with the cover structure in open position, applying a wrapper to the elements to hold them in said box-forming position, inserting the box contents through the open top, and thereafter closing the cover and completing the wrapping of the box.

1,887,865. CASING HEAD. MERTON T. ARCHER, Pittsburgh, Pa., assignor to The National Supply Company, Toledo, Ohio, a Corporation of Ohio. Filed Apr. 22, 1931. Serial No. 531,908. 6 Claims. (Cl. 285—22.)



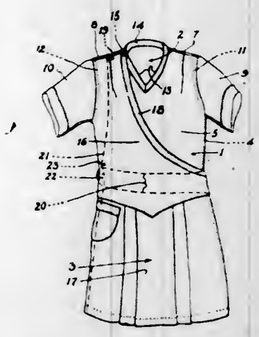
1. In a casing head, a plurality of annular superposed heads, each head having an internal shoulder on which the next head above rests, a stuffing box surrounding each upper head above the shoulder upon which the upper head rests, packing within each stuffing box, an annular gland resting on each packing, and adjustable means connecting each head and its associated gland for varying the compression of the packing.

1,887,866. DOUBLE DOOR FLOOR SAFE. SAMUEL L. BELKNAP, Los Angeles, Calif. Substituted for application Serial No. 154,497, filed Dec. 13, 1926. This application filed Sept. 16, 1930. Serial No. 482,345. 4 Claims. (Cl. 109—1.)



1. A safe comprising a container, two doors for the entrance to the container, each door being rotatable while in closed position, a lock in each door for locking the door against removal, the locks being located otherwise than at the centers of their respective doors to prevent the locks being aligned and punched through.

1,887,867. DRESS. JANET CARR, Los Angeles, Calif. Filed Dec. 10, 1930. Serial No. 501,295. 2 Claims. (Cl. 2—74.)



1. A dress comprising main, back and front portions permanently secured together at one side of the garment and at a corresponding shoulder and open at the other side of the garment from the neck to the bottom of the skirt, and a supplementary front permanently secured to the back and detachably secured to the shoulder on the open side of the garment, means for attaching the front and back together at said opening at a plurality of points, said main, back and front, and said supplementary front each including a waist portion and a skirt portion, the waist portion of the supplementary front formed to completely cover the lateral portion of the waist of said main front adjacent said opening, and the skirt portion of said supplementary front formed to cover all of the skirt portion of the underlying main front, and a narrow extension formed as a continuation of said supplementary front and extending entirely around and attached to said back portion adjacent the juncture of said back and supplementary front.

1,887,868. RECTIFIER. THORNDIKE F. CHENEY, Danvers, Mass., assignor, by mesne assignments, to Old Colony Trust Company, a Corporation of Massachusetts, trustee. Filed Nov. 3, 1925. Serial No. 66,627. 33 Claims. (Cl. 250—27.5.)



1. A rectifier having in combination, a glass bulb, a tubular glass stem carried by an end of said bulb and opening to the exterior of said bulb at said end, said stem having a closed end carrying a glass tube integrally formed therewith, a body of insulating material carried by said tube, conductive material constituting a cathode carried by said body, a support for said cathode carried by said stem, conductive material constituting an anode in proximity with said cathode, a lead wire for said anode passing through said stem and the closed end thereof into said tube, and a lead wire for said cathode passing through said stem and the closed end thereof.

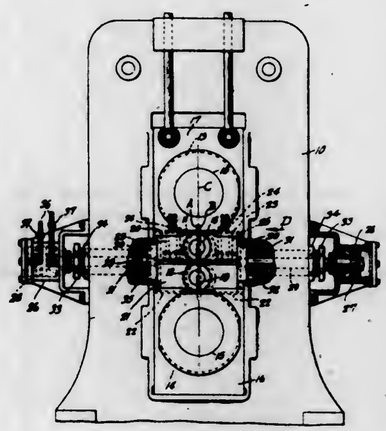
1,887,869. BIRD CAGE. CHARLES F. CLAMPITT, North Hollywood, Calif. Filed Sept. 23, 1931. Serial No. 564,541. 4 Claims. (Cl. 119—17.)



1. A bird cage, a member forming the front wall of said cage, which member is mounted for rotation, perches projecting inwardly from said rotary member, a reflector arranged in a cage to the rear of said rotary member and animal or bird representing figures loosely suspended from said perches.

1,887,870. ROLLING MILL. JAMES R. COE, Waterbury, Conn., assignor to The American Brass Company, Waterbury, Conn., a Corporation of Connecticut. Filed Dec. 23, 1929. Serial No. 415,918. 11 Claims. (Cl. 80—38.)

2. In a rolling mill, a pair of upright spaced housings, a pair of vertically spaced backing rolls between said housings, bearing blocks for said rolls in said housings, a pair of work rolls of smaller diameter between said backing rolls, bearing blocks for the work rolls mounted for sliding movement on the blocks for the backing rolls



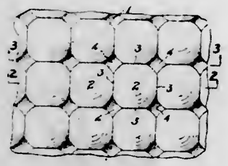
in a direction transversely of their axes, and means for shifting said blocks for the work rolls in opposite directions.

1,887,871. FULL VISION VISOR. DAVID CRAIG, Los Angeles, Calif. Filed June 2, 1931. Serial No. 541,622. 2 Claims. (Cl. 2—13.)



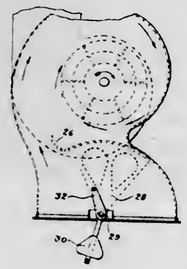
1. A visor or glare shield for use in conjunction with spectacles, eye glasses and the like, comprising a concavo-convex member formed of transparent material colored to subdue the glare of light transmitted therethrough, said member being shaped in plan to substantially cover only a portion of a spectacle lens, having one straight edge and one arcuate edge, there being an aduncate clip on the arcuate edge extending upwardly over the concave side of the member for fastening the device to the spectacle lens, the arcuate edge being outwardly deflected so as not to engage the edge of the lens or the surrounding frame to limit the position of the member with respect thereto whereby the member may be applied to many types of lenses and may have its position with respect to the centers thereof adjusted.

1,887,872. LENSIC SCREEN. VICTOR C. ERNST, Lakewood, Ohio, assignor to Full-Tone Process Company, Cleveland, Ohio. Filed June 18, 1927. Serial No. 199,842. 6 Claims. (Cl. 95—81.)



1. A lensic screen of transparent material comprising plano-convex lenses of microscopic size each of said lenses being fashioned with a series of separated edge truncations of which pairs on adjacent lenses coincide whereby to eliminate possibility of any parallel rays passing between said truncated coinciding edges.

1,887,873. CENTRIFUGAL FAN. HAROLD F. HAGEN, Dedham, Mass., assignor to B. F. Sturtevant Company, Hyde Park, Mass., a Corporation of Massachusetts. Filed Feb. 3, 1930. Serial No. 425,433. 14 Claims. (Cl. 230—114.)



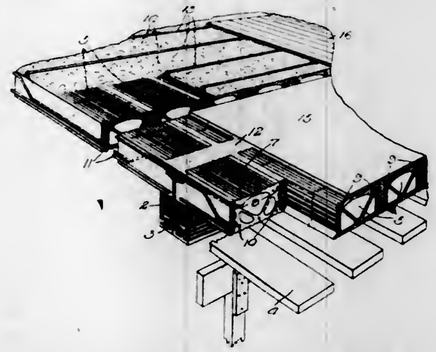
1. A fan comprising an inlet scrool having an eccentric eye and an entrance opening from which the fluid circulates about the scrool to attain a spin component of velocity, and means for varying the direction of the fluid admission to the scrool to vary the magnitude of spin velocity in the scrool prior to admission of fluid to the eye, whereby the output of the fan may be controlled.

1,887,874. HIGH VOLTAGE MERCURY ARRESTER. RYOTARO MITSUDA, Tokyo, Japan. Filed May 17, 1930, Serial No. 453,285, and in Japan May 22, 1929. 2 Claims. (Cl. 175—30.)



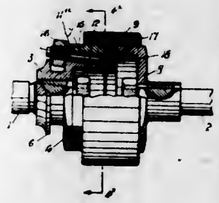
1. A mercury-arc arrester, comprising a plurality of superimposed disc-like mercury-containers, and means therein for causing the discharge arc to pass along each separate, component disc in a series of steps and to pass from disc to disc in zigzag form.

1,887,875. FLOOR CONSTRUCTION. ELMER A. NELSON, Dormont, Pa., assignor, by mesne assignments, to National Fireproofing Corporation, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed July 26, 1928. Serial No. 295,516. 13 Claims. (Cl. 72—66.)



7. A hollow structural unit of generally rectangular cross-section having strengthening ribs radiating from its lower portion and having a plurality of key pockets at each side.

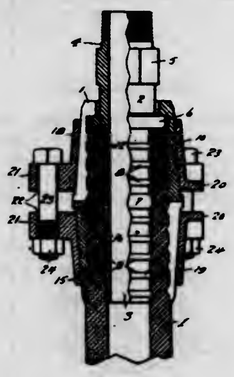
1,887,876. COUPLING. WARREN NOBLE, Detroit, Mich. Filed Mar. 10, 1927, Serial No. 174,293. Renewed Mar. 29, 1932. 9 Claims. (Cl. 64—90.)



9. In a coupling for two substantially aligned shafts, a member keyed to one of said shafts having an out-of-round exterior configuration, a second member keyed to the other of said shafts having a cylindrical exterior configuration, a cylindrical collar fitting over said second member and having an out-of-round exterior configuration the counterpart of the exterior configuration of said first member, a keyway in said second member, a key in said keyway for frictionally locking said second member and said collar in any desired arcuate position, flexible means engaging both out-of-round surfaces whereby a driving connection is formed between said shafts and means embedded in said flexible means for resisting distortion thereof.

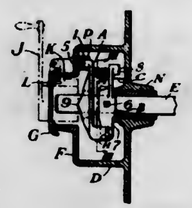
1,887,877. HOSE COUPLING. ERNEST J. SHAFFER, Oklahoma City, Okla., assignor to George W. Shaffer, Tulsa, Okla. Filed June 1, 1931. Serial No. 541,265. 5 Claims. (Cl. 285—84.)

1. In a hose coupling, the combination of a nipple including a coupling part at one end and a shank at the other, the shank being adapted to be inserted into a hose, an outer and an inner set of slips surrounding the hose in the region of the shank and arranged in opposed relation to each other, the outer ends of the slips of the outer set having holding engagement with the nipple, the outer surfaces of the slips of each set diverging in



the direction of the other set, a sleeve surrounding each set of slips, and means for forcing the sleeves toward each other.

1,887,878. SHAFT OPERATING AND LOCKING APPARATUS. WILLIAM E. SMITH, Pittsburgh, Pa., assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed Apr. 9, 1932. Serial No. 604,157. 3 Claims. (Cl. 74—39.)

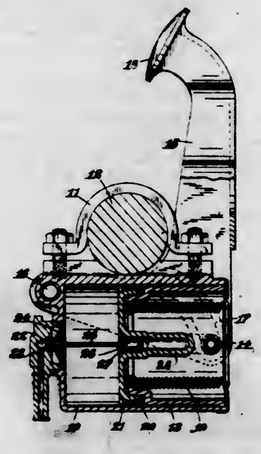


1. In combination, a shaft mounted to oscillate and having a free end, a hand crank arranged to coact with the free end of said shaft, a fixed housing partially enclosing the free end of said shaft, a collar fixed to said shaft and having diametrically opposite arms, a locking dog located between said collar and the free end of the shaft and pivotally attached to one of said arms and extending across the shaft and terminating in a free end which faces the other of said arms, said housing having notches adapted to receive the free end of said dog when the dog is swung outwardly from the collar, a spring interposed between the free end of said dog and the said other arm of said collar to bias the dog into any one of said notches with which it may be in alignment, said dog being positioned for engagement with the hub of the hand crank so that when the crank is applied to the shaft the dog is swung inwardly against the action of said spring and so is released from whatever notch it previously occupied.

1,887,879. PROCESS OF DEFECATING CANE JUICE. TRUMAN B. WAYNE, Houston, Tex., assignor to National Aluminate Corporation, Chicago, Ill., a Corporation of Delaware. Filed Sept. 8, 1930. Serial No. 480,609. 5 Claims. (Cl. 127—49.)

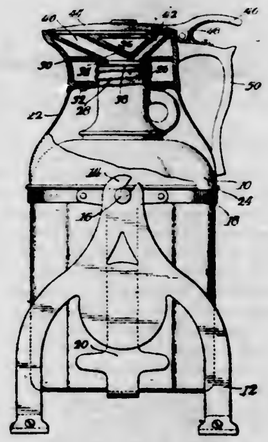
1. Process of defecating cane juice which comprises treating the same with a soluble aluminate followed by addition of lime.

1,887,880. MEANS FOR PRODUCING FLUID PRESSURE. WILLIAM LEICESTER AVERY, London, England, assignor to The India Rubber, Gutta Percha and Telegraph Works Company Limited, London, England, a British Company. Filed Jan. 30, 1930, Serial No. 424,588, and in Great Britain Sept. 21, 1929. 4 Claims. (Cl. 60—54.)



1. Pressure-applying apparatus for fluid-operated wheel-brakes comprising in combination a cylinder to contain the fluid, a piston slidable within said cylinder, a gudgeon pin projecting transversely through the piston and extending through longitudinal slots in the cylinder wall, and a pair of L-shaped operating levers one on each side of the cylinder each pivoted at one end about a fixed axis and having a cam slot in the neighborhood of the bend to engage the gudgeon pin and having their other ends joined together for simultaneous operation.

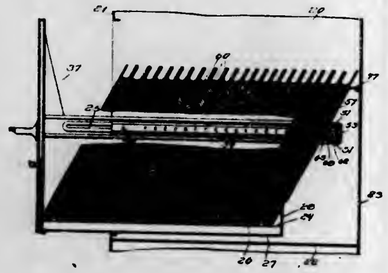
1,887,881. DISPENSING ATTACHMENT FOR BOTTLES, JUGS, OR THE LIKE. CARL F. BLATTNER, Los Angeles, Calif. Filed Feb. 3, 1930. Serial No. 425,695. 1 Claim. (Cl. 221—14.)



A dispensing attachment, comprising a liquid container in the form of a jug with a threaded neck, a cap adapted to be removably applied to the container, said cap comprising a spout, a cover hingedly mounted on the spout,

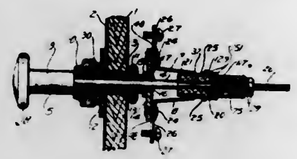
an operating handle forming part of the cap, and a skirt attached to the cap and spout and projecting downwardly from the spout portion to inclose the upper end of the container, and having a central threaded portion for attachment to the container neck, and a pivotally mounted support for the assembled container and cap, said support comprising a stand, and a receiving element for the lower part of the container pivotally mounted in the stand, said receiving element adapted to contact at its upper edge with the lower edge of the cap when the same are in position on the container, thereby inclosing the container.

1,887,882. CABINET FILING DRAWER. PAUL A. BREDSVOLD, Chicago, Ill., assignor of one-half to William P. Hoy, Chicago, Ill. Filed Apr. 25, 1931. Serial No. 532,789. 10 Claims. (Cl. 129—28.)



2. In a cabinet drawer, a member slidably mounted in each side wall and projecting rearwardly from the drawer into position to contact with the cabinet, a transversely extending follower plate mounted on said members and movable longitudinally of the drawer in accordance with the movement of said members resulting from their contact with the cabinet.

1,887,883. ELECTRICAL SWITCH. WILLIAM B. CHURCHER, Cleveland, Ohio, assignor to The White Motor Company. Filed June 19, 1926. Serial No. 117,140. 4 Claims. (Cl. 200—4.)



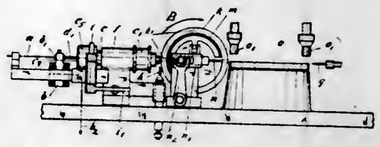
1. In an electric switch construction, a support, a face plate provided with a central perforation secured to the support, a plunger reciprocatively mounted in the support and extending through the perforation, a handle at one end of the plunger for reciprocatively moving it, an electric switch element provided with conducting surfaces and insulating surfaces supported on the rod and reciprocable therewith, the face plate being provided with a plurality of pairs of primary and secondary perforations, the primary perforations being disposed in a circle around the central perforation, the secondary perforations also being disposed in a circle around the central perforation, said pairs of perforations being positionally distributed on the face plate to provide even numbers and odd numbers of said pairs of perforations symmetrically disposed around said central perforation, a plurality of resilient electric contacts each supported at a portion thereof on the face plate and at a free portion thereof adapted to resiliently successively engage the conducting and insulating surfaces of the switch element when the same is reciprocated, means for effecting rigid association of the contacts with the face plate comprising a pair of spaced binding elements associated with each contact and extending into a corresponding pair of said perforations in the face plate to prevent movement of the unsupported end of each contact relative to the face plate in directions transversely of the plunger or rotatably about either binding element of the pair.

1,887,884. ROTARY PUMP MACHINE. GEORGE EDWARD THOMAS EYSTON, London, England, assignor to Powerplus (1927) Limited, London, England, a Company of Great Britain. Filed June 23, 1930, Serial No. 463,118, and in Great Britain July 18, 1929. 17 Claims. (Cl. 103—160.)



1. Rotary pump or like machine, comprising an outer casing, a hollow member mounted to revolve in said casing, a piston body adapted to reciprocate across said member while revolving bodily therewith, said piston body being provided with a centric track, a cam member disposed eccentrically in the machine and adapted to have rolling contact engagement with said track, and an offset part associated with said cam member and adapted to engage formations of the piston body to prevent slip in the rolling contact engagement between said cam and track.

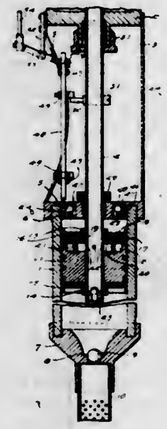
1,887,885. DEVICE FOR THE PRODUCTION AND INSERTION OF THE WIRE SPIRALS INTO THE RING SLEEVES OF SNAP RINGS. BERNHARD FÖRSTER, Pforzheim, Germany. Filed Dec. 23, 1930, Serial No. 504,320, and in Germany July 11, 1930. 4 Claims. (Cl. 29—33.)



1. Apparatus for producing and inserting the wire spirals into the ring sleeve of snap rings, comprising in combination a winding mandrel on which a wire spiral is wound, a hollow spindle into which one end of said winding mandrel engages the other end serving as outlet for the wire spiral, a knife at the outlet end of said hollow spindle for cutting off a piece from said wire spiral, a step-wise rotated drum having continuous bores in its crown designed to receive the end of the wire spiral intermittently pushed out of said hollow spindle, a plate carrying the snap ring sleeves said plate moving along said drum, and a ram adapted to move through said continuous bores of said drum adapted to eject the wire spirals and insert the same into said snap ring sleeves.

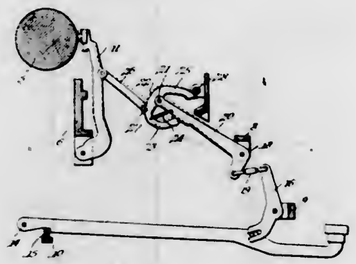
1,887,886. DEEP WELL PUMP. ROBERT U. GRANT, Breckenridge, Tex., assignor of one-half to T. H. P. Duncan, Fort Worth, Tex. Filed Oct. 24, 1931. Serial No. 570,952. 5 Claims. (Cl. 103—46.)

1. In a pump structure of the character described, a pair of cylinders one constituting a pumping cylinder and the other a power cylinder, connecting means between the cylinders and maintaining the same in alignment, a piston in each cylinder, a hollow piston rod passing through each piston and passing entirely through the power cylinder, valved inlet means for and opening through each end of the pumping cylinder, valve means controlling the passage of fluid from the pumping cylinder into the hollow



rod, means for introducing the power fluid into the power cylinder, valve means for controlling the introduction of power fluid therein to, and means operating within the space between the cylinders and having connection with said last valve means, for actuating the said last valve means.

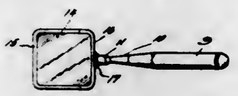
1,887,887. TYPEWRITER. CARL A. JOERISSEN, Westfield, N. J. Filed Mar. 15, 1932. Serial No. 599,018. 9 Claims. (Cl. 197—27.)



1. In a typewriter, a platen, a type bar swingable toward and away from the platen, and type bar actuating mechanism including a pivoted key bar, a pair of links of which one is pivotally mounted at one end on a fixed machine part and the other is in pivotal connection at one end with the type bar, means connecting the other ends of said links for pivotal movement about different centers with the line of said centers normally at an angle less than a straight angle to a straight line through the pivot axes of one of the links, depression of the key bar serving to move the links from a collapsed position to a relatively straightened relation whereby to impart to the type bar an initial swing to a position immediately adjacent the platen, and an arm on said connecting means actuated at the end of said initial swing to swing said connecting means and thereby impart a longitudinal movement to said type bar connected link to complete the stroke of the type bar.

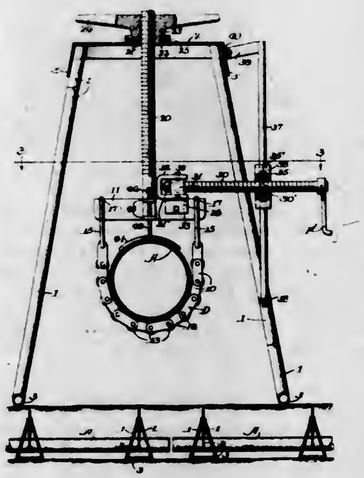
CARNEGIE LIBRARY OF ATLANTA

1,887,888. MOUTH MIRROR. JOHN B. MALATESTA, New York, N. Y. Filed Jan. 30, 1931. Serial No. 512,421. 2 Claims. (Cl. 32—27.)



1. A mirror of the character described comprising a polygonal plate, a mirror disposed on the plate, a flange formed integrally on a portion of the marginal portion of the plate and operatively engaged with the mirror for retaining said mirror on the plate, an apertured ear formed integrally on a marginal edge of the plate which is free of the flange, a flange removably mounted on that portion of the plate which is free of the first named flange and engaged with the mirror and having its ends engaged with the ends of the first named flange, an apertured ear formed integrally on the removable flange and disposed in abutting engagement with the first named ear, a stem extending through the second named ear and threaded into the first named ear for clamping said ears together and securing the second named flange in position, and a handle connected to the stem.

1,887,889. PIPE-HANDLING TOOL. JOHN HENERY OWENS, Elgin, Ill. Filed Sept. 2, 1930. Serial No. 479,381. 21 Claims. (Cl. 254—85.)

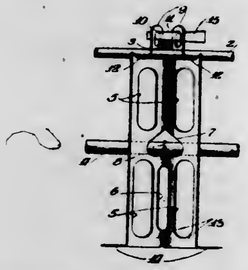


1. In a tool of the class described, the combination of a supporting standard, a pipe-holding member in which the pipe is freely rotatable about its axis, suspended from said standard and vertically and laterally adjustable therein, and means connected between said standard and said holding member for shifting said holding member to adjust said holding member vertically and laterally.

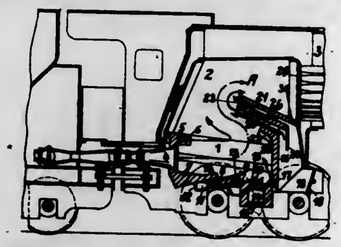
1,887,890. BAR SUPPORT. ROBERT R. ROBERTSON, Chicago Heights, Ill. Filed Feb. 7, 1930. Serial No. 426,456. 9 Claims. (Cl. 94—8.)

1. A bar support comprising a pair of apertured walls integrally connected and positioned at an angle with respect to one another, feet integrally formed on the lower ends of said walls, said walls cut out to form a dowel bar pocket, a retaining finger former by said dowel bar pocket

adapted to be bent to hold a dowel bar locked in said pocket, a slotted arm integrally formed on the upper end of each of said walls and separated by means of an intermediate pocket and having side recesses or pockets positioned to the outside thereof for the reception of crossed reinforcing rods adapted to be held locked in position by means of a wedge member engaged through the slotted arms.

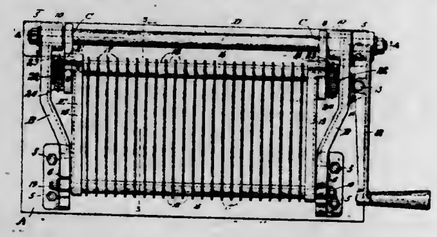


1,887,891. PULVERIZED FUEL FURNACE. RICHARD ROOSEN, Cassel, Germany, assignor to Stug Kohlenstaubfeuerung Patentverwertung G. m. b. H., Cassel, Germany. Filed Sept. 20, 1930, Serial No. 483,365, and in Germany Oct. 9, 1929. 7 Claims. (Cl. 110—28.)



1. A pulverized fuel furnace having a firebox, a fire bridge therein, a powdered fuel burner mounted to direct fuel towards said fire bridge, secondary air supply passages arranged in the bottom of said firebox at least approximately in parallel with the entrance path of the fuel, an auxiliary fire bridge spacedly arranged below said fire bridge, and another secondary air supply passage opening into the space existing between said fire bridge and auxiliary fire bridge.

1,887,892. MEAT TENDERER. AXEL E. ROSANDER and OSCAR D. SCHVARTZ, Cincinnati, Ohio. Filed Apr. 11, 1931. Serial No. 529,512. 5 Claims. (Cl. 17—25.)



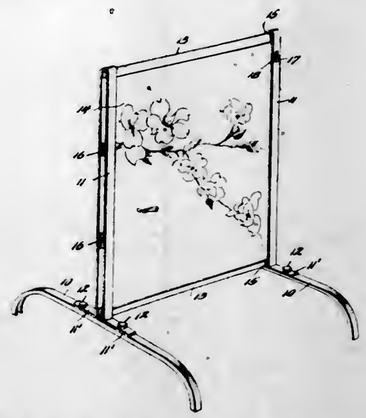
1. In a meat tenderer, the combination with a base, of a pair of spaced standards secured thereon and having rearwardly and downwardly extending cam slots formed adjacent the forward ends thereof, a knife-carrying frame disposed between the standards and comprising spaced side bars and front and rear transverse rods connecting the bars, the ends of the front rod projecting into the cam slots of the standards, a plurality of cutting knives located between the side bars of the frame and connected to the front and rear rods thereof, an operating shaft disposed in rear of said frame and having its ends journaled in the standards adjacent the rear ends thereof, forwardly extending lever arms fixed to the operating shaft and having pivotal connections with the rear transverse rod of the frame, and an operating handle fixed to one end of the operation shaft.

1,887,893. AUTO BRUSH. MAX H. SCHLYPERSTONE, Pontiac, Mich. Filed Feb. 11, 1932. Serial No. 592,370. 4 Claims. (Cl. 15—128.)



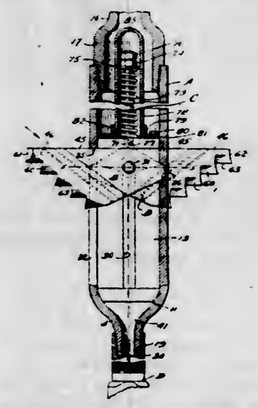
1. An auto brush comprising a head body of elongated design, a water receiving chamber upon and extending longitudinally of one face of the head, said chamber having two rows of oppositely directed water outlet apertures, a pair of brush elements, means forming a part of the body for receiving and removably securing each brush element to said head upon one side of said water chamber to receive the water ejected from one row of apertures, and means for injecting water into said chamber.

1,887,894. SIGN HOLDER. ROBERT W. SCHWAB, Atlanta, Ga., assignor to Southern Spring Bed Company, Atlanta, Ga., a Corporation of Georgia. Filed May 23, 1932. Serial No. 613,026. 2 Claims. (Cl. 40—125.)



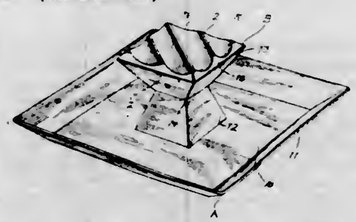
1. As an article of manufacture, a sign holder of the type described including, in combination, spaced base members having floor engaging portions and a frame affixed thereto for supporting a flat display card in such manner that it may be readily removed, said frame having two vertically disposed one-piece members each having the form of an inverted U, the stems or legs of which define between them a narrow vertical slot, the bottoms of said stems having substantially horizontal portions projecting outwardly and secured to said base members, and two cross tying and sign supporting elements disposed substantially horizontally, one such element having its ends positioned within the slots of said members at the tops thereof and the other having its ends positioned within said slots at the bottoms thereof, the said ends of the elements being rigidly secured to said members and said elements having mutually facing continuous grooves formed therein and adapted to receive and retain, respectively, the upper and lower edges of a display card inserted laterally into said frame through one of said slots.

1,887,895. COMBINED DRILL AND UNDERREAMER. GEORGE B. SIPE, Shreveport, La. Filed Sept. 6, 1930. Serial No. 480,259. 7 Claims. (Cl. 255—75.)



1. In a collapsible drill, the combination of a holder provided with a groove and a slide face therein, and a collapsible bit blade movably connected with said holder, including a projection operating in said groove, said blade having its one end portion riding in engagement with said slide face to guide the blade into extended and collapsed positions.

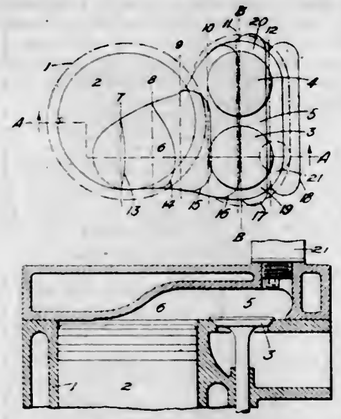
1,887,896. ASH TRAY. HAROLD S. WATSON, Brooklyn, N. Y. Filed Mar. 25, 1931. Serial No. 525,227. 1 Claim. (Cl. 131—51.)



A device of the character described comprising a tray, a pedestal arranged centrally of the tray and upstanding therefrom, a beveled wall defining the edge of the upper face of said pedestal, and a plurality of seats upon the upper face of the pedestal, each seat consisting of a groove extending angularly across the upper face of the pedestal and terminating at its ends in said beveled wall.

1,887,897. COMBUSTION CHAMBER OF INTERNAL COMBUSTION ENGINES. WILFRED AMBROSE WHATMOUGH, New Barnet, England. Filed Dec. 27, 1929, Serial No. 416,883, and in Great Britain Jan. 16, 1929. 11 Claims. (Cl. 123—191.)

1. An internal combustion engine comprising in combination a cylinder, a valve cavity disposed to one side of said cylinder, a transfer passage joining said valve cavity with the cylinder, the valve cavity and the transfer passage in that part which lies to one side of the cylinder having a continuous upper surface which is free of inflexions, inlet and exhaust ports arranged side by side in said valve cavity, the walls of which transfer passage



and valve cavity adjacent said inlet port are formed with a convex inflexion extending throughout the depth of the wall to direct the inlet gases towards said exhaust port on their way to the cylinder, and a socket for an ignition device arranged near said exhaust port.

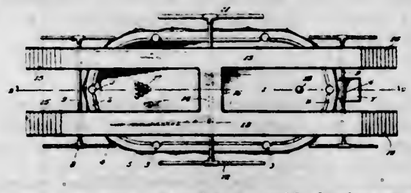
1,887,898. PROCESS FOR THE REGENERATION OF VULCANIZED RUBBER. OLOF GUSTAV BOHLIN, Helsingborg, Sweden, assignor to Helsingborgs Gummifabriks Aktiebolag, Helsingborg, Sweden. Filed Jan. 21, 1930, Serial No. 422,497, and in Germany Dec. 27, 1929. 8 Claims. (Cl. 18—52.)

1. Process for reclaiming vulcanized rubber wherein a quantity of mercury amounting only to a fraction of that equalizing the amount of sulphur contained in the vulcanized rubber is incorporated with the rubber refuse, whereafter the mixture is subjected to a treatment involving disaggregation of the rubber.

1,887,899. PRODUCTION OF PULP. LINN BRADLEY, Montclair, N. J., and EDWARD P. MCKEEFE, Plattsburg, N. Y., assignors to Bradley-McKeefe Corporation, New York, N. Y., a Corporation of New York. Original application filed Mar. 28, 1921, Serial No. 456,187. Divided and this application filed Mar. 2, 1925. Serial No. 12,760. 22 Claims. (Cl. 92—11.)

1. The improvement in the cooking of wood with a cooking liquor containing caustic alkali and a sulfite of an alkali which comprises subjecting the wood chips to a vacuum, introducing gaseous sulfur dioxide into the evacuated chips, and supplying an alkaline cooking liquor to combine with the sulfur dioxide.

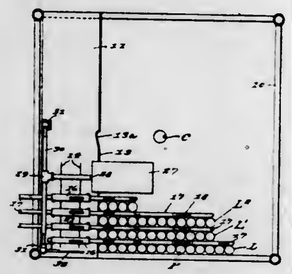
1,887,900. GAME APPARATUS. ANDREW J. BRAND, New Hyde Park, N. Y. Filed Sept. 27, 1930. Serial No. 484,907. 1 Claim. (Cl. 273—1.)



A game apparatus comprising a table having openings at intervals around its edge, counting balls for movement over the table and escape through said openings, a cue

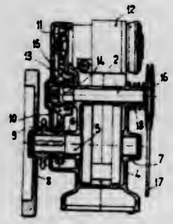
ball to be propelled over the table and impart movement to the counting balls, arched supports arranged adjacent the ends and at the center of the table, the central support being longer than the end supports whereby it may span the table, a platform carried by said supports above the table and including two parallel cat walks parallel with the sides of the table and a central transverse connecting walk resting directly on the central arched support, and means to be manipulated by players upon the platform for impelling the cue ball.

1,887,901. PIPE STACKING APPLIANCE FOR OIL WELLS. SIDNEY V. DODSON, Friendship, N. Y., assignor of one-half to Victor L. Collins, Friendship, N. Y. Filed Dec. 12, 1930. Serial No. 501,993. 4 Claims. (Cl. 211—60.)



1. An appliance for stacking pipe in oil wells comprising a shelf support adapted to be secured intermediate the height of the derrick, and members adjustably mounted on said support and equipped with means for positively adjusting them selectively outward from said support to engage progressively pipe sections as they are stacked in the derrick.

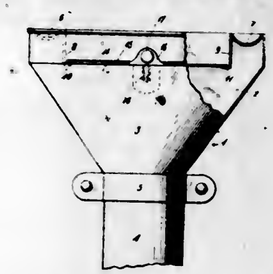
1,887,902. STARTING DEVICE FOR INTERNAL-COMBUSTION ENGINES. ADALBERTO GARELLI, Milan, Italy. Filed July 16, 1931, Serial No. 551,260, and in Italy July 19, 1930. 6 Claims. (Cl. 74—7.)



1. In an internal combustion engine having a toothed wheel gear train for imparting rotation to secondary shafts of the engine during its operation, said gear train comprising an idler gear; a starting device comprising a starting operating member and means for connecting in a single direction of revolution said member with said idler gear of said gear train.

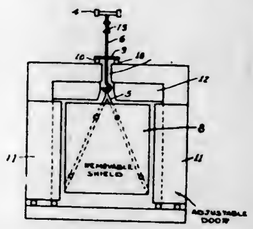
1,887,903. ASH RECEIVER. EDWARD GIBSON, Jr., Wilmington, Del., assignor of one-half to Rodmond S. Mahaffy, Wilmington, Del. Filed Feb. 16, 1929. Serial No. 340,634. 1 Claim. (Cl. 206—19.5.)

An ash receiver of the character described comprising a receptacle having a substantially flat rear wall and a rounded semi-cylindrical front wall, metallic strips secured to the upper portion of the receptacle at the corner thereof of angular formation and comprising horizontal portions dished to receive cigars and the like and having vertical portions terminating in horizontal fingers constituting tracks, the front of the rounded wall having a slot therein, a slide mounted in said receptacle and supported by said tracks and extending through said slot, said



slide constituting a support for a limited quantity of ashes and being movable into a position to automatically discharge ashes into the lower confines of the receptacle and a conduit communicating with the receptacle for conveying the ashes to a point remote, spring means secured to said receptacle for exerting an upward pressure against the slide to resist movement thereof.

1,887,904. CONTINUOUS CONVEYER FURNACE. BOYD M. JOHNSON, Metuchen, N. J., assignor to The Carborundum Company, Niagara Falls, N. Y., a Corporation of Pennsylvania. Filed May 22, 1929. Serial No. 365,206. 17 Claims. (Cl. 25—142.)

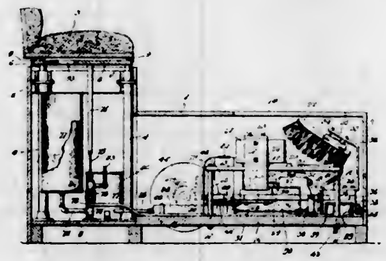


1. A continuous furnace into which articles to be fired are continuously fed and from which articles which have been fired are continuously discharged, having an endless conveyer therealong for transporting successive articles to be heat treated therethrough, and shields supported by the conveyer traveling with the ware and arranged transversely to the direction of travel of the ware, to retard the transmission of radiation through the ends of the furnace and providing the only closure for the passageway to the furnace.

1,887,905. PROCESS FOR MAKING A FOOD SUBSTANCE FROM COCOA, SUGAR, AND WATER. HANS-ADALBERT SCHWEIGART, Koditz, near Saalfeld-Saale, Germany. Filed June 23, 1931, Serial No. 546,415, and in Germany Nov. 14, 1929. 2 Claims. (Cl. 99—11.)

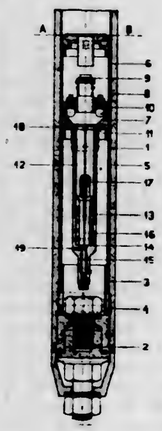
1. A process of making a cocoa preparation consisting in mixing cocoa in the form of a partially de-oiled cocoa powder in a sugar-containing liquid which is acidified by adding an acid of a low dissociation degree, then heating at boiling temperature and under moderate pressure, thereby converting the starch and the protein substances into soluble decomposition products and the non-soluble constituents of the cocoa converted into a state of swelling, and finally evaporating the obtained liquid wherein all constituents of the cocoa remain, said acidified aqueous liquid containing milk constituents.

1,887,906. SHOE SHINING MACHINE. MOYE W. SPRUILL, Plymouth, N. C. Filed Aug. 28, 1930. Serial No. 478,414. 3 Claims. (Cl. 15—31.)



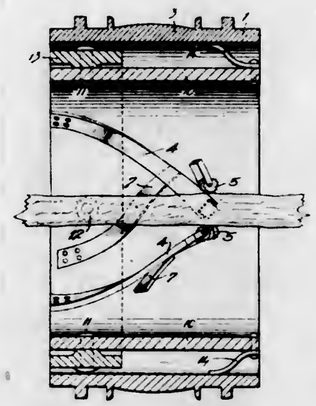
3. In a shoe shining machine, the combination of a liquid polish metering chamber, nozzles directed toward a shoe positioned in the machine, pipes connecting the nozzles to the metering chamber, and means to deliver air under pressure to the metering chamber to force polish from the metering chamber onto a shoe supported in polishing position and then deliver an air-blast to dry the polish.

1,887,907. APPARATUS FOR SURVEYING WELLS. ALPHONS GERARD HUBERT STRAATMAN, The Hague, Netherlands, assignor to Naamlooze Vennootschap de Bataafsche Petroleum Maatschappij. Filed Feb. 25, 1931, Serial No. 518,219, and in Germany Feb. 27, 1930. 5 Claims. (Cl. 234—1.)



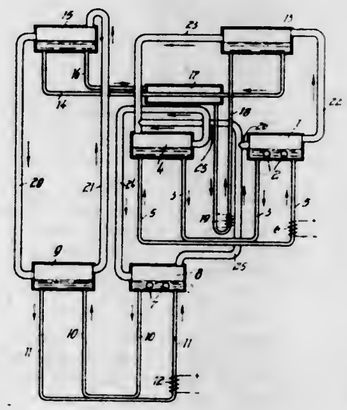
1. An apparatus for determining the inclination of wells comprising a cylindrical jacket, a flexible rod normally extending longitudinally within said jacket, one end of the rod being clamped in fixed position relative to said jacket and the other end being free to move, a weight associated with said rod and being of sufficient mass to bend the rod when the jacket is in an inclined position, and means for recording the position of the rod relative to the jacket.

1,887,908. BARKING MACHINE. ANDERS TYCHO TIDBLAD, Soderhamn, Sweden. Filed Apr. 4, 1930, Serial No. 441,631, and in Sweden Feb. 20, 1929. 5 Claims. (Cl. 144—208.)



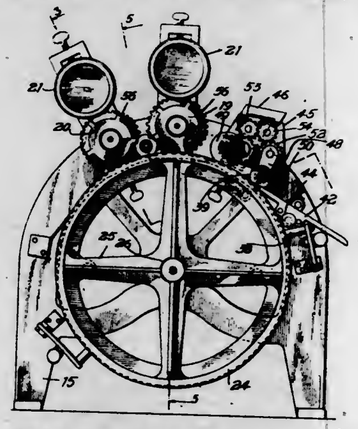
1. A bark-removing machine comprising a drum; a ring universally mounted in said drum; and a plurality of debarking members mounted in said ring, said universal mounting readily permitting the debarking of curved logs.

1,887,909. ABSORPTION MACHINE. EDMUND ALTENKIRCH, Neuenhagen, near Berlin, Germany, assignor to Siemens-Schuckertwerke Aktiengesellschaft, Berlin-Siemensstadt, Germany, a Corporation of Germany. Original application filed June 8, 1929, Serial No. 369,358, and in Germany June 16, 1928. Divided and this application filed Oct. 9, 1930. Serial No. 487,465. 16 Claims. (Cl. 62—119.5.)



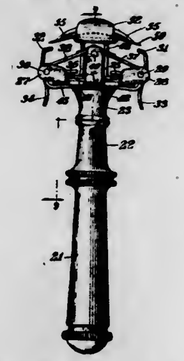
11. An absorption machine for the production of heat of high temperature, containing a generator, an absorber, an evaporator and a resorber, connecting pipes between said vessels to permit circulation of absorption solution through them, the gaseous working medium in said vessels having an indifferent gas admixed to it, and further connecting pipes between the said vessels to permit circulation of indifferent gas through said generator, resorber, absorber and evaporator.

1,887,910. MACHINE FOR PRINTING LABELS. ALOISE ANTOINE, Brooklyn, N. Y. Filed Jan. 29, 1932. Serial No. 589,552. 12 Claims. (Cl. 101—228.)



1. A device as characterized comprising a dove-tailed grooved drum for receiving a strip of labels to be imprinted, and means for varying the width of the groove to accommodate strips of varying width.

1,887,911. COMBINED SAFETY RAZOR AND SHARPENING DEVICE. LOUIS V. ARONSON, Newark, N. J., assignor to Art Metal Works, Inc., Newark, N. J., a Corporation of New Jersey. Filed Feb. 21, 1931. Serial No. 517,382. 11 Claims. (Cl. 30—12.)



2. The combination in a razor, of a honing device, a razor blade supporting means, means for supporting said device and said razor blade supporting means to permit of relative longitudinal movement, and means for locking said device and said razor blade supporting means against longitudinal movement.

1,887,912. DISPENSING CONTAINER FOR PAPER ROLLS. NED G. BEGLE, Greenwich, Conn., assignor to Berst-Forster-Dixfield Company, Dixfield, Me., a Corporation of Maine. Filed Sept. 4, 1929. Serial No. 390,233. 4 Claims. (Cl. 206—58.)



2. A pasteboard container having an element thereof stiffened with an indurating agent to form a paper cutting edge for severing a portion from a roll of paper within the container.

1,887,913. TOOTHBRUSH. HARRY D. BELL, New York, N. Y. Filed Jan. 9, 1932. Serial No. 585,681. 1 Claim. (Cl. 306—1.)



A tooth brush comprising a handle element, a separable bristle supporting element, said elements having aligned bores in adjacent ends, a stem lying snugly in said bores and acting to connect said elements, integral overlapping flanges formed on adjacent ends of said elements, interlocking means on said flanges to hold the elements together when disposed in abutting relation, said flanges and said elements formed with cooperating sloping faces and shoulders adapted to lie in abutting relation when the elements are drawn together to prevent relative angular movement between the elements.

1,887,914. DUMP WAGON. JAMES D. BENBOW and JAMES B. GREEN, Aurora, Ill., assignors to Western Wheeled Scraper Company, Aurora, Ill., a Corporation of Illinois. Original application filed Apr. 17, 1928, Serial No. 270,645. Divided and this application filed Jan. 5, 1929. Serial No. 330,556. 18 Claims. (Cl. 298—35.)

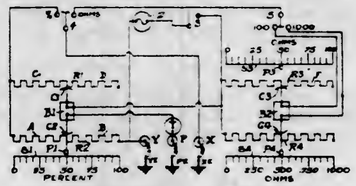


1. The combination with a dump wagon comprising two dump doors, of mechanism for raising said doors to closed position comprising flexible hoisting members operatively connected with both doors, winding members on which said flexible hoisting members are wound, ratchet wheels individual to each of said winding members, advancing pawls associated with each of said ratchet wheels, a common operating handle for transmitting movement to both pawls, and means comprising a selector member carried by and actuatable from said handle for selectively engaging and disengaging said pawls and their associated ratchet wheels.

1,887,915. EARTH OHMMETER. STEPHEN W. BORDEN, Summit, N. J. Filed Dec. 3, 1930. Serial No. 499,695. 3 Claims. (Cl. 175—183.)

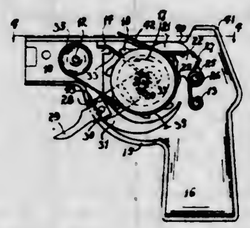
1. A Wheatstone-bridge arrangement for measuring the resistance of an earth electrode as XE, which includes a reference electrode as YE, a potential electrode as PE, a source of current, a null indicator, a variable resistance unit as EF, and a pair of equal resistances as AB and CD each adjustably electrically divided into two parts and so interlocked that they can be adjusted only simultaneously and in like manner, and switching mechanism arranged to connect the above elements in either of two relationships such that in the first relationship a Wheatstone-bridge is formed in which the two parts, as A and B of resistance AB, constitute two adjacent ratio arms of the bridge, the electrodes YE and XE constitute the other two arms of the bridge, resistances B and YE being in adjacent arms, the source of current and the null indicator are connected to the arms as in the conventional Wheatstone-bridge, the connection to the junction of the arms containing YE and XE being established via the electrode PE, the whole being now arranged so that the bridge is in balance when A is to B as XE is to YE; and in the second relationship the above defined

bridge is modified by doubling the ratio between the two ratio arms by including in one of the arms one part of resistance CD and further modified by connecting the



variable resistance EF in the arm with resistance XE, the whole being now arranged so that the bridge is in balance when EF has the same value as XE.

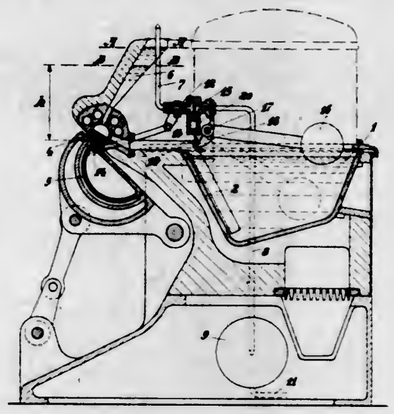
1,887,916. TOY PISTOL. WILLIAM H. BREWSTER, Jr., Verona, N. J. Filed Mar. 9, 1932. Serial No. 597,658. 10 Claims. (Cl. 42—57.)



1. A toy pistol embodying therein a bi-part casing, means for securing the parts of the casing together, a spindle for a reel of ribbon, a rotatable drum, a spring actuated hammer, a spring restored trigger, a clamp member carried by said trigger, a ratchet wheel carried by said drum, means carried by said clamp member co-operating with said ratchet wheel, whereby with the movement of said trigger in one direction, said clamp member will be moved toward said drum and said drum will receive a partial rotation, and with the movement of said trigger in the opposite direction, said clamp member will be moved away from said drum, means carried by said hammer engageable by said ratchet wheel whereby movement of said drum will actuate said hammer, said casing having an opening therein adjacent said ribbon spindle, said clamp member and said drum, and a movable closure for said opening.

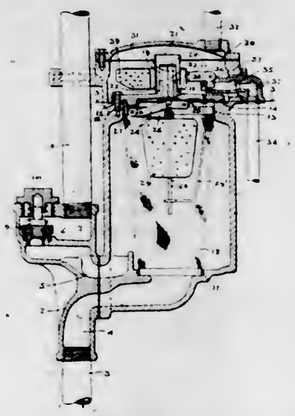
1,887,917. STEREOTYPE PLATE CASTING MACHINE. ERNST BROCKEL, Augsburg, Germany, assignor to Maschinenfabrik Augsburg-Nurnberg A. G., Augsburg, Germany, a Corporation of Germany. Filed Sept. 28, 1931, Serial No. 564,485, and in Germany Oct. 8, 1930. 5 Claims. (Cl. 22—2.)

1. A casting machine of the character described comprising, in combination, a melting pot, a mould, a valve casing having a valve chamber in communication with the upper end of the mould, a molten metal supply pipe opening at one end into the pot below the level of the metal therein and at its other end into said valve chamber, a container for molten metal located above the valve casing and opening at its lower end into said valve chamber, a source of sub-atmospheric pressure connected with the upper end of said container, means for cutting off communication between said container and said source of sub-atmospheric pressure and for establishing communication between the upper end of said container and a higher pressure at least as high as atmospheric pressure, and a valve within said valve chamber movable to a position to establish communication between said pipe and said container and to simultaneously deny communication of both said pipe and said container with the mould,



and also to another position in which communication of the pipe with both the container and the mould is denied and communication is established between the container and the mould.

1,887,918. AIR ELIMINATOR FOR LIQUID PUMP EQUIPMENT. WILLIAM H. D. BROUSE, Toronto, Ontario, Canada, assignor to Service Station Equipment Co. Limited, Toronto, Canada. Filed May 8, 1931. Serial No. 535,918. 5 Claims. (Cl. 183—2.5.)

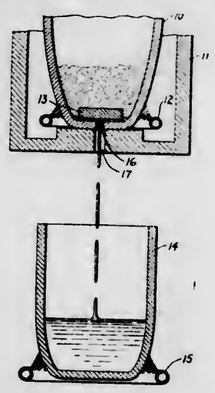


4. An air eliminator for liquid pump equipment, comprising in combination, a casing having an inlet and an outlet at the lower end, a partition intermediate of the height of said casing dividing same into upper and lower chambers, a filter sleeve in the lower chamber having one end fitting over the inlet of said casing and having its other end terminating at said partition and closed thereby, a valved passage in said partition connecting the interior of said filter sleeve with said upper chamber, a float enclosed within said filter sleeve in the lower chamber and controlling the valve of said passage, an air vent in the upper chamber, and means enclosed in said upper chamber for controlling the outlet of liquid therefrom.

1,887,919. **PRIMING MIXTURE.** WILLI BRÜN, Krefeld, Germany, assignor to Remington Arms Company, Inc., a Corporation of Delaware. Filed June 3, 1931. Serial No. 541,946. 5 Claims. (Cl. 52—3.)

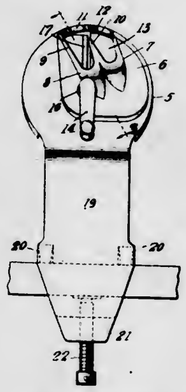
1. A priming mixture for ammunition containing a lead salt of 3-5 dinitrobenzoic acid.

1,887,920. **REFINING APPARATUS AND PROCESS.** JAMES E. BURNS and WATSON H. WOODFORD, Bridgeport, Conn., assignors to Remington Arms Company, Inc., a Corporation of Delaware. Filed Nov. 16, 1926. Serial No. 148,703. 4 Claims. (Cl. 23—136.)



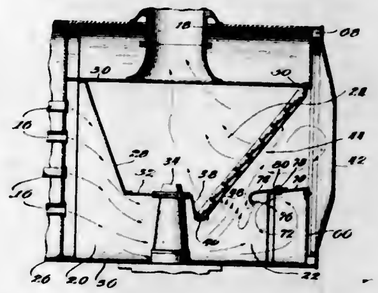
1. The method of refining crude antimony sulphide which comprises melting in the presence of sulphur in a crucible and drawing off the molten product as it is melted.

1,887,921. **BEAN CUTTING DEVICE.** BERNHARD CLUSS, Nutley, N. J. Filed July 31, 1930. Serial No. 471,907. 1 Claim. (Cl. 146—114.)



A device for cutting string beans, comprising a casing having a front wall, said front wall being enlarged, the enlarged portion being provided with inclined, spaced grooves, the upper edge of the casing being further provided with grooves spaced from and in alignment with the first-named grooves to facilitate positioning beans in said first named grooves, a boss on the enlarged front wall of the casing, a shaft journalled in said boss, a crank attached to said shaft, for actuating the same, a plate fixed to said shaft and forming the rear wall of the casing, said plate having spaced, inclined surfaces and slots adjacent thereto, cutting blades attached to the inclined surfaces, the edges of the blades extending through the slots, the lower edge of the casing being provided with an opening, whereby on rotation of said plate, said blades will be progressively brought into engagement with the beans positioned in the grooves in the front wall of the casing, and the cut portions of the beans will fall through the lower open edge of the casing.

1,887,922. **SPARK ARRESTER.** RICHARD M. CROSBY, Tacoma, Wash. Filed May 18, 1931. Serial No. 538,115. 5 Claims. (Cl. 110—122.)



1. In a locomotive boiler, a channel through which the products of combustion pass away from said boiler, a series of deflecting vanes extending in substantially a plane across said channel, said vanes lying in parallel planes which are inclined to the plane of the series, the plane of the series being upwardly inclined toward one wall of said channel, each of said vanes having its lower edge spaced from the upper edge of the next adjacent vane to form apertures for the flow of the gases of combustion, and adjustable baffle means projecting into said channel and reducing the cross-sectional area thereof at a point adjacent said series of vanes.

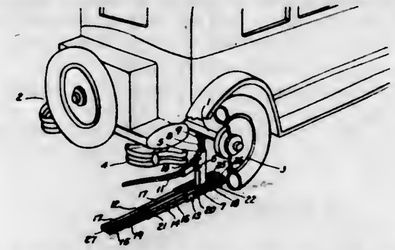
1,887,923. **PROCESS OF MANUFACTURING CORRUGATED PLASTIC BOARD.** HANS ELMIGER, St. Louis, Mo. Filed Oct. 18, 1930. Serial No. 489,544. 1 Claim. (Cl. 154—33.)



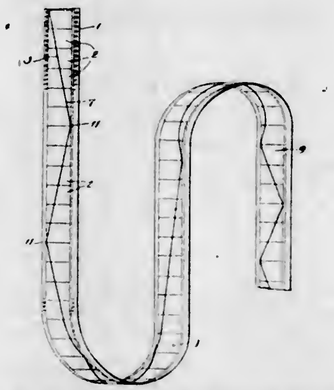
An improved process of manufacturing plastic corrugated sheets, which consists of preparing a sheet of any suitable plastic material, one side of which has a plain, flat surface and the opposite side provided with lateral parallel ridges spaced apart at equal distances from the apex of one ridge to the next adjacent ridge, said ridges being of equal height from a sheet of uniform thickness between said ridges and beneath said ridges, then corrugating said prepared sheet so that the radii of the inner curves of said corrugated sheets will be equal to the radii of the external and opposite curves of said corrugated sheets, so that when one sheet is superimposed on another the curved portions of one sheet will fit and contact at all points with the curves of the other sheet.

1,887,924. **JACK TRACK.** ROLLO E. EVANS, Emporia, Kans. Filed Dec. 16, 1929. Serial No. 414,424. 1 Claim. (Cl. 254—1.)

A jack track comprising a footing member having vertical integral edge flanges provided with longitudinal slots and keeper flanges extending inwardly from said vertical flanges and provided with a plurality of pairs of apertures, a stop member comprising a bar having lugs receivable in a selected pair of said apertures of said keeper flanges, a guide member comprising a plate having integral upturned horizontal edge portions and flanges extending inwardly from said portions, and lugs projecting laterally from said upturned portions and operating in said slots for movably connecting the guide member to the footing member.



1,887,925. **TEMPO INDICATING MOTION PICTURE FILM.** MAX FLEISCHER, Brooklyn, N. Y. Filed Jan. 17, 1931. Serial No. 509,366. 4 Claims. (Cl. 88—16.2.)



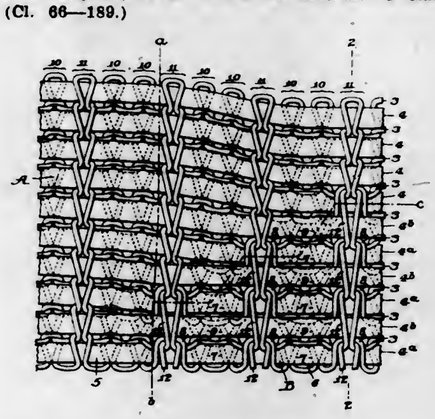
3. A motion picture film having a continuous line thereon zigzagging from side to side thereof and intercepting a plurality of frames of said film for indicating the tempo of sound to be synchronized therewith.

1,887,926. **COMBINATION GARMENT.** SAMUEL FOX, New York, N. Y. Filed Feb. 18, 1930. Serial No. 429,388. 1 Claim. (Cl. 2—77.)



A combination garment for athletic purposes, comprising a shirtwaist portion and a drawers portion and having a waist band the shirtwaist portion being formed to open in front from the neck downward to the front center of the waist-line, the waist band comprising a part permanently secured only to the shirtwaist extending from the front center to a point at one side and a part permanently secured to both the shirtwaist and the drawers extending from said side point across the back and the other side to the front center and a part permanently secured only to the drawers extending along the top of the drawers from the front center and adapted to overlap and to be secured to the underlying part of the band at said side point, and the drawers being formed to open from said side point downward to the lower edge thereof.

1,887,927. **ELASTIC FABRIC.** WILLIAM J. FOX, Philadelphia, Pa., assignor to James R. Kendrick Co. Inc., Philadelphia, Pa., a Corporation of Pennsylvania. Filed May 12, 1932. Serial No. 610,762. 8 Claims. (Cl. 66—189.)



1. A fashioned elastic fabric having a wide portion and a narrower portion merging into the same, said fabric comprising successive courses of elastic strands extending continuously through said portions and complemental courses of plain and tuck stitches of knitted thread confining the strands within the fabric, all strands in said wide portion and alternate strands in said narrower portion being confined between plain stitches on both faces of the fabric, and the strands intermediate said alternate strands in said narrower portion being confined between plain and tuck stitches which hold the strands in closer relationship in said narrower portion than in said wide portion.

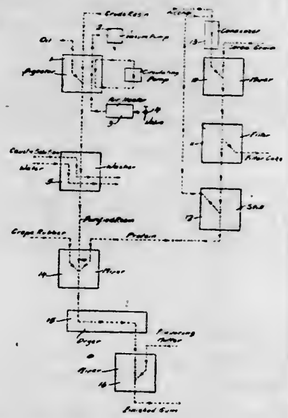
1,887,928. **YARN CARRIER.** GUSTAV GASTRICH, Wyomissing, Pa., assignor to Textile Machine Works, Wyomissing, Pa., a Corporation of Pennsylvania. Filed Sept. 12, 1930. Serial No. 481,366. 1 Claim. (Cl. 66—126.)



In a yarn carrier for knitting machines, the combination with a yarn supporting member, and means guiding the yarn therealong; of a spring clip on said member provided with an extension for limiting the lateral slack movement of the yarn due to movement of the carrier and an extension cooperating with said member to grip the yarn adjacent the normal path of travel of the latter.

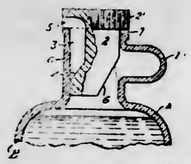
1,887,929. [WITHDRAWN.]

1,887,930. CHEWING GUM BASE. GEORGE A. HATHWELL, Burbank, Calif., assignor to Frank A. Garbutt, Los Angeles, Calif. Filed Nov. 24, 1930. Serial No. 497,770. 5 Claims. (Cl. 96—16.)



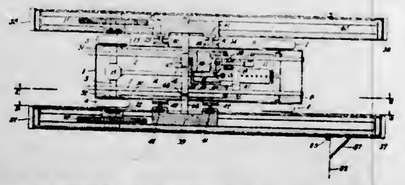
1. A chewing gum base containing: rubber; a protein; and a resin.

1,887,931. BOTTLE. JOSEPH M. KENNEDY, St. Louis, Mo. Filed Nov. 8, 1930. Serial No. 493,220. 10 Claims. (Cl. 215—57.)



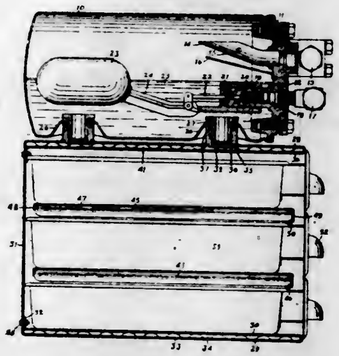
1. A measuring device for bottles, comprising a neck portion, a measuring well associated with said neck portion, said measuring well being entirely closed to the passage of liquid to or from same except through said neck portion, and adjustable means comprising a cork provided with a discharge passageway formed therein, said discharge passageway being open at one side only of said adjustable means, and said adjustable means being movable to positions where said passageway is out of or in communication with said measuring well.

1,887,932. TANK. JOHN E. KETONEN, White Plains, N. Y. Filed June 18, 1928. Serial No. 286,162. 5 Claims. (Cl. 180—9.1.)



1. In a vehicle the combination of a plurality of continuous treads, frames supporting the treads, a main tank body having an automobile suspension, sliding connections between the main tank body and the frames supporting the treads, a motor carried by said main tank body, driving gear connected with said motor and with said main tank body for enabling said motor to drive said automobile suspension, hoisting mechanism connected with said motor and driven thereby for raising and lowering the frames and treads carried thereby relatively to said automobile suspension, and gearing connected with said hoisting mechanism and actuated by hoisting movements thereof for connecting said driving gear with said treads and for disconnecting the same therefrom.

1,887,933. REFRIGERATING APPARATUS. JESSE G. KING, Dayton, Ohio, assignor to Frigidaire Corporation, Dayton, Ohio, a Corporation of Delaware. Filed Apr. 26, 1929. Serial No. 358,299. 15 Claims. (Cl. 62—126.)

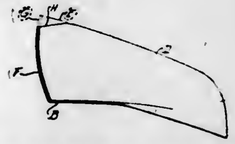


1. An evaporator for refrigerating apparatus including a header, and an enclosure for an ice making receptacle, said header having one or more depressions in its under portion, fastening means attached to said enclosure and projecting for a major portion of its length into said depressions whereby said enclosure is close coupled to said header.

1,887,934. METHOD OF MARKING AND PRODUCING DESIGNS ON PAPER. OTTO KRESS, Appleton, Wis. Filed June 5, 1929. Serial No. 368,744. 2 Claims. (Cl. 92—40.)

1. That step in the method of marking paper in a predetermined design, which consists in applying to a damp sheet web of paper, a bleaching compound in predetermined areas, whereby said areas will be bleached a lighter color than the body of the sheet.

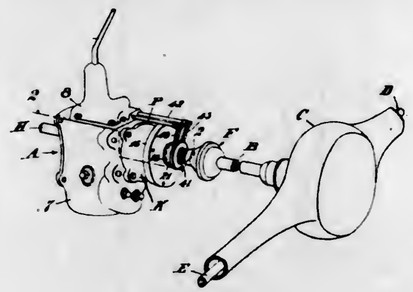
1,887,935. SHOE COUNTER. JOHN W. LAKE, St. Louis, Mo. Filed Sept. 21, 1931. Serial No. 563,997. 1 Claim. (Cl. 36—68.)



A shoe counter having wing portions provided with an upper edge which slopes upwardly to the back of the counter, said upper edge at its center having an arcuate cutout therein, whereby to form a relatively slight depression, without, in any way weakening the center structure, and whereby the tendency of the formation of an inwardly extending overhang is avoided when the counter is incorporated in a shoe.

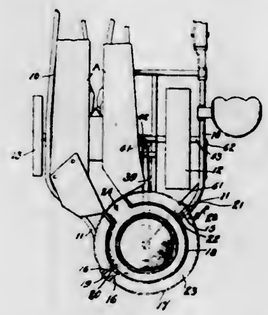
1,887,936. MOTOR VEHICLE BRAKE. FRANK C. LAMB, Los Angeles, Calif. Filed Apr. 21, 1930. Serial No. 445,967. 9 Claims. (Cl. 192—4.)

1. The combination with the transmission mechanism, the transmission control lever and the propeller shaft of a motor vehicle; of brake means for normally inhibiting reverse rotation of said propeller shaft, means controlled by the transmission control lever for placing said brake means out of operative relation with said



propeller shaft when said control lever is actuated to place said transmission mechanism in reverse, and separate means independent of said transmission operable by said transmission control lever for placing said brake means out of operative relation with said propeller shaft.

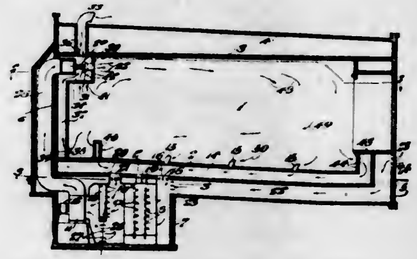
1,887,937. CORN HARVESTER. JOSEPH LANG, Philadelphia, Pa. Filed Mar. 14, 1932. Serial No. 598,595. 4 Claims. (Cl. 56—71.)



1. A corn harvester comprising in combination a cutting and elevating mechaniam, a drum positioned to receive cut stalks from the elevating mechanism, a rotating device within the drum adapted to carry the stalks about the drum, a stop for limiting the orbital movement of the stalks, means facilitating the swinging of the drum to a lateral position, means to drop the shock of corn formed within the drum, and means to open the drum to release the dropped shock.

1,887,938. NOZZLE HEATING, COOLING AND VENTILATING SYSTEM. GEORGE C. LEWIS, Philadelphia, Pa. Filed Mar. 19, 1931. Serial No. 523,660. 6 Claims. (Cl. 98—33.)

1. In a heating cooling and ventilating system, a compartment adapted to be heated, cooled, ventilated or to have the air therein otherwise conditioned, air conditioning devices including heating, cooling and humidifying elements, an intake air duct leading to said air conditioning devices, inlet openings in the floor of said compartment leading to said intake air duct, valved inlets intermediate said air duct and said respective air conditioning devices, a blower, a discharge air duct into which the conditioned air is adapted to be forced by said blower, a discharge jet at the end of said discharge air duct, a mixing chamber into which said discharge jet projects, a conduit communicating at its upper end with said



mixing chamber and at its lower end with the inside of said compartment at a point near the floor thereof and an aspirating nozzle leading from said mixing chamber to said compartment, said aspirating nozzle having a flared portion juxtaposed to the end of said discharge jet.

1,887,939. GARMENT SUPPORTER. GRACE J. LYONS, Bronx, N. Y., assignor, by mesne assignments, to Elasto Ribbon Co., Inc., New York, N. Y., a Corporation of New York. Filed Dec. 4, 1931. Serial No. 578,911. 3 Claims. (Cl. 241—12.)

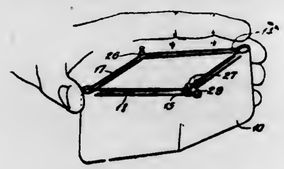


1. A supporter for attachment to a garment, said supporter comprising an elongated inelastic element, a take-up means comprising one or more elastic elements combined with said inelastic element, the elasticity of the take-up means being sufficient to take up slack in the inelastic member, but insufficient alone to support the garment to which it is attached.

1,887,940. CLOSURE DEVICE. DAVID MARINSKY, New York, N. Y. Filed Mar. 3, 1930. Serial No. 432,697. 7 Claims. (Cl. 150—6.)

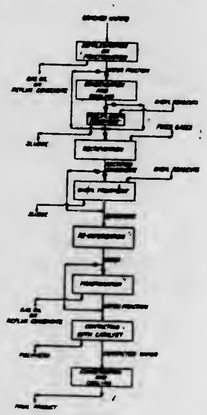
1. A closure device of the class described comprising two similar spring link units arranged in opposed relation, each unit comprising a pair of straight rods, means involving a coil spring for pivotally coupling one end of each pair of rods, said spring having end portions engaging

said rods to support the same in predetermined relation with respect to each other and to dispose the coils of said springs in spaced relation to the ends of said rods,



and the other ends of the rods of the separate units being pivotally coupled to form a frame having the spring pivots disposed at opposed ends of the frame.

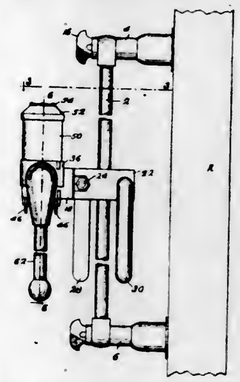
1,887,941. PROCESS OF TREATING HYDROCARBONS. NORMAN H. MOORE, Westfield, N. J., assignor to The Texas Company, New York, N. Y., a Corporation of Delaware. Filed Jan. 15, 1930. Serial No. 421,027. 6 Claims. (Cl. 196—96.)



1. In the method of treating hydrocarbon vapors evolved during cracking under superatmospheric pressure, the steps which comprise subjecting the evolved vapors to dephlegmation under superatmospheric pressure to form a reflux condensate and an overhead vapor fraction having an end point higher than that desired for the final product, condensing the vapor fraction to form a distillate, subjecting the distillate to preliminary chemical treatment for partial removal of impurities, subjecting the treated distillate to rectification under reduced superatmospheric pressure to form a condensate of desired vapor tension, chemically treating the rectified condensate for further removal of impurities, re-vaporizing the chemically treated condensate, fractionating the revaporized condensate to form a vapor of desired final end point and a liquid free from constituents desired for the final product, contacting said vapor with solid adsorbent catalytic material to polymerize its undesirable unsaturated constituents and separating and condensing the remaining vapors to form a treated final product.

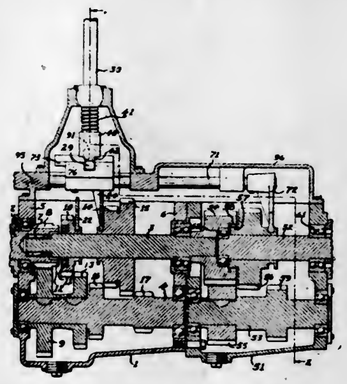
1,887,942. REDUCING APPARATUS. ARTHUR B. MUELLER, Kansas City, Mo. Filed May 19, 1930. Serial No. 453,771. 6 Claims. (Cl. 272—79.)

1. In an apparatus of the character described, a tubular shaft adapted to hold a lubricant and provided with outlet ports, a hand lever for operating said shaft and closing one end thereof, suitable means closing the opposite end



of said shaft, and supporting means frictionally engaging said shaft for retarding the operation thereof.

1,887,943. TRANSMISSION GEARING. JOSEPH E. PADGETT and CARL D. PETERSON, Toledo, Ohio, assignors to Spicer Manufacturing Corporation, Toledo, Ohio, a Corporation of Virginia. Filed June 25, 1931. Serial No. 546,726. 11 Claims. (Cl. 74—39.)

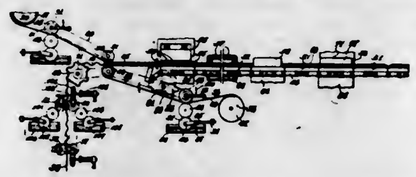


1. In a transmission gearing, the combination of a main gear set including shiftable gear elements, and an auxiliary gear set including shiftable gear elements, a single selecting and shifting lever normally located in neutral position, and a plurality of shift rods operated by the lever, one of said shift rods being connected to a shiftable element of the auxiliary gear set and said lever and said shift rod having coacting means permitting uncoupling of the lever from the shift rod and the return of the lever to neutral position independently of said shift rod.

1,887,944. MACHINE FOR MAKING MATCH PACKAGES. RODNEY S. PULLEN, Philadelphia, Pa., assignor to Pullenlite Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Dec. 7, 1928. Serial No. 324,414. 17 Claims. (Cl. 93—2.)

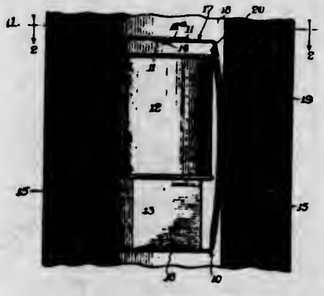
1. In mechanism for manufacturing a packet of the character indicated of headed matches, an intermittent conveyer having carrying units adapted to successively receive the assembled upper and lower cover sheets and intermediate corrugated paper for successive packet sections,

members operating during the forward movements of the conveyer for forwardly feeding the lower cover sheet, upper cover sheet and the corrugated paper intermediate the cover sheets, for applying glue to the inside surface of the lower cover sheet, glue to the inside surface of the upper cover sheet and for applying ignition material to



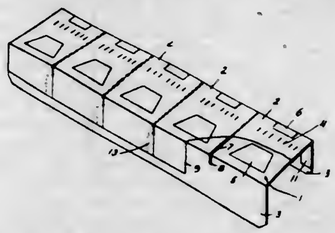
both sides of the corrugated paper along a portion thereof more distant from the match heads and other members operating at different carrying units during the rest periods of the conveyer, for gluing and forming the packet and for delivering matches stick end foremost into the packet sections.

1,887,945. PACKAGE HOLDER. JOSEPH R. RICHER, Oak Park, Ill., assignor to Jens P. Nielsen. Filed Nov. 10, 1930. Serial No. 494,504. 1 Claim. (Cl. 206—59.)



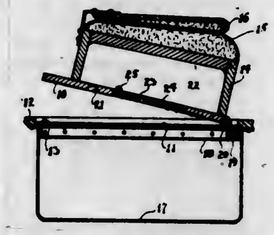
A package holder of the character described comprising a thin strip of spring sheet metal bent to a substantially rectangular form to provide two side members of arcuate cross section and bowed outwardly away from each other and an integral connecting member acting as a strut to space two corresponding ends of the side members, the ends of the strip being bent toward each other into overlapping relation to form a strut between the other ends of the side members, and means securing said overlapped portions together to limit movement of the ends of the side members toward each other.

1,887,946. DISPLAY DEVICE. RUDOLPH M. SANDERS, New York, N. Y., assignor to Adartcraft, Inc., New York, N. Y., a Corporation of Delaware. Filed June 2, 1931. Serial No. 541,612. 7 Claims. (Cl. 40—126.)



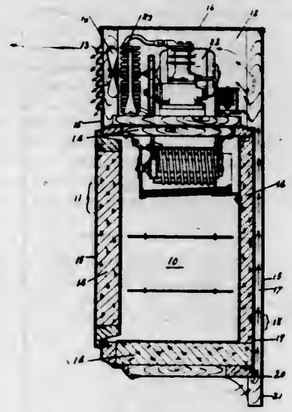
1. A display device comprising a member formed to simulate a plurality of individual packages, said member being provided with relatively narrow slots between adjacent package representations, and a sheet of transparent wrapping material arranged over said member and extending into said slots.

1,887,947. VEHICLE SEAT. LOUIS C. SAVALE, West Orange, N. J., assignor of one-half to Howell Topping, Orange, N. J. Filed Apr. 11, 1929. Serial No. 354,222. 6 Claims. (Cl. 155—32.)



1. The combination with a floor area having an opening therethrough and a space below said opening adapted to receive a seat structure of tracks adjacent opposite sides of said opening, a base plate fitted to said opening, members hinged to said base plate, means carried by said hinged members slidably mounted in said tracks, whereby said base plate may be inverted, and a non-collapsible seat member permanently secured to one side of said base plate.

1,887,948. REFRIGERATING APPARATUS. CHARLES W. SCHERER, Dayton, Ohio, assignor, by mesne assignments, to Frigidaire Corporation, a Corporation of Delaware. Filed Jan. 31, 1927. Serial No. 164,722. 4 Claims. (Cl. 62—116.)

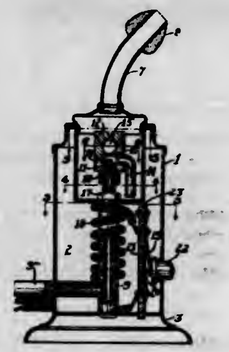


1. In a refrigerating apparatus a cabinet having a plurality of side walls enclosing a refrigerating compartment and a machine compartment above the refrigerating compartment, the side walls including insulating members and facing members, a facing member spaced from one of said insulating members to provide a conduit for cooling air communicating with the machine compartment and having its inlet near the bottom of the cabinet.

1,887,949. MEDICINAL SPRAY. JOY B. SCHMITT, Toledo, Ohio, assignor to The De Vilbiss Company, Toledo, Ohio, a Corporation of Ohio. Filed Aug. 28, 1930. Serial No. 478,361. 7 Claims. (Cl. 299—88.5.)

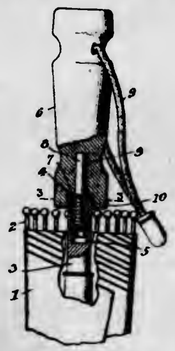
1. A device of the class described, comprising a casing forming a heating chamber, the top of said casing hav-

ing a receptacle depending therefrom into the heating chamber, said receptacle being provided at its top with a discharge outlet, an air pressure supply tube entering the bottom portion of the receptacle through said chamber and having a discharge nozzle within the receptacle, a head cooperating with said discharge nozzle to form a chamber therearound in communication with the lower interior portion of the receptacle and also forming a liquid discharge opening from said surrounding chamber around the end of the nozzle and having a cross opening into which said air nozzle and liquid discharge openings have their discharge, whereby material contained in the receptacle is sprayed into said cross opening by the air discharge action and is finely broken up therein by contact with the wall of said cross opening and then discharged in spray form into the receptacle from the opposite ends of the cross opening.



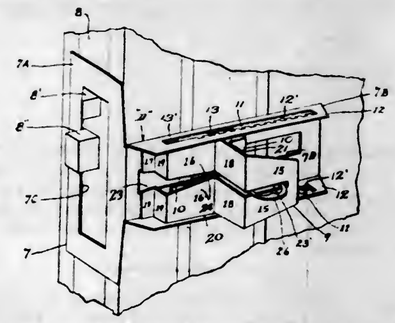
2. In a device of the class described, a casing forming a heating chamber, means closing the upper end of the casing and forming a receptacle which extends down into the casing, said receptacle having a removable cover with a discharge tube carried thereby, an air pressure actuated liquid spraying device disposed within said receptacle and having a spray baffling part associated therewith for breaking up and directing the spray into the receptacle laterally from the spraying device, an air supply tube for said spraying device extending down into the heating chamber through the bottom of the receptacle and thence from the chamber, said tube forming a tying means for the receptacle and casing, an electric heating unit disposed around said tube within the heating chamber, and a switch in circuit with said coil controlled exteriorly of the casing.

1,887,950. INTERCHANGEABLE UMBRELLA HANDLE. MILTON H. SIEGEL, Baltimore, Md., assignor to Siegel, Rothschildgans Bros., Inc., Baltimore, Md. Filed July 6, 1932. Serial No. 621,128. 4 Claims. (Cl. 135—46.)



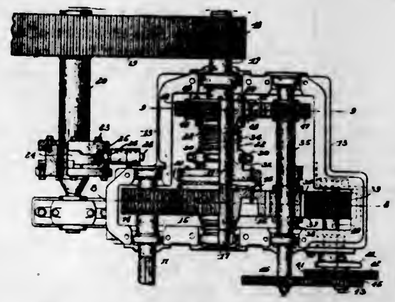
1. An umbrella staff provided at its end with a socket, an internally threaded collar housed in the socket, a handle provided at its end with a socket adapted to receive the end portion of the stiff and a threaded pin carried by the handle and concentrically positioned with relation to the socket thereof and adapted to engage said collar.

1,887,951. KEY FASTENER. MAURICE L. CRUM, Chicago, Ill. Filed Nov. 4, 1929. Serial No. 404,696. 7 Claims. (Cl. 70—7.)



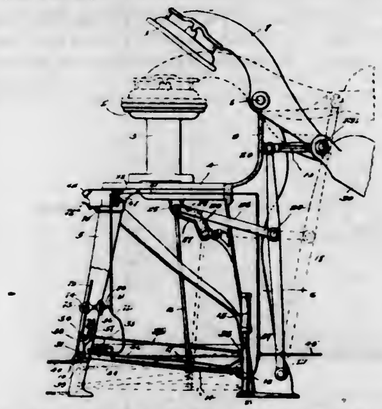
1. In a key fastening device comprising, in combination; a bent plate having a channel shaped portion having notched elongated openings therein, said plate being adapted to be arranged around an inside corner of a door, over a door key and over lock-bars which extend from the door lock and into a lock plate as being arranged in a frame in which the door is hung when the door is in its closed locked position, and a slidable key fastening means being adapted to be adjustably arrangeable to various positions in said channel shaped portion to a position for preventing the door key from being turned.

1,887,952. SHEARING MECHANISM. FRANCIS W. HARNEY, Lockport, N. Y., assignor to The Upson Company, Lockport, N. Y., a Corporation of New York. Filed Jan. 18, 1929. Serial No. 333,431. 1 Claim. (Cl. 74—59.)



Shearing mechanism comprising a rotary cutting element, a shaft operatively connected to said cutting element to rotate the element, a gear mounted on said shaft, an overrunning clutch connection between said gear and said shaft, means for driving said gear relatively slowly to rotate said cutting element relatively slowly during one part of each revolution, a second gear rotatably mounted on said shaft, clutch teeth associated with said second gear, complementary clutch teeth operatively connected to said shaft, means for driving said second gear relatively rapidly, and mechanism for automatically engaging said complementary clutch teeth with said clutch teeth associated with said second gear during another part of each revolution of said cutting element, to cause said element to rotate more rapidly during said other part of each revolution.

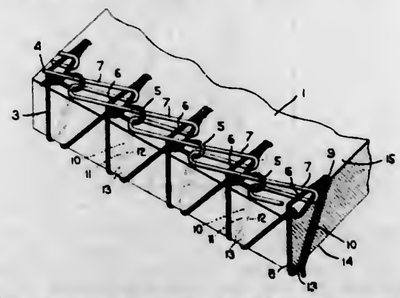
1,887,953. COMBINED FOOT AND POWER OPERATED PRESSING MACHINE. ERNEST DAVIS, Syracuse, N. Y., assignor to The Prosperity Company, Inc., Syracuse, N. Y., a Corporation of New York. Filed Mar. 24, 1928, Serial No. 264,389. Renewed May 21, 1931. 19 Claims. (Cl. 68—9.)



1. In a pressing machine, cooperating pressing elements, one of which is movable toward and from the other, mechanism for actuating the movable element including a pedal, a power actuator and a differential motion transmitting member common to the pedal and the power actuator whereby the force of the actuator is transmitted to the pedal against the foot of the operator, and operator-operated means for controlling the operation of the power actuator.

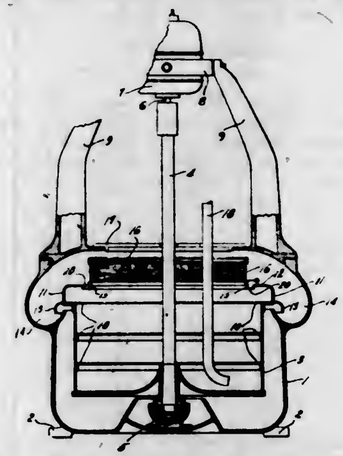
18. In a garment or laundry pressing machine in combination cooperative pressing elements, one of which is movable with respect to the other to open and close the press; operating mechanism for the movable pressing element including a pedal and motion transmitting means between the pedal and the movable pressing element for transmitting force from the pedal to the movable pressing element to close the press; a brake drum connected to and rotated by the pedal during movement thereof; and a brake coacting with the brake drum and operable to lock the pedal and to hold the press closed.

1,887,954. STITCHED BUTTONHOLE. JOSEPH PIKUL, Troy, N. Y., assignor to The Reece Button Hole Machine Company, Boston, Mass., a Corporation of Maine. Filed July 17, 1931. Serial No. 551,397. 6 Claims. (Cl. 112—264.)



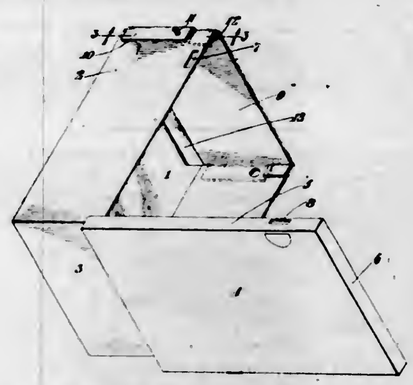
1. A stitched buttonhole comprising a piece of goods with a buttonhole slit and a series of concatenated thread loops binding the edge of the buttonhole slit, certain of the loops passing through the slit and other loops passing through the work and emerging therefrom on one face thereof at a greater distance from the slit than on the other face thereof, the interlocking of the thread loops being on said first-named face.

1,887,955. PAPER PULP EXTRACTOR. LEMUEL V. REESE and GEORGE W. JOHNSON, Cincinnati, Ohio, assignors to The American Laundry Machinery Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Mar. 2, 1931. Serial No. 519,448. 4 Claims. (Cl. 233—2.)



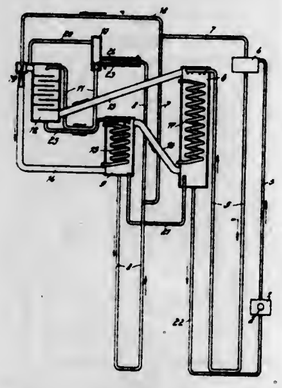
1. Apparatus of the class described, comprising a rotatable basket wherein material is subjected to centrifugal action for separating the material into different strata in accordance with the specific gravity of the different parts of the material, means for delivering one stratum from the basket, and means for segregating another stratum of the material, extracting liquid from said segregating stratum, and delivering such liquid to the stratum delivered from the basket.

1,887,956. METER CONNECTION BOX. ALBERT B. RYPINSKI, Laurelton, N. Y., assignor, by mesne assignments, to Metropolitan Device Corporation, a Corporation of New York. Filed Oct. 12, 1928. Serial No. 312,072. 3 Claims. (Cl. 247—2.)



3. A meter box having an open end and having side walls, a cover for said box having flanges overlapping the edges of said side walls, a removable end wall having a flange overlying the inner face of said wall, an outer flange overlying the outer face of said side wall adjacent the open end of said box beyond said cover flange, a rear flange overlying the front surface of the rear wall of said box adjacent said open end, and means for securing the side walls of said box to said outer flange of said end wall.

1,887,957. ABSORPTION REFRIGERATING MACHINE. EDMUND ALTENKIRCH, Neuenhagen, near Berlin, Germany, assignor to Siemens-Schuckertwerke Aktiengesellschaft, Berlin-Siemensstadt, Germany, a Corporation of Germany. Filed June 8, 1929, Serial No. 369,358, and in Germany June 16, 1928. 21 Claims. (Cl. 62—119.5.)



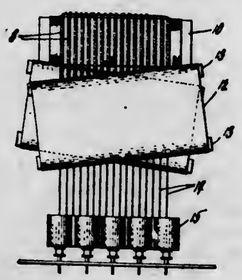
3. In an absorption machine involving a cycle of generation, resorption, evaporation into an inert gas and absorption, the method of setting the gas mixture in circulation through the evaporator, the resorber and the absorber, by introducing into it working medium generated at a higher pressure.

1,887,958. WEIGHTING ANIMAL HAIRS. GUSTAV SCHWEN, Ludwigshafen-on-the-Rhine, and HANS KRZIKALLA, Mannheim, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Filed Nov. 6, 1930, Serial No. 493,909, and in Germany Nov. 19, 1929. 9 Claims. (Cl. 8—13.)

1. The process for weighting animal hairs which comprises acting on animal hairs with an aqueous preparation comprising at least 10 per cent by weight of the hairs of a water-soluble organic non-dyeing halogenated compound having a high molecular weight and an affinity for animal fibres.

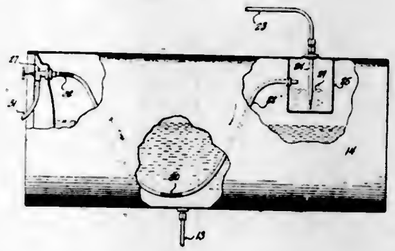
3. As new articles of manufacture animal hairs combined with and weighted by at least 5 per cent their weight of an organic non-dyeing halogenated compound having a high molecular weight and an affinity for animal fibres.

1,887,959. MANUFACTURE OF PULP ROVINGS. JOHN C. SHERMAN, Gorham, Me., assignor to Brown Company, Berlin, N. H., a Corporation of Maine. Filed June 6, 1931. Serial No. 542,646. 4 Claims. (Cl. 92—39.)



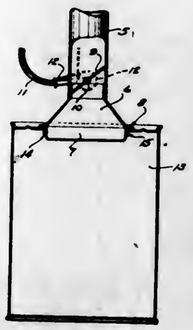
1. A method which comprises progressively depositing from aqueous pulp suspension on an endless travelling wire cloth a series of continuous pulp ribbons, progressively furling the damp ribbons into rovings, and progressively leading the damp rovings into spinning pots under conditions to build up compact annular masses from which the rovings may be progressively withdrawn.

1,887,960. CONSTANT LEVEL SAFETY DEVICE FOR LIQUID FUEL LIGHTERS. JOSEPH SLADKY and ALEXANDER C. SLADKY, Milwaukee, Wis., assignors to National Enameling & Stamping Company, Inc., Milwaukee County, Wis. Filed Feb. 11, 1929. Serial No. 339,168. 1 Claim. (Cl. 158—81.)



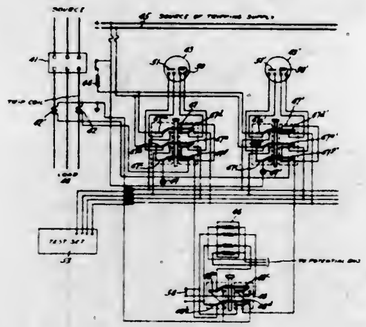
In a constant level safety device for liquid fuel lighters, a supply and storage tank, an auxiliary supply tank carried by the top wall of the main supply storage tank, and arranged within the main tank and depending from said top wall, said auxiliary supply tank being normally arranged above the fuel level in the main tank, an outlet fuel pipe leading from the auxiliary supply tank, and a pipe for feeding air under pressure extending into the main tank and having a loop provided with an opening arranged adjacent the bottom of the tank, the inner end of said pipe extending into the auxiliary supply tank above the liquid level thereof.

1,887,961. DISPENSER FOR MATERIALS IN THEIR ORIGINAL CONTAINERS. PAUL D. SMITH, Minneapolis, Minn. Filed June 1, 1931. Serial No. 541,157. 2 Claims. (Cl. 221—23.)



1. The combination with a can having in its top a central opening, a spout having an expanded base provided with a joint flange extending into said opening and engaging the can with sufficient friction to hold the spout in an operative position thereon, a spring closed valve turnably mounted in the spout and having a finger piece relatively close to the top of the can, said can being of such size that the same may be held in the palm of a hand with certain of the fingers extending therearound and with one of the fingers extending above the top of the can for engagement with the finger piece to operate the same and open the valve.

1,887,962. TESTING ARRANGEMENT FOR POWER CIRCUITS. PHILIP SPORN, Brooklyn, and HENRY D. FREITAG, Lynbrook, N. Y., assignors to Electric Progress Company, Inc., New York, N. Y., a Corporation of New York. Original application filed Sept. 17, 1924, Serial No. 738,272. Divided and this application filed Dec. 5, 1930. Serial No. 500,180. 5 Claims. (Cl. 175—183.)



2. In a testing arrangement for power station apparatus, an alternating-current power line, a current transformer energized by said line, a plurality of auxiliary apparatus associated with said line, each of said auxiliary apparatus having a current element adapted to be connected in series with each other to form a closed circuit with said current transformer to be energized thereby, a testing device for one of said auxiliary apparatus, and switch means for disconnecting said auxiliary apparatus from its normal operating circuits and said current transformer and connecting said auxiliary apparatus to said testing apparatus, said switch means being so arranged that on being actuated from operating to testing position the connections to the current element of the auxiliary apparatus to be tested are bridged and a closed circuit for the current transformer and the current element of the other auxiliary apparatus is completed prior to opening of the closed circuit connection to the current element of the aparatus to be tested, and on being actuated from testing position to operating position said switch means restore the normal closed circuit connections of said transformer prior to opening of said bridging closed circuit.

1,887,963. NUT FOR VALVE STEMS. DAVID G. STAFFORD, Vancouver Island, British Columbia, Canada. Filed Nov. 19, 1930, Serial No. 496,653, and in Canada Nov. 15, 1930. 2 Claims. (Cl. 85—33.)



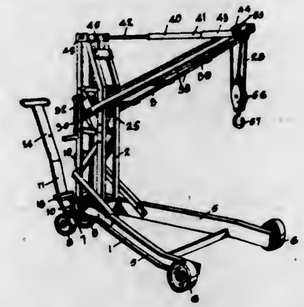
1. A quick detachable nut comprising a pair of sections, said sections being internally threaded to receive between them a valve stem and also externally threaded at one end to receive a dust cap; and a spring slip ring adapted to be slipped over the nut sections to hold the sections together, said nut being formed with an annular groove below the externally threaded portion into which said spring slip ring is adapted to project.

1,887,964. WRIST PIN. RAY N. STEELE, Cedar Rapids, Iowa. Filed June 25, 1930. Serial No. 463,650. 4 Claims. (Cl. 74—108.)

1. A wrist-pin for an internal combustion motor, comprising a tubular body member having a portion externally cylindrical, provided adjacent its ends with perforations for the reception of securing means, and having imperforate closure members fitting tightly within the tubular member, and located closely adjacent said perforations, to serve as supporting means for the tubular member whereby to prevent distortion with as little increase in weight of the tubular body member as possible.

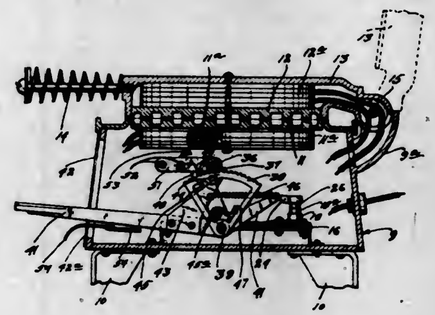


1,887,965. HOIST DERRICK. FRANK H. STONER, Monroe, Mich. Filed Apr. 8, 1931. Serial No. 528,512. 2 Claims. (Cl. 254—139.)



1. In a hoist, a base part having a swiveled truck and supporting wheels, a derrick, a cable suspended from the end of the beam, a shaft supported in the derrick and for oscillatively supporting the beam and rotatively supporting the drum, sleeves surrounding the shaft and extending through the derrick and the beam for preventing binding of the shaft by the pressure transmitted through the beam, and means for changing the angle between the beam and the derrick.

1,887,966. ELECTRIC WAFFLE IRON. LLOYD C. STRITE, Minneapolis, Minn. Filed Mar. 12, 1927. Serial No. 174,783. 4 Claims. (Cl. 161—16.)



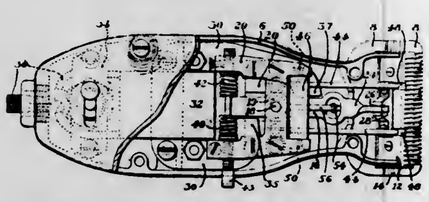
1. In a timing mechanism for use with electric heating elements and a two position switch mechanism normally connecting the elements in series and in its second position connecting the elements in multiple, a timed power mechanism with a pinion, a gear subject to said pinion, a common control lever having an arm operative to move said gear into a set position and to set the timed mecha-

nism into action, a trip arm eccentrically pivoted to said control lever and a spring connected thereto for tripping movement when released, a latch engageable with said trip arm to hold the same in a set position during the timed operation, said lever operating to move said trip arm into engagement with said latch, and a connection between said trip arm and a pivoted member designed to assume two selected positions.

1,887,967. COMPOSITION FOR COATING METALS AND METHOD OF MAKING THE SAME. ROBERT R. TANNER, Detroit, and VAN M. DARSEY, Morenci, Mich., assignors to Parker Rust Proof Company, Detroit, Mich., a Corporation of Michigan. Filed Jan. 10, 1929. Serial No. 331,705. 6 Claims. (Cl. 148—6.5.)

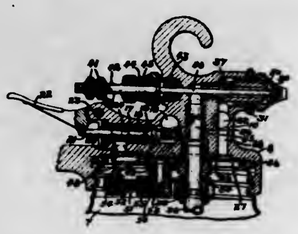
1. A granular or powdery material for replenishing a metal-coating bath, comprising soluble phosphates of copper and of metal as basic as iron, the phosphates of metal as basic as iron constituting the major portion of the material.

1,887,968. HAIR CLIPPER. FREDERICK N. TOMPKINS, Pawtucket, and IRVING O. MINER, East Greenwich, R. I., assignors to Brown and Sharpe Manufacturing Company, a Corporation of Rhode Island. Filed Dec. 28, 1928. Serial No. 329,009. 9 Claims. (Cl. 30—1.)



1. A hair clipper having, in combination, a movable cutter blade, a cutter blade cooperating therewith, an electro-magnet, an armature movable towards and from the poles of the magnet and connected to the movable blade, and unitary spring tensioning means engaging the movable blade to press it against the cooperating blade and tending to hold the movable blade in rest position yieldingly against movement by the armature in either direction.

1,887,969. SPRAY GUN. ROBERT W. TRACY, Toledo, Ohio, assignor to The De Vilbiss Company, Toledo, Ohio, a Corporation of Ohio. Filed Sept. 18, 1929. Serial No. 393,546. 6 Claims. (Cl. 91—45.)



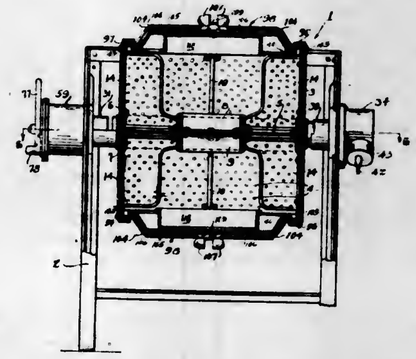
5. In a spraying device, a cover assembly for a receptacle containing liquid to be sprayed, comprising a housing having a base constituting a cover and provided with means for attaching it to the receptacle, said housing having an air passage and a liquid passage terminating in a spray nozzle, said base being formed with a channel in its inner face constituting a part of said air passage, a member closing the face of said channel, and a liquid tube secured to the base in line with the liquid passage and at the same time securing said member to said base.

1,887,970. DENTAL PLATE. LUIS M. VALBUENA, New York, N. Y. Filed Jan. 9, 1931. Serial No. 507,541. 8 Claims. (Cl. 32—4.)



1. In a dental plate, a suction chamber containing tissue supporting projections located therein, and provided with a vertical air passageway extending from the base of the suction chamber to communicate with a horizontal cavity in one of the teeth of the denture, a circumferentially contractable valvular element situated within the horizontal cavity and including a pin-hole opening at its exposed surface to facilitate the initial withdrawal of air from the interior of the valvular element, whereby, the withdrawal of air from the suction chamber around the periphery of the valvular element is facilitated upon the creation of a partial vacuum in the mouth.

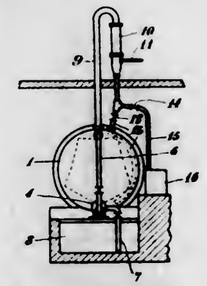
1,887,971. WASHING MACHINE. DAVID M. WENGER, Leola, Pa. Filed Apr. 27, 1929. Serial No. 358,713. 14 Claims. (Cl. 68—18.)



1. A washing machine comprising a support, oppositely disposed alined cylindrical bearings fixed to said support, a cylindrical receptacle having alined diametrically opposite trunnions extending from the opposite sides of said receptacle and rotatably mounted in said bearings, means extending into one of said bearings and engageable with one of said trunnions to cause rotation of the receptacle in said bearings, yielding means in said bearings to prevent driving connection of said rotation causing means with said trunnion, and means engageable with the other trunnion to move the first named trunnion into driven connection with the said rotation causing means.

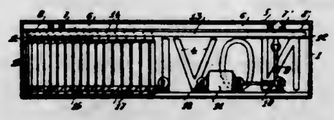
1,887,972. PROCESS OF TANNING HIDES. GEORG VIKTOR WRANGE, Stockholm, Sweden, assignor of one-half to Aktiebolaget Friberg's Hogvacuumpump, Stockholm, Sweden, a Company of Sweden. Filed Mar. 4, 1931, Serial No. 519,923, and in Sweden Mar. 11, 1930. 2 Claims. (Cl. 149—4.)

1. In the process of tanning hides and the like, which consists in subjecting the material to be tanned to the influence of vacuum and a circulating tanning solution, the steps of drawing off vapours and the like formed during such vacuum treatment and condensing such vapours, and reintroducing such condensate according as it is formed and while the tanning process proceeds directly



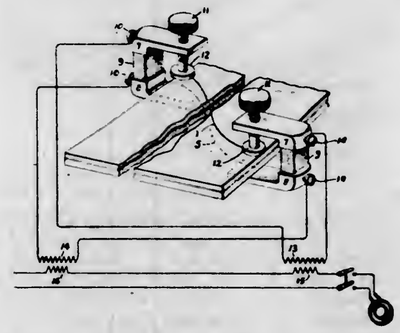
into the tanning solution, for the purpose of maintaining the percentage of volatile acids in the tanning solution as constant as possible during the entire tanning process.

1,887,973. LUMINOUS SIGN. GUGLIELMO ANGELI, Rome, Italy. Filed Apr. 10, 1931, Serial No. 529,234, and in Italy Feb. 7, 1931. Renewed Mar. 19, 1932. 3 Claims. (Cl. 40—133.)



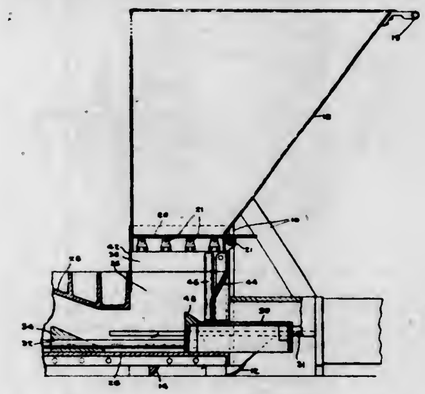
1. A device of the class described comprising a source of light, a horizontally directed opaque panel having cut out display matter, glass rods inserted in the resulting display openings, a curtain comprising a band and a plurality of multicolored transparent solid glass rods suspended from said band, interposed between said source of light and said panel, and means for causing continuous travel of said band.

1,887,974. METHOD OF CUTTING GLASS. CHARLES J. BARROW, Albany, N. Y. Filed Apr. 16, 1928. Serial No. 270,509. 10 Claims. (Cl. 49—50.)



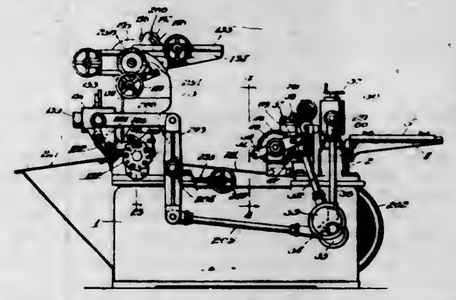
9. Process of severing laminated glass of which the laminations are secured together by shatter preventing binding material, which comprises cracking the glass layers along a predetermined line of separation, the binding material at said line being separated by the controlled application of heat along said line only, sufficient to soften only a narrow strip of the binding material at said line.

1,887,975. CHARGING DEVICE FOR FURNACES. CHESTER E. BETCHER, Minneapolis, Minn., assignor to Anna A. Betcher, Minneapolis, Minn. Filed July 22, 1929. Serial No. 380,026. 3 Claims. (Cl. 198—226.)



1. A charging device for furnaces comprising a throat member adapted to deliver to a furnace, a chute connected with the upper portion of said throat member, a plunger operating in said throat member for forcing fuel therefrom into the furnace, and scrapers carried by said plunger in scraping engagement with the side walls of said chute.

1,887,976. ADJUSTABLE PARTITION MACHINE. WALTER E. JENSEN, Chicago, Ill., assignor to Partition Machinery, Inc., a Corporation of Illinois. Filed May 3, 1929. Serial No. 360,093. 9 Claims. (Cl. 93—37.)

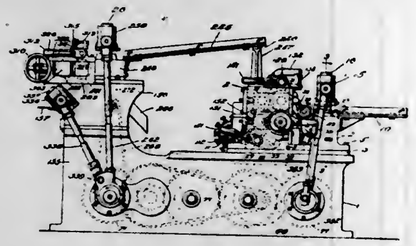


1. In a machine of the character described, means to feed and punch a sheet and cut it into longitudinal strips, a stationary guide extending transversely of the strips, a plurality of carriages on and movable lengthwise of said guide, means to lock the carriages to the guide, feed rollers on each carriage to engage one of the strips and feed it ahead, shears on each carriage in advance of the rollers to sever the corresponding strip, means to operate the feed rollers and the shears in all positions of the carriage, and means to punch a second sheet and cut it into transverse strips and feed such strips into interlocking engagement with the longitudinal strips.

1,887,977. PARTITION MACHINE. WALTER E. JENSEN, Chicago, Ill., assignor to Partition Machinery, Inc., a Corporation of Illinois. Filed Apr. 20, 1931. Serial No. 531,490. 25 Claims. (Cl. 93—37.)

1. In a machine of the character described, feed rolls, a rotatable driving member, mechanism between said member and the rolls to turn the latter step by step during rotation of said member, a movable selective device deter-

mining the length of each individual step according to the position of the device, and means actuated by said member to bring said device into a different position



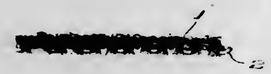
for each step through which the rolls are turned, and mechanism cooperating with a sheet fed by said feed rolls, and a second sheet to form cell cases.

1,887,978. CATALYST. HENRY JOSEPH, St. Albans, N. Y., assignor to General Chemical Company, New York, N. Y., a Corporation of New York. Filed Sept. 23, 1931. Serial No. 564,719. 19 Claims. (Cl. 23—175.)

8. The method of effecting gas phase catalytic reactions which comprises contacting a gas mixture containing reactant constituents and heated to a reactive temperature with a catalyst comprising vanadium in chemical combination distributed on a finely divided carrier and containing sodium and potassium in such quantities that the ratio of sodium to potassium, calculated as sulfates, is not substantially greater than 0.5 and not substantially less than 0.25.

16. A vanadium catalyst containing sodium and potassium in such quantities that the ratio of sodium to potassium, calculated as sulfates, is not substantially greater than 0.5 and not substantially less than 0.25.

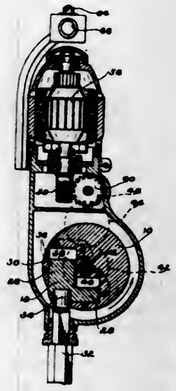
1,887,979. FIBROUS COVERING AND METHOD OF MAKING SAME. HAROLD L. LEVIN, Nutley, N. J., assignor, by mesne assignments, to The Flintkote Corporation, Boston, Mass., a Corporation of Massachusetts. Original application filed Jan. 17, 1927, Serial No. 161,711. Divided and this application filed May 29, 1930. Serial No. 457,474. 7 Claims. (Cl. 91—68.)



2. A floor covering or like article comprising a woven or open mesh fabric, loosely felted fibers formed with one face of said fabric and extended through the interstices, of the foundation and secured thereto by a continuous film of waterproofing material derived from a thickened emulsion thereof.

1,887,980. POWER HAMMER. ROBERT P. MARTIN, Seattle, Wash., assignor of one-fourth to Horace Byford, Seattle, Wash. Filed July 30, 1930. Serial No. 471,873. 3 Claims. (Cl. 78—34.)

1. In a power hammer, a tool; a revolvable shaft; means for driving said shaft; a hammer base fixedly secured to said revolvable shaft; an L-shaped hammer member having a body portion adapted for limited reciprocal movement within and tangent to the circle of rotation of said hammer base; and an L-shaped portion which extends at right angles to the body portion, toward the direction of travel of the hammer for substantial radial movement in and with respect to the plane of rotation of

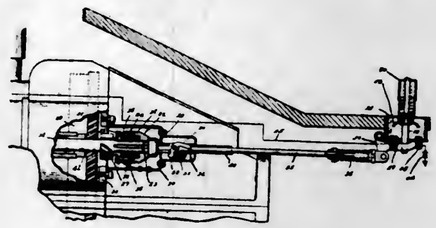


the hammer under the influence of centrifugal force developed by said base to move said body portion along its path of movement.

1,887,981. BRAKE LINING. ADOLPH ROSNER, South Bend, Ind., assignor to Bendix Brake Company, South Bend, Ind., a Corporation of Illinois. Filed Oct. 27, 1930. Serial No. 491,500. 9 Claims. (Cl. 28—1.)

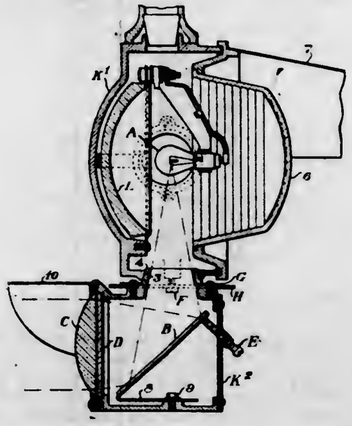
8. A friction facing comprising a woven fabric matrix impregnated with cyanide salt, castor oil, synthetic resin and lead.

1,887,982. STARTER. WILLIAM CARLETON STARKEY, Indianapolis, Ind., assignor to L. G. S. Devices Corporation, Indianapolis, Ind., a Corporation of Indiana. Filed May 9, 1927. Serial No. 190,030. 13 Claims. (Cl. 74—7.)



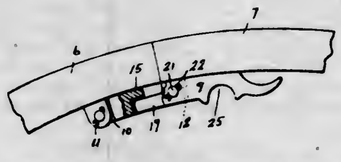
1. An engine starting device, comprising a helical gear connected to the engine, a starter-motor, a switch therefor, a starter-motor-driven shaft, a helical pinion slidable on said shaft into and out of mesh with said gear, an overrunning clutch connecting said shaft and pinion, a thrust member for moving said pinion axially into partial engagement with said gear, the teeth of said pinion and gear being inclined so that the reaction at their faces when the pinion is driving the gear will tend to move said pinion into complete engagement with said gear, and means operated by said starter-motor switch and acting on said thrust member to move said pinion into partial engagement with said gear before the circuit of said starter motor is closed.

1,887,983. LIGHT SIGNAL. WESLEY B. WELLS, Wilkinsburg, Pa., assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed July 1, 1930. Serial No. 465,084. 2 Claims. (Cl. 177—329.)



2. A light signal comprising a main casing containing a lamp and means for projecting a beam of light therefrom in one direction, the bottom wall of said casing being provided with a conical hole the axis of which is vertical and passes through said lamp, an auxiliary casing the upper wall of which is provided with a hollow conical stem projecting into the hole in the main casing, the inner surface of said stem being a section of a cone the apex of which coincides with the light source of said lamp, a mirror supported in said auxiliary casing at an angle of substantially 45° from the vertical and receiving light from said lamp through said hole and said hollow stem, a ring attached to the top of said auxiliary casing and surrounding said stem, a second ring coacting with the under surface of the first ring, and means for attaching said second ring to said main casing, whereby the auxiliary casing may be adjusted around said vertical axis with respect to said main casing and may be locked in adjusted position.

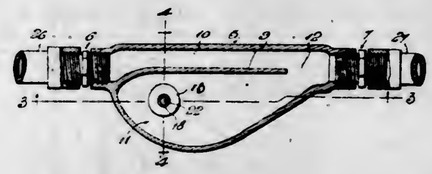
1,887,984. TIRE RIM. ANGELO L. ALBERTI, Beaver Falls, Pa. Filed Jan. 11, 1932. Serial No. 585,995. 3 Claims. (Cl. 301—32.)



1. In a sectional tire rim, in combination, an intermediate section, end sections hingedly connected thereto, a lever pivotally connected to one of the end sections and provided with an aperture, a lug on the proximate end of the other end section and insertable in the aperture in the lever, said lug and said lever being provided with registering openings, and a pin extending through said registering openings.

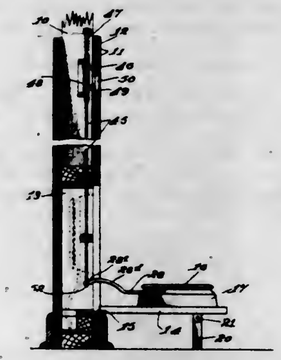
1,887,985. RADIATOR AND ENGINE JACKET CLEAN-OUT DEVICE. HUBERT H. AUKER, Ashtabula, and CHARLES W. STEVENS, Jefferson, Ohio, assignors of one-third to H. A. Gleason, Conneaut, Ohio. Filed Nov. 27, 1931. Serial No. 577,628. 1 Claim. (Cl. 141—1.)

A radiator clean-out device comprising a straight horizontal top wall, a downwardly bowed lower wall and opposed side walls jointly forming a semi-ovate casing, a water-admitting hose connection in the larger end of said casing immediately under said top wall, a water-emitting hose connection in the smaller end of said casing immediately under said top wall, said connections being alined, a horizontal partition extending transversely throughout the width of the casing and extending longitudinally from



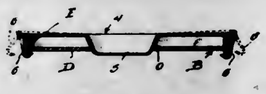
a point immediately below said water-admitting connection to a point spaced inwardly from said water-emitting connection, said partition dividing the interior of said casing into an upper straight water passage and a lower semi-ovate chamber adapted to fill with water from said passage, and a valved compressed air inlet into the larger end of said chamber.

1,887,986. SCALE. ELMER E. BALDWIN, Chicago, Ill. Filed Jan. 19, 1931. Serial No. 509,806. 2 Claims. (Cl. 265—68.)



1. In combination with a wall having a recess therein; weight-indicating means mounted in the wall and having a part leading to the recess; a scale platform and stand therefor hingedly attached to the wall, said scale and stand adapted to be swung into horizontal operative position or vertical inoperative position substantially completely housed in said recess; and a connection between said weight-indicating means and said scale platform, said connection permitting said swinging of said scale platform and stand.

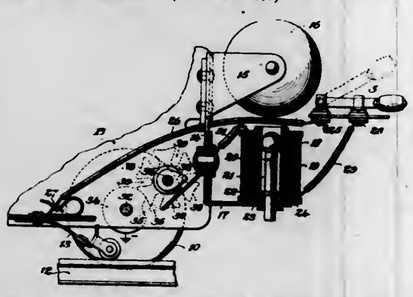
1,887,987. HIGH-CHAIR TRAY ATTACHMENT. FLORENCE BECKERMAN, Atlantic City, N. J. Filed Apr. 21, 1931. Serial No. 531,781. 2 Claims. (Cl. 155—127.)



1. In combination, a high-chair tray having an opening formed in the bottom thereof, and an attachment on the tray embodying a cover plate having a central receptacle portion projecting downwardly through said tray opening and contacting the edges thereof, said plate having

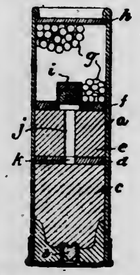
resilient side portions extending over and normally spaced above said tray, and means carried by the sides of said plate and engageable with the sides of the tray when the side portions of said plate are sprung downwardly into contact with the side portions of said tray to secure the attachment in place on said tray.

1,887,988. BELL RINGING DEVICE FOR TOY LOCOMOTIVES. EARL D. BOISSELIER, Chicago, Ill., assignor to American Flyer Mfg. Co., Chicago, Ill., a Corporation of Illinois. Filed June 17, 1932. Serial No. 617,895. 7 Claims. (Cl. 46—47.)



1. In a toy locomotive, a bell, a bell clapper, electrical means operable when energized to cause said clapper to strike the bell, an electric circuit including said means, and means operable by movement of the locomotive for periodically closing and opening said circuit.

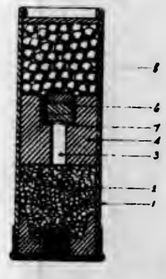
1,887,989. SHOTGUN CARTRIDGE. HENRY WINDER BROWNSDON, Birmingham, WALTER RULE NIMMO, Bushey Heath, and GEORGE PATON POLLITT, London, England, assignors to Imperial Chemical Industries Limited, a Corporation of Great Britain. Filed Nov. 13, 1930, Serial No. 495,504, and in Great Britain Feb. 12, 1930. 4 Claims. (Cl. 102—15.)



1. In a shot gun shell containing a powder charge, a shot charge, and driving wad interposed between the powder charge and shot charge, a tracer pellet for indicating the path of the shot, comprising a small cylinder containing the tracing composition, which cylinder is closed at one end and open at the other, the open end of said cylinder resting upon the driving wad, while the remainer of the pellet is embedded in the shot charge, whereby the pellet is positively driven by the wad and is accurately centered in the midst of the flying shot.

1,887,990. SHOTGUN CARTRIDGE. HENRY WINDER BROWNSDON, Moseley, Birmingham, and WALTER R. NIMMO, Sparrows Herne Hall, Bushey Heath, England, assignors to Imperial Chemical Industries Ltd., a Corporation of Great Britain. Filed Jan. 29, 1931. Serial No. 512,188. 1 Claim. (Cl. 102—15.)

A shot gun cartridge comprising a shell containing a powder charge, a shot charge, and a driving wad interposed between the powder charge and the shot charge, said wad having a cylindrical opening therein in the direction of the shot charge and an opening of smaller diameter extending rearwardly from the larger opening to the powder charge, a tracer cartridge comprising a small cylinder open at one end and closed at the other



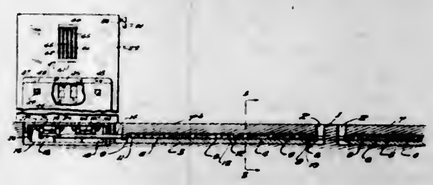
and seated in said larger opening, but spaced laterally from the walls thereof, the open end of said cylinder being seated upon the driving wad and directly over the passage leading to the powder charge, the closed end of the said tracer cartridge being in engagement with the shot charge.

1,887,991. CAMERA. JOHN CAIN, Chicago, Ill. Filed July 20, 1931. Serial No. 552,021. 1 Claim. (Cl. 95—53.)



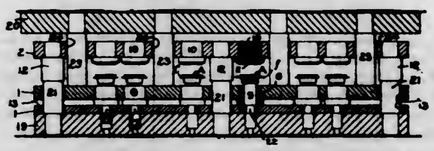
A camera comprising a body having a lens opening and a shutter movable over said opening, a lever operatively connected with the shutter and provided with lugs located at opposite side edges, a pair of disks journaled in the body and engaging each other, said disks being provided at their sides with lugs adapted to be engaged by the respective lugs of the lever and the disks having upon their faces series of numbers visible through the side of the body.

1,887,992. BRAKE TESTING DEVICE. HERMAN CASLER, Canastota, N. Y. Filed Mar. 1, 1929. Serial No. 343,633. 6 Claims. (Cl. 265—47.)



1. A brake testing device used on vehicle wheels, comprising a pair of movable plates adapted to be overrun and horizontally shifted by the vehicle wheels when the brakes are applied to said wheels while moving over said plates, a pair of gauges, liquid ejecting means communicating with said gauges, forcing a liquid into said gauges, a liquid contained in said ejecting means, differential means connected to said liquid ejecting means, and means operatively connecting said differential means to said plates whereby one-half the thrust of each of said platforms will be communicated to one of said liquid ejecting means and the full thrust of one of said platforms will be communicated to the other of said liquid ejecting means.

1,887,993. MOLDING APPARATUS AND METHOD OF MOLDING FOR INTERIORLY THREADED ARTICLES. BENJAMIN F. CONNER, Hartford, and WILLIAM F. SCHMALZ, Rockville, Conn., assignors to Colt's Patent Fire Arms Manufacturing Co., Hartford, Conn., a Corporation of Connecticut. Filed Mar. 6, 1929. Serial No. 344,746. 12 Claims. (Cl. 18—34.)



4. In a mold for an article having an opening therein, the combination of two separable companion mold sections serving when in operative relationship to provide a mold recess shaped to determine the exterior contour of the article to be molded, one of the said sections having a hole terminating at its inner end at the said mold recess, and a core pin in the hole longitudinally movable into the mold recess while the mold sections are in operative relationship and serving upon such movement to apply molding pressure to moldable material in the recess and also to determine the interior contour of the opening in the resultant molded article, the said core pin being additionally movable longitudinally in the same direction as before after the mold sections have been separated so as to eject the completed molded article from the mold recess.

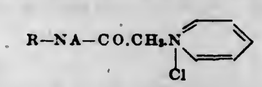
1,887,994. TOOL FOR REMOVING THREADED ARTICLES FROM A MOLD. BENJAMIN F. CONNER, Hartford, and WILLIAM F. SCHMALZ, Rockville, Conn., assignors to Colt's Patent Fire Arms Manufacturing Co., Hartford, Conn., a Corporation of Connecticut. Original application filed Mar. 6, 1929, Serial No. 344,746. Divided and this application filed July 28, 1931. Serial No. 553,570. 5 Claims. (Cl. 81—121.)



1. In a tool for the purpose described, the combination of a rotatable head having a central hole therethrough shaped to receive and approximately fit the articles to be engaged, and a rigidly connected rotatable actuating means including a stem above the head and coaxial therewith, which actuating means has therein an unobstructed space above the head and at least one unobstructed lateral opening communicating with the said space, the minimum dimensions of the space and of the opening being considerably greater than the maximum diameter of the article receiving hole so that each article passing through the hole may freely enter the space in any relative position and may then pass freely outward through the opening.

1,887,995. MANUFACTURE OF STRONGLY BASIC AZO-DYESTUFFS. ACHILLE CONRETTI, Basel, Switzerland, assignor to the Firm: J. R. Geigy S. A., Basel, Switzerland. Filed July 28, 1928, Serial No. 296,102, and in Germany Aug. 6, 1927. 4 Claims. (Cl. 260—42.)

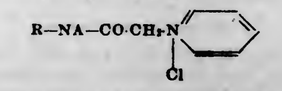
1. A process for the manufacture of strongly basic monoazo-dyestuffs, consisting in converting nitrated primary and secondary amines of the benzene series by successive treatment with chloracetyl-chloride and a body of the pyridine group into a basic body containing the group



wherein R represents an aryl radical of the benzene and naphthalene series and A represents hydrogen, alkyl or aryl of the benzene series, reducing the nitro group of the body thus obtained, diazotising and coupling same with an azo coupling component of the benzene and naphthalene series and phenylmethylpyrazolone.

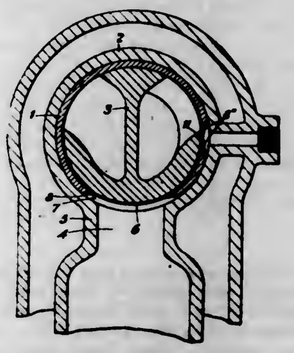
1,887,996. MANUFACTURE OF STRONGLY BASIC AZO-DYESTUFFS. ACHILLE CONRETTI, Basel, Switzerland, assignor to J. R. Geigy S. A., Basel, Switzerland. Original application filed July 28, 1928, Serial No. 296,102, and in Germany Aug. 6, 1927. Divided and this application filed Dec. 14, 1931. Serial No. 581,070. 4 Claims. (Cl. 260—42.)

1. A process for the manufacture of strongly basic diazo-dyestuffs, consisting in starting from a diazotised aromatic amine of the benzene series, coupling therewith a metaphenylenediamine derivative transformed by successive treatment with chloracetyl-chloride and pyridine, into a basic body containing the group:



wherein R represents an aryl radical of the benzene and naphthalene series and A represents hydrogen, alkyl or aryl of the benzene series, diazotising the monoazo body thus obtained and further coupling the diazo compound with azo components of the benzene and naphthalene series and phenylmethylpyrazolone.

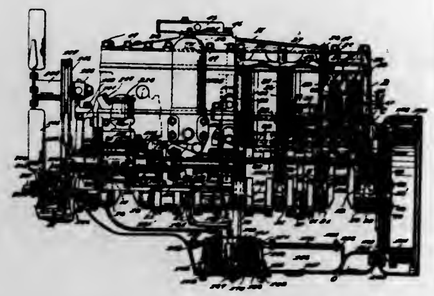
1,887,997. VALVE FOR INTERNAL COMBUSTION ENGINES AND PUMPS. ROLAND CLAUDE CROSS, Bath, England. Filed Oct. 28, 1931, Serial No. 571,624, and in Great Britain Feb. 2, 1931. 10 Claims. (Cl. 123—190.)



1. A valve assembly comprising a valve housing having a port, a valve having a port for cooperation with said housing port, a valve bearing element interposed between the

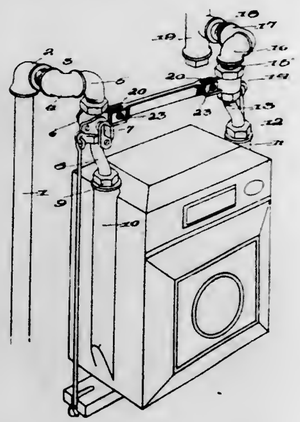
valve and the housing and having a port alined with the housing port, and a resilient lip integral with the bearing element, surrounding the port therein, and tending to project into the space occupied by the valve whereby it seals fluid tight against the valve.

1,887,998. INTERNAL COMBUSTION ENGINE. WILLIAM B. FAGEOL, Kent, Ohio, assignor to Twin Coach Company, Kent, Ohio, a Corporation of Delaware. Filed Oct. 21, 1929. Serial No. 401,194. 5 Claims. (Cl. 123—195.)



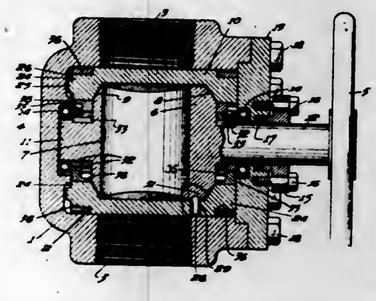
1. An internal combustion motor comprising a crank case; a cylinder block provided with intake and exhaust valves removably supported on said crank case; a cylinder head removably supported on said cylinder block; and common securing means for said crank case; cylinder block and cylinder head.

1,887,999. BRACE OR TIE-IN BAR FOR GAS METERS. AMBROSE F. FOW, Philadelphia, Pa., assignor to Kitson Company, Philadelphia, Pa., a Corporation of West Virginia. Filed Oct. 15, 1929. Serial No. 399,866. 1 Claim. (Cl. 248—30.)



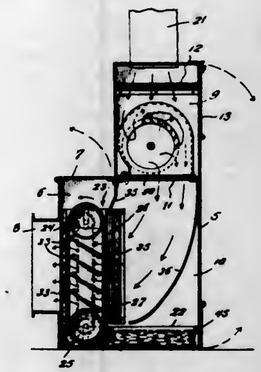
The combination of a pair of pipe fittings having alined vertical integral ears projecting from respective fittings toward each other; of a rigid tie-bar having forked ends, each straddling a respective ear and fitting closely thereon, said ears having a lateral flange extending along its edges on each side thereof and engaged by the lower edges of the forked portion of the bar in selected upright and inverted position of the bar, and means for securing the tie-bar ends in position on said ears.

1,888,000. VALVE. ALFRED G. HEGGEM, Tulsa, Okla. Filed Mar. 31, 1930. Serial No. 440,431. 29 Claims. (Cl. 251—102.)



1. A valve involving a valve body formed with a chamber and having an inlet opening and an outlet opening, said openings being in communication with said chamber, and means extending into said chamber and rotatable with respect to said body for controlling the flow of fluid through said openings, said means including a valve core having a passage permitting the flow of fluid therethrough, a plurality of valve plates engaging said core and respectively interposed immediately between said valve core and the valve body and adapted to close said openings, said valve plates, core and body being so formed that said plates and core may rotate with respect to said body and that said core may rotate relatively to said plates, and a plurality of link members movable with respect to said core and actuated upon a rotation of said core with respect to said valve plates for forcing said plates into sealing contact with the valve body to prevent passage of said fluid through said openings in the body.

1,888,001. AIR CLEANER AND HUMIDIFIER. EARL M. HICKS, Lebanon, Ind. Filed June 14, 1932. Serial No. 617,211. 6 Claims. (Cl. 183—18.)

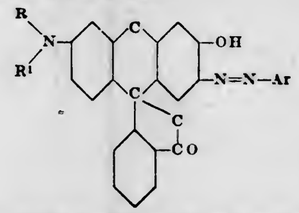


1. In an air conditioning apparatus of the class described, a casing having an air inlet and an air outlet, an open top water pan within said casing, an air cleaning and moistening unit mounted in the casing between the air inlet and the air outlet and including an endless traveling web arranged to be moistened by the water in said pan, said unit being slidably mounted in the casing to facilitate insertion and removal of the same, means for forcing air through the casing and driving said web, and

a baffle plate assembly interposed between the runs of said web for removing excess moisture from the air after passing through one run of the web and before leaving the casing.

1,888,002. MANUFACTURE OF AZOPHTHALEIN DYESTUFFS. ADOLF KREBSER, Basel, Switzerland, assignor to the Firm J. R. Geigy S. A., Basel, Switzerland. Filed May 17, 1929, Serial No. 364,002, and in Germany May 24, 1928. 4 Claims. (Cl. 260—86.)

4. As new products of manufacture, the hereinbefore described azophthalein dyestuffs having in the lactone form probably the following formula:

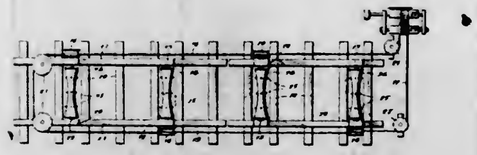


wherein R—alkyl, R^1—alkyl or hydrogen and Ar—any aromatic radical, said dyestuffs constituting powders of bronze lustre dissolving in concentrated sulphuric acid with yellowish-red to green coloration and in sodium carbonate to a blue to violet solution and yielding on wool in acid bath blue to greenish blue tints showing, when after-chromed, an enhanced fastness.

1,888,003. METHOD FOR THE CONVERSION OF FERROPHOSPHORUS. NILS C. LINDBERG, Crete, Ill., assignor to Victor Chemical Works, a Corporation of Illinois. Filed Dec. 16, 1929. Serial No. 414,596. 3 Claims. (Cl. 23—106.)

1. The method of utilizing ferrophosphorus and securing separable phosphorus compounds therefrom which comprises forming briquettes comprising comminuted ferrophosphorus, alkali metal carbonate and caustic alkali, and heating the briquettes to a reacting temperature below the fusion temperature thereof.

1,888,004. LOGGING ROAD. ALLAN ALEXANDER MACLEOD, Victoria, British Columbia, Canada. Filed Mar. 14, 1931, Serial No. 522,741, and in Canada Dec. 8, 1930. 1 Claim. (Cl. 198—127.)



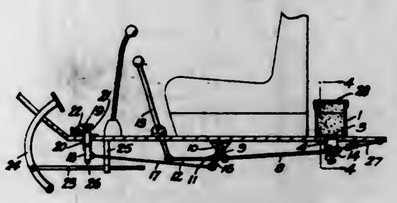
In a logging road, a series of parallel rollers having alternate ends thereof provided with pulleys and the remaining ends thereof free of pulleys, a driving cable having runs at opposite ends of said rolls and trained about said pulleys, pairs of sheaves at opposite ends of the series of rolls and engaged by said cable, and a driving mechanism engaging that portion of the cable between the sheaves of one pair and having means for tensioning the cable, said driving means being spaced laterally of the plane of said series of rolls affording access to said tensioning means and allowing adjustment of the tensioning means during operation of the rolls.

1,888,005. AMUSEMENT APPARATUS. FRED L. MARKEY, Lawrence, and JOSEPH R. STANTON, Newburyport, Mass., assignors to Dodgem Corporation, Lawrence, Mass., a Corporation of Massachusetts. Filed July 20, 1931. Serial No. 552,030. 13 Claims. (Cl. 46—40.)



1. In an amusement apparatus, the combination with a playing floor and occupant steered propelled vehicles movable on said floor, of a target including an animated figure adapted when struck by one of said vehicles to produce fantastic gyrations.

1,888,006. AUTOMOBILE SANDING DEVICE. AINSLEY DE BLOIS MARRYATT and GEORGE HUMISTEN METELER, Quarry Heights, Northeastle, N. Y. Filed Feb. 18, 1931. Serial No. 516,553. 1 Claim. (Cl. 291—28.)

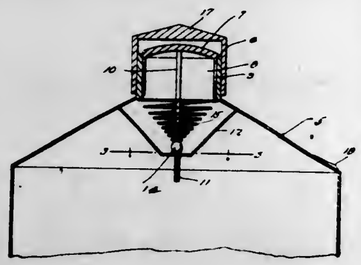


In an automobile sanding device in combination a brake pedal, a sand container having outlet orifices in the vicinity of its ends, a sand controlling valve below each orifice, a pipe leading from each sand controlling valve into proximity with each rear wheel of the vehicle and in front thereof, a sand valve operating lever within reach of the driver of the vehicle for independent operation of the sand valves, connections between the operating lever and the sand valves, an orificed slide rod extending rearwardly from the brake pedal, a plunger having a hinged portion, said plunger normally springheld in the inoperative position, a flexible connection between the hinged portion of the plunger and the connections between the sand valve operating lever and the sand valves, said flexible connection establishing a connection between the brake pedal and the sand valves when the plunger is depressed into the orifice in the slide rod for automatically operating the sand valves upon the application of the brake.

1,888,007. SANITARY SELF-CLOSING CAP. CHARLES T. MILLIS, Jr., and ELBERT A. PARKER, Dallas, Tex. Filed Apr. 4, 1932. Serial No. 603,146. 3 Claims. (Cl. 221—60.)

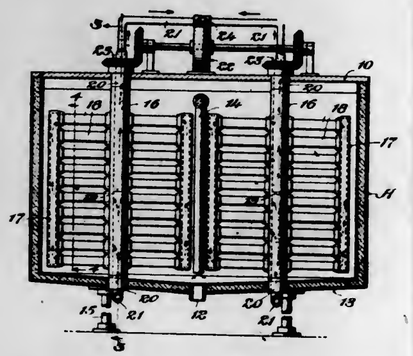
1. In a collapsible tube structure of the class described, a neck, a valve cap including a head and a skirt, said skirt being telescopically mounted in the neck, said skirt having an opening in one side, and spring means

normally holding the skirt inwardly of the neck so that the opening is closed, said spring means comprising a helical spring about a stem projecting from the head



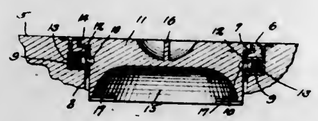
of the valve cap, the largest convolute of the spring bearing against the neck and the smallest convolute bearing against a member on the stem.

1,888,008. PASTEURIZER MIXER. CORNELIUS MORTENSEN, Louisville, Ky. Filed May 7, 1931. Serial No. 535,777. 4 Claims. (Cl. 257—104.)



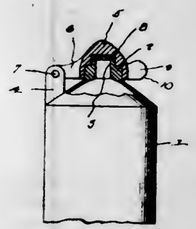
1. Heat exchange apparatus comprising a receptacle, a tube within said receptacle, a plurality of lateral tubes extending from said first mentioned tube at points spaced along the length of the latter, a partition within said first mentioned tube within the length of that portion thereof from which the lateral tubes extend, and a manifold connecting and providing communication between all of the tubes at their ends remote from the first mentioned tube.

1,888,009. ASH TRAY. THOMAS R. MOSS, Dyersburg, Tenn. Filed Mar. 4, 1931. Serial No. 520,138. 1 Claim. (Cl. 45—75.)



In an ash receiver, a ring member fitted in an opening of a support, said ring member having a flange formed with an offset portion providing a shoulder, said flange having openings to receive securing screws, lateral housings formed on the ring member, said ring member having openings adjacent to the housings, spring pressed plungers mounted within the housings, and extended through the openings, a circular tray having an annular extension to contact with the offset portion of the ring member to secure the tray in position, said tray having openings to receive the plungers to hold the tray within its support.

1,888,010. TUBE CAP. KARL LIPPHART MOSTELLER, Mount Airy, Pa. Filed Jan. 25, 1932. Serial No. 588,774. 1 Claim. (Cl. 221—60.)



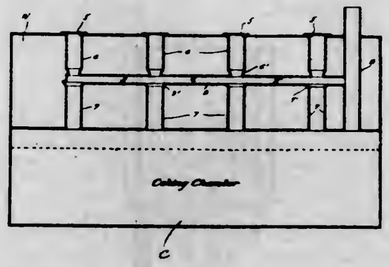
In combination with a tube having a neck provided with a reduced upper portion, providing a sharply defined shoulder at the juncture of the reduced part with the rest of the neck, a cap having a two diameter socket therein, the lower and larger part of which receives part of the neck and the upper and smaller part receiving the reduced portion, and a sharply defined shoulder formed at the juncture of the two parts of the socket for contacting the shoulder on the neck to provide a seal, an upright connected to the top portion of the tube at the outer edge thereof, said cap having a shank extending from one side thereof and pivoted to the upright, and a second projection connected to that side of the cap opposite the side to which the shank is connected.

1,888,011. SURVEYING INSTRUMENT. WILLIAM PILKINGTON, Beckley, W. Va. Filed June 10, 1931. Serial No. 543,456. 7 Claims. (Cl. 33—66.)



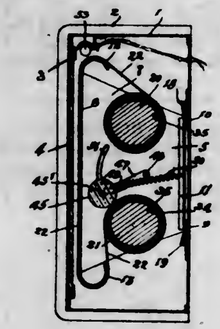
7. In a surveying instrument the combination of a bottom plate, a top plate, standard means supporting the top plate in spaced parallel relation with the bottom plate, a rotary ring mounted on the top plate, a pair of collapsible sight bars mounted on the bottom plate, and a pair of collapsible sight bars mounted on said ring.

1,888,012. BY-PRODUCT COKE OVEN. PAUL M. PINCKARD, Birmingham, Ala. Filed June 24, 1930. Serial No. 463,485. 3 Claims. (Cl. 202—257.)



1. In combination with a coking chamber and a stand pipe connected therewith, a by-pass for gases leading from the coking chamber to the stand pipe and having lateral branches providing coal charging passages for the coking chamber; the by-pass and branches being arranged in the roof of the coking chamber.

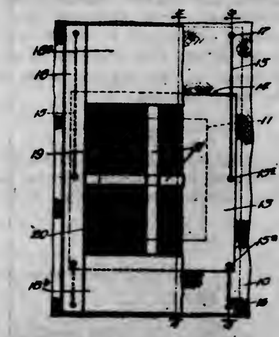
1,888,013. ROUTE INDICATOR. CHARLES N. POGUE, St. Boniface, Manitoba, Canada. Filed Feb. 16, 1931, Serial No. 515,986, and in Canada Aug. 5, 1930. 4 Claims. (Cl. 40—42.)



1. A route indicator for a vehicle comprising a stationary receiving casing having a sight opening therein, an endwise withdrawable frame slidably carried by the casing, winding rollers rotatably carried by the frame and removable therewith, a winding strip connecting the rollers and having a portion thereof visible through the sight opening, said strip being provided with road signs of the route to be traversed by the vehicle and means actuated by the vehicle as it progresses over the route for driving the rollers, said means being attached to the removable frame.

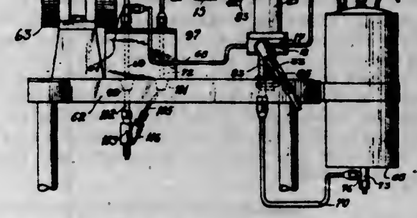
1,888,014. TENT WINDOW. FRANK M. POWERS, Chicago, Ill., assignor to Powers & Company, Chicago, Ill., a Corporation of Illinois. Filed Apr. 18, 1932. Serial No. 606,959. 5 Claims. (Cl. 135—14.)

1. In combination with a tent wall having an opening therein; a flap with its upper edge attached to the outside of the wall above the opening, said flap adapted to be lowered to cover the opening or raised to uncover the same; means for raising and lowering said flap; and a cover sheet of material attached to the outside of the



wall completely covering said flap when said flap is raised, said cover sheet being provided with an opening registering with the opening in the wall.

1,888,015. OIL BURNER SUPPLY SYSTEM. CHARLES L. RAYFIELD, Chicago, Ill., assignor to Rayfield Mfg. Co., Chicago, Ill., a Corporation of Illinois. Filed Feb. 24, 1930. Serial No. 430,574. 10 Claims. (Cl. 158—36.3.)



1. In a combustion mixture supply system, the combination of an angular rotary pump structure comprising two pump sections having interconnected pistons, a combustion mixture delivery element, means for causing part of the pistons of one of the pump sections to pump combustion fluid to said combustion delivery element, and means for causing the other pistons of said pump section and all the pistons of the other pump section to pump air to said combustion delivery element.

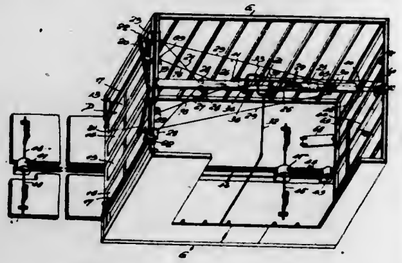
1,888,016. BOILER FEEDING DEVICE. KOLOMAN REZSNY, Budapest, Hungary, assignor to Hydrometer A. G., Breslau. Filed Oct. 29, 1929, Serial No. 403,848, and in Germany Nov. 5, 1928. 3 Claims. (Cl. 103—265.)



1. In a boiler feeding device, especially for locomotives, a two-stage injector, the first stage being started with

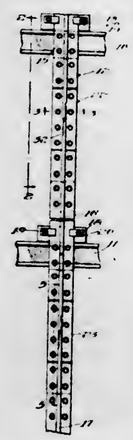
live steam while cold water passes through the second stage, an exhaust steam starter separated from the injector in the exhaust steam pipe of the slide valve chest of the locomotive, said starter consisting of a pair of automatically closing valves arranged one behind the other for regulating the supply of steam to the injector, the exhaust steam of the locomotive being only admitted in the second stage of the injector when the injector delivers as live steam injector.

1,888,017. GARAGE DOOR OPERATING AND LOCKING MEANS. EDWIN W. SCHUCKMAN, Wichita, Kans. Filed Apr. 27, 1931. Serial No. 533,236. 6 Claims. (Cl. 268—34.)



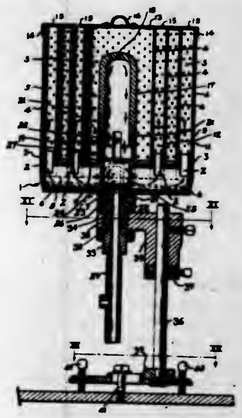
1. In a garage door operating means, fluid-actuating means for opening the door, a fluid-conducting line, valve means for controlling admission of fluid from said line to said fluid-actuated means and exhaust of fluid from said fluid-actuated means, operating means for said valve means embodying a car-actuated member at the exterior of the garage, a normally open cut-off valve adapted when closed to prevent the actuating fluid from so operating said fluid-actuated means as to move it in door-opening direction, and car-actuated means within the garage for closing said cut-off valve when the car has completely entered, whereby said fluid-actuated means cannot be brought into operation by opening said exterior car-actuated member.

1,888,018. ELEVATOR SHAFT CONSTRUCTION. CLARK SHANAFELT, Akron, Ohio. Filed July 11, 1930. Serial No. 467,305. 11 Claims. (Cl. 187—95.)



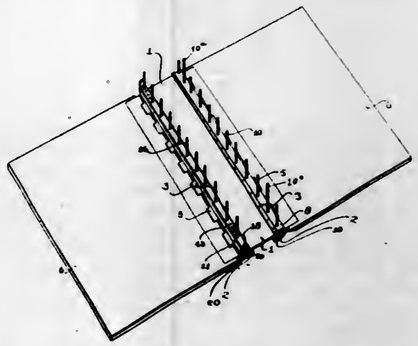
1. In elevator shaft construction, guiding means comprising guide rails, a fish-plate, sliding plates slidably secured to the fish-plate, said sliding plates being constrained to move with said guide rails, and guide rail sections rigidly secured to said sliding plates and forming a continuation of said guide rails.

1,888,019. LIQUID FUEL BURNER. NAPOLEON R. THIBERT, Worcester, Mass. Filed Sept. 18, 1930. Serial No. 481,695. 19 Claims. (Cl. 158—87.)



15. In a device of the character described, a base member having a fuel groove, a combustion chamber including upstanding perforated members, thereabove, and a vaporizing chamber; means to introduce liquid fuel to said chamber, and means establishing communication between said chamber and said groove, including a conduit forming an additional vaporizing chamber, the level of the bottom of said conduit being located below the level of the bottom of said first vaporizing chamber.

1,888,020. LOOSE LEAF BINDER. WILLIAM F. WARNER, Jr., Rochester, N. Y., assignor to Henry Conolly Company, Inc., Rochester, N. Y., a Corporation of New York. Filed Mar. 21, 1929. Serial No. 348,909. 6 Claims. (Cl. 129—8.)



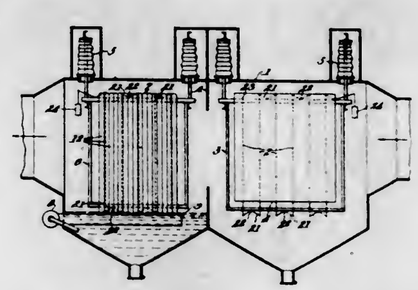
1. In a loose leaf binder, the combination with a metallic back piece, metallic supporting strips for the binding means hinged to the back piece, covers hinged to said supporting strips, protecting strips secured to the outer faces of the supporting strips, and a covering for said protecting strips, the ends of the coverings being spaced from the ends of the projecting strips to expose such ends.

1,888,021. TRACTOR OR AUTOMOTIVE VEHICLE AUTOMATIC GUIDE. MARK B. WILLIAMS, Plainview, Tex. Filed Oct. 23, 1930. Serial No. 490,802. 13 Claims. (Cl. 97—49.)



1. In a tractor guide, or automotive vehicle automatic steering device, a furrow-following assembly embodying a left-tending member and a right-tending member, means for mounting said members for movement to and from open and closed positions transversely of a furrow, thereby to enable them to move toward and away from each other, and to enable them to follow the respective banks of a furrow at a curve, and means for connecting said members to render each of them operative to move the other to and from open and closed position.

1,888,022. APPARATUS FOR ELECTRICAL PRECIPITATION. HARRY A. WINTERMUTE, Plainfield, and CARL W. J. HEDBERG, Middlesex, N. J., assignors to Research Corporation, New York, N. Y., a Corporation of New York. Original application filed Nov. 28, 1927, Serial No. 236,335. Divided and this application filed May 1, 1929. Serial No. 359,683. 14 Claims. (Cl. 183—7.)



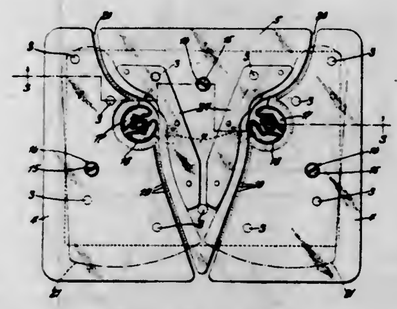
1. An electrical precipitator comprising in combination with discharge electrodes, a collecting electrode system comprising a plurality of vertically disposed units of cylindraceous form whose exterior surfaces constitute collecting surfaces opposed to said discharge electrodes, and means for establishing a flow of liquid over the exterior surface of said units.

1,888,023. COLOR STABILIZATION OF LUBRICATING OILS. CHESTER E. ADAMS, Hammond, Ind., assignor to Standard Oil Company, Whiting, Ind., a Corporation of Indiana. Filed June 8, 1928. Serial No. 284,016. 36 Claims. (Cl. 87—9.)

1. A hydrocarbon lubricating oil containing a small proportion of an aliphatic amine having an alkyl group containing not less than four carbon atoms.

1,888,024. ORNAMENTING DIE. ARTHUR W. ALTVATER, St. Louis County, Mo. Filed Jan. 4, 1929. Serial No. 330,191. 19 Claims. (Cl. 101—28.)

1. A die of te character described comprising a rigid base having holes therein, springs seated on said base, a plate rigid and removably attached to said base and having holes through which said springs extend, guide elements extending through said plate and being movable into said holes in said base, a work supporting platen attached to said guide elements and seated on said spring, means on said guide elements cooperating

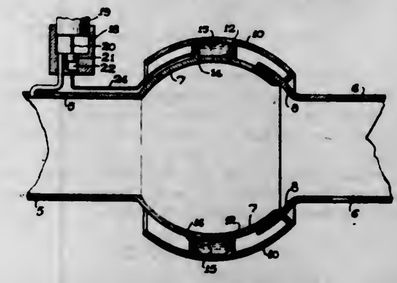


with said plate to limit extent of movement of said platen by said springs, a die rigid with respect to said plate and said base laterally from the edge of said platen, and a resiliently supported gage for positioning the work upon said platen.

1,888,025. METHOD OF EXTRACTING RESINOUS MATERIAL FROM PLANT TISSUE. LEAVITT N. BENT, Holly Oak, Del., assignor to Hercules Powder Company, Wilmington, Del., a Corporation of Delaware. Filed Feb. 15, 1928. Serial No. 254,622. 18 Claims. (Cl. 87—2.)

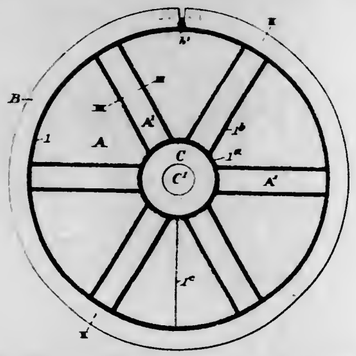
1. The method of extracting rosin from resinous wood, which includes extracting the wood with an organic aliphatic solvent for the rosin which is miscible with water, adding a low boiling petroleum hydrocabon, which has selective solvent power on the rosin and which is immiscible and non-reactive with the first mentioned solvent, to the solution of rosin obtained, separating the low boiling petroleum hydrocarbon and dissolved rosin from the original solvent and distilling off the low boiling hydrocarbon for the recovery of rosin.

1,888,026. BALANCED JOINT. RALPH E. CHAPMAN, Brooklyn, N. Y. Filed Mar. 19, 1925, Serial No. 16,598. Renewed Apr. 9, 1932. 26 Claims. (Cl. 285—91.)



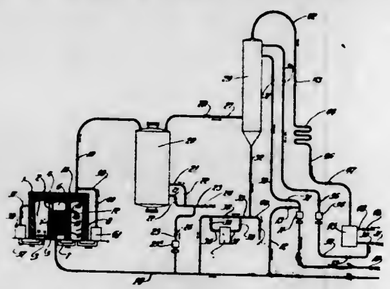
1. A coupling comprising two sections and means operative to set up a force opposing that force which tends to produce relative movement between the sections and which results from a difference between the external and internal pressures, said means comprising an expansible pressure chamber and means for maintaining a pressure in said chamber different from but dependent upon the pressure within the sections.

1,888,027. WELDED BLANK FOR MACHINE ELEMENTS AND THE LIKE AND METHOD OF MAKING THE SAME. EVERETT CHAPMAN, Coatesville, Pa., assignor to Lukenweld, Inc., Coatesville, Pa., a Corporation of Pennsylvania. Filed July 22, 1931. Serial No. 552,356. 7 Claims. (Cl. 29—159.)



1. As a new article of manufacture, a built-up blank comprising a circular flat metal plate, a central hub, a solid rim concentric therewith; said plate engaging said rim mid-way of its lateral surfaces and being welded at its marginal edges to said hub and rim, and hollow reinforcing ribs radially disposed between said hub and rim and having their ends welded to said parts and their longitudinal portions welded to said circular plate.

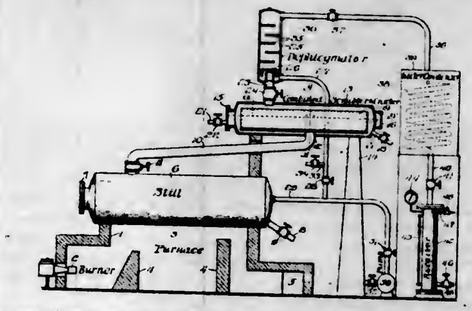
1,888,028. PROCESS FOR HYDROCARBON OIL CONVERSION. CARBON P. DUBBS, Wilmette, Ill., assignor to Universal Oil Products Company, Chicago, Ill., a Corporation of South Dakota. Filed Apr. 4, 1927. Serial No. 180,687. 9 Claims. (Cl. 196—67.)



4. A process of hydrocarbon oil conversion consisting in generating gases of combustion in a gas generating zone, heating the oil in indirect contact with the gases of combustion, passing the heated oil and gases combustion into a second zone in direct physical contact attended by vaporization of the oil, and recirculating regulated portions of the contents of said zones in a local cycle respectively through each of said zones.

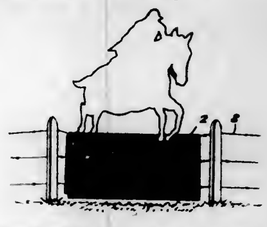
1,888,029. PROCESS FOR TREATING PETROLEUM OIL. GUSTAV EGLOFF and HARRY P. BENNER, Chicago, Ill., assignors to Universal Oil Products Company, Chicago, Ill., a Corporation of South Dakota. Original application filed Oct. 21, 1920, Serial No. 418,567. Divided and this application filed July 17, 1924. Serial No. 726,439. Renewed Aug. 14, 1930. 2 Claims. (Cl. 196—66.)

1. A process for cracking hydrocarbon oils, consisting in distilling the charging oil at a cracking temperature under superatmospheric pressure, in passing the generated vapors to a combined scrubbing and cracking vessel, in maintaining a predetermined supply of a second oil in said vessel, in compelling the vapors evolved from the charging oil undergoing pressure distillation to pass first downwardly and thence upwardly through the supply of said second oil in said vessel before escaping therefrom to simultaneously scrub such vapors and crack



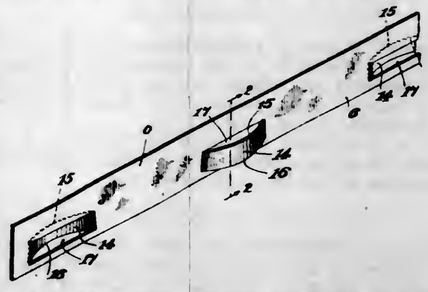
some fractions of the oil in said vessel, in discharging scrubbed vapors evolved from said charging oil, commingled with vapors released from said second oil, from said vessel to a dephlegmator, wherein the insufficiently cracked fractions are condensed, forming reflux condensate, in retreating the reflux condensate by uniting the same with the charging oil undergoing treatment in the process, and in condensing the dephlegmated vapors and collecting the resulting distillate.

1,888,030. FENCE GUARD. WILLIAM NEWBOLD ELY, Jr., Gwynedd Valley, Pa. Filed Mar. 4, 1932. Serial No. 596,755. 4 Claims. (Cl. 272—5.)



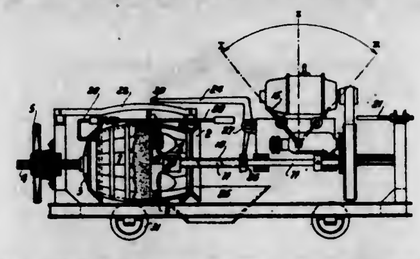
1. A protective device for association with a wire fence including a plurality of plates flexibly secured together, the device being adapted to be folded over a fence.

1,888,031. TERRAZZO STRIP. HARRY L. FINK, New York, N. Y. Filed Dec. 7, 1929, Serial No. 412,320. Renewed May 5, 1932. 6 Claims. (Cl. 94—17.)



1. A dividing strip having therein spaced integral loop-form bonding projections inclined downwardly outward in relation to the plane of the strip.

1,888,032. MEANS FOR EMPTYING BARRELS. JOHANN GEORG FISCHER, Hamburg, Germany. Filed July 13, 1931, Serial No. 550,506, and in Germany May 5, 1930. 1 Claim. (Cl. 82—6.)



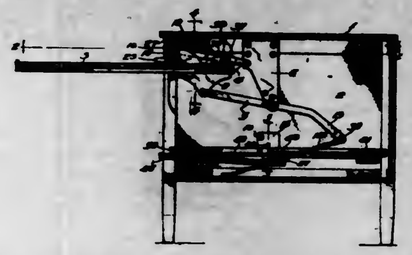
In a device for emptying barrels containing paste-like material, the combination of a truck formed with a guideway conforming in curvature to that of the inner contour of the barrel, a bi-concave ring arranged on and between the truck and the inside end of aforesaid frame, a journal secured to the rear end of said frame, a tightening gear at the outer end of said journal and a concave cap at its inner end, a screw-threaded shaft operable in said journal, a rotary shaft supported on said truck in axial alinement with said screw-threaded shaft, reversible driving means adapted to cooperate with said rotary shaft to impart a reciprocating motion thereto, radially alined adjustable scrapers secured to the end of the rotary shaft adjacent the barrel, a hollow sleeve slidable over said rotary shaft engageable with said scrapers, a bell-crank lever hinged to said driving means and having one end pivoted to said sleeve and its other end slidable along said curved guideway, and a stop device adapted to stop the rotation of the scrapers when they have reached the bottom of the barrel and to reverse the direction of the rotary shaft to withdraw the scrapers from the barrel after the contents thereof has been removed.

1,888,033. ORNAMENTAL YARN AND METHOD OF MAKING THE SAME. MORRIS J. FRANK, New York, N. Y., assignor to Frank Associates, Inc., New York, N. Y., a Corporation of New York. Filed Jan. 9, 1931. Serial No. 507,562. 5 Claims. (Cl. 117—21.)



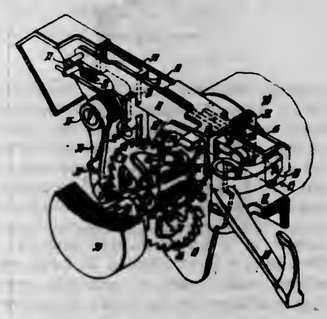
1. A method of producing an ornamental yarn which consists in reversely twisting a base portion comprising a pair of twisted members, and causing the reversely twisted members to come into adhering contact with an outer covering, so that said outer covering is helically wound around said base portion by the reverse twisting of said members.

1,888,034. TYPEWRITER DESK ATTACHMENT. ISADORE FRANKEL, Chicago, Ill., assignor to Commercial Furniture Company, Chicago, Ill., a Corporation of Illinois. Filed June 21, 1928. Serial No. 287,068. 1 Claim. (Cl. 312—28.)



In a typewriter desk provided with a well adapted to house a typewriter, a movable member for supporting a typewriter, carrying plates including rollers operatively engaging said movable member, arms pivoted to said plates for supporting and for movement of said member from within said well to its operative position, a plate rigidly mounted on opposite sides of said well, auxiliary rollers on said last mentioned plates for engagement with said member when within said well, a latch pivoted to said carrying plates and adapted to positively engage a catch on said movable member for preventing horizontal movement of said member in either direction, and lugs carried by said latch for disengaging the same from said catch when the typewriter and supporting member are forced into the well.

1,888,035. TYPEWRITING MACHINE. WILLIAM F. HELMOND, West Hartford, Conn., assignor to Underwood Elliott Fisher Company, New York, N. Y., a Corporation of Delaware. Filed July 25, 1929. Serial No. 380,872. 3 Claims. (Cl. 197—114.)

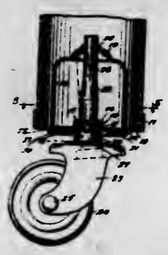


1. In a typewriting machine having a paper-carriage, a revoluble platen, a ratchet-wheel therefor, a line-space lever mounted upon the carriage, and a shiftable platen-frame mounted upon said carriage, the combination of a front guiding eye in the form of a bracket of hardened metal fastened upon the front of the end of said platen-frame, and a line-space slide having a pawl to drive said ratchet-wheel and having a reflex bend at its front end terminating in a front slide-guiding tongue guided in said eye, said platen-frame having rear means for laterally guiding the rear of the line-space slide.

1,888,036. CASTER. WALTER F. HEMOLD, Upper Montclair, N. J., assignor to The Bassick Company, Bridgeport, Conn., a Corporation of Connecticut. Filed Jan. 24, 1927. Serial No. 163,940. 3 Claims. (Cl. 16—30.)

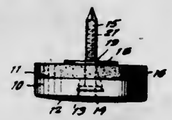
1. A furniture leg engaging unit for casters comprising a centrally apertured base plate having diametrically op-

posed openings disposed between said aperture and the periphery, said openings being relatively narrow at their inner ends and relatively wide at their outer ends and a spring frame member having side leg portions adapted to be compressed and expanded, and extensions at the lower ends of said side leg portions laterally movable with respect to said base member adapted in the expanded position of said side leg portions to be inserted in said



openings and bent beneath said base plate into angular relation with said side leg portions, and in their compressed positions to be interlockingly connected to said base member to prevent relative rotary movement of said base member, said openings limiting the expanded position, said spring frame member adapted to be inserted and retained in the furniture leg in its compressed relation, whereby relative rotary movement of said base plate is prevented.

1,888,037. CUSHION SLIDE FOR FURNITURE. WALTER F. HEBOLD, Bridgeport, Conn., assignor to The Bassick Company, Bridgeport, Conn., a Corporation of Connecticut. Filed Apr. 30, 1931. Serial No. 533,881. 6 Claims. (Cl. 16—42.)



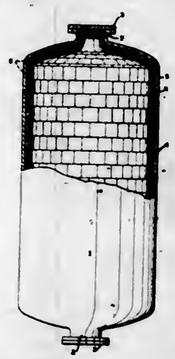
1. A cushion slide for furniture, comprising a floor engaging shoe, attaching means adapted to be driven into the furniture connected to said shoe and having free up and down and tilting movement relative to said shoe, a cushion layer at the upper side of said shoe, and a non-flexible and non-compressible washer frictionally engaged on said attaching means at the upper side of said cushion layer and adapted to yieldably retain said attaching means in a predetermined position relative to said washer, said washer adapted to have movement on said attaching means only toward said shoe, said attaching means adapted to be driven by blows applied to said shoe.

1,888,038. WINDSHIELD SCREEN. ALBERT HOILAND and PATRICK V. MOHER, Fargo, N. Dak. Filed Nov. 30, 1928. Serial No. 322,861. 9 Claims. (Cl. 296—94.)



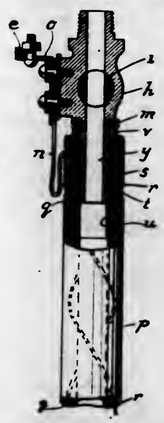
9. A shatter-proof window including, a body made of several layers of transparent material, and a member adapted to support a screen marginally anchored in one edge of said window and projecting from the edge thereof.

1,888,039. INTERLOCKING LINING FOR VESSELS OR RECEPTACLES. LYMAN C. HUFF, Chicago, Ill., assignor to Universal Oil Products Company, Chicago, Ill., a Corporation of South Dakota. Filed July 28, 1930. Serial No. 471,153. 8 Claims. (Cl. 220—63.)



1. A resistant lining for a non-resistant surface comprising a plurality of resistant blocks having recesses formed in opposite edges, a plurality of elements extending outwardly from said surface, and projections upon said elements which register with the recesses provided in said blocks.

1,888,040. CONNECTER FOR MILKING MACHINES. JOHN L. HULBERT, Poughkeepsie, N. Y., assignor to The De Laval Separator Company, New York, N. Y., a Corporation of New Jersey. Filed July 5, 1928. Serial No. 290,359. 7 Claims. (Cl. 173—326.)

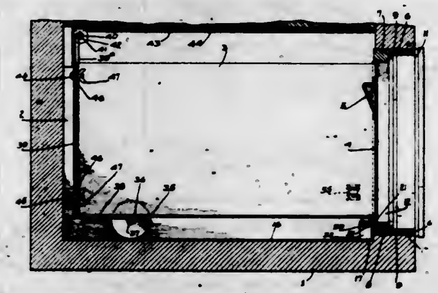


1. A combined pneumatic and electric connecter comprising a flexible hose member, a body having a pneumatic conduit member, a metal liner in one of said members and a shouldered metal tube carried by the other member and adapted to enter said liner, and a soft ring adapted to surround said tube and be compressed between said shoulder and the end of the metallic liner, thereby making an air tight joint.

1,888,041. STORAGE DRAWER FOR REFRIGERATING APPARATUS. CHARLES E. LONG, Minneapolis, Minn. assignor of one-half to Puffer-Hubbard Mfg. Co., Minneapolis, Minn., a Corporation of Minnesota. Filed May 19, 1930. Serial No. 453,586. 8 Claims. (Cl. 45—77.)

1. In combination with a structure providing a chamber having a drawer opening, a drawer arranged within

the chamber and movable within the opening, rollers carried by the drawer and arranged adjacent the inner end of the drawer to support it, and additional rollers arranged rearwardly of and above said first mentioned rollers and adapted to co-act with the chamber to resist rocking motion of the drawer about said first mentioned



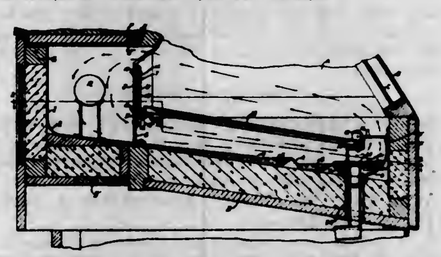
rollers and downward motion of the forward portion of the drawer for any withdrawal position, said rollers being arranged on a single mount, and means detachably securing the mount to the rear face of the rear wall of the drawer, said means being accessible from within the drawer.

1,888,042. COMPOUND ALLOY PLATE. HARRY H. LYNN, Wyoming, and HENRY L. COLES, Hamilton, Ohio, assignors to Guardian Metals Company, Hamilton, Ohio, a Corporation of Delaware. Filed Dec. 20, 1930. Serial No. 503,688. 2 Claims. (Cl. 109—1.)



1. As an article of manufacture, an improved composite plate for burglar resisting safes and vaults, including in combination, a plurality of spaces slats having common ends, the said slats being disposed in the same planes and being mutually overlapping, whereby to present substantially continuity of front and rear surfaces and a sheath of metal therearound.

1,888,043. REFRIGERATOR. DON C. MCCORD, St. Louis, Mo., and GERALD S. BATAILLE, Royal Oak, Mich., assignors to Hussmann-Ligonier Company, St. Louis, Mo., a Corporation of Delaware. Filed May 4, 1929. Serial No. 360,364. 1 Claim. (Cl. 62—89.5.)

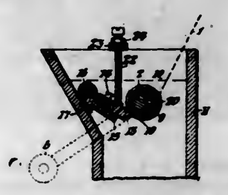


A display case refrigerator comprising a casing having a forwardly and downwardly inclined bottom wall, a lining member permanently secured to said bottom wall, said lining member being provided with a water-receiving depression, and a cooling element, said cooling element being positioned so that circulating air passing from said cooling element will move immediately adjacent to said water-receiving depression, said lining member having oppositely disposed and integrally formed curved portions for directing the air moving from said cooling element.

1,888,044. PROCESS OF OBTAINING RESINS OR RESIN LIKE BODIES FROM CRACKED HYDROCARBON PRODUCTS. JACQUE C. MORRELL, Chicago, Ill., assignor to Universal Oil Products Company, Chicago, Ill., a Corporation of South Dakota. Filed Jan. 6, 1928. Serial No. 245,042. 8 Claims. (Cl. 260—2.)

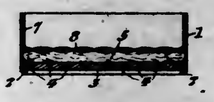
1. A process of improving resin-like bodies obtained from cracked hydrocarbon distillates which comprises first removing said resinous bodies with an adsorbing material and separating the same from the absorbing material, and thereafter subjecting the removed bodies to the simultaneous action of an oxidizing agent and ultra-violet light.

1,888,045. METHOD OF AND MEANS FOR MAKING TUBES OF CELLULOID AND THE LIKE. SAMUEL A. NEIDICH, Edgewater Park, N. J. Filed Mar. 13, 1929, Serial No. 346,789. Renewed July 30, 1932. 4 Claims. (Cl. 18—14.)



1. Means for forming tubes of celluloid and the like, including a mandrel holder for such material, and means adapted to roll a sheet of such material on said mandrel holder; a gauge member mounted substantially parallel with the axis of said holder; and means adapted to adjustably determine the position of said gauge member with respect to said axis; whereby said gauge member is adapted to deform the outer surface of said tube; including a screw adapted to shift the position of said gauge by its rotation.

1,888,046. TRAY. SAMUEL A. NEIDICH, Edgewater Park, N. J. Original application filed Feb. 12, 1929, Serial No. 339,470. Divided and this application filed May 3, 1930. Serial No. 449,513. 3 Claims. (Cl. 18—8.)

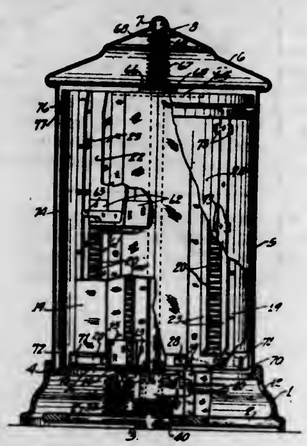


1. In a tray adapted to hold filaments; the combination with an outer cylindrical band; of an internally extending annular flange in the lower portion of said band; a ceramic disk fitted to said band, resting upon said flange, and having perforations therethrough permitting the passage of liquid to and from filaments supported by said disk; a closure or said tray, including a cylindrical band, frictionally engaging the inner wall of said outer band; and a screen formed of Monel metal wires, in reticulated spaced relation, at the lower end of said inner band; whereby filaments supported by said disk may be held in position during the raising and lowering of said tray in a liquid.

1,888,047. DISPENSING MACHINE. CONSTANTINE N. NEKLUTIN, Ferguson, Mo., assignor to The Universal Match Corporation, St. Louis, Mo., a Corporation of Delaware. Filed Apr. 15, 1929. Serial No. 355,257. 5 Claims. (Cl. 312—97.1.)

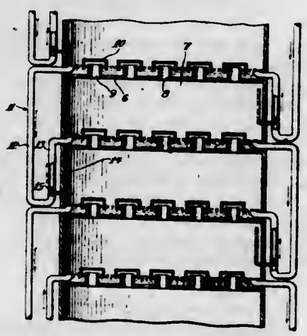
2. In combination, in a machine of the class described, a base, a post upstanding from the base, a drum journaled

for rotation on the post, means for effecting rotary movement of the drum, and means for yieldingly retarding rotary movement of the drum, said last named means including a plate disposed about the post and having engagement with a wall of the drum, a second plate fixed on the post, and a spring interposed on the post between said plates and yieldingly engaging against the first one thereof.



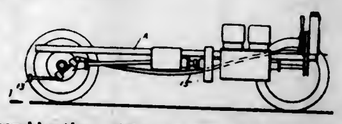
3. In combination, in a machine of the class described, a base, a post upstanding from the base, a plate mounted on the post for horizontal rotary movement relatively to the base, an annular series of spaced catchdogs on the plate, a notched latch pivotally mounted on the base and laterally swingable relatively to the plate for releasable engagement with the successive dogs for latching the plate against rotary movement, and means for effecting dog-release of the latch and step-by-step rotary movement of the plate, said means including an operating lever pivoted on the post for oscillation in a horizontal plane relatively to the plate, a first pawl pivotally mounted on the lever for dog-releasing actuation of the latch, and a second pawl on the lever for plate-actuating engagement with the successive dogs.

1,888,048. TREATMENT OF HYDROCARBON OILS. EDWIN F. NELSON, Chicago, Ill., assignor to Universal Oil Products Company, Chicago, Ill., a Corporation of South Dakota. Filed Oct. 22, 1930. Serial No. 490,472. 9 Claims. (Cl. 261—114.)



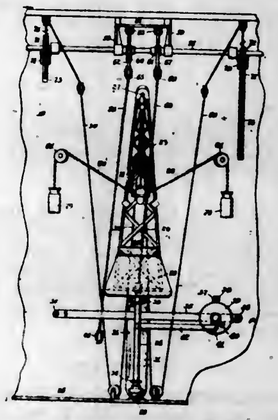
1. In a method of intimately associating liquid and vapors, which comprises passing liquid downwardly through a plurality of zones in each of which a fixed liquid level is maintained, and passing vapors under pressure upwardly through said plurality of zones, the step of facilitating the passage of liquid from one zone to the zone next below by passing a stream of vapors at relatively high velocity from a zone of relatively high pressure into the liquid passing from said upper zone to said lower zone.

1,888,049. JACK-AND-PARKING MECHANISM FOR AUTOMOTIVE VEHICLES. FRANK W. L. PEBBLES, St. Louis, and CHARLES W. BAKER, Lake Charles Park, Mo. Filed Nov. 25, 1929. Serial No. 409,450. 6 Claims. (Cl. 180—1.)



1. In combination with a motor vehicle, a jacking device comprising a lifting lever angularly revoluble through a conical surface, the pivotal point of said lever being disposed with relation to the vehicle so that when in elevated position the lever will be approximately in line with the understructure of said vehicle and when in lowermost position the vehicle will be raised.

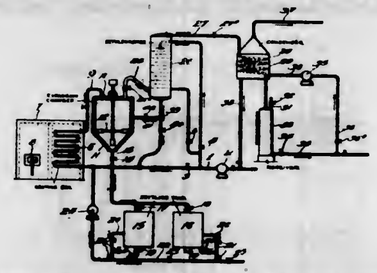
1,888,050. AMUSEMENT AND DISPENSING DEVICE. WILLIAM RABKIN, New York, and CHARLES FLEISCHER, Brooklyn, N. Y.; said Fleischer assignor to said Rabkin. Filed Oct. 18, 1929. Serial No. 400,590. 4 Claims. (Cl. 212—8.)



1. A device of the character described, comprising a boom, a ball joint upon which the boom is supported and mounted, a guide for the boom pivotally mounted on a center with said ball joint and connected with the boom, and means operated from a remote point and connected with the guide for changing the angle of the boom in a single plane.

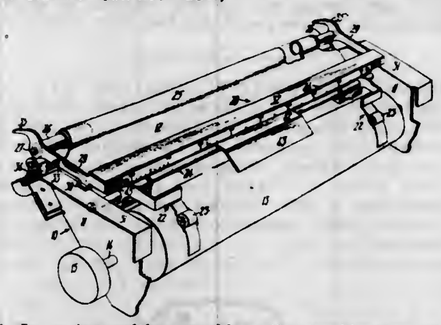
1,888,051. PROCESS AND APPARATUS FOR TREATING HYDROCARBONS. JEAN D. SUBUY, Chicago, Ill., assignor to Universal Oil Products Company, Chicago, Ill., a Corporation of South Dakota. Filed Oct. 26, 1928, Serial No. 670,847. Renewed July 8, 1929. 2 Claims. (Cl. 196—49.)

1. A process for cracking oil, consisting in subjecting the oil to conversion conditions of heat and pressure in a coil, in transferring the heated oil to an enlarged chamber, in dephlegmating the vapors issuing from said chamber, in condensing and collecting the dephlegmated vapors, in continuously discharging unvaporized residual oil from said chamber to a settling zone wherein substantial portions of its free carbon content is precipitated in re-distilling substantial portions of the pressure distillate produced, under a lower pressure than is maintained on the oil in the coil by passage thereof through a zone of heat interchange with uncondensed vapors, in returning regu-



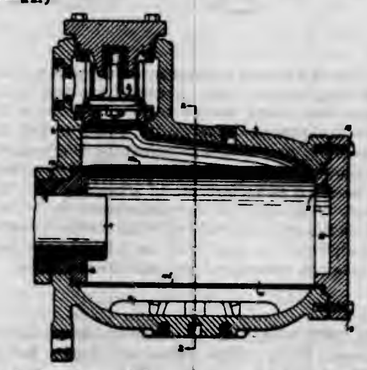
lated quantities of the unvaporized distillate from said zone of heat interchange and carbon-free residual oil from said settling zone to said coil for further treatment.

1,888,052. TYPEWRITING MACHINE. JESSE A. B. SMITH, Stamford, Conn., assignor to Underwood Elliott Fisher Company, New York, N. Y., a Corporation of Delaware. Filed Nov. 18, 1930. Serial No. 496,404. 10 Claims. (Cl. 197—181.)



1. In a typewriting machine, the combination of a platen, an erasing table arranged above the platen to correct a work-sheet, and a pair of paper-tables, one table at the rear of the platen and the other table above the platen at the front thereof, said front table having a sheet-deflector to guide the sheet from the platen over said table and under the erasing table.

1,888,053. PUMP. JOSEPH A. TENNANT, Houston, Tex., assignor, by mesne assignments, to Stephens Pump Company, Round Rock, Tex., a Corporation of Delaware. Filed May 5, 1932. Serial No. 609,395. 9 Claims. (Cl. 103—44.)



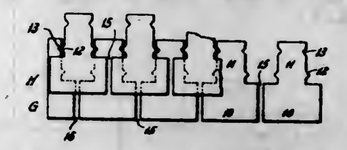
1. A hollow expansible pumping member having one portion of a greater thickness than another portion to resist expansion in one direction more than in another.

1,888,054. APPARATUS FOR REPRODUCING LITERARY AND PICTORIAL MATTER. GÉZA TIPECSKA and LUDWIG MACH, Munich, Germany. Filed June 20, 1930 Serial No. 462,518, and in Germany July 1, 1925. 1 Claim. (Cl. 88—24.)



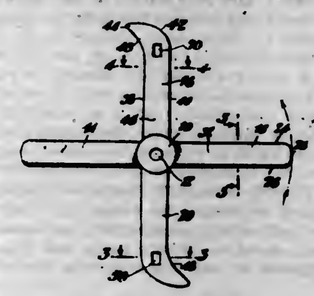
An optical projection apparatus for projecting enlarged images of microphotographic matter located on a plate with reference to a system of co-ordinates, comprising the combination of means for projecting a beam of light, a photographic plate holder, manually operable means for moving the plate holder in one direction of the co-ordinate system, mechanically operable means for moving the plate holder in the same direction, means for effecting automatic movement of the plate holder in the other direction of the co-ordinate system, key controlled means for controlling movement of the plate holder through predetermined distances in said last mentioned direction, and a graduated scale for each direction of movement for approximately setting any particular part of the plate in position for projection.

1,888,055. SHINGLE. ROBERT J. TOBIN, Hollis, and GEORGE A. TOBIN, Forest Hills, N. Y. Filed July 22, 1930. Serial No. 469,709. 7 Claims. (Cl. 108—7.)



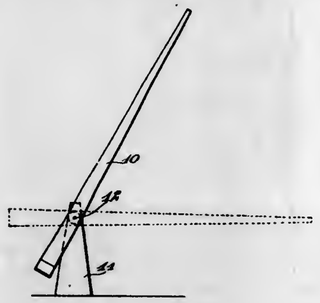
2. A shingle comprising a lower part and a reduced upper part secured thereto, the side edges of said upper part having projections and notches, respectively, for fitting corresponding notches and projections of like shingles in the next courses.

1,888,056. FOUR BLADE PROPELLER. JACK VERSILLO and AUGUSTINE YODICE, New York, N. Y. Filed May 31, 1932. Serial No. 614,440. 6 Claims. (Cl. 170—159.)



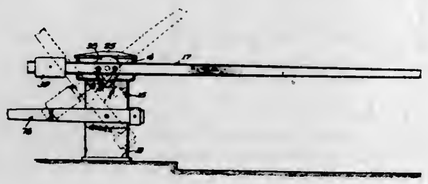
1. A propeller having a hub and a plurality of different pairs of oppositely disposed blades extending therefrom, one pair of the blades having trailing and leading edges substantially parallel to each other and a working face of inclined cross section toward the leading edge thereof, and the other pair having a leading and trailing edge merging toward each other whereby an extending lip portion is formed leading in the direction of rotation of the propeller.

1,888,057. AUTOMATIC GATE. ORVILLE L. VINCENT, Chicago, Ill. Filed Mar. 19, 1931. Serial No. 523,908. 7 Claims. (Cl. 39—62.)



1. A highway gate including a drive shaft on which the gate is mounted for free rotary motion, a disk carried by the shaft opposite the gate, a coil spring disposed about the shaft, one end of the spring being connected to the gate and the other end to the disk, and a second coil spring arranged concentrically of the first and similarly connected, the second spring being wound in reverse direction to the first.

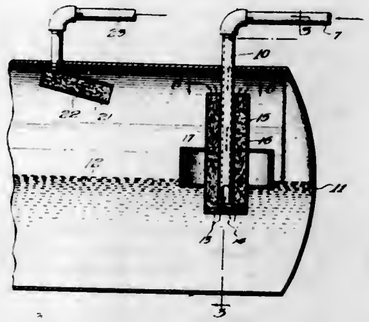
1,888,058. ELECTRICALLY OPERATED AUTOMATIC CROSSING GATE. ORVILLE L. VINCENT, Chicago, Ill. Filed Sept. 30, 1931. Serial No. 565,975. 15 Claims. (Cl. 39—7.)



1. In a crossing gate of the character described, the combination of a tubular standard having at the upper end thereof a cap with a pair of undulatory, concentrically arranged, circular tracks, a housing positioned above the cap, a gate arm carried by the housing so as to swing vertically and adapted normally to extend substantially parallel to the crossing, rollers on the under side of the housing arranged to travel on the tracks and form therewith a mount whereby the housing is supported to rotate on a substantially vertical axis to permit the gate arm to swing horizontally, and is automatically urged in response to the joint action of the rollers and the undulations of the tracks to return to its normal position wherein the gate arm is parallel to the crossing when it is rotated out of such position by horizontal swinging of the gate arm, and mechanism for swinging the gate arm vertically into and out of a substantially horizontal, operative position comprising an electric motor and speed reducing gearing disposed in and rotatable with the housing.

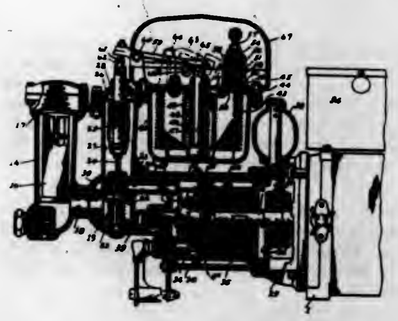
1,888,059. PROCESS FOR MAKING CARBURETED AIR GAS. CARL OTTO WANNACK, Chicago, Ill., assignor, by mesne assignments, to S. H. G. Incorporated, Chicago, Ill., a Corporation of Delaware. Filed June 14, 1928. Serial No. 285,229. 5 Claims. (Cl. 48—219.)

1. A process of generating combustible carbureted air gas, which comprises maintaining a bulk supply of volatile combustible liquid under pressure in a closed zone, temporarily isolating a portion of the liquid from said bulk supply, intermittently introducing air under pressure into contact with the isolated liquid to form combustible gas, withdrawing combustible gas thus formed from the gas



storage zone thereby reducing the pressure in said storage zone, and automatically regulating the introduction of air to said storage zone by the reduction in pressure following the withdrawal of gas from said storage zone.

1,888,060. ELECTRICALLY OPERATED AND CONTROLLED OIL BURNING MECHANISM. WALTER W. WILLIAMS, Bloomington, Ill., assignor to Williams Oil-O-Matic Heating Corporation, Bloomington, Ill., a Corporation of Illinois. Original application filed June 11, 1928, Serial No. 284,545, now Patent No. 1,817,051, dated Aug. 4, 1931. Divided and this application filed June 24, 1931. Serial No. 546,537. 2 Claims. (Cl. 103—40.)



1. In a fluid pumping apparatus, a fluid pump, a normally closed fluid intake valve, a closed housing, a bellows having one end closed by the housing closure, a connection from the pressure side of the pump to the interior of the housing, and means actuated by the compression of the bellows to open the fluid intake valve including a plunger mounted to reciprocate in a bearing in said housing closure with one end in engagement with the movable end of the bellows, and regulated means to allow the escape of air from the interior of the bellows upon compression to time the opening of the fluid intake valve.

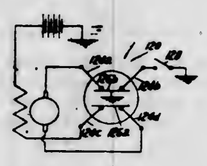
1,888,061. FOUNTAIN MOP. ERNEST EDGAR ALLEN, San Francisco, Calif. Filed May 3, 1930. Serial No. 449,463. 3 Claims. (Cl. 15—128.)

1. A fountain mop attachment for a hose, comprising a hand grip tubular body adapted to receive a length of hose and open longitudinally at one side providing a pair of spaced parallel terminal edges, a mop support member comprising elongated bars mounted along said terminal edges of the tubular body and extending beyond the end



of the hand grip body portion, and a saturable member mounted on said extended portion, said tubular portion of the hand grip being positioned on one side only of the said elongated bars.

1,888,062. COMBINED STARTING AND REVERSING SWITCH. VINCENT G. APPLE, Dayton, Ohio, assignor to Bendix Brake Company, South Bend, Ind., a Corporation of Illinois. Filed Feb. 11, 1929. Serial No. 338,975. 14 Claims. (Cl. 200—16.)



1. In an electric switch, the combination of a substantially closed body having terminal members insulated from each other extending inwardly through the sides of the body and from its inner wall substantially midway of its length, connectors within the said body between the said terminals and the one end adapted to engage the said terminals to connect certain of the said terminals in pairs, connectors within the said body between the said terminals and the other end adapted to engage the said terminals to connect certain other of the said terminals in other pairs, and means to move the said connectors to engage the said terminals.

1,888,063. VEHICLE CONTROL MECHANISM. VINCENT G. APPLE, Dayton, Ohio, assignor to Bendix Brake Company, South Bend, Ind., a Corporation of Illinois. Filed Jan. 27, 1930. Serial No. 423,644. 4 Claims. (Cl. 74—81.)

1. In combination with a control unit of the character described, a plate, a housing secured to one side of said plate at each extremity thereof, an operating plunger positioned within each of said housings extending through said

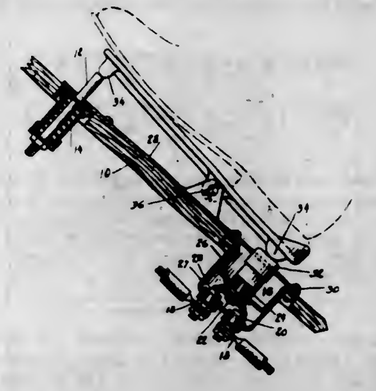
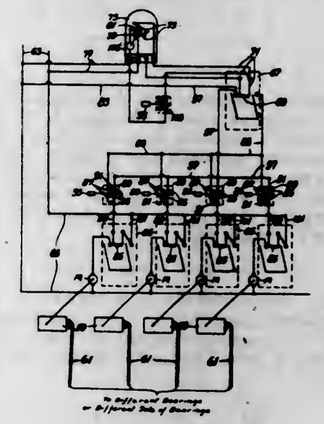


plate to the opposite side thereof, and means yieldably urging each of said plungers to its extended position.

1,888,064. LUBRICATOR. FRANK S. BARES, St. Louis, Mo. Filed Sept. 17, 1930. Serial No. 482,439. 9 Claims. (Cl. 184—7.)

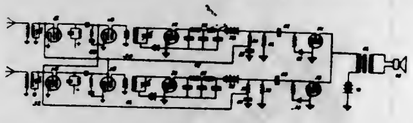


1. A lubricating system comprising a plurality of pumping units, a driving motor for each unit, a switch for each motor, automatic means for closing said switches to operate the motors according to predetermined intervals, manual means for closing all of said switches to operate the motors independently of said automatic means and individual manual means for independently closing any one of said switches to operate any motor independently of said automatic means.

1,888,065. DIFFERENTIAL VOLUME CONTROL FOR DIVERSITY RECEPTION. HAROLD H. BEVERAGE, Riverhead, N. Y., assignor to Radio Corporation of America, a Corporation of Delaware. Filed Dec. 11, 1928. Serial No. 325,304. 10 Claims. (Cl. 250—20.)

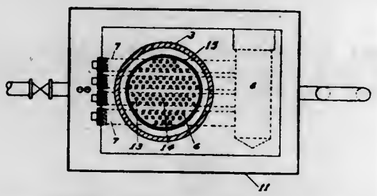
6. A diversity receiving system comprising a plurality of antennas having different fading characteristics, an

amplifier coupled to each of the antennas, volume control means following each of the amplifiers, and means so coupling each of the volume control means to the amplifiers as to control the gain in the amplifiers partially in accordance with the magnitude of the energies from the other



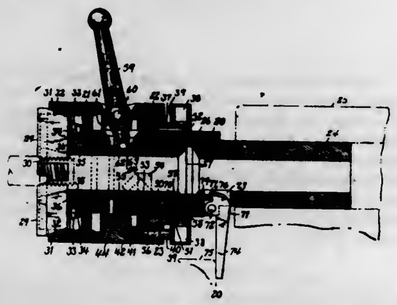
amplifiers, and partially in accordance with the magnitude of their own outputs, in order to strengthen the maximum signal and to make the change-over from one signal to another more stable and less noticeable, means to combine the volume controlled energies, and means to translate the combined energy.

1,888,066. TEMPERATURE CONTROL OF EXOTHERMIC REACTIONS. HARLAN A. BOND, Metuchen, N. J., assignor, by mesne assignments, to The Roessler & Hasslacher Chemical Company, New York, N. Y., a Corporation of Delaware. Filed Apr. 2, 1930. Serial No. 441,013. 2 Claims. (Cl. 23—288.)



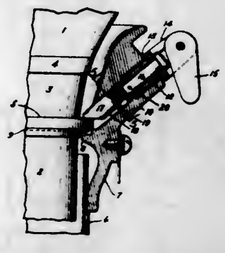
1. A method of regulating the temperature of exothermic gas phase reactions wherein the gases to be reacted are passed through a permeable heat conducting catalyst body, which comprises removing heat from the reaction zone along straight line paths of thermal flow in the direction of the gas flow within the catalyst chamber while preventing removal of heat from such chamber in a direction transverse to the gas flow.

1,888,067. SELF-OPENING DIE-HEAD. ALBERT F. BREITENSTEIN, New Haven, Conn., assignor to The Geometric Tool Company, New Haven, Conn., a Corporation. Filed May 2, 1930. Serial No. 449,233. 1 Claim. (Cl. 10—95.)



A self-opening die-head including a mounting-member having a clearance-passage; a floating chaser-carrying member carried by the said mounting-member with capacity for axial movement with respect thereto and provided with a rearwardly-offsetting thrust-transmitting member entering at its rear end the said clearance-passage in the said mounting-member; chasers installed in the said chaser-carrying member; a chaser-operating member for controlling the said chasers; a locking-member installed in the said mounting-member with capacity for reciprocating movement in a plane inclined with respect to the axis of the die-head and operatively connected to the said chaser-operating member and the said chaser-carrying member for locking the former and being released by a relative forward movement of the latter; a tripping-lever pivotally carried intermediate its ends by the said mounting-member and having one arm extended inwardly into the aforesaid clearance-passage therein and engaging the rear portion of the thrust-transmitting member of the chaser-carrying member and having a complementary arm extending outwardly away from the die-head structure in position to engage an external abutment.

1,888,068. ELECTRICAL DISCHARGE DEVICE. HAROLD W. BROWN, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed July 20, 1928. Serial No. 294,276. 3 Claims. (Cl. 250—27.5.)



1. In combination, an electrical discharge device comprising an anode having a flanged portion, a jacket therefor adapted to contain a cooling fluid, contact members slidably mounted in openings in the jacket and adapted to engage the upper surface of the flange to secure the jacket to the discharge device, and means rotatably mounted in said openings for operating said slidable members.

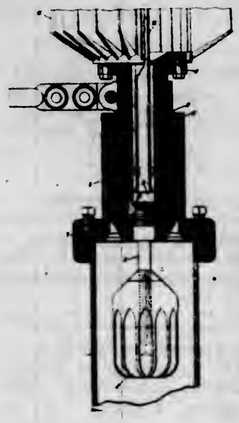
1,888,069. FEELER GAUGE. FRED BUCK, Saginaw, Mich., assignor to Lufkin Rule Co., Saginaw, Mich., a Corporation of Michigan. Filed Apr. 20, 1931. Serial No. 531,896. 4 Claims. (Cl. 33—168.)



1. In combination a feeler gauge strip, a handle member having a face thereof formed with a channel the width of which is defined by longitudinally disposed rib members, the opposite walls of said rib members being spaced apart to receive said gauge strip between them with a face thereof exposed, said walls being positioned to engage the longitudinal edges only of said strip in a manner to releasably secure the strip and handle together, for the purposes set forth.

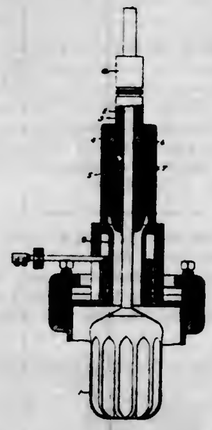
1,888,070. GAS TIGHT SEAL. GUENTHER BUECHNER, Scotia, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Sept. 5, 1928. Serial No. 304,141. 6 Claims. (Cl. 250—27.5.)

1. A gas tight seal including a core of conductive material, a layer of insulating material surrounding said core, a metallic shell surrounding said insulating material, and a cylindrical member embedded in said insulating mate-



rial and pressing said insulating material into intimate contact with said core and said shell, said member being attached at its exposed end to said core.

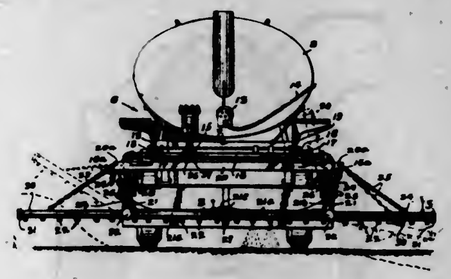
1,888,071. SEAL FOR ELECTRIC DISCHARGE DEVICES. JAMES W. CASE, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Dec. 28, 1929. Serial No. 417,289. 6 Claims. (Cl. 250—275.)



1. A seal including a metallic sleeve, a substantially non-oxidising metal core and a vitreous compound including mica and lead borate interposed between said shell and core, the surfaces of said core and shell being wet by the vitreous compound.

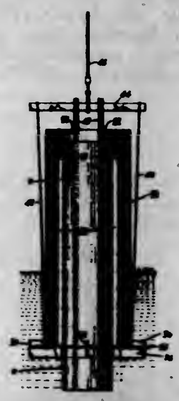
1,888,072. SPRAY BAR FOR ROAD SPRAYING VEHICLES. HAROLD A. CEDARSTROM, Minneapolis, Minn., assignor, by mesne assignments, to The Rosco Manufacturing Company, Minneapolis, Minn., a Corporation of Minnesota. Filed Sept. 26, 1930. Serial No. 484,566. 6 Claims. (Cl. 299—84.)

5. In a spray bar apparatus for road spraying vehicles, a pair of vertically disposed fluid conduits designed to discharge downwardly at opposed sides of a vehicle; a pair of horizontal spray pipes rigidly joined together at their inner ends substantially centrally of the vehicle, and projecting laterally into rigid union at their outer ends with the lower ends of said vertical conduits; at least one extension spray bar pivotally mounted for sup-



port by and communication with the lower ends of the corresponding vertical conduit, and designed to extend laterally beyond the vehicle; and means for securing said vertical conduits to the vehicle, whereby they and said rigid unions may comprise the sole support for said horizontal and extension spray bars.

1,888,073. METHOD OF PROTECTING PILES FROM EROSION. JEREMIAH J. COLLINS, Orange, N. J., assignor to Raymond Concrete Pile Company, New York, N. Y., a Corporation of New Jersey. Filed Oct. 11, 1929. Serial No. 398,841. 13 Claims. (Cl. 25—118.)

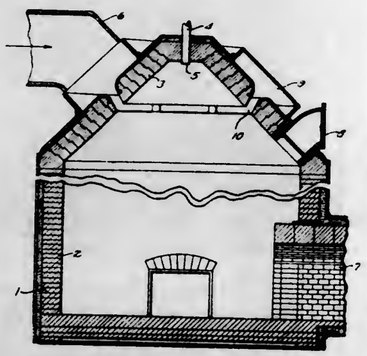


8. In the process of forming a concrete shell about a pile from a position above high water to a position below low water, the steps of placing about the pile a shell of sufficient inside diameter to provide an annular space between shell and pile, applying a sectional device about the pile below the shell after the lower end of the shell is submerged whereby the lower end of the annular space is sealed, filling said space with grout, and removing said sectional device.

1,888,074. GAS CARBURETOR. HORACE TYLER DYER, Greenwich, Conn. Filed Dec. 6, 1927. Serial No. 238,015. 12 Claims. (Cl. 48—78.)

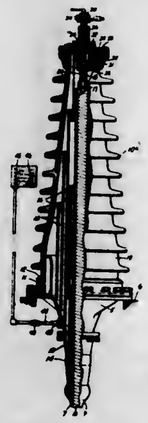
2. A gas carburetor for introducing enriching hydrocarbons into combustible gas which comprises a chamber, a carbureting-oil inlet adapted for spraying oil into a

central space of said chamber, a conduit surrounding said carbureting-oil inlet, and at least one passageway from said conduit to said chamber through which combustible gas to be carbureted may be passed into the chamber from points surrounding the spray and in a direction so related to the spray of oil as to urge it away from the walls of the chamber.



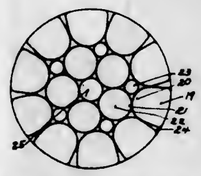
8. The method of enriching combustible gases which comprises establishing a blast of the combustible gas at a temperature substantially above that at which the hydrocarbon oil used for enriching is converted into gas, entraining the hydrocarbon oil in said blast, and maintaining the gases of said blast so long as they contain liquid hydrocarbons away from surfaces heated to temperatures which would cause decomposition of the liquid hydrocarbons.

1,888,075. TERMINAL FOR OIL FILLED CABLES AND METHOD OF EVACUATING THE SAME. EUGENE D. EBY, Pittsfield, Mass., assignor to General Electric Company, a Corporation of New York. Filed Feb. 17, 1930. Serial No. 428,925. 14 Claims. (Cl. 173—353.)



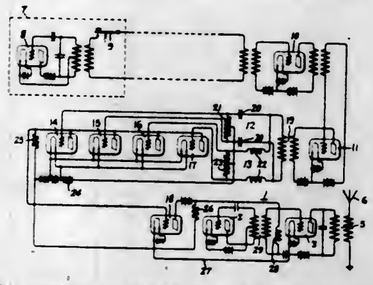
1. A terminal for high tension electric conductors comprising an insulator having an hermetically sealed chamber, a hollow conductor containing fluid insulation under a pressure above that of the atmosphere, a conduit member connected to the conductor inside of the chamber and extending through a wall thereof, said conduit being in communication with the interiors of the conductor and chamber, a valve by means of which communication between the said interiors may be made and broken, and a fluid filling for the terminal.

1,888,076. WIRE ROPE AND METHOD OF MANUFACTURE. MARTIN E. EVANS, Pittsburgh, Pa. Filed Aug. 29, 1930. Serial No. 478,687. 13 Claims. (Cl. 117—59.)



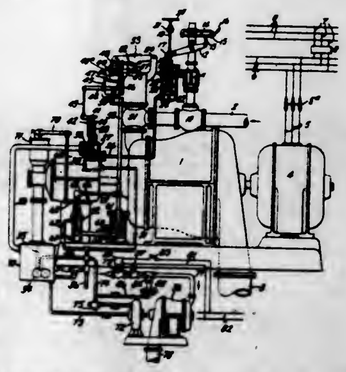
1. A wire rope or strand comprising a core and a plurality of layers of wires upon said core including an outer layer of Keystone shaped wire resting on an adjacent layer of wires so that two sizes of Keystone wire and one size of round wire cooperate to form said outer and adjacent layers of wire.

1,888,077. TRANSMITTING SYSTEM. PAUL C. GARDINER, Scotia, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Oct. 14, 1930. Serial No. 488,616. 8 Claims. (Cl. 250—17.)



1. The method of keying a transmitter comprising a source of oscillations in accordance with rapid impulses of single phase oscillations which includes the steps of converting said single phase oscillations to polyphase oscillations, rectifying said polyphase oscillations and controlling the output from said source of oscillations in accordance with the unidirectional electromotive force resulting from said rectification.

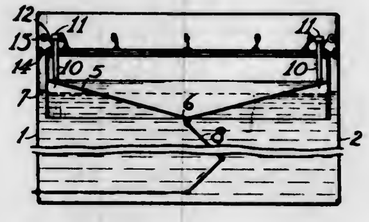
1,888,078. TURBINE INSTALLATION. LESTER E. GRUBE and DONALD F. WARNER, Lynn, and FRANKLIN R. ERICSON, Beverly, Mass., assignors to General Electric Company, a Corporation of New York. Filed Sept. 19, 1929. Serial No. 393,824. 16 Claims. (Cl. 137—158.)



8. The combination with an elastic fluid turbine having an emergency trip valve and regulating valve means

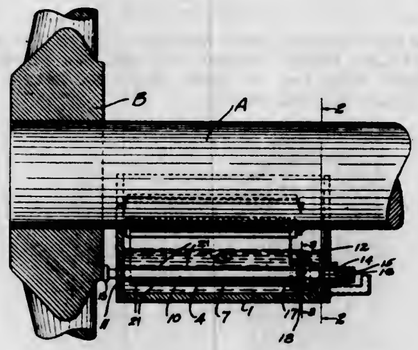
for controlling the admission of elastic fluid to the turbine, of a speed governor for controlling the regulating valve means, and fluid actuated means for opening said emergency trip valve and said regulating valve means to start the turbine.

1,888,079. STABILIZED FLOATING DECK. CHARLES H. HAUPT, Elizabeth, N. J., assignor to Standard Oil Development Company, a Corporation of Delaware. Filed May 29, 1931. Serial No. 540,929. 5 Claims. (Cl. 220—26.)



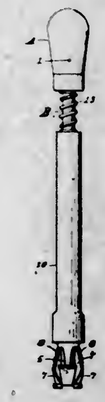
1. A device for minimizing evaporation losses from tanks containing volatile liquids, comprising a buoyant deck so shaped and constructed as to include an area constituting a vapor pressure pocket and an area constituting a liquid displacement portion, the relative extent of these two areas being variable depending upon the amount of immersion of the deck in the liquid, the bottom of the deck being so shaped as to provide a changing amount of surface displacement as the deck rises and falls with reference to the surface of the liquid, and pressure control means operatively associated with the vapor pressure pocket.

1,888,080. JOURNAL LUBRICATOR. JAMES J. HENNESSY, New York, N. Y. Filed Nov. 12, 1927. Serial No. 232,829. 8 Claims. (Cl. 308—88.)



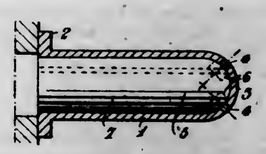
8. In a journal lubricating device, a lubricant reservoir, an endless belt, elements for guiding said belt into said reservoir and into contact with the journal with which the device is assembled, and reciprocating means actuated automatically by the operation of the journal for moving said belt over said elements.

1,888,051. SCREW DRIVER. ROY P. HENRY, Battle Creek, Mich. Filed Feb. 12, 1932. Serial No. 592,568. 5 Claims. (Cl. 145—52.)



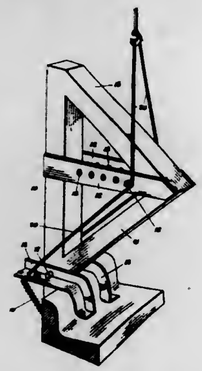
1. In a screw driver, the combination with the shank of a screw driver, its handle and a compression coil spring about said shank below said handle, of a screw driving head at the opposite end of said shank, said head having an annular shoulder above the blade end of said head, a sheath about said shank between said spring and said shoulder and having forwardly and outwardly extending resilient screw clamping jaws forming a part therewith and adapted to extend over said head, a barrel about said sheath having a shoulder adapted to abut the rear end of said sheath below said spring, said barrel being limited to longitudinal movement on said sheath whereby it may be moved to force said jaws to a common center about a screw head, and release said head when retracted, or when said head has been driven to a seat in an object.

1,888,082. APPARATUS FOR INTRODUCING LIQUID FUEL INTO INTERNAL COMBUSTION ENGINES. KNUT JONAS ELIAS HESSELMAN, Saltsjo-Storangen, near Stockholm, Sweden. Filed Dec. 21, 1929, Serial No. 415,630, and in Sweden Jan. 2, 1929. 18 Claims. (Cl. 299—120.)



1. A nozzle for injecting liquid fuel into internal combustion engines comprising a sleeve having a hemispherical end portion and one or more discharge orifices angularly disposed with respect to the axis of the sleeve in said end portion and a plug fitted in said sleeve, said plug having a corresponding hemispherical end portion and the end portion of the plug having one or more cylindrical recesses, each recess being in coaxial communication with an orifice, and said plug having a fuel supply channel communicating substantially tangentially with each recess.

1,888,083. CURB JACK. HAROLD F. HOLTZ, Lincoln, Nebr. Filed June 20, 1932. Serial No. 618,201. 6 Claims. (Cl. 294—104.)



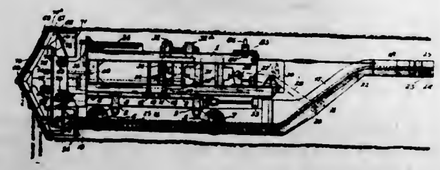
1. A curb jack having a pair of jaws for engaging the curb, and means for applying lifting power in the vertical center line of mass of the curb section to be lifted and for simultaneously actuating said jaws into clamping engagement with the section of the curb to be lifted.

1,888,084. FINISHING WELT. ALBERT L. HOWARD, Brockton, and JAMES CHRISTIE, Hanover, Mass., assignors to Hamilton-Wade Company, Brockton, Mass., a Corporation of Massachusetts. Filed Dec. 18, 1930. Serial No. 502,110. 5 Claims. (Cl. 155—184.)



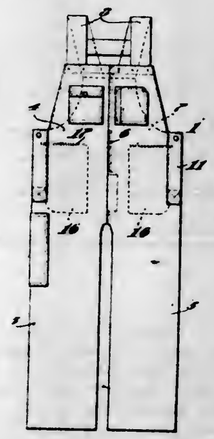
1. A finishing welt comprising a one piece strip of sheet material having one marginal edge portion wrapped about a cover bead and the other edge portion doubled over so that the two edge portions lie in substantially the same plane when the welt is fully opened, and a single strip of previously manufactured adhesive sheet material secured to said edge portions in position to reinforce them in the welt structure and to be doubled into adhering face to face contact and seal the cover bead when the welt is closed.

1,888,085. MINING MACHINE. ALEXANDER HUMBEL, Cleveland, Ohio, assignor to The A. L. Connelly Co., Cleveland, Ohio. Filed Aug. 21, 1930. Serial No. 476,957. 13 Claims. (Cl. 262—7.)



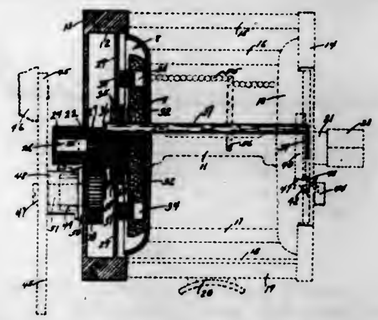
1. In a mining machine, the combination of a frame, a shaft mounted thereon, an outer cutter head rotatably mounted thereon near the forward end of said shaft and provided only at opposite sides with forward projections, opposed sides of said projections being defined by concave arcuate surfaces, an inner head mounted on the end of said shaft and having convex edges adapted to conform to and describe a path within the path of said concave surfaces of the outer head and means for rotating said heads at different speeds.

1,888,086. OVERALLS. HARRY B. JACKSON, Lebanon, N. H., assignor to H. W. Carter & Sons, Lebanon, N. H., a Co-partnership consisting of Harry B. Jackson, Stanley S. Jackson and John J. Landers, Lebanon, N. H., L. F. Fletcher, Newtonville, Mass., and G. E. Cogswell, Brookline, Mass. Filed Oct. 15, 1931. Serial No. 568,916. 2 Claims. (Cl. 2—227.)



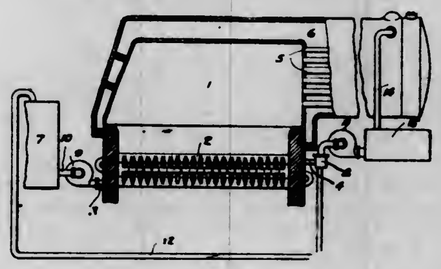
1. In a garment having body and leg portions and front and back flaps located approximately at the thigh part of the body portion between front and back sections of the garment, said flaps being separably connected at their upper ends and forming a normally constricted side opening of the garment, and a bag-like pocket attached to the inside of the front section and having a slit along its outer edge, the top of the pocket being spaced below the upper ends of the flaps and said slit being located remote from the outer edge of the front flap so that the mouth of the pocket is spaced inwardly from the mouth of the garment opening and is normally covered by the overlapping margins of the back and front flaps.

1,888,087. AUTOMATIC CASTING ANTIBACKLASH FISHING REEL. ARTHUR JACOBSEN, San Francisco, Calif. Filed Dec. 26, 1930. Serial No. 504,708. 7 Claims. (Cl. 242—84.5.)



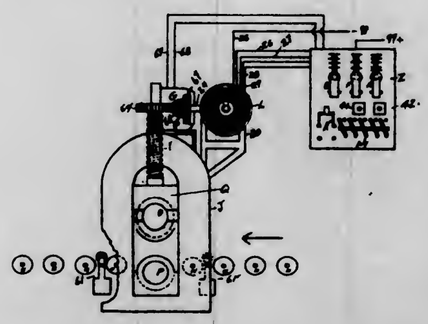
4. In a fishing reel, a shaft, a reel spool mounted on said shaft, said reel spool having a braking surface, a braking disc on said shaft adjacent said braking surface, means for bringing said braking disc into frictional engagement with said braking surface, said means comprising a pair of levers loosely mounted on and depending from said shaft, a line drop shaft connecting the lower free ends of said levers, means on one of said levers adapted to travel on said first named shaft towards and away from said friction disc to cause said friction disc to advance and retract from said braking surface.

1,888,088. COOLING SYSTEM FOR NOZZLE BURNERS. WALTER KLEINOW, Hennigsdorf, near Berlin, ALBERT MORGENROTH, Niederneuendorf, near Berlin, FRIEDRICH REINHARDT, Hennigsdorf, near Berlin, and WILHELM BRUHN, Teiten, Germany. Original application filed Mar. 24, 1927, Serial No. 178,073, Patent No. 1,789,035, and in Germany May 1, 1925. Divided and this application filed Mar. 14, 1929. Serial No. 347,100. 2 Claims. (Cl. 122—412.)



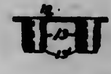
1. The combination with a boiler having a burner provided with a conduit for the circulation of cooling water, of a water supply tank, a pumping means provided between said tank and the inlet of said conduit, a small tank having an inlet and an outlet, said inlet being connected to the outlet of said conduit, and said small tank outlet being connected to said water supply tank whereby said pumping means is adapted to cause circulation of cooling water between said water supply tank and said small tank, and means for supplying water from said small tank to said boiler.

1,888,089. CONTROLLER CONSTRUCTION. CLAUDE M. KNIGHT, Cleveland, Ohio. Original application filed Feb. 11, 1925, Serial No. 8,382, now Patent No. 1,832,400. Divided and this application filed Nov. 16, 1931. Serial No. 575,888. 16 Claims. (Cl. 200—5.)



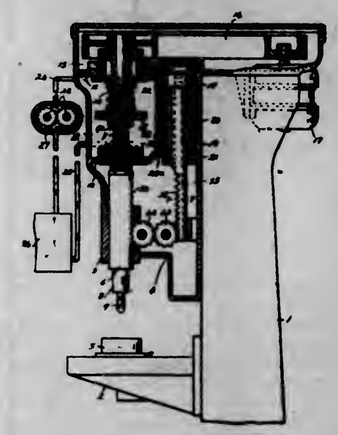
1. A controller for electric circuits having in combination a supporting member, a contact ring formed of a plurality of segments, an arm pivoted within said ring, a circuit terminal contact carried by said arm, means to produce relative motion between said segment ring and said contact arm to bring said elements successively into contact therewith, a second circuit terminal, connections between said segment ring and said second circuit terminal including a plurality of individual switches for selectively establishing contact between said individual segments and said second circuit terminal.

1,888,090. IDENTIFICATION MEANS. PAUL P. LINDEN, Yonkers, N. Y. Filed Jan. 7, 1932. Serial No. 585,225. 18 Claims. (Cl. 40—2.2.)



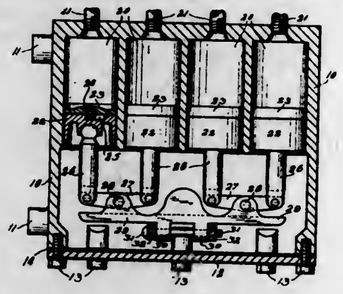
1. An identification means consisting of two interlocking members adapted to engage between themselves the material to be identified, one of said members having means to be pierced through said material and the other of said members having means to engage and on compression to deform said piercing means and itself be deformed so as to become interlocked with said piercing means in an inaccessible location to prevent removal of said identification means without destruction thereof.

1,888,091. HYDRAULIC FEED MECHANISM. ALEXANDER OSBAHOWSKY, Detroit, Mich., assignor to Production Engineering Company, Detroit, Mich., a Corporation of Michigan. Filed July 15, 1929. Serial No. 378,380. 8 Claims. (Cl. 77—32.7.)



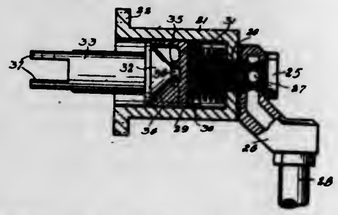
1. In a feed mechanism, the combination with a reciprocatory tool holder, of a fluid motor comprising a cylinder and a piston reciprocatory therein, a valve member carried by said piston and controlling the application of fluid pressure thereto, a tubular rod connected to said piston and projecting from the cylinder, a stem connected to said valve member and extending through said rod, the rod and stem being formed with gear racks, a gear meshing with the rack of said rod and establishing a drive therefrom to said tool holder for advancing the latter to the work, a coaxial gear meshing with the rack on said stem, and means for actuating the last-mentioned gear to control said valve member.

1,888,092. BRAKE MECHANISM. JOHN H. PETERSON, Silver City, Iowa, assignor of thirty-five per cent to Elmer G. Green, Silver City, Iowa. Filed Feb. 16, 1931. Serial No. 516,105. 1 Claim. (Cl. 60—54.6.)



A combined supply and control unit for use in hydraulic vehicle brakes, comprising a casing, a plurality of containers in the casing, a cylinder disposed below each container and communicating therewith, a rocker member in the casing adapted to be swung for operating the vehicle brakes, a sleeve mounted to turn on the rocker member in position to be moved toward and from said cylinders, means for limiting the turning of said sleeve on the rocker member, equalizing means mounted on said sleeve to move therewith, pistons in said cylinders, and piston rods carried by the pistons and connected to said equalizing means whereby to equalize pressure of the rocker member equally and against said pistons, said limiting means for the sleeve adapted to hold the equalizing means in position to transmit said pressure to the remaining pistons when the fluid resistance falls with respect to other pistons.

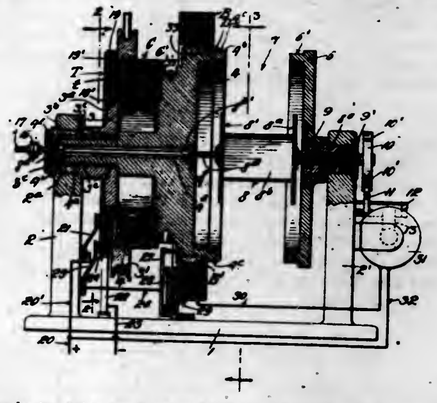
1,888,093. HYDRAULIC BRAKE. JOHN H. PETERSON, Silver City, Iowa. Filed June 29, 1931. Serial No. 547,735. 8 Claims. (Cl. 60—54.6.)



2. A motor for hydraulic brake mechanism, comprising a cylinder open at one end and having a reduced threaded opening through its inner end, a piston in the cylinder, a piston rod connected to the piston and extending through the open end of the cylinder, a hollow angular coupling fitted against the inner end of the cylinder and having a threaded opening therethrough adapted to align with the threaded opening in the cylinder, said coupling adapted for connection with a source of pressure supply, and a hollow connecting screw threaded through the coupling and the inner end of the cylinder and having lateral openings communicating with the coupling for supplying pressure therethrough to the inner end of the cylinder.

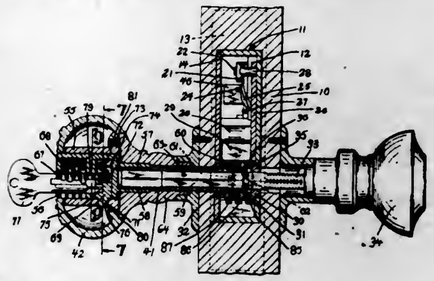
1,888,094. CINEMATOGRAPHIC PROJECTOR, CAMERA, AND THE LIKE. LUIGI RANIERI, Rome, Italy, assignors of one-half to Carlo Dentice Di Frasso. Filed Oct. 3, 1930. Serial No. 486,126. 15 Claims. (Cl. 88—18.2.)

1. A cinematographic projector embodying, in combination, a source of driving power, a rotatable film-driving element having means for engaging a film, rotatable power-coupling means arranged to cause a coupling and uncoupling of said film-driving element with said power



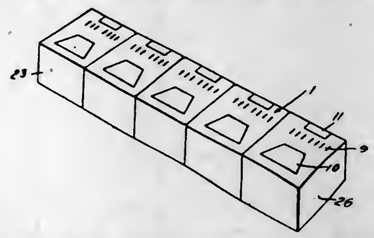
source to drive and release the said driving element intermittently at predetermined intervals through electromagnetic force, and means for braking said film-driving element also by electro-magnetic force.

1,888,095. LOCK. JOHN H. SHAW, New Haven, Conn., assignor to Sargent & Company, New Haven, Conn. Filed Mar. 7, 1929. Serial No. 344,978. 29 Claims. (Cl. 70—91.)



2. In a lock for a door or the like, a lock case, a latch bolt therein, a knob at the exterior of said door, a pair of rollbacks in the lock case, means connected to said knob and extending into said lock case to engage said rollbacks, means for dogging one of said rollbacks, and means at the exterior of the door for disengaging the first named means from the dogged rollback.

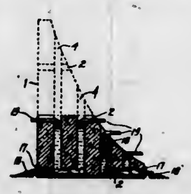
1,888,096. DISPLAY DEVICE. LOUIS E. SHAW, East Orange, N. J., assignor to Adartcraft, Incorporated, New York, N. Y., a Corporation of Delaware. Filed June 2, 1931. Serial No. 541,600. 18 Claims. (Cl. 40—126.)



1. The method of forming a display device to simulate a plurality of packages arranged in a row which comprises folding a sheet of material along parallel spaced

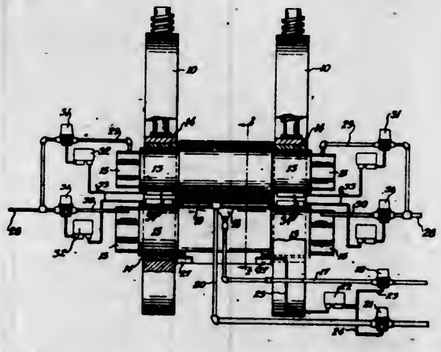
lines between the individual package representations to form the side edges of the front surfaces of a plurality of packages, and folding the sheet along parallel lines at right angles to said first mentioned lines to form the top and bottom edges of the front surfaces of the packages.

1,888,097. METHOD FOR THE COOLING OF THE INTERIOR OF A SEAMLESS BLOCK OF SETTING CONCRETE. HENRY SORENSEN, San Francisco, Calif. Filed June 27, 1932. Serial No. 619,409. 3 Claims. (Cl. 61—30.)



1. In the method of casting a seamless block of concrete of such size as would ordinarily crack or become weakened upon setting in the absence of heat dispelling means therein, comprising providing shafts extending from the base of the block to the top thereof, positioning said shafts throughout the block at such intervals as will enable the heat generated by setting of the concrete to be conducted thereto, and providing water standing at any desired height in said shafts to absorb the generated heat.

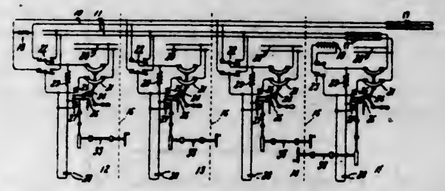
1,888,098. THERMOSTATIC CONTROL FOR ROLLING MILLS. FRANK S. SWANEY, Massillon, Ohio. Filed Jan. 16, 1930. Serial No. 421,238. 9 Claims. (Cl. 236—1.)



1. In combination with a rolling mill for rolling metal and having solid rolls therein, means for applying a heating agent externally to the longitudinally central portion of the rolls, a valve controlling the heating means, means for applying a cooling agent externally to the longitudinally central portion of the rolls, a valve controlling the cooling means, thermostatic means controlling the valves, a thermal bulb operating the thermostatic means, and means holding the thermal bulb in contact with the outer surface of one of the rolls.

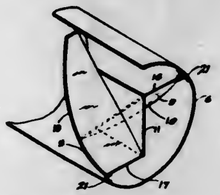
1,888,099. CIRCUIT CONTROLLING APPARATUS. WALDO W. WILLARD, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed May 10, 1930. Serial No. 451,448. 7 Claims. (Cl. 175—294.)

1. In combination with craft adapted to be operated under water and divided into compartments which are arranged to be made water-tight, a source of electromotive force in one of said compartments, a load circuit in one of said compartments, means for connecting said load circuit to said source including a switch, a liquid-



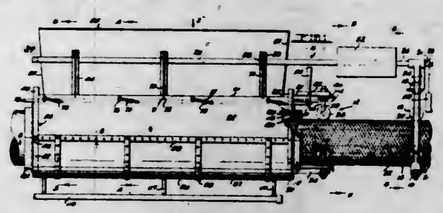
filled water-tight casing for housing said switch, and means for equalizing the pressures within and without said casing.

1,888,100. CONCRETE MIXER. HENRY F. WILMS, Cleveland, Ohio, assignor to Industrial Brownhoist Corporation, Bay City, Mich., a Corporation of Ohio. Filed Jan. 28, 1931. Serial No. 511,828. 8 Claims. (Cl. 83—73.)



1. In a mixing drum the combination of two mixing blades, fastened to said drum and one of its heads, and a baffle fastened to said head and extending therefrom on the drum's median plane between said blades and fastened to the same, said blades being oppositely inclined with respect to said median plane, and cooperating with said baffle and head to form pockets to collect and eject the mixed concrete from the drum.

1,888,101. METHOD AND APPARATUS FOR COATING PIPE WITH PLASTIC COMPOSITION. THOMAS H. WILSON, Los Angeles, Calif., assignor, by mesne assignments, to Viber Company, Limited, Los Angeles, Calif., a Corporation. Filed Oct. 14, 1931. Serial No. 568,780. 20 Claims. (Cl. 25—38.)



12. An apparatus for coating pipe comprising, in combination, a carriage having an inner and outer dolly with wheels to engage the uncoated pipe, a frame comprising upper and lower sections extending from the carriage to one end to overlap the pipe to be coated, the lower section of the frame directly carrying and supporting an upper longitudinal section of a mold, the upper section of the frame having a lower longitudinally extended mold section suspended therefrom, a longitudinally extending locking bar with means to lock the upper and lower sections of the mold together for pouring the composition and to allow unlocking of said sections to permit dropping slightly of the lower section of the mold to permit

longitudinal shifting of the mold to an uncoated section of the pipe, the mold having a longitudinal opening at the top with means for feeding a plastic composition therethrough.

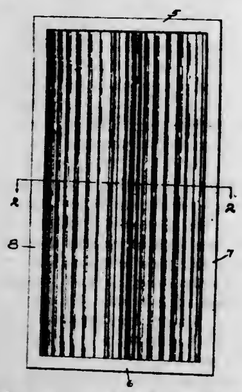
19. In the method of coating a pipe with a plastic composition, comprising casting the composition in a porous mold, surrounding the pipe and during such casting creating an air suction through the mold, then separating the parts of the mold and shifting the mold longitudinally of the pipe to extend over an uncoated section.

1,888,102. KNIFE SHARPENING DEVICE. GEORGE A. ZAHLER, Cleveland, Ohio. Filed Feb. 24, 1931. Serial No. 517,905. 4 Claims. (Cl. 76—84.)



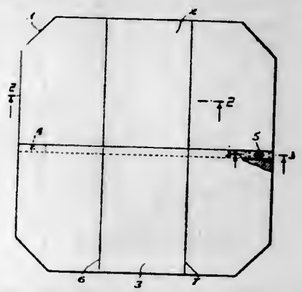
1. A knife sharpening device having in combination an elongated body member substantially circular in cross-section presenting a plurality of spaced transversely curved operative surfaces, two of said operative surfaces having rows of file teeth inclined in one direction only, and the teeth of said two operative surfaces being parallel to each other, and being disposed substantially opposite each other and being uni-directional in use, said surfaces having a preliminary cutting effect, and two other of said operative surfaces disposed substantially opposite each other and intermediate said first-named two surfaces, said intermediate surfaces having a structure to produce a finishing effect.

1,888,103. LIGHTING UNIT FOR REFLECTED ILLUMINATION. EDWIN F. GUTH, Webster Groves, Mo. Filed May 16, 1931. Serial No. 537,851. 13 Claims. (Cl. 240—103.)



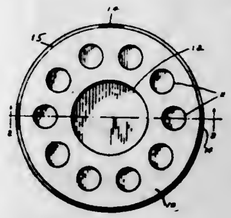
1. In a device of the character described a frame having top, bottom and side members, and a central member pivoted to the top and bottom of said frame, said member provided with longitudinal corrugations, its inner surface forming a reflector.

1,888,104. TABLE PAD. LEWIS I. KAHN, Brooklyn, N. Y. Filed Aug. 7, 1931. Serial No. 555,827. 3 Claims. (Cl. 45—68.4.)



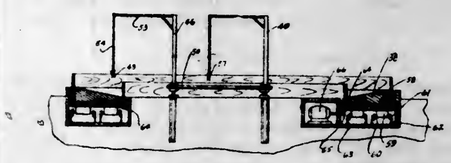
1. A pad comprising a body formed with a plurality of sections, each section being divided into a plurality of parts, strips of cloth secured to adjacent parts for hingedly connecting said parts together, a continuous covering member positioned to cover all of said parts and said strips of cloth, each of said sections along their abutting edges being notched and overlapped, and disengageable means for fastening said sections together one of said means being fixed and the other slidable.

1,888,105. EXTINGUISHER FOR CIGARETTES AND THE LIKE. CHARLES B. ARMSTRONG, Cleveland, Ohio. Filed Jan. 10, 1931. Serial No. 507,828. 6 Claims. (Cl. 131—51.)



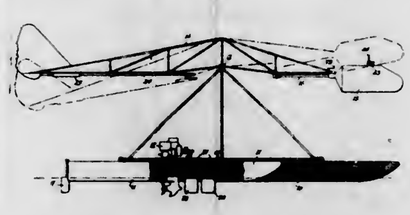
1. A device of the character described comprising: a body portion having a bore for the reception of the lighted end of a cigarette or the like, and a closure cooperating with one end of said bore to cut off air from said bore and extinguish the lighted end of said cigarette, said closure having a plurality of spring clips disposed in engagement with said body portion for yieldably maintaining said closure in position.

1,888,106. RACING APPARATUS. ELMER L. BALLEW, Chicago, Ill. Filed Dec. 29, 1928. Serial No. 329,112. 3 Claims. (Cl. 272—4.)



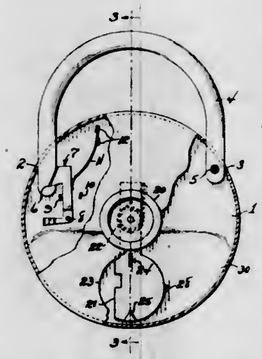
1. In animal racing apparatus, an endless trackway rotatable in a horizontal plane and providing a surface over which animals may run, a supporting bed, an endless track of rails on said bed and in a common horizontal plane, rotatable means on said trackway movable over said rails, and means for imparting movement to said rotatable means to move said trackway over said rails.

1,888,107. WATER CRAFT. JACOB G. BATT, New York, N. Y., assignor to The American Aquaplane Co., Melrose, Conn., a Corporation of Connecticut. Filed Oct. 22, 1931. Serial No. 570,477. 22 Claims. (Cl. 114—66.5.)



2. In a marine craft, the combination of a floatable structure, a passenger carrying structure mounted for rocking movement on a horizontal axis on the floatable structure, and means under the control of a passenger and responsive to the pressure of the water as the craft moves therein, for the purpose of rocking said passenger carrying structure.

1,888,108. PADLOCK. ALFRED S. BEARDSLEY, Montevideo, Uruguay. Filed Apr. 9, 1931. Serial No. 528,876. 5 Claims. (Cl. 194—4.)

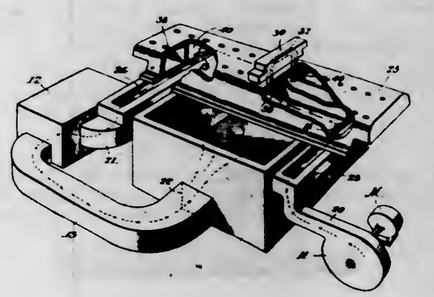


1. A padlock comprising a casing having an entrance, a pivoted shackle carried by the casing, tumblers in the casing to engage and hold the shackle against pivotal movement, a slug receiving and holding member journalled in the casing, a slug adapted to be positioned on said member by way of the entrance and having slots, lugs on said member fitting in the slots, and a finger piece connected to the member for moving the latter to cause the slug to engage the tumblers to disengage the latter from the shackle.

1,888,109. COMPOSITION AND PROCESS FOR RUBBER BLANKET PRINTING. GEORGE W. BENNETT, Cincinnati, Ohio. Filed Sept. 5, 1930. Serial No. 480,025. 9 Claims. (Cl. 41—25.5.)

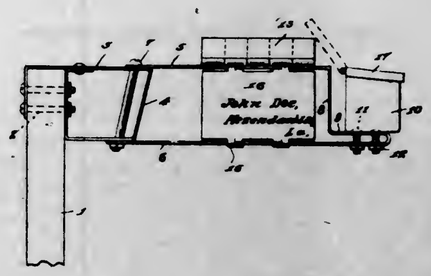
1. A composition of matter adapted for being applied to the face side or rear side of rubber printing blankets, the same being a liquid containing as a vehicle, a liquid mineral oil product less volatile than gasoline and more volatile than spindle oil, spirits of turpentine, a penetrating oil consisting largely of hydrocarbons, oil of sassafras and oil of cloves, such vehicle carrying small amounts of powdered sulphur and powdered orris root.

1,888,110. FURNACE GRATE. ALFRED WILLIAM BENNIS, Bolton, England. Filed Mar. 14, 1929, Serial No. 347,068, and in Great Britain Mar. 14, 1928. 10 Claims. (Cl. 110—40.)



1. A furnace grate comprising stationary longitudinally directed and transversely spaced air inlet and outlet trunks having top apertures, hollow carrier bars operable to travel over said trunks and to substantially close said apertures and having bottom apertures positioned to register with the apertures of the trunks, hollow grate bars mounted on said carrier bars and communicating therewith so that air may pass between the cavities of said grate and carrier bars, means for supplying air to said inlet trunk, said inlet trunk and carrier bars and grate bars providing passages for the air therethrough to said outlet trunk, and means for withdrawing air from said outlet trunk.

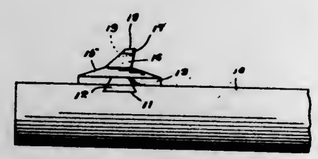
1,888,111. MAIL-BOX AND PARCEL BRACKET. OSCIN E. BROWN, Delmar, Iowa. Filed May 31, 1930. Serial No. 458,226. 1 Claim. (Cl. 232—40.)



In a support for the purpose set forth, the combination with a post, a bracket fixed thereto comprising upper and lower arms, having their outer ends connected by an angle portion, said support comprising a frame-like member that includes upper and lower arms, the upper arm being of less length than the lower arm, an angular pivot passing through the arms of the support and the bracket,

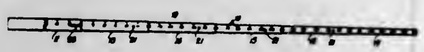
a spacer sleeve between the arms of the bracket through which the pivot passes, the upper arm of the support having its outer end bent downwardly and from thence extended outwardly in a plane with the lower arm and connected with said lower arm, a mail box resting on said extension, bolt members passing through the mail box, the extension and the lower arms, and which bolts are engaged by nuts, a slotted package receiving tray riveted to the upper arm of the support inward of the mail box and affording a rest for the top of the mail box when the said top is swung to open position, and a plate having bendable fingers on the edges thereof which are bent over the upper and lower arms of the support.

1,888,112. GUN SIGHT. GEORGE E. COLEMAN, Walsenburg, Colo. Filed Dec. 27, 1929. Serial No. 416,900. 1 Claim. (Cl. 33—47.)



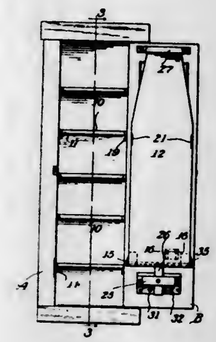
A gun sight comprising a horizontally disposed dovetailed base member, a second base member carried by and disposed at right angles to the former-mentioned base member, and provided with upwardly and inwardly extending portions, a sight member of V-shaped formation formed integral with the second base member and provided with flat vertically spaced side walls providing therebetween a U-shaped peep opening, said peep opening having a forwardly and downwardly inclined bottom wall to expose a thin line to the eye, the upper portions of the side walls of the sight gradually diverging to obviate objectionable canting.

1,888,113. MEASURING RULE. JOSEPH M. DOUGOVITO, Cedar River, Mich. Filed Feb. 21, 1930. Serial No. 430,289. 1 Claim. (Cl. 33—161.)



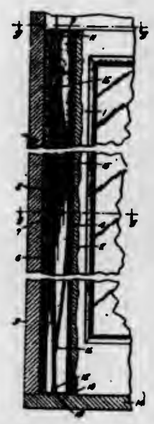
In a measuring device, a plurality of relatively flat telescoping sections provided with U-shaped incisions defining longitudinally extending spring tongues, said tongues being provided at points spaced inward of the sides and the free ends thereof with rounded protuberances, said sections being provided with apertures for the partial reception of said rounded protuberances to yieldingly hold said sections in a predetermined position, and a casing receiving said sections and having a closed end, and a spring between said closed end of the casing and the adjacent ends of said sections and being expansible to urge the sections endwise, said casing being provided with a catch to yieldingly retain said sections in place in the casing, the protuberances of said sections being adapted to press against adjacent closed portions of the sections to yieldingly hold the sections against movement with respect to each other.

1,888,114. IRONING BOARD MOUNTING. WINFIELD R. DUNKIN, Huntington, Ind. Filed Feb. 5, 1932. Serial No. 591,209. 6 Claims. (Cl. 68—10.)



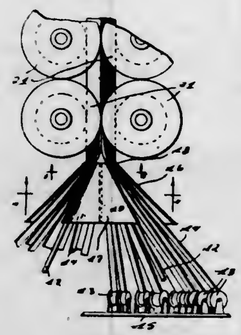
1. In a mounting of the character described, a cabinet having a door, means within the cabinet and upon the door for the hanging of an ironing board, and means carried by the door for transferring the board from the hanger within the cabinet to the hanger on the door or vice versa.

1,888,115. AUTOMATIC WEATHER STRIP. FRANK EVANS, California, Pa. Filed Jan. 12, 1931. Serial No. 508,298. 4 Claims. (Cl. 20—68.)



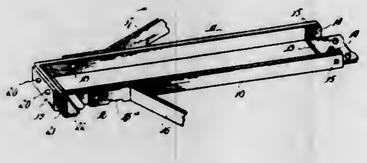
1. In a device for the purpose set forth, a movable member and a stationary member for the movable member, a casing carried by the movable member having a compressible strip on the outer face thereof, a normally straight spring rod having one of its ends secured in one of the ends of the casing and its other end extending through the second end of the casing, a stop in the casing to be engaged by the rod when pressure is exerted upon the extending end thereof to bow the rod and an arched spring centrally fixed in the casing having its ends contacted with the spring rod for slidable movement on said rod, for the purpose set forth.

1,888,116. METHOD OF FORMING PACKING. FLETCHER H. FIELD, Detroit, Mich., assignor to Rhodes Metallic Packing Company, Detroit, Mich., a Corporation of Michigan. Filed Nov. 3, 1930. Serial No. 493,203. 6 Claims. (Cl. 154—2.)



1. In the method of forming a flexible packing having a plurality of substantially triangular sections, those steps which consist in leading a plurality of flexible strips from spaced sources of supply through forming means arranged to separate said strips into sections and to simultaneously apply progressively increasing pressure upon opposed sides of the strips of each section to interfold and compact said strips with each other, and then pressing and shaping the sections so that together they assume the desired exterior configuration.

1,888,117. LEG BRACE FOR FOLDING TABLES. MARTIN FOX, Chicago, Ill., assignor to The Seng Company, Chicago, Ill. Filed Jan. 16, 1931. Serial No. 509,198. 7 Claims. (Cl. 45—11.)

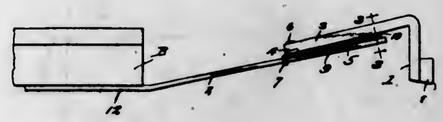


2. A jointed metal brace for articles of furniture comprising sections pivoted together for folding one upon another, one of the sections having an attaching plate pivoted to the outer end thereof and a companion section having a notch near its pivot end, and a spring catch on the first mentioned section engaging the aforesaid notch.

1,888,118. PRODUCTION OF FLUORINE. KARL FREDENHAGEN, Greifswald, Germany. Filed July 11, 1929, Serial No. 377,607, and in Germany July 17, 1928. 1 Claim. (Cl. 204—19.)

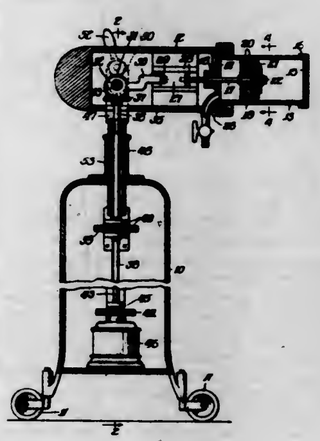
The process of producing fluorine which comprises subjecting a substantially anhydrous solution of potassium bifluoride in hydrogen fluoride which contains more than 1 but not more than 1.8 molecular proportion of hydrogen fluoride to each molecular proportion of potassium fluoride to electrolysis.

1,888,119. MAIL-BOX SUPPORT. CHARLES H. FULLER, Mason, Mich. Filed June 12, 1931. Serial No. 543,952. 4 Claims. (Cl. 232—40.)



1. An inclined arcuate rail, a support therefor, a pivoted inclined sweep extending under and mounted to move along the bottom of the rail and a box at the lower end of the sweep.

1,888,120. HYDROTHERAPEUTIC APPARATUS. LEO GINSBURG, Chicago, Ill. Filed June 7, 1930. Serial No. 459,722. 8 Claims. (Cl. 128—66.)

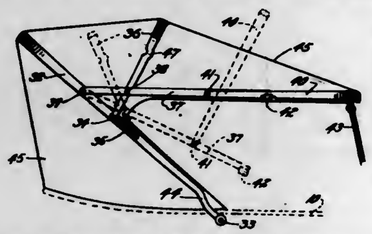


2. In an apparatus of the character described, a cylinder, a perforated plate at the front end of the cylinder, a piston in the cylinder, a valve on the piston and positioned between the latter and said plate and which opens when the piston is moved rearwardly and closes when the piston is moved forwardly, a water inlet in the cylinder behind the piston, an electric motor, and a power-transmitting connection between the motor and the piston for rapidly reciprocating the latter in the cylinder, whereby to cause the water entering the cylinder to be ejected spasmodically therefrom in a fine forcibly surging spray.

1,888,121. AUTOMOBILE TOP. DUNCAN EARL GRAHAM, Denver, Colo., assignor of one-fourth to Dr. and Mrs. Glyde W. Bumpus, Denver, Colo. Filed Oct. 9, 1926. Serial No. 140,528. 10 Claims. (Cl. 296—116.)

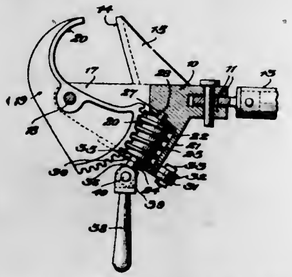
1. A foldable frame for supporting a flexible automobile top comprising a main bow; a forwardly extending top bow pivoted to the inside of said main bow and a foldable

front bow pivoted to the inside of both said main bow and said top bow, said main bow being mounted to incline rearwardly and the remaining bows to incline forwardly



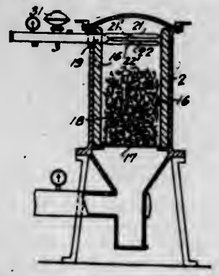
when the top is erected, and all of said bows being constructed and shaped to interfit and adapted to lie in the same plane when folded.

1,888,122. HITCH. EARL F. GREEN, York, Pa. Filed Aug. 19, 1927. Serial No. 214,086. 11 Claims. (Cl. 280—33.15.)



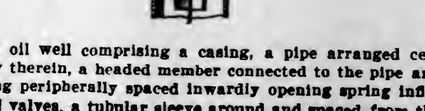
4. In a towing hitch, an attaching member having means whereby it is to be secured to a towing truck, a substantially horizontal supporting surface, a hook member pivoted near the free end of the attaching member, an abutment rising sharply upward from said supporting surface between said free end and said attaching member, said hook member having a concave face adapted to rise above the horizontal surface to engage a portion of a vehicle to be towed so as to slide said portion along the horizontal surface of the attaching member and into contact with said abutment to clamp the vehicle portion against said abutment, and means for locking the hook in a plurality of angular relations with the attaching member to accommodate different sized portions of the towed vehicle.

1,888,123. PROCESS FOR THE MANUFACTURE OF GAS. JOHN HANSFORD, Enfield, England, assignor to The H. H. Gas Plant Syndicate, Limited, London, England. Filed Dec. 5, 1927, Serial No. 237,932, and in Great Britain Dec. 13, 1926. 3 Claims. (Cl. 48—212.)



1. A process for the manufacture of gas by injecting liquid or powdered fuel together with air into a partial combustion or gasifying chamber and subjecting it therein to the presence of a body containing metallic iron in a divided state to partial combustion through the action of a rotary flame at a temperature in said chamber of from substantially 700° C. to 900° C., the temperature at the center of the combustion zone being considerably higher and the proportions of air and oil being such that a residue of magnetic oxide is formed.

1,888,124. EXTENSION TABLE. JACOB L. PULASKI, West Roxbury, Mass., assignor, by direct and mesne assignments, to Miracle Table Corporation, Boston, Mass., a Corporation of Massachusetts. Filed Dec. 17, 1931. Serial No. 581,643. 13 Claims. (Cl. 45—112.)



1. An extension table comprising a supporting frame, main leaves mounted to slide toward and from each other on the frame, a central leaf mounted to move up and down on the frame, a rotatable actuator journalled on the frame, having means respectively operable in sequence by the rotation of the actuator in one direction, to slide the main leaves apart a distance greater than the width of the central leaf, means to move the central leaf from a position beneath up into the plane of the main leaves, and, means to slide the main leaves together into edge to edge engagement with the central leaf, said respective means being operably connected to said rotatable actuator, whereby said means will be operable by continued rotation of the actuator in one direction.

1,888,125. PARAFFIN LIQUEFYING DEVICE. WILLIAM J. HART, Springdale, Ark., assignor to Hart Brothers and Company, a Corporation of Oklahoma. Filed May 4, 1931. Serial No. 535,023. 1 Claim. (Cl. 166—18.)



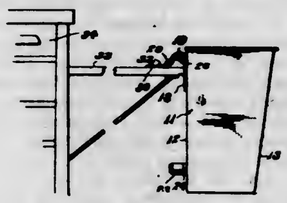
An oil well comprising a casing, a pipe arranged centrally therein, a headed member connected to the pipe and having peripherally spaced inwardly opening spring influenced valves, a tubular sleeve around and spaced from the pipe below the head and secured to the pipe by circumferentially spaced lugs, said sleeve having its upper end arranged in close proximity to the lower end of the head, a disc valve slidable on the pipe for closing the upper end of the sleeve, a member surrounding the lower end of the sleeve and in frictional contact with the bore of the casing, and dividing the space in the well casing outside of the tube into an upper and a lower part and effecting a seal between such upper and lower parts.

1,888,126. JAR FOR DRILLING TOOLS. LYALS L. HAZEN, Joplin, Mo. Filed June 20, 1929. Serial No. 372,846. 5 Claims. (Cl. 255—27.)



2. In a set of jars, a link having reins provided with concentric arcuate inner and outer bounding surfaces, each rein being slightly less than a quadrant in extent.

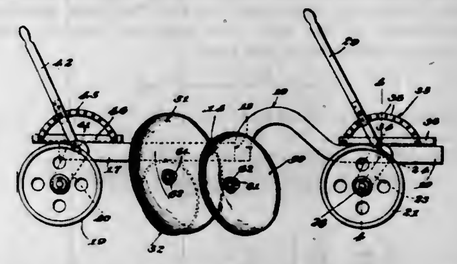
1,888,127. WASTE PAPER CONTAINER. SUNYA DIANA HEARNE, Memphis, Tenn. Filed Oct. 9, 1930. Serial No. 487,544. 1 Claim. (Cl. 248—20.)



A quick detachable fixture for mounting a container to hang from either an edge or the wall of a support, comprising a plate formed of sheet metal and having an integral curved web projecting forwardly from the center of one edge, said web terminating in an integral cross bar of arched cross section, said cross bar projecting at both ends laterally beyond the side edges of the web, and a second plate formed of sheet metal and having spaced hooks on the top edge adapted to engage snugly upon the arched top surface of the cross bar on opposite sides of the web and position the second named plate below and in front of the first named plate, both of said sheet metal plates having openings adapted to receive mounting screws, the bills of said hooks being bent outwardly to provide guides for initially engaging the top surface of the cross bar for directing the hooks into position upon the cross bar, said plates when said hooks are engaged extending at substantially a right angle to each other whereby when one of the plates is attached to the top surface of a support the other plate will engage the edge of the support for positioning a container upright and stationary on said edge.

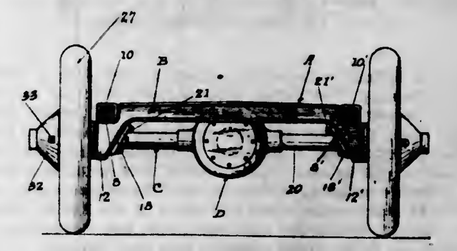
1,888,128. FORESTER'S FIRE-LINE PLOW. LEVI C. HESTER, Jacksonville, Fla. Filed Apr. 8, 1931. Serial No. 528,694. 3 Claims. (Cl. 97—53.)

1. In a clearing plow, a frame including a centrally disposed longitudinally extending beam, a pair of side bars having their forward ends secured to said beam and diverging rearwardly in opposite directions therefrom, a pair of upstanding rearwardly inclined rotatable ground engaging disks carried by each of said bars, said disks being spaced along said bars, the edges of the foremost disk



of each pair being substantially in contact but spaced to permit clearance at approximately the center line of the plow, said disks being curved to throw the dirt outwardly.

1,888,129. MOTOR VEHICLE AXLE. WARD W. HOOPER, Hollister, Calif. Filed Sept. 10, 1930. Serial No. 481,062. 1 Claim. (Cl. 180—75.)



A motor vehicle axle of the class described comprising, in combination, a master load supporting axle having shouldered end sections, a centrally slotted section and outwardly projecting tubular wheel supporting spindles, the inner faces of said end sections being bevelled, a sub-axle housing positioned below said master axle and having a differential housing extending into the centrally slotted master axle, said sub-axle housing having correspondingly bevelled end sections adapted to be bolted to the master axle, driving shafts extending through said sub-axle housing and said tubular spindles, and hollow cones bolted to the wheels and in turn keyed to the ends of said driving shafts.

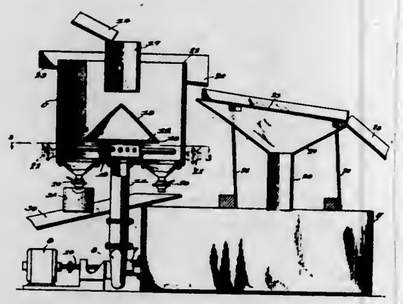
1,888,130. NONFREEZING VALVE. ROSS L. HUFFMAN, Longton, Kans. Filed Dec. 23, 1930. Serial No. 504,401. 1 Claim. (Cl. 251—137.)



A non-freezing valve comprising an elongated body adapted to extend into a container and having a bore extending through the inner end thereof and through one side of the body adjacent the outer end, an enlargement formed on the outer end of the body and having a transverse opening and a slot in communication with said opening and extending through the end of the enlargement, a valve stem extending through the body and enlargement, a packing means between the enlargement and the stem accessible through the opening, a valve on the inner end of the stem to control passage of fluid through the body, a

handle on the outer end of the stem, tension means between the enlargement and stem to normally seat the valve, a pin on the stem and operating in the slot and adapted to be positioned in said opening transversely of said slot and against the enlargement to hold the valve unseated, and guides on the valve and extending into the body during all positions of said valve.

1,888,131. GYROSEPARATOR. EFFINGHAM P. HUMPHREY, Drifton, Pa. Filed Feb. 24, 1931. Serial No. 517,933. 8 Claims. (Cl. 209—159.)

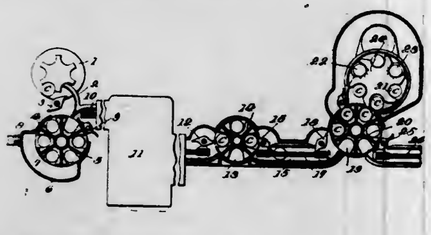


1. A hydraulic classifying apparatus including a classifying tank, a distributing cone centrally disposed in said tank, means for feeding material to be classified onto said cone, a header centrally supported in the lower portion of said tank, a plurality of radially extending conduits carried by said header, each of said conduits having a circumferentially disposed liquid discharging nozzle, certain of said nozzles being positioned in the line of travel of material discharged from said cone, and means for introducing liquid under pressure into said header.

1,888,132. METHOD OF CASTING STEEL INGOTS. AUGUSTUS B. KINZEL, Beechhurst, N. Y., assignor to Electro Metallurgical Company, a Corporation of West Virginia. Filed Oct. 27, 1930. Serial No. 491,488. 9 Claims. (Cl. 22—214.)

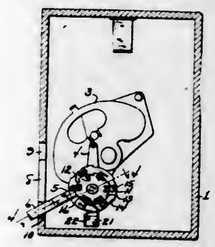
1. A method of casting metal to produce a rimming effect, which comprises charging a non-oxidising gas into the molten metal, and solidifying the metal in a mold by cooling at such a rate that enough of the non-oxidizing gas is trapped in the metal to at least partly compensate for its strinkage.

1,888,133. METHOD OF VACUUMIZING CONTAINERS. ALFRED L. KRONQUEST, Syracuse, N. Y., assignor to Continental Can Company, Inc., New York, N. Y., a Corporation of New York. Filed Aug. 19, 1931. Serial No. 558,108. 2 Claims. (Cl. 99—8.)



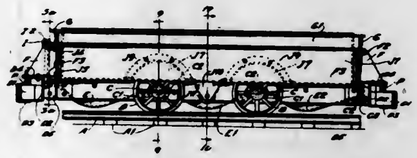
1. The process of packaging powdered material in sealed containers under vacuum comprising placing the powdered material in a container and subjecting the container to a vacuum before the sealing cover is applied thereto, releasing the vacuum on the container, placing a cover on the container, subjecting the container to a vacuum for withdrawing the air therefrom, and seaming the cover to the container while maintained under said vacuum.

1,888,134. CAMERA LOCK AND NUMBER INDICATING DEVICE. CLARENCE A. KUNKLER, Mount Clemens, Mich. Filed Apr. 2, 1931. Serial No. 527,271. 3 Claims. (Cl. 95—31.)



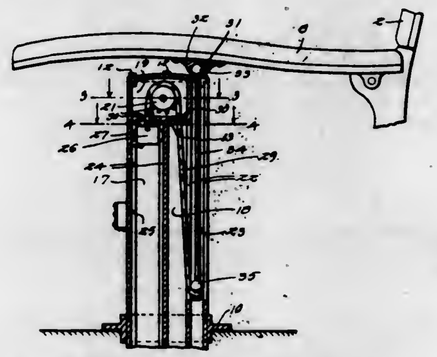
1. A camera having a window on its front, a vertical slot on one of its sides and having notches that communicate with the ends of the slot, a shutter operating member pivotally secured in the camera and having a spring arm extending through the slot and the said arm being bent upon itself to provide the same with a spring finger which is also received through the slot and which forces the arm against one wall of the slot and permits of the finger being received in the notches when the lever has been swung to throw the shutter to either of its two positions, number bearing wheels journaled on the pivot and the numbers of the said wheels being visible through the window, said dics having peripheral teeth, and the angle walls between the teeth on the respective discs being oppositely directed, said lever having an offset portion provided with spaced spring fingers to engage with the periphery and with the notches of the discs, and spring dogs also engaging with the periphery and the notches of the discs for holding the discs from accidental turning.

1,888,135. MINE CAR. PERRY S. MCCALLEN, Knoxville, Tenn., assignor to Hugh W. Sanford, Knoxville, Tenn. Filed Jan. 29, 1930, Serial No. 424,206. Renewed Aug. 11, 1931. 28 Claims. (Cl. 105—262.)



1. In a mine or similar car, the combination of a wheel-supported body having a middle longitudinal discharge opening and said body having at each side a lateral opening, a movable bottom controlling said discharge opening, and a side structure at each side of said discharge opening and normally extending laterally into said lateral body opening into position to meet lifting means at the rail track and said side structures being normally positioned to receive and support a part of the lading or material constituting the load of the car and to retain a part of said lading after said movable bottom has been moved for discharge of lading through said discharge opening and said side structures being tiltable to discharge their lading through said discharge opening.

1,888,136. SEAT RAISER AND VACANCY INDICATOR. PETER J. MCDERMOTT, Salt Lake City, Utah. Filed Dec. 5, 1929. Serial No. 411,953. 6 Claims. (Cl. 155—85.)



1. A raising device for pivotally mounted seats, comprising an upright casing adapted to be disposed beneath a seat, said casing being longitudinally divided into a pair of chambers and transversely divided at its upper end to provide an upper chamber, a rotatable element within said upper chamber, a flexible elements passing over the rotatable element and having each end disposed in a longitudinal chamber, a rigid lifting member connected at one end to one end of the flexible element and having pivotal connection at its other end with said seat, means for guiding the first mentioned end of the lifting member for travel in a vertical path, and a control weight attached to the other end of the flexible element and disposed in the other of the longitudinal chambers.

1,888,137. GARMENT HANGER. HARRY C. MOLNER, Pitcairn, Pa. Filed Nov. 4, 1931. Serial No. 572,992. 2 Claims. (Cl. 223—64.)



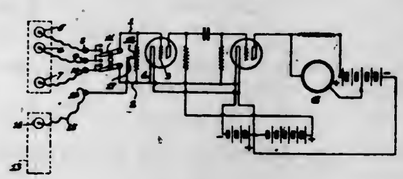
1. A garment hanger comprising stationary arms, enlarged portions formed with said arms and being provided with a chamber communicating with bores extending through the enlarged portions, movable arms cooperating with the stationary arms and having reduced ends mounted for pivotal movement in said bores, spring means for normally holding said movable arms in closed position, a trigger member mounted for movement in said chamber and engageable with the movable arms for disposing the latter in open position and strips of resilient material between the confronting faces of the arms.

1,888,138. LIVE BAIT TRAP NET. CHARLES F. MYERS and WILLIAM H. REISNER, Hagerstown, Md., assignors to The W. H. Reisner Manufacturing Company, Hagerstown, Md., a Corporation of Maryland. Filed Nov. 28, 1931. Serial No. 577,800. 5 Claims. (Cl. 43—12.)

1. In a live bait trap net, a frame structure including a rod member, an eyelet formed on the end of the rod member, a cylindrical device carried by said rod member, radially extending grooves in said cylindrical device, an annularly extending groove on said cylindrical device, frame members for said net having hook shaped ends projecting into said radially extending grooves, and a wire member wound around the annularly extending groove and under the hook shaped ends of said frame members for securing said frame members in position free to angularly rock with respect to said central rod member.

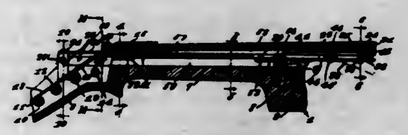


1,888,139. INTERFERENCE ELIMINATOR FOR ELECTROCARDIOGRAPHS. HORACE E. NICHOLS, Detroit, Mich., assignor to Clinical Development Laboratories, Inc., Detroit, Mich., a Corporation of Michigan. Filed July 16, 1928. Serial No. 293,264. 8 Claims. (Cl. 178—44.)



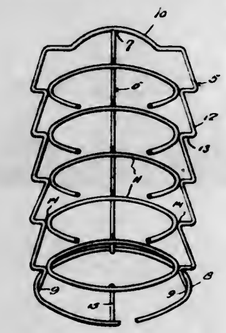
1. In apparatus having an element responsive to changes in the difference of potential across its terminals, and wherein the terminals are subject to the activity of alternating potential interference, the method of eliminating such interference potential activity which consists in retaining the interfering potentials in the respective terminals and augmenting the potential values of the respective terminals from a collector independent of the terminals and subject to such interference potential and in regulated amount such as to equalize the interfering potential value relationship between the terminals and establish an in-phase relationship therebetween.

1,888,140. VIBRATO STRINGED MUSICAL INSTRUMENT. JOHN N. NOVOTNY, East Grand Forks, Minn. Filed Sept. 3, 1930. Serial No. 479,573. 7 Claims. (Cl. 84—318.)



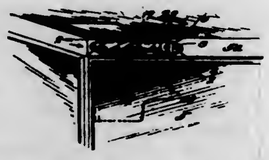
7. The herein described stringed musical instrument having a finger board raised above the neck of said instrument, means movably supporting the finger board and maintaining a uniform space between it and the neck throughout the extent thereof, and independent means for varying the amplitude of said movement.

1,888,141. PLATE RACK. ANDREW J. OSTH, Cleveland, Ohio, assignor to Zoia Banquetier Company, Inc., Cleveland, Ohio. Filed Dec. 16, 1930. Serial No. 502,810. 7 Claims. (Cl. 211—41.)



4. A plate rack comprising a wire frame member of general inverted U-shape a further vertical wire frame member arranged intermediate the legs of the first-named frame member at the back of the rack and having an inwardly extending upper end portion whose free end is rigidly attached to and centrally of the intermediate upper portion of the first-named frame member, a base ring encompassing and secured to the lower ends of said frame members, and a vertical series of spaced plate-supporting rings arranged within the space bounded by the frame members and attached to the latter, each of said shelves being formed from a single piece of wire having the ends thereof turned inwardly and formed to provide spaced concentric ring members.

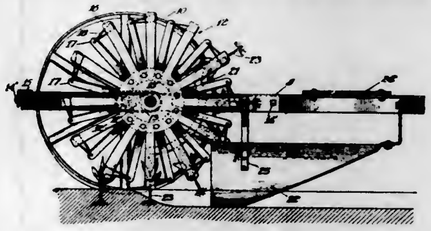
1,888,142. HEADLIGHT GLARE SHIELD. JOSEPH C. PEARSON, Media, Pa. Filed May 19, 1930. Serial No. 453,770. 1 Claim. (Cl. 296—97.)



In a headlight glare shield, the combination with a cylindrical casing adapted for mounting immediately above and adjacent the windshield, of a pair of solenoids one supported in each end of the casing, a core mounted for reciprocating movement within the solenoids, said casing having a compound curved slot arranged on an angle in the wall of the casing at a point between the adjacent ends of the solenoids, an arm carried by the core extending radially therefrom and guided in said slot, whereby as the core is reciprocated back and forth between the solenoids a swinging movement is imparted to the arm, and a glare shield carried by the arm adapted to swing down in front of the windshield, when the arm swings downwardly, and adapted to assume a position adjacent the top of the automobile when the arm is swung upwardly, said solenoids including an electrical circuit, and means including a manually operated tensioned rocking element in the circuit for energizing first one and then the other of the solenoids for reciprocating the core.

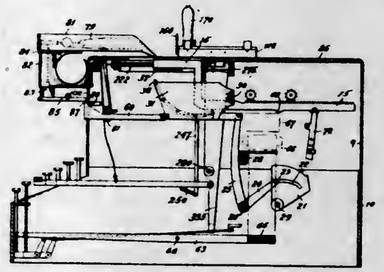
1,888,143. PLANTING MACHINE. LOUIS POLL, Hamilton, Mich. Filed Nov. 19, 1927. Serial No. 234,802. 14 Claims. (Cl. 111—3.)

1. In a planting machine, a frame, a revoluble disk having radial arms and rotatably mounted on said frame, resilient means arranged between said arms, flexible members connected to said arms and said resilient means ar-



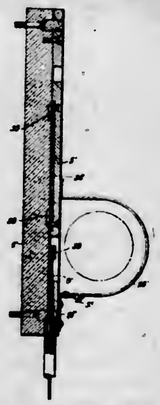
ranged in the path of the resilient means for moving the flexible members in cooperation with the arms for holding plants.

1,888,144. VISIBLE WRITING CALCULATING MACHINE. DAVID Y. READ, Washington, D. C., assignor of one-fourth to Jessie P. Grandy and one-fourth to Henry H. Snelling, Washington, D. C. Filed Apr. 27, 1926. Serial No. 104,968. 58 Claims. (Cl. 235—60.)



1. In a printing adding machine, a housing having a table, adding mechanism within said housing including a series of members carrying printing types, and a platen above said table and having a flat face which is movable sideways of the table and in its own plane and cooperating with said types to print characters on a sheet of paper on said table said platen moving relatively to the paper.

1,888,145. LIGHT CONTROL SWITCH. DEWEY VERNON RHOADES, Wichita, Kans., assignor to Charles E. Farrow and Harlan W. Farrow, Wichita, Kans. Filed Aug. 1, 1930. Serial No. 472,424. 1 Claim. (Cl. 200—122.)



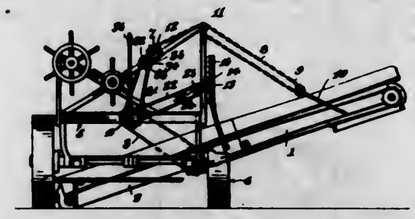
In a device of the class described, an insulating block adapted to be mounted upon a support and having a longitudinal groove therein, said block having a pair of spaced contacts located at the bed of the groove and adapted to be arranged in a normally open electric circuit, an insulated elongated plate movably mounted in the groove and having means for bridging the contacts to constitute a switch for closing said electric circuit, a bracket mounted upon the block beyond one end of the groove, a substantially U-shaped thermostatic strip carried by the bracket and having one end engaging the plate for releasably holding the same in position for the closing of said circuit, an extension on the plate, and a crank located with respect to the extension for action thereon for the moving of the plate in one direction and manually operable.

1,888,146. MEANS FOR HOLDING STAIR CARPETS AND RUNNERS IN POSITION. LENNOX ROBERTSON, Cardiff, Wales. Filed June 10, 1930, Serial No. 460,265, and in Great Britain June 22, 1929 6 Claims (Cl. 16—15.)



1. A carpet fastening device, comprising a flat metal bar having axial openings in its ends, lateral swing-arms at the ends of the bar having projections slidably fitting into said openings thereof and extremital portions parallel thereto providing swivel pins, and supporting bracket-members having swivel-holes into which said extremital portions of the arms slidably fit in a hinged connection: whereby said arms are rendered removable from and adjustable toward and from each other in both said bar and said bracket-members.

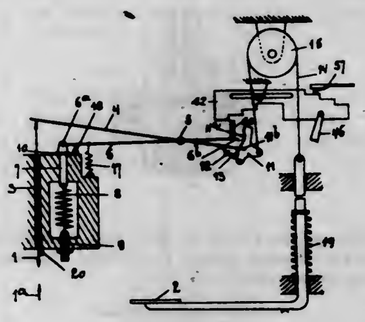
1,888,147. ELEVATOR LIFTING MECHANISM FOR GRADERS. INGVALD RUND, Hayti, S. Dak. Filed Sept. 11, 1931. Serial No. 562,891. 4 Claims. (Cl. 37—110.)



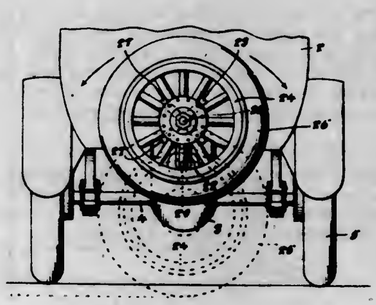
1. In a lifting mechanism for a grader having an elevator driven from a drive shaft and including upper and lower sections, a clutch element fixedly mounted on the drive shaft, a pair of clutch members slidably and rotatably mounted on the drive shaft, shifting means for engaging the clutch members with the clutch element, and means operatively connecting said clutch members with said sections to provide for the lifting of the latter upon the engagement of the clutch members.

1,888,148. ELECTRIC WELDING MACHINE. DAVID SCIAKY, Paris, France. Filed Nov. 11, 1930, Serial No. 494,933, and in France Nov. 22, 1929. 8 Claims. (Cl. 219—4.)

1. An electric welding machine, comprising a movable electrode, lever means for bringing the said movable electrode in contact with the work piece, another lever means for then coming automatically in operation and for producing the desired pressure of the said electrode upon the work, and means for actuating both of said lever means.



1,888,149. MOTION TRANSMISSION FOR MOTOR VEHICLES. CLIFFORD P. TRUMAN, Brewster, N. Y. Filed Nov. 16, 1931. Serial No. 575,407. 3 Claims. (Cl. 180—1.)



1. A motion transmission for a motor vehicle comprising a shaft journalled to a vehicle and extending beyond one end thereof, means for connecting and disconnecting the shaft to power means of the vehicle, a crank secured to the shaft, yieldable means connected to the crank for normally supporting the same in a given position, and means carried by the crank to engage and disengage with the ground during the rotation of the shaft for elevating and moving the vehicle laterally.

1,888,150. GAS STRAINER. WOODS S. WALKER, New York, N. Y., assignor to The Consolidated Gas Company of New York, New York, N. Y., a Corporation of New York. Filed Nov. 15, 1930. Serial No. 495,992. 1 Claim. (Cl. 183—51.)

A filter including a two-piece housing having an inlet member and an outlet member, said inlet member having a threaded tubular pipe-receiving portion merging into a radiating plate having a centrally positioned apertured boss, and an upstanding threaded annular flange, said outlet member having a tubular threaded pipe-receiving portion merging into a radiating plate having an upstanding annular seat, and an upstanding threaded flange adapted to be screwed on to the flange on said inlet mem-

ber, and a filtering member positioned with its perimeter resting on said seat and pressed against said seat by the upstanding flange on said inlet member, said flange,



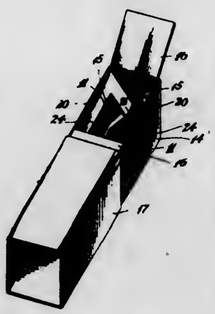
plate and apertured boss of said inlet member defining an entrance chamber having a depressed annular refuse-receiving compartment.

1,888,151. METHOD OF MANUFACTURING WALL BOARD CHANNELS. CURRY ORA WALPER, Huntington Woods, Mich. Filed Nov. 28, 1930. Serial No. 498,815. 8 Claims. (Cl. 153—28.)



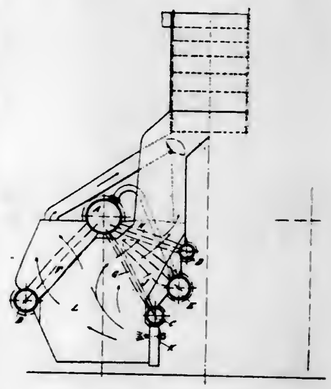
1. The method of forming wall board channel strips including, the steps of progressively transversely fashioning the strip to form a channel, and fashioning the sides of said channel to form opposed outwardly opening channels having the outer face of one side of each of said latter channels formed by the base of said first channel.

1,888,152. CARTON. ROBERT E. WORDEN, Fairfield, Conn., assignor to Dictaphone Corporation, Bridgeport, Conn., a Corporation of New York. Filed Oct. 17, 1927. Serial No. 226,589. 2 Claims. (Cl. 206—15.)



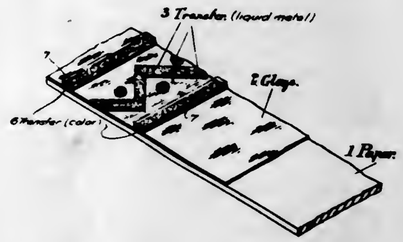
1. A shipping carton for fragile tubular articles comprising a cylindrical container substantially fitting the article; a box in which said container is placed, said box being substantially rectangular in transverse cross section; and two V-shaped cradles placed in the box so that the legs of the V extend into the lateral corners thereof and the apex of one V engages the apex of the other V beyond the ends of the container, portions of the cradles being cut out to receive the container, the portions left engaging the container and extending radially into and engaging the corners of the box; whereby the cradles may flex under pressure.

1,888,153. WATER TUBE BOILER. HAROLD EDGAR YARROW, Glasgow, Scotland. Filed Sept. 25, 1929, Serial No. 395,078, and in Great Britain Oct. 12, 1928. 2 Claims. (Cl. 122—473.)



1. A water tube boiler of the Yarrow type, comprising an elevator stem drum, water drums disposed on each side of a combustion space, banks of steam generating tubes connecting said water drums to said steam drum and forming therebetween unbaffled passages for furnace gases from the combustion space on each side of said space, a superheater situated beyond one of said banks of steam generating tubes in the direction of flow of the furnace gases, a furnace wall situated below the water drum with which the last-named bank of steam generating tubes is connected, a range of burners fitted in the said wall and directed away from said bank of tubes towards the opposite side of the combustion space, and separate damper-controlled uptakes located on opposite sides of the steam drum.

1,888,154. MANUFACTURE AND PRODUCTION OF TRANSFERS. LEONARD ALLEN, Burslem, and ERNEST CHARLES DEERING, New Barnet, Barnet, England. Filed Oct. 19, 1928, Serial No. 313,641, and in Great Britain Mar. 16, 1928. 4 Claims. (Cl. 41—33.)



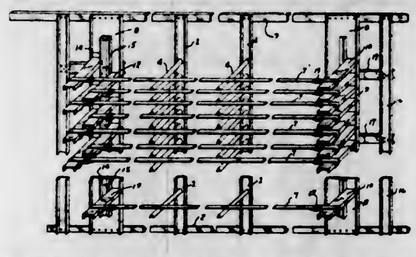
1. The manufacture of transfers for decoration of articles having a smooth, glass-like surface, comprising printing transfers of finely divided metals in essential oils, upon transfer paper.

1,888,155. RACK. JOHN R. BIEDINGER, Cincinnati, Ohio, assignor to Carthage Mills, Incorporated, Carthage, Ohio, a Corporation of Ohio. Filed Feb. 13, 1930. Serial No. 428,160. 8 Claims. (Cl. 211—182.)

1. In a rack the combination of spaced vertically extending frames, supporting members transverse of said frames,

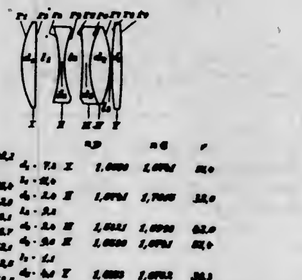
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said supporting members being of angular formation having stiffness without tensioning, and supporting bands of



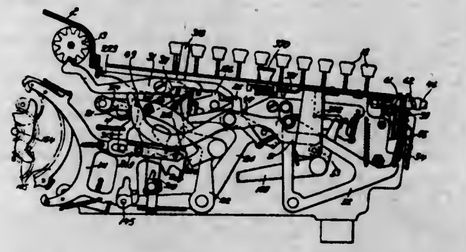
metal running longitudinally of said rack and resting on said supporting members, said supporting members comprising angle irons disposed with their angles upwardly.

1,888,156. OBJECTIVE LENS SYSTEM. WILLY F. BIELICKE, Berlin-Halensee, Germany. Filed Mar. 3, 1932, Serial No. 596,650, and in Germany Jan. 22, 1931. 2 Claims. (Cl. 88—57.)



1. In an objective lens system for photographic, microscopic, projection and similar purposes, the combination of three collective lenses enclosing a dispersive lens, one of the collective lenses being located on that side of the dispersive lens that faces the incident light, the other two collective lenses being placed on the opposite side of the dispersive lens and at least one of the latter two collective lenses being composed of a dispersive flint glass lens member, and a collective crown glass lens member having a higher refractive index and lower dispersion than the flint glass member and being cemented to that side of the flint glass member which is away from the incident light.

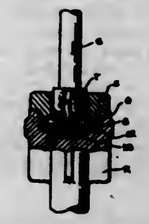
1,888,157. CALCULATING MACHINE. LEE R. BROWN, East Orange, N. J., assignor to Monroe Calculating Machine Company, Orange, N. J., a Corporation of Delaware. Filed Apr. 15, 1930. Serial No. 444,574. 8 Claims. (Cl. 235—63.)



1. In a calculating machine having a transversely shiftable numeral wheel carriage, and means for registering additively or substractively upon the numeral wheels;

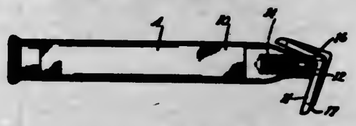
a power train, a carriage shifting train, a connecting member between said trains, means selectively operable according to the nature of the registration to render the connecting member active at the conclusion of an additive registering operation only, and a member adjustable to render the connecting member active also at the conclusion of a subtractive registering operation.

1,888,158. FLEXIBLE VALVE STEM JOINT. LYLE W. BROWNE, Marshalltown, Iowa, assignor to The Fisher Governor Company, Marshalltown, Iowa. Filed July 31, 1931. Serial No. 554,365. 14 Claims. (Cl. 251—44.)



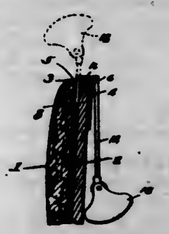
7. In a valve including a valve disc and valve stem, a flexible joint between said disc and stem comprising a ferrule carried by said stem and adapted to fit into a suitable recess in the valve disc, means for securing said ferrule in place in said recess, longitudinal and transverse clearances between said ferrule and the securing means to permit a relative universal movement of said disc on said stem and a rigid projection carried by said stem and extending into said valve disc for engagement with a complementary recess in said disc, said recess being sufficiently larger than said projection in transverse dimension to permit a limited relative rotary movement of said stem and disc.

1,888,159. RAZOR. ALFRED GODFREY CAMPBELL, Sherbrooke, Quebec, Canada. Filed Aug. 17, 1931. Serial No. 557,664. 5 Claims. (Cl. 30—12.)



5. A safety razor blade having substantially rigid plane portions, each of said portions having a cutting edge, said portions being inclined at an angle to each other, and one of said portions being wider than the other and having lug receiving apertures.

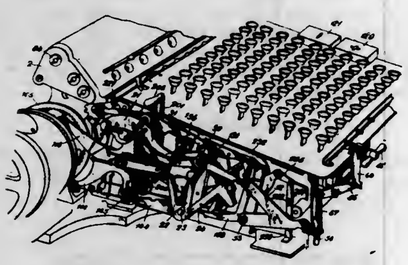
1,888,160. FOLDABLE HEAD SLAT. GEORGE P. CRAVEN, Franklinville, N. C. Filed Apr. 6, 1931. Serial No. 528,201. 1 Claim. (Cl. 155—177.)



A chair for the use of barbers, surgeons, dentists, and others of similar calling, having a back which is provided with an internal, substantially-vertical guide spaced from

the front and rear surfaces of the back, a binding mounted on the upper, rear corner of the back and including a horizontal flange covering the upper end of the guide, and a vertical, depending flange overlapped on the rear surface of the back, the horizontal flange having a hole in vertical alinement with the guide, a support comprising a plurality of links pivotally joined together, end to end, and slidable through the hole of the horizontal flange, into the guide, the horizontal flange directing the links into the guide, both flanges being interposed between the links and the outside of the back, to prevent the links from wearing the upper portion of the back, as the links are slid up and down in the guide, and as the support is flexed to hang dependent behind the back; a head rest on the outer end of the support and carried by one of the links, and a latch guided in the vertical flange and slidable through a portion of the back, into and out of engagement with divers of the links, the latch projecting rearwardly beyond the vertical flange, and engaging the link that carries the head rest, when said link is folded downwardly along the back, the latch then spacing said link and the head rest from wearing contact with the back, and said link holding the latch engaged with another of the links.

1,888,161. AUTOMATIC CONTROL FOR CALCULATING MACHINES. GEORGE C. CHASE, South Orange, N. J., assignor to Monroe Calculating Machine Company, Orange, N. J., a Corporation of Delaware. Filed Jan. 7, 1926. Serial No. 79,811. 46 Claims. (Cl. 235—63.)

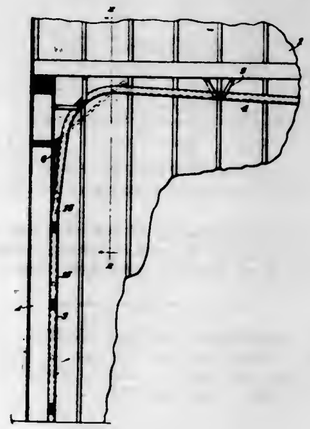


9. In a calculating machine, numeral wheels, means for rotating said wheels including a motor, selecting mechanism, means for automatically dividing an amount registered upon said wheels by an amount set up by said selecting mechanism upon operation by said motor, including a device manually settable to initiate the operation and manually retractible at any stage of an operation and adapted thereupon to stop the same at the next completion of a quotient figure registration.

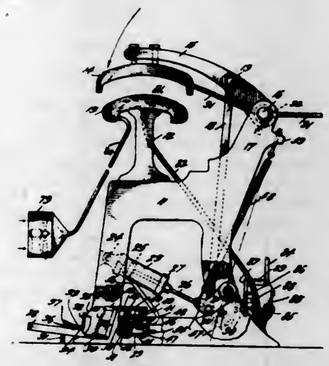
26. In a calculating machine, a transversely shiftable carriage, numeral wheels mounted thereon, actuating means for said wheels, driving means including a motor, clutch means operable to transmit movement from said driving means to said actuating means, control means comprising automatic clutch releasing elements and a member settable to active position and actuated by the released actuating means to reeffect the clutch and to shift the carriage.

1,888,162. OVERHEAD DOOR. HERBERT RALPH EKLUND, Rockford, Ill. Filed May 12, 1931. Serial No. 536,870. 1 Claim. (Cl. 20—20.)

A door comprising a plurality of relatively spaced panels, metallic strips secured to the panels and projecting beyond the edges thereof to provide extensions having overlapped relation and one extension of each strip bent upon itself and curved into cylindrical formation to form a hinge section, the other extension of each strip curved to provide a cylindrical hinge section fitting in the hinge section of the adjacent extension, tubular sleeves mounted in the hinge sections, and track engaging shafts projecting from the ends of the sleeves.



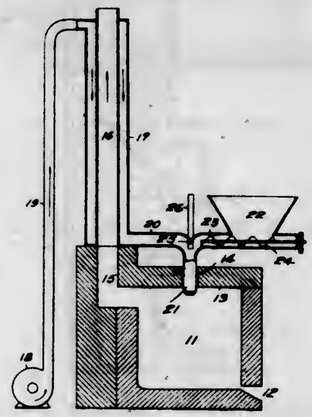
1,888,163. METHOD OF AND APPARATUS FOR PRESSING. HARRY DONALD FORBE, Anderson, Ind. Filed June 3, 1932. Serial No. 615,224. 22 Claims. (Cl. 68—9.)



1. In a pressing apparatus, a frame, a buck carried by the frame, an arm pivoted to the frame and overhanging said buck, a pressing head carried by said arm, means for rocking the arm on the frame and bringing the head into operative engagement with the buck including a crank shaft, means for rocking the crank shaft, a link connection between the crank shaft and arm, said buck being provided with an inner chamber having a substantially impervious distendable wall forming the working face of the buck, means for admitting fluid pressure to the buck to distend said working face, and means carried by said crank shaft for operating said last mentioned means in timed relation with respect to operation of the movable pressing head.

19. The method of pressing which comprises supporting an article to be pressed, contacting said article on the unsupported face thereof, and simultaneously applying pressure to said article on the supported face and subjecting said article to a stretching force to free the article of wrinkles.

1,888,164. PROCESS OF SMELTING FINELY DIVIDED SULPHIDE ORES. HORACE FREEMAN, Shawinigan Falls, Quebec, Canada, assignor to The Sulphide Research Corporation, Limited, Montreal, Canada, a Corporation of Canada. Filed June 15, 1929, Serial No. 371,123. Renewed Aug. 8, 1932. 3 Claims. (Cl. 75—60.)



1. A continuous process of smelting copper or lead sulphide ores, which by interaction with oxygen or oxides will yield the metallic element, which comprises, introducing fuel together with the ore and a flux into a furnace heated to a temperature at which smelting will occur, the ore being in finely divided state and introduced continuously and substantially vertically downwardly through the furnace roof by means of a current of oxidizing gas not more than is substantially sufficient in amount for oxidation of all the sulphur, iron and fuel present, said gas being preheated to such temperature as will, with the heat evolved from combustion of the sulphur, iron and fuel and from the combination of iron oxide and flux, maintain a temperature in the furnace sufficient for smelting of the ore in a single step to a fluent metallic body on the bottom of the furnace, the gaseous products of combustion being removed through the furnace in a direction contrawise to the movement of ore and oxidizing gas, and utilizing heat from said gaseous products after the same have been removed from the furnace, to preheat said oxidizing gas.

1,888,165. CONTACT OF THE PIN TYPE. WILLIAM J. GAGNON, Bridgeport, Conn., assignor to The Bead Chain Manufacturing Company, Bridgeport, Conn., a Corporation of Connecticut. Filed Sept. 14, 1925. Serial No. 56,292. 11 Claims. (Cl. 173—361.)



1. A longitudinally split pin formed from sheet metal stock and laterally closed throughout its length, and comprising a bulbous head at one end, and a rigid tubular shank extending therefrom.

8. A rigid tubular contact pin formed from sheet metal stock, in combination with a molded insulating base to which one end of the pin is rigidly attached, said end of the pin having a mechanical engagement with the base to prevent longitudinal and rotary displacement with respect thereto and affording a guide mouth for the entry of a lead wire to the interior of the pin.

1,888,166. GASKET. STANLEY S. GRIPEL, New Brunswick, N. J., assignor to Metallo Gasket Company, New Brunswick, N. J., a Corporation of New Jersey. Filed Apr. 16, 1931. Serial No. 530,679. 2 Claims. (Cl. 154—45.5.)



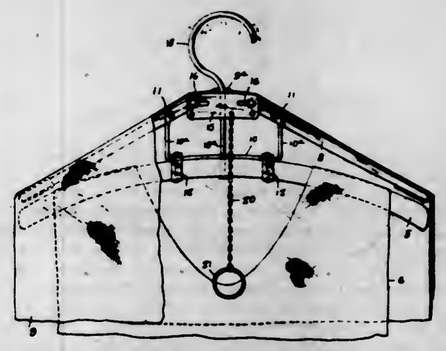
1. A gasket consisting of two metal channel-shaped pieces laid together and having their side edge portions at each side of the gasket directed laterally outward and suitably joined together, said pieces thus joined forming a continuous space, and a suitable filler in said space.

1,888,167. TEETHING DEVICE. IRENE GLENN, Port Washington, N. Y. Filed Apr. 20, 1932. Serial No. 606,454. 3 Claims. (Cl. 128—359.)



2. A teething device comprising a handle, and a lip curved in longitudinal section carried by one end of the handle and projecting laterally beyond the handle, said lip having its longitudinal axis arranged generally at a right angle to the longitudinal axis of the handle.

1,888,168. HANGER. ROSE HOFFMAN, Hartford, Conn., assignor to Pauline Hoffman, Hartford, Conn. Filed July 27, 1931. Serial No. 553,417. 1 Claim. (Cl. 223—68.)



A hanger for the purpose indicated comprising a garment supporting member, means for suspending the same from a support, arms pivotally mounted on said member with their pivotal mountings disposed adjacent said

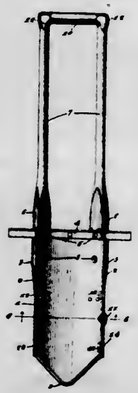
suspending means, a protective covering carried by said arms and enclosing said garment supporting member in one position of the arms, a link member slidably mounted on said suspending means and having slot and pin connections with the adjacent ends of said arms, and a pull chain connected with said link member for applying a downward pull on the same to elevate the remote ends of the arms and thereby elevate the protective covering above said garment supporting members.

1,888,169. PRESS BUTTON. KARL HOLLERER and ADOLF KADLETZ, Vienna, Austria. Filed Feb. 28, 1930, Serial No. 432,239, and in Austria Jan. 2, 1929. Renewed Oct. 6, 1932. 4 Claims. (Cl. 24—104.)



2. A press button comprising a top member, a sleeve in said top member, movable elements carried by the sleeve, a pin having serrations carried thereby, and a wedge member slidably guided on the pin to retain selected serrations thereof engaged with the movable elements.

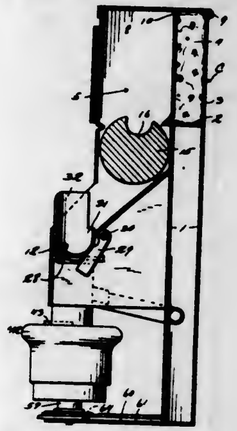
1,888,170. DIGGING IMPLEMENT. JOSEPH N. HORNBAKER, St. Petersburg, Fla. Filed Mar. 16, 1932. Serial No. 599,282. 2 Claims. Cl. 294—49.)



1. A digging implement comprising a body blade curved transversely upon itself and being provided with a lower beveled cutting edge, flanges formed with the sides of the body blade and having slots disposed therein, side blades adapted to be detachably secured to the body blade, tongues formed with said side blades and received in said slots, a foot receiving strip secured to the upper edge of the body blade and a handle for said implement.

1,888,171. AUTOMATIC CIGARETTE LIGHTER AND ASH RECEIVER. JOSEPH J. ITCZAK, Hartford, Conn. Filed Oct. 9, 1930. Serial No. 487,569. 2 Claims. (Cl. 312—86.)

1. An apparatus of the class described provided with a supply chamber, a delivery cylinder rotatably mounted within said chamber, a normally horizontally disposed swinging tray normally positioned to receive a cigarette delivered from the supply chamber, and means coacting



with the cylinder and the tray for swinging the tray in a vertical direction to vertically discharge a cigarette therefrom upon rotation of the cylinder.

1,888,172. KNITTED FOOTWEAR AND METHOD OF MAKING THE SAME. ELMER N. JOHA, Wauwatosa, Wis., assignor to Reliable Knitting Works, Milwaukee, Wis., a Corporation of Wisconsin. Filed June 6, 1932. Serial No. 615,605. 12 Claims. (Cl. 66—177.)



12. Knitted footwear having wales extending longitudinally in the side portions and in the lower portions of the toe and convergently upwardly in the upper part of the toe portions and instep covering portions to the center line of the instep, said knitted portions of the footwear having selvedged top and bottom margins.

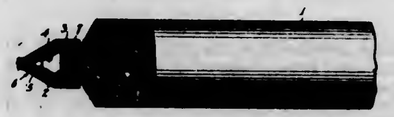
1,888,173. METHOD OF TREATING TOBACCO LEAVES, PROCESS OF PRODUCING A COMPOSITION FOR USE IN THE PRACTICE OF THE METHOD, AND RESULTANT COMPOSITION. STROUD JORDAN, Brooklyn, N. Y., assignor to Applied Sugar Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Mar. 7, 1932. Serial No. 597,426. 6 Claims. (Cl. 131—55.)

1. The process of treating tobacco leaves, comprising spraying the same with a composition comprising invert sugar, calcium nitrate and water.

1,888,174. DISPENSING DEVICE FOR COLLAPSIBLE TUBES. WILLIAM G. KENDALL, Maplewood, N. J. Filed Mar. 11, 1932. Serial No. 598,248. 4 Claims. (Cl. 221—60.)

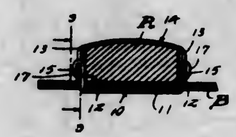
1. A dispensing device for containers comprising a rubber cap cone-shaped portion having a discharge slit at one

point and a tubular body, and a metal sleeve firmly fitted into said tubular body, said sleeve being formed with a tubular portion having threads for engagement with part



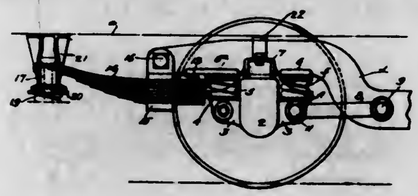
of said container and a cone-shaped portion engaging the under surface of the cone-shaped portion of said cap for preventing collapsing thereof.

1,888,175. CLEAT FASTENING MEANS. THOMAS M. KIMES, Merna, Nebr. Filed June 18, 1932. Serial No. 618,069. 2 Claims. (Cl. 198—199.)



1. As a new article of manufacture, a staple having a tang at each end thereof and a U-shaped staple engaging member, said member having a portion of each leg offset outwardly and an aperture in each offset portion to receive the tangs, said tangs upon being bent reversely coacting with the staple engaging member to firmly secure a pair of articles between the staple and the staple engaging member.

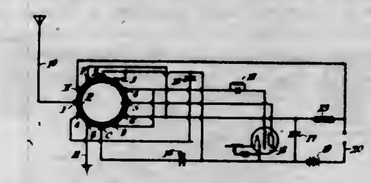
1,888,176. RAILWAY TRUCK. ELMER LATSHAW, Philadelphia, Pa., assignor to The J. G. Brill Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Mar. 29, 1932. Serial No. 601,854. 3 Claims. (Cl. 105—218.)



1. The combination of the side frame of a car truck; a journal box mounted under the frame and guided against excessive transverse movement independent of the frame; springs between the box and the frame; and a pair of longitudinally extending links spaced apart at opposite ends by the frame and the journal box and pivotally connected to the frame and to the journal box the connections of the links to the frame and journal box including means clampingly engaging the links to the frame and journal box whereby to restrain transverse and longitudinal movement of the journal box with relation to the frame.

1,888,177. RADIO SYSTEM. THOMAS P. LITTLEPAGE, Jr., Washington, D. C. Filed Dec. 13, 1927. Serial No. 239,766. 9 Claims. (Cl. 250—40.)

1. In a radio system in which a plurality of inductance units are employed alternatively in receptor means therefor and in which a plurality of capacities are connected in circuit with said receptor means, the improvement characterized by the fact that means is provided in said receptor means whereby when one inductance unit is employed in said receptor means the capacities bear a certain relation in the circuits and when another inductance unit is in-



serted in said receptor means the relation of the said capacities in the circuit is automatically altered to bear a different relation to each other.

1,888,178. METHOD OF PREPARING ICE CREAM SERVINGS. HARRY MACELHONE, Binghamton, N. Y., assignor to MacElhone Methods Inc., Binghamton, N. Y., a Corporation of New York. Filed June 28, 1930. Serial No. 464,688. 9 Claims. (Cl. 107—54.)

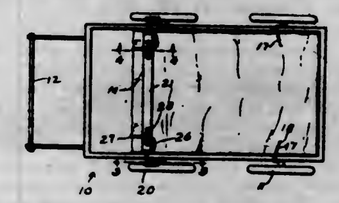


8. The method of preparing individual ice cream serving comprising the steps of dispensing the ice cream mixture into formed, individual, substantially cone shaped wrappers, freezing said mixture in said wrappers, removing said wrappers from said frozen mixture and placing said frozen mixture in substantially cone shaped edible holders for serving with the frozen mixture supported solely by the side walls of the edible holder.

1,888,179. VALVE DISK COMPOSITION. CLARENCE A. NASH, Newark, N. J., assignor to Bakelite Corporation, New York, N. Y., a Corporation of Delaware. Filed Oct. 19, 1928. Serial No. 313,652. 12 Claims. (Cl. 251—158.)

4. A valve disk molded from resinoid-impregnated woven asbestos fabric in sheet form cut to size for the exterior surfaces and a filler therebetween of asbestos fibers likewise impregnated with resinoid.

1,888,180. BABY CARRIAGE QUILT HOLDING DEVICE. RAPHAEL PORCELLO, Richmond Hill, N. Y. Filed July 20, 1932. Serial No. 623,649. 2 Claims. (Cl. 24—72.5.)



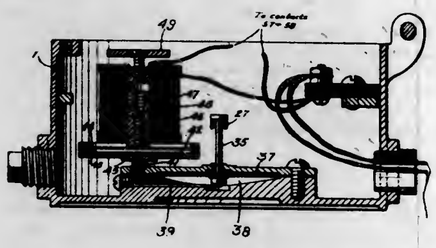
2. A baby quilt holder and baby holding device comprising a strap, hook means projecting from each end of said strap, means for detachably securing said hook means to a hood supporting post of a baby carriage, means extending from each end of said strap for detachably engaging the baby quilt, said latter means comprising a flexible chain, an eye member on said strap through which said chain passes, and a resilient hook on the end of said chain adapted to receive an edge of the baby quilt therein.

1,888,181. CONCRETE BUILDING FORM. HENRY C. RIESBOL, New York, N. Y. Filed May 11, 1929. Serial No. 362,251. 2 Claims. (Cl. 25—131.5.)



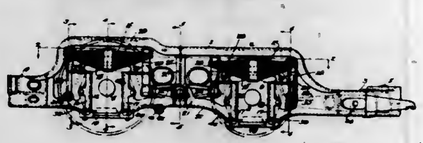
1. A building form structure including a plurality of rows of spaced pairs of telescoping channel members of substantially U-shape cross section, flanges extending from opposite sides of said channel members, the flanges of the telescoped portion of said channel members lying one against the other, C-clamps engaging the overlying flanges to secure said channel members in adjusted position, horizontal beams for holding said rows of telescoping channel members rigid, brackets carried on said channel members for supporting said beams, and means removably engaging said beams and said brackets.

1,888,182. RELEASE DEVICE. ARTHUR C. ROWLEY, Philadelphia, Pa., assignor to Globe Automatic Sprinkler Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed June 11, 1930. Serial No. 460,511. 6 Claims. (Cl. 74—93.)



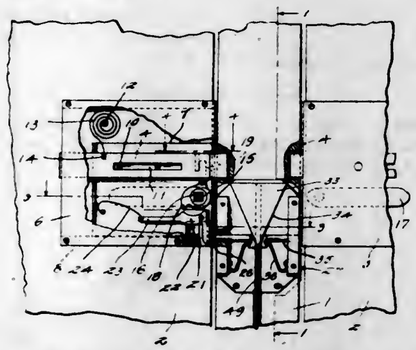
1. In a release device, a movable member, means for locking said member in predetermined position including a retractible latch, a flexible diaphragm connected with and operative by an unbalance of fluid pressure at opposite sides thereof to retract the latch, and electrically-actuated means for creating a differing fluid pressure on opposite sides of the diaphragm.

1,888,183. LOCOMOTIVE TRAILER TRUCK. ELLWOOD M. SHANNON, Bala, Pa. Filed Mar. 16, 1931. Serial No. 523,096. 7 Claims. (Cl. 105—82.)



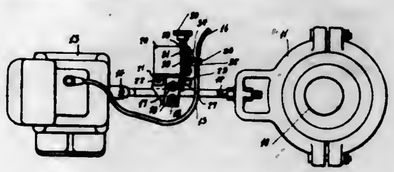
1. The combination in a locomotive trailer truck, of an integral truck frame having side members and transverse members connecting the side members; axle box openings in the side frame; pedestals on each side of the openings, formed integral with the frame, the frame having a vertical deep web extending from one end of the side frame to the other and at the inner side of the longitudinal center line of the side frame; the pedestals projecting outwardly from the web; and equalizing mechanism consisting of an equalizing lever, springs and links located at the longitudinal center of the truck frame and on the outside of the vertical web, so that access may be had to the equalizing mechanism and the axle boxes from the outside of the truck.

1,888,184. DOOR LOCKING DEVICE. HARRY W. SHONTZ, Maquoketa, Iowa, assignor of one-third to Roy S. Murray and one-third to Charles J. Rutenbeck, Lost Nation, Iowa. Filed Apr. 7, 1932. Serial No. 603,827. 9 Claims. (Cl. 70—14.)



8. Mechanism for securing a pair of doors having their free edges in opposed relation and separated by a stile post and having a bolt carrying lock, comprising a pair of aligned shiftable pin members mounted in spaced relation in the post and when separated each engaging in an opening in the adjacent door, an element movable between the pin members to separate the same, key controlled means for effecting movement of said element, and means actuated by each pin when in the said opening of a door for securing the adjacent lock bolt against movement.

1,888,185. SPEED REGULATOR. ORVAIL G. SIMMONS, Guernsey, Ohio, assignor of one-half to Joseph C. Pickens, Elm Grove, W. Va. Filed Dec. 24, 1931. Serial No. 583,127. 4 Claims. (Cl. 123—118.)



1. In combination with a reciprocating element of an internal combustion engine, a casing having a contact thereon and insulated therefrom, a spark plug wire connected to the contact, an element movable relatively to the contact to ground current passing through the spark plug wire, and means to vary the position of the casing to control the operation of the movable element.

1,888,186. COMPLEX GLUCOSAMINIC ACID SALTS OF THE METALS OF THE IRON GROUP. ARTHUR STOLL and ALBERT HOFMANN, Basel, Switzerland, assignors to Firm of Chemical Works formerly Sandoz, Basel, Switzerland. Filed Nov. 5, 1931, Serial No. 573,298, and in Germany Nov. 10, 1930. 1 Claim. (Cl. 260—11.)

The complex glucosaminic acid salts of the iron group, prepared by interaction of the glucosaminic acid with salts of the metals of the iron group, which constitute in dry state nonhygroscopic powders, soluble in water, yielding stable solutions and which give with basic compounds easily soluble salts.

1,888,187. GLUCOSAMINIC SALTS OF ANTIMONY. ARTHUR STOLL and ALBERT HOFMANN, Basel, Switzerland, assignors to Chemical Works formerly Sandoz, Basel, Switzerland. Filed Nov. 6, 1931, Serial No. 573,520, and in Germany Nov. 10, 1930. 8 Claims. (Cl. 260—11.)

1. The complex antimony glucosaminates, prepared by the interaction of glucosaminic acid with antimony hydroxides, which constitute in dry state white nonhygroscopic powders easily soluble in water with an acid reaction and yielding stable solutions, which can be boiled without decomposition taking place.

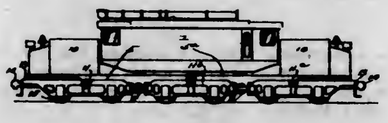
1,888,188. STAINLESS SILVER ALLOY. TADASHI TANABE, Torigai, Fukuoka, Japan. Filed Feb. 12, 1932, Serial No. 592,661, and in Japan Feb. 17, 1931. 1 Claim. (Cl. 75—1.)

A stainless alloy consisting of 0.5–20.0% of zinc, 10.0–40.0% of tin and 50.0–89.5% of silver.

1,888,189. COATED METAL ARTICLE AND METHOD OF AND COMPOSITION FOR PRODUCING SAID ARTICLE. ROBERT R. TANNER, Highland Park, and VAN M. DARSEY, Morenci, Mich., assignors to Parker Rust Proof Company, Detroit, Mich., a Corporation of Michigan. Filed Mar. 29, 1932, Serial No. 601,882, and in New Zealand Dec. 18, 1929. 20 Claims. (Cl. 148—6.5.)

1. The process of coating a metal of the group consisting of iron steel, zinc and their alloys, which consists in subjecting the metal to a balanced phosphate solution and including in the solution an amount of metal of the group consisting of copper, silver and tungsten, regulating the quantity of said metal inversely as to the free acidity of the bath and directly as to the rate of formation of the phosphate coating so as to expedite the production of a phosphate coating and without depositing more metal from the solution than is firmly embedded in the phosphate coating.

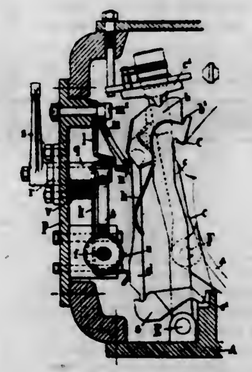
1,888,190. OIL-ELECTRIC LOCOMOTIVE. ALLEN WALLACE, Moorestown, N. J. Filed July 23, 1931. Serial No. 552,714. 16 Claims. (Cl. 105—175.)



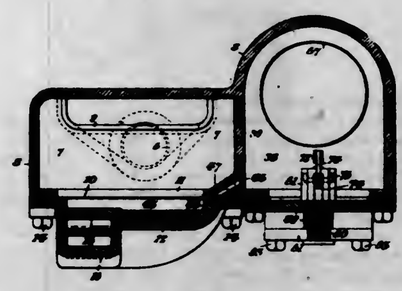
1. The combination in an electric locomotive, of three 4-wheel trucks pivotally connected; motors for driving the axles of the trucks; two sub-frames connected together at the center of the locomotive, each sub-frame being pivotally mounted on the center of the end trucks, the inner ends of the sub-frames, which are connected, being pivotally mounted on the central truck; a cab pivotally mounted on each sub-frame between the bearings on the trucks; and a generator mounted in the cab for driving the motors on the trucks.

1,888,191. CHANGE SPEED GEAR BOX. ANDREW GORDON WILSON, Westminster, London, England. Filed Mar. 8, 1932, Serial No. 597,527, and in Great Britain Dec. 8, 1930. 4 Claims. (Cl. 74—89.)

1. In a change speed gear box containing a plurality of constant mesh epicyclic gear trains, reaction brake bands for controlling said gear trains, and toggle mechanism for actuating said brake bands, and having an aperture for rendering said gear trains accessible from the exterior of said box, a detachable cover plate for closing said aperture, a cam shaft mounted on the inner side of said cover plate, a plurality of spaced cams corresponding in number to said gear trains arranged in relatively different phase on said cam shaft, spring members operatively associated with said cams, toggle mechanism actuating struts responsive to the movement of said spring members, and means carried by said cover plate and operable from the exterior of said box for turning the cam shaft in order to move any one of the struts into an operative position for the purpose described.



1,888,192. LIQUID DISPENSING APPARATUS. JOSEPH WILLIAM WINTER, Penfield, Pa., assignor to John Wood Manufacturing Company, Conshohocken, Pa., a Corporation of Pennsylvania. Filed June 16, 1931. Serial No. 544,797. 6 Claims. (Cl. 183—2.6.)



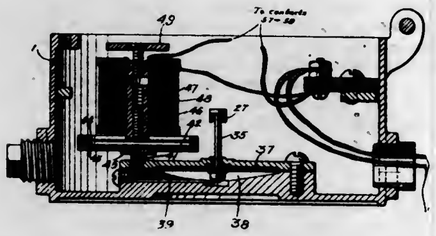
6. In a gas eliminator for liquid dispensing apparatus, the combination with a casing comprising a screen chamber and a float chamber with separate respective openings from said chambers in the same side wall of said casing, and a gas passage from the top of said screen chamber to said float chamber; of a plane foraminous screen covering said screen chamber opening; a removable cover for said screen chamber opening and screen, forming a fluid outlet chamber and having a liquid outlet port leading from the bottom of said screen; a removable cover for said float chamber opening, having a gas vent and a liquid vent; a gas vent valve and a liquid vent valve for respectively controlling said vents; a single float in said float chamber; and means operatively connecting said single float with both of said valves; whereby said liquid vent is normally closed by its valve, held by said float, and said float chamber forms a liquid trap, and said gas vent valve is normally held open by said float, but said

1,888,181. CONCRETE BUILDING FORM. HENRY C. RIMBOL, New York, N. Y. Filed May 11, 1929. Serial No. 362,251. 2 Claims. (Cl. 25—131.5.)



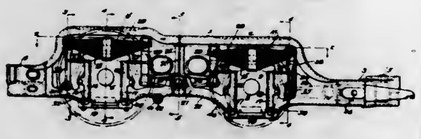
1. A building form structure including a plurality of rows of spaced pairs of telescoping channel members of substantially U-shape cross section, flanges extending from opposite sides of said channel members, the flanges of the telescoped portion of said channel members lying one against the other, C-clamps engaging the overlying flanges to secure said channel members in adjusted position, horizontal beams for holding said rows of telescoping channel members rigid, brackets carried on said channel members for supporting said beams, and means removably engaging said beams and said brackets.

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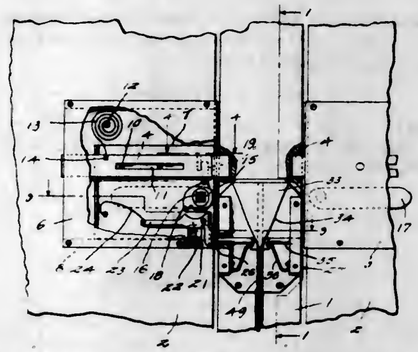
1. In a release device, a movable member, means for locking said member in predetermined position including a retractible latch, a flexible diaphragm connected with and operative by an unbalance of fluid pressure at opposite sides thereof to retract the latch, and electrically-actuated means for creating a differing fluid pressure on opposite sides of the diaphragm.

1,888,183. LOCOMOTIVE TRAILER TRUCK. ELLWOOD M. SHANNON, Bala, Pa. Filed Mar. 16, 1931. Serial No. 523,096. 7 Claims. (Cl. 105—82.)



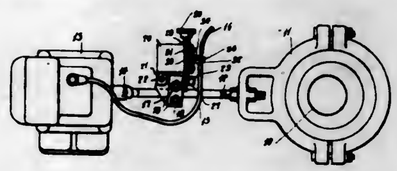
1. The combination in a locomotive trailer truck, of an integral truck frame having side members and transverse members connecting the side members; axle box openings in the side frame; pedestals on each side of the openings, formed integral with the frame, the frame having a vertical deep web extending from one end of the side frame to the other and at the inner side of the longitudinal center line of the side frame; the pedestals projecting outwardly from the web; and equalising mechanism consisting of an equalising lever, springs and links located at the longitudinal center of the truck frame and on the outside of the vertical web, so that access may be had to the equalising mechanism and the axle boxes from the outside of the truck.

1,888,184. DOOR LOCKING DEVICE. HARRY W. SHONTZ, Maquoketa, Iowa, assignor of one-third to Roy S. Murray and one-third to Charles J. Rutenbeck, Lost Nation, Iowa. Filed Apr. 7, 1932. Serial No. 603,827. 9 Claims. (Cl. 70—14.)



8. Mechanism for securing a pair of doors having their free edges in opposed relation and separated by a stile post and having a bolt carrying lock, comprising a pair of aligned shiftable pin members mounted in spaced relation in the post and when separated each engaging in an opening in the adjacent door, an element movable between the pin members to separate the same, key controlled means for effecting movement of said element, and means actuated by each pin when in the said opening of a door for securing the adjacent lock bolt against movement.

1,888,185. SPEED REGULATOR. ORVAIL G. SIMMONS, Guernsey, Ohio, assignor of one-half to Joseph C. Pickens, Elm Grove, W. Va. Filed Dec. 24, 1931. Serial No. 583,127. 4 Claims. (Cl. 123—118.)



1. In combination with a reciprocating element of an internal combustion engine, a casing having a contact thereon and insulated therefrom, a spark plug wire connected to the contact, an element movable relatively to the contact to ground current passing through the spark plug wire, and means to vary the position of the casing to control the operation of the movable element.

1,888,186. COMPLEX GLUCOSAMINIC ACID SALTS OF THE METALS OF THE IRON GROUP. ARTHUR STOLL and ALBERT HOFMANN, Basel, Switzerland, assignors to Firm of Chemical Works formerly Sandos, Basel, Switzerland. Filed Nov. 5, 1931, Serial No. 573,298, and in Germany Nov. 10, 1930. 1 Claim. (Cl. 260—11.)

The complex glucosaminic acid salts of the iron group, prepared by interaction of the glucosaminic acid with salts of the metals of the iron group, which constitute in dry state nonhygroscopic powders, soluble in water, yielding stable solutions and which give with basic compounds easily soluble salts.

1,888,187. GLUCOSAMINIC SALTS OF ANTIMONY. ARTHUR STOLL and ALBERT HOFMANN, Basel, Switzerland, assignors to Chemical Works formerly Sandos, Basel, Switzerland. Filed Nov. 6, 1931, Serial No. 573,520, and in Germany Nov. 10, 1930. 3 Claims. (Cl. 260—11.)

1. The complex antimony glucosaminates, prepared by the interaction of glucosaminic acid with antimony hydroxides, which constitute in dry state white nonhygroscopic powders easily soluble in water with an acid reaction and yielding stable solutions, which can be boiled without decomposition taking place.

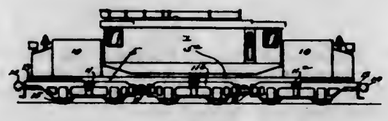
1,888,188. STAINLESS SILVER ALLOY. TADASHI TANABE, Torigai, Fukuoka, Japan. Filed Feb. 12, 1932, Serial No. 592,661, and in Japan Feb. 17, 1931. 1 Claim. (Cl. 75—1.)

A stainless alloy consisting of 0.5–20.0% of zinc, 10.0–40.0% of tin and 50.0–89.5% of silver.

1,888,189. COATED METAL ARTICLE AND METHOD OF AND COMPOSITION FOR PRODUCING SAID ARTICLE. ROBERT R. TANNER, Highland Park, and VAN M. DARBY, Morenci, Mich., assignors to Parker Rust Proof Company, Detroit, Mich., a Corporation of Michigan. Filed Mar. 29, 1932, Serial No. 601,882, and in New Zealand Dec. 18, 1929. 20 Claims. (Cl. 148—6.5.)

1. The process of coating a metal of the group consisting of iron steel, zinc and their alloys, which consists in subjecting the metal to a balanced phosphate solution and including in the solution an amount of metal of the group consisting of copper, silver and tungsten, regulating the quantity of said metal inversely as to the free acidity of the bath and directly as to the rate of formation of the phosphate coating so as to expedite the production of a phosphate coating and without depositing more metal from the solution than is firmly embedded in the phosphate coating.

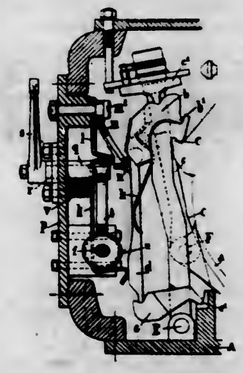
1,888,190. OIL-ELECTRIC LOCOMOTIVE. ALLEN WALLACE, Moorestown, N. J. Filed July 23, 1931. Serial No. 552,714. 16 Claims. (Cl. 105—175.)



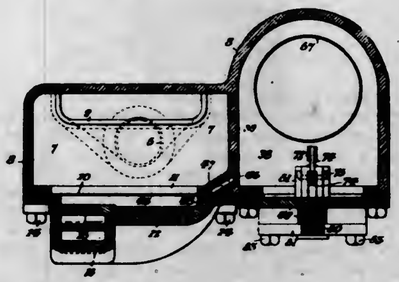
1. The combination in an electric locomotive, of three 4-wheel trucks pivotally connected; motors for driving the axles of the trucks; two sub-frames connected together at the center of the locomotive, each sub-frame being pivotally mounted on the center of the end trucks, the inner ends of the sub-frames, which are connected, being pivotally mounted on the central truck; a cab pivotally mounted on each sub-frame between the bearings on the trucks; and a generator mounted in the cab for driving the motors on the trucks.

1,888,191. CHANGE SPEED GEAR BOX. ANDREW GORDON WILSON, Westminster, London, England. Filed Mar. 8, 1932, Serial No. 597,527, and in Great Britain Dec. 8, 1930. 4 Claims. (Cl. 74—89.)

1. In a change speed gear box containing a plurality of constant mesh epicyclic gear trains, reaction brake bands for controlling said gear trains, and toggle mechanism for actuating said brake bands, and having an aperture for rendering said gear trains accessible from the exterior of said box, a detachable cover plate for closing said aperture, a cam shaft mounted on the inner side of said cover plate, a plurality of spaced cams corresponding in number to said gear trains arranged in relatively different phase on said cam shaft, spring members operatively associated with said cams, toggle mechanism actuating struts responsive to the movement of said spring members, and means carried by said cover plate and operable from the exterior of said box for turning the cam shaft in order to move any one of the struts into an operative position for the purpose described.



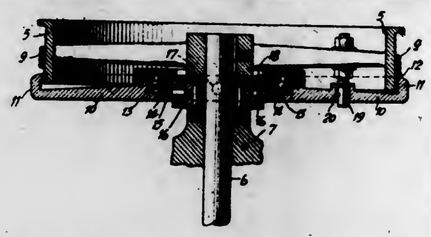
1,888,192. LIQUID DISPENSING APPARATUS. JOSEPH WILLIAM WINTER, Penfield, Pa., assignor to John Wood Manufacturing Company, Conshohocken, Pa., a Corporation of Pennsylvania. Filed June 16, 1931. Serial No. 544,797. 6 Claims. (Cl. 183—2.5.)



6. In a gas eliminator for liquid dispensing apparatus, the combination with a casing comprising a screen chamber and a float chamber with separate respective openings from said chambers in the same side wall of said casing, and a gas passage from the top of said screen chamber to said float chamber; of a plane foraminous screen covering said screen chamber opening; a removable cover for said screen chamber opening and screen, forming a fluid outlet chamber and having a liquid outlet port leading from the bottom of said screen; a removable cover for said float chamber opening, having a gas vent and a liquid vent; a gas vent valve and a liquid vent valve for respectively controlling said vents; a single float in said float chamber; and means operatively connecting said single float with both of said valves; whereby said liquid vent is normally closed by its valve, held by said float, and said float chamber forms a liquid trap, and said gas vent valve is normally held open by said float, but said

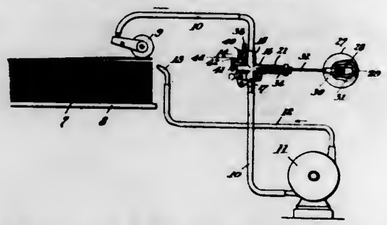
float is adapted to be uplifted by liquid caught in said trap, to close said gas vent and open said liquid vent, when the liquid in said trap reaches a predetermined level.

1,888,193. CAPSTAN. ERNEST J. BARTELL, Canastota, N. Y., assignor to General Cable Corporation, New York, N. Y., a Corporation of New Jersey. Filed Sept. 2, 1931. Serial No. 560,692. 6 Claims. (Cl. 254—176.)



1. A capstan comprising in combination a rotatable pulley and a strand-guiding member associated with the strand-engaging surface of said pulley and rotatable about an axis positioned at an angle to the axis of said pulley, and means for flexibly connecting said pulley and said guiding means for unitary movement.

1,888,194. VALVE MECHANISM FOR SUCTION FEEDERS. ALBERT BROADMEYER, Harrisburg, Pa., assignor to W. O. Hickok Manufacturing Company, Harrisburg, Pa., a Corporation of Pennsylvania. Filed Nov. 15, 1929. Serial No. 407,547. 15 Claims. (Cl. 271—27.)



1. In sheet feeding apparatus, the combination with a support for a pile of sheets, of a suction device for removing sheets from the pile, a nozzle for delivering a current of air to the pile to elevate the top sheets for action on by the suction device, an air pump, a conduit connecting the suction device and nozzle and including the pump, to cause the pump to withdraw air from the suction device and deliver air through the nozzle, a valve casing in the conduit, a valve in the valve casing movable between a position to close the conduit and a position to open it, mechanism for periodically moving the valve to one of said positions, and means for automatically freeing the valve from said operating mechanism and causing it to move from said position to its other position independently of the operating means.

1,888,195. LAP. ROY B. FEHR, Detroit, Mich., assignor, by mesne assignments, to Detroit Trust Company, Detroit, Mich., a Corporation of Michigan. Filed Apr. 17, 1931. Serial No. 530,784. 12 Claims. (Cl. 51—204.)



1. An annular lap having a series of internal lap teeth arranged around the inner circumferential face thereof substantially complementary to the teeth of a given gear to be lapped, each extending continuously from one end of the lap to the other, and each having the portion thereof extending radially inwardly from the pitch circle partially or completely removed, whereby the portion outwardly of the pitch circle may form an area of relief in the addendum face of the driven side of the complementary tooth of the given gear to be lapped.

1,888,196. LAP. ROY B. FEHR, Detroit, Mich., assignor, by mesne assignments, to Detroit Trust Company, Detroit, Mich., a Corporation of Michigan. Filed Apr. 18, 1931. Serial No. 531,059. 11 Claims. (Cl. 51—204.)



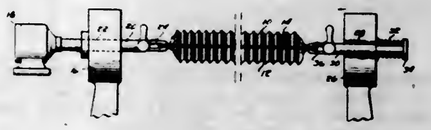
1. An annular lap having a series of internal lap teeth arranged around the inner circumferential face thereof substantially complementary to the teeth of a given gear to be lapped, each extending continuously from one end of the lap to the other, and each having the portion thereof extending radially outwardly from the pitch circle partially or completely recessed, whereby the portion lying radially inwardly of the pitch circle may form an area of relief in the dedendum face of the side of the complementary tooth of the given gear which may become the driving side thereof.

1,888,197. MACHINE FOR MAKING CONVOLUTED STRUCTURES OF FLEXIBLE MATERIAL. VICTOR T. HOEFLICH, New York, N. Y., assignor to American Meri-Lei Corporation, New York, N. Y., a Corporation of New York. Filed Oct. 20, 1928. Serial No. 313,711. 63 Claims. (Cl. 41—1.)



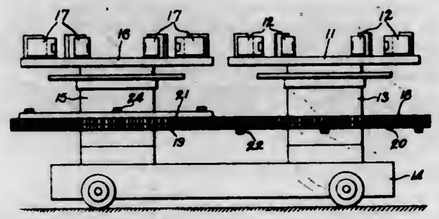
1. In a machine of the class described, the combination of means for crimping a strip, means for inserting a core through the individual folds, and means for twisting the strip after insertion of said core.

1,888,198. METHOD OF MAKING CONVOLUTED ORNAMENTS OF FLEXIBLE MATERIAL. VICTOR T. HOEFLICH, New York, N. Y., assignor to American Meri-Lei Corporation, New York, N. Y., a Corporation of New York. Original application filed Apr. 4, 1928, Serial No. 267,387. Divided and this application filed May 21, 1929. Serial No. 364,724. 20 Claims. (Cl. 41—10.)



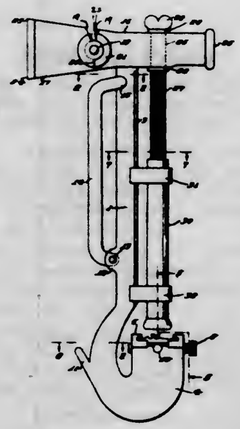
1. The hereindescribed method which consists in taking a plaited strip of flexible material having a core member threaded through the folds thereof, supporting said core member in comparatively taut condition, and twisting said strip thereon while retaining said strip against twisting movement at a point in spaced relation to the point of application of the twisting power thereto.

1,888,199. APPARATUS FOR ALIGNING MOLDS OF GLASSWARE FORMING MACHINES. EDWARD H. LORENZ, West Hartford, Conn., assignor to Hartford-Empire Company, Hartford, Conn., a Corporation of Delaware. Filed May 16, 1929. Serial No. 363,522. 5 Claims. (Cl. 49—14.)



1. Apparatus for forming glassware, comprising a plurality of mold carriers, molds carried by each of the said carriers, means for aligning the molds upon one carrier with the molds upon another carrier, synchronized driving connections between the said carriers, and means for taking up wear in the said driving connections without disturbing the alignment of the molds.

1,888,200. TRAP SETTER'S TOOL. ANTON OLSON, Evanston, Ill., assignor of one-half to Martha M. Henrichs, Evanston, Ill. Filed July 21, 1930. Serial No. 469,360. 5 Claims. (Cl. 43—97.)



1. In a trap setter's tool, a shank having a hook-shaped end, manually adjustable jaws carried thereby, a head at one end of said shank, and a plunger carried by said head and disposed above said jaws.

1,888,201. PUSHER FOR RETORT OVENS. EUGENE W. SCHELLENTRAGER, Shaker Heights, Ohio, assignor to Atlas Bolt & Screw Company, Cleveland, Ohio. Filed Jan. 5, 1931. Serial No. 506,654. 3 Claims. (Cl. 214—23.)

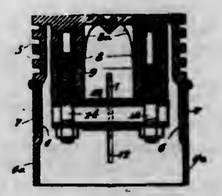


3. In a pusher for retort ovens, a reciprocal ram, a head on said ram, an oven floor scraping member on said head, said floor scraping member being adjustable on said head for adjustment thereon to adapt the pusher for different heights of oven floors independently of other parts of the pusher.

1,888,202. ZINC ALUMINUM ANODE FOR ELECTRODEPOSITION OF ZINC. ARTHUR K. GRAHAM, Sea Girt, N. J., assignor to Hanson-Van Winkle-Munning Company, Matawan, N. J., a Corporation of New Jersey. Filed Feb. 20, 1931. Serial No. 517,807. 3 Claims. (Cl. 204—4.)

1. A zinc anode having a small content of aluminum amounting to less than 5%.

1,888,203. ENGINE PISTON. RAY N. STEELE, Cedar Rapids, Iowa. Filed Jan. 17, 1930. Serial No. 421,426. 6 Claims. (Cl. 74—108.)

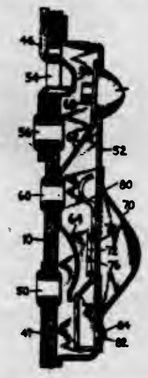


1. An engine piston having a head and a tubular lower extension forming a skirt, the same being laterally imperforate, a pair of internal posts detached from the side walls and extending from the closed end, sleeves within said posts and rigidly united therewith, said sleeve extending at least to the free ends of the posts, a wrist-pin flattened upon one side of each end, to rest on the ends of the sleeves, fastening bolts connected with the sleeves and passing through the pin, and means on said bolts engaging said pin and holding same against said sleeve.

1,888,204. FLASH LIGHT SWITCH. FRANK G. STIMSON, Belleville, N. J., assignor to Bond Electric Corporation, Jersey City, N. J., a Corporation of Delaware. Filed May 8, 1931. Serial No. 535,873. 3 Claims. (Cl. 200—60.)

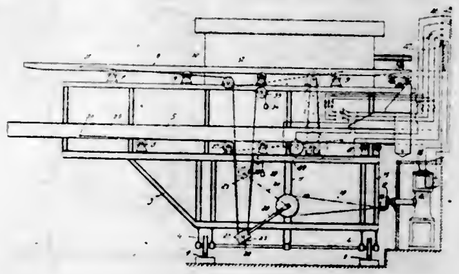
1. A safety switch comprising a resilient circuit closer member having main and auxiliary circuit closers adapted for series connection in an electric circuit, a housing for said circuit closer member, a slide slidably mounted upon

said housing outwardly thereof for manual movement, a cam member mounted within said housing, means to connect said slide and cam member for bodily movement of the cam member with the slide, said cam member comprising an auxiliary camming surface adapted to be brought into engagement with the auxiliary circuit closure



to effect movement thereof to circuit closing position upon movement of the slide from open circuit position and a main camming surface adapted to be brought into engagement with the main circuit closer to effect movement thereof to circuit closing position upon movement of the slide to steady light position.

1,888,205. **RECORDING MECHANISM FOR COKE-OVEN PUSHERS AND THE LIKE.** AUGUST KOPPERS, Bochum, Germany. Filed Sept. 11, 1930, Serial No. 481,096, and in Germany Feb. 12, 1930. 10 Claims. (Cl. 234—1.)



1. A recording mechanism for coke-oven pushers comprising a stationary recording instrument and a pusher machine movable from one to another of a plurality of ovens, means mounted on and movable with the pusher for operating said instrument in conformity with the movements of said pusher and its parts.

Patents Nos. 1,888,206 to 1,888,969

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Total	1,112		

Adjudicated Patents

(C. C. A. N. Y.) Colpitts patent, No. 1,128,292, for electric-wave amplifier, claims 1 and 5 *Held* invalid. *Western Electric Co.* v. *Wallerstein*, 60 F.(2d) 723.

(D. C. N. Y.) Gaumont patent, No. 1,177,697, for developing, fixing, toning, and otherwise treating photographic films and prints, claims 2, 8–12 *Held* valid but not infringed. *Cinema Patents Co.* v. *Duplex Motion Picture Industries*, 60 F.(2d) 1013.

(C. C. A. Iowa.) Kimes patent, No. 1,195,282, for automatic cut-out for electric motors, claims 1, 2, 3, 8, 11, and 12, if valid, *Held* not infringed. *McKaye Co.* v. *Penn Electric Switch Co.*, 60 F.(2d) 762.

(D. C. N. Y.) Gaumont patent, No. 1,209,606, for apparatus for drying photographic films, claims 12, 14, 16, and 17 *Held* valid but not infringed. *Cinema Patents Co.* v. *Duplex Motion Picture Industries*, 60 F.(2d) 1013.

(C. C. A. N. Y.) Lowenstein patent, No. 1,231,764, for telephone-relay, claims 1, 2, 4, 5, 6, and 7 *Held* invalid and, if valid, infringed. *Western Electric Co.* v. *Wallerstein*, 60 F.(2d) 723.

(C. C. A. Wis.) Morton patent, No. 1,278,985, for portable electric-arc-welding apparatus, *Held* not infringed. *Automatic Arc Welding Co.* v. *A. O. Smith Corporation*, 60 F.(2d) 740.

(C. C. A. N. Y.) Short patent, No. 1,383,035, for bearing-shim, claims 1, 2, 5, and 9 *Held* invalid, claims 3, 6, 7, and 8 *Held* valid but not infringed, claim 4 *Held* valid and infringed. *General Motors Corporation* v. *Leer Auto Supply Co.*, 60 F.(2d) 902.

(C. C. A. N. Y.) Mathes patent, No. 1,426,754, for circuits for electron-discharge devices, claim 25 *Held* invalid. *Western Electric Co.* v. *Wallerstein*, 60 F.(2d) 723.

(C. C. A. N. Y.) Blottner patent, No. 1,483,273, for circuit for heating the filaments of audions, claims 6 and 8 *Held* invalid. *Id.*

(C. C. A. N. Y.) Arnold patent, No. 1,504,537, for power-limiting amplifying devices, claims 17, 18, 20, 33, 34, 35, and 36 *Held* invalid. *Id.*

(D. C. N. Y.) Epperson patent, No. 1,505,592, for frozen confectionery, claims 1–7, inclusive, *Held* not infringement shown on motion for preliminary injunction. *National Popsicle Corporation* v. *Brookfield Ice Cream Corporation*, 60 F.(2d) 1000.

(C. C. A. N. Y.) Heddersen-Balling patent, No. 1,516,383, for ham boiler, claim 8 *Held* not infringed, claims 11 to 14, inclusive, *Held* invalid. *Heddersen-Balling* v. *Lorens*, 60 F.(2d) 709.

(C. C. A. Conn.) Fink patent, No. 1,581,188, for process of electro-depositing chromium and of preparing baths therefor, claims 1–6, 10–13, 15, 16, and 18 *Held* valid and, except claim 16, infringed. *United Chromium* v. *International Silver Co.*, 60 F.(2d) 913.

(C. C. A. Minn.) Wheaton patent, No. 1,586,764, for base-exchange silicate and process of making it, *Held* not infringed. *Arizona Minerals Corporation* v. *American Dowell Co.*, 60 F. (2d) 756.

(D. C. Conn.) Gaisman patent, No. 1,633,739, for safety razor, claims 1 and 2 *Held* valid and infringed. *Gillette Safety Razor Co.* v. *Hawley Hardware Co.*, 60 F.(2d) 1019.

(C. C. A. Wis.) Morton patent, No. 1,648,560, for electric-arc welding, *Held* not infringed. *Automatic Arc Welding Co.* v. *A. O. Smith Corporation*, 60 F.(2d) 740.

(C. C. A. Wis.) Morton patent, No. 1,648,562, for electric-arc welding control method and means, *Held* not infringed. *Id.*

(D. C. Conn.) Thompson patent, No. 1,815,745, for safety razor, claims 1, 2, 4, 5, 7, and 8 *Held* valid and infringed. *Gillette Safety Razor Co.* v. *Hawley Hardware Co.*, 60 F.(2d) 1019.

(D. C. N. Y.) Stephens reissue patent, No. 16,360, for needle and its method of use, claim 23 *Held* invalid, but, if valid, not infringed. *Steles Co.* v. *Hosiery Motor-Mend Corporation*, 60 F.(2d) 1000.

(D. C. Pa.) Stephens reissue patent, No. 16,360, for needle and its method of use, claims 2–5, 9, 10, 23 *Held* valid and infringed. *Steles Co.* v. *Gearhart*, 60 F.(2d) 1006.

Condition of Applications Under Examination at Close of Business November 5, 1932

Room No.	(Total number of applications awaiting action, excluding Trade-Mark Division, 64,203; Trade-Mark Division, 1,034. Oldest new case, May 6, 1932; oldest amended, May 5, 1932.) DIVISIONS, EXAMINERS, AND SUBJECTS OF INVENTIONS	Oldest new application and oldest action by applicant awaiting office action: New	Amended	No. of applications awaiting action
6624	1. LOEFFLER, F. A., Closure Operators; Fences; Gates; Tillage; Handling Implements	Aug. 16	Sept. 10	267
6708	2. HERRMANN, D. (Act.), Fishing and Trapping; Dairy; Animal Husbandry; Presses; Tobacco; Velocipedes.	July 7	July 8	845
4093	3. LINDSEY, A., Heating; Metal Founding; Metallurgy; Metal Treatment; Electric Furnaces	July 29	Aug. 6	652
7083	4. MERRITT, A. D., Conveyers; Hoists; Handling Apparatus; Excavating	Aug. 8	Sept. 13	318
3628	5. MACNAB, J. F., Harvesters; Music; Acoustics; Sound Recording; Knotters	July 16	July 21	296
4898C	6. LEWERS, A. M., Carbon Chemistry	May 10	May 11	1,910
5725	7. JARBOE, C. G., Optics; Photography	June 22	June 22	1,208
7514	8. ADAMS, F. L., Beds; Chairs; Kitchen and Table Articles; Racks and Cabinets	July 18	July 15	796
4624	9. ADAMS, R. E., Pumps; Fluid and Fluid-Current Motors	Aug. 5	Aug. 29	588
6612	10. HUNTER, O. F., Land Vehicles—Animal Draft Appliances, Bodies and Tops	June 10	June 11	721
5087B	11. BENHAM, E. V., Boots, Shoes, and Leggins; Button, Eyelet, and Rivet Setting; Harness; Leather Manufactures; Nailing and Stapling; Whip Apparatus.	July 11	July 12	586
7701	12. HENRY, C. O., Machine Elements	July 20	Aug. 2	397
5096	13. BORLIK, F. J., Gear Cutting, Milling, and Planing; Metal Drawing; Metal Forging and Welding; Metal Rolling; Metal Working; Needle and Pin Making; Turning; Boring and Drilling.	July 8	July 11	986
5097	14. BRUMBAUGH, N. J., Farriery; Metal Bending; Metal Tools and Implements, Making; Sheet-Metal Ware, Making; Wire Fabrics; Wire Working; Metal Working, Blanks and Processes.	July 18	Aug. 4	672
4897	15. WORRELL, L. W., Glass; Plastic Block and Earthenware Apparatus; Plastics	June 13	June 13	1,641
5612	16. SPENCER, C. J., Telegraphy; Telephony	July 23	July 23	737
5701	17. ARMSTRONG, H. (Act.), Label Pasting and Paper Hanging; Ornamentation; Paper Manufactures; Printing; Type Casting; Sheet-Material Associating or Folding; Sheet or Web Feeding; Type Setting.	May 12	May 14	1,377
4612	18. PORTER, M. E., Motors, Expansible-Chamber Type; Power Plants; Speed-Responsive Devices	July 15	July 23	561
4096	19. KENNEDY, A. R., Furnaces and Stoves; Heating Systems; Fuel Burners	May 9	May 9	1,780
6613	20. GROVE, S. D., Miscellaneous Hardware; Closure Fasteners; Locks and Latches; Safes; Undertaking	Aug. 5	Aug. 5	451
7733	21. THOMPSON, T. J., Textiles; Cloth Finishing	July 4	July 5	844
5724	22. RINGLE, D. (Act.), Aeronautics; Firearms, Ordnance, and Explosive Devices; Air Guns, Catapults, and Targets; Boats and Buoys; Ships; Marine Propulsion.	Aug. 8	Aug. 13	416
7892	23. GROESBECK, W. D., Coin Handling; Recorders; Registers	May 17	May 19	812
5083	24. DURAS, C. O., Apparel; Apparel Apparatus; Garment Supporters; Sewing Machines	Aug. 11	Aug. 26	527
5709	25. BLAKELY, C. F., Agitating; Butchering; Classifying Solids; Centrifugal-Bowl Separators; Mills; Threshing; Vegetable and Meat Cutters and Comminuters.	June 3	June 4	1,326
5893	26. ADAMS, W. M. (Act.), Electricity, Generation; Motive Power	May 31	May 31	830
5708	27. CLARK, W. N. (Act.), Brushing, Scrubbing, and Cleaning; Washing Apparatus	July 16	July 16	730
4628	28. BENSON, A. R., Internal-Combustion Engines	May 9	May 5	1,295
5082	29. MORRIS, B. N., Woodworking; Tools; Compound Tools; Furniture; Metal Working, Assembling	May 13	June 1	717
4074	30. SHIPMAN, J. L., Automatic Temperature and Humidity Regulation, Illuminating Burners; Illumination; Thermostats and Humidostats.	July 8	July 12	736
4716	31. HOLMES, W. N., Gas, Heating and Illuminating; Mineral Oils	May 31	June 1	1,444
4086	32. BARTHOLOMEW, J. A., Gas and Liquid Contact Apparatus; Heat Exchange; Gas Separation	July 22	Aug. 1	670
6096	33. WYMAN, W. L., Bridges; Masonry and Concrete Structures; Metallic Building Structures; Roads and Pavements; Roofs; Wooden Buildings.	May 6	May 10	2,115
6625	34. SAPERSTEIN, S. (Act.), Electricity, Transmission to Vehicles; Pneumatic Dispatch; Railways, Rolling Stock, Switches, and Signals; Store Service; Vehicle Fenders; Track Sanders.	June 8	June 8	818
3600	35. REYNOLDS, E. C., Buckles, Buttons, Clasps, Etc.; Card and Sign Exhibiting; Signals; Toilet	Sept. 13	Sept. 20	290
7624	36. McFAYDEN, A. D. (Act.), Automatic Weighers; Geometrical and Measuring Instruments; Force Measuring.	May 12	May 14	1,497
5889	37. WEAVER, M. E., Electricity, Circuit Makers and Breakers	June 11	June 25	931
7510	38. KRAFFT, C. F., Earth Boring; Hydraulic and Earth Engineering; Mining, Quarrying, and Ice Harvesting; Stoneworking; Walls.	Sept. 13	Sept. 7	117
4874	39. WHITNEY, F. J. (Act.), Fluid-Pressure Regulators; Multiple Valves; Valves; Water Distribution	May 9	May 9	1,304
7880	40. OBERLIN, J. J., Receptacles	June 14	June 14	2,159
6082	41. WHITNEY, M. L., Land Vehicles, Wheels, and Axles: Resilient Tires and Wheels; Wheel Substitutes; Railway Draft Appliances; Spring Devices.	Aug. 8	Sept. 7	449
5882	42. CUTTING, H. O., Electric Signaling	May 16	May 9	1,263
4886B	43. KLINGE, E. F., Baths, Closets, Sinks, and Spittoons; Sewerage; Electricity, Medical and Surgical; Medicines; Surgery; Dentistry; Artificial Body Members.	June 6	June 6	1,486
4807B	44. SHAFFER, C. H., Dispensing; Filling and Closing Portable Receptacles; Refrigeration	May 6	May 12	1,606
7097	45. HILL, H. D., Pulleys and Shafting; Lubrication; Bearings and Guides	July 30	Aug. 1	333
4813	46. TAYLOR, M., Evaporators; Fluid Sprinkling; Fire Extinguishers; Boilers	July 14	July 14	517
7600	47. BARKER, H., Clutches and Power Stops; Brakes; Motors	June 10	June 10	1,857
5731	48. ROEPKE, O. B., Electricity, General Applications	June 22	June 22	620
7725	49. SHEFFIELD, E. L., Check-Controlled Apparatus; Domestic Cooking Vessels; Ventilation; Driers; Liquid Separation or Purification.	May 16	May 17	1,393
4701	50. BLAKE, C. L., Plastic and Liquid Coating Compositions; Coating	May 7	May 9	2,052
5528	51. BACKUS, C. D., Radiant Energy	June 27	June 27	1,063
7709	52. KNOTTS, M. K., Supports; Chucks; Joint Packing; Pipe and Rod Joints or Couplings; Tool-Handle Fastenings.	Aug. 8	Aug. 8	614
6897	53. PECK, M. K., Books; Manifolding; Printed Matter; Stationery, Educational Appliances; Paper Files and Binders; Tents, Canopies, Umbrellas, and Canes; Curtains, Shades, and Screens.	Aug. 22	Aug. 26	411
5874	54. WAITE, W. E., Electric Lamps; Vapor Electric Devices; Space Discharge Tubes; Light Sensitive Circuits.	June 3	June 2	1,016
6887	55. BOWEN, S. T. {Bread, Pastry, and Confection Making; Cutlery	Aug. 15	Aug. 16	334
	{Designs	Oct. 15	Oct. 25	204
4725	56. PORTER, F. J., Electrochemistry; Laminated Fabrics; Paper Making; Substance Preparation	May 18	May 19	1,308
3623	57. NICOLSON, G. D. G., Cutting and Punching; Bolt, Nut, Rivet, Nail, Screw, Chain, and Horse-Shoe Making; Driven and Screw Fastenings; Jewelry; Nut and Bolt Locks.	July 5	July 5	649
5805	58. DOWELL, E. F., Abrading; Typewriting	May 16	May 16	1,232
4709	59. RICHARD, V. I., Chemistry; Alcohol; Fertilizers; Cement and Lime; Hides, Skins, and Leather; Fuel.	May 6	May 6	1,647
5896	60. GLASS, R. L., Electricity, Heating, and Welding; Batteries; Resistances and Rheostats; Prime Mover Dynamo Plants.	May 21	May 21	1,380
6724	61. PARKS, G. E., Elevators; Winding and Reeling; Pushing and Pulling; Fire Escapes; Ladders; Scaffolds; Horology; Time-Controlling Apparatus.	June 7	June 8	1,181
7525	62. COCHRAN, W. W., Toys; Amusement Devices; Baggage; Package and Article Carriers; Bottles and Jars; Deposit and Collection Receptacles.	June 17	June 17	1,395
4888	63. WINKELSTEIN, A. H., Bleaching and Dyeing; Explosive Pyrotechnic, and Match Compositions; Preserving; Sugar, Starch, and Carbohydrates.	May 23	May 23	1,356
4708	64. NASH, P. N., Acetylene; Distillation; Gas Mixers; Oils, Fats, and Glue	Aug. 4	Aug. 10	401
5624	65. McDERMOTT, F. P., Electricity, Conductors; Conduits and Housings; Repeaters; Relays; Wave Transmission.	May 18	May 17	1,507
2099B	TRADE-MARKS, LABELS, AND PRINTS: F. A. RICHMOND {Trade-Marks	Oct. 5	Oct. 24	684
	{Labels and Prints	Oct. 5	Oct. 22	150

DECISIONS IN PATENT AND TRADE-MARK CASES

U. S. Court of Customs and Patent Appeals

IN RE TOWNSEND

No. 2,973. Decided June 20, 1932

[59 F.(2d) 230]

PATENTABILITY—METHOD OF MAKING PHONOGRAPH RECORDS AND RECORDING SYSTEM.

Certain claims for a method of making a phonograph record and certain claims for a phonograph recording system *Held* patentable over the prior art.

APPEAL from the United States Patent Office. Modified.

GRAHAM, *P. J.*, dissenting in part.

Mr. W. E. Beatty, Mr. Harris D. Hineline, and *Mr. Willis H. Taylor, jr.,* for Townsend.

Mr. T. A. Hostetler and *Mr. Howard S. Miller* for the Commissioner of Patents.

LENROOT, *J.:*

This is an appeal from a decision of the Board of Appeals of the United States Patent Office, affirming that of the Examiner, rejecting, for want of patentability over the prior art, claims 6, 7, 8, 9, 11, 13, 14, and 15 of appellant's application, filed December 29, 1924.

Claims 6, 9, and 13 are illustrative of the appealed claims and read as follows:

6. An arrangement for recording sound waves comprising a recording stylus adapted to impress sound wave undulations on a phonograph record blank, means adapted to be actuated by an existing phonograph record for producing electrical waves corresponding with the sound recorded on that existing record and for amplifying the same, an electrically operated device for actuating the recording stylus, said device being responsive to said electrical waves and adapted to be actuated thereby, and a microphone connected in circuit with said electrically operated device and adapted to produce electrical current variations corresponding with sound waves impressed thereon, which current variations are impressed upon said electrically operated device.

9. The method of making a phonograph record which consists in transferring the music, speech or the like recorded on an existing record to a record blank and recording and amplifying supplemental sound waves on the same record blank in superposition to the sound wave record transferred and amplified from the said existing record.

13. A phonographic recording system comprising a pair of rotatable tables, a phonograph record mounted on one of the tables and rotatable therewith, a record blank mounted on the other table and rotatable therewith, a stylus engaging the sound groove of the phonograph record, means operable in response to vibrations imparted to the stylus to produce fluctuating electrical energy corresponding to said vibrations, a recording stylus engaging the record blank, an electrical actuating device for the recording stylus, circuit connections for impressing said fluctuating electrical energy on said device, a vacuum tube amplifier included in said circuit connections, a microphone pick-up electrically connected with said actuating device whereby sound waves other than those recorded on the phonograph record may be impressed on the record blank, and a telephone receiver included in the circuit connections and interposed between the reproducing stylus and said vacuum tube amplifier for reproducing the sound waves from the original phonograph record without blending them with the waves transmitted through said microphone pick-up.

The references relied upon are: De Forest, 1,375,447, April 19, 1921; Vreeland et al., 1,593,735, July 27, 1926; Wier, 1,617,428, February 15, 1927; Craft et al., 1,540,317, June 2, 1925.

Appellant's application relates to sound recording apparatus, the salient features of which may be summarized as follows: a phonograph record is placed upon a rotatable table, and upon said record there is placed a stylus; said stylus is connected to an armature positioned between the poles of a magnet, the armature being surrounded by a coil of wire. This coil is connected in circuit with an amplifier, thence to a similar coil surrounding a second armature positioned between the poles of a second magnet. This latter armature is connected to a stylus which rests upon a blank record, said record being also placed upon a rotatable table. The movement of the first stylus as it progresses in the sound groove of the phonograph record produces fluctuations in the circuit in which the coils and the amplifier are connected, said fluctuations corresponding to the vibrations produced in the stylus. The reverse action takes place on the second turntable, these fluctuations in electrical current being translated into mechanical vibrations of the stylus on the blank record, thereby recording on said blank record a sound groove similar to that possessed by the playing record. Between the first named stylus and the amplifier there is connected across this circuit a telephone receiver, which enables one to hear only the reproduction of the phonograph record. Connected in circuit with the coil on the second armature is a microphone, the same being also connected through an amplifier; this microphone, employed by one utilizing said telephone receiver, enables him to produce on the receiving record sounds supplemental to the sounds reproduced thereon from the first record. There is also connected across this second coil another telephone receiver which enables one to hear both the sounds being transmitted from the playing record and also the sounds being impressed by the microphone, whereas, as stated with reference to the first telephone receiver, only the sounds produced by the playing record are audible through it. The object of the apparatus is to enable one to reproduce on a blank record the subject matter of an existing phonograph record, coincident with such other supplemental sounds as are desired. For example, a record playing the instrumental music of a song may be played; the operator may listen to this music through the first named telephone receiver and, in time with the music, sing into the microphone. The result will be that the record on the second turntable will have impressed upon it a sound groove that will reproduce the instrumental music of the existing record, together with the vocal rendition of the operator.

The patent to De Forest discloses a method of amplifying currents in electrical sound recording and reproducing systems, in which vacuum tube amplifiers are used.

The patent to Vreeland et al. relates to the art of recording sounds upon records; it involves the use of a plurality of microphones at different points

in a room, the circuits from which all feed into a common circuit which actuates the recorder magnet with an effect which is the result of all the microphones; there is also shown means by which the director may listen to the result of all the microphones and so be enabled to make adjustments in the position of one or all of the microphones, or of the performers, to bring about the best result. There is also provided means for controlling the amount of amplification secured.

The patent to Craft and the one to Weir are the principal references. Craft sought to overcome what he claimed was a deficiency in the method of recording sound from a plurality of microphones. He indicates that where two or more microphones are being used, the voice of a singer, for example, will register most strongly on the microphone nearest to him; however, it will also register in the other microphones. He states that there is a delay in the effect of the more distant microphone reaching the actuating magnet for the recording stylus, due to its receiving the sound later, and that the impressions of the one voice on the two microphones would not register on the blank record at the same instant, resulting in an echo effect being produced when said record is played. He sought to overcome this by interposing between each microphone circuit and the common circuit what is referred to as an artificial line, the same being capable of adjustment in such manner as to delay the transmission of current to the common circuit to any extent desired within certain limits. Accordingly, in the above example, the artificial line in circuit with the microphone nearest the singer would be adjusted to delay transmission over this circuit just enough to synchronize the effects of the two microphones in the common circuit, thus disposing of said echo effect. His structure shows three microphones, the currents in which circuits are amplified by thermionic amplifiers; these currents are impressed in common upon the electromagnet which actuates the recording stylus. There is connected a telephone which, by means of a switch, may be connected to each microphone circuit individually, or to the common circuit, enabling the control man to listen to the output of any microphone, or of all three.

The patent to Weir is primarily for an electrical phonograph. A record is placed on a turntable, upon which record rests a stylus. The vibrations of the stylus operate to cause fluctuations in an electrical circuit. The current passes through a succession of wave filters, the purpose of which is to eliminate any undesirable frequency which may have been superimposed during the recording of the record being played and so eliminate the resulting tone produced by the stylus in passing over the record. This circuit is ultimately inductively connected to a common circuit, which in turn is connected to loud speakers through other wave filters. Means are shown for connecting two other reproducers, operating on other records, which producers are similarly connected to the common circuit and thence to the loud speakers. There is interposed in the secondary of the last wave filter preceding the common circuit a variable resistance, by means of which it is possible to vary the volume of the impulses being transmitted over this individual circuit. Also, presumably, a similar resistance would be interposed in the circuits of the other two reproducers at the same point in their individual circuits, or just before they join the common circuit. In the last wave filter, the one preceding the loud speakers, there is a variable resistance by means of which it is possible to control the volume of the common circuit, thus intensifying or decreasing the output of the loud speakers. The common circuit is also used to energize a second circuit, independent of the loud speakers, whereby a stylus is actuated and cuts upon a receiving blank a sound groove which corresponds to the variations of current in the common circuit.

It is clear from the references, and appellant admits, that each of the elements required in the several claims is found in the prior art, but appellant contends that he has so combined these elements in his application as to produce a new and useful result, which involved the exercise of the inventive faculty.

The Examiner and the Board of Appeals held that appellant's combination did not constitute invention, and that the reference Weir, while confined to sounds originating in phonograph records, contemplated simultaneous recording of the same upon a blank record, and that said reference showed a means of varying the volume of sound reproduced from the whole group of records or independently varying the volume of the sound produced by any one of them.

Appellant contends that the reference Weir does not contemplate the simultaneous recording from the group of records, but that Weir's idea was that the group of records might be recorded successively upon the blank. With reference to this point the Board of Appeals stated:

> It is noted that lines 16 to 25, page 2 of Weir, include the statement, in substance, that, resistance 16 makes it possible to vary the volume of sound produced from the *whole group of records* while the adjustable resistance 12 serves to vary the volume of the sound produced by any one record. This disclosure appears to indicate that these records may be used simultaneously. * * *

We are inclined to the view that appellant's contention is correct, and that Weir did not contemplate the simultaneous recording of the various records for the reason that, so far as any teaching of Weir is concerned, if said records were recorded simultaneously there would be produced nothing but a discordant jumble of sound. We believe there are instances where two pieces of music may be played harmoniously together, but these instances are so comparatively rare as to negative the suggestion that Weir had such a purpose in mind. Furthermore, assuming that a group of records was suitable for such a purpose, simultaneous recording of them upon a common record, to produce a harmonious result, could only be brought about in the presence of some method of synchronization. Inasmuch as Weir shows no means of synchronization, we are of the opinion that he did not contemplate a simultaneous playing of the group of records.

We believe the Board has misinterpreted the portion of Weir's specification to which it makes reference in the above quoted matter. It must be borne in mind that Weir had in mind primarily an electrical phonograph, and it is significant that the resistance 16, whereby the volume produced from the whole group of records is controlled, is found to be positioned only in the circuit restricted to the loud speakers of the phonograph apparatus; it has no effect whatever upon the control of volume in the circuit which actuates the recording stylus. Its purpose is clearly to suit the intensity of the phonograph reproduction to the type of room in which the machine is operating, much in the same manner as one controls the volume of his radio to suit his room. The individual resistances 12, referred to by the Board, are, we think, for the purpose of providing a means whereby the operator may preset a volume for each individual record peculiarly suited thereto, thereafter being enabled to play a succession of records without resorting to the common control for each record.

But even assuming that Weir contemplated the simultaneous recording of a plurality of records on a common blank record, the tribunals of the Patent Office, we think, lost sight of the fact that some of the claims in issue, to which we will later refer, clearly provide for the recording on a blank record of sounds originating in an existing phonograph record, and in addition the simultaneous recording of sounds supplemental to the sounds produced by said phonographic record and synchronized therewith. It is our opinion, therefore, that Weir does not show or suggest the precise object of appellant, which is as above stated.

In his discussion of Weir the Examiner stated as follows:

> * * * Pick-ups 22 and 23 are electrically connected by means of the transformers shown with the actuating or recording device 25, whereby *sound waves other than those recorded on record (25) may be impressed on the record blank.* * * * (Italics ours.)

The pick-ups to which the Examiner here refers appear in the Weir drawings only as terminal connections whereby additional input circuits may be connected. In speaking of these pick-up connections Weir has this to say in his specification:

> * * * Connections 22 and 23 are for the purpose of connecting other individual *reproducers* to the common circuit 11. (Italics ours.)

Earlier in his specification he refers to this common circuit 11 in the following terms:

> * * * The current is then induced in the secondary 8 which is in series with the primary coil 9 and thence to the secondary 10 which is connected in circuit with a common circuit 11, *common to a plurality of individual reproducers such as 4.* * * *

The reproducer 4, referred to in the last quotation, is the reproducer with stylus which rests upon the existing phonograph record. It is clear therefore that Weir had in mind the transfer to a common record of sounds originating only in phonographic records; and if the Examiner, by the above quoted statement, meant to imply that Weir disclosed a method of recording sounds from a record together with other sounds not originating in records, then such an inference on his part was not, in our judgment, warranted from the presence of the pick-up connections 22 and 23.

The reference Craft clearly shows the microphone feature of appellant's combination, and also the simultaneous recording of sounds from a plurality of microphones upon a common record blank; connections are also shown whereby the operator is enabled to listen to the sounds picked up by any one of said microphones, or to listen to the aggregate of sounds resulting from all. It is clear, however, that Craft contemplated merely a simultaneous recording of the sounds produced by various performers, by means of individual microphones, under conditions which presented no difficulty in the matter of synchronization; in other words, each of the performers could hear all of the other performers.

The question before us, therefore, is whether, in view of the references, it involved the exercise of the inventive faculty so to arrange the various elements as to permit the reproduction upon a blank record of the sounds from a phonograph record and also other sounds, supplemental thereto and synchronized therewith, said supplemental sounds being contributed through a microphone, the person contributing or controlling said supplemental sounds being permitted to listen to the sound produced by the original record and control the supplemental sounds accordingly.

In our opinion this objective is neither shown nor suggested by any or all of the references and, in our view, it constitutes a distinct contribution to the art and involves the exercise of the inventive faculty. Therefore, all of the claims upon appeal which embrace such a combination should be allowed, and we will proceed to consider these claims to determine which, if any of them, are limited to a combination accomplishing the above result.

Claim 6 provides for a reproducing stylus on an existing record, a second stylus electrically operated to impress a sound wave on a blank record responsive to the sound wave of the existing record, and a microphone whereby to register other sounds, connections to said microphone by means of which the recording stylus may be actuated by electrical current fluctuations resulting from said other sounds. All of these features are old in the art, and there are no limitations in the claim which call for a simultaneous and synchronized recording of the sounds originating in the two sources; accordingly we find that claim 6 was properly rejected.

Claim 7 includes means for electrically transmitting and amplifying sound wave undulations from a phonograph record to a record blank, together with "electrical means in circuit with said means for simultaneously impressing supplementary and amplified sound wave undulations on said record blank." We think the quoted limitation brings this claim within the class which, as indicated

above, should be allowed. The word "supplementary" is defined in Webster's New International Dictionary as follows:

Supplementary: added to supply what is wanted; additional; serving as a supplement.

The word "supplement", used as a noun, is defined by the same authority as:

Supplement: 1. That which supplies a want; * * * 2. That which completes, or makes an addition to, something already organized, arranged, or set apart; * * *

The word "supplement," used as a verb, is there defined as:

Supplement: to fill up or supply by additions; to add something to; to fill the deficiencies of.

In view of the foregoing, having in mind the art involved, we think that this claim, involving as it does the *simultaneous* recording of *supplementary* sounds, requires that the sounds from both sources be synchronized, and said claim falls within the class of claims which should be allowed.

Claim 8 is a method claim providing for the existing record and the production of supplemental sound waves, with connections whereby both sound sources actuate an electro-magnetic cutter upon a blank record. Said claim contains the following: "*synchronizing* said first mentioned electrical energy with said *supplemental* electrical energy." (Italics ours.) This claim clearly meets the requirement of synchronization of the sound from the two sources, and should be allowed.

Claim 9 is also a method claim, and contains the following: "and recording and amplifying *supplemental* sound waves on the same record blank *in superposition* to the sound wave record transferred and amplified from the said existing record." (Italics ours.) We think this claim is allowable for the same reason as given with respect to claims 7 and 8.

Claim 11 is an apparatus claim and recites the various elements set forth in our description of appellant's disclosure, with the exception of the telephone receiver in the common circuit. The other telephone receiver, over which one may hear only the sounds reproduced from the existing record, is a specific element of the claim, and, together with the other elements set out, presents a combination which, in our opinion is patentable over the prior art.

Claim 13, hereinbefore quoted, likewise sets out the various elements, with the exception of the common circuit telephone receiver. This claim is much the same as claim 11 in substance, and is allowable for the same reason.

Claim 14, like claims 11 and 13, is an apparatus claim. The principal difference between this claim and claims 11 and 13 is that there is included as an element the telephone receiver in the common circuit, whereby one may listen to both sound reproductions, the one from the microphone and the other from the record, but may not listen to either individually, while the single circuit receiver present in said claims 11 and 13 is omitted in claim 14. Thus it appears that the combination detailed in claim 14 is not limited to apparatus that includes the synchronization of the two sets of sound waves, and for that reason we think this claim was properly rejected. The presence of the common circuit receiver adds nothing to the patentability of any claim, and we are of the opinion that this claim fails to distinguish from the references cited.

Claim 15, also an apparatus claim, is similar in substance to claims 11 and 13, and includes as elements both of the telephone receivers hereinabove referred to. This claim is allowable for the same reason stated with respect to claims 11 and 13.

For the reasons stated, the decision of the Board of Appeals is reversed as to claims 7, 8, 9, 11, 13, and 15, and affirmed as to claims 6 and 14.

Modified.

Patent Suits

[Notices under sec. 4921, R. S., as amended Feb. 18, 1922]

1,089,405, W. S. Ferguson, Reinforced concrete dock or pier, D. C., W. D. N. Y., Doc. 481, *The Dock & Terminal Engineering Co. et al.* v. *Eastern Grain Elevator Corp. et al.* Doc. 483, *The Dock & Terminal Engineering Co. et al.* v. *Archer-Daniels-Midland Co. et al.* Doc. 484, *The Dock & Terminal Engineering Co. et al.* v. *American Elevator & Warehouse Co. et al.* Doc. 486, *The Dock & Terminal Engineering Co. et al.* v. *Spencer Kellogg & Sons, Inc.* Doc. 487, *The Dock & Terminal Engineering Co. et al.* v. *Marine Elevator Co.* Discontinued Oct. 1, 1932, in each of above cases.

1,125,476, G. Claude, System of illuminating by luminescent tubes, D. C., N. D. Calif. (San Francisco), Doc. E 2846, *Claude Neon Electrical Products, Inc.*, v. *J. G. Sims et al.* Dismissed for want of prosecution July 11, 1932.

1,170,790, A. M. Weston, Serving device for eating houses, D. C. Minn., 4th Div., Doc. E 2073, *Mapleton Corp.* v. *Wong Hing (Mun Hing Cafeteria)*. Dismissed for lack of prosecution Sept. 27, 1932.

1,183,161, F. N. Bierce, Guards for guys, D. C., S. D. Ohio, W. Div., Doc. E 730, *The Specialty Device Co. et al.* v. *South East Joslyn Co.* Claims 1, 2, 3, and 4 held valid and infringed (notice Oct. 3, 1932).

1,194,752, T. H. Krueger, Moistening device for gummed sticker or labels; 1,638,815, 1,742,603, same, Tape serving device, D. C., S. D. N. Y., Doc. E 54/192, *Better Packages, Inc.*, v. *L. Link & Co., Inc. et al.* Decree for plaintiff (notice Oct. 3, 1932).

1,233,242, P. C. Jacquerod, Mechanical eyes; 1,433,901, S. Marcus, Artificial eyes for dolls, display figures, etc.; 1,689,925, same, Tongue and teeth for doll heads; 1,792,176, same, Eye set; Re. 16,536, L. J. Grubman, Eye mounting for dolls; Re. 18,585, A. Konoff, Eye set, filed Oct. 3, 1932, D. C., E. D. N. Y., Doc. E 6585, *Margon Corp.* v. *Emerson-Steuben Corp. et al.*

1,345,073, E. L. Clark, Headlight; 1,359,789, S. Brown, Reflector headlight; 1,826,712, S. F. Arbuckle, Fixed focus headlamp, D. C., N. D. Ohio, W. Div., Doc. 1237, *The United Lens Corp.* v. *Relay Motors Corp.* Claims 9, 10, 11, and 17 of 1,345,073; claims 1 to 17, inclusive, and 20 to 28, inclusive, of 1,359,789, and claims 1, 2, and 3 of 1,826,712 held valid Oct. 4, 1932.

1,359,789. (See 1,345,073.)

1,360,256, E. Anderson, Can opener, D. C., N. D. Calif. (San Francisco), Doc. E 2368, *Star Can Opener Co.* v. *L. K. Liggett Co.* Dismissed for want of prosecution July 11, 1932.

1,433,901. (See 1,233,242.)

1,491,915, W. L. McLaine, Float plug, filed Aug. 19, 1932, D. C., E. D. Tex., Tyler Div., Doc. E 438, *Baker Oil Tools, Inc., et al.* v. *International Derrick & Equipment Co. of Texas.*

1,496,537, B. Hirschhorn, Tea cartridge; 1,497,276, same, Method of manufacturing tea cartridges; Re. 16,897, T. Allatt, Bag closing machine, appeal filed Aug. 30, 1932, C. C. A., 2d Cir., Doc. 12258, *Millis Patent Holding Co., Inc.*, v. *Joseph Tetley & Co. et al.*

1,497,276. (See 1,496,537.)

1,520,424, C. McCullough, Machine for treating eggs, D. C., N. D. Calif. (San Francisco), Doc. E 2402, *McCullough Egg Equipment Co.* v. *Poultry Producers of Central California.* Dismissed for want of prosecution July 11, 1932. Doc. E 2644, *McCullough Egg Equipment Co.* v. *W. H. Roussel.* Decree as above.

1,526,982, E. W. Hill, Stencil sheet, D. C. Minn. (Minneapolis), Doc. E 1412, *A. B. Dick Co.* v. *Miller-Davis Co.* Consent decree for injunction Sept. 22, 1932.

1,638,815. (See 1,194,752.)

1,673,727, L. V. Aronson, Cigar lighter, filed Sept. 30, 1932, D. C., S. D. N. Y., Doc. E 71/215, *Art Metal Works, Inc.*, v. *H. A. Groen & Bro., Inc., et al.*

1,683,531. (See Re. 17,393.)

1,687,013, O. A. Frederickson, Armored electric cable; 1,801,549, same, Anti-short bushing, appeal filed Sept. 16, 1932, C. C. A., 2d Cir., Doc. 12279, *National Electric Products Corp.* v. *Circle Flexible Conduit Co., Inc.*

1,689,925. (See 1,233,242.)

1,720,301, 1,720,302, E. F. Suter, Hair drying, appeal filed Sept. 18, 1932, C. C. A., 2d Cir., Doc. 12280, *Eugene, Ltd.*, v. *The Chas. Arnao Co., Inc.*

1,720,302. (See 1,720,301.)

1,724,493. (See Des. 72,523.)

1,733,358. (See Des. 72,523.)

1,734,515, W. S. Elliott, Method and apparatus for degasifying liquid, filed Oct. 4, 1932, D. C., S. D. Ohio, (Dayton), Doc. E 339, *Elliott Co.* v. *The Hoopes Mfg. Co.*

1,742,603. (See 1,194,752.)

1,771,020, Thurm & Engels, Traveling tray ovens, appeal filed Aug. 31, 1932, C. C. A., 2d Cir., Doc. 12261, *Baker Perkins Co., Inc.*, v. *Thos. Roulston, Inc.*

1,787,235, F. A. Donaldson, Air cleaner and coupling, D. C. Minn., 4th Div., Doc. 2493, *Donaldson Co., Inc.*, v. *The Maytag Co. et al.* Dismissed without prejudice Sept. 20, 1932. Same filed Sept. 20, 1932, D. C. Minn., 4th Div., Doc. E 2500, *Donaldson Co., Inc.*, v. *The Maytag Co. et al.*

1,792,176. (See 1,233,242.) 1,801,549. (See 1,687,013.)

1,805,403, T. Johnson, Casement window structure, D. C., N. D. Ohio, E. Div., Doc. E 4142, *Johnson Metal Products Co. et al.* v. *Crittall Casement Window Co.* Dismissed Sept. 20, 1932.

1,815,745, R. E. Thompson, Safety razor, filed Sept. 28, 1932, D. C., S. D. N. Y., Doc. E 71/212, *Gillette Safety Razor Co.* v. *Cooper Products Corp.*

1,826,712. (See 1,345,073.) Re. 16,536. (See 1,233,242.)

Re. 16,897. (See 1,496,537.)

Re. 17,393, J. Mayer, Hair waving appliance and method; Re. 17,585, same, Permanent hair waving appliance; 1,683,531, G. Decker, Hair waving outfit, D. C., N. D. Ohio, E. Div., Doc. E 4278, *The Philad Co. et al.* v. *Modernistic Permanent Wave Machine Co. et al.* Patents Re. 17,393 and Re. 17,585 held valid and infringed Sept. 27, 1932.

Re. 17,585. (See 17,393.)

Re. 18,146. (See Des. 72,523.)

Re. 18,585. (See 1,233,242.)

Des. 72,523, Z. Maulsby, Burial casket; 1,724,493, Re. 18,146 (of 1,733,358), Maulsby & Maulsby, Fabric forming machine, filed Sept. 17, 1932, D. C. Minn., 4th Div., Doc. E 2499, *J. R. Maulsby* v. *Minneapolis Casket Co., Inc., et al.*

Des. 83,006, H. Potter, Floral basket, filed Oct. 4, 1932, D. C., N. D. Ohio, E. Div., Doc. E 4445, *H. Potter et al.* v. *The Madison Willow Craft Co., Inc.*

Des. 87,760, O. N. Segall, Display fixture, filed Oct. 4, 1932, D. C., S. D. N. Y., Doc. E 71/230, *O. N. Segall* v. *H. Brocciale et al.* (*B. & V. Woodworkers*). Doc. E 71/231, *O. N. Segall* v. *T. Marcus* (*Frankel Display Fixture Co.*). Doc. E 71/232, *O. N. Segall* v. *W. Marshals.* Doc. E 71/233, *O. N. Segall* v. *Display Equipment Corp.* Same, filed Oct. 6, 1932, D. C., E. D. N. Y., Doc. E 6586, *O. N. Segall* v. *S. Silverman et al.*

Adverse Decisions in Interference

In interferences involving the indicated claims of the following patents final decisions have been rendered that the respective patentees were not the first inventors with respect to the claims listed:

Pat. 1,822,961, W. D. Emery, Orifice fitting, decided October 22, 1932, claim 3.

Pat. 1,844,427, E. J. Kirchoff, Vertically and laterally movable window, decided October 22, 1932, claim 4.

Disclaimers

1,589,304.—*Karl E. Peller*, West Hartford, Conn. FERDINO MOLTEN GLASS. Patent dated June 15, 1926. Disclaimer filed November 3, 1932, by the assignee, *Hartford-Empire Company*, and ratified by the patentee, said *Peller*.

Hereby disclaims claim 1 of said Letters Patent.

1,784,811.—*Vere B. Browne*, Brackenridge, Pa. SILICON STEEL. Patent dated December 16, 1930. Disclaimer filed October 22, 1932, by the patentee.

Hereby disclaims from the scope of claims 5, 7, and 9 of said patent any silicon steel except that defined by said claims and in which the silicon content is not over 5 per centum.

1,820,244.—*John P. Pederson*, Chicago, Ill. CARRIAGE ROLL RELEASE FOR HECTOGRAPH MACHINE. Patent dated August 25, 1931. Disclaimer filed November 3, 1932, by the assignee, *Ditto Incorporated.*

Therefore, enters this disclaimer to claim 8 in said patent, which is in the following words, to-wit:

"8. In a duplicating machine, in combination with a printing surface, a carriage, means mounting the carriage for reciprocation over the printing surface, an impression member journaled in said carriage, means locking the member in depressed position, a trip lever adapted to be manually actuated for releasing said locking means when desired, and other means automatically releasing said locking means when the carriage is located in its forward position."

1,837,474.—*George K. Newell*, Level Green, Pa. BACK UP WHISTLE AND APPLICATION VALVE. Patent dated December 22, 1931. Disclaimer filed October 28, 1932, by the assignee, *The Westinghouse Air Brake Company*, the patentee, said *Newell*, concurring and assenting.

Hereby enters this disclaimer to those claims which are in the following words:

"1. The combination with a brake pipe of a fluid pressure brake system, of a back-up device comprising a valve for controlling the venting of fluid from the brake pipe to effect an application of the brakes, a manually controlled lever for holding said valve closed, the valve being opened upon release of the lever, and a manually controlled member acting on said lever to prevent the opening of said valve upon release of said lever.

2. The combination with a brake pipe of a fluid pressure brake system, of a back-up device comprising a valve subject to brake pipe pressure tending to open the valve for

controlling the venting of fluid from the brake pipe to effect an application of the brakes, a manually controlled lever for holding said valve closed, and a manually controlled member acting on said lever to prevent the opening of the valve upon release of the lever.

1,857,704.—*Arthur B. Wilkoff* and *Olaf J. Nyberg*, Niles, Ohio. SPECIAL METAL CHANNEL SECTION. Patent dated May 10, 1932. Disclaimer filed November 2, 1932, by the assignee, *Youngstown Steel Car Corporation.*

Hereby disclaims the subject matter of claims 1, 2, 3, and 4 of said patent excepting when the special metal channel section claimed is of a one-piece construction and a portion of the wider flange above the plane of the web is bent outwardly to reinforce and stiffen said flange.

Interference Notice

U. S. PATENT OFFICE, *Washington, Oct. 21, 1932.*

Harry Harris, his assigns or legal representatives, take notice:

An interference having been declared by this Office between the application of the Brown Shoe Company, Inc., 1600 Washington Avenue, St. Louis, Mo., for registration of a trade-mark and trade-mark registered November 23, 1915, No. 107,421, to Harry Harris, 800–802 Penn Avenue, Pittsburgh, Pa., and a notice of such declaration sent by registered mail to said Harris at the said address having been returned by the post office as undeliverable, notice is hereby given that unless said Harris, his assigns or legal representatives, shall enter an appearance therein within 30 days from the first publication of this order the interference will be proceeded with as in case of default. This notice will be published in the OFFICIAL GAZETTE for three consecutive weeks.

WM. A. KINNAN,
First Assistant Commissioner.

TRADE-MARKS

OFFICIAL GAZETTE, NOVEMBER 22, 1932

[VOL. 424. No. 4]

The following trade-marks are published in compliance with section 6 of the act of February 20, 1905, as amended March 2, 1907. Notice of opposition must be filed within thirty days of this publication.

Marks applied for "under the ten-year proviso" are registrable under the provision in clause (b) of section 5 of said act as amended February 18, 1911.

As provided by section 1 of said act, a fee of ten dollars must accompany each notice of opposition.

CLASS 1

Raw or Partly-Prepared Materials

Ser. No. 310,707. KENNETH C. LIVERMORE, Honeoye Falls, N. Y. Filed Feb. 2, 1931.

Quaker Hill Farm

For Seed Potatoes, Seed Oats, Seed Barley, Seed Rye, Seed Wheat, Seed Peas, Seed Beans, Seed Corn, and Cabbage Seed.
Claims use since 1924.

Ser. No. 328,190. THE SPONGE RUBBER PRODUCTS CO., Derby, Conn. Filed June 21, 1932.

SPONGEX

For Sponge Rubber, Medical Sponge Rubber, and Rubber Sponges.
Claims use since Feb. 11, 1932.

Ser. No. 328,788. HITEMAN LEATHER COMPANY, INC., West Winfield, N. Y. Filed July 14, 1932.

EBON-APEX

For Leathers.
Claims use since May 21, 1932.

Ser. No. 330,691. BOONE COUNTY COAL CORPORATION, Sharples, W. Va., and Philadelphia, Pa. Filed Sept. 27, 1932.

VESTA

For Bituminous Coal.
Claims use since Apr. 5, 1932.

CLASS 2

Receptacles

Ser. No. 328,072. PADUCAH COOPERAGE CO., INC., Paducah, Ky. Filed June 17, 1932.

PADCO

For Kegs and Barrels of Wood.
Claims use since July 1, 1931.

CLASS 3

Baggage, Animal Equipments, Portfolios, and Pocketbooks

Ser. No. 330,946. SAMUEL ALEXANDER, New York, N. Y. Filed Oct. 5, 1932.

VENTAURE

For Collars for Dogs and Other Animals.
Claims use since Mar. 3, 1931.

CLASS 4

Abrasive, Detergent, and Polishing Materials

Ser. No. 319,838. VADSCO SALES CORPORATION, New York and Long Island City, N. Y. Filed Oct. 7, 1931.

Dier Lady

For Laundry Soaps, Toilet Soaps, Shaving-Cream Soaps, Shaving Soaps, Shredded Soaps, Soap Jelly, Soap Powders, Soap Flakes, Metal Polishes, Silver Polishes, Shoe Polishes and Stove Polishes.
Claims use since May 17, 1927.

Ser. No. 326,604. JOSEF BRANDSTETTER, doing business as Alto Mfg. Co., Chicago, Ill. Filed Apr. 29, 1932.

EXCELLO.

For Scouring Pad Made of Steel Wool or Metallic Wire.
Claims use since Apr. 1, 1932.

Ser. No. 327,285. PENN-JERSEY AUTO STORES, INC., Easton, Pa. Filed May 20, 1932.

Corona
ALL-WAYS THE BEST

The words "All-Ways The Best" are disclaimed apart from the other features of the mark shown on the drawing.
For Brake Lining Restorative Preparation.
Claims use since Mar. 1, 1931.

Ser. No. 329,993. KAUFMANN DEPARTMENT STORES, INC., Pittsburgh, Pa. Filed Aug. 30, 1932.

no delay

For Brushless Shaving Cream.
Claims use since Aug. 15, 1932.

Ser. No. 330,383. MANUEL S. SIGREN, doing business as Chilean Products Mfg. Company, Boston, Mass. Filed Sept. 15, 1932.

VALPO

For Washing Fluids or Compounds for Laundry Use, Preparations for Removing Stains from Fabrics and the Like.
Claims use since Aug. 8, 1932.

Ser. No. 330,416. H. BEHLEN & BRO., New York, N. Y. Filed Sept. 17, 1932.

A·F·Cleaner

No claim is made to the exclusive use of the word "Cleaner" apart from the mark shown in the drawing.
For Dry Cleaner Preparation for Fabrics, Silks, Upholstery, Rugs, Carpets, Felts, Leather, and All Heavy and Light Fabrics.
Claims use since Jan. 1, 1932.

Ser. No. 330,650. WILLIAM COOPER & NEPHEWS, INCORPORATED, Chicago, Ill. Filed Sept. 26, 1932.

PULVEX

For Dog Soap.
Claims use since Nov. 1, 1930.

CLASS 6

Chemicals, Medicines, and Pharmaceutical Preparations

Ser. No. 321,066. EUGENE M. CHEESMAN, Des Moines, Iowa. Filed Nov. 12, 1931.

Eugene

The words "Des Moines, Iowa," appearing on the drawing are hereby disclaimed apart from the mark as shown.
For Cleansing Cream, Tissue Cream, Foundation Cream, Muscle Oil, Pore Cream, Lemon Cream, Acne Cream,

CARNEGIE LIBRARY OF ATLANTA

Facial Pack, Liquid Cucumber Cream, Liquid Foundation Cream, Astringent, Skin Stimulant Preparation, Hand Lotion, Liquid Skin Cleaner, Depilatory, After-Shaving Lotion, Eye Brow Pencils, Eye Shadow, Cake Rouge, Paste Rouge, Lip Stick, Rouge and Powder Compacts, Lash Tint, and Face Powder.
Claims use since June 1, 1931.

Ser. No. 325,092. EILARM CO., Los Angeles, Calif. Filed Mar. 14, 1932.

LILAK

For Eyelash Dye and Permanent Wave Solutions.
Claims use since Dec. 1, 1931.

Ser. No. 325,234. NORDMARK-WERKE G. M. B. H., Hamburg, Germany. Filed Mar. 17, 1932.

Kationorma

For Medicinal Preparations for the Treatment of Bronchial Asthma, Exudative Diathesis, Hay Fever, and Diseases of the Skin.
Claims use since Feb. 10, 1931.

Ser. No. 325,236. NORDMARK-WERKE G. M. B. H., Hamburg, Germany. Filed Mar. 17, 1932.

„Photadyna"

For Medicinal Preparations for the Causative Treatment of Melancholia and Depression.
Claims use since Oct. 1, 1931.

Ser. No. 325,576. FORD HOPKINS CO., doing business as Vin-Cola Co., Chicago, Ill. Filed Mar. 28, 1932.

VINKOLA

That portion "Kola" of the mark is disclaimed apart from the relation shown to the complete trade-mark.
For General Tonic.
Claims use since Jan. 2, 1930.

Ser. No. 326,335. NATIONAL CARBIDE CORPORATION, Wytheville, Va.; New York, N. Y.; and Ivanhoe, Va. Filed Apr. 21, 1932.

MINERS LAMP CARBIDE

No claim is made to the exclusive use of the words "Miners Lamp Carbide" apart from the mark shown.
For Calcium Carbide.
Claims use since March, 1921.

Ser. No. 326,565. DAVID RODERICK WATKINS, Dormont Branch, Pittsburgh, Pa. Filed Apr. 27, 1932.

MILAN

David R Watkins

Applicant disclaims the right to the exclusive use of the word "Milan" apart from the trade-mark as shown in the drawing. The name David R. Watkins shown in the drawing is a facsimile of the applicant's signature.
For Shampoo Preparation in Paste Form.
Claims use since Aug. 15, 1931.

Ser. No. 326,809. THE EASTERN CHEMICAL AND RESEARCH COMPANY, New Haven, Conn. Filed May 6, 1932.

VITALO

For Plant and Flower Preservatives.
Claims use since Feb. 20, 1932.

Ser. No. 326,894. THE DELATONE COMPANY, Chicago, Ill. Filed May 9, 1932.

DEL-A-TONE

For Depilatory Used for the Removal of Superfluous Hair.
Claims use since Apr. 7, 1910.

Ser. No. 328,542. LOUIS J. BAYLISS, doing business as Nature's Food Laboratory, Keene, Tex. Filed July 5, 1932.

VEGEFOOD

For Medicinal Tonic Embodying Highly Concentrated Extracts from Green Leafy Vegetables and Recommended for Pellagra, High Blood Pressure, Anemia, Stomach Trouble, and Nervous Disorders in the Human System.
Claims use since Jan. 25, 1932.

Ser. No. 328,733. H. G. KNOLL & CO., INC., New York, N. Y. Filed July 12, 1932.

BROMIDON

For Medicinal Preparation, Consisting of a Mixture of Bromides and Amidopyrine, in Tablet Form or in Solution.
Claims use since Apr. 1, 1932.

Ser. No. 329,181. DEUTSCHE GOLD- UND SILBER SCHEIDEANSTALT, Frankfort-on-the-Main, Germany. Filed July 29, 1932.



For Astringents, Astringent Cerates, Bleach Creams, Beauty Creams, Cold Creams, Cleansing Creams, Obesity Creams, Refreshing Creams, Obesity Astringents, Dry Rouges, Liquid Rouges, Face Bleaches, Face Packs, Eyebrow and Eyelash Grower, Eye Drops, Hand Lotions, Skin Lotions, After Shaving Lotions, Pomades, Face Powders, Talcum Powders, Sachets, Hair Salves, Hair Elixirs, Dandruff Preparations, Hair Tonics, Hair Oils, Shampoos, Hair Dyes, Bath Salts, Smelling Salts, Lip Sticks, Incense, Tooth Powders, Mouth Washes, Dentifrices, Tooth Pastes, Nail Powders, Nail Polishes, Nail Bleaches, Nail Creams, Witch Hazel, Peroxide, Petroleum Jellies, Witch Hazel Salves, Camphor Creams, Foot Powders, Corn Salves, Deodorants, Disinfectants, Bay Rum, Perfumes, and Toilet Waters.
Claims use since Sept. 24, 1930.

Ser. No. 329,314. MCCOY'S LABORATORIES, INC., New York, N. Y. Filed Aug. 3, 1932.

By=Kem

For Anti-Ferment and Cholagogue for Constipation, Indigestion, Flatulence, and All Toxic Conditions Due to Derangements of the Liver, Gall-Bladder or Intestinal Tract.
Claims use since July 29, 1932.

Ser. No. 329,721. ISADORE SCHNITZER, South Norwalk, Conn. Filed Aug. 20, 1932.

HONEYTREE HOUSE

For Facial Creams.
Claims use since Feb. 4, 1931.

Ser. No. 329,793. FOLEY & CO., Chicago, Ill. Filed Aug. 24, 1932.

X-MARX

Exclusive right to "Marx" as a surname is not claimed.
For Medicinal Salve, Specifically, Pile Ointment.
Claims use since July 15, 1932.

Ser. No. 329,906. E. R. SQUIBB & SONS, New York, N. Y. Filed Aug. 27, 1932.

SQUIBB-OL

The applicant is the owner of Trade-Mark No. 129,544 for the name "Squibb" granted under the 10-year proviso.
For Laxatives and Intestinal Lubricants.
Claims use since Aug. 22, 1932.

Ser. No. 329,925. BECK, KOLLER & COMPANY, INC., Detroit, Mich. Filed Aug. 29, 1932.

PLASTIC BECKOSOL RESINS

No claim is made herein to the words "Plastic Resins" appearing in the drawing apart from the mark as shown.
For Plastic Synthetic Resins.
Claims use since Sept. 16, 1931.

Ser. No. 329,937. THE DOW CHEMICAL COMPANY, Midland, Mich. Filed Aug. 29, 1932.

XENOCHLOR

For Monochloro-Diphenyls, Including the Ortho-, Meta-, and Para-Monochloro-Diphenyls; Para-Para'-Dichloro-Diphenyl; Ortho-Para-Dichloro-Diphenyl; and Poly-Chloro-Diphenyls.
Claims use since Aug. 23, 1932.

Ser. No. 329,938. THE DOW CHEMICAL COMPANY, Midland, Mich. Filed Aug. 29, 1932.

XENOCLOR

For Monochloro-Diphenyls, Including the Ortho-, Meta-, and Para-Monochloro-Diphenyls; Para-Para'-Dichloro-Diphenyl; Ortho-Para-Dichloro-Diphenyl; and Polychloro-Diphenyls.
Claims use since Aug. 23, 1932.

Ser. No. 329,939. THE DOW CHEMICAL COMPANY, Midland, Mich. Filed Aug. 29, 1932.

XENOBROM

For Monobromo-Diphenyls, Including Ortho-, Meta-, and Para-Monobromo-Diphenyls; Para-Para'-Dibromo-Diphenyl; Ortho-Dibromo-Diphenyl; and Polybromo-Diphenyls.
Claims use since Aug. 23, 1932.

Ser. No. 329,940. THE DOW CHEMICAL COMPANY, Midland, Mich. Filed Aug. 29, 1932.

XENOSAL

For Phenyl-Salicylic Acid, Including the Ortho- and Para-Phenyl-Salicylic Acids—i. e., the Product Obtained by Substituting a Phenyl Group for the Hydrogen in the Ortho- or Para-Position with Respect to the Hydroxyl Group of Salicylic Acid.
Claims use since Aug. 23, 1932.

Ser. No. 329,941. THE DOW CHEMICAL COMPANY, Midland, Mich. Filed Aug. 29, 1932.

XENAMINE

For Amino-Diphenyls, Including Products Obtained by Substituting an Amino Group for a Nuclear Hydrogen in Either an Ortho-, Meta-, or Para-Position with Respect to the Diphenyl Linkage of Diphenyl.
Claims use since Aug. 23, 1932.

Ser. No. 330,044. GOTHAM LABORATORIES, INC., New York, N. Y. Filed Sept. 1, 1932.

GO-LA-JEL

The use of the term "J E L" is disclaimed separate and apart from the mark.
For Antiseptic Vaginal Jellies for Feminine Hygiene.
Claims use since July 15, 1932.

Ser. No. 330,048. MORTON G. NEUMANN, doing business as Mo-Jo Products Co., Chicago, Ill. Filed Sept. 1, 1932.

Luckyspirit

For Perfume and Incense.
Claims use since Apr. 28, 1932.

Ser. No. 330,189. E. F. YOUNG JR., doing business as E. F. Young Jr. Mfg. Co., Meridian, Miss. Filed Sept. 8, 1932.



The portrait is that of applicant.
For Bay Rum, Tooth Powder, Brilliantine, Shaving Powder, Massage Cream, an Antiseptic, Cleansing Cream, Wrinkle Cream, Preparation for the Treatment of Colds and Fever, Preparation for Use in Straightening the Hair; Salve for Use in the Treatment of Colds, Coughs, and Croup; a Preparation for the Treatment of Mange and Tetter in Horses, Dogs, or Cattle; a Temple Grower for Use in Treating Thin Hair and Baldness, Body Deodorant, Hair Tonic, Face Powder, Toilet Water, a Lotion for the Face and Hands, Vanishing Cream; a General Liniment for External Use, Menthol Cream, Hair Grower and Dressing, Freckle Remover, Pomade, Pressing Oil; Tonic and Blood Medicine for Weak, Run-Down, and Nervous Conditions; a Hair Dye, Cocoanut Oil Shampoo, Tissue Cream, Petroleum Jelly, Perfume, Cold Cream, Talcum Powder, Witchhazel, Bleaching Cream, and Tooth Paste.
Claims use since Jan. 5, 1932.

Ser. No. 330,233. STANCO INCORPORATED, Wilmington, Del., and New York, N. Y. Filed Sept. 10, 1932.

TRI-RAD

For Automobile Radiator Anti-Freeze Solution or Compound.
Claims use since Aug. 25, 1932.

Ser. No. 330,269. NICHOLAS J. MATRAGOS, doing business as Nicholas C. Vallos, New York, N. Y. Filed Sept. 12, 1932.

MATRAGO'S
The Liberty Life

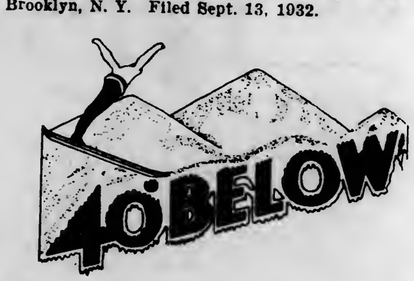


The use of the word "Product" is disclaimed apart from the mark as shown on the drawing.

For Medicinal Preparation Used in the Treatment of Malignant Diseases, Social Diseases, Stomach Disorders, Colds, Skin Diseases, and Dandruff.

Claims use since Apr. 15, 1925.

Ser. No. 330,302. LINCOLN LABORATORIES, INCORPORATED, Brooklyn, N. Y. Filed Sept. 13, 1932.



No claim is made to the numeral and word "40 Below" apart from the mark as shown.

For Anti-Freeze Solution.

Claims use since May 2, 1932.

Ser. No. 330,316. SUPERIOR LABORATORIES, INC., Cleveland, Ohio. Filed Sept. 13, 1932.

TITEETH

For Powdered Preparation for Holding Dental Plates in Position.

Claims use since Aug. 12, 1932.

Ser. No. 330,356. J. A. TUMBLER LABORATORIES, Baltimore, Md. Filed Sept. 12, 1932.

VIKING

For Anti-Freeze Solution.

Claims use since Aug. 19, 1932.

Ser. No. 330,380. THE E. L. PATCH COMPANY, Stoneham, Mass. Filed Sept. 15, 1932.

PATCH

For Tablets for Croup and Bronchial Conditions, Ointments for Burns and Skin Irritations, Capsules for Diarrhœa and Intestinal Fermentation, Laxative Tablets, Cod Liver Oil, Compound Digestive Tablets, Digestive Hypophosphites, Nasal Jelly for Congestion of Mucous Membranes, Astringent Throat Tablets, Cough Glycerole Solutions, Suppositories for Hemorrhoids, Irish Moss Throat Tablets, Emulsions of Mineral Oil and Irish Moss, Mistura Corrigens, Stomachic and Anti-Diarrhœa Mixtures, Stannous Oxide Compound Tablets, Sodium Acid Oleate Compound Pills, Analgesic Balm, Sugar of Milk, Creams for Toothache Relief, Compound Powders for Intestinal Elimination, Cold Creams, Face Powders, Skin Lotions, Shampoos; Elixirs—Namely, Cinchona and Hydrastis Comp., Gentian Glycerinated, Helonias Compound, Iron, Quinine, and Strychnine, Malt and Hypophosphites Comp., Pepsin Glycerinated; Cough Syrups; Medicinal Tablets—Namely, Acetanilid Comp., Acetphenetidin and Salol, Acid Acetylsalicylic, Acid Astringent, Aconite-Belladonna Comp., Aconite-Biniodide Comp., Alkiaine Aromatic, Aloin and Belladonna Comp., Aloin and Cascara Comp., Aloin-Podophyllin Comp., Ammonium Chloride, Ammonium Chloride-Ipecac Comp., Antiseptic Corrosive, Asafœtida-Ginger Comp., Bismuth-Ipecac Comp., Bismuth-Nux Vomica Comp., Bismuth-Salol Comp., Blaud Pill, Blaud and Podophyllin Comp., Blaud and Strychnine Comp., Bryonia-Gelsemium Comp., Calcium Lactate, Calomel, Calomel and Phenolphthalein Comp., Camphor-Belladonna Comp., Camphor-Quinine Comp., Cascara, Cerium Oxalate-Benzocaine Comp., Digitalin, Dobell Alkaline, Gentian Comp., Ginger Soda Mints, Iron-Quinine Comp., Magnesuim Carbonate Comp., Mercuric Iodide Comp., Nickel Bromide Comp., Ox Gall Comp., Papain-Pepsin Comp., Pepsin and Soda Mint, Phenophthalein Aromatic, Potassium Citrate Comp., Potassium Permanganate, Quinine-Acetanilid Comp., Rhinitis, Rhubarb and Ipecac Comp., Salol, Salol and Copaiba Comp., Senega Comp., Soda Mint, Sodium Bicarbonate, Sodium Citrate, Sodium Nitrite, Sodium Salicylate, Strychnine Sulphate; Iron Capsules, Granular Effervescent Salts, Vaginal Douches and Suppositories, Manganese and Iron Peptonate Solutions.

Claims use since 1889.

Ser. No. 330,432. SCHERING CORPORATION, New York, N. Y. Filed Sept. 17, 1932.

Neo-Hormonal

For Medicinal Preparation for the Treatment of Post-operative Paralysis of the Intestines and Chronic Obstipation.

Claims use since Oct. 25, 1929.

Ser. No. 330,562. THEODOR E. ZANGENBERG, Tottenville, Staten Island, N. Y. Filed Sept. 21, 1932.

Saint John's

For Medicinal Fluid or Compound, Having for its Purpose to Stimulate the Activity of the Kidneys.

Claims use since Aug. 15, 1932.

Ser. No. 330,622. THE C. B. DOLGE COMPANY, Westport, Conn. Filed Sept. 24, 1932.

Rat-Scat

For Preparation for Exterminating Rodents.

Claims use since Jan. 11, 1927.

Ser. No. 330,625. RICHARD HUDNUT, New York, N. Y. Filed Sept. 24, 1932.

CHEVRON

For After Shaving Lotion, Face Cream (Cleansing), Liquid Brilliantine, Powder Deodorant, Talcum, Tooth Paste, Mouth Wash, After-Shave Cream, Solid Brilliantine Hair Tonic, After-Shave Powder, Handkerchief Scent, Liquid Deodorant, and Eau de Cologne.

Claims use since Sept. 10, 1932.

Ser. No. 330,630. THOMAS E. KEATING, New York, N. Y. Filed Sept. 24, 1932.

SENIOR GROW SR.
TRADE MARK
FOR THE HAIR

No claim is made to the words "Trade Mark" and "For the Hair" apart from the mark shown on the drawing.

For Hair Grower and Tonic.

Claims use since Aug. 31, 1932.

Ser. No. 330,654. MOISÉS L. DE GUEVARA, doing business as Laboratorios Ionine, Mexico, Mexico. Filed Sept. 26, 1932.

IONINE

For Preparations for the Treatment of Diseases of the Pulmonary and Respiratory Tracts.

Claims use since Feb. 10, 1930.

Ser. No. 330,666. OIL JOBBERS REFINING COMPANY, Chicago, Ill. Filed Sept. 26, 1932.

DIE DEW

For Insecticides.

Claims use since Aug. 26, 1932.

Ser. No. 330,689. MARY A. BAUR, Edmonston, Md. Filed Sept. 27, 1932. Under 10-years proviso.

BOYCE'S

For Eczema Lotion.

Claims use since Feb. 1, 1890.

Ser. No. 330,690. ERNST BISCHOFF COMPANY, INCORPORATED, New York, N. Y. Filed Sept. 27, 1932.

FULLITIN

For Preparations for Fulling and Finishing Textile Fabrics.

Claims use since August, 1928.

Ser. No. 330,707. THE MONROE SANDER CORPORATION, Long Island City, N. Y. Filed Sept. 27, 1932.

Salon

For Liquid Nail Polish.

Claims use since Nov. 10, 1931.

Ser. No. 330,754. PEOPLES DRUG STORES, INC., doing business as Barnard Company, Washington, D. C. Filed Sept. 28, 1932.

JAPALMO

For Cold Cream, Vanishing Cream, Cleansing Liquefying Cream, Honey and Almond and Cucumber Cream, Cocoanut Oil Shampoo, and Tissue Cream.

Claims use since 1909.

Ser. No. 330,848. GRAITMORE COMPANY, New York, N. Y. Filed Oct. 1, 1932.

NOVOI

For Hair Dye and Hair Rinse.

Claims use since Sept. 17, 1932.

Ser. No. 331,069. HENRY K. WAMPOLE AND COMPANY, INCORPORATED, Philadelphia, Pa. Filed Oct. 7, 1932.

BISMU-KINO

For Preparation for the Treatment of Diarrhoea and Irritated Conditions of the Gastro-Intestinal Tract.
Claims use since Sept. 21, 1932.

CLASS 8

Smokers' Articles, Not Including Tobacco Products

Ser. No. 331,066. SMOKADOR MANUFACTURING CO., INC., Bloomfield, N. J. Filed Oct. 7, 1932.

FLEXADOR

For Ash Receivers of Non-Precious Metal.
Claims use since Sept. 30, 1932.

Ser. No. 331,206. JOHN WANAMAKER PHILADELPHIA, Philadelphia, Pa. Filed Oct. 12, 1932.

REDLEAF



For Smoking Pipes, Cigarette Cases, Cigar Cases, Pipe Cases, and Tobacco Pouches.
Claims use since 1927.

CLASS 9

Explosives, Firearms, Equipments, and Projectiles

Ser. No. 331,089. L. OPPLEMAN, INC., New York, N. Y. Filed Oct. 8, 1932.



The drawing is lined for shading.
For Adults' Target Air Pistols.
Claims use since Apr. 11, 1932.

CLASS 12

Construction Materials

Ser. No. 306,628. UNITED STATES RUBBER COMPANY, New York, N. Y. Filed Oct. 10, 1930.

DURITE

For Rubber Flooring Made Principally of Rubber, Vulcanizing and Curing Ingredients, and Pigments.
Claims use since Sept. 2, 1930.

Ser. No. 330,696. JAMES E. DICK, Somerville, Mass. Filed Sept. 27, 1932.



For Refractory Cements, Refractory Mortars, and Refractory Concrete.
Claims use since Apr. 1, 1932.

Ser. No. 330,715. STONELITE CORPORATION, Cleveland, Ohio. Filed Sept. 27, 1932.

STONELITE

For Floor Tile, Wall Tile, Roofing Tile; Stone, Imitation Stone, and Cement Building Slabs for Interior or Exterior Construction Purposes; Brick, Finished Construction Stone and Imitation Stone; Railroad Crossties, Artificial Stone and Cement Fence Posts, Stone, Artificial Stone, and Marble Railings, Palings, and Spindles, and Stone, Artificial Stone, and Cement Highway Curbing.
Claims use since July 25, 1932.

CLASS 13

Hardware and Plumbing and Steam-Fitting Supplies

Ser. No. 311,979. SAFETY NUT CORPORATION, Philadelphia, Pa. Filed Mar. 10, 1931.



No claim is made to the word "Safe-T-Nut" and the representation of the goods alone and apart from the mark as shown.
For Nuts, Nuts Combined with Brake Bands Which Serve to Lock the Nut Against Backward Rotation of the Bolt with Which It is Associated, and for Brake Bands per se Which Combine With Nuts and Bolts to Lock the Nut Against Backward Rotation Off the Bolt.
Claims use since Mar. 2, 1931.

Ser. No. 330,220. THE AMERICAN STEEL AND WIRE COMPANY OF NEW JERSEY, Cleveland, Ohio. Filed Sept. 10, 1932. Under 10-year proviso.

LYMAN

For Barb Wire.
Claims use since June 1, 1889.

CLASS 16

Paints and Painters' Materials

Ser. No. 327,255. NATIONAL CHEMICAL & MANUFACTURING COMPANY, Chicago, Ill. Filed May 19, 1932.



For Paste Paints.
Claims use since Mar. 11, 1930.

Ser. No. 327,930. ACME CHEMICAL COMPANY, Milwaukee, Wis. Filed June 13, 1932.

MISTO

For Floor Dressing.
Claims use since Sept. 1, 1923.

Ser. No. 329,564. THE SHERWIN-WILLIAMS COMPANY, Cleveland, Ohio. Filed Aug. 15, 1932. Under 10-year proviso.

FAMILY PAINT

For Paints in Paste, Semi-Liquid, or Ready-Mixed Form, Varnishes, Lacquers, Paint Enamels, Japans, Stains, and Paint Fillers.
Claims use since Dec. 1, 1878.

Ser. No. 329,923. BECK, KOLLER & COMPANY, INC., Detroit, Mich. Filed Aug. 29, 1932.

BECK-O-LAC

No claim is made to the term "Lac" appearing herein apart from the mark as shown.
For Dry, Paste, and Ready Mixed Paints, Varnishes, and Lacquers.
Claims use since Sept. 20, 1928.

Ser. No. 330,073. THE SHERWIN-WILLIAMS COMPANY, Cleveland, Ohio. Filed Sept. 2, 1932.

ELKOL

For Thinners for Shellac, Liquid and Paste Paints, Paint Colors, Stains, Paint Fillers, Varnishes, and Lacquers.
Claims use since July 25, 1932.

Ser. No. 330,683. MAX ABELMAN, doing business as M. Abelman Co., and Hartwell-Paint Co., Boston, Mass. Filed Sept. 24, 1932.

HARCO

For Ready Mixed Paint, Paste Colors in Oil, Shellac, and Varnishes.
Claims use since Oct. 1, 1927.

Ser. No. 330,920. CHILTON PAINT COMPANY, College Point, N. Y. Filed Oct. 4, 1932. Under 10-year proviso.

CHILTON

For Ready-Mixed, Liquid, Semi-Paste, and Paste Paints; Paint Enamels, Varnishes, Lacquers, Japans, Stains, Colors in Japan, Colors in Oil, Prepared Shellac, Prepared Shellac Substitute, White Zinc, Wax for Polishing Purposes, and Fillers.
Claims use since 1884.

CLASS 17

Tobacco Products

Ser. No. 330,732. JOSEPH S. SLAMBY, Boston, Mass. Filed Sept. 27, 1932.



For Cigarettes.
Claims use since May 1, 1931.

Ser. No. 330,758. SALVADOR RODRIGUEZ, INC., Tampa, Fla., and Habana, Cuba. Filed Sept. 28, 1932.

SALVADOR RODRIGUEZ 409

For Cigars.
Claims use since Jan. 5, 1929.

CLASS 21

Electrical Apparatus, Machines, and Supplies

Ser. No. 305,369. PRESTO-LITE STORAGE BATTERY CORPORATION, Speedway, Ind. Filed Sept. 5, 1930.

HILEVEL

For Storage Batteries.
Claims use since July 19, 1930.

Ser. No. 327,903. CENTURY LIGHTING EQUIPMENT, INC., New York, N. Y. Filed June 11, 1932.

CENTURY

For Electric Lighting Equipment for Theatre and Stage Use, for Outdoor Areas, Merchandise Display, Auditoriums, Industrial Plants, and for General Illumination, Consisting of Floodlights, Spotlights, Flashlights, Arc Lights, Border Lights, Footlights; Louvre, Aisle, and Exit Lights; Fixtures for Such Lights, Wiring Fixtures Therefor, Portable Standard Lamps, Unitary Lamp Banks and Strips and Separable Lamps Therefor; Flashers, Dimmers, Switchboards, and Arc Light Carbons; and Public Address Systems, Consisting of Electric Sound-Amplifying Equipment.
Claims use since June, 1930.

Ser. No. 330,845. CLAGO RADIO CORPORATION, Chicago, Ill. Filed Oct. 1, 1932.

BREMER-TULLY

For Radio Receiving Sets.
Claims use since Sept. 27, 1932.

Ser. No. 331,018. THE F. W. WAKEFIELD BRASS CO., Vermilion, Ohio. Filed Oct. 6, 1932.

DOMINO

For Ceiling-Attached and Wall-Attached Lighting Fixtures.
Claims use since Sept. 6, 1932.

Ser. No. 331,073. WITTE ENGINE WORKS, Kansas City, Mo. Filed Oct. 7, 1932.

NITE-LITE

For Electric Light Plants.
Claims use since Sept. 1, 1931.

CLASS 22

Games, Toys, and Sporting Goods

Ser. No. 330,355. MORRIS KOHN, doing business as J. T. Thorn Company, Philadelphia, Pa. Filed Sept. 14, 1932.

FELTIES

For Felt Pieces to Form Designs Used for Educational Purposes.
Claims use since Aug. 30, 1932.

Ser. No. 330,426. LACY PRODUCTS CORPORATION, Chicago, Ill. Filed Sept. 17, 1932.

GOLF MASTER MASTER GOLF

No claim is made to the word "Golf" nor to the representation of a name plate per se.
For a Golf Teaching and Practicing Device.
Claims use since July 1, 1932.

Ser. No. 330,604. PARKER BROTHERS, INC., Portland, Me., and Salem, Mass. Filed Sept. 23, 1932.

DERBY DAY

For Game Played upon a Table with Movable Pieces.
Claims use since April, 1930.

Ser. No. 330,776. BLOOMINGDALE BROS. INC., New York, N. Y. Filed Sept. 29, 1932.

Bloomingdale's HANSEL and GRETEL and their doll house

No claim is made to the words "Doll House" apart from the mark shown on the drawing.
For Dolls and Dolls' House.
Claims use since Sept. 15, 1932.

Ser. No. 330,881. ALL-METAL BOTTLE COOLER CORPORATION, Atlanta, Ga. Filed Oct. 3, 1932.



No claim is made to the word "Bouncer" or to the representation of the goods apart from the mark as shown.
For Toy of the Bandalore Type—Namely, a Wooden Bat or Paddle, Tennis Racket Shaped, with Rubber Ball Attached by Rubber Thread to Bat or Paddle.
Claims use since Sept. 1, 1932.

Ser. No. 331,339. PARKER BROTHERS, INC., Portland, Me., and Salem, Mass. Filed Oct. 18, 1932.

TWINKY WINKIE

For Picture Puzzles, Consisting of a Number of Pieces.
Claims use since Mar. 1, 1932.

Ser. No. 331,340. PARKER BROTHERS, INC., Portland, Me., and Salem, Mass. Filed Oct. 18, 1932.

IMPERIAL

For Picture Puzzles, Consisting of a Number of Pieces.
Claims use since Oct. 3, 1932.

Ser. No. 331,347. HENRY J. SULLIVAN, Providence, R. I. Filed Oct. 18, 1932.

EUREKA

For Bowling Hand Moisteners.
Claims use since Sept. 12, 1932.

CLASS 23

Cutlery, Machinery, and Tools, and Parts Thereof

Ser. No. 323,929. AKTIEBOLAGET IMOINDUSTRI, Stockholm, Sweden. Filed Feb. 8, 1932.

IMO

For Liquid Pumps and Motors Operated by Liquid Pressure, Air, and Gas Compressors.
Claims use since Sept. 24, 1931.

Ser. No. 325,443. THE "SOCIÉTÉ FRANÇAISE HISPANO-SUIZA," Bois-Colombes, France. Filed Mar. 24, 1932.



For Internal Combustion Engines and Their Parts.
Claims use since Oct. 2, 1931.

Ser. No. 326,557. SEGAL SAFETY RAZOR CORPORATION, New York, N. Y. Filed Apr. 27, 1932.

SCOTTY

For Razors and Razor Blades.
Claims use since Feb. 28, 1932.

Ser. No. 326,558. SEGAL SAFETY RAZOR CORPORATION, New York, N. Y. Filed Apr. 27, 1932.



No claim is made for the word "Blade" as appearing in the drawing, this word being specifically disclaimed.

Referring to the drawing, it will be noted that the horizontally extending lines indicate a blue color and that the vertically extending lines indicate red, while the tangentially extending lines indicate green.

For Razors and Razor Blades.

Claims use since Feb. 28, 1932.

Ser. No. 326,711. GOULDS PUMPS, INCORPORATED, Seneca Falls, N. Y. Filed May 3, 1932.



For Double Acting Piston Pumps.

Claims use since 1931.

Ser. No. 329,169. ROSS M. TURNER, New York, N. Y. Filed July 28, 1932.



For Portable Self Contained Machines for Dispensing Drinks.

Claims use since April, 1932.

Ser. No. 329,482. THE SINGER MANUFACTURING COMPANY, Elizabeth, N. J., and New York, N. Y. Filed Aug. 11, 1932.

SINGERCRAFT

For Loop Forming Implements for Use in Production of Rugs and Pile Effects on Fabrics.

Claims use since Mar. 26, 1932.

Ser. No. 330,244. CHARLES B. BILLS, Sacramento, Calif. Filed Sept. 12, 1932.

Shasta Snow

The use of the word "Snow" is disclaimed apart from the mark as shown.

For Machines for the Manufacture of Artificial Snow From Ice.

Claims use since Aug. 1, 1932.

Ser. No. 330,490. NATIONAL INDUSTRIAL PRODUCTS CORPORATION, Wilkinsburg, Pa. Filed Sept. 19, 1932.



The word "Products" is disclaimed apart from the mark as shown.

For Lubricating Devices—Namely, Drop Feeders for Machinery Bearings, and Oil Separators for Use in Connection with Lubricating Systems for Machinery.

Claims use since Aug. 31, 1932.

CLASS 26

Measuring and Scientific Appliances

Ser. No. 312,079. ETABLISSEMENTS AERA, Paris, France. Filed Mar. 12, 1931.



AERA

For Meteorological Covers, Accelerometers, Accessories for Dynamometers, Aerothermometers, Altimeters, Registering Altimeters, Coil Amperemeters, Anemo-Clinographs, Anemographs, Registering Anemographs, Wind Anemographs, Precision Anemographs, Cinematographic Camera, Automatic Photographic Camera, Single Photographic Camera, Photo-Restitution Apparatus for Air Photographing, Semi-Automatic Photographic Camera, Aerodynamic Gauge, Sounding Balloons for Meteorological Purposes, Circular Calculators for Aerophotography, Automatic Meters for Measuring Speed and Distance, Heat Indicators, Drift Correctors, Barograph Correctors, Scale for Range of Aero Photographs, Speed Indicators, Ball Hardness Testers, Photo Film Casings, Photo Objectives, Sensitized Photographic Papers, Gyroscopic Horizon Indicators, Safety Gauges, Pluviometer Tenths Gauge, Pluviometer Totals Gauge, Standard Meteorological Instruments, Test Bench for Altimeters, Test Bench for Manometers, Test Bench for Motors, Test Bench for Tachymeters, Barographs, Mercury Barographs, Baro-Thermo-Hygrographs, Dynamometric Levers, Anemometer Test Cases, Compasses, Chronographs, Cineme-Derivometers, Bead Inclinometers, Gyroscopic Clinometers, Floating Clinometers, Hanging Clinometers, Complete Navigating

Compasses, Navigation Compasses, Cardinal Compasses, Revolution Indicators, Registering Revolution Indicators, Oxygen Meters, Route Indicators, Flight Indicators, Altimetric Gauges, Drift Correctors, Gas Densimeters, Derivometers, Optic Derivometers, Lever Dynamometers, Spring Dynamometers, Speed Indicators, Estimeters, Leak Measuring Instruments, Geoscopes, Multiple Vanes, Goniometers, Luminous Gyro-Clinometers, Hydrographs, Hygrometers, Inclinometers, Anemometric Indicators, Drift Indicators, Gliding Indicators, Incidence Indicators, Gas Leak Indicators, Level Indicators, Flowmeters, Clinometers, Pressure Gauges, Turn Indicators, Prismatic Lenses, Goggles, Plate Testing Machines, Micromanometers, Nephoscopic Mirrors, Dynamometric Testing Machines for Metal, Dynamometric Testing Machines for Wood, Navigraphs, Gyroscopic Levels, Sensitized Photographic Plates, Psychrometers, Protractors, Sextants, Mirror Stereoscopes, Stigmatometers, Tachygraphs, Tachymeters, Registering Tachymeters, Graphic Taximeters, Tensio-Comparators, Tensiometers, Theodolites, Thermographs, Thermohygrographs, Distance Thermometers, Registering Thermometers, Gyrostatic Thermometers, Strut Thermometers, Maximum Thermometers, Minimum Thermometers, Speed Triangles, Venturi Tubes, Pitot Tubes, Variometers, Altimetric Variometers, Petrol Gauges, Universal Gauges.

Claims use since January, 1909.

Ser. No. 326,331. MONEX CORPORATION, New York, N. Y. Filed Apr. 21, 1932.



For Coin Dispensing Change Making Machines.

Claims use since Mar. 28, 1932.

Ser. No. 327,440. I. G. FARBENINDUSTRIE AKTIENGESELLSCHAFT, Frankfort-on-the-Main, Germany. Filed May 25, 1932.

SUPERPAN

For Sensitized Photographic Plates, Sensitized Photographic Films, and Cinematographic Films.

Claims use since Mar. 16, 1932.

Ser. No. 330,440. WILLOUGHBY CAMERA STORES, INC., New York, N. Y. Filed Sept. 17, 1932.

CANDID

For Cameras, Sensitized Photographic Plates, and Films; Photographic Camera Tripods, and Camera Plate-Holders.

Claims use since Sept. 5, 1932.

Ser. No. 330,719. WORLD WIDE PICTURES INC., New York, N. Y. Filed Sept. 27, 1932.



The portrait shown in the drawing is merely fanciful and not that of a living individual. Applicant hereby disclaims exclusive right to the use of the word "Pictures" except as the same may be used in connection with the other features of the trade-mark shown on the drawing.

For Motion Picture Films.

Claims use since July 21, 1932.

CLASS 27

Horological Instruments

Ser. No. 319,799. AUTORIST S. A.-AUTORIST LTD., Fribourg, Switzerland. Filed Oct. 7, 1931.

AUTORIST

For Self Winding Wrist Watches, and Watches and Chronometers.

Claims use since May 20, 131.

CLASS 29

Brooms, Brushes, and Dusters

Ser. No. 330,709. PRO-PHY-LAC-TIC BRUSH COMPANY, Northampton, Mass. Filed Sept. 27, 1932.



The drawing is lined to indicate shades of blue. No claim is made to the representation of the box, the trade-mark claimed being the word "Masso" as shown in the drawing in combination with the blue carton, the color of which is indicated by the lining on the drawing.

For Tooth Brushes.

Claims use since Jan. 1, 1932.

CLASS 31

Filters and Refrigerators

Ser. No. 330,451. THE CHAMPION HARDWARE COMPANY, Geneva, Ohio. Filed Sept. 19, 1932.

CHAMPION

For Water Filters.
Claims use since 1883.

CLASS 32

Furniture and Upholstery

Ser. No. 327,665. THE STATTON FURNITURE MFG. COMPANY, Hagerstown, Md. Filed June 2, 1932.



No claim is made to the words "Trutype Furniture" apart from the mark as shown.

For Furniture—Namely, Beds, Benches, Bureaus, Chairs, Clothing Chests, Chests of Drawers, Consoles, Cupboards, Desks, Dough Troughs, Dressers, Dressing Table, Low Boys, Mirrors, Secretaries, Shelves, Sideboards, Stands, Stools, Tables, Magazine Trays or Racks, Wall Brackets, and Wall Boxes.

Claims use since Dec. 1, 1930.

Ser. No. 329,454. OSTERMOOR & COMPANY, INC., New York, N. Y. Filed Aug. 10, 1932.

SleepComfort

For Mattresses, Pillows, Bolsters, Cushions, Bedsteads, and Box-Springs.
Claims use since Mar. 9, 1932.

Ser. No. 330,679. SLEEPER PRODUCTS, INC., Wilmington, Del., and Philadelphia, Pa. Filed Sept. 21, 1932.

The
WONDER MAT

Applicant disclaims the word "Mat" apart from the mark as shown on the drawing.

For Box-Springs and Mattresses.
Claims use since Aug. 19, 1932.

CLASS 33

Glassware

Ser. No. 330,876. USERVO, INC., South Bend, Ind. Filed Sept. 30, 1932.



For Glass Milk Bottles.
Claims use since Dec. 26, 1931.

CLASS 34

Heating, Lighting, and Ventilating Apparatus, Not Including Electrical Apparatus

Ser. No. 325,845. THE COLEMAN LAMP AND STOVE COMPANY, Wichita, Kans. Filed Apr. 6, 1932.

Roto Type

The word "Type" is disclaimed apart from the mark as shown.

For Gasoline Fuel Burning Lamps and Lanterns.
Claims use since Oct. 1, 1931.

Ser. No. 328,800. PLEN-T-HOT PRODUCTS, INC., New Rochelle, N. Y. Filed July 14, 1932.

PLEN-T-HOT PRODUCTS

No claim is made to the word "Products" apart from the association shown in the drawing.

For Domestic Stand Boiler for Use in Conjunction with Heating Plants.
Claims use since June 15, 1930.

Ser. No. 330,240. AIRITE MFG. CORP., Toledo, Ohio. Filed Sept. 12, 1932.

AIRITE

For Fans, Housings, Liquid Containers, and Pumping Means Units and Parts Thereof, More Particularly as Designed for Air Handling and Conditioning Equipment and Parts Thereof.
Claims use since Aug. 11, 1932.

Ser. No. 331,100. COMBUSTIONEER, INC., Springfield, Ohio. Filed Oct. 10, 1932.



For Fuel-Handling Equipment—Namely, Fuel Stokers.
Claims use since July 1, 1932.

CLASS 35

Belting, Hose, Machinery Packing, and Non-metallic Tires

Ser. No. 318,228. DEUTSCHE GOLD- & SILBER-SCHEIDEANSTALT, Frankfort-on-the-Main, Germany. Filed Aug. 20, 1931.



DEGUSSA

For Cotton and Leather Driving Belts, Leather and Rubber Hose and Packing Materials—Namely, Washers Other Than Metal, Metallic Packings, Molded Packings for Various Mechanical Purposes, Packing for Piston Rods; Machinery Packings of Leather, Rubber, Metal, and Composition.
Claims use since Sept. 24, 1930.

Ser. No. 329,274. EDGAR M. SHANER, Lynchburg, Va. Filed July 30, 1932.

TEXTIRE

For Pneumatic Tires and Casings.
Claims use since Jan. 1, 1932.

Ser. No. 330,857. HAROLD S. MIKESELL, Chicago, Ill. Filed Oct. 1, 1932.

SUPERBESTOS

For Brake Lining and Clutch Facings.
Claims use since Mar. 15, 1920.

Ser. No. 331,253. THE GOODYEAR TIRE & RUBBER COMPANY, Akron, Ohio. Filed Oct. 14, 1932.

SPEEDWAY

For Pneumatic, Cushion and Solid Tires of All Kinds Constructed Wholly or Partly of Rubber, Inner Tubes Therefor; and Hose and Tubing of All Kinds Constructed Wholly or Partly of Rubber.

Claims use since Apr. 1, 1900, on tires; since Oct. 7, 1927, on tubes; and since Mar. 17, 1932, on hose and tubing.

CLASS 37

Paper and Stationery

Ser. No. 325,579. HOBERG PAPER & FIBRE COMPANY, Green Bay, Wis. Filed Mar. 28, 1932.



Applicant disclaims the words "Processed Paper" and "It's Borated" per se.

For Paper Towels, Toilet Tissues, and Napkins.
Claims use since Mar. 3, 1932.

Ser. No. 330,574. HARRY M. HITCHINS, Minneapolis, Minn. Filed Sept. 22, 1932.

C-LUM-PAK

No claim is made to the word "Pak" except in the association shown on the drawing.

For Paper Box Liners and Sheets.
Claims use since Aug. 15, 1932.

Ser. No. 331,087. BUTLER BROTHERS, Chicago, Ill. Filed Oct. 7, 1932.

BE WISE

For Paper Goods—Namely, Writing Tablets.
Claims use since Apr. 4, 1932.

Ser. No. 331,104. FORT HOWARD PAPER COMPANY, Green Bay, Wis. Filed Oct. 10, 1932.

PUL-A-NAP

For Paper Napkins.
Claims use since Oct. 22, 1930.

Ser. No. 331,109. HOPPER PAPER COMPANY, Taylorville, Ill. Filed Oct. 10, 1932.

Airways

For Papers Used for Writing, Lithographing, Printing, Offset Printing, Engraving, Covers, Mimeographing, Envelopes, Postcard Stock, and Onion Skin Paper.
Claims use since Jan. 3, 1931.

Ser. No. 331,119. RIEGEL PAPER CORPORATION, Riegelsville, N. J., and New York, N. Y. Filed Oct. 10, 1932.

PLASTIC

For Glassine Paper.
Claims use since May 20, 1932.

Ser. No. 331,121. RISING PAPER COMPANY, Housatonic, Mass. Filed Oct. 10, 1932.

Reference

For Writing and Printing Paper.
Claims use since Apr. 13, 1911.

Ser. No. 331,209. JOHN WANAMAKER PHILADELPHIA, Philadelphia, Pa. Filed Oct. 12, 1932.

REDLEAF



For Golf Score Pads and Bridge Score Pads.
Claims use since 1927.

Ser. No. 331,237. LEWIS M. ADAMS, Clinton, Mass. Filed Oct. 14, 1932.

Self

For Blankbooks.
Claims use since Aug. 25, 1932.

CLASS 38

Prints and Publications

Ser. No. 329,792. DOUBLEDAY, DORAN & COMPANY, INC., Garden City, N. Y. Filed Aug. 24, 1932.

STAR NOVELS MAGAZINE

No claim being made by applicant to the exclusive right to use the words "Novels" and "Magazine" apart from the mark shown.
For Magazine Issued Quarterly.
Claims use since July 7, 1932.

Ser. No. 330,393. BROWN-MAYER PUBLISHING CO. INC., New York, N. Y., assignor to Colonel L. Brown, New York, N. Y. Filed Sept. 16, 1932.

THE PRODUCE BAROMETER

For Periodical.
Claims use since June, 1929.

Ser. No. 330,965. NATIONAL BISCUIT COMPANY, New York, N. Y. Filed Oct. 5, 1932.

TABLEGRAMS

For Publication Published from Time to Time.
Claims use since Sept. 1, 1932.

Ser. No. 331,193. PARADE, INC., Cleveland, Ohio. Filed Oct. 12, 1932.

CLEVELAND
MIDWEEK·REVIEW

For Weekly Magazine.
Claims use since Oct. 5, 1932.

Ser. No. 331,246. CHICAGO ROTOPRINT COMPANY, Chicago, Ill. Filed Oct. 14, 1932.

Kitchen

For Publication in Magazine Form.
Claims use since Oct. 11, 1932.

CLASS 39

Clothing

Ser. No. 319,493. THE MUNSINGWEAR CORPORATION, Minneapolis, Minn. Filed Sept. 28, 1931.

MUNSING Wear

Exclusive rights to the word "Wear" apart from the mark shown on the drawing are disclaimed.
For Knitted Outerwear—Namely, Pull-Ons, Coats, Sweaters, Jackets, Vests, Beach Pajamas, Beach Robes, Caps, Dresses, and Skirts, for Men, Women, and Children.
Claims use since Aug. 28, 1931.

Ser. No. 330,133. WELLS-LAMONT-SMITH CORPORATION, Minneapolis, Minn. Filed Sept. 6, 1932.



Applicant disclaims right to the exclusive use of the geographical terms "Chicago," "Milwaukee," and "St. Paul," except in the combination set forth.
For Work Gloves of Fabric and Combined Fabric and Leather.
Claims use since Aug. 15, 1932.

Ser. No. 330,134. WELLS-LAMONT-SMITH CORPORATION, Minneapolis, Minn. Filed Sept. 6, 1932.

Santa Fe

Applicant disclaims right to the exclusive use of the term "Santa Fe."
For Work Gloves of Fabric and Combined Fabric and Leather.
Claims use since Aug. 15, 1932.

Ser. No. 330,199. CRESCENT SHOE COMPANY, New York, N. Y. Filed Sept. 9, 1932.



No claim being made to the words "Arch Builder."
For Leather Shoes.
Claims use since September, 1931.

Ser. No. 330,300. JOSEPH A. JONAS, doing business as J. A. Jonas Shoe Co., Haverhill, Mass., and Manchester, N. H. Filed Sept. 13, 1932.

CENTRAL PARK SPORTS

No claim being made for the word "Sports," apart from the trade-mark shown in the drawing.
For Leather Shoes.
Claims use since Aug. 18, 1932.

Ser. No. 330,387. STEWART & CO., Baltimore, Md. Filed Sept. 15, 1932.



Applicant disclaims the exclusive right to use the word "Clothes" except in association with the word "Ruxton."

For Dress, Negligee, and Work Shirts; Pajamas, Dressing Robes, Bath Robes, Beach Robes; Suits for Men, Women, and Children; Trousers, Vests, Coats, Knickers, Top-Coats for Men and Boys, and Raincoats.

Claims use since May 1, 1931.

Ser. No. 330,409. J. C. PENNEY COMPANY, Wilmington, Del., and New York, N. Y. Filed Sept. 16, 1932.

Beverly-Jean

For Ladies' and Children's Shoes of Leather, Rubber, or Fabric Construction, or a Combination of These Materials.

Claims use since Aug. 8, 1932.

Ser. No. 331,063. RELIANCE MANFACTURING COMPANY, Chicago, Ill. Filed Oct. 7, 1932.



The words "Yankoat, a Reliance Product" and the border line are woven in silver color and field is woven in blue (the drawing being lined to indicate blue). For the purpose of this registration applicant disclaims the word "Product" apart from the mark shown.

For Men's, Ladies, and Children's Jackets of Wool, Corduroy and Suede Cloth.

Claims use since Sept. 1, 1932.

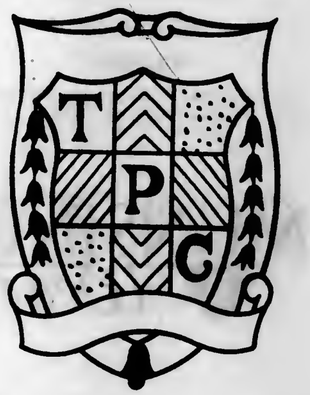
Ser. No. 331,385. SEMINOLE MANUFACTURING COMPANY, McAlester, Okla. Filed Oct. 19, 1932.

LINEX

For Men's and Boys' Pants and Suits.

Claims use since Sept. 20, 1932.

Ser. No. 331,392. APEX HOSIERY COMPANY, Philadelphia, Pa. Filed Oct. 18, 1932.



For Hosiery.

Claims use since Oct. 3, 1932.

CLASS 40

Fancy Goods, Furnishings, and Notions

Ser. No. 318,209. DEUTSCHE GOLD- & SILBER-SCHEIDEANSTALT, Frankfort-on-the-Main, Germany. Filed Aug. 20, 1931.



For Combs; Toilet Sets Comprising Combs, Mirrors, Hair Brushes, and the Like Made of or Backed with Precious Metal; Hooks and Eyes; Trimmings,—Namely Apparel Trimmings, Dress Trimmings, Millinery Trimmings and Ornaments, Shoe Ornaments, Medallions, Artificial Flowers, Fringes, Garnitures, Braids; Ornamental Trimmings, Not Including Metal Curtain or Drapery Fixtures, for Draperies and Upholsteries; Pipings, Plumes for Trimmings, Tassels, and the Like; Buttons Not Made of Precious Metals, and Needles for Hand Use, Tapestry Needles.

Claims use since Sept. 24, 1930.

Ser. No. 329,017. C. A. FUTIER, Chicago, Ill. Filed July 23, 1932.

KURLYQU

For Eye-Lash Curlers.

Claims use since June 20, 1931.

CLASS 42

Knitted, Netted, and Textile Fabrics

Ser. No. 319,764. CELANESE CORPORATION OF AMERICA, New York, N. Y. Filed Oct. 6, 1931.

SUEDENESE

For Fabrics Made Wholly or Partially of Cellulose Derivatives.

Claims use since Oct. 5, 1931.

Ser. No. 327,725. BREWER & CLARK, Millerton, N. Y. Filed June 4, 1932.



For Bedspreads, Table Covers, Couch Covers, Scarfs, and Pillow Tops.

Claims use since July, 1931.

Ser. No. 330,643. WAUREGAN-QUINEBAUG LINING & FABRICS, INC., New York, N. Y. Filed Sept. 24, 1932.

Swan Suede

No claim is made to the word "Suede" except in the association shown on the drawing.

For Textile Fabrics in the Piece—Namely, Cloth of Artificial or Natural Yarns.

Claims use since May 31, 1932.

CLASS 44

Dental, Medical, and Surgical Appliances

Ser. No. 328,824. YOUNGS RUBBER CORPORATION, INC., New York, N. Y. Filed July 15, 1932.



The drawing is lined for blue, red, and gold.

For Prophylactic Rubber Articles for the Prevention of Contagious Diseases.

Claims use since July 5, 1932.

Ser. No. 328,825. YOUNGS RUBBER CORPORATION, INC., New York, N. Y. Filed July 15, 1932.



The drawing is lined for blue, red, and gold. The right of exclusive use of the word "Brand" is not claimed apart from the mark as shown in the drawing.

For Prophylactic Rubber Articles for the Prevention of Contagious Diseases.

Claims use since July 5, 1932

Ser. No. 329,876. WHITALL TATUM COMPANY, Millville, N. J. Filed Aug. 26, 1932.



For Hot Water Bottles, Fountain Syringes, Combination Hot Water Bottles and Syringes; Eye, Ear, Nose, and Throat Syringes; Medicinal and Perfume Atomizers, Ice Bags, Rubber Nipples for Nursing Bottles, Eye Baths, and Urinals.
Claims use since October, 1924.

Ser. No. 330,263. S. H. KRESS & Co., New York, N. Y. Filed Sept. 12, 1932.

Baby Dot

For Gauze Sanitary Neckbands, Cotton Plaster Bandages (Not Medicated), Absorbent Cotton, Eye Bandages, Sanitary Gauze and Bandage Gauze, Sanitary Bloomers, Fountain Syringes, Nasal Syringes, Ear Syringes, Ulcer Syringes, Infants' Syringes, Nursing Bottles, Infants' or Babies' Feeding Cups, Nursing Nipples, Teething Rings, Bed Pans, Abdominal Supporters, Medicinal Atomizers, and Perfume Atomizers, Nasal Douches, Infants' Rectal Douches, Eye Cups, Hot-Water Bottles, Hospital Cups, Intestinal Irrigators, and Infants' Pacifiers.
Claims use since May 15, 1932.

Ser. No. 330,923. DONALD F. DUNCAN, INC., Chicago, Ill. Filed Oct. 4, 1932.

BAG-A-TELLE

For Combined Hot-Water Bottle and Syringe.
Claims use since June 1, 1932.

Ser. No. 331,210. JOHN WANAMAKER PHILADELPHIA, Philadelphia, Pa. Filed Oct. 12, 1932.

REDLEAF



For Fitted Manicure Cases.
Claims use since 1927.

CLASS 45

Beverages, Nonalcoholic

Ser. No. 330,693. EDWARD & JOHN BURKE, LIMITED, Long Island City, N. Y. Filed Sept. 27, 1932.



For Nonalcoholic, Maltless Beverage Sold as a Soft Drink.
Claims use since Aug. 20, 1932.

Ser. No. 331,297. BEN-BURK, INCORPORATED, Boston, Mass. Filed Oct. 17, 1932.

CONNOISSEUR

For Non-Alcoholic, Maltless Beverages, and Syrups and Extracts for Making the Same.
Claims use since Oct. 5, 1932.

CLASS 46

Foods and Ingredients of Foods

Ser. No. 318,154. LISTER BROS. INC., New York, N. Y. Filed Aug. 19, 1931.

Listers

For Foods and Ingredients of Food for Special Diets—Namely, Starch-Free, Sugar-Free, and Salt-Free Flour, Flour Having Low and Equal Amounts of Fat, Protein, and Carbohydrate, Starchless Breakfast Food, Sugar-Free Jelly and Jam Powder, Sugarless Sweetener, Sugarless Ice Cream Powder, and Sugar-Free Imitation Candy, India Gum (Karaya), Low Calory Flour, Porridge Powder, Saccharine Tablets, Starchless Macaroni, Starch-Free Bran, No Starch, Salt Free Dietetic Flour Containing Casein and Palm Nuts.
Claims use since May, 1915.

Ser. No. 327,879. FRANK KUMMER, doing business as Astrasan Manufacturing Co., Hackensack, N. J. Filed June 10, 1932.

ASTRASAN

For Powdered Cereal Health Food and Oven Goods—Namely, Cookies Made Therefrom.
Claims use since Aug. 10, 1931, on powdered cereal food; January, 1932, on oven goods such as cookies, cakes, etc.

Ser. No. 327,976. GEORGIA-CAROLINA DAIRIES, Augusta, Ga. Filed June 14, 1932.

Cremefrost

For Frozen Confections in the Nature of Sherbets.
Claims use since Sept. 1, 1931.

Ser. No. 328,186. NEW BRITAIN BIRD & FEED COMPANY, INCORPORATED, New Britain, Conn. Filed June 20, 1932.

CHECKER

For Feed, Supplies, and the Like as Follows—Ant Eggs Used as Food for Goldfish, Turtles, Newts, Lizards, Chameleons, Reptiles, and Other Aquarium Inhabitants, Bird Dessert Used as a Food for Improving Song and General Health, Bird Seeds, Fish Food, Nestling Food, Scavenger Food for Chameleons, Tadpoles, Turtles, Lizards, Snails, Newts, Etc., and Turtle Food.
Claims use since Sept. 11, 1930.

Ser. No. 329,039. VICTOR BASCHE, doing business as Squeelee & Piggee Sandwich Co., San Francisco, Calif. Filed July 25, 1932.

Squeelee & Piggee



For Sandwiches.
Claims use since July 3, 1932.

Ser. No. 329,114. JOHN F. HUNT & CO. INC., New York, N. Y. Filed July 27, 1932.



The Key to Better Results

No claim being made to the exclusive use of the words "Brand" or "Better Results" apart from the mark as shown in the drawing.
For Malt Syrups.
Claims use since June, 1927.

Ser. No. 329,126. AKTIEBOLAGET SVERIGES FORENADE KONSERVFABRIKER, Goteborg, Sweden. Filed July 28, 1932.

FYRMÄSTARE



For Canned Fish.
Claims use since December, 1921.

Ser. No. 329,741. L. L. CORYELL & SON, Lincoln, Nebr. Filed Aug. 22, 1932.

Coryell
-70-

For Wheat Flour.
Claims use since Sept. 1, 1931.

Ser. No. 330,247. THE "DRY-KOLD" REFRIGERATOR CO., doing business as Big Frosty Company, Niles, Mich. Filed Sept. 12, 1932.

Big Frosty

For Ice Cream in the Form of Ice Cream Sundaes, Ice Cream Cones, and Ice Cream Packages.
Claims use since July 28, 1932.

Ser. No. 330,330. AURELIA PEARL BLANKENSHIP, doing business as The Qu-I-Hi Sauce Co., Atlanta, Ga. Filed Sept. 14, 1932.

QU-I-HI

For Flavoring Sauce for Meats, Vegetables, and Other Foodstuffs.
Claims use since 1928.

Ser. No. 330,413. RAYMOND TLAPEK, doing business as Green Bonnet Stores, Elvins, Mo. Filed Sept. 16, 1932.



The portrait is a printed reproduction of a photograph of applicant's daughter.
For Canned Tomatoes and Canned Peas.
Claims use since Aug. 1, 1932.

Ser. No. 330,660. LAYTON PURE FOOD COMPANY, Providence, R. I., and East St. Louis, Ill. Filed Sept. 26, 1932.

HEALTH CLUB

For Baking Powder.
Claims use since May, 1902.

Ser. No. 330,669. BLUMA RUBIN, Brooklyn, N. Y. Filed Sept. 26, 1932.

BLUMAS

For Chocolate Malt Syrup.
Claims use since Oct. 1, 1915.

Ser. No. 330,714. STANDARD BRANDS INCORPORATED, New York, N. Y. Filed Sept. 27, 1932. Under section 5b of the act of 1905 as amended in 1920.

FLEISCHMANN'S

Applicant is the owner of registration No. 151,760 of February 14, 1922, effected on the ground of actual and exclusive use by the applicant's predecessors in business of the mark shown therein on the goods recited in said registration as a trade-mark for ten years next preceding February 20, 1905, and the mark has been used by the applicant on the goods in the present application in interstate commerce for at least one year.
For Malt Syrup Adapted for Use as an Ingredient in Making Bread and in Making Other Bakery Products.
Claims use since October, 1923.

Ser. No. 330,832. THE POPSICLE CORPORATION OF THE UNITED STATES, New York, N. Y. Filed Sept. 30, 1932.

CHOCSICLE

For Frozen Confections.
Claims use since Aug. 4, 1932.

Ser. No. 330,833. THE POPSICLE CORPORATION OF THE UNITED STATES, New York, N. Y. Filed Sept. 30, 1932.

PY-SICLE

For Frozen Confections.
Claims use since July 27, 1932.

Ser. No. 330,834. THE POPSICLE CORPORATION OF THE UNITED STATES, New York, N. Y. Filed Sept. 30, 1932.

VITA-SICLE

For Frozen Confections.
Claims use since July 27, 1932.

Ser. No. 331,159. MARTIN BROS., New Orleans, La. Filed Oct. 11, 1932.

POOR BOY

For Mayonnaise.
Claims use since Sept. 1, 1932.

Ser. No. 331,212. OLD KING KOLD CORPORATION, Nashville, Tenn. Filed Oct. 12, 1932.

OLD KING KOLD

For Frozen Fruit Bars.
Claims use since Oct. 5, 1932.

Ser. No. 331,248. THE CURTISS CANDY COMPANY, Chicago, Ill. Filed Oct. 14, 1932.

USE YOUR CENTS

For Candy.
Claims use since Sept. 30, 1932.

Ser. No. 331,331. ARMAND H. DEMOTT, doing business as Safebreath Products Co., Brooklyn, N. Y. Filed Oct. 18, 1932.

SAFEBREATH

For Candy Used as a Perfume for the Breath.
Claims use since Sept. 1, 1932.

CLASS 47

Wines

Ser. No. 329,104. MIZRACH WINE COMPANY, New York, N. Y. Filed July 27, 1932.

CARMEL

For Sacramental Kosher Wine.
Claims use since Mar. 20, 1929.

CLASS 49

Distilled Alcoholic Liquors

Ser. No. 330,492. JOSEPH E. SEAGRAM & SONS LIMITED, Waterloo, Ontario, Canada. Filed Sept. 19, 1932.

NO. 83

The drawing is lined for red.
For Whiskey and Potable Spirits.
Claims use since 1883.

CLASS 50

Merchandise Not Otherwise Classified

Ser. No. 330,509. DU PONT CELLOPHANE COMPANY, INC., New York, N. Y. Filed Sept. 20, 1932.

DU PONT CELLOPHANE CEL-O-SEAL

The word "Seal" is disclaimed for registration purposes apart from the mark shown in the drawing.
For Caps and Bands of Non-Fibrous Cellulose or Cellulose Derivative, Whether Transparent, Opaque, Colored, Ornamented, or Plain, Which in Their Use, for Example, as a Bottle Closure, Attain Their Ultimate Condition by Shrinking as a Result of the Evaporation of Their Contained Water.
Claims use since Aug. 12, 1932.

TRADE-MARK REGISTRATIONS GRANTED

[ACT OF FEBRUARY 20, 1905]

NOVEMBER 22, 1932

299,037. WOMEN'S AND CHILDREN'S TWEED RIDING APPAREL, CONSISTING OF RIDING COATS AND RIDING BREECHES, COATS, AND SUITS. BROWS & JACOBSON, INC., New York, N. Y.
Filed June 13, 1932. Serial No. 328,046. PUBLISHED AUGUST 30, 1932. Class 39.

299,038. WOMEN'S AND MISSES' DRESSES, COATS, SKIRTS, SHIRT WAISTS, BLOUSES, AND SLIPS. LADYCRAFT DRESSES, INC., New York, N. Y.
Filed June 18, 1932. Serial No. 328, 01. PUBLISHED AUGUST 30, 1932. Class 39.

299,039. SALVE TO BE USED IN THE TREATMENT OF PILES AND HEMORRHOIDS. DEMEESTER LABORATORIES, Detroit, Mich.
Filed June 22, 1932. Serial No. 328,214. PUBLISHED AUGUST 30, 1932. Class 6.

299,040. LAXATIVE SALT. FELICE ORLANDELLA, Boston, Mass.
Filed June 28, 1932. Serial No. 328,868. PUBLISHED AUGUST 23, 1932. Class 6.

299,041. SKIN LOTION. JEAN NATHAN, New York, N. Y.
Filed June 30, 1932. Serial No. 328,446. PUBLISHED AUGUST 23, 1932. Class 6.

299,042. INSECTICIDES, GERMICIDES, AND FUNGICIDES. CALIFORNIA SPRAY-CHEMICAL CORPORATION, Wilmington, Del., and Berkeley, Calif.
Filed July 5, 1932. Serial No. 328,547. PUBLISHED AUGUST 30, 1932. Class 6.

299,043. MEN'S AND YOUNG MEN'S SUITS AND OVERCOATS. MAX UDELL SONS & CO., New York, N. Y.
Filed July 6, 1932. Serial No. 328,588. PUBLISHED SEPTEMBER 6, 1932. Class 39.

299,044. WOMEN'S SCARFS AND JACKETS. NUSBAUM, KNITTERS, INC., Ozone Park, N. Y.
Filed July 9, 1932. Serial No. 328,671. PUBLISHED SEPTEMBER 6, 1932. Class 39.

299,045. PREPARATION FOR USE AS A VASODILATOR AND CARDIOTONIC. WINTHROP CHEMICAL COMPANY, INC., New York, N. Y.
Filed July 21, 1932. Serial No. 328,967. PUBLISHED AUGUST 30, 1932. Class 6.

299,046. PALLIATIVE FOR SORE EYES, IVY POISONING, ITCHING SKIN, ETC. STEPHEN ADAM, Trenton, N. J.
Filed July 18, 1932. Serial No. 328,862. PUBLISHED AUGUST 30, 1932. Class 6.

299,047. LADIES' HOSIERY. HARRY CONSTON, Camden, N. J.
Filed July 22, 1932. Serial No. 328,978. PUBLISHED AUGUST 30, 1932. Class 39.

299,048. HOSIERY AND UNDERWEAR FOR MEN, WOMEN, AND CHILDREN. STRUTWEAR KNITTING COMPANY, Minneapolis, Minn.
Filed July 23, 1932. Serial No. 329,029. PUBLISHED AUGUST 30, 1932. Class 39.

299,049. PREPARATION WHICH ENCOURAGES AND HOLDS A NATURAL WAVE TO THE HAIR. MEYER BROTHERS DRUG COMPANY, doing business as Imperial Crown Perfumery Co., St. Louis, Mo.
Filed July 25, 1932. Serial No. 329,055. PUBLISHED AUGUST 30, 1932. Class 6.

299,050. WOMEN'S AND MISSES' FROCKS, DRESSES, AND SUITS. PAUL PARNES, INCORPORATED, New York, N. Y.
Filed July 27, 1932. Serial No. 329,120. PUBLISHED AUGUST 30, 1932. Class 39.

299,051. HOSIERY. INTEGRITY HOSIERY CO., Philadelphia, Pa.
Filed December 29, 1930. Serial No. 309,432. PUBLISHED FEBRUARY 24, 1931. Class 39.

299,052. WOMEN'S, LADIES', MISSES', AND CHILDREN'S DANCE FROCKS. FURST-GREENMAN CO., INC., New York, N. Y.
Filed February 12, 1931. Serial No. 310,991. PUBLISHED SEPTEMBER 6, 1932. Class 39.

299,053. DRAG LINKS, TIE RODS, RADIUS RODS, TORQUE RODS, AND THRUST RODS FOR VEHICLES. THE COLUMBUS AUTO PARTS COMPANY, Columbus, Ohio.
Filed April 3, 1931. Serial No. 312,903. PUBLISHED SEPTEMBER 6, 1932. Class 19.

299,054. PIECE GOODS IN THE NATURE OF CUT-OUT DRESSES. TRU-FIT DRESS CO. INC., New York, N. Y.
Filed June 9, 1931. Serial No. 315,612. PUBLISHED AUGUST 30, 1932. Class 39.

299,055. HONEY. HERBERT A. WILBUR, Southville, Mass.
Filed June 9, 1931. Serial No. 315,657. PUBLISHED SEPTEMBER 6, 1932. Class 46.

299,056. PREPARATION FOR COATING, SIZING AND STIFFENING RUGS AND TO PREVENT THEIR SLIPPING. MCCARTY ANILINE & EXTRACT CO. INC., New York, N. Y.
Filed June 17, 1931. Serial No. 315,972. PUBLISHED AUGUST 23, 1932. Class 6.

299,057. PAJAMAS. STADIUM UNDERWEAR COMPANY, INCORPORATED, Baltimore, Md.
Filed May 23, 1932. Serial No. 327,375. PUBLISHED SEPTEMBER 6, 1932. Class 39.

299,058. BEAUTY CREAM AND PERFUME. THE POLYPHASE CORPORATION, New York, N. Y.
Filed June 6, 1932. Serial No. 327,768. PUBLISHED AUGUST 30, 1932. Class 6.

299,059. HOSIERY. TROJAN & MILLS, INC., Indianapolis, Ind.
Filed June 14, 1932. Serial No. 327,994. PUBLISHED AUGUST 30, 1932. Class 39.

299,060. STENCILS AND STENCIL CORRECTION VARNISH. ILLINOIS PAPER COMPANY, Chicago, Ill.
Filed August 8, 1930. Serial No. 304,375. PUBLISHED AUGUST 23, 1932. Class 37.

299,061. GASOLINE AND LUBRICATING OILS. BLACK EAGLE OIL COMPANY, West Allis, Wis.
Filed September 15, 1930. Serial No. 305,692. PUBLISHED SEPTEMBER 6, 1932. Class 15.

299,062. OUTBOARD MOTOR BOATS. BOYD-MARTIN BOAT COMPANY, Delphi, Ind.
Filed July 7, 1930. Serial No. 303,154. PUBLISHED SEPTEMBER 6, 1932. Class 19.

299,063. LEATHER AND FABRIC SHOES. PREMIER SHOE CO. INC., New York and Brooklyn, N. Y.
Filed March 6, 1930. Serial No. 296,921. PUBLISHED JULY 12, 1932. Class 39.

299,064. FRESH AVOCADOS. CALAVO GROWERS OF CALIFORNIA, Los Angeles, Calif.
Filed February 29, 1932. Serial No. 324,590. PUBLISHED SEPTEMBER 6, 1932. Class 46.

299,065. FOOD PRODUCT CONSISTING OF CHOCOLATE, YEAST, CANE SUGAR, MALT, AND OTHER INGREDIENTS FOR USE IN PRODUCING FOOD BEVERAGES. BERNARD FIEG, Brooklyn, N. Y.
Filed February 26, 1932. Serial No. 324,508. PUBLISHED SEPTEMBER 6, 1932. Class 46.

299,066. PROPHYLACTIC RUBBER ARTICLES FOR THE PREVENTION OF CONTAGIOUS DISEASES. YOUNGS RUBBER CORPORATION, INC., New York, N. Y.
Filed May 7, 1932. Serial No. 326,879. PUBLISHED AUGUST 23, 1932. Class 44.

299,067. EPSOM SALT, SODIUM BICARBONATE, BAY RUM, ETC. PEOPLES DRUG STORES, INC., doing business as Munes Wurth Laboratories, Washington, D. C.
Filed April 29, 1932. Serial No. 326,615. PUBLISHED AUGUST 30, 1932. Class 6.

299,068. COSMETIC AND DERMATOLOGICAL PREPARATIONS, AND EYE LOTIONS. COMPAGNIE RENAITER, INC., New York, N. Y.
Filed March 25, 1932. Serial No. 325,460. PUBLISHED AUGUST 30, 1932. Class 6.

299,069. RADIO APPARATUS, COMPRISING RADIO RECEIVING SETS AND LOUD SPEAKERS. UNITED AMERICAN BOSCH CORPORATION, Springfield, Mass.
Filed July 16, 1932. Serial No. 328,853. PUBLISHED SEPTEMBER 6, 1932. Class 21.

299,070. STORAGE BATTERIES. PRICE BATTERY CORPORATION, Philadelphia, Pa.
Filed July 12, 1932. Serial No. 328,827. PUBLISHED SEPTEMBER 6, 1932. Class 21.

299,071. ANÆSTHETIC. OSSIP A. GRAZO, doing business as Fantasm Laboratories. Los Angeles, Calif.
Filed July 14, 1932. Serial No. 328,805. PUBLISHED AUGUST 30, 1932. Class 6.

299,072. LAMINATED STRUCTURAL WOOD. M AND M PLYWOOD CORPORATION, Longview, Wash., and Portland, Oreg.
Filed July 14, 1932. Serial No. 328,795. PUBLISHED AUGUST 30, 1932. Class 12.

299,073. COMPOSITION FLOORING MATERIAL. MARVIN CANTER, doing business as Continental Asbestos & Refining Co., New York, N. Y.
Filed July 9, 1932. Serial No. 328,659. PUBLISHED AUGUST 23, 1932. Class 12.

299,074. STORAGE BATTERIES, THEIR PARTS AND ACCESSORIES REFERRING TO PLATES OR ELECTRODES, JARS OR CONTAINERS, SEPARATORS OR SPACES, AND CONNECTORS. THE ELECTRIC STORAGE BATTERY COMPANY, Philadelphia, Pa.
Filed July 8, 1932. Serial No. 328,633. PUBLISHED SEPTEMBER 6, 1932. Class 21.

299,075. LUMBER. FROST LUMBER INDUSTRIES, INC., Shreveport, La.
Filed July 7, 1932. Serial No. 328,601. PUBLISHED AUGUST 23, 1932. Class 12.

299,076. LUMBER. WILLIAM DIXON SMITH, Parkersburg, W. Va.
Filed July 2, 1932. Serial No. 328,514. PUBLISHED AUGUST 30, 1932. Class 12.

299,077. DENATURANT FOR ALCOHOL. TENNESSEE EASTMAN CORPORATION, Kingsport, Tenn.
Filed June 28, 1932. Serial No. 328,376. PUBLISHED AUGUST 23, 1932. Class 6.

299,078. MIXTURE OF AN EGG MATERIAL AND OTHER SUBSTANCES SUITABLE FOR USE AS AN INGREDIENT IN MAKING CAKES AND OTHER FOOD PRODUCTS. STANDARD BRANDS INCORPORATED, New York, N. Y.
Filed June 25, 1932. Serial No. 328,313. PUBLISHED SEPTEMBER 6, 1932. Class 46.

299,079. AGGREGATE, SUCH AS CRUSHED STONE, SLAG, OR OTHER AGGREGATE COATED WITH TAR, ASPHALT, OR OTHER BINDER, TO BE USED FOR ROAD BUILDING PURPOSES. BLACKTOP EQUIPMENT CORPORATION, Johnstown, Pa.
Filed June 21, 1932. Serial No. 328,155. PUBLISHED AUGUST 23, 1932. Class 12.

299,080. HYDROGEN PEROXIDE. PARIS BEAUTY PARLOR SUPPLY CO. LTD., Los Angeles, Calif., Salt Lake City, Utah, and San Francisco, Calif.
Filed June 14, 1932. Serial No. 327,988. PUBLISHED AUGUST 30, 1932. Class 6.

299,081. WATCH AND CLOCK SPRINGS. THE K K IMPORTING CORPORATION, New York, N. Y.
Filed June 10, 1932. Serial No. 327,877. PUBLISHED SEPTEMBER 6, 1932. Class 27.

299,082. INCANDESCENT ELECTRIC LAMP BULBS AND ELECTRIC FLOOR, TABLE, CEILING, AND AUTOMOBILE LAMPS. SAMUEL LYMAN, Brooklyn, N. Y.
Filed May 26, 1932. Serial No. 327,470. PUBLISHED SEPTEMBER 6, 1932. Class 21.

299,083. ELECTRIC ARC AND INCANDESCENT LAMPS, ELECTRIC CONTROLLERS, ELECTRIC FUSES, AND FUSE HOLDERS, ETC. WESTINGHOUSE ELECTRIC AND MANUFACTURING COMPANY, East Pittsburgh, Pa.
Filed May 18, 1932. Serial No. 327,286. PUBLISHED SEPTEMBER 6, 1932. Class 21.

299,084. SPAGHETTI SAUCE. VENICE MAID COMPANY, Vineland, N. J.
Filed May 16, 1932. Serial No. 327,174. PUBLISHED AUGUST 2, 1932. Class 46.

299,085. CANNED TOMATO SAUCE WITH MEAT BALLS. ANTONINO CANNOVA, Freeport, Ill.
Filed March 28, 1932. Serial No. 325,629. PUBLISHED SEPTEMBER 6, 1932. Class 46.

299,086. FRESH CITRUS FRUIT. SCOTT-BORDEN, Anaheim, Calif.
Filed February 2, 1932. Serial No. 323,753. PUBLISHED SEPTEMBER 6, 1932. Class 46.

299,087. BOILER COMPOUNDS FOR REMOVING SCALE AND PREVENTING CORROSION. THE WM. L. MCLELLAN COMPANY, Norwalk, Conn.
Filed February 6, 1932. Serial No. 323,900. PUBLISHED AUGUST 23, 1932. Class 6.

299,088. FRESH AVOCADOS. CALAVO GROWERS OF CALIFORNIA, Los Angeles, Calif.
Filed February 20, 1932. Serial No. 324,340. PUBLISHED SEPTEMBER 6, 1932. Class 46.

299,089. EMBALMING FLUIDS, ETC. DR. G. H. MICHEL AND COMPANY, Cleveland, Ohio.
Filed January 29, 1932. Serial No. 323,583. PUBLISHED AUGUST 23, 1932. Class 6.

299,090. PLASTIC ROOF COATING. A. C. HORN COMPANY, Long Island City, N. Y.
Filed November 28, 1931. Serial No. 321,563. PUBLISHED AUGUST 23, 1932. Class 12.

299,091. CATARRHAL MEDICINE. MARY M. KEELING, Bristol, Va.
Filed January 25, 1932. Serial No. 323,471. PUBLISHED AUGUST 23, 1932. Class 6.

299,092. PETROLEUM PRODUCTS, PARTICULARLY GASOLINE AND LUBRICATING OIL. SPARTAN REFINING COMPANY, INC., Shreveport, La.
Filed September 30, 1931. Serial No. 319,592. PUBLISHED NOVEMBER 17, 1931. Class 15.

299,093. OLIVE OIL. PHILIP MERIANO, Philadelphia, Pa.
Filed October 27, 1931. Serial No. 320,655. PUBLISHED SEPTEMBER 6, 1932. Class 46.

299,094. MEN'S, WOMEN'S, AND CHILDREN'S LEATHER AND FABRIC SLIPPERS, MOCCASINS, SHOES, AND PARTS THEREOF—NAMELY, SOLES AND HEELS, RUBBERS, AND HOSIERY. FOOT FORM SHOE SHOPS, INC., New York, N. Y.
Filed September 24, 1931. Serial No. 319,357. PUBLISHED JANUARY 5, 1932. Class 39.

299,095. CANDY. D. D. CARNEY, doing business as D. D. Carney Candy Co., Huntington, W. Va.
Filed September 16, 1931. Serial No. 319,099. PUBLISHED SEPTEMBER 6, 1932. Class 46.

299,096. FEED FOR FISH. NICHOLAS WAPLER COMPANY, New York, N. Y.
Filed August 1, 1932. Serial No. 329,269. PUBLISHED SEPTEMBER 20, 1932. Class 46.

299,097. FRANKFURTERS. FRANK AND COMPANY, Milwaukee, Wis.
Filed April 9, 1932. Serial No. 325,944. PUBLISHED SEPTEMBER 13, 1932. Class 46.

299,098. DEODORANT CREAM. THE SCRAM COMPANY, New York, N. Y.
Filed April 7, 1932. Serial No. 325,883. PUBLISHED SEPTEMBER 6, 1932. Class 6.

299,099. DIURETIC STIMULANT TO THE KIDNEYS PREPARED FOR PHYSICIANS' PRESCRIPTIONS IN CASES INVOLVING ALBUMENURIA AND GLYCOSURIA AND IS IN TWO FORMS, VIZ: FIRST, LIQUID (INFUSION) FORM, AND SECOND, IN DRY (CONCENTRATED) CAPSULE FORM. JOHN J. FULTON COMPANY, San Francisco, Calif.
Filed April 4, 1932. Serial No. 325,836. PUBLISHED AUGUST 30, 1932. Class 6.

299,100. PREPARATION FOR USE IN THE TREATMENT OF CONDITIONS INVOLVING DEFICIENT UTILIZATION IN THE BODY OF CALCIUM AND PHOSPHORUS, AS FOR EXAMPLE, IN THE TREATMENT OF RICKETS. PARKE, DAVIS & CO., Detroit, Mich.
Filed April 4, 1932. Serial No. 325,796. PUBLISHED AUGUST 30, 1932. Class 6.

299,101. PAPER AND CARDBOARD CLOTHING STORAGE CHESTS. ODORA COMPANY, INC., New York, N. Y.
Filed March 24, 1932. Serial No. 325,438. PUBLISHED SEPTEMBER 20, 1932. Class 2.

299,102. PREPARATION FOR THE TREATMENT OF CORNS, CALLOUSES, ETC. SLOANE PRODUCTS, New York, N. Y.
Filed March 18, 1932. Serial No. 325,270. PUBLISHED SEPTEMBER 6, 1932. Class 6.

299,103. FISHING LINES. FINLAYSON, BOUSFIELD & CO., LTD., Johnstone, Scotland.
Filed March 17, 1932. Serial No. 325,217. PUBLISHED SEPTEMBER 20, 1932. Class 22.

299,104. LIVE LOBSTERS AND COOKED LOBSTERS. CONSOLIDATED LOBSTER CO., INC., Gloucester, Mass.
Filed March 15, 1932. Serial No. 325,186. PUBLISHED SEPTEMBER 20, 1932. Class 46.

299,105. OINTMENT FOR THE TREATMENT OF NERVOUS AILMENTS. CHARLES L. SEVERY, Detroit, Mich.
Filed June 15, 1932. Serial No. 328,020. PUBLISHED SEPTEMBER 20, 1932. Class 6.

299,106. HAIR LOTION. GIACOMO CHELUCCI, Plains, Pa.
Filed June 20, 1932. Serial No. 328,116. PUBLISHED SEPTEMBER 20, 1932. Class 6.

299,107. FACE CREAMS. A. J. KRANK COMPANY, St. Paul, Minn.
Filed June 20, 1932. Serial No. 328,128. PUBLISHED SEPTEMBER 20, 1932. Class 6.

299,108. OINTMENT FOR THE TREATMENT OF EPIDERMOPHYTOSIS. SAUL PHARMACAL CO. INC., New York, N. Y.
Filed June 21, 1932. Serial No. 328,185. PUBLISHED SEPTEMBER 20, 1932. Class 6.

299,109. DRY YEAST. JOHN F. HUNT & CO., INC., New York, N. Y.
Filed June 22, 1932. Serial No. 328,219. PUBLISHED SEPTEMBER 20, 1932. Class 46.

299,110. MEDICINE USED FOR THE TREATMENT OF ACIDITY, FLATULENCY, HEADACHE FROM ACIDITY, AFTER EFFECT OF EXCESSIVE USE OF ALCOHOLIC BEVERAGES, BAD BREATH FROM ACIDITY, SEASICKNESS, AND OTHER AILMENTS CAUSED BY ACIDITY. ACIDACURE COMPANY, Warrenton, Va.
Filed June 20, 1932. Serial No. 328,257. PUBLISHED SEPTEMBER 20, 1932. Class 6.

299,111. PREPARATION TO BE USED FOR DYSMENORRHEA. HART PRODUCTS COMPANY, Toledo, Ohio.
Filed June 27, 1932. Serial No. 328,329. PUBLISHED SEPTEMBER 20, 1932. Class 6.

299,112. MEDICINAL PREPARATION FOR GANGRENE, TUMORS, ULCERS, WOUNDS, SORES, PANARICES, PILES, RHEUMATISM, AND GLANDULAR ALTERATIONS. VINCENZO CIPOLLA, Philadelphia, Pa.
Filed June 28, 1932. Serial No. 328,350. PUBLISHED SEPTEMBER 6, 1932. Class 6.

299,113. ASTRINGENTS, BLEACHING CREAMS, ROUGE, ETC. VIVINY PERFUMERS, INC., doing business as Dubois Laboratories, West Haven, Conn.
Filed June 30, 1932. Serial No. 328,456. PUBLISHED SEPTEMBER 20, 1932. Class 6.

299,114. SKIN LOTION. SAMUEL R. UPHAM, doing business as Upham Company, Boston, Mass.
Filed May 10, 1932. Serial No. 326,956. PUBLISHED AUGUST 30, 1932. Class 6.

299,115. SKIN OINTMENT, SALVES, ANTISEPTIC LINIMENT, AND SKIN TONIC FOR EXTERNAL USE IN THE TREATMENT OF THE SKIN, FOR PROTECTION AGAINST SUNBURN, AND FOR THE SOFTENING OF THE SKIN, AND FOR THE RELIEVING THEREOF OF IRRITATIONS; POWDERS FOR EXTERNAL USE IN THE TREATMENT OF SKIN DISORDERS, RELIEVING AND AIDING IN ELIMINATING IRRITATIONS AND OTHER TROUBLES ON THE SURFACE OF THE SKIN, AND ROUGE. ROYAL LABORATORIES, INC., Newark, N. J.
Filed May 9, 1932. Serial No. 326,913. PUBLISHED AUGUST 30, 1932. Class 6.

299,116. PILE OINTMENT, BLOOD TONIC, LAXATIVE PREPARATIONS, STOMACH MEDICINE. THE THORNTON & MINOR SANITARIUM COMPANY, doing Business as Thornton & Minor Clinic, Kansas City, Mo.
Filed April 30, 1932. Serial No. 326,650. PUBLISHED AUGUST 30, 1932. Class 6.

299,117. CAKES AND PEANUTS. OVERLAND CANDY CORPORATION, doing business as Food Confections Company, Chicago, Ill.
Filed May 5, 1932. Serial No. 326,789. PUBLISHED JULY 12, 1932. Class 46.

299,118. MEDICINAL PREPARATION USED FOR TREATMENT OF NEURALGIA, RHEUMATISM, SORE THROAT, LA GRIPPE, COLDS, COUGHS, BRONCHITIS, INFLAMMATORY CONDITIONS, INSECT BITES, SPRAINS, INDIGESTION AND STOMACH DISORDERS, CATARRHAL CONDITIONS OF THE MUCOUS MEMBRANES, NERVOUS DISORDERS, AND AS A TONIC AND BLOOD PURIFIER. MANUEL MARIN & CO., Mayaguez, Puerto Rico.
Filed May 7, 1932. Serial No. 326,866. PUBLISHED SEPTEMBER 6, 1932. Class 6.

299,119. MEDICINAL PREPARATION USED FOR TREATMENT OF NEURALGIA, RHEUMATISM, SORE THROAT, LA GRIPPE, COLDS, COUGHS, BRONCHITIS, INFLAMMATORY CONDITIONS, INSECT BITES, SPRAINS, INDIGESTION AND STOMACH DISORDERS, CATARRHAL CONDITIONS OF THE MUCOUS MEMBRANES, NERVOUS DISORDERS, AND AS A TONIC AND BLOOD PURIFIER. MANUEL MARIN & CO., Mayaguez, Puerto Rico.
Filed May 7, 1932. Serial No. 326,865. PUBLISHED AUGUST 30, 1932. Class 6.

299,120. POLISHING AND CLEANING POWDER. THE BON AMI COMPANY, New York, N. Y.
Filed May 6, 1932. Serial No. 326,803. PUBLISHED SEPTEMBER 13, 1932. Class 4.

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299,121. HAIR DRESSING. KEYSTONE LABORATORIES, Memphis, Tenn.
Filed April 27, 1932. Serial No. 326,599. PUBLISHED JUNE 21, 1932. Class 6.

299,122. LINOLEUM AND FELT BASE WALL COVERINGS. ARMSTRONG CORK COMPANY, Lancaster, Pa.
Filed August 17, 1932. Serial No. 329,590. PUBLISHED SEPTEMBER 20, 1932. Class 20.

299,123. WHISKY. JAMES MCCREADIE & COMPANY, LIMITED, Glasgow, Scotland.
Filed August 16, 1932. Serial No. 329,585. PUBLISHED SEPTEMBER 20, 1932. Class 49.

299,124. ROOT BEER. MAX GLAZER, doing business as Real Juice Company, Dallas, Tex.
Filed August 15, 1932. Serial No. 329,556. PUBLISHED SEPTEMBER 20, 1932. Class 45.

299,125. GAME PLAYED ON A BILLIARD TABLE, WITH BALLS AND SKITTLES OR WOODEN PINS. THE BRUNSWICK-BALKE-COLLENDER COMPANY, Wilmington, Del., and Chicago, Ill.
Filed August 15, 1932. Serial No. 329,550. PUBLISHED SEPTEMBER 20, 1932. Class 22.

299,126. ICED AND AUTOMATIC REFRIGERATORS AND PORCELAIN ENAMELED REFRIGERATOR CASINGS, SHELVES, DRIP PANS, AND PIPES. TENNESSEE ENAMEL MANUFACTURING COMPANY, Nashville, Tenn.
Filed August 12, 1932. Serial No. 329,514. PUBLISHED SEPTEMBER 20, 1932. Class 31.

299,127. OILS AND GREASES USED IN THE MANUFACTURE OF RUBBER, SOAP, AND OF USE IN TEXTILE TRADES. THOMAS ASPHALT PRODUCTS CO., Newark, N. J.
Filed June 28, 1932. Serial No. 328,377. PUBLISHED SEPTEMBER 6, 1932. Class 6.

299,128. MATERIALS AND SOLUTIONS FOR RENEWING USED PRINTING PLATES. MULTIGRAPH COMPANY, Wilmington, Del., and Cleveland, Ohio.
Filed June 28, 1932. Serial No. 328,364. PUBLISHED AUGUST 30, 1932. Class 6.

299,129. MATERIALS AND SOLUTIONS FOR DEVELOPING PHOTOGRAPHICALLY APPLIED IMAGES ON PRINTING PLATES. MULTIGRAPH COMPANY, Wilmington, Del., and Cleveland, Ohio.
Filed June 28, 1932. Serial No. 328,363. PUBLISHED AUGUST 30, 1932. Class 6.

299,130. MATERIALS FOR DRAWING AND WRITING ON PLANOGRAPHIC PRINTING PLATES. MULTIGRAPH COMPANY, Wilmington, Del., and Cleveland, Ohio.
Filed June 28, 1932. Serial No. 328,362. PUBLISHED AUGUST 30, 1932. Class 6.

299,131. MATERIALS FOR PRESERVING THE BLANKETS OF PRINTING MACHINES. MULTIGRAPH COMPANY, Wilmington, Del., and Cleveland, Ohio.
Filed June 28, 1932. Serial No. 328,361. PUBLISHED AUGUST 30, 1932. Class 6.

299,132. DENATURANTS. STANDARD OIL COMPANY OF CALIFORNIA, Wilmington, Del., and San Francisco, Calif.
Filed June 27, 1932. Serial No. 328,340. PUBLISHED AUGUST 30, 1932. Class 6.

299,133. MEDICINE FOR BLEEDING GUMS. PYO-NOX COMPANY, Los Angeles, Calif.
Filed June 25, 1932. Serial No. 328,308. PUBLISHED AUGUST 30, 1932. Class 6.

299,134. BATH TONIC IN LIQUID FORM. JAMES P. GALLIGAN, doing business as Gal'An Laboratories, South Chicago, Ill.
Filed June 25, 1932. Serial No. 328,304. PUBLISHED AUGUST 30, 1932. Class 6.

299,135. SEASONING AGENT FOR SALT FREE DIET. WINTHROP CHEMICAL COMPANY, INC., New York, N. Y.
Filed June 23, 1932. Serial No. 328,256. PUBLISHED AUGUST 30, 1932. Class 6.

299,136. DRY CLEANING FLUID. A. D. MILLER SONS' CO., Pittsburgh, Pa.
Filed July 22, 1932. Serial No. 328,993. PUBLISHED SEPTEMBER 13, 1932. Class 4.

299,137. AN ARTICLE FOR REMOVING SUPERFLUOUS HAIR. JAMES O. DAVIES, doing business as Baby-Touch Hair Remover Company, St. Louis, Mo.
Filed July 20, 1932. Serial No. 328,914. PUBLISHED SEPTEMBER 13, 1932. Class 44.

299,138. BLOWTORCH USED AS A DENTAL APPLIANCE. STEFFAN AND ROHRER, San Francisco, Calif.
Filed July 16, 1932. Serial No. 328,881. PUBLISHED SEPTEMBER 20, 1932. Class 44.

299,139. A HAND SOAP. MARY L. SCHMITT, doing business as Mit-Zee Products Co., Lakewood, Ohio.
Filed July 13, 1932. Serial No. 328,762. PUBLISHED SEPTEMBER 13, 1932. Class 4.

299,140. SPECTROSCOPICALLY STANDARDIZED CHEMICAL SUBSTANCES FOR USE IN SPECTROSCOPIC AND PHYSICAL RESEARCH. ADAM HILGER, LIMITED, London, England.
Filed July 9, 1932. Serial No. 328,667. PUBLISHED SEPTEMBER 20, 1932. Class 6.

299,141. CERTAIN MANICURE ARTICLES. SCHNEPEL BROTHERS, INC., Newark, N. J.
Filed July 7, 1932. Serial No. 328,623. PUBLISHED SEPTEMBER 13, 1932. Class 44.

299,142. PRECIOUS METAL SALTS AND PRECIOUS METAL ELECTROPLATING PREPARATIONS CONTAINING GOLD. BAKER & COMPANY, INC., Newark, N. J.
Filed July 1, 1932. Serial No. 328,474. PUBLISHED SEPTEMBER 6, 1932. Class 6.

299,143. INSECTICIDE AND FLY EXTERMINATOR. SOLOMON H. STEPHENS, Denver, Colo.
Filed June 30, 1932. Serial No. 328,451. PUBLISHED SEPTEMBER 6, 1932. Class 6.

299,144. MALT SYRUP. BEST MALT PRODUCTS COMPANY, Chicago, Ill.
Filed July 23, 1932. Serial No. 329,012. PUBLISHED SEPTEMBER 13, 1932. Class 46.

299,145. LIME. THE WESTERN LIME & CEMENT CO., Milwaukee, Wis.
Filed July 23, 1932. Serial No. 329,031. PUBLISHED SEPTEMBER 6, 1932. Class 12.

299,146. MASONRY CEMENT. THE WESTERN LIME & CEMENT CO., Milwaukee, Wis.
Filed July 23, 1932. Serial No. 329,032. PUBLISHED SEPTEMBER 6, 1932. Class 12.

299,147. COFFEE. EDWARD CLARENCE CONROY, doing business as E. C. Conroy Coffee Co., Kansas City, Mo.
Filed July 25, 1932. Serial No. 329,043. PUBLISHED SEPTEMBER 13, 1932. Class 46.

299,148. LAXATIVE TABLET. G. W. CARNRICK CO., Newark, N. J.
Filed April 13, 1932. Serial No. 326,048. PUBLISHED SEPTEMBER 6, 1932. Class 6.

299,149. AN IRON COMPOUND IN THE FORM OF A DRY POWDER USED TO REPAIR DEFECTS AND BREAKS IN AND MAKE PATCHES ON IRON AND OTHER METALLIC SUBSTANCES TO MAKE METALLIC JOINTS, AND TO COVER METALLIC SURFACES. SMOOTH-ON MANUFACTURING COMPANY, Jersey City, N. J.
Filed July 25, 1932. Serial No. 329,068. PUBLISHED SEPTEMBER 6, 1932. Class 12.

299,150. CARBONATED NON-ALCOHOLIC, NONCEREAL, MALTLESS BEVERAGES SOLD AS SOFT DRINKS, AND SYRUPS, EXTRACTS, AND CONCENTRATES USED IN MAKING THE SAME. STAR BOTTLING & SUPPLY CO., INC., New Haven, Conn.
Filed July 25, 1932. Serial No. 329,066. PUBLISHED SEPTEMBER 13, 1932. Class 45.

299,151. GOLF CLUBS AND PARTS THEREOF, GOLF BALLS, GOLF TEES, GOLF CLUB BAGS, TENNIS RACKETS, TENNIS BALLS, BASEBALLS, BASEBALL BATS, BASEBALL GLOVES, BASEBALL CATCHERS' MASKS, TENNIS COURT MARKERS, MECHANICAL TOYS, TOY MUSICAL INSTRUMENTS, PARTY AND HOLIDAY FAVORS, FISH HOOKS, FISHING RODS, REELS, FISHING CREELS, CHRISTMAS TREE ORNAMENTS, DOLLS, SPINNING TOPS, TOY ANIMALS, AND TOY GUNS. HARRISON WHOLESALE COMPANY, Chicago, Ill.
Filed July 29, 1932. Serial No. 329,185. PUBLISHED SEPTEMBER 20, 1932. Class 22.

299,152. DAIRY CLEANSING POWDERS, ETC. MILWAUKEE LUBRICANTS CO., Milwaukee, Wis.
Filed July 29, 1932. Serial No. 329,197. PUBLISHED SEPTEMBER 13, 1932. Class 4.

299,153. SKILL TABLE BOARD GAME PLAYED WITH PIECES. DAVID C. ROCKOLA, Chicago, Ill.
Filed July 29, 1932. Serial No. 329,203. PUBLISHED SEPTEMBER 20, 1932. Class 22.

299,154. MATCHES. THE FIRESTONE TIRE & RUBBER COMPANY, Akron, Ohio.
Filed August 2, 1932. Serial No. 329,279. PUBLISHED SEPTEMBER 13, 1932. Class 9.

299,155. MATCHES. THE FIRESTONE TIRE & RUBBER COMPANY, Akron, Ohio.
Filed August 2, 1932. Serial No. 329,281. PUBLISHED SEPTEMBER 13, 1932. Class 9.

299,156. MATCHES. THE FIRESTONE TIRE & RUBBER COMPANY, Akron, Ohio.
Filed August 2, 1932. Serial No. 329,283. PUBLISHED SEPTEMBER 13, 1932. Class 9.

299,157. BUFFING WHEELS, POLISHING WHEELS, AND OTHER ABRASIVE ARTICLES. DIVINE BROTHERS COMPANY, Utica, N. Y.
Filed August 4, 1932. Serial No. 329,326. PUBLISHED SEPTEMBER 20, 1932. Class 4.

299,158. CARPET AND RUG CLEANING COMPOUND. JAMES B. MCCOMB, New York, N. Y.
Filed August 5, 1932. Serial No. 329,351. PUBLISHED SEPTEMBER 20, 1932. Class 4.

299,159. COIN CONTROLLED AMUSEMENT MACHINES. JOHN F. MEYER, doing business as The Exhibit Supply Company, Chicago, Ill.
Filed August 8, 1932. Serial No. 329,403. PUBLISHED SEPTEMBER 13, 1932. Class 22.

299,160. MAGNESIA. PIETRO ZINZANI, Piacenza, Italy.
Filed April 22, 1932. Serial No. 326,410. PUBLISHED SEPTEMBER 20, 1932. Class 6.

299,161. VERMOUTH, COCKTAILS, LIQUORS, AND BITTERS. MARTINI & ROSSI S. A., Turin, Italy.
Filed August 9, 1932. Serial No. 329,425. PUBLISHED SEPTEMBER 13, 1932. Class 49.

299,162. SURGICAL INSTRUMENTS, HOSPITAL FURNITURE, ETC. GEORGE P. PILLING & SON CO., doing business as Pilling, Philadelphia, Pa.
Filed August 12, 1932. Serial No. 329,492. PUBLISHED SEPTEMBER 13, 1932. Class 44.

299,163. NONALCOHOLIC MALTLESS BEVERAGES SOLD AS SOFT DRINKS AND SYRUPS THEREFOR. CHERRIN B. STEIN, Pittsburgh, Pa.
Filed August 9, 1932. Serial No. 329,431. PUBLISHED SEPTEMBER 20, 1932. Class 45.

299,164. FACE POWDER, HAND LOTION, ALMOND CREAM, ETC. GABY, INC., Philadelphia, Pa.
Filed February 13, 1931. Serial No. 311,030. PUBLISHED SEPTEMBER 15, 1931. Class 6.

299,165. NON-ALCOHOLIC MALTLESS BEVERAGES. ROYAL CANADIAN COMPANY, Chicago, Ill.
Filed July 16, 1932. Serial No. 328,848. PUBLISHED SEPTEMBER 13, 1932. Class 45.

299,166. NON-ALCOHOLIC MALTLESS BEVERAGES SOLD AS SOFT DRINKS. JOHN KARRAS, doing business as Minerva Beverage Co., Chicago, Ill.
Filed July 16, 1932. Serial No. 328,841. PUBLISHED SEPTEMBER 13, 1932. Class 45.

299,167. TEA. PACKET TEA CORPORATION OF AMERICA, New York, N. Y.
Filed July 15, 1932. Serial No. 328,818. PUBLISHED SEPTEMBER 20, 1932. Class 46.

299,168. CANNED OLIVE OIL. SALVATORE A. LARAJA, Brooklyn, N. Y.
Filed July 15, 1932. Serial No. 328,814. PUBLISHED SEPTEMBER 13, 1932. Class 46.

299,169. VEGETABLE PURE FOOD ICE AND SHERBET STABILIZER STANDARDIZED. JOE LOWE CORPORATION, Brooklyn, N. Y.
Filed July 13, 1932. Serial No. 328,757. PUBLISHED SEPTEMBER 13, 1932. Class 46.

299,170. A SAUCE CONSISTING OF A COMBINATION OF TOMATOES, MUSHROOMS, PEPPERS, ONIONS, CONDIMENTS, AND SPICES. FRANCIS H. LEGGETT & COMPANY, New York, N. Y.
Filed July 12, 1932. Serial No. 328,735. PUBLISHED SEPTEMBER 20, 1932. Class 46.

299,171. HAIR PREPARATIONS. TERRI COSMETICS CORPORATION, New York, N. Y.
Filed July 11, 1932. Serial No. 328,708. PUBLISHED SEPTEMBER 20, 1932. Class 6.

299,172. FINGER WAVE PREPARATION. EUGENE SCHMITT, Astoria, N. Y.
Filed July 11, 1932. Serial No. 328,706. PUBLISHED SEPTEMBER 20, 1932. Class 6.

299,173. PREPARATION USED IN THE TREATMENT OF SYPHILITIC AND RELATED TYPES OF INFECTION. PARKE, DAVIS & CO., Detroit, Mich.
Filed July 11, 1932. Serial No. 328,700. PUBLISHED SEPTEMBER 20, 1932. Class 6.

299,174. PREPARATION USED FOR THE TREATMENT OF SYPHILITI AND SIMILAR TYPES OF INFECTION. PARKE, DAVIS & COMPANY, Detroit, Mich.
Filed July 11, 1932. Serial No. 328,699. PUBLISHED SEPTEMBER 20, 1932. Class 6.

299,175. QUARRIED NATURAL STONE PARTIALLY OR FULLY DRESSED FOR USE FOR BUILDING PURPOSES. TEXAS QUARRIES INC., Austin, Tex.
Filed July 8, 1932. Serial No. 328,650. PUBLISHED SEPTEMBER 6, 1932. Class 12.

299,176. AROMATIC BODIES DESIGNED FOR THE DUAL PURPOSE OF NEUTRALIZING THE ODOR OF PETROLEUM DISTILLATES AND OTHER SOLVENTS OF SIMILAR APPLICATION FOR USE IN INSECTICIDE SPRAYS, FLOOR WAXES, CLEANERS, NAPHTHA, AND ALL MANNER OF TECHNICAL PRODUCTS AND OF ODORIZING OR AROMATIZING THE PRODUCTS WHOSE INHERENT ODOR HAS BEEN THUS NEUTRALIZED. FRITZSCHE BROTHERS, INC., New York, N. Y.
Filed July 5, 1932. Serial No. 328,637. PUBLISHED SEPTEMBER 6, 1932. Class 6.

299,177. PHARMACEUTICAL PREPARATION FOR THE REMOVAL OF ROUNDWORMS AND HOOKWORMS IN DOGS, CATS, AND FOXES; ROUNDWORMS IN POULTRY AND SWINE; AND STOMACH WORMS IN SHEEP AND GOATS. LEDERLE LABORATORIES, INC., New York, N. Y.
Filed July 7, 1932. Serial No. 328,618. PUBLISHED SEPTEMBER 6, 1932. Class 6.

299,178. FACE POWDER. POND'S EXTRACT COMPANY, New York, N. Y.
Filed July 6, 1932. Serial No. 328,584. PUBLISHED SEPTEMBER 6, 1932. Class 6.

299,179. AN ILLUMINATED BOX WITH GLASS TOP FOR USE AS A DESK IN MAKING TRACINGS OF DRAWINGS, CARTOONS, AND OTHER SIMILAR DESIGNS. THE MULTISTAMP COMPANY, INC., Norfolk, Va.
Filed July 5, 1932. Serial No. 328,561. PUBLISHED SEPTEMBER 13, 1932. Class 26.

299,180. MEDICINAL PREPARATION FOR THE ALLEVIATION OF RHEUMATISM, ARTHRITIS, AND OTHER MUSCULAR AND JOINT ARTHRITIS. MRS. LILLIAN M. LUNDBERG, Hannibal, Mo.
Filed July 5, 1932. Serial No. 328,558. PUBLISHED SEPTEMBER 6, 1932. Class 6.

299,181. PHOTOGRAPHIC CHEMICALS. PHOTOCHROM INC., New York, N. Y.
Filed July 2, 1932. Serial No. 328,534. PUBLISHED SEPTEMBER 6, 1932. Class 6.

299,182. BRILLIANTINE, TOILET WATER, COLD CREAM, VANISHING CREAM, FACE POWDER, PERFUME, TALCUM POWDER, LIPSTICK, CREAM ROUGE. JOUBERT CIE, INC., New York, N. Y.
Filed July 2 1932. Serial No. 328,530. PUBLISHED SEPTEMBER 20, 1932. Class 6.

299,183. LAUNDRY BLUING. THE ALDEN SPEARE'S SONS CO., Cambridge, Mass.
Filed July 1, 1932. Serial No. 328,509. PUBLISHED SEPTEMBER 6, 1932. Class 6.

299,184. A BOARD GAME WITH POCKETS AND A PIECE OR PIECES TO BE THROWN THEREAT. ALEXANDER WEINBERG, New York, N. Y.
Filed June 30, 1932. Serial No. 328,458. PUBLISHED SEPTEMBER 20, 1932. Class 22.

299,185. MINERAL WATER SALTS WHICH REPRESENT IN DRY FORM THE CONSTITUENTS OF NATURAL MINERAL WATER KNOWN AS FRENCH VICHY. LA COMPAGNIE FERMIERES DE L'ETABLISSEMENT THERMAL DE VICHY, SOCIETE ANONYME, Paris, France.
Filed June 30, 1932. Serial No. 328,437. PUBLISHED SEPTEMBER 20, 1932. Class 6.

299,186. PASTILLES MADE FROM MINERAL WATERS. LA COMPAGNIE FERMIERES DE L'ETABLISSEMENT THERMAL DE VICHY, SOCIETE ANONYME, Paris, France.
Filed June 30, 1932. Serial No. 328,436. PUBLISHED SEPTEMBER 20, 1932. Class 6.

299,187. LAVENDER WATER, FACE POWDER, SACHETS, COLD CREAM, BATH SALTS, SHAMPOO POWDER, TALCUM POWDER, BATH DUSTING POWDER, TOILET LOTION, BRILLIANTINE, FACE CREAM, SKIN CREAM, AND PERFUME. YARDLEY & CO., LIMITED, London, England.
Filed June 28, 1932. Serial No. 328,379. PUBLISHED SEPTEMBER 6, 1932. Class 6.

299,188. COLOR RESTORER FOR GRAY HAIR. DEORA LABORATORIES, Burlington, Iowa.
Filed November 30, 1931. Serial No. 321,592. PUBLISHED AUGUST 30, 1932. Class 6.

299,189. BOARD GAMES PLAYED WITH PIECES. FISHER & MATSON COMPANY, Park Ridge, Ill.
Filed October 24, 1931. Serial No. 320,406. PUBLISHED DECEMBER 15, 1931. Class 22.

299,190. TOILET PREPARATIONS—NAMELY, PERFUME, TOILET WATER, FACE POWDER, ETC. BOURJOIS, INC., New York, N. Y.
Filed October 20, 1931. Serial No. 320,226. PUBLISHED DECEMBER 22, 1931. Class 6.

299,191. CANNED ORANGE JUICE FOR FOOD PURPOSES. FLORIORANGE CANNERIES, INC., Mount Dora, Fla.
Filed September 18, 1931. Serial No. 319,175. PUBLISHED NOVEMBER 10, 1931. Class 46.

299,192. PRINTED FELT BASE FLOORINGS IN PIECE GOODS FORM. CARTHAGE MILLS INCORPORATED, Cincinnati, Ohio.
Filed August 17, 1931. Serial No. 318,040. PUBLISHED SEPTEMBER 13, 1932. Class 20.

299,193. ICE CREAM. HARRY FRANCISCO, doing business as Francisco Company, Atlanta, Ga.
Filed August 7, 1931. Serial No. 317,761. PUBLISHED SEPTEMBER 20, 1932. Class 46.

299,194. TOP DRESSING AND HAND SOAPS. SPEED BOY SOAP PRODUCTS CO., Moline, Ill.
Filed July 31, 1931. Serial No. 317,588. PUBLISHED SEPTEMBER 13, 1932. Class 4.

299,195. NONALCOHOLIC, MALTLESS BEVERAGE DERIVED FROM YERBA MATÉ AND COMPOUND FOR MAKING. ARTURO G. DE FAUZON, Cleveland, Ohio, assignor to The Pam-Pa Company of America, Inc., Wilmington, Del., a Corporation of Delaware.
Filed July 21, 1931. Serial No. 317,164. PUBLISHED SEPTEMBER 20, 1932. Class 45.

299,196. A PORTABLE GOLF GAME APPARATUS CONSISTING OF A RUNWAY AND A PERFORATED TARGET THROUGH WHICH THE BALLS ARE KNOCKED. CARL F. MICHELFELDER, New Rochelle, N. Y.
Filed August 28, 1930. Serial No. 804,964. PUBLISHED SEPTEMBER 20, 1932. Class 22.

299,197. MEDICINE FOR TREATMENT OF RHEUMATISM, OR AMYLACEOUS INDIGESTION, ETC. WILLIAM H. ROHRE, INC., Philadelphia, Pa.
Filed June 16, 1931. Serial No. 315,928. PUBLISHED SEPTEMBER 15, 1931. Class 6.

299,198. MINERAL WATERS. INDIAN MINERAL WELLS, Inc., Saint Matthews, Ky.
Filed February 14, 1931. Serial No. 311,060. PUBLISHED MARCH 24, 1931. Class 45.

299,199. CONCENTRATED ACCESSORY TONIC HEALTH FOOD. CHASE-WILLIAMS CORPORATION, New York, N. Y.
Filed July 20, 1932. Serial No. 328,912. PUBLISHED SEPTEMBER 20, 1932. Class 46.

299,200. TOILET SOAPS. THE CINCINNATI SOAP COMPANY, Cincinnati, Ohio.
Filed July 11, 1932. Serial No. 328,685. PUBLISHED SEPTEMBER 13, 1932. Class 4.

299,201. GRANULATED SOAP. STOCKTON SOAP WORKS, Stockton, Calif.
Filed July 19, 1932. Serial No. 328,896. PUBLISHED SEPTEMBER 13, 1932. Class 4.

299,202. MEDICINAL PREPARATION FOR THE TREATMENT OF DISORDERS DUE TO AMENORRHEA, DYSMENORRHEA, AND MENORRHAGIA. S. PFEIFFER MANUFACTURING COMPANY, St. Louis, Mo.
Filed June 15, 1932. Serial No. 328,014. PUBLISHED SEPTEMBER 6, 1932. Class 6.

299,203. TABLE BOARD GAMES PLAYED WITH BALLS, COIN-CONTROLLED AND BALL-PROJECTING AMUSEMENT DEVICES. RAYMOND A. HENNINGS, New Orleans, La.
Filed July 22, 1932. Serial No. 328,988. PUBLISHED SEPTEMBER 20, 1932. Class 22.

299,204. MEDICINE FOR THE STOMACH. BERNARDO SCHMUTZER, Valparaiso, Chile.
Filed June 17, 1932. Serial No. 328,077. PUBLISHED SEPTEMBER 20, 1932. Class 6.

299,205. DRY MINERAL PREPARATION FOR THE TREATMENT OF BURNS, BRUISES, SUNBURN, MINOR IRRITATIONS OF THE SKIN AND OTHER EXTERNAL AFFECTIONS AND FOR APPLICATION IN SOLUTION WITH WATER AS A BATH OR FOMENTING FLUID IN THE SAID TREATMENTS. COONS PURE MINERAL COMPANY, Portland, Oreg.
Filed June 18, 1932. Serial No. 328,085. PUBLISHED AUGUST 30, 1932. Class 6.

299,206. SHAVING CREAM. NELSON, BAKER & COMPANY, Detroit, Mich.
Filed June 20, 1932. Serial No. 328,135. PUBLISHED SEPTEMBER 20, 1932. Class 4.

299,207. COLORED LIQUID DRESSING FOR USE IN DARKENING EYELASHES AND EYEBROWS. KATHERINE A. MACDONALD HOLMES, doing business as Katherine A. MacDonald, Hollywood, Calif.
Filed June 21, 1932. Serial No. 328,171. PUBLISHED SEPTEMBER 6, 1932. Class 6.

299,208. COLORED DRESSING FOR EYELASHES AND EYEBROWS. KATHERINE A. MACDONALD HOLMES, doing business as Katherine A. MacDonald, Hollywood, Calif.
Filed June 21, 1932. Serial No. 328,172. PUBLISHED SEPTEMBER 6, 1932. Class 6.

299,209. DEODORANT. PURITAN COSMETICS, INC., St. Louis, Mo.
Filed June 22, 1932. Serial No. 328,226. PUBLISHED SEPTEMBER 6, 1932. Class 6.

299,210. COMPOUNDED MINERAL OIL FOR USE IN THE TREATMENT OF TEXTILE FIBERS. THE TEXAS COMPANY, New York, N. Y.
Filed June 22, 1932. Serial No. 328,230. PUBLISHED SEPTEMBER 6, 1932. Class 6.

299,211. LIQUID HAIR AND SCALP CLEANSER AND SHAMPOO. NELLIE SILVERSTEIN, doing business as Vi-Vu Products, New York, N. Y.
Filed June 23, 1932. Serial No. 328,254. PUBLISHED SEPTEMBER 6, 1932. Class 6.

299,212. ALMOND CREAM, SKIN FRESHENER, HAND LOTION, FACIAL ASTRINGENT, VANISHING CREAM, SHAMPOO, COLD CREAM, CLEANSING CREAM, BRILLIANTINE, TISSUE CREAM, AND FACE POWDER. FREDERICK STEARNS & COMPANY, Detroit, Mich.
Filed June 24, 1932. Serial No. 328,281. PUBLISHED SEPTEMBER 6, 1932. Class 6.

299,213. HEADACHE POWDER. ALONZO M. GERRALD, doing business as E. E. Medicine Co., Greenville, S. C.
Filed June 23, 1932. Serial No. 328,240. PUBLISHED AUGUST 30, 1932. Class 6.

299,214. SOAP CLEANER FOR THE HANDS, ETC. MEYER & TRUDEAU, Alexandria, Va.
Filed March 4, 1932. Serial No. 324,795. PUBLISHED SEPTEMBER 20, 1932. Class 4.

299,215. FRESH AVOCADOS. CALAVO GROWERS OF CALIFORNIA, Los Angeles, Calif.
Filed February 29, 1932. Serial No. 324,589. PUBLISHED SEPTEMBER 13, 1932. Class 46.

299,216. METAL POLISHES AND MARBLE CLEANING POWDER. I. EDWARD BROWN, INC., New York, N. Y.
Filed February 2, 1932. Serial No. 323,768. PUBLISHED SEPTEMBER 13, 1932. Class 4.

299,217. SKIN TONIC, ASTRINGENT. WIEBOLDT STORES, INC., Chicago, Ill.
Filed January 2, 1932. Serial No. 322,666. PUBLISHED SEPTEMBER 20, 1932. Class 6.

299,218. PREPARATION FOR USE IN THE TREATMENT OF SIMPLE OR NERVOUS HEADACHES, PAINS OR SORENESS DUE TO COLDS OR NEURALGIA, AND AS A SEDATIVE FOR THE NERVES. KAM DRUG MANUFACTURING CO., INC., doing business as Kam Remedy Company, Durham, N. C.
Filed April 21, 1932. Serial No. 326,326. PUBLISHED SEPTEMBER 20, 1932. Class 6.

299,219. CHEMICAL SOLUTION TO PREVENT SCALE AND CORROSION IN BOILERS AND THE LIKE. JOSEPH A. CARTER, San Antonio, Tex.
Filed May 18, 1932. Serial No. 327,044. PUBLISHED AUGUST 30, 1932. Class 6.

299,220. PHARMACEUTICAL PREPARATIONS—NAMELY, LINIMENT, OINTMENT, OR SALVES FOR CUTS, BURNS, SPRAINS, ACHES, PAINS, BOILS, COLD SORES, SORE THROAT, COLDS, AND SUNBURN. MOLLER BROTHERS, Chicago, Ill.
Filed May 18, 1932. Serial No. 327,116. PUBLISHED SEPTEMBER 6, 1932. Class 6.

299,221. PREPARATION FOR BUILDING UP THE SYSTEM, ENRICHING THE BLOOD, INCREASING THE APPETITE, CATARRH OF THE STOMACH, CHRONIC CONSTIPATION, INDIGESTION, LIVER AND KIDNEY DISEASES, AND FOR USE AS A LAXATIVE TONIC; AND HAIR TONIC FOR INVIGORATING THE SCALP AND RELIEVING DANDRUFF. DAVID WRÓBLEWSKI, doing business as D. Wróblewski, Brooklyn, N. Y.
Filed May 19, 1932. Serial No. 327,265. PUBLISHED AUGUST 30, 1932. Class 6.

299,222. POWDERED DEHYDRATED WHOLE EGG, POWDERED DEHYDRATED EGG ALBUMIN, AND POWDERED DEHYDRATED EGG-YOLK. JOS LOWE CORPORATION, Brooklyn, N. Y.
Filed May 21, 1932. Serial No. 327,317. PUBLISHED SEPTEMBER 20, 1932. Class 46.

299,223. ENDOCRINE COMPOUNDS. COLE CHEMICAL COMPANY, Wilmington, Del., and St. Louis, Mo.
Filed May 23, 1932. Serial No. 327,444. PUBLISHED SEPTEMBER 20, 1932. Class 6.

WITHDRAWN.

299,224. NURSING BOTTLES. SCHEUERMAN-GEISTLINGER MFG. CO. INC., Peekskill, N. Y.
Filed May 27, 1932. Serial No. 327,530. PUBLISHED SEPTEMBER 20, 1932. Class 44.

299,225. PREPARATION CONTAINING CHEMICAL PROPERTIES FOR THE ELIMINATION OF BODY ODORS IN POWDER AND LIQUID FORM. WILLING W. RYAN, doing business as The Odor Away Company, Fort Worth, Tex.
Filed May 28, 1932. Serial No. 327,567. PUBLISHED AUGUST 30, 1932. Class 6.

299,226. TOILET CREAMS. EMMOR G. TUTHILL, Los Angeles, Calif.
Filed May 31, 1932. Serial No. 327,610. PUBLISHED AUGUST 30, 1932. Class 6.

299,227. TABLE BOARD GAME PLAYED WITH MARBLES. GOLDWIN SMITH, doing business as Smith Mfg. Co., Tampa, Fla.
Filed June 1, 1932. Serial No. 327,637. PUBLISHED SEPTEMBER 18, 1932. Class 22.

299,228. LIQUID NAIL POLISH, LIQUID NAIL POLISH REMOVER, CUTICLE REMOVER, NAIL WHITE. L'ONGLEX LIMITED, New York, N. Y.
Filed June 3, 1932. Serial No. 327,697. PUBLISHED SEPTEMBER 6, 1932. Class 6.

299,229. PREPARATION FOR THE TREATMENT OF GONORRHEA. MEDICAL ACCESSORIES, INC., Chicago, Ill.
Filed June 4, 1932. Serial No. 327,733. PUBLISHED AUGUST 30, 1932. Class 6.

299,230. EXTRACT OF LIVER PREPARATION FOR USE AS A MEDICINAL PREPARATION IN THE TREATMENT OF THE VARIOUS FORMS OF ANAEMIA. THE UPJOHN COMPANY, Kalamazoo, Mich.
Filed June 6, 1932. Serial No. 327,777. PUBLISHED AUGUST 30, 1932. Class 6.

299,231. STEEL WOOL AND PUMICE STONE. JAMES H. RHODES & COMPANY, Chicago, Ill.
Filed June 2, 1932. Serial No. 327,781. PUBLISHED SEPTEMBER 20, 1932. Class 4.

299,232. LIQUID FOR THE FIREPROOFING OF VARIOUS MATERIALS, SUCH AS TEXTILES, WOOD, ETC., AND IS ALSO TO BE USED AS A LIQUID WHICH IS INCORPORATED IN PAINT AND IS USED IN THE FIRE RETARDANCE OF LUMBER, CONTAINING MONOBASIC, DIBASIC, AND TRIBASIC SALTS OF AMMONIUM PLUS THE SODIUM SALTS OF PHOSPHORIC ACID. M. J. MERKIN PAINT CO. INC., New York, N. Y.
Filed June 7, 1932. Serial No. 327,802. PUBLISHED SEPTEMBER 6, 1932. Class 6.

299,233. FOOT LINIMENT, FOOT OINTMENT, FOOT POWDER, FOOT SALVE. PROF. F. A. MATSUYAMA, San Francisco, Calif.
Filed June 6, 1932. Serial No. 327,841. PUBLISHED AUGUST 30, 1932. Class 6.

299,234. HAIR RESTORERS. MAMIE HAMILTON, doing business as Raymond-Hamilton Co., New Orleans, La.
Filed June 9, 1932. Serial No. 327,848. PUBLISHED SEPTEMBER 6, 1932. Class 6.

299,235. PREPARATIONS OF CHEMICAL CARBON REMOVERS FOR INTERNAL COMBUSTION ENGINES. ROCKY MOUNTAIN CHEMICAL AND MANUFACTURING CO., Phoenix, Ariz.
Filed June 10, 1932. Serial No. 327,889. PUBLISHED AUGUST 30, 1932. Class 6.

299,236. LIQUID SHAMPOOS. MIDWEST HARDWARE COMPANY, Chicago, Ill.
Filed June 11, 1932. Serial No. 327,915. PUBLISHED AUGUST 30, 1932. Class 6.

299,237. HAIR RESTORER AND SKIN ANTISEPTIC. JAMES MENTO, Philadelphia, Pa.
Filed June 11, 1932. Serial No. 327,912. PUBLISHED AUGUST 30, 1932. Class 6.

299,238. BASE METAL SERVICE TRAYS AND MERCHANDISE HOLDING AND DISPLAYING ATTACHMENTS FOR SUCH TRAYS. RED BOY, INC., Chicago, Ill.
Filed June 13, 1932. Serial No. 327,946. PUBLISHED SEPTEMBER 13, 1932. Class 13.

299,239. PERFUMES. JEAN PATOU, INC., New York, N. Y.
Filed June 14, 1932. Serial No. 327,984. PUBLISHED SEPTEMBER 6, 1932. Class 6.

[ACT OF MARCH 19, 1920, SEC. 1 (b)]

THESE REGISTRATIONS ARE NOT SUBJECT TO OPPOSITION

299,240. (CLASS 39. CLOTHING.) QUICKSLIP CO., INC., Brooklyn, N. Y. Filed Sept. 23, 1932. Serial No. 330,645.

TOWLRAP

For Bath and Beach Robes.
Claims use since Mar. 10, 1931.

299,241. (CLASS 39. CLOTHING.) MORRIS OPPER, New York, N. Y. Filed Aug. 26, 1932. Serial No. 329,864.

TWIN-END

For Four-in-Hand Ties for Juniors.
Claims use since Jan. 10, 1930.

299,242. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) CARL F. BOKMEYER, doing business as Carl F. Bokmeyer Co., Sheffield, Iowa. Filed July 22, 1932. Serial No. 328,977.

BOKMEYER'S

For Medicine for Treating Goitre.
Claims use since July 15, 1930.

299,243. (CLASS 46. FOODS AND INGREDIENTS OF FOODS. SHEBOYGAN CHEESE CO., Sheboygan, Wis. Filed Jan. 29, 1931. Serial No. 310,537.

CHEEZHAM

For an Edible Product Made From Ham and Cheese.
Claims use since Nov. 19, 1930.

299,244. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) BLANCHE GORDON M. FLAHIVE, doing business as Gordon Gum Company, Los Angeles, Calif. Filed Mar. 2, 1932. Serial No. 324,705.

GIN-GUM

GORDON'S

For Chewing Gum.
Claims use since June 1, 1931.

299,245. (CLASS 16. PAINTS AND PAINTERS' MATERIALS.) JOHN H. PRAY & SONS CO., Boston, Mass. Filed Feb. 29, 1932. Serial No. 324,626.

NEWAX

For Wax Floor Dressing.
Claims use since Oct. 13, 1931.

299,246. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) ARKANSAS COMPANY INC., New York, N. Y. Filed Feb. 5, 1932. Serial No. 323,851.

ANTHRACHROME MORDANT

For Preparation Used in Conjunction with Chromate Dyestuffs for Mordanting in Dyeing Processes.
Claims use since 1920.

299,247. (CLASS 26. MEASURING AND SCIENTIFIC APPLIANCES.) HERBERT G. SMITH, Jackson, Mich., and Rochester, N. Y. Filed Dec. 31, 1931. Serial No. 322,605.

EZEE-PRINT

For Apparatus for Use in Making Finger Prints and Foot Prints.
Claims use since Sept. 9, 1931.

299,248. (CLASS 39. CLOTHING.) R. H. WHITE COMPANY, Boston, Mass. Filed Nov. 20, 1931. Serial No. 321,404.

Whitely

For Men's Suits and Men's Dress and Negligee Shirts.
Claims use since Aug. 3, 1931.

299,249. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) SERVICE PRODUCTS, INC., doing business as West Point Laboratories, New York, N. Y. Filed Nov. 17, 1931. Serial No. 321,221.

WEST POINT

For Preparation for the Treatment of the Hair and Scalp.
Claims use since Oct. 9, 1931.

299,250. (CLASS 37. PAPER AND STATIONERY.) THEO. H. DAVIES & CO., LTD., Honolulu, Territory of Hawaii. Filed Nov. 18, 1931. Serial No. 321,098.

Hawaiian Ledger

For Paper for Printing Purposes.
Claims use since Sept. 25, 1931.

299,251. (CLASS 37. PAPER AND STATIONERY.) THEO. H. DAVIES & CO., LTD., Honolulu, Territory of Hawaii. Filed Nov. 13, 1931. Serial No. 321,097.

Hawaiian Index Bristol

For Paper for Printing Purposes.
Claims use since Sept. 30, 1931.

299,252. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) FRANK L. ALBINO, doing business as Albino Drug Company, West Haven, Conn. Filed Nov. 11, 1931. Serial No. 320,998.

ALBINO TIMELY CAPSULES

For Medicinal Compound Contained in Capsules Said Compound Being an Utero-Ovarian Corrective and Tonic for Irregular and Delayed Menstruation Due to: Colds, Amenorrhea, Dysmenorrhea, Etc.
Claims use since Sept. 1, 1931.

299,253. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) N. DORMAN & Co., New York, N. Y. Filed Oct. 24, 1931. Serial No. 320,899.

GUTA

For Cheese.
Claims use since Feb. 10, 1931.

299,254. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) THE FAIR, Chicago, Ill. Filed Oct. 19, 1931. Serial No. 320,190.

Helen Ogden

For Double Loose Vanity Containing Rouge and a Compartment for Loose Face Powder, Single Loose Vanity Containing Loose Face Powder Only, and a Double Compact Vanity Containing Solid Face Powder and Rouge.
Claims use since Sept. 2, 1931.

299,255. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) H. V. SCHIEREN, New York, N. Y. Filed Oct. 10, 1931. Serial No. 319,950.

NOGRAIN DEVELOPER

For Photographic Developing Powder.
Claims use since Oct. 1, 1931.

299,256. (CLASS 42. KNITTED, NETTED, AND TEXTILE FABRICS.) SIDNEY BLUMENTHAL & CO. INC., New York, N. Y. Filed Oct. 3, 1931. Serial No. 319,685.

Avon

For Pile Fabrics in the Piece.
Claims use since Sept. 14, 1931.

299,257. (CLASS 32. FURNITURE AND UPHOLSTERY.) BARKER BROS. INCORPORATED, Los Angeles, Calif. Filed Sept. 23, 1931. Serial No. 319,304.

PEMBROKE

For Furniture for the Household and for the Office—Namely, Bookcases, Tables, Desks, Secretaries, Bookracks, Magazine Racks, Sofas, Chairs, Hall Trees, Radio Cabinets, Kitchen Cabinets, Tea Wagons, Sideboards, China Cabinets, Buffets, Beds, Dressers, Dressing-Tables, Chiffoniers.
Claims use since Aug. 15, 1931.

299,258. (CLASS 4. ABRASIVE, DETERGENT, AND POLISHING MATERIALS.) STA-DREST PRODUCTS CO., Des Moines, Iowa. Filed Aug. 22, 1931. Serial No. 318,328.

STA-DREST

For Automobile Top Dressing.
Claims use since Jan. 15, 1931.

299,259. (CLASS 16. PAINTS AND PAINTERS' MATERIALS.) WM. POSTON MANUFACTURING CO., Davenport, Iowa. Filed Sept. 16, 1931. Serial No. 319,123.

POSTON'S GLOSS

For Certain-Named Polishing and Cleaning Preparation.
Claims use since Aug. 31, 1931.

299,260. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) PHILFUELS COMPANY, Bartlesville, Okla. Filed Aug. 18, 1931. Serial No. 318,113.

REDIGAS

For Liquefied Natural Gas.
Claims use since July, 1931.

299,261. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) PHILFUELS COMPANY, Bartlesville, Okla. Filed Aug. 18, 1931. Serial No. 318,112.

READYGAS

For Liquefied Natural Gas.
Claims use since July, 1931.

TRADE-MARK REGISTRATIONS RENEWED

39,060. LEATHER BOOTS AND SHOES. Registered October 21, 1902. LEWIS A. CROSSETT, North Abington, Mass. Renewed October 21, 1932, to Crossett Shoe Co., Augusta, Me., a Corporation of Maine, assignee by mesne assignments.

39,228. CERTAIN NAMED RUBBER GOODS. Registered November 11, 1902. THE B. F. GOODRICH CO., Akron, Ohio. Renewed November 11, 1932, to The B. F. Goodrich Company, New York, N. Y., a Corporation of New York, assignee.

39,983. SAFETY RAZORS AND RAZOR BLADES. Registered March 24, 1903. KAMPFE BRO'S., New York, N. Y. Renewed March 24, 1933, to American Safety Razor Corporation, Brooklyn, N. Y., a Corporation of Virginia, assignee by mesne assignments.

40,093. FINE WRITING PAPER. Registered April 14, 1903. MITTINEAGUE PAPER CO. Renewed April 14, 1933, to Strathmore Paper Company, West Springfield, Mass., a Corporation of Massachusetts, assignee.

40,094. FINE WRITING PAPER. Registered April 14, 1903. MITTINEAGUE PAPER CO. Renewed April 14, 1933, to Strathmore Paper Company, West Springfield, Mass., a Corporation of Massachusetts, assignee.

86,285. WALL-PAPERS. Registered April 30, 1912. F. C. DAVIDGE & CO., as assignee of Frank C. Davidge. Renewed April 30, 1932, to F. C. Davidge & Company, Limited, Toronto, Ontario, Canada, a Corporation of Canada, assignee by mesne assignments.

88,134. HAY AND FIELD SEEDS. Registered August 27, 1912. P. M. SWARTZ & SONS. Renewed August 27, 1932, to Swartz Bros., Waukesha, Wis., a Firm, successor.

88,585. CERTAIN KINDS OF HEATING AND COOKING STOVES. Registered October 1, 1912. OLIVE STOVE WORKS, Rochester, Pa., a Corporation of Pennsylvania. Renewed October 1, 1932.

88,675. A MAGAZINE. Registered October 15, 1912. LYMAN D. HALL, New York, N. Y. Renewed October 15, 1932.

88,704. PRINTING-INKS. Registered October 15, 1912. PHILIP RUXTON, INC. Renewed October 15, 1932, to The International Printing Ink Corporation, New York, N. Y., a Corporation of Ohio, assignee.

88,729. STOCKINGS. Registered October 22, 1912. JOSEPH BLACK & SONS COMPANY, New York, N. Y. Renewed October 22, 1932, to Joseph Black & Sons Company, York, Pa., a Corporation of Pennsylvania.

88,767. BOOTS, SHOES, AND SLIPPERS OF LEATHER. Registered October 22, 1912. MANFIELD & SONS. Renewed October 22, 1932, to Manfield & Sons, Ltd., Northampton, England, a Corporation of Great Britain, successor.

88,817. PLOWS AND CERTAIN NAMED PARTS THEREOF. Registered October 22, 1912. S. R. WHITE'S SONS. Renewed October 22, 1932, to S. R. White's Sons, Inc., Norfolk, Va., a Corporation of Virginia, assignee.

88,914. CANDY. Registered October 29, 1912. THE MIRROR, New York, N. Y., a Corporation of New York. Renewed October 29, 1932.

88,922. BISCUIT. Registered October 29, 1912. NATIONAL BISCUIT COMPANY, Jersey City, N. J., and New York, N. Y. Renewed October 29, 1932, to National Biscuit Company, New York, N. Y., a Corporation of New Jersey.

88,923. BISCUIT. Registered October 29, 1912. NATIONAL BISCUIT COMPANY, Jersey City, N. J., and New York, N. Y. Renewed October 29, 1932, to National Biscuit Company, New York, N. Y., a Corporation of New Jersey.

88,924. BISCUIT. Registered October 29, 1912. NATIONAL BISCUIT COMPANY, Jersey City, N. J., and New York, N. Y. Renewed October 29, 1932, to National Biscuit Company, New York, N. Y., a Corporation of New Jersey.

88,925. BISCUIT. Registered October 29, 1912. NATIONAL BISCUIT COMPANY, Jersey City, N. J., and New York, N. Y. Renewed October 29, 1932, to National Biscuit Company, New York, N. Y., a Corporation of New Jersey.

88,926. BISCUIT. Registered October 29, 1912. NATIONAL BISCUIT COMPANY, Jersey City, N. J., and New York, N. Y. Renewed October 29, 1932, to National Biscuit Company, New York, N. Y., a Corporation of New Jersey.

88,927. BISCUIT. Registered October 29, 1912. NATIONAL BISCUIT COMPANY, Jersey City, N. J., and New York, N. Y. Renewed October 29, 1932, to National Biscuit Company, New York, N. Y., a Corporation of New Jersey.

88,928. BISCUIT. Registered October 29, 1912. NATIONAL BISCUIT COMPANY, Jersey City, N. J., and New York, N. Y. Renewed October 29, 1932, to National Biscuit Company, New York, N. Y., a Corporation of New Jersey.

88,929. BISCUIT. Registered October 29, 1912. NATIONAL BISCUIT COMPANY, Jersey City, N. J., and New York, N. Y. Renewed October 29, 1932, to National Biscuit Company, New York, N. Y., a Corporation of New Jersey.

88,930. BISCUIT. Registered October 29, 1912. NATIONAL BISCUIT COMPANY, Jersey City, N. J., and New York, N. Y. Renewed October 29, 1932, to National Biscuit Company, New York, N. Y., a Corporation of New Jersey.

88,931. BISCUIT. Registered October 29, 1912. NATIONAL BISCUIT COMPANY, Jersey City, N. J., and New York, N. Y. Renewed October 29, 1932, to National Biscuit Company, New York, N. Y., a Corporation of New Jersey.

88,932. BISCUIT. Registered October 29, 1912. NATIONAL BISCUIT COMPANY, Jersey City, N. J., and New York, N. Y. Renewed October 29, 1932, to National Biscuit Company, New York, N. Y., a Corporation of New Jersey.

89,108. A TOOTH-PASTE. Registered November 12, 1912. JOHN GOSNELL & CO., LIMITED, London, England, a Corporation of Great Britain. Renewed November 12, 1932.

89,210. METAL CUSPIDORS. Registered November 19, 1912. THE JACOB J. VOLLRATH MFG. CO. Renewed November 19, 1932, to The Vollrath Company, Sheboygan, Wis., a Corporation of Wisconsin, assignee.

89,989. COFFEE. Registered January 28, 1913. COMPANIA DE CAFE ESPERANZA, Paterson, N. J., and New York, N. Y. Renewed January 28, 1933, to Compania de Cafe Esperanza, New York, N. Y., a Corporation of New Jersey.

90,115. MEDICINAL SALTS. Registered February 4, 1913. E. GRIFFITHS HUGHES (KRÖSCHEN) LIMITED. Renewed February 4, 1933, to E. Griffiths Hughes, Limited, Manchester, England, a Corporation of Great Britain, by change of name.

90,304. CERTAIN NAMED FIRE-ARMS AND SUPPLIES THEREFOR. Registered February 18, 1913. M. HARTLEY DODGE, Passaic, N. J., and New York, N. Y. Renewed February 18, 1933, to Remington Arms Company, Inc., Bridgeport, Conn., and Ilion and New York, N. Y., a Corporation of Delaware, assignee by mesne assignments.

90,454. ORANGES AND GRAPE-FRUIT. Registered February 25, 1913, MANATEE FRUIT CO., Palmetto and Tampa, Fla. Renewed February 25, 1933, to Manatee Fruit Co., Tampa, Fla., a Corporation of Florida.

90,514. WRAPPING-PAPERS. Registered March 4, 1912. CONTINENTAL PAPER BAG COMPANY, Rumford, Me., and New York, N. Y. Renewed Mach 4, 1932, to Continental Paper and Bag Corporation, New York, N. Y., a Corporation of Delaware, assignee by mesne assignments.

90,641. TOILET WATER. Registered March 11, 1913. RICHARD HUDNUT, New York, N. Y., a Corporation of New York. Renewed March 11, 1933.

90,870. CERTAIN NAMED ARTICLES OF CLOTHING. Registered April 1, 1913. CONRAD & CO. Renewed April 1, 1933, to Conrad & Co., Inc., Boston, Mass., a Corporation of Massachusetts, assignee.

90,876. WHEAT-FLOUR. Registered April 1, 1913. EMPIRE STATE FLOUR MILLS, Syracuse and New York, N. Y. Renewed April 1, 1933, to Empire State Flour Mills, New York, N. Y., a Corporation of New York.

90,880. A COMPOUND FOR PURIFYING ACETYLENE. Registered April 1, 1913. PASCAL JULES GRANJON, Paris, France. Renewed April 1, 1933, to R. Granjon Fils & Cie., Saint-Marcel, France, a Corporation of France, assignee.

91,128. LUBRICATING-OILS. Registered April 15, 1913. Russia Cement Company, Gloucester, Mass., a Corporation of Massachusetts. Renewed April 15, 1933.

91,280. CERTAIN CHEMICAL AND PHARMACEUTICAL PREPARATIONS. Registered April 22, 1913. HENRY S. WELLCOME, London, England. Renewed April 22, 1933, to Burroughs Wellcome & Co. (U. S. A.) Inc., New York, N. Y., a Corporation of New York, assignee by mesne assignments.

LABELS

REGISTERED NOVEMBER 22, 1932

41,420.—*Title:* DICKINSON'S BUSTER BRANDS POPCORN. For Popped Corn. THE ALBERT DICKINSON COMPANY, Chicago, Ill. Published October 1, 1932.

41,421.—*Title:* BLUE RIDGE MOUNTAIN APPLES. For Apples. THE BLUE RIDGE MOUNTAIN ORCHARDS, Ella Gap, Ga. Published August 30, 1932.

41,422.—*Title:* MELONICE. For Frozen Fruit Ices. BOCCIA SPUMONI CO., New York, N. Y. Published June 1, 1932.

41,423.—*Title:* JEANNE'S FRENCH DRESSING. For French Dressing. JEANNE MCCLOY BRENNER, Pittsburgh, Pa. Published July 15, 1932.

41,424.—*Title:* RADIO MINIATURES. For Electrical Transcription Discs for Radio Broadcasting Use. BROOKE, SMITH & FRENCH, INC., Detroit, Mich. Published August 24, 1932.

41,425.—*Title:* RADIO TABLOIDS. For Electrical Transcription Discs for Radio Broadcasting Use. BROOKE, SMITH & FRENCH, INC., Detroit, Mich. Published August 24, 1932.

41,426.—*Title:* DESERT GOLD FRESH CALIFORNIA DATES. For Dates. CALIFORNIA DATE GROWERS ASSOCIATION, Los Angeles, Calif. Published September 27, 1932.

41,427.—*Title:* DESERT GOLD GROWN IN CALIFORNIA HYDRATED DATES. For Dates. CALIFORNIA DATE GROWERS ASSOCIATION, Los Angeles, Calif. Published September 27, 1932.

41,428.—*Title:* EVEREADY PURE COCOA. For Cocoa. CANADA'S PRIDE PRODUCTS CO., INC., New York, N. Y. Published October 3, 1932.

41,429.—*Title:* PEPER'S PETITE. For Tobacco. CHRISTIAN PEPER TOBACCO COMPANY, St. Louis, Mo. Published October 1, 1932.

41,430.—*Title:* ANESTEX INJECTUBES. For Local Anesthetic. DAVID CURTIS, doing business as Anestex Laboratories (De-Ce Products Co. of N. Y.), New York, N. Y. Published September 15, 1932.

41,431.—*Title:* STA-SHINE. For Shoe Polish and Dressing. BERTRAM J. HIRSCH, doing business as Sta-Shine Laboratories, Terre Haute, Ind. Published July 1, 1932.

41,432.—*Title:* TUNA MAID. For Canned Food Incorporating Tuna Fish Together with Vegetables, Etc. HOVDEN FOOD PRODUCTS CORPORATION, Monterey, Calif. Published June 15, 1932.

41,433.—*Title:* JANE ADARE. For Chocolates. IMPERIAL CANDY COMPANY, Seattle, Wash. Published September 30, 1932.

41,434.—*Title:* HARRARI EGYPTIAN HENNA. For Henna. A. J. KRANK COMPANY, St. Paul, Minn. Published August 25, 1932.

41,435.—*Title:* BRONZINE. For Henna. A. J. KRANK COMPANY, St. Paul, Minn. Published August 25, 1932.

41,436.—*Title:* SELECTED BRUSSEL SPROUTS. For Brussel Sprouts. SUTHERLAND PAPER COMPANY, Kalamazoo, Mich. Published July 1, 1932.

41,437.—*Title:* SELECT STRAWBERRIES. For Strawberries. SUTHERLAND PAPER COMPANY, Kalamazoo, Mich. Published June 24, 1932.

41,438.—*Title:* POUND O'GOLD. For Butter. SUTHERLAND PAPER COMPANY, Kalamazoo, Mich. Published June 29, 1932.

41,439.—*Title:* DANDELION. For Butter. SUTHERLAND PAPER COMPANY, Kalamazoo, Mich. Published July 14, 1932.

41,440.—*Title:* PASCHER BOND. For Fillers for Loose Leaf Note Books. WHITE & WYCKOFF MFG. CO., Holyoke, Mass. Published June 18, 1932.

PRINTS

REGISTERED NOVEMBER 22, 1932

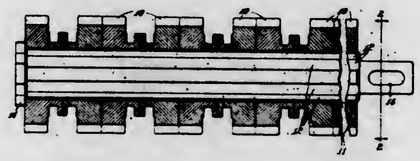
13,966.—*Title:* MAID FOR YOUR TEETH. For a Non-Medicinal Dental Cleansing Cream. DR. HENRY HALES COLLINS, Los Angeles, Calif. Published May 20, 1932.

13,967.—*Title:* THAT HAPPY CIRCLE BREAD. For Bread. B. D. NORDHEM, New York, N. Y. Published June 2, 1932.

REISSUES

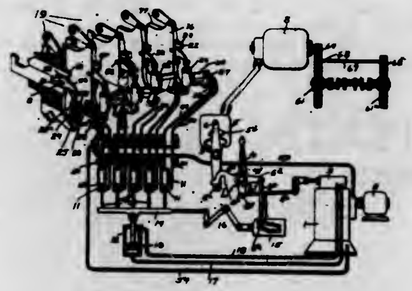
NOVEMBER 22, 1932

18,661. METHOD OF MAKING SPLINED GEARS. Ernest F. Davis, Muncie, Ind., assignor to Warner Gear Company, Muncie, Ind., a Corporation of Indiana. Original No. 1,789,968, dated Jan. 27, 1931, Serial No. 473,647, filed Aug. 7, 1930. Application for reissue filed Sept. 30, 1932. Serial No. 635,622. 8 Claims. (Cl. 29—159.2.)



4. The process of producing articles having openings extending therethrough and having their outer surfaces hardened which comprises the formation of the article of a specified material with the opening reduced closely to the desired dimensions, the placing of said article upon a holder extending through said opening, the subjection of said holder and article to a heat treatment, and the subjection of the heated holder and article to a quenching bath and the subsequent removal of the material of the surfaces of the opening to reduce said surfaces to ultimate dimensions, the holder having such dimensions and such coefficient of expansion that the surfaces of the opening will be free to expand and contract and the quenching action of the bath will be retarded at the surfaces of the opening, whereby the surfaces of the opening in the article upon the emergence from the quenching bath will be less hard than the outer surfaces of the article and in condition to permit, as by a broaching operation, the removal of material therefrom for a final finishing operation.

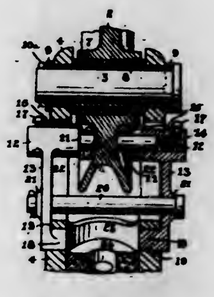
18,662. MACHINE TOOL. William F. Groene and Harold J. Siekmann, Cincinnati, Ohio, assignors to The R. K. Le Blond Machine Tool Company, Cincinnati, Ohio, a Corporation of Delaware. Original No. 1,744,885, dated Jan. 28, 1930, Serial No. 246,814, filed Jan. 12, 1928. Application for reissue filed Jan. 21, 1932. Serial No. 588,021. 31 Claims. (Cl. 82—9.)



16. In a lathe the combination with a frame, of means thereon for engaging and rotating a crank shaft on its axis so that the crank pins move in an eccentric path, a series of carrier members, means for moving said carrier members eccentrically with the crank pins, and tool supporting means on the carriers, tool feeding means on the carriers, and comprising hydraulic elements connected to said feeding means, and flexible means for applying a source of power to each tool feeding means, said source of power having a main power delivery means, and a series of auxiliary power delivery means operated by the main means, one for each carrier.

21. In a lathe for turning a plurality of the crank pins of a crank shaft simultaneously, the combination of tool carrying frames, means for supporting and rotating a shaft whose pins are to be turned, means for causing the frames to move in synchronism with the pins of the shaft, said means comprising a pair of eccentric members engaging said frames, one located at the front of the machine above the location of the shaft to be turned, and the other located below the shaft and rearwardly of the machine, whereby the shaft may be inserted at the front of the machine, and during the turning operation the chips and lubricant will fall clear of the lower eccentric member, said lathe having a frame in which said parts are mounted, and a portion of said frame arranged as a barrier between the lower eccentric member and the front of the machine.

18,663. TROLLEY HARP AND WHEEL STRUCTURE. Salvator Maggio, Pittsburgh, Pa. Original No. 1,811,362, dated June 23, 1931, Serial No. 473,737, filed Aug. 7, 1930. Application for reissue filed May 4, 1932. Serial No. 609,322. 17 Claims. (Cl. 191—62.)



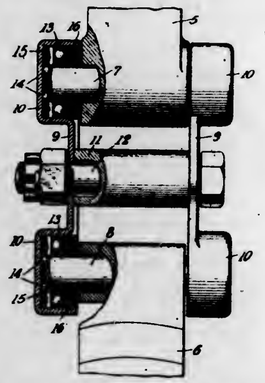
1. In a trolley harp and wheel structure, the combination of the harp, an axle mounted in the arms of the harp and insulated therefrom, a metallic bushing rotatably mounted on the axle, a wheel mounted on the bushing and insulated therefrom and from the harp, and a brush engaging the wheel and electrically connected to the harp

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18,664. SPRING END CONNECTION. Fred J. Bechert, Stamford, Conn., assignor to The Fafnir Bearing Company, New Britain, Conn., a Corporation of Connecticut. Original No. 1,757,700, dated May 6, 1930, Serial No. 285,579, filed June 15, 1928. Application for reissue filed Apr. 13, 1932. Serial No. 605,073. 14 Claims. (Cl. 267—54.)

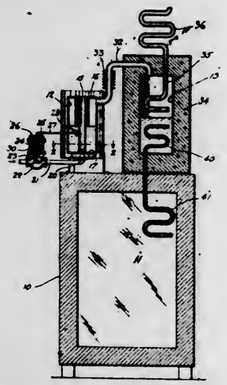
11. In a spring connection, a pair of side means, bearing means between said side means, said side means having continuous annular anti-friction bearing member raceway surfaces thereon, anti-friction bearing members between said bearing means and said raceway surfaces for sustaining radial loads and supporting said side means and said bearing means relatively to each other, said side means and said bearing means having thrust surfaces to

sustain axial thrust loads between said side means and said bearing means independently of said anti-friction bearing members, and means for detachably securing said



side means in operative position and serving when released to permit axial separation of said side means and said anti-friction bearing members from said bearing means.

18,665. REFRIGERATION. CARL GEORG MUNTERS, Stockholm, Sweden, assignor to Electrolux Servel Corporation, New York, N. Y., a Corporation of Delaware. Original No. 1,711,804, dated May 7, 1929, Serial No. 153,262, filed Dec. 8, 1926. Application for reissue filed Sept. 22, 1930. Serial No. 483,732. 14 Claims. (Cl. 62—120.).



14. A refrigerator including a chamber to be cooled, an air-cooled absorption refrigerating apparatus of the intermittent type having a heat insulated evaporator, and an hermetically sealed vessel containing a volatile fluid and having its upper portion in thermal exchange relation with said evaporator and its lower portion in thermal exchange relation with said chamber.

18,666. GOLF CLUB SHAFT. ROBERT MORGAN, West Hartford, Conn., assignor to The American Fork & Hoe Company, Cleveland, Ohio, a Corporation of Ohio. Original No. 1,848,374, dated Mar. 8, 1932, Serial No. 460,341, filed June 11, 1930. Application for reissue filed Sept. 30, 1932. Serial No. 635,699. 9 Claims. (Cl. 273—80.)



1. A golf club shaft comprising a substantially cylindrical tubular metallic handle portion and a shaft portion integral therewith including a tubular core having its external diameter decreasing from the handle portion toward the head end and having corrugations therein providing external ribs which decrease in width and increase in depth from said handle portion to said head, and an enclosing and stiffening case of composition covering said core and extending from said handle portion to the head and having inwardly directed ribs filling the external grooves of said corrugations between the ribs of said core.

18,667. VERMIFUGE AND INSECTICIDE. WILLIAM J. DENNIS, Iowa City, Iowa. Original No. 1,621,240, dated Mar. 15, 1927, Serial No. 632,358, filed Apr. 16, 1923. Application for reissue filed Feb. 25, 1929. Serial No. 342,656. 7 Claims. (Cl. 167—24.)

1. An insecticide and vermifuge comprising ground cube root with the fibrous element removed.

PLANT PATENTS

GRANTED NOVEMBER 22, 1932

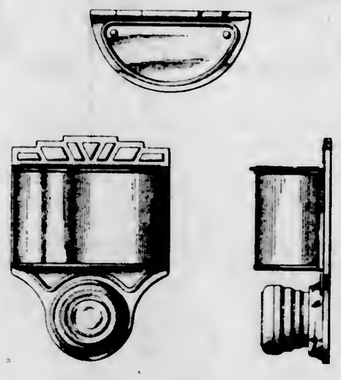
44. FREESIA. GERALD HEW DALRYMPLE, Bartley, near Southampton, England, assignor to C. J. Van Bourgondien, Babylon, N. Y. Filed June 2, 1932. Serial No. 615,053. 1 Claim. (Cl. 47—1.)

The variety of freesia herein shown and described, characterised particularly by its large orange colored flowers, profuse growth and blooming habits and rapidity of reproduction.

DESIGNS

NOVEMBER 22, 1932

88,340. COMBINED ASH RECEIVER AND CIGAR LIGHTER. JOSEPH H. COHEN, Bridgeport, Conn. Filed Sept. 8, 1931. Serial No. 41,043. Term of patent 14 years.



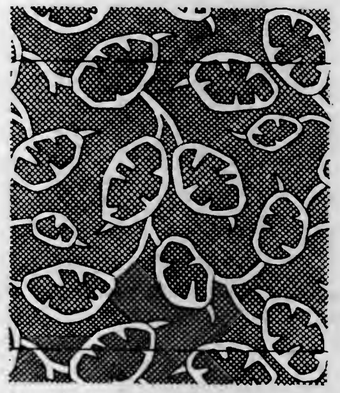
The ornamental design for a combined ash receiver and cigar lighter, as shown and described.

88,341. LACE. JEAN DOGNIN, Paris, France, assignor to The Lace Net Importing Co Inc., New York, N. Y. Filed July 15, 1932. Serial No. 44,351. Term of patent 3½ years.



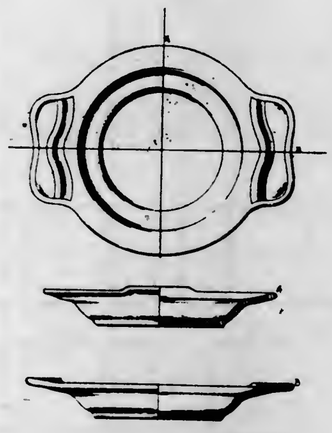
The ornamental design for lace, substantially as shown.

88,342. LACE. JEAN DOGNIN, Paris, France, assignor to The Lace Net Importing Co Inc., New York, N. Y. Filed July 15, 1932. Serial No. 44,353. Term of patent 3½ years.



The ornamental design for lace, substantially as shown.

88,343. CHILD'S PLATE OR OTHER SIMILAR ARTICLE. JOHN LEO DOWD, Meriden, Conn., assignor to International Silver Company, Meriden, Conn., a Corporation of New Jersey. Filed Aug. 10, 1932. Serial No. 44,574. Term of patent 7 years.



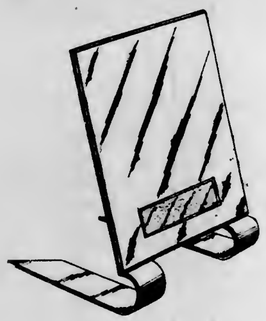
The ornamental design for a child's plate or other similar article, substantially as shown.

88,344. COUNTER MIRROR. GEORGE H. DUFOUR, Oak Park, Ill., assignor to Marshall Field & Company, Chicago, Ill., a Corporation of Illinois. Filed July 22, 1932. Serial No. 44,410. Term of patent 3½ years.



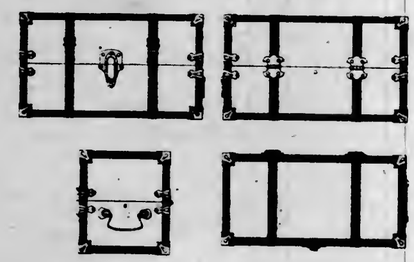
The ornamental design for a counter mirror as shown.

88,345. MIRROR. DONALD A. EDDY, Cincinnati, Ohio. Filed Mar. 14, 1932. Serial No. 43,188. Term of patent 3½ years.



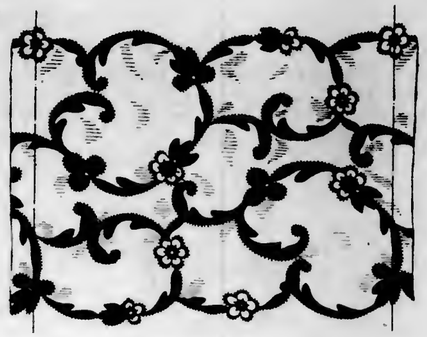
The ornamental design for a mirror as shown.

88,346. DOLL'S TRUNK. HARRY FLMSIG, New York, N. Y. Filed Apr. 22, 1932. Serial No. 43,575. Term of patent 7 years.



The ornamental design for a doll's trunk, as shown and described.

88,347. EMBROIDERED TEXTILE FABRIC OR A SIMILAR ARTICLE. ERNEST W. FREUDENBERG, Larchmont, N. Y. Filed Oct. 18, 1932. Serial No. 45,388. Term of patent 3½ years.



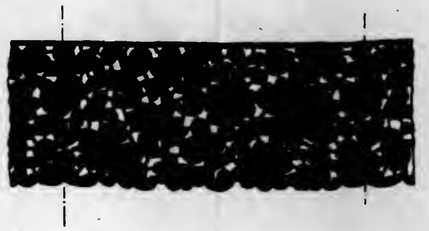
The ornamental design for an embroidered textile fabric or a similar article substantially as shown and described.

88,348. EMBROIDERED TEXTILE FABRIC OR A SIMILAR ARTICLE. ERNEST W. FREUDENBERG, Larchmont, N. Y. Filed Oct. 18, 1932. Serial No. 45,390. Term of patent 3½ years.



The ornamental design for an embroidered textile fabric or a similar article substantially as shown and described.

88,349. EMBROIDERED TEXTILE FABRIC OR A SIMILAR ARTICLE. ERNEST W. FREUDENBERG, Larchmont, N. Y. Filed Oct. 18, 1932. Serial No. 45,393. Term of patent 3½ years.



The ornamental design for an embroidered textile fabric or a similar article substantially as shown and described.

88,350. COFFEE URN OR THE LIKE. LEE B. GERAN, Lakewood, Ohio, assignor to The Globe Machine & Stamping Company, Cleveland, Ohio, a Corporation of Ohio. Filed Mar. 12, 1932. Serial No. 43,162. Term of patent 7 years.



The ornamental design for a coffee urn or the like, substantially as shown.

88,351. FUEL BRIQUETTE. PETER F. HERELY, Minneapolis, Minn., assignor, by mesne assignments, to Briquet Engineering Company, Minneapolis, Minn., a Corporation. Filed Sept. 25, 1931. Serial No. 41,222. Term of patent 14 years.



The ornamental design for a fuel briquette, as shown.

88,352. ELASTIC LACE BRAID. OTTO EUGENE HUBER, Reading, Pa., assignor to Narrow Fabric Company, West Reading, Pa., a Corporation of Pennsylvania. Filed Apr. 28, 1932. Serial No. 43,644. Term of patent 14 years.



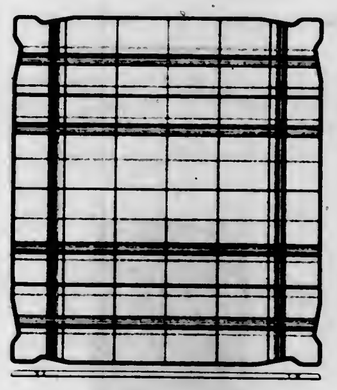
The ornamental design for an elastic lace braid, as shown and described.

88,353. LACE SCARF OR SIMILAR ARTICLE. HAGE W. HUCKNALL, Elyria, Ohio, assignor to The American Lace Manufacturing Company, Elyria, Ohio, a Corporation of Ohio. Filed Oct. 7, 1932. Serial No. 45,252. Term of patent 3½ years.



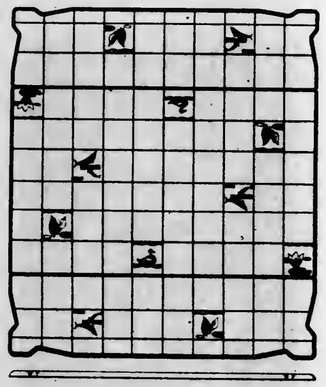
The ornamental design for a lace scarf or similar article, substantially as shown.

88,354. TABLE TOP OR THE LIKE. LEE D. JALKUT, Lawrence, N. Y., assignor to Ingram Richardson Corporation, Bayonne, N. J., a Corporation of New Jersey. Filed Sept. 10, 1932. Serial No. 44,795. Term of patent 3½ years.



The ornamental design for a table top or the like substantially as shown.

88,355. TABLE TOP OR THE LIKE. LEE D. JALKUT, Lawrence, N. Y., assignor to Ingram Richardson Corporation, Bayonne, N. J., a Corporation of New Jersey. Filed Sept. 10, 1932. Serial No. 44,796. Term of patent 3½ years.



The ornamental design for a table top or the like substantially as shown.

88,356. TOILET BRUSH. EDWARD JOHNSON, Montclair, N. J., assignor to Meinecke & Company, New York, N. Y., a Corporation of New Jersey. Filed Sept. 16, 1932. Serial No. 44,869. Term of patent 14 years.



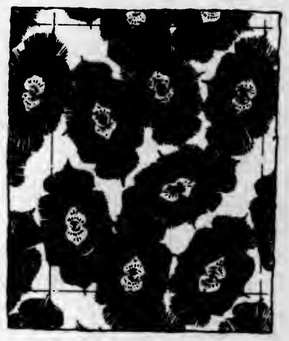
The ornamental design for a toilet brush as shown.

88,357. TEXTILE FABRIC OR THE LIKE. JULIA LUKAS, New York, N. Y. Filed Oct. 19, 1932. Serial No. 45,405. Term of patent 3½ years.



The ornamental design for a textile fabric or the like substantially as shown and described.

88,358. TEXTILE FABRIC OR THE LIKE. JULIA LUKAS, New York, N. Y. Filed Oct. 19, 1932. Serial No. 45,406. Term of patent 3½ years.



The ornamental design for a textile fabric or the like substantially as shown and described.

88,359. AUTOMOTIVE TIRE COVER. GEORGE ALBERT LYON, Allenhurst, N. J. Filed Nov. 18, 1931. Serial No. 41,766. Term of patent 14 years.



The ornamental design for an automotive tire cover as shown and described.

88,360. BOTTLE. WILLIAM BAIRD MARBLE, Los Angeles, Calif., assignor to Latchford Glass Company, Los Angeles, Calif., a Corporation of California. Filed Oct. 7, 1932. Serial No. 45,258. Term of patent 14 years.



The ornamental design for a bottle, as shown and described.

88,361. TEXTILE FABRIC OR THE LIKE. NADINE MARTINOFF, New York, N. Y., assignor to Wullschleger & Co., New York, N. Y. Filed Oct. 24, 1932. Serial No. 45,512. Term of patent 3½ years.



The ornamental design for a textile fabric or the like substantially as shown and described.

88,362. ELASTIC LACE BRAID. CLARENCE D. MAURER, West Reading, Pa., assignor to Narrow Fabric Company, West Reading, Pa., a Corporation of Pennsylvania. Filed Apr. 28, 1932. Serial No. 43,646. Term of patent 14 years.



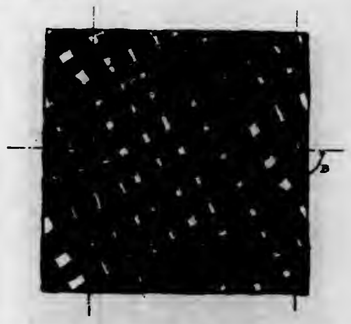
The ornamental design for an elastic lace braid, as shown and described.

88,363. TEXTILE FABRIC OR THE LIKE. GEORGES MEGROZ, Bronxville, N. Y., assignor to Combier & Co. Inc., New York, N. Y., a Corporation of Delaware. Filed Oct. 4, 1932. Serial No. 45,200. Term of patent 3½ years.



The ornamental design for a textile fabric or the like substantially as shown and described.

88,364. TEXTILE FABRIC OR THE LIKE. GEORGES MEGROZ, Bronxville, N. Y., assignor to Combier & Co. Inc., New York, N. Y., a Corporation of Delaware. Filed Oct. 4, 1932. Serial No. 45,202. Term of patent 3½ years.



The ornamental design for a textile fabric or the like substantially as shown and described.

88,365. SHOE. CHARLES MILLER, New York, N. Y. Filed July 22, 1932. Serial No. 44,420. Term of patent 3½ years.



The ornamental design for a shoe, as shown.

88,366. GOLF BALL EMBOSSER. HARRY W. MOORE, Dayton, Ohio. Filed May 29, 1931. Serial No. 40,026. Term of patent 7 years.



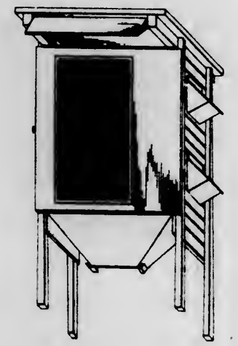
The ornamental design for a golf ball embosser, as shown.

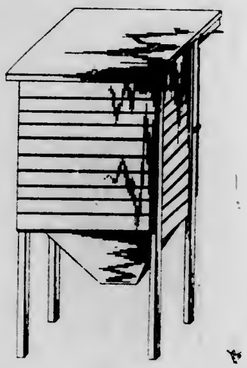
88,367. CARPET. ANTHONY E. SMIDLEIN, Yonkers, N. Y., assignor to Bigelow Sanford Carpet Co., Inc., a Corporation of Massachusetts. Filed Oct. 6, 1932. Serial No. 45,285. Term of patent 7 years.



The ornamental design for a carpet substantially as shown and described.

88,368. RABBIT HUTCH. ABRAHAM DEWEY STONER, New Windsor, Md. Filed Sept. 18, 1931. Serial No. 41,137. Term of patent 7 years.





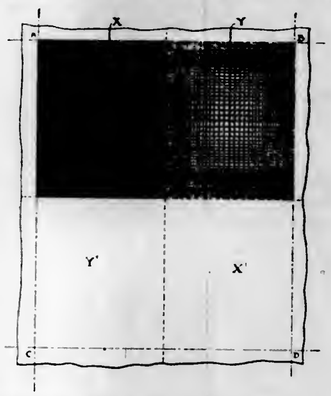
The ornamental design for a rabbit hutch, as shown.

88,369. PIN. WALTER H. UNVERSAW, Kokomo, Ind. Filed Mar. 17, 1932. Serial No. 43,219. Term of patent 3½ years.



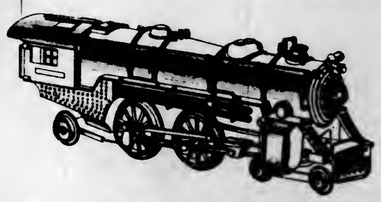
The ornamental design for a pin as shown.

88,370. TEXTILE FABRIC OR SIMILAR ARTICLE. WILLIAM WILLHEIM, New York, N. Y. Filed Oct. 14, 1932. Serial No. 45,338. Term of patent 3½ years.



The ornamental design for a textile fabric or similar article as shown and described.

88,371. LOCOMOTIVE FOR TOY RAILWAYS. JAMES E. CUFF, Hinsdale, Ill., assignor to American Flyer Mfg. Co., Chicago, Ill., a Corporation of Illinois. Filed Dec. 1, 1930. Serial No. 37,861. Term of patent 14 years.



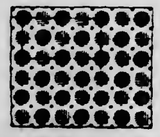
The ornamental design for a locomotive for toy railways, as shown.

88,372. EMBROIDERED TEXTILE FABRIC OR A SIMILAR ARTICLE. ERNEST W. FREUDENBERG, Larchmont, N. Y. Filed Oct. 18, 1932. Serial No. 45,391. Term of patent 3½ years.



The ornamental design for an embroidered textile fabric or a similar article substantially as shown and described.

88,373. TEXTILE FABRIC OR THE LIKE. JULIA LUKAS, New York, N. Y. Filed Oct. 25, 1932. Serial No. 45,549. Term of patent 3½ years.



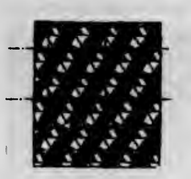
The ornamental design for a textile fabric or the like substantially as shown and described.

88,374. TEXTILE FABRIC OR THE LIKE. JULIA LUKAS, New York, N. Y. Filed Oct. 25, 1932. Serial No. 45,550. Term of patent 3½ years.



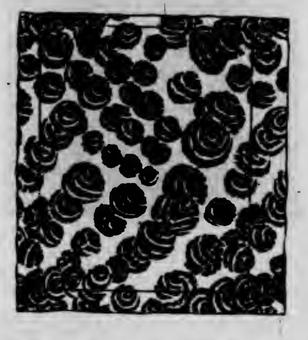
The ornamental design for a textile fabric or the like substantially as shown and described.

88,375. TEXTILE FABRIC OR THE LIKE. JULIA LUKAS, New York, N. Y. Filed Oct. 25, 1932. Serial No. 45,552. Term of patent 3½ years.



The ornamental design for a textile fabric or the like substantially as shown and described.

88,376. TEXTILE FABRIC OR THE LIKE. JULIA LUKAS, New York, N. Y. Filed Oct. 25, 1932. Serial No. 45,553. Term of patent 3½ years.



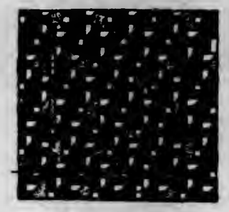
The ornamental design for a textile fabric or the like substantially as shown and described.

88,377. TEXTILE FABRIC OR THE LIKE. JULIA LUKAS, New York, N. Y. Filed Oct. 25, 1932. Serial No. 45,554. Term of patent 3½ years.



The ornamental design for a textile fabric or the like substantially as shown and described.

88,378. TEXTILE FABRIC OR THE LIKE. JULIA LUKAS, New York, N. Y. Filed Oct. 25, 1932. Serial No. 45,555. Term of patent 3½ years.



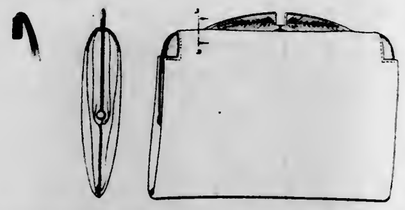
The ornamental design for a textile fabric or the like substantially as shown and described.

88,379. TEXTILE FABRIC OR THE LIKE. JULIA LUKAS, New York, N. Y. Filed Oct. 25, 1932. Serial No. 45,556. Term of patent 3½ years.



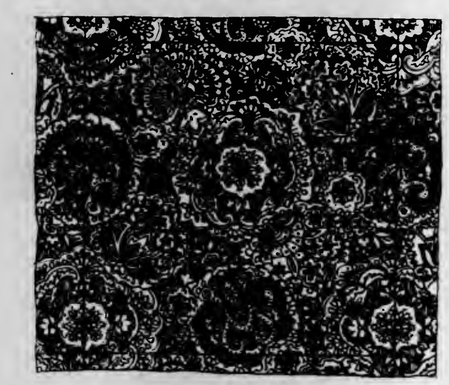
The ornamental design for a textile fabric or the like substantially as shown and described.

88,380. HAND BAG. SAMUEL MAKSIK, Brooklyn, N. Y., assignor to Michel, Maksik & Feldman, Inc., New York, N. Y., a Corporation of New York. Filed Aug. 10, 1932. Serial No. 44,571. Term of patent 3½ years.



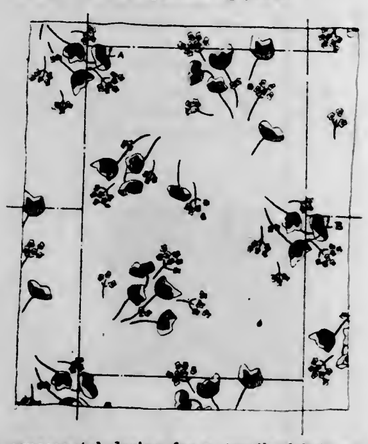
The ornamental design for a hand bag substantially as shown and described.

88,381. TEXTILE FABRIC OR THE LIKE. NADINE MARTINOFF, New York, N. Y., assignor to Wullschleger & Co., New York, N. Y. Filed Oct. 24, 1932. Serial No. 45,513. Term of patent 3½ years.



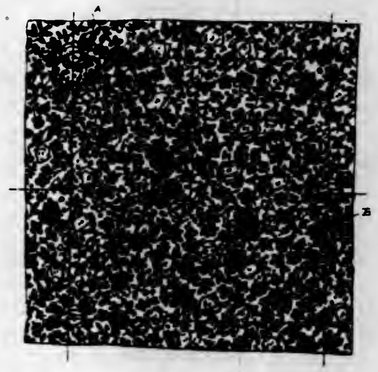
The ornamental design for a textile fabric or the like substantially as shown and described.

88,382. TEXTILE FABRIC OR THE LIKE. NADINE MARTINOFF, New York, N. Y., assignor to Wullschleger & Co., New York, N. Y. Filed Oct. 25, 1932. Serial No. 45,559. Term of patent 3½ years.



The ornamental design for a textile fabric or the like substantially as shown and described.

88,383. TEXTILE FABRIC OR THE LIKE. NADINE MARTINOFF, New York, N. Y., assignor to Wullschleger & Co., New York, N. Y. Filed Oct. 25, 1932. Serial No. 45,562. Term of patent 3½ years.



The ornamental design for a textile fabric or the like substantially as shown and described.

88,384. TEXTILE FABRIC OR THE LIKE. NADINE MARTINOFF, New York, N. Y., assignor to Wullschleger & Co., New York, N. Y. Filed Oct. 25, 1932. Serial No. 45,568. Term of patent 3½ years.



The ornamental design for a textile fabric or the like substantially as shown and described.

88,385. TEXTILE FABRIC OR SIMILAR ARTICLE. HERMAN S. MURRAY, Woodmere, N. Y., assignor to William Willheim Co., Inc., New York, N. Y. Filed Oct. 22, 1932. Serial No. 45,493. Term of patent 3½ years.



The ornamental design for a textile fabric or similar article as shown and described.

88,386. TEXTILE FABRIC OR SIMILAR ARTICLE. HERMAN S. MURRAY, Woodmere, N. Y., assignor to William Willheim Co., Inc., New York, N. Y. Filed Oct. 22, 1932. Serial No. 45,495. Term of patent 3½ years.



The ornamental design for a textile fabric or similar article as shown and described.

88,387. TEXTILE FABRIC OR SIMILAR ARTICLE. HERMAN S. MURRAY, Woodmere, N. Y., assignor to William Willheim Co., Inc., New York, N. Y. Filed Oct. 22, 1932. Serial No. 45,496. Term of patent 3½ years.



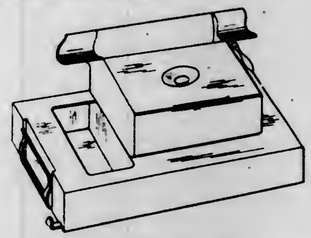
The ornamental design for a textile fabric or similar article as shown and described.

88,388. TEXTILE FABRIC OR SIMILAR ARTICLE. FRANÇOIS J. SCHAETZEL, Staten Island, N. Y., assignor to William Willheim Co., Inc., New York, N. Y. Filed Oct. 22, 1932. Serial No. 45,457. Term of patent 3½ years.



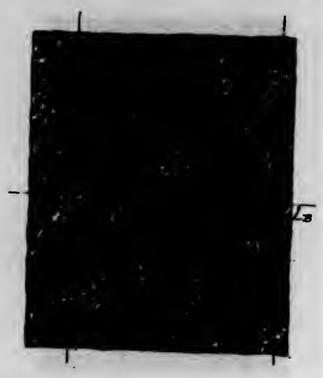
The ornamental design for a textile fabric or similar article as shown and described.

88,389. SMOKER'S DEVICE. WALTON W. TAIGG, Cincinnati, Ohio. Filed Aug. 16, 1932. Serial No. 44,620. Term of patent 3½ years.



The ornamental design for a smoker's device substantially as shown.

88,390. TEXTILE FABRIC OR THE LIKE. IRENE A. WEITZ, Brooklyn, N. Y. Filed Oct. 25, 1932. Serial No. 45,547. Term of patent 3½ years.



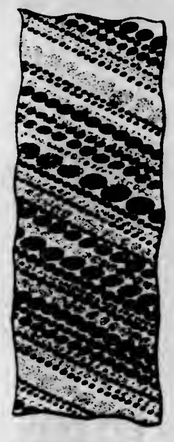
The ornamental design for a textile fabric or the like substantially as shown and described.

88,391. TEXTILE FABRIC OR SIMILAR ARTICLE. WILLIAM WILLHEIM, New York, N. Y. Filed Oct. 22, 1932. Serial No. 45,460. Term of patent 3½ years.



The ornamental design for a textile fabric or similar article as shown and described.

88,392. TEXTILE FABRIC OR SIMILAR ARTICLE. WILLIAM WILLHEIM, New York, N. Y. Filed Oct. 22, 1932. Serial No. 45,462. Term of patent 3½ years.



The ornamental design for a textile fabric or similar article as shown and described.

88,393. HAND BAG. MORRIS WHITE, New York, N. Y., assignor to Morris White Mfg. Co. Inc., a Corporation of New York. Filed Oct. 12, 1932. Serial No. 45,320. Term of patent 3½ years.

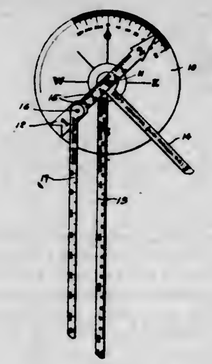


The ornamental design for a handbag as shown and described.

PATENTS

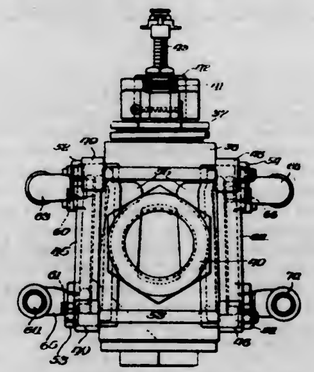
GRANTED NOVEMBER 22, 1932

1,888,206. AIRPLANE COURSE CORRECTOR. HOWARD D. ALLEN, Los Angeles, Calif. Filed Aug. 22, 1929. Serial No. 387,638. 2 Claims. (Cl. 33—76.)



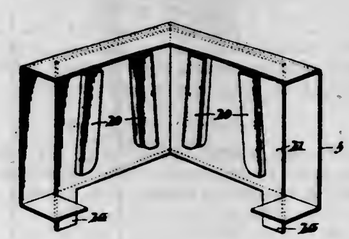
1. An instrument for the study of navigation comprising a compass dial, a wind arm, a ground speed arm and a compass course arm pivoted to the center of the compass dial, a vehicle speed arm pivoted to the wind arm, said wind arm being capable of being adjusted with respect to the center of the compass dial in accordance with various wind velocities.

1,888,207. LUBRICATED PLUG VALVE. FRANCIS NORWOOD BARD, Highland Park, Ill., assignor to Walworth Patents Inc., Boston, Mass., a Corporation of Massachusetts. Filed Dec. 31, 1927. Serial No. 243,994. 5 Claims. (Cl. 251—91.)



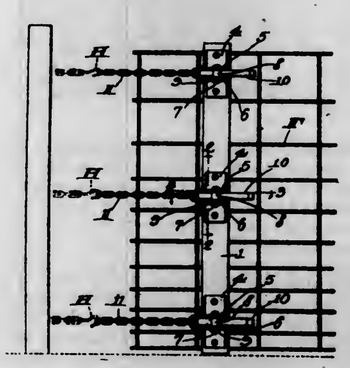
2. In a device of the character described, in combination, a valve casing having a substantially cylindrical portion, heating jackets having heat conducting walls conforming to the shape of and in contact with opposite sides of said cylindrical portion, means for connecting said jackets to produce a circulation of heating fluid simultaneously through each of said jackets and means extending across said casing and clamping the heat conducting walls of said jackets against said cylindrical portion.

1,888,208. METALLIC FURNITURE. FRANK C. FERGUSON, Philadelphia, Pa., assignor to David Lupton's Sons Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Mar. 29, 1932. Serial No. 601,736. 2 Claims. (Cl. 45—48.)



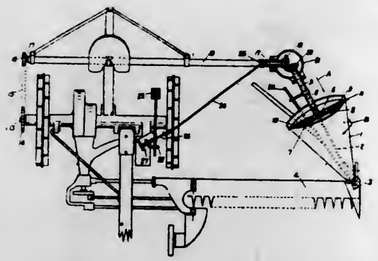
1. A leg attachment construction for metallic furniture comprising a sheet metal box-frame having on adjacent sides at its corner pairs of upward-converging inward-offset ears, a post or leg structure having on adjacent sides undercut heads for hooking behind said ears and wedging between them, and means for securing said leg structure against disengagement of its heads from said ears.

1,888,209. CLAMP. HERMAN KREBS, Sunbury, Iowa. Filed Apr. 9, 1932. Serial No. 604,343. 3 Claims. (Cl. 254—33.)



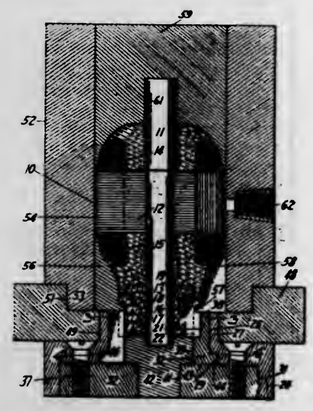
1. A fence clamp including opposed bars having transverse slots arranged in pairs, tie plates extending through the slots and projecting outwardly from the bars, removable connections between the end portions of the plates of each pair, wedging slides movably mounted between the bars and said connections, and means for connecting a power mechanism to the wedging slides to shift the bars toward each other in proportion to the power applied.

1,888,210. AGRICULTURAL REAPING MACHINE. ALEXANDER SANDS MOIR, Stirling, Scotland. Filed Oct. 29, 1931. Serial No. 571,787. 2 Claims. (Cl. 56—317.)



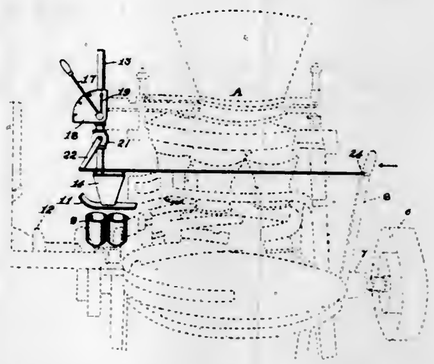
1. In an agricultural reaping machine, the combination with a cutter of a forwardly directed rotary cone located at the outer end of said cutter, and crop-entraining means including sun-and-planet gear mechanism incorporated in said cone and rods adapted to be projected radially of said cone beyond the outer surface of said cone.

1,888,211. MOLD FOR INSULATING AN ARMATURE. VINCENT G. APPLE, Dayton, Ohio. Filed Feb. 3, 1930. Serial No. 425,685. 3 Claims. (Cl. 18—34.)



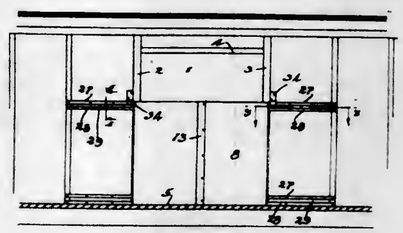
3. For insulating an armature comprising a core, a winding on said core, and a commutator axially spaced apart from said core said commutator having open spaces between the segments at the active surface, a mold having a lower section to receive the active portion of said commutator, said lower section comprising in combination, sheet metal spacers equal in number, in spacing and in thickness to said open spaces in said commutator but wider and longer and having outwardly extending L ends at the bottom, a stepped member having a cylindrical upper portion of two outside diameters, the smaller outside diameter at the top, and two inside diameters, the larger inside diameter at the top, said larger inside diameter corresponding to the outside diameter of the commutator, said cylindrical upper portion having slots to receive said L shaped sheet metal spacers, said slots completely containing said L shaped spacers except where they extend radially inward into said inside upper diameter of said cylindrical upper portion, a base portion having two inside diameters to fit over the two said outside diameters of said cylindrical upper portion, and a plug to fit the smaller of the two said inside diameters.

1,888,212. LIQUID SUPPLY MECHANISM. CHARLES H. AYARS, Salem, N. J., assignor to Ayars Machine Company, Salem, N. J., a Corporation of New Jersey. Filed Jan. 8, 1930. Serial No. 419,427. 1 Claim. (Cl. 226—100.)



In combination with a can filling machine having an operating handle, of means comprising a fluid pipe for supplying liquid to said cans and having a gate valve in said pipe for opening and closing the passageway for said liquid, and means connecting said gate valve with the operating handle of said machine whereby the gate valve is fully opened when the machine is operated and totally closed when the machine is stopped.

1,888,213. GRAIN CAR DOOR. ARTHUR B. H. BAKER, Portage La Prairie, Manitoba, Canada. Filed Feb. 16, 1931, Serial No. 515,998, and in Canada May 5, 1930. 2 Claims. (Cl. 20—31.)

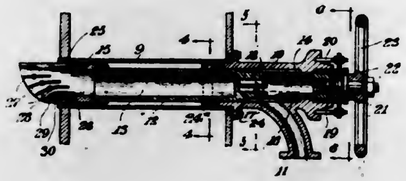


1. In a grain door for a grain car, pairs of guiding members secured to the interior wall of the car containing the doorway opening and forming upper and lower horizontally disposed key hole slots, a pair of similar door sections adapted to close the doorway opening with their inner ends butted and their outer ends to the inner sides of the posts; heads permanently secured to the outer ends of the sections and slidably received within the key hole slots of the guiding members, said guiding members and heads being designed to permit of the out swinging of the door sections under the pressure of the grain within the car and while retaining the door sections anchored to the car and means for releasably fastening the butted ends of the sections together to withstand the outward pressure of the grain within the car.

1,888,214. BOILER TUBE BLOWER. OLE K. BOGSTRAND, Brooklyn, N. Y. Filed Nov. 12, 1926. Serial No. 147,863. 7 Claims. (Cl. 122—391.)

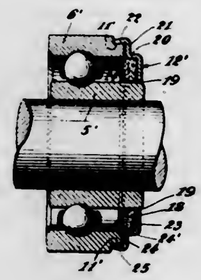
1. A boiler tube blower located in proximity to the tubes to be cleaned and the boiler fire box comprising a body portion having a longitudinal bore, a plurality of

relatively thin vanes mounted within the bore adjacent the exit end thereof, and another relatively thick vane also mounted within the bore adjacent the exit end thereof and spaced from the wall of the nozzle to form an orifice for emitting a jet of steam in a direction substantially perpendicular to the axis of the nozzle bore, said thick vane



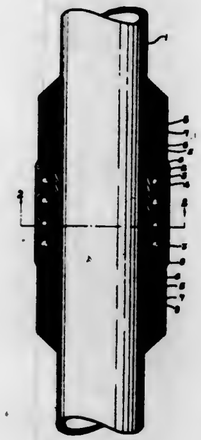
being so constructed and arranged as to provide a substantially fan-shaped area substantially void of steam between the streams of steam emitted from orifices formed by the thin vanes and the substantially perpendicular jet of steam when the blower is in operation so that steam will be prevented from being projected into the fire in the fire box of the boiler.

1,888,215. ANTIFRICTION BEARING. GEORGE R. BOTT, Stamford, Conn., assignor to Norma-Hoffmann Bearings Corporation, Stamford, Conn., a Corporation of New York. Filed Feb. 6, 1930. Serial No. 426,252. 4 Claims. (Cl. 308—187.)



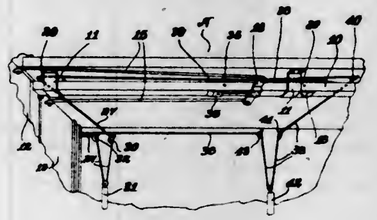
1. An anti-friction bearing unit including inner and outer circular members, bearing elements between said members, said inner circular member being of greater width than the outer member and projecting at one of its ends laterally beyond the latter, said outer circular member having an annular groove in its outer surface provided with a base wall inclined inwardly from one end face of said member, a cup-shaped side plate consisting of a sheet metal stamping arranged with the open side of the cup opposed to the space between said inner and outer circular members and having its outer edge angularly offset and pressed into said groove in bearing contact upon the inclined base wall thereof to retain said plate in fixed relation to the outer circular member, the body wall of said cup having a central opening through which the end of the inner circular member projects, a felt sealing gasket within said cup and in contact with the outer surface of said inner circular member, and a sheet metal washer plate having an inner portion bearing against the inner side of said gasket to confine the same within the cup and having its outer edge portion rigidly clamped by a part of said side plate against the edge face of the outer circular member.

1,888,216. ANTIFRICTION DEVICE. CLINTON H. M. BULL, Houston, Tex., assignor to Reed Roller Bit Company, Houston, Tex., a Corporation of Texas. Filed Dec. 27, 1927. Serial No. 242,921. 1 Claim. (Cl. 308—6.)



The combination with a drill pipe of an anti-friction device having a pair of pipe gripping elements, each of said elements comprising an inner and an outer sleeve, said inner sleeve having a radial opening therein and said outer sleeve having a tapered portion adjacent said opening, and a pipe gripping plug movable in said opening and actuated by said portion when said sleeves are moved with respect to each other; a bushing between said elements; a plurality of collar sections on said bushing, said collar sections being revoluble independently of each other; and balls between each of said sections and said bushing.

1,888,217. DOOR OPERATING AND LOCKING MECHANISM. FRANK G. BUTLER, Fargo, N. Dak. Filed Sept. 18, 1929. Serial No. 392,352. 8 Claims. (Cl. 268—62.)



1. A door operating and locking mechanism including, a controlling beam member, means for supporting said beam slidable longitudinally thereof, connecting arms adapted to connect said beam with the doors, catch means for holding said beam against longitudinal movement, means for lifting said beam into releasing position and simultaneously operating said beam to open or close the doors.

1,888,218. MANICURE TOOL. HUGH R. BYNUM, Memphis, Tenn. Filed Jan. 19, 1931. Serial No. 509,611. 2 Claims. (Cl. 132—73.)

1. An abrasive tool, comprising a holder and cooperating abrasive blade therefor, said holder comprising a handle having at one end a jaw arcuate in transverse section, a

complementary arcuate jaw detached therefrom, and a clamping screw rotatably secured in said detached jaw and adapted to pass through said blade and engage with

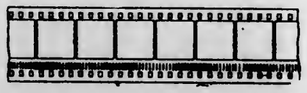


threads in the other jaw, one of said jaws having projecting pins and the other thereof having complementary holes for the reception of said pins.

1,888,219. METHOD OF FORMING SWEETENING REAGENT. HUGH HARLEY CANNON, Los Angeles, Calif., assignor to Cannon-Prutzman Treating Processes, Ltd., Los Angeles, Calif., a Corporation of California. Filed Sept. 24, 1930. Serial No. 484,129. 5 Claims. (Cl. 252—1.)

1. The method of preparing a sweetening reagent comprising litharge, an alkali earth hydroxid and an absorbent earth, all in solid comminuted form, together with an aqueous constituent, which comprises: intimately intermingling said constituents in suspension in the minimum quantity of an oily vehicle, said quantity being materially less than the quantity of oil to be treated by said reagent.

1,888,220. SOUND PICTURE SYSTEM. SHELBY C. CHAPMAN, New York, N. Y., assignor to Electrical Research Products Inc., New York, N. Y., a Corporation of Delaware. Filed June 6, 1929. Serial No. 368,902. 4 Claims. (Cl. 88—16.2.)



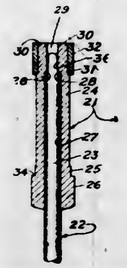
2. The method of making a composite photographic sound record which comprises printing one sound record on a sensitive film then printing a second sound record on the same film superimposed on the first print to form one composite sound record and developing the film.

1,888,221. FISH LURE. GEORGE M. COFFIN, Hinsdale, Ill. Filed Mar. 27, 1929. Serial No. 350,175. 8 Claims. (Cl. 43—42.)



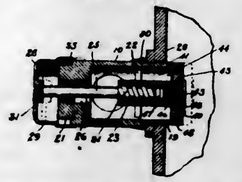
1. An animated fish lure comprising a body formed in simulation of a live bait, a flexible member extending rearwardly of the body to simulate a movable extremity of the live bait, a guide formed in said body, means connecting the flexible member to a fish line, said means extending in said guide whereby to cause the flexible member to move in realistic simulation of the natural movements of the live bait when the fish line is tensioned, and a forwardly and downwardly extending resilient member secured to the forward portion of said body, means formed and arranged in the body whereby the lure will float in water with the resilient member in position to engage and be flexed by submerged obstructions which the lure may meet during fishing operations whereby to employ the resilience of the member to throw the lure upwardly of the obstruction thereby causing the same to jump in a life-like manner whenever an obstruction is met.

1,888,222. SCREW DRIVER. HARRY B. CURTIS, Huntington, and ARTHUR E. KEATING, Bridgeport, Conn., assignors to The Bridgeport Hardware Manufacturing Corporation, Bridgeport, Conn., a Corporation of Connecticut. Filed Dec. 26, 1931. Serial No. 583,298. 5 Claims. (Cl. 145—61.)



1. A screw driver comprising a handle and a blade, a metal insert in said handle, said insert comprising an elongated member having a recess opening through the outer end thereof and receiving a portion of the blade, said insert having a transverse kerf across its inner end providing plane surfaces at the inner end of the recess, means to prevent lateral yielding of the walls of the kerf, and said blade being flattened at its inner end and tapered to enter the kerf to cooperate with the walls thereof to secure the handle and blade against casual separation and permit the blade to be withdrawn from the handle.

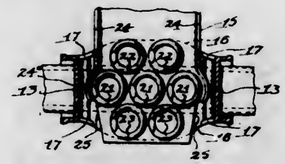
1,888,223. VALVE. GROVER C. FRANTZ, Harrisburg, Pa., assignor to Dauphin Deposit Trust Company, Harrisburg, Pa. Filed Oct. 28, 1930. Serial No. 491,660. 8 Claims. (Cl. 251—43.)



6. A valve organization comprising a body having one open end externally threaded and terminating in a valve seat, a valve closing said open end and seated upon the valve seat, said valve being provided with a bleeder perforation, a closure for the bleeder perforation, a hub located within the body and provided with internal threads, a valve stem extending through the hub and having threaded connection therewith, and a cap carried by the valve stem embracing the body at the end opposite the threads.

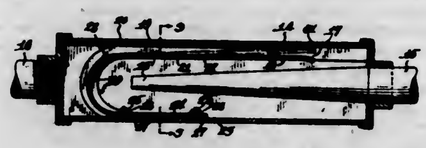
1,888,224. SIDE FRAME. CLARENCE B. HARBISON, Lima, Ohio, assignor to The Ohio Steel Foundry Company, Lima, Ohio, a Corporation of Ohio. Filed May 18, 1931. Serial No. 538,097. 3 Claims. (Cl. 105—208.)

1. In a truck, a side frame including compression and tension members and a pair of upright columns, said tension member having laterally extending flanges forming an extended support, a spring plank resting on said support, said spring plank having laterally projecting portions between said columns adapted to accommodate a plurality of coil springs, and upright flanges formed along the op-



posite sides of said spring plank, said flanges being of reduced height along the sides of said widened portions of said spring plank and terminating immediately in front of said widened portions to permit the adjacent springs to be withdrawn forwardly therefrom.

1,888,225. AUTOMATIC THERMOSTATIC CONTROL VALVE. ROBERT HETHERINGTON, Sharon Hill, Pa. Filed Dec. 24, 1928. Serial No. 328,261. 9 Claims. (Cl. 236—93.)



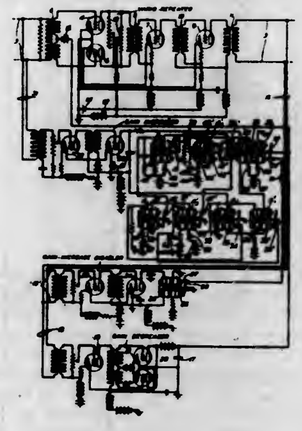
4. A thermostatic valve comprising a casing having a rear wall and spaced side walls and a thermostat having a U-shaped arm adapted to seal against excessive leakage between it and the side walls in the closed position of the valve and to form a passage when the valve is open between the arm and the rear wall but to seal by its outer surface against leakage between it and the rear wall with continued thermal expansion of the thermostatic arm.

1,888,226. TEAT CUP. BESSIE S. HOGELAND, Glen Ridge, N. J. Filed June 7, 1929. Serial No. 369,027. 6 Claims. (Cl. 31—85.)



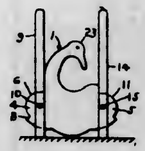
6. An elastic teat cup inflation comprising a rubber lining and a reinforcement consisting of a plurality of layers of threads, the threads of a layer crossing the threads of the adjacent layer at an angle without being interwoven therewith, the threads of each layer extending obliquely to the axis of the inflation at substantially equal but opposite angles.

1,888,227. VOLUME CONTROL SYSTEM. ARTHUR W. HORTON, Jr., East Orange, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Aug. 29, 1931. Serial No. 560,131. 10 Claims. (Cl. 178—44.)



1. In a signal transmission system, a signal transmission path subject to interfering noise waves, wave-controlled means connected to said path and responsive to waves therein above a given level to adjust the gain of said path, and means under control of the noise waves in said path above said certain level, for reducing the operating sensitivity of the gain adjusting means to prevent its false operation by said noise waves alone.

1,888,228. COMBINED COAT HANGER AND HAT STAND. EMMA F. HUNT, New York, N. Y. Filed Aug. 2, 1929. Serial No. 383,007. 1 Claim. (Cl. 223—61.)

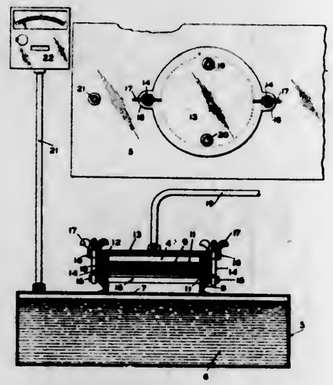


In a combination apparel hanger and hat stand, a base formed to provide a hanging means, with bifurcated, pivoted arms, each side of the base piece having a sector and stops to provide means for engaging and positioning the said bifurcated arm against the stops, said arms positionable against said stops, providing a hat stand.

1,888,229. GAS ANALYZER. WILLIAM KEMP, St. Louis, Mo. Filed Dec. 4, 1931. Serial No. 578,918. 5 Claims. (Cl. 73—51.)

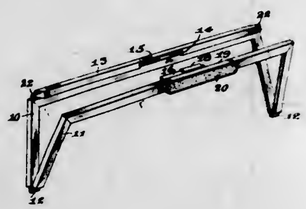
1. In a device of the class described, an absorption chamber provided with a seat, a diffusion plate, an im-

pervious binding surrounding the periphery of said plate and having inwardly extending flanges overlapping both



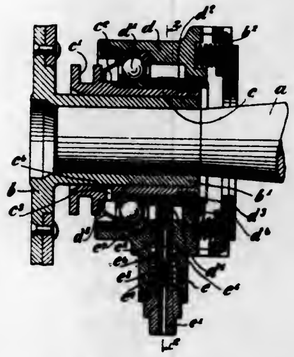
faces thereof, one of said flanges bearing on said seat, a cover contacting with the other of said flanges, and clamping means for securing the cover in position.

1,888,230. FASTENING DEVICE FOR BAGS. HARRY LEBERMAN, New York, N. Y., assignor to Groove Lock Co. Inc., New York, N. Y., a Corporation of New York. Filed May 14, 1930. Serial No. 452,356. 2 Claims. (Cl. 292—145.)



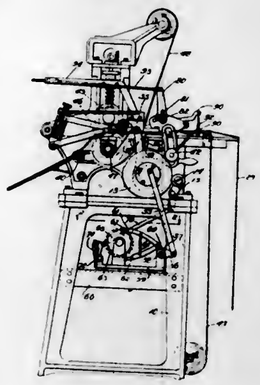
1. A fastening device for a pair of movable pivotally connected inverted U-shaped bag frames, the first of which has a channel rail on its top side adapted to overlap the top of the second frame when in closed relation, and have the sides thereof in alignment with the outer sides of the frames, said rail having a longitudinally recessed side portion intermediate the ends thereof with a depending locking lip disposed in the recess and facing the inner side of the other opposing frame, a guide strip projecting from the inner face of the other frame, having a length substantially equal to that of the recess and adapted to fit into the recessed portion of the rail on the first frame so as to be in axial alignment therewith, a locking member slidably mounted on said guide strip for fitting into the recess to slide behind the depending lip when moved in one direction, and a vertically disposed finger hold connected to said slide arranged against the outer side face of the opposing frame whereby to push one frame against the other in closed position and slide the locking member into the recess and against the inside of the depending lip, said finger hold having its top portion co-extensive with the top of the channel rail and one face in flush sliding contact with the outer face of the second frame.

1,888,231. POSITIVE LUBRICATING DEVICE FOR CLUTCH THROW-OUT BEARINGS. BRUNO LOEFFLER, Plainfield, N. J., assignor to International Motor Company, New York, N. Y., a Corporation of Delaware. Filed Sept. 12, 1929. Serial No. 392,081. 1 Claim. (Cl. 308—122.)



A lubricating device comprising relatively rotatable elements, a bearing therebetween, a source of lubricant under pressure, a chamber carried by one of the elements, the source of lubricant communicating with the chamber, a plunger in the chamber movable radially with respect to the axis of the bearing, an axial passage and a radial port in the plunger forming a communication between the source of lubricant and the chamber and bearing, said port being adapted to be closed by the walls of the chamber, a coiled cylindrical spring coaxial with the plunger and source of lubricant whereby uninterrupted flow of the lubricant is afforded, and a radial cam on the other element engaging the plunger to close the port therein intermittently.

1,888,232. PLAITING MACHINE. LAWRENCE E. MCDONOUGH, Chicago, Ill. Filed Dec. 26, 1928. Serial No. 328,476. 10 Claims. (Cl. 223—44.)



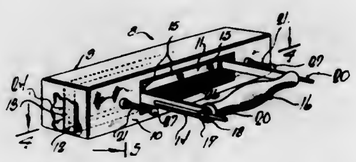
1. In a plaiting machine, mechanism for forming side plaits, reverse plaits, box plaits or combinations thereof, and selective means operable at will for instantaneously setting the mechanism to form any one of said types of plaits, said machine adapted to normally form side plaits independently of the selective operative means; and said selective means including separate operating cams for reverse plaits, box plaits, and combination plaits.

1,888,233. ROOF AND WALL STRUCTURE. KARL MENNICKEN, Essen, Germany. Filed Dec. 11, 1928, Serial No. 325,267, and in Germany Nov. 26, 1927. 2 Claims. (Cl. 108—1.)



1. A structure substantially as herein described for roofs, walls and the like consisting of two series of vertically disposed intersecting lamellas the member of each series being parallel with each other, the ends of the members of the first series being adjoined to members of the other at a point approximately one-third from their ends, the opposite sides of the members of the first series being adjoined by the ends of members of the second series at points one-third the length of the members of the first series, and bolted fastening devices joining the lamellas at their jointures whereby the angle formed between the adjoining end and the one-third length of the members is an acute angle.

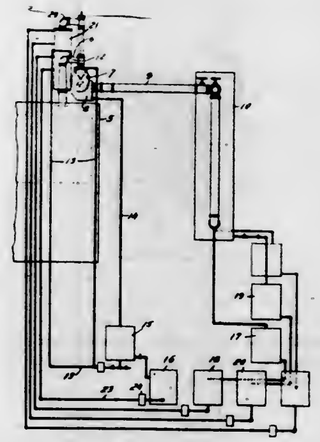
1,888,234. METHOD OF AND APPARATUS FOR APPLYING WALL FINISHES. EDWARD J. MILLER, Milwaukee, Wis. Filed Nov. 9, 1929. Serial No. 406,025. 12 Claims. (Cl. 25—1.)



12. A tool for applying plastic material to a wall comprising a casing having an open front and adapted to hold a quantity of plastic material, a plunger movable within the casing, a handle for moving the plunger outwardly of the casing to press the plastic material therein onto the wall, means carried by the plunger projecting through the closed back of the receptacle to freely rotatably mount the handle, and means connected with the handle and engageable with the receptacle closed rear wall to limit the outward movement of the plunger by the handle and regulate the degree of compression to which the plastic material is subjected and its thickness on the wall, said limiting means being movable with the handle to enable the same to be readily moved out of operative position to permit the casing to be withdrawn from the pressed material on the wall while the plunger is retained thereagainst.

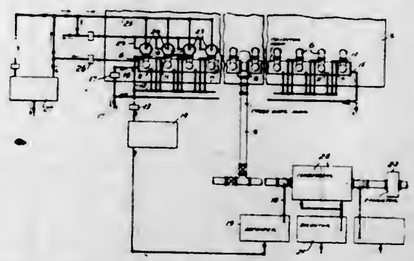
1,888,235. DISTILLATION OF TAR. STUART PARMELEE MILLER, Tenafly, N. J., assignor to The Barrett Company, New York, N. Y., a Corporation of New Jersey. Filed Mar. 14, 1927. Serial No. 175,075. 4 Claims. (Cl. 202—64.)

1. The method of distilling tar, which comprises passing hot coke-oven gases through successive sprays of coal tar immediately after the gases leave the ovens, thereby effecting distillation of the tar, the first spray being subjected thereby to the maximum temperature of the gases and each of the succeeding sprays being subjected



to gases of progressively decreasing temperatures, and separately collecting the residue from the distillation of the tar in the successive tar sprays.

1,888,236. DISTILLATION OF TAR. STUART PARMELEE MILLER, Tenafly, N. J., assignor to The Barrett Company, New York, N. Y., a Corporation of New Jersey. Filed Mar. 15, 1927. Serial No. 175,480. 8 Claims. (Cl. 202—66.)

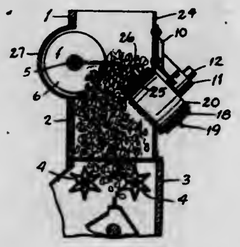


1. The improvement in the distillation of tar and production of pitch in combination with the distillation of coal in a coke oven, which comprises spraying tar into hot coke-oven gases immediately after withdrawal thereof from the coke oven to distill the tar and produce pitch, thereafter subjecting the gases to intimate contact with tar in volume sufficient to effect substantial cooling of the gases with only a limited distillation of the tar and further cooling the gases and vapors carried thereby to recover condensable constituents.

1,888,237. MECHANICAL COTTON DISTRIBUTOR. ORVILLE MITCHELL, Dallas, Tex. Filed Dec. 5, 1930. Serial No. 500,238. 6 Claims. (Cl. 19—74.)

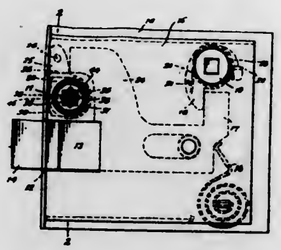
1. In a cotton distributor, in combination with a housing having a plurality of depending hoppers and with

means for feeding cotton into one end of said housing, means for distributing cotton to said hoppers comprising a screw conveyor mounted in said housing to extend over



said hoppers, and an endless carrier having a working side traveling in spaced parallel relation to, and cooperating with said conveyor.

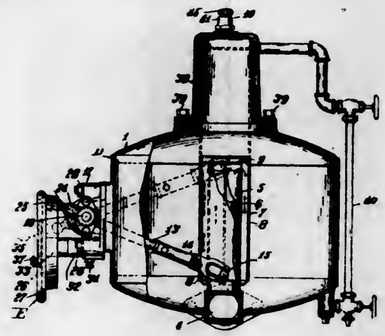
1,888,238. LATCH. RAYMOND G. MOORE, Bridgeport, Conn., assignor to The Bassick Company, Bridgeport, Conn. Filed Jan. 13, 1930. Serial No. 420,451. 5 Claims. (Cl. 292—348.)



5. In a latch, a latch casing having roll-back bearing means, a latch bolt, a pair of members supported in said casing by said bearing means, one of said members constituting a roll-back for retracting said bolt, abutment means on said casing adapted to restrict movement of the other of said members; each of said members having an opening of non-circular cross-section normally out of register with each other adapted upon predetermined rotary movement of said roll-back member relatively to the other member to be disposed in registering relation, and a rotary handle shaft engaged in the openings of said members and adapted to be held against withdrawal movement in the unregistered relation of said openings, and to be inserted and withdrawn in the registered relation thereof.

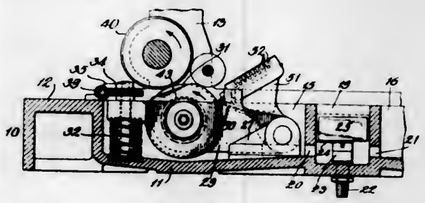
1,888,239. MEASURING APPARATUS. ALFRED D. MOSBY, Waterloo, Iowa, assignor to Construction Machinery Company, Waterloo, Iowa, a Corporation of Iowa. Filed Aug. 3, 1931. Serial No. 554,744. 9 Claims. (Cl. 221—95.)

1. In a measuring device the combination of a vessel, means for filling the vessel with liquid, an outlet port, a movable element for controlling the amount of discharge of liquid from the vessel, and means for moving said element to determinate levels in the vessel, said means comprising a lever arm secured at one end to said movable element, a rock shaft engaging the other end of said lever arm, a ball end shaft projecting from said



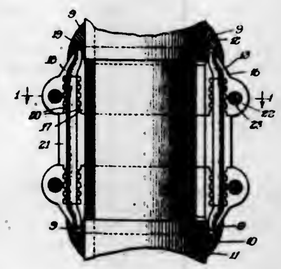
rock shaft and a regulating hand wheel outside of the tank having an eccentric cam groove on one face thereof adapted to engage said ball and shaft.

1,888,240. FOUNTAIN CONSTRUCTION FOR PRINTING PRESSES. ARTHUR J. MUNSON, Plainfield, N. J., assignor to The Wood Newspaper Machinery Corporation, New York, N. Y., a Corporation of Virginia. Filed Nov. 8, 1930. Serial No. 494,211. 13 Claims. (Cl. 101—350.)



1. A bed plate adapted to support the frame of a printing press, said bed plate being formed with a recess adapted to serve as a fountain bowl.

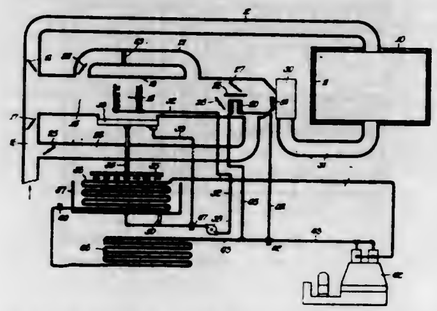
1,888,241. INSULATING JOINT. JOSEPH RAH, Chicago, Ill., assignor to G. & W. Electric Specialty Company, Chicago, Ill., a Corporation of Illinois. Filed May 31, 1928. Serial No. 281,760. 3 Claims. (Cl. 173—268.)



1. A connection comprising, the combination of a plurality of similar members, each member including spaced

sleeve members, a recess in each of said sleeve members and insulating means disposed between said sleeve members and extending into the recesses thereof, said sleeve members having interfitting parts, and means on each member for securing said members in operative relation.

1,888,242. REFRIGERATING AND VENTILATING SYSTEM. STEPHEN SHOLTES, Chicago, Ill. Filed Feb. 5, 1930. Serial No. 425,934. 1 Claim. (Cl. 98—33.)



In a mechanically cooled ventilating system, in combination with an enclosure, a conduit, a passage for conducting air from the enclosure to the conduit, a passage for conducting fresh air to the condit, a dehumidifier located within the conduit, a by-pass in said conduit for passing a portion of the mixed air in the conduit around the dehumidifier, and a second by-pass for conducting the fresh air to the conduit by passing the same around the dehumidifier.

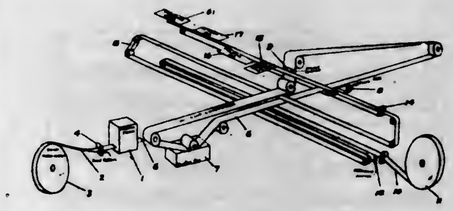
1,888,243. TURPENTINE TOOL. BENNIE H. SMITH, Manatee, Fla., assignor of one-half to A. B. Murphy, Manatee, Fla. Filed Dec. 15, 1930. Serial No. 502,503. 6 Claims. (Cl. 47—18.)



5. A cutting element for a tool of the character described comprising a shank, and a head U-shaped in cross section to form side walls joined by a bridge portion, one wall being rigid with the shank, and the bridge and adjoining portions of the walls being extended at the rear end of the bridge to form a chip deflector.

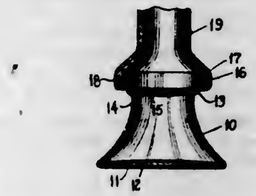
1,888,244. MECHANISM FOR MAKING MATCH BOOKS. RUSSELL W. SMITH, Union, N. J. Filed Aug. 18, 1929. Serial No. 385,587. 22 Claims. (Cl. 93—7.)

1. In a match book machine including a portion for assembling the match splint strips and covers; an assembly conveyer belt having a driven part, means for driving said part, a plurality of assembly blocks mounted in spaced relation on said driven part, means on said blocks for engaging and holding the strip for making the covers, means for passing the splint strips onto said blocks over the cover strip, means for shearing the cover strip



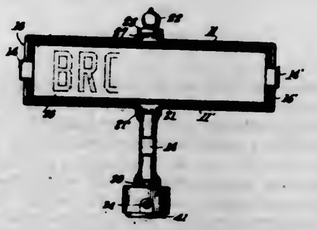
and splint strips between said blocks into individual units, means including movable parts on said blocks for folding the cover ends over the splint strip on the blocks, means for stitching the covers to their respective splint strips while the covers are held in folded position, means for releasing the cover holding means, ready for ejecting the match books from the blocks.

1,888,245. STRAINER. JOSEPH SPERLING, New York, N. Y. Filed June 23, 1930. Serial No. 463,059. 2 Claims. (Cl. 210—84.)



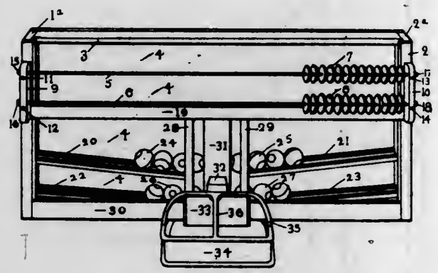
1. A strainer comprising a metallic element in the form of a frustrum of a cone, in the lower base of which there is fixed a metallic filter element, and in the upper base of which there is carried a removable flexible non-metallic filter element, a flange formed on the peripheral surface of the strainer adjacent the upper base, and a removable flexible element surrounding said flanged portion and interlocked therewith, said flexible element being attached by its free end to the nozzle of a faucet.

1,888,246. STREET SIGN. ABRAHAM SPRUNG, Brooklyn, N. Y. Filed June 8, 1932. Serial No. 615,966. 29 Claims. (Cl. 40—145.)



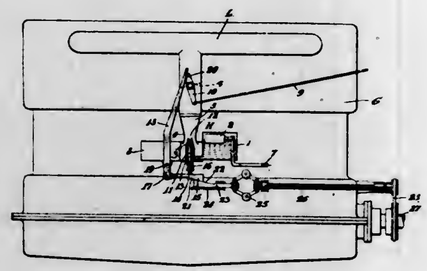
1. In a sign holder, a frame comprising a pair of transversely separable members, a locking element integral with each of the members, a post passing through said members, and a locking element on the post adapted to cooperate with the locking element of one of the said members to lock the frame to the post.

1,888,247. BALL RACK. JOHN HENRY STAHL, El Paso, Tex. Filed Aug. 14, 1931. Serial No. 557,059. 5 Claims. (Cl. 211—15.)



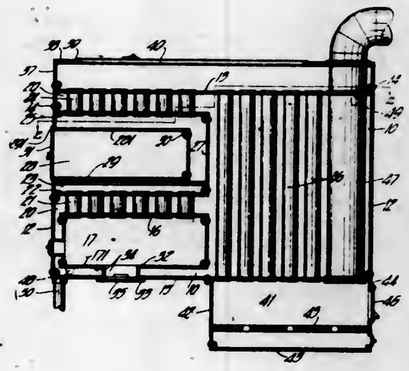
3. In a ball rack, the combination of a frame including supporting upright ends; a ball stop and release member having thereon a base and an offset piece, the said ball stop and release member being secured to said frame by a cleat and a spring hinge; a basket supporting member grooved at its top to receive the bails of a basket or the like; a plurality of inclined runways or shelves intermediate said supporting upright ends and the central supporting parts of said frame; a top cross piece extending between and secured to said supporting upright ends, and a back.

1,888,248. CARBURETOR. IRVING STEINHARDT, New York, N. Y. Filed Aug. 9, 1930. Serial No. 474,184. 5 Claims. (Cl. 123—123.)



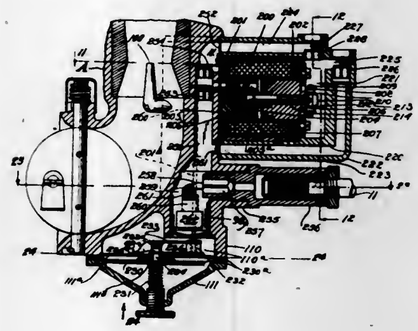
1. A carburetor comprising means providing an air passage, a gasoline jet within said air passage, a throttle valve, a control member for determining the outlet size of the gasoline jet, a speed controlled governor device having means by which it may be driven from the engine shaft, and connections between the throttle valve, the governor device and said control member to operate the control member in response to both the movements of the throttle valve and the speed of the engine, and add said connections including a pair of movable wedge acting parts having relatively inclined surfaces engaging against each other one of said parts being connected to be moved in response to movements of the throttle valve and the other of said parts being connected to be moved in response to operation of the governor device.

1,888,249. COMBINED FLUID HEATER AND BAKING OVEN. GEORGE SURPRENANT, Rotterdam, N. Y. Filed Dec. 10, 1930. Serial No. 503,516. 7 Claims. (Cl. 126—5.)



1. In combination, a furnace, a fire tube liquid heater comprising two spaced sections of tubes through which the gases flow upwardly, and a baking oven interposed in the space between said two sections of tubes and subjected to the action of said gases.

1,888,250. ELECTROMAGNETIC FUEL PUMP. PERCIVAL S. TICE, Chicago, Ill., assignor to Stewart-Warner Corporation, Chicago, Ill., a Corporation of Virginia. Filed Feb. 13, 1928. Serial No. 253,974. 14 Claims. (Cl. 158—36.4.)

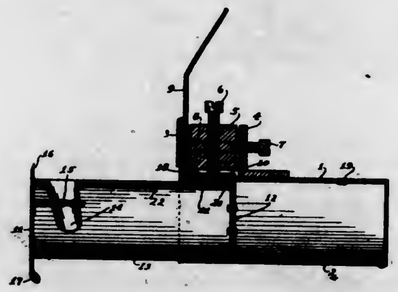


6. In combination with the carbureter of an internal combustion engine, an electro-mechanical fuel pumping apparatus having connection for fuel flow from a fuel source, and having a magnet energizing circuit, means adapted to be connected with the source of circuit; a switch device arranged for making and breaking such connection, means operable by the pressure of the fuel pumped for operating the switch to break the circuit upon said pressure reaching a predetermined degree, a chamber in which the fuel pumped may accumulate to said degree, the fuel flow connection to the pumping apparatus being made in said chamber, whereby the pump energizing circuit will be interrupted when the fuel level at the source is such

as to produce the predetermined degree of pressure, independently of the operation of the pump; a valve positioned for controlling the flow of liquid from the source to the chamber arranged to be seated against inflow, a pendulum lever in the chamber having a weighted longer arm and a shorter arm which is encountered by the valve at the open position of the valve and the position of the pendulum lever on level road, said weighted lever being arranged to operate the valve in closing direction by the shorter arm upon the change of position of the pendulum lever due to the vehicle moving on descending grade.

10. In combination with a chamber in which liquid is accumulated, pressure-producing means for so accumulating it; electro-magnetic means for controlling said pressure producing means; an electric circuit in which said electro-magnetic means is energised; a switch mounted in the fuel chamber controlling said circuit; the chamber having a movable wall member exposed to pressure of the liquid accumulated due to its being fed to a predetermined level, and connections from said member for operating said switch to interrupt the circuit when the liquid reaches said level.

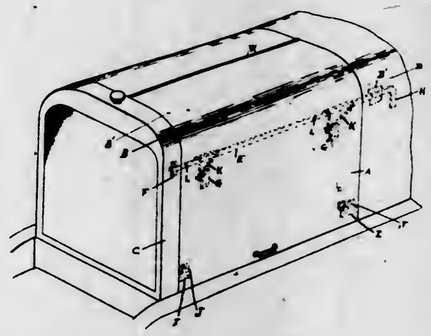
1,888,251. ASH RECEIVER. HOWARD A. WIELAND, San Francisco, Calif. Filed Apr. 2, 1929. Serial No. 352,015. 3 Claims. (Cl. 206—19.5.)



1. An ash receiver comprising a longitudinal guide adapted to slidingly support a drawer, a drawer having an open top and slidably mounted in said guide, a top wall mounted on the support and overlying the drawer when the drawer is in closed position, a stop lug positioned forwardly relative to said top wall, a button positioned rearwardly relative to said wall, and a tongue of spring material carried by the rearward portion of the drawer and provided with a depression adapted by the resilience of the tongue to yieldingly engage said rearward button when the drawer is pushed inwardly the full length of the drawer and to release said engagement responsive to longitudinal pressure on the drawer and said depression in the tongue adapted by resilience of the tongue to positively and releasably engage said forward stop lug when the drawer is pulled outwardly a sufficient distance to position the depression underlying said forward stop lug, said spring tongue extending forwardly and overlying the drawer so that when the drawer is opened, the forward end of the tongue is accessible to manual manipulation from the open end of the drawer to release said tongue from engagement with said forward lug.

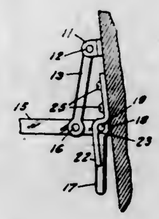
1,888,252. HOOD CATCH. WILLIAM R. WILEY, Detroit, Mich., assignor to The Bassick Company, Bridgeport, Conn., a Corporation of Conn. Filed May 18, 1931. Serial No. 538,124. 13 Claims. (Cl. 292—162.)

1. In a hood catch, in combination with a hood wall provided with interiorly projecting engagement brackets, a locking bar adapted to be manually actuated lengthwise of itself while terminally supported from the radiator frame and the dash of a vehicle, spring-actuated cam members supported by said locking bar in operative proximity to said engagement brackets on the hood wall and adapted when the bar is actuated lengthwise of itself to frictionally engage said brackets, thereby exercising a depressing action upon their supporting hood wall, and



means carried adjacent the lower edge of the hood wall and adapted to engage correspondingly positioned projections from a fixed portion of the vehicle structure, whereby as the hood wall is lowered it is drawn by a transversely imposed strain into proper closed position while its described lowering movement is in progress.

1,888,253. COMBINED SHELF AND ROBE RAIL. HERMAN ADLER, Berkeley, Calif. Filed Feb. 15, 1932. Serial No. 593,058. 4 Claims. (Cl. 211—93.)



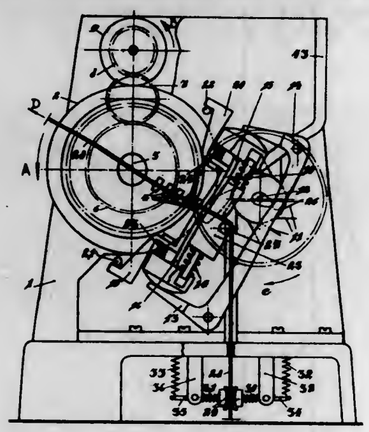
3. In combination, a shelf, a link pivotally secured to each end of the shelf rearwardly of the center of gravity, a robe rail longitudinally spanning the shelf and pivotally secured adjacent the rearward edge of the shelf and means for frictionally retaining the shelf in operative position against the weight of the robe rail.

1,888,254. MACHINE AND METHOD FOR AUTOMATICALLY FIXING THE HOOKS ON THE BANDS FOR ZIP FASTENERS. OSKAR AMIET, La-Chaux-De-Fonds, Switzerland. Filed Dec. 16, 1930. Serial No. 502,877, and in Switzerland Dec. 10, 1929. 6 Claims. (Cl. 153—1.)

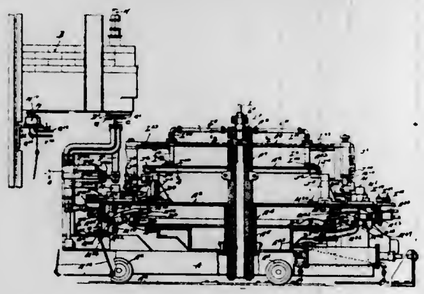
1. A machine for automatically fixing hooks on bands for zip fasteners, comprising in combination a rotary element having grooves, a guide cooperating with said rotary element, and auxiliary elements adapted to automatically bring the hooks supported partly in said rotary element and partly in said guide into the proper position with their bases towards the band and to automatically fix the hooks at uniform distances apart.

2. A method for automatically fixing hooks on bands for zip fasteners, consisting in automatically imparting a for-

ward movement to the band, after the fixing of each hook, and in imparting a backward movement to the band subsequently to said forward movement until the last fixed hook abuts against an automatically shiftable element, determining the regular spacing for each hook.



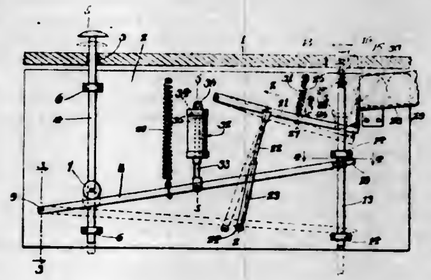
1,888,255. AUTOMATIC MOLDING MECHANISM FOR PLASTIC MATERIAL. WILLIAM A. ANDERSON, Huntington Park, Calif. Filed Oct. 5, 1929. Serial No. 397,538. 13 Claims. (Cl. 49—37.)



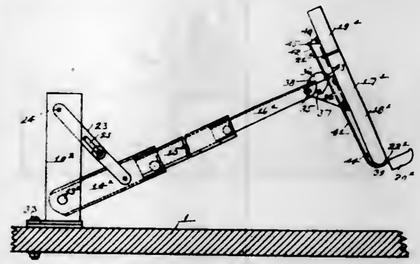
1. A molding machine comprising a rotatable frame, a plurality of molds mounted thereon and arranged to be moved successively to and from charging position for receiving charges of material, plungers pivotally and reciprocably mounted on said frame adjacent said molds, means for swinging said plungers on their axes into and from registration with said molds preparatory and subsequent to the charging of the molds respectively, means for slidably moving said plungers into and from the molds for applying pressure to the material during a forming operation, perforating members axially alined with the molds and with said plungers for perforating the work, and means for reciprocably operating said perforating members.

1,888,256. MECHANICAL TEEING DEVICE. FLOYD D. BAUMGARTNER, Cedar Rapids, Iowa. Filed Nov. 12, 1930. Serial No. 495,256. 1 Claim. (Cl. 273—33.)

A mechanical teeing device comprising, a vertically slidable tee supporting bar, a tee supported thereon, means including a vertically swinging lever for moving the bar downwardly to lower the tee, a downwardly inclined ball dispensing chute having an open lower end adjacent the bar, a ball stop arranged in spaced relation to the open end of the chute, a pivoted lever carrying a stop for normally closing the open end of the chute, a depending, depressible bifurcated arm rigidly connected with said last named lever and having said first named lever extending therethrough to provide for depressing said arm, to move the chute closing stop on the operation of the bar moving means from normal, means for returning the bar to its original position, and means for returning the chute closing stop to its original position upon the return movement of the bar.

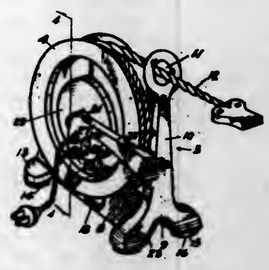


1,888,257. SUPPORT FOR BOOKS AND THE LIKE. HENRY E. BENNETT, Chicago, Ill. Filed Jan. 20, 1930. Serial No. 421,939. 3 Claims. (Cl. 45—82.)



1. In a book support of the character described, a book holder comprising: a middle part, an extension portion and a ledge portion hinged to the middle part at its opposite edges respectively; link connections between said portions for swinging one of said portions by the swinging movement of the other portion.

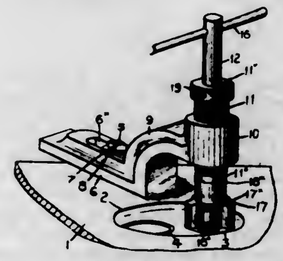
1,888,258. ELECTRICAL CORD TAKE-UP DEVICE. INA LETITIA BETTINGER, National City, Calif. Filed Dec. 16, 1930. Serial No. 502,756. 3 Claims. (Cl. 173—367.)



3. In a device of the class described, an implement including a base provided with a longitudinal V-groove extending thereunder, the vertex of which groove is rounded

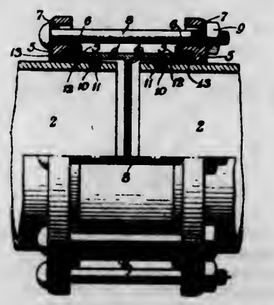
for applying the device to a circular object, clamping means associated with said base portion adapted for attaching it to a support, means upstanding from said base, and a bracketed arm extending from said upstanding means, a stationary conductor detachably applied thereto, said arm having formed therewith a circular cap, a bearing containing a spindle non-rotatingly journalled in said cap, said bearing having a circular flange, a reel ball-bearingly mounted upon said flange, conductors wound on said reel and means for making electrical contact between the stationary conductor and the conductors wound on the reel.

1,888,259. APPARATUS FOR RENEWING VALVE SEATS. RICHARD BURSTON, Toronto, Ontario, Canada. Filed Nov. 21, 1931, Serial No. 576,592, and in Canada July 15, 1931. 1 Claim. (Cl. 10—141.)



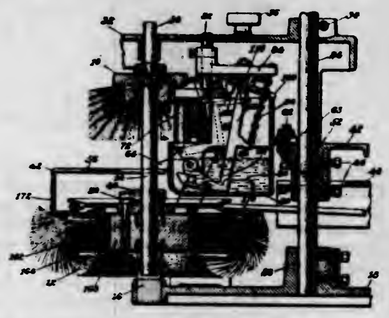
An apparatus for threading an engine block valve seat comprising a stationary centering spindle mounted vertically in the valve spindle guide, a tapping tool freely mounted on the spindle, a bracket securable to an engine block having a vertical bearing sleeve threaded to correspond in pitch to the thread of the tap and having a longitudinal bore through which the centering spindle extends concentrically, a lead screw screwed in the sleeve, and a coupling directly connecting the lead screw and tapping tool.

1,888,260. PIPE COUPLING FOR PLAIN END PIPES. JAMES CLARK, Bradford, Pa., assignor to S. R. Dresser Manufacturing Company, Bradford, Pa., a Corporation of Pennsylvania. Filed Feb. 6, 1930. Serial No. 426,214. 4 Claims. (Cl. 285—182.)



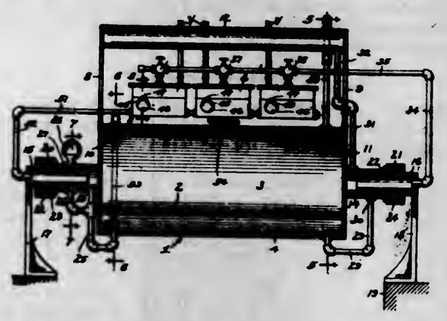
1. In a pipe coupling for plain end pipes, the combination with an integral middle ring provided at each end with a packing engaging portion, and having its inner surface provided on opposite sides of its longitudinal center with an integral annular shoulder, disposed substantially perpendicular to the axis of the ring, a pair of packing rings, a pair of clamping rings provided with portions for directly engaging said packing rings, a pair of plain end pipe sections provided each with an annular locking groove and an integral spring split locking ring in each of said locking grooves for engaging a locking shoulder of the middle ring, and clamping bolts for connecting said clamping rings.

1,888,261. SHOE POLISHING MACHINE. HENRY A. DODGE, Newton, Mass., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed June 5, 1925, Serial No. 35,121. Renewed Apr. 13, 1932. 3 Claims. (Cl. 15—30.)



1. A shoe-polishing machine comprising a driven vertical shaft, a plurality of shoe-treating tools mounted on said shaft in superposed relation, one of which is provided with radial and peripheral treating surfaces for treating the lateral and the top surfaces of a shoe presented thereto, and means between said lateral and top surface-treating tool and an adjacent treating tool for supporting a shoe presented to either the side or the bottom of said first-mentioned tool and for contacting with the work-engaging elements of the other tool to control the operative positions of said elements.

1,888,262. LIQUID DISPENSING SYSTEM. MANUEL FERNANDEZ Y FERNANDEZ, New Orleans, La. Filed June 12, 1931. Serial No. 543,951. 12 Claims. (Cl. 158—46.)

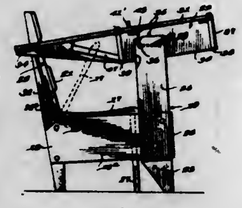


1. A liquid dispensing system comprising a tank mounted to rotate about a fixed axis, a measuring container supported above the bottom of said tank, and means operated by rotation of said tank about said axis for transferring liquid from the tank to the container.

1,888,263. SCHOOL DESK. WASHINGTON THOMAS PARK GIBSON, Fort Myers, Fla. Filed Nov. 12, 1929. Serial No. 406,602. 4 Claims. (Cl. 155—125.)

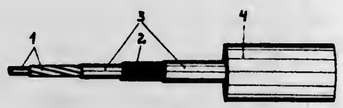
4. A combined chair and desk comprising a framework defining a seat and back, said back including an upright member having a slot extending from a point adjacent said

seat and terminating at a point in proximity to the upper end of said upright, a support secured to said seat and in advance thereof, said support having a plurality of spaced apertures, an arm, said arm being mounted upon said support and including a plurality of horizontally



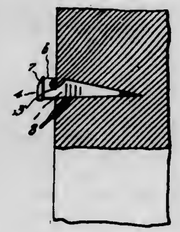
spaced apertures for registry with a selected aperture of said support, fastening means extended through alined apertures for pivotally securing said arm to said support, said arm further having a slot for registry with the slot of said upright member, and means for securing said arm to said upright in various adjusted positions.

1,888,264. LOADED SUBMARINE CABLE. KONRAD GOES, Rosrath, near Cologne, and ERNST BADUM, Cologne-Mulheim, Germany, assignors to Felten & Guilleaume Carlswerk Actiengesellschaft, Cologne-Mulheim, Germany. Filed Dec. 5, 1930, Serial No. 500,418, and in Germany Sept. 13, 1930. 3 Claims. (Cl. 178—45.)



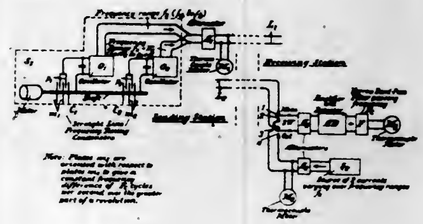
1. A submarine cable including a conductor, a layer of loading material surrounding said conductor and a filling comprising hydrocaoutchouc wherein the layer of loading material is embedded.

1,888,265. NONSPREADING STAPLE. ROBERT M. GUTHRIE, Chicago, Ill. Filed Jan. 15, 1932. Serial No. 586,877. 4 Claims. (Cl. 85—49.)



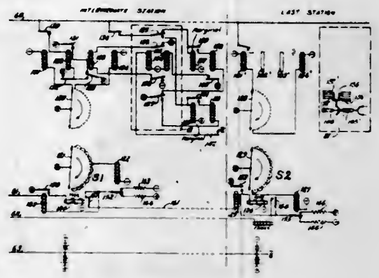
1. A device of the class described comprising a shank of wedge shape, a head connected to the shank and an upwardly curved recess in the upper part of the shank passing through both sides and one wedge of the shank, said edge from the head to the lower wall of the recess being perpendicular to the head.

1,888,266. MEASUREMENT OF CROSS-TALK. JOSEPH HERMAN, Westfield, N. J., assignor to American Telephone and Telegraph Company a Corporation of New York. Filed Aug. 28, 1930, Serial No. 478,509. Renewed Apr. 11, 1932. 11 Claims. (Cl. 179—175.3.)



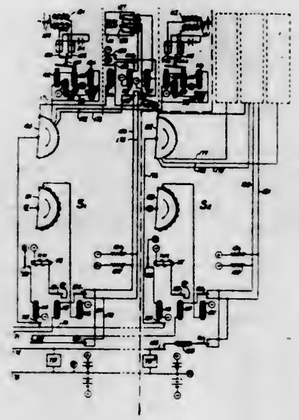
1. The method of measuring the interference between two transmission lines which consists in producing at each of two distant stations a first alternating current of continuously varying frequency and a second alternating current varying in frequency simultaneously with the first current but having a constant frequency difference therefrom, applying the currents produced at the first station to the interfering line, deriving from that portion of the two currents received at the second station over the line interfered with a current of the difference frequency, and determining the attenuation of the interfering path from the magnitude of this current segregated from other currents.

1,888,267. REMOTE CONTROL SYSTEM. HARRY E. HERSHEY, Oak Park, Ill., assignor, by mesne assignments, to Associated Electric Laboratories, Inc., Chicago, Ill., a Corporation of Delaware. Filed May 4, 1928. Serial No. 275,027. 12 Claims. (Cl. 177—353.)



7. In a remote control system, a series of selecting switches, operating means in each switch, means for energizing the operating means of the first of said switches, means responsive thereto for thereafter consecutively energizing the operating means of the second and last of said switches in the order named, means responsive to the energization of the operating means of the last switch for deenergizing the operating means of all said switches in the order in which they were energized, means responsive to the deenergization of each operating means for operating its associated switch one step to operate said switches in synchronism, and means for re-operating said operating means only in case each of said switches has advanced a step in response to the deenergizations of their operating means.

1,888,268. REMOTE CONTROL SYSTEM. HARRY E. HERSHEY, Oak Park, Ill., assignor, by mesne assignments, to Associated Electric Laboratories, Inc., Chicago, Ill., a Corporation of Delaware. Filed May 5, 1928. Serial No. 275,304. 5 Claims. (Cl. 177—353.)



1. In a remote control system, switching mechanism having wipers and bank contacts accessible thereto, a plurality of three-position polarized relays each associated with a certain one of said contacts, an armature for each of said relays having three positions, means for operating the wipers of said mechanism to select one of said relays and to place, positive, negative battery or alternating current on the contact associated with said relay, means responsive thereto for operating the armature of the relay to one of its three positions in accordance with the potential placed on its associated contact when the wipers of said mechanism reach such contact, and means for maintaining the armature of said relay in the position to which it is operated after the wipers of said mechanism have passed beyond its associated contact.

1,888,269. SEWER-CLEANING IMPLEMENT. WARD F. HERST, Grand Rapids, Mich., assignor to Wolverine Brass Works, Grand Rapids, Mich., a Corporation of Michigan. Filed Apr. 2, 1931. Serial No. 527,132. 1 Claim. (Cl. 81—8.)

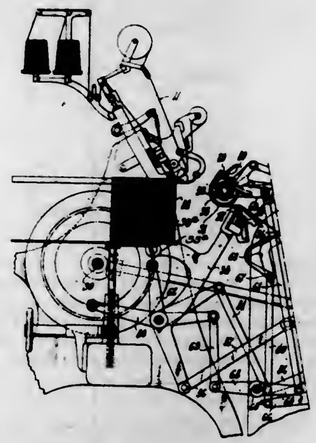


A handle for operating an elongated tool comprising: a hollow member having a bottom on whose inner surface the tool bears slidably in its longitudinal direction, and sides extending around the opposite edges of the tool; a pivot pin mounted on said sides; a lever fulcrumed on the pivot pin, and having a cam inner end and an outer end handle portion, said lever being turnable to a position wherein its inner end clamps the tool on said bottom so that the tool may be moved longitudinally by the lever turned to its said position; a clamp shoe having a middle portion extending between the tool and the inner end of the lever, and sides provided with outwardly extending bearings in which the pivot pin slidably bears.

1,888,270. PROCESS AND METHOD OF PRODUCING EXPANSION JOINT FILLING MATERIAL. JOHN S. HIPPLE, Temple, Pa. Filed Mar. 17, 1931. Serial No. 523,877. 4 Claims. (Cl. 106—31.)

1. The process of making expansion joint filling material which comprises mixing together 16 parts of vulcanizable vegetable oils, 4 parts of rosin, and 1 part of "Hydrolene" and liquefying the mixture by application of heat thereto; and then introducing into the liquefied mixture 8 parts of sulphur and 4 parts of pulverized silica, and continuing the application of heat until vulcanization thereof takes place, then withdrawing the heat and permitting the vulcanized mass to cool for pouring.

1,888,271. METHOD OF AND MECHANISM FOR AUTOMATICALLY FEEDING INDIVIDUAL SIGNATURES INTO A SIGNATURE-HANDLING MACHINE. RUDOLF KLEMM, Leipsig-Plagwitz, Germany, assignor to Gebruder Brehmer, Leipsig-Plagwitz, Germany, a German Firm. Filed Nov. 3, 1930, Serial No. 493,114, and in Germany May 8, 1930. 25 Claims. (Cl. 270—53.)

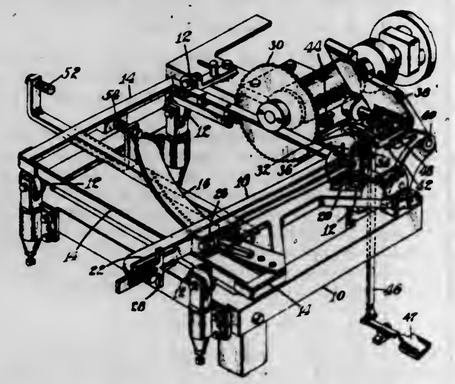


1. A method of automatically supplying folded signatures to a signature-handling machine, which includes seizing the upper section of a signature by at least one rotatable and intermittently moved suction member, seizing the lower section of the said signature by at least one rotatable and intermittently moved suction member, inversely rotating the said suction members to open the said signature, and thereafter turning the said signature about the edge of one section and then depositing the signature straddlewise for its further handling upon a conveyor member.

1,888,272. BLOCK SAWING MACHINE. RALPH F. KNIGHT, Beverly, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Mar. 20, 1930. Serial No. 437,529. 3 Claims. (Cl. 143—157.)

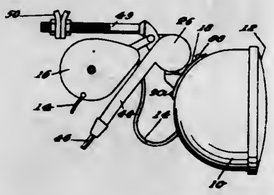
1. In a heel blank sawing machine, a saw, a work carrier arranged to carry a bolt of wood past the saw, a receiver for imperfect blanks, normally maintained in in-

operative position, to permit the severed blanks to fall freely from the saw but movable by the operator to intercept selected blanks as they drop from the saw, and



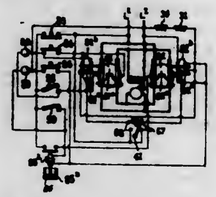
gaging means for the work piece, mounted on the receiver and arranged to move into operative position as the receiver moves from one of its positions to the other.

1,888,273. UNIVERSALLY MOUNTED SPOTLIGHT. ARTHUR KOSIAN, Chicago, Ill. Filed July 17, 1931. Serial No. 551,462. 13 Claims. (Cl. 240—61.13.)



1. A universally mounted spotlight, including a support, a differential gear mounting for the light in the support, and an operating handle therefor, said operating handle being remote from the support, and a pair of flexible rods connecting the operating handle to the support, together with a flexible conduit in which said rods are mounted.

1,888,274. DRIVING MECHANISM FOR VALVES AND OTHER DEVICES. CLARENCE W. KUHN, Milwaukee, Wis., assignor, by mesne assignments, to Cutler-Hammer Inc., Milwaukee, Wis., a Corporation of Delaware. Filed Dec. 17, 1927. Serial No. 240,823. 9 Claims. (Cl. 172—239.)



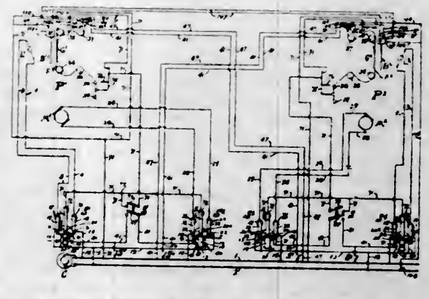
1. The combination with a part to be driven to a definite limit, of a driving motor therefor, and driving connections therebetween including a slip clutch, and a speed reducing gearing, said gearing being connected to said motor through the medium of said clutch and having means associated therewith to provide for initiation of the movement of said part out of said limit with a hammer-like blow.

1,888,275. ELECTRICAL APPARATUS AND A METHOD OF MANUFACTURING IT. LEONARD O. LARSEN, Downers Grove, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed July 7, 1931. Serial No. 549,285. 16 Claims. (Cl. 175—21.)



1. A method of forming electrical coils comprising assembling alternate layers of insulating material and the conducting material on a core, dissolving the edges of the insulating material, and coalescing a head comprising a similar insulating material to the layers of insulating material.

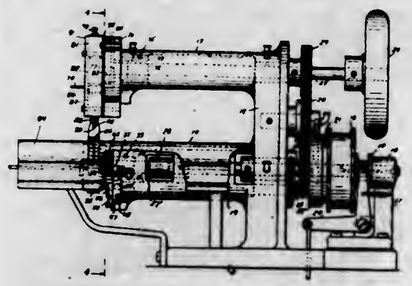
1,888,276. CINEMATOGRAPHIC APPARATUS. ADOLPH LOEHR, Jr., Bronx, N. Y., and EDWARD S. SCHWAB, Jersey City, N. J., assignors to Adolph Loehr, New York, N. Y. Filed Dec. 20, 1930. Serial No. 503,846. 5 Claims. (Cl. 88—17.)



1. Cinematographic apparatus characterized by a plurality of projector sets each comprising a lamp and a projecting machine, and each further characterized by a shutter interposed in the path of the light passing through the film from the lamp in each set, also by devices acting automatically concurrently with the passage of the film to open the shutter in one set and simultaneously to close the shutter in another set, and devices acting automatically concurrently with the passage of the film to energize the motor and lamp of the set in which the image is to be projected, prior to the opening of its shutter, thereby effecting instantaneous change-over of projection automatically, said shutter-actuating devices comprising means associated with the film and moving synchronously with the film to operate at a sufficient interval of time subsequently to the starting of the motor and lamp in the projector set in which the display of film is to be initiated to permit said film to attain substantially the same speed as that of the film in the other set; whereby both films are caused to run at the same speed at the time of the change-over operation.

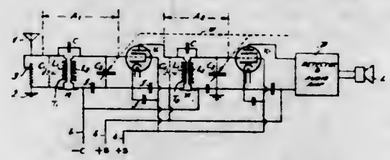
5. Cinematographic apparatus characterized by a plurality of projector sets, each comprising a film support, a film gate, a motor for propelling the film through said gate, a lamp for illuminating said film, and a shutter for interposition in the path of the light rays passing through said film from each of said lamps; said apparatus being further characterized by electro-responsive means and associated switches and connections to co-ordinate the operation of said projector sets and adapted to act automatically to cause said sets to operate in alternation for the projection in continuous succession of a plurality of film parts respectively supported in said sets, causing energization of the lamp and motor and subsequent opening movement of the shutter of each set to which changeover is to be effected and simultaneous closing of the shutter in the set from which changeover is being effected, and deenergization of the lamp and motor of the latter set, for an indefinite number of changeover operations, and electro-responsive means including a magnetic switch for each of said motors and lamps respectively, and electrical circuits provided with controlling devices operated by the respective films to cause energization and de-energization of the motor and lamp and appropriate movement of the shutter respectively in each set in proper sequence to effect said changeover operations as long as each set contains a film; and films in said sets respectively provided with a plurality of electro-conductive parts each adapted to form a portion of one of said electrical circuits controlling a portion of said electro-responsive means.

1,888,277. MESH MACHINE. FRED H. LYNDS, North Attleboro, Mass., assignor to Whiting & Davis Company, Plainville, Mass., a Corporation of Massachusetts. Filed Dec. 12, 1931. Serial No. 580,603. 25 Claims. (Cl. 140—8.)



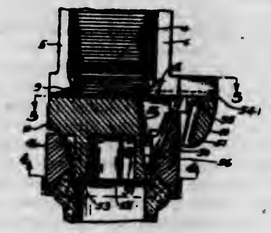
1. A machine for removing links from link mesh fabric which comprises the combination of means for advancing a piece of the fabric, means for holding the mesh adjacent the link to be removed, means for distorting said link, and means for forcing the distorted link from the fabric.

1,888,278. ELECTRICAL COUPLING CIRCUIT. WILLIAM A. MACDONALD, Little Neck, N. Y., assignor to Hazeltine Corporation, Jersey City, N. J., a Corporation of Delaware. Filed July 19, 1930. Serial No. 469,040. 7 Claims. (Cl. 178—44.)



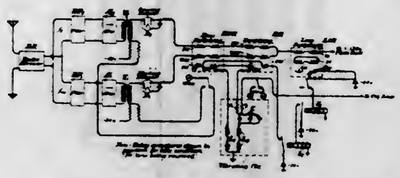
1. A high-frequency electrical coupling system tunable over a range in frequency comprising separate primary and secondary circuits, said circuits being coupled magnetically by means of primary and secondary transformer windings individual thereto, respectively, and coupled capacitively by means of capacity connecting said circuits, said capacitive coupling being arranged to oppose said magnetic coupling throughout said frequency range, and said primary transformer winding having, in the operation of said system an effective capacity associated therewith rendering said primary circuit resonant at a frequency above the highest frequency of said tuning range.

1,888,279. BOTTLE CAPPER. EDWARD MANNING and ROY A. MANNING, Rutland, Vt., assignors to Manning Manufacturing Company, Incorporated, Rutland, Vt. Filed Nov. 23, 1931. Serial No. 576,907. 2 Claims. (Cl. 226—92.)



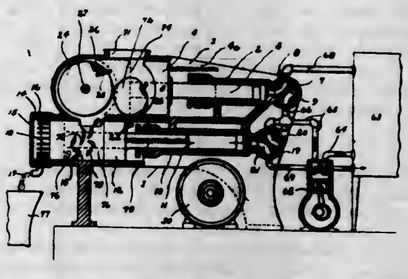
1. A bottle capper comprising a tube for holding a stack of disks, a cylindrical disk support connected to said tube to slide axially toward and from the bottom thereof, means operated by the sliding movements of said support toward and from the bottom of said tube for transferring disks one at a time from said stack to said support, and means on said support to prevent overturning of the disks during their passage from the tube to the support.

1,888,280. REDUCTION OF INTERFERENCE. THOMAS A. MCCANN, East Orange, N. J., assignor to American Telephone and Telegraph Company, a Corporation of New York. Filed Oct. 8, 1931. Serial No. 567,726. 6 Claims. (Cl. 178—88.)



1. In a transmission system having means for transmitting one frequency for marking and another frequency for spacing signals, a receiver including two paths, means for selecting the marking frequency into one path, means for selecting the spacing frequency into the other path, and means responsive to the frequency received in either path for exercising a control over the other path, and means rendering said control circuit independent of change in the amplitude of the received current.

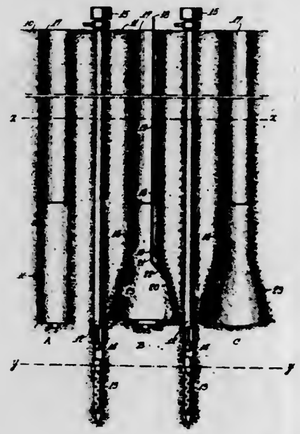
1,888,281. FRUIT PRESS. BRUCE L. MCKINSTRY, Entiat, Wash. Filed Aug. 1, 1931. Serial No. 554,560. 8 Claims. (Cl. 100—50.)



1. A press of the class described comprising a frame formed with a cavity to receive fruit, a rotating cutting blade for slicing the fruit into sections, a plunger to force

the fruit into contact with the rotating cutting blade, a piston connected to the plunger, means for expressing the juice from the cut fruit including a piston, a valve for controlling fluid to the first mentioned piston, a second valve for controlling fluid to the second mentioned piston, means connected to the first mentioned valve for locking the valve in open position when admitting fluid to operate the first mentioned piston, a latch operated and set by the operation of the aforesaid means, a pawl and ratchet connection between said latch and the second mentioned valve, a second pawl cooperating with the ratchet, a connection between the first mentioned valve and the second mentioned pawl, a trip on the plunger for releasing the locked connecting means, means for returning said connecting means and the first mentioned valve to normal position, means operated by the second mentioned piston to automatically release the latch and cause the ratchet to open the second mentioned valve, and means for returning the juice expressing means to normal position.

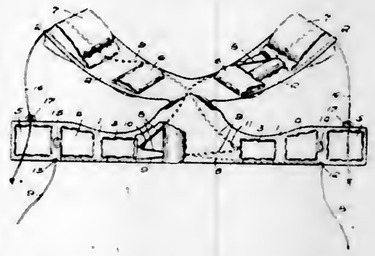
1,888,282. METHOD OF INSTALLING PILING. ANTHONY PAUL MILLER, Pleasantville, N. J. Filed Nov. 19, 1929. Serial No. 408,205. 2 Claims. (Cl. 61—57.)



1. A method of installing pedestal piling in water bearing sand which includes the steps of (1) lowering the water level to a depth below the proposed bottom of the piling, (2) sinking a straight shaft in the sand to a depth corresponding to the proposed bottom of the piling, (3) lining the upper end of the shaft with a shell to prevent shaling of the walls thereof during subsequent excavating and concrete placing operations, (4) chopping out the dewatered but still moist sand below the shell to form an inverted conical enlargement of the lower end of the shaft, the taper of said enlargement being at a lesser angle than the caving angle of moist sand, (5) removing the sand thus chopped out, (6) pouring water into the mold to recreate an undisturbed footing, and (7) when such water has drained out of the mold through the sand filling the mold with concrete.

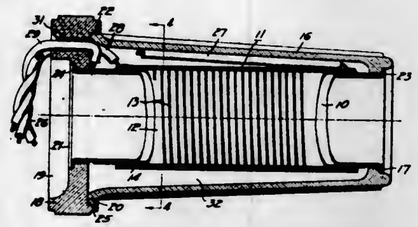
1,888,283. LIFE BELT. ALEXANDER MOORE, Okain's Bay, Banks Peninsula, New Zealand. Filed Dec. 3, 1931, Serial No. 578,782, and in New Zealand May 16, 1931. 10 Claims. (Cl. 9—17.)

1. A lift-belt comprising a body-encircling member having buoyant elements commencing at the parts which fit against the two lateral sides of the wearer and extending from thence around the front, and a yoke united to the back portion of said body-encircling member and having two branches designed to pass over the shoulders and chest of the wearer and provided with buoyant elements at the parts which fit behind the shoulders of the wearer



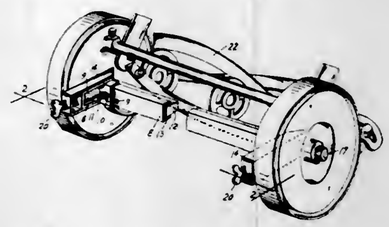
and at an interval from such elements with further buoyant elements designed to fit over the chest of the wearer.

1,888,284. HAIR WAVING DEVICE. TOMLINSON I. MOSELEY, San Francisco, Calif., assignor to Duart Manufacturing Co., Ltd., San Francisco, Calif., a Corporation of California. Filed May 8, 1931. Serial No. 535,911. 7 Claims. (Cl. 132—36.)



1. In a hair waving heater, a metallic open ended tube, a heating element surrounding the medial portion of the tube, an exterior casing member of insulating material surrounding said tube, one end of said member engaging one end portion of the tube, and an annular ring of insulating material surrounding and engaging the other end of the tube, said ring having a recess in which the adjacent end of the casing member is interlocked.

1,888,285. LAWN MOWER SHARPENER. ROBERT JOHN MUIR, Mosman, near Sydney, New South Wales, Australia. Filed Oct. 28, 1931, Serial No. 571,605, and in Australia Apr. 15, 1931. 3 Claims. (Cl. 51—250.)



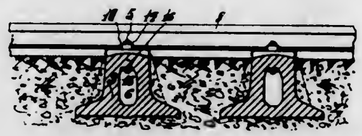
1. An improved lawn mower sharpener comprising a hollow longitudinally open abrasive carrier with an abrasive exposed therefrom, a pair of channelled supports each with one end of the carrier slidably engaged therein, each support being adapted for engagement with a bracket and having adjusting means whereby the carrier and

abrasive are resiliently adjustable in relation to the revolving blades of the mower, and a pair of brackets each adapted for affixing at one end of the rear of the mower by the ground blade and roller bracket bolts and to be engaged by and support the abrasive carrier support.

1,888,286. ELECTRODE FOR USE IN ARC WELDING. JOHN HAMILTON PATERSON, Westminster, London, England, assignor to Imperial Chemical Industries Limited, Westminster, England, a British Company. Filed Feb. 7, 1930, Serial No. 426,768, and in Great Britain Feb. 18, 1929. 5 Claims. (Cl. 219—8.)

1. A welding electrode comprising a plurality of elements, each element being laid alternately over and under the others throughout the length of the electrode, each element in laying being offset transversely of its length through the center of the electrode and thereby being displaced more radially of the electrode in each convolution than it is twisted circumferentially of the electrode, and each element throughout its length having the minimum displacement from a straight line as is consistent with said laying.

1,888,287. FERRO-CONCRETE RAILWAY SLEEPER. ETIENNE MARCEL PROT, Paris, France, assignor to Société à Responsabilité Limitée Dite: La Voie Ferrée Moderne, Paris, France. Filed Aug. 15, 1929, Serial No. 385,996, and in France Mar. 1, 1929. 1 Claim. (Cl. 238—30.)



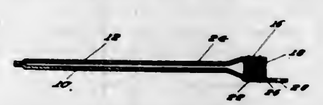
A ferro-concrete railway sleeper including a relatively wide sole portion, an upward extension continuing therefrom in the form of a hollow web, divergent ribs between the ends of the web and the sole portion, reinforcing and anti-creeping ribs on the under surface of the sole portion, rail seats provided on the upper surface of the web near the opposite ends thereof, additional ribs on opposite sides of the web between the seats and sole portion for reinforcing purposes, and the sole portion and its extension having a depth at least equal to that of an ordinary timber sleeper increased by that of an ordinary layer of ballast and the sole portion having the value of at least double that of an ordinary timber sleeper.

1,888,288. CONTAINER AND ITS METHOD OF MANUFACTURE. CHESTER A. PURDY, Oak Park, Ill., and SIGURD J. STOCKFLETH, Brooklyn, N. Y., assignors to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Original application filed Jan. 31, 1930, Serial No. 424,813. Divided and this application filed Feb. 27, 1931. Serial No. 518,786. Renewed June 8, 1932. 11 Claims. (Cl. 175—21.)



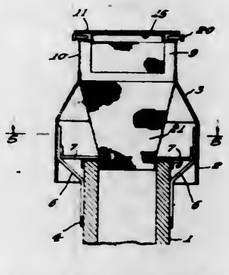
1. A spool comprising heads and a tube composed of cellulose material coalesced into a unitary structure, a supply of strand material wound on the spool, and a protective coating consisting of cellulose material.

1,888,289. TOOL HOLDER. FRANK RAFFLES, Chicago, Ill., assignor to Harry Raffles, Chicago, Ill. Filed Dec. 28, 1929. Serial No. 417,281. 1 Claim. (Cl. 206—16.)



In a tool container, the combination of a sheath shaped to conform to the contour of the tool, said sheath comprised of die-pressed fabric impregnated with a grease-proof composition, and means for retaining grease therein, said means including a pair of felt wiping pads positioned at the entrance of the container and adapted to slidably receive the tool therebetween.

1,888,290. CHIMNEY HOOD. PAUL RHINOW, Merrill, Wis. Filed Jan. 23, 1930. Serial No. 422,808. 1 Claim. (Cl. 98—66.)



In a chimney hood, a skirt having a contracted top portion, the lower portion of said skirt being of materially greater width than the chimney to provide air space thereabout and terminating below the top of the chimney in an open end, supports connecting said skirt to the sides and top of the chimney, a head at the upper end of said skirt, said head being open on all sides, and a solid, flat, close fitting cap hinged to said head.

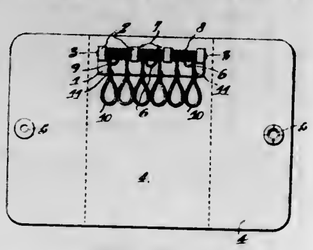
1,888,291. HOSE SUPPORTER. ISIDOR ROTH, Chicago, Ill., assignor to Natures Rival Co., Chicago, Ill., a Corporation of Illinois. Filed Sept. 22, 1930. Serial No. 483,425. 4 Claims. (Cl. 241—1.)



1. A hose supporter comprising a main depending supporting web; a supplemetnal attaching web in the form of a tape having button holes arranged against the inner

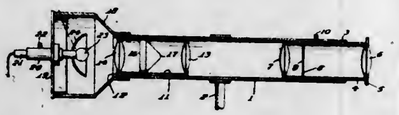
side of said main web and secured thereto at top and bottom, being otherwise free therefrom; a hose fastener having a loop at its upper end slidably engaging the lower end of both said main and supplemental webs; and a button on the inner side of said main web at the extreme lower end thereof adapted and arranged to engage the different button holes in said supplemental web.

1,888,292. KEY CASE. SEBASTIAN SCHMALZGRUBER, Bloomfield, Conn. Filed Jan. 22, 1931. Serial No. 510,518. 2 Claims. (Cl. 150—40.)



1. In a key case, a rigid supporting plate having spaced coil spring retaining loops, a coil spring located in said loops with portions thereof of substantial length located between the loops and exposed, and a set of key hangers having heads removably and swivelly and swingably located in said exposed coil portions, said hangers being pendent from said coil spring, said hangers comprising wires having at one end key loops and at the other end head loops coiled closely together and having a wedge-shaped portion for entering the spring in the insertion and removal of the hanger.

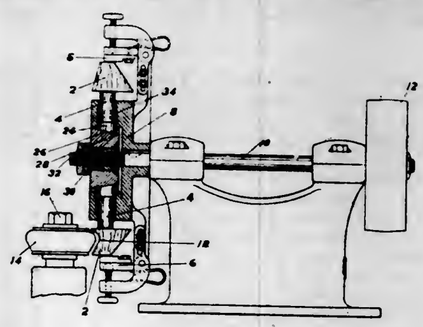
1,888,293. SOUND PICTURE ATTACHMENT FOR MOVING PICTURE MACHINES. VIRGIL A. SCHOENBERG, Morton Grove, Ill., assignor to Light-Sensitive Apparatus Corporation, Niles Center, Ill. Filed Nov. 16, 1929. Serial No. 407,683. 1 Claim. (Cl. 179—100.3.)



In a sound picture attachment for moving picture machines, a sectional shield unit having its sections disposed all in a straight line, the two end sections being instantly adjustable longitudinally of the cooperating sections manually, a light source adjustable in one end, and means within said shield unit for focusing light received therefrom and for projecting all of the same optically and in a rectangular beam upon an objective spaced a material distance therefrom.

1,888,294. WOOD-HEEL MACHINE. WESLEY JOHN SHAW, Haverhill, Mass., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed May 13, 1925. Serial No. 30,067. 7 Claims. (Cl. 12—47.1.)

1. A machine for operating on heels having, in combination, a shaft, a bushing longitudinally adjustable on the shaft having a cam face, a jack having a plurality of cooperating jaws one of which jaws has a cam face in contact with the bushing cam face, means yieldingly maintaining the cam faces in engagement, whereby the jaw having the cam face may be relatively adjusted by adjusting the bushing on the shaft, means for rotating the shaft, and a cutter rotatable about an axis at an angle to the axis of rotation of the shaft, the axes being



coplanar, and the cutter being positioned in the path of travel of a blank in the jack during the rotation of the shaft.

1,888,295. BITUMINOUS EMULSION AND METHOD OF PRODUCING. PRESTON R. SMITH, Rahway, N. J., assignor to The Barber Asphalt Company, Philadelphia, Pa., a Corporation of West Virginia. Filed July 26, 1928. Serial No. 295,614. 12 Claims. (Cl. 134—1.)

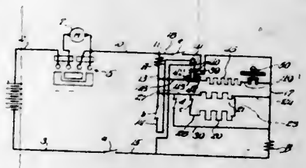
1. A bituminous emulsion including bitumen dispersed in an aqueous dispersing medium including an alkaline salt of a sulfonated oil and having an alkalinity within about the range pH 11.5–pH 13.2.

1,888,296. SINTERING MACHINE PALLET. HENRY J. STEHLI, Cedar Grove, N. J. Filed Jan. 20, 1930. Serial No. 422,220. 2 Claims. (Cl. 266—21.)



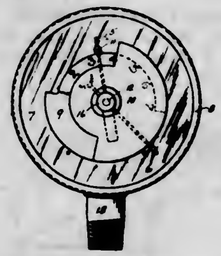
1. A sintering machine pallet comprising a cast iron body containing one or more nickel steel reinforcing rods embedded therein, said rods containing less than 5% of nickel.

1,888,297. CONTROL SYSTEM FOR ELECTRICAL VEHICLES AND THE LIKE. LEIGH J. STEPHENSON and HERBERT J. FRAMHEIN, Chicago, Ill., assignors to Walker Vehicle Company, Chicago, Ill., a Corporation. Filed Apr. 15, 1931. Serial No. 530,174. 6 Claims. (Cl. 172—179.)



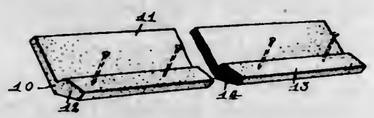
1. An electrical apparatus comprising, in combination, a series motor having two field windings therefor connected in parallel and cooperating resistances shunting the windings, and means responsive to a reduced flow of current in both of said windings for short circuiting at least a portion of said resistances to reduce the strength of said field.

1,888,298. GAUGE. JOHN B. TEESDALE, Grand Rapids, Mich., assignor to Teesdale Manufacturing Company, Grand Rapids, Mich., a Corporation of Michigan. Filed May 25, 1931. Serial No. 539,768. 6 Claims. (Cl. 116—118.)



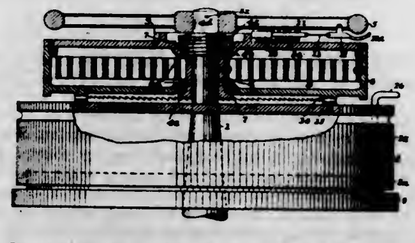
1. In gauge for determining the quantity of liquid within a supply tank having a nipple adapted to be inserted in feed line from the supply tank, a dial bearing lift indicia, a pointer operable by the liquid withdrawal from the supply tank for indicating the amount of liquid within said tank during withdrawal of liquid therefrom, a second pointer operable by the first pointer for indicating the amount of liquid within said tank irrespective of liquid withdrawal therefrom, and an adjustable blind for blanking predetermined lift indicia whereby the gauge is adaptable for use with a tank having a given lift within the range of the indicia on said dial.

1,888,299. WEATHER STRIP. JOSEPH A. TREMBLAY and GREGORY E. TREMBLAY, Dolbeau, Quebec, Canada. Filed Feb. 28, 1931, Serial No. 519,224, and in Canada Oct. 31, 1930. 1 Claim. (Cl. 20—69.)



In a weather strip made entirely of rubber, a relatively thick base pad adapted to be secured to a carrier member, said pad being of tapered cross section, and a flexible flange formed integral with the pad and extending angularly from one face of the pad, said flange being of substantially equal thickness joins the other face of the pad below the apex represented by the maximum thickness of the pad and a portion of the pad extending from said apex and decreasing in thickness to meet the said flange, the flange being adapted to resiliently contact with a stationary member adjacent the carrier member.

1,888,300. ENGINE STARTER. FREDERICK A. VASTANO, Paterson, N. J. Filed Mar. 22, 1932. Serial No. 600,441. 4 Claims. (Cl. 185—41.)



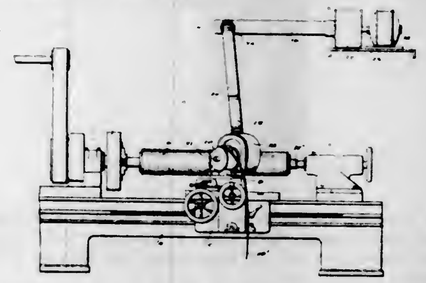
1. In combination, with the rotary element of an internal combustion engine, said element having a projecting axial shaft, a unitary starting mechanism for the engine comprising a handle structure having a sleeve to fit over and revolve upon the shaft, a drum revolubly on the sleeve and a helical spring in the drum connected at its ends to the drum and sleeve, said drum having ratchet teeth concentric with the sleeve, and a manually disengageable pawl normally engaged with said teeth and carried by the handle structure, said element and drum having coactive abutments adapted to resist rotation of the drum relatively to said element when the handle structure is rotated in the direction in which the pawl clicks idly over said ratchet teeth and formed to cam past each other when said element is rotated in said direction under engine power.

1,888,301. TIE HOLDER. OVANDO W. WALLER, Los Angeles, Calif. Filed July 6, 1931. Serial No. 549,068. 1 Claim. (Cl. 206—50.)



A tie holder comprising a thin, flat, rectangular plate provided with a slot extending from one edge of the plate coaxially with the longitudinal axis of the plate and terminating at a point adjacent to the opposite edge of the plate, said slot producing a pair of arms, said arms being rigid against flexing in a direction to close the slot, the remaining side edges of the plate being recessed.

1,888,302. ROLL TRUING APPARATUS. CHARLES F. WEAVER, ROBERT W. HYMAN, and GEORGE H. WHEATLEY, Ashland, Ky. Filed Mar. 6, 1930. Serial No. 433,752. 1 Claim. (Cl. 90—15.)

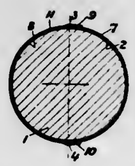


In an apparatus for truing canton flannel rolls and the like, the combination with a lathe, of an electric motor mounted on the tool carriage of the lathe, a circular cutter mounted on the inner end of the rotor shaft of said motor for trimming down the ordinary rough uneven surface of a roll mounted in the usual head and tail stocks of the lathe, an upstanding yoke carried by said tool carriage, a casing carried by said yoke and enclosing said cutter and having an opening therein in immediate proximity to the point of engagement of said cutter with the surface of the roll, the casing being inclined at an angle to the longitudinal axis of the roll, the opening in the casing being in a plane parallel to said axis, and pneumatic means connected to said casing for removing the trimmed material deposited therein, the casing being movable with the head.

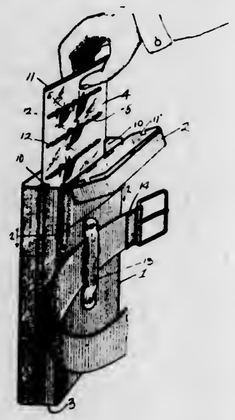
1,888,303. METHOD OF PRODUCING INTAGLIO PRINTING FORMS. KURT WOLFSOHN, Schoeneberg, near Berlin, Germany, assignor to Rotophot Aktiengesellschaft fuer Graphische Industrie, Berlin, Germany. Filed Dec. 30, 1929, Serial No. 417,602, and in Germany June 21, 1929. 7 Claims. (Cl. 41—43.)

6. In a process for the production of circular intaglio printing forms, the steps which comprise producing a re-

sist photographically upon a plurality of transfer sheet sections whose total effective length along any line is equal to the circumference of the form along a corresponding line, mounting such sections in succession upon said form to form an endless covering, and subsequently etching the whole form simultaneously.

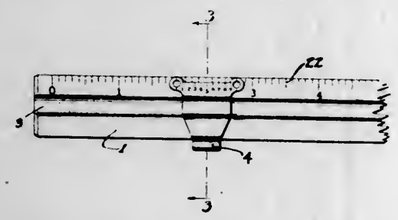


1,888,304. CONTAINER FOR FLY HOOKS AND PLAIN HOOKS. PHILIP BALDWIN BEKEART, San Francisco, Calif. Filed Nov. 5, 1928. Serial No. 317,303. 4 Claims. (Cl. 43—32.)



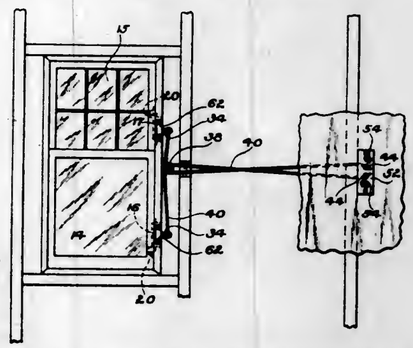
1. A spring for holding fish hook snells comprising a series of windings, each winding being provided with a lateral bow and all of the bowed windings lying in nested relation.

1,888,305. VERNIER SCALE GUARD MEASURING DEVICE. EMERICK BERGER, Bridgeport, Conn. Filed Sept. 6, 1930. Serial No. 480,051. 2 Claims. (Cl. 33—107.)



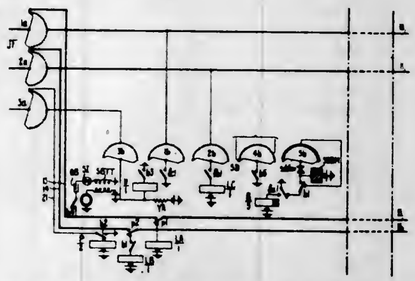
1. A vernier scale guard measuring device comprising a member adapted to slidably embrace a rule, one of the horizontal free edges of the member terminating inwardly of the adjacent measuring edge of the rule and provided with indices to form a vernier, and projecting ears at the respective corners of the aforesaid edge of said member, each ear being provided with an opening forming a measuring point locater, the outer edges of the ears lying substantially flush with the adjacent measuring edge of the rule.

1,888,306. SAFETY LOCKING DEVICE. OSCAR A. CARLSON, Aberdeen, Wash. Filed Aug. 18, 1930. Serial No. 475,903. 1 Claim. (Cl. 292—222.)



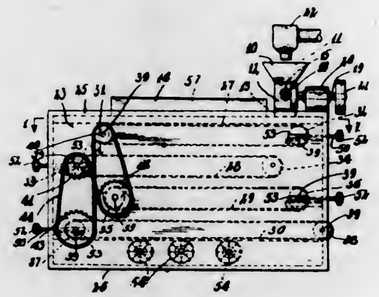
A locking device for a sliding closure consisting of a bearing plate secured to the sliding member and having a latch opening therein; a locking member pivotally secured to the window casing adapted to normally rest upon said plate; means adapted to urge said locking member against said plate; a cam adapted to retract said locking member against said urging means; control means for said cam adapted to be placed at a point removed from the sliding member; said means consisting of a spindle, a ratchet wheel secured to said spindle, a pawl adapted to engage said ratchet and a release member adapted to control said pawl; and a flexible tension member connecting said control means and the said cam.

1,888,307. TELEPHONE SYSTEM. ARTHUR EDWARD CASWELL, Liverpool, England, assignor to Associated Telephone & Telegraph Company, Chicago, Ill., a Corporation of Delaware. Filed May 4, 1931, Serial No. 534,829, and in Great Britain June 18, 1930. 7 Claims. (Cl. 179—175.2.)



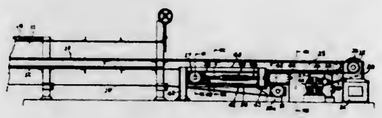
1. In a testing system, a first station, a second station, a plurality of junctions originating in the first station and terminating in the second station in automatic switches, all of said junctions being accessible at the first station for regular service to the second station, routine testing equipment at the second station for routine testing said automatic switches and having means for successively associating it with said switches, and means at the first station controlled by said equipment over a certain one of said junctions for marking each junction busy to its normal means of access at the first station while said equipment is testing the switch in which that junction terminates.

1,888,308. CONVEYER FOR PRELIMINARY DRYING OF SHORT MACARONI. JOHN S. COFFARO, Brooklyn, N. Y., assignor, by mesne assignments, to Consolidated Macaroni Machine Corporation, a Corporation of New York. Filed Oct. 5, 1929. Serial No. 397,718. 1 Claim. (Cl. 198—84.)



In a device of the class described, four conveyer units arranged in a vertical row, sprocket wheels fixed upon the left side of all the conveyer units, and means for rotating successive sprocket wheels in opposite directions comprising a sprocket chain engaging over the wheel of the first conveyer unit and extending down from the left side of the wheel and engaging under the wheel of the fourth conveyer and extending up from the left side of the wheel of the fourth conveyer and engaging over the wheel of the second conveyer and extending down from the right side of the wheel of the second conveyer and engaging under the wheel of the third conveyer and extending up from the right side of the wheel of the third conveyer and meeting itself at the wheel of the first conveyer.

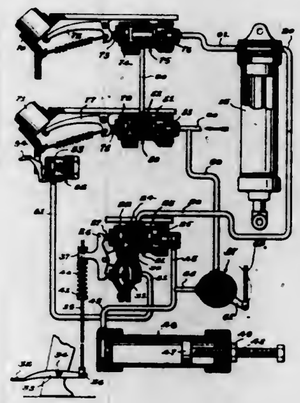
1,888,309. CONVEYER. ALBERT N. CRAMER, Toledo, Ohio, assignor to Owens-Illinois Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed May 4, 1928. Serial No. 274,987. 10 Claims. (Cl. 198—208.)



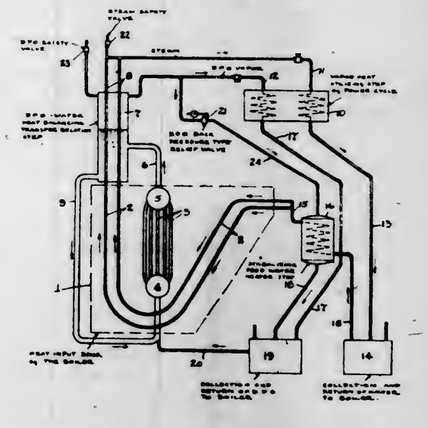
1. The combination of a roll, a support on which said roll is mounted for movement in a direction transverse to its axis, an element running over said roll and tending to move it in said direction, a tension device opposing said movement, said tension device comprising a piston motor including a piston movable in said direction, means for transmitting movement of the piston to said roll, and manually releasable means operating independently of the motor to secure the roll against movement in the opposite direction.

1,888,310. PRESSING MACHINE WITH STORAGE TANKS. ERNEST DAVIS, Syracuse, N. Y., assignor to The Prosperity Company Inc., Syracuse, N. Y., a Corporation of New York. Filed July 7, 1930. Serial No. 465,867. 4 Claims. (Cl. 68—9.)

1. In a pressing machine in combination, cooperative pressing elements, one of which is movable with respect to the other to open and close the press; operating means for the movable pressing element including motor means; motive fluid storing means connected to the motor means and having a capacity to operate the motor a predetermined distance; adjustable means for varying the amount of motive fluid stored in said motive fluid storing means; and control means for controlling the flow of motive fluid from the motive fluid storing means to the motor means.

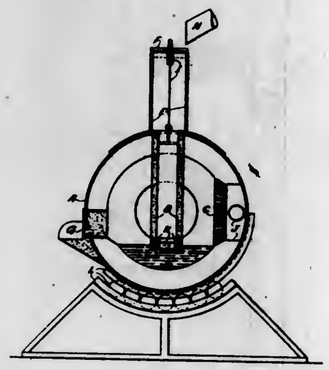


1,888,311. BIFLUID BOILER CONTROL. HERBERT H. DOW, Midland, Mich., assignor to The Dow Chemical Company, Midland, Mich., a Corporation of Michigan. Filed Dec. 29, 1928. Serial No. 329,177. 6 Claims. (Cl. 122—33.)



1. A method of the character described which comprises simultaneously supplying vaporizing heat to a low and a high boiling point liquid by passing them through separate containers in heat absorbing relation with a common source of heat, bringing the so heated fluid products into temperature balancing heat transfer relation, utilizing the so treated vapor of the low boiling point liquid while utilizing the vapor of the high boiling point liquid, and preventing excess pressure development in the high boiling point liquid vaporizing and utilizing system by transferring to the low boiling point liquid boiler feed at least part of the heat that would otherwise cause said excess pressure.

1,888,312. METALLURGICAL PROCESS FOR THE MAKING OF FERROUS METALS. JAMES G. DUDLEY and JOHN G. KREBS, Brooklyn, N. Y., assignors, by mesne assignments, to Harrison Osborne, New York, N. Y. Filed Feb. 23, 1926. Serial No. 90,180. 11 Claims. (Cl. 75—17.)



2. The process of melting iron oxide ore and, when molten, of the automatic separation of its gangue therefrom by feeding said ore into a furnace through a gastight refractory conduit immersed in the furnace hot-blast; said conduit having one end opening external the furnace for ore entrance and having its second end opening internal the furnace beneath the surface of the molten bath discharging there the molten ore; and said conduit having minor peripheral ports adjacent the external surface of the molten bath discharging gangue separating from the melting ore within the conduit.

1,888,313. ADVERTISING ENVELOPE. LUCIEN C. FIORENZA, New York, N. Y. Filed Aug. 3, 1929. Serial No. 383,320. 3 Claims. (Cl. 229—85.)



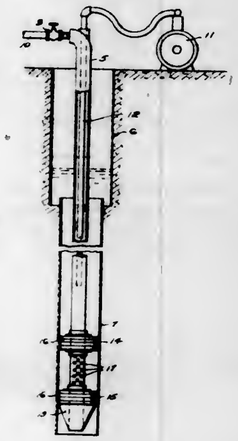
1. An envelope comprising a main cover sheet having a central or face section and flaps, a guard sheet substantially overlying the central section, the cover sheet being provided with means indicating a tearable margin, the guard sheet having a folded marginal portion incorporated in and adhesively secured to the tearable main sheet margin, an advertising slip or the like movably located between the guard sheet and the central section of the main sheet, and a connection between the advertising slip and the tearable margin portion.

1,888,314. MAKE-UP APPLICATOR. ARTHUR M. FRAMKE, Chicago, Ill. Filed Jan. 30, 1931. Serial No. 512,287. 2 Claims. (Cl. 132—78.5.)



1. A pack of the class described comprising a removable front protective shield, a removable rouge impregnated pad covered by said shield, a removable powder impregnated pad covered by the rouge pad, and a back pad provided on its inner face with lip paste and covered by the powder pad.

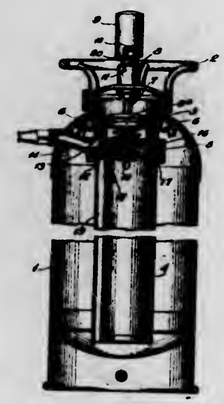
1,888,315. METHOD OF AND MEANS FOR TESTING AND CLEANING WELLS. FRANK C. GAULT, Lake Charles, La. Filed Mar. 1, 1932. Serial No. 596,102. 3 Claims. (Cl. 166—20.)



1. The combination with a well and its screen, of a flow line, means for introducing fluid under pressure to said flow line, pistons carried by said flow line, an air supply line in the flow line, said flow line having openings formed therethrough at a point between said pistons, a discharge line leading from the flow line, and a valve in said discharge line to confine the air in the flow line.

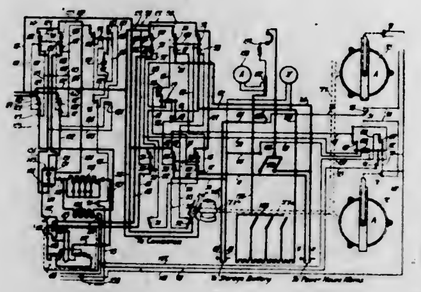
1,888,316. FIRE EXTINGUISHER. VICTOR GEORGE WILLIAM GILBERT, London, England, assignor to American-La France and Foamite Corporation, New York, N. Y., a Corporation of New York. Filed Apr. 28, 1930, Serial No. 447,875, and in Great Britain Apr. 30, 1929. 7 Claims. (Cl. 169—32.)

1. In a fire extinguisher the combination of an outer container, an inner container supporting-member therein, a stopple adapted to seat on an upper face of said member, said face having an outlet for foam discharge, an inner container adapted for support on said member and having a seat arranged for engagement with said stopple when the same is in engagement with said surface.



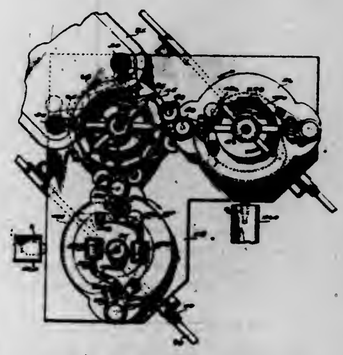
5. In a fire extinguisher, the combination of inner and outer solution containers, said outer container having a neck opening for the insertion of the inner container and also having a seat structure depending from the neck arranged to support said inner container, a stopple for the latter, a spring urging the stopple toward its open position and also engaging the inner container to hold it on its seat, a closure cap for said neck opening and stopple operating means carried thereby.

1,888,317. AUTOMATIC CONVERTER OPERATING DEVICE. BERT S. HIND and WILLIAM FRANK BELL, Potrerillos, Chile. Filed Feb. 15, 1930. Serial No. 428,559. 3 Claims. (Cl. 266—36.)



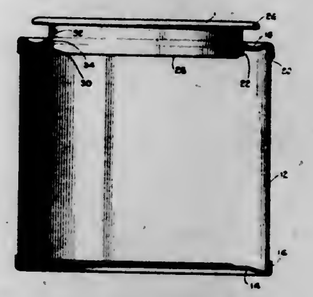
1. Apparatus of the type described which comprises a tilting converter, an air supply for said converter, a reversible electric motor and connections for tilting said converter, manual control means in a circuit for energizing said motor to shift said converter between tilted and upright positions, an air controlled switch connected to the air supply for said converter, automatic tilting means controlled by said air controlled switch for disconnecting said manual control means when the pressure in said supply means falls below a definite minimum and for thereupon actuating said motor to shift said converter to tilting position, means for stopping said motor when said converter reaches tilted position, and re-setting means for disconnecting said tilting means and restoring said manual control means.

1,888,318. MECHANISM FOR FORMING HOLLOW GLASS ARTICLES. VICTOR E. HOFMANN, Toledo, Ohio, assignor to Owens-Illinois Glass Company, a Corporation of Ohio. Filed May 8, 1930. Serial No. 450,717. 13 Claims. (Cl. 49—9.)



1. In apparatus for forming glass articles, the combination of a blank mold carriage, blank molds thereon, finishing mold carriages, a finishing mold on each finishing mold carriage, and automatic means for simultaneously transferring parisons from the blank molds to said finishing molds.

1,888,319. METAL CAN AND CLOSURE THEREFOR. ARTHUR G. HOPKINS, Maspeth, N. Y., assignor to Metal Package Corporation, New York, N. Y., a Corporation of Delaware. Filed Oct. 21, 1930. Serial No. 490,111. 5 Claims. (Cl. 220—42.)

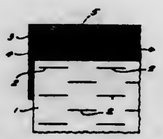


1. An air-tight metal package comprising a can including a cover seat and a downwardly depending flange or side wall defining the can opening, and a closure therefor including a flange, a depressed central portion, and a side wall for engaging the aforesaid side wall of the cover seat, one of said side walls being straight, and the other of said side walls having a straight centering portion dimensioned to readily fit the first mentioned side wall, a transition portion, and a straight sealing portion dimensioned for a force or friction fit with the first mentioned side wall.

1,888,320. APPARATUS FOR MULTIPLE VISUAL EFFECTS. ANDREI HUDIAKOFF, New York, N. Y. Filed Oct. 7, 1931. Serial No. 567,378. 2 Claims. (Cl. 272—22.)

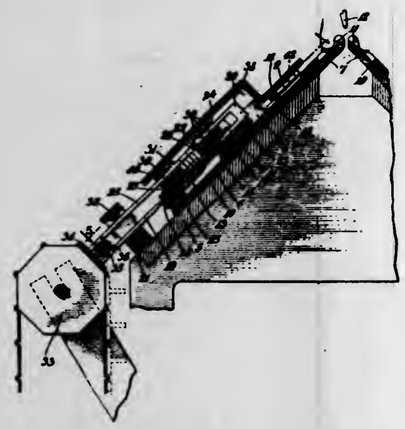
1. Apparatus for multiple visual effects comprising a unitary flat design carrying base having a slot, a support arranged in operative position at one side of said base,

said support and said base being mounted for relative movement of one in relation to the other, a supplementary design carrying member mounted with one end hinged on said support and with the opposite free end positioned



in operative relation to said slot, and a guide effectively positioned between said base and said support and secured along one edge of said slot to guide the free end of the supplementary member into engagement with the slot.

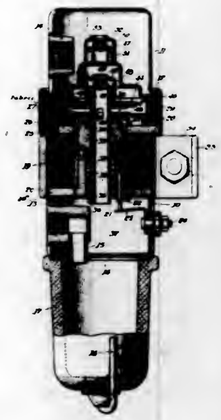
1,888,321. KNITTING MACHINE. MARTIN KUEHNE, Floral Park, Long Island, N. Y. Filed Aug. 29, 1929. Serial No. 389,170. 8 Claims. (Cl. 66—75.)



1. In a jacquard knitting machine, a needle bed and needles slidably mounted therein, an actuating member for each needle in constant superimposed contact throughout its length with the needle, means including a part angularly movable relative to the actuating member and the needle to connect the member and needle for unitary sliding movement on the needle bed, and a member movable over the needle bed provided with spaced operating means for said movable connecting parts and for the needle actuating members respectively.

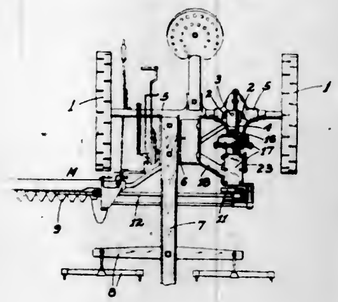
1,888,322. MAGNETIC PUMP. ADOLPH LANCTOT, Desplaines, and ERNEST SPERISEN, Chicago, Ill. Filed May 31, 1932. Serial No. 614,458. 12 Claims. (Cl. 103—53.)

1. In a magnetic pump, the combination of a two part casing consisting of a body and a dome in superimposed relation, a fluid inlet in the body and an outlet in the dome, a magnet within the body, an armature concentric with the magnet, a tube secured to and projecting axially through the armature into a liquid space below the magnet and above the magnet into the dome, a diaphragm extending across the space above the magnet and held at its edges at the junction of the body and dome and mov-



able with the armature, and a contact piece held above the magnet in position to be contacted by an upward motion of the armature.

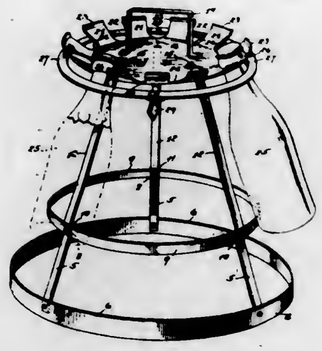
1,888,323. MOWING MACHINE. CARL F. MASKUS, Hipon, Calif. Filed Feb. 24, 1931. Serial No. 517,739. 3 Claims. (Cl. 56—271.)



1. A driving mechanism for a mower comprising the combination of a pair of mower supporting and driving wheels, a two piece axle driven by the wheels, a differential gearing connected in driving relation with the axle elements, a separate speed step up gearing connected in driving relation with the differential gearing, a pitman, a train of gears connected in driving relation between the speed step up gears and pitman, such train normally driving the pitman at the speed of the step up gears, and means interposed in the train of gears operable to selectively change the speed ratio thereof to increase the speed of the pitman, and a sickle connected in driving relation with the pitman.

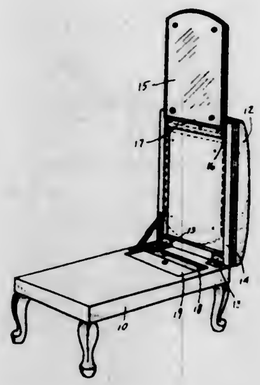
1,888,324. BOTTLE RACK. WILLIAM HOWARD MATTHAI, Garrison, Md. Filed May 18, 1932. Serial No. 611,965. 3 Claims. (Cl. 211—74.)

1. In a bottle rack the combination with an annular suspension-plate having an annular series of alternate suspension fingers and bottle-neck receiving-notches around its periphery for pendantly sustaining bottles by their necks



and means below said suspension-plate and above the bottoms of the bottles for holding the neck-sustained bottles in an inclined position.

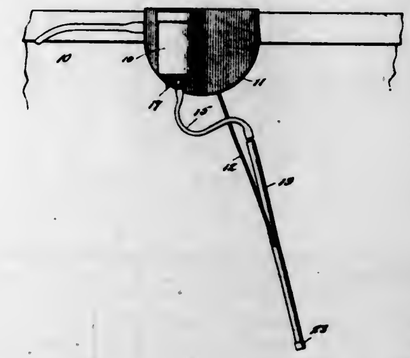
1,888,325. VANITY BENCH. EDWARD W. MCCARROLL, Chicago, Ill. Filed Mar. 13, 1931. Serial No. 522,289. 3 Claims. (Cl. 155—188.)



1. A vanity bench including a supporting bed, a seat hingedly mounted thereon adapted to be swung from closed to upright position, and a mirror pivotally mounted upon said seat adapted to be concealed thereby when in closed position and extend upwardly therefrom to be supported thereby when in upright position.

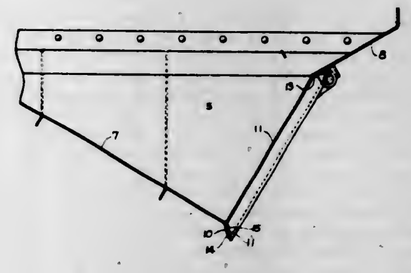
1,888,326. WINDSHIELD WIPER. JAMES H. MULLEN, Jersey City, N. J. Filed Feb. 15, 1930. Serial No. 428,564. 2 Claims. (Cl. 15—255.)

1. A wiper element which comprises a tubular wiper member adaptable to contain liquid, having a longitudinal opening in one face, a U-shaped absorbent wick element projecting through said slot, with the folded edge extending outwardly to contact with the windshield, a rubber wiper element also extending from said slot adjacent the wick element and a metallic spacing means disposed between the rubber wiper element and wick element to



space the same and metallic spacing means disposed between the tubular member, and the rubber wiper, and between the tubular member and wick element to space them respectively, from the tubular member.

1,888,327. HOPPER CAR CONSTRUCTION. WALTER P. MURPHY, Chicago, Ill., assignor to Union Metal Products Company, Chicago, Ill., a Corporation of Delaware. Filed Oct. 2, 1929. Serial No. 396,665. 5 Claims. (Cl. 105—249.)

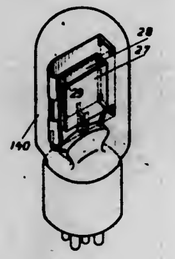


1. In a railway hopper car, the combination of a hopper door frame having a discharge opening provided with an outwardly flared oblique door engaging surface bordering the entire perimeter of the discharge opening, and a door provided with outwardly flared oblique surfaces bordering the entire perimeter of the door adapted to engage the door engaging surfaces of the frame when in closed position.

1,888,328. RECORDING GLOW LAMP. THEODORUS H. NAKKEN, Forest Hills, N. Y., assignor to Nakken Patents Corporation, a Corporation of Delaware. Filed June 12, 1929, Serial No. 370,293. Renewed Mar. 14, 1931. 7 Claims. (Cl. 176—122.)

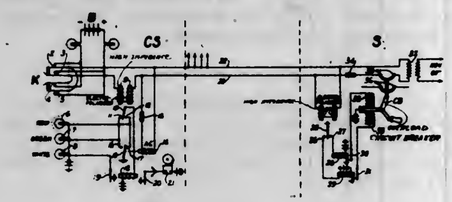
1. In a glow lamp an anode comprising opposed parallel plates having a cross-wall at one side provided with a slot-

like window; and a cathode within said anode comprising spaced parallel plates substantially separated from said



cross-wall and short-path insulated from the parallel plates of said anode.

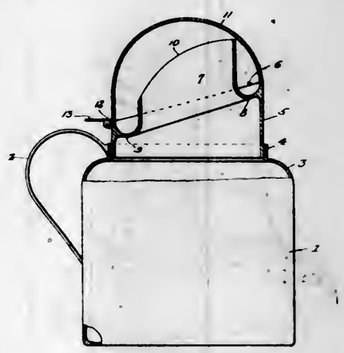
1,888,329. REMOTE CONTROL SYSTEM. MARTIN L. NELSON, Park Ridge, Ill., assignor, by mesne assignments, to Associated Electric Laboratories, Inc., Chicago, Ill., a Corporation of Delaware. Filed Aug. 6, 1927. Serial No. 211,100. 7 Claims. (Cl. 177—311.)



1. In a remote control system, a control station and a distant device interconnected by a pair of conductors, signals at said station, a source of direct current and a source of alternating current, a polarized relay responsive to direct current and a supervisory relay responsive to alternating current at said station, a second polarized relay responsive to direct current, means for operating said device, means at said station for connecting either pole of said direct current source to said conductors, said polarized relays selectively operated in accordance with the direction of current flow in said conductors, the first polarized relay operating said signals to indicate a desired change in position of said device and the second polarized relay operating said operating means to operate said device, and means operated by said device for connecting said alternating current source to said conductors, said supervisory relay operated responsive to the connection of said alternating source to operate said signals to indicate that the device has operated and to indicate the position to which said device has been operated.

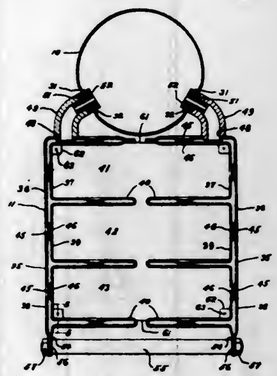
1,888,330. SIRUP PITCHER. EUGENE ROBINSON, Level Land, S. C. Filed Mar. 18, 1931. Serial No. 523,554. 1 Claim. (Cl. 65—13.)

A pitcher of the class described comprising a body part having a reduced upper end forming a large opening and an internally threaded flange around the opening, a neck portion threaded to the flange and having its upper end sloping downwardly and rearwardly, a spout having its upper and lower ends sloping downwardly and rearwardly from the front part thereof with the lower end bent outwardly into substantially semi-circular shape to provide a trough, the outer end of which is connected to the upper end of the neck, said trough having a hole in the bottom of its rear part, and a substantially dome-shaped cover hingedly connected at its rear to the rear part of



the neck and having its lower edge sloping downwardly and rearwardly to engage the upper edge of the neck with the cover closing the trough when in closed position.

1,888,331. REFRIGERATING APPARATUS. OTTO M. SUMMERS, Dayton, Ohio, assignor to Frigidaire Corporation, Dayton, Ohio, a Corporation of Delaware. Filed July 31, 1929. Serial No. 382,516. 7 Claims. (Cl. 62—126.)

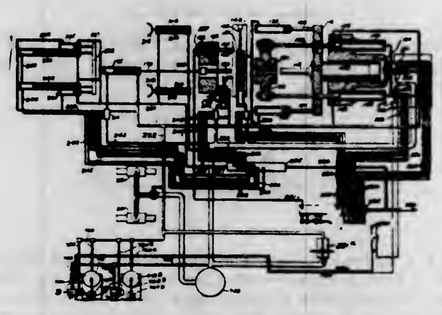


1. An evaporator for refrigerating apparatus including a plurality of sheet metal members detachably held together to provide complementary portions forming a freezing zone, each of said members forming refrigerant expansion chambers separate from one another, said refrigerant expansion chambers having liquid refrigerant inlet and outlet connections, means formed integral with at least one of said members and extending horizontally into said freezing zone to divide the zone into a plurality of sharp freezing compartments.

1,888,332. PRESSURE CONTROL SYSTEM. DAVID L. SUMMEY, Waterbury, Conn. Original application filed Mar. 12, 1926, Serial No. 94,834. Divided and this application filed Sept. 21, 1928. Serial No. 307,542. 19 Claims. (Cl. 60—52.)

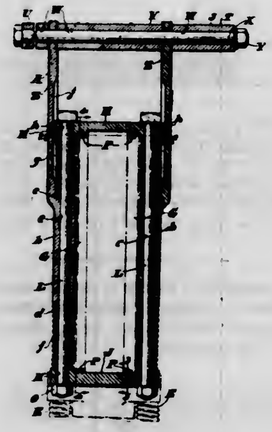
1. In a combination with the main pressure line of a fluid pressure system and means for building up pressure

therein, a plurality of power units operated by said pressure, valve means for connecting and disconnecting the respective power units with the line, a plurality of control units for limiting the fluid pressure to different pre-



determined levels, selective means for selecting the particular control unit to be effective, and means automatically operated in timed relation with one of said valve means for operating said selective means.

1,888,333. HANDLE FOR ROCK DRILLS. EDWARD F. TERRY, Phillipsburg, N. J., assignor to Ingersoll-Rand Company, Jersey City, N. J., a Corporation of New Jersey. Filed Aug. 7, 1930. Serial No. 473,744. 7 Claims. (Cl. 121—36.)

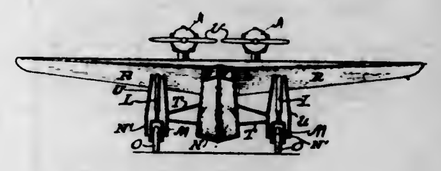


1. A handle assembly adapted to be attached to a preassembled rock drill and comprising a pair of plates, bolts for clamping the plates rigidly to the rock drill and being removable with the handle assembly, a grip portion having a pair of legs slidable on the bolts, and springs on the bolts acting against the legs to cushion the movement of the grip portion.

1,888,334. COMPOSITION FOR CLEANING. OSCAR TEXTOR, Shaker Heights, and BURT O. CARTER, Cleveland, Ohio. Filed Dec. 15, 1928. Serial No. 326,403. 2 Claims. (Cl. 87—5.)

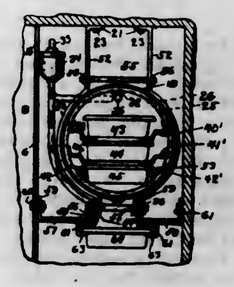
1. A cleaning composition, which comprises about 9 per cent. of sulphuric acid, about 3 per cent of diatomaceous earth, and about 88 per cent. of sodium sulphate.

1,888,335. AMPHIBIAN AIRPLANE. TOM TOWLE, Detroit, Mich., assignor to Towle Aircraft Company, Detroit, Mich., a Corporation of Michigan. Filed Feb. 7, 1930. Serial No. 426,454. 2 Claims. (Cl. 244—2.)



1. An amphibian airplane having wings, wing floats having a fixed position relative to the wings, a pair of wheels each mounted on a truss pivotally supported both by said wing floats and by said wings, a suitable opening in each of said wing floats, means for withdrawing the wheels through said openings.

1,888,336. EVAPORATOR. HARRY R. VAN DEVENTER and J. ALFRED GAIER, New York, N. Y., assignors, by mesne assignments, to Frigidaire Corporation, Dayton, Ohio, a Corporation of Delaware. Filed Oct. 27, 1927. Serial No. 299,001. 4 Claims. (Cl. 62—126.)



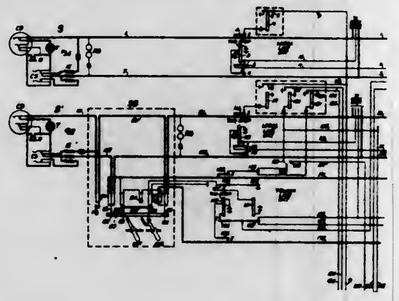
1. Suspension means for the evaporating unit of a mechanical refrigerator, comprising, in combination, a plurality of hoops having split portions, suspension straps welded to the hoops, and clamping means adapted to coact with the split portions of the hoops.

2. An evaporator for a refrigerating apparatus comprising inner and outer walls arranged to form a chamber for refrigerant, a refrigerant inlet conduit connection communicating with said chamber through one of said walls, a refrigerant outlet conduit connection communicating with the upper portion of said chamber through the inner wall thereof.

1,888,337. TELEPHONE SYSTEM. JOHN H. VOSS, Berwyn, Ill., assignor, by mesne assignments, to Associated Electric Laboratories, Inc., Chicago, Ill., a Corporation of Delaware. Filed May 11, 1931. Serial No. 536,842. 42 Claims. (Cl. 179—18.)

1. In a telephone system, a local exchange and a distant exchange, a plurality of subscribers' lines in said local exchange, a plurality of trunk lines connecting said

exchanges, incoming trunk signals common to all said trunk lines, means for operating all said signals responsive to an incoming trunk call on any one of said trunk



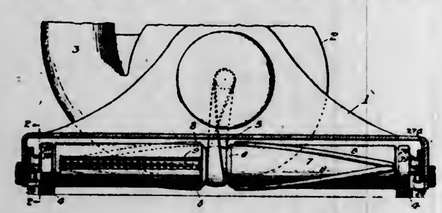
lines, and means for automatically connecting the trunk line in use in the incoming call with a subscriber's line in response to such subscriber answering the call.

1,888,338. COUPLING. ALBERT J. WEATHERHEAD, Jr., Cleveland, Ohio. Filed June 13, 1930. Serial No. 460,837. 1 Claim. (Cl. 285—30.)



A coupling for a hose and small tube comprising a body having a screw-threaded extension and an enlarged screw-threaded cavity closed by a straight wall, a passage in the central area of said wall extending through said extension, a conically recessed seat encircling the inside end of said passage, and an independent sealing disk of narrow width provided at one side with a conical protuberance adapted to be tightly seated upon said conically recessed seat and to force the flared end of a pipe, extended through said passage, into sealing engagement with said seat, said disk having a flat surface at its other side adapted to engage with and seal the end portion of a hose secured into said body.

1,888,339. SUCTION CLEANER. HARRY B. WHITE, Canton, Ohio, assignor to The Hoover Company, North Canton, Ohio, a Corporation of Ohio. Filed Jan. 14, 1931. Serial No. 508,563. 3 Claims. (Cl. 15—8.)



1. A rotary agitator for a suction cleaner comprising a hollow body, a brush carried by said body, a bearing-receiving member positioned within each end of the body, stationary stub-shafts extended within said bearing-receiving members, bearings within said bearing-receiving members rotatably supporting said members, said body and said brush for rotation about said stub-shafts, and a stationary thread guard carried by each of said stub-shafts spaced from the end of the body, characterized by the fact that said stub-shafts are bored at their outer ends and the space between said thread guard and the end of said agitator body is connected to said bores.

1,888,340. CIGARETTE HOLDER. WILLIAM N. WHITE, Spokane, Wash. Filed Jan. 11, 1930. Serial No. 420,119. 1 Claim. (Cl. 131—10.)



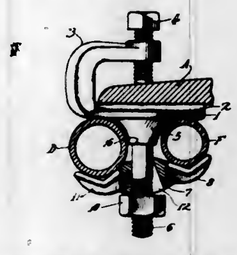
In a cigarette holder, the combination with a bit-portion, a fixed, integral recessed jaw having a flat face forming a perpendicular abutment wall, and flanged edges on the jaw, of a hinged jaw having complementary overhanging flanges, a longitudinally extending pivot plate fixed at one end to the hinged jaw and located within a groove intermediate the bit portion and the fixed jaw, a pivot for the plate, a button on the plate depressible within a socket at the rear end of the groove, and a spring within the socket beneath the button.

1,888,341. COMPOSITE SILICA ARTICLE. GUNNAR A. F. WINCKLER, Worcester, Mass., assignor to General Electric Company, a Corporation of New York. Filed Nov. 6, 1930. Serial No. 493,837. 4 Claims. (Cl. 49—78.1.)



1. An article of manufacture comprising a support constituted of angular pieces of vitreous silica united with one another at isolated regions of contact only, and having spaces therebetween which constitute a large fraction of the total volume of said support and a layer of substantially cavity-free silica united with said support.

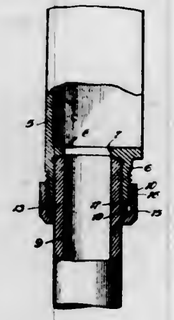
1,888,342. HANGER. ERNST G. K. ANDERSON, Evanston, Ill., assignor to Appleton Electric Company, a Corporation of Illinois. Filed June 1, 1931. Serial No. 541,345. 1 Claim. (Cl. 248—82.)



A hanger comprising a round table flat on the top to fit against the under side of a structural beam or the like, an arm extending up at one edge of the table and then across the top to the middle, a set screw passing through the free end of the arm at right angles to the top of the table, the table having on the under side a central boss flat on the bottom, the boss decreasing in diameter from the top toward the bottom and having the contour of

the inner half of an inverted annular trough semi-cylindrical in cross section, a stud smaller in diameter than the lower end of the boss depending from the lower end of the boss, a holder loose on the stud, and a nut screwed on the lower end of the stud to secure the holder thereon.

1,888,343. OUTLET BOX. ERNEST A. BOHLMAN and HENRY BRACHTL, Chicago, Ill., assignors, by mesne assignments, to Appleton Electric Company, Chicago, Ill., a Corporation of Illinois. Filed Nov. 9, 1928. Serial No. 318,162. 2 Claims. (Cl. 247—25.)



1. An outlet box comprising, in combination, a box body having an aperture through one of the walls thereof, a tubular externally screw-threaded nipple on said body about said aperture, an internally screw-threaded gland capable of being screwed upon said nipple and of permitting a conduit to be inserted through said gland into said nipple, a split ring positioned within said gland and arranged to abut the outer end of said nipple, a flange on the abutting face of said ring, a plurality of sharp projections upon the abutting face of said flange, said nipple being annularly recessed to receive said flange and to be engaged by the serrations thereon as the gland is screwed upon the nipple, and a plurality of sharp interrupted projections running circumferentially about the inner face of said ring and adapted to bite into the outer surface of said conduit as the gland is screwed upon the nipple.

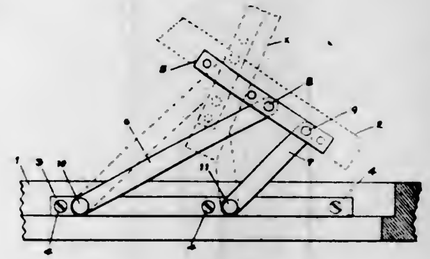
1,888,344. PRODUCTION OF RELIEFS AND OF COLORED PICTURES. PIERO BON, Venice, Italy. Filed Feb. 15, 1928. Serial No. 254,601. 12 Claims. (Cl. 95—5.6.)



1. The method of producing a color picture which comprises preparing by photographic means a glyptic image in which the different planes correspond to different actinic color values of a multi-colored original, applying to different zones thereof color media of corresponding value, and removing the resulting pigmented film.

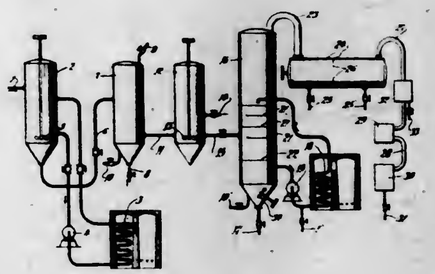
1,888,345. FRICTION SASH FIXTURE. EARLE W. CUMMINGS, Los Angeles, Calif., assignor to Watertite Casement Hardware Co., Santa Barbara, Calif., a Corporation of California. Filed Mar. 27, 1929. Serial No. 350,272. 3 Claims. (Cl. 16—163.)

1. A swinging window mounting comprising a pair of elongated flat attachment plates spaced apart to permit one to be placed over the other when the window is closed, a pair of links between the plates pivoted at opposite ends respectively at spaced points to said plates, means spacing said links to allow folding thereof between the



plates in overlying position, and a friction means embracing and retarding pivotal movement of one of said pivots, one of said links being shorter than the other whereby the plates will diverge when the window is opened.

1,888,346. APPARATUS FOR THE PRODUCTION OF LUBRICATING OIL. HOMER T. DARLINGTON, West Chester, Pa., assignor, by mesne assignments, to Oil Corporation of America, a Corporation of Delaware. Original application filed May 26, 1927, Serial No. 194,282. Divided and this application filed Sept. 10, 1928. Serial No. 304,859. 3 Claims. (Cl. 196—79.)

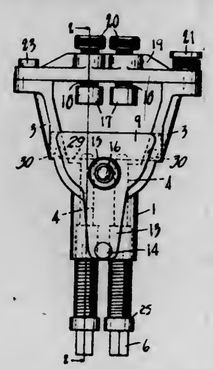


2. In an apparatus for treating liquid hydrocarbon oil, the combination of means for heating oil mixed with adsorptive addition agent under pressure, means for separating lighter products from the heated oil, means for adding an additional adsorptive agent to the residual oil, means for heating, distilling and condensing said residual oil while subjected to vacuum, and means in the distilling means for mechanically agitating liquid oil and adsorptive addition agent, and means for withdrawing unvaporized oil.

1,888,347. PUNCH. JAMES K. DIAMOND, Grand Rapids, Mich., assignor to Clipper Belt Lacer Company, Grand Rapids, Mich. Filed Aug. 5, 1931. Serial No. 555,824. 5 Claims. (Cl. 164—27.)

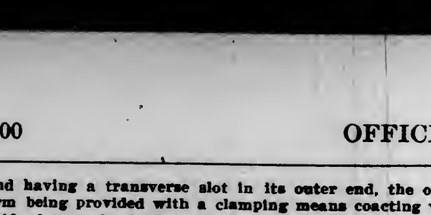
1. In a device of the class described, the combination of a body member having parallel threaded bores and spaced arms disposed in the longitudinal plane of the bores, a work holder on said body member, tubular dies having threaded engagement with said bores in said body member, a die block holder pivotally mounted on one of said arms to swing in a plane transverse to the plane of the arms

and having a transverse slot in its outer end, the other arm being provided with a clamping means coacting with said slot, and die blocks provided with stems having



threaded engagement with said holder and having finger pieces at their outer ends, said die blocks having annular recesses in their faces positioned to receive said dies.

1,888,348. GRATE. JULIUS W. HEGELER and HAL E. EACANBRACK, Danville, Ill., assignors to The Hegeler Zinc Company, Danville, Ill., a Corporation of Illinois. Filed Apr. 8, 1930. Serial No. 442,502. 5 Claims. (Cl. 266—21.)



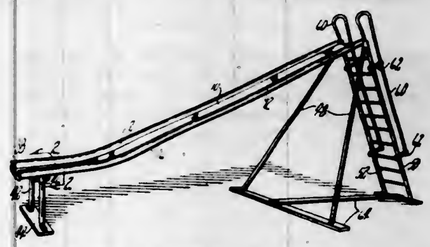
1. In a pallet and grate mechanism for machines of the class specified, the combination of a pallet consisting of side walls, spaced bars which rigidly connect said side walls and which define openings in said pallet, grates supported on said pallet above each of the openings therein, each of which consists of a lock bar secured to opposite side walls of the pallet, and series of separate grate bars provided with holes loosely fitted to said lock bar, the ends of said grate bars extending over and resting upon adjacent pallet bars.

1,888,349. CATHETER. CHARLES M. JACOBY, Kansas City, Mo. Filed Feb. 15, 1932. Serial No. 593,017. 4 Claims. (Cl. 128—349.)



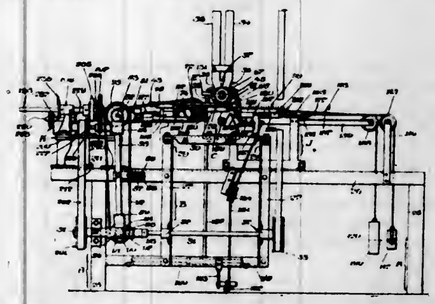
2. A catheter having a longitudinal passage therethrough and having at its discharge end a flexible portion adapted to be doubled on itself so as to close said passage, means for releasably fastening said flexible portion in the doubled condition, a head at the other end of the catheter, a cylindrical peripherally spirally grooved portion between said head and said flexible portion, and an annular groove between and of less diameter than said head and said cylindrical portion.

1,888,350. ALL-METAL SLIDE. RALPH F. LAMAR, Pueblo, Colo., assignor to R. F. Lamar and Company, Pueblo, Colo., a Corporation of Colorado. Filed Nov. 30, 1931. Serial No. 577,897. 8 Claims. (Cl. 272—56.5.)



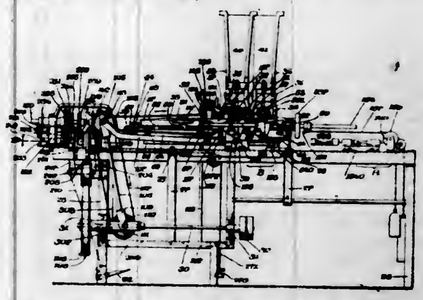
1. A slide device comprising a metal bedway plate, a side rail at each lateral side of said plate, each rail being composed of a substantially tubular metal member, and means for securing said rails to said bedway plate.

1,888,351. MACHINE FOR MAKING BRUSHES. WILLIAM D. LIPPS, Frederick, Md., assignor to Ox Fibre Brush Company, Inc., New York, N. Y., a Corporation of Delaware. Filed June 20, 1930. Serial No. 462,498. 24 Claims. (Cl. 300—7.)



1. The combination with means for supplying fibres, of a fibre assembling rack, means for intermittently moving said rack, an oscillatory transfer head between the first-named means and the rack, said head including fibre-receiving portions and co-acting fibre discharge means, and means for oscillating said head and actuating its discharge means in timed relation to the travel of the rack.

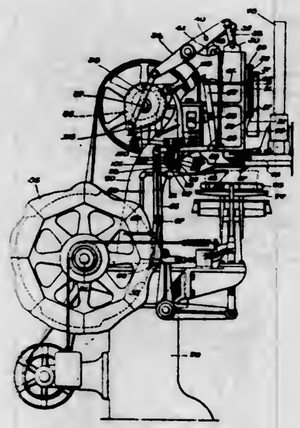
1,888,352. MACHINE FOR MAKING BRUSHES. WILLIAM D. LIPPS, Frederick, Md., assignor to Ox Fibre Brush Company, Inc., New York, N. Y., a Corporation of Delaware. Filed Jan. 8, 1932. Serial No. 585,441. 21 Claims. (Cl. 300—2.)



1. The combination with means for supplying fibres, of an intermittently-movable endless fibre-assembling rack,

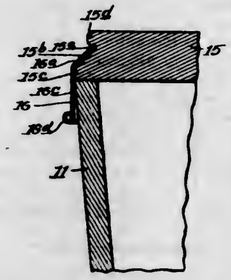
a transfer element between the fibre-supply means and the rack, means including a clutch element for actuating said rack and transfer element in co-operative relation, and mechanism for rendering said clutch element inactive when the rack has received its quota of fibres for a brush, thereby stopping the travel of the rack and the operation of the transfer element.

1,888,353. BRUSH MAKING MACHINE. WILLIAM D. LIPPS, Frederick, Md., assignor to Ox Fibre Brush Company, Inc., New York, N. Y., a Corporation of Delaware. Filed Feb. 16, 1932. Serial No. 593,272. 12 Claims. (Cl. 300—5.)



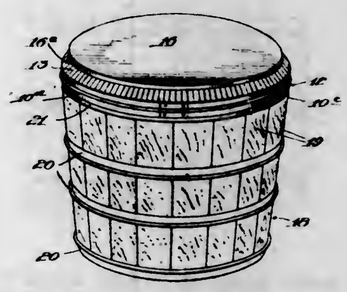
1. In a brush machine, the combination with a brush-back feeding table, means for feeding brush material to tuft-setting position, and a reciprocating tuft-setting tool for engaging the positioned brush material adjacent one end of the material, of means for oscillating said tool about its longitudinal axis at prescribed intervals during the tuft-setting operation.

1,888,354. BUTTER TUB COVER. CHESTER M. MACCHESNEY and ALLEN B. WILSON, Chicago, Ill., assignors to Acme Steel Company, Chicago, Ill., a Corporation of Illinois. Filed Apr. 19, 1929. Serial No. 356,401. 7 Claims. (Cl. 217—81.)



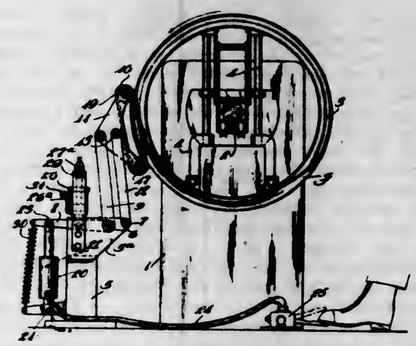
1. A tub cover comprising a non-metallic cover section having an annular recess in its outer edge bounded by annular shoulders of different diameter, and a metallic rim extending around said cover section and having an inwardly directed annular resilient flange moved into engagement with said recess by being snapped over said annular shoulder of lesser diameter.

1,888,355. BUTTER TUB AND METHOD OF FORMING THE SAME. CHESTER M. MACCHESNEY, Chicago, Ill., assignor to Acme Steel Company, Chicago, Ill., a Corporation of Illinois. Filed Aug. 2, 1929. Serial No. 382,926. 4 Claims. (Cl. 217—81.)



1. A container comprising a vessel, a cover mounted on said vessel and having an annular groove therein, and a complete annular metallic band having an inwardly directed flange of lesser diameter than the walls of said groove to permit said flange to be snapped into interlocking engagement with said groove, said rim being provided on its outer side with an annular projection and having a depending part provided with a series of transverse corrugations to permit transverse bending thereof to form a transverse flange, said vessel having a transverse shoulder to be engaged by said transverse flange.

1,888,356. APPARATUS FOR SHAPING SHEET MATERIAL. ROBERT MAYNE, Akron, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y., a Corporation of New York. Filed Sept. 18, 1930. Serial No. 482,750. 8 Claims. (Cl. 154—10.)

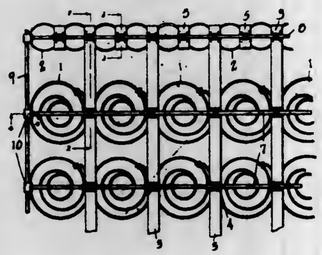


1. Apparatus for shaping sheet material, said apparatus comprising a revoluble form for supporting said material, an orbital elastic belt having an unbacked reach thereof adapted to engage the material on the form, and means for effecting laterally progressive contacting engagement between the belt and the material on the form to progressively shape the material to the form.

1,888,357. MATTRESS FILLER OR CUSHION UNIT. JOHN M. OLDHAM, Detroit, Mich., assignor to L. A. Young Spring & Wire Corporation, Detroit, Mich. Filed Aug. 16, 1930. Serial No. 475,702. 7 Claims. (Cl. 5—248.)

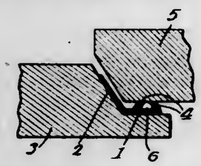
2. A spring mattress filler or cushion unit consisting of helically coiled hour-glass shaped body springs ar-

ranged in transverse rows, a plurality of cylindrically coiled side border springs disposed at the ends of each of said rows, thin cross strips having slotted offsets with which the end coils of springs of adjacent transverse rows are engaged, clips having slotted offsets therein with which



adjacent border springs are engaged intermediate said cross strips, and tie strands threaded through the alined offsets of said cross strips and clips between the bights of the offsets and the portions of the springs engaged with the offsets.

1,888,358. RUBBER CUSHION AND INSULATING STRIP FOR REFRIGERATOR DOORS. FREDERICK C. PALENSKE, St. Joseph, Mich. Filed Aug. 10, 1931. Serial No. 556,055. 3 Claims. (Cl. 20—69.)



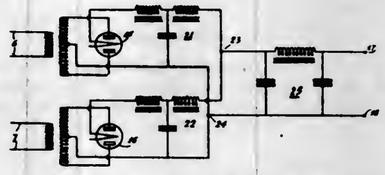
1. Rubber stripping for refrigerator doors, or other closures, comprising a base for attachment to a relatively movable member of the structure, formed with a portion to extend between the meeting edges of the door and doorway, said base having another portion disposed at an angle to said first mentioned portion, and a plurality of ribs on the face thereof, said ribs spaced apart to provide air space between them, and said ribs being adapted to engage another relatively movable member of the structure, when the door or closure is moved into closed position, each rib providing an air-tight joint or seal, and the ribs also providing dead air space between them when the door or closure is in closed position, thereby providing an air-tight seal and insulation in the joint between the door or closure and doorway of the body of the structure.

1,888,359. WALL HYDRANT. THOMAS RITCHIE, Marshalltown, Iowa, assignor to Ritchie Manufacturing Company, Marshalltown, Iowa, a Corporation of Iowa. Filed Dec. 23, 1929. Serial No. 416,154. 3 Claims. (Cl. 251—159.)



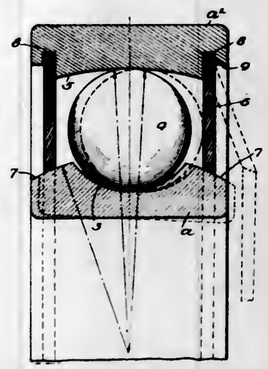
1. In a hydrant construction, a valve body having a valve seat, a valve for coaction therewith and including a stem and a sleeve member threaded thereon having a flange on one end thereof to extend into the opening of said valve seat and a plurality of gaskets on said sleeve member.

1,888,360. MEANS FOR HEATING CATHODES OF SPACE DISCHARGE DEVICES. WALTER VAN B. ROBERTS, Princeton, N. J., assignor to Radio Corporation of America, a Corporation of Delaware. Filed Mar. 18, 1930. Serial No. 436,688. 4 Claims. (Cl. 175—363.)



2. In combination, a source of alternating current, a second source of alternating current which is ninety degrees out of phase with the alternating current in the first mentioned source, a whole wave rectifier operatively associated with each source, a filter system for each rectifier, means for connecting the outputs of the filter systems to a single pair of leads, and an additional filter system for smoothing out the current in said common leads.

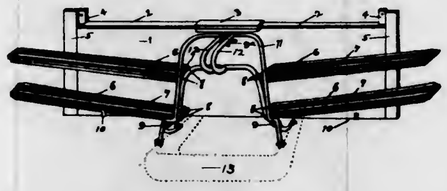
1,888,361. SELF-ALIGNING BALL BEARING. THOMAS L. ROBINSON, Valparaiso, Ind. Filed May 29, 1931. Serial No. 540,896. 2 Claims. (Cl. 308—186.)



1. In combination, a self-aligning ball bearing, comprising outer and inner bearing members, the outer bearing member being provided with a spherical ball race described from a center positioned in the axis of rotation of the bearing, and the inner bearing member being provided with a usual ball race and with spherical surfaces at opposite sides of said ball race concentric with the spherical ball race in the outer bearing member when said bearing members are in alignment, and sealing means for said bearing, comprising rings of sheet material, the outer edges of which, respectively, are secured to the outer bearing member within the lateral faces of said bearing member, and the inner edges of which extend into close proximity to the spherical surfaces on the inner bearing member, misalignment of the bearing members being limited by contact of the sealing plates with the anti-friction balls confined in the ball race of the inner bearing member.

1,888,362. BALL RACK AND RECEPTACLE SUPPORT. JOHN HENRY STAHL, El Paso, Tex. Filed Feb. 15, 1932. Serial No. 592,926. 7 Claims. (Cl. 211—15.)

1. In a ball rack and receptacle support, a frame, a plurality of runways secured thereto and so positioned thereupon that said runways incline downward toward an imaginary perpendicular line about midway of a space between the approaching runways on each side of said space; channels within said runways; ball-guides along said channels; a spring latch secured to said frame and centrally positioned adjacent the top of said frame; a receptacle support placeable on and removable off said spring latch and receiving holders disposed conveniently



apart and secured to the bottom and to the rear of said frame, the said receptacle support having handles near its top and means adjacent its lower extremities of attaching thereto some form of receptacle, basket or the like, substantially as herein described.

1,888,363. INKWELL. CARL E. TANNEWITZ, Grand Rapids, Mich. Filed Apr. 6, 1932. Serial No. 603,501. 5 Claims. (Cl. 120—57.)



1. An inkwell comprising a receptacle of hard rubber composition having an internal annular shoulder spaced from but adjacent the top thereof and an internal annular groove above the shoulder, a disk-like cover of hard rubber composition disposed on said shoulder and having a peripheral rib engaging said groove in said receptacle, said cover having an opening adjacent one edge thereof and a transverse dove-tailed groove of a width exceeding the diameter of said opening and extending from edge to edge of the cover, and a closure slidable in said groove, the ends of the groove being closed by the walls of the receptacle whereby the closure is retained.

1,888,364. JETTY CONSTRUCTION. CLARE R. VAN ORMAN, Topeka, Kans. Filed Oct. 1, 1930. Serial No. 485,615. 9 Claims. (Cl. 61—3.)



9. A current-retard, comprising an open wound helix of wire or the like, and a drift-catching screen supported from said helix and extending between adjacent turns thereof.

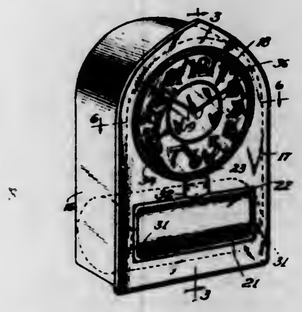
1,888,365. PRESSURE GAUGE. JOHN WAHL, Rosedale, and OTTO MELZER, Hollis, N. Y., assignors to A. Schrader's Son, Inc., New York, N. Y., a Corporation of New York. Filed Apr. 30, 1927. Serial No. 187,908. 4 Claims. (Cl. 73—111.)

2. A pressure gauge comprising a casing, a tubular member within the casing adapted to receive fluid under pressure, a pressure-responsive piston in said tubular member, said piston having a rod provided with an abutment, spring means acting to resist movement of the piston upon admission of fluid under pressure within the tubular mem-



ber, a loading spring between the walls of the casing and the tubular member engageable by the abutment on the piston rod to additionally load the piston after it has been moved by the fluid pressure a predetermined distance.

1,888,366. ADVERTISING CLOCK. GEORGE WILLENS, Chicago, Ill. Filed Aug. 27, 1932. Serial No. 630,649. 10 Claims. (Cl. 40—130.)

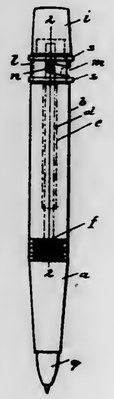


1. In an advertising clock, a clock casing having a front panel provided with a pair of apertures, a clock dial disposed in one of said apertures, a rotatable drum bearing advertising matter supported within the casing and adapted to be seen through the second aperture, a luminescent tube disposed around each of the two apertures and having a relatively narrow portion extending between the portions around the two apertures, whereby a single tube is effective to frame both apertures, said tube having electrodes extending through a third small aperture to the inside of the casing so as to be concealed, and means for supporting said tube.

1,888,367. AUTOMATICALLY FILLING FOUNTAIN PEN. CARL ZORN, Munich, Germany. Filed Feb. 10, 1932, Serial No. 592,104, and in Germany Feb. 11, 1931. 3 Claims. (Cl. 120—46.)

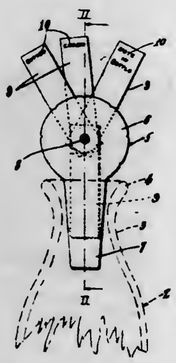
1. An automatically filling fountain pen, comprising in combination a tubular body, a head piece on the front end of said body, a closing cap on the rear end of said body,

a rubber hose in said body, a blade spring at the side of said rubber hose, a turnable ring between the rear end of said body and said cap, and a coupling device between



said turnable ring and said blade spring consisting of a coupling projection on one of said elements and of an inclined guide on the other of said elements.

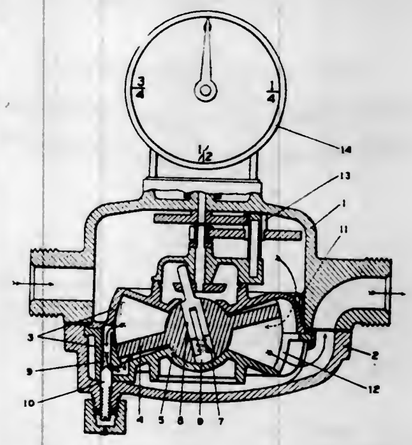
1,888,368. DAIRY FLAG. MARTIN W. ALLEN, Los Angeles, Calif. Filed Oct. 30, 1931. Serial No. 571,985. 2 Claims. (Cl. 40—4.)



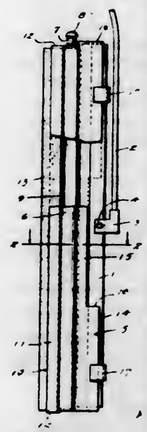
1. A dairy flag comprising a body member having an enlarged portion and a depending leg portion, the enlarged body portion being adapted to rest upon the lip of the dairy bottle when the leg portion extends partially into the dairy bottle, an eyelet attached to said body member, and a plurality of dairy markers pivoted at one end to said eyelet and adapted to move into depending suspended positions where they extend down into the dairy bottle and into display positions where they are pivoted upwardly and appear above the enlarged portion of the body member, the dairy markers being relatively shorter than the leg of said body member and of relatively less width.

1,888,369. LIQUID METER. ROBERT S. BASSETT, Buffalo, N. Y. Filed July 16, 1930. Serial No. 468,475. 9 Claims. (Cl. 73—98.)

7. In a liquid meter of the piston type, a piston chamber having inlet and outlet openings and having a by-pass, one end of which has a port opening directly into said chamber; a liquid operated piston having a cycle of travel within said piston chamber and adapted to cover and uncover said port; a registering mechanism and means operatively connecting said registering mechanism with said piston.

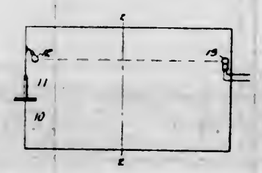


1,888,370. WINDSHIELD WIPER ATTACHMENT. JACOB A. BERDAN, Port Huron, Mich. Filed Feb. 16, 1932. Serial No. 593,343. 2 Claims. (Cl. 15—250.)



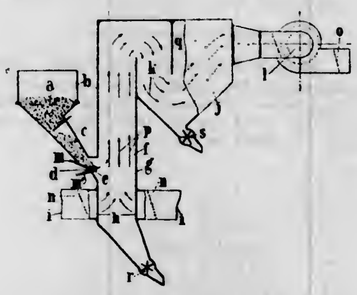
1. In a device designed for attachment to a windshield wiper having a supporting bar attached thereto midway of the ends of the wiper, for applying frost preventing liquid to an adjacent motor vehicle windshield, an elongated receptacle, a wiper carried by the receptacle, the receptacle being designed to discharge liquid therefrom onto the wiper, and means for attaching the receptacle to a windshield wiper to extend longitudinally thereof, comprising a channel formed longitudinally of the receptacle into which the windshield wiper is adapted to fit, said channel being closed at one end only, and a pair of yoke members disposed across and secured to the channel at points thereon spaced from the adjacent ends of the windshield wiper, when the same is in the channel, a distance less than the distance from the members to the point of connection of said bar with the windshield wiper, said yokes operating to prevent the accidental removal of the windshield wiper from the channel, the said closed end of the channel resting upon the upper end of the windshield wiper.

1,888,371. BURGLAR ALARM. BLANCHARD BOYLE, Indianapolis, Ind. Filed May 11, 1931. Serial No. 536,631. 3 Claims. (Cl. 177—314.)



2. A burglar alarm adapted to be used in a room of the kind described comprising a signal giving device, means normally holding said device inactive, a light sensitive cell positioned on the rear wall of said room in control of said means, a constant source of light positioned on the front wall for rendering said cell active, interruption of the light causing operation of the said signal giving device, substantially as set forth.

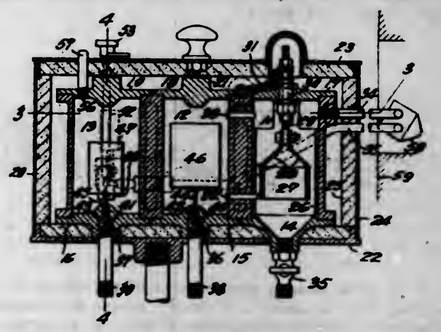
1,888,372. SEPARATION OF DRY MATERIALS. IVOR LLOYD BRAMWELL, Birtley, England, assignor of one-half to The Birtley Iron Company Limited, Birtley, England. Filed Feb. 13, 1930, Serial No. 428,200, and in Great Britain Aug. 6, 1929. 3 Claims. (Cl. 209—139.)



1. In an apparatus for the separation of dry materials, a main flue having a depending portion formed thereon with an air inlet, suction means for causing a main air material-bearing current to flow upwardly through said flue, said flue including an opening above the depending portion, a feeding device including a plate at the bottom of the opening extending outward in a substantial horizontal plane, a feed hopper having a bottom plate spaced above the first plate and forming therewith an air jet orifice, the material to be separated lying substantially at rest against the action of gravity on the first mentioned plate and the feed of such material being effected by the disturbance caused by the action of air flowing inwardly through said orifice.

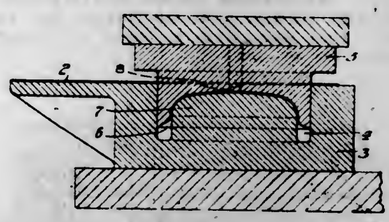
1,888,373. APPARATUS FOR BURNING LIQUID FUEL. HARRY F. CLAYTON, Strathmore, Quebec, Canada. Filed Jan. 15, 1930, Serial No. 420,949. Renewed Apr. 12, 1932. 7 Claims. (Cl. 158—73.)

1. In liquid fuel burning apparatus, a steam generator including water supply controlling means and fuel supply controlling means closely related and enclosed in a single insulated casing, whereby heat lost from the generator



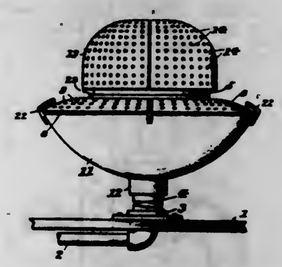
will be partly absorbed by the fuel supply controlling means and fuel therein for preheating of the fuel.

1,888,374. METHOD OF MAKING ARTICLES OF MANUFACTURE. JOHN C. CROMWELL, Alliance, Ohio, assignor to The Steel Sanitary Company, Alliance, Ohio, a Corporation of Ohio. Filed June 9, 1928. Serial No. 284,173. 4 Claims. (Cl. 113—120.)



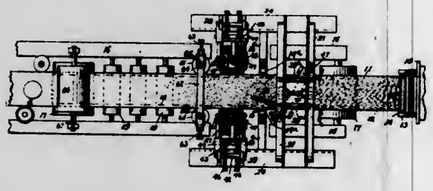
4. In a method of making bath tubs having rim, apron, body and bottom sections, the steps including punching a portion from a plate, die forming the remainder of the plate to form the rim and apron and the portion to form the bottom section, die forming another sheet to form body sections, assembling the body and bottom sections on the rim and bending down the apron.

1,888,375. HAT STEAMING AND BLOCKING ATTACHMENT. HYMAN DIENER, Washington, D. C. Filed Nov. 15, 1926, Serial No. 148,503. Renewed Apr. 9, 1932. 20 Claims. (Cl. 223—21.)



1. In a hat steaming and blocking device, a crown receiving member, interchangeable means for varying the size thereof, a brim receiving member and means for receiving and protecting the sweat band of a hat against the action of steam.

1,888,376. PROCESS OF AND APPARATUS FOR FORMING FACE BRICK. SPENCER C. DUTY, Cleveland Heights, Ohio. Filed July 18, 1929. Serial No. 379,216. 19 Claims. (Cl. 25—1.)



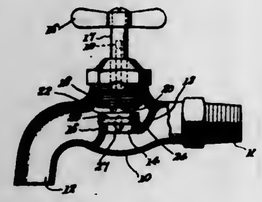
13. A brick making machine comprising means for extruding brick material in a column, means for scratching a series of parallel longitudinal lines in a surface or surfaces of the extruded column, means for moving the extruded column longitudinally, and means for scratching a series of transverse lines in such surface or surfaces of the column, said means comprising scratching devices moving obliquely of such surface or surfaces of the column at an angle thereto and at a relative speed therewith, such that the resultant lines scratched thereby will be substantially perpendicular to the first mentioned lines.

1,888,377. MULTIFORM PRISM ADVERTISING APPARATUS. GUSTAVUS W. ESCHENBACH, Los Angeles, Calif. Filed May 11, 1931. Serial No. 536,437. 8 Claims. (Cl. 40—133.)



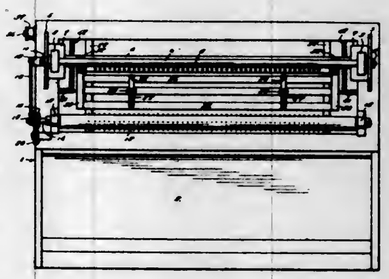
1. In a multiform prism advertising apparatus the combination with a main skeleton bill-board frame, panels therein having pictorial advertising thereon, of a lamp for illuminating the advertising on said panel, a demountable prism frame in said main frame and multiform prisms of different colors grouped together and interposed between said lamp and panel for the purpose specified.

1,888,378. FAUCET. MIGUEL ESNARD, Matanzas, Cuba. Filed June 8, 1931, Serial No. 543,188, and in Cuba July 24, 1930. 4 Claims. (Cl. 251—27.)



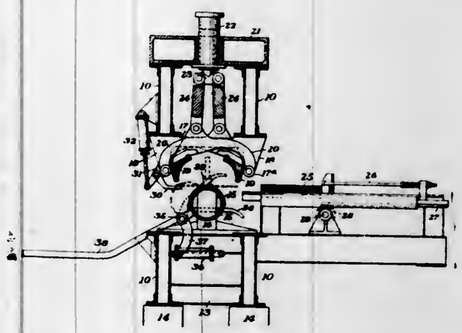
3. An improved faucet comprising a casing having a valve seat therein, a stem having threaded connection with the casing and provided with a hollow bore and an extension neck, a shank of shorter length than said bore fitting loosely therein, a plate carried on the lower portion of said shank and having a grooved lower surface opposed to said valve seat, and a yieldable valve facing carried by said backing plate.

1,888,379. TURFING MACHINE. JACOB FOBEN, Jamesburg, N. J. Filed Feb. 11, 1932. Serial No. 592,409. 6 Claims. (Cl. 112—79.)



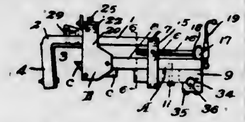
1. A turfing machine comprising a supporting structure, a needle bar mounted for vertical reciprocation on the supporting structure, a series of needles mounted on the needle bar, means for actuating the needle bar, means for feeding the material beneath the needle bar for operative engagement by the needles, a shiftable presser foot mounted on the supporting structure and engageable with the material beneath the needles, and means operatively connecting the presser foot to the needle bar for actuation thereby in a manner to shift the presser foot from the needles on the operating stroke of the needles.

1,888,380. SKELP FORMING MACHINE. JOHN W. FREE, Aliquippa, Pa., assignor to Jones & Laughlin Steel Corporation, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Aug. 30, 1929. Serial No. 389,374. 8 Claims. (Cl. 153—44.)



1. In a skelp-forming machine, upper and lower longitudinal frame members, and means for maintaining a spaced relation therebetween, a cylindrical die supported horizontally on said lower frame members, means including push rods and a balancing finger for positioning a strip of skelp on said die, means for holding it thereon, forming means for bending said skelp around said die including arms pivoted at each side of said upper frame member for engaging the edge of the skelp on the other side of the die, and a fluid-operated piston for actuating said arms.

1,888,381. CUTTING TOOL. JOSEPH B. GALBRAITH, Kaysville, Utah. Filed May 30, 1930. Serial No. 457,620. 2 Claims. (Cl. 81—191.)

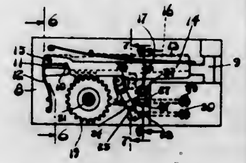


1. In a cutting off tool the combination of a back bar having the end bent down to form a leg at an acute angle to the back bar; a blade carrying framework formed of two plates slidably carried on said back bar; a block spacing said plates apart and having an adjustment screw passed therethrough to raise said block from said back bar and said plates thereover; a triangular plate carried on the back of said bar to raise the framework as it is advanced to the work; a cutting blade set between said plates of the blade carrying framework at an angle thereto; a sliding bar secured to said framework and extending away from the cutting blade; spaced apart bars secured to the free end of said back bar between which bars said first mentioned bar is passed and carried; means to support said sliding bar on a suitable support; and an adjustment and feeding screw passed through a pivot block in said sliding bar and through a feed nut carried between said spaced apart bars said screw to feed said cutting blade to the work advancing and raising the blade to the work at the proper cutting angle at all times.

1,888,382. A PROCESS FOR REFINING PETROLEUM OILS. FRANK WILLET HEATH, Pittsburg, Calif., assignor to Shell Development Company, San Francisco, Calif., a Corporation of Delaware. Filed Oct. 22, 1930. Serial No. 490,549. 15 Claims. (Cl. 196—42.)

3. A process for obtaining color-stable, and doctor-sweet gasoline from light mineral oil distillates comprising causing instantaneous discoloration of the light mineral oil distillates by means of the chromogenic bodies contained therein by the addition thereto of an alkali-metal ferricyanide and extracting the colored products formed with an acid.

1,888,383. LOCK. RALPH L. HOLTON, Dayton, Ohio. Refiled for abandoned application Serial No. 198,468, filed June 13, 1927. This application filed May 14, 1931. Serial No. 537,375. 2 Claims. (Cl. 70—29.)



1. A lock comprising a frame, a bolt reciprocally mounted in the frame, a toothed rack member pivoted on each side of the bolt, a separate gear meshing with the teeth of each rack member, a separate knob carrying each gear and adapted to rotate it, and means manually operated and when the lock is assembled adapted to be placed to effect disengagement of one of the rack members from engagement with its cooperating gear.

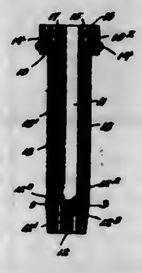
1,888,384. ELECTRICAL TERMINAL. RALPH C. HYDE, Los Angeles, Calif., assignor to Claude Neon Electrical Products Corporation, Ltd., Wilmington, Del., a Corporation of Delaware. Filed Aug. 8, 1931. Serial No. 554,656. 5 Claims. (Cl. 173—328.)

2. In a terminal connection a clip formed of a substantially U-shaped piece of metal having the outer ends of the legs bent inwardly toward the longer axis of the U and having complementary arcuate cuts in the end surfaces of said ends aligned with an opening through the



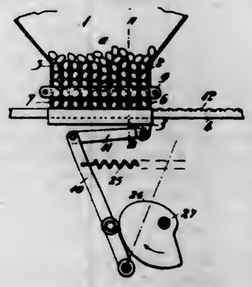
base of the U, a pair of transversely aligned depressions in each of the legs of said U, and a washer to which an electrical conductor may be attached surrounding the legs of said U and receivable in said depressions.

1,888,385. TIP FOR OXY-ACETYLENE TORCHES. ALEXANDER F. JENKINS, Baltimore, Md. Filed Apr. 4, 1931. Serial No. 527,789. 5 Claims. (Cl. 158—27.4.)



1. A tip for a torch having passages for heating gases and a passage for oxygen, the discharge port for the oxygen passage being substantially annular whereby a stream of oxygen of annular cross section is discharged therefrom, the heating gases being discharged exteriorly of the annular oxygen stream.

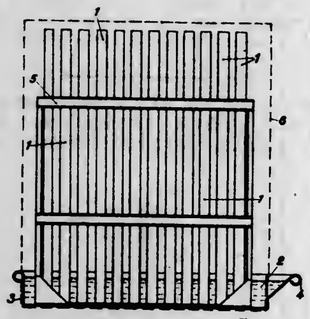
1,888,386. MEANS FOR ARRANGING OVAL CIGARETTES. BROR ANDERS EMIL JOHNSON and GUSTAV ÖSTRÖM, Alsten, Sweden, assignors to Aktiebolaget Gerh. Arehns Mekaniska Verkstad, Stockholm, Sweden, a Corporation of Sweden. Filed May 6, 1931, Serial No. 535,518, and in Germany May 9, 1930. 4 Claims. (Cl. 226—5.)



1. In a machine for packing oval cigarettes and similar staff-shaped articles a device for bringing the cigarettes into the same inclined position before their introducing into a box or the like, said device comprising a number of chambers each adapted to contain only one cigarette and so arranged, that the cigarette may not be turned round in the chamber but only occupy one or the other of

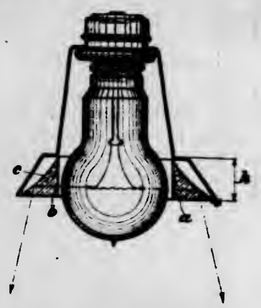
two symmetrical inclined positions in the same, and a member in contact with the cigarettes, so that at a relative movement between the chamber and the said member transversely of the cigarette the cigarette is brought into a distinct inclined position.

1,888,387. VESSEL FOR HOLDING A LIQUID FOR HUMIDIFYING THE AIR. ARTHUR KILLING, Dortmund-Horde, Germany, assignor to Vereinigte Stahlwerke Aktiengesellschaft, Dusseldorf, Germany. Filed Dec. 1, 1930, Serial No. 499,350, and in Germany Dec. 27, 1929. 1 Claim. (Cl. 229—24.)



An absorption block in a humidifier consisting of kieselguhr having a structure with pores formed by the burning out of combustible material mixed therein.

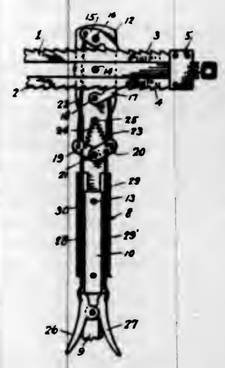
1,888,388. REFLECTOR. LUDWIG KRAL, Vienna, Austria, assignor to Gral Prisma Gesellschaft m. b. H., Vienna, Austria, a Company of Austria. Filed July 22, 1930, Serial No. 469,800, and in Austria Nov. 18, 1929. 1 Claim. (Cl. 240—103.)



In a lamp reflector having an annular member of light permeable material enclosing a source of light with the light absorbing face and the light emitting face of said member arranged at a right angle to each other, the provision of a third or light reflecting face shaped convex with respect to the source of light.

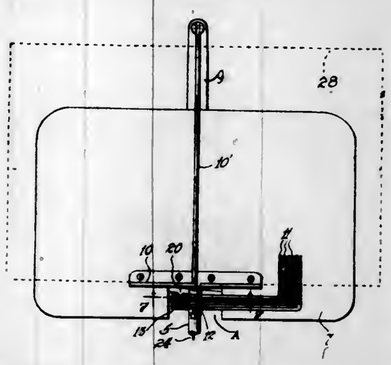
1,888,389. PULLING DEVICE. DANIEL KREMKO, Detroit, Mich., assignor of one-third to John H. Mitchell, Northampton, Pa. Filed Aug. 12, 1931. Serial No. 556,706. 1 Claim. (Cl. 254—109.)

In a puller, a pair of spaced ratchet bars having ratchet teeth formed in the outer edges thereof, pairs of plates inter-connecting the ends of the ratchet bars, a non-movable draw-bar connected at its inner end between one pair of plates, a movable draw-bar slidable between the ratchet bars and through the other pair of plates, an operating lever including a shank and a handle at the lower end of the shank, a pair of plates secured on the opposite sides of the shank, the upper ends of the plates being disposed on opposite sides of the ratchet bars, upper and lower pawls pivotally supported between the plates for engagement with the ratchet teeth of the respective ratchet bars, the inner end of the movable draw-bar being pivotally connected between the upper portions of the said



plates, a pair of links pivotally supported at their inner ends between the plates below said pawls, rods connecting the outer ends of the links with the respective pawls, spring means associated with the links and the lever for normally holding the pawls in engagement with the respective ratchet bars, and additional means on the lever for releasing the pawls from engagement with the ratchet teeth.

1,888,390. DEVICE FOR TURNING MUSIC. EMMY MAHR, Dallas, Tex. Filed Sept. 9, 1929. Serial No. 391,473. 2 Claims. (Cl. 84—507.)



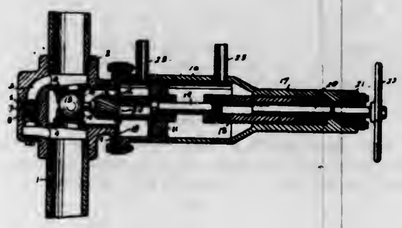
1. A device for turning music, in combination with a stand, comprising a support for the music, a rod depending from the support and upon which are mounted for rotation a plurality of members, each of said members for engagement with sheets or pages of music and each having a collar for supporting the member upon said rod, a music-engaging arm formed integrally with said collar, said collar having an integrally-formed curved element for engagement with a bar in turning the music; a bell crank pivoted to said music support, a slidable bar pivoted to one end of said bell crank, said bar having a member to successively engage with the curved element of said collar as the music is turned; means for actuating said slidable bar and means for returning the bar to normal inoperative position.

1,888,391. PROCESS OF PREPARING BORIC ACID. ALFRED NEWMAN, Tompkinsville, N. Y., assignor to Pacific Coast Borax Company, New York, N. Y., a Corporation of Nevada. Filed Apr. 16, 1928. Serial No. 270,579. 10 Claims. (Cl. 23—149.)

1. In a process of making boric acid, the step of treating a suspension of a borate in water, in the cold, with an acid to decompose said borate and to form boric acid, the amount of water present being insufficient to dissolve all of the boric acid formed.

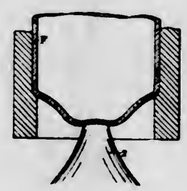
8. The process of producing solid boric acid which comprises adding sulphuric acid to solid borax suspended in water, the quantity of water present being insufficient to dissolve the borax used or the solid acid produced, but being sufficient to dissolve the sodium sulphate formed.

1,888,392. SAFETY VALVE. ARTHUR J. PENICK and KIRBY T. PENICK, Houston, Tex. Filed May 5, 1930, Serial No. 450,026. Renewed Sept. 22, 1932. 4 Claims. (Cl. 137—139.)



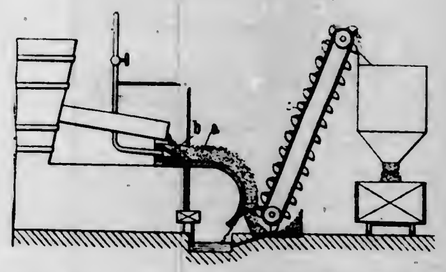
3. A safety valve mechanism comprising a valve casing having a fluid passageway therethrough and a valve seat aligned with said passageway, a cylinder associated with the casing, a movable valve actuator in the cylinder, a valve arranged to cooperate with said seat to open and close the passageway, means connecting the valve to the actuator, a shaft having a threaded connection with the cylinder and operatively connected to the actuator, an actuating rod associated with said shaft and longitudinally movable relative thereto, means preventing the rotation of the actuating rod relative to said shaft and means for applying pressure fluid to said actuator.

1,888,393. PROCESS FOR PUSHING GLASS BOTTLES. EMILE ROIRANT, Paris, France, assignor to Société Anonyme d'Etudes et de Constructions d'Appareils Mécaniques pour la Verrerie, Paris, France. Filed Mar. 12, 1931, Serial No. 522,097, and in France Apr. 17, 1930. 8 Claims. (Cl. 49—80.)



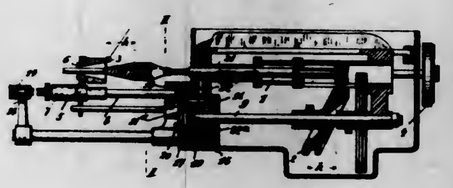
1. A process of "pushing" bottles in the interior of a finishing mould, which consists, after blowing of the bottle, in separating the bottom of the finishing mould and the bottom of the bottle from each other, then in allowing the central portion of the bottom of the bottle to sag and rest during a suitable period of time on the corresponding part of the finishing bottom, in substituting the "pusher" for the finishing bottom, and finally in effecting the "pushing" of the bottom of the bottle.

1,888,394. APPARATUS FOR OBTAINING A HIGHLY POROUS, CELLULAR, LIGHT MATERIAL FROM BLAST FURNACE SLAG. CARL HEINRICH SCHOL, Allendorf, Germany. Filed May 20, 1930, Serial No. 454,163, and in Germany Jan. 23, 1930. 5 Claims. (Cl. 83—91.)



1. Apparatus for producing highly porous, cellular material adapted for constructional and insulating purposes from liquid blast furnace slag or the like material consisting of a trough for guiding the slag having a short straight part and having the remaining part downwardly curved, said parts forming a solid bottom, and means for producing a stream of liquid in the trough along said bottom, the downwardly curved bottom portion of the trough being bent back at its end away from the line of fall of the material in order to separate as much liquid as possible from the latter.

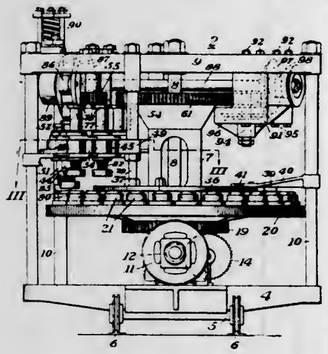
1,888,395. COP WINDING MACHINE. WALTER SCHWEITER, Horgen, near Zurich, Switzerland. Filed Dec. 3, 1930, Serial No. 499,796, and in Germany Jan. 27, 1930. 1 Claim. (Cl. 242—18.)



In a cop winding machine, a spindle adapted to receive a spool to be wound, means for rotating and reciprocating said spindle comprising a driven shaft disposed in the machine casing, a thread guide disposed adjacent the spool, means for independently reciprocating said thread guide for displacing the ends of the successive layers of thread at the peak of the wound cop comprising a cammed wheel mounted exteriorly of said casing, a recess on the external wall of said casing for enclosing said cammed wheel, a removable cover to tightly close said

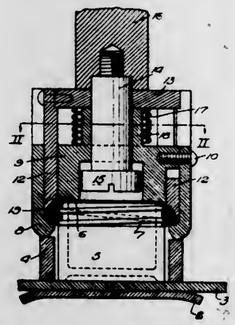
recess, transmission means extending from said driven shaft to said cam which in said recess, and a guide bar yieldingly retained against said cammed wheel at one end thereof, and carrying said thread guide.

1,888,396. GLASS WORKING MACHINE. EDWIN E. SLICK, Pittsburgh, Pa. Filed May 1, 1928. Serial No. 274,244. 18 Claims. (Cl. 49—37.)



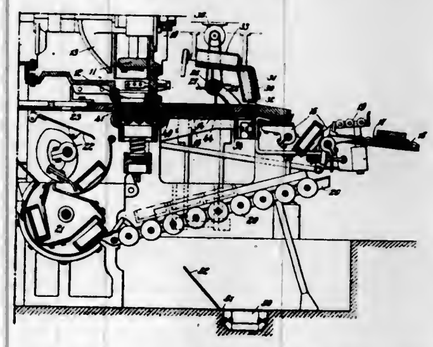
13. In a plastic shaping machine, a horizontally disposed rotatable support, a plurality of shaping elements carried thereby, a flexible endless conveyor disposed above said member, a plurality of vertically movable shaping elements carried by said conveyor, and continuously driven yieldable means for selectively moving the last named shaping elements into engagement with the shaping elements on said support while compensating for different amounts of material confined between said elements.

1,888,397. APPARATUS FOR SHAPING MATERIALS. EDWIN E. SLICK, Pittsburgh, Pa. Filed Apr. 17, 1929. Serial No. 355,940. 1 Claim. (Cl. 226—85.)



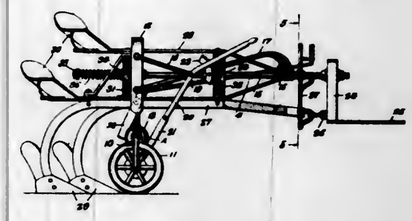
Forming apparatus comprising a holder adapted to receive a portion of a container having a closure thereon, a compression member having a plurality of upwardly extending arms thereon, a shaping means having flow characteristics carried by the holder and adapted to cooperate with the closure, a spider formed to provide a plurality of spaced indentations along the periphery thereof adapted to receive the arms of the compression member, said spider being adapted to cooperate with the holder, fastening means for securing the holder and the spider together, a crosshead connecting the upwardly extending arms, and means cooperating with the crosshead for moving the compression member relative to the spider.

1,888,398. BRICK MOLDING. DAVID J. STRICKLAND, Beacon, N. Y., assignor to Henry Powell Ramsdell, trustee, Newburgh, N. Y. Filed May 25, 1929. Serial No. 365,916. 8 Claims. (Cl. 25—104.)



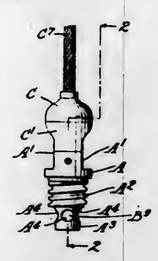
1. In a molding machine having a mold filling mechanism, full-mold advancing means and a rapidly rotating cutter adapted to remove, in the direction of motion of the mold, plastic material extending above the rim of the mold and discharge said material centrifugally.

1,888,399. REVERSIBLE TRACTOR PLOW. IRVING W. THAYER, North Haverhill, N. H. Filed June 3, 1929. Serial No. 368,094. 3 Claims. (Cl. 97—26.)



1. A plowing machine comprising a supporting frame, a longitudinal shaft slidable in said frame, a plow frame on the shaft, resilient means on one end of the shaft engaged with the plow frame, and means on the other end of the shaft for attachment to a draft means for sliding the shaft to compress said resilient means and exert a direct pull on the plow frame and supporting frame.

1,888,400. HEATING DEVICE. JOHN H. VERNET, Oak Park, Ill. Filed Aug. 18, 1930. Serial No. 476,068. 8 Claims. (Cl. 219—41.)



1. In a heating plug adapted for use in connection with a liquid containing receptacle as a means for heating the liquid, a plug housing shaped to be positioned within an opening in the receptacle, the plug including electrical

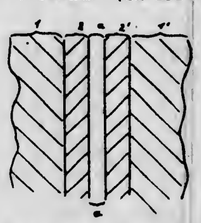
conductors, said conductors extending inwardly beyond the end of the plug housing, a heating element in circuit with said conductors, a cap surrounding said heating element and holding it out of contact with the liquid within the receptacle, the plug housing shaped to surround the cap and provided with perforations whereby liquid within the container reaches the cap.

1,888,401. TUBE DRAWING PROCESS. HERMANN VON FORSTER, Niederursel, near Frankfort-on-the-Main, Germany, assignor to American Lurgi Corporation, New York, N. Y., a Corporation of New York. Filed May 13, 1930, Serial No. 452,093, and in Germany Dec. 21, 1927. 7 Claims. (Cl. 205—8.)



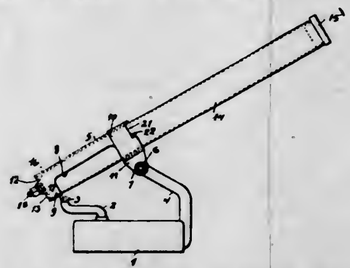
1. The method of forming hollow bodies which comprises supporting a hollow body blank upon a mandrel, and decreasing the diameter and increasing the length of said blank by a drawing operation, loosening the blank from the mandrel, and repeating said drawing and loosening operations while said hollow body is continuously retained upon said mandrel, and at least one end of said body being maintained in its original position on the mandrel.

1,888,402. UNITING LACQUERED CELLULOSE FOILS. RICHARD WEINOAUD, Bomlitz, near Walsrode, Germany. Filed July 9, 1929, Serial No. 377,063, and in Germany July 31, 1928. 7 Claims. (Cl. 154—2.)



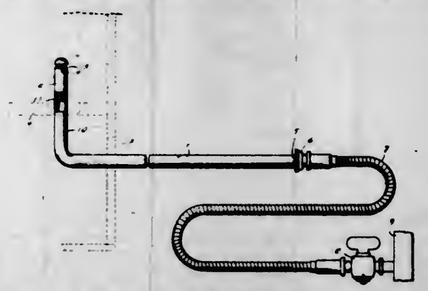
1. In a method of cementing together cellulose foils capable of swelling in water and provided with a lacquer coating, with their lacquered surfaces juxtaposed, the employment as adhesive of a mixture of a gluing agent and of an organic acid selected from the group containing lactic and acetic acid.

1,888,403. DEVICE FOR APPLYING SEALING WAX. DANIEL VERNER WEBSTER, Stockholm, Sweden. Filed Sept. 23, 1931, Serial No. 564,668, and in Sweden Oct. 4, 1930. 5 Claims. (Cl. 120—116.)



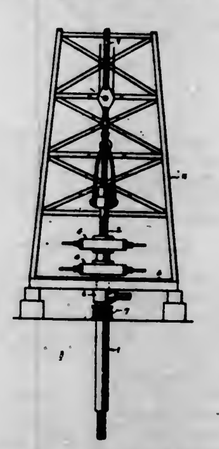
1. In a device for applying sealing-wax the combination of a tubular receptacle for the sealing-wax and provided in its bottom wall with an exit-opening for melted wax, a sleeve-shaped holder, in which the said receptacle is turnably mounted and which is provided with a bottom wall having an opening corresponding to the opening of the said receptacle, and means for heating the said receptacle.

1,888,404. BURNER TIP FOR IGNITING DEVICES. OTTO P. YAHNKA, East Dearborn, Mich. Filed Apr. 30, 1931. Serial No. 534,044. 1 Claim. (Cl. 158—116.)



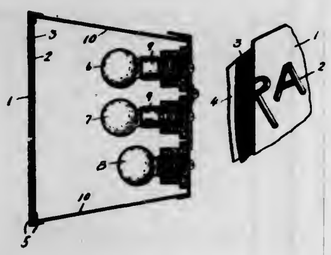
A burner tip for a device including a tube having an interiorly threaded end, comprising an elongated body of cylindrical cross section and having a passage extending longitudinally therein from one end and terminating in close proximity to the other end, the body at the said other end being substantially semi-spherical and having a surrounding groove or channel therein, the top wall of the channel extending in a plane at right angles to the longitudinal axis of the body, and further substantially passing through the radial center of the semi-spherical end, the wall of the body having a plurality of radial passages therethrough from the bottom of said channel into the said longitudinal passage, said channel having its lower corner cut away from a point adjacent the bottom thereof outwardly to form an outwardly sloping shoulder, and the opposite end of the body from the rounded end being reduced and exteriorly threaded for engagement in the threaded end of said tube.

1,888,405. METHOD AND APPARATUS FOR SETTING SCREENS. SANFORD E. MANNING, Houston, Tex. Filed Feb. 13, 1930. Serial No. 428,009. 6 Claims. (Cl. 166—13.)



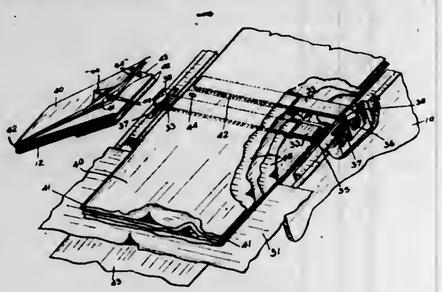
1. In well drilling operations the method of setting screen and completing a well which consists in lowering a well screen into the well bore which contains fluid, excluding the inflow of fluid into the screen and meanwhile maintaining said fluid under pressure.

1,888,406. DISPLAY CARD. ANDREW PAYBERG, Belmont, Mass., assignor to Viking Manufacturing Company, Inc., Cambridge, Mass., a Corporation of Massachusetts. Filed Jan. 18, 1932. Serial No. 587,315. 1 Claim. (Cl. 40—133.)



The combination of a framework and means for holding the display card in the front part thereof, of electric lamps one above the other and four flat reflecting surfaces mounted in said framework, said surfaces being arranged to direct the light from the lamps so as to illuminate the design to be displayed at all points, whether one or all of the lights are lit, the display card having a design cut through the same backed with colored cellophane and a white paper backing inside the cellophane whereby the design is displayed in color both by day and night.

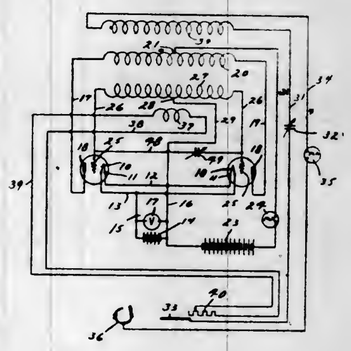
1,888,407. MANIFOLDING DEVICE. WILLIAM A. PRINGLE, Niagara Falls, N. Y., assignor to American Sales Book Company, Limited, Toronto, Ontario, Canada, a Corporation of Ontario, Canada. Filed Nov. 30, 1929. Serial No. 410,694. 8 Claims. (Cl. 282—19.)



1. A transfer sheet support for manifolding machines including adjacent spring fingers having separate free ends yieldably movable apart for the reception therebetween of the transfer sheet, said support having a supporting lug opposed to said free ends.

1,888,408. HIGH FREQUENCY OSCILLATORY CIRCUIT FOR THERAPEUTIC PURPOSES. PAUL C. RAWLS, Des Moines, Iowa, assignor to Technical Equipment Company, Des Moines, Iowa, a Corporation of Iowa. Filed Nov. 3, 1930. Serial No. 493,024. 3 Claims. (Cl. 174—177.)

1. In an electro-therapeutic apparatus the combination of an oscillatory circuit, a vacuum tube included in said circuit and comprising a grid and a plate circuit inductively coupled with each other, means for establishing in said circuit a variable predetermined high frequency oscillatory current, a variable capacity in said grid circuit for varying selectively the constants of said grid circuit, to thereby establish in the said oscillatory circuit an oscillatory current of predetermined frequency, a patient's circuit, means for inductively coupling said patient's circuit to said oscillatory circuit, means for varying the constants of said patient's circuit whereby



it may be brought into resonance with said oscillatory circuit, and means for including an anatomical member in said patient's circuit.

1,888,409. PAPER. ELMER C. SCHACHT, Troy, N. Y., assignor to Behr-Manning Corporation, Troy, N. Y., a Corporation of Massachusetts. Filed Dec. 16, 1931. Serial No. 581,511. 6 Claims. (Cl. 154—45.5.)

1. Resilient and flexible sheet material having a body mass consisting of comminuted cork and fibres in interlaced relation, and a flexible binder permanently incorporated in the mass, said binder being resistant to the action of either water or mineral oils.

1,888,410. LAMINATED ARTICLE. ELMER C. SCHACHT, Troy, N. Y., assignor to Behr-Manning Corporation, Troy, N. Y., a Corporation of Massachusetts. Filed Mar. 11, 1932. Serial No. 598,285. 6 Claims. (Cl. 154—45.5.)

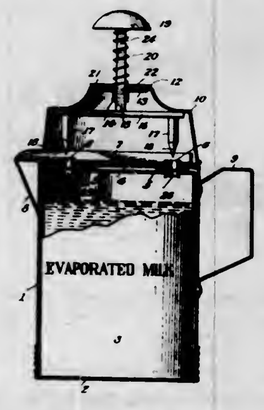


1. Resilient and flexible sheet material having a web formed of a body mass consisting of comminuted cork and fibres in interlaced relation, a paper-like web adapted to receive a finishing material and formed of a body mass consisting of fibres felted to said first web and forming therewith a substantially integral laminated sheet, and a flexible binder permanently incorporated in the sheet throughout both webs.

1,888,411. EVAPORATED MILK SERVER AND PRESERVER. CARL G. SCHILLING, Oakland, Calif. Filed Sept. 11, 1931. Serial No. 562,336. 3 Claims. (Cl. 65—61.)

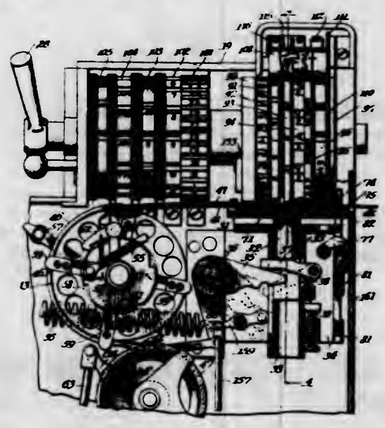
1. A casing having a closed top provided with a spout, hollow rivets holding the spout on the top, compressible disks held on the inner face of the top by said rivets, a bottom adjustably secured to the casing to afford a rest for forcing a fluid containing can against the disks, a

hinged closure on the top of the casing, a spring latch therefor, penetrating elements carried by the closure movable through the washers to enter the top of the can,



means for holding the elements in such position, and spring means for moving the elements in a second direction when the holding means are released.

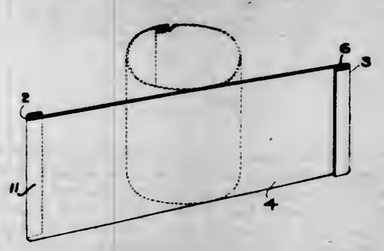
1,888,412. TRANSFER PRINTING AND ISSUING MACHINE. JOSEPH MARION SEAWELL, Richmond, Va., assignor to Coleman Wortham and William T. Reed, Richmond, Va. Filed Oct. 12, 1929. Serial No. 399,320. 41 Claims. (Cl. 101—69.)



1. A machine of the character described having easily changeable printing characters, a platen movable into printing position, means for intermittently feeding a partly severed strip of printing stock between the platen and printing characters, said feeding means including a wheel provided with protuberances spaced to engage in the partly severed portions of said strip, an inking ribbon between said strip and the printing characters, means for feeding said ribbon and common means for operating the platen, ribbon and strip.

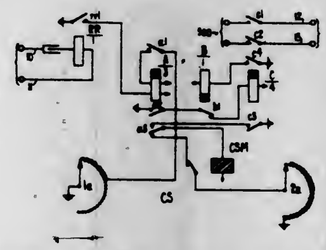
1,888,413. METHOD OF MAKING A CAN. HARRY SEBELL, Boston, Mass., assignor of one-half to Arthur H. Parker, Lexington, Mass. Filed Mar. 13, 1930. Serial No. 435,898. 3 Claims. (Cl. 113—120.)

1. The method of making a can body which consists in bending the ends of the blank from which the can body is to be made to form hook portions, one of which is located on one side of the blank and the other of which is located on the other side thereof, applying a soldering flux and a soldering material to the outer face of one hook portion, subsequently, bending the blank into the form of a can body and in so doing giving a concave curvature to the side of the blank on which the hook portion face carrying the soldering flux and soldering material is located, interlocking the hook portions with the hook portion having



the soldering flux and soldering material on the outside of the other hook portion, whereby the hook portion face carrying the soldering flux and soldering material is separated from the interior face of the can body by a single thickness of metal and from the outer face of the can body by three thicknesses of metal, applying sufficient heat to the interior face of the can along the same to fuse the soldering material and simultaneously subjecting the outer face of the can body along the seam to a cooling action.

1,888,414. ELECTRICAL SIGNALING SYSTEM. JOSEPH SMITH, Liverpool, and GEORGE DEAN TURTON, Ripley, near Derby, England, assignors to Associated Telephone and Telegraph Company, Chicago, Ill., a Corporation of Delaware. Filed Feb. 28, 1931, Serial No. 518,932, and in Great Britain May 26, 1930. 12 Claims. (Cl. 179—45.)

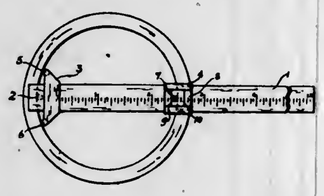


1. In a telephone system, a line, a source of current of a particular voice frequency, means including a timing device for connecting said source to said line at intervals to transmit impulses thereover, and counting means for terminating the transmission of said impulses after a predetermined number have been sent.

1,888,415. PROCESS FOR THE PRESERVATION OF EGGS. THEODORE L. SWENSON, Bethesda, Md., dedicated to the free use of the public. Filed Jan. 21, 1932. Serial No. 587,970. 2 Claims. (Cl. 99—8.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)

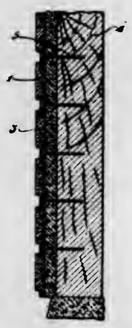
1. A process of preserving eggs, which comprises immersing the eggs in a mineral oil in a chamber capable of being evacuated, followed by evacuating said eggs, oil and chamber and then raising the said eggs above the surface of the oil, after which the vacuum previously created is released by introducing carbon dioxide gas into the vacuum chamber.

1,888,416. GAUGE. JOHN W. WILLIAMS, U. S. Army, Tampa, Fla. Filed Mar. 14, 1929. Serial No. 347,109. 3 Claims. (Cl. 33—178.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)



1. In a circle gauge, an elongated limb having flat upper and lower surfaces, a graduated scale marked on the upper surface thereof and a gauge stud mounted on the lower surface, the center line of said gauge stud lying beyond the scale with the longitudinal extremity of said gauge stud registering with the zero marking thereon, a slide having flat upper and lower surfaces, the upper surface being transparent, a second gauge stud mounted on the lower surface of said slide, hair-lines normal to the aforesaid scale marked on the upper transparent surface thereof and spaced at a longitudinal distance equal to the sum of the longitudinal breadth of the two gauge studs, the longitudinal extremity of the second gauge stud nearest the zero marking of the limb registering with the corresponding hair-line, a runner slidably mounted on said limb having flat upper and lower surfaces, and two centering studs mounted on the lower surface of said runner equidistant from the longitudinal center line thereof, substantially as set forth.

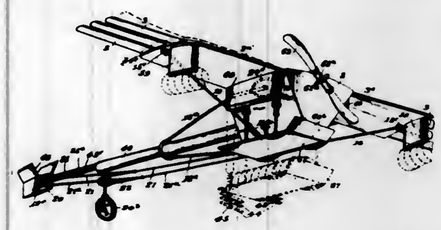
1,888,417. MULTIPLE SLAB UNIT. NATHANIEL L. ARBERSON, Detroit, Mich. Filed May 15, 1930. Serial No. 452,747. 11 Claims. (Cl. 72—19.)



3. An exterior building unit for use in forming ornamental veneer walls of brick and the like, comprising a substantially rigid supporting and securing member adapted to be fastened to a wall of the building, and ornamental means arranged in spaced relation on and forming a permanent part of said member, said means extending not more than ¾ of an inch from the normal surface of said member and having substantially the same surface characteristics and texture as ornamental brick and the like.

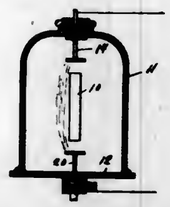
1,888,418. FLYING MACHINE. HERBERT LUTHER ADAMS, Somerville, Mass. Filed Apr. 14, 1921. Serial No. 461,412. 32 Claims. (Cl. 244—12.)

1. In a flying machine of the type having independent and collective controlled wing tips comprising openings that have a general line of direction from above the plane to below the plane with the said line above the plane being in advance, relative to the direction of flight of the



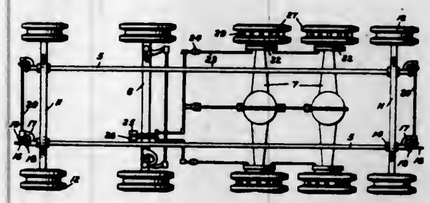
said line below with individual and collective control of tips (in groups and) for closing or opening, openings for parts that are not movable.

1,888,419. PROCESS FOR TREATING CELLULOSIC MATERIAL. CHESTER D. AINSWORTH, Wollaston, Mass. Filed Aug. 14, 1923. Serial No. 657,441. 18 Claims. (Cl. 204—31.)



7. The method of treating wood which comprises establishing about the wood a high potential arc stream in a substantially inert atmosphere.

1,888,420. VEHICLE. GLADSON M. BARNES, U. S. Army, Hastings, Mich. Filed Dec. 17, 1930. Serial No. 502,996. 3 Claims. (Cl. 180—9.1.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)

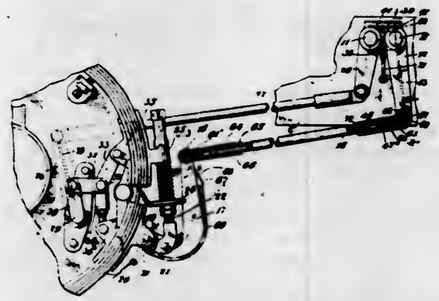


1. A combination wheel and track-laying vehicle including a frame, a twin axle unit including driving wheels on the rear of the frame, a front steering wheel unit set back from the front end of the frame to provide a sub-normal wheel base, a power plant carried by the frame in an inclined position in front of the front steering wheel unit, an axle carried at each extremity of the frame, means for moving each of said axles longitudinally of the frame, track idler wheels on said axles and normally spaced from the ground, and a track-driving sprocket carried by each of the driving wheels.

1,888,421. VACUUM TUBE. LEO L. PECK, Jackson Heights, N. Y., assignor to Claude Neon Lights, Inc., New York, N. Y., a Corporation of New York. Filed Dec. 19, 1927. Serial No. 241,277. 20 Claims. (Cl. 176—122.)

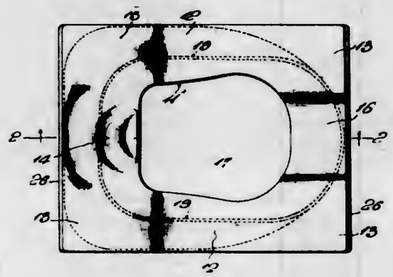
20. A luminescent gas discharge tube containing mercury, argon, neon and helium, the per cent of helium being greater than 50 per cent of the rare gas content, the tube being adapted to maintain its blue color at low temperatures.

1,888,422. CENTRAL LUBRICATION. JOSEPH BIJUR, New York, N. Y., assignor, by mesne assignments, to Auto Research Corporation, a Corporation of Delaware. Filed Dec. 27, 1924. Serial No. 758,361. 28 Claims. (Cl. 184—7.)



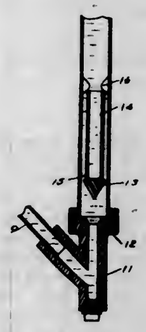
1. In a motor vehicle of the type including an axle, a chassis frame and springs therebetween; the combination therewith of an arm pivoted to the frame, depending therefrom and movable in a plane longitudinally of the vehicle, a lever pivoted to one of the axles and movable in substantially the same plane as said arm, a tubular pitman connecting said arm and said lever and having pivot bearings at the ends thereof with respect thereto, means admitting lubricant to the upper end of said arm through a conduit lengthwise thereof for flow to the bearing at the lower end thereof, said bearing draining to and through said tubular pitman to the bearing at the opposite end thereof, and a conduit intercepting the drain from said latter bearing and extending lengthwise of the lever to the axle, whereby said arm, pitman and lever will constitute a lubricant conduit between the frame and the axle, which will accommodate the displacement of the axle relative to the frame in operation.

1,888,423. BEDPAN. ADRIAN COMPER, London, England, assignor to Hospital Appliances, Inc., Pittsfield, Mass., a Corporation of Massachusetts. Filed July 29, 1931. Serial No. 553,877. 9 Claims. (Cl. 4—112.)



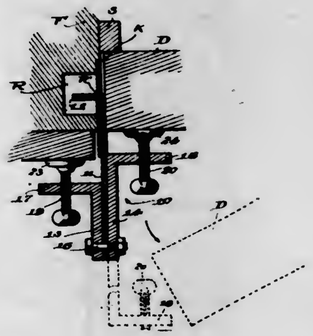
1. A bedpan comprising a seat-forming top plate having an opening, an inner pan and an outer pan under said top plate, the inner pan being free from abrupt corners to facilitate cleaning, the two pans being fluid-tightly joined along their upper edges to said top plate and forming therewith a unitary article.

1,888,424. U TUBE STRUCTURE. JOHN C. DIEHL, Erie, Pa., assignor to American Meter Company, New York, N. Y., a Corporation of Delaware. Filed Jan. 3, 1931. Serial No. 506,401. 2 Claims. (Cl. 73—31.)



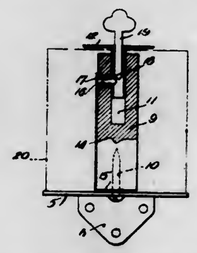
1. In a U-tube structure, the combination of a U tube; and a valve in the tube comprising a seat and a valve head, said valve head being adapted to close on said seat and carrying a receptacle within and communicating with the tube, said receptacle having a leak opening in the lower part of the receptacle.

1,888,425. DOOR FASTENER. EDWARD JOHN DOWLING, Pawhuska, Okla. Filed Apr. 15, 1931. Serial No. 530,842. 1 Claim. (Cl. 292—291.)



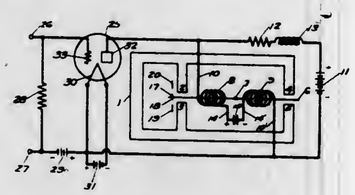
A portable door fastener comprising a binde having a laterally disposed lug at one end for entry into the keeper recess in the jamb of a door, the opposite end of the blade projecting outwardly from the door face, L-shaped braces arranged upon opposite sides of the blade, each brace including a straight side in flat contact with the blade and a laterally projecting foot, a pivot for swingably connecting the outer ends of the braces with the outer end of the blade so that the braces will have swinging contact with the blade when the braces are swung outwardly from the door on the pivot, one of the braces being longer than the other, the pivot including means for rigidly clamping the braces to the blade, and means on each foot adjustable lengthwise of the blade for engaging the door jamb and the door face for securing the door against unauthorized opening.

1,888,426. HOLDER FOR ROLLS OF PAPER. JOHN F. DUBY, Boston, Mass. Filed Mar. 26, 1929. Serial No. 349,998. 1 Claim. (Cl. 242—55.2.)



A holder for a roll of paper comprising a base plate, a cylinder fixed in upright position upon the base plate and adapted to extend through an axially upright roll of paper having its lower end resting on the base plate, the cylinder having an axial recess extending downwardly from its upper end, a top plate having a depending tubular stem received within said recess, the cylinder and stem having registering apertures, and a spring having a locking detent releasably engaging within said registering apertures normally to prevent separation of the top plate from the cylinder, said top plate extending outwardly over a portion of the paper roll so that the roll is secured within the holder until the locking detent is released from engagement with the stem aperture to permit removal of the top plate, said engagement being releasable irrespective of the amount of paper on the roll.

1,888,427. POLARIZED RELAY. JAMES DONALD DURKEE, Washington, D. C. Filed Nov. 1, 1928. Serial No. 316,511. 6 Claims. (Cl. 175—320.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)

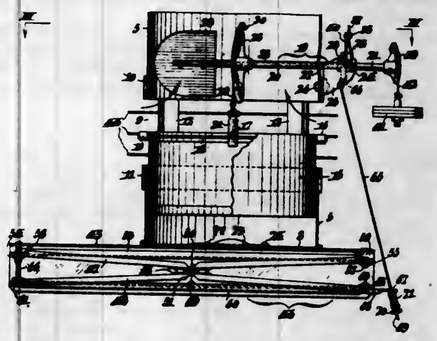


1. A relay circuit comprising a relay, a condenser in series therewith, a vacuum tube and circuit having an impedance and power source in the plate circuit thereof, said relay and condenser being shunted about the impedance and power source and means for blocking the plate circuit whereby the condenser discharges through the relay and energizes the same.

5. A polarized relay circuit comprising a polarized relay having a plurality of coils for operating the moving elements thereof, a condenser in series with said coils, means for charging and for discharging said condenser through said coils comprising a vacuum tube circuit having a resistance in series with the power supply in the plate filament circuit thereof, said condenser and coils being shunted about the same and means controlling said vacuum tube circuit for blocking and unblocking the plate filament circuit thereof whereby said condenser is charged and discharged.

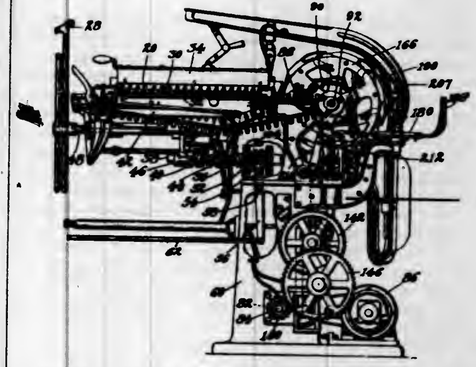
1,888,428. VENTILATING DEVICE. PERRY S. MARTIN, Harrisonburg, Va. Filed July 8, 1930. Serial No. 466,377. 11 Claims. (Cl. 98—42.)

1. A ventilating device comprising a vertical cylindric conduit to conduct exhaust air from a building for release at the exterior, said conduit having a circumferential port around its lower end; a concentric valve sleeve to govern the port; and actuating mechanism including means re-



sponsive to variations in the upward pressure of the exhaust flow in the conduit and means subject to variations in the temperature within the building to jointly control movement of the valve sleeve.

1,888,429. LACE TIPPING MACHINE. CARL A. MATSON, Danvers, Mass., assignor, by mesne assignments, to Shoe Lace Company, Boston, Mass., a Corporation of Maine. Filed Mar. 15, 1929. Serial No. 347,424. 42 Claims. (Cl. 18—1.)

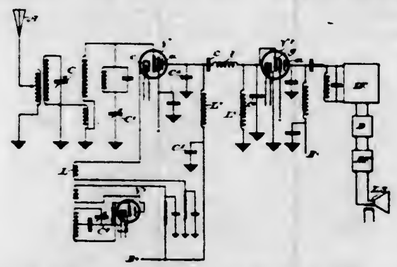


10. In a lace tipping machine wherein a die is continuously rotated between a receiving position and a discharge position, means for holding said die closed between its receiving and discharge positions, and means for rotating said first-mentioned means in a direction opposite to that of the die to close the die whereby a molding period of maximum length is insured and gradually retracted in the opposite direction to its initial position.

26. In a lace tipping machine having a tipping device and means for collecting tipped laces comprising a plurality of holders, means for transferring laces from the tipping device to the collecting means, means for intermittently operating said lace collecting means to bring its holders successively into position to receive the tipped laces, and means controlled by said laces for causing said transferring means to actuate said operating means.

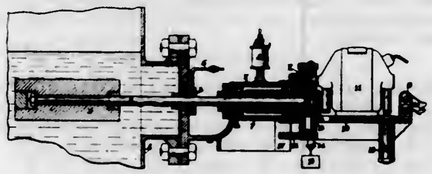
1,888,430. RADIO RECEIVING SYSTEM. JOHN M. MILLER, Philadelphia, Pa., assignor to Atwater Kent Manufacturing Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Sept. 27, 1930. Serial No. 484,815. 5 Claims. (Cl. 250—20.)

1. A radio receiving system comprising a thermionic tube having an input circuit, a second thermionic tube having an output circuit, one only of said circuits being resonant at a desired radio-frequency, and a series combination of capacity and inductance substantially reso-



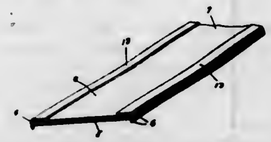
nant at said desired radio-frequency directly coupling said circuits and forming therewith a filter having the characteristic of a low-pass filter for frequencies higher than said desired frequency.

1,888,431. METHOD AND APPARATUS FOR INDICATING AND REGULATING THE VISCOSITY OF MATERIALS. ALAN OSBOURNE, San Francisco, Calif. Filed Aug. 17, 1929. Serial No. 386,549. 15 Claims. (Cl. 23—258.)



1. Means for regulating the consistency of liquids comprising a body immersible in a liquid, means for rotating the body, which means is adapted to be moved to different positions by the resistance of the liquid to the body, and electrically controlled means adapted to be actuated by the change of position of the first mentioned means for controlling the consistency of the liquid.

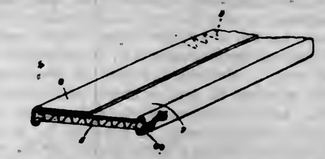
1,888,432. BINDING TAPE. PHILIP L. O'DONNELL, Norwood, Ohio, assignor to Parco Specialty Co., Lynn, Mass., a Corporation of Massachusetts. Filed July 5, 1929. Serial No. 376,027. 4 Claims. (Cl. 2—274.)



1. An article of manufacture comprising a binding tape having a beaded selvage, a coating of heat plastic adhesive on one face of the tape, and a narrow coating of a non-fluid lubricating material superposed on a portion of the adhesive adjacent to said beaded edge whereby a sewing needle may penetrate without adhesion to said adhesive.

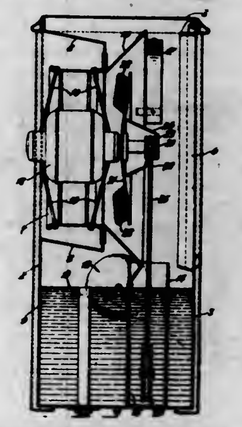
1,888,433. ADHESIVE BINDING TAPE. PHILIP L. O'DONNELL, Cincinnati, Ohio, assignor to Parco Specialty Co., Lynn, Mass., a Corporation of Massachusetts. Filed Mar. 10, 1930. Serial No. 434,540. 4 Claims. (Cl. 2—274).

1. As a new article of manufacture a heat plastic adhesive tape wherein one face of the tape is completely covered by two longitudinal coatings of heat plastic adhesive in side by side relation, one of the coatings being



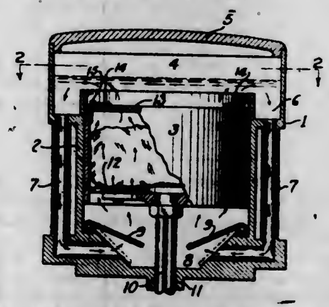
relatively thinner than the other, the thinner coating including in its composition a substance serving as a mechanical lubricant for stitching when cold.

1,888,434. HUMIDIFIER. LAWRENCE M. PERSONS, St. Louis, Mo., assignor to The Emerson Electric Mfg. Co., St. Louis, Mo., a Corporation of Missouri. Filed June 28, 1930. Serial No. 464,491. 2 Claims. (Cl. 261—28.)



1. A humidifier including a receptacle adapted to contain water, a fan member mounted above said receptacle including a concave disk, a motor adapted to drive the fan member, means operable by the motor for conveying water from the receptacle to the path of the air currents produced by the fan, including a pulley on the motor shaft, a pulley touching the water, a conveyor belt about said pulleys, a conical member about the pulley on the motor shaft adapted to receive and divert the water thrown off by the conveyor belt and having its rear end adjacent to the concave disk.

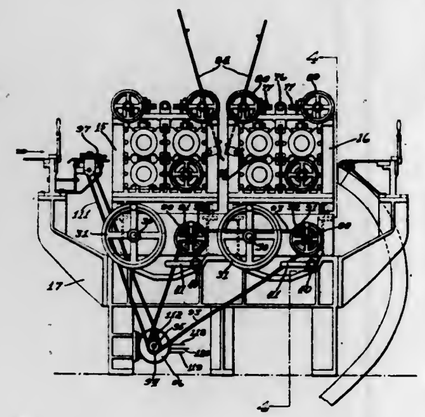
1,888,435. WASHING MACHINE. HIRAM L. QUACKENBUSH, Monroe, Mich. Filed Mar. 25, 1932. Serial No. 601,217. 2 Claims. (Cl. 68—37.)



1. In a washing machine, means forming a vertically disposed cylinder with liquid-receiving compartments at

the top and bottom thereof and with communicating passages therebetween without the cylinder, check-valve means in connection with said passages and opening inwardly relative to the bottom compartment, the upper compartment having a trough in its bottom surrounding the upper end of the cylinder and from which said passages lead and a clothes-container of the plunger-type reciprocally movable in said cylinder and having foraminous bottom and top members through which the liquid in the bottom compartment is required to pass to the upper compartment upon a down stroke of the container.

1,888,436. SHEET TRIMMING AND SCORING MECHANISM. RALPH N. RICHARDS, Toledo, Ohio, assignor to The Ottawa River Paper Company, Toledo, Ohio, a Corporation of Ohio. Filed Mar. 26, 1931. Serial No. 525,351. 17 Claims. (Cl. 164—61.)



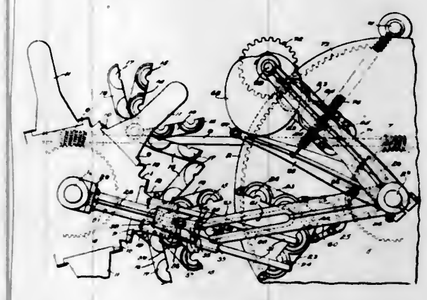
1. In a machine for working on a traveling web of sheet material, a bed over which the material is fed, a plurality of machine units, means for separately and selectively shifting said units on said bed into or out of operative position, a follower mounted independently of said units, means normally causing the follower to continuously engage the edge of the traveling sheet as the latter deviates laterally, and means controlled by the follower to shift all of said units laterally and simultaneously as a gang in accordance with the lateral deviation of the sheet.

1,888,437. INSULATING COMPOSITION. SAMUEL T. SHERRICK, Denver, Colo., assignor of forty-nine one-hundredths to Charles Diehl, Denver, Colo. Filed Nov. 3, 1930. Serial No. 493,099. 1 Claim. (Cl. 106—23.)

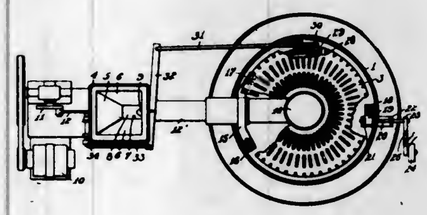
A heat insulating composition comprising in approximate proportions of rubber 40 pounds, water-absorbent clay 60 pounds, resinous substance 1 pound, sufficient non-drying solvent to dissolve all of the resinous substance, and one gallon of water.

1,888,438. CONTINUOUS TWO-TABLE GLASSWARE FORMING MACHINE. ALGY J. SMITH, Bloomfield, Conn., assignor to Hartford-Empire Company, Hartford, Conn., a Corporation of Delaware. Filed Oct. 18, 1929. Serial No. 400,519. 24 Claims. (Cl. 49—9.)

1. Apparatus for fabricating glassware comprising a parison mold table, a plurality of parison molds thereon, a finishing mold table, a plurality of finishing molds thereon, means for supporting said tables for rotation about eccentric axes, means for continuously rotating said tables, and means for transferring parisons from the parison molds to the finishing molds comprising a single ware holder, a support for said holder, means for actuating said support to move the holder alternately into and out of vertical alignment with consecutive parison and finishing molds respectively, additional means for moving said support horizontally, and means for timing the operation of the last-named means with respect to said actuating means so that the carrier travels alternately with consecutive parison molds and consecutive finishing molds respectively while held in vertical alignment therewith.



1,888,439. AUTOMATIC FEEDER FOR COAL BURNING FURNACES. FREDERICK A. STOLTE, Indianapolis, Ind., assignor to Stolte Stoker Corporation, Indianapolis, Ind., a Corporation of Indiana. Filed Oct. 5, 1929. Serial No. 397,506. 5 Claims. (Cl. 110—46.)



1. The combination with a fire-pot and a grate tiltably supported therein, of a counter-balanced lever normally supporting one end of said grate in its raised position, means for automatically delivering fuel to said grate, an electric motor for operating said means and a switch operated by said lever when the grate is tilted by the weight of the fuel for opening the circuit through said motor.

1,888,440. OSCILLATING GLASSWARE TRANSFER. THOMAS WAUGH, Jr., West Hartford, Conn., assignor to Hartford-Empire Company, Hartford, Conn., a Corporation of Delaware. Filed Oct. 22, 1929. Serial No. 401,422. 8 Claims. (Cl. 49—9.)

5. In glassware handling machinery in combination a continuously rotating mold table, a continuously moving conveyor, a glassware transfer device, means for supporting the said device for oscillatory movement above the mold table and the conveyor respectively, a moving cam adapted to oscillate said supporting means and transfer device, means for transmitting motion from said cam to the transfer device, and means for shifting the transfer

mechanism on its supporting means from above the mold table to a position over the conveyor, the transfer device is moved alternately in coincidence first with the mold

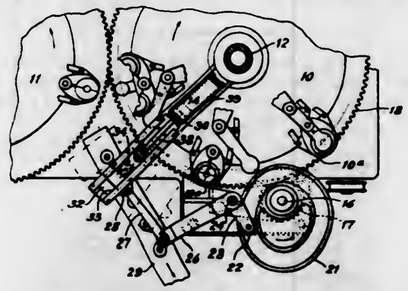
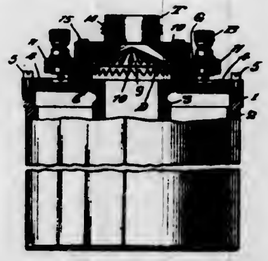


table and then with the conveyor in response to the oscillation of the supporting means and the shifting of the transfer device thereon.

1,888,441. MOLD PART. GEORGE H. WEIDEMANN, Midland, Mich., assignor to The Dow Chemical Company, Midland, Mich., a Corporation of Michigan. Filed Aug. 30, 1930. Serial No. 479,106. 7 Claims. (Cl. 22—188.)

1. As an article of manufacture, a molded and dried mold part formed from a molding composition and an ammonium compound.

1,888,442. LOUD SPEAKER UNIT. ALEXANDER I. ABRAHAMS, New York, N. Y. Filed May 21, 1929. Serial No. 364,792. 10 Claims. (Cl. 181—31.)



1. A speaker unit for a horn comprising a casing having an opening, a diaphragm located in said casing, said diaphragm having a periphery and a central part, the central part of said diaphragm projecting forwardly from said periphery towards the opening of the casing, the wall of said casing adjacent said diaphragm being shaped so that the passage between said wall and said diaphragm has an increasing cross-sectional area, said diaphragm having a central portion which is sharply inclined to said periphery.

1,888,443. WATER CRAFT. GUSTAF ALEXANDER, Chicago, Ill. Filed Aug. 14, 1931. Serial No. 557,124. 6 Claims. (Cl. 164—61.)



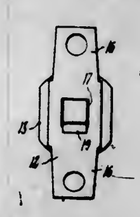
1. In a watercraft, a hull having a submerged medial longitudinally extending open-ended tube, a propeller within said tube reversely operative and of the same effect in drawing water into the tube at either end and discharging it in a column from the opposite end, and independently operative and controllable rudders at opposite ends of said tube, the under end portions of said hull being inclined upwardly from said tube and concaved transversely of a median axis coincident with the axis of said tube.

1,888,444. TOGGLE SWITCH. HUGH W. BATCHELLER, Worcester, Mass. Filed Sept. 11, 1931. Serial No. 562,231. 5 Claims. (Cl. 200—154.)



1. A toggle switch comprising a tubular casing having means for attachment to a support and provided at its outer end with an internal ball seat and an oblong guiding slot in said seat; a hand piece including a ball portion adapted to turn on said seat, and a handle portion movable in a predetermined path in the guiding slot; a bridging conductor carried by said ball portion and pressed outwardly by a spring in a radial guiding recess therein, gap separated terminals provided with circuit wire-engaging means and including an inner and an outer terminal, said terminals being formed and arranged to contact simultaneously with the bridging conductor when the hand piece is in a given position, only the inner terminal contacting with the conductor when the hand piece is in another position; and insulating confining means for said terminals, fixed to the inner end portion of the casing and to said terminals, and insulating the terminals from each other and from the casing.

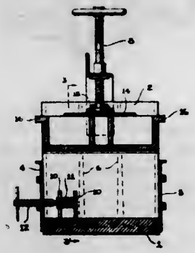
1,888,445. TOGGLE SWITCH. HUGH W. BATCHELLER, Worcester, Mass. Filed Sept. 11, 1931. Serial No. 562,232. 4 Claims. (Cl. 200—154.)



1. A toggle switch comprising a sheet metal facing having an angular lever-receiving orifice and insulator attaching means projecting from the inner side of the facing; an insulator engaged with said attaching means and spaced thereby from the facing, said insulator having an orifice alined with the facing orifice; terminals attached to the insulator and separated from each other by a gap adjacent the insulator orifice, a one-piece switch lever extending through and oscillatable in the facing plate orifice and having an angular cross section conforming to the angular margin of said orifice, whereby the lever is prevented from turning on its longitudinal axis in said orifice, said lever having fulcrum studs projecting from two of its opposite sides and in rocking contact with the inner side of the facing, said projections being so arranged that the lever has a longer outer arm and a shorter inner arm, the lever having a longitudinal guiding recess extending through the shorter arm between said fulcrum studs and into the longer arm, a gap-bridg-

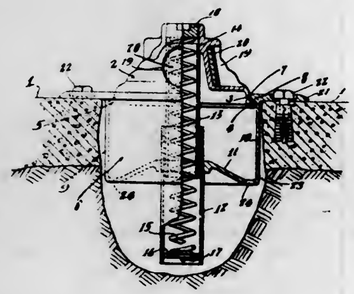
ing conductor movable in said recess, and an elongated helical spring seated on the inner end of said guiding recess and pressing the conductor against the terminals, and the fulcrum studs against the inner side of the facing, the lever being movable to cause the conductor to close and open the gap between the terminals.

1,888,446. MEAT PRESS. WALTER BELLINGHAUSEN and MARINUS VANDERKLOOT, Chicago, Ill., assignors, by mesne assignments, to Industrial Patents Corporation, Chicago, Ill., a Corporation of Delaware. Filed July 2, 1931. Serial No. 548,339. 1 Claim. (Cl. 100—57.)



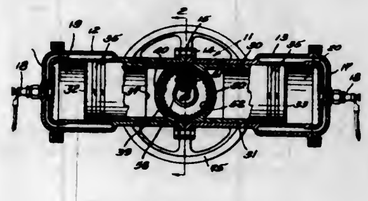
A press comprising a forming chamber and a cooperating plunger, a yieldable abutment within an end portion of the forming chamber, an adjusting screw threaded into an end wall of the forming chamber, a plate connected to the inner end of said adjusting screw and movable by said screw, yieldable means between said plate and said abutment, an end wall hinged to form a swinging end wall and means to lock said swinging end wall in closed position.

1,888,447. COLLAPSIBLE TRAFFIC SIGNAL. JOHN T. BOATWRIGHT, Los Angeles, Calif., assignor of one-half to Gus E. Heinze, Huntington Park, Calif. Filed Nov. 3, 1930. Serial No. 493,008. 7 Claims. (Cl. 40—125.)



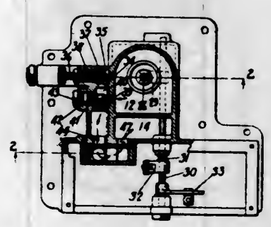
1. In a collapsible traffic signal, a hollow base member having an open top, a flange extending inwardly of the periphery of said top, a dome member telescopically fitted into said base member having a periphery greater than the periphery of said flange, a vertically extending tube secured to said bottom of the base member, a tube depending from said dome member telescopically engaged in said base tube, and a spring within said tubes for normally extending said dome member into abutting relation with said flange.

1,888,448. CRANK MECHANISM FOR RECIPROCATING ENGINES. DAVID O. BRANT, Owensmouth, Calif. Filed Sept. 29, 1930. Serial No. 485,055. 14 Claims. (Cl. 74—14.)



1. In a transmission mechanism of the character described, the combination of: a reciprocating member having a gear thereon; a rotatable member; and a pinion fixed on said rotatable member in a position eccentric to the axis of rotation of said member, said pinion being in toothed engagement with said gear to be revolved thereby to rotate said member.

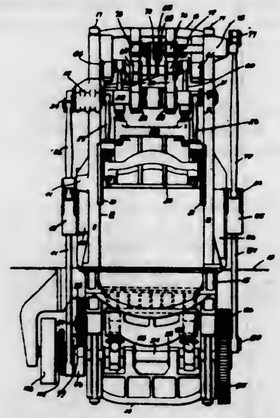
1,888,449. HIGH AND LOW FLAME CONTROL FOR GAS BURNERS. GORDON B. BURNS, Toledo, Ohio, assignor to The Columbia Burner Co., Toledo, Ohio, a Corporation of Ohio. Filed Oct. 12, 1931. Serial No. 568,231. 24 Claims. (Cl. 236—1.)



1. In a control device for a gas burner, means for automatically establishing and maintaining a predetermined flow of gas during the existence of a predetermined range of temperature in the space to be heated, and means for establishing and maintaining a relatively larger flow of gas during the existence of a lower temperature, said last mentioned means being also effective to turn on temporarily the larger flow of gas as the temperature drops into said predetermined range.

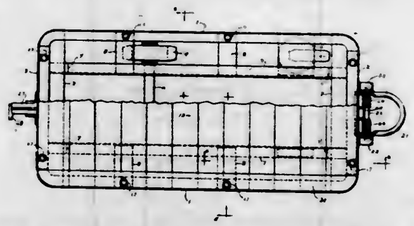
1,888,450. DRAWING PRESS. ARTHUR A. BYERLEIN, Detroit, Mich., assignor to General Machinery Corporation, Hamilton, Ohio, a Corporation of Delaware. Filed Nov. 2, 1931. Serial No. 572,556. 10 Claims. (Cl. 113—38.)

1. In a drawing press, a frame, a die supporting member in said frame, a die slide operable in said frame, toggle links connected to said slide for operating it with a dwell in its movements, a second die slide, toggle links connected to said second die slide for operating it with a dwell in its movements, a drive shaft in said frame, means operated from one end of said drive shaft for moving said



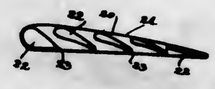
first named toggle links, and means operated from the other end of said drive shaft for operating said second named toggle links.

1,888,451. TRAILER TRUCK. SHERWOOD M. CHASE, Columbus, Ohio, assignor to The Chase Foundry and Mfg. Co., Columbus, Ohio, a Corporation of Ohio. Filed Dec. 20, 1929. Serial No. 415,388. 4 Claims. (Cl. 280—49.)



1. In a truck a frame having side sills, each sill being formed of a pair of angle irons, one side of one angle iron being parallel to one side of the other angle iron, and the other sides of both angle irons being in the same plane, and a plurality of reenforcing plates having one of their ends between the parallel sides of said angle irons, there being an aligned hole through each reenforcing plate and the parallel sides of the angle irons adjacent the other sides of said angle irons for the purpose of stake sockets.

1,888,452. AIRCRAFT. GEORGE CLARK, St. Boniface, Manitoba, Canada. Filed July 2, 1931. Serial No. 548,436. 8 Claims. (Cl. 244—12.)



4. In a heavier than air aircraft, a wing formed from a plurality of spaced hollow foils receiving air under pressure and having restricted air outlets, the foils being disposed in relation one to the other that the air discharging through the outlets causes an area of increased pressure on the under side of the wing and an area of decreased pressure on the top side thereof.

1,888,453. SALINE COATINGS AND PROCESS OF MAKING THE SAME. FERDINAND DE PAPA, Uccle, Belgium, assignor to La Soudure Electrique Autogène S. A., Brussels, Belgium. Filed Nov. 12, 1928, Serial No. 319,023, and in France June 26, 1928. 5 Claims. (Cl. 219—8.)

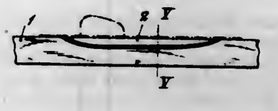
1. A method of making welding compositions in the form of a paste containing water soluble compounds, to form a dry coating for welding rods and electrodes used for arc welding, comprising dispersing the silica of an alkali metal silicate solution with water soluble compounds which enter into the flux forming composition and which at the same time chemically combine the alkali of said alkali metal silicate solution.

1,888,454. LOOSE PLAY INDICATOR. WILLIAM R. EDSON, Southbridge, Mass., assignor to B. C. Ames Co., Waltham, Mass., a Corporation of Massachusetts. Filed Apr. 9, 1927. Serial No. 182,359. 9 Claims. (Cl. 33—172.)



1. A distance gauge having, in combination, a support comprising a permanent magnet of the horse-shoe type having one face of the respective legs thereof in a common plane, whereby said support may be magnetically secured flatwise to a body, a distance indicator comprising a casing carrying a relatively movable contact feeler, and means including a rod-like member secured to said magnet for operatively securing said casing to said support.

1,888,455. SKI. EMIL MARIUS ERIKSEN, Besserud, near Oslo, Norway. Filed Sept. 22, 1930, Serial No. 483,437, and in Norway Sept. 27, 1929. 4 Claims. (Cl. 208—184.)

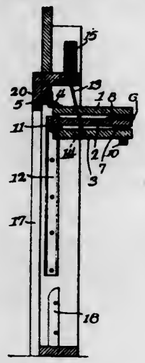


1. A ski comprising a runner having upright longitudinal sides provided with a protruding portion on each side to form a broad foot support, each protruding portion being flush with the top of the runner along its upper surface and tapered inwardly towards its lower edge to meet the upright side of the runner along a line spaced substantially above the lower edge of the runner, the protruding portions being further tapered at their opposite ends to meet the sides of the runner.

1,888,456. GARAGE DOOR. WILLIAM D. FERRIS, Sterling, Ill., assignor to Frantz Manufacturing Co., Sterling, Ill., a Corporation of Illinois. Filed Nov. 5, 1928. Serial No. 317,178. 17 Claims. (Cl. 20—20.)

1. A door construction comprising a plurality of vertically disposed and hinged or articulated sections all mounted to fold upwardly together into a final overhead open position at the top of the doorway, having means

whereby a lower section is movable upwardly a distance in the vertitcal plane thereof, in the operation of opening the door, and is movable downward in said



plane in the closing of the door, the lowermost edge of the door being releasable from said plane and being free when the door is folded and fully open.

1,888,457. METHOD OF TREATING MAGNESIUM AND PRODUCT OBTAINED THEREBY. JOHN A. GANN and WILLIAM H. GROSS, Midland, Mich., assignors to The Dow Chemical Company, Midland, Mich., a Corporation of Michigan. Filed May 8, 1931. Serial No. 536,084. 22 Claims. (Cl. 148—6.)

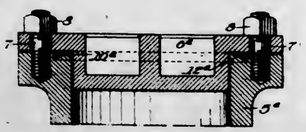
1. The method of treating a magnesium article which comprises subjecting said article to the action of an etching solution containing an organic aromatic coloring agent for magnesium.

1,888,458. METHOD OF CONSTITUTING A CHARGE FOR SINTERING. JOHN E. GREENAWALT, New York, N. Y. Filed Apr. 27, 1931. Serial No. 533,148. 6 Claims. (Cl. 266—21.)



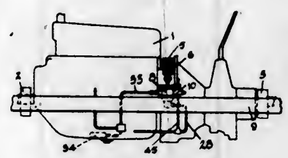
1. The method of constituting a charge of material to be sintered, which comprises so depositing and incidentally sorting a layer of said material in finely divided condition on a pervious support as to group portions of the coarser particles of the charge into zones extending from side to side of the layer.

1,888,459. CLOSURE MEANS FOR CYLINDERS AND THE LIKE. EDGAR E. GREVE, Bellevue, Pa., assignor, by mesne assignments, to Oil Well Supply Company, Pittsburgh, Pa., a Corporation of New Jersey. Filed July 5, 1928. Serial No. 290,456. 3 Claims. (Cl. 220—46.)



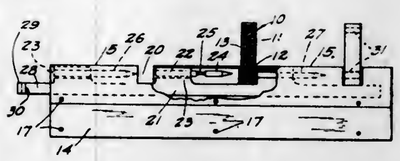
1. The combination with a cylinder or the like having a wedge-shape gasket receiving groove formed in a base thereof adjacent the bore, said groove having a vertical inner wall, a cap, a continuous non-metallic ring gasket of wedge-shape in cross-section entered in the groove with its inner thick portion in contact with the said wall, and means for securing the cap to the cylinder, said gasket arranged to effect a wedging action upon application of pressure thereto by the cap and a further wedging action by pressure within the cylinder.

1,888,460. MOTOR COUNTER REACTANT DEVICE. FRANCIS J. LAPOINTE, Ann Arbor, Mich. Filed Mar. 7, 1932. Serial No. 597,195. 4 Claims. (Cl. 123—192.)



1. In a motor reactant device, means for rotatably supporting the stator and rotor of the motor, a fixed member, a fluid pressure power means having relatively movable parts one of the parts connected to the stator of the motor and the other connected to the fixed member, and means for maintaining a substantially constant fluid pressure in the power means to normally maintain the stator in a predetermined position and to return it to said position by said pressure when deflected therefrom.

1,888,461. LOOSE-LEAF BINDER. MARY L. LARSEN, Oakland, Calif. Filed Oct. 27, 1930. Serial No. 491,370. 4 Claims. (Cl. 129—24.)



3. A loose leaf binder, including a plurality of posts each having a transverse aperture adjacent each end, one of said posts being provided with a resiliently urged latch, a cover edge element having a series of equally spaced transverse post receiving slots and a slide provided with a plurality of hinge pins the forward ends of said pins being unequally spaced and adapted to successively cooperate with said posts, one of said pins having a groove adapted to cooperate with said latch and detachable means on said slide for preventing cooperation of said latch with said groove.

1,888,462. TOBACCO PIPE. DAVID P. LAVIETES, Brooklyn, N. Y. Filed June 6, 1932. Serial No. 615,519. 10 Claims. (Cl. 131—12.)



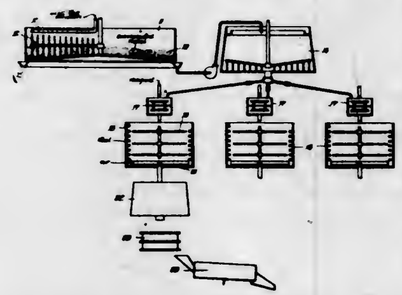
1. In a tobacco pipe comprising a bowl, bowl stem and bit, a joint between the stem and bit comprising complemental, tapered members with tolerance therebetween.

1,888,463. PRINTING PRESS CYLINDER SUPPORT. JAMES EDGAR LEE, Grand Haven, Mich., assignor to Challenge Machinery Company, Grand Haven, Mich., a Corporation of Michigan. Filed Oct. 13, 1930. Serial No. 488,276. 7 Claims. (Cl. 101—269.)



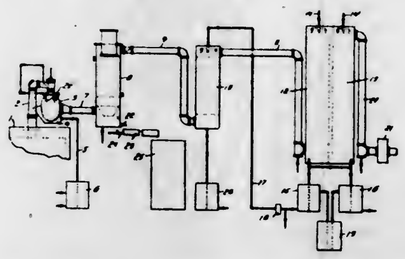
1. In a device of the class described, a horizontal bed having a track portion, a cylinder extending over and spaced above said bed, yieldable means traversably engaging the upper surface of said track portion and rotatably supporting said cylinder to thrust it upwardly, and means traversably engaging the lower surface of said track portion and associated with said cylinder to limit its upward movement.

1,888,464. MANUFACTURE OF PIGMENTS. EMIL M. LOFLAND, Chicago, Ill. Filed Sept. 27, 1928. Serial No. 308,628. 10 Claims. (Cl. 134—59.)



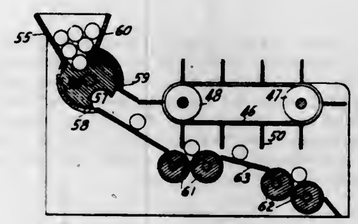
1. A process for production of pigment which comprises subjecting metallic iron to oxidation to produce hydrous ferrous oxide, removing the ferrous oxide from the presence of the metallic iron, alkalizing the ferrous oxide in a body of liquid, and oxidizing the ferrous oxide to a ferric oxide.

1,888,465. OPERATION OF BY-PRODUCT COKE OVEN PLANTS. STUART PARMELEE MILLER, Englewood, N. J., assignor to The Barrett Company, New York, N. Y., a Corporation of New Jersey. Filed Oct. 21, 1927. Serial No. 227,634. 2 Claims. (Cl. 202—30.)



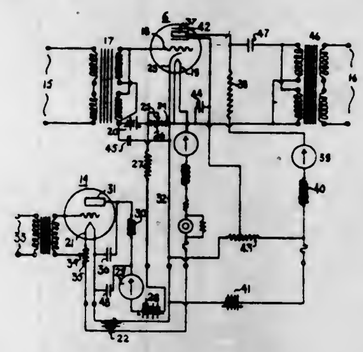
1. The method of producing coke and clean oils from coal which comprises coking coal in a coke oven, removing entrained solid particles and entrained liquid particles of high boiling range from the resulting hot fresh distillation gases at a temperature at which the constituents of the gas are separated into gases and vapors which pass off and a pitch residue which is left behind; returning at least part of the pitch residue to the oven in admixture with the coal and coking the mixture therein, and recovering oils of lower boiling range from the gases and vapors.

1,888,466. CORN HUSKING MACHINE. WILLIAM W. MORRAL and SAMUEL E. MORRAL, Morral, Ohio. Filed Apr. 27, 1926. Serial No. 104,969. 5 Claims. (Cl. 130—5.)



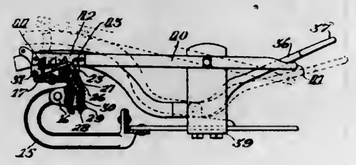
1. In a corn husking machine, a device having means to move an ear of corn in a direction transverse to its length, a pair of husking rollers arranged to receive ears of corn from said ear moving device, said husking rollers extending transversely to the direction of movement of said ear of corn and having their axes in a substantially horizontal plane, a second pair of husking rollers arranged beyond the first mentioned pair of husking rollers with their axes below said plane and substantially parallel with the axes of the first mentioned husking rollers, and a conveyor to move ears of corn across the first mentioned pair of husking rollers, said conveyor being spaced from said second pair of husking rollers to permit said ears to move out of engagement therewith before they are operatively engaged by said second pair of husking rollers.

1,888,467. SOUND RECORDING. WILLIAM A. MUELLER, Hollywood, Calif., assignor to United Research Corporation, a Corporation of Delaware. Filed May 16, 1932. Serial No. 611,537. 14 Claims. (Cl. 179—100.1.)



1. The method of recording, which comprises simultaneously actuating a recorder from a plurality of recording channels and in controlling the recording effect of one of said channels in response to another recording effect in another channel.

1,888,468. SELF-DUMP RAKE. CHARLES PEARSON, Cicero, Ill., assignor to International Harvester Company, a Corporation of New Jersey. Filed Aug. 21, 1931. Serial No. 558,505. 6 Claims. (Cl. 56—392.)



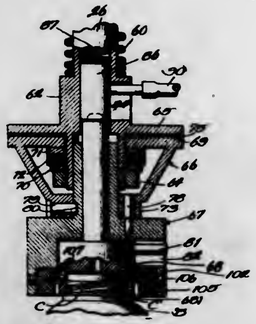
1. In a rake having a draft frame and a rake head pivotally connected thereto on a transverse axis, the combination of power lift means for rotating said rake head, tripping means for actuating said power lift means, latch means connected to the draft frame operative to positively engage and hold the rake head in operative position, and means to disengage said latch means prior to operation of the tripping means.

1,888,469. SPRING. CHRISTIAN A. RASMUSSEN, Cleveland, Ohio. Filed Apr. 27, 1931. Serial No. 533,047. 3 Claims. (Cl. 267—1.)



1. As an article of manufacture adapted to yieldingly connect a series of members having partly intersleeved portions, a compression spring seated upon one of said portions and partly sleeved over the other of said portions, said spring including integral, freely and laterally shiftable locking means extending from one end of said spring into its hollow portion to the center thereof for readily releasable engagement with that portion over which it is sleeved.

1,888,470. SCREW CAP APPLYING MACHINE. ARTHUR I. RISSER, Chicago, Ill. Filed Aug. 17, 1931. Serial No. 557,649. 4 Claims. (Cl. 226—88.)



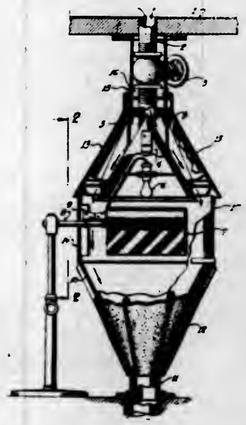
1. The combination with a machine of the class described of a rotatably mounted spindle, a vacuum cup for receiving and holding a cap snugly therein, the cup being mounted at the end of the spindle so as to have a limited amount of axial movement with respect thereto and connected therewith for rotation, means for producing a vacuum in the cup, radially disposed pins projecting through and slidable in the walls of the cup for engaging the cap, a ring mounted on the spindle concentric with and surrounding the cup, the ring having a cam surface adapted to engage and move the pins into engagement with the cap when the cup is moved axially on the spindle.

1,888,471. ADJUSTABLE ARM CHAIR. ELMER ROBBINS, Portland, Oreg. Filed Jan. 29, 1930. Serial No. 424,204. 3 Claims. (Cl. 155—116.)



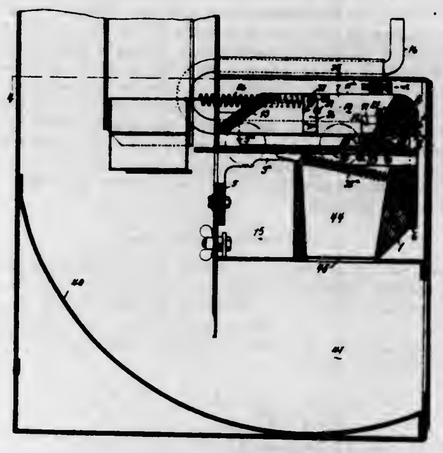
1. In an arm chair of the character described, a frame including fixed sides and elevated back sections, a seat and a back-rest hinged thereto, said back-rest being pivoted at the top pendant from the upper ends of the back sections of the chair frame, a transverse angular rod rotatably supported at its ends between the sides of the chair frame, such rod supporting the forward end of said seat, the interior of the sides of the chair frame being recessed to receive and house the angular ends of said rod, the under side of the seat frame being provided with notches and said rod bearing in said notches, the whole chair being upholstered, whereby said operable supports of the seat and back-rest are concealed and an arm chair appearance is maintained in all adjustments of said seat.

1,888,472. APPARATUS FOR STERILIZING FOOD SUBSTANCES. HUGO W. ROHDE, Shorewood, Wis., assignor to Jos. Schlitz Beverage Company, Milwaukee, Wis., a Corporation of Wisconsin. Original application filed Feb. 9, 1931, Serial No. 514,456. Divided and this application filed Oct. 1, 1931. Serial No. 566,277. 15 Claims. (Cl. 99—2.)



13. An apparatus for subjecting food substances of a normally viscous nature to a light treatment comprising an enclosure having means for admitting a limited amount of air, means for discharging the substance to be treated into the top of the enclosure, a member having an inclined surface onto which the substance to be treated is discharged whereby the substance flows down over the inclined surface and falls therefrom in a thin curtain, heating means within the enclosure for maintaining the substance in a fluid state, a source of highly actinic light within the enclosure beneath the inclined surface so that the substance is subjected to the rays of light emitted from said source as it falls in a curtain, said actinic rays of light combining with the limited air within the enclosure to produce ozone in the substance, and an outlet at the bottom of the enclosure into which the treated substance flows.

1,888,473. COIN VENDING MECHANISM. WILLIAM HUNTINGTON RUSSELL, New Haven, Conn. Filed May 11, 1931. Serial No. 536,466. 8 Claims. (Cl. 194—80.)



1. In a coin vending mechanism, a plurality of metal castings attached to the outer surface of an article container, plate supports in each casting, a plate slideable along its supports against an article in the article container, a slot within each plate, a spring under each slot attached to its plate, a coin ejector in the said casting, a handle attached to a coin pusher movable within each casting, a cover for all of the castings attached to the article container, said cover having insertion slots through it; means on said casting for directing a coin placed in any insertion slot to the slot in said plate, a spring attached to the movable plate and casting, a spring attaching the handle and casting together; and an article chute in the cabinet leading to an article exit.

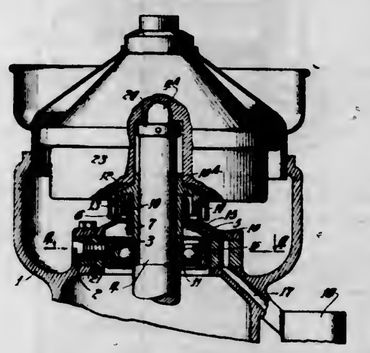
1,888,474. PUMP. CRAWFORD B. SANDERS, Wyandotte, Mich. Filed Dec. 22, 1928. Serial No. 327,951. 7 Claims. (Cl. 103—38.)

1. In a pumping mechanism, a cylinder element, a piston element reciprocable therein, said elements being concurrently reciprocable, separate driving means for each said reciprocable element, means connecting both said driving means to effect synchronous operation thereof, one of said driving means adapted to move its associated element at rates both greater and less than the rates at which the other element is concurrently driven by its associated driving means at different parts of the cyclic period of reciprocation of said elements, one of said driving means comprising a crank moving eccentrically in a circular path, the other of said driving means comprising a cam rotatably mounted on the crank and



constrained to move in an elliptical path, each of said driving means including a driven rod for communicating motion to the associated element.

1,888,475. LIQUID EXCLUDER FOR THE BEARINGS OF CENTRIFUGAL SEPARATORS. CARL SCHMITZ, Oelde, Germany. Filed Nov. 25, 1929, Serial No. 409,782, and in Germany Nov. 5, 1929. 5 Claims. (Cl. 286—5.)

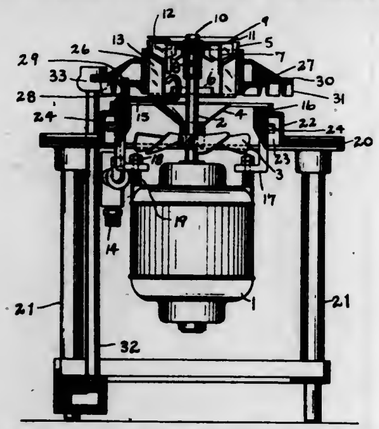


1. In a centrifugal separator, an upright spindle, a bearing for the spindle, including a member mounted on the spindle, and a shield located above the bearing and comprising a sleeve mounted on the spindle and seated on the bearing, an annular trough surrounding the sleeve, and a hood member carried by the sleeve and including an annular web that depends into the trough.

1,888,476. ROTARY OIL BURNER. LEWIS L. SCOTT, St. Louis, Mo. Filed July 6, 1931. Serial No. 548,826. 7 Claims. (Cl. 158—77.)

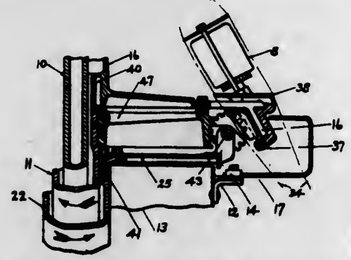
1. In a rotary type oil burner, an atomizing cup adapted to atomize oil, having an opening through which atomized oil and air is ejected, a motor adapted to rotate said cup, having a shaft connected to said cup, an inlet open-

ing to the atomizing cup through which air may pass to the inside of said atomizing cup, means for distributing oil to be atomized to the interior of the atomizing cup,



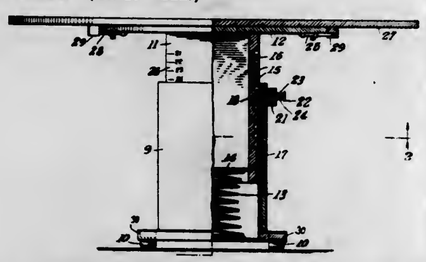
means located near the air entrance to the atomizing cup adapted to prevent dust which is carried in the air from entering the interior of the atomizing cup.

1,888,477. BRAIDING MACHINE. EDWARD K. STANDISH, Stoughton, Mass. Filed Apr. 1, 1931. Serial No. 526,869. 8 Claims. (Cl. 96—6.)



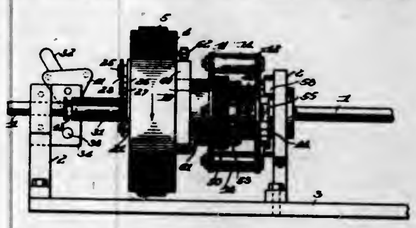
1. In a braiding machine, spool-carrier driving means, essentially comprising slots on said carriers, discs mounted to rotate in said slots, spiral gear teeth on the periphery of each of said discs, and a spiral gear mounted to move in a direction opposite to the direction of said spool-carriers and to mesh with the teeth on the periphery of each of said discs.

1,888,478. COMBINATION TABLE. JOSEPH STEIDL, Bronx, N. Y. Filed May 18, 1931. Serial No. 538,224. 8 Claims. (Cl. 45—111.)



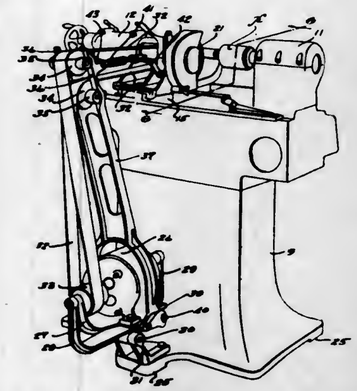
1. A combination table, comprising a vertically extensible pedestal, a table top carried thereby, spring means for extending the pedestal to lift the table top and ratchet means for restraining the extension movement of the pedestal, said ratchet means being yieldable to permit contracting adjustment of the pedestal.

1,888,479. ACCELERATING TRANSMISSION MECHANISM. FRANK H. STOLP, Geneva, N. Y. Filed July 18, 1931. Serial No. 551,704. 8 Claims. (Cl. 74—84.)



1. In a power transmission mechanism, the combination with a driving element and a driven element, of gearing between the two acting initially to the mechanical advantage of the driving element and having a limited cycle of movement during which it tends to build up the speed of the driven element during a progressive decrease in the mechanical advantage of the driving element, said gearing embodying means for locking the driving and driven elements together for direct drive at the conclusion of the cycle, and an overrunning clutch between the driving and driven elements operating to prevent reverse movement of the driven element.

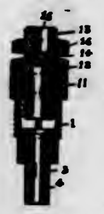
1,888,480. UNIVERSAL DRIVE FOR GRINDING MACHINES AND THE LIKE. ADOLPH STORM and THOR THORSEN, Minneapolis, Minn., assignors to Storm Manufacturing Co., Inc., Minneapolis, Minn., a Corporation of Minnesota. Filed Feb. 18, 1931. Serial No. 516,653. 20 Claims. (Cl. 51—50.)



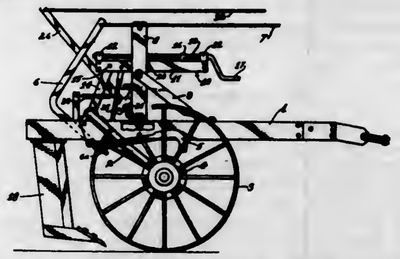
8. In a machine of the class described, a reciprocatory carriage, a cross slide on the carriage, a grinding wheel on the cross slide, a motor mounted for compound rocking movements in the direction of the travel of the carriage and in the direction of the travel of the cross slide, and driving connections from the motor to the grinding wheel.

1,888,481. GREASE CUP. DANIEL D. THOMAS, Township of Moon, Allegheny County, Pa. Filed Dec. 28, 1928. Serial No. 328,934. 6 Claims. (Cl. 184—38.)

1. In combination with a seat in a driving rod consisting of an outer screw socket sunk into the rod of greater diameter and an interior passage of lesser diameter leading to the crank pin bearing, a grease cup comprising in an integral structure a receptacle member having its outer end portion diametrically enlarged to form the lubricant pressure chamber and exteriorly threaded so as to be screwed into said socket and having its inner end diametrically reduced to form a tubular neck extending into said passage and the bore of said neck communicating with the pressure chamber, and a pressure plunger exteriorly threaded throughout its length and working by means of screw engagement in said pressure chamber.

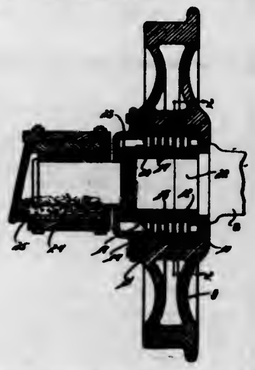


1,888,482. LOCKING AND TRIPPING DEVICE FOR A POWER LIFT IMPLEMENT. JESSE A. VAUGHN, Los Angeles, Calif., assignor to Killefer Manufacturing Corporation, Ltd., Los Angeles, Calif., a Corporation of California. Filed Oct. 12, 1931. Serial No. 568,258. 6 Claims. (Cl. 97—73.)



1. A lock and release device for an earth working implement of the lift type including a sliding control bar, a latch means for locking said bar, a toggle means for retaining said latch in locking position, and a release means operable for actuating said toggle means to release said latch means for unlocking said control bar.

1,888,483. ROLLER BEARING. CHARLES H. WITTHOFFT, St. Louis, Mo. Filed Feb. 20, 1930. Serial No. 429,887. 2 Claims. (Cl. 308—207.)

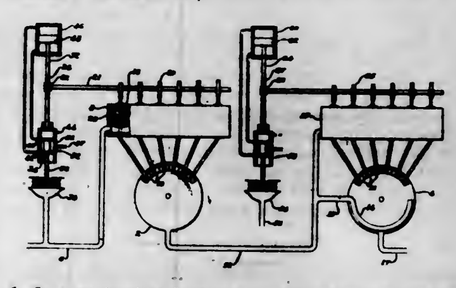


1. In a roller bearing of the class described: a plurality of anti-friction bearing members arranged in rows, each of said bearing members having a boss projected outwardly from one side and engaging in a recess formed in the opposite side of an adjacent bearing.

1,888,484. PROCESS OF PRECIPITATING SILICA FROM SOLUTION IN ALKALI BRINES. ARSEN H. AVAKIAN, Long Beach, Calif. Filed Nov. 28, 1930. Serial No. 498 906. 10 Claims. (Cl. 23—89.)

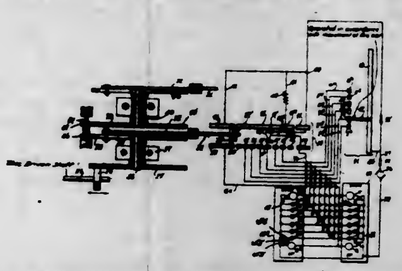
1. The method of removing silica from the salts of brine solutions which comprises producing the HCO_3 radical in the solution and mechanically separating the precipitated silica from the brine.

1,888,485. ELASTIC FLUID TURBINE. OLIVER D. H. BENTLEY, Norfolk, Mass., assignor to B. F. Sturtevant Company, Hyde Park, Mass., a Corporation of Massachusetts. Filed Feb. 14, 1930. Serial No. 428,499. 30 Claims. (Cl. 236—14.)



1. In a mechanical draft system for a furnace, the combination with induced and forced draft turbines, of automatic means for simultaneously varying the power supplied to both turbines to vary the total draft, and means for varying the division of power supplied to the turbines to control the furnace pressure.

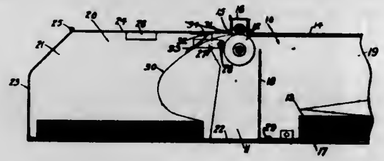
1,888,486. SERVICE INDICATING SYSTEM FOR ELEVATORS. FRANZ A. BOEDTCHER, Bergenfield, N. J., assignor to Otis Elevator Company, Jersey City, N. J., a Corporation of New Jersey. Filed June 26, 1925. Serial No. 39,670. 20 Claims. (Cl. 177—386.)



2. In an elevator system, the combination with an elevator car mounted to travel in a shaft, of a plurality of indicators corresponding to the several floors served by the car, means synchronized with the movement of said car for causing the display of said indicators individually to indicate car position, time-controlled means for independently causing the display of said indicators in succession in accordance with a predetermined schedule so as continuously to indicate the floor at which the car should be, means for differentiating between the indications whose display is controlled by car movement and the indications whose display is controlled by time, a signal for starting said car from each terminal floor served by the car, and means responsive to said time-controlled means for operat-

ing said starting signal at such a time that upon reasonable compliance of the car with said starting signal said car may attain its said predetermined schedule for the floors adjacent the terminal floors.

1,888,487. MANIFOLDING MACHINE. CARL WILLIAM BRENN, Montclair, N. J., assignor to Autographic Register Company, Hoboken, N. J., a Corporation of New Jersey. Filed June 25, 1926. Serial No. 118,473. 8 Claims. (Cl. 282—16.)



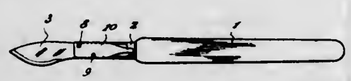
1. An attachment for a manifolding register having a box-like frame at the delivery end of which a severing knife is fixed against intentional removal from operative position, said attachment comprising a box adapted to be secured to the delivery end of the register for storing a strip after it has been written upon in said register, and said box having means movably mounted thereon to be extended beneath the severing knife to guide the strip to be stored into said box and to prevent said strip from passing directly under said knife to the exterior of the box.

1,888,488. KNIFE. ROBERT E. BROWN, Olean, N. Y. Filed Sept. 5, 1931. Serial No. 561,446. 12 Claims. (Cl. 30—9.)



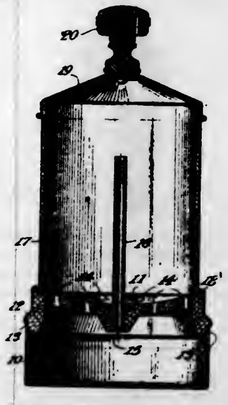
1. An implement comprising a shank, a blade, the front end of said shank and the rear end of said blade being formed with bills facing in opposite directions transversely of the shank and a sleeve slidably carried by said shank and movable longitudinally thereon in one direction to permit insertion and interengagement of said bills within the sleeve and movable in another direction to overlap and bear against the blade and hold said blade rigidly in alignment with the shank, the rear portion of the blade being reduced in width to form shoulders for engaging the sleeve and limiting forward movement thereof, the shank being formed of resilient material and split longitudinally and transversely to form a latch having its free end facing forwardly to engage the rear end of said sleeve and releasably secure the sleeve in an extended position.

1,888,489. KNIFE. ROBERT E. BROWN, Olean, N. Y. Filed Jan. 9, 1932. Serial No. 585,783. 7 Claims. (Cl. 30—9.)



7. A knife comprising a handle, headed studs on one side of the handle, a blade having marginal notches to engage the studs and having a shoulder on its inner end, and a resilient latch secured on the handle and having a depending detent at its free end engaging the shoulder on the end of the blade.

1,888,490. COOKER. CLARENCE F. COOKSON, Lyndhurst, N. J., assignor to Counter Cooking Machine Corporation, New York, N. Y., a Corporation of Delaware. Filed Aug. 30, 1930. Serial No. 478,841. 2 Claims. (Cl. 53—2.)



1. A cooking device which comprises a metallic heating pan for water and the like, a porcelain perforated support resting on the pan and closing the top thereof, an enclosing casing of glass resting on the top of the support, a metallic cover for the casing, an imperforate pipe of vitreous enamel on the support forming a passage from the pan to a point above the articles of food on the perforated support.

1,888,491. PROCESS OF CASE HARDENING METALS. ROYSEL J. COWAN, Toledo, Ohio, assignor to Surface Combustion Corporation, Toledo, Ohio, a Corporation of New York. Filed Oct. 27, 1930. Serial No. 491,640. 1 Claim. (Cl. 148—16.)

The process of case-hardening metal with ammonia which comprises heating the metal in a closed heating chamber, supplying to such chamber while the metal is absorbing heat, such amounts of ammonia as will result in maintaining the percentage of ammonia dissociation to a minimum and after absorption of heat by the metal is complete, reducing the ammonia supply to such extent that substantially complete ammonia dissociation will result.

1,888,492. MANUFACTURE OF MOSAIC FABRICS. EDWARD C. DEARDEN, Merion, Pa., assignor, by mesne assignments, to Sloane-Blabon Corporation, New York, N. Y., a Corporation of Delaware. Filed Jan. 17, 1930. Serial No. 421,368. 4 Claims. (Cl. 154—25.)

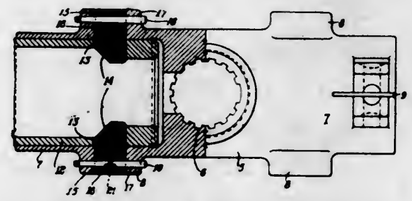


1. The method of making moulded inlaid linoleum which consists in depositing on a backing unseasoned granulated plastic linoleum composition forming tesseræ having spaces between them, compacting such deposited composition, depositing between compacted tesseræ aforesaid unseasoned granulated plastic linoleum composition, and compacting said last named deposited composition.

1,888,493. PROPELLER HUB. THOMAS A. DICKS, Pittsburgh, Pa., assignor to Pittsburgh Screw and Bolt Corporation, a Corporation of Pennsylvania. Filed Feb. 1, 1932. Serial No. 590,094. 6 Claims. (Cl. 170—160.)

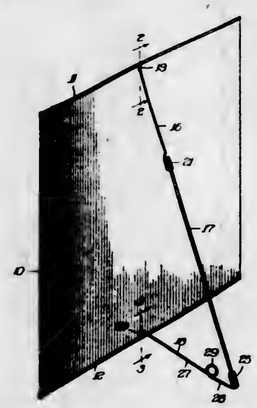
1. In a propeller, a hub, a plurality of radially extending sockets on said hub, apertured lugs projecting

from the sides of said sockets, a tubular propeller blade for each of said sockets having portions of the shank of increased thickness and apertured to register with the apertures in said lugs, a shear pin extending through each set of these registering apertures for securing said



blades in said sockets, each of said shear pins being of such a length that the inner end thereof terminates substantially flush with the inner surface of those portions of the shank of increased thickness, and means for retaining said shear pins in said apertures.

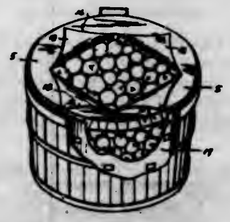
1,888,494. POSTER-SUPPORTING DEVICE. JOHN W. DIXON, River Forest, Ill., assignor to U. S. Finishing & Mfg. Co., Chicago, Ill., a Corporation of Illinois. Filed Sept. 17, 1931. Serial No. 563,287. 10 Claims. (Cl. 40—125.)



1. A device for supporting a flexible poster, consisting of a plurality of members which are adapted to be connected with each other and with the upper and lower edges of the poster, said members being made of ordinary wire of uniform cross section, and the end of one of the wire members being wound into a straight helical coil of substantially the same inside diameter as the wire to form a socket for the reception of the end of another member.

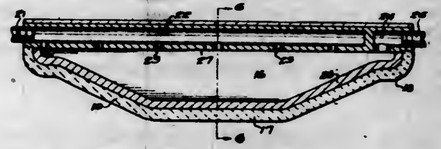
1,888,495. LINER FOR BASKETS. COLON J. DUDLEY, Hamburg, N. Y. Filed July 19, 1930. Serial No. 469,153. 2 Claims. (Cl. 217—8.)

1. The combination with a receptacle, of a cover therefor, the cover being removable and replaceable, a liner for the cover, the liner being separable from the cover, a flange on the liner designed to engage between the contents of the receptacle and the walls thereof, the central



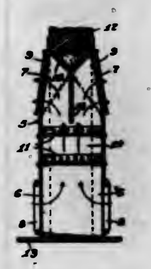
portion of the liner being provided with flap means, whereby access may be had through the liner when the cover is removed.

1,888,496. CONTINUOUS TANK FURNACE. ENOCH T. FERNGREN, Toledo, Ohio, assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio, a Corporation of Ohio. Original application filed Oct. 27, 1923, Serial No. 671,126. Divided and this application filed Mar. 26, 1926. Serial No. 97,509. 13 Claims. (Cl. 49—54.)



2. A floater for use in a glass furnace, comprising an elongated member of refractory clay, having an interior chamber of similar configuration, lined with silicon-carbide, and means for flowing a cooling fluid through the chamber.

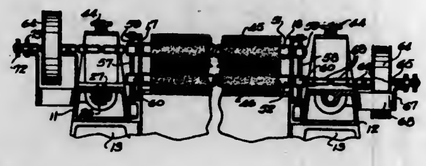
1,888,497. ELECTRIC HEATER. FRED G. GASCH, Seattle, Wash. Filed June 6, 1931. Serial No. 542,552. 3 Claims. (Cl. 219—38.)



1. An electric heater having in combination a casing with a middle vertically disposed heating chamber portion, said casing having inlet means disposed in the opposite sides of its lower portion and substantially equal in area to the area in cross section of the heating chamber portion, a plurality of electrical heating elements mounted horizontally across the heating chamber portion in spaced apart relation and having spaced apart resistance coils, and said casing having outlet means disposed

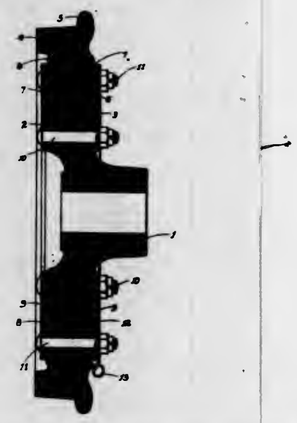
in the opposite sides of its upper portion and substantially equal in area to the area of the heating chamber in cross section whereby cold air enters the inlets and passes upwardly through the heating elements and outwardly through the outlets.

1,888,498. APPARATUS FOR WASHING SHEET GLASS. JOHN C. GIPE and JOSEPH P. CROWLEY, Toledo, Ohio, assignors to Libbey-Owens-Ford Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed Sept. 12, 1927. Serial No. 218,892. 6 Claims. (Cl. 15—77.)



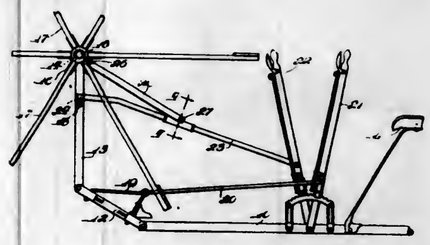
8. In apparatus for washing sheet glass, a supporting framework, means carried by said framework for conveying the sheet in a definite substantially horizontal path, means for simultaneously washing the opposite surfaces of said sheet during horizontal movement thereof including a pair of washing brushes arranged above and beneath the path of travel of the sheet, shafts for said brushes, and means for adjustably mounting the brushes including oppositely disposed pairs of vertical threaded rods carried by the framework, bearing members adjustably carried by the rods and within which the opposite ends of the brush shafts are received, said bearing members having openings therein for receiving the rods therethrough, and means for moving the bearing members along said rods whereby the brushes may be moved vertically independently of one another.

1,888,499. RESILIENT RAIL CAR WHEEL. CHARLES H. GUNN, Burlingame, Calif. Filed Oct. 27, 1931. Serial No. 571,329. 2 Claims. (Cl. 295—11.)



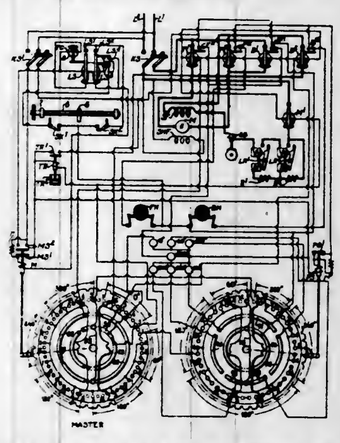
1. A resilient car wheel comprising a hub portion, a rim portion separate therefrom, a resilient endless band between and engaging such portions, rigid side plates secured to the hub and projecting thence radially and beyond the band in overlapping relation to the rim portion, bolts through the plates and said portion, the latter having relatively large holes through which the bolts project, resilient spacers about the bolts for the width of said portion and filling the holes and resilient side rings seated between the plates and the adjacent surfaces of the rim portion.

1,888,500. REEL SUPPORT FOR HARVESTER BINDERS. GUSTAF HAMMER, Chicago, Ill., assignor to International Harvester Company, a Corporation of New Jersey. Filed May 6, 1932. Serial No. 609,616. 9 Claims. (Cl. 56—221.)



1. In a binder, a pivotally mounted reel frame, a reel moving member pivotally connected thereto to move the frame, means to operate the member, and means having sliding connection with said member to prevent twisting of the reel frame.

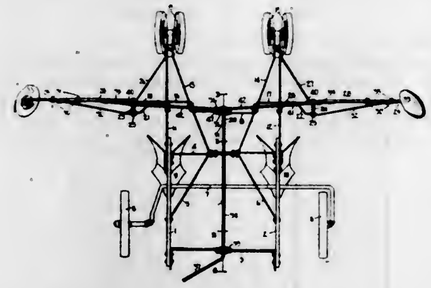
1,888,501. CONTROL SYSTEM FOR BLAST FURNACE CHARGING EQUIPMENT. PAISLEY B. HARWOOD, Milwaukee, Wis., assignor to Cutler-Hammer, Inc., Milwaukee, Wis., a Corporation of Delaware. Original application filed Mar. 28, 1927, Serial No. 179,092. Divided and this application filed July 18, 1930. Serial No. 468,972. 8 Claims. (Cl. 214—19.)



1. In blast furnace charging equipment, in combination, a distributing hopper, means for intermittently discharging loads of material directly into said hopper at a given point peripherally of the latter, means for individually discharging a multiplicity of said loads of material from the hopper sequentially at each of a number of different points angularly spaced from said first mentioned point, said means including means for automatically effecting rotation of said hopper prior to discharge of certain of said loads of material therefrom, and means controlled by said last mentioned means for automatically reversing the direction of rotation of said hopper to provide for travel thereof to said points through the smallest arc or angle.

1,888,502. MARKER FOR CORN PLANTERS. JOHN V. HOLSTEIN, Moline, Ill., assignor to Deere & Company, Moline, Ill., a Corporation of Illinois. Filed Mar. 4, 1931. Serial No. 519,967. 10 Claims. (Cl. 97—230.)

1. In an agricultural implement having a supporting frame, the combination therewith of a shaft disposed longitudinally of the frame and rockably and longitudinally movable in bearings thereon, a vertically extending arm on the rear end of the shaft, marker arms pivotally supported on opposite sides of the frame, means connecting



the marker arms with the vertical arm, a lever on the forward end of the shaft operable to rock said shaft and arms, and a locking device on the frame automatically operative to prevent the rocking movement of the shaft.

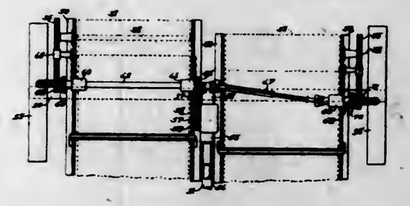
1,888,503. DEVICE FOR AERATING LIQUIDS. EMIL C. HOPPE, Elizabeth, N. J. Filed May 31, 1930. Serial No. 457,954. 3 Claims. (Cl. 226—69.)



2. In a liquid aerating device, the combination with o base, of a hollow standard extending therefrom and adapted for conveying gas, gas intake means provided at one end of said standard, gas discharge means secured at its other end, gas and liquid control means connected with said discharge means and removably associated with said standard, and adjustable container supporting means removably and adjustably mounted with said standard and adapted to facilitate pressing a container, the content of which is to be aerated, against said gas and liquid control means.

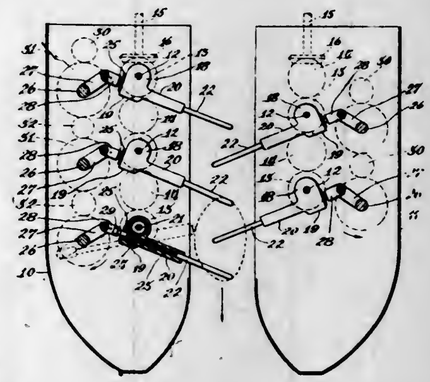
1,888,504. POWER DRIVEN POTATO DIGGER. ARNOLD E. W. JOHNSON, Chicago, Ill., and WILLIAM C. DWYER, Auburn, N. Y., assignors to International Harvester Company, a Corporation of New Jersey. Filed Feb. 9, 1931. Serial No. 514,422. 4 Claims. (Cl. 55—51.)

1. A potato digger comprising a frame structure, digger units pivotally and slidably mounted at the rear of the frame structure, means for attaching the forward ends of the units to the frame structure, a driving shaft rotatably mounted at the forward end of the frame structure, a gear case mounted on one of the units, a driving shaft forwardly extending from said case, a splined shaft connected by universal joints to said shaft and to the shaft mounted on the frame structure, a transverse shaft mounted above the unit which carries the gear case, means for driving said shaft from the mechanism contained in said gear case, means for driving the digger mechanism on said



unit from said shaft, a shaft rotatably mounted on the second unit, and means for driving said shaft from the transverse shaft on the first named unit consisting of a splined shaft connected by universal joints to said shafts, and means for driving the mechanism on the second unit from the shaft mounted thereon.

1,888,505. COTTON PICKER. EDWARD A. JOHNSTON, Chicago, Ill., assignor to International Harvester Company, a Corporation of New Jersey. Filed Feb. 1, 1929. Serial No. 336,885. 3 Claims. (Cl. 56—46.)

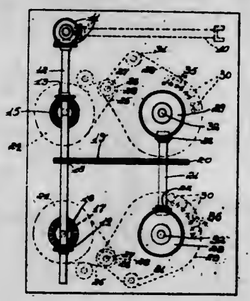


1. In a cotton harvester, a picker assembly comprising a drive shaft, a spindle housing rockably mounted on the drive shaft and formed with a bearing portion at one side in angular relation to the drive shaft, a spindle rotatively and reciprocably journaled between its ends in said bearing portion, a driving pinion on the shaft within the housing, a driven pinion splined on the spindle within the bearing portion of the housing and in engagement with the driving pinion, and a driving element rotating on an axis perpendicular to the axis of the spindle and connected to one end of the spindle eccentrically to the axis of said driving element.

1,888,506. COTTON PICKER. EDWARD A. JOHNSTON, Chicago, Ill., assignor to International Harvester Company, a Corporation of New Jersey. Filed July 23, 1930. Serial No. 470,024. 14 Claims. (Cl. 56—44.)

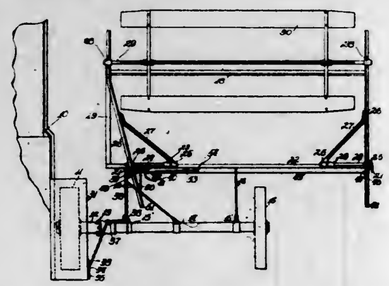
1. A cotton picker comprising a drum structure mounted for rotation, a plurality of conical picker spindles mounted for rotation on the drum structure, and doffing means comprising carriers mounted for movement in over-

lapping relationship with respect to the spindles and brushes mounted on said carriers and positioned to contact with the surfaces of said conical spindles, the axes



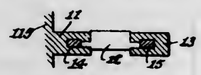
of the spindles being at an angle with respect to the contacting surfaces of the brushes whereby an area of contact is obtained.

1,888,507. HARVESTER THRESHER. EDWARD A. JOHNSTON and MELVILLE J. MITCHELL, Chicago, Ill., assignors to International Harvester Company, a Corporation of New Jersey. Filed Feb. 9, 1931. Serial No. 514,423. 15 Claims. (Cl. 56—20.)



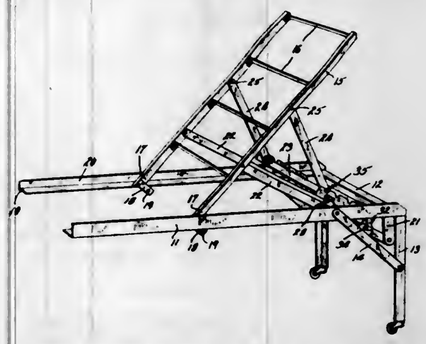
15. A harvester thresher comprising, in combination, a thresher part, a harvester part floatingly connected to the thresher part, a pair of spaced beams rockingly carried on the harvester part, a reel mounted on said beams, a lever fulcrumed on the thresher part, a member pivotally mounted on the harvester part, flexible connections between the lever and pivoted member, flexible connections from said pivoted member to the beams whereby when the lever is actuated said beams will be moved together to adjust the reel, and spring means acting on said pivoted member to counter-balance the weight of the reel.

1,888,508. METHOD OF MANUFACTURE OF BLADE DISKS FOR RADIAL ADMISSION TURBINES. WILHELM KASTERT, Mulheim-Ruhr, Germany, assignor to Siemens-Schuckertwerke Aktiengesellschaft, Berlin-Siemensstadt, Germany, a Corporation of Germany. Filed Jan. 17, 1930, Serial No. 421,438, and in Germany Jan. 18, 1929. 8 Claims. (Cl. 29—156.8.)



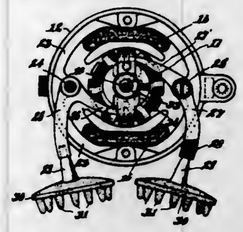
1. The process of producing sections of blades for radial flow turbines, which process consists in arranging the individual blades in parallelism with each other and extending between the spaced adjacent edges of two parallelly arranged flat side bars, in joining the opposite ends of said blades to said side bars respectively, and finally in bending the flat blading section thus produced into an arcuate cylindrical form.

1,888,509. BACK-REST FOR BEDS. OTTO H. KIESELER, Cleveland, Ohio, assignor to The Champion Spring Company, Cleveland, Ohio, a Corporation of Ohio. Filed Nov. 5, 1928. Serial No. 317,347. 2 Claims. (Cl. 5—73.)



2. A back rest attachment for a cot frame, comprising side bars adapted to ride upon the side rails of said frame and carrying on their lower ends, outwardly extending pins sliding beneath said rails, brace bars pivoted to said side bars and side rails and carrying ratchet bars secured thereto and spaced thereabove in a common vertical plane by the provision of a plurality of offset U-shaped members secured to the adjacent edges of the ratchet bars and brace bars with the yoke of the U member in alinement with the said space, and an adjusting bail swinging from said slide bars and carrying outwardly projecting pins permitting their travelling through the space between the supporting braces and ratchet bars and detachably entering the notches of the latter, the said supporting braces being pivoted to the side bars intermediate the bail and the lower ends of said bars.

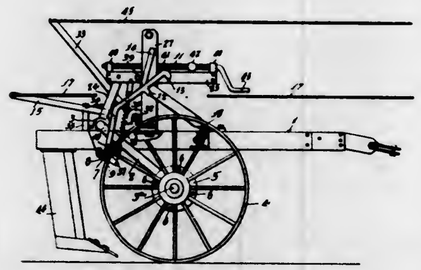
1,888,510. MASSAGE DEVICE. JOSEPH A. MASHEK, Kewaunee, Wis. Filed June 27, 1930. Serial No. 464,353. 4 Claims. (Cl. 128—59.)



2. In a device of the character described, a pair of oscillatory supporting members having inwardly extending opposed lever arms, a power shaft interposed between the opposed inner end portions of said oscillatory members, an intermediate circular driving member mounted eccentrically on said power shaft, an opposed pair of annular outer driving members on opposite sides of said intermediate member, said members having interposed anti-friction bearings afforded by annularly grooving their meeting faces and placing therein a series of balls, and means for pivotally connecting the cooperating inner end portions of said oscillatory members respectively to said outer annular driving members, said means comprising right angular

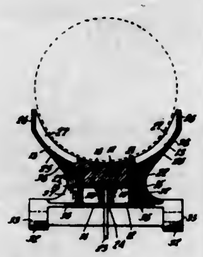
clips adjustably secured on said oscillatory members and having opposed angular portions straddling the assembled driving members, the cooperating angular portion of one of said attaching clips and the meeting face of the adjacent annular outer driving member having registered indentations, and a ball contained therein.

1,888,511. POWER LIFT. ROLLIN H. MITCHELL, South Gate, and JESSE A. VAUGHN, Los Angeles, Calif., assignors to Killefer Manufacturing Corporation, Ltd., Los Angeles, Calif., a Corporation of California. Filed June 20, 1932. Serial No. 618,100. 10 Claims. (Cl. 97—73.)



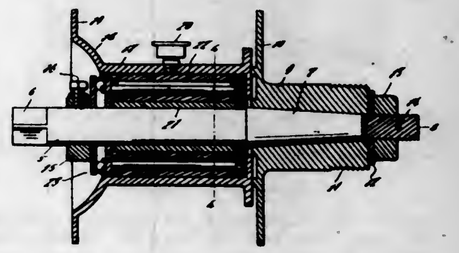
1. In a power lift implement, a frame, a crank axle journaled transversely of said frame and having aligned spindles, traction wheels journaled upon said spindles, a trundle wheel mounted upon each wheel, a lifting rack pivotally mounted on the frame at a point beneath the axis of the axle and normally extending to a point adjacent said trundle wheel, a rack stop mounted on the frame, means for swinging said lifting rack into an engageable position with said trundle wheel whereby when one tooth of the rack engages one rung of the trundle wheel and the trundle wheel rotated, the rack will gear along the trundle wheel until the implement has been elevated to a predetermined height at which point the rack will engage the rack stop and be thereby automatically disengaged from said trundle wheel.

1,888,512. GREASE CELLAR. ABRAHAM L. MOLER, Richmond, Va., assignor of one-half to John W. Small, Richmond, Va. Filed May 21, 1927, Serial No. 193,296. Renewed July 23, 1930. 5 Claims. (Cl. 308—83.)



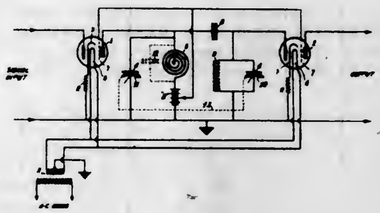
2. A lubricating cellar for locomotive driving boxes, said cellar having a lubricant-dispensing chamber and a waste lubricant collecting chamber, the latter being open on its upper side with the opening presented to the journal and having a bottom wall provided at different zones with openings extending therethrough to the exterior of the cellar, whereby the collected waste lubricant is extruded while in a plastic state.

1,888,513. POWER TAKE-OFF DEVICE. BROR NASTROM, Holdrege, Nebr. Filed Nov. 29, 1929. Serial No. 410,488. 1 Claim. (Cl. 74—7.)



A power take-off device comprising a bearing structure including a housing, a roller bearing assembly therein and a thrust bearing in the inner end of the assembly, a shaft rotatably arranged in said bearing structure and having its ends projecting therefrom, a collar adjustably connected with the shaft adjacent its inner end and engaging a part of the thrust bearing, a hub spinning on the outer end of the shaft said hub having an apertured flange on its inner end formed with an annular flange engaging the outer end of the housing of the bearing structure.

1,888,514. TUNED RADIO FREQUENCY RECEIVER. WALTER VAN B. ROBERTS, Princeton, N. J., assignor to Radio Corporation of America, a Corporation of Delaware. Filed March 30, 1929. Serial No. 351,407. 5 Claims. (Cl. 179—171.)

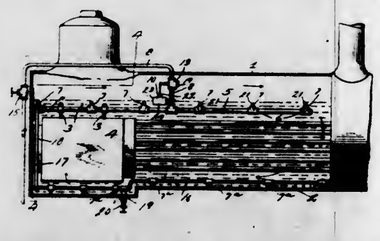


1. In a receiving circuit, a space discharge device having an anode, a cathode, a control electrode and a shielding electrode, a source of current and a choke coil in series connected between the anode and the cathode, a second space discharge device having a tuned input circuit and an output circuit, said tuned input circuit comprising a variable capacity, a condenser for connecting the anode of said first mentioned space discharge device to one side of said variable condenser, a second variable condenser shunted across said choke coil and said current source, one side of each of said variable condensers and one side of said current source being grounded.

1,888,515. BOILER CLEANER. JOHN H. STOCKHOLDER, New Orleans, La. Filed Oct. 30, 1931. Serial No. 572,141. 6 Claims. (Cl. 122—381.)

1. The combination with a locomotive boiler having a fire box, longitudinally disposed tubes, of a combined

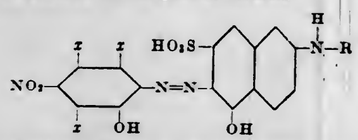
skimmer and mud removing device, said skimmer being supported by the fire box, said mud removing device dis-



posed beneath the fire box and in the bottom of the boiler and a flexible connection between the skimmer and the mud removing device and extending around the fire box.

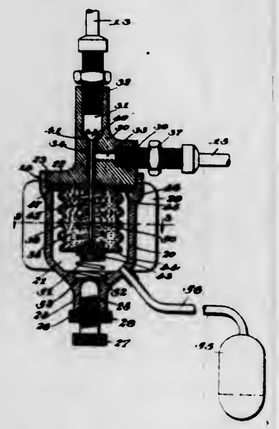
1,888,516. AZO-DYESTUFFS CONTAINING CHROMIUM AND PROCESS OF MAKING SAME. FRITZ STRAUB, WALTER ANDEREAU, and HANS MAYER, Basel, Switzerland, assignors to Society of Chemical Industry in Basle, Basel, Switzerland. Filed Apr. 11, 1928, Serial No. 269,293, and in Switzerland, Apr. 23, 1927. 14 Claims. (Cl. 260—12.)

1. Process for the manufacture of dyestuffs containing chromium, consisting in treating the herein described o-hydroxy-azo-dyestuffs of the general formula



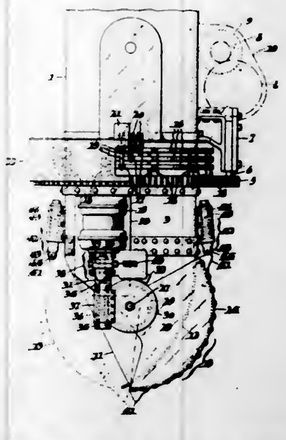
wherein x means hydrogen or halogen or sulfo groups, and R alkyl, alkylene, benzyl, phenyl, naphthyl, phenylene or an acidyl radicle of the aliphatic or of the benzene series, with compounds of the trivalent chromium.

1,888,517. DEVICE FOR CONTROLLING THE FLOW OF REFRIGERANT IN A REFRIGERATING APPARATUS. EUGENE H. THREADGILL, Raleigh, N. C. Filed Mar. 3, 1931. Serial No. 519,908. 3 Claims. (Cl. 236—92.)



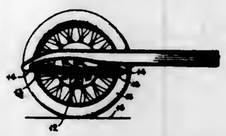
1. In a refrigerating system including an expansion coil and a compressor, a device for controlling the flow of the refrigerant from the compressor to the expansion coil comprising a pipe connecting the compressor with the expansion coil, a valve interpolated in the pipe for cutting off the flow of the refrigerant to the expansion coil, an expansible member in communication with the pipe and containing oil, a valve stem connecting the valve with the expansible member, pressure in the expansion coil acting on the oil causing expansion of the expansible member thereby tending to close the valve.

1,888,518. DISCHARGE CHUTE. JULIUS TOROK and EDWIN LEE BURGSTRESSER, Renovo, Pa. Filed Feb. 9, 1932. Serial No. 591,800. 8 Claims. (Cl. 193—3.)



1. In a discharge chute, a tube, a bucket rotatable about the axis of the tube at the end thereof and terminating in a laterally directed discharge opening, a gate pivoted on said bucket and movable upward to retard the rate of flow of material through said discharge opening, a driving unit mounted on said tube for effecting rotation of the bucket about said tube, and an additional driving unit mounted on said elbow extension for opening and closing said gate.

1,888,519. ELASTIC SUSPENSION. FRANCESCO TRAVERSO, Genoa, Italy. Filed Apr. 23, 1930, Serial No. 446,709, and in Italy May 31, 1929. 7 Claims. (Cl. 267—60.)

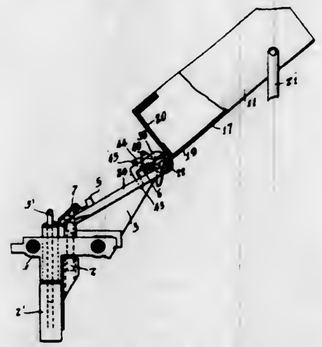


1. Elastic suspension for vehicles and other purposes including at least one helical or coil spring, the coils of each spring being always in contact with each other at least at one point of their annular length.

1,888,520. NAIL GATE FOR NAILING MACHINES. HERBERT E. TWOMLEY, Riverside, Calif., assignor to Clara B. Parker, Riverside, Calif., as executrix of George D. Parker, deceased. Filed Dec. 28, 1931. Serial No. 583,585. 8 Claims. (Cl. 1—16.)

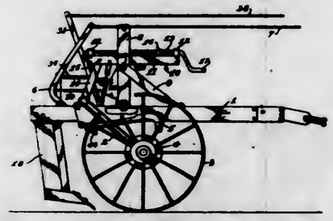
1. In a nail feeding device having an agitated nail container and a slot through which nails may pass from the container, a nail holder for receiving nails from said

slot, a nail gate for obstructing said slot to prevent passage of nails therethrough, means operably responsive to the movement of said nail container for moving said nail



gate to non-obstructing position, and means responsive to the presence of a predetermined number of nails in said holder for preventing effective movement of said nail gate.

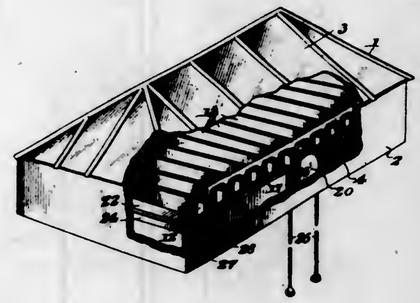
1,888,521. LOCKING AND TRIPPING DEVICE FOR POWER LIFT IMPLEMENTS. JESSE A. VAUGHN, Los Angeles, Calif., assignor to Killefer Manufacturing Corporation, Ltd., Los Angeles, Calif., a Corporation of California. Original application filed Oct. 12, 1931, Serial No. 568,258. Divided and this application filed July 12, 1932. Serial No. 622,065. 4 Claims. (Cl. 97—73.)



1. A lock and release device for an earth working implement of the lift type including a sliding control bar, a stop means carried thereby, a pivoted latch having one end adapted to engage said stop means, a retaining means operatively engaging the other end of said latch for holding said latch means in locking position, and a release means operable for actuating said retaining means to release said latch for unlocking said control bar.

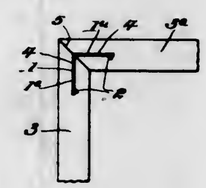
1,888,522. SKYLIGHT BLIND. LAWRENCE THOMAS WARD, Kane, Pa., assignor to Kane Manufacturing Company, Kane, Pa., a Corporation of Pennsylvania. Filed Nov. 29, 1930. Serial No. 499,110. 8 Claims. (Cl. 20—62.)

1. In a skylight blind, a frame comprising end supports and side members, said end supports being arranged to support said side members in a horizontal position within a skylight well, means for detachably mounting said side



members on said end supports, and a plurality of slats pivotally mounted on said frame.

1,888,523. STRUCTURAL JOINT. EDWARD B. WILLIAMSON, Petersburg, Va. Filed June 8, 1929. Serial No. 369,399. 1 Claim. (Cl. 20—92.)

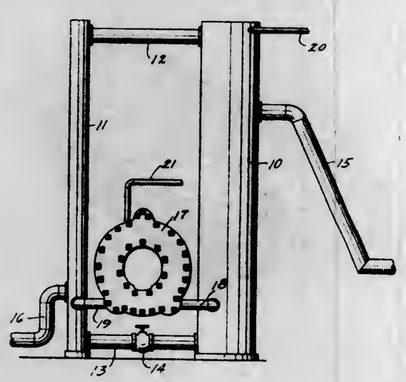


A joint structure including a fastening element comprising a strip of sheet metal bent into L-shape in cross-section, said fastening element being disposed to fit in kerfs preformed in the parts to be joined, said kerfs registering at the meeting faces of the parts to be joined, said fastening element having its edges bent over at an inclination forming an obtuse angle relative to the body thereof to be driven downwardly into the walls forming the kerfs in applying the fastening device downwardly into the kerfs in forming the joint, said obtuse angled edges causing no tendency to separation of the joint as the fastener is driven in, said parts being drawn together at the joint by means of the obtuse inclination of the bent edges pulling outwardly from the heel or bend of the L-shaped fastener in being driven into place.

1,888,524. BY-PASS CONNECTION FOR METERS. ROBERT L. WRIGHT, Tulsa, Okla. Filed Oct. 25, 1930. Serial No. 491,299. 9 Claims. (Cl. 137—78.)

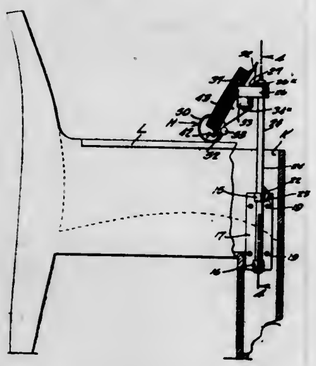
1. In a by-pass for oil meters, a pair of upright containers, an oil meter connected between the containers to receive oil from one container and discharge it into the other container, an oil inlet pipe connected to the inlet container at an elevation considerably above the meter connection, whereby a head of oil is built up in said inlet container, an outlet pipe extending from the

outlet container adjacent the meter connection at a considerably lower elevation than the inlet pipe, and means for admitting to the upper portion of the inlet container



fluid under pressure other than the oil or the fluid contained therein, for building up a pressure against oil discharged from the meter.

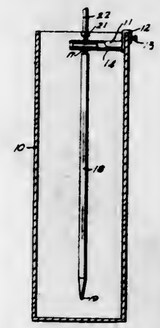
1,888,525. BOOKHOLDER. ROLLA W. CALLAWAY and HARRISON ANDERSON, Los Angeles, Calif.; said Anderson assignor to said Callaway. Filed Sept. 19, 1928. Serial No. 307,004. 3 Claims. (Cl. 45—82.)



1. A post, means for supporting the post for vertical adjustment, a splined connection between the post and first means for securing the post against rotation in any position of adjustment, a connecting arm rotatable on the post, means for latching the connecting arm in adjusted position circumferentially on the post, a rack arm rotatable on the connecting arm, latching means for securing the rack arm in adjusted position circumferentially on the connecting arm, and a book rack carried by the rack arm.

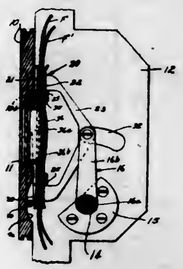
1,888,526. AGITATION MEANS AND METHOD FOR ICE MAKING. JOHN J. CATRON, Bonham, Tex. Filed Apr. 26, 1930. Serial No. 447,719. 3 Claims. (Cl. 62—159.)

1. The method of agitating water in the art of ice making which consists, in storing water in an upright container, then agitating the lower portion of the body of water by ejecting jets of water thereinto, alternately agitating the entire body of water by ejecting jets of air thereinto at the bottom of said body of water, and



changing said point of air injection from the point of water injection in the bottom of said body of water to transversely aerate the entire body of water.

1,888,527. SHUTTLE PRESSURE PLATE. ALEXANDER FARCIOT EDOUART, Los Angeles, Calif., assignor to Paramount Publix Corporation, Los Angeles, Calif., a Corporation of New York. Filed Sept. 2, 1930. Serial No. 479,376. 18 Claims. (Cl. 88—17.)



5. A film holding device comprising a film shuttle, a pressure plate on said shuttle having a plurality of spaced film supporting bars thereon, an exposure aperture, and a curved pressure plate about said aperture.

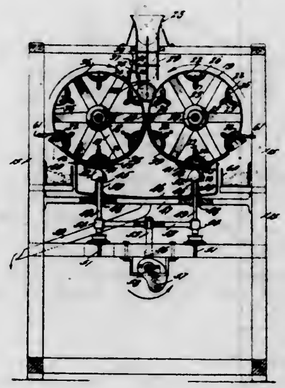
9. In a film exposure apparatus, a film holding device that includes two film holding elements, one of said elements comprising spaced bars in curved surface formation arranged over the film exposure area.

11. In a film exposure apparatus, a film holding device that includes two film holding elements, one of said elements comprising spaced bars in curved surface formation and the other of said elements comprising an open frame, and a viewing optical system behind said film holding elements.

1,888,528. APPARATUS FOR EXTRACTING AND COLLECTING FRUIT JUICE. NORVAL M. FAULDS, Clearwater, Fla. Filed Aug. 13, 1930. Serial No. 475,112. 5 Claims. (Cl. 146—3.)

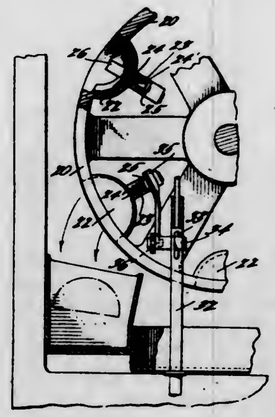
1. In a fruit juice extracting machine, pairs of wheels having coinciding peripheral fruit receiving cups, means for delivering fruit to the cups successively, means for intermittently partially rotating the wheels in unison and in opposite directions, means for cutting the fruit as it is carried by the wheels, means for holding the cut fruit in

the cups while the wheels are moving, the said means each having an opening at a fixed location, movable means at such locations for temporarily guarding the opening and preventing dislodgment of the fruit, juice extracting means



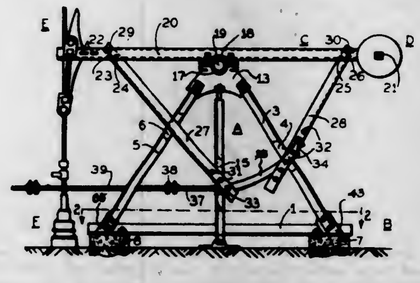
movable into cooperative relation with the fruit at the opening, means for uncovering the opening for the admission of the juice extracting means, and means for operating the juice extracting means.

1,888,529. FRUIT JUICE EXTRACTOR. NORVAL M. FAULDS, Clearwater, Fla. Filed May 5, 1931. Serial No. 535,211. 3 Claims. (Cl. 146—3.)



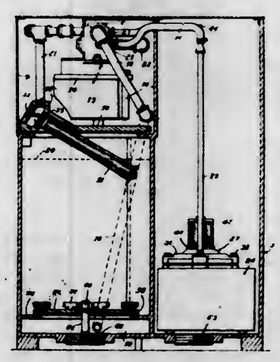
1. In a fruit juice extractor, a rotatably mounted wheel, cups at the periphery thereof, peel ejectors in the cups, an element connected to each peel ejector projecting inwardly through the cup, a bell crank lever, one arm of which successively engages the ends of the elements for dislodging peel, means for oscillatably mounting the bell crank lever, a cam formed on the end of the arm of the lever adapted to engage the elements, and means engaging the other arm of the bell crank lever for oscillating said lever.

1,888,530. WELL PUMPING JACK. BERT G. GOBLE, Tulsa, Okla., assignor to W. A. Quigley. Filed Aug. 2, 1926. Serial No. 126,493. 4 Claims. (Cl. 74—5.)



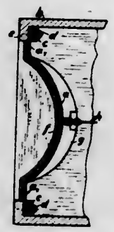
4. A jack comprising a support, a frame pivotally mounted on the support, a rocker having a curved surface, adjustable means for adjustably mounting said rocker on said frame whereby said rocker may be moved to and from the center and also turned with relation thereto and means attached along the curved surface to actuate the rocker.

1,888,531. WATER SOFTENER BRINE APPARATUS. STANLEY G. HARWOOD, Minneapolis, Minn., and DONALD GRISWOLD, Los Angeles, Calif., assignor, by mesne assignments, to The Permutit Company, Wilmington, Del., a Corporation of Delaware. Original application filed Nov. 28, 1927, Serial No. 236,122, now Patent No. 1,846,419, dated Feb. 23, 1932. Divided and this application filed Mar. 15, 1929. Serial No. 347,319. 28 Claims. (Cl. 210—24.)



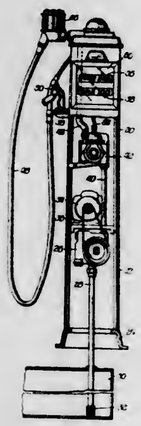
1. In a water softener apparatus, means for providing brine comprising a salt tank, and a brine tank removably installed in the salt tank and arranged to have salt stored on top thereof, said brine tank being normally in open communication with the interior of the salt tank and having connections for flowing water through the brine tank, valve means for controlling the flow through the connections, and means for shutting off communication between the two tanks during the flow of water through the brine tank.

1,888,532. DIAPHRAGM FOR LOUD SPEAKERS. DAVID CARL ALFRED HULTSTRÖM, Berlin, Germany. Filed Sept. 29, 1931, Serial No. 565,887, and in Germany Mar. 14, 1930. 4 Claims. (Cl. 181—31.)



1. A diaphragm for loud speakers, comprising a trough-shaped body curved in section, and at least one stiffening rib extending in the peripheral direction about the curved surface of the body and disposed transversely to the longitudinal direction of the latter.

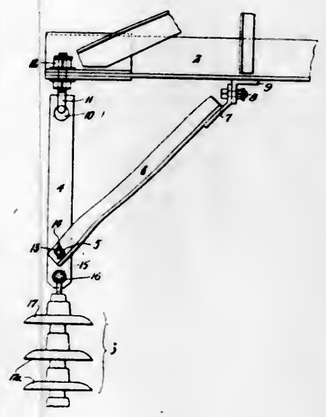
1,888,533. LIQUID DISPENSING APPARATUS. ROBERT J. JAUCH, IVAN R. FARNHAM, and ROSS H. ARNOLD, Fort Wayne, Ind., assignors to Wayne Company, Fort Wayne, Ind., a Corporation of Indiana. Filed June 3, 1932. Serial No. 615,134. 32 Claims. (Cl. 221—101.)



1. In liquid dispensing apparatus, the combination of a source of liquid supply, a pump the suction side of which is connected to said source, a meter connected to the outlet side of said pump and connected to dispensing means for measuring liquid dispensed through said dispensing means, and registering means operated by said meter for registering the amount of liquid dispensed and the cost of said liquid, and means for selectively changing the relation between the cost operating portion of said registering means and the amount operating portion thereof whereby the unit cost per unit amount dispensed may be varied.

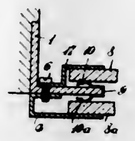
1,888,534. TRANSMISSION LINE SUPPORT. RALPH L. JENNER, East Orange, and FRED E. CHESTER, Woodbury, N. J., assignors to Blaw-Knox Company, Pittsburgh, Pa., a Corporation of New Jersey. Filed Oct. 29, 1928. Serial No. 315,719. 8 Claims. (Cl. 173—251.)

1. A transmission line supporting structure including, with a transmission tower and cross-arm, a combined supporting bracket and insulator yoke, triangulated firstly in a plane substantially vertically paralleling the line, and triangulated secondly generally transverse the line, pivoted on said arm on an axis extending longitudinally of



the arm, and a plurality of insulator strings, for carrying said line, pivoted on said bracket yoke, each at a lower point of triangulation which points are spaced apart longitudinally of the line.

1,888,535. PLATE GLASS SETTING. CLAËS GEORG URBAN KREUGER and SIGURD LEWERENTZ, Stockholm, Sweden. Filed Dec. 14, 1929, Serial No. 414,185, and in Sweden Dec. 15, 1928. 3 Claims. (Cl. 189—78.)

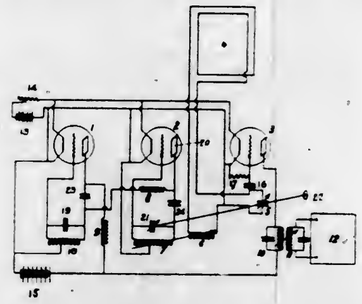


1. In a plate glass setting for windows, a frame to receive the plate glass, a non-resilient molding substantially U-shaped in cross-section having one narrower and one broader flange, said narrower flange directly engaging said frame with a plane surface, fixing screws screwed from that side of the window which faces the room, through said surface to secure said molding detachably to said frame to form a substantially rigid construction therewith, a strip of sheet metal between said glass and said frame, and resilient tongues on said strip engaging said glass to press it against said broader flange.

1,888,536. RADIO RECEIVING SYSTEM. LUCIEN LEVY, Paris, France. Filed Oct. 3, 1927, Serial No. 223,762, and in France Oct. 22, 1926. 4 Claims. (Cl. 250—20.)

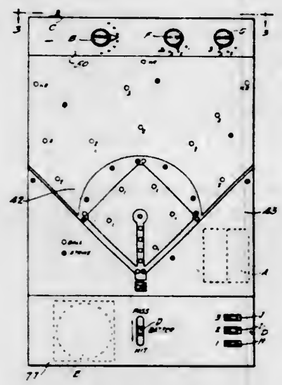
1. The method of superheterodyne radio receiving, comprising tuning the antenna circuit to a given frequency, generating local oscillations at the frequency of the incoming oscillations, generating local oscillations at a second-

ary frequency, superimposing said second local oscillations on said first-mentioned local oscillations, combining the composite oscillations thus produced and the incom-



ing oscillations by demodulation, to produce a beat frequency and rendering audible the beat oscillations thus produced.

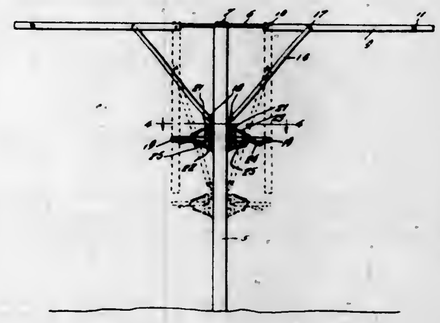
1,888,537. GAME. ROBERT I. MAYORGA, Dallas, Tex. Filed July 24, 1929. Serial No. 380,727. 7 Claims. (Cl. 273—88.)



1. In a ball game, a baseboard having a playing field thereon and provided with electric lamps for indicating the elements of the game, means for closing an electric circuit to illuminate certain of the lamps to simulate the throwing of a ball, a concealed switch having selectable points of contact for differently designating the play of the ball, a batter's switch having selectable points of contact for closing the electric circuits to anticipate the play simulating the throwing of a ball, and a distributor having electrical connection with both the lamps indicating the elements of the game and the batter's switch and arranged to be intermittently operated to close certain pre-determined electrical circuits to indicate a variation of the plays made upon the operation of the batter's switch.

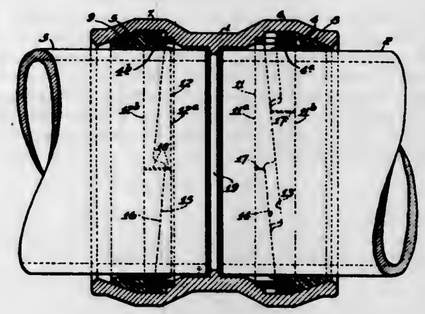
1,888,538. CLOTHES RACK. MAYHUGH M. MEADOWS, Lawton, Okla. Filed July 14, 1931. Serial No. 550,753. 1 Claim. (Cl. 211—171.)

A clothes rack of the character described comprising a post, a plurality of arms radiating from the post and being swingably connected thereto, a collar vertically slidable on the post, a handle on the collar, claw means between the handle and the said post whereby the collar can be retained in adjusted position on the post, said handle being provided with a longitudinally extending slot therein, a swingable claw member rockable on the handle and in the slot and being engageable with the post, spring means interposed between the claw member and the handle for normally maintaining the claw mem-



ber engaged with the post, and a rockable arm on the handle within the slot and a connection between the arm and the claw member whereby the claw member can be disengaged from the post.

1,888,539. PIPE COUPLING. OSCAR OTTERSON, Butler, Pa. Filed Jan. 6, 1932. Serial No. 584,963. 9 Claims. (Cl. 285—196.)

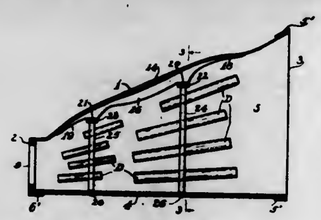


1. In combination, a pipe provided with a bell shaped end having an inwardly tapered portion at the outer end of its bell, a smooth ended pipe fitted in said bell, an annular flexible gasket of tapered cross section mounted in the bell of said outer pipe to bear on its opposite sides against the tapered surface adjacent the outer end of said bell and the outer wall of said smooth pipe, and a ring member mounted in said bell with one end disposed in a groove in said gasket in such a way as to hold said gasket in place and be frictionally engaged thereby, said ring being split about its periphery along an irregular line and its end opposite said gasket attached to said bell adapting its parts to be separated by relative rotary movement of the pipes for forcing said gasket between the outer inwardly tapered portion of the bell and the outer wall of the inner pipe to form a seal therebetween.

1,888,540. SOUND RESONATOR. MAXIMILLIAN T. PROBANSKI, Yonkers, N. Y. Filed July 21, 1931. Serial No. 552,128. 26 Claims. (Cl. 181—27.)

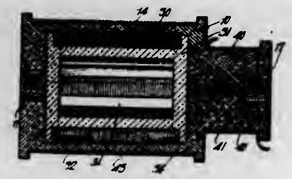
1. An amplifier comprising opposed non-resonating walls having enlarged ends disposed in parallel relation,

a loud speaker receiving terminal, reduced ends of said walls carried by said terminal, and opposed diaphragms



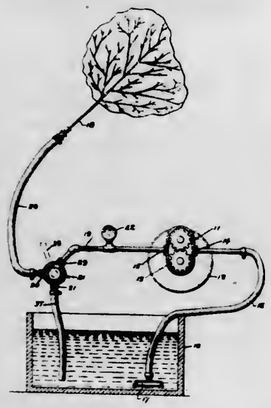
having also enlarged and reduced ends and supported on said walls and on said terminal, the enlarged ends of said diaphragms being also positioned in parallel relation.

1,888,541. COIL STRUCTURE. GIUSEPPE RIGANTE, Westerleigh, Staten Island, N. Y. Filed Nov. 5, 1931. Serial No. 573,215. 5 Claims. (Cl. 175—359.)



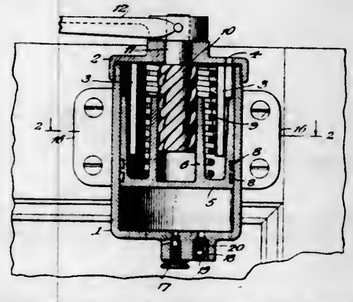
1. A device of the character described, comprising an outer skeleton frame and an inner skeleton frame, the outer skeleton frame being formed of two members each of which consists of two end sections, parallel extending spaced bars connecting said end members, means for securing said members together to form the said outer skeleton frame, and the inner skeleton frame being formed in one piece.

1,888,542. APPARATUS FOR TREATING MEATS. JOHN E. ROSBERG, San Francisco, Calif. Filed June 25, 1930. Serial No. 463,627. 3 Claims. (Cl. 99—2.)



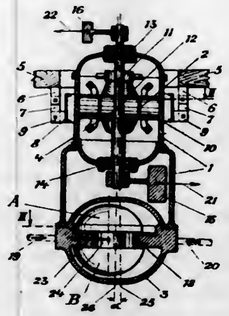
1. An apparatus for treating meats comprising a pump, a source of fluid supply, means for directing fluid under pressure from said pump to the arteries of a piece of meat, a conduit between said means and said pump, and a valve in said conduit, said valve being adapted to direct part of the fluid from said pump to the meat and part back to the source of supply whereby the pressure of the fluid directed into the meat may be regulated and the source of supply may be kept in a state of constant agitation.

1,888,543. DOORCHECK. JOHN A. H. SIERS, Jersey City, N. J. Filed Dec. 22, 1931. Serial No. 582,542. 3 Claims. (Cl. 16—66.)



1. A pneumatic door check comprising, a casing having a space forming an air chamber at the lower end thereof, a longitudinally slidable plunger therein, a spring within said casing for producing a pressure upon said plunger, a screw threaded spindle engaging said plunger for moving the same longitudinally, means connected with said spindle for rotating the same by relative motion between a door and its casing, and valves in the wall of said casing for controlling the flow of external air into and out of the door check during opening and closing motions of the door.

1,888,544. PUMP OR COMPRESSOR. OSCAR SIMMEN, Erlach, Switzerland, assignor to Firm of Suizer Frères Societe Anonyme, Winterthur, Switzerland. Filed Oct. 8, 1930, Serial No. 487,165, and in Switzerland Oct. 19, 1929. 11 Claims. (Cl. 230—137.)



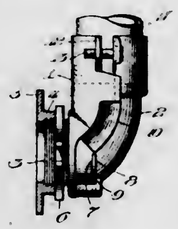
1. A compressor-apparatus, comprising a driving-system, a compressing-system, and at least one casing-system mounted to revolve and swing about a single point, said compressing system being mounted to be actuated by the centrifugal forces set up by said swinging casing-system, said systems reacting respectively on each other to produce respective centers of instantaneous rotation, the said systems being arranged and mounted to mutually react on each other to cause the said respective centers of instantaneous rotation to coincide in a single common point for the entire apparatus, the apparatus being pivotally suspended as a whole at a point thereof so related to the various reactions of the systems on each other that the centers of instantaneous rotation are maintained substantially immobile and fixed.

1,888,545. HEATING CONVECTOR. ROBERT S. WENTWORTH, Johnstown, Pa., assignor to National Radiator Corporation, Johnstown, Pa., a Corporation of Delaware. Filed Feb. 7, 1931. Serial No. 514,164. 8 Claims. (Cl. 257—150.)



1. A convector section comprising a barrel portion adapted to set in an inclined position having two series of sloped fins therealong, the slope of the fins being at an angle to the transverse and longitudinal axes of the section, one series terminating on one side of the longitudinal axis of the barrel and the other series terminating at the other side of the longitudinal axis thereof, the fins of the two series having their longitudinal axes equidistantly alternated.

1,888,546. BOX CONNECTION OR ELBOW. ERNST G. K. ANDERSON, Chicago, Ill., assignor to Appleton Electric Company, a Corporation of Illinois. Filed Apr. 5, 1930. Serial No. 441,736. 7 Claims. (Cl. 247—31.)

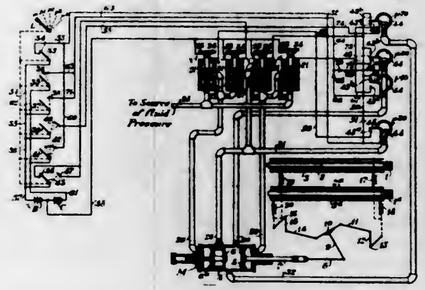


1. A tubular elbow divided into two separate members through one end to a point past the turn, interlocking shoulders between said members at said point to form a separable hinge connection, and screws connecting said members at the aforesaid end of the elbow.

1,888,547. PROCESS FOR THE REMOVAL OF NITRIC OXIDE FROM GASES. FRANKLIN A. BENT, Berkeley, Calif., assignor to Shell Development Company, San Francisco, Calif., a Corporation of Delaware. Filed May 14, 1931. Serial No. 537,509. 20 Claims. (Cl. 23—2.)

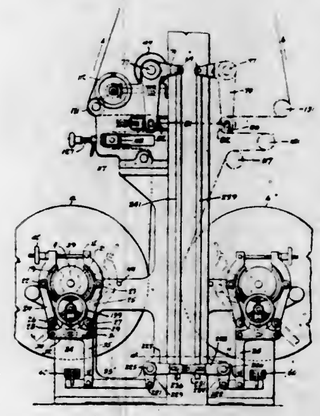
1. The process for the purification of a gas mixture from its contained oxides of nitrogen which comprises contacting the gas mixture with a chromous compound whereby the oxides of nitrogen undergo a reduction reaction.

1,888,548. RAILWAY BRAKING APPARATUS. HERBERT L. BONE, Swissvale, and JOHN W. LIVINGSTON, Wilkinsburg, Pa., assignors to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed May 12, 1931, Serial No. 536,750. Renewed May 4, 1932. 8 Claims. (Cl. 303—20.)



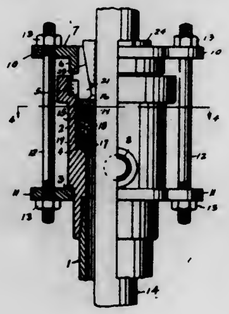
1. Trackway car retarding apparatus comprising a cylinder, a piston movable therein and having a retracted and a projected position, means for normally admitting fluid pressure in front of said piston to move it to its retracted position, means for at times admitting fluid pressure behind said piston to move it to its projected position, pressure responsive means connected with said cylinder at such point as to be subjected to the pressure in front of said piston when the piston is in its retracted position and to the pressure behind the piston when the piston is in its projected position, means controlled by said pressure responsive means for determining the pressure behind said piston, and car retarding means operated by said piston.

1,888,549. WEB TENSION CONTROLLING MECHANISM. CURTIS S. CRAPTS, Oak Park, Ill., assignor to Goss Printing Press Company, a Corporation of Illinois. Filed Aug. 28, 1928. Serial No. 302,460. 6 Claims. (Cl. 242—75.)



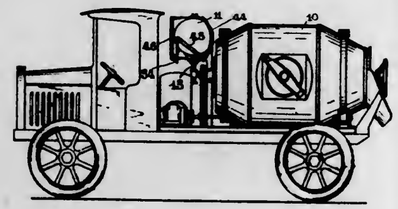
1. A web supplying means including in combination a plurality of horizontally-disposed web roll supporting devices having roll shaft journals, brake mechanisms for said roll supporting devices, openable to permit free access to said journals from above, web-engaging means for controlling said brake mechanisms, said means being connected to the brake mechanism by positive connections transmitting the movements of the web engaging means and the brake mechanism to each other.

1,888,550. CONTROL HEAD. WALTER L. CHURCH, Houston, Tex., assignor of one-half to W. L. Pearce, Houston, Tex. Filed Mar. 6, 1930. Serial No. 433,595. 8 Claims. (Cl. 166—14.)



1. A control head for forming a seal between an outer and inner pipe in a well bore, including a bowl attached to the outer pipe and having an inside seat and an outlet beneath said seat, a sectional packer formed to fit within the bowl and rest on said seat, said packer being shaped to closely surround the inner pipe, a sectional spider on said packer and having an upwardly flared seat around the inner pipe, pipe engaging slips in the spider seat and formed to engage the inner pipe and means for maintaining said spider in position on said packer, said spider maintaining means comprising a yoke around and interlocked with the spider and means for securing the yoke to said bowl.

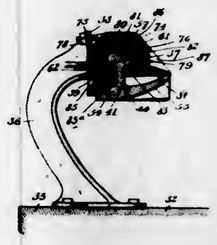
1,888,551. WATER TANK FOR CONCRETE MIXERS. JOSEPH EGGERT, Columbus, Ohio, assignor to The Jaeger Machine Company, Columbus, Ohio, a Corporation of Ohio. Filed July 10, 1931. Serial No. 549,861. 12 Claims. (Cl. 221—95.)



1. Means for supplying water to a concrete mixer including a tank provided with a discharge opening to the mixer, a valve for said discharge, a collapsible conductor within the tank communicating with said discharge, and means external to the tank for moving said conductor to effect the removal of the desired portion of water for the mixer from the tank.

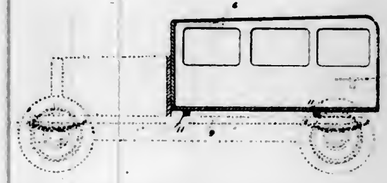
1,888,552. INSULATION FOR THIRD RAILS. WILLIAM H. FORD, Buffalo, N. Y., assignor to Liquid Veneer Corporation, Buffalo, N. Y., a Corporation of New York. Filed Mar. 10, 1931. Serial No. 521,505. 16 Claims. (Cl. 191—30.)

1. An insulation covering for third rails of railway systems, formed of insulating material having three walls arranged at angles to each other, said walls having inwardly-projecting retainer elements on their inner sides provided with inclined riding faces adapted to ride in contact with the opposite edges of the head of a third rail



under pressure applied to the top of the covering and to engage the under side of said head under the inherent resiliency of said walls.

1,888,553. AUTOMOBILE. JOSEPH P. HOLT, Merion, Pa. Filed Oct. 6, 1930. Serial No. 486,529. 3 Claims. (Cl. 180—1.)



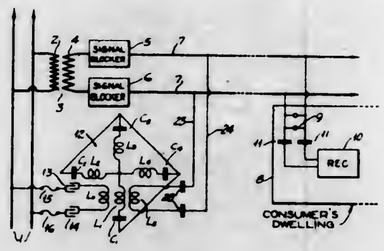
1. A motor vehicle having a chassis supported by springs above the traction means, a body, extensible means permitting the raising of the vehicle body above the chassis, and elevators on said body adapted to be acted upon by the rush of air when the vehicle is in motion for raising and sustaining said body above said chassis.

1,888,554. METHOD OF TREATING YARN. JOSEPH P. HOLT, Merion, Pa., assignor to Aberfoyle Manufacturing Company, Chester, Pa., a Corporation of Pennsylvania. Filed Mar. 23, 1931. Serial No. 524,608. 1 Claim. (Cl. 118—69.)



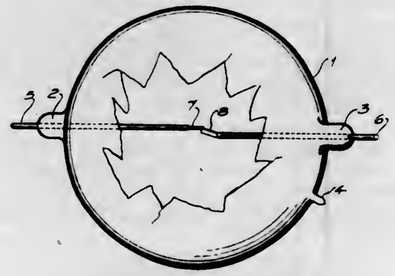
The herein described process of softening treated twisted yarns, comprising the steps of putting a number of twists in excess of the desired final twist into the yarn before treatment, and then partially untwisting the same after treatment.

1,888,555. SYSTEM OF ELECTRICAL DISTRIBUTION. AUGUST HUND, West Orange, N. J., assignor to Wired Radio, Inc., New York, N. Y., a Corporation of Delaware. Filed Apr. 16, 1931. Serial No. 530,715. 3 Claims. (Cl. 178—44.)



1. In a system for the transfer of alternating currents, an input circuit for supplying alternating currents at a plurality of discrete frequencies, an output circuit, and a network including a plurality of differently resonant selection circuits each formed in part by an element common to all of said selection circuits, said element being mutually coupled with said input and output circuits.

1,888,556. SPACE DISCHARGE TUBE. AUGUST HUND, West Orange, N. J., assignor to Wired Radio, Inc., New York, N. Y., a Corporation of Delaware. Filed Sept. 29, 1931. Serial No. 565,761. 5 Claims. (Cl. 250—27.5.)



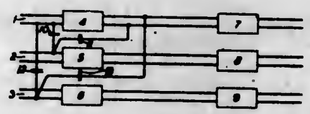
1. A space discharge tube comprising, an envelope with an attenuated atmosphere of gas therein and a plurality of electrodes within said envelope having respectively adjacent spatulate end portions disposed in different planes with respect to each other.

1,888,557. RAIL SECURING MEANS. JOSEPH S. KURKOWSKI, Pittsburgh, Pa., assignor to Jones & Laughlin Steel Corporation, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed July 17, 1931. Serial No. 551,367. 9 Claims. (Cl. 238—304.)



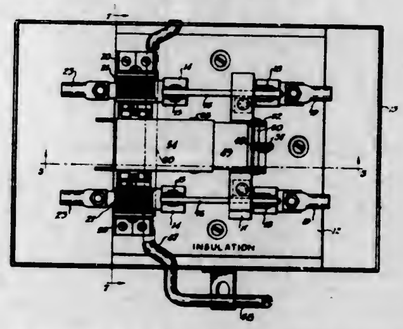
1. In a tie-plate, a pair of spaced shoulders struck up from the material of the plate, and a pair of holes each having a shouldered side wall for receiving a resilient rail securing clamp.

1,888,558. METHOD OF AND MEANS FOR REDUCING CROSSTALK IN CABLE SYSTEMS. KENNETH E. LATIMER, Aldwych, London, England, assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Jan. 13, 1932. Serial No. 586,263, and in Great Britain Jan. 5, 1931. 4 Claims. (Cl. 179—78.)



1. In a transmission system, a communication cable comprising conductors forming two-wire and four-wire circuits, said four-wire circuits being nearer the center of the cable than the two-wire circuits, and means for reducing far end crosstalk between said circuits comprising balancing impedance elements connected between certain of said circuits at the near end of said cable.

1,888,559. ELECTRIC SWITCH. MORGAN J. LEWIS, Massillon, Ohio. Filed Apr. 30, 1930. Serial No. 448,593. 8 Claims. (Cl. 200—88.)



1. An electric switch, a latch for normally holding the switch in closed position, a spring operated releasing plate for releasing the latch, means for automatically opening the switch when the latch is released, a thermostatic device in circuit with the switch for normally holding the releasing plate inoperative and for releasing said releasing plate after a brief lag upon the maintenance of a slight overload, and a magnet coil in circuit with the switch for attracting said thermostatic device to release the releasing plate immediately upon an abnormal overload.

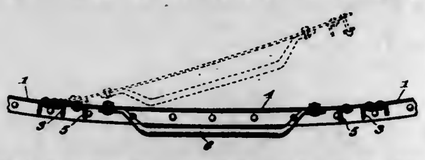
1,888,560. WATER AND MOISTURE PROOF COATING MATERIAL AND METHOD OF MAKING SAME. CHARLES F. MAUER, San Francisco, Calif. Filed Oct. 24, 1927. Serial No. 228,497. 9 Claims. (Cl. 134—22.)

1. A new article of manufacture, consisting of a mixture of clay and a carbohydrate binder impregnated with a waterproofing compound, comprised of dissolved sodium phosphate, vegetable wax, glue, and alum.

1,888,561. DOOR FRAME AND DOOR FOR SHEET METAL STRUCTURES. FRED W. MECKLENBORG, Springfield, Ohio, assignor to The Thomas & Armstrong Company, London, Ohio, a Corporation of Ohio. Filed Apr. 29, 1930. Serial No. 448,351. 1 Claim. (Cl. 189—46.)

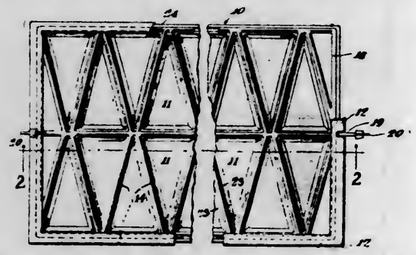
A door frame for sheet metal structures, comprising, channel iron jambs and top and bottom cross members of flat strip metal connecting with the jambs, the jambs having their opposite ends offset at the connection with the cross members and the cross members extending laterally beyond the jambs for reinforcing the wall structure

at and beyond the door opening, the frame adapted to be secured about a door opening in a sheet metal structure to overlap the open edges of the opening for re-



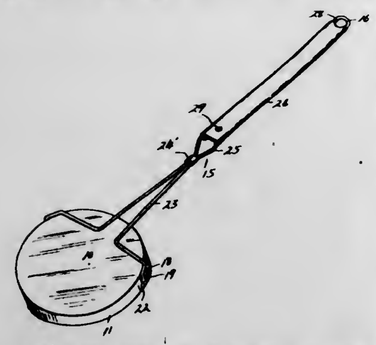
cessing a sheet metal door when closed to bear against the frame and bring its inner surface flush with the inner surface of the container.

1,888,562. METHOD AND APPARATUS FOR MANUFACTURING PIES. DAVID TROMPETER, Baldwin, N. Y., assignor to Tri Pie Corporation, Brooklyn, N. Y., a Corporation of Delaware. Filed Oct. 2, 1931. Serial No. 566,471. 4 Claims. (Cl. 107—1.)



2. The method of making individual triangular or sector shaped sealed pies having the cubical contents of the conventional sector shaped individual pie portion in quantity which consists in making one large pie in a mold or pie tin having a plurality of triangular or sector shaped recesses assembled together and separated by partition walls having flat top surfaces recessed to define a guideway network, applying a wire framework conforming in configuration to the configuration of the flat topped surfaces and guideway to compress and seal the upper and lower layers of dough together and to partially separate said layers vertically in said guideway, and then baking said pie as a single unit while retaining said wire framework in place.

1,888,563. INSECT TRAP. CHARLES H. NIXON, Detroit, Mich. Filed Dec. 10, 1928. Serial No. 325,078. 3 Claims. (Cl. 43—136.)



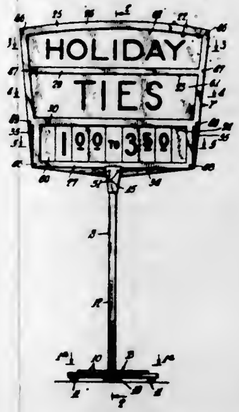
1. In an insect destroyer, a handle, an insect destroying member having a pivotal connection with said handle permitting the member to align itself with the surface to be engaged, yieldable means mounted upon said handle and engageable with the base of said destroying member to automatically move the latter to its normal position.

1,888,564. DISPLAY DEVICE. TEX O'ROURKE, New York, N. Y., assignor, by mesne assignments, to Card Display, Inc., New York, N. Y., a Corporation of New York. Filed Feb. 1, 1930. Serial No. 425,103. 5 Claims. (Cl. 40—148.)



1. A display device of the character described, including a pair of generally similar skeleton superposed members forming adjacent frames, means of similar shape interposed between and connecting the members and following their general contour and completing the frames, said members cooperatively defining channels for the reception of the edges of cards to be displayed in said frames, said interposed spacer means being interrupted to provide entrance openings through which cards may be slid into the frames, the entrance opening for one card being through the channel of the adjacent frame and the entrance opening for the other frame being disposed at right angles to the entrance opening of the first, whereby when cards are slid into position in the two frames, one card will lock the other against displacement.

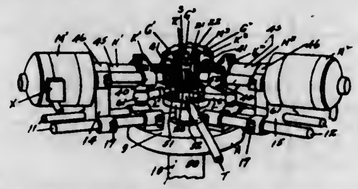
1,888,565. CARD DISPLAY STAND. TEX O'ROURKE, New York, N. Y., assignor, by mesne assignments, to Card Display, Inc., New York, N. Y., a Corporation of New York. Filed Sept. 8, 1930. Serial No. 480,312. 22 Claims. (Cl. 40—64.)



1. A display device of the class described, including a pair of generally similar coinciding outer frame members and spacer means fixed between the same and cooperating with them to define a plurality of card holding frames, each having an opening in a side through which a card may be slidably applied, only one of said openings lead-

ing directly to the exterior of said device, the card receiving opening in the side of one frame being through the side of another frame and at right angles to the receiving opening for the card to be mounted in said other frame, whereby withdrawal of a card from the first frame is blocked by the card in the second frame.

1,888,566. MULTIPLE BIT BORING MACHINE. CARL PALMER PARK, Manchester, N. H., assignor to U. S. Bobbin & Shuttle Company 1929, Providence, R. I., a Corporation of Rhode Island. Filed Jan. 22, 1931. Serial No. 510,494. 5 Claims. (Cl. 144—110.)

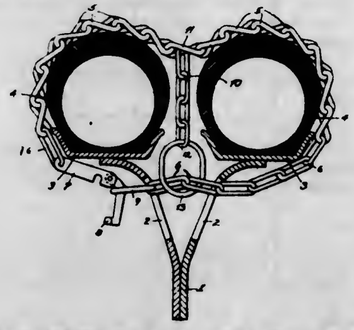


5. The combination in a multiple bit boring machine, of a frame; a work rest carried by the frame and having an upwardly projecting work holding centre pin and a positioning pin; a plurality of sets of head guide ways radially disposed around the centre pin; a plurality of bit driving heads each head having a revoluble bit, each head being slidable on a set of ways towards and from the centre pin; and means to move the heads to and from the centre pin.

1,888,567. WROUGHT ZINC PRODUCT. WILLIS M. PEIRCE, Palmerton, Pa., assignor to The New Jersey Zinc Company, New York, N. Y., a Corporation of New Jersey. Filed Mar. 14, 1929. Serial No. 347,195. 5 Claims. (Cl. 148—11.5.)

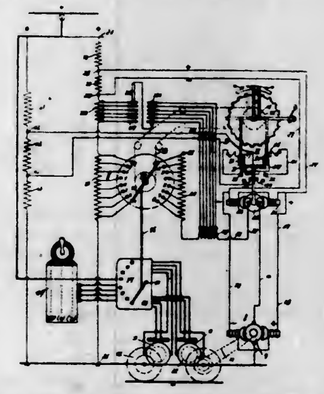
5. The method of producing wrought zinc products by mechanically working a zinc base alloy containing one or more of the alloy elements copper or cadmium from 0.05 to 5%, manganese from 0.01 to 2%, and also containing one or more of the alloy elements magnesium or lithium from 0.005 to 0.5%, or nickel from 0.05 to 1%, which comprises conducting at least the final stages of the mechanical working operation at a temperature not less than 175 to 200° C. adapted to avoid any appreciable work hardening in the finished wrought zinc product while preserving its resistance to slow plastic deformation or cold flow.

1,888,568. TIRE CHAIN. JOHN R. REYBURN, Fairfield, Conn., assignor to American Chain Company, Inc., a Corporation of New York. Filed Dec. 15, 1930. Serial No. 502,888. 7 Claims. (Cl. 152—14.)



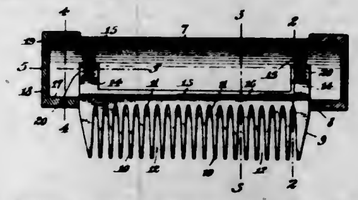
1. An anti-skid tire chain for vehicle wheels of the type having dual tires mounted in spaced relation upon the periphery of the wheel, said chain comprising a part embodying a series of links sufficient in length to extend around both tires and the supporting rim structure, and a part adapted to extend between said tires, said part serving when in place upon the wheel to connect the chain parts above said tires and beneath said rim structure, and acting to prevent displacement of said chain in the direction of its length.

1,888,569. SYSTEM FOR AUTOMATICALLY CONTROLLING THE SPEED OF ELECTRIC MOTORS. ANGELO DELLA-RICCIA, Brussels, Belgium. Filed Jan. 6, 1930, Serial No. 418,886, and in France Jan. 7, 1929. 9 Claims. (Cl. 172—179.)



1. In a system for automatically controlling the speed of electric motors comprising in combination, a number of motors and their mover, a controlling device for controlling the speed of said motors and having a plurality of operating positions, means controlled by the speed of said mover for automatically generating a variable E. M. F. depending directly at each moment on the actual instantaneous value of the speed of said mover, means for supplying a plurality of E. M. F.'s in steps progressively corresponding to said controlling device positions, means responsive to a combined E. M. F. of one polarity and of a determined value for advancing said controller in one direction and responsive to a combined E. M. F. of opposite polarity of a determined value for returning said controller in the opposite direction, means operatively connected to said controlling device for automatically impressing said first and one of the second E. M. F.'s upon said third means to render said third means responsive to a differential combination of said E. M. F.'s—means to obtain a progressive change of the sequence of means speeds corresponding to said controlling device positions in order to realize a multiple device for the accelerating and the slowing of the starting and braking and thus to proceed from a given starting or braking to several startings or brakings more rapid or less rapid than the first.

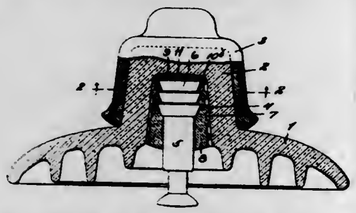
1,888,570. FOUNTAIN COMB. LLOYD S. RICE, Oakfield, N. Y. Filed May 27, 1932. Serial No. 613,926. 8 Claims. (Cl. 132—13.)



1. A fountain comb, comprising a casing having an opening therein and adapted to contain a liquid, a comb

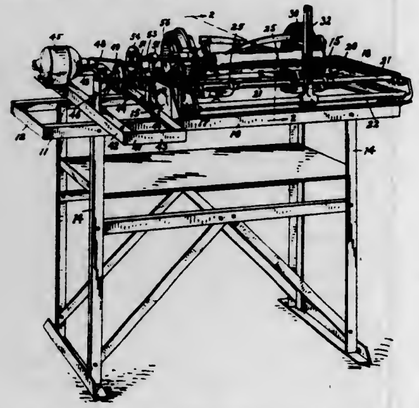
extending outwardly through said opening and having means to close said opening and to permit regulation of the flow of liquid through said opening, and means to normally hold said comb in position to close said opening.

1,888,571. PIN CENTERING DEVICE AND CUSHION RETAINER. JOHN CULLEN ROBERTSON, Annapolis, Md., assignor to Locke Insulator Corporation, Baltimore, Md., a Corporation of Maryland. Filed Mar. 12, 1929. Serial No. 346,406. 11 Claims. (Cl. 173—318.)



1. The combination with an insulator having a pin cemented within a recess thereof, of means for centering the pin within the recess, said means comprising a member embracingly engaged upon the pin and having outwardly extending portions engaging against the recess wall, and a yieldable pad interposed between said member and the pin.

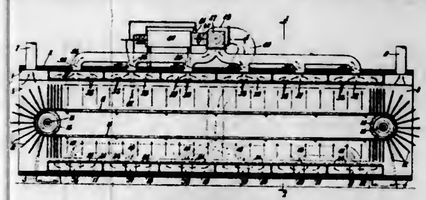
1,888,572. LAWN MOWER SHARPENING MACHINE. PERCY H. ROOT, Plymouth, Ohio, assignor to The Fate-Root-Heath Company, Plymouth, Ohio, a Corporation of Ohio. Filed Mar. 2, 1932. Serial No. 596,265. 12 Claims. (Cl. 51—26.)



1. A device for sharpening lawn mowers having, in combination, a frame, means associated with said frame for supporting the cutter head of a lawn mower, and a driving mechanism, said driving mechanism including a pair of interconnected members, one of said members being supported by an arm which is pivoted to swing about the axis of the other of said members, the pivotally mounted member being adapted to rotate the reel of the lawn mower.

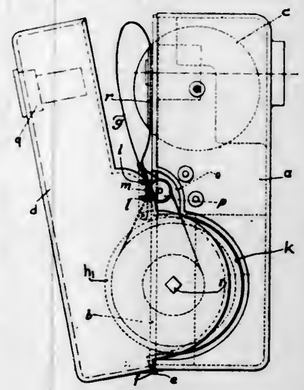
1,888,573. DRIER. RYAN SADWITH, Newark, N. J. Filed Nov. 13, 1929. Serial No. 406,735. 8 Claims. (Cl. 34—12.)

1. A drier for metal lithographic plates or the like comprising an open end housing having a single open end compartment lengthwise thereof, a source of drying medium, a plurality of plenum chambers within and at the top of said housing, said source of drying medium severally connected to each of said chambers, means for controlling the quantity and velocity of drying medium to each of said chambers, outlets from said chambers to the interior of said drier, corresponding outlet chambers



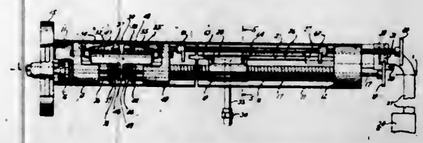
to said plenum chambers, said outlet chambers positioned within said drier at the top thereof, openings from the interior of said drier to said outlet chambers, a circulation fan for said drying medium, connections from said chambers and said circulation fan.

1,888,574. TWO-PART CASE FOR CINEMATOGRAPHS. LEOPOLD SCHABET, Stuttgart, Germany. Filed June 5, 1929, Serial No. 368,516, and in Germany July 7, 1928. 1 Claim. (Cl. 88—17.)



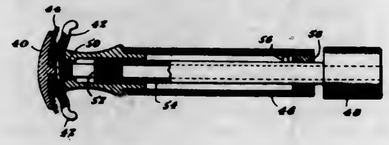
In a cinematographic camera and projector having a box formed with a housing adapted to receive two co-operatively engaged rolls of film and having in each of its side walls a recess serving as a film magazine, the combination comprising a substantially plane partition, provided with clearances, each of which communicates with one of aforesaid magazines, arranged upon and within the edges of aforesaid box, and of a substantially pan-shaped cover, hingedly connected to the lower front edge of aforesaid box and having on its side walls extensions shaped so as to cover aforesaid recesses, to close the camera.

1,888,575. CLEANSING APPARATUS. GILBERT J. SCOFIELD, Albany, N. Y. Filed July 6, 1928. Serial No. 290,763. 10 Claims. (Cl. 92—50.)



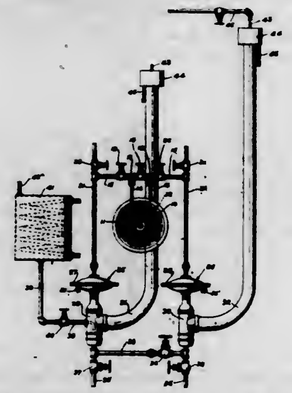
9. In cleansing apparatus, in combination, a nozzle, means adapted to move said nozzle in two directions along a predetermined path, reversing means for controlling the direction of movement of said nozzle along said path, resilient means adapted to actuate said reversing means, and means situated substantially at the ends of said path and adapted to initiate the action of said resilient means when said nozzle reaches either end of its path of movement.

1,888,576. SAFETY RAZOR. THEODORE L. SMITH, Concord, Mass., assignor to Gillette Safety Razor Company, Boston, Mass., a Corporation of Delaware. Filed Nov. 18, 1930. Serial No. 496,446. 14 Claims. (Cl. 30—12.)



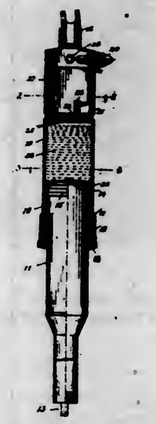
10. A safety razor comprising cap and guard members for gripping a blade and holding it in position for shaving, a handle including two elements disposed in telescopic relation, a stem on the cap member, said stem being threaded and said elements having threaded portions, both of said elements adapted to engage the threaded stem simultaneously, co-acting means on said stem and inner telescopic element to prevent locking engagement of said elements when threaded on said stem, means to maintain the cap and guard in spaced relation for cleansing purposes when the outer telescopic element is unthreaded from the stem.

1,888,577. DENSITY MEASURING APPARATUS. WILLIAM H. STEPHENS and JOHN H. GRIBBIN, Jr., Crockett, Calif. Filed Mar. 9, 1927. Serial No. 174,055. 6 Claims. (Cl. 265—44.)



5. A density measuring apparatus comprising a pair of liquid column supporting members, one of said members being adapted to contain a liquid having a standard specific gravity and the other a liquid having a specific gravity to be measured, a housing connected to said member for standard liquid, a housing connected to the said member for liquid to be measured, diaphragms in each housing and responsive respectively to the pressures exerted by said liquids on one side thereof, and a conduit connecting said housings at the other sides of said diaphragms, liquid filling said conduit and in contact with said other sides of said diaphragms, and transmitting the pressure on said diaphragms to a suitable differential pressure measuring device connected to said conduit and operable by the pressure differential of said liquids.

1,888,578. SHOCK ABSORBING STRUT FOR AEROPLANES. JOHN F. WALLACE, Shaker Heights, Ohio, assignor to The Cleveland Pneumatic Tool Company, Cleveland, Ohio, a Corporation of Ohio. Filed Mar. 30, 1927. Serial No. 179,488. 13 Claims. (Cl. 267—64.)



1. A strut for the landing gear of an aeroplane comprising telescopic cylinders forming a continuously closed chamber for non-compressible and compressible fluids, packing means for sealing the sliding joint between the cylinders, and means responsive to telescopic movement of the cylinders for varying the friction exerted by the packing against the relative movement of said cylinders.

1,888,579. HOLDER FOR SAFETY RAZOR BLADES. WILLIAM G. WALLENBECK, Chicago, Ill. Filed Feb. 15, 1930. Serial No. 428,551. 7 Claims. (Cl. 30—25.)

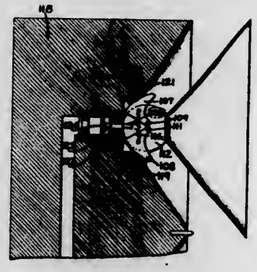


1. In a holder for safety razor blades, the combination of a metal tube comprising integral handle and blade mounting portions, said blade mounting portions having a longitudinal slot extending through its wall from one of its ends, a frame comprising a flat metal bar bent at its mid-portion so its end portions extend in the same general direction and wholly contained in said blade mounting portion, a pair of sheet metal clamping plates of a combined thickness substantially equal to the width of said slot and located between the end portions of said frame, and a pivotal connection between the end portions of said frame and said plates, said frame being slidable in said handle with said plates pivotally mounted upon it for assembling purposes, whereby with said frame assembled in said handle said plates may be swung on said pivotal connection into and from said slot as desired.

1,888,580. COUPLING FOR TIRE INFLATING MACHINES. ELLIS EDMOND WHITE, Hollywood, Calif., assignor to Pneumatic Tire Inflating Devices Corporation, Los Angeles, Calif., a Corporation of California. Filed Aug. 6, 1930. Serial No. 473,889. 2 Claims. (Cl. 152—11.)

2. A device for connecting a supply of fluid under pressure to a pneumatic tire mounted upon a journalled wheel; comprising a spindle, means for mounting said spindle coaxially upon said wheel to extend laterally therefrom, a spherical head on said spindle having an aperture there-

through, a tube comunicating with the interior of said tire and with the aperture through said head, a dust cover removably mounted on said head over said aperture, and

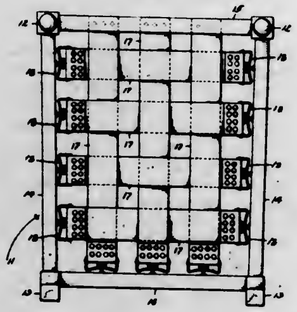


means operative upon engagement of said connecting device with said fluid supply for withdrawing said dust cover from said aperture.

1,888,581. PROCESS OF RECOVERING ROSIN FROM ROSIN-CONTAINING SOAP PRODUCED IN THE MANUFACTURE OF PAPER PULP FROM ROSIN-CONTAINING WOOD. LEAVITT N. BENT, Holly Oak, Del., assignor to Hercules Powder Company, Wilmington, Del., a Corporation of Delaware. Filed May 25, 1927. Serial No. 194,289. 3 Claims. (Cl. 87—2.)

1. The process of recovering rosin from rosin soaps of the character of those produced in the manufacture of paper pulp from rosin-containing wood, which comprises precipitating the rosin by means of carbon dioxid, and separating out the rosin.

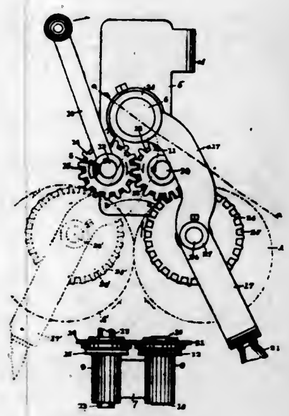
1,888,582. CONNECTION FOR WEBBED BOTTOM SEATS. SAMUEL S. BERNSTEIN, Beverly Hills, Calif. Filed July 25, 1930. Serial No. 470,637. 9 Claims. (Cl. 155—179.)



1. In an article of manufacture: a frame; a plurality of flexible strips disposed across said frame; a resilient stirrup attached at its ends to each strip; and means connecting said stirrups at their midportions to the frame.

1,888,583. HAND CAN SEAMER. JOHN H. BURPEE, Bellingham, Wash., assignor to Eugene B. Foster and Cecil A. Folsom, Bellingham, Wash. Filed May 25, 1931. Serial No. 539,791. 6 Claims. (Cl. 113—19.)

1. A can seamer including, a pair of continuously revoluble seamer rolls in the same plane, a shaft fastened in the center of each of said seamer rolls, a pair of stationary parallel bearings for mounting said seamer roll shafts for revolution, a press-roll shaft bearing, a press-roll shaft mounted in said press-roll shaft bearing for revolution, a press roll fastened concentrically on said press-roll shaft, means for mounting said press-roll shaft bearing for oscil-



lation disposing the same parallel with said seamer-roll shaft bearings and disposing said press roll adjacent each of said seamer rolls in turn by oscillation, means to revolve said seamer rolls, and means to oscillate said press-roll shaft bearing.

1,888,584. ANNUNCIATOR PANEL. JOSEPH O. CADIEUX, Meriden, Conn., assignor to Connecticut Telephone & Electric Corporation, Meriden, Conn., a Corporation of Delaware. Filed Mar. 6, 1930. Serial No. 433,671. 1 Claim. (Cl. 40—183.)

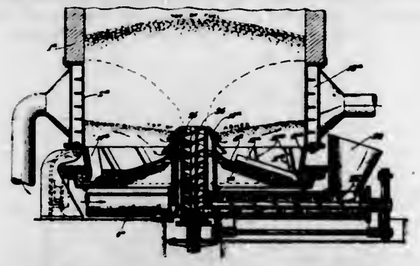


An annunciator panel comprising a transparent supporting body, an opaque coating superimposed on the outside of said body and provided with openings to form indicia, the edges of the coating around the openings being thin and sharp, an outer translucent coating applied to and extending over said opaque coating, said edges and the exposed portion of said transparent body, said outer coating being formed with a continuous and uniform light reflecting surface, and a light source behind the supporting body at the side opposite to the coatings.

1,888,585. FURNACE CONSTRUCTION. WILLIAM B. CHAPMAN, Jackson Heights, N. Y. Filed May 10, 1928. Serial No. 276,582. 10 Claims. (Cl. 110—45.)

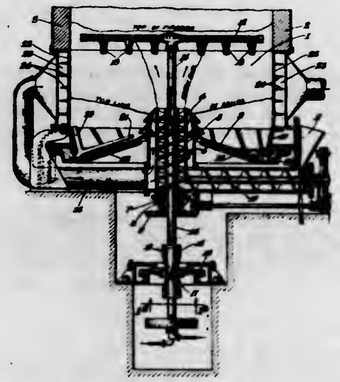
1. A furnace construction comprising a stationary sidewall enclosing the firebed, a stationary supporting member

underlying the firebed to hold the firebed against rotation and separated from the sidewall by a narrow annular opening, a rotary pan underlying the sidewall and sup-



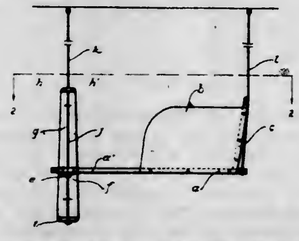
porting member beneath said opening and an agitating member supported by said pan which agitating member projects through said opening into the interior of the furnace.

1,888,586. FIREBED AGITATING MECHANISM. WILLIAM B. CHAPMAN, Jackson Heights, N. Y. Filed May 10, 1928. Serial No. 276,588. 6 Claims. (Cl. 110—45.)



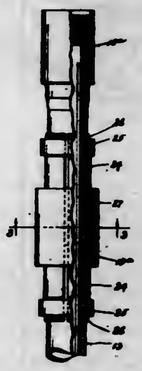
1. A firebed agitating mechanism comprising a rotary agitating member adapted to work in the top portion of the firebed, means extending up from beneath the firebed for rotating said agitating member, means whereby the height of the agitating member is automatically regulated according to the resistance to turning which is exerted by the firebed, and a central fuel underfeed device adapted to feed in fuel to the central portion of the firebed beneath said agitating member.

1,888,587. SWING. JOHN C. DE PENNING, Portland, Oreg. Filed Oct. 21, 1929. Serial No. 401,114. 5 Claims. (Cl. 155—65.)



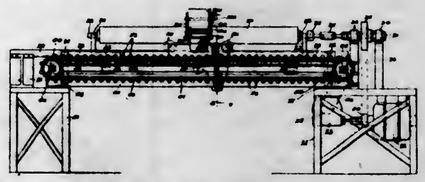
2. A swing of the character described comprising a seat having a forwardly extending tongue portion, a handle pivotally secured intermediate its ends to such tongue, said handle provided with transverse members arranged adjacent its ends, a support for such swing comprising two spaced flexible elements formed into pendent loops, one loop being quite narrow and engaging the handle, passing thru alined eyes in the transverse members thereof and the other thru spaced eyes at the rear edge of said seat.

1,888,588. PUMP TUBING PROTECTOR. ALBERT B. EDWARDS, Long Beach, Calif., assignor of one-half to E. C. Culbertson, Inglewood, Calif. Filed June 26, 1929. Serial No. 373,861. 1 Claim. (Cl. 308—4.)



A tubing protector comprising a split sleeve having taper threaded end portions, threaded rings adapted to engage said end portions for clamping said sleeve upon a tubing section, and a collar member slidably mounted on said sleeve between said clamping rings, said collar member having a bearing surface of wearable material formed therein.

1,888,589. RUBBER ROLLER POLISHING MACHINE. THEODORE L. EGNOR, Hillside, N. J. Filed Sept. 5, 1930. Serial No. 479,864. 6 Claims. (Cl. 51—67.)



1. In a machine for polishing rollers, a roller carrying spindle, a carriage movable longitudinally of the roller carried by said spindle, a polishing element carried by and movable with said carriage and comprising a frame including spaced-apart side plates hinged to said carriage, transverse bars connecting said plates, a relatively flat pad having its opposite edge portions secured to said transverse bars, a roll of polishing material carried by the frame, a portion of said material extending across the face of the pad for contact with said roller, and an adjustable plate beneath which said material is drawn from said roll to bring new portions into roller engaging relation.

1,888,590. TRAFFIC CONTROL DEVICE. ELI M. GREENLEE, Newport, Ky., assignor of one-fourth to Orville W. House, Williamsport, Ohio, one-fourth to Harry H. Cohen, Cincinnati, Ohio, and one-half to Harry H. Martin, Covington, Ky., and George W. Shuey, Cincinnati, Ohio. Filed Nov. 18, 1931. Serial No. 575,266. 3 Claims. (Cl. 40—125.)

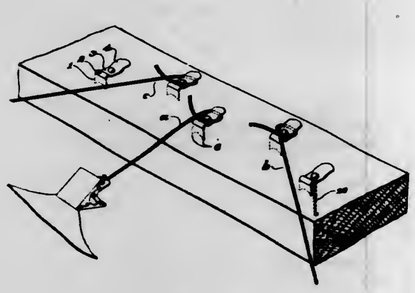
1. In a traffic control device, a frame, means for securing said frame to the surface of the street, said frame in-

cluding a recess in the surface thereof, a plate mounted in said recess and including the signal to be displayed, said frame provided with pivot sockets, said plate having pivot lugs loosely seated in said pivot sockets for rocking movement therein for displaying the signal to the approaching motorist, means independent of the lug



and socket connections for preventing displacement of the plate from its mounted position in said recess, said independent means normally out of contact with the plate, and springs for normally urging the plate upwardly on its pivot, said plate arranged relative to said recess whereby, upon the passage of a vehicle over the plate, the plate will be depressed into the recess without damage thereto.

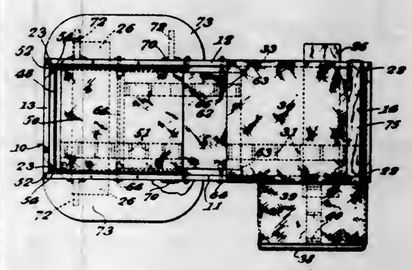
1,888,591. FASTENING DEVICE. ROGER L. GRIFFIN, Peabody, Mass., assignor to A. C. Lawrence Leather Company, Peabody, Mass., a Corporation of Maine. Filed Nov. 20, 1930. Serial No. 496,974. 7 Claims. (Cl. 24—130.)



4. A cleat comprising a flat middle body portion provided with an opening to receive a fastening device, a flat cord-engaging portion disposed at an oblique angle to the body portion and provided with a rounded convex end, a flat nail portion disposed at right angles to the middle body portion and provided with a rounded concave end complementary to the end of the cord-engaging portion to form driving prongs, and a rounded transverse rib uniting the flat middle body portion and the nail portion and serving as a cord abutment.

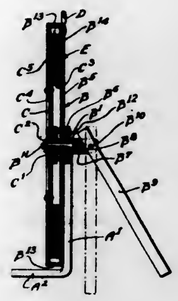
1,888,592. SUPPORT FOR INVALIDS. JESSE E. HARRISON, Wakefield, Mass. Filed July 23, 1931. Serial No. 552,620. 1 Claim. (Cl. 5—327.)

A device for supporting invalids comprising a rigid substantially rectangular skeleton frame, means for supporting said frame in raised position above a bed or the like, a strip of canvas stretched around said frame near the foot thereof and having its ends adjustably connected below the frame near one side thereof, a central support detachably connected to said frame and having a strip of canvas stretched around it with the ends adjustably con-



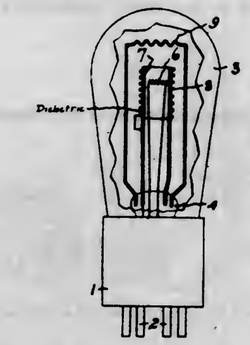
nected below it near the other side of the frame, and a support pivotally connected to said frame above said central support and having a strip of canvas stretched around it with its ends adjustably connected on the under side of the frame near the first mentioned side of said frame.

1,888,593. WIRE AND BAND DISPENSING MACHINE. HERBERT HARVEY, Los Angeles, Calif. Filed Aug. 31, 1929. Serial No. 389,775. 2 Claims. (Cl. 242—129.)



1. A wire or band dispensing machine comprising a frame, a shaft journaled in said frame, a drum rotatably mounted on said shaft and detachable from said frame, a housing including a wall at one end of said drum, and an annular rim concentric with and spaced from the drum to provide space for supporting a band on the drum and within the housing, said rim having an aperture thru which the band may be dispensed and a side member on the outer end of said drum forming a closure for said space.

1,888,594. VACUUM DEVICE. FREDERICK W. HOCHSTETTER, Pittsburgh, Pa. Filed Dec. 4, 1929. Serial No. 411,408. 1 Claim. (Cl. 250—27.5.)

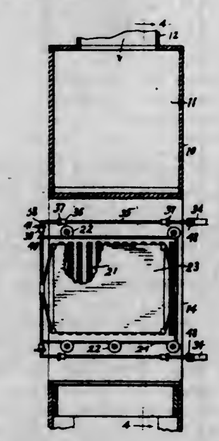


An audion comprising an evacuated vessel, a cathode within said vessel, an open ended insulating sleeve surrounding the cathode, a grid surrounding the sleeve and an anode in alignment with the cathode opposite the open end of the sleeve.

1,888,595. BASE FOR PAINTS, VARNISHES, AND LACQUERS, AND METHOD OF MAKING THE SAME. EDWARD C. HOLTON, Olmsted Falls, Ohio, assignor to The Sherwin-Williams Company, Cleveland, Ohio, a Corporation of Ohio. Filed Feb. 24, 1931. Serial No. 518,038. 7 Claims. (Cl. 260—8.)

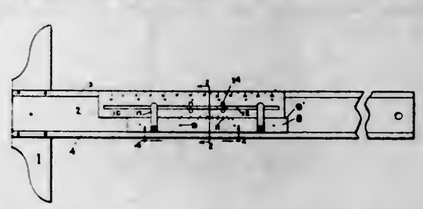
1. The steps of the hereindescribed method which consist in destructively distilling a mixture of castor oil and a vegetable drying oil having an iodine value above 160 until the residue is from seventy to ninety per cent of the original weight of said mixture, and then heating such residue with a polyhydric alcohol.

1,888,596. FILM DRIER. GEORGE W. HOPKINS, Cleveland, Ohio. Filed Jan. 7, 1930. Serial No. 419,062. 4 Claims. (Cl. 34—26.)



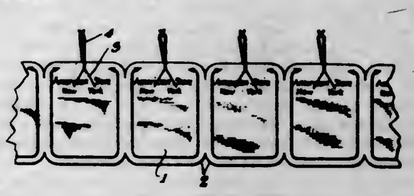
4. In a drier for films, the combination of a drying chamber, means for supporting a film in said chamber, an arrangement of nozzles for directing a plurality of spaced streams of air into contact with a plurality of correspondingly spaced surface portions of said film, and means for moving said film back and forth in its own plane transversely of the direction of the movement of said streams and for substantially equal distances in opposite directions whereby said surface portions are enlarged to aggregate substantially the entire surface of said film.

1,888,597. SLIDE SCALE. FREDERICK B. HUFFMAN, Spokane, Wash. Filed Oct. 7, 1930. Serial No. 486,991. 3 Claims. (Cl. 33—107.)



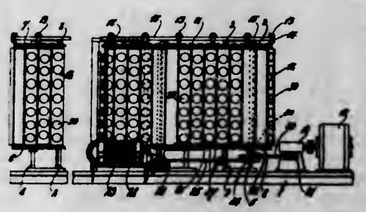
1. The combination with the blade of a T-square and a guide block rigid therewith, of a slotted plate having a scale edge coinciding with the ruling edge of the blade, resilient means mounted on the block for pressing the plate against the blade, a guide plate back of the slide plate and a vernier scale on adjoining edges of the slide plate and guide plate, and means on the guide plate for frictionally engaging the slide plate to retain the latter in adjusted position.

1,888,598. PRICE TAG. FREDERICK W. LABNCHER, Elmhurst, N. Y., and JACOB F. GRABERS, Norristown, Pa., assignors to National Tag Manufacturing Corporation. Filed Jan. 30, 1929. Serial No. 336,030. 4 Claims. (Cl. 40—2.)



1. A gang strip of price tags, each tag having a substantially unbroken printing surface and being provided with a knife cut slit entirely within the marginal edges of said tag, and a string threaded through said slit and frictionally held between the normally abutting edges thereof, the said slits being uniformly shaped and arranged in all of the tags of the strip.

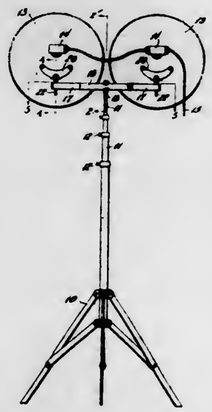
1,888,599. ADVERTISING AND SIGNALING DEVICE. HENRY KINGSFORD HARRIS, Westminster, London, England. Filed Apr. 2, 1929, Serial No. 351,962, and in Great Britain May 12, 1928. 25 Claims. (Cl. 40—52.)



1. Advertising, signaling, indicating and display devices of the type set forth comprising display elements adapted to become visible by photoluminescence, exciting means

for rendering the elements photoluminescent, means for relatively positioning the exciting means and display elements for exciting the display elements, means for selecting the display elements to be excited, and means for causing the display elements to pass from the exciting to the exhibiting position for the purposes set forth.

1,888,600. REFLECTOR SUPPORT. CHARLES R. LUDER, Washington, Ind. Filed Apr. 7, 1931. Serial No. 528,375. 6 Claims. (Cl. 240—81.)



1. A reflector support of the class described comprising, in combination, a tubular standard; a cross-arm having a tapered pin removably mounted in the upper end of the standard; said cross arm having a vertical opening at each end; and a reflector having a tapered pin removably mounted in the opening at each end of the cross-arm, said tapered pins preventing turning of the cross-arm and of the reflectors because of their frictional engagement with the members in which they are inserted.

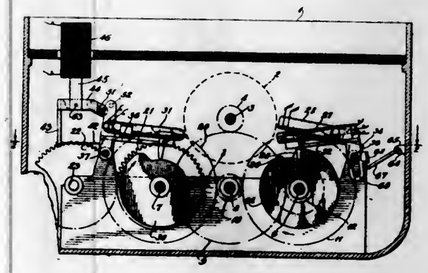
1,888,601. EMULSION. EDWARD L. MACK, North Tarrytown, and CHARLES W. BENNETT, Douglaston, N. Y., assignors to Bennett-Mack Corporation, Douglaston, Long Island, N. Y., a Corporation of New York. Filed Mar. 7, 1930. Serial No. 434,178. 1 Claim. (Cl. 87—5.)

An emulsion substantially devoid of an alkali soap and composed of

	Parts
Stearic acid	9. to 12.
Cocoanut oil	6. to 8.
Paraffine wax	6. to 8.
Zinc stearate	.15 to .20
Ethyl-p-amino benzoate	.80 to 3.00
Glycerine	5.50 to 7.50
Borax	.80 to 1.10
Ammonia	.30 to .40
Water	56. to 75.

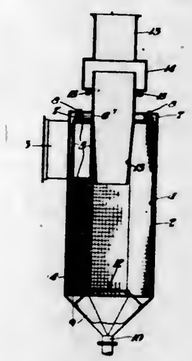
1,888,602. CONTROLLING APPARATUS FOR OIL BURNERS. JAMES N. MACRAE and CALVIN P. PACKARD, Stamford, Conn., assignors to Petroleum Heat and Power Company, New York, N. Y., a Corporation of Delaware. Filed Aug 13, 1929. Serial No. 385,618. 1 Claim. (Cl. 158—28.)

In control apparatus for oil burners, the combination of a program or cycling motor, a blower motor, a switch in the circuit of the blower motor, a cam driven by the cycling motor for closing said switch, a solenoid, a combustion-controlled switch for controlling the circuit of said solenoid, a mechanical connection between the solenoid core and said switch whereby when the solenoid is energized said switch will be held closed, deenergizing of said sole-



noid releasing said blower motor switch to permit the same to move to open position, the said cam being so arranged with respect to said blower motor switch that the cam must be moved to starting position to again close the motor switch after deenergizing of said solenoid.

1,888,603. GAS CLEANER. JAMES LESTER MAUTHE, Elyria, Ohio. Filed Oct. 27, 1931. Serial No. 571,419. 2 Claims. (Cl. 183—21.)

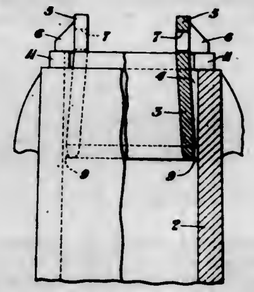


1. A gas cleaner comprising a vertically elongated inclosure having an inlet constructed and arranged for tangential gas injection, a perforated walled member spaced from the inner vertical surface of said inclosure, a trough having an irregularly edged side following the configuration of the top edge of said member and positioned proximate thereto and means for carrying fluid to said trough.

1,888,604. CASTING INGOTS. LOUIS N. MCDONALD, Youngstown, Ohio. Filed June 5, 1930. Serial No. 459,270. 1 Claim. (Cl. 22—200.)

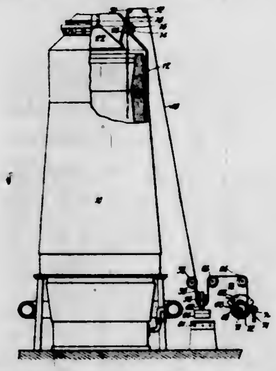
The method of casting ingots which includes inserting an upwardly tapering open ended metal form member centrally in the upper end of the ingot mold and spaced from the sides of the mold, pouring the molten metal through said form and into the mold, stopping the supply of molten metal when the mold is filled up to a point slightly above the lower end of said form to permit the metal to solidify between said form and the mold, then continuing the pouring of the molten metal until said

form is filled, permitting the metal to chill until a skin is formed around the interior of said form, then withdrawing said form and filling the space between the portion of



said ingot cast in said form and the sides of the ingot mold with granulated refractory material to prevent the rapid cooling of the upper portion of the ingot.

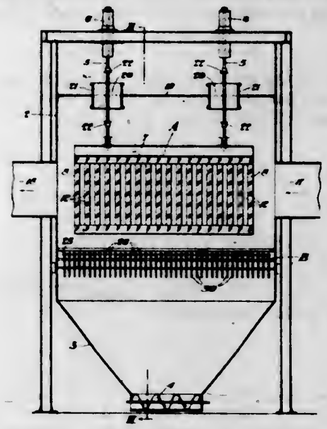
1,888,605. BLAST FURNACE TEST ROD. EUGENE M. NEELY, Swissvale, Pa. Filed Dec. 28, 1929. Serial No. 417,183. 2 Claims. (Cl. 33—125.)



2. In combination with a blast furnace, a test rod having an enlargement forming a valve, a guide secured in the furnace and having a seat for coaction with said enlargement, a flexible member connected to said rod, winding means for taking up and slacking said flexible member to raise and lower said rod, a pair of horisontally spaced sheaves adjacent said winding means, said flexible member being threaded over said horisontally spaced sheave and looped downwardly between said sheaves to form a bight-like portion, a sheave carrying a weight of greater weight than said rod mounted in said bight-like portion of said flexible member between said horizontally spaced sheaves so as to yieldably hold said enlargement in engagement with said seat when said flexible member is taken up by said winding means so as to suspend said weight, and a support adapted to receive said weight when said winding means is operated to slacken said flexible member so as to remove the pull of said weight from said flexible member and permit said rod to be lowered as said flexible member is slackened.

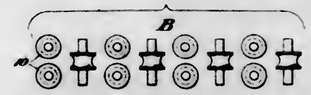
1,888,606. METHOD OF AND APPARATUS FOR CLEANING GASES. ARTHUR F. NESBIT, Wilkinsburg, Pa. Filed Apr. 27, 1931. Serial No. 533,310. 5 Claims. (Cl. 183—7.)

1. In an electric precipitator for precipitating solid and liquid particles from a stream of fluid flowing therethrough, the combination of a discharge electrode unit and a grounded electrode unit, said discharge electrode unit comprising a plurality of vertically and horizontally spaced discharge elements, each of said elements having an enlarged body portion and a sharp discharge edge directed toward said grounded electrode unit, so as to cause a



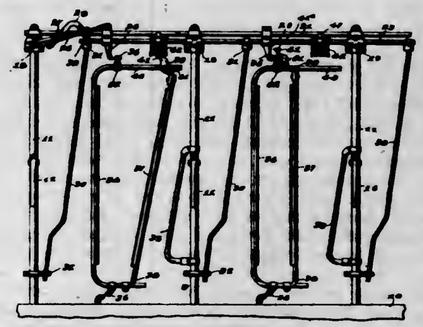
unilateral discharge of ions from all of said discharge electrode elements toward said grounded electrode unit forming an electric wind.

1,888,607. METHOD OF MAKING SEAMLESS TUBES. JOHN W. OFFUTT, Ellwood City, Pa., assignor to National Tube Company, a Corporation of New Jersey. Filed Apr. 6, 1929. Serial No. 353,175. 11 Claims. (Cl. 80—62.)



8. In the manufacture of tubes, the steps including increasing the wall thickness and length of a tubular blank while decreasing its inner and outer diameters by rolling it in a sinking mill, and then lessening the outer diameter and wall thickness and materially increasing the length of the blank in said rolling operation by rolling it in a second sinking mill, and stretching the blank in rolling it in the second sinking mill.

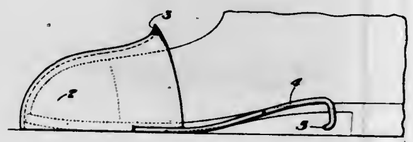
1,888,608. STALL OR STANCHION. HUGO C. RASSMANN, Beaver Dam, Wis., assignor to F. Rassmann Manufacturing Company, Beaver Dam, Wis. Filed Mar. 5, 1930. Serial No. 433,842. 10 Claims. (Cl. 119—148.)



1. In combination, stalls including vertical posts, a top rail, and clamps joining the posts to the top rail,

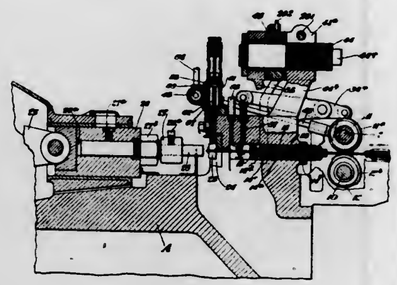
stanchions having movable members, means for operating said movable members comprising a bar arranged beneath the top rail and slidably mounted in said clamps and connected to said movable members, and anti-friction bearings for the rod arranged within said clamps.

1,888,609. FOOT PROTECTOR. CLINTON E. SANKEY, Ellwood City, Pa. Filed Dec. 31, 1931. Serial No. 584,240. 2 Claims. (Cl. 36—72.)



1. A foot protector comprising a body constructed for application to a shoe's toe portion and a wire frame having its ends fixed to said body and shaped to substantially follow the shape of the shoe's sole back to its instep portion and to cross thereat with spaced upwardly and inwardly looped portions.

1,888,610. NAIL MACHINE. HARVEY B. TROTT, McKeesport, Pa. Filed Dec. 30, 1929. Serial No. 417,451. 4 Claims. (Cl. 10—43.)



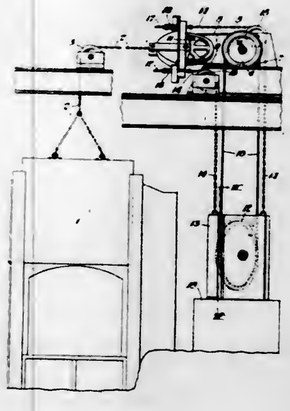
1. In a nail machine, means for feeding wire in measured lengths into said machine, means for guiding the wire as it is fed into the machine, means for forming a head on the wire, means for cutting off and pointing a length of the headed wire to form a finished nail, and means for gripping the wire during said heading operation, said gripping means comprising pinch dies mounted between said head forming means and said cutting-off and pointing means, said guiding means comprising inner and outer sleeve members, said outer sleeve member being adjustable toward and away from said heading means, said inner sleeve having a threaded engagement with said outer sleeve, said outer sleeve being provided with an internal flange at its forward end, and said inner sleeve being provided with a tapered nose formed of segments separated by longitudinal slots, said nose being in contact with said flange on said outer sleeve whereby said inner sleeve may be threaded back and forth relative to said outer sleeve to force said nose of the inner sleeve to engage or move away from said flange on said outer sleeve and contract or expand said nose to accommodate different gages of wire.

1,888,611. FLOORING AND THE LIKE. SAMUEL J. WOLFSON, Everett, Mass., assignor, by direct and mesne assignments, to Concrete-Wood Floor Clip Company, Inc., Charlestown, Mass., a Corporation of Massachusetts. Filed June 10, 1930. Serial No. 460,189. 6 Claims. (Cl. 20—16.)



1. In a fastener for flooring and the like, a base portion extending laterally from the body of the fastener, and a nail-receiving raised portion extending longitudinally of said base portion intermediate the sides thereof, said raised portion being adapted to be flattened when nails are driven therethrough into the flooring or the like.

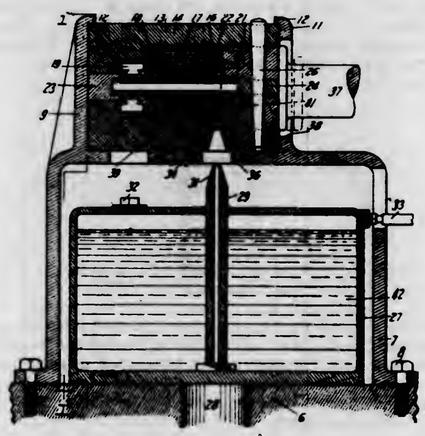
1,888,612. LIFTING MECHANISM. DAVID P. ANDERSON, Pittsburgh, Pa. Filed Sept. 21, 1931. Serial No. 564,181. 4 Claims. (Cl. 254—178.)



1. A lifting mechanism including a pair of interconnected differently sized sheaves, an endless cable arranged from one of said sheaves to the other in two looped portions, means for connecting one of said looped portions to the object to be lifted, and means constructed and arranged to slacken the other of said looped portions when the same has moved to a predetermined position and to tauten the same when at other positions.

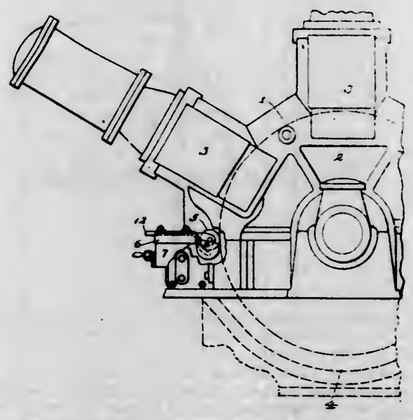
1,888,613. APPARATUS FOR IMPREGNATING AND MOLDING A POROUS STRUCTURE. VINCENT G. APPLE, Dayton, Ohio. Filed Feb. 24, 1930. Serial No. 430,863. 7 Claims. (Cl. 18—30.)

1. Molding apparatus comprising, a mold body containing a mold cavity of the contour of the article to be molded, a horizontal opening extending into said cavity from the end of the mold, and a vertical opening extending through the body into the horizontal opening from below, a horizontally movable plunger in said horizontal opening, the inner end of said plunger forming one end of said cavity, said plunger being of such length as to cover said vertical opening when fully inserted and to uncover it when partly withdrawn, a substantially closed supply receptacle containing the material to be molded, a vertically movable nozzle adapted to be inserted into said vertical opening to convey said material to said cavity to fill said cavity when said plunger is partly



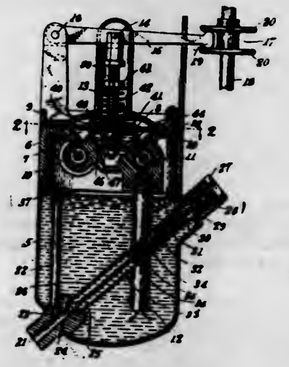
withdrawn, means to convey compressed gas into said receptacle to force said material through said nozzle into said cavity, and means to fully insert said plunger after said cavity is filled.

1,888,614. METHOD AND MEANS FOR DRESSING GRINDSTONES. WEBSTER NOYES BAKER and RALPH A. MASTEN, Glens Falls, N. Y., assignors to International Paper Company, a Corporation of New York. Filed June 19, 1928. Serial No. 286,515. 6 Claims. (Cl. 125—11.)



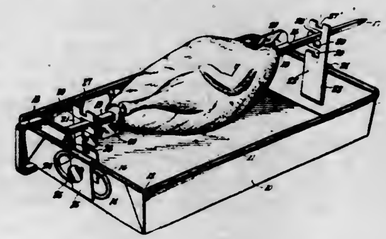
6. In combination with a rotary grindstone, a rotary burring tool engaged therewith and movable longitudinally thereof to traverse the face of the stone, a receptacle associated with the tool to receive the material resulting from the burring operation, a water jet directed against the stone at a point adjacent the point of contact of the tool therewith, and in a direction opposite that of the movement of the stone at that point, to dislodge said material, said jet acting in a direction to cause the dislodged material to be deflected into said receptacle.

1,888,615. LIQUID FUEL FEEDING SYSTEM. ALBERT E. BERDON, East Orange, N. J., assignor to A C Spark Plug Company, Flint, Mich., a Corporation of Michigan. Filed Oct. 6, 1927. Serial No. 224,325. 2 Claims. (Cl. 158—46.5.)



1. In liquid feeding systems, the combination with a reserve tank and pump mechanism for transferring liquid into the reserve tank, said reserve tank having means for discharging a flow of liquid therefrom and for automatically trapping a reserve body of liquid up to a predetermined limit level therein and means for simultaneously venting said tank to atmosphere and discharging the reserve liquid below said predetermined liquid level therefrom, said means including a spring loaded discharge valve and a manually operable closure for an air vent which when operated to open the same relieves the spring pressure on said discharge valve permitting the same to open.

1,888,616. ROASTING PAN ATTACHMENT. ERNEST BOCCHINO, Newark, N. J. Filed Dec. 10, 1930. Serial No. 501,178. 5 Claims. (Cl. 53—6.)

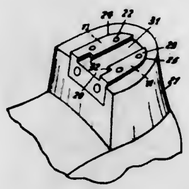


1. The combination with a roasting pan having a beaded edge, of a cover adapted to rest on said edge, said cover having slots in its end walls, a spit having means to adjustably engage the ends of an object through which the spit is passed, and stepped supports carried by the ends of said pan to engage said spit at different distances from the pan bottom.

1,888,617. HEEL FOR BOOTS. BASILIO BRIDI, Zurich, Switzerland. Filed Aug. 25, 1930, Serial No. 477,660, and in Switzerland Mar. 11, 1930. 1 Claim. (Cl. 36—42.)

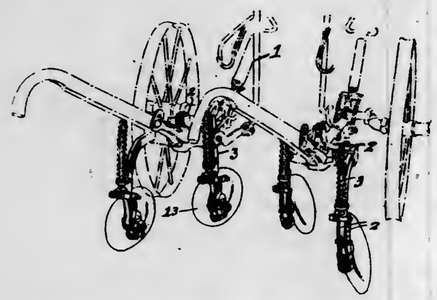
A heel having a fixed heel body and a removable pad, a plate fitted in the pad and provided with a pair of forwardly extending spaced spring operated locking teeth provided with lugs on the outer sides of their free ends, said heel body having a pair of spaced guide pieces on

its body, on which the pad is longitudinally slidable, to receive the locking teeth therebetween, and provided with oppositely extending shoulders for engagement by the lugs of the locking teeth, said pad having a recess in its upper



side open at its front end to receive said guide pieces, the walls of said recess and the outer edges of said guide pieces being beveled, to cause said guide pieces to lock said pad in place.

1,888,618. DISK BARRING-OFF ATTACHMENT FOR CULTIVATORS. ALVAN V. BURCH, Evansville, Ind. Filed Jan. 13, 1930. Serial No. 420,445. 4 Claims. (Cl. 97—54.)



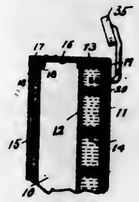
1. In a cultivator, the combination with a shank, of a foot adjustably connected to said shank, a cultivator disk-carrier for adjustably connecting the disk to the cultivator foot to enable said disk to be swung to different positions on the foot, comprising a clamping disk-mounting provided with a thimble, a disk, means by which the disk is journalled in said thimble, and clamping bolts and nuts by which the disk-mounting is adjustably clamped against the foot, said bolts extending clear through the disk mounting and having their heads exposed and located on one side of the disk mounting and their nuts exposed on the other side of said disk mounting.

1,888,619. RIM TOOL. JAMES L. CHANCE, Ranger, Tex. Refiled for application Serial No. 471,541, filed July 29, 1930. This application filed May 10, 1932. Serial No. 610,493. 3 Claims. (Cl. 157—1.)



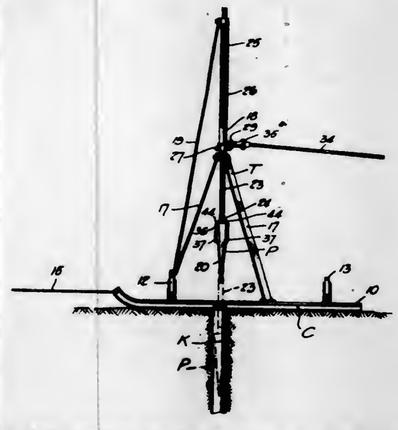
1. A rim tool of the character described comprising a rim actuating rod, a substantially U-shaped abutment rigidly mounted on the rod, and an operating lever rotatably connected to the rod and engageable with an intermediate portion of the abutment for limiting the rotary movement of the lever on the rod.

1,888,620. SOLAR HEATER. WARREN F. CLARK, Philadelphia, Pa., assignor to Automatic Electric Heater Company, Pottstown, Pa., a Corporation of Delaware. Filed May 7, 1927. Serial No. 189,608. 3 Claims. (Cl. 126—271.)



1. In a solar heater, a hollow frame having a back plate, said back plate having hollow projections provided thereon, a heat transmitting plate secured to said frame and engaging said projections to form with said back plate and frame a water chamber, insulation for said back plate extending into said projections, an inlet for supplying water to said water chamber, and an outlet through which the heated water is drawn off.

1,888,621. FLOW CONTROL APPARATUS FOR WELLS. JOSEPH PAYTON COLLINS, Bakersfield, Calif. Filed Jan. 19, 1931. Serial No. 509,801. 2 Claims. (Cl. 166—15.)

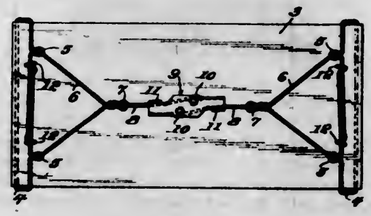


1. A flow control apparatus for wells comprising a carriage movable over the ground, a sleeve supported vertically on the carriage, a feed screw mounted in the sleeve for movement vertically and having a closure element for the well casing secured thereto, means for preventing rotation of the feed screw in the sleeve, a nut threadedly mounted on the feed screw and confined against movement longitudinally of the screw, and means for rotating the nut to feed said screw in the sleeve and thereby raise or lower the closure element.

1,888,622. CLAMP OR HOLDER FOR EGG CASE TOPS. OLIVER L. CUPP and JOHN C. ATTERBURY, Madison, Mo. Filed Sept. 18, 1931. Serial No. 563,519½. 3 Claims. (Cl. 292—288.)

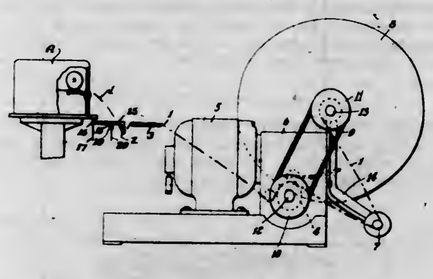
1. A clamp comprising looped elements to be positioned in engagement with opposite ends of a container

and over the closure thereof, connecting elements secured to the looped elements and extending in the direction of each other over the closure, a tensioning element pivotally connected to the connecting elements and adapted to be rotated in one direction for drawing the



looped elements into tight engagement with the container and the closure, and hook shaped elements on the tensioning element adapter to engage the connecting elements for holding the tensioning element against reverse rotation.

1,888,623. TAPE PULLING DEVICE. ROBERT LOUIS DAINE, New York, N. Y. Filed May 13, 1926. Serial No. 108,775. 4 Claims. (Cl. 88—24.)



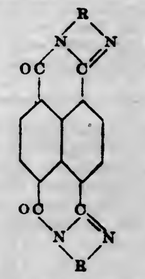
1. In combination, a stock ticker from which a printed tape is ejected intermittently and at an irregular rate, a projection field, a motor, means operated by said motor for pulling said tape through said projection field, a reel for receiving said tape after passage thereof beyond said means, there being a tape loop between said projection field and said ticker which changes in configuration when said ticker and the tape-pulling means operate in non-synchronous relation with respect to each other, means whereby the operation of said tape-pulling means is discontinued in response to decrease in configuration of said tape loop, and means forming a driving connection between said motor and reel, said motor, by said driving connection, rotating said reel at progressively decreasing speed as the tape roll thereon progressively increases in size.

1,888,624. PREPARATION OF VAT DYESTUFF ISOMERS OF THE 1.4.5.8 NAPHTHOYLENE DIBENZIMIDAZOL SERIES AND THE PRODUCT. WILHELM ECKERT and HEINRICH GARUNS, Frankfort-on-the-Main-Hochst, and WILLY EICHHOLZ, Mannheim, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Apr. 4, 1930, Serial No. 441,712, and in Germany Apr. 15, 1929. 3 Claims. (Cl. 260—44.)

1. The process which comprises dissolving such a dyestuff mixture as is obtainable by condensing a 1.4.5.8-naphthalene-tetra-carboxylic acid compound with an ortho-diamine compound, in concentrated sulfuric acid and subjecting the solution to a fractional crystallization.

1,888,625. NEW VAT DYESTUFF ISOMERS. WILHELM ECKERT and OTTO BRAUNSDORF, Frankfort-on-the-Main-Hochst, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Apr. 4, 1930, Serial No. 441,714, and in Germany May 10, 1929. 5 Claims. (Cl. 260—44.)

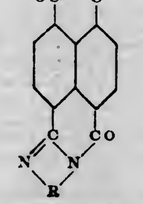
1. The compounds of the general formula:



wherein R represents a phenylene group substituted by alkyl, alkoxy, halogen or nitro, or a naphthylene group, the arylene groups being bound in two adjacent positions to the nitrogen atoms, the said products being capable of yielding a vat from which cotton is dyed very fast tints.

1,888,626. SEPARATION OF NEW VAT DYESTUFF ISOMERS. WILHELM ECKERT and OTTO BRAUNSDORF, Frankfort-on-the-Main-Hochst, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Apr. 4, 1930, Serial No. 441,713, and in Germany May 10, 1929. 8 Claims. (Cl. 260—44.)

1. As new products the compounds of the following general formula:



wherein R represents a phenylene group substituted by alkyl, alkoxy, halogen or nitro, or a naphthylene group, the arylene groups being bound in two adjacent positions to the nitrogen atoms, the said products being capable of yielding a vat from which cotton is dyed very fast tints.

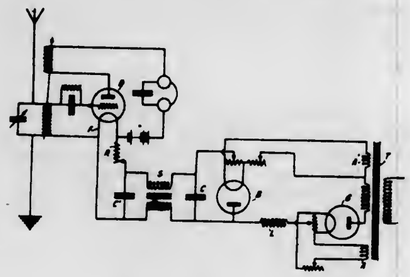
1,888,627. TRACTION WHEEL. JOSEPH L. HECHT, Davenport, Iowa, assignor to French & Hecht, Incorporated, a Corporation of Iowa. Filed Sept. 18, 1930. Serial No. 482,709. 4 Claims.). (Cl. 301—43.)



2. In a tractor wheel, the combination with a rim formed with a curved seat for the attachment of traction

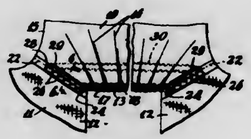
cleats, of traction cleats comprising each a bracket formed with a curved protuberant portion adapted to extend in the seat on the rim, and a connected cleat portion proper provided with a recess to receive the peripheral edge of the rim, and means for fastening the protuberant portions of the brackets in the seat in the rim, the contacting faces of said seat and protuberant portion being of such relative form that in the operation of fastening the parts together, the cleats will be drawn radially inwardly against the peripheral edge of the rim and the latter will be seated in the recesses therein.

1,888,628. CIRCUIT ARRANGEMENT FOR SMOOTHING RECTIFIED ALTERNATING VOLTAGES. GILLES HOLST and EKKO OOSTERHUIS, Eindhoven, Netherlands, assignors to Radio Corporation of America, a Corporation of Delaware. Filed May 18, 1927, Serial No. 192,239, and in the Netherlands May 20, 1926. 8 Claims. (Cl. 178—44.)



1. In radio apparatus, an alternating current source, a rectifier tube fed thereby, a load circuit, an enclosed arc discharge tube comprising a coated cathode and an anode in an atmosphere consisting of at least one rare gas and at least one metal vapor, a filter network including choke coils and condensers connecting the terminals of said load circuit to the terminals of said discharge tube and means including an alternating current resistance for connecting said discharge tube in parallel with said rectifier tube.

1,888,629. SELF-FITTING APRON. HARRY KASS, Brooklyn, N. Y. Filed Apr. 15, 1931. Serial No. 530,232. 4 Claims. (Cl. 2—48.)



1. In a self-fitting apron, having an upper body having a front and back portion, and a skirt portion attached upon said front portion and having sides extending part ways across the back, means for holding the apron on a wearer comprising resilient means upon the lower edge of the back portion between the sides, and means for changing the resiliency of the resilient means.

1,888,630. SHEET PILING. HERBERT M. KNIGHT, Upper Montclair, N. J. Filed Sept. 2, 1930. Serial No. 479,277. 15 Claims. (Cl. 61—31.)

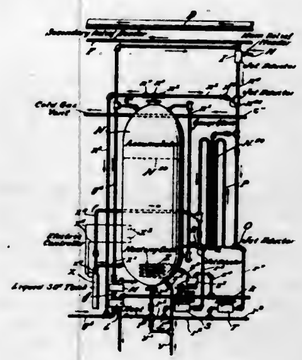


1. In a structure of the class described, the combination of pre-cast piles, a mass concrete cap engaging the tops of said piles and a stop-plank structure superimposed upon said cap and removably connected thereto.

1,888,631. PRODUCTION OF NITROGENOUS VAT DYESTUFFS OF THE AZINE SERIES AND THE PRODUCTS. MAX ALBERT KUNZ, Mannheim, and KARL KOEBERLE, Ludwigshafen-on-the-Rhine, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Oct. 22, 1928, Serial No. 314,311, and in Germany Nov. 3, 1927. 17 Claims. (Cl. 260—27.)

1. A process of producing new vat dyestuffs which comprises condensing an oxygen-free six membered ring compound containing at least one nitrogen atom in the nucleus and substituted by at least one halogen atom with a dibenzanthrone containing a nitrogen atom to which a reactive hydrogen atom is attached.

1,888,632. DIGESTING PROCESS AND APPARATUS. THOMAS LEONIDAS DUNBAR and ALBERT DARIUS MERRILL, Watertown, N. Y. Filed Apr. 8, 1931. Serial No. 528,696. 38 Claims. (Cl. 92—11.)

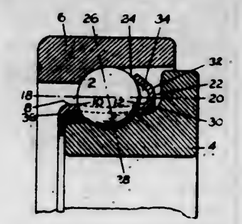


1. In a process of the character described, preparing a preheated high acid content cooking liquor, introducing this liquor into a digester containing fibrous material, and pumping such liquor into the digester until the pressure in the latter rises to at least 50 pounds.

1,888,633. PROCESS FOR MANUFACTURING AMMONIUM SULPHATE OR SALTS CONTAINING IT. SHOICHIRO HORI, Yoyohatacho, Toyotamagun, Tokyo-Fu, Japan. Filed Oct. 23, 1930. Serial No. 490,825. 4 Claims. (Cl. 23—119.)

1. The process for manufacturing ammonium sulphate or salts containing the same, consisting in dissolving ammonium sulphite in saturated solution of ammonium sulphate while maintaining the proportion between ammonia and sulphurous acid contained therein in such proportion that they form normal ammonium sulphite, a small excess of sulphurous acid existing beside normal ammonium sulphite; and in subjecting said solution to the action of oxygen under pressure in the presence of catalysers.

1,888,634. RETAINER OR SEPARATOR FOR ANTIFRICTION BEARINGS. FREDERICK G. HUGHES and CHARLES B. SIMMONS, Bristol, Conn., assignors to The New Departure Manufacturing Company, Bristol, Conn., a Corporation of Connecticut. Filed May 28, 1928. Serial No. 281,200. 10 Claims. (Cl. 308—201.)



1. The combination with a rolling antifriction-member, of a cage therefor having at one side of said antifriction-member a portion that contacts with said antifriction-member at substantially the pole of said antifriction-member's axis of rotation, and also having at the other side of said antifriction-member portions that contact with said antifriction-member at points upon opposite sides of said axis of rotation, said antifriction-member and said cage being out of contact with each other at other points; substantially as described.

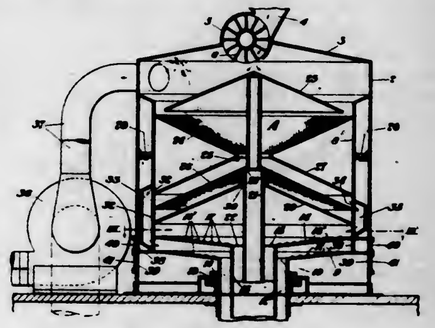
1,888,635. PROCESS OF FORMING GLASS TUBES FOR EYE-DROPPERS. ROBERT H. KOENIG, Haddon Heights, N. J. Filed Mar. 19, 1932. Serial No. 599,990. 4 Claims. (Cl. 49—84.)



1. The herein described method of forming a pair of dropper tubes from a tubular body which consists in reducing the diameter of the body for a predetermined area midway between the ends thereof, then softening two relatively closely related circular areas about the reduced portion, then applying pressure to the two ends of the tubular body to force outwardly the softened areas to form beads, and finally separating the tubular body between the beaded areas.

1,888,636. SCREENING AND CONCENTRATING APPARATUS. EDWARD O'TOOLE, Gary, W. Va. Filed Feb. 5, 1929. Serial No. 337,668. 6 Claims. (Cl. 209—44.)

1. A screening and cleaning apparatus for coal and the like comprising a cylindrical casing provided at its top with an inlet for the material to be treated, a cylindrical screening unit mounted for oscillatory movement within said casing, said unit comprising an outer cylindrical shell, a conical deflector plate mounted at the top of said shell and terminating short of the inside face of said shell and disposed beneath the inlet of the casing, a plurality of reversely inclined screens fixedly mounted in said shell below said deflector plate, an inclined collecting plate fixedly mounted in said shell below each of said screens and adapted to catch the material passing through the respective screens, means for delivering the material passing over one screen to the next succeeding screen, a pair of cleaning tables fixedly mounted in vertical spaced relation within the lower end of said shell below the screens and deflector plates, means for receiving the material passing over said screens and delivering said material onto one of said cleaning tables, means for receiving



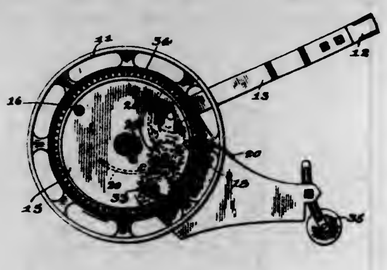
the material from said collecting plates and delivering said material to the other of said cleaning tables, said tables being adapted to separate the lighter and heavier particles of material delivered thereon, separate outlet ports for the heavy and light material separated by said tables, and means for causing an oscillatory jigging action of said screening unit within said casing.

1,888,637. HEAD FOR WELL CASINGS AND TUBINGS. WALLACE A. ROCKWELL, Long Beach, and LAURENCE M. STANFIELD, Whittier, Calif. Filed Mar. 3, 1931. Serial No. 519,854. 3 Claims. (Cl. 285—22.)



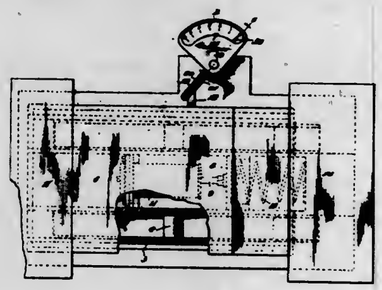
1. A head for well casing and tubing comprising a body having its intermediate portion flared to provide an inner tapered wall, and having its upper portion enlarged and interiorly threaded, and having the inner shoulder at the base of the threaded portion stepped, a cap member within the upper portion of the head and formed with an outer flange to engage the inner stepped portion of the shoulder, and having its upper portion reduced to provide an outer shoulder, and a locking ring comprising a head and a straight portion, the head overlapping and engaging the outer shoulder of the cap and the upper end of the said body, and the lower end of the straight portion engaging the said outer flange and overlapping the upper stepped portion of the shoulder.

1,888,638. DANDELION AND BUCKHORN HEADER. CHARLES K. SALISBURY, Mount Vernon, Ohio. Filed Jan. 20, 1932. Serial No. 587,805. 11 Claims. (Cl. 56—254.)



1. A weeding machine comprising a roller frame, and a rotary comb carried and driven by said roller frame and having cutter teeth movable forwardly against the stems of the weeds.

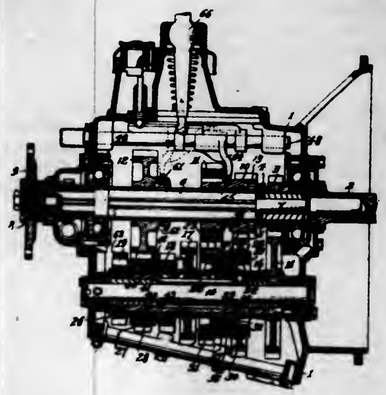
1,888,639. BRAKE TESTER FOR MOTOR VEHICLE WHEELS. FRANCIS H. STROUD, Seattle, Wash., assignor to George Wilmont Graetz, Seattle, Wash. Filed July 3, 1929. Serial No. 375,671. 5 Claims. (Cl. 73—51.)



3. A brake tester for vehicle wheels comprising a platform, means for slidably supporting the platform, a bracket depending from the platform, a helical spring adapted to be compressed by the bracket and extending parallel with the direction of movement of the platform, means for opposing expansion movement of said spring, a casing mounted adjacent the platform and having graduations therein, a shaft extending into the casing, means connecting the shaft and platform for rotating the former upon longitudinal movement of the platform in one direction when subjected to the drag of a wheel, an arm pivotally connected with the shaft and having a pointer connected thereto for cooperation with the graduations, a detent pivotally connected with the arm and having one end detachably engaged in a notch in the shaft, said detent serving to swing the arm and pointer in one direction upon rotation of the shaft, and means for frictionally holding the arm in its shifted position upon the reverse rotation of the shaft.

1,888,640. TRANSMISSION. EARL A. THOMPSON, Portland, Oreg., assignor to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Filed Apr. 15, 1925. Serial No. 23,221. 5 Claims. (Cl. 74—58.)

1. A transmission including a driven shaft, a countershaft, a shiftable power gear mounted on one of said shafts, a power gear mounted on the other of said shafts, a normally freely rotatable gear mounted on said last mentioned shaft, and means for connecting the normally freely rotatable gear to its shaft, said means including a bushing,



an exteriorly threaded stationary member and an interiorly threaded movable member thereon said movable member adapted to engage the bushing.

1,888,641. ARTIFICIAL FISH BAIT. HENRY CHARLES TOEPPER, Des Plaines, Ill. Filed Nov. 26, 1930. Serial No. 498,205. 3 Claims. (Cl. 43—49.)



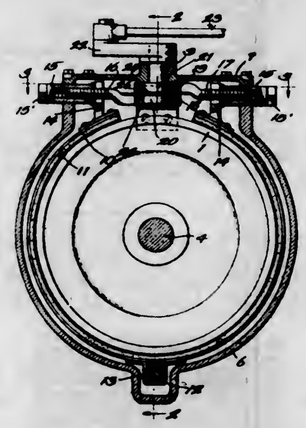
1. A lure of the character described comprising an elongated sheet metal member formed to provide a shallow spoon portion, a fishhook secured adjacent the front end of said spoon and engaging the opposite end, the front end of said member being tapered and bent upwardly on a transverse line adjacent the front end of said hook to form an upwardly and forwardly extending tapered transverse plane, the extreme forward end of said member being formed to provide a line engaging portion at an angle to the horizontal less than the said plane, a line engaging eyelet in said forward end, and weed guards secured by said eyelet and extending to a position adjacent the point of said hook.

1,888,642. METHOD OF ASSEMBLING YIELDABLE BUSHINGS ON SUPPORTING PINS. WILLIAM A. TYRON, Elmira, N. Y. Filed June 27, 1929. Serial No. 374,011. 6 Claims. (Cl. 29—149.5.)



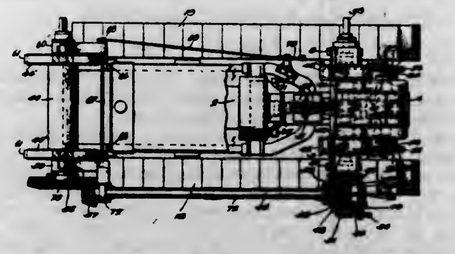
1. The method of assembling a hollow bushing of yieldable material in non-rotatable position on a pin, which comprises the steps of enclosing the bushing in a substantially non-radially expansible sleeve disposing in the bushing a relatively thin tube of expansible material and then forcing the pin longitudinally through the tube to thereby expand the latter radially throughout its length.

1,888,643. BRAKING MECHANISM. FRANCIS TURZICKY, Chicago, Ill., assignor to Henry E. Bullock, Chicago, Ill. Filed Aug. 19, 1929. Serial No. 386,912. 2 Claims. (Cl. 188—77.)



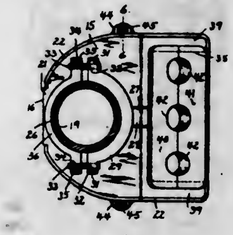
2. In a braking mechanism, a brake drum, a brake band, a casing enclosing the drum and band, an abutment mounted on each end of the band, members slidably and rotatably mounted on the casing for cooperation with said abutments respectively when moved toward each other to apply the band to the drum, said abutments being movable transversely of said members, a pair of eccentrics rotatably mounted in the casing between said members, a connection between each eccentric and a related member responsive to simultaneous rotation of the eccentrics in one direction to draw the members toward each other and toward said eccentrics, said connections having thread engagement in recesses in the members respectively to permit relative adjustment between each connection and its related member, and means for simultaneously rotating the eccentrics.

1,888,644. AUTOMOTIVE VEHICLE. FRANCIS TURSICKY, Chicago, Ill., assignor to Henry E. Bullock, Chicago, Ill. Filed Aug. 19, 1929. Serial No. 386,914. 1 Claim. (Cl. 180—58.)



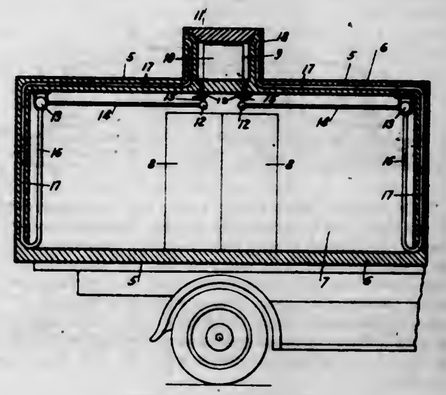
In a tractor, a body, a variable speed gearing mounted on one end of the body, a jack shaft transverse the body directly connected to the variable speed gearing and operable by the latter, driving wheels associated by gearing with said jack shaft, clutch mechanism between the jack shaft and each driving wheel, a member splined to rotate with the jack shaft and slidable thereon to positively engage either of two idler bevel pinions mounted on the shaft, a bevel gear mounted separately from the jack shaft to be turned in either direction by one of the idler pinions, a shaft fixed to be rotated by the bevel gear, and mechanism at the other end of the body connected with and operable by the latter shaft, whereby the mechanism may be driven by the variable speed gearing in either direction.

1,888,645. CONDUIT CAP. WHEELER H. VIBBER, New London, Conn. Filed May 11, 1928. Serial No. 277,068. 4 Claims. (Cl. 247—6.)



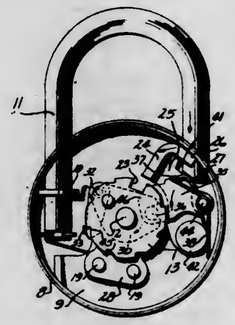
1. In a conduit-cap for electrical installations, the combination with a two-part separable mounting-plate comprising a main mounting-member having a conduit-receiving socket element and an installation-slot intersecting the same, and a secondary or clamping-member having a conduit-receiving socket element co-acting with the complementary feature of the said main member to grip the conduit and also having a forwardly-extending tongue fitting into the said slot to form a closure therefor, and a hood fitting over the said two-part separable mounting-plate to which it may be applied or removed after the installation thereof upon the conduit.

1,888,646. REFRIGERATING APPARATUS. BURT H. WESTON, Wood River, Ill. Filed Mar. 20, 1929. Serial No. 348,634. 12 Claims. (Cl. 62—91.5.)



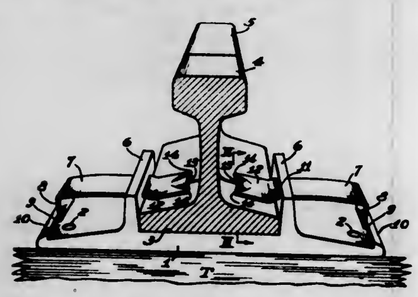
1. In a refrigerating apparatus comprising a structure having a compartment to be cooled and having a refrigerant chamber adapted to receive solid carbon dioxid, means for conducting carbon dioxid gas from said refrigerant chamber, in cooling relation to said compartment, to a point spaced below the top of said compartment and thence upwardly to a point of discharge, and means for insulating the upwardly extending part of said conducting means.

1,888,647. PERMUTATION LOCK. ROBERT K. WINNING, Wauwatosa, Wis., assignor, by mesne assignments, to The Dudley Lock Corporation, Chicago, Ill., a Corporation of Illinois. Filed Sept. 22, 1930. Serial No. 483,481. 8 Claims. (Cl. 70—113.)



1. A permutation lock provided with means for utilizing the entering movement of its shackle for engaging a keeper therewith, said means comprising the combination with a permutation disk provided with means for interacting with a keeper, of a pair of levers in motion transmitting connection, one of said levers being pivoted coaxially with said disk and provided with means engageable with said disk for the rotation thereof and normally disengaged therefrom, the other of said levers being positioned for operation by a portion of said shackle.

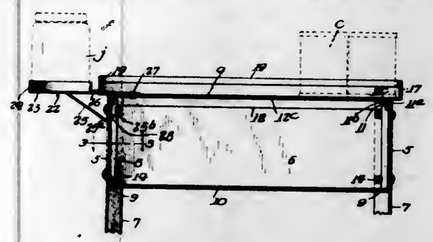
1,888,648. ELECTRICAL CONNECTION FOR RAIL JOINTS. EMANUEL WOODINGS, Oakmont, Pa., assignor to Woodings-Verona Tool Works, Verona, Pa., a Corporation of Pennsylvania. Filed Sept. 4, 1931. Serial No. 561,139. 2 Claims. (Cl. 173—262.)



1. In railway track construction, the combination with a rail joint, of a rail-retaining and electrical-connecting device comprising a tie plate, a spring member engaging the rail base flanges at one end and the tie plate at the other end, the rail-engaging end of the spring member being transversely arched to insure firm contact of the edges of the spring with the ends of the rails, respectively, and a fulcrum member engaging the top of the spring to hold it in gripping contact with the rail flanges and tie plate.

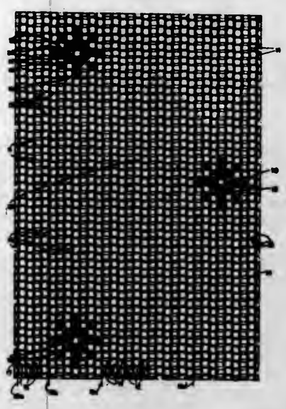
1,888,649. MERCHANDISING AND DISPLAY TABLE. LOUIS S. ANDERSON, Chicago, Ill., assignor to Reid, Murdoch & Co., Chicago, Ill., a Corporation of Illinois. Filed June 28, 1930. Serial No. 464,463. 4 Claims. (Cl. 45—31.)

1. A merchandising and display table comprising a top adapted to support canned goods or like articles and provided with an upwardly extending marginal flange, legs for sustaining the top in an elevated position, and a bracket at one side of the top for retaining for display purposes a transparent jar containing specimens of the goods, said bracket embodying an elongated plate pro-



vided with jar-holding means at one end thereof and having its other end extending through a slot in the marginal flange and secured fixedly to the upper face of the top.

1,888,650. LACE. HENRY BELIN, 3d, Scranton, Pa., assignor to The Scranton Lace Company, Scranton, Pa., a Corporation of Pennsylvania. Filed Feb. 6, 1932. Serial No. 591,329. 5 Claims. (Cl. 96—24.)

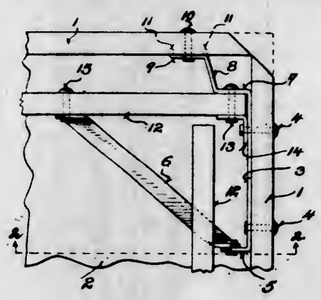


3. A substantially uniform weight lace made on a Nottingham lace curtain loom, said lace having detached figures composed of pattern spots thrown in by spool threads which are discontinuous between figures in the same longitudinal strip and in which the warp threads of the lace are heavier in the longitudinal strips in which the spool threads are discontinuous whereby the loss in weight accountable by the absence of spool threads between figures is substantially compensated.

1,888,651. FOLDING TABLE. WILLIAM H. BERSSENBRUGGE, Milwaukee, Wis. Filed May 22, 1931. Serial No. 539,259. 2 Claims. (Cl. 45—11.)

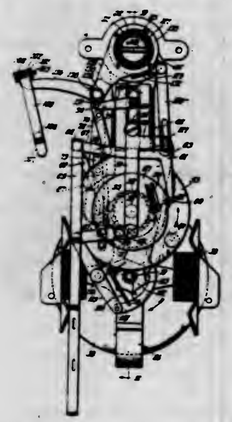
1. In a folding table, a table top, a pair of connected side rails secured to the table top and extending at right angles to one another, a swinging leg, a brace including a flat body portion arranged in abutting parallel relation to the inner face of one rail, a right angularly extending ear formed on the outer end of the body portion, a similar right angularly extending ear formed on the inner end of the body portion arranged in spaced parallel relation to the other rail, an angularly disposed extension formed on the last mentioned ear projecting toward the last mentioned rail, an attaching ear formed on the extension arranged in abutting parallel relation to the last mentioned rail and secured thereto, all of said ears

being arranged in spaced parallel relation, an angle bracket including a pair of right angularly disposed arms one of which is disposed in spaced parallel relation to the ear on the inner end of the body portion and the other of which is arranged in abutting facial relation to the body portion, an attaching element extending through



one of the rails, the body portion of the brace and the angle bracket, means pivotally connecting the leg to the angle bracket and the ear formed on the inner end of the body portion, and a diagonal brace pivotally connected to the leg and to the ear on the outer end of the body portion.

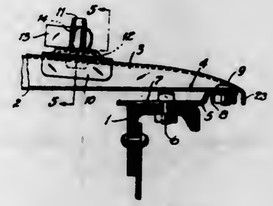
1,888,652. PHONOGRAPH. JOSEPH W. BISHOP, Muskegon Heights, Mich., assignor to United Research Corporation, a Corporation of Delaware. Filed Sept. 4, 1930. Serial No. 479,616. 30 Claims. (Cl. 274—10.)



23. In a phonograph, in combination, a vertical sleeve, a drive spindle extending through said sleeve, a centering pin slidably mounted in one end of said spindle and projecting therefrom, a cam member slidably mounted on said spindle and keyed to said sleeve, means connecting said cam member to said centering pin, and a cam member rotatably mounted on said spindle for engagement with said first mentioned cam member, each of said cam members being formed with a spiral cam terminating in an abrupt drop.

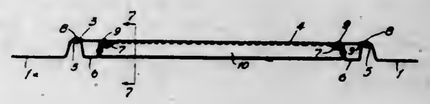
1,888,653. REMOVABLE GONDOLA CAR ROOF. CHARLES DAVID BONSALL, Pittsburgh, Pa., assignor to P. H. Murphy Company, New Kensington, Pa., a Corporation of Pennsylvania. Filed Dec. 3, 1930. Serial No. 499,641. 3 Claims. (Cl. 108—5.)

1. A removable roof for gondola cars of substantially different widths, said roof comprising a series of roof sheets spanning the car from side rail to side rail and supported only at their ends, means for removably securing adjacent margins of said sheets together to form weatherproof joints therebetween, and plates bolted to the tops of said side rails and to the undersides of said



roof sheets, said plates being wide enough to bear upon the side rails of the narrowest and the widest of such cars, the hole in said plates for the bolts that secure said plates to said side rails being elongated in directions transverse to said rails.

1,888,654. CAR ROOF. CHARLES DAVID BONSALL, Pittsburgh, Pa., assignor to P. H. Murphy Company, New Kensington, Pa., a Corporation of Pennsylvania. Filed Feb. 26, 1931. Serial No. 518,432. 14 Claims. (Cl. 108—5.4.)



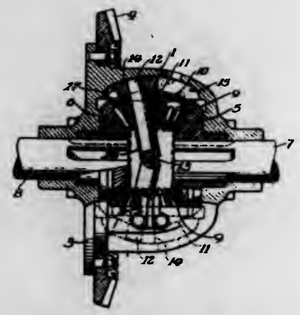
1. A car roof comprising roof sheets arranged to form panels at different levels with their side edges secured together, the distance between the upper and lower panels being such as to develop substantial beam action in said sheets and separate seam reinforcing members secured to the underside of the upper sheets and substantially between the upper and lower levels of the sheets.

1,888,655. CAR ROOF. CHARLES DAVID BONSALL, Pittsburgh, Pa., assignor to P. H. Murphy Company, New Kensington, Pa., a Corporation of Pennsylvania. Filed Feb. 27, 1932. Serial No. 595,453. 10 Claims. (Cl. 108—5.)



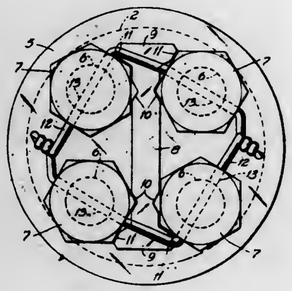
1. A car roof comprising hollow ribs alternating with channels, said ribs and channels being of substantially equal widths, whereby the neutral axis of the roof is substantially midway between the tops of said ribs and the bottoms of said channels, wooden reinforcing members being located within said ribs substantially midway between the sides thereof, and means for removably securing said wooden strips to said ribs.

1,888,656. DIFFERENTIAL GEAR. FREDERICK L. BOYNTON, Sycamore, Ill. Filed May 16, 1932. Serial No. 611,606. 7 Claims. (Cl. 74—99.)



1. A differential gearing comprising a pair of driven gears, a driving pinion intermediate the driven gears, a shaft passing through said pinion at an angle to the axis of the pinion, said shaft being pivotally supported at one end on a rotatable supporting frame structure, said supporting frame structure having a guideway with which the opposite end of the shaft interfits, and means for rotating said supporting frame structure.

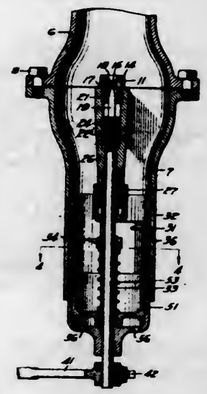
1,888,657. NUT LOCKING DEVICE. TRACY V. BUCKWALTER, Canton, Ohio, assignor to The Timken Roller Bearing Company, Canton, Ohio, a Corporation of Ohio. Filed June 1, 1931. Serial No. 541,383. 6 Claims. (Cl. 151—154.)



1. A locking device for nuts, screw heads and the like, comprising a strip having a projecting flange whose inner face makes an angle with the body of the strip to accommodate one corner of a nut, said strip also having near the end thereof a notch in its body for accommodating a corner of a nut.

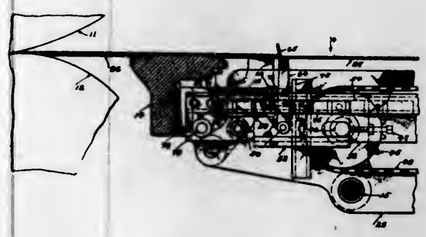
1,888,658. CARBURETOR FOR INTERNAL COMBUSTION ENGINES. CLINTON DAVIDSON, San Francisco, Calif. Filed Mar. 18, 1929. Serial No. 347,974. 3 Claims. (Cl. 261—50.)

1. A carburetor comprising a body having an unobstructed induction passage therein, a fuel nozzle in said passage, a valve for controlling said nozzle, a valve for controlling air flow through said passage, means for mechanically moving said valves in unison in both directions



between their extreme positions, and means responsive to pressure in said passage for additionally controlling air flow through said passage.

1,888,659. SHEET FEEDING MECHANISM. WILLIAM K. ECKHARD, Dunellen, N. J., assignor to R. Hoe & Co., Inc., New York, N. Y., a Corporation of New York. Filed Apr. 10, 1930. Serial No. 443,168. 20 Claims. (Cl. 271—54.)

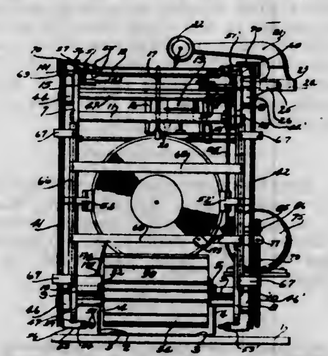


1. In a sheet feeder, a reciprocating pusher, mechanism to raise and lower the pusher, a track on which the pusher travels, and means to move the pusher forward and backward on the track; said means including a chain supported on sprockets and operatably connected to the pusher.

1,888,660. REPEATING PHONOGRAPH. CARL L. FERGUSON, Indianapolis, Ind. Filed May 28, 1928. Serial No. 281,186. 25 Claims. (Cl. 274—10.)

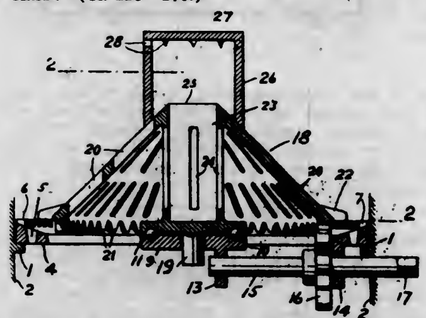
3. An apparatus for playing a plurality of records comprising record playing means, a storage station for the records, transfer means for taking a record from the storage station and transferring it to the record playing means and vice versa, a drive for said transfer means, means controlled by the record playing means when the playing of a record is completed to start said transfer drive and directly controlled by the record playing means when the parts thereof are positioned to initiate the playing of a record to stop said transfer drive, means

for automatically shifting the parts of the record playing means to position to initiate playing of a record when a new record is transferred to the turn table, and means



controlled by the transfer means for advancing the records in the storage station each time a record is transferred and during a transferring operation.

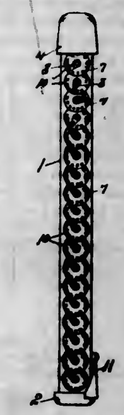
1,888,661. FURNACE GRATE. JOHN J. FLEMING, Vineland, N. J. Filed Feb. 18, 1932. Serial No. 593,730. 1 Claim. (Cl. 126—170.)



A furnace grate intended for the complete combustion of coal including in combination a support, a bottom member mounted on said support and having a perforated outer portion, upstanding teeth on said outer portion, said perforations in said outer portion being of decreasing cross section from top to bottom, a bracket across said bottom member and having a central opening and a bearing race therein, a perforated depending lug on said bracket, a perforated depending lug on said outer portion, a shaft mounted in the perforations in said lugs, a gear mounted on said shaft, means for attaching an actuating member to said shaft, a conical perforated grate mounted on said bracket, a stub shaft on said grate extending through said central opening, rotatable bearings interposed between said bracket and said grate, teeth on the lower outer edge of said grate cooperating with said gear, outstanding fingers on the lower lateral edge of said grate spaced opposite said upstanding teeth on said outer portion, a tube extending vertically centrally of said grate and having perforations in its lateral walls, a wall upstanding from said grate and surrounding the upper end of said tube, a solid top on said wall, and perforations in the upper portion of said wall adjacent said top.

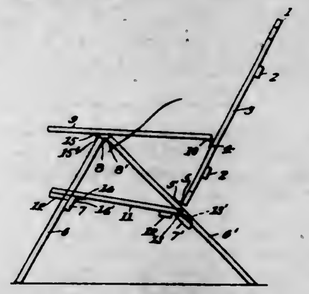
1,888,662. GOLF SCORE REGISTER. JULIUS FREELANDER, Kansas City, Mo. Filed Oct. 2, 1930. Serial No. 485,923. 1 Claim. (Cl. 235—112.)

In a golf score register, a member having on its exterior a plurality of arcuate rows of characters representing strokes, pointers pivoted to said member respectively centrally with respect to said rows, and arcuate raised ribs on said member concentric with said rows respectively and partly encircling said pointers the tip of a



pointer being spaced from the member a distance less than the height of a cooperating rib, said ribs serving as stops for adjacent ones of said pointers, each of said ribs having its ends abutting against one of said ribs next thereto.

1,888,663. FURNITURE. MARTIN H. GAMBEE, Pawling, N. Y. Filed Apr. 29, 1932. Serial No. 608,257. 1 Claim. (Cl. 155—139.)

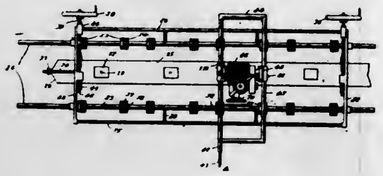


Furniture of the type described, comprising seat, arm, back and leg members formed of wide strips of suitable material, and being detachably connected together by hinges, the front and rear leg members being hinged together at their upper transverse inner edges, the back member having its outer strips hinged to the wider surfaces of said rear leg members, transverse bars connecting the front leg members and the rear leg members, respectively, said seat being removably connected with said front transverse bar and said rear transverse bar, and strips forming said arms and hinged to the upper front surfaces of the front leg members and to said strips forming the back, said hinges forming the sole connection betwen said arms and the adjacent parts of the chair, and certain of said hinges having removable pins to afford detachability of the parts to which they are attached.

1,888,664. POLE GAINING AND BORING MACHINE. LESLIE H. GIDDINGS and JUDSON H. MANSFIELD, Rockford, Ill., assignors to Greenlee Bros. & Co., Rockford, Ill., a Corporation of Illinois. Filed Mar. 23, 1931. Serial No. 524,472. 31 Claims. (Cl. 144—3.)

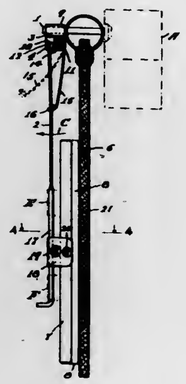
14. In a machine of the class described, the combination of an elongated frame arranged to be placed on the

side of a pole spanning a given length thereof in which one or more gains are to be made, said frame being constructed to provide longitudinally extending supports on opposite sides of the pole, a portable auxiliary frame arranged to be placed on said supports crosswise with respect to the pole and arranged to have movement on said supports transversely relative to the pole, a power operated cutter head adapted for cutting gains in the pole, means for supporting the cutter head on a horizontal axis beneath the auxiliary frame for operation transversely over the side of the pole, a prime mover also supported on the frame substantially directly over the cutter head and having a direct operating connecting therewith, a vertically disposed boring spindle also supported on said auxiliary frame in offset relation to the prime mover and cutter head for vertical feed movement downwardly past the same toward the post therebeneath to operate a bit therein, and means providing a driving connection between the boring spindle and prime mover.



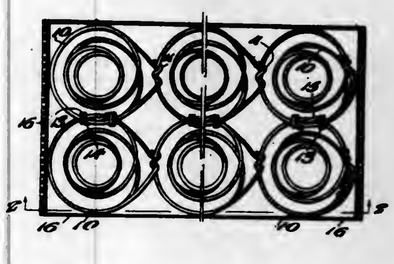
25. A gain cutter for poles comprising an elongated main frame, means to secure the frame on a pole, means to mount fixed guide elements spaced on predetermined centers along said frame, a transversely movable cutter frame transferable into engagement with different guide elements to center it for different gain cutting positions, and a motor driven cutter head mounted on said cutter frame.

1,888,665. WINDSHIELD WIPER. JOSEPH J. HERLBAUER, Hollis, and CHARLES GULOTTA, New York, N. Y. Filed May 8, 1929. Serial No. 361,450. 4 Claims. (Cl. 15—255.)



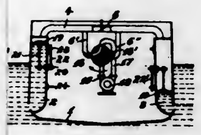
1. In a wiper assembly for automobile shields comprising a shaft and an arm, which later is provided with an angularly disposed terminal extension, a resilient clamp carrying said arm and adjustably mounted on said shaft, said clamp having a body portion disposed in engagement with said shaft, spring constructed spaced ears projecting from said portion and having therein opposed apertures, said extension being positioned in said apertures, said ears having also therein a bore and an opposed tapped bore, a screw turnably mounted in said bore and threadedly engaged in said tapped bore for moving said ears whereby to adjust the engagement of said body portion on said shaft, a wiper carried by the other terminal of said arm, and spring means mounted on said screw and engaging said arm to urge said wiper against a shield to be wiped.

1,888,666. SPRING CONSTRUCTION AND METHOD OF MAKING SAME. OLIVER HETHERINGTON, West Chester, Pa., assignor to Peerless Springs, Incorporated, West Chester, Pa., a Corporation of Pennsylvania. Filed May 13, 1930. Serial No. 451,893. 2 Claims. (Cl. 5—259.)



1. A self supporting spring cushion or mat consisting of spiral springs the upper and lower adjacent coils of which overlap, a wire arranged diagonally through said overlapped portions the respective ends of said diagonal wire being wound around said adjacent coils to provide a hinge-joint.

1,888,667. STABILIZING DEVICE FOR SHIPS. HERMANN HORT, Berlin-Westend, Germany, assignor to Siemens & Halske, Aktiengesellschaft, Siemensstadt, near Berlin, Germany, a Corporation of Germany. Filed Oct. 26, 1931, Serial No. 571,049, and in Germany Oct. 28, 1930. 17 Claims. (Cl. 114—125.)

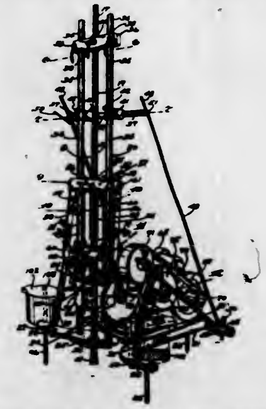


1. A stabilizing device for ships, comprising tanks adapted to contain a liquid, a pressure-equalizing conduit connected with said tanks, a valve controlling said conduit, a circulation conduit connected with the first named conduit and by-passing said valve, a fluid propelling device connected with said circulation conduit, and means for controlling said fluid propelling device.

1,888,668. DRILLING MACHINE. ALBERT HOSSFELD, Winona, Minn. Filed Dec. 4, 1931. Serial No. 578,883. 15 Claims. (Cl. 255—40.)

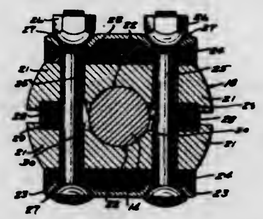
1. In a device of the class described, a frame, a carriage mounted to reciprocate on the frame, a bearing mounted to turn on the carriage, means actuated by the carriage for turing the bearing, a drill mounted to reciprocate endwise in the bearing with freedom for the

bearing to turn thereon, a grip frictionally held on the drill, an abutment on the frame with which the grip engages during the operative stroke of the drill to cause



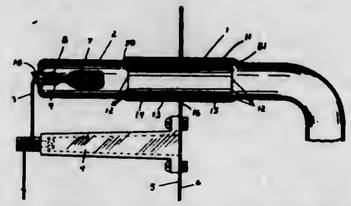
the drill to feed independently of the grip, and means co-acting with the bearing and the grip for turning the drill with the bearing.

1,888,669. FRICTION GRIP FOR DRILLING MACHINES. ALBERT HOSSFELD, Winona, Minn. Filed Apr. 20, 1932. Serial No. 606,372. 6 Claims. (Cl. 24—243.)



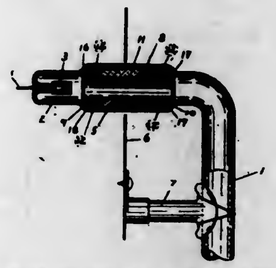
1. A friction grip including a pair of laterally spaced blocks having cooperating half seats in their opposing faces, a pair of face plates outward of the blocks, a resilient member interposed between each block and its face plate, and a pair of nut-equipped bolts extending through aligned holes in the blocks and the face plates said holes being of such diameter as to permit free angular movement of said bolts therein.

1,888,670. SELF-INSULATED DISCHARGE TUBE TERMINAL. FRED HOTCHNER, Los Angeles, Calif. Filed Nov. 14, 1930. Serial No. 495,648. 11 Claims. (Cl. 176—122.)



1. The combination of a metallic supporting member for a discharge tube, a hole therethrough, through which extends a terminal of said discharge tube, the diameter of said hole as compared with the diameter of the tube being such that additional insulation is necessary other than that of the wall of the tube itself, a shield within said tube extending both ways from the plane of said supporting member, the distance between the outside surface of said shield and the inside surface of said tube being so small that the insulating effect of a small space in the containing gaseous medium in such discharge tube provides the additional insulation needed.

1,888,671. INSULATED DISCHARGE TUBE TERMINAL. FRED HOTCHNER, Los Angeles, Calif. Filed Mar. 21, 1931. Serial No. 524,270. 14 Claims. (Cl. 176—122.)

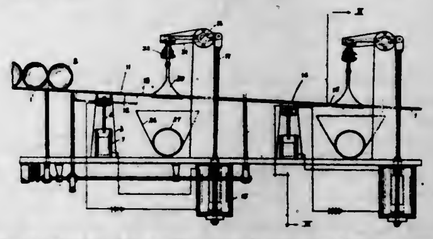


1. In a discharge tube, an internal insulator for preventing break down from the inside of said tube to an external body consisting of a dielectric body within said tube in the path of a possible break down discharge, the main portion of said dielectric body being out of contact with the portions of the wall of said tube immediately adjacent thereto leaving a very small space therebetween in which the probability of ionization occurring upon the application of electric stress is so reduced that the said space serves as additional insulation, the length of a possible break down passage from the main chamber in said tube to any possible break down point on the wall of said tube near said dielectric body being of such length that the probability of such break down is reduced to a very low value.

1,888,672. COMPOSITE SHEET. MARSHALL R. HOWARD, Kenosha, Wis. Filed Sept. 22, 1930. Serial No. 483,761. 1 Claim. (Cl. 91—67.9.)

That step in the process of forming playing cards or similar paper sheets, which consists in impregnating paper stock with a potentially reactive resin, sheeting the impregnated stock, coating the sheeted stock with a pigment, then calendering the coated stock to form a printing surface, printing the calendered sheets, applying a finishing coat to the printed surface, and finally applying heat and pressure to the sheets.

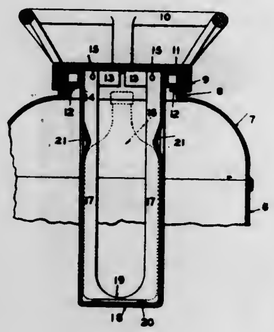
1,888,673. SORTING APPARATUS. WALTER E. HUMPHREY, Jeannette, Pa., assignor to Pennsylvania Rubber Company, a Corporation of Pennsylvania. Filed Jan. 31, 1931. Serial No. 512,610. 1 Claim. (Cl. 209—121.)



In apparatus for sorting articles by weight, a runway including two adjacent sections severally movable, one

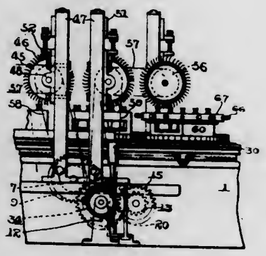
section movable downwardly and the adjacent section movable transversely with respect to the direction of movement of the first section, means yielding under weight for sustaining the downwardly movable section in its elevated position, and means responsive to such downward movement of the section last mentioned for effecting the transverse movement of the second section.

1,888,674. FIRE EXTINGUISHER. CHARLES KNET HUTHSING, St. Louis County, Mo. Filed Oct. 27, 1930. Serial No. 491,410. 1 Claim. (Cl. 169—32.)



In a device of the class described, the combination with a fire extinguisher provided with a charging opening, of a container support extending into the extinguisher through said opening, said support including a bottom plate and an integral side wall perpendicular to the bottom wall throughout its length, said side wall including a pair of arms arcuate in cross section, each of said arms being provided intermediate its length with a pair of vertical slits, the material between said slits being bent inwardly to provide a shoulder stop for the container.

1,888,675. DEVICE FOR POINTING BRISTLES OF BRUSHES. RIICHIRO IZAWA, Kyoto, Japan. Filed Mar. 20, 1931, Serial No. 524,021, and in Japan Dec. 13, 1930. 3 Claims. (Cl. 51—71.)



1. A device for pointing bristles, comprising in combination, a movable abrading tool, a sliding table having reciprocating motion in a plane contiguous to the path of movement of said tool, a plurality of rotatable brush holders mounted on the sliding table, said brush holders being divided into a plurality of rectangular compartments, wavy plate springs secured to the opposite walls of said compartments, means cooperatively connecting all of the brush holders and a controlling device rotating said brush holders one step at every reciprocating motion of the sliding table.

1,888,676. PROTECTIVE OUTER GARMENT. AMY S. JENNINGS, New York, N. Y. Filed Feb. 1, 1930. Serial No. 425,130. 5 Claims. (Cl. 2—227.)



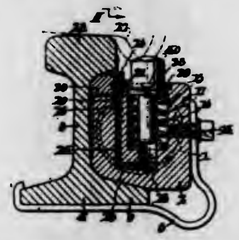
1. A protective garment comprising a body portion adapted to enclose the sides and back of the wearer, a flap adapted when raised to cover the front of the wearer, leg and foot portions connected to the body portion, and hookless fasteners adapted when closed to close the foot and leg portions and to raise said flap and fasten the same between the edges of said body portion.

1,888,677. ELECTROLYTIC CELL. JOSEPH E. JEWETT, Buffalo, N. Y., assignor to National Aniline and Chemical Company, Inc., New York, N. Y., a Corporation of New York. Filed Jan. 31, 1930. Serial No. 424,916. 14 Claims. (Cl. 204—5.)



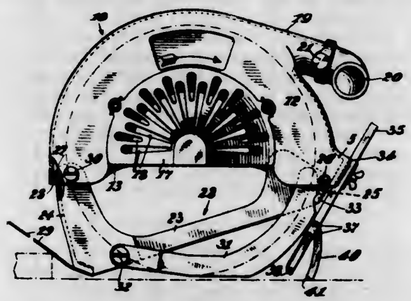
1. An electrolytic cell comprising a cathode casing open at its sides, cathode plates extending laterally the width of the casing and terminating short of the top and bottom walls of the casing, a web completely dividing the space between the cathode plates into separate cathode compartments, diaphragms held spaced from the cathode plates and completely closing the sides of the casing, anode compartments clamped to the sides of the cathode casing, and anode plates extending parallel to and spaced from the diaphragms in the anode compartments.

1,888,678. TRACK-RAIL LUBRICATING DEVICE. ELISHA B. KEIM, Philadelphia, Pa. Filed Oct. 13, 1930. Serial No. 488,311. 5 Claims. (Cl. 184—3.)



1. A track-rail lubricating device comprising a pair of blocks snugly fitting the web of the rail and secured thereto, a lubricant reservoir extending longitudinally of the rail and having its ends retained within said blocks, and means within one of said blocks and operable by a passing wheel for delivering a spray of lubricant.

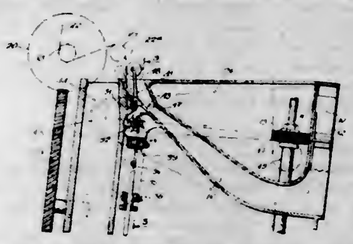
1,888,679. SAFETY DEVICE FOR CUTTING MACHINES. WALTER KNAPP, Lancaster, Pa., assignor to De Walt Products Corporation, Lancaster, Pa. Filed Jan. 7, 1931. Serial No. 507,077. 5 Claims. (Cl. 143—159.)



2. In combination, a machine having a rotary cutter, an arcuate main guard of channel-shaped cross section attached to a part of the machine and covering part of the cutter, a front guard pivoted to the main guard at a point to the rear of the axis of the cutter, the forward end of the front guard being formed with an upwardly and forwardly extending guide surface which causes the front guard to move upwardly when work material approaches the cutter from the front, two side guards, each side guard having one of its ends pivoted to the front guard near the forward end of the front guard, each side guard being formed with an upwardly and rearwardly extending guide surface, said rearwardly extending guide surfaces causing the side guards to move upwardly when work material approaches the cutter from the rear.

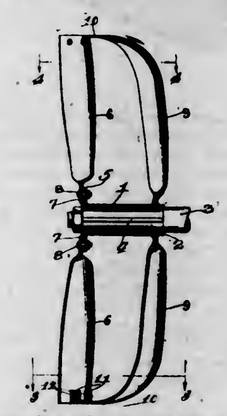
1,888,680. AUTOMATIC FILM FEED MECHANISM. WILHO A. KOSKEN, Richmond Hill, N. Y., assignor to Wilho A. Kosken, Inc., a Corporation of New York. Filed Nov. 21, 1929. Serial No. 408,717. 17 Claims. (Cl. 88—17.)

12. In moving picture projecting machines, the combination with the film feed mechanism of the machine and the film actuated thereby, of an automatically actuated device for feeding a portion of the film in a reverse direction, said device being positioned adjacent that part of the film through which the rays of light pass and idly



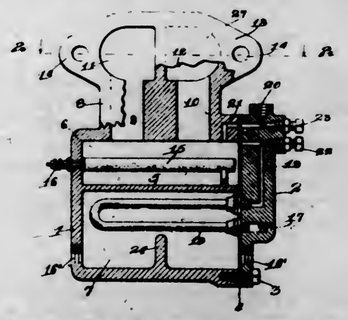
turned by the film in the normal feed thereof, means controlled by engagement with the film for controlling the operation of said device.

1,888,681. PROPELLER. GUSTAV LAUSZAT, Milwaukee, Wis. Filed Apr. 25, 1931. Serial No. 532,960. 8 Claims. (Cl. 170—171.)



1. A propeller comprising a bearing sleeve, opposed sets of spaced propeller blades carried by said bearing sleeve, each set of blades including radially extending elongated substantially parallel body portions, the body portions of one set of blades being provided with a greater transverse curvature than the other set of blades.

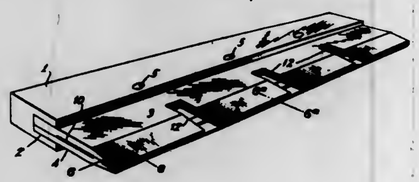
1,888,682. VAPORIZER. MARIJAN I. MAZAREK, West Allis, Wis. Filed Oct. 29, 1930. Serial No. 491,949. 4 Claims. (Cl. 123—25.)



1. A vaporizer including a body, a partition therein dividing the body into separate chambers, means for directing gaseous fuel through one of said chambers, means

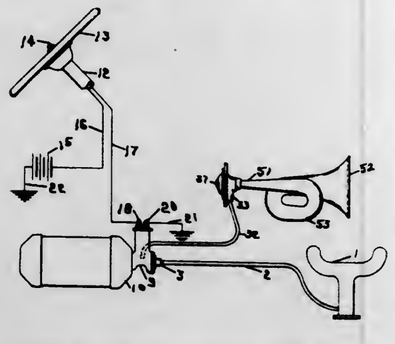
for directing heated air into the other of said chambers to maintain the first chamber in a heated condition, means arranged within the first chamber for initially heating the fuel, means for introducing crank case vapors into the first chamber, means for heating the crank case vapors in the second chamber before the crank case vapors are introduced into the first chamber, and means for introducing water vapor into the first chamber to be mixed with the gaseous fuel passing therethrough.

1,888,683. **BLADE HOLDER FOR RAZOR SHARPENING MACHINES.** THEODORE G. McGIRR, Brooklyn, N. Y., assignor to Magazine Repeating Razor Company, New York, N. Y., a Corporation of New Jersey. Filed Mar. 7, 1927. Serial No. 173,580. 2 Claims. (Cl. 51—218.)



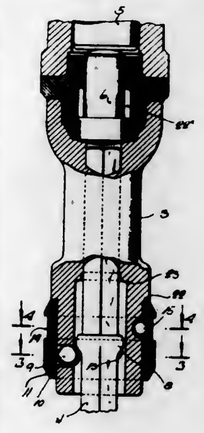
1. A blade holder for sharpening machines comprising an elongated rigid back plate and clamping jaws rigidly fixed to said back plate and of sufficient length or extent to hold a plurality of blades, one of said jaws having an inner rib of less height than the thickness of the blades to be sharpened, so that the normal space between the outer gripping edges of said jaws will be less than the thickness of the blades to be inserted in the holder, thus enabling the jaws to properly grip and hold the blades; one of said clamping jaws being rigid and the other resilient, said rigid jaw extending uninterruptedly the whole length of the holder, the said resilient jaw being divided to afford a plurality of clamping fingers adapted to engage the blades individually, thus adapting the holder to grip blades of slightly varying thicknesses properly.

1,888,684. **SIGNALING.** LESLIE H. MIDDLETON, Adrian, Mich., assignor to Schwarze Electric Company, Adrian, Mich., a Corporation of Michigan. Filed Aug. 5, 1931. Serial No. 555,162. 15 Claims. (Cl. 116—142.)



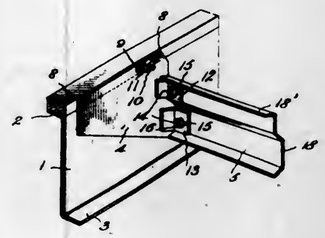
1. A signal comprising a chamber having a port, a valve for the port, said chamber having a flexible wall opposing the port, means mounting the valve on said wall, control means for varying the pneumatic pressure in said chamber, and a damping control for the flexible wall including an approximate volume retaining chamber.

1,888,685. **DRILL STEEL RETAINER.** REINHOLD A. NORLING, Aurora, Ill., assignor to Independent Pneumatic Tool Co., Chicago, Ill., a Corporation of Delaware. Filed Nov. 28, 1930. Serial No. 498,721. 1 Claim. (Cl. 121—32.)



A drill steel retainer for impact tools, comprising in combination with the nozzle of the tool and drill steel insertable into the nozzle, of means providing a shoulder on the portion of the drill steel within the nozzle, retainer means carried by the nozzle and projectable into the same in advance of said shoulder, a sleeve rotatably mounted on the nozzle for controlling the projectability of the retainer means into the nozzle, a spring pressed detent carried by the sleeve and extending into a circumferential groove in the nozzle to limit the extent of rotation of the sleeve, and a shoulder on the nozzle above the sleeve, said shoulder forming a solid abutment for the sleeve to prevent upward movement of the same on the nozzle due to inertia through the impacts of the drill steel on the retainer means in the operation of the tool.

1,888,686. **STAIR CONSTRUCTION.** JOHN ROBERT O'DONNELL, Brooklyn, N. Y. Filed Sept. 20, 1930. Serial No. 483,172. 2 Claims. (Cl. 25—118.)



1. In concrete stair construction, the combination of strings having flanges disposed on their upper edges, said strings constituting part of the worm-work and eventually entering into the permanent construction, supporting strips superimposed upon the strings said strips being longitudinally arranged with respect to the strings and being substantially coextensive therewith, side-forms secured to the strips and riser-forms extending between the strings and secured to said side-forms.

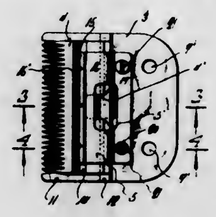
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1,888,687. **TIME SWITCH.** GEORG OGURKOWSKI, Zug, Switzerland, assignor to Landis & Gyr, A.-G., a Joint-Stock Company of Switzerland. Filed Sept. 11, 1929, Serial No. 391,779, and in Switzerland Sept. 11, 1928. 2 Claims. (Cl. 161—1.)



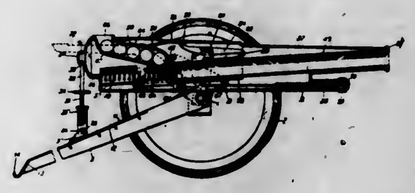
1. A time switch control mechanism including in combination a member to be rotated in accordance with time, a month indicating scale thereon, an hour indicating scale supported thereby and movable relative thereto, a scale to indicate relative displacement of the hour scale from its normal position and indicating the corrections made for local time, switch operating members movable relative to the hour scale and means for moving said members relative thereto in accordance with seasonal changes in the setting and rising of the sun.

1,888,688. **UNITARY CUTTING ASSEMBLY FOR HAIR CLIPPERS.** JOHN OSTER, Racine, Wis., assignor to John Oster Mfg. Company, Racine, Wis., a Corporation of Wisconsin. Filed Aug. 25, 1930. Serial No. 477,535. 6 Claims. (Cl. 30—1.)



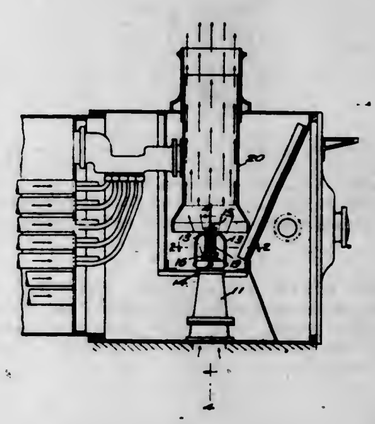
4. A cutter assembly adapted to be attached to and detached from a hair clipper as a unitary assembly and comprising a fixed blade having cutting teeth and adapted to be secured to the clipper, a movable blade slidable back and forth across the fixed blade and having cooperable cutting teeth, a combined tension plate and guide having an attaching portion adjacent the fixed blade and a portion extending over the movable blade, interengageable guiding means between said plate and said movable blade for guiding the movable blade and determining the position thereof relative to the fixed blade, and means for securing the attaching portion of said plate to the fixed blade and for placing a flexing tension on said plate to cause said plate to act through said inter-engaging guide means to press the movable blade against the fixed blade with the proper pressure and to aline the movable blade with the fixed blade.

1,888,689. **TOY GUN.** WILLIAM L. PAYNE, Columbus, Ohio, assignor to Fox Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed July 2, 1930. Serial No. 465,378. 17 Claims. (Cl. 124—13.)



1. A toy gun comprising, an axle, a barrel pivotally mounted on said axle, ejecting mechanism mounted in said barrel, means pivotally mounted on said axle for effecting the operation of said ejecting mechanism, and means for pivotally adjusting said barrel about said axle.

1,888,690. **NOZZLE TIP AND SPREADER FOR LOCOMOTIVES.** JAMES I. PARKE, Cherokee, Iowa. Filed Dec. 14, 1931. Serial No. 581,015. 4 Claims. (Cl. 230—100.)

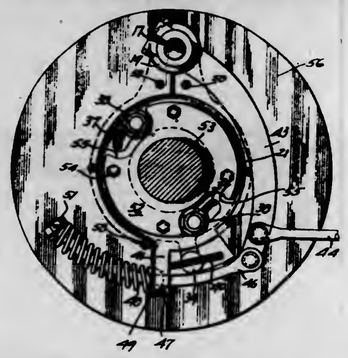


1. In combination with the exhaust nozzle of a steam locomotive of a device to evenly spread the flow of steam as it leaves said nozzle, said means comprising a vertically adjustable spreader for spreading the flow of steam, and a conduit passing centrally and longitudinally through said spreader to permit a portion of the steam to pass therethrough, and thus completely fill the area of the smokestack and cause an even draft in the firebox of the locomotive.

1,888,691. **BRAKE.** HOWARD B. PEARSON, San Francisco, Calif. Filed Apr. 16, 1929. Serial No. 355,487. 18 Claims. (Cl. 188—78.)

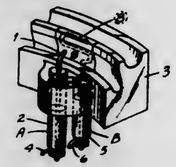
1. A brake comprising a stationary element; a brake drum rotatable relative to said element; a brake band in

said drum; an anchor for holding said brake band in position; means to move the anchor on a substantially lineal path to rotate said brake band relatively to said mounting



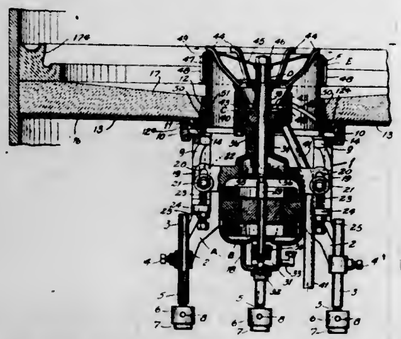
element and means actuated by the rotation of said brake band to expand said brake band thereby pressing the same against the drum.

1,888,692. LIQUID FUEL BURNER IGNITION. MILTON A. POWERS, Detroit, Mich., assignor to The Timken Silent Automatic Company, Detroit, Mich., a Corporation of Michigan. Filed June 10, 1929. Serial No. 369,863. 13 Claims. (Cl. 175—115.)



1. An electric ignitor system for oil burners of the kind having a non-metallic refractory hearth ring, comprising a transformer, a pair of electrodes constituting the ignitor gap of the transformer circuit, both electrodes being supported in fixed relation in a segment of the hearth ring.

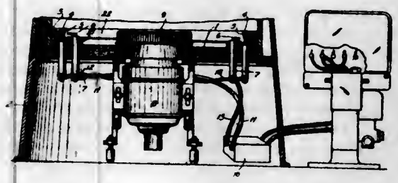
1,888,693. ROTARY OIL BURNER. MILTON A. POWERS, Detroit, Mich., assignor to The Timken Silent Automatic Company, Detroit, Mich., a Corporation of Michigan. Filed July 24, 1929. Serial No. 380,527. 7 Claims. (Cl. 158—77.)



4. A rotary oil burner comprising a supporting member, an electric motor thereon, a vertical armature shaft for said motor, a centrifugal fuel distributing head rotatable with said armature shaft, a fan rotatable with said armature shaft and provided with a depending peripheral flange having a series of openings, and an axially adjustable cylindrical tube disposed concentric to said peripheral flange with one end inside thereof.

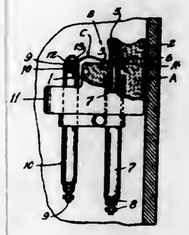
7. A rotary oil burner comprising a supporting member, a rotary shaft, a cup mounted on said supporting member and having a hub portion sleeved on the rotary shaft, means for feeding liquid fuel to said cup, and a distributer head fixed to said shaft with its lower end disposed in said cup, said distributer head having an inverted cone-shape chamber therein communicating at its bottom with the interior of said cup, said distributer head chamber being provided at its upper end with a series of circumferentially spaced discharge openings, and means on the lower end of said distributer head adapted to pick up the fuel in said cup and deposit it on the conical surface of said distributer head chamber.

1,888,694. ELECTRIC IGNITION FOR FLUID FUEL BURNERS. MILTON A. POWERS, Detroit, Mich., assignor to The Timken Silent Automatic Company, Detroit, Mich., a Corporation of Michigan. Filed May 29, 1930. Serial No. 456,940. 7 Claims. (Cl. 175—115.)



1. The improvement in the process of fluid fuel burner ignition which consists in maintaining an electric current of at least ten thousand volts and in excess of twenty-five milliamperes.

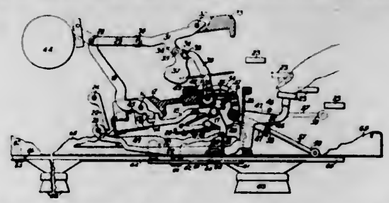
1,888,695. OIL BURNER IGNITION DEVICE. MILTON A. POWERS, Detroit, Mich., assignor to The Timken Silent Automatic Company, Detroit, Mich., a Corporation of Michigan. Filed July 1, 1931. Serial No. 548,094. 9 Claims. (Cl. 175—115.)



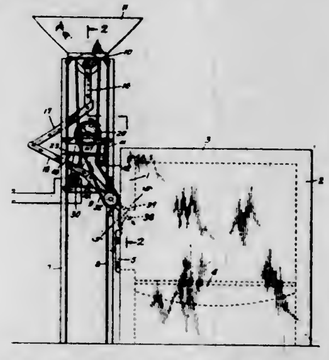
1. A spark igniter for oil burners wherein ignition and combustion take place at the outer periphery of a hearth member toward which fuel and air are sprayed, said igniter having a sparking point located in a position normally protected against gas movement and deflecting means for directing an air flow to the vicinity of said sparking point.

1,888,696. TYPEWRITING MACHINE. JAMES H. RAND, Jr., Buffalo, N. Y., assignor to Remington Typewriter Company, Ilion, N. Y., a Corporation of New York. Filed Jan. 13, 1932. Serial No. 586,348. 10 Claims. (Cl. 197—180.)

1. In a noiseless typewriting machine, the combination of a type-action including means for effecting substantially a noiseless pressure imprint, noise-producing means operating at each actuation of said type-action for simulating the noise produced in a hammer-blow typewriting machine, and means for at will rendering said noise producing means effective or ineffective.

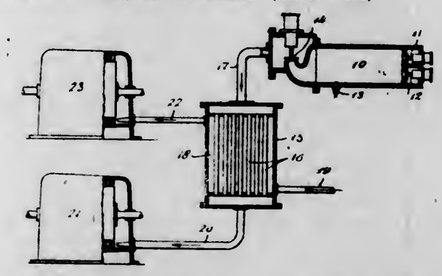


1,888,697. AUTOMATIC FEEDING DEVICE FOR GRATES. JOSEPH J. RATHGEB, Jr., New York, N. Y. Filed Oct. 26, 1926. Serial No. 144,241. 4 Claims. (Cl. 110—115.)



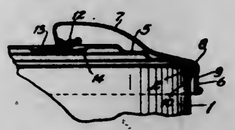
2. In combination with a furnace having an opening in a wall thereof provided with curved walls, a fuel hopper, an oscillating delivery conduit extending through said opening and into said furnace from a point without the same, a connecting conduit extending from said hopper to said delivery conduit for conducting fuel from said hopper to said conduit, lug members on said delivery conduit formed with curved engagement surfaces engaging said curved walls of said opening to permit rocking movement of said delivery conduit about a horizontal axis and means for oscillating said delivery conduit.

1,888,698. PROCESS AND APPARATUS FOR OPERATING TURBINES. WILHELM SCHÜLE, Gorlitz, Germany, assignor to Holzwarth Gas Turbine Co., San Francisco, Calif., a Corporation of Delaware. Filed Dec. 20, 1926. Serial No. 155,849. 2 Claims. (Cl. 60—49.)



1. In a turbo-engine, the combination of an explosion chamber adapted to be intermittently charged with an explosive mixture of air and fuel for explosion therein under constant volume, whereby explosion gases of high temperature and pressure are produced, a nozzle valve at the outlet end of such chamber adapted to be opened after each explosion to discharge such gases under pressure, means whereby said gases are expanded without the performance of external work to increase their velocity and simultaneously to reduce their temperature, a heat exchanger, a conduit for leading the high velocity gases into said heat exchanger, a conduit for conducting into the latter a fluid in heat exchange relation with said gases to be heated by the latter, a turbine arrangement, and means for conducting to the latter the cooled gases and the heated fluid to perform work therein.

1,888,699. RECEPTACLE. MICHAEL SCHWARZ and FRED J. GOETZ, St. Louis, Mo., assignors to Crunden-Martin Manufacturing Company, St. Louis, Mo., a Corporation of Missouri. Filed Oct. 25, 1929. Serial No. 402,436. 4 Claims. (Cl. 220—56.)



1. A receptacle having an outstanding rim portion, and a cover for said receptacle having a depending rim flange provided with an opening, and a cover fastener comprising a single latch bar mounted on said cover with its outer end projecting through the opening in the rim flange thereof beneath the rim portion of said receptacle, said latch bar having a downwardly bent inner end portion, and a link pivotally connected at one end to the downwardly bent inner end portion of said latch bar and to said cover at a point located intermediate between the ends of said latch bar and adapted by its swinging movement to shift said latch bar longitudinally to move the outer end thereof underneath or clear of the rim portion of said receptacle.

1,888,700. CIRCUIT CLOSING DEVICE. HANS SIEMSBUSCH, Villa Park, Ill., assignor, by mesne assignments, to Associated Electric Laboratories, Inc., Chicago, Ill., a Corporation of Delaware. Filed Feb. 1, 1932. Serial No. 590,037. 8 Claims. (Cl. 179—27.52.)

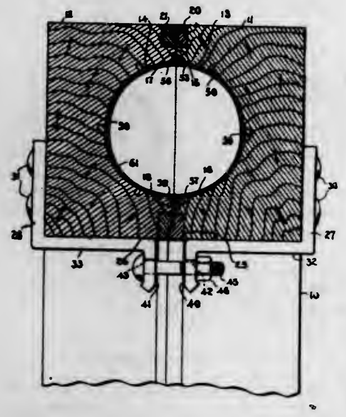


1. In an automatic switch having a wiper shaft and means for moving said shaft longitudinally in a step-by-step manner into a plurality of positions, stationary contact-spring assemblies, each including an operating member for operating the contact springs of that assembly, and a member carried by said shaft and provided with means for causing said operating members to operate their respective contact springs as said shaft is moved, said last means comprising a plurality of cams placeable in operative relation with said operating members as required to secure required operation of the contact springs of said assemblies as said shaft is moved into its various positions.

1,888,701. REFINED CLAY AND METHOD OF PRODUCING SAME. GEORGE SIMCOE, Trenton, N. J., assignor to Edgar Brothers Company, Metuchen, N. J., a Corporation of New Jersey. Filed Nov. 9, 1926, Serial No. 147,868. Renewed June 8, 1932. 14 Claims. (Cl. 252—8.)

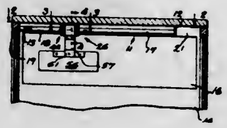
1. In the art of purifying and decolorising clay, the improvement comprising subjecting the clay to at least partial deflocculation in the presence of water and removing more or less of the insoluble impurities by gravitative settling to produce a partially purified slip, treating the slip with sulfur dioxid whereby insoluble iron compounds are converted into soluble compounds, organic discoloration is removed, and the slip strongly flocculated, and treating the slip to partially re-deflocculate the same and eliminate sulfur odors.

1,888,702. MOLD. ROBERT W. SNYDER, Akron, Ohio, assignor to The Goodyear Tire & Rubber Company, Akron, Ohio, a Corporation of Ohio. Filed Aug. 1, 1929. Serial No. 382,607. 1 Claim. (Cl. 18—35.)



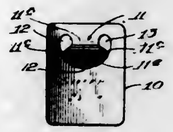
In a mold for a rubber article in which vulcanising heat is supplied to the interior of the article, said mold having a cavity for receiving the article, a metallic lining for said cavity, means for preventing dissipation of heat through said lining, said means comprising wood secured to said lining, and interlocking projections and recesses arranged respectively on said lining and said wood to retain the latter together.

1,888,703. GLARE SHIELD. WILLIAM J. SUMMERBELL, Los Angeles, Calif. Filed Oct. 9, 1931. Serial No. 567,879. 17 Claims. (Cl. 296—97.)



1. In a glare shield, a track, and a head comprising a housing encircling said track, a pair of opposed shoes disposed within said housing with said track extending between the shoes, one of said shoes engaging a face of said track, a slipper engaging the opposite face of said track, and a spring interposed between the other of said shoes and said slipper, and a shield carried by said head.

1,888,704. TAG. ARTHUR H. SWETT, Chicago, Ill. Filed Nov. 27, 1931. Serial No. 577,408. 3 Claims. (Cl. 40—20.)

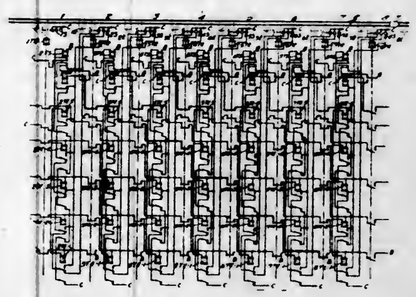


1. A tag structure comprising a body formed of relatively stiff material and an integral interlocking means formed therein being defined by a pair of comma-shaped openings formed near one edge of the body with the tails of said openings projected inwardly toward each other and connected by a slit in said tag body formed on a radius substantially the same as the radius of the outer curved walls of said openings, said arrangement providing an interlocking member having an oval-shaped head with an arcuate-shaped edge adapted to engage a complementally-shaped body edge when said interlocking member and said body are in the same plane, whereby upon insertion of a flexible object between said body and said interlocking member and movement of said interlocking member laterally over said body edge, the tag is secured to the object so that it cannot be normally removed by bodily movement of the tag away from the object.

1,888,705. ANTIOXIDANT. JAN TEPPEMA, Akron, Ohio, assignor to The Goodyear Tire & Rubber Company, Akron, Ohio, a Corporation of Ohio. Filed Mar. 20, 1928. Serial No. 263,225. 13 Claims. (Cl. 18—50.)

1. A method of treating rubber which comprises incorporating therein a compound having the following structural formula: $RN=N-R_1NH_2$, in which R and R_1 are phenyl radicals.

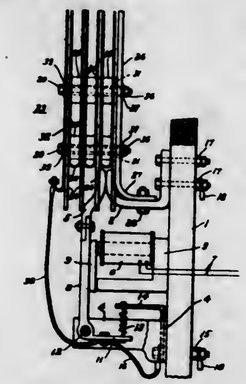
1,888,706. TRAIN SIGNALING SYSTEM. HOWARD A. THOMPSON, Edgewood, Pa., assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed Jan. 6, 1932. Serial No. 585,044. 12 Claims. (Cl. 246—53.)



1. A railway block signaling system comprising in combination, a signal at the entrance to each block adapted to give a proceed indication and at least one other more restrictive indication, a plurality of alternative controls for each signal responsive to track conditions over a different number of blocks in advance of the signal, and means responsive to the rate at which a train approaches a signal for selecting which of said alternative controls will be effective to operate the signal; the selection being such that a train travelling at any speed will receive a proceed indication if a number of blocks proportional to the speed of the train unoccupied ahead of the signal, wherein said signals are adapted to give three indications

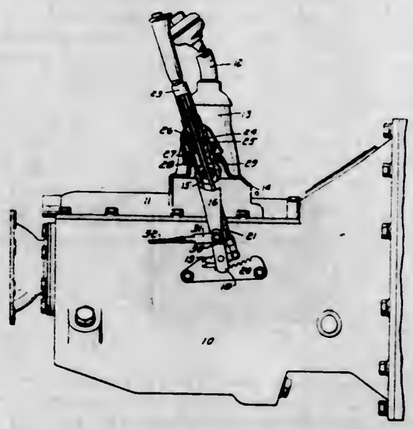
corresponding to proceed, caution and stop and wherein each of said alternative controls for each signal is adapted when selected by said speed responsive means to cause the signal to display a proceed indication when the required number of blocks in advance of the signal are unoccupied and to cause the signal to display a caution indication when less than the required number of blocks in advance of the signal are unoccupied, and means independent of said controls and of the speed of an approaching train for causing the signal to display a stop indication under certain traffic conditions.

1,888,707. CIRCUIT INTERRUPTER. FRANCIS C. TODD, Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed July 14, 1928. Serial No. 292,824. 25 Claims. (Cl. 200—144.)



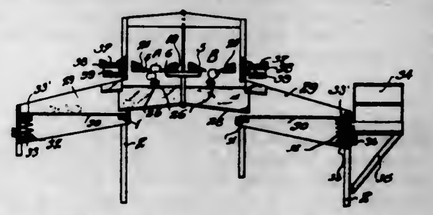
1. An arc-quenching device comprising a plurality of U-shaped members having a plurality of slots in the surfaces thereof for causing rotation of the arc.

1,888,708. BRAKE. JOHN J. WHARAM, Detroit, Mich., assignor to Ford Motor Company, Dearborn, Mich., a Corporation of Delaware. Filed Oct. 27, 1931. Serial No. 571,307. 7 Claims. (Cl. 74—89.)



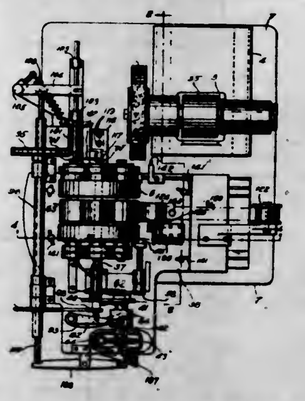
7. A hand lever construction comprising a pair of longitudinally spaced members one of which is provided with a longitudinal opening adapted to receive the adjacent end of the other member to form a telescopic connection, the elements forming said connection being non-symmetrical whereby clearance between said opening and the sides of said co-acting member is provided whereby relative movement between the members in a plane transverse to the normal load applying plane is allowed and a rigid connection between said elements in the normal load applying plane is provided, a resilient ring of rubber disposed around the outside of the outer of said telescopic members, and a shroud secured to the other of said members, said shroud extending down over said resilient ring, whereby transverse relative movement of said telescopic members is resiliently restricted.

1,888,709. FRUIT SIZING MACHINE. CHARLEY E. WHISNAND and LEO KUBOSKE, Wenatchee, Wash., assignors to Cataract Fruit Equipment Company, Yakima, Wash., a Corporation. Filed Sept. 24, 1928, Serial No. 308,023. Renewed July 27, 1932. 2 Claims. (Cl. 209—102.)



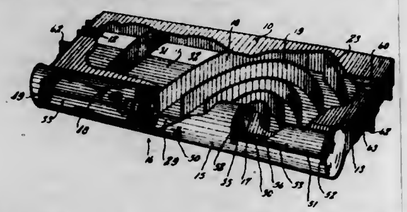
1. The combination with a pair of guide rails and means for adjustably holding the rails in divergent position, of endless belts guided in said rails and guide rollers journaled on the rails for said belts, an intermediate, lower, diverging endless rope forming gaging slots with the belts, and driving mechanism for operating said belts and rope.

1,888,710. GRINDING MACHINE. WILLIAM ARTER, Worcester, and WARREN F. FRASER, Westboro, Mass.; said Fraser assignor to Arter Grinding Machine Company, Worcester, Mass, a Corporation of Massachusetts. Filed Mar. 1, 1927. Serial No. 171,891. 18 Claims. (Cl. 51—108.)



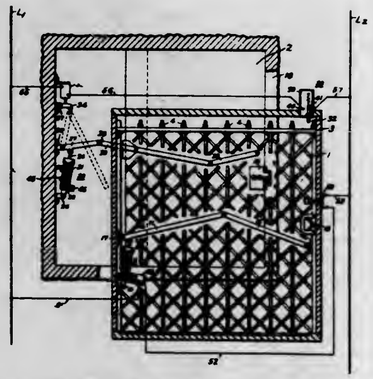
1. In a grinding machine, the combination of a turret carrying a series of work supporting chucks, a grinding wheel for acting on the work supported in said chucks, means whereby the wheel and turret may be relatively adjusted to change their angular relationship, power driven mechanism for giving said wheel an approaching and receding movement with reference to the work, mechanism for rotating said wheel, and power driven mechanism for giving said turret a traversing movement to carry the work across the face of the wheel.

1,888,711. WINDOW VENTILATOR AND SILENCER. ROLAND B. BOURNE, Hartford, Conn., assignor to The Maxim Silencer Company, Hartford, Conn., a Corporation of Connecticut. Filed Feb. 4, 1930. Serial No. 425,892. 6 Claims. (Cl. 98—94.)



1. A ventilator comprising a casing, a motor driven fan in the casing, an acoustically silenced air passage between the fan and the interior of the room, an air passage between the fan and the outer air, an adjustable shutter controlling the opening between said silenced air passage and the room, and means for preventing operation of the fan except when the shutter is open.

1,888,712. GATE AND DOOR SEQUENCE. EDGAR M. BOUTON, Park Ridge, Ill., assignor to Westinghouse Electric Elevator Company, a Corporation of Illinois. Filed Dec. 20, 1929. Serial No. 415,458. 7 Claims. (Cl. 187—52.)



1. In an elevator system, a pair of doors, means for retaining one of said doors in it open position, and means operably responsive to a closing movement of the other of said doors for operating said retaining means to release the retained door.

1,888,713. PREPARATION OF PHOSPHORUS COMPOUNDS. EDGAR C. BRITTON and HAROLD R. SLACH, Midland, Mich., assignors to The Dow Chemical Company, Midland, Mich., a Corporation of Michigan. Filed July 9, 1929. Serial No. 377,074. 16 Claims. (Cl. 23—205.)

1. A process of preparing halogen compounds of phosphorus which comprises reacting phosphorus and a halogen in a liquid medium including at least one halogen derivative of phosphorus.

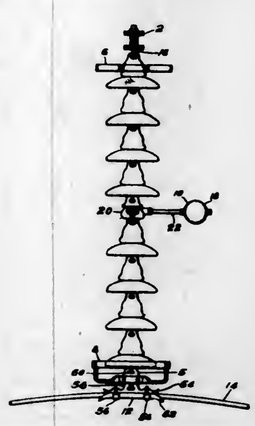
1,888,714. TWO-PART ELECTRIC-LAMP SOCKET. LEONARD ERIKSON, Malden, Mass., assignor to Erikson Electric Company, Boston, Mass., a Corporation of Massachusetts. Filed Mar. 5, 1931. Serial No. 520,261. 4 Claims. (Cl. 173—344.)

1. A two-part electric-lamp socket comprising a stationary end portion, supply-circuit terminals secured thereto, a lamp-receiving portion relatively movable with respect to said end portion and embodying lamp terminals, and a pair of resilient hinge members electrically and



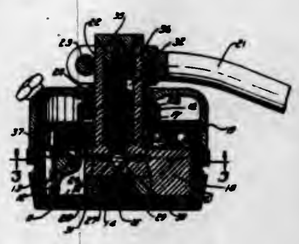
mechanically connecting the terminals of the said end portion to the corresponding terminals of said lamp-receiving portion.

1,888,715. TRANSMISSION-LINE DEVICE. THEODORE B. FLEMING, Latrobe, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Nov. 26, 1930. Serial No. 498,426. 6 Claims. (Cl. 173—318.)



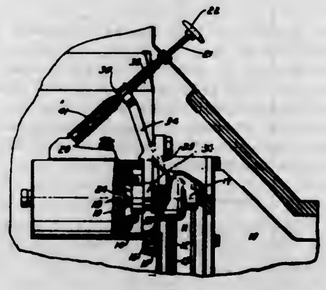
1. In combination, an insulator and an electrostatic-field control element mounted to move about the axis thereof.

1,888,716. HYDRAULIC SHOCK ABSORBER. HENRY FORD, Dearborn, Mich., assignor to Ford Motor Company, Dearborn, Mich., a Corporation of Delaware. Filed June 11, 1930. Serial No. 460,312. 2 Claims. (Cl. 188—89.)



1. In a fluid shock absorber having a compression chamber and an expansion chamber and a passageway connecting said chambers, the actuation of the shock absorber forcing the fluid to flow from the compression chamber through the passageway into the expansion chamber, a valve cylinder in communication with said passageway and a spring actuated piston type relief valve disposed in said cylinder and reciprocally mounted so that in its extended position said flow is resiliently obstructed and in its contracted position the passageway is unobstructed, said cylinder in which said piston is mounted having a tapered longitudinal slot therein forming a by-pass around said piston, said slot being substantially covered by the piston when it is extended by its spring and progressively uncovered thereby as the piston is reciprocated against this spring pressure whereby a cushioning effect will result in the closing of said relief valve to prevent chattering thereof.

1,888,717. STARTING GEAR. HENRY FORD, Dearborn, Mich., assignor to Ford Motor Company Dearborn, Mich., a Corporation of Delaware. Filed Sept. 8, 1930. Serial No. 480,446. 3 Claims. (Cl. 74—7.)



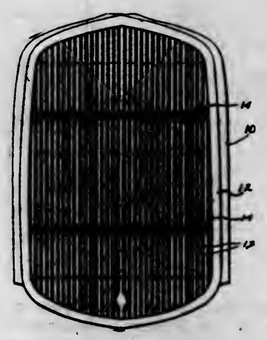
1. In the device of the character described, an engine flywheel having a spiral toothed ring gear formed thereon, a starting motor upon the driving shaft of which a spiral toothed pinion is rotatably and reciprocally mounted so as to mesh with said ring gear when reciprocated to one of its positions, a switch mounted upon said starting motor having a reciprocable rod extending radially therefrom to actuate same, a lever pivotally mounted on said motor having one end disposed adjacent to said rod and the other connected to said pinion whereby oscillation of said lever will reciprocate said pinion into mesh with said ring gear, and a compression spring disposed around said rod having its outer end secured thereto and its inner end abutting said lever, whereby upon depressing said rod said pinion will be reciprocated into mesh with the ring gear and upon said engine starting under its owen power said pinion and lever will be returned to their inoperative positions independently of the position of said rod.

1,888,718. RELAYING SYSTEM. ERICH FRIEDLÄNDER, Spandau, near Berlin, Germany, assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Aug. 30, 1929, Serial No. 389,870, and in Germany Sept. 26, 1928. 11 Claims. (Cl. 175—294.)



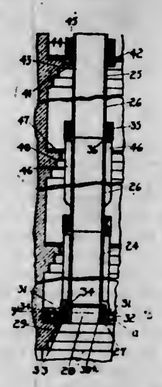
1. In combination with a polyphase circuit, means responsive to an unbalanced current condition on the phases of said circuit comprising a relay, and means for energising said relay in accordance with the unbalance between rectified currents derived from said circuit respectively proportional to the phase currents thereof.

1,888,719. RADIATOR SHIELD CONSTRUCTION. JOSEPH GALAMB, Detroit, Mich., assignor to Ford Motor Company, Dearborn, Mich., a Corporation of Delaware. Filed Apr. 1, 1931. Serial No. 526,823. 11 Claims. (Cl. 193—54.)



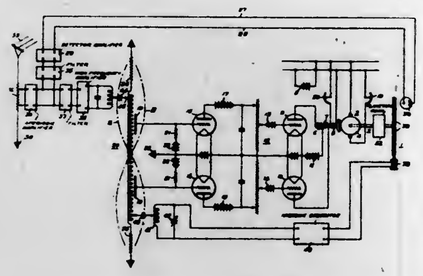
1. In a radiator shield, reinforcing members extending along two opposite edges of the radiator, a plurality of tabs extending outwardly from each of said members, and a plurality of U shaped strips extending between said members and straddling one of the tabs thereon, said strips being secured to said tabs to thereby form a unitary structure.

1,888,720. RECUPERATIVE FURNACE CONSTRUCTION. JEROME R. GEORGE, Worcester, Mass., assignor to Morgan Construction Company, Worcester, Mass., a Corporation of Massachusetts. Filed May 27, 1930. Serial No. 456,206. 5 Claims. (Cl. 263—20.)



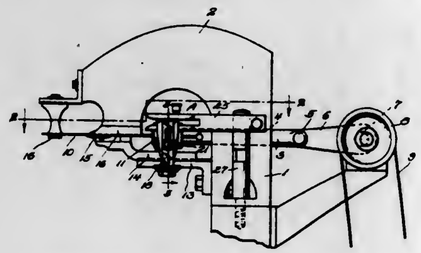
2. In a furnace recuperator of the class described, an upper plate and a lower plate, a tube with its lower end resting on said lower plate in registry with an aperture therein, and with its upper end telescopically received in an aperture of said upper plate, sand or like material on the surface of said lower plate to provide a seal in surrounding relation to the lower end of said tube, and means for detachably interlocking said tube with said lower plate to prevent axial displacement of the lower end of said tube, whereby upon recurring expansions and contractions of said tube, its frictional engagement with the aperture of said upper plate is rendered ineffective to so space the lower tube end from the lower plate as ultimately to destroy the seal provided by said material.

1,888,721. CONTROL SYSTEM. THADDEUS R. GOLDSBOROUGH, Forest Hills, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Apr. 11, 1929. Serial No. 354,254. 11 Claims. (Cl. 250—2.)



1. A synchronizing system comprising, in combination, a plurality of sources of alternating potentials, means for impressing said potentials on a resonance-wave coil, and means, coupled to said wave-coil, for indicating a lack of synchronism of said impressed frequencies.

1,888,722. HEEL-SEAT TRIMMING MACHINE. HIRAM GORDON, Columbus, Ohio. Filed Sept. 16, 1930. Serial No. 482,227. 6 Claims. (Cl. 12—31.5.)



1. A machine for use in the manufacture of shoes having a cutting blade for severing the waste stock material transversely at a point indicating the breast line of the heel of the shoe following an edge beveling operation on the sole around the heel area thereof, said machine including a reciprocatory blade holder, means for securing the blade to said holder in a substantially vertical position with its cutting edge at the lower end thereof, a stationary work support having a shoe engaging edge disposed horizontally and located immediately to the rear of said blade, said edge being formed to be inserted between the sole of the shoe and the previously cut waste stock thereof which stock will thus be positioned above said edge, means for reciprocating said blade in a horizontal plane, whereby upon the movement of the shoe along said edge in a direction towards said blade, the latter will sever said waste stock material.

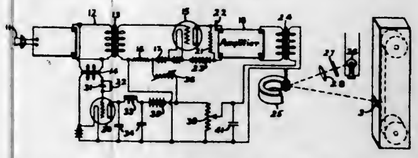
1,888,723. LAMP SUPPORTING DEVICE. GEORGE D. GOULD, Chicopee, Mass. Filed Feb. 1, 1932. Serial No. 590,031. 1 Claim. (Cl. 240—52.1.)

The combination in a device of the class described of, an attaching unit and a lamp socket receiving unit arranged for relative swinging movements, said attaching unit including a body member having a lower portion and a portion extending upwardly therefrom the extremity of which is turned outwardly and then downwardly to form a curving hook, a member having a lower portion contiguous to one side of the lower portion of the body member and a free end portion extending upwardly and outwardly therefrom the extremity of which yieldingly bears against the inner side of said hook and another spring-like loop-member having a lower portion contiguous to the other side of the lower portion of the body member and a free-end portion which is bent outwardly and downwardly from said lower portion to form with



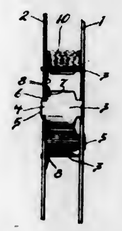
said lower portion a loop having relatively yieldable spaced sides and the inner faces of said sides being provided with sockets for receiving a ball member therebetween, the lower contiguous portions of said members being secured together, said lamp socket receiving member having relatively yieldable spaced socket embracing arms and a ball attached thereto which is receivable in the sockets of said loop member.

1,888,724. SOUND RECORDING AND REPRODUCING SYSTEM. CLINTON R. HANNA, Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Nov. 23, 1928. Serial No. 321,365. 12 Claims. (Cl. 179—100.3.)



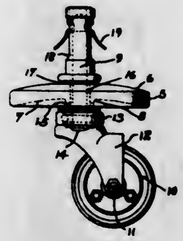
1. In a sound-recording system, an amplifier, including a vacuum tube, means for impressing a potential varying at sound frequency upon the grid thereof, means controlled by the intensity of the sound for impressing a slowly varying potential upon said grid, a recorder including a member moved by the output of said amplifier and means responsive to the said slowly varying potential for controlling the mean position of said member.

1,888,725. FILM REEL. ALBERT S. HOWELL, Chicago, Ill., assignor to The Bell & Howell Company, Chicago, Ill., a Corporation of Illinois. Filed Aug. 3, 1928. Serial No. 297,296. 5 Claims. (Cl. 242—74.)



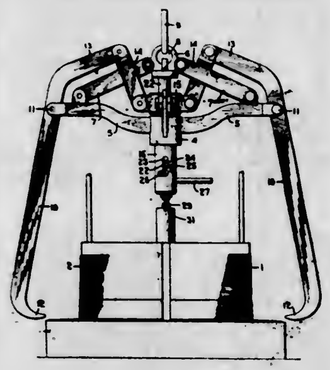
1. In a film reel the combination of spaced side plates and a hub extending therebetween, said hub having a portion thereof extending to one of said plates and being spaced therefrom about said portion, and a spring member provided with an opening engaged on said portion and adapted to engage a film on said hub edgewise for frictional engagement thereof.

1,888,726. GUARD WHEEL. FRANK J. JARVIS and NELSON L. JARVIS, Palmer, Mass., assignors to Jarvis and Jarvis, Inc., Palmer, Mass., a Corporation of Massachusetts. Filed Dec. 24, 1930. Serial No. 504,582. 3 Claims. (Cl. 16—18.)



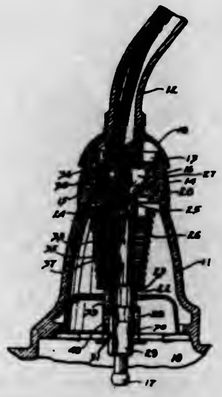
1. In a device of the character described for use with a caster bracket and caster stem a guard wheel for rotatable mounting on the stem, said wheel having a relatively hard non-metallic central portion with a central bearing opening to fit on the stem and a projecting bearing boss surrounding the opening on the lower face of said central portion, and a relatively soft non-metallic annular rim portion surrounding said central portion, the upper surface of the central portion and rim being a continuous convex curved surface and the lower surface thereof being a continuous concave curved surface except for the said projecting bearing boss.

1,888,727. STRIPPER FOR REMOVING COILS OF WIRE FROM A DRAWING HEAD. CHARLES D. JOHNSON, Worcester, Mass., assignor to Johnson Steel & Wire Company, Inc., Worcester, Mass., a Corporation of Massachusetts. Filed Feb. 9, 1931. Serial No. 514,509. 4 Claims. (Cl. 294—106.)



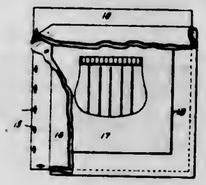
1. A stripper for stripping wire bundles from a drawing block, said stripper comprising a supporting frame having a central hub and radially-extending arms, stripper arms pivotally mounted to said radially-extending arms, each stripper arm having at its lower end an inwardly-directed finger, a sleeve member extending through and slidably mounted in said hub, links connecting the upper ends of said stripper arms to said sleeve, movement of the sleeve through the hub swinging the stripper arms from inoperative to operative position, and means to lock said arms in their operative position.

1,888,728. TRANSMISSION. FRANK JOHNSON, Detroit, Mich., assignor to Ford Motor Company, Dearborn, Mich., a Corporation of Delaware. Filed Mar. 16, 1931. Serial No. 522,876. 4 Claims. (Cl. 74—89.)



1. In a transmission, a housing having a shift lever universally mounted therein, a washer disposed around said lever so as to be permitted a limited rocking movement upon the housing, a second washer disposed around one end of said lever, and a spring interposed between said washers whereby the shift lever is resiliently urged into its mounting and the distortion of said spring due to shifting the lever is minimized.

1,888,729. DEVICE FOR UPHOLSTERING VEHICLE DOORS. EMIL B. G. LEHMER, Detroit, Mich., assignor to Ford Motor Company, Dearborn, Mich., a Corporation of Delaware. Original application filed Nov. 19, 1930, Serial No. 496,767. Divided and this application filed Apr. 8, 1932. Serial No. 604,049. 2 Claims. (Cl. 45—138.)

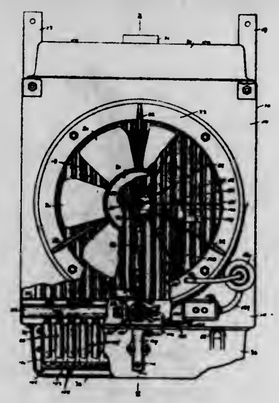


1. An upholstery panel consisting of, a cardboard reinforcing panel having a section of upholstery fabric overlapping its edges, said fabric being secured thereto by a stitched seam spaced from the edges of said panel, and said panel having a plurality of fastener clip receiving openings disposed therein between its periphery and said seam to thereby allow the insertion of the clips after the assembly of the fabric on the panel.

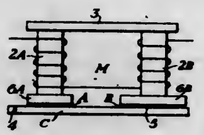
1,888,730. HEATING DEVICE. RICHARD D. MADISON, Buffalo, N. Y., assignor to Buffalo Forge Company, Buffalo, N. Y., a Corporation of New York. Filed Sept. 29, 1930. Serial No. 485,028. 12 Claims. (Cl. 126—110.)

1. A heater comprising heating means, a source of heat for the heating means, a rotary fan for forcing air over

said heating means and for creating a whirling stream of air on its pressure side, and means located on the pressure side of the fan and adjacent thereto for controlling the source of heat by means of the whirling action of the stream of air.

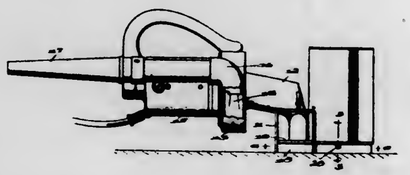


1,888,731. ELECTROMAGNETIC DEVICE. PAUL N. MARTIN, Swissvale, Pa., assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed Aug. 28, 1932. Serial No. 630,076. 1 Claim. (Cl. 175—336.)



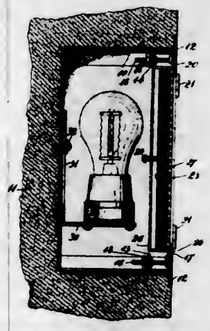
An electromagnetic device comprising an electromagnet having two poles of different areas, and an armature coacting with said poles and pivotally mounted on an axis which is located adjacent the outer edge of the pole of smaller area.

1,888,732. APPARATUS FOR INSECTICIDE DUSTING RUGS, UPHOLSTERY, AND CLOTHING. JOHN R. MATHES, Dover, N. H., assignor to The Expello Corporation, Dover, N. H., a Corporation of New Hampshire. Filed Sept. 27, 1930. Serial No. 484,909. 14 Claims. (Cl. 43—124.)



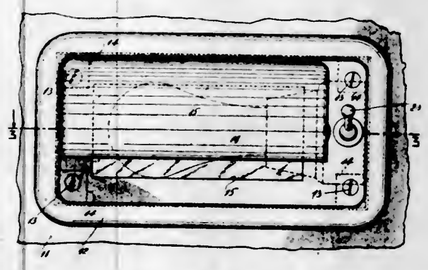
1. In combination with a differential pressure device, a powder dusting attachment therefor comprising a hollow casing detachably connected with the intake of said device, said casing being of varying cross-sectional area to provide a region of concentrated suction, and means for supplying powder to said casing at the region of concentrated suction.

1,888,733. LIGHTING UNIT. ANTHONY L. MCCABE, Newtonville, Mass., assignor to Erikson Electric Company, Boston, Mass., a Corporation of Massachusetts. Filed Apr. 6, 1931. Serial No. 527,861. 2 Claims. (Cl. 240—73.)



1. A lighting unit comprising in combination a casing, a lamp-supporting bracket disposed within said casing, a front for said casing, lugs secured to the interior of said casing, each of said lugs having a cupped aperture, screws passing through said front and through said apertures, a ball-nut having threaded engagement with each of said screws and taking into the apertures in said lugs, respectively and a door hinged to said front and overlying the heads of said screws.

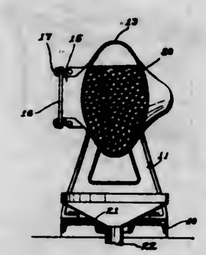
1,888,734. LIGHTING UNIT. ANTHONY L. MCCABE, Newtonville, Mass., assignor to Erikson Electric Company, Boston, Mass., a Corporation of Massachusetts. Filed May 15, 1931. Serial No. 537,662. 1 Claim. (Cl. 240—1.)



A lighting unit comprising in combination a wall box, a face-plate having an elongated opening therein, means for securing said face-plate to said wall box, a visor constructed and arranged to reflect the light downwardly when in its uppermost position and upwardly when in its lowermost position, said visor being co-extensive longitudinally with said opening and with the greater portion thereof transversely, means pivotally connecting said visor to the exterior of said face-plate substantially midway between the upper and lower limits of said opening, and means for maintaining said visor in its uppermost and lowermost positions.

1,888,735. PAINT GRINDING MACHINE. DENNIS A. MCKINNEY, Detroit, and LESLIE A. MCLEAN, Highland Park, Mich., assignors to Ford Motor Company, Dearborn, Mich., a Corporation of Delaware. Filed Mar. 6, 1930. Serial No. 433,534. 1 Claim. (Cl. 83—9.)

In a paint grinding machine, a U shaped frame member having a pair of aligned bearings therein, a hollow container having trunnions formed on the ends thereof adapted to rotate horizontally in said bearings, the opposite ends of said container being formed having elliptical cross sections placed at substantially right angles to each other with the major axes of said elliptical sections being equal, an opening in said container adjacent to one end thereof and aligned with the major axis of said end, a strainer



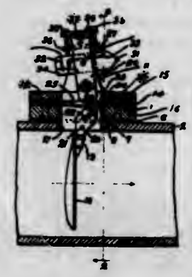
adapted to be detachably secured over said opening, a cover plate adapated to be secured over said opening, and a plurality of metal balls in said container, the interstices between said balls comprising the space occupied by the material being ground, whereby upon rotation of said container both longitudinal reciprocation and tumbling action are produced.

1,888,736. REFRESHMENT TRAY. PHOCION S. PARK, Houston, Tex. Filed Apr. 15, 1930. Serial No. 444,378. 6 Claims. (Cl. 45—51.)



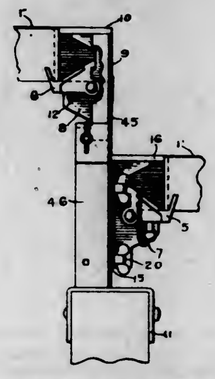
2. A serving tray for automobiles including a tray portion, a bracket extending from one end thereof, a slidable bracket at the other end, said brackets having a yoke pivoted at the ends thereof and adapted to engage against the inside of the automobile body to support said tray and contents.

1,888,737. FLUID FLOW INDICATOR. LOUIS E. RICHMOND, Shelby, Ohio, assignor to The Autocall Company, Shelby, Ohio, a Corporation of Ohio. Filed Nov. 20, 1931. Serial No. 576,321. 5 Claims. (Cl. 200—81.)



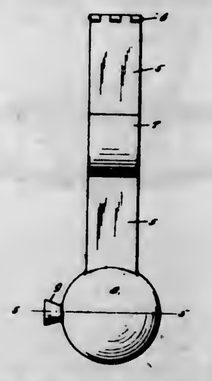
1. A fluid flow indicator comprising the combination of a fluid conduit, a magnet oscillatably mounted on the exterior of said conduit, and having its poles disposed in proximity thereto, a cylindrical armature for said magnet movably mounted on the interior of said conduit and a non-magnetic partition positioned in the wall of said conduit separating said magnet and said armature, and said armature being magnetically held against and adapted to roll across said partition.

1,888,738. ADJUSTABLE SHORE. HENRY W. ROOS, Cincinnati, Ohio. Filed Mar. 13, 1930. Serial No. 435,450. 11 Claims. (Cl. 25—131.5.)



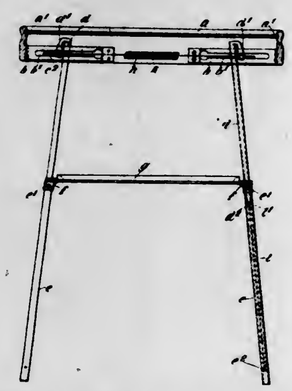
9. A shore for supporting floor molds in different horizontal planes, comprising a support, a top on said support arranged in a horizontal plane and adapted to directly engage a slab to be formed in the higher plane, a bracket on said support for supporting a form for the mold in the plane of said top, a second bracket mounted on said support, a top on said second bracket arranged in a different horizontal plane from the top on the support and adapted to directly engage a slab to be formed in the lower plate and means on said second bracket for supporting a form for the mold in the lower plane.

1,888,739. ICE CREAM DISHER. LEO I. SANDERS, Estherville, Iowa. Filed Aug. 1, 1931. Serial No. 554,541. 1 Claim. (Cl. 107—48.)



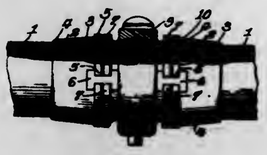
A pair of elongated members having adjacent ends hingedly connected together for permitting said members to be brought into parallel contacting relation and the other ends having formed therein cup like members in opposed relationship, said cup like member being formed with registering notches at the edges thereof and opposed flaring sections projecting outwardly therefrom adjacent the notches and defining a gradually restricted entrance opening to the interior of said members, the elongated members being formed with outwardly offset arcuate portions intermediate their ends defining finger grips.

1,888,740. AUTOMATICALLY EXTENSIBLE AND COLLAPSIBLE TRAY. KARL OSTEN SCHAUMAN, Hampton Wick, England. Filed Jan. 7, 1931, Serial No. 507,204, and in Great Britain Sept. 15, 1930. 3 Claims. (Cl. 45—11.)



1. A combined serving tray and table comprising a tray element, a pair of rods extending transversely across the tray at the under side and near the ends thereof and connected with the tray for inward and outward movement relative to each other, yieldable means tending constantly to move said rods relatively inward, a plurality of legs one at each end of each rod, said legs being pivoted at their upper ends to said rods for movement between folded positions underlying the tray element and extended tray element supporting positions, members slidably mounted on said legs, and a leg spreader element pivotally connected with said members, whereby the spreader element is movable upwardly along the legs to lie closely adjacent to the tray element when the legs are folded, and downwardly along said legs when the same are extended to hold the lower end portions of the legs against both inward and outward movement relative to each other.

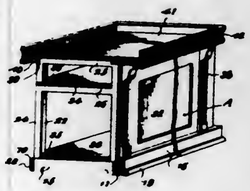
1,888,741. HOSE COUPLING. JOHN C. SCHELLIN, Wooster, Ohio. Filed July 19, 1932. Serial No. 623,319½. 2 Claims. (Cl. 285—84.)



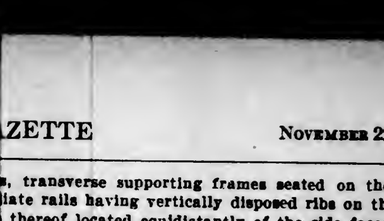
1. In a hose coupling, the combination with the tail section of the coupling, a tapered shank integral therewith, a rim bordering said section adjacent the tapered shank, a tapered sleeve spaced apart a limited distance from said tapered shank, a rim bordering said tapered sleeve adapted to abut against the rim on said tapered shank when said sleeve is forcibly drawn over a hose terminus interposed between them, and means, including a key member adapted to engage said abutting rims and hold them in juxtaposition, substantially as set forth.

1,888,742. STORE COUNTER. LOUIS SCHUMM, 3d, La Porte, Ind., assignor to Superior Wood Products Corporation, La Porte, Ind., a Corporation of Indiana. Filed Aug. 15, 1930. Serial No. 475,541. 5 Claims. (Cl. 45—140.)

1. In a store counter, a longitudinally extending base rail, transverse end rails, and intermediate transverse rails, transverse supporting frames seated on the intermediate rails having vertically disposed ribs on the front face thereof located equidistantly of the side faces of the frames, a front finishing strip connected with the base rail and extending above the upper face thereof and defining in conjunction therewith a seat, front panels having their lower edges received in said seat and their adjacent edges engaging the opposite sides of the rib and the front faces of the transverse frames, and finishing and securing molding strips engaging over the meeting edges of the panels and ribs.

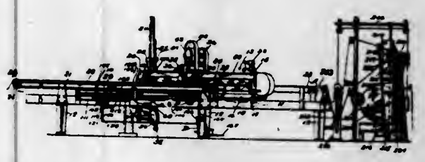


1,888,743. SEDIMENTATION APPARATUS. CHARLES H. SCOTT, Edgewater, Colo., assignor to The Dorr Company, Inc., New York, N. Y., a Corporation of Delaware. Filed Feb. 23, 1932. Serial No. 594,441. 10 Claims. (Cl. 210—55.)



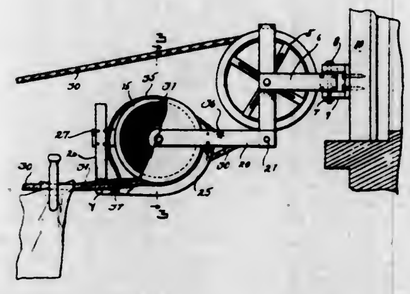
1. A sludge discharge operating mechanism for a sedimentation tank comprising an upstanding pier in the tank, a flanged ring rotatably mounted on said pier, a drum depending from said ring, a motor supported from said pier, a driving gear connection between said motor and said ring for rotating said ring and its depending drum, and sludge rakes operated by rotation of said drum.

1,888,744. BIAS CUTTING AND FABRIC STRIPPING MACHINE. FLORIAN J. SHOOK, Akron, Ohio, assignor to Selberling Rubber Company, a Corporation of Delaware. Filed Aug. 24, 1929. Serial No. 388,195. 26 Claims. (Cl. 164—76.)



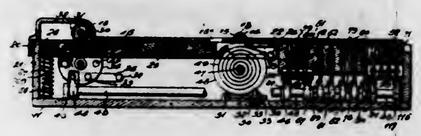
1. A bias cuting machine comprising, in combination, means for advancing fabric to cutting position, a rotary power-driven cutter movable transversely of the fabric to sever the same into successive bias-cut strips, and power mechanism for reciprocating the cutter with a varying speed which accelerates from the beginning to the middle of the cutting stroke, and decelerates from the middle to the end of said stroke.

1,888,745. CLOTHESLINE PROTECTING DEVICE. ROBERT SONNTAG, Jersey City, N. J. Filed June 17, 1931. Serial No. 545,114. 1 Claim. (Cl. 68—3.)



In a structure of the class described, a frame having a pulley mounted thereon, a second frame in alignment with said first mentioned frame having spaced parallel side members pivoted to the frame of said clothesline pulley, a reel mounted between the spaced parallel side members of said second named frame, a tape trained about said reel, and a guide extending in superposed relation to the tape trained about said reel and having one end thereof pivoted to the second named frame and having the other end thereof provided with a loop receiving said tape, said guide being positioned between the spaced parallel side members of said second named frame.

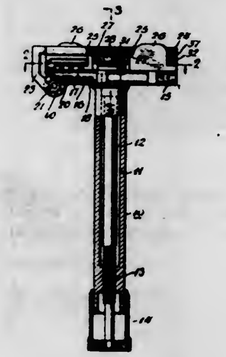
1,888,746. MACHINE FOR PERFORATING TRANSFER SLIPS. HATTIE R. SPECHT, Norfolk, Va. Filed May 5, 1930. Serial No. 449,920. 4 Claims. (Cl. 164—86.)



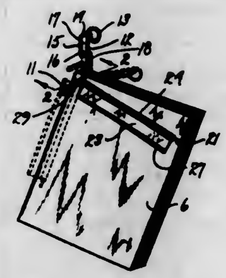
1. In a device of the class described, a plurality of groups of punches, cam-operating members for selectively advancing a punch from each group into operative position, means for giving each group of punches an operative stroke, a common actuating element for said last named means, a separate group of punches and periodically operating means for positioning one of these punches for an operative stroke, said means being operatively connected to said common actuating element.

1,888,747. RAZOR. HARRY SWAN, New York, N. Y. Filed Apr. 28, 1932. Serial No. 607,905. 28 Claims. (Cl. 30—12.)

1. In a safety-razor of the double edged flexible blade type, a cap supporting member, a cap rotatably mounted with respect to said member, a guard having an operative position with respect to said member, cap rotating means, and a member having a given path of movement with respect to said cap supporting member engageable successively with the cap rotating means and with said cap for first rotating the cap into blade clamping position with respect to said guard and then holding the cap in said position.



1,888,748. COMBINATION BOOK HANGER AND ADVERTISING HOLDER. JOSEPH H. THORNTON, Spokane, Wash. Filed Mar. 28, 1931. Serial No. 525,957. 3 Claims. (Cl. 45—58.)

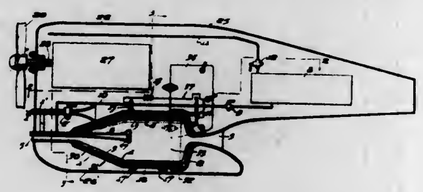


1. A combination book hanger and advertising holder comprising a pair of extended arms disposed in parallel spaced relation and adapted to receive a book therebetween, an annular loop and a rectangular loop for the upper portion of the hanger adapted to serve as suspension and finger grasp means respectively, an offset portion transversely disposed at one end of said arms adapted to pivotally support a book by passing same through a hole therein, and a deflected finger portion disposed below said offset portion adapted to engage the rear edge of a book supported by the device whereby same is prevented from swinging about its pivotal support.

1,888,749. REACTIVE COMBUSTION ENGINE. KENNETH M. URQUHART, Norfolk, Va. Filed Sept. 5, 1930. Serial No. 480,010. 3 Claims. (Cl. 244—18.)

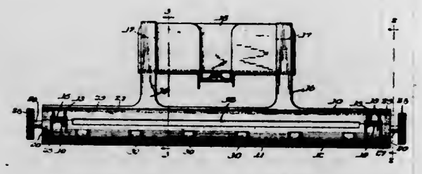
2. In a combustion engine for propelling airplanes a fuel tank and a combustion chamber, separate means

effective according to the speed of travel of the airplanes for introducing separate charges of compressed air to said fuel tank and to said combustion chamber, said combus-



tion chamber having an exhaust opening for passing the products of combustion therefrom, whereby the reaction of the exhausting products of combustion propels the vehicle.

1,888,750. LINE READING DEVICE. ELMER M. WANGEN, Duluth, Minn. Filed July 18, 1932. Serial No. 623,252. 9 Claims. (Cl. 120—30.)



1. In a device of the character described, in combination, a sectional shield, means pivotally securing the sections of the shield together at the ends, an elongated slot in the shield, and a roller rotatably supported from one section of the shield.

1,888,751. CORRUGATED SHEET PILING. JULIUS R. WEMLINGER, New York, N. Y. Filed Jan. 20, 1930. Serial No. 422,155. 1 Claim. (Cl. 61—60.)



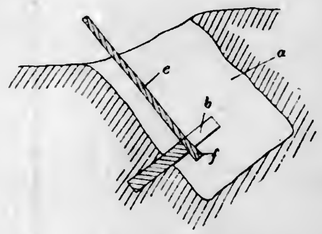
Corrugated sheet piling having the marginal corrugations of lesser radius than those of the main body, and interlocking clips, having stiffening ribs on their backs, secured to the body adjacent one of the marginal corrugations, as and for the purpose described.

1,888,752. SHEET PILING. JULIUS R. WEMLINGER, New York, N. Y. Filed Nov. 21, 1930. Serial No. 497,319. 1 Claim. (Cl. 61—60.)



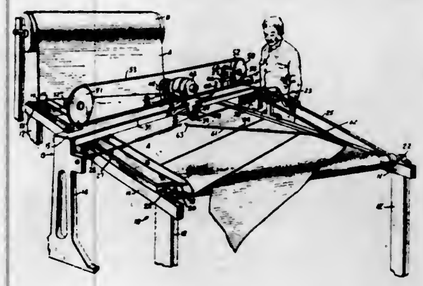
Corrugated sheet piling having interlocking clips punched out of the corrugation next to one of the marginal corrugations.

1,888,753. METHOD AND MEANS FOR ANCHORING THE CABLE ENDS OF SUSPENSION BRIDGES. GEORG ZAPF, Cologne, Germany, assignor to Felten & Guilleaume Carlswerk Actien-Gesellschaft, Cologne-Mulheim, Germany. Filed Mar. 25, 1931, Serial No. 525,299, and in Germany Mar. 22, 1930. 1 Claim. (Cl. 14—21.)



An anchoring device for the terminals of suspension bridge cables comprising a plate having a part embedded in the corner of an angular shaped savity formed in a rock, the plate bridging the space between the two sides of the cavity, portions of the side edges of the plate being embedded in the side walls of the cavity and spaced a distance from its back wall, the plate extending into the cavity, the extended portions having slots therein and holes communicating with the slots, said holes being spaced from any of the walls of the cavity, the cable terminals being passable through the slots into the holes and having enlargements thereon engaging the plate to prevent withdrawal of the terminals from the holes.

1,888,754. BIAS CUTTING MACHINE. HARRY S. ALEXANDER and FRED B. PFEIFFER, Akron, and JOHN W. WHITE, Barberton, Ohio, assignors to Seiberling Rubber Company, a Corporation of Delaware. Filed June 15, 1928. Serial No. 285,555. 20 Claims. (Cl. 164—76.)

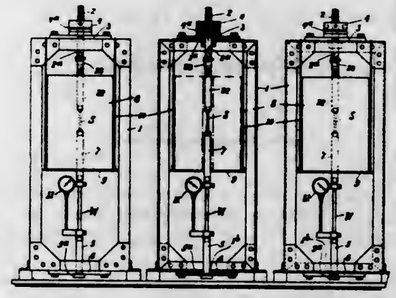


1. A bias cutting machine comprising a conveyor operable at will for advancing fabric step by step any desired amount from a source of supply to a cutting position, a carriage movable transversely back and forth over the fabric independently of the conveyor feed and intermediate the advancing steps thereof, and a power-driven rotary cutter mounted on said carriage and arranged to sever the fabric into successive bias-cut strips.

1,888,755. DETERMINING THE SAFE WORKING STRESS OF METALS AT ELEVATED TEMPERATURES. WILLIAM BARR, Hamilton, and WILLIAM EDWARD BARDGETT, Glasgow, Scotland, assignors to Colvilles Limited, Glasgow, Scotland. Filed Oct. 8, 1931. Serial No. 566,754. 6 Claims. (Cl. 265—12.)

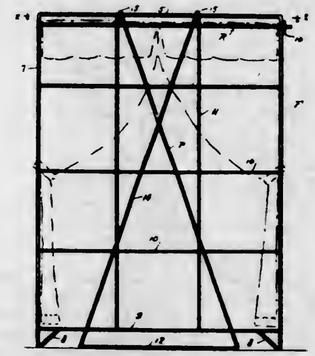
1. A method of determining the safe working stress of metals at a selected temperature, which consists in

subjecting specimens of a metal while at said temperature to different initial stresses, allowing said stresses to decrease under the creep of the specimens themselves for a selected period of time, ascertaining the different creep



values at the end of said period, and evaluating the safe working stress of the metal at said temperature from the relationship between said values and the corresponding initial stresses.

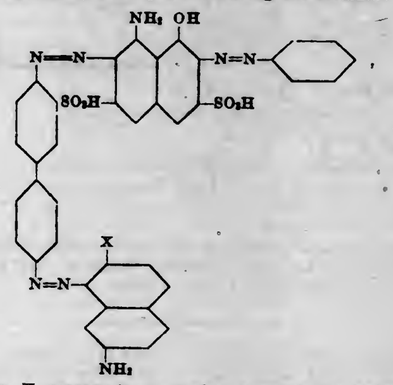
1,888,756. CURTAIN DISPLAY RACK. MORRIS BROWNSTEIN, Los Angeles, Calif. Filed Nov. 10, 1931. Serial No. 574,201. 1 Claim. (Cl. 211—161.)



A rack of the class described including, in combination, a frame, a prop swingably mounted on the frame, and a rod across the upper portion of the frame, said frame comprising an upper cross rod merging into depending side rods which terminate in upwardly and inwardly inclined extensions of relatively short length and a bottom cross rod between the side rods adjacent the terminals of the extension, and additional cross rods between the upper and lower cross rods and additional vertical rods between the side rods, said prop being formed from a rod bent to provide a base portion having sides rising therefrom and crossing each other intermediate their ends and terminating in eyes circumjacent the top rod of the frame, said first mentioned rod being fixed to one of the side rods and having its free end engageable in a hook on the other side rod.

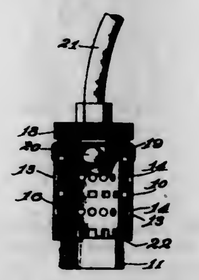
1,888,757. BLACK TRISAZO DYESTUFFS AND THEIR PRODUCTION. ACHILLE CONZETTI, Basel, Switzerland, assignor to the Firm J. R. Geigy S. A., Basel, Switzerland. Filed Dec. 30, 1931, Serial No. 584,008, and in Germany Jan. 16, 1931. 3 Claims. (Cl. 260—74.)

3. The hereinbefore described trisazo dyestuffs from a combination of a substitution product of 2-aminonaphthalene containing in one of positions 6 and 7 an amino or hydroxyl group, but containing no sulphonic acid group, with a diazo compound obtained by means of a monodiazo compound and a monoazodyestuff from a 4 : 4'-tetrazoidiphenyl and 1-amino-8-hydroxynaphthalene-3 : 6-disulphonic acid, said dyestuffs having the formula:



wherein X represents an amino group or a hydroxyl group, and dyeing cotton, wool, artificial silk, silk and mixed fabrics thereof deep greenish-black to bluish-black shades, being completely fast to acids and alkalies.

1,888,758. ATTACHMENT FOR AN INTERNAL COMBUSTION ENGINE. CHARLES J. COSTELLO, Chicago, Ill., assignor to George H. Meiser, Chicago, Ill. Filed Dec. 6, 1930. Serial No. 500,624. 3 Claims. (Cl. 277—61.)

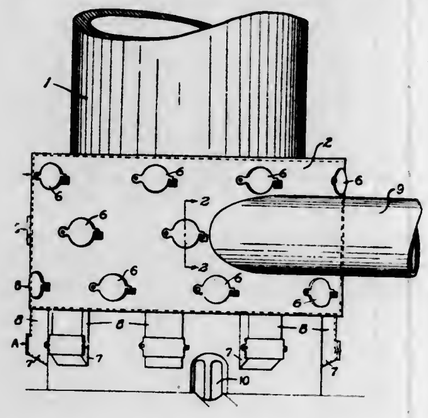


1. A device of the character described including a casing adapted for communication with the interior of a cylinder of an internal combustion engine, said casing having a side opening to the atmosphere, a removable cap for said casing carrying an outlet valve, and a valve within said casing for said side opening which may be removed from said casing when said cap is removed.

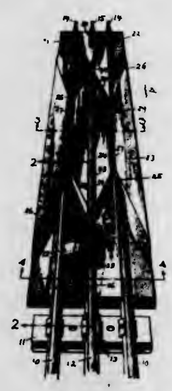
1,888,759. METHOD OF OPERATING A CUPOLA FURNACE. VOTAW S. DURBIN, St. Louis, Mo. Filed May 4, 1931. Serial No. 534,756. 6 Claims. (Cl. 266—30.)

1. The method of operating a cupola furnace which consists in first running a heat in conventional manner,

then closing tuyères of the furnace employed in running said heat, and without removing the remaining slag, running successive heats, and from time to time during the running of the heats supplying blasts to said furnace at successively higher points therein.



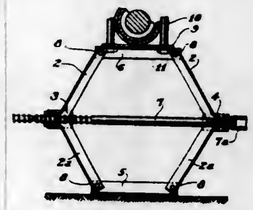
1,888,760. SELF-RAILING TRACKWAY. HARRY BUTLER FLOWER, Bayville, N. Y. Filed May 18, 1932. Serial No. 611,999. 8 Claims. (Cl. 104—264.)



1. A self-railing trackway construction, comprising an interrupted rail end section at each side, upstanding opposite side sections each having a straight inner edge alining with said end section and an inclined edge converging with the adjacent end section, and with a wheel flange groove between the end and side sections, and an upstanding middle section spaced from the rails and having diverging opposite inclined edges each converging with the adjacent end section.

1,888,761. LIFTING JACK. CHARLES A. FOYER, Cleveland Heights, Ohio. Filed Jan. 16, 1931. Serial No. 509,071. 3 Claims. (Cl. 254—126.)

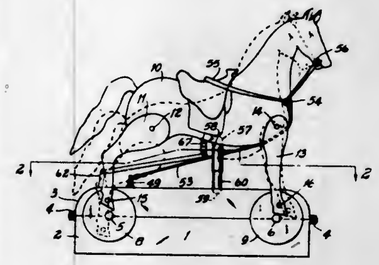
1. A jack for vehicles and the like comprising a flat upper base to be secured to a vehicle and having a longitudinal recess on its under side; a flat lower base having a similar recess to cooperate herewith; double toggle arms having an aggregate length in excess of the vertical movement of said jack and pivoted at the ends of said upper and lower bases, one middle joint of said toggles being bored and threaded for engaging a screw having a blank end passing through the opposite middle joint, means for rotating said screw whereby the toggle arms may be raised or depressed and means for preventing said arms from attaining a vertical position.



1,888,762. ELECTRICAL ELEMENT AND METHOD OF PRODUCING THE SAME. WILLIAM C. GEER, Akron, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y., a Corporation of New York. Filed Apr. 7, 1923. Serial No. 630,596. 1 Claim. (Cl. 201—75.)

An electrical element comprising a vulcanized intimate mixture of 80 parts of a hard rubber compound and 20 parts by weight of graphite.

1,888,763. MECHANICAL HOBBYHORSE. JAMES OTTO HAHS, Sikeston, Mo. Filed Nov. 11, 1931. Serial No. 574,303. 9 Claims. (Cl. 272—52.)



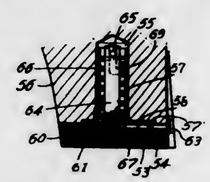
1. In a device of the class described, in combination with a base enclosing driving mechanism, two pairs of crank members located, respectively, at opposite ends of said base and adapted to be rotated simultaneously by said driving mechanism, a horse body having front and hind legs pivotally secured at their upper ends to the horse body and at their lower ends to the respective pairs of crank members, and means under the control of the rider for causing one pair of crank members to be rotated at a higher rate of speed than the other pair.

1,888,764. CLEANING ATTACHMENT FOR DUCK FOOT CULTIVATORS. WILLIAM F. HOGE. Great Falls, Mont. Filed July 28, 1931. Serial No. 553,639. 3 Claims. (Cl. 97—194.)

2. A cleaning attachment of the class described comprising a pair of duplicate end bars, a plurality of vertically disposed hanger and attaching bars secured to said end bars and adapted for adjustable mounting on a cultivator frame, a pair of spaced parallel polygonal shafts having their end portions mounted for rotation in bearings in said end bars, cleaning teeth adjustably and spirally arranged on said shafts, a flanged plate fastened to one of said end bars, a plurality of sprocket wheels carried by said plate, the adjacent ends of said shafts extending through apertures in said plate and being provided with additional sprocket wheels, a chain operably associated with all of said sprocket wheels, and means to drive the said chains to rotate the said shafts.



1,888,765. REPLACEABLE HEEL. BERN JASSEN and FRANK I. NUSSBAUM, Brooklyn, N. Y. Filed Mar. 12, 1932. Serial No. 598,337. 4 Claims. (Cl. 36—36.)



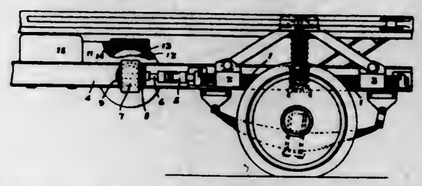
2. In a lift attachment for a shoe, a heel having a bore, means secured within said bore for supporting a lift, and means for retaining and locking said lift in normal seated position against the heel and in disengaged unseated position with respect to said heel to permit the ready removal and replacement of the lift, including a spring for holding the lift in both positions.

1,888,766. WINDOW. ALEXANDER KALLA, Linden, N. J. Filed June 25, 1931. Serial No. 546,838. 1 Claim. (Cl. 20—42.)



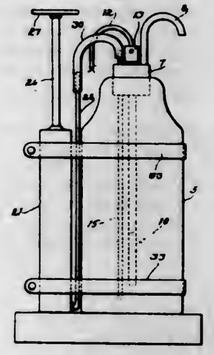
A window comprising a frame, said frame including vertical side members having stepped opposed faces, strips secured on said opposed faces of the side members and, in conjunction therewith, defining channels, said strips having transverse passages in their lower portions, upper and lower sashes mounted for sliding and swinging movement in a vertical plane in the frame, pins on the upper side portions of the sashes disposed for travel in the channels for guiding the sashes vertically in the frame, lugs projecting from the lower side portions of the sashes and disposed for travel in the channels, said lugs being operable through the passages when the sashes are swung in a vertical plane, the upper sash being of less width than the lower sash, said sashes being operable between the strips when swung in a vertical plane, the strips having notches therein, and supporting arms pivotally mounted on the sashes and engageable in the notches for supporting the sashes in upwardly swung position.

1,888,767. TRUCK. WILLIAM PLATTS KELLETT, New York, N. Y. Filed July 7, 1930. Serial No. 466,143. 6 Claims. (Cl. 254—9.)



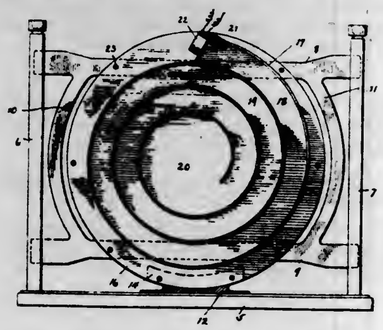
2. In a truck, the combination of a rigid frame having a movable frame superposed thereabove and means at the respective ends of the frame to be operated to selectively raise and lower the ends of the superposed frame relative to the rigid frame, said means rigidly securing said superposed frame against longitudinal thrusts in any position to which the frame is moved, power units operatively connected one to each of said respective raising and lowering means, a source of power, and control means directing power from said source to said power units collectively or individually to control respectively the elevation and angular disposition of said superposed frame relative to the rigid truck frame.

1,888,768. LATHER GENERATING DEVICE. JOSEPH LACH, Englewood, N. J. Filed May 2, 1931. Serial No. 534,658. 1 Claim. (Cl. 299—83.)



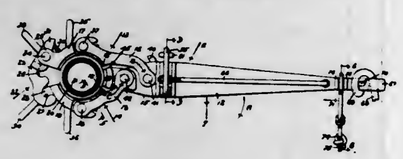
A lather producing device comprising a receptacle having a restricted mouth, a stopper closing the mouth, said stopper being spaced from the inner end of the mouth, a gooseneck pipe passing through the stopper with its lower end flush with the lower end of the stopper, a pipe having its upper end passing through the stopper with its upper end projecting above the stopper and its lower end spaced slightly from the bottom of the receptacle, a pump cylinder vertically arranged, clamps connecting the cylinder with the receptacle in spaced relation, a piston in the cylinder having its stem passing through the top thereof, a vertically arranged pipe having its major portion located in the space between the receptacle and cylinder and having its lower end connected with the lower end of the pump cylinder, and a flexible pipe connecting the upper end of the last-mentioned pipe with the projecting end of the pipe which extends to a point spaced from the bottom of the receptacle.

1,888,769. LOUD-SPEAKER. WALTER MUENCH, Brooklyn, N. Y. Filed Jan. 16, 1929. Serial No. 332,848. 21 Claims. (Cl. 181—27.)



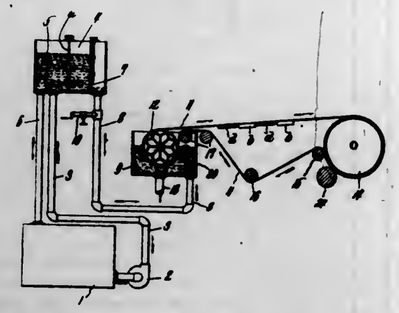
1. In combination with the cochleate sound channel of a loud speaker, a partition bent into a flat spiral separating adjoining convolutions of said sound channel, and front and rear walls, between which said partition is assembled.

1,888,770. DRILL PIPE TONG ASSEMBLY. ALFRED W. POSEY, Ventura, Calif. Filed Feb. 6, 1931. Serial No. 513,859. 11 Claims. (Cl. 81—66.)



1. Pipe tongs embodying: a handle; a plurality of gripping jaws pivotally attached to said handle in spaced relation with each other; and a floating shoe mounted on the pivot of one of said jaws and adapted to have pivotal and longitudinal movement relative to said handle.

1,888,771. MANUFACTURE OF FELTED FIBROUS SHEET MATERIAL OF HIGH ABSORPTIVITY. GEORGE A. RICHTER and HENRY A. CHASE, Berlin, N. H., assignors to Brown Company, Berlin, N. H., a Corporation of Maine. Continuation of application Serial No. 198,747, filed June 14, 1927. This application filed Aug. 5, 1931. Serial No. 555,232. 9 Claims. (Cl. 92—3.)

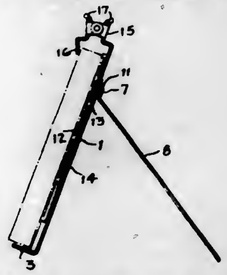


1. A water-laid sheet of loosely felted, substantially uncompacted and unbeaten wood pulp having an alpha cellulose content of at least about 93%, said sheet having an absorptivity of at least about six inches in terms of water crawl up a strip in five minutes.

1,888,772. MANUFACTURE OF BITUMINIZED FIBROUS WEBS. GEORGE A. RICHTER and HENRY A. CHASE, Berlin, N. H., assignors to Brown Company, Berlin, N. H., a Corporation of Maine. Filed Oct. 20, 1931. Serial No. 570,034. 6 Claims. (Cl. 92—3.)

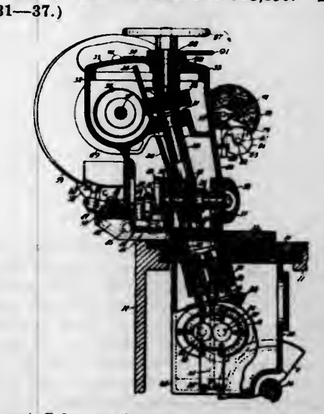
1. As an article of manufacture, sheet material for roofing, flooring, building, and analogous purposes, comprising a water-laid, fibrous base containing as an essential ingredient substantially unbeaten, wood pulp fibers whose alpha cellulose content is at least about 93%, said fibrous base having a compactness falling within the range of about 30 to 55 as determined by dividing its basis weight in pounds by its thickness in inches and multiplying by the factor 10^{-3}, and said sheet carrying substantially uniformly distributed through its pores and interstices a continuous phase of asphalt in amount of at least about 250% based on the dry weight of fiber.

1,888,773. COMBINED BOOK HOLDER AND MARKER. ALBERTINE RUELLAND, New York, N. Y. Filed Mar. 21, 1929. Serial No. 348,778. 5 Claims. (Cl. 45—80.)



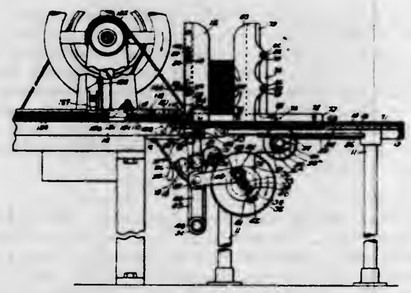
1. A combined holder and page marker for books or the like comprising a holding member adapted to engage the back or to be shifted and engage the cover of a book, an angularly adjustable supporting member, a strap for loosely connecting the supporting member to the holding member, a vertically and separately adjustable member, straps for securing the vertically adjustable member to the front face of the holding member, and spring means for releasably engaging the upper blank edge of adjacent open pages of a book or the like.

1,888,774. OBLIQUE CUT-OFF. RUPERT E. RUNDELL, Rockville Center, N. Y., assignor to American Machine & Foundry Company, a Corporation of New Jersey. Filed Feb. 4, 1931. Serial No. 513,399. 15 Claims. (Cl. 131—37.)



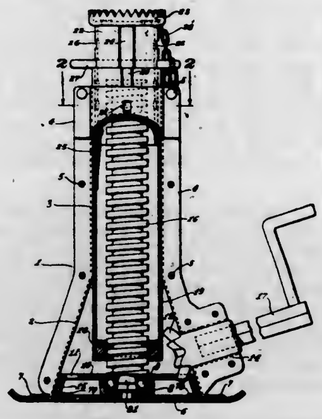
1. In a cutoff for continuous rod cigarette machines, the combination with a cutoff knife, of a carrier for said knife, means for rotating said carrier on an axis inclined to the cigarette rod, and mechanism for adjusting said knife radially of said carrier, said mechanism including a slide on which said knife is mounted, two axially fixed screw shafts supported by said carrier and oppositely threaded into said slide at one end and provided with gears at their other ends, and a knob rotatably mounted in said carrier and connected to a gear meshing with the gears on said screw shafts, whereby rotation of said carrier will lock said gears.

1,888,775. BOOK FEEDING DEVICE. HENRY SIEB, Hammond, Ind., assignor to W. B. Conkey Company, Hammond, Ind., a Corporation of Illinois. Filed Aug. 11, 1931. Serial No. 556,456. 3 Claims. (Cl. 112—21.)



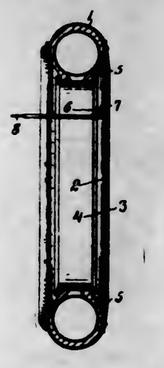
1. A book feeding device adapted to be connected to an operate conjointly with a book stitching machine having means for advancing a group of signatures by a predetermined intermittent motion, and comprising a pusher bar, means for moving said pusher bar at the same speed as said advancing means, and means for retracting said pusher bar to permit of one stitch being taken intermediate succeeding books advanced to said stitching machine.

1,888,776. LIFTING JACK. SAMUEL A. SNELL, Toledo, Ohio, assignor to Nagole, Inc., Toledo, Ohio, a Corporation of Ohio. Filed Nov. 7, 1927, Serial No. 231,400. Renewed Aug. 16, 1932. 9 Claims. (Cl. 254—103.)



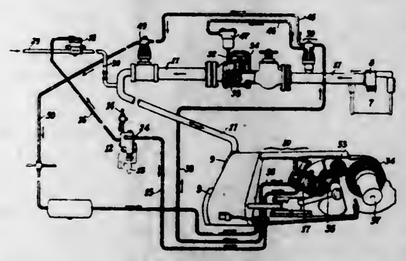
1. A lifting jack, comprising, a sheet metal casing consisting of formed half sections, each having flanges extending therealong, said sections being secured together through said flanges to provide a reinforced tubular guide, each of said sections having a lateral extension formed to provide a cylindrical tubular bearing portion having a reinforcing flange therealong, said bearing portions of said half-sections forming together a bearing, a lifting element guided for movement in said casing, and a driving element mounted for rotation in said bearing.

1,888,777. SPARE-TIRE COVER AND RADIO AERIAL. FREDERICK W. STEIN, Atchison, Kans. Filed Mar. 24, 1930. Serial No. 438,489. 5 Claims. (Cl. 250—33.)



1. A spare-tire cover and radio aerial comprising a casing having an opening adapted to receive a spare-tire carried by an automobile, and having a closed side comprising two layers of insulation material, and having reenforcing electric conductive means between and insulated by said two layers and adapted to intercept radio waves or oscillations, and an aerial conductor attached to said conductive means and adapted for electrical connection with a radio receiving set adapted to be carried by said automobile.

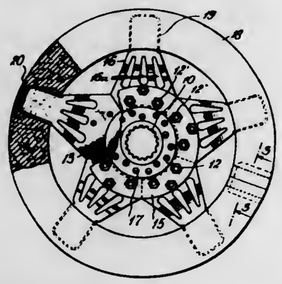
1,888,778. CONTROLLING MECHANISM FOR LOCOMOTIVE BOOSTERS. HUBERT J. TITUS, Paterson, N. J., assignor to Franklin Railway Supply Company, New York, N. Y., a Corporation of Delaware. Filed Feb. 18, 1931. Serial No. 516,568. 5 Claims. (Cl. 105—48.)



1. Locomotive booster motor apparatus including in combination with a cylinder of the locomotive and its steam supply means, a steam actuated booster motor, an axle to be driven thereby, entraining mechanism for connecting the booster motor to said axle including a fluid actuated entraining motor, a steam supply pipe connecting the booster motor with said locomotive steam supply means, a throttle valve in said supply pipe, a supplemental means for supplying the booster motor with steam, a fluid pressure actuated motor device for opening said throttle valve, a line for supplying fluid pressure to said entraining motor, a line adapted to supply fluid pressure from the entraining motor to the throttle opening motor after entrainment has been effected, a valve in said last line, and means actuated by pressure of steam in the pipe which connects the booster motor with the locomotive supply

means for opening the valve in said last line, said valve opening means acting to close the valve upon substantial cessation of pressure in the steam supply means for the locomotive cylinder whereby to cut off the supply of fluid to the throttle operating motor without disturbing the supply to the entraining motor.

1,888,779. FRICTION TRANSMITTING ELEMENT. ELMER V. J. TOWER, North Syracuse, N. Y., assignor to Russell Manufacturing Company, Middletown, Conn., a Corporation of Connecticut. Filed Jan. 12, 1928. Serial No. 246,124. 18 Claims. (Cl. 192—107.)



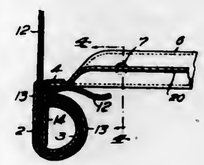
1. A transmitting element for friction clutches comprising a supporting structure having a plurality of radially extending members and a ring of friction material secured directly but yieldingly on the outer ends of said members by yieldable means.

1,888,780. ELECTRIC HEATER. RUDOLF VON BROCKDORFF, Munich, Germany, assignor to Schutte and Koerting Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Oct. 10, 1929, Serial No. 398,603, and in Germany Apr. 6, 1929. 8 Claims. (Cl. 219—34.)



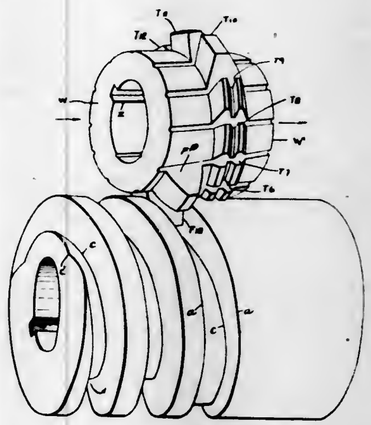
1. An electric heater comprising a casing having an opening in the front wall thereof, a reflector located within the said casing, said reflector comprising a plurality of angularly related reflecting surfaces one of which is located in rear of and in opposed relation to the said opening and another of which is located above and in the rear of said opening in spaced relation to the opposing portion of said front wall, and electric heating elements located between the last mentioned reflecting surface and the said opposing portion of said front wall.

1,888,781. CUSHION SEAT AND THE LIKE. HARRY E. WOLF, Pittsburgh, Pa., assignor to Fort Pitt Bedding Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed May 31, 1929. Serial No. 367,844. 6 Claims. (Cl. 155—180.)



3. A spring frame for cushion seats, comprising a lower border frame having an outside vertical wall and an inside wall spaced therefrom, a rigid bottom positioned within said lower border frame and having downwardly turned portions positioned between the outside and inside walls of said lower border frame, the said rigid bottom closing the bottom of said spring frame and having ribs formed in its face for supporting the springs within the spring frame.

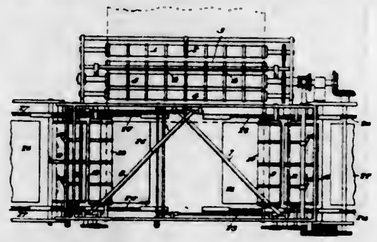
1,888,782. WORM MAKING PROCESS. WILLIAM F. ZIMMERMANN, Maplewood, N. J., assignor to Gould & Eberhardt, Newark, N. J., a Corporation of New Jersey. Original application filed Jan. 28, 1921, Serial No. 440,782, now Patent No. 1,430,485, dated Sept. 26, 1922. Divided and this application filed Apr. 1, 1922. Serial No. 548,722. 18 Claims. (Cl. 90—4.)



1. The art of continuously and progressively producing a finished helicoidal contour by a non-intermittent operation consisting in cyclically presenting to the work in rapid succession a series of cutting-edges each having an arcuate motion and arranged progressively to act in the path of the immediately-preceding cutting-edge and to remove about the same amount of material as said immediately-preceding edge, and simultaneously effecting a rectilinear feeding motion between the work and said cutting-edges parallel with the axis of the work to produce a helicoid.

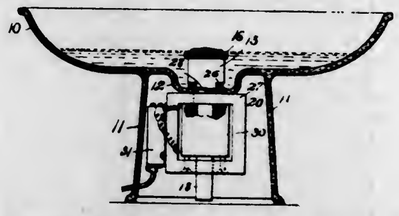
8. A generative method of converting a cylindrical blank into a worm which consists in employing a disk-like-hob presenting a succession of cutting edges coincident with a tapered spiral locus extending through about one convolution; so maintaining said disk-like hob that its axis is held at an angle of a few degrees to the plane containing both the axis of the blank and the line perpendicular to both of said axes; causing both said hob and said blank to rotate and simultaneously effecting a relative feed in a rectilinear direction, whereby a considerable number of the advance cutting edges of said hob may progressively take deeper cuts and generate a helical groove in the periphery of said blank.

1,888,783. FLAT SHEET DELIVERY FOR PRINTING PRESSES. HOWARD M. BARBER, Pawcatuck, Conn., assignor to C. B. Cottrell & Sons Company, Westerly, R. I., a Corporation of Delaware. Filed Oct. 23, 1930. Serial No. 490,625. 7 Claims. (Cl. 271—64.)



1. A four pile flat sheet delivery comprising means for feeding a wide web, means for slitting the wide web longitudinally into two narrow webs, means for leading the two narrow webs in opposite directions to their respective sheet cutting means, said sheet cutting means, and means for delivering the sheets cut from each narrow web in opposite directions to two piles.

1,888,784. FOUNTAIN. FRED C. BAUER, Irvington, N. J. Filed May 20, 1930. Serial No. 454,027. 3 Claims. (Cl. 299—7.)



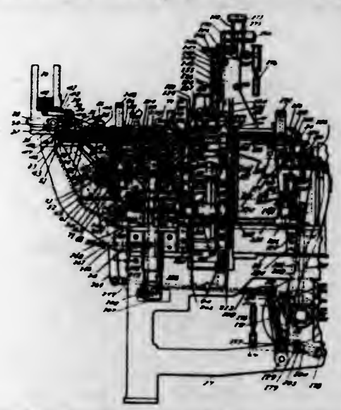
1. A fountain comprising a bowl, a solenoid device including a make and break connection for operating a pump, a pump in the bottom of the bowl, the pump including a piston, the piston being secured at the end of the armatuer of the solenoid, and a compression spring between the piston and the armature to modify the impulse of the armature on the piston.

1,888,785. TREATMENT OF CORN GLUTEN. HENRY BERLIN, New York, N. Y., assignor to International Patents Development Company, Wilmington, Del., a Corporation of Delaware. Filed July 19, 1929. Serial No. 379,563. 10 Claims. (Cl. 127—70.)

1. Method of separating starch from corn gluten and starch mixtures which consists in adding a phenol to the mixture and washing the starch therefrom.

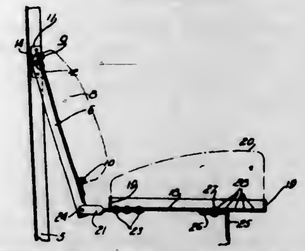
1,888,786. POUCH MAKING ATTACHMENT FOR PACKAGING MACHINES. WILHELM B. BRONANDER, Montclair, N. J., assignor to American Machine & Foundry Company, a Corporation of New Jersey. Filed May 10, 1928. Serial No. 276,784. 34 Claims. (Cl. 93—7.)

1. The combination with a package support, of means for moving a package to said support, means for thereafter circumferentially wrapping a sheet of pouch material around and overhanging one end of said support



and a package therein, and means for thereafter folding the overhanging part of the sheet over the end of the support.

1,888,787. ADJUSTABLE SEAT AND BACK. PHILIP CARLSON, Long Hill, Conn., assignor, by mesne assignments, to The Bridgeport-City Trust Company, Bridgeport, Conn., a Corporation of Connecticut. Filed Feb. 15, 1930. Serial No. 428,730. 2 Claims. (Cl. 155—116.)

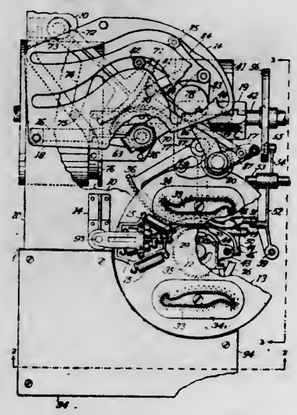


1. In combination with a truck cab body including a pair of spaced uprights, a pair of vertically arranged back supporting members, means pivotally connecting the back supporting members to the opposed faces of said spaced uprights, said back supporting members each including a length of angle iron having one of its sides against the upright to which it is pivoted whereby its other side projects laterally of the upright, a back secured to said other sides of the back supporting members and extending downwardly from a point adjacent their upper ends, a seat member, straps pivoted at their rear ends to the lower ends of the back supporting members, said straps rigidly connected with the seat member whereby as the seat member is moved forwardly and rearwardly for adjustment the angle of the back will also be adjusted, means to secure the seat member and thereby the back in adjusted positions, and said pivotal connecting means for the back supporting members located at the upper ends of said members whereby the upper portion of the back will not be swung rearwardly as the seat is adjusted forwardly.

1,888,788. CIGAR WRAPPER CUTTING MECHANISM. SIGURD CLAUSEN, Brooklyn, N. Y., assignor to International Cigar Machinery Company, a Corporation of New Jersey. Filed Jan. 14, 1932. Serial No. 586,645. 17 Claims. (Cl. 131—49.)

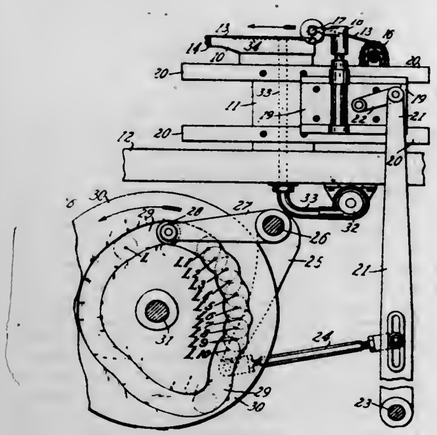
1. In a cigar machine, the combination with a plurality of leaf supporting suction beds having wrapper cutting

dies thereon, of mechanism receiving and transporting wrappers away from said beds, means for successively moving said beds in and out of the range of action of



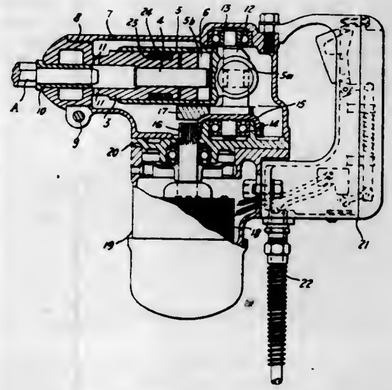
said mechanism, and rollers adjacent the path of said beds for coacting with said dies to cut wrappers out of the leaves thereon in transit.

1,888,789. REROLLING BUNCH FORMER. SIGURD CLAUSEN, Brooklyn, N. Y., assignor to International Cigar Machinery Company, a Corporation of New Jersey. Filed Jan. 18, 1932. Serial No. 587,426. 5 Claims. (Cl. 131—42.)



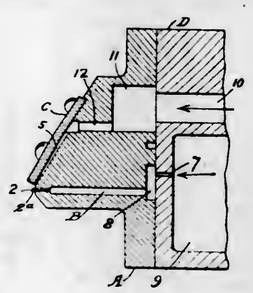
1. In a bunch rolling mechanism, the combination with a rolling table, of a chianti belt extending over said table and having one of its ends fastened thereto, a tension roller to which the other end of said belt is fastened, a slide, guide ways for said slide, a bight forming roller supported by said slide, and means connected to said slide to advance said bight forming roller across said table, said means being constructed to give the bight forming roller backward movements during its advance across the table to manipulate the bunch.

1,888,790. POWER HAMMER. CHARLES B. COATES, Cleveland, Ohio, assignor to Chicago Pneumatic Tool Company, New York, N. Y., a Corporation of New Jersey. Filed Feb. 16, 1928. Serial No. 254,845. 20 Claims. (Cl. 125—34.)



1. A power hammer comprising a barrel, a piston slidable therein, a cylinder enclosing said barrel and having a bearing upon the exterior of the latter, and means for reciprocating said cylinder upon said barrel.

1,888,791. SPRAYING METHOD AND MACHINE. HARRY C. COLE, Philadelphia, Pa. Filed Sept. 27, 1930. Serial No. 484,850. 8 Claims. (Cl. 299—86.)

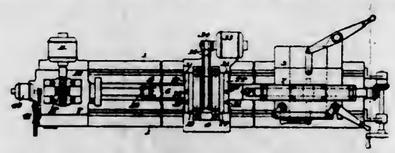


8. The method of spraying in which liquid is distributed to a plurality of discharge points by discharging it under pressure against a uniform back pressure set up by a blast of air.

1,888,792. LATHE. CALVERT B. COTTRELL, 3d, Westerly, R. I., assignor to C. B. Cottrell & Sons Company, Westerly, R. I., a Corporation of Delaware. Filed Apr. 24, 1930. Serial No. 446,895. 8 Claims. (Cl. 82—20.)

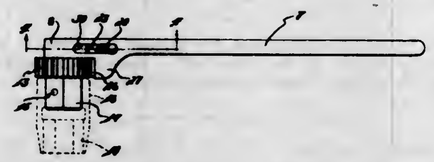
1. In a turning lathe, cutters, their holder, an electric motor having a belt drive connection with the holder for revolving the cutters in one direction around the work, means for rotating the work in the opposite direction, and means for imparting a relative feeding movement of the holder and work.

8. In a turning lathe, a bed, a traveling carriage, cutters, their holder rotatably mounted on the carriage, an electric motor mounted on the carriage and having a belt drive connection with the tool holder for revolving the cutters in one direction around the work, a head stock and its live center, a tail stock and its dead center,



an electric motor operatively connected to the live center for rotating the work in the opposite direction, and an electric motor for feeding the tool holder along its work.

1,888,793. WRENCH. JOHN ERICKSON, Detroit, Mich. Filed Nov. 28, 1930. Serial No. 498,556. 3 Claims. (Cl. 81—63.)



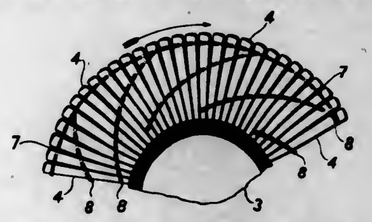
1. A wrench of the class described, comprising: a handle; a head mounted on one end of said handle; the under surface of said head at the forward end thereof being cut away to provide a shoulder at the rearward portion of said head on its under surface; a socket engaging portion rotatably mounted on said head and projecting beyond said cut away portion; a ratchet wheel fixedly mounted on said socket engaging portion and positioned to lie in the cut away portion of said head forwardly of said shoulder, said head having a transversely extending opening formed therein at the rearward side of the cut away portion, the forward face of said shoulder being recessed to provide a surface aligning with the inner surface of the rearward side of said opening; a pawl forming member having a cylindrical portion engaging in said opening, the remaining portion of said pawl being substantially semi-cylindrical and engaging with its curved surface the recessed portion of said shoulder and adapted for engaging with the edges of its flat face the teeth on said ratchet wheel.

1,888,794. PROCESS OF PREPARING SALTS OF THE CHLOROETHANE SULPHONIC ACID. OTTO ERNST and OTTO NICODEMUS, Frankfort-on-the-Main-Hochst, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Filed Aug. 28, 1930, Serial No. 478,548, and in Germany Sept. 5, 1929. 9 Claims. (Cl. 260—159.)

1. The process which comprises causing a solution of ethylene dichloride to react, while refluxing the vapors evaporated from the reaction mixture, with a solution of a sulfurous acid salt of a metal selected from the group consisting of Na, K, Ca, Mg, at a temperature below 90° C., wherein ethylene dichloride is used in excess, and then separating the chloroethane sulfonate produced.

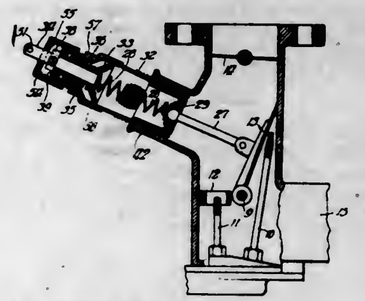
1,888,795. TURBINE BLADE LASHING. PAUL FABER, Baden, Switzerland. Filed July 18, 1930, Serial No. 468,808, and in Switzerland July 18, 1929. 6 Claims. (Cl. 253—77.)

1. In a tubine rotor stage, blades extending radially outwardly from the axis of rotation of said stage, and lashing elements for said blades, each of said elements operating to lash a section of said blades and extending from substantially the root portion of the blade at one end of the section to substantially the tip portion of the blade at the other end of the section, said rotor stage



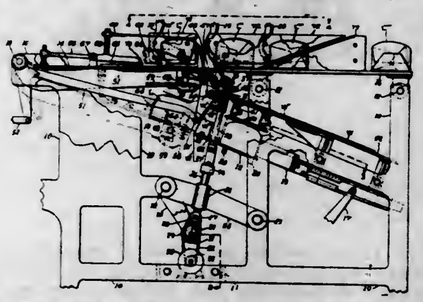
characterized by the fact that the angles of intersection between a lashing element and the respective blades comprising a particular section are substantially equal.

1,888,796. CARBURETOR. HERBERT M. FRIENDLY, Chicago, Ill.; Milton S. Friendly and Central Trust Company of Illinois executors of said Herbert M. Friendly, deceased. Filed Sept. 27, 1929. Serial No. 395,487. 6 Claims. (Cl. 261—47.)



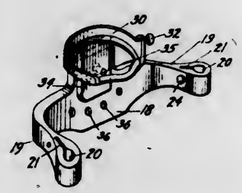
1. In a carburetor provided with low-speed and high-speed fuel jets, and an air valve opened by pressure of air to operate the high-speed jet, an air valve spring for returning the valve to closed position when the air pressure diminishes, and means for automatically decreasing the tension of such spring for high speeds and increasing the tension for low speeds.

1,888,797. LOAF-SLICING AND WRAPPING ATTACHMENT FOR BREAD WRAPPING MACHINES. FREDERICK C. GLADECK and JAMES W. WARREN, Brooklyn, N. Y., assignors to American Machine & Foundry Company, a Corporation of New Jersey. Filed Aug. 30, 1930. Serial No. 478,954. 31 Claims. (Cl. 93—2.)



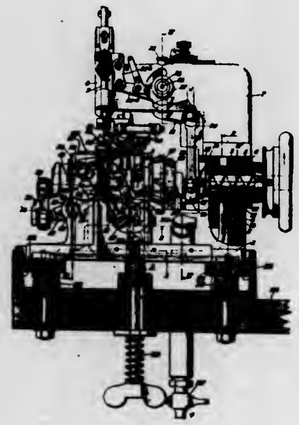
1. The combination with a wrapper positioning device, of a moving element for forwarding a loaf sidewise into a wrapper in said device, and coacting mechanism engaging and cutting said loaf into slices while being forwarded by said element.

1,888,798. BEVERAGE MIXER SUPPORT. LEON GRAUMAN, Denver, Colo. Filed Mar. 17, 1928. Serial No. 262,467. 1 Claim. (Cl. 248—20.)



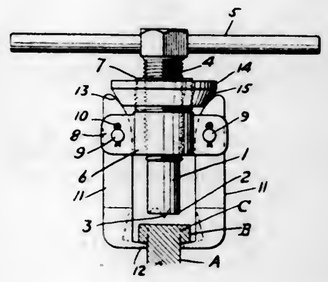
A device of the character described comprising a bracket having means for fastening it to an upright surface, two forwardly projecting arms on the bracket, each having at its ends means to operatively support a self-contained beverage mixer in an elevated position, and a seat on the bracket between and rearward of the arms for the support of a container.

1,888,799. LUBRICATING SYSTEM FOR SEWING MACHINES. ALFRED GRIER, Elizabeth, and NICHOLAUS KNAUS, Newark, N. J., assignors to The Singer Manufacturing Company, Elizabeth, N. J., a Corporation of New Jersey. Filed Aug. 20, 1931. Serial No. 558,228. 15 Claims. (Cl. 112—256.)



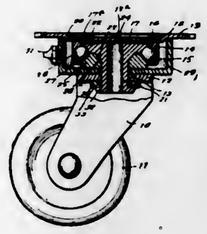
1. A sewing machine comprising a frame-casting including a flat bed recessed in its under face to form an oil-cavity, stitch-forming and feeding mechanisms disposed above and carried by said bed externally of said oil-cavity, wick-filled conduits leading upwardly from said oil-cavity through said bed to working bearings of said mechanisms, and a removable plate secured to said bed and closing the bottom of said oil-cavity.

1,888,800. CONNECTER PULLER FOR STORAGE BATTERIES. ERNEST F. H. GROTHE, Philadelphia, Pa. Filed Aug. 1, 1931. Serial No. 554,461. 5 Claims. (Cl. 29—85.)



1. In a connecter puller for storage batteries, a bolt member having at its lower end a downwardly projecting cutting edge adjacent its periphery.

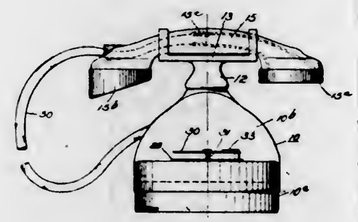
1,888,801. CASTER. WALTER F. HEROLD, Upper Montclair, N. J., assignor to The Bassick Company, Bridgeport, Conn., a Corporation of Connecticut. Filed Apr. 30, 1929. Serial No. 359,199. 5 Claims. (Cl. 16—21.)



1. In a caster, a supporting element, an apertured attaching plate, and a ball-bearing assembly unit including relatively rotatable inner and outer ball-race members and anti-friction balls between them, means carried by said inner ball-race member adapted to be secured to said supporting element, and a flange carried by said outer ball-race member disposed in spaced relation to the inner and outer peripheries of said outer ball-race member to provide lateral ledges at the inner and outer edges of said member, said flange adapted to be engaged within said aperture of the attaching plate, and bent upon and securing said plate, and a dust closure plate secured within said flange, said attaching plate and said dust plate resting on said ledges at the respective outer and inner edges of said outer race member, said flange adapted to be bent upon and securing said dust plate.

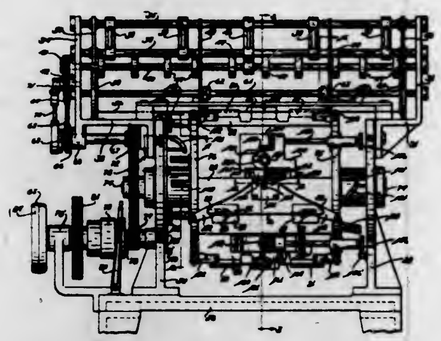
1,888,802. TOY TELEPHONE. EINAR JANSEN, Chicago, Ill., assignor of one-half to Martin S. Hamm, Chicago, Ill. Filed May 2, 1931. Serial No. 534,566. 15 Claims. (Cl. 274—9.)

1. A toy of the class described, including a hollow casing having a movable supporting bracket, a receiver element adapted to be carried by said bracket, a motor driven phonograph in said casing including a record-carrying turntable and a reproducing element, together with means connected to the reproducer and associated



with the bracket and responsive to the movement thereof when said receiver is replaced thereon, for raising said reproducer out of engagement with the record.

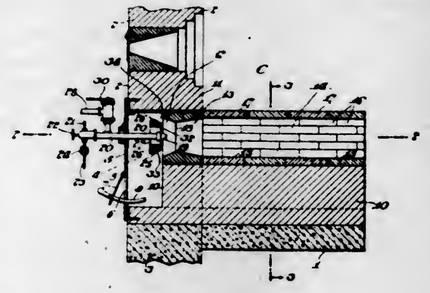
1,888,803. FORMING MACHINE. JOHN MOORE, Detroit, Mich., assignor, by mesne assignments, to Andrew Ruen Hanger Co. Inc., a Corporation of Michigan. Filed Mar. 1, 1930. Serial No. 432,322. 10 Claims. (Cl. 140—71.)



1. In a forming machine of the class described: a rotatable carrier, a wire receiving portion; a bending mechanism for bending said wire inwardly to provide an inwardly projecting offset intermediate its ends; a pair of bending arms for bending the ends of said wire intermediate toward each other; a bending mechanism for bending the inwardly bent ends into parallel relation on a twisting mechanism for twisting said ends about each other; a hook forming mechanism for forming a hook on one of said ends; and means for actuating said bending mechanism, said bending arms, said twisting mechanism, and said hook forming mechanism upon rotation of said carrier.

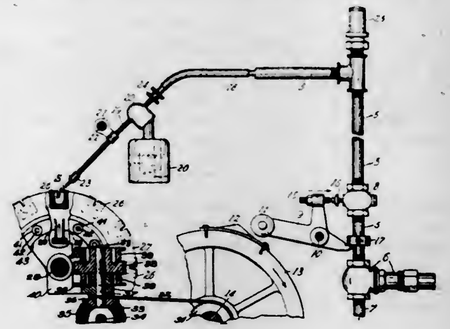
1,888,804. HEATING APPARATUS AND METHOD. ARTHUR E. NASH, Philadelphia, and JAMES S. ALCORN, Cynwyd, Pa., assignors to Alcorn Combustion Company, Philadelphia, Pa., a Corporation of Delaware. Filed May 8, 1929. Serial No. 361,290. 5 Claims. (Cl. 158—1.)

5. Fuel burning structure comprising a combustion chamber in the form of a nozzle passage convergent at its inlet, means for delivering fuel in the form of an annular jet discharging into said convergent inlet, and means for producing a jet of atomized liquid fuel within said annular jet, said jets so related to said convergent inlet that air



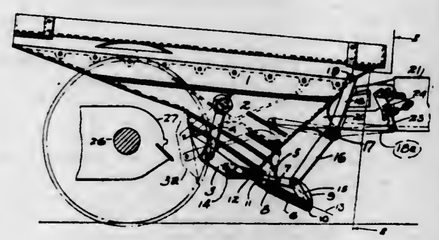
is entrained and forced into said nozzle passage to effect therein intimate mixture of the air and fuel and rapid combustion of the fuel.

1,888,805. BUNCH CONCENTRATOR ATOMIZING CLEANER. PONTUS PETERSON, Richmond Hill, N. Y., assignor to International Cigar Machinery Company, a Corporation of New Jersey. Filed Apr. 15, 1931. Serial No. 530,340. 3 Claims. (Cl. 131—9.)



1. The combination with a cigar bunch concentrator having a plurality of cavities, of means for spraying liquid into said cavities to clean and wet the same, whereby the bunches may be removed more easily therefrom.

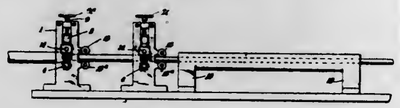
1,888,806. LOCOMOTIVE ASH HOPPER MECHANISM. STEPHEN J. RAETZ, Lowell, Mass. Filed Feb. 11, 1929. Serial No. 339,148. 9 Claims. (Cl. 110—166.)



1. In combination, a locomotive ash pan having a discharge opening, a door for closing said opening hinged on

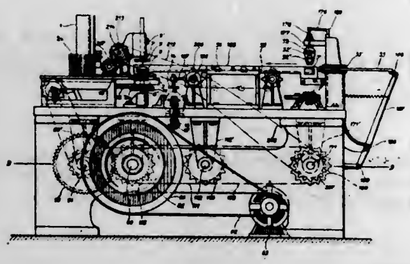
said pan to swing longitudinally of the locomotive, members comprising a toggle lock for said door, an operating shaft extending transversely of the locomotive, and means connecting said shaft to said members, said members and said shaft being mounted on said ash pan exclusively.

1,888,807. MACHINE FOR SHAPING METAL TUBES. ELMER JAMES RIVERS, Farmingdale, N. Y., assignor to The Aviation Patent and Research Corporation, a Corporation of New York. Filed Mar. 18, 1932. Serial No. 599,683. 1 Claim. (Cl. 153—54.)



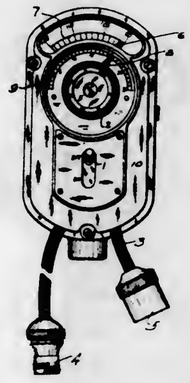
A device for compressing and shaping tubes, including two roller members having opposed concave surfaces, and substantially abutting shoulders, means for rotating said roller members in opposite directions, and a single means for adjusting and maintaining the operating position of one of said roller members with respect to the other, one of said roller members having circular flanges at either end to engage and maintain the alignment of the shoulders of the other roller member, said adjustment means comprising a resilient means tending to separate said roller members and a manual adjustment member operable against the action of said resilient means, the latter being adapted to retain the device in each of its various adjusted positions and to force said roller members out of contact with each other and disengage the means for rotating said adjustable roller member upon the breakage or failure of said manual adjustment member rendering the latter incapable of overcoming the resistance of said resilient member.

1,888,808. MACHINE FOR PRODUCING TWO-PART BOXES. JOHANNES SCHMIEDEL, Dresden, Germany, assignor to the Firm Universelle Cigarettenmaschinen-Fabrik J. C. Muller & Co., Dresden, Germany. Filed May 12, 1930, Serial No. 451,652, and in Germany Jan. 11, 1930. 3 Claims. (Cl. 93—39.)



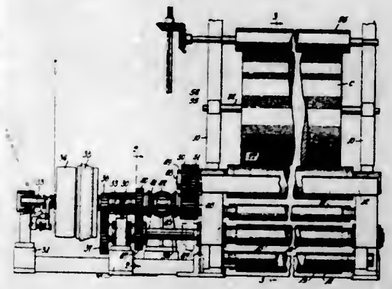
1. A machine for producing two-part boxes comprising in combination means for producing a plurality of box lids at a time and delivering them to a pile, means for producing the body portions of boxes, said means including a shaping channel a forming block and a frame into which the body portion of each box is pressed with the forming block, a uniting station in which box lids and box bodies are joined, thereby enclosing said forming block disposed beneath the means for producing the box lids, a moving box carrier for feeding the body portions of boxes to the uniting station and to binding and cutting stations and means for removing the forming block from the completely formed box.

1,888,809. TIMING DEVICE. WILLIAM G. SHELTON, St. Louis, Mo. Filed Nov. 24, 1928. Serial No. 321,628. 5 Claims. (Cl. 161—1.)



1. In a device of the class described, a voltmeter, a scale of time units and a hand movable along said scale by the current in the circuit to which the device is attached, a clock for opening said circuit, a member for setting said clock to determine the time at which it will operate as described, and a hand movable along said scale by said member.

1,888,810. DRUM WINDER. KARL SIEG, Philadelphia, Pa., assignor to Samuel M. Langston Co., Camden, N. J., a Corporation of New Jersey. Filed Aug. 26, 1931. Serial No. 559,445. 21 Claims. (Cl. 242—66.)

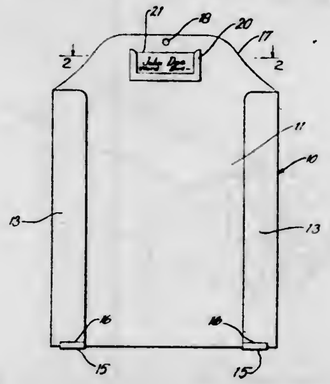


20. A web winding machine including a cutter shaft, a clutch for stopping and starting said shaft at will, a pair of winding drums for engaging the roll of material being wound, and reversing gears between said drums and said cutter shaft for rotating said drums in either direction in respect to said cutter shaft.

1,888,811. HOSPITAL CHART AND IDENTIFICATION CARD HOLDER. CHARLOTTE TALLEY, New York, N. Y. Filed July 15, 1931. Serial No. 550,844. 1 Claim. (Cl. 40—16.)

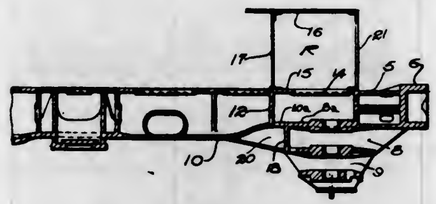
A hospital chart and identification card holder, comprising, in combination, a main receptacle having a skeleton bottom, a rear wall, side walls and a front wall, the latter having the entire central portion cut away to provide side panels to retain the chart when in place and expose to

view the central portion of the chart, a tab extending upwardly from said rear wall and provided with supporting means for said main receptacle, and a substantially



U-shaped auxiliary receptacle rigidly secured on said tab at a point above that to which the chart when in place normally reaches and adapted to receive a bed-card.

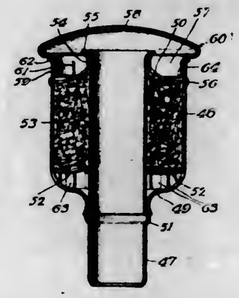
1,888,812. TANK VEHICLE UNDERFRAME. JAMES C. TRAVILLA, Jr., Philadelphia, Pa., assignor to General Steel Castings Corporation, Granite City, Ill., a Corporation of Delaware. Filed June 18, 1931. Serial No. 544,185. 13 Claims. (Cl. 105—286.)



1. In a railway vehicle underframe, a draw bar pocket, and underframe elements forming walls, a fluid compartment extending around the sides and rear of said pocket, the adjacent walls of said pocket and compartment being spaced apart to provide access between them to said compartment walls for inspection and repair purposes.

1,888,813. AIR CLEANER AND THE LIKE. CHARLES A. WINSLOW, Oakland, Calif. Filed Apr. 25, 1932. Serial No. 607,443. 5 Claims. (Cl. 121—194.)

3. A combined air cleaner and lubricant filler for internal combustion engines, comprising an upstanding inner tubular member open at its top and bottom, an outer tubular member, open at its top and bottom and surrounding and connected to said inner tubular member and spaced radially therefrom to form a filter material space, filter material within said space, filter retaining means above and below said material for confining said material within said space each of said means having openings therethrough the upper filter retaining means being below the top of the inner tubular member, and a removable cap for the open top of said outer tubular member, said cap being spaced from the upper end of said inner tubular member and defining a chamber above the tops of the inner and outer tubular members and in open and unobstructed communication therewith, whereby when said cap is in position on said outer member, air may pass upwardly through the open lower end of the outer tubular member and said filter material and thence downwardly through the open top of said inner tubular member, and when said cap is removed oil poured in through the open top of the outer tubular member and into the space between said members will flow downwardly through said filter material and out through the open bottom of the



outer tubular member for washing and reoiling said filter material, said inner tubular member being open at its top and bottom and open throughout its interior to form a lubricant filler when the cap is removed and to conduct oil vapors upwardly to the cap, when the latter is in place, so that said oil vapors may be condensed on the under side of the cap and conducted to the filter material.

1,888,814. MEANS FOR DRILLING WELLS. JAMES S. ABERCROMBIE, Houston, Tex. Filed Oct. 19, 1931. Serial No. 569,665. 2 Claims. (Cl. 255—28.)

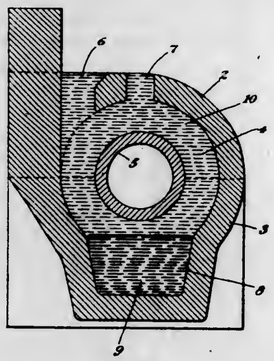


1. A slip joint drive coupling for drill stems including a housing, a drive bushing thereon, a drive stem telescopically mounted in said bushing whereby said housing and said stem may have relative longitudinal movement, and means to restrict the flow of fluid through said passage when the coupling is extended or contracted.

1,888,815. METHOD AND APPARATUS FOR PRESSURE BUTT-WELDING TUBES AND THE LIKE. EDWARD F. ENGTRUP, Jersey City, N. J. Filed Dec. 23, 1930. Serial No. 504,254. 2 Claims. (Cl. 78—94.)

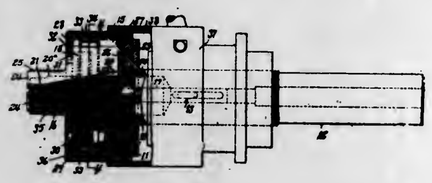
2. The method of butt-pressure welding tubes, bars and like metal bodies, which comprises enclosing the ends of the bodies in abutting relation in a mold, filling the mold cavity about said ends and completely surrounding

said ends solely with the mass of superheated slag from an alumino-thermic reaction, collecting the metal of said reaction in a separate section of the mold away from and



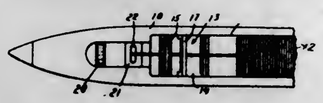
at one side of said bodies to avoid contact between said metal and the bodies, and pressuing the ends of the bodies together.

1,888,816. MOVABLE-CHASER TAP. ALBERT F. BREITENSTEIN, New Haven, Conn., assignor to The Geometric Tool Company, New Haven, Conn., a Corporation. Filed Jan. 2, 1931. Serial No. 506,156. 8 Claims. (Cl. 10—145.)



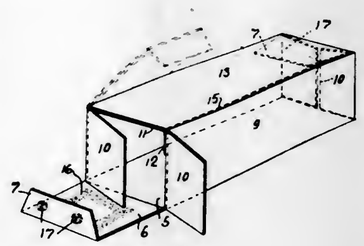
1. In a movable-chaser tap, the combination with a body-member formed with a plurality of substantially-radial guide-ways; of a chaser-operating member mounted for reciprocating movement with respect to the said body-member and provided with substantially-radial guide-lugs forming a unit with and reciprocating with the chaser-operating member itself and extending into the radial guide-ways in the said body-member for guidance thereby; and chasers respectively installed in the guide-lugs of the said chaser-operating members for substantially radial movement with respect thereto and coacting with the said chaser-operating member for being so moved.

1,888,817. SHUTTLE FILLING GUIDE. JOHN CRAWFORD, Amsterdam, N. Y., assignor to Mohawk Carpet Mills, Inc., Amsterdam, N. Y., a Corporation of New York. Filed Jan. 18, 1932. Serial No. 587,229. 11 Claims. (Cl. 139—212.)



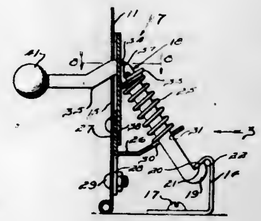
1. In a shuttle, a receptacle for a yarn package and an elongated slot in the body of the shuttle through which the yarn is fed, said slot having a portion which is inclined to the direction of shuttle movement.

1,888,818. CARTON. ADRIAN O. DALLER, Mount Vernon, N. Y., assignor, by direct and mesne assignments, to Daller Carton Co. Inc., a Corporation of New York. Filed July 1, 1927. Serial No. 202,773. 13 Claims. (Cl. 229—51.)



9. A carton having top, bottom, side and end walls, one of said walls comprising overlying sections of said carton, a score-line in one of said overlying sections, a portion of said sections being intersecured and adapted upon the perforation of said score-line to remain intersecured and a part of that section having no score-line being adapted to form a tucking flap.

1,888,819. HOOD LATCH. TOM I. DUFFY, Detroit, Mich., assignor, by mesne assignments, to The Bassick Company, Bridgeport, Conn., a Corporation of Connecticut. Filed Dec. 22, 1930. Serial No. 503,904. 17 Claims. (Cl. 292—114.)

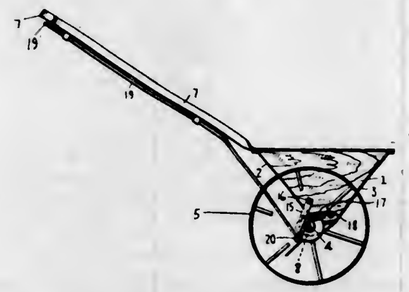


1. In a latch organization suitable for cooperation with an interior and fixed keeper in the releasable retention of an engine hood which is provided with a vertical slot: a unitary bar slidably extending inwardly and downwardly through said slot and provided, near its inner end, with a hook portion for direct engagement with said keeper; a fulcrum element rigidly secured to said hood and slidably receiving said bar; a stop element nonrotatably supporting said bar and means interposed between said stop element and the fulcrum element for maintaining said bar in an inclined plane.

1,888,820. COMBUSTIBLE PASTE. ALBERT A. EPSTEIN, New York, N. Y., assignor to Consolidated Patentees Corporation, New York, N. Y., a Corporation of New York. Filed Nov. 13, 1930. Serial No. 495,538. 3 Claims. (Cl. 44—7.)

1. A combustible paste comprising a mixture of one part of magnesium stearate by weight with two parts of alcohol by volume and a flame modifying ingredient added thereto.

1,888,821. FERTILIZER-SOWING MACHINE. GUY V. FEARN, Fredericktown, Ohio. Filed Aug. 10, 1931. Serial No. 556,139. 8 Claims. (Cl. 275—2.)



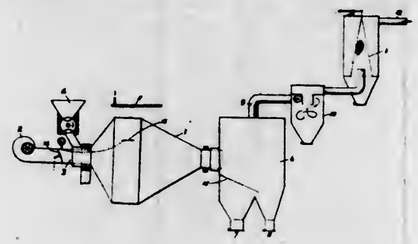
1. In a fertilizer-sowing machine, a hopper having a discharge opening, means for forcing the fertilizing material therethrough, a shutter for closing said openings, manually-operated means for opening said shutter, and a spring for closing said shutter.

1,888,822. ARTICULATED LOCOMOTIVE. CHARLES F. FREDE and KARL S. HOWARD, St. Louis, Mo., assignors, by mesne assignments, to General Steel Castings Corporation, Granite City, Ill., a Corporation of Delaware. Filed Aug. 29, 1927. Serial No. 216,136. 17 Claims. (Cl. 105—175.)



1. A tender frame forming a water tank bottom and having steam cylinders formed integrally therewith.

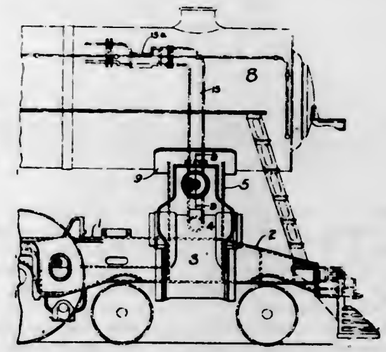
1,888,823. LEAD OXIDE POWDER AND METHOD OF MAKING THE SAME. CLARENCE A. HALL, Philadelphia, Pa. Filed Mar. 29, 1924, Serial No. 702,889. Renewed Dec. 24, 1926. 4 Claims. (Cl. 23—146.)



1. As an article of manufacture an amorphous lead oxide powder of olive gray color and of specific weight approximately 2.15 and being the product of the mutual attrition of metallic lead lumps at a temperature under 360° F. and in the presence of a controlled stream of air.

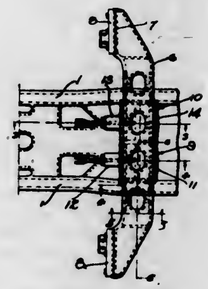
2. The process of making lead oxide powder of olive gray color and of amorphous structure which consists in subjecting balls or lumps of metallic lead to mutual attrition by rumbling them while confined by the closed wall of a vessel in a stream of air passing through said vessel, and controlling the temperature by the application of cooling fluid to the exterior of said wall.

1,888,824. LOCOMOTIVE STRUCTURE. KARL S. HOWARD, St. Louis, Mo., assignor to General Steel Castings Corporation, Granite City, Ill., a Corporation of Delaware. Filed Apr. 27, 1931. Serial No. 533,325. 22 Claims. (Cl. 105—44.)



1. In a locomotive, an integral structure comprising a smoke box support, steam control chambers, and a live steam pipe, said live steam pipe comprising transverse portions extending between said chambers and an upright portion extending through the top of said support.

1,888,825. LOCOMOTIVE STRUCTURE. CLEMENT W. KELL, Ridley Park, Pa., and WILLIAM O. ASHE, St. Louis, Mo., assignors to General Steel Castings Corporation, Granite City, Ill., a Corporation of Delaware. Filed June 18, 1931. Serial No. 545,818. 17 Claims. (Cl. 105—172.)

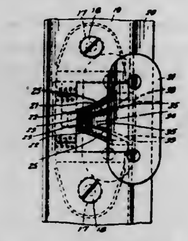


1. In a locomotive underframe, side frames, a boiler supporting saddle, and an integral structure comprising a transverse member spaced substantially from said saddle and applied to and extending between said side frames and outwardly beyond the same, and including a brake cylinder.

1,888,826. ANTIRATTLE DOVETAIL FOR DOORS. GEORGE W. KERR, Springfield, Mass. Filed Jan. 5, 1931. Serial No. 506,674. 7 Claims. (Cl. 16—86.)

1. In an anti-rattle device for doors, members movable one relatively to the other, said members having converging contact surfaces for contacting one with the other and the contact surface of one of said members being

formed on a part that is yieldable in the directions of relative movement of said members, and means in association with said members and movable with said mem-

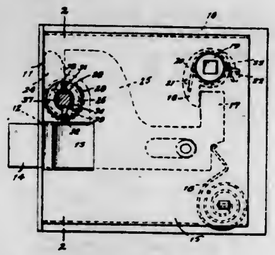


bers into relation with each other having cooperating parallel abutment surfaces offering abutment transversely to said direction of relative movement of said members.

1,888,827. MONOETHERS OF RESORCINOL. EMIL KLARMANN, Jersey City, and LOUIS W. GATYAS, Bloomfield, N. J., assignors to Lehn & Fink, Inc., Bloomfield, N. J., a Corporation of New York. Filed Mar. 12, 1931. Serial No. 522,161. 7 Claims. (Cl. 260—150.)

1. As a composition of matter, a resorcinol monoether in which the substituting ether radical is an unsubstituted hydrocarbon radical having at least three carbon atoms, said ether having a high bactericidal efficiency.

1,888,828. LATCH. RAYMOND G. MOORE, Bridgeport, Conn., assignor to The Bassick Company, Bridgeport, Conn. Filed Sept. 3, 1929. Serial No. 389,921. 4 Claims. (Cl. 292—348.)



1. In a latch, a latch casing, a latch bolt, a roll-back for retracting said bolt having a non-circular opening therein, a handle shaft of non-circular cross-section adapted to be longitudinally engaged with said roll-back opening and including a laterally projecting abutment in spaced relation to the end, abutment means secured to the latch casing having an opening adapted to permit insertion and rotary movement therein of the non-circular roll-back engaging portion of said shaft, said abutment means adapted to abut said laterally projecting abutment upon longitudinal withdrawal movement in the normal non-bolt-retracting position of said roll-back.

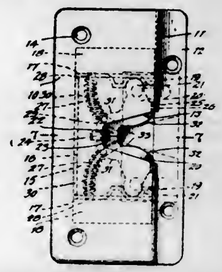
1,888,829. SELF-ADJUSTING ANTIRATTLE DOVETAIL FOR DOORS. RAYMOND G. MOORE, Bridgeport, Conn., assignor to The Bassick Company, Bridgeport, Conn., a Corporation of Connecticut. Filed Dec. 16, 1929. Serial No. 414,548. 2 Claims. (Cl. 16—85.)

1. In an anti-rattle device for doors, a socket member, and a wedge member adapted to be engaged therewith, said socket member comprising a casing and opposed wedge engaging elements disposed in said casing and adapted to be moved laterally through engagement of said wedge member therebetween, resilient means adapted to oppose said lateral movement and laterally disposed means cooperating between the side wall of said casing



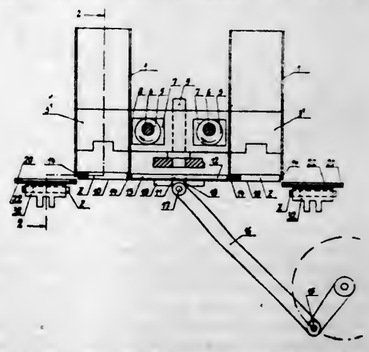
and the adjacent side walls of said wedge engaging elements adapted to prevent vertical movement of said wedge engaging elements.

1,888,830. ANTIRATTLE DOVETAIL FOR DOORS. RAYMOND G. MOORE, Bridgeport, Conn., assignor to The Bassick Company, Bridgeport, Conn., a Corporation of Connecticut. Filed Jan. 30, 1931. Serial No. 513,884. 10 Claims. (Cl. 16—85.)



1. In an anti-rattle device for doors, members movable one relatively to the other, said members having converging contact surfaces for contacting one with the other and the contact surfaces of one of said members being opposed and non-yielding in a direction transversely to the direction of relative movement of said members, one of said surfaces being formed on a pivotally mounted part yieldable in the direction of relative movement of said members but non-yielding in a direction transversely thereto.

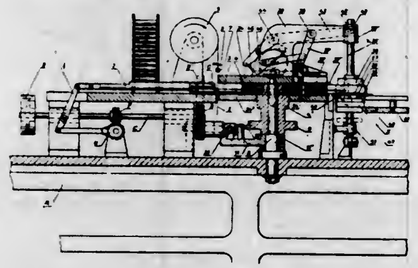
1,888,831. APPARATUS FOR DISTRIBUTING CIGARETTES FROM A CONTAINER. JOHANNES NEFF, Dresden, Germany, assignor to the Firm "Universelle" Cigarettenmaschinen-Fabrik J. C. Müller & Co., Dresden, Germany. Filed May 5, 1930, Serial No. 449,828, and in Germany July 20, 1929. 5 Claims. (Cl. 226—5.)



1. Apparatus for distributing cigarettes from a container comprising partitions within said container form-

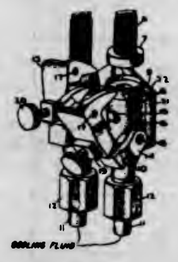
ing separate feed channels for the cigarettes, said channels closed at their lower ends but having lateral openings, plungers acting to eject the cigarettes in said feed channels through said lateral openings, an intermittently actuated slotted feed mechanism, and a moving conveyor beneath said feed mechanism, said intermittently actuated feed mechanism serving in one position to receive the cigarettes ejected and in another position to deliver them to the moving conveyor.

1,888,832. APPARATUS FOR PACKETING GOODS. JOHANNES NEFF, Dresden, Germany, assignor to the Firm Universelle Cigaretten-Maschinen-Fabrik J. C. Muller & Co., Dresden, Germany. Filed Nov. 29, 1930, Serial No. 499,014, and in Germany Apr. 8, 1930. 10 Claims. (Cl. 93—7.)



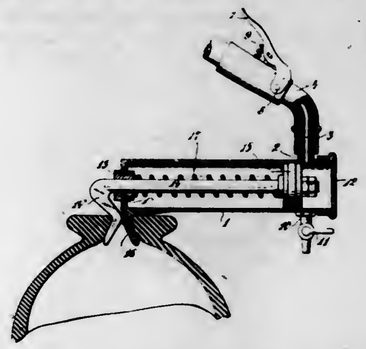
1. Apparatus for packeting goods and at the same time enwrapping the goods, comprising in combination with a turntable formed with pockets to receive the goods and a stationary cover plate and a bottom plate for such turntable, means for positioning a wrapper strip in front of a pocket, a plunger for pushing the goods into the pocket entraining the wrapper strip, means for intermittently rotating the turntable and for folding the ends of the wrapper strip, means for moving said goods radially out of said pocket and over a second wrapper strip lying transversely of the first mentioned wrapper strip and a second plunger for pushing the partially enwrapped goods into a packet and entraining the second wrapper strip.

1,888,833. COMBINED FLUID AND ELECTRICAL COUPLING FOR ELECTRIC DISCHARGE DEVICES. HENRY J. NOLTE, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed July 28, 1931. Serial No. 553,602. 2 Claims. (Cl. 285—171.)



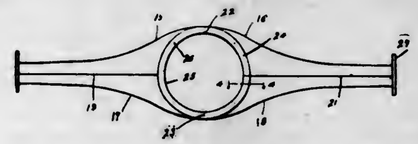
1. A coupling for detachably connecting two conduits together, one of which terminates in a collar, and the other of which is provided with a recessed member adapted to receive said collar and with a device adapted to clamp the collar to the recessed member, said device comprising a yoke member pivotally mounted on the recessed member and a jaw piece pivotally mounted on the yoke member, and means in addition to the yoke member for moving the jaw piece on its pivot thereby causing the jaws to exert a clamping effect on the collar and the recessed member.

1,888,834. TIRE SPREADER. ANTHONY PULEO, Brooklyn, N. Y. Filed Aug. 29, 1931. Serial No. 560,085. 1 Claim. (Cl. 152—27.)



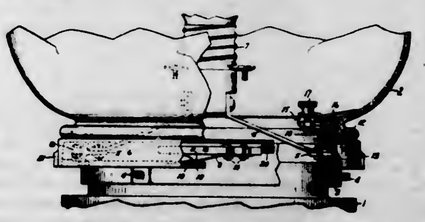
A tire spreader comprising a cylinder carrying thereon a tire bead engaging jaw, a piston within the cylinder, a piston rod, a tire bead engaging jaw carried by the piston rod, means for admitting air to the cylinder to cause separation of the jaws, and means for discharging air from the piston.

1,888,835. METHOD OF MAKING AXLE HOUSINGS. FREDERICK H. RAGAN, Shaker Heights, Ohio. Filed Oct. 18, 1930. Serial No. 489,567. 1 Claim. (Cl. 29—153.1.)



In the method of making axle housings, the steps which comprise first severing flat blanks from a sheet of metal, second forming one of said blanks to produce a quarter segment, third, forming complementary segments from said blanks to produce the other quarter segments, and then uniting all of said quarter segments to form the housing.

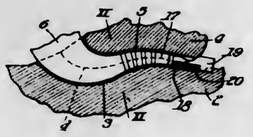
1,888,836. GLOBE HOLDER AND THE LIKE. WILLIAM H. ROWE, Cliftondale, Mass., assignor to General Electric Company, a Corporation of New York. Filed July 20, 1931. Serial No. 551,824. 3 Claims. (Cl. 240—135.)



1. In a globe holder, the combination of a support comprising a supporting ring having spaced projecting ledges

and spring catches carried by said ledges, a globe ring having a globe supporting portion and a portion concentric with said supporting ring, means for fastening a globe on said globe supporting portion, lugs carried by said concentric portion adapted to be brought into engagement with said spring catches by a turning movement of said globe ring, and stop means for limiting the turning movement of said globe ring.

1,888,837. DIE MECHANISM FOR FORMING TUBULAR BODIES. DUNY A. SCHUTT, New Kensington, Pa. Filed Sept. 15, 1931. Serial No. 562,856. 20 Claims. (Cl. 153—32.)



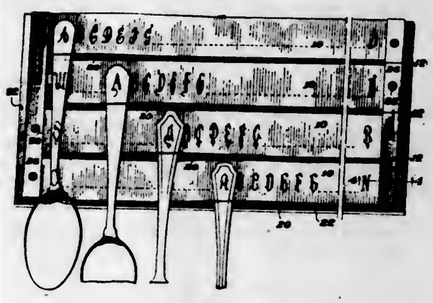
1. Forming mechanism for hollow metal shapes consisting of a stationary die having an undulating longitudinal contour and a downwardly and forwardly movable die of similar contour, and an intermediate flexible mandrel conformable under pressure of said dies to the contour thereof.

1,888,838. MONOGRAM ADAPTER. CATO SMITH, Newburyport, Mass., assignor to Towle Manufacturing Company, Newburyport, Mass., a Corporation of Massachusetts. Filed Aug. 1, 1931. Serial No. 554,591. 11 Claims. (Cl. 35—17.)



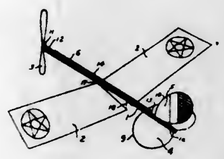
1. A monogram adapter comprising two sheets of transparent material each having a central salient panel extending across the material from one edge to the other, at least one of said sheets bearing an initial or monogram and said sheets being placed together with their salient panels opposed and facing outward thereby presenting permanently open mouths at two opposite edges, and means for securing the sheets together in such relation.

1,888,839. DISPLAY DEVICE. CATO SMITH, Newburyport, Mass., assignor to Towle Manufacturing Company, Newburyport, Mass., a Corporation of Massachusetts. Filed Oct. 31, 1931. Serial No. 572,312. 13 Claims. (Cl. 35—17.)



1. A display device of the character described comprising a support and a flexible sheet of transparent material bearing indicia to be displayed lying on said support and secured thereto solely by two opposite edges, the securement at at least one of said edges being through an accordion fold hinge.

1,888,840. MINIATURE AIRPLANE. GEORGE D. WANNER, Dayton, Ohio. Filed Jan. 28, 1929. Serial No. 335,623. 3 Claims. (Cl. 46—50.)



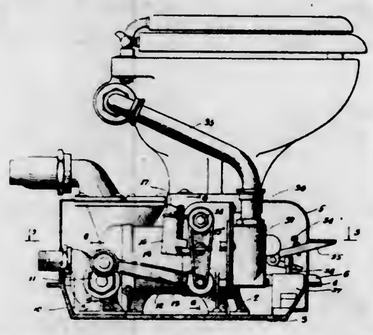
1. In a miniature airplane, an elongated member constituting a fuselage, separate wings arranged on opposite sides of said fuselage, and a bracket having a recessed portion to receive said fuselage and frictionally engage the same and having laterally extending arms secured to the respective wings to support the same in spaced relation to said fuselage, said arms being bendable to adjust said wings with relation to said fuselage.

1,888,841. ART OF HEAT INSULATION. EDWIN H. WENZEL and MAXIMILLIAN P. JANISCH, Milwaukee, Wis.; said Janisch assignor to said Wenzel. Original application filed Dec. 17, 1923, Serial No. 681,308. Divided and this application filed May 9, 1929. Serial No. 361,560. 10 Claims. (Cl. 20—4.)



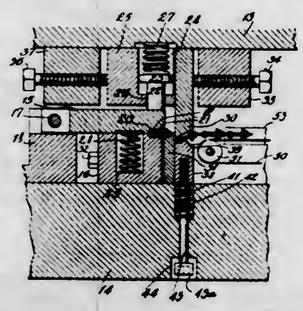
1. An insulating mat comprising fragments of fibrous sheet material of irregular form having adhesive means superficially connecting them to each other at their several points of contact and disposed in various irregular positions whereby to minimize points of contact between them and to provide innumerable air spaces throughout the mat.

1,888,842. MARINE TOILET. PERCY ALLAN, Montclair, N. J., assignor to A. B Sands & Son Company, New York, N. Y., a Corporation of New York. Filed May 6, 1931. Serial No. 535,312. 7 Claims. (Cl. 4—77.)



1. In combination with a toilet bowl and a discharge pipe, a suction chamber between the bowl and pipe, check valves between the chamber and the bowl and pipe, respectively, a rinsing pipe for the bowl, a pump cylinder communicating at one end with the suction chamber and at the other end with the rinsing pipe, a pipe between a supply of water for rinsing and the cylinder end in communication with the rinsing pipe, valves in the supply pipe and rinsing pipe, a piston in the cylinder, power means to actuate the piston, manual means to control the power means, means to actuate the last named valves by the manual means, and means to initiate actuation of the power means and actuate the said last named valves simultaneously.

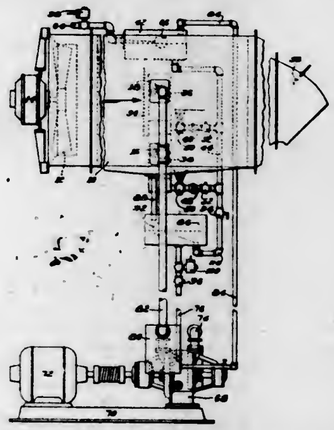
1,888,843. APPARATUS AND METHOD FOR MANUFACTURING WINDSHIELD WIPER BLADES. JOHN W. ANDERSON, Gary, Ind. Filed Mar. 4, 1931. Serial No. 519,971. 20 Claims. (Cl. 153—1.)



1. In an apparatus for manufacturing windshield wiper blades, the combination of means for bending the sides of channel shape holders into gripping engagement with the shanks of wiper strips; means for feeding a blank comprising a plurality of parallel wiper strips so as to successively dispose the shanks of successive trips in position for the application of a holder by the first mentioned means; and means for severing each successive strip from the blank after its holder has been applied thereto.

18. The method of manufacturing windshield wiper blades, comprising the steps of forming a blank embodying a plurality of parallel wiper strips; successively assembling holders on the shanks of successive strips; and severing each successive strip from the blank after its holder has been assembled.

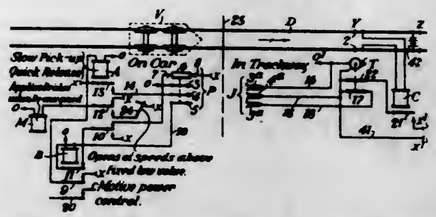
1,888,844. AIR CONDITIONING APPARATUS. SAMUEL M. ANDERSON, Sharon, Mass., assignor to B. F. Sturtevant Company, Hyde Park, Mass., a Corporation of Massachusetts. Filed June 24, 1929. Serial No. 373,414. 26 Claims. (Cl. 261—26.)



1. Air conditioning apparatus comprising a chamber through which the air being conditioned flows, a water tube, a tank for supplying water to the tube, means for atomizing the water as it leaves the tube, an indicator mechanism for determining the humidity of the conditioned air, and mechanism for controlling automatically the level of the water in the tank to maintain a predetermined degree of humidification of the conditioned air.

26. Air conditioning apparatus comprising a chamber through which air to be conditioned flows, a compressed air atomizing nozzle for producing a finely divided spray in the air current, a water supply for the nozzle, a pump for supplying compressed air to the nozzle, and commonly controlled devices for cutting off the water supply and throwing the pump out of operation.

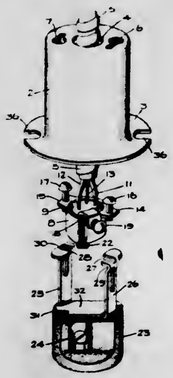
1,888,845. RAILWAY TRAFFIC CONTROLLING APPARATUS. GEORGE W. BAUGHMAN, Pittsburgh, Pa., assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed Sept. 24, 1930, Serial No. 484,049. Renewed Aug. 3, 1931. 15 Claims. (Cl. 246—183.)



1. A railway traffic controlling apparatus comprising a trackway trip arm, a trackway jack, a car-carried plug normally occupying a receptacle on the car but capable of being manually removed from such receptacle and inserted in said jack, means for clearing said trip arm in-

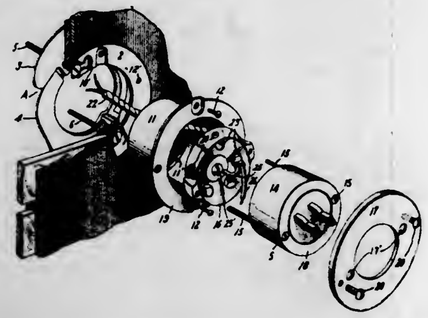
cluding a circuit located partly in the car and partly in the trackway and completed when said plug is inserted in said pack, and means for preventing said car from moving unless said plug is in said receptacle.

1,888,846. CABLE TERMINAL HOLDER AND RECEPTACLE FOR HOUSE WIRING SYSTEMS. GEORGE CARLSON, Ansonia, Conn., assignor to General Electric Company, a Corporation of New York. Filed Sept. 11, 1929. Serial No. 391,898. 9 Claims. (Cl. 247—15.)



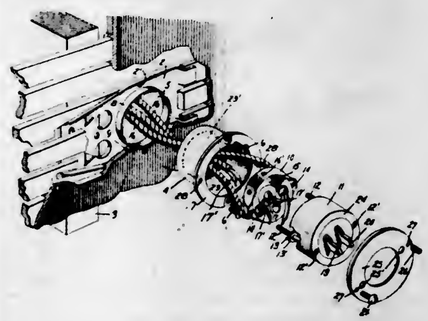
1. In a wiring system, in combination with a receptacle, a cable terminal holder, an opening in the bottom of said receptacle through which a cable may be inserted, said holder being hollow and adapted to receive the end of said cable, means for securing the armor of said cable to said holder, an electric device and a terminal therefor, means for securing said device to said holder and for connecting a conductor in said cable to said holder, and means for securing the holder within said receptacle, said holder being larger than said opening to prevent the holder from passing therethrough before the holder is secured to the receptacle.

1,888,847. HOUSE WIRING STRUCTURE. GEORGE CARLSON, Ansonia, and HOMER G. KNODERER, Fairfield, Conn., assignors to General Electric Company, a Corporation of New York. Filed Sept. 11, 1929. Serial No. 391,899. 16 Claims. (Cl. 247—21.)



1. A brace comprising a pair of plates with their sides opposite each other, each of said plates having a hole formed therein, one of said plates being formed in two sections, means for locking said sections together and for permitting them to move with respect to each other in a direction to reduce one of the overall dimensions thereof sufficiently to permit said plate being passed through a hole of the size substantially of one of said holes, said means serving also for clamping said plates together with a perforated body between them, said holes and said perforation being in alignment along a common axis.

1,888,848. RECEPTACLE FOR HOUSE WIRING SYSTEMS. GEORGE CARLSON, Ansonia, and HOMER G. KNODERER, Fairfield, Conn., assignors to General Electric Company, a Corporation of New York. Filed Sept. 11, 1929. Serial No. 391,900. 6 Claims. (Cl. 247—15.)



1. A receptacle for a wiring system having a mouth and an opening, the latter being located in the rear of the receptacle and opposite the former, a base element for the receptacle, a seat in said receptacle for said base element, said seat being located about said opening, said mouth being larger than said base element whereby the said base element may be thrust through said mouth into the receptacle, said opening being smaller than said base element whereby said base element is prevented from passing through said opening and whereby it may be seated on its seat, and means for maintaining said base element on its seat, said means being secured to the receptacle above said base element, and being in the form of a U-shaped bracket, said bracket being inserted in the receptacle and secured in the region of the mouth thereof.

1,888,849. PROCESS OF MAKING RESINOUS COMPOSITIONS. EDWARD S. DAWSON, JR., Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Feb. 17, 1927. Serial No. 169,146. 6 Claims. (Cl. 260—8.)

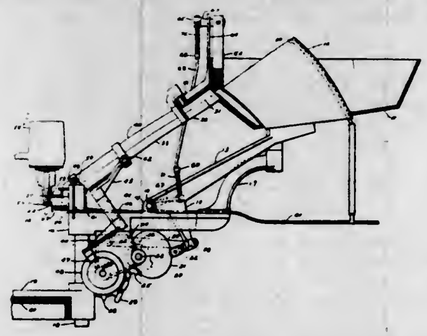
1. The process of compounding a drying oil with an alkyd resin which consists in dissolving said oil in a polybasic, organic acid and reacting upon said solution with a polyhydric alcohol at a temperature sufficiently high to produce resinification.

1,888,850. WIRE CONNECTION AND METHOD OF MAKING SAME. FRANK C. DE RHAMER, Bridgeport, Conn., assignor to General Electric Company, a Corporation of New York. Filed Jan. 29, 1931. Serial No. 512,095. 8 Claims. (Cl. 178—269.)



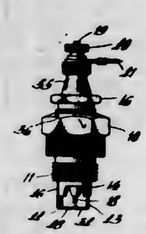
1. A connection comprising a member having a transverse open ended slot extending rearwardly from an edge thereof and a wire expanded in the slot to fill the same.

1,888,851. DEVICE FOR FEEDING GLASS ARTICLES. JOHN F. DONOVAN and GEORGE ILLINGWORTH, East Cleveland, Ohio., assignors to General Electric Company, a Corporation of New York. Filed Oct. 14, 1931. Serial No. 568,792. 4 Claims. (Cl. 198—26.)



1. A feeding apparatus comprising a guideway disposed to allow the feeding of articles therealong by gravity, means for oscillating said guideway in a substantially horizontal plane and escapement means for allowing the discharge of said articles one by one in predetermined time relation with the movements of said guideway comprising stationary fingers oppositely disposed so as to engage said articles at different positions of said guideway.

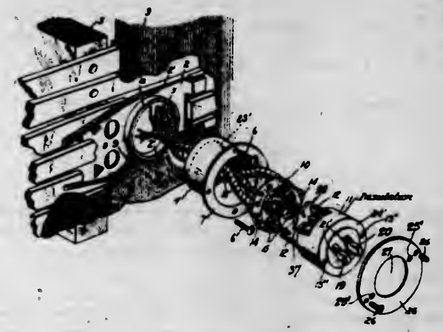
1,888,852. SPARK PLUG. JAMES D. FORSYTH, Tonawanda, N. Y. Filed Apr. 8, 1930. Serial No. 442,658. 2 Claims. (Cl. 123—169.)



1. A spark plug, comprising a metallic casing, an insulating core adapted to turn therein and having its lower end in eccentric relation to the casing-bore, a main electrode extending through said core, and a plurality of auxiliary electrodes applied to said core about the main electrode to form a plurality of spark gaps, the innermost terminal of said auxiliary electrodes being in sparking relation to the main electrode and the outermost terminal of said auxiliary electrodes being disposed between the contiguous faces of the casing and the core, said outermost terminal being adapted to form a ground contact with the casing in one position of the core and to form a spark gap therewith in another position of the core.

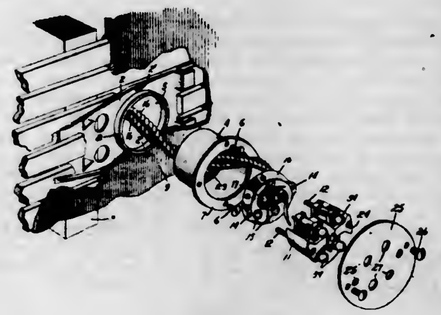
1,888,853. ELECTRIC SWITCH. ERNEST A. FRANCE, Bridgeport, and HOMER G. KNODERER, Fairfield, Conn., assignors to General Electric Company, a Corporation of New York. Filed Sept. 11, 1929. Serial No. 391,878. 10 Claims. (200—5.)

1. A switch comprising a block with a compartment having a pair of walls parallel to each other and having a third wall extending transverse the first two, a plurality of contact plates, one of said plates being folded over each wall, two of said folded plates having each a switch contact in said compartment and another of said folded plates having two contacts in said compartment, all of said contacts being located in a common plane, a brush mounted in said compartment in operative relation and in alignment with said contacts and located



along said plane, means for moving said brush into either of two positions, in one position in engagement with two of said contacts to connect two of said plates and in the other of said positions to connect the other two of said contacts and thereby connect one of said last mentioned plates with the third plate.

1,888,854. FUSE BLOCK AND FUSE THEREFOR. ERNEST A. FRANCE, Bridgeport, and HOMER G. KNODERER, Fairfield, Conn., assignors to General Electric Company, a Corporation of New York. Filed Sept. 11, 1929. Serial No. 391,879. Renewed May 25, 1932. 10 Claims. (Cl. 200—133.)

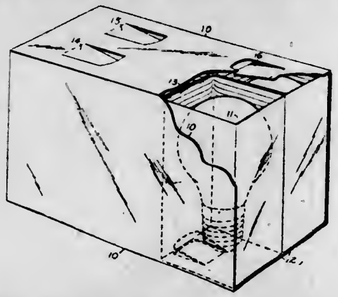


1. A fuse support comprising a block of insulating material and a frame mounted thereon comprising a plurality of pairs of spaced fuse holding clips, the clips of each pair being insulated from each other, and terminals for connecting conductors to said clips.

1,888,855. PACKAGE FOR INCANDESCENT LAMPS AND SIMILAR ARTICLES. CARL T. FULLER, Cleveland Heights, Ohio, assignor to General Electric Company, a Corporation of New York. Filed Dec. 21, 1929. Serial No. 415,734. 3 Claims. (Cl. 229—15.)

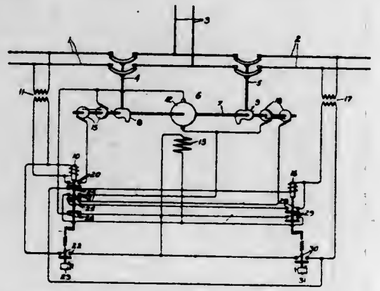
1. A package comprising an open ended outer container, a plurality of wrappers each open at both ends disposed

transversely within said container, said outer container being slit to form a pair of tabs depressible to extend



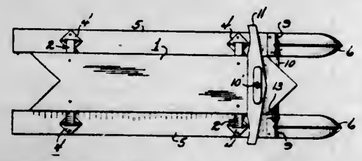
within said container and engage one of said wrappers, said tabs being disposed on opposite sides of said container to engage opposite ends of a wrapper.

1,888,856. AUTOMATIC SWITCHING SYSTEM. ROGER A. FULLER, Philadelphia, Pa., assignor to General Electric Company, a Corporation of New York. Filed Nov. 30, 1929. Serial No. 410,827. 6 Claims. (Cl. 171—97.)



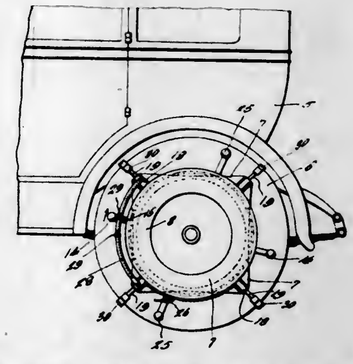
1. In combination, two electric circuits, a switch in each circuit, means including a reversible motor for closing one of said switches and opening the other of said switches when the armature of said motor rotates in one direction and for opening said one of said switches and closing said other of said switches when the armature of said motor rotates in the opposite direction, and means responsive to the voltages of said circuits for controlling the energization of said motor so that it develops a torque in a direction to cause the armature of said motor to rotate in one direction when one of said circuits is energized and the other circuit is deenergized and it develops a torque which causes the armature to rotate in the opposite direction when said one of said circuits is deenergized and the other circuit is energized.

1,888,857. COMBINATION SLED AND TOBOGGAN. CARROLL E. GREENE, South Ryegate, Vt. Filed Apr. 21, 1931. Serial No. 531,828. 1 Claim. (Cl. 280—21.)



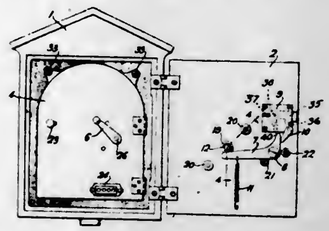
A sled comprising a seat, legs on said seat, flat runners hinged to the legs, tapered arms secured to the runners and the width of said arms where secured to said runners being substantially equal to the width of the runners, a link pivoted to the reduced ends of the arms, a steering post carried by the seat, an element secured to the post and extending forwardly thereof and located under the seat, an arm pivoted to the forward end of the element and to the link adjacent the latter's connection to one of the tapered arms, and a handle secured to the post and extending across the upper face of the seat.

1,888,858. BRAKE TESTING MECHANISM. JOHN HARRISON and GEORGE W. MATHENY, Caldwell, Ohio. Filed Aug. 30, 1930. Serial No. 478,914. 1 Claim. (Cl. 265—1.)



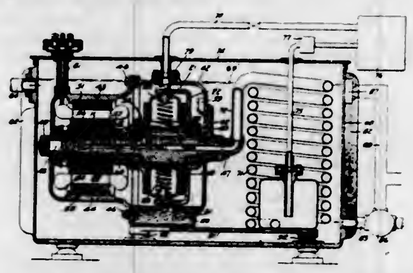
A brake testing mechanism for wheels comprising a body, clamp devices on the body for engaging the wheel, manually operated means for operating the clamp device, means for ascertaining the force that must be exerted in order to turn the wheel against a given application of the brake including spring means connecting said latter means to the clamp devices, said manual means comprising a ring gear, rack teeth on the devices, a gear meshing with the teeth of each clamp device and also with the ring gear, a lever projecting from the ring gear, and ratchet and pawl means whereby the ring gear can be retained in a given position.

1,888,859. SIGNALING BOX LOCK. JOHN JUST, Chicago, Ill., assignor, by mesne assignments, to Associated Electric Laboratories, Inc., Chicago, Ill., a Corporation of Delaware. Filed Sept. 25, 1929. Serial No. 395,013. 2 Claims. (Cl. 70—14.)



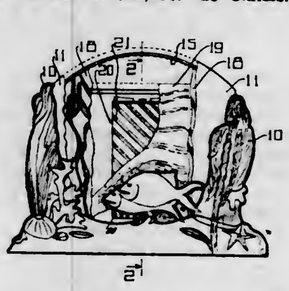
1. In a locking arrangement for a door and casing, a lock on said door having a spring pressed bolt engaging said casing, a lever on the rear of said door, a handle on the front of said door connected to said lever, means on said lock in engagement with one end of said lever for withdrawing said bolt from said casing, a plunger extending through said door and projecting into the path of movement of the other end of said lever, and frangible means on the front of said door for holding said plunger in the path of said lever to prevent operation of said handle and the opening of said door.

1,888,860. COMPRESSOR. ARTHUR J. KERCHER, Berkeley, Calif. Filed July 18, 1927. Serial No. 206,441. 19 Claims. (Cl. 230—177.)



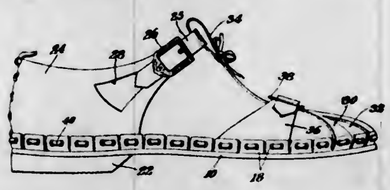
1. In a pump the combination of a stationary shaft, a piston and cylinder assembly mounted to rotate about the shaft, an actuator rotatably mounted eccentrically with respect to the shaft for effecting reciprocatory movement of the pistons, a reservoir from which oil flows by gravity into the compressor, and means operable upon rotation of said assembly to introduce oil into the reservoir.

1,888,861. APPARATUS FOR PRODUCING MOVING PICTURE EFFECTS. HARRY M. LAXER, New York, N. Y., assignor to Marvelite Products Corporation, New York, N. Y., a Corporation of New York. Filed July 18, 1931. Serial No. 551,586. 25 Claims. (Cl. 40—40.)



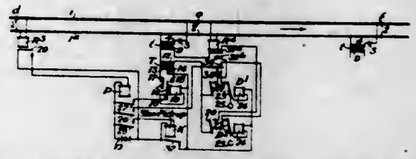
18. In apparatus of the character described the combination comprising a translucent field, an element presenting an opaque design spaced a distance behind said field, means for refracting certain light rays, said means being spaced a distance behind said field and comprising a translucent screen, and means for cutting off the light rays in certain directions at certain times.

1,888,862. SHOE. EDWARD F. MATHEWS, Ypsilanti, Mich., assignor, by mesne assignments, to Dun Deer Sandals, Inc., Auburn, N. Y., a Corporation of Delaware. Filed Aug. 20, 1929. Serial No. 387,203. 8 Claims. (Cl. 36—12.)



3. A shoe comprising a sole having a series of upstanding segments about its marginal portion, two perforations in each such segment, perforated upper members with their lower edges inside of said segments, and a lacing running around the shoe through the perforations in the segments and the upper members, with a loop of said lacing on the outside running between the two perforations in each segment.

1,888,863. RAILWAY TRAFFIC CONTROLLING APPARATUS. RONALD A. MCCANN, Swissvale, Pa., assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed Oct. 2, 1929. Serial No. 396,818. 20 Claims. (Cl. 246—34.)

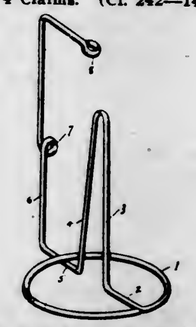


20. In combination, a section of railway track, means for supplying train controlling current to said section when a train enters the section, and means for discontinuing the supply of said current to said section after the section has been occupied for a given interval of time.

1,888,864. ART OF PRINTING OR GRAINING. LOGAN A. MIZENER, Wilmette, Ill., assignor to Chicago Mill and Lumber Corporation, Chicago, Ill., a Corporation of Delaware. Original application filed Jan. 26, 1931, Serial No. 511,434. Divided and this application filed Nov. 30, 1931. Serial No. 578,211. 11 Claims. (Cl. 41—26.)

1. The method of graining which consists in printing directly upon the surface of wet wood with a water-resistant compound comprising a starch, coloring matter, glycerine and acetic acid, in which said last mentioned ingredients are present in the proportions of at least three times as much glycerine as acetic acid.

1,888,865. TWINE HOLDER. EWALD F. PAWSAT, Maysville, Ky., assignor to Wald Manufacturing Company, a Corporation of Kentucky. Filed Apr. 27, 1931. Serial No. 533,114. 4 Claims. (Cl. 242—141.)

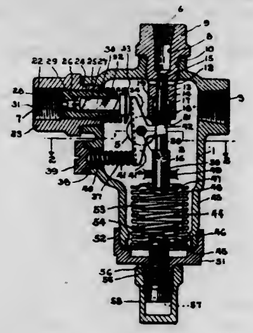


1. A device of the character described comprising a single piece of wire, said wire being formed into a circular base member, and upwardly converging arms disposed within said circular base, adapted to receive a cone of twine.

1,888,866. CONTROL MEANS. PHILIP SHERMAN RUSSEL, Detroit, Mich., assignor to Detroit Lubricator Company, Detroit, Mich., a Corporation of Michigan. Filed Dec. 31, 1930. Serial No. 505,718. 14 Claims. (Cl. 137—153.)

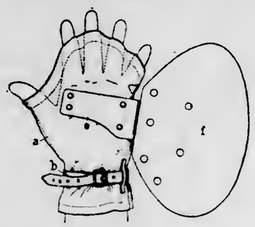
1. A device of the character described, comprising a hollow casing having an inlet port and a plurality of

outlet ports, a valve member controlling each of said outlet ports, one of said valve members being operable upon predetermined fluid pressure in said casing, another of said valve members being operable upon a predetermined increase of fluid pressure in said casing, means normally tending to move said other valve member toward open position, means responsive to fluid pressure in said



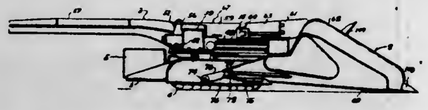
casing and operatively connected to said one member, means exerting a predetermined resistance to operation of said responsive means, and means opposing said first-named means and operable by said responsive means upon a predetermined increase of fluid pressure in said casing to permit said first-named means to actuate said other valve member.

1,888,867. SWIMMING APPLIANCE. GEORG GUSTAV EMIL SCHMITT, Berlin-Wilmersdorf, Germany. Filed June 11, 1931, Serial No. 543,663, and in Germany Apr. 23, 1931. 3 Claims. (Cl. 9—21.)



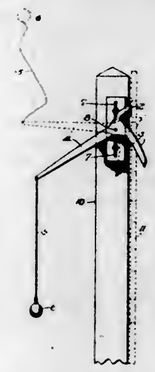
1. A swimming appliance of the character described comprising a glove, and a thrust plate connected immovably to one side of said glove in a laterally extending position and maintained at an angle less than 180° to the palm of the hand.

1,888,868. LOADING MACHINE. ROBERT E. SCHRODER, Chicago, Ill., assignor to Goodman Manufacturing Company, Chicago, Ill., a Corporation of Illinois. Filed Mar. 12, 1930. Serial No. 435,064. 20 Claims. (Cl. 198—8.)



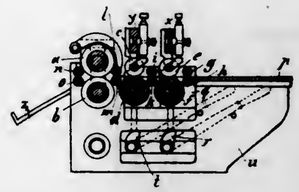
1. In a loading machine, a base frame, and a gathering element supported thereon including a frame member pivotally supported on said base frame and extending forwardly therefrom and having a transversely extending bottom surface adapted to slidably engage the ground and a plurality of continuously movable scoops extensible longitudinally forwardly of said base frame beyond the forward end thereof to penetrate a pile of loose material along the ground and then pivotally movable upwardly and rearwardly to move said material into a conveyor.

1,888,869. AUTOMATIC CHECK-HOOK. HENRY SPANGENBERG, Longbranch, Wash. Filed June 23, 1930. Serial No. 463,047. 1 Claim. (Cl. 292—99.)



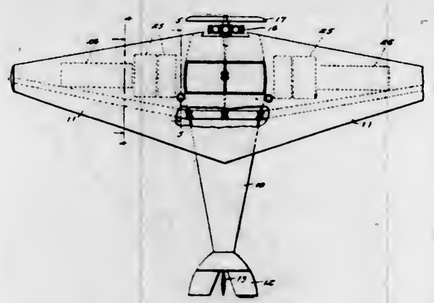
The combination with a double-swinging gate of an automatic checkhook of one piece construction having a downward, tapered, curved extension providing actuating means when struck and pushed back by an open-swinging gate, an upper neck-like forward extension with jaw on outer end pointing downward providing means to grab an open-swung gate and to hold same until released by a dropping weight, a tapered rear lever-like extension providing means to jerk up weight and a pivot hole placed in the proper position relative to the radius and leverage of the different extensions mentioned, all substantially as set forth.

1,888,870. CIRCULAR SHEARS. FRITZ STEIN, Berlin, Germany, assignor of one-half to Hermann Ebeling, Wilhelminenhofstrasse, Berlin-Oberschoneweide, Germany. Filed Oct. 16, 1931, Serial No. 569,149, and in Germany Oct. 17, 1930. 4 Claims. (Cl. 93—58.)



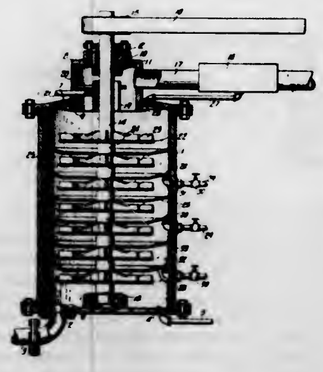
1. A circular shears machine for creasing, scoring and cutting pasteboard, cardboard and the like, comprising in combination circular shears for the cutting operation, feed rolls for the said shears, scoring means, feed rolls for the said scoring means, creasing means, feed rolls for the said creasing means, and a displaceable feed table enabling the material to be fed in direct fashion to any of the said feed rolls as desired.

1,888,871. AIRPLANE. WALTER R. APPERMAN, Fort Worth, Tex. Filed July 27, 1928, Serial No. 295,742. Renewed Apr. 9, 1932. 1 Claim. (Cl. 244—12.)



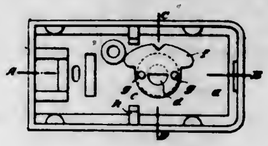
An airship including wings connected together at their inner ends whereby to produce a continuous wing spread, and a fuselage connected to and extending rearwardly from the center of the wing spread, said wings and fuselage being double-cambered in cross section, the forward edges of said wings converging forwardly and meeting in the longitudinal center of said fuselage, the rear edges of said wings converging rearwardly and meeting in the longitudinal center of said fuselage.

1,888,872. FRACTIONATING TOWER. EDWARD C. D'YARMETT, Kansas City, Mo., assignor to The Fractionator Company, Kansas City, Mo., a Corporation of Missouri. Filed Sept. 3, 1929. Serial No. 389,957. 8 Claims. (Cl. 261—89.)



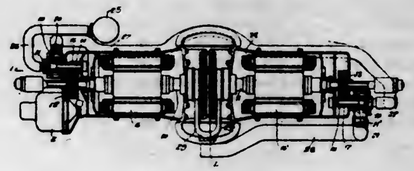
1. A fractionating tower including a shell, an inlet port in said shell, a vapor dome above and communicating with the interior of the shell, a shaft rotatable in the shell and dome, spaced disks on the shaft within the shell, means in association with the disks and operable by the shaft for centrifuging vapors and their condensates passing through the shell, drip plates extending downwardly and inwardly from the wall of the shell between the disks, and separate means for removing vapors from said dome and condensed liquid from the shell.

1,888,873. LOCK. ALBERT EISELE, Berlin-Westend, Germany. Filed June 19, 1930, Serial No. 462,817, and in Germany June 25, 1929. 3 Claims. (Cl. 70—16.)



1. In locks, a casing, and a rollback structure with cam and pins for cooperating either with a spring pressed latch bolt or with a sliding dead bolt.

1,888,874. ELASTIC FLUID TURBINE PLANT. ALF LYSHOLM, Stockholm, Sweden, assignor to Aktiebolaget Ljungströms Angturbin, Stockholm, Sweden, a Corporation. Filed Sept. 6, 1927, Serial No. 217,663, and in Sweden Sept. 7, 1926. 11 Claims. (Cl. 60—70.)



1. In a turbine plant, in combination, a low pressure section comprising a radial flow turbine including a rotor, a section of higher pressure than the low pressure section comprising an axial flow turbine having a rotor including reaction wheels coupled to the rotor of the radial flow turbine, means to supply elastic fluid to said higher pressure section to expand therein and to exhaust therefrom, and means for conducting the expanded fluid to said low pressure section for further expansion in the low pressure section.

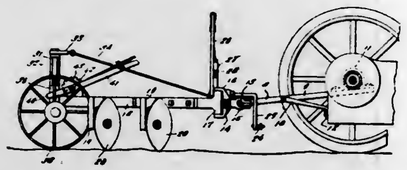
1,888,875. FASTENING DEVICE. ELDRIDGE E. LONG and WILLIAM C. GOETZE, Troutdale, Oreg. Filed Jan. 30, 1932. Serial No. 589,984. 2 Claims. (Cl. 24—123.)



2. A fastening device of the character described comprising a hook, an eye formed with the shank thereof, a

socket member, spaced apertured ears formed with the socket member and adapted to receive the eye between the same, a pivot pin passing through the ears and eye, a strand of flexible material secured in the socket member, said hook being tapered toward its free end, a spiral portion formed with the tapered portion and adapted to receive the strand of flexible material in a manner whereby the latter extends through the convolutions thereof.

1,888,876. TRACTOR PLOW. ALTON MAHAN, Rydal, Ga. Filed Nov. 7, 1931. Serial No. 573,655. 4 Claims. (Cl. 97—47.)



1. In a structure of the class described, in combination, a tractor, a frame structure rigidly secured to the tractor, a yoke rockably and slidably mounted on said frame structure, adjusting and retaining means between the frame structure and yoke for bodily shifting the yoke laterally with respect to the longitudinal line of draft, a diagonally disposed plow beam pivotally connected to the central portion of the yoke, a ground engaging wheel adjustably fulcrumed on a vertical turning axis at the rear end of said beam, and plow discs carried by said beam.

1,888,877. REENFORCING MEANS FOR THE RIMS OF OPENINGS IN METAL CONTAINERS. KARL WILHELM MAUSER, Waldeck, Germany. Filed Sept. 22, 1930, Serial No. 488,632, and in Germany Sept. 27, 1928. 2 Claims. (Cl. 285—49.)



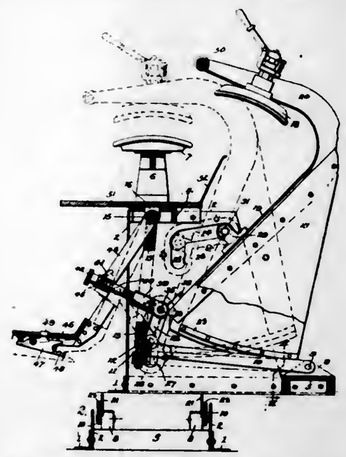
1. The combination with a sheet metal container having an opening in a wall thereof, of a collar fitted in the opening, a polygonal shaped peripheral flange on the collar, an uninterrupted fold ring on the collar, the container wall having an outwardly extending flange surrounding the opening and terminating in an uninterrupted fold ring adapted to cooperate with the fold ring of the collar to provide a seam connection between the container wall and the collar, the flange of the collar extending beyond the outer end of the fold ring carried thereby and having intimate engagement with the flange of the container for its entire width.

1,888,878. FURRING AND SPACING DEVICE. JAMES MCSKIMMING, Santa Barbara, Calif. Filed Dec. 12, 1930. Serial No. 501,989. 1 Claim. (Cl. 72—118.)



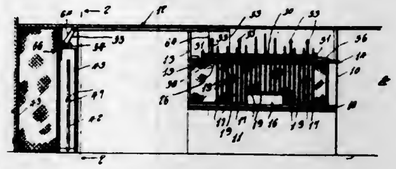
A furring and spacing device comprising a disk having flat opposite faces and one of said faces provided with a cup-like recess located centrally thereof to receive lubricant and to receive the pointed end of a headed fastener to aid in starting the fastener when driven through the disk and to apply a lubricant to the fastener for aiding the latter in penetrating the disk and an object to which the disk is secured by the fastener.

1,888,879. GARMENT PRESSING MACHINE. HENRY C. A. MEYER, Baltimore, Md., assignor, by mesne assignments, to United States Hoffman Machinery Corporation, New York, N. Y., a Corporation of Delaware. Filed Dec. 3, 1925. Serial No. 72,978. 14 Claims. (Cl. 68—9.)



1. In a press of the class described, the combination of a frame; a buck mounted thereon; a platform pivoted to the frame; resilient means normally acting to raise the free end of the platform; a rocker frame mounted on the platform; a pressing head carried at the upper end thereof; and a pressure applying mechanism interposed between the forward lower portion of the rocker frame and a fixed portion of the press.

1,888,880. BANK COUNTER PROTECTIVE DEVICE AND DOOR OR GATE LATCH. JOHN W. MINTON, Mebane, N. C., assignor of five per cent to George S. Ray, Mebane, N. C. Filed June 27, 1929. Serial No. 374,280. 1 Claim. (Cl. 20—1.01.)

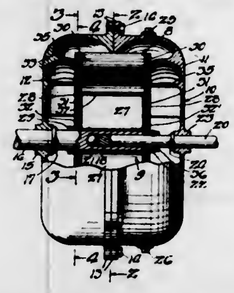


A device of the class described comprising slats, cranks on said slats, an actuating element for said cranks, means to urge actuation of said element, a rock shaft, means to actuate the rock shaft, a detent for said element, means mounting the detent for sliding movement transversely of the path of movement of the element, an operative connection between said shaft and detent, a lever on the rock shaft extending rearwardly beyond the device, and a flexible element connected to the lever and vertically depending therefrom in the rear of the device for operation to retract the first mentioned element.

1,888,881. HYDRAULIC TRANSMISSION. EDWIN L. MURPHY, Chicago, Ill. Filed Apr. 3, 1931. Serial No. 527,546. 4 Claims. (Cl. 60—54.)

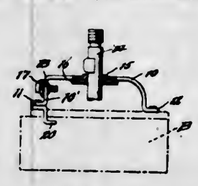
1. In combination with a drive and driven shaft, a transmission structure comprising a housing adapted to contain a fluid and including arcuate ribs on the inside of its side walls, stationary discs disposed over the inner ends of said ribs and cooperating with said ribs and with said walls to provide passages between said discs, a rotor

fast on the driven shaft and including side plates arranged in parallelism with and between said discs, said rotor including a plurality of blades arranged between said plates, said passages having communication with the interblade spaces of said rotor, an impeller fast on the drive shaft and including a plurality of radially arranged blades rotatable between said plates, said plates and discs having



openings therein providing communication between said passages and the interblade spaces of said impeller whereby rotation of the drive shaft and the impeller will force said fluid against the blades of said rotor to rotate said rotor and driven shaft, said fluid then discharging from between the blades of said rotor into said passages and returning to the interblade spaces of said impeller through said openings.

1,888,882. COMBINED YOKE AND TERMINAL. ARVID H. NERO, West Hartford, Conn., assignor to The Arrow-Hart & Hegeman Electric Company, Hartford, Conn., a Corporation of Connecticut. Filed Feb. 14, 1931. Serial No. 515,873. 8 Claims. (Cl. 200—166.)



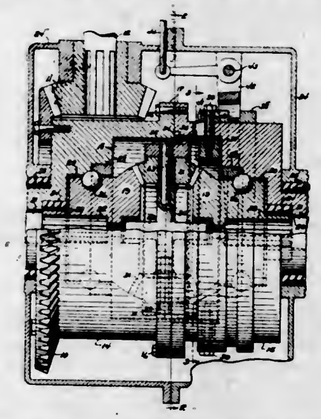
1. In combination with a switch mechanism, a switch yoke apertured for the passage therethrough of a switch spindle, a wire terminal formed at one end of said yoke, and an insulating member between the switch spindle and said terminal insulating the switch spindle from said terminal.

1,888,883. METHOD OF DYEING EYEBROWS AND EYELASHES. LOUISE NORRIS, Kansas City, Mo. Filed July 24, 1930. Serial No. 470,545. 2 Claims. (Cl. 167—88.)

1. The method of dyeing eyelashes which comprises coating the skin area immediately adjacent the eyelashes to be dyed with a protecting solution containing sterile olive oil and lanoline to protect the area against the action of the dye, applying the dye to the eyelashes, and removing the coating.

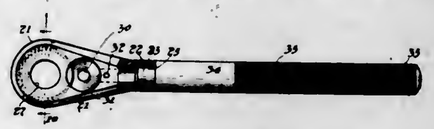
1,888,884. DRIVE AXLE GEARING. HARRY F. OMER, Kansas City, Kans., and MARION R. WILLIAMS, Kansas City, Mo. Filed Nov. 12, 1931. Serial No. 574,608. 7 Claims. (Cl. 74—99.)

1. A drive axle gearing comprising a two-part axle, a member in surrounding relation to the adjacent ends of said axle parts, a driving element operatively connected with said member, a differential gearing operatively connecting the axle parts and housed by said member, overrunning clutches interposed between the axle parts and said member, the differential gearing comprising a gear connected with each axle part and a set of spider gears in



mesh with the axle gears, the spider gears being mounted on a spider, and means for selectively locking the spider to said member or releasing it therefrom.

1,888,885. METHOD OF MAKING TOOL HANDLES. BEN PEPPERDINE, Chicago, Ill. Filed May 21, 1932. Serial No. 612,769. 9 Claims. (Cl. 76—114.)



1. The method of making tool handles of the class described, consisting in first revolving and cutting a suitable body to form a substantially hemispherical head and stem; and then flattening opposite sides of said head and welding a handle shank to said stem.

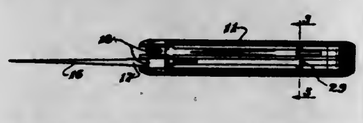
9. The method of making tool handles of the class described, consisting in first revolving a rod and cutting said rod to form a substantially hemispherical head at its inner end and a cylindrical stem at its outer end, the peripheries of said head and stem being joined by means of a substantially conical surface; then boring a socket into the end of said stem extending into said head; then enlarging the outer end of said socket forming a plug socket; then flattening opposite sides of said head, inserting a plug in said plug socket and welding a handle shank to said stem; and then forming two transverse, cylindrical bearing sockets in opposite sides of said head in intersecting, co-operative relationship with the bottom of each socket provided with a concentric bearing opening, the open end of one of said sockets being provided with a threaded enlargement for the reception of an annular securing nut.

1,888,886. TREATMENT OF CAUSTIC SOLUTIONS FOR THE PRODUCTION OF SOLUTIONS AND OF SOLID CAUSTIC SODA OF A HIGH DEGREE OF PURITY. DAVID ARTHUR PRITCHARD, Sandwich, Ontario, Canada, assignor to The Pennsylvania Salt Manufacturing Company, Philadelphia, Pa. Filed July 17, 1928, Serial No. 293,489, and in Great Britain Oct. 21, 1927. 10 Claims. (Cl. 23—184.)

7. An improved process for the manufacture and production of caustic soda solutions and solid caustic soda therefrom of a high degree of purity comprising treating

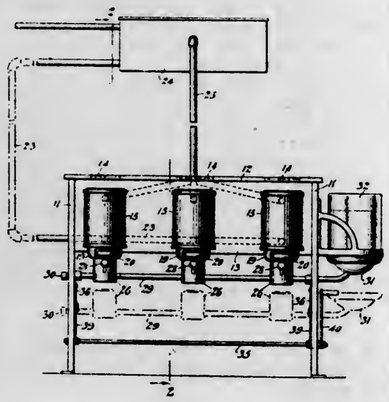
concentrated caustic soda liquors or solutions with a reagent which will increase the amount of sodium sulphate in the liquors or solutions to such an extent that the major portion of the sodium chloride originally present in the liquors or solutions is precipitated.

1,888,887. POCKET KNIFE. BERNARD WILLIAM READMAN, Lilac, North Battleford, Saskatchewan, Canada. Filed Apr. 20, 1929. Serial No. 356,707. 2 Claims. (Cl. 30—10.)



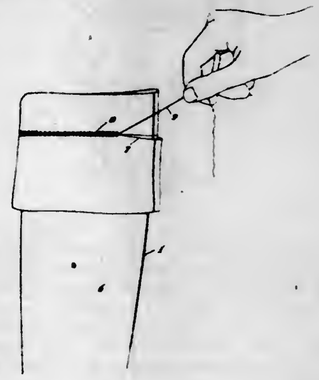
1. A pocket knife including a body provided with spaced side plates and a parallel partition plate therebetween; said side plates and said partition plate having opposed longitudinal flanges on their upper edges and longitudinal grooves in their opposed faces below said flanges with upwardly directed notches extended through said flanges at the opposite ends of said grooves; means for spacing said side plates from said partition plate along the lower edges thereof; blades with vertical open pockets in the upper portions of the heads thereof; said blades being slidable longitudinally between said partition plate and said side plates and operable through one end of said body; locking members carried on said blades and having enlarged lower ends working in the said pockets thereof; said locking members being automatically engageable in said notches to lock said blades in their extreme inner and outer positions; and covering and finishing members provided on the outer faces of said side plates.

1,888,888. OIL STOVE. JACOB RUDOY, Haifa, Palestine. Filed July 21, 1930. Serial No. 469,554. 1 Claim. (Cl. 126—50.)



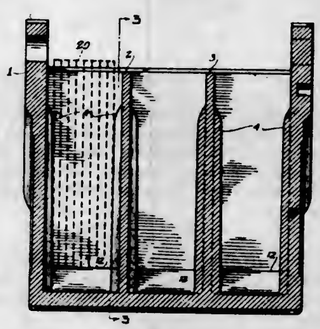
A stove having the combination of fixed flues, oil burners, an oil feed tube for the burners on which they are mounted in alinement respectively with said flues, guides respectively on the ends of the stove, slides having guided up and down movement on said guides respectively, said feed tube having its opposite ends connected respectively with said slides, a rock shaft supported by the stove ends, arms on said shaft, links pivotally connected respectively with said arms and also pivotally connected respectively with said slides, and a handle rigidly secured to said shaft, the provision and arrangement being such that the burners will be normally projected into the lower ends of said flues, and be movable downwardly to positions clear of said flues and upwardly into their projected positions in the flues by manipulating said handle.

1,888,889. HOSIERY. ELWOOD W. SACHSENMAIER, Charlotte, N. C., assignor to Larkwood Silk Hosiery Mills, Inc., Charlotte, N. C., a Corporation of Delaware. Filed July 21, 1931. Serial No. 552,231. 2 Claims. (Cl. 66—173.)



1. An extensible stocking having a plural-ply top formed by a single-ply portion of the leg fabric and a finished-edge upper portion turned-down thereupon and having its finished edge separably secured thereto by means of a draw thread.

1,888,890. BATTERY CONTAINER. WILLIAM J. SANDMAN, Louisville, Ky. Filed Mar. 22, 1930. Serial No. 438,225. 1 Claim. (Cl. 136—81.)



An integral battery container of solid inflexible composition having partitions constituting with the sides, ends and bottom of said container, cells, plate groups of less thickness than the width of said cells with the faces of the plates thereof substantially parallel to the partitions and ends of said container, said partitions and ends being formed with flexible ribs having faces snugly engaging the faces of the outside plates of said groups.

1,888,891. PROCESS FOR MANUFACTURING BENT PIPES. ALFRED SCHMIDT, Dusseldorf, Germany. Filed Mar. 30, 1931, Serial No. 526,514, and in Germany May 31, 1930. 1 Claim. (Cl. 153—32.)

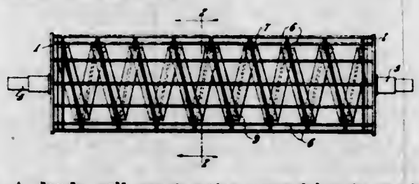
A process for bending pipes which are suitable to withstand internal pressure, comprising filling the pipe with

sand and securing it, heating the whole circumference of the part to be bent and partly bending it allowing the pipe to cool, heating individual parts of the pipe walls



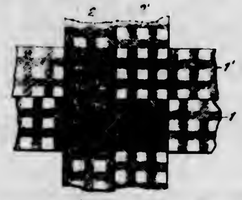
on the inside of the bend, and bending the pipe a small amount after each heating until the desired shape is obtained.

1,888,892. DANDY ROLL. JOHN R. SINCLAIR, Holyoke, Mass. Filed Sept. 29, 1931. Serial No. 565,817. 4 Claims. (Cl. 92—48.)



1. A dandy roll construction comprising in combination, head members, journal members attached thereto, rods extending between the head members, a rigid spiral support secured to the rods, and a rigid spiral member formed with outwardly extending radial flanges secured to the said support for receiving and conveying away any material that may pass through from the outer to the inner portion of the roll.

1,888,893. PICTURE REPRODUCING DEVICE FOR TELEVISION. LUDWIG TSCHÖSNER, Vienna, Austria. Filed Feb. 26, 1931, Serial No. 518,511, and in Austria Nov. 16, 1929. 8 Claims. (Cl. 178—6.)



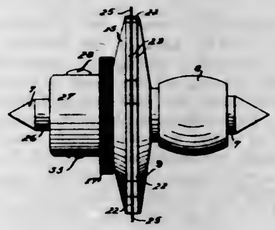
1. Picture reproducing device for television, comprising two superimposed strips of screen composed of a plurality of units and adapted to be displaced in different directions, means for displacing the said screen strips, means for returning the said strips to their initial position, and an illuminant, the light of the said illuminant passing through the said strips when the dark screen units are covered and being stopped when the said screen strips are displaced for the width of a unit.

1,888,894. TOOL FOR PNEUMATIC TIRES. HAROLD A. VAN VALKENBURG, Van Nuys, Calif. Filed Aug. 22, 1930. Serial No. 477,083. 2 Claims. (Cl. 157—6.)



1. A tire tool for use in removing and replacing pneumatic tires on their rims comprising a resilient band having a curved upper portion conforming generally to the shape of the tire, and having depending ends engageable with the opposite sides of a tire to compress the same, said resilient band being sufficiently stiff to compress the sides of the tire so that the beads thereof are substantially in contact with one another.

1,888,895. STONE CUTTING MACHINERY. LEENDERT VERKUIL, Staten Island, N. Y. Filed May 1, 1930. Serial No. 449,081. 14 Claims. (Cl. 125—30.)



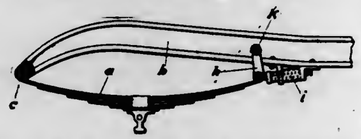
1. A rotatable unit of the character described, comprising a circular saw mounted between a plurality of radially adjustable elements, means for adjusting said elements to vary the distance through which the periphery of said saw projects beyond said elements, and means for forcing said elements into engagement with said saw.

1,888,896. PRODUCTION OF PHOSPHORUS AND PHOSPHORIC ACID. WILLIAM H. WAGGAMAN, Lakeland, and STAPLETON D. GOOCH, Lake Wales, Fla., assignors to Coronet Phosphate Company, New York, N. Y., a Corporation of New York. Filed Mar. 21, 1930. Serial No. 437,748. 1 Claim. (Cl. 23—223.)



A method of pyrolytically producing phosphorus from phosphatic material comprising charging a mixture consisting of a sintered mass of phosphate and siliceous material together with a fuel into a furnace zone, building the charge in the furnace zone until the height of the charge bears a ratio to the width of the charge of more than seven and one-half to one, igniting the charge and passing the generated gases and vapors upwardly through the elongated column-like charge, the height of which is more than seven and one-half times the width, thereby effecting a high flow velocity of the gases and vapors and insuring a prolonged heat exchange period between the hot evolved gases and vapors and the upper section of the charge.

1,888,897. UNDERFRAME FOR AUTOMOBILE VEHICLES. MAX WAGNER, Stuttgart, Germany, assignor to Daimler-Benz Aktiengesellschaft, Stuttgart-Underturkheim, Germany, a Company of Germany. Filed June 18, 1931, Serial No. 545,292, and in Germany Jan. 25, 1930. 5 Claims. (Cl. 267—29.)



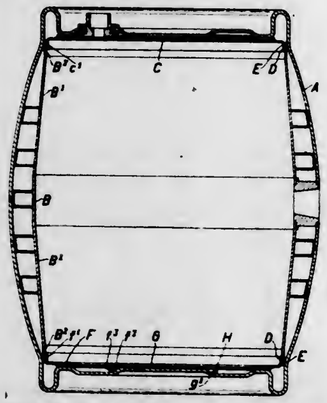
2. In an automobile vehicle, the combination with the vehicle frame and an axle for the steering wheels, of a longitudinal supporting spring for connecting the axle to the vehicle, an eye on the front end of said spring, a pivot on the frame for said eye, said pivot fitting the eye loosely, a bush interposed between said eye and pivot and capable of radial movement with respect thereto, a shackle pivotally connected to the rear end of the spring and to the vehicle frame and a spring connected to the rear end of the spring and to the vehicle frame and arranged so as to urge the axle supporting spring forwardly.

1,888,898. QUILL-LIKE STRUCTURE IN THE FORM OF A RIGID, WATERPROOF, AND IF DESIRED, TRANSPARENT TUBE. FRIEDRICH KARL WICKEL, Dresden, Germany. Filed Aug. 20, 1928, Serial No. 300,954, and in Germany Aug. 22, 1927. 6 Claims. (Cl. 93—94.)



1. As a new article of manufacture, a drinking tube composed of a non-absorbent paper coated with an odorless and tasteless resin.

1,888,899. METAL DRUM. PETER WOLF, Essen, Germany, assignor to Fried. Krupp Aktiengesellschaft, Essen-on-the-Ruhr, Germany. Filed May 29, 1930, Serial No. 457,264, and in Germany June 7, 1929. 6 Claims. (Cl. 220—10.)



2. A metal drum one front wall of which has an inwardly directed flange inserted in and joined to the shell both by a resistance weld directly on its free edge and another weld behind said resistance weld, the free edge of said flange having a ground surface subsiding smoothly into the wall of said drum without any shoulder.

3. A metal drum according to claim 2, an aperture in at least one of the front walls to admit resistance welding and grinding apparatus for forming said joints and grinding sharply said flange edge.

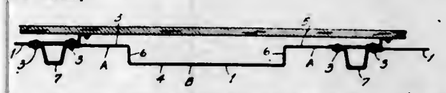
1,888,900. RADIATOR. FREDERICK HUGH AUSTEN, Leicester, England. Filed Apr. 11, 1928, Serial No. 269,138, and in Great Britain May 9, 1927. 14 Claims. (Cl. 257—136.)



1. In combination, a radiator having a flat face formed integral with its front surface, such face being backed by heating fluidways and forming a large part of the front area of the radiator, a panel element concealing the radiator and having its rear side in contact with said flat face, said element being adapted to disseminate by radiation a substantial proportion of the heat, and securing means located within the area of the radiator for detachably engaging the panel element in heat transference relationship with the radiator.

13. The combination with a radiator having an integral flat face transmitting heat through a removable panel element resiliently held in association therewith, of packing strips or material located between the radiator and the panel element for modifying the temperature of the panel.

1,888,901. CAR ROOF. CHARLES DAVID BONSALL, Pittsburgh, Pa., assignor to P. H. Murphy Company, New Kensington, Pa., a Corporation of Pennsylvania. Filed Feb. 25, 1932. Serial No. 595,107. 10 Claims. (Cl. 108—5.4.)



7. A car roof comprising hollow ribs alternating with channels, the metal in the tops of said ribs being thicker than the metal in the sides thereof.

9. A car roof comprising metal roof sheets whose side marginal portions are thicker than their body portion and shaped to form hollow box seams.

1,888,902. AIRPLANE CONSTRUCTION. GIUSEPPE M. BELLANCA, New Castle, Del. Filed June 7, 1930. Serial No. 459,746. 7 Claims. (Cl. 244—2.)



2. In an airplane a fuselage, a main wing, stub wings, air foils connecting the stub wings and the main wing, and landing wheels mounted between the stub wings and the air foils.

1,888,903. MANUFACTURE OF MORDANT AZO DYESTUFFS. ERNST BODMER and FRANZ NEITZEL, Basel, Switzerland, assignors to the Firm of Durand & Huguenin S. A., Basel, Switzerland. Filed Feb. 20, 1930, Serial No. 430,128, and in Germany Mar. 1, 1929. 5 Claims. (Cl. 260—72.)

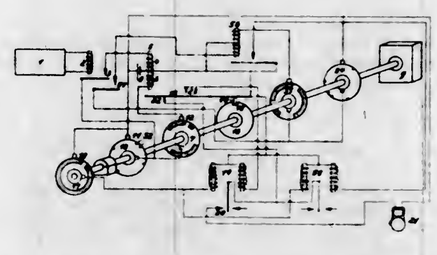
1. The herein described process for the manufacture of new mordant azo dyestuffs, which consists in using as starting material an amino azo compound of the following general formula:

$$R_1—N=N—R_2—NH_2$$

(R_1 standing for a benzene nucleus containing as substituents a hydroxy and a carboxylic group in ortho-position to each other, R_2 standing for a benzene nucleus bearing an amino group in para-position to the azo group) and subjecting such body to an oxidizing action in an alkaline medium, to form by union of two molecules of the starting material probably a trisazo body of the following general formula:

$$R_1—N=N—R_2—N=N—R_2—N=N—R_1.$$

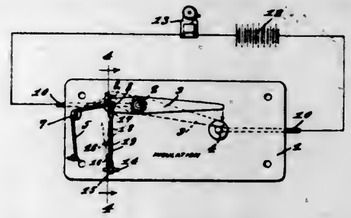
1,888,904. STATION CALLING DEVICE. ERNST BRÄUER, Voigtsdorf in Riesengebirge, Germany. Filed Oct. 12, 1929, Serial No. 399,269, and in Germany Oct. 16, 1928. 7 Claims. (Cl. 250—2.)



4. An apparatus for calling a certain station among several all of which receive the signals consisting of direct current impulses and pauses from the sending station, comprising a source of current in the receiving station, a signal organ in circuit with said source of current and having conducting and non-conducting portions to produce signals equal to the arriving signal, driving means to drive said signal organ, a differential relay interposed in the circuit and acted upon equally strongly in opposite directions by the received and produced signals, a current interrupter having its current interrupting portions arranged in relation to the passages between the conducting and non-conducting portions of said signal organ to render ineffective the differences between the received and produced signals occurring at the transition points between the impulses and pauses, and a switching element in said circuit to alter in wireless transmission, the tuning to another wave length.

1,888,905. LIFE AND PROPERTY PROTECTOR. WILLIAM G. BUNTEN, Detroit, Mich., assignor of one-fifth to Lem L. Reece, Elizabethton, Tenn. Filed Apr. 6, 1931. Serial No. 528,143. 1 Claim. (Cl. 200—142.)

In a switch construction, a block of insulating material having binding posts providing contacts thereon, a switch blade pivoted to one of the contacts, swingable against the other contact, and having one of its ends provided with an opening, a spring comprising a centrally coiled member having a pivot passed therethrough, one of its arms fixed on the block and its second arm hooked to be received in the opening in the switch blade, plates having hooked ends, the hooked end of one of the plates being received in the opening in the switch blade and a staple on the plate to receive the hooked end of the second plate therethrough, said plates being arranged in lapping relation and being provided with a plurality of apertures designed to aline, and fuse plugs meltable under predetermined degrees of heat received through certain of the apertures and connecting the plates and the connected plates holding the blade away from the contact.



1,888,906. TESTING APPARATUS. ANATOLY E. COLOSOFF, Berkeley, Calif. Filed Oct. 8, 1931. Serial No. 566,731. 1 Claim. (Cl. 175—183.)



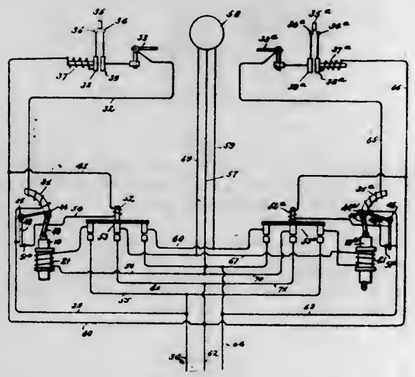
In a device of the character described, a tubular member, a conductor extending through said tubular member, said tubular member having a recess formed therein, a magnet secured to said conductor and insulated therefrom, an electromagnetic coil mounted between the legs of said magnet, said coil having a voltage winding and an amperage winding thereon, one end of each of said windings being connected to said conductor, the opposite ends of said windings being connected to contacts, a cap positioned on said tubular member and having said contacts extending therethrough, an indicator positioned between said tubular member and said cap, said indicator having its pointer adapted to move over indicia, a housing rotatably mounted on said cap, a cable secured to said housing, a bulb carried by said housing, a spring contact carried by said housing, and being connected to said cable whereby when said housing is rotated said contact will engage said first mentioned contacts.

1,888,907. FLOOR CONTROL DEVICE FOR ELEVATORS. SVEN COMETH, New York, N. Y. Filed Dec. 13, 1930. Serial No. 502,248. 11 Claims. (Cl. 172—152.)

1. In a device of the class described having a motor with a circuit, a switch in the motor circuit, means to release the switch from a predetermined position, means to retard the operation of the first mentioned means, and a solenoid in the motor circuit having a core for adjusting the second mentioned means.

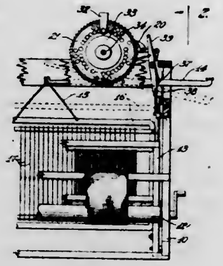
11. A floor control device for elevators having a motor circuit, a casing having a dash pot chamber with two open-

ings, a piston in the chamber, a piston rod disposed in an opening and secured to the piston, a tapered pin in the other opening for engagement by the piston, means for holding the tapered pin yieldingly relatively to the casing, a solenoid in the motor circuit having a core for



adjusting the position of the tapered pin, a switch in the motor circuit, a second circuit having means for operating the switch, a switch in the second circuit, a floor circuit having means for closing the second mentioned switch, and means connecting the piston rod with the second mentioned switch for retarding the operation of the latter.

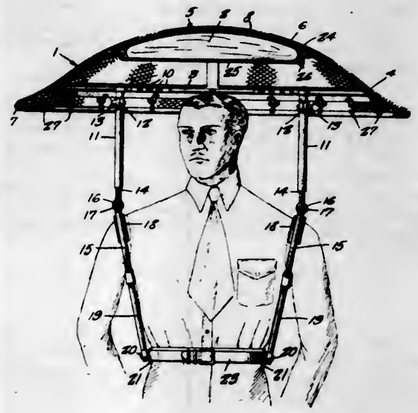
1,888,908. LOOM. LEWIS W. CONNELL, Joliet, Ill. Filed Jan. 23, 1932. Serial No. 588,467. 9 Claims. (Cl. 139—33.)



1. In a loom, the combination of heddles, a beater, a movable support, an indicator, a member carried by said support bearing indicia representing a scheme according to which the heddles are operable, and means operatively connecting the beater and support for moving the support to advance said indicia-bearing member step-by-step past said indicator.

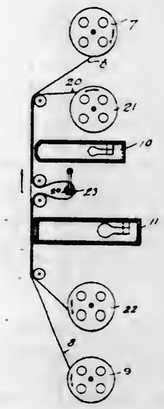
1,888,909. CANOPY. ASA B. CROSTHWAIT, San Antonio, Tex. Filed July 1, 1931. Serial No. 548,222. 2 Claims. (Cl. 135—12.)

1. A canopy comprising rigid shoulder engaging portions, rigid depending members on said shoulder portions, a waist belt connecting said depending members, vertically disposed adjustable members adjustably secured to said shoulder portions and having reduced free ends, a



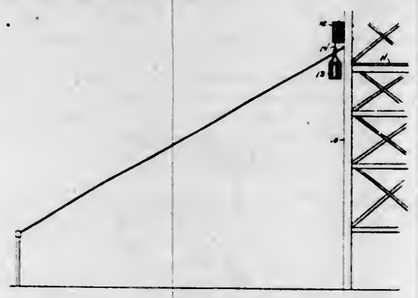
bar having a series of openings to receive the reduced ends of the vertical members, a frame on said bar, and a covering carried by the frame.

1,888,910. MEANS FOR SECURING SYNCHRONIZATION IN TALKING MOTION PICTURE PHOTOGRAPHY. LEE DE FOREST, New York, N. Y., assignor, by mesne assignments, to General Talking Pictures Corporation, a Corporation of Delaware. Filed June 7, 1924. Serial No. 718,642. 2 Claims. (Cl. 95—75.)



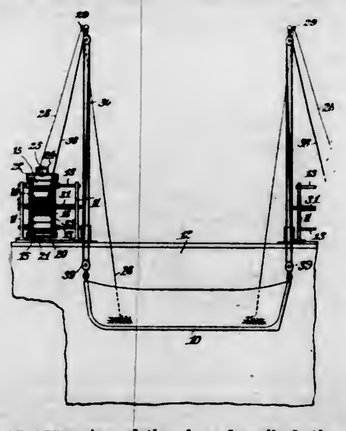
1. A printing machine for printing positives from negatives having sound and motion picture records displaced thereon, comprising means for printing the sound record from the negative onto the positive, mechanism displaced from the said means for printing the picture record from the negative onto the positive, and instrumentalities arranged between the said means and mechanism for predetermining the displacement between the sound and picture records on the positive.

1,888,911. FIRE ESCAPE. CHARLIE D. DE GRAFFENREID, Seminole, Okla. Filed Oct. 7, 1929. Serial No. 397,982. 1 Claim. (Cl. 227—12.)



In a centrifugal governor, a rectangular frame, a rotatably mounted shaft carried by the frame, a stationary brake drum arranged concentrically about the shaft and secured to the frame, brake shoes mounted for sliding movement within the drum, said shoes being normally spaced from and adapted to engage the inner periphery of the drum, substantially L-shaped arms secured to and extending axially from the shaft, a collar rotatably and slidably secured to the shaft, arms extending from the collar parallel with the shaft, pivotally mounted bell crank levers having one of their ends pivotally secured to said arms and their other ends pivotally secured to the brake shoes to move the shoes outward when the collar is moved inward, and weight carrying bell crank levers pivotally secured to the L-shaped arms and operatively engaging the collar to control the position of the latter through speed and rotation of the shaft.

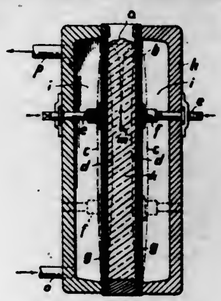
1,888,912. LOWERING APPARATUS. GABRIEL H. W. DOOSE, New Orleans, La. Filed May 18, 1931. Serial No. 537,124. 11 Claims. (Cl. 254—160.)



1. In an apparatus of the class described, the combination of an element having rotary and axial movement, means to yieldably resist the axial movement of said element to thereby resist its rotary movement, and raising and lowering means operated by the rotary movement of said element.

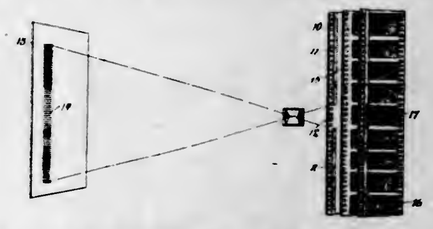
1,888,913. MOLD FOR CASTING METALS AND METAL ALLOYS. ABRAHAM MARTINIUS ERICHSEN, Teltow near Berlin, Germany. Filed Oct. 9, 1930, Serial No. 487,591, and in Germany Feb. 28, 1929. 8 Claims. (Cl. 22—67.)

1. In a mold for casting metals and metallic alloys, a wall made of material subject to distortion when exposed to differences in temperature; a support for said wall, rigidly connected to the ends of the latter for maintaining



said ends in fixed relation and leaving the intermediate portion of the wall free to become distorted upon pouring, and exert a pressure on the mass poured in the mold.

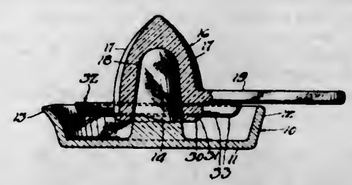
1,888,914. METHOD OF MARKING FILMS FOR PRODUCING SOUND EFFECTS. DAVE FLEISCHER, Brooklyn, N. Y. Filed Nov. 21, 1929. Serial No. 408,865. 8 Claims. (Cl. 274—46.)



5. A manually delineated sound track capable of producing desired sound when used in a suitable apparatus.

6. The method of making an original sound track on suitable material which consists in manually marking the track thereon.

1,888,915. JUICE EXTRACTOR. HERBERT FROMM, Hamburg, Wis. Filed Feb. 27, 1931. Serial No. 518,885. 1 Claim. (Cl. 146—3.)

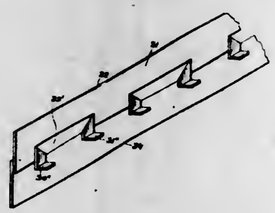


A juice extractor comprising a receptacle, an upstanding bearing post on the receptacle, a dome-like reamer having a recess formed on its under side to receive the bearing post, a strainer carried by and rotatable with said reamer, and a handle integral with the reamer for oscillating the reamer and strainer on the bearing post, the juice extracted thereby passing through said strainer and being collected in said receptacle.

1,888,916. DIVIDER STRIP. PASQUALE GALASSI, New York, N. Y. Filed Dec. 11, 1931. Serial No. 580,511. 9 Claims. (Cl. 94—17.)

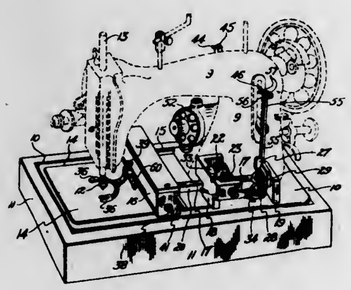
1. A divider strip for terrazzo or like floors, comprising upper and lower longitudinal sections, the upper section

having its inner edge notched at longitudinally spaced intervals, at least a portion of the edges of the notches thus produced extending inwardly of the ends thereof, the



lower section having upwardly extending tongues bent over said inwardly directed end edge portions, permanently connecting said sections to each other.

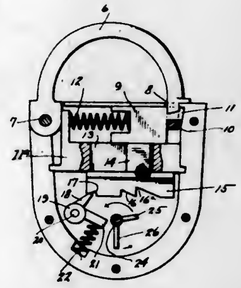
1,888,917. DARNING MECHANISM. ALBERT EDWARD GIBBES, Sydney, New South Wales, Australia. Filed Jan. 9, 1931, Serial No. 507,695, and in Australia Jan. 14, 1930. 2 Claims. (Cl. 112—121.)



1. Darning mechanism comprising a sewing machine head of the kind referred to, a carriage mounted slidably on the machine bed, a holder for a darning ring supported on the carriage said holder having a rack bar engaged by a pinion rotated by a flexible shaft said shaft being driven by one of a pair of crown wheels capable of being brought alternately into engagement with a driving pinion.

1,888,918. LOCK. ROBERT W. GODDEN, Seattle, Wash. Filed Feb. 11, 1930. Serial No. 427,528. 3 Claims. (Cl. 70—106.)

1. A lock of the type including a casing, a shackle pivoted at one end therein and adapted to enter its other end into the casing, a frame in the casing having a slot, a spring pressed slide on the upper side of the frame having detent means for locking the said other end of the shackle in the casing, another slide engaging the lower side of the frame, a connecting web between the spring pressed slide and the other slide positioned in and slidably movable in the slot of the frame, a pivoted stop member in the casing provided with an operating arm, a spring connected with the operating arm and the casing for urging the stop member in one direction, and a stop notch on the said other slide adapted to be engaged by the stop to prevent normally the withdrawal of the detent from engagement with the shackle, a plurality of progressively enlarged key notches in the said other slide, said stop member and said slide by reason of said key notches being adapted to be operated by a key whereby the detent may be withdrawn

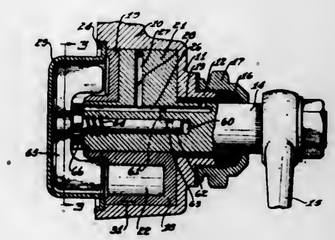


in successive steps upon sufficient force being applied to the casing to frictionally retard shackle reengaging movement of the spring pressed slide.

1,888,919. TREATMENT OF PHOSPHATIC MATERIAL. STAPLETON D. GOOCH, Lake Wales, Fla., assignor to Coronet Phosphate Company, New York, N. Y., a Corporation of New York. Filed Mar. 4, 1930. Serial No. 433,185. 9 Claims. (Cl. 71—7.)

1. The method of drying moist phosphatic material comprising mixing phosphorus with the material and then burning the phosphorus in contact with the material, while maintaining the temperature below that at which phosphorus in the phosphate rock is reduced and volatilized.

1,888,920. SHOCK ABSORBER. WALTER R. GRISWOLD, Detroit, Mich., assignor to Packard Motor Car Company, Detroit, Mich., a Corporation of Michigan. Filed Dec. 6, 1930. Serial No. 500,585. 14 Claims. (Cl. 188—89.)



1. In a hydraulic shock absorber, a casing containing fluid, a piston in the casing, valve means controlling the flow of fluid from one to the other side of the piston during operation thereof, and means responsive to the viscosity of the fluid for regulating the valve means.

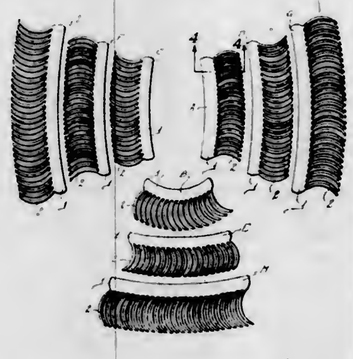
1,888,921. METHOD OF MANUFACTURING FERTILIZER. HERMAN L. HARTENSTEIN, Chicago, Ill. Filed Oct. 18, 1926. Serial No. 142,191. 5 Claims. (Cl. 71—9.)

1. The method of manufacturing fertilizer from a material of the group consisting of muck and peat in their natural state which comprises adding to said material finely divided iron, and digesting said mixture with sulphur oxide gases.

1,888,922. MANUFACTURE OF FERTILIZER. HERMAN L. HARTENSTEIN, Chicago, Ill. Original application filed Oct. 18, 1926, Serial No. 142,192. Divided and this application filed Apr. 4, 1927. Serial No. 180,997. 5 Claims. (Cl. 71—9.)

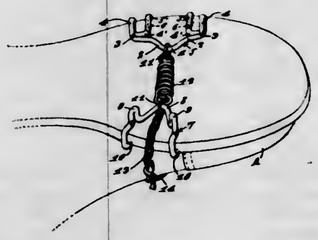
2. A method for manufacturing a fertilizer from a material of the group consisting of peat and muck in their natural wet state which comprises adding to said material sodium nitrate, phosphate rock, aluminum nitrate, digesting said mixture with sulphur oxide gases and ageing said mass for a period of at least ten days.

1,888,923. CIRCLE WAVING COMB. ELIZABETH JENNISON, Detroit, Mich. Filed Aug. 14, 1929. Serial No. 385,894. 5 Claims. (Cl. 132—38.)



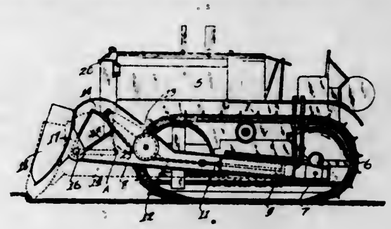
1. A comb comprising a curved strip adapted to form a back, and arcuately curved teeth formed integral with said back and adapted to cause hair to assume a wavy position, the outside faces of said teeth being parallel to the face of said back directly adjacent thereto.

1,888,924. SPIKE ATTACHMENT FOR SHOES. JOHN LAW KERR, Albany, Ga. Filed Jan. 15, 1932. Serial No. 586,799. 1 Claim. (Cl. 36—62.)



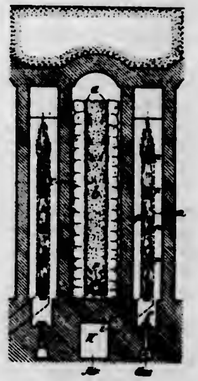
A spike attachment for a shoe, comprising a pair of members each of which being formed from a single strand of wire bent to provide an intermediate looped portion, ground penetrating means formed with said members, sole gripping means formed with said members, a coil spring having connection with the looped portions of said members to urge the sole gripping means in operative position, rings for connecting the coil spring to the looped portions, and a flexible means having one end secured to one of said rings and its opposite end being adapted to be secured to the lace of the shoe.

1,888,925. LAND LEVELLING DEVICE. CLIFTON H. KROYER and ROBERT A. FARISH, San Francisco, Calif., assignors to American Tractor Equipment Co., Oakland, Calif., a Corporation of Nevada. Filed Sept. 11, 1931. Serial No. 562,342. 3 Claims. (Cl. 37—144.)



8. In a device of the character described adapted to be attached to a tractor, a scraper, a pair of pusher arms secured to said scraper and to said tractor, one of said arms being hollow, a shaft journalled to said scraper, a pair of arms extending rearwardly from said shaft and having their free ends supported from said tractor, a segmental member secured to said shaft at a point within said hollow pusher arm, a sheave positioned in said pusher arm, flexible means secured to said segmental member and reaved over said sheave, and a power actuated drawbar connected to said flexible member.

1,888,926. COKE OVEN. GUSTAV LAMBERTZ, Recklinghausen, Germany, assignor to Carl Still, Recklinghausen, Germany. Filed May 11, 1926, Serial No. 108,314, and in Germany May 13, 1925. 3 Claims. (Cl. 202—135.)

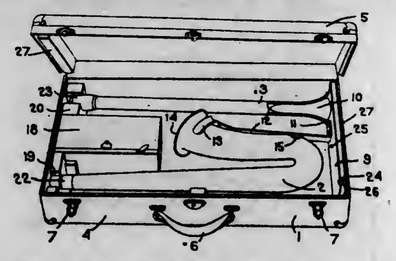


1. In an intermittently operable horisontal coke oven, a coking chamber, vertical heating flues, means for feeding combustible gas to said flues adjacent the base thereof, means for supplying the total combustion air in several definite portions to said flues at different levels above the gas inlet, required to produce a gradual combustion and nearly uniform heating throughout the length of the flues, in combination with means for drawing off gaseous distillation products adjacent the bottom of said coking chamber.

1,888,927. COMBINED CARRYING CASE AND HOLDER FOR MUSICAL INSTRUMENTS. ALBION S. LANG, Roslindale, Mass. Filed Mar. 7, 1932. Serial No. 597,132. 5 Claims. (Cl. 206—13.)

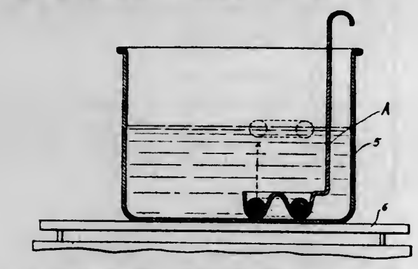
1. A holder for musical instruments comprising a carrying case, and a stand for an instrument separable from

the case, said stand having means to engage one portion of an instrument and hold the instrument in position thereon, and having a base constructed to support the instrument in elevated position when the stand is removed



from the case; said base being engageable with one wall of the case when positioned therein, and said case having means to engage another portion of the instrument thereby to hold said base in its wall-engaging position.

1,888,928. DOUGHNUT COOKING DEVICE. ARTHUR B. LEWIS, Claremont, N. H. Filed Feb. 14, 1931. Serial No. 515,862. 2 Claims. (Cl. 53—7.)



1. A doughnut cooking device comprising an open top receptacle like member having a circular channel portion adapted to receive the doughnut batter and shape the same, the walls of said channel being imperforate and rounded and a relatively long operating handle projecting upwardly from said receptacle like member.

1,888,929. POSTHOLE DIGGER. DANIEL L. MCDOWELL, Taylor, Tex., assignor of one-half to John A. Thompson, Taylor, Tex. Filed Dec. 16, 1931. Serial No. 581,469. 4 Claims. (Cl. 55—71.)



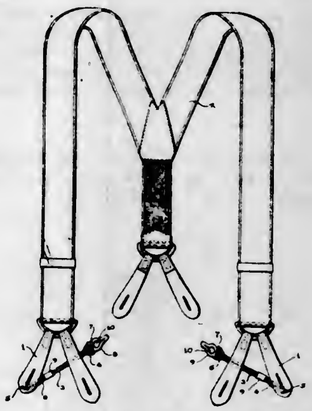
1. A post hole digger comprising a tubular staff, shovels pivoted to the lower end of the staff for opening and closing movement of the lower ends thereof, a rod slidable in the staff, and toggle links connecting the lower end of the rod to the upper ends of the shovels, the connection of the links between the rod and shovels providing for depressing the inner ends of the links slightly below the plane of the pivotal connections of said links with the shovels for locking the shovels in closed position; together with means for sliding the rod consisting of levers pivoted to the upper end of the staff, and toggle links connecting said levers to said rod.

1,888,930. BRUSH HANDLE. HUGH P. MCMILLAN, Baltimore, Md., assignor to Samuel M. Dell & Co., Inc., Baltimore, Md. Filed July 11, 1929. Serial No. 377,481. 1 Claim. (Cl. 15—143.)



A paint brush including a flat head, and a handle of a general oval shape in cross-section, the central plane of said handle being positioned at an oblique angle with respect to the central plane of said head.

1,888,931. SHIRT HOLDDOWN ATTACHMENT FOR SUSPENDERS. EDWIN S. MIX, Rochester, N. Y. Filed Aug. 2, 1932. Serial No. 627,236. 7 Claims. (Cl. 241—12.)

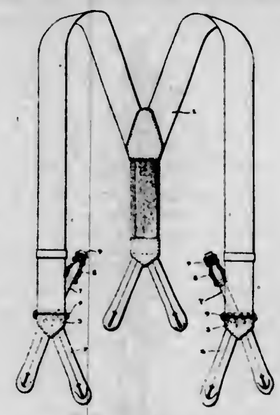


1. In combination with a pair of suspenders, a shirt hold down attachment comprising a pair of elastic members converging upwardly from and attached at their lower ends to the tips of two of the front suspender ends and provided at their upper ends with shirt engaging means.

1,888,932. SHIRT HOLDDOWN ATTACHMENT FOR SUSPENDERS. EDWIN S. MIX, Rochester, N. Y. Filed Aug. 2, 1932. Serial No. 627,237. 3 Claims. (Cl. 241—12.)

1. Suspenders having braid ends and provided with connecting tabs folded to form inner and outer sides between which the braid ends are secured, the inner sides of the tabs having slits, and a shirt hold down attachment comprising elastic members consisting of strips of elastic material extending upwardly from the said slits

and having their lower ends extended through the same and secured between the sides of the tabs, and means carried by the upper ends of the elastic members for en-



gaging a shirt whereby a downward pull in two directions is exerted on the shirt and the bosom thereof held down and maintained in a smooth, flat, unwrinkled condition.

1,888,933. ANTIGRAVITY MIDDLING CHUTE ATTACHMENT FOR PNEUMATIC COAL CLEANING TABLES. ALWYN G. OFFY, Welch, W. Va., assignor to American Coal Cleaning Corporation, Welch, W. Va., a Corporation of West Virginia. Filed Jan. 30, 1930. Serial No. 424,634. 14 Claims. (Cl. 209—467.)



14. An apparatus for improving the control of the separation of coal on a pneumatic separating table, comprising a separating table, a reciprocating chute for receiving the middlings discharge of the table, the delivery end of the chute extending above the receiving end of said table and conveying the middlings to the receiving end of the table for reworking, said chute being mounted upon toggles and reciprocated by the reciprocation of the separating table to impart conveying movement to the middlings in the chute.

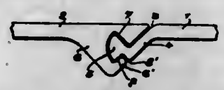
1,888,934. SPINAL ANÆSTHETIC SOLUTION. GEORGE PHILO PITKIN, Bergenfield, N. J., and CHARLES WARREN HOOPER, Jamaica, N. Y., assignors to H. A. Metz Laboratories, Inc., New York, N. Y., a Corporation of New York. Filed May 10, 1928. Serial No. 276,804. 9 Claims. (Cl. 167—52.)

1. A new composition of matter comprising a spinal anæsthetic agent and a gluelike adhesive substance which is insoluble in the spinal fluid.

1,888,935. PROCESS OF PRODUCING ETHYL ALCOHOL FROM WOOD OR OTHER CELLULOSE CONTAINING MATERIALS. ADOLPH PLAČEK, New Orleans, La. Filed Jan. 28, 1929. Serial No. 335,757. 2 Claims. (Cl. 195—20.)

2. A process of manufacturing alcohol which comprises saccharifying cellulose material with an excess of a strong mineral acid capable of hydrolyzing the material and of liberating organic acids from the organic salts in materials containing fermentable sugars and obtained in manufacture of sugars, mixing the liquor with such material in proportion to partly neutralise the excess of acid and to obtain an optimum acidity, and fermenting the mixture with yeast.

1,888,936. JOINT FOR IRON PILINGS. MAXIMILIAN SACHS, Vienna, Austria, assignor to Arthur Mauterer, Dortmund, Germany. Filed Oct. 5 1929, Serial No. 397,624, and in Germany Apr. 26, 1929. 4 Claims. (Cl. 61—62.)



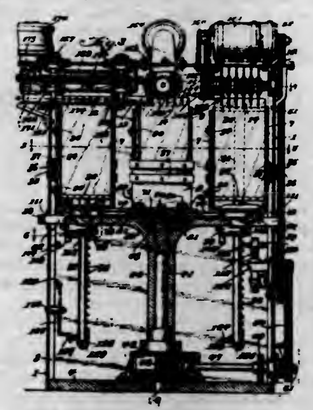
1. A joint for sheet iron pilings comprising two members exposing surfaces in a level plane thruout one side thereof, one member having an angularly disposed end which contacts the end of the other member so as to form an oblique joint, a head at the end of the first-named member extending towards said level plane, a socket in the other member to receive said head, said head and socket each having two cooperating surfaces located in planes at an angle relatively to each other.

1,888,937. METALLIC FLOORING AND METHOD OF LAYING THE SAME. LEON SAIVRE, Billancourt, France, assignor to Louis Renault, Billancourt, France. Filed Mar. 28, 1929, Serial No. 350,724, and in France Apr. 6, 1928. 5 Claims. (Cl. 94—11.)



1. A flooring comprising a panel made up of a plurality of similar units secured each to each at their meeting corners by tubular connectors, for introducing a binding medium therethrough, substantially as and for the purposes set forth.

1,888,938. ICE CUTTING MACHINE. CHARLES B. SHELLMAN, Washington, D. C. Filed Aug. 8, 1932. Serial No. 627,980. 34 Claims. (Cl. 143—46.)

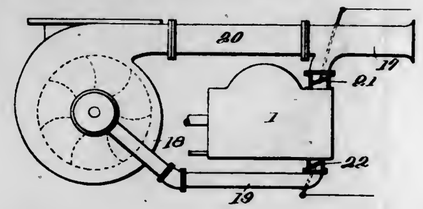


1. An ice cutting machine including spaced gangs of vertical overhead circular saws arranged in planes at right angles to each other, said vertical saws being

adapted to cut series of grooves in a cake of ice at right angles to one another to divide a section of the cake of ice into small blocks and partially sever the same, horizontal sawing means arranged to completely sever the partially severed blocks of ice from the cake, means traveling in a closed circuit for feeding a cake of ice to present the top of the ice successively to the said saws and sawing means while moving parallel to the planes thereof, and means for elevating the cake of ice to cut successive sections of the cake into small blocks.

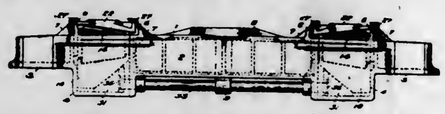
17. An ice sawing machine including overhead saws for cutting small blocks of ice from the top of a cake, a fixed vertical post, a rotary carrier mounted on the post and provided with diametrically arranged guides, slides mounted on the carrier and operating in the guides thereof, holders for cakes of ice mounted upon the slides, means for rotating the said carrier including a shaft, worm gearing connecting the shaft with the carrier, a motor, and chain gearing connecting the shaft with the motor, and means for causing the holders to travel in a rectangular path including a fixed rectangular guide, a stationary cam mounted on the post, and cam actuated and controlled bars connected with the slides and engaged by the cam.

1,888,939. METHOD AND APPARATUS FOR NEBULIZING AND BURNING FUEL OIL. WILLIAM EDWARD SHORE, West New Brighton, N. Y. Filed Jan. 20, 1930, Serial No. 422,237, and in Great Britain Dec. 21, 1923. 8 Claims. (Cl. 158—36.3.)



1. An oil burning apparatus comprising a vacuum pump, means for admitting a mixture of oil and air to said pump, means for rotating said pump whereby said mixture is expanded, a burner, means for conducting said mixture to said burner, and a means to accelerate the mixture in its movement toward said burner.

1,888,940. EQUALIZING BOLSTER. THOMAS H. SYMINGTON, Baltimore, Md., assignor, by mesne assignments, to T. H. Symington and Son, Inc., Baltimore, Md., a Corporation of Maryland. Filed Mar. 24, 1926. Serial No. 96,979. 23 Claims. (Cl. 308—226.)



1. In a railway car truck bolster, vertically movable side bearings embodying friction producing means opposing downward movement thereof, and means extending between and connecting said bearings and responsive to variations in pressure on either of the bearings for moving the other upwardly.

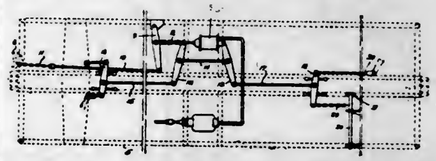
1,888,941. APPARATUS FOR TUFTING FABRICS. WILLIAM D. VAN DYKE, Chattanooga, Tenn., assignor to Van Dyke Textigraph Corp., Chattanooga, Tenn., a Corporation of Tennessee. Filed Mar. 7, 1931. Serial No. 520,877. 21 Claims. (Cl. 112—80.)

1. A turfing appliance comprising a tubular member of cylindrical form beveled at its lower end upwardly and rearwardly, and having its point in line with the straight front surface of said tubular member, a presser foot in rear of the needle and juxtaposed to the rear surface of the needle to immediately overlie the last loop inserted as the appliance advances step by step over the surface of the



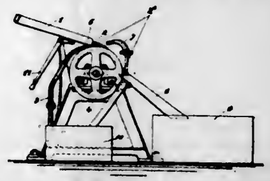
cloth, the presser foot being maintained against the cloth during the reciprocations of the needle, and means for reciprocating the needle, said appliance advancing automatically along the fabric during and as a consequence of the operation of the needle, and means for directing the thread down through the interior of the needle.

1,888,942. SLACK ADJUSTER FOR RAILWAY BRAKES. JOHN J. TATUM, Baltimore, Md. Filed Aug. 15, 1929. Serial No. 386,055. 20 Claims. (Cl. 188—197.)



1. In combination, in a slack adjuster for railway brakes, a pair of floating levers of the foundation brake rigging of a car independent of the cylinder levers thereof and located at opposite ends of the car, a shaft rotatably mounted on the car, a chain connecting one of said levers with said shaft, whereby when the shaft is turned to wind up the connecting chain it will draw the two floating levers on both ends of the car toward the rotating shaft.

1,888,943. PROCEEDING AND ARRANGEMENT FOR MAKING OF FOAMY DRY DROSS. LUDWIG VON REICHE and JULIUS GIERSBACH, Oberscheid (Dillkreis), Germany. Filed June 29, 1929, Serial No. 374,922, and in Germany July 4, 1928. 8 Claims. (Cl. 83—91.)



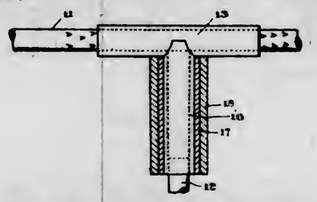
1. A process for making a foamy dry dross from fluid dross which comprises conveying the dross on to a current of water of an amount sufficient to swell the dross, and simultaneously blowing a cooling means on the surface of the current of the dross whereby the foamy dross is formed and the surplus of water removed therefrom.

1,888,944. WARP PILE FABRIC. FRITZ ANDREAE, Cologne, Germany. Filed June 26, 1931, Serial No. 547,111, and in Germany Mar. 28, 1931. 2 Claims. (Cl. 139—402.)



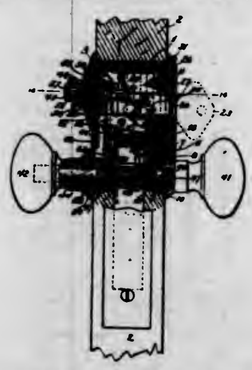
1. The method of producing a fabric which consists in simultaneously interweaving with a backing of warp and weft threads, an uncut pile face consisting of highly twisted continuous filament crepe threads passed under and over the weft threads and looped selectively and successively between two weft threads of the backing, inserting a loop supporting element while said crepe threads are being secured in place, and then withdrawing the said loop supporting element, whereupon the said crepe threads twist to form a plurality of loops projecting substantially at right angles to the warp and weft of the fabric.

1,888,945. WIRE CONNECTING DEVICE. DAVID H. BOTTRILL, Montreal, Quebec, Canada, assignor to Thermweld Limited, Montreal, Quebec, Canada. Filed May 18, 1929. Serial No. 364,300. 1 Claim. (Cl. 173—263.)



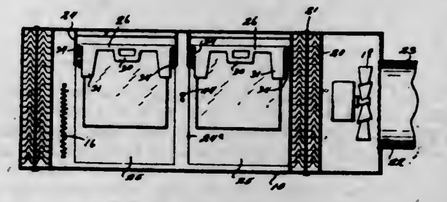
A T connection comprising a split tubular connector having a main portion and an angularly disposed arm portion, said arm portion being lined with a fusible alloy and adapted to communicate with the interior of the main portion, a metallic sleeve surrounding the arm portion for clamping the connector to the wire, and a body of heat generating material surrounding said sleeve in heat interchanging relation.

1,888,946. MASTER-KEYED LOCK. KARL A. BRAUNING, Stamford, Conn., assignor to The Yale & Towne Manufacturing Company, Stamford, Conn. Filed July 14, 1928. Serial No. 292,786. 63 Claims. (Cl. 70—92.)



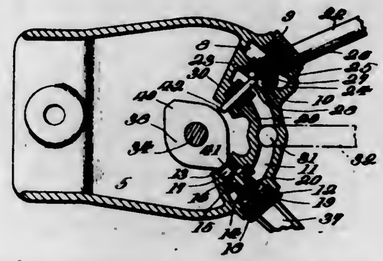
63. In a lock, a locking member, a plurality of tumbler controlled locking plugs, each of said plugs being movable bodily when key operated, means for operating said locking member positioned to obstruct the free movement of said plugs when released, whereby any one of said plugs when individually key operated and moved bodily will actuate said operating means.

1,888,947. PHOTOGRAPHIC FILM DRIER. ARTHUR W. BUCK, St. Louis, Mo., assignor to Buck X-Ograph Company, St. Louis, Mo., a Corporation of Missouri. Filed Nov. 29, 1930. Serial No. 499,098. 9 Claims. (Cl. 34—40.)



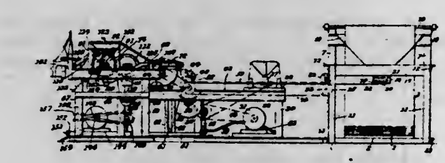
5. A film drier of the character described including a casing closed at its top, bottom and sides but open at its opposite ends, the casing having opposed openings in its sides, means at opposite ends for preventing the inlet of light to the interior of the casing, but permitting the passage of air, doors at opposite sides of the casing, coacting with said openings parallel tracks attached to the casing adjacent the top thereof and extending from front to rear thereof, slides slidably mounted on said tracks, and film supporting racks slidably mounted on the slides.

1,888,948. VALVE. GEORGE EDGAR HAZARD, Rochester, N. Y., assignor to Kellogg Manufacturing Company, Rochester, N. Y. Filed Feb. 1, 1928. Serial No. 251,183. 8 Claims. (Cl. 277—21.)



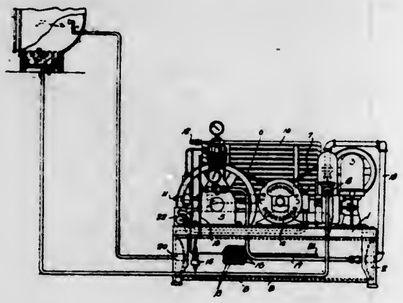
1. A valve comprising a housing having in one end thereof a valve chamber and an air chamber having communication with one another, a valve in the valve chamber provided with a coil spring normally holding the valve upon its seat to close communication between the chambers, a screw plug in the valve chamber above said valve provided with a cup-shaped depression adapted to receive one end of said valve spring, said valve provided with a peripheral flange adapted to engage the opposite end of said valve spring and hold it in position upon said valves, an elongated stem for said valve extending across the air chamber and beyond the inner wall of said chamber, an escape opening in the inner wall of said air chamber and a valve of similar construction to said first mentioned valve normally closing said outlet opening, the elongated end of said valve provided with a guide plunger adapted to reciprocate in said outlet opening and protrude inwardly beyond the same, an outlet delivery pipe constantly in communication with said air chamber, a cam having two oppositely disposed high spots positioned within said housing and adapted to engage the protruding ends of said valve stem and said guide plunger, and means to oscillate said cam for the purpose described.

1,888,949. BAG MAKING MACHINE. HILARION G. HENARES, Isabela, Philippine Islands. Filed Apr. 24, 1931. Serial No. 532,627. 11 Claims. (Cl. 112—10.)



1. In a bag making machine, means for folding a strip of cloth along its longitudinal center to form a doubled strip having free edges of its layers meeting, means for stitching along the free edges of the strip to form a flat tube having opposed walls, rollers to feed the folded strip through the stitching means, a drum, a marker carried by said drum to imprint identifying marks upon the walls of the folded strip as it passes over said drum, a groove being formed longitudinally in the drum opposite the marker, and means to cut marked sections from the sewed strip as it passes over the drum including a cutter movable longitudinally of the drum and engaged in the groove during such movement.

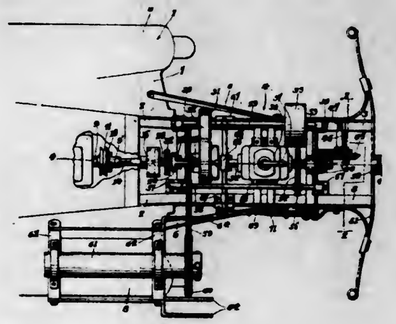
1,888,950. REFRIGERATING UNIT. EARL VERNON HILL, Chicago, Ill. Filed June 16, 1932. Serial No. 617,669. 3 Claims. (Cl. 62—129.)



1. A refrigerating apparatus for an air conditioning unit having water spraying means therein, said refrigerating apparatus having means for cooling spray water comprising a water cooler having an expansion coil therein, means for compressing a refrigerant communicating with said expansion coil, and means for placing said spray water under pressure in said cooler prior to cooling by said expansion coil, said compression means and said pressure means being actuated by a single motor.

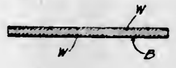
1,888,951. POWER TAKE-OFF. EDGAR W. HOLLAND, Waco, Tex. Filed July 21, 1931. Serial No. 552,286. 10 Claims. (Cl. 74—7.)

1. In a power take-off, a forwardly extending supporting structure, means for connecting the rear of said structure to the front of a motor vehicle, a set of lengthwise aligned shafts including a front, a rear and a pair of intermediate shafts rotatably supported upon said structure, means for connecting the rear shaft with the forward end of the crank shaft of the vehicle, clutching means detachably connecting the rear shaft with one of the intermediate shafts, means for clutching said intermediate shafts together and having as a part thereof a fly



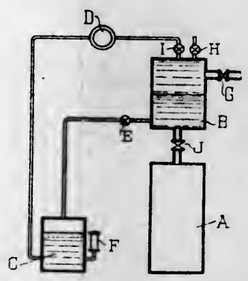
wheel constituting a power transmitting means, and a transmission mechanism connecting the other of said intermediate shafts with the front shaft.

1,888,952. CELLULOSIC MATERIAL AND PROCESS FOR ITS MANUFACTURE. CHARLES HOLZWARTH, Parlin, N. J. Filed Oct. 23, 1930. Serial No. 490,806. 11 Claims. (Cl. 18—57.)



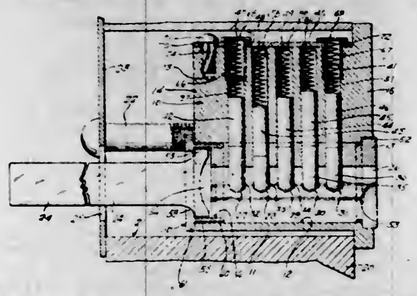
1. The improvement in the art of treating cellulose ester photographic film base to make it resistant to abrasion, comprising applying thereto a heated colloidal solution of a wax in alcohol, said solution being applied while said base is heated and its freshly cast, recently solidified state, and finally seasoning the thus treated base.

1,888,953. METHOD OF INTRODUCING LIQUIDS OR MIXTURES THEREOF WITH SOLIDS INTO HIGH PRESSURE APPARATUS. HERBERT ALFRED HUMPHREY, Billingham, Stockton-on-Tees, England, assignor to Imperial Chemical Industries Limited, London, England, a British Company. Filed Aug. 25, 1927, Serial No. 215,500, and in Great Britain Sept. 27, 1926. 8 Claims. (Cl. 226—125.)



1. Method of introducing semi-liquid materials into high pressure vessels which comprises running said semi-liquid material into an auxiliary high pressure reservoir, forcing into said reservoir from a liquid storage tank, a liquid under a pressure of at least about 100 atmospheres, injecting said semi-liquid material into the high pressure vessel, and when the auxiliary reservoir is empty of semi-liquid material, running the displacing liquid back by a different path to the storage tank.

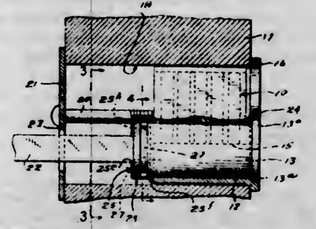
1,888,954. LOCK MECHANISM. HENRY F. KEIL, Scarsdale, N. Y., assignor to Francis Keil & Son, Inc., a Corporation of New York. Filed Oct. 19, 1929. Serial No. 400,889. 16 Claims. (Cl. 70—47.)



1. In lock construction, in combination, a key-receiving cylinder, a casing rotatably mounting said cylinder, said casing and said cylinder being dimensioned at their rear ends to provide an annular space therebetween, tumbler means for coaction with a key for controlling the rotation of said cylinder, a connecting bar for actuation by said cylinder, said cylinder having a transverse slot at its rear end for receiving said bar and having a peripherally extending groove adjacent its rear end, and a cap-like member fitted over the rear end of said cylinder and having said bar projecting therethrough, said cap-like member having portions thereof pressed inwardly into said groove and the side wall portions of said cap-like member being received within said annular space.

12. In lock construction, in combination, a key-receiving cylinder, a casing, said cylinder and casing having recesses each adapted to receive a lower and an upper tumbler and a spring, said tumblers operating normally to hold said cylinder against rotation relative to said casing and against relative axial movement therebetween a member for holding said spring and tumblers in said recesses, a member for holding said cylinder in assembled relation to said casing and for maintaining proper alinement of said recesses, and means for holding one of said members in position and including a sheet metal member strained into interlocking frictional engagement with the part by which said one member is carried.

1,888,955. LOCK MECHANISM. HENRY F. KEIL, Scarsdale, N. Y., assignor to Francis Keil & Son, Inc., a Corporation of New York. Filed Sept. 10, 1930. Serial No. 480,834. 20 Claims. (Cl. 70—40.)



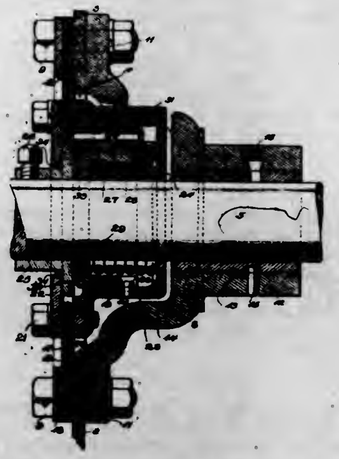
1. In lock construction, in combination, a key-receiving cylinder, a casing rotatably mounting said cylinder, a connecting bar for actuation by said cylinder, said cylinder having a transverse slot at its rear end for receiving said bar and having a peripherally extending groove adjacent its rear end, a sheet metal cap-like member adapted to be received over the rear end of said cylinder and having an opening in its rear end through which said connecting bar passes, said opening being shaped with respect to said connecting bar to permit relative rotation therebetween, and a pair of opposed inwardly directed-projections in the side wall of said cap-like member, said projections being adapted to be received in the opposite ends of said slot and, upon rotation of said cap-like member relative to said cylinder, to be moved into said peripheral groove, and an inwardly directed projection in the end wall of said cap-like member adapted to be seated in said slot after a certain rotational movement has taken place between said cap-like member and said cylinder, thereby to prevent further relative rotation therebetween.

1,888,956. METHOD OF FORMING TELEPHONE PAY STATION BOXES. GEORGE A. LONG, Hartford, Conn., assignor to The Gray Telephone Pay Station Company, Hartford, Conn., a Corporation of Connecticut. Filed June 10, 1931. Serial No. 543,276. 5 Claims. (Cl. 113—120.)



1. The process for forming an open back and bottomless box that consists in shaping a flat blank with a tapered and rounded end to compose the top of the box, then stamping the blank to box form with an open back and bottom and before such forming creating a cup shaped projection in the blank to closely engage said cup shaped portion with a die member to be held from lateral movement thereby during said stamping operation, and subsequently, by a succession of operations, gradually perfecting the shape of the box and different portions thereon.

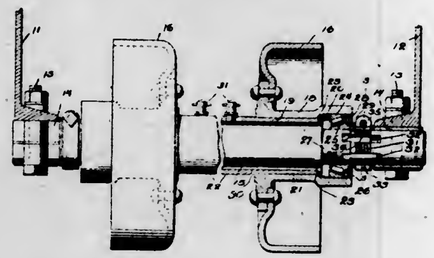
1,888,957. SEALING GLAND. CHARLES I. LONGENECKER, Milwaukee, Wis., assignor to Chain Belt Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed Dec. 16, 1929. Serial No. 414,481. 11 Claims. (Cl. 286—11.)



1. A sealing gland for a rotating shaft entering a receptacle, comprising a ring carried by the shaft, sealing plates engaging with opposite faces of the ring and a

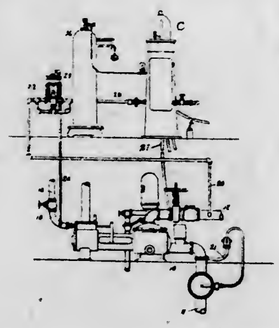
spring acting upon the said sealing plates and operating to force them in opposite directions and into engagement with the ring.

1,888,958. DRUM ROLLER MOUNTING FOR CONCRETE MIXERS. JOHN C. MERWIN, Milwaukee, Wis., assignor to Chain Belt Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed Sept. 18, 1928. Serial No. 305,760. 5 Claims. (Cl. 308—203.)



1. A supporting unit for concrete mixer drums, comprising a non-rotative shaft; a sleeve surrounding said shaft; a pair of longitudinally spaced drum supporting rollers rigidly mounted upon said sleeve, provided with counterbored hubs; an adjustable antifriction bearing mounted in the counterbore of each hub, rotatably mounting said rollers and sleeve upon said shaft; and means carried by said shaft for adjusting said bearings.

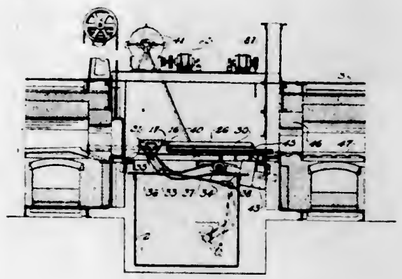
1,888,959. STERILIZING APPARATUS. GERALD D. PEET, Montclair, N. J., assignor to Wallace & Tiernan Company, Inc., Belleville, N. J., a Corporation of New York. Filed Nov. 9, 1929. Serial No. 405,869. 5 Claims. (Cl. 210—28.)



1. The combination with normally inoperative emergency water supply means, of chlorine supply apparatus, means for maintaining said apparatus normally in operation to feed chlorine at a low rate, and automatic means for causing said apparatus to operate when the emergency water supply means is in operation to supply the chlorine at full rate to the water supplied by said emergency means.

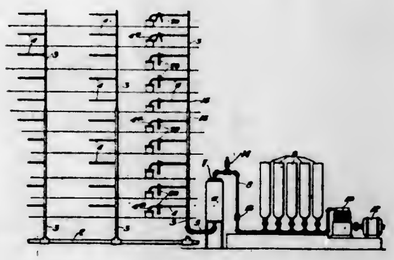
1,888,960. CONTINUOUS HARDENING, QUENCHING, AND DRAWING FURNACE. RANDAL E. TALLEY, Irwin, Pa., assignor to George J. Hagan Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed May 13, 1932. Serial No. 611,040. 16 Claims. (Cl. 266—4.)

1. Apparatus for heating, quenching, and reheating articles to be treated, comprising in combination a pair of furnace chambers in end to end relation having a quench tank disposed therebetween, a pusher mechanism for conveying articles to be heated through one of said furnaces, a charge manipulator and index mechanism for receiving the heated articles from said furnace, means associated



with the quenching tank for lifting the articles from said charge manipulator and submerging the same into the quench, said means being operative to return the quenched articles to said charge manipulator, and means for conveying the charge from the manipulator to the draw furnace and for pushing the same therethrough.

1,888,961. METHOD OF RECLAIMING PIPE. EUGENE L. CHAPPELL, Pittsburgh, Pa. Filed Aug. 15, 1931. Serial No. 557,422. 7 Claims. (Cl. 91—68.)

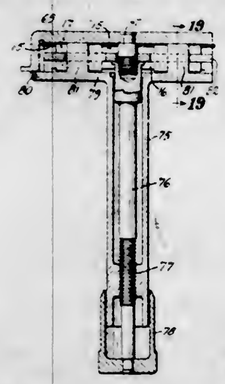


1. The method of reclaiming corroded hollow metal articles, such as tanks, pipe and cylinders, which consists in blowing granular abrasive material through said article to remove the corrosion, then closing said article except for an inlet and vent, and then blowing cement grout through said article, continuing the blowing until air passes through said vent, stopping the blowing, then blowing gaseous fluid under pressure through the article prior to the time the cement begins to set so as to spread any of the cement that has accumulated in deposits throughout the article being coated, and finally blowing gaseous fluid under pressure through the article as said cement begins to set, to finally spread any accumulated deposits of cement and celar the article.

1,888,962. RAZOR. HARRY SWAN, New York, N. Y., assignor to Patents Incorporated, Wilmington, Del., a Corporation of Delaware. Filed Sept. 17, 1931. Serial No. 563,273. 27 Claims. (Cl. 30—12.)

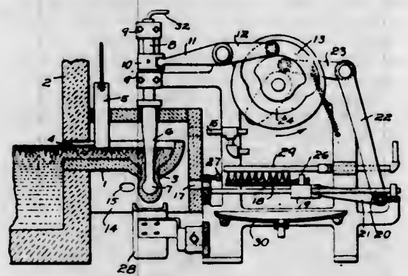
5. In a razor, a guard, a handle member, a base member having threaded engagement with said handle member, a

cap hinged to said base member, a threaded member on said cap adapted to pass through an opening in said guard,



threads formed on said handle member for engaging said threaded member, and means spacing said cap from said base member.

1,888,963. GLASS FEEDING METHOD AND APPARATUS. KARL E. PEILER, West Hartford, Conn., assignor, by mesne assignments, to Hartford-Empire Company, Hartford, Conn., a Corporation of Delaware. Filed Dec. 4, 1916, Serial No. 134,828. Renewed Oct. 12, 1929. 22 Claims. (Cl. 49—55.)

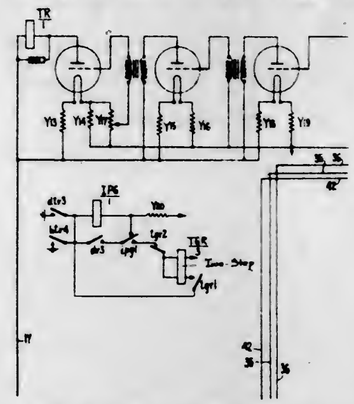


3. Apparatus for feeding molten glass, including a container having a discharge outlet below the surface level of the glass, an implement extending through the glass and protruding through the outlet, and mechanism for reciprocating the implement to draw it back toward the outlet to assist in forming a mold charge.

8. Apparatus for feeding molten glass, including a forehearth provided with a discharge outlet in its bottom, an implement having a head movable vertically through and below said discharge outlet, mechanism for reciprocating said implement, shears movable below said discharge outlet across the path of movement of the head of the implement, and mechanism for reciprocating and opening and closing the shears in timed relation to the movements of the implement, whereby the head and the shears alternately cross each others paths of movement.

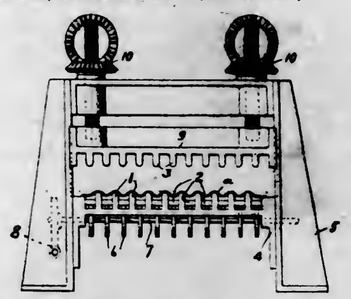
1,888,964. TELEPHONE SYSTEM. OWEN AVIS PEARCE, Liverpool, and LANCELOT MARTIN SIMPSON, Stanks, near Leeds, England, assignors to Associated Telephone and Telegraph Company, Chicago, Ill., a Corporation of Delaware. Filed May 24, 1930, Serial No. 455,352, and in Great Britain June 6, 1929. 12 Claims. (Cl. 179—175.21.)

1. Routine testing apparatus for testing the selector switches of an automatic telephone exchange, each switch adapted when its calling loop circuit is closed to apply dial tone thereto, said apparatus including testing mechanism, means for selecting each selector switch and connecting the selected switch to said testing mechanism,



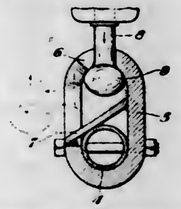
thereby closing the calling loop circuit to the switch, said mechanism thereupon testing said switch for the application of dial tone to the closed loop.

1,888,965. MANUFACTURE OF CORRUGATED WIRE GLASS. ARNO SHUMAN, Philadelphia, Pa., assignor to Pennsylvania Wire Glass Company, Philadelphia, Pa., a Corporation of New Jersey. Filed June 8, 1931. Serial No. 542,763. 5 Claims. (Cl. 49—32.)



5. In apparatus for corrugating flat sheets of hot wire glass the combination of two sets of table bars arranged side by side in lateral proximity with each other and of which one set is movable vertically in respect to the other set, one set of bars having rounded faces, platen bars having rounded faces and confronting the spaces between the movable set of table bars, and means for actuating said parts.

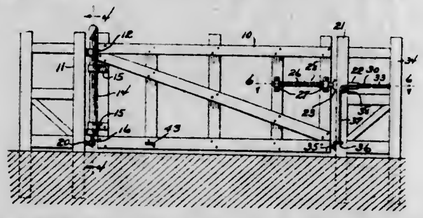
1,888,966. COUPLING. JUSTIN K. BABCOCK, Cleveland, Ohio. Filed Aug. 28, 1931. Serial No. 560,009. 1 Claim. (Cl. 287—118.)



A coupling comprising, in combination, a frame having semi-cylindrically shaped ends in straight back and forth

side walls, one of said side walls being provided with a slot which extends from its upper end downwardly in enlarged proportions, a flat deflector plate extending from the bottom wall of said slot upwardly and rearwardly to the opposite side wall, said plate being welded in position and a link having an enlarged lower end for insertion through the enlarged part of said slot in said frame for engagement with the top thereof.

1,888,967. GATE. NELSON J. CONSTABLE, Manilla, Iowa. Filed Oct. 6, 1930. Serial No. 486,847. 4 Claims. (Cl. 292—255.)



1. A latch operating mechanism comprising a support having an opening, a hollow socketed member mounted in the opening of the support, a plunger slidably mounted within the socket member and provided with oppositely extending arms, means connected to one of said arms for retaining the plunger within the socket, and means connected to both of said arms and disposed exteriorly of the support causing the movement of the bolt out of the socket.

1,888,968. INTERLOCKING SHEET PILING. ARTHUR MAUTERER, Dortmund, Germany. Filed Nov. 23, 1928, Serial No. 321,325, and in Germany Nov. 23, 1927. 6 Claims. (Cl. 61—62.)

1. Interlocking means for sections of sheet piling adapted to be assembled to present a flat surface at one face of the piling comprising an offset extension on one section inclined to the plane of the face of the section, the other member having the face of its end inclined in the same plane as said extension for abutting engagement



therewith, an open socket formed in said end and opening on said inclined face, and a head on said extension engageable in said socket when said sections are assembled with said inclined face abutting said extension.

1,888,969. FROSTING PROCESS. MARIA LUISA MESA, New York, N. Y. Filed Mar. 19, 1930. Serial No. 437,230. 2 Claims. (Cl. 91—68.)



1. A process of the character described which involves first dipping the article to be treated in a hot aqueous solution consisting of gum arabic and ammonia alum, then drying said article whereby said alum crystallises upon said article and said gum arabic separates and hardens into a binder to firmly hold said crystals together, then again dipping said article in said hot solution, and again drying the article, thereby producing larger crystals, then dipping said article in a coloring solution, and finally drying said article.

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T. M. Renewals	26		
Labels	32	No. 41,441 to No.	41,472, inclusive.
Prints	7	No. 13,968 to No.	13,974, inclusive.
Reissues	10	No. 18,668 to No.	18,677, inclusive.
Plant Patents	2	No. 45 to No.	47, inclusive.
Designs	90	No. 88,394 to No.	88,492, inclusive.
Patents	769	No. 1,888,970 to No.	1,889,738, inclusive.
Total	1,074		

Interference Notices

U. S. PATENT OFFICE, *Washington, Nov. 9, 1932.*

Aenne Harteneck, her assigns or legal representatives, take notice:

An interference having been declared by this Office between the patent granted October 6, 1931, No. 1,826,467, to Aenne Harteneck, I. G. Farbenindustrie Aktiengesellschaft, Ludwigshafen-on-the-Rhine, Germany, and an application for patent filed by Leo Wallerstein, care of Wallerstein Company, Inc., 171 Madison Ave., New York, N. Y., and a notice of such declaration sent by registered mail to said Harteneck at the said address having been returned by the post office undeliverable, notice is hereby given that unless said Harteneck, her assigns or legal representatives, shall enter an appearance therein within 30 days from the first publication of this order the interference will be proceeded with as in case of default. This notice will be published in the OFFICIAL GAZETTE for three consecutive weeks.

WM. A. KINNAN,
First Assistant Commissioner.

U. S. PATENT OFFICE, *Washington, Nov. 11, 1932.*

George G. Brown, his assigns or legal representatives, take notice:

An interference having been declared by this Office between an application for patent filed by George C. Brown, formerly of 1221 N St. N. W., and more recently of 1230 11th St. N. W., Washington, D. C., and an application for patent filed by Arthur Hungerford, 15 Dun Building, Buffalo, N. Y., and the Office having failed to secure service on said Brown, notice is hereby given that unless said Brown, his assigns or legal representatives, shall enter an appearance therein within 30 days from the first publication of this order the interference will be proceeded with as in case of default. This notice will be published in the OFFICIAL GAZETTE for three consecutive weeks.

WM. A. KINNAN,
First Assistant Commissioner.

Attorney Disbarred

(ORDER No. 8,222)

U. S. PATENT OFFICE, *Washington, July 23, 1932.*

Acting under the provisions of section 487 of the Revised Statutes of the United States (U. S. C., title 35, sec. 11), Glen P. Clinger, of Erie, Pa., whose registration is number 12,792, has this day been disbarred from practice before the United States Patent Office.

THOMAS E. ROBERTSON,
Commissioner.

Adverse Decisions in Interference

In interferences involving the indicated claims of the following patents final decisions have been rendered that the respective patentees were not the first inventors with respect to the claims listed:

Pat. 1,737,063, Charles Smith, Variable radio tuning device, decided November 3, 1932, claims 2 and 3; November 4, 1932, claim 1.

Pat. 1,770,721, R. C. Willis, Universal mounting, decided November 4, 1932, claim 9.

Pat. 1,824,748, N. L. Donovan, Interlocking system for railroads, decided October 8, 1932, claims 1 and 7.

Pat. 1,826,853, A. O. Williams and W. L. Davis, Conveyor, decided November 1, 1932, claims 1, 2, 3, 4, 5, 14, 17, and 18.

Pat. 1,837,755, R. W. Carlisle and I. S. Pierson, Translating device, decided November 3, 1932, claims 1, 2, 4, 5, 6, and 8.

Pat. 1,840,950, Wm. Hatton and Robert Dahl, Automatic telephone system, decided October 29, 1932, claims 1, 2, 3, 4, and 5.

Condition of Applications Under Examination at Close of Business November 12, 1932

(Total number of applications awaiting action, excluding Trade-Mark Division, 62,602; Trade-Mark Division, 1,023. Oldest new case, May 12, 1932; oldest amended, May 12, 1932)

Room No.	Divisions, Examiners, and Subjects of Inventions	Oldest new application and oldest action by applicant awaiting office action: New	Amended	No. of applications awaiting action
6624	1. LOEFFLER, F. A., Closure Operators; Fences; Gates; Tillage; Handling Implements	Aug. 29	Sept. 27	270
6708	2. HERRMANN, D. (Act.), Fishing and Trapping; Dairy; Animal Husbandry; Presses; Tobacco; Velocipedes.	July 14	July 14	861
4093	3. LINDSEY, A., Heating; Metal Founding; Metallurgy; Metal Treatment; Electric Furnaces	Aug. 10	Aug. 15	623
7083	4. MERRITT, A. D., Conveyers; Hoists; Handling Apparatus; Excavating	Aug. 20	Sept. 22	314
3628	5. MACNAB, J. F., Harvesters; Music; Acoustics; Sound Recording; Knotters	July 27	Aug. 2	291
4898C	6. LEWERS, A. M., Carbon Chemistry	May 24	May 24	1,879
5725	7. JARBOE, C. G., Optics; Photography	July 1	July 1	1,306
7514	8. ADAMS, F. L., Beds; Chairs; Kitchen and Table Articles; Racks and Cabinets	July 20	July 16	804
4624	9. ADAMS, R. E., Pumps; Fluid and Fluid-Current Motors	Aug. 15	Sept. 6	574
6612	10. HUNTER, O. F., Land Vehicles—Animal Draft Appliances, Bodies and Tops	June 21	June 21	707
5087B	11. BENHAM, E. V., Boots, Shoes, and Leggins; Button, Eyelet, and Rivet Setting; Harness; Leather Manufactures; Nailing and Stapling; Whip Apparatus.	July 20	July 20	583
7701	12. HENRY, C. C., Machine Elements	July 27	Aug. 9	362
5096	13. BORLIK, F. J., Gear Cutting, Milling, and Planing; Metal Drawing; Metal Forging and Welding; Metal Rolling; Metal Working; Needle and Pin Making; Turning; Boring and Drilling.	July 15	July 19	969
5097	14. BRUMBAUGH, N. J., Farriery; Metal Bending; Metal Tools and Implements, Making; Sheet-Metal Ware, Making; Wire Fabrics; Wire Working; Metal Working, Blanks and Processes.	July 30	Aug. 9	649
4897	15. WORRELL, L. W., Glass; Plastic Block and Earthenware Apparatus; Plastics	June 22	June 22	1,603
5612	16. SPENCER, C. J., Telegraphy; Telephony	July 30	July 30	731
5701	17. ARMSTRONG, H. (Act.), Label Pasting and Paper Hanging; Ornamentation; Paper Manufactures; Printing; Type Casting; Sheet-Material Associating or Folding; Sheet or Web Feeding; Type Setting.	May 19	May 21	1,383
4612	18. PORTER, M. E., Motors, Expansible-Chamber Type; Power Plants; Speed-Responsive Devices	July 29	Aug. 1	536
4096	19. KENNEDY, A. R., Furnaces and Stoves; Heating Systems; Fuel Burners	May 16	May 17	1,765
5613	20. GROVE, S. D., Miscellaneous Hardware; Closure Fasteners; Locks and Latches; Safes; Undertaking	Aug. 11	Aug. 11	456
7733	21. THOMPSON, T. J., Textiles; Cloth Finishing	July 5	July 5	836
5724	22. RINGLE, D. (Act.), Aeronautics; Firearms, Ordnance, and Explosive Devices; Air Guns, Catapults, and Targets; Boats and Buoys; Ships; Marine Propulsion.	Aug. 16	Aug. 22	401
7892	23. GROESBECK, W. D., Coin Handling; Recorders; Registers	May 31	May 19	821
5063	24. DURAS, C. O., Apparel; Apparel Apparatus; Garment Supporters; Sewing Machines	Aug. 19	Sept. 6	513
5709	25. BLAKELY, C. F., Agitating; Butchering; Classifying Solids; Centrifugal-Bowl Separators; Mills; Threshing; Vegetable and Meat Cutters and Comminutors.	June 11	June 11	1,319
5893	26. ADAMS, W. M. (Act.), Electricity, Generation; Motive Power	June 8	June 8	813
5708	27. CLARK, W. N. (Act.), Brushing, Scrubbing, and Cleaning; Washing Apparatus	July 25	July 26	715
4628	28. BENSON, A. R., Internal-Combustion Engines	May 12	May 12	1,243
5082	29. MORRIS, B. N., Woodworking; Tools; Compound Tools; Furniture; Metal Working, Assembling	May 21	June 1	720
4074	30. SHIPMAN, J. L., Automatic Temperature and Humidity Regulation, Illuminating Burners; Illumination; Thermostats and Humidostats.	July 14	July 14	737
4716	31. HOLMES, W. N., Gas, Heating and Illuminating; Mineral Oils	June 9	June 9	1,427
4086	32. BARTHOLOMEW, J. A., Gas and Liquid Contact Apparatus; Heat Exchange; Gas Separation	July 29	Aug. 6	688
6096	33. WYMAN, W. I., Bridges; Masonry and Concrete Structures; Metallic Building Structures; Roads and Pavements; Roofs; Wooden Buildings.	May 19	May 18	2,083
6625	34. SAPERSTEIN, S. (Act.), Electricity, Transmission to Vehicles; Pneumatic Dispatch; Railways, Rolling Stock, Switches, and Signals; Store Service; Vehicle Fenders; Track Sanders.	June 14	June 13	801
3600	35. REYNOLDS, E. C., Buckles, Buttons, Clasps, Etc.; Card and Sign Exhibiting; Signals; Toilet	Sept. 19	Sept. 29	282
7624	36. McFAYDEN, A. D. (Act.), Automatic Weighers; Geometrical and Measuring Instruments; Force Measuring.	May 20	May 25	1,497
5889	37. WEAVER, M. E., Electricity, Circuit Makers and Breakers	June 14	July 5	909
7510	38. KRAFFT, C. F., Earth Boring; Hydraulic and Earth Engineering; Mining, Quarrying, and Ice Harvesting; Stoneworking; Wells.	Sept. 19	Sept. 7	116
4374	39. WHITNEY, F. J. (Act.), Fluid-Pressure Regulators; Multiple Valves; Valves; Water Distribution	May 19	May 19	1,294
7880	40. OBERLIN, J. J., Receptacles	June 23	June 23	2,147
6062	41. WHITNEY, M. L., Land Vehicles, Wheels, and Axles: Resilient Tires and Wheels; Wheel Substitutes; Railway Draft Appliances; Spring Devices.	Aug. 27	Sept. 14	447
5882	42. CUTTING, H. O., Electric Signaling	May 19	May 14	1,268
4886B	43. KLINGE, E. F., Baths, Closets, Sinks, and Spittoons; Sewerage; Electricity, Medical and Surgical; Medicines; Surgery; Dentistry; Artificial Body Members.	June 15	June 15	1,483
4087B	44. SHAFFER, C. H., Dispensing; Filling and Closing Portable Receptacles; Refrigeration	May 16	May 20	1,688
7097	45. HILL, H. D., Pulleys and Shafting; Lubrication; Bearings and Guides	July 30	Aug. 1	824
4613	46. TAYLOR, M., Evaporators; Fluid Sprinkling; Fire Extinguishers; Boilers	July 25	July 25	506
7600	47. BARKER, H., Clutches and Power Stops; Brakes; Motors	June 12	June 13	1,832
5731	48. ROEPKE, O. B., Electricity, General Applications	July 5	July 5	605
7725	49. SHEFFIELD, E. L., Check-Controlled Apparatus; Domestic Cooking Vessels; Ventilation; Driers; Liquid Separation or Purification.	May 18	May 18	1,375
4701	50. BLAKE, C. L., Plastic and Liquid Coating Compositions; Coating	May 14	May 17	2,025
5628	51. BACKUS, C. D., Radiant Energy	July 5	July 5	1,055
7709	52. KNOTTS, M. K., Supports; Chucks; Joint Packing; Pipe and Rod Joints or Couplings; Tool-Handle Fastenings.	Aug. 15	Aug. 20	614
6897	53. PECK, M. K., Books; Manifolding; Printed Matter; Stationery, Educational Appliances; Paper Files and Binders; Tents, Canopies, Umbrellas, and Canes; Curtains, Shades, and Screens.	Aug. 30	Sept. 2	425
5874	54. WAITE, W. E., Electric Lamps; Vapor Electric Devices; Space Discharge Tubes; Light Sensitive Circuits.	June 10	June 10	1,030
6887	55. BOWEN, S. T.—Bread, Pastry, and Confection Making; Cutlery	Aug. 19	Aug. 19	330
	—Designs	Oct. 20	Oct. 29	201
4725	56. PORTER, F. J., Electrochemistry; Laminated Fabrics; Paper Making; Substance Preparation	May 24	June 3	1,268
3623	57. NICOLSON, G. D. G., Cutting and Punching; Bolt, Nut, Rivet, Nail, Screw, Chain, and Horse-Shoe Making; Driven and Screw Fastenings; Jewelry; Nut and Bolt Locks.	July 9	July 12	644
5605	58. DOWELL, E. F., Abrading; Typewriting	May 27	May 27	1,207
4709	59. RICHARD, V. I., Chemistry; Alcohol; Fertilizers; Cement and Lime; Hides, Skins, and Leather; Fuel.	May 14	May 14	1,623
5896	60. GLASS, R. L., Electricity, Heating, and Welding; Batteries; Resistances and Rheostats; Prime Mover Dynamo Plants.	May 31	May 31	1,353
6724	61. PARKS, G. E., Elevators; Winding and Reeling; Pushing and Pulling; Fire Escapes; Ladders; Scaffolds; Horology; Time-Controlling Apparatus.	June 15	June 16	1,183
7525	62. COCHRAN, W. W., Toys; Amusement Devices; Baggage; Package and Article Carriers; Bottles and Jars; Deposit and Collection Receptacles.	June 27	June 27	1,368
4888	63. WINKELSTEIN, A. H., Bleaching and Dyeing; Explosive, Pyrotechnic, and Match Compositions; Preserving; Sugar, Starch, and Carbohydrates.	May 31	May 31	1,353
4708	64. NASH, P. N., Acetylene; Distillation; Gas Mixers; Oils, Fats, and Glue	Aug. 12	Aug. 24	363
5624	65. McDERMOTT, F. P., Electricity, Conductors; Conduits and Housings; Repeaters; Relays; Wave Transmission.	May 27	May 28	1,494
2099B	Trade-Marks, Labels, and Prints: F. A. RICHMOND.—Trade-Marks	Oct. 15	Oct. 27	873
	—Labels and Prints	Oct. 12	Nov. 1	150

DECISIONS IN PATENT AND TRADE-MARK CASES

Commissioner's Decision

Ex Parte Rodman, Hecht, and Jones

Ser. No. 290,530. Decided September 30, 1932

Application—Prosecution—Citation of New Reference—Final Rejection Premature.

The citation of a new reference in an Office action precludes the making of that action final. If the reference is sufficiently pertinent to the issue raised to justify its citation applicant should be given an opportunity to present his views relative thereto.

On petition.

Messrs. Cheever, Cox & Moore, for Rodman, Hecht, and Jones.

Kinnan, *First Assistant Commissioner:*

The applicants petition that the Examiner be directed to withdraw his final rejection of August 22, 1932 as premature.

The reason presented in support of the petition is that the Examiner cited a new reference in his action closing the prosecution of the case before him.

Notwithstanding the reasons stated by the Examiner in his answer to the petition it is thought that the citation of the new reference precluded making the action final. If a reference is sufficiently pertinent to the issue raised in an application to justify its citation the applicant should be given an opportunity to present his views in connection with the newly cited patent before the prosecution of the case before the Examiner is closed.

In view however of the last paragraph in the Examiner's statement in which he suggests that "perhaps the final rejection should be withdrawn to insert additional art," he is authorized to reopen the application.

The petition is granted.

U. S. Circuit Court of Appeals—Second Circuit

Danbury & Bethel Fur Co. *v.* American Hatters & Furriers Co., Inc.

Eastern Fur Products Co. et al. *v.* Same.

Gebert et al. *v.* Same

Nos. 93–95. Decided December 7, 1931

[54 F.(2d) 344]

1. Patents—Sufficiency of Specification.

Inventor need not necessarily understand or be able to state scientific principles underlying invention.

2. Patentability—Combination.

Valid claim for combining elementary parts may be had where successive action of each contributes to produce particular result as product of the simultaneous or successive actions of the elementary parts.

3. Same—Same.

Discovery of novel use of old substance in new composition, with new and unobvious result, is patentable.

4. Same—Double Patenting—Process and Product.

The exercise of inventive thought may produce both a process and its product, as a composition of matter in the art, by the act in which it is applied, and its intended use, if the inventions are truly separable. The inventor is entitled to a monopoly for each, although neither could have been discovered and been available without the other.

Appeal from the District Court of the United States for the District of Connecticut.

Patent infringement suits by the American Hatters & Furriers Company, Inc., against the Danbury & Bethel Fur Company, against the Eastern Fur Products Company and another, and against Henry J. Gebert and another, individually and as copartners, doing business under the name of Henry J. Gebert & Son. Decrees for plaintiff [47 F.(2d) 268], and defendants separately appeal.

Affirmed.

Mr. Victor D. Borst, of New York city, for appellants.

Messrs. Janney, Blair & Curtis, of New York city, for appellee.

Before Manton, L. Hand, and Swan, Circuit Judges.

Manton, *C. J.:*

These three suits for infringement of Patents Nos. 1,507,891 and 1,507,892, granted to Parks, were tried together, and will be considered in one opinion.

The patent, No. 1,507,891, is for a composition of matter employed in carrying on the process Patent No. 1,507,892. The latter is the process and product patent. Both were granted on September 9, 1924, on applications filed June 30, 1923. They propose the conjoint use as a carrot of an oxidizing agent, as hydrogen peroxide, and a caustic alkali, as sodium hydroxide. Carroting is an art used in the manufacture of felt hats. Felt hats are made of the fur of small animals, principally rabbits. The hat-making process involves the formation of a cone of loosely deposited fibers, known as a hat body, and also as a hat bat, which, by manipulation in a wet state, is caused to gradually change into a very much smaller, and very much stronger, firmer, and thicker article from which the hat is ultimately formed by blocking and stretching. This change is rendered possible by the carroting of the fur. Uncarroted fur will not felt and shrink. The transformation of the fur fabrics by the carroting process is an important step, and is the subject to which both inventions relate. The usual carroting operation, and the preferred form of the patents in suit, is that the carroting solution is brushed onto the fur when it is on the pelt, and the fur is then allowed to dry. Sometimes artificial heat is used. The carroting of the fur by immersion is unusual; in fact there is no testimony that any one has ever carroted furs by immersion in solution, although that is claimed by the appellant. Except for the carroting under the invention in suit, the use of mercury was universal. But the use of a mercury carrot was found to be poisonous, and resulted in an occupational disease of hat makers—mercury poisoning. The carrot of the patents in suit proved to be nonpoisonous, and avoided stains on the fur which the mercury carrot imparted, a yellowish tinge.

Appellee's inventions permit the stain or dye to penetrate entirely through the fur; mercury carrot

does not do this. It has been found that fur, carroted by the inventions in suit, produces many attractive and popular characteristics as are referred to in the so-called "flannel felt." Moreover, it has been found that economies in producing cheaper grades of hats have been possible. It gives a closer felt because it is more evenly knit together. These enumerated advantages have been found to result from the application of the appellee's process of brushing a strong carrot of the described character on the pelt. Patent No. 1,507,892 deals with a convenient method of getting an aqueous solution of hydrogen peroxide and sodium hydroxide by simply introducing a specified amount of sodium peroxide into water. Sodium peroxide in water inevitably and immediately works down into the two above-named chemical compounds.

The claims deal with the process, but some of the claims, as claim 8, deal with the treatment of the fur, preparatory to felting, with a solution of an oxidizing agent and a cleansing agent of such nature as to give the fur felting properties. Claim 11 is more specific as to the solution used, setting forth sodium hydroxide and hydrogen peroxide as ingredients of the solution. Some of the claims in suit, instead of specifying the result of adding sodium peroxide to water, define the solution as a solution of sodium peroxide in water, which is another way of saying the same thing. A solution of sodium peroxide in water is a solution of sodium hydroxide and hydrogen peroxide. Claims 12 and 16 specify the range of strength of the solution with different degrees of narrowness.

Patent No. 1,507,891 deals with the composition of matter which forms the material for carrying on the process and for producing the product dealt with in the patent just considered. This material and its action are referred to in the specifications of the patent with particularity substantially equal to that contained in Patent No. 1,507,892.

There are three claims in suit. The first sets forth the carroting liquid comprising the solution of sodium peroxide dissolved in water; claim 2 specifying and defining a carroting solution comprising an aqueous solution of sodium hydroxide and hydrogen peroxide of a strength of not less than 1° Baumé nor more than 10° Baumé; claim 3 is similar to claim 2, but narrower, in that it specifies the limits of the range as 2½° Baumé and 7° Baumé. These claims are explicit and clearly stated.

[1] It is not clear as to what action takes place in the chemical and physical structure of the fur when it is carroted. Experts differ as to the result, but, whatever may be the cause of the change, some marked change is wrought. After the fur has been carroted, it seems to felt with ease. The changed character of the fur is important, and what may be the microscopic actions which bring this about are not so important, nor is the difference of opinion as to it. It is not necessary that the inventor understand or be able to state the scientific principles underlying his invention. *Diamond Rubber Co.* v. *Consolidated Tire Co.*, 220 U. S. 428, 31 S. Ct. 444, 55 L. Ed. 527.

[2] Patent No. 501,797, issued to Lussigny, was for the use of caustic soda in carroting, and the Tweedy patent, No. 339,350, for the use of hydrogen peroxide. They are urged upon us as prior art. Both were considered in the Patent Office on these applications and found not to anticipate Parks. Other patents showing these two elements, caustic soda and hydrogen peroxide, are cited but are not prior art. But it is claimed because of these prior patents that the patents in suit are an aggregation and not a patentable combination. The argument is that the two agents, caustic sodium and hydrogen peroxide, may be separately applied to the fur, instead of first being mixed and thus simultaneously applied, and the same excellent results obtained. And it is argued there can be no true coaction. Assuming that separate uses have the same result as the use of a mixed carrot, we would have first the application of caustic soda and then hydrogen peroxide; and caustic soda once applied to the fur remains upon it, for, as defendant Zwyner testified, washing the caustic soda off as much as he could with water, it was not all washed off. He indicates that the washing consisted of brushing some water on the fur. The caustic soda, even after the skin dries, remains on the hair, and, when the hydrogen peroxide is applied, the same combination is found as if they had been mixed in the first place. If the hydrogen peroxide is first applied and sodium hydroxide—caustic soda—later put on the pelt, there would be some reaction on the fur which prepares it to fit in with the action of the caustic soda. Some chemical or microscopic change of such nature adapts it for a different reaction by the caustic soda, different than that in the case of caustic soda acting upon the raw fur. If the separate action of the agents in either order gives the same results as their simultaneous reaction, no deduction can be made therefrom which tends to strengthen the argument of aggregation. In all processes, the individual steps are successive rather than simultaneous, and to make a valid claim for a combination it is not necessary that the several elementary parts of the combination act simultaneously. If the successive action of each contributes to produce one particular result which, when attained, is the product of the simultaneous or successive actions of the elementary parts viewed as one entire whole, a valid claim for thus combining those elementary parts may be made. Walker on Patents (6th Ed.) p. 87. The test is whether the combination produces a new result or an old result in a better way. *Webster Loom Co.* v. *Higgins*, 105 U. S. 580, 26 L. Ed. 1177. This record demonstrates that the admitted failures of caustic soda and hydrogen peroxide used alone, have been overcome by the patented combination of the matters used in practicing the Parks inventions.

An argument is advanced that the component constituents do not coact. Apparently each does something because of the action of the other. No matter how strong a solution of caustic soda is used or how long it is applied, it does not get the result. The same is true of hydrogen peroxide, but, when both

are used together, even successively, they do something which the other cannot do alone. They bring about the result which the art desired. As stated in the report of the Mellon Institute, which made research on hatting,

carroting reaction is bound up in interdependent reactions of hydrolysis and oxidation

and

neither is sufficient in itself, but together they can cause a reaction which duplicates that of mercury carrot.

The caustic soda has a hydrolyzing effect, and the hydrogen peroxide has an oxidizing effect. No one claims that an oxidizing action is found in the caustic soda alone, nor a hydrolyzing action in the hydrogen peroxide alone. As compared with these constituents, the patented carrot has a new action which is different from either alone, oxidization in one case or hydrolization in the other. Thus interaction is clearly established as is chemical reaction. The result has been of great value to the manufacturers of hats. It is thus apparent that the inventor Parks took the two unqualified failures as carrots and by putting them together has made a success, bringing about the new and desired results as above stated.

[3] The appellant argues that the Patent No. 1,507,891, is invalid because the composition of matter is an unpatentable discovery. The discovery of a novel use of an old substance in a new composition, whereby there is attained a new and unobvious result, has long been held to be patentable. In *General Electric Co.* v. *Hoskins*, 224 F. 464 (C. C. A. 7), it was argued that the nichrom wire, of which are made the resistance wires for electric toasters, flatirons and the like, was not patentable because the alloy of the wire was old at the time of the invention there in question, and it was old for the purpose of electrical resistance. But the court held that was insufficient to invalidate the patent. Copper sulphate used in the gas mask to absorb ammonia was broadly patentable, although the same substance had been used for the same purpose before. *Yablick* v. *Protecto Corp.*, 21 F.(2d) 885 (C. C. A. 3). See: *Corona* v. *Dovan*, 275 U. S. 358, 48 S. Ct. 380, 72 L. Ed. 610; *Ansonia Co.* v. *Electrical Supply Co.*, 144 U. S. 11, 12 S. Ct. 601, 36 L. Ed. 327; *Internatl. Cork Co.* v. *New Process Co.*, 6 F.(2d) 420 (C. C. A. 2). The claims here specify the strength of the solution or proportions of chemicals used, and the patent explains the proper use thereof. It is not a matter which is obvious to those skilled in the art, and this knowledge was acquired only after a long period of experimentation to find the proper strength of solution to be used. *Minerals, Ltd.* v. *Hyde*, 242 U. S. 261, 37 S. Ct. 82, 61 L. Ed. 286; *Macomber* v. *Hazard*, 211 F. 976 (C. C. A. 2). The composition of the matters which is suggested in the patents in suit, in the combination devised to be used, had never been suggested.

[4] The claim that Patent No. 1,507,892 is void for double patenting because of the grant of the combination patent, is equally without merit. The exercise of inventive thought, may produce both a process and its product, as a composition of matter in the art, by the act in which it is applied, and its intended use, if the inventions are truly separable. The inventor is entitled to a monopoly for each, although neither could have been discovered and been available without the other. *Sandy Macgregor Co.* v. *Vaco Co.*, 2 F.(2d) 655 (C. C. A. 6); *Leonard* v. *Maxwell* (D. C.) 288 F. 62; *Crown Cork Co.* v. *Standard Co.* 136 F. 841 (C. C. A. 2); *Writing Machine Co. v. Elliott* (C. C.) 106 F. 507; *Willcox* v. *Merrow*, 93 F. 206 (C. C. A. 2). The issuance of two copending patents to the same inventor may not be used one against the other where it appears that the claims for a separate invention from the original claims were allowed on the first application. Each patent is novel and useful and is entitled to protection. *Traitel* v. *Hungerford*, 22 F.(2d) 259 (C. C. A. 2); *Benjamin Elec. Co.* v. *Dale*, 158 F. 617 (C. C. A. 2).

Infringement is amply established. Indeed, it is practically admitted, except as to the Eastern Fur Products Company. Claims 5, 7, 12, 14, 15, 16, and 17 of the process Patent No. 1,507,892, and claim 1 of the matter Patent No. 1,507,891, are infringed, Appellants admit that they follow the recommended procedure of the patent. The constituent agents of caustic soda and hydrogen peroxide are applied in mixed form and they are applied by brushing the fur instead of immersing the fur in the solution. They admit the exactness of the infringement by the solution used, making and using a solution comprised of 2½ per cent. of caustic soda and 1 per cent. sodium carbonide and 3.75 per cent. hydrogen peroxide, all by weight. As to claim 1 of composition of matter patent, that likewise is established. As to the infringement by the Eastern Fur Products Company, the testimony and the answers of Zwyner fully establish its infringement. He was president of the company and carried on its business. His act was the act of the corporation of which he was an officer. His use in directing the business activities of this appellant constituted acts of the corporation.

The patents are held valid and infringed.

Decrees affirmed, with costs.

U. S. Circuit Court of Appeals—Tenth Circuit

B. F. GOODRICH RUBBER CO. *v.* GATES RUBBER CO.

No. 521. Decided December 16, 1931

[54 F.(2d) 580]

1. PATENTABILITY—INVENTION—CARRYING FORWARD IDEA.
"It is well settled that the mere carrying forward or more extended application of the original idea, involving a change only in form, proportions, or degree, where the same work is performed in the same way by substantially the same means although with better results, is not invention."

2. SAME—SAME—V-SHAPED ENDLESS BELT.
The patent to Gates, No. 1,400,539, for an endless belt *held* unpatentable over the prior art where the belt of the patent in suit differs from the prior art in that it is V-shaped, while that of the prior art is flat but it appears that the patentee had merely applied the principle of the prior art to a V-shaped belt.

Mr. Merrell E. Clark, Messrs. Fish, Richardson & Neave, Messrs. Dines, Dines & Holme, and *Mr. W. D. Hakir* for B. F. Goodrich Rubber Co.

Mr. A. J. O'Brien and *Mr. Wilbur F. Denious* for Gates Rubber Co.

APPEAL from the District Court of the United States for the District of Colorado; J. Foster Symes, judge.

Patent infringement suit by the Gates Rubber Company against the B. F. Goodrich Rubber Company. Decree for plaintiff [45 F.(2d) 652], and defendant appeals.

Reversed and remanded.

Before COTTERAL and PHILLIPS, Circuit Judges, and POLLOCK, District Judge

PHILLIPS, *C. J.*:

This is a patent infringement suit brought by the Gates Rubber Company against the B. F. Goodrich Rubber Company. The patent in suit is for improvements in an endless belt. It was applied for by Charles C. Gates on March 18, 1919, and issued on December 20, 1921. It was thereafter assigned to plaintiff.

The trial court held that claims 1, 2, 3, 4, 5, 6, and 8 of the patent are valid, and that claims 1, 2, 3, 6, and 8 had been infringed. Defendant has appealed.

The claims held valid and infringed read as follows:

1. An endless vulcanized V-shaped belt having rubberized cord embedded therein and lying substantially parallel with the length of the belt, the inclined sides and the inner narrow surface of the belt being composed of rubberized woven fabric whose warp and woof form oblique angles to the length of the belt.

2. An endless vulcanized V-shaped belt having rubberized cord embedded therein and lying substantially parallel with the length of the belt, the inclined sides and the inner narrow surface of the belt being composed of rubberized woven fabric whose warp and woof form oblique angles to the length of the belt, the belt also having a number of layers of woven fabric located between the cord and the inner narrow face of the belt.

3. An endless vulcanized V-shaped belt having rubberized cord embedded therein and lying substantially parallel with the length of the belt, the inclined sides and the inner narrow surface of the belt being composed of rubberized woven fabric whose warp and woof form oblique angles to the length of the belt, the belt also having a number of layers of woven fabric whose warp and woof are diagonal to the length of the belt, located between the cord and the inner narrow face of the belt.

6. A vulcanized V-shaped belt whose opposite inclined side walls are composed of rubberized woven fabric, whose warp and woof form oblique angles to the length of the belt.

8. An endless vulcanized V-belt having substantially non-elastic cords at its neutral axis and whose opposite inclined side walls are composed of rubberized woven fabric whose warp and woof are diagonal to the length of the belt.

Endless V-shaped belts were old in the art when Gates entered the field. Dennison's Patent No. 556,663 issued March 17, 1896, and Lycett's (British) Patent No. 6,846 issued August 28, 1913.

In use V-shaped belts differ from flat belts in that the former run on grooved rather than smooth pulleys, and the driving contact is between the sides of the belt and the pulley flanges rather than between the inner surface of the belt and the pulley face. To be efficient, a belt must have adequate tensile strength; must be substantially non-stretchable; and must have a durable driving surface. To give it tensile strength and render it non-stretchable, the center core or backbone of the belt is usually constructed of non-elastic rubberized cords. This core or backbone is sometimes called the neutral layer. A belt must bend about and conform to the shape of the pulley which it drives by friction. This does not materially affect the core or neutral layer which retains substantially its original length, but it causes the parts of the belt between the core and outer surface to stretch and the parts between the core and the inner surface to contract. In a V-shaped belt the portion between the core and the inner surface contracts lengthwise and expands crosswise. Therefore, the portions of the belt outside of the core or neutral portion must be constructed of elastic or flexible material.

In his specification, Gates said:

My invention relates to improvements in endless belts in which rubberized cords, or other suitable material, constitutes the structural element, or the element which gives strength or backbone to the belt, while the wearing feature of the belt consists of rubberized fabric and rubber or rubber compound.

It should be understood that the object of so applying the rubberized fabric to the grooves of the drum that the warp and woof of the fabric shall form oblique angles to the direction of the length of the belt is to give the latter a limited degree of elasticity beyond that portion of the belt which may be termed its "neutral axis," to permit the flexing of the belt freely when bending over a pulley and which flexing will not in any way injure the material of the belt.

Instead of cords, I may employ rubberized woven fabric in which one set of threads extends in the direction of the length of the belt, since this element of the belt will then become substantially non-elastic and will perform virtually the same function as the convolution or convolutions of cord. This element of the belt, whether composed of cord or fabric, will form the neutral axis of the belt, or the portion which does not stretch when the belt is in use. It will be understood that when the belt is passing around a small pulley, its outer portion beyond the neutral axis is stretched to some extent, but owing to the fact that the warp and woof of the woven fabric in this portion of the belt form oblique angles to the length of the belt, this portion of the belt is more flexible and more elastic and will not be subject to any injurious stress or tension during the use of the belt, and the latter, due to this fact, will wear longer because any material which is not stressed will better resist abrasion and general wear during the performance of its function.

While the outer portion of the belt, due to the employment of woven rubberized fabric whose warp and woof form oblique angles to its length, is permitted while passing around a small pulley to yield readily without placing the belt under injurious stress or strain, the inner portion of the belt beyond the "neutral axis" is correspondingly compressed, this compression being considerable by reason of the fact that the inner part of the belt is also composed of rubberized fabric whose warp and woof are diagonal to its length, thus providing for a considerable degree of elasticity. This compression of the inner portion of the belt produces a widening or enlargement of the outer face of the belt and causes its inclined sides to grip the adjacent walls of the grooved pulley more tightly, thus preventing the possibility of slipping.

Compression of the inner portion of the Gates belt and expansion of its inclined sides, thereby causing it to contact more tightly with the flanges of the grooved pulley, were not new. They are characteristics inherent in all V-shaped belts.

[1, 2] Counsel for defendant contend that the claims held valid by the trial court were fully anticipated by the Gammeter patent No. 1,277,711, applied for November 5, 1913, and issued September 3, 1918.

Gammeter stated the object of his invention as follows:

The object of this invention is to produce a practically non-stretchable, flat, endless belt of maximum tensile strength and flexibility.

In his specification he said:

The body of my improved belt consists of a series of strands 10 of rubberized fibrous cord or cords laid closely together, side by side, preferably in a single row only, and a cover 11 which I prefer to make of rubberized fibrous fabric cut on the bias, so that the warp and weft threads cross the belt diagonally, the whole being vulcanized together.

A single row of cords gives the belt greater flexibility than plural rows or bundled parallel strands, and a cover of bias fabric is more flexible than one of straight fabric.

The description of the method of constructing the belt is substantially the same in both the Gammeter and Gates patents, except that the former patent produces a flat belt while the latter produces a V-shaped belt due to the different shapes of the peripheral grooves in the drums in which the belts are formed before they are vulcanized. The principle of a core or non-elastic rubberized cord or fabric to give tensile strength and prevent the belt from stretching, and a cover of rubberized fabric, cut on the bias so that the warp and woof threads cross the belt diagonally and at oblique angles to the length of the belt to give it flexibility, free it from stress and strain on the driving surface, and thereby give it durability, are fully disclosed by the Gammeter patent. Gates merely applied the Gammeter principles to a V-shaped belt. The non-elastic rubberized core and rubberized fabric, cut on the bias and wrapped so that the warp and woof form an oblique angle to the length, perform the same function in substantially the same way in both belts. The difference is in form, proportions, or degree and not in principle. It is well settled that the mere carrying forward or more extended application of the original idea, involving a change only in form, proportions, or degree, where the same work is performed in the same way by substantially the same means although with better results, is not invention. *Linville* v. *Milberger* (C. C. A. 10) 34 F.(2d) 386; *Geo. F. Hinrichs, Inc.*, v. *Henderson* (C. C. A. 8) 32 F.(2d) 655; *Sloan Filter Co.* v. *Portland Gold Min. Co.* (C. C. A. 8) 139 F. 23, 26; *Smith v. Nichols*, 21 Wall. 112, 119, 22 L. Ed. 566.

In *Sloan Co.* v. *Mining Co.*, supra, the court said:

The mere carrying forward or more extended application of the original idea, involving a change only in form, proportions, or degree, and resulting in the doing of the same work in the same way and by substantially the same means—is not patentable, even though better results are secured.

The trial court in its opinion suggested certain differences between the Gammeter belt and the Gates belt:

(1) That the Gammeter belt was non-stretchable. This also is true of the Gates belt. In his specification Gates said:

Instead of cords, I may employ rubberized woven fabric in which one set of threads extends in the direction of the length of the belt, since this element of the belt will then become substantially non-elastic. • • • This element of the belt, whether composed of cord or fabric, will form the neutral axis of the belt, or the portion which does not stretch when the belt is in use.

Gammeter said that he applied the non-elastic cords under tension. Gates testified that the cords in his belt were put in under tension.

(2) That there was a difference in the number of cords used in the two belts. It is true that a single row of cords gives a belt greater flexibility than plural rows or bundled parallel strands, but the Gammeter patent specified either a single row or plural rows of cords, and he taught that a single row of cords gives a belt greater flexibility than plural rows.

(3) That Gammeter's belt has no side walls. That is true, but by using a V-shaped instead of a flat shaped groove in the drum a V-shaped belt substantially the same as the Gates belt could be produced by the Gammeter method. The groove and drum method for shaping belts was old in the art when Gates applied for his patent.

We are unable to escape the conclusion that Gates only applied to a V-shaped belt the principles disclosed by Gammeter, and that his accomplishment did not amount to invention.

Reversed and remanded for further proceedings in accordance with this opinion.

Patent Suits

[Notices under sec. 4921, R. S., as amended Feb. 18, 1922.]

1,089,405, W. S. Ferguson. Reenforced concrete dock or pier, D. C., S. D. Calif. (Los Angeles), Doc. 4406–J. *The Dock & Terminal Engineering Co. et al.* v. *City of Long Beach, Calif.* Dismissed for want of prosecution Sept. 13, 1932.

1,189,887. (See Re. 14,816.)

1,194,752. 1,312,486, T. H. Krueger, Moistening device for gummed stickers or labels; 1,638,815, same, Tape serving device, D. C., S. D. Ohio, W. Div., Doc. E 722, *Better Packages, Inc.*, v. *A. C. Hummel.* Dismissed for want of prosecution without prejudice Oct. 4. 1932.

1,199,775, Garbell & Cimorosi, Toy torpedo; 1,467,755, A. Cimorosi, same, filed Sept. 30, 1932, D. C. Md., Doc. E 2100, *J. N. Mackall* v. *Commercial Novelty Fireworks Mfg. Co.*

1,203,611. (See 1,402,764.) 1,220,180. (See 1,402,764.)

1,223,371. (See 1,402,764.)

1,227,805, J. E. Landry, Braking mechanism for automobiles; 1,435,813, same, Brake for steering wheels, D. C. Mass., Doc. E 2828, *Landry Mfg. Co.* v. *C. P. Rockwell, Inc.* Decree affirmed Jan. 27, 1931.

1,247,419, N. D. Levin, Mining apparatus; 1,414,877, E. L. Hopkins, same, D. C., S. D. Ohio, W. Div., Doc. E 625. *The Jeffrey Mfg. Co.* v. *Oldroyd Machine Co.* Dismissed without prejudice Oct. 7, 1932.

1,262,725. (See 1,402,764.)

1,263,778, 1,314,341, C. W. Larner, Taper plug valve, filed Oct. 7, 1932, D. C., N. D. Ohio, E. Div., Doc. E 4447. *Automatic Cone Valve Co.* v. *American Construction Co., Inc., et al.*

1,264,560, A. L. Riker, Sparking means for motor vehicles; 1,301,053, 1,305,601, J. A. Heany, Ignition device for motor vehicles; 1,347,460, same, Means for supplying lighting and ignition current for automotive vehicles, D. C., N. D. Ohio, W. Div., Doc. E 273, *Industrial Research Corp.* v. *Jefferson Sales Co.* Dismissed without prejudice for lack of prosecution (notice Oct. 1, 1932).

1,264,740, G. L. Young, Frying apparatus, D. C. Mass., Doc. E 3083, *A. & E. Pitman Mfg. Co., Inc.*, v. *J. C. Pitman et al.* Decree affirmed Aug. 12, 1931.

1,274,188, L. R. Carvalho, Process for manufacturing closures for receptacles, D. C., N. D. Ohio, W. Div., Doc. E 499, *Paragon Can & Cap Co., Inc.*, v. *The Closure Service Co. et al.* Dismissed without prejudice (notice Oct. 1, 1932).

1,301,053. (See 1,264,560.) 1,305,601. (See 1,264,560.)

1,312,486. (See 1,104,752.) 1,314,341. (See 1,263,778.)

1,347,460. (See 1,264,560.)

1,388,434, G. V. Johnston, Method of and apparatus for butt-welding thin gauge tubing and the product thereby produced; 1,435,306, same, Butt-welded thin-walled tubing, C. C. A., 3d Cir., Doc. 4844, *Steel & Tubes, Inc.*, v. *General Tube Co.* Decree modified and affirmed Oct. 3, 1932.

1,402,763. (See 1,402,764.)

1,402,764, 1,402,763, 1,208,611, 1,504,555, C. H. Hapgood, Scale; 1,220,180, J. D. Burkholder, Dash pot; 1,223,371, A. De Vilbiss, jr., Scale; 1,262,725, L. C. Wetzel, same; 1,543,768, H. O. Hem, Weighing scale, D. C., N. D. Ohio, W. Div., Doc. E 701, *The Toledo Scale Co.* v. *Fairbanks, Morse & Co.* Dismissed without prejudice for lack of prosecution (notice Oct. 1, 1932).

1,414,877. (See 1,247,419.)

1,420,454, J. W. Smith, Attachment for paper machine drier, D. C. Mass., Doc. E 3259, *J. W. Smith & Carthage Machine Co.* v. *Rice Barton & Fales, Inc.* Dismissed July 8, 1932.

1,423,956, Mitchell & White, Tipless incandescent lamp, D. C., S. D. Calif. (Los Angeles), Doc. E. V-19-H, *General Electric Co.* v. *International Trading Co. et al.* Patent held valid and infringed Oct. 4, 1932.

1,435,306. (See 1,388,434.) 1,435,313. (See 1,227,805.)

1,467,755. (See 1,199,775.) 1,504,555. (See 1,402,764.)

1,543,768. (See 1,402,764.)

1,575,945, B. K. Stroud, Application of mud-laden fluids to oil or gas wells, T. M. 214,989, National Pigments & Chemical Co., Barytes, filed Oct. 5, 1932, D. C., S. D. Tex. (Houston), Doc. E 530, *National Pigments & Chemical Co.* v. *Mid Continent Mud Co. et al.*

1,608,615, L. Pengilly, Cigarette dispenser and lighter, D. C., N. D. Ohio, W. Div., Doc. E 855, *L. Pengilly* v. *Koolfast Radiator Co.* Dismissed without prejudice for want of prosecution (notice Oct. 1, 1932).

1,638,815. (See 1,194,752.) 1,654,330. (See 1,669,246.)

1,666,516. (See Re. 14,816.)

1,669,246, 1,654,330, C. E. Jenkins, Food conveying apparatus, D. C. Mass., Doc. 3531, *C. E. Jenkins* v. *L. I. Beckwith (Market Forge Co.)*. Consent decree dismissing bill May 19, 1932.

1,673,727, L. V. Aronson, Cigar lighter, filed Oct. 7, 1932, D. C. Conn. (New Haven), Doc. 2252, *Art Metal Works, Inc.*, v. *McKesson & Robbins, Inc., et al.*

1,677,998, C. T. Bliss, Electrical Christmas candles, D. C. Mass., Doc. E 3386, *Chetlew Mfg. Co. et al.* v. *The Holly Co.* Decree for plaintiff Apr. 28, 1932.

1,753,310, H. O. Costello, Exercising ball and support therefor, D. C. Mass., Doc. E 3438, *H. O. Costello et al.* v. *M. M. Israel (Ace Leather Goods Co.)*. Dismissed Apr. 20, 1932.

1,754,669, J. H. Cohen, Heater, D. C. Mass., Doc. E 3346, *Casco Products Corp.* v. *Reliance Specialty Co., Inc.* Dismissed pursuant to stipulation Mar. 22, 1932.

1,787,610, A. Blustein, Counter and method of making same, D. C. Mass., Doc. E 3415, *H. Brown et al. (Brown Counter Co.)* v. *S. Merker et al. (National Counter Co.)*. Consent decree dismissing bill Mar. 17, 1931.

1,789,901, F. Hotchner, Electrode, D. C., E. D. Wis. (Milwaukee), Doc. 3172, *Q. R. S. Neon, Inc., et al.* v. *Metal Products, Inc.* Consent decree for plaintiff Oct. 7, 1932.

1,791,605, H. H. Root, Radial extractor and method of extracting honey, filed Oct. 7, 1932, Supreme Court, D. of C., Doc. E 54895, *The A. I. Root Co.* v. *Sears, Roebuck & Co.*

Re. 14,816 (of 1,189,887), W. Tschudy, Method of controlling the efficiency of mercury rectifiers; 1,666,516, same, Vapor rectifier, D. C., S. D. Calif. (Los Angeles), Doc. 5499-C, *W. Tschudy* v. *Westinghouse Electric & Mfg. Co.* Dismissed with prejudice Sept. 10, 1932.

T. M. 214,989. (See 1,575,945.)

Adjudicated Patents

(D. C. N. Y.) Garratt patent, No. 1,391,887, for pneumatic horn, claim 4 *Held* not infringed. *Trico Products Corporation* v. *E. A. Laboratories*, 1 F. Supp. 22.

(D. C. N. Y.) Shoup patent, No. 1,396,070, for paper-feed devices for autographic registers, claims 4–6, 29–33, 47, 48, 53, and 54 *Held* valid and infringed. *Autographic Register Co.* v. *A. I. Namm & Sons*, 1 F. Supp. 85.

(D. C. N. Y.) Respess patent, No. 1,411,376, for process of making a leather substitute, claims 1 and 2 *Held* valid and infringed. *Respro, Inc.*, v. *Vulcan Proofing Co.*, 1 F. Supp. 45.

(D. C. N. Y.) Garratt patent, No. 1,434,655, for sounding device, claims 1–4 *Held* not infringed. *Trico Products Corporation* v. *E. A. Laboratories*, 1 F. Supp. 22.

(D. C. N. Y.) De Forest patent, No. 1,507,016, for radio-signaling system, claims 24, 25, 26, 27, and 28 *Held* infringed. *Radio Corporation of America* v. *Radio Engineering Laboratories*, 1 F. Supp. 65.

(D. C. N. Y.) De Forest patent, No. 1,507,017, for wireless telegraph and telephone system, claims 15, 17, 18, 19, 20, and 21 *Held* infringed. *Id.*

(C. C. A. Mich.) Carr patent, No. 1,535,981, for fastener, claims 17 and 20 *Held* valid and infringed. *Magnus & Easterman Co.* v. *United-Carr Fastener Corporation*, 61 F.(2d) 3.

(C. C. A. Mich.) Carr patent, No. 1,535,982, for fastener, claim 10 *Held* valid and infringed. *Id.*

(C. C. A. Calif.) Walker patent, No. 1,575,239, for method of counterbalancing engine main shafts, claims 1–4, inclusive, *Held* invalid. *Don Lee, Inc.* v. *Walker*, 61 F.(2d) 58.

(C. C. A. N. Y.) Aronson patent, No. 1,673,727, for cigar lighter, claims 7, 12, 13, and 14 *Held* valid and infringed. *Art Metal Works* v. *Abraham & Straus*, 61 F.(2d) 122.

Trade-Marks Canceled

164,499. Perspiration preventive. Sheffield Pharmacal Co., Chicago, Ill. Registered February 20, 1923. Canceled November 14, 1932.

189,342. Oils and greases. Sterling Oil Company, Emlenton, Pa. Registered September 16, 1924. Canceled November 14, 1932.

207,534. Food product. Milliner Dairy Company, Norfolk, Va. Registered January 5, 1926. Canceled November 8, 1932.

257,628. Oysters in their natural state. John B. Cartwright, doing business as Cartwright & Company, New York, N. Y. Registered June 11, 1929. Canceled November 14, 1932.

264,915. Oils and greases. Sterling Oil Company, Emlenton, Pa. Registered December 10, 1929. Canceled November 14, 1932.

287,415. Sausage. Keane-Loffler, Inc., Benning, D. C. Registered September 22, 1932. Canceled November 14, 1932.

TRADE-MARKS

OFFICIAL GAZETTE, NOVEMBER 29, 1932

[VOL. 424. No. 5]

The following trade-marks are published in compliance with section 6 of the act of February 20, 1905, as amended March 2, 1907. Notice of opposition must be filed within thirty days of this publication.

Marks applied for "under the ten-year proviso" are registrable under the provision in clause (b) of section 5 of said act as amended February 18, 1911.

As provided by section 1 of said act, a fee of ten dollars must accompany each notice of opposition.

CLASS 1

Raw or Partly-Prepared Materials

Ser. No. 329,289. KATAKURA SEISHI BOSEKI KABUSHIKI KWAISHA, Tokyo, Japan. Filed Aug. 2, 1932.



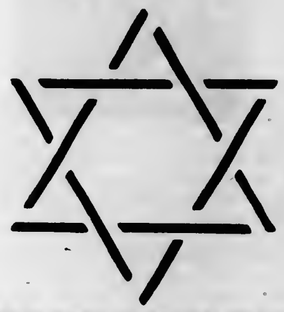
The words "Takei", "Filature Raw Silk", "Trade Mark" and "Japan" are disclaimed apart from the mark as shown. The word "Takei" is the name of one of the filature plants which the applicant owns. The word "Torii" means "temple gate". The translation of the Japanese characters appearing on the tablet in the center of the gate is "Itsukushima Jinja" which represents the name of a shrine. Therefore, this translation means "Itsukushima Shrine".

For the Following Raw Materials—Raw Silk, Rayon (Artificial Silk), Tussah Silk, Wild Silk Other Than Tussah, Gold Silk, Silver Silk.

Claims use since Apr. 26, 1926.

Ser. No. 330,017. ATKINS & DURBROW, INC., New York, N. Y. Filed Oct. 4, 1932.

Star Brand



No registration rights are claimed in the word "Brand".

For Peat Moss Used for Horticultural Purposes and Poultry Litter.

Claims use since Sept. 13, 1929.

CLASS 2

Receptacles

Ser. No. 330,364. CRESCENT BOX CORPORATION, Philadelphia, Pa. Filed Sept. 15, 1932.



The drawing is lined for shading only.

For Corrugated Fibreboard Boxes and Paper Boxes.

Claims use since 1913.

Ser. No. 330,839. WESTINGHOUSE ELECTRIC AND MANUFACTURING COMPANY, East Pittsburgh, Pa. Filed Sept. 30, 1932.

MICARTA

For Trays and Food and Drink Dishes, Constructed of Molded Material with a Heat Hardened Binder.
Claims use since August, 1924.

Ser. No. 331,090. AUGUST F. PFINGSTEN, Rock Rapids, Iowa. Filed Oct. 8, 1932.

"MY PRIDE"



The drawing is lined to indicate the colors gold, blue, black, pink, green, and brown. The picture is merely fanciful, no claim being made to the representation of a bread box per se.

For Bread and Cake Boxes Made of Metal.
Claims use since Apr. 29, 1932.

Ser. No. 331,125. "SEMPERIT" OESTERREICHISCH-AMERIKANISCHE GUMMIWERKE AKTIENGESELLSCHAFT, Vienna, Austria. Filed Oct. 10, 1932.

BELINDE

For Soap Dishes, Tooth Brush Stands, Egg Cups, and Drip Catchers, Made of India Rubber of All Kinds, Particularly Made of India Rubber Having Sponge-Like or Moss-Like Appearance.
Claims use since May 5, 1931.

Ser. No. 331,205. JOHN WANAMAKER PHILADELPHIA, Philadelphia, Pa. Filed Oct. 12, 1932.

REDLEAF



For Bottle Cases, Cases for Field Glasses, Opera Glasses, Spectacle Cases, Flask Holders, Drinking Glass Holders, and Jewel Boxes Made of Materials Other Than Precious Metal.
Claims use since 1927.

Ser. No. 331,207. JOHN WANAMAKER PHILADELPHIA, Philadelphia, Pa. Filed Oct. 12, 1932.

REDLEAF



For Playing Card Cases Made of Leather, Paper, Pasteboard, and Combinations Thereof.
Claims use since 1927.

CLASS 3

Baggage, Animal Equipments, Portfolios, and Pocketbooks

Ser. No. 331,262. LIDO LUGGAGE CO., INC., New York, N. Y. Filed Oct. 14, 1932.

LIDO

For Luggage—Namely, Suitcases, Hat-Boxes, Wardrobe Suitcases, Wardrobe Hat-Boxes, Satchels, Handbags, Gladstone Cases, Grips, Utensil Cases for Toilet Accessories, and Fitted Cases.
Claims use since Sept. 20, 1932.

CLASS 4

Abrasive, Detergent, and Polishing Materials

Ser. No. 322,421. COLUMBIA PHONOGRAPH COMPANY, INC., Bridgeport, Conn. Filed Dec. 24, 1931, under section 5b of the act of 1905 as amended in 1920.

Columbia

For Dry Cleaning Fluid and Spot Removing Fluid.
Claims use since July 15, 1931.

Ser. No. 327,870. FUGER AND BAKER, Lincoln, Nebr. Filed June 10, 1932.



The word "Cleaner" is disclaimed except in association with the other features of the trade-mark.

For Cleaner for Cleaning Floors, Carpets, Clothes, Painted and Varnished Surfaces, Automobiles, Cement, Glass, and the Like, and More Especially for Cleaning Painted Walls.
Claims use since May 3, 1932.

Ser. No. 330,516. MARTIN DENNIS COMPANY, Newark, N. J. Filed Sept. 20, 1932.

LEXOL

For Leather Dressing.
Claims use since July, 1930.

CLASS 6

Chemicals, Medicines, and Pharmaceutical Preparations

Ser. No. 318,199. DEUTSCHE GOLD- & SILBER-SCHEIDEANSTALT, Frankfort-on-the-Main, Germany. Filed Aug. 20, 1931.



DEGUSSA

For Absorbents, Alteratives, Analgesics, Anaphrodisiacs, Anæsthetics, Anodynes, Antisyphilitics, Antacids, Antiarthritics, Anthelmintics, Antichlorotics, Antiemetics, Antiepileptics, Antigalactogogues, Antigonorrheics, Antihydropics, Antilithics, Antineuralgics, Antiparasitics, Antiperiodics, Antiphlogistics, Antipyretics, Antirheumatics, Antiseptics, Antisialogogues, Antispasmodics, Antisymotics, Aperients, Aphrodisiacs, Aromatics, Armomatic Bitters, Bitters (Simple), Calefacients, Cardiac Depressants, Cardiac Sedatives, Cardiac Stimulants, Carminatives, Cathartics, Caustics, Cerebral Depressants and Stimulants, Cholagogues, Constructives, Correctives, Counterirritants, Demulcents, Deoxidizers, Depilatories, Depressants, Depresso-Motors, Depurants, Detergents, Diaphoretics, Digestives, Diluents, Discutients, Diuretics, Drastics, Ecbolics, Emetics, Emmenagogues, Emollients, Errhines, Escharotics, Evacuants, Excitants, Expectorants, Febrifuges, Galactagogues, Gastric Tonics, Hæmostatics, Hydrogogues, Hypnotics, Irritants, Laxatives, Local Anæsthetics, Motor Depressants, Motor Excitants, Mydriactics, Myotics, Narcotics, Nervines, Neurotics, Nutrients, Nutriants, Oxytocics, Peristaltics, Prophylactics, Protectives, Ptyalagogues, Purgatives, Pustulants, Refrigerants (Medicinal), Resolvents, Respiratory Depressants, Respiratory Stimulants, Restoratives, Revulsants, Rubefacients, Sedatives, Sialogogues, Soporifics, Sorbefacients, Specifics, Sternutatories, Stimulants (Cardiac, Cerebral, Hepatic), Stomachics, Styptics, Sudorifics, Tænicides, Tænifuges, General Tonics, Vasoconstrictors, Vasodilators, Vascular Sedatives, Vermicides, Vermifuges, Vesicants; Acids—Namely, Acetic, Acetic Anhydride, Glacial Acetic, Acetyl Salicylic, Aconitric, Arsenous, Benzoic, Boric Butyric, Cacodylic, Camphoric, Carbolic, Cresylic, Cubeoic, Chromic, Chrysophanic, Cinnamic, Citric, Creosotic, Diethylbarbituric, Formic, Gallic, Glycerinophosphoric, Hydrobromic, Hydrochloric, Hydriodic, Hydrocyanic, Hydrofluoric, Hypophosphoric, Hypophosphorus, Lactic, Monochloracetic, Nitric, Nucleinic, Oleic, Oxalic, Oxybenzoic, Palmitic, Phosphoric, Phosphoric Glacial, Phenylcinchoninic, Phthalic, Picric, Pyrogallic, Pyrosulphuric, Rosolic, Salicylic, Silicic, Stearic, Succinic, Sulphuric C. P., Sulphuric Commercial, Sulphurous, Tannic, Tartaric, Valerianic; Chemicals and Drugs—Namely, Abscess Root, Acetanilid, Acacia, Acetphenetidin, Acetyl Chloride, Acid Sodium Oleate, Acid Sodium Phosphate, Aconite Leaves, Aconite Root, Aconite Herb, Aconitine Crystals, Aconitine Nitrate, Aconitine Amorphous, Aconitine Hydrobromide, Adeps Lanæ, Adonidin, Adonis Vernalis, Adrenalin, Æsculin, Agaric White, Agaricin, Agar-Agar, Agrimony, Egg Albumen, Albargin Powder, Aletris, Alkanet Root, Althea Root, Allspice, Allyl Isosulphocyanate, Almonds (Bitter and Sweet), Almond Meal, Aloin, Aloes Cape, Aloes Curacao, Aloes Socotrine, Alpha Naphthol, Aluminum Acetate, Aluminum and Potassium, Nitrato Salt, Alum, Aluminum Hydroxide, Alum Ammonia, Aluminum Chloride, Aluminum Nitrate, Aluminum Sulphate, Ambrol; Amonia and Ammonium Compounds—Namely, Benzoate, Bromide, Carbonate, Acetate, Chloride, Citrate, Ferric Alum, Ferric Sulphate, Hypophosphite, Iodide, Muriate, Nitrate, Oxalate, Persulphate, Phosphate, Picrate, Salicylate, Sulphocyanate, Spirits, Sulphocyanide, Sulphate, Sulphide, Valerate, Ammonia Water; Ambergris Gray, Amyl Acetate, Amyl Nitrite, Amyl Valerate, Amylopsin, Amylene Hydrate, Anemonin, Anethol, Angelica Root, Angelica Seed, Angostrua Bark, Anise, Star Anise; Antimony Compounds—Namely, Arsenate, Arsenite Black, Chloride, Oxide, Sulphide Golden, Sulphurated, Tartrate; Antipyrine, Apomorphine Hydrochloride, Apomorphine Hydrobromide, Apomorphine Apocynum, Apocynum Cannabinum, Apple-Tree Bark, Apiol Green, Agaric, Arbutin, Areca Nuts, Arecoline, Arecoline Hydrobromide, Arecoline Hydrochloride, Arbor Vitæ, Aristol, Arnica Flowers, Arnica Root, Argyrol, Aristochin, Arrhenal, Arsenic, Arsenic Chloride, Arsenic Sulphide, Arsenic Trioxide, Arsenic Bromide, Arsenic Iodide, Arsenous Iodide, Arsenous Chloride, Asafetida, Asparagin, Asparagus Root, Asparagus Seed, Atoxyl, Atropine, Atropine Sulphate, Atropine Valerate, Avens Root, Avenin Legumin, Avenin Alcohol, Benzyl Alcohol, Dehydrated Alcohol, Methylic Alcohol, Isobutylic Alcohol, Denatured Alcohol, Bael Fruit, Balm Gilead Buds, Balmony, Balsam Copaiba, Balsam Light, Balsam Fir, Balsam Para, Balsam Peru, Balsam Sulphur, Balsam Tolu, Balsam Curjun, Bamboo Brier Root, Barberry Bark, Barbital Sodium, Barbital; Barium and Its Compounds—Namely, Chloride, Carbonate, Dioxide, Hydroxide, Crystals, Iodide, Nitrate, Sulphate, Sulphide, Sulphite; Bay Laurel, Bay-Berry Bark, Bear's-Foot Root, Beeswax, Benzaldehyde, Benzoin, Benzole, Benzyl Chloride, Benzyl Benzoate, Benzyl Succinate; Berberin and Salts—Namely, Bisulphate, Hydrochloride, Phosphate, Sulphate, Acid Sulphate, Nitrate; Berberis Aquifolium, Beta Naphthol, Beta Naphthol Benzoate, Beth Root, Bismuth Beta Naphthol, Biebrick Scarlet Red, Birch Bark; Bismuth and Compounds—Namely, Citrate, Ammonium Citrate, Nitrate, Oxide, Subcarbonate, Oxiodide, Subgallate, Phosphate, Salicylate, Subsalicylate, Subcarbonate, Subnitrate, Subsulphate, Trioxide; Bitter Root, Bittersweet Bark, Bittersweet Herb, Bittersweet False, Black-Ash Bark, Blackberry Juice, Blackberry Bark of Root, Black Haw, Black Cohosh, Black Hellebore, Black Pepper, Black-Willow Bark, Black-Willow Buds, Black-Walnut Hulls, Bladder Wrack, Blessed Thistle, Bloodroot, Blue Cohosh, Blue Flag, Blue Mallow, Blue Mass, Bluestone, Boldo Leaves, Boneset, Borage Leaves, Borax, Boxwood, Brain Substance, Bone Black, Bromine, Bromipin, Bromoform, Broomcorn Seed, Broom Tops, Brucine, Bryonia, Bryonin, Buchu, Buckbean Leaves, Buckbean Root, Buckhorn Brake, Buckeye Bark, Buckthorn Bark, Buckthorn Berries, Bugleweed, Burdock Root and Seed, Butterfly Root, Butternut Bark, Button Snakeroot, Cactin, Cactoid, Cactus, Grandiflorus, Caffeine, Caffeine Hydrochloride, Caffeine Citrated, Caffeine Hydrobromide, Caffeine Muriate, Calabar Bean, Calamine, Calamus Root, Calcidin, Calcium Bromide, Calendula, Calcium Chloride; Calcium and Its Compounds—Namely, Cyanamid, Creosote, Formate, Fluoride, Glycerophosphate, Hypophosphite, Hydroxide, Iodide, Lactate, Lactophosphate, Nitrate, Phenopsulphonate, Phosphate, Oxylate, Oxide, Permanganate, Salicylate, Sulphate, Sulphide; Calomel, Camphor Monobromated, Canella Bark, Cannabin Tannate, Cannabis Americana, Cannabis Indica, Cantharidine, Cantharides, Capsicum, Caprenalin, Caraca,

Cocoa Beans, Caramel, Caraway Seed, Carbon Disulphite, Carbon Tetrachloride, Cardamon Seed, Caroba Leaves, Cascara Bark, Casein, Cascara Amarga, Cascara Sagrada, Cascarilla Bark, Cassia, Cassia Fistula, Cassia Ceylon, Caustic Soda (Nitrous), Catechol, Castor Beans, Castor Fiber, Castor Leaves, Castor Oil, Castor-Oil Seeds, Catechu, Catnip Herb, Cayenne, Celandine (Garden), Celery Seed, Celery Root, Celloidin, Centaury Americana, Centaury Minor, Centaury Flowers Blue, Cerium Nitrate, Cerium Oxalate, Cerrhalysin, Cetanine, Muriate, Chalk, Chamomile Flowers (German, Roman, and Hungarian), Chaparro Amargoso, Charcoal (Animal, Willow, Short Purified, and Blood), Checker-Berry, Chekan Leaves, Cherry Laurel Water, Chestnut Leaves, Chelonoid, Chickweed Red, Chicory Root, Chillies Zanzibar, Chinoidine, Chiretta, Chloral Hydrated, Chloroform, Chlorophyll, Chloestrin, Chromium Sulphate, Chrysarobin, Cinchona Calisaya, Cinchona Pale, Cinchona Bark Red, Cinchona Yellow, Cinchonidine, Cinchonidine Bihydrobromide, Cinchonidine Hydrobromate, Cinchonidine Salicylate, Cinchonidine Sulphate, Cinnamon Bark, Cinnamon Saigon, Cinnamic Aldehyde, Citral, Cleavers, Clover (Red and White), Cloves, Cobalt Nitrate, Cacao Butter, Cocaine, Cocaine Hydrochloride, Cocaine Sulphate, Cochineal, Cocillana, Cacao Leaves, Coculus Indicus, Codeine, Codeine Acetate, Codeine Hydrochloride, Codeine Nitrate, Codeine Phosphate, Codeine Sulphate, Codeine Salicylate, Colchicum Root, Colchicum Seed, Colchicine, Colchicine Salicylate, Cocillanna, Collodion, Colocynth Apple, Colocynth Pulp, Coltsfoot, Colombo Root, Comfrey Root, Condurango, Coniine, Coniine Hydrobromide, Coniine Hydrochlorate, Conium Leaves, Convallemarin, Coolwort, Copper Arsenite, Copper Acetate, Copper Nitrate, Copper Oxide Black, Copper Phosphate, Copper Sulphate, Copper Sulphocarbolate, Cotton-Root Bark, Coriander Seed, Corn Silk, Corpus Luteum, Smut, Corrosive Sublimate, Coto Bark, Cottonseed Oil, Couch Grass, Cowhage, Cramp Bark, Crane's-Bill, Cream Tartar, Creosote Beechwood, Creosote Carbonate, Cresol, Cresolis Compound, Cubeb, Cube Gambier, Cudbear, Culber's Root, Cumarin, Cutch, Damiana Leaves, Dandelion, Deer-Tongue Leaf, Dewberry, Dextrine Powder, Dextrose, Diacetyl Morphine, Diastase, Diastase Malt, Digitalin, Digitalis Leaves, Digitoxin, Dittany, Diuretin, Doggrass, Dogwood, Duotal, Duboisine Sulphate, Dwarf-Elder Root, Etchinacea Root, Elaterin, Elaterium, Elder Bark, Elder Flowers, Elecampane Root, Elder-Flower Water, Elm Bark (Slippery), Emetine Hydrochloride, Ergot, Eserine, Eserine Salicylate, Eserine Sulphate, Ether, Ether Nitrous Concentrated, Eucalyptol, Ethyl Acetate, Ethyl Bromide, Ethyl Formate, Ethyl Iodide, Eucalyptus Leaves, Euphorbia Pilulifera, Evergreen, Euphorbia Hypericifolia, Euonymin Green, Evening Primrose, Extract of Pine Needles, Extract of Malt, Eyebright Herb, Fennel Seed, Feverfew, Fishberries, Figwort, Five-Flower Gentian, Fleabane, Flaxseed Meal, Fenugreek Seed, Formaldehyde, Formin, Fringe-Tree Bark, Frostwort, Fumitory, Fustic, Gaduol, Galangal Root, Guarana, Gambier, Gamboge, Garlic, Garden Lettuce, Gelatin, Gelseminine, Gelseminine Hydrobromide, Gelsemium, Gentian, Ginger (African and Jamaica), Giant Ragweed, Ginger Wild, Gingerine, Ginseng Root, Glauber Salt, Glucose, Glycerine, Glycyrrhizin, Glycyrrhizin Ammoniated, Goat's Rue, Gold Bromide, Gold Choride, Gold and Sodium Chloride, Gold Iodide, Gold Tribromide, Goldenrod, Golden Seal, Green Soap, Goldthread, Gravel Plant, Grindelia Robusta, Guaiac, Guaiacol, Guaiacol Carbonate, Guarana, Guaranine; Gums—Namely, Ammoniac, Acacia, Catechu, Chicle, Damar, Euphorbium, Ghatti, Guarana, Galbanum, Kino, Mastic, Myrrh, Opium (Red), Olibanum Tears, Sagepenum, Sandarac, Senegral, Tragacanth, Turpentine; Haircap Moss, Hardhack, Hawthorn Berries, Hellebore (Black and White), Helonias, Hematoxylin, Hemlock, Hemogallol, Hemoglobin, Hemp American White, Henbane, Henna Leaves, Heroin, Heroin Hydrochloride, Histamine Hydrochloride, Hernaria Herb, Hexamethylenetramine, Homatropine, Homatropine Hydrobromide, Holocaine, Honey, Hops, Horehound Herb, Horse-Chestnut Bark, Horsemint, Horse-Nettle Berries, Horse-Radish Leaves, Horse-Radish Root, Hound's-Tongue, Huckleberry Leaves, Hydrangea, Hydrastine, Alkaloid, Hydrastine Hydrochloride, Hydrastine Sulphate, Hydrastin, Hydroquinine, Hydroquinine Hydrochloride, Hyoscine, Hyoscine Hydrobromate, Hyoscine Hydrochloride, Hyoscine Sulphate, Hyoscyamine, Hyoscyamine Hydrobromide, Hyoscyamine Sulphate, Hypophysics, Hyssop, Ichthalbin, Ignatia Bean, Black Hemp, White Hemp, Canadian Hemp, Indian Turnip, Iodine, Iodoform, Insect Flowers, Iodole, Iodalbin, Ionone, Ipecac; Iron and Its Compounds—Namely, Acetate, Albuminate, Ammonia, Arsenate, Arsenite, Arsenite with Ammonium Citrate, Bromide, Bihydrogen, Cacodylate (Ammonia Citrate), Carbonate Precipitated, Carbonate Mass, Carbonate Saccharated, Chloride, Chloride Solution, Citrate Solution, Citrate Scales, Citrate Insoluble, Citrate and Ammonia, Citrate and Manganese, Citrate and Quinine Soluble, Citrate and Quinine Insoluble, Citrate and Strychnine, Citrate-Quinine and Strychnine, Citrate Insoluble Powder Dialyzed, Ferrocyanide, Formate, Glycerophosphate, Hydrocyanate, Hydroxide, Hypophosphate, Hypophosphite, Hyposulphite, Iodide, Lactate, Nitrate Solution, Oxalate, Oxide Powdered, Oxide Saccharated, Oxide Anhydrous, Oxide Hydrate, Oxide Metallic, Peptonized, Peptonate, Phosphate Soluble, Phosphate Precipitated, Protochloride, Protobromide, Pyrophosphate Soluble, Protocarbonate, Pyrophosphate Solution Reduced, Subcarbonate, Subsulphate Solution, Subsulphate, Succinate, Sulphate Ferric, Sulphate Crystals, Sulphate Dried Powdered, Sulphide, Sulphuret, Tartrate and Potassium, Tersulphate, Valerate Ferric, Ironwood, Iron Ivy American, Irish Moss, Jaborandi Leaves, Jalapin, Jalap, Jambul Seed, Jequirity Seed, Jersey Tea, Johnswort Herb, Judas-Tree Bark, Juniper Berries, Kamala, Kaolin, Kava Kava, Kino, Kieselguhr, Kola Nuts, Kousso Flowers, Lactucarium, Lady's Slipper, Lard Benzoinated, Laurel Leaves, Larkspur Seed, Lavender Flowers, Lead Acetate, Lead Carbonate, Lead Oxide, Lead Metallic, Lead Nitrate, Lead Oxide Red, Lead Oxide Yellow, Lead Peroxide, Lecithin, Lemon Balm, Lemon Peel, Lettuce Leaves, Lettuce Wild, Liverwort Herb, Licorice Root, Licorice-Root Compound Powder, Life Everlasting, Life Plant, Lily Root, Lily of the Valley, Lime Juice, Linden Flowers, Lippa Mexicana, Litharge, Lithia Benzoate, Lithia Benzosalicylate, Lithia Bitartrate, Lithia Bromide, Lithia Carbonate, Lithia Citrate, Lithia Iodide, Lithia Salicylate, Lithia Tartrate, Liverwort, Lobeline Sulphate, Liquor Cresolis Compound, Lobelia Herb, Lobelia Seed, Logwood, Lovage Leaves, Lovage Root, Lungwort, Lupulin, Lycopodium, Red-Rose Leaves, Magnesia Bromide, Magenta, Magnesia (Calcined), Magnesia (Heavy and Light), Magnesia Citrate, Magnesia Carbonate (Heavy and Light), Magnesia Chloride, Magnesia Formate, Magnesia Glycerophosphate, Magnesia Hypophosphite, Magnesia Iodide, Magnesia Lactate, Magnesia Oxide, Magnesia Nitrate, Magnesia Peroxide, Magnesia Phosphate, Magnesia Phosphate and Ammonia, Magnesia Salicylate, Magnesia Silicate, Magnesia Sulphate, Magnesia Sulphite, Malt, Maidenhair, Magnolia Bark, Malefern Oleoresin, Malva Flowers Blue, Manaca Root, Mammary-Gland Substance, Mammary Gland Desiccated, Mangrove Bark, Mandrake, Mannite; Manganese and Its Compounds—Namely, Citrate Soluble, Carbonate, Citrate, Chloride, Dioxide, Glycerophosphate, Hypophosphite, Iodide, Lactate, Oxide Black, Oxide Heavy, Nitrate, Peptonized, Peptonate, Phosphate, Sulphate, Salicylate; Manna, Manzanita Leaves, Marigold, Marjoram Sweet, Marshmallow (Leaves and Flowers), Marshmallow-Root, Marsh Rosemary, Matico, Mayapple, Menthol; Mercury and Its Compounds—Namely, Ammoniated Benzoate, Bromide, Bisulphate, Cyanide with Chalk, Iodide Green, Iodide Red, Iodide Yellow, Nitrate, Oxide Red, Oxide Yellow, Oxide White, Oleate, Oxycyanide, Salicylate, Succinimide, Soziodole, Tannate; Mercurous Iodide Yellow, Meto Cresol, Methylene Blue, Methyl Iodide, Methyl Salicylate, Mezereon Bark, Mezereum Bark, Milkweed, Mountain Mint, Mistletoe, Mombassa Chillies; Morphine and Its Compounds—Namely, Acetate, Bimeconate, Bromide, Citrate, Diacetyl, Diacetyl Hydrochloride, Diacetyl Hydrobromide, Hydrochloride, Bimeconate, Phosphate, Phthalate, Hydrobromide, Tannate, Sulphate; Valerianate, Tartrate; Motherwort Leaves, Motherwort Herb, Mountain Laurel,

CARNEGIE LIBRARY OF ATLANTA

Mullein Flowers, Mullein Leaves, Mugwort, Muirapuama, Musk Root, Musk Tonquin, Musk Artificial, Mustard Seed, Myrrh, Moss (Haircap, Iceland, Irish), Mercurial Ointment, Naphthalene, Naphthol Alpha, Naphthol Beta, Naphthol Beta and Bismuth, Naphthal Beta Benzoate, Naphthol Hydrochloride, Narceine, Narcotin, Nettle, Nickel Bromide, Nightblooming Cereus, Nitroglycerin, Novocain, Novocain Hydrochloride, Nutgalls, Nutmeg, Nux Vomica, Oak Leaves (Jerusalem and Poison), Oak Bark (Red and White), Oats, Oil Apricot Kernels, Oil Almonds Bitter, Oil Almonds True, Oil Almonds Sweet, Oil Amber, Oil Animal, Oil Anise, Oil Staranise, Oil Bay, Oil Balm, Oil Bergamot, Oil Betula, Oil Birch, Oil Cade, Oil Camphor, Oil Cajuput, Oil Calamus, Oil Cardamon, Oil Caraway, Oil Canada Snakeroot, Oil Cassia, Oil Castor, Oil Cedarwood, Oil Celery Seed, Oil Camomile, Oil Chaulmoogra, Oil Cinnamon Ceylon, Oil Cloves, Oil Cod Liver, Oil Chloroform, Oil Copaiba, Oil Coconut, Oil Coriander, Oil Cottonseed, Oil Croton, Oil Cubebs, Oil Cumin, Oil Erigeron, Oil Ethereal, Oil Eucalyptus, Oil Fennel, Oil Geranium, Oil Haarlem, Oil Hemlock, Oil Horsemint, Oil Hyssop, Oil Juniper Berries, Oil Laurel, Oil Lard, Oil Lavender, Oil Linseed, Oil Lemon, Oil Lobelia, Oil Lemon Terpeneless, Oil Mineral, Oil Mustard, Oil Mirbane, Oil Marjoram, Oil Myristica, Oil Meroli, Oil Nutmegs, Oil Olive, Oil Origanum, Oil Attar of Rose, Oil Orange Bitter, Oil Orange Sweet, Oil Orris Root, Oil Parsley Seed, Oil Peanut, Oil Pennyroyal, Oil Pepper Black, Oil Peppermint, Oil Pimento, Oil Pinus Pumulionis, Oil Pine Needles, Oil Rosemary, Oil Sandalwood, Oil Sassafras, Oil Savin, Oil Saw Palmetto, Oil Spearmint, Oil Sesame, Oil Spice, Oil Thuja, Oil Tansy, Oil Tar, Oil Thyme, Oil Turpentine, Oil Verbena, Oil Wine, Oil Wintergreen, Oil Wormwood, Oil Wormseed, Orange-Flower Water, Orange Peel Bitter, Orange Sweet, Orchic Gland Desiccated, Orchic Extract, Orris Root, Orthoform Powder, Opium, Osier Bark (Green), Ovarian Substance Desiccated, Oxgall Powdered Extract, Oxgall Purified Powder, Ovarian Glands Desiccated; Oleoresins, as Follows: Black Pepper, Buchu, Capsicum, Cubeb, Ginger, Lupulin, Malefern, Matico, Parsley Seed, Kava Kava, Saw Palmetto, Pancreatin, Pancreas Substance Desiccated, Pancreatin Saccharated, Papain, Paraformaldehyde, Paraldehyde, Pareira-Brava, Parilla Yellow, Parsley Root, Parsley Seed, Passion Flower, Paw Paw, Pelletierine, Pellitory Root, Pencil Root, Pennyroyal Leaves, Pepper Black, Pepper White, Peppermint Herb, Pepsin Powder 1:3000, Pepsin Granular 1:3000, Pepsin Glycerole, Pepsin Lacticated, Persimmon, Petrolatum, Phenacetine, Phenolphthalein, Phosphorus Trichloride, Phosphorus Oxychloride, Phosphorus Pentachloride, Phosphorus Spirit N. F., Phosphorus Amorphous, Pichi, Picrotoxin, Pilocarpine, Pilocarpine Hydrochloride, Pilocarpine Nitrate, Pimpinella, Pimento Powdered, Pineal Substance Desiccated, Pinkroot, Pinus Canadensis, Pitcher Plant, Pituitary Substance, Pituitary Gland, Piperazine, Pituitary Anterior Substance, Piperine, Pipsissewa, Plantain, Pleurisy Root, Placenta Powdered, Podophyllin, Poison Oak Leaves, Poke Berries, Pokeroot, Pomegranate, Poplar Bark, Poppy Heads, Poppy Flowers, Poppy Leaves; Potassium and Its Compounds—Namely, Acetate, Arsenate, Arsenite, Bicarbonate, Bichromate, Biphosphate, Bisulphate, Bitartrate, Bromate, Bromide, Carbonate Calcined, Chlorate, Chloride Pure, Chromate Yellow, Citrate, Cyanide, Dichromate, Ferrocyanide, Formate, Glycerophosphate, Guaiacol Sulphonate, Manganate, Nitrate, Hypophosphite, Iodide, Iodate, Permanganate, Phosphate, Perchlorate, Persulphate, Prussiate Yellow, Salicylate, Sulphate, Thiocyanate, Sulphocyanate, Tartrate, Prickly-Ash Bark, Prickly-Ash Berries, Princess Pine, Prostate-Gland Substance, Protargol, Pulsatilla Leaves, Pumpkin Seed, Pyramidon, Precipitate Red, Precipitate White, Quassia, Quassin, Quebracho Bark, Queen of the Meadow Leaves, Quince Seed, Quinidine, Quinidine Sulphate, Quinine and Its Compounds—Namely, Acetate, Arsenate, Arsenite, Benzoate, Bimuriate and Urea, Bisulphate, Bromide, Bihydrochloride, Carbolate, Ethyl Carbonate, Chlorohydrosulphate, Citrate, Dihydrobromide, Hydrochloride, Ferrocyanide, Formate, Glycerophosphate, Hypophosphite, Lactate, Sulphate, Phosphate, Salicylate, Sulphocarbolate, Tartrate, Tannate Valerate; Raspberry Leaves, Red-Clover Flowers, Red-Clover Tops, Red Root, Red Saunders, Rennin, Resorcin, Resin Scammony, Rhatany Root, Rhubarb, Rhus Aromatica, Rose Leaves, Rosemary, Rose Water, Rosin, Rosinweed, Rue; Resinoids, as Follows: Aletrin, Alnuin, Apocynin, Asclopedin, Baptisin, Cannabin, Cascarin, Caulophyllin, Chionanthin, Cimicifugin, Collinsonin, Colocyathin, Cypripedin, Dioscorein, Euonymin (Brown and Green), Eupurpurin, Fraserin, Gelsemin, Geranin, Gossypiin, Hamamelin (Brown and Green), Helonin, Hydrastin, Irisin, Jalapin, Juglandin, Leptandrin, Lobelin, Lycopin, Macrotin, Menispermin, Myricin, Phytolaccin, Prunin, Podophyllin, Rumicin, Sanguinarin, Scutellarin, Senecin, Stillingin, Trillin, Viburnin, Xanthoxyllin and Sabadilla Seed, Saccharin, Saffrol, Saffron, Sage Leaves, Salicin, Salol, Salt Rochelle, Sandalwood, Sanguinarin Muriate, Sanguinarin Nitrate, Santonin, Saponin, Sarsaparilla, Sassafras Bark, Savin Leaves, Savory, Saw Palmetto, Saw Palmetto Berries, Saxifrage Root, Scammony Mexican, Scopola Root, Scopolamine Hydrobromide, Sourwood Leaves, Scouring Rush, Skullcap Leaves, Scurvy Grass, Seidlits Mixture, Senecio Gracilis, Senega Root, Senna, Serpentaria Root, Sheep Laurel, Sheep Sorrel, Shepherd's Purse, Silver Iodide, Silver Nitrate, Silver Proteinate, Silver Nucleinate, Silver Oxide, Silkweed Root, Simaruba Bark, Skunk Cabbage, Smartweed, Smut Corn, Snakeroot Canada, Snakeroot Virginia, Soap-Tree Bark, Soapwort; Sodium and Its Compounds—Namely, Acetate, Arsenate, Arsenite, Ash, Benzoate, Bicarbonate, Bichromate, Bisulphate, Bisulphite, Borate, Bromide, Cacodylate, Carbonate, Chloride, Gold and Soda Chloride, Choleate, Cinnamate, Citrate, Copaivate, Cyanide, Fluoride, Formate, Glycerophosphate, Glycocbocolate, Hydroxide, Hypophosphite, Hyposulphite, Iodide, Lactophosphate, Methyl Arsenate, Nitrate, Nitrite, Nucleinate, Perborate, Persulphate, Phenolsulphonate, Phosphate Dry, Pyrophosphate, Salicylate, Santonate, Silicate, Succinate, Sulphate, Sulphite, Sulphocarbolate, Sulpho-Ichthyolate, Sulphide, Stearate, Taurocholate, Thiosulphate, Tartrate, Tungstate, Valerate; Solomon's Seal, Sparteine Sulphate, Spearmint, Spermaceti, Spikenard Root, Squills Root, Starch, Star Grass, Star Root, Stavesacre Seed, Stoneroot, Storax Liquid, Stovaine, St. John's Bread, St. John's Wort, St. Ignatius Bean, Stillingia Root, Stramonium Leaves, Stramonium Seed, Strontium Arsenite, Strontium Bromide, Strontium Carbonate, Strontium Iodide, Strontium Lactate, Strontium Nitrate, Strontium Salicylate, Strophanthain, Strophanthus Seed; Strychnine and Its Compounds—Namely, Arsenate, Arsenite, Acetate, Bromide, Citrate, Cacodylate, Glycerophosphate, Hydrobromide, Hydrochloride, Hypophosphite, Nitrate, Phosphate, Sulphate, Salicylate, Valerianate; Sugar, Milk Sugar, Sulphonethylemethane, Sulphur Balsam, Sulphur Flowers, Sulphur Iodide, Sulphur Precipitated, Sumac Berries, Sumac Bark, Sumac Leaves, Summer Savory, Sumbul, Sundew, Sunflower Seed, Suparenal Gland, Sweet Basil Leaves, Simple Sirup, Tag Alder, Tallow, Tamarack Bark, Tamarinda, Tannin, Tar, Tansy, Tartar, Emetic, Terebene, Terra Alba, Terpinol, Terpin Hydrate, Theobromine, Theobromine and Soda Salicylate, Thiosinamine, Thymol, Thyme, Thymus Substance Powder, Thymus Gland, Thymol Iodide, Thyroidin, Thyroids Desiccated, Tilia Flowers, Tin Chloride, Toluene, Tonga Bark, Tonga Root, Tonka Beans, Trional, Tragacanth, Trumpet Plant, Turpentine, Venice Turpentine, Turkey Corn, Turpeth Mineral, Turpeth Root, Twin Root, Twin Leaf, Unicorn Root (True and False), Uranium Nitrate, Ustilago Maydis, Uva Ursi Leaves, Valerian Root, Vallet's Mass, Vanilla Beans, Vanillin, Veratrine, Veratine Hydrochloride, Veratrine Sulphate, Veratrum Viride, Virginia Stone Crop, Wafer Ash Bark, Wahoo Bark of Root, Wahoo Twigs, Walnut Leaves (Black and English), Water Cress, Water Eryngo, Water Fennel, Water Hemlock, Water Pepper, Watermelon Seed, White Wax, Yellow Wax, White Poplar Bark, White Pine Bark, White-Pond-Lily Root, White Willow, White-Oak Bark, Wild Carrot, Wild-Cherry Bark, Wild Ginger, Wild Indigo, Wild Lettuce, Wild Turnip, Wild Yam, Wintergreen, Witch-Hazel Bark, Wood Betony, Wormseed, Wormseed Levant, Wormwood Xanthoriza Root, Yar-

row Herb, Yellow Dock, Yellow Root, Yellow Bark, Yerba Reuma, Yerba Santa, Yohimbebe Bark, Yohimbin Hydrochloride, Zedoary Root, Zinc Acetate, Zinc Arsenite, Zinc Borate, Zinc Bromide, Zinc Carbonate Precipitated, Zinc Cyanide, Zinc Chloride, Zinc Iodide, Zinc Oxide, Zinc Perborate, Zinc Peroxide, Zinc Permanganate, Zinc Phenosulphonate, Zinc Phosphate, Zinc Phosphite, Zinc Stearate, Zinc Sulphate, Zinc Sulphite, Zinc Sulphide, Zinc Valerate. The Above-Mentioned Products May Be in Any One or Another of the Following Forms: Fluid Extracts, Tinctures, Solid and Powdered Extracts, Concentrations, Oleates, Oleoresins; Gelatin-Coated, Sugar-Coated, and Enteric Coated Pills; Pink Granules, Hypodermic Tablets, Veterinary Hypodermic Tablets, Ampules, Dispensary Tablets, Table Triturates, Compressed Tablets; Sugar-Coated Tablets, Chocolate-Colored Coated Tablets Elixir, Wines, Cordials, Sirups, Solutions, Spirits, Waters, Liniments, Ointments, Cerates, Confections, Powders, Soluble Elastic Capsules, Globules, Granular Effervescent Salts, Miscellaneous Products or Specialties, Such as Acetidine Capsules and Tablets, Acid Phosphates, Liquid, Alkaline and Antiseptic Tablets, Analgesic Balm, Antiseptic Disks (Wilson's); Antiseptic Tablets (Bernay's Small Porous, Round), Antiseptic Tablets (Bernay's Small Porous, Oblong), Antiseptic Tablets (Bernay's Special Large Porous, Round), Antiseptic Tablets (Clover Shaped Porous, Not Threaded), Antiseptic Tablets (Cyanide Porous, Round), Antiseptic Tablets (Mercury Bichloride Threaded), Antiseptic Tablets (Potassium Permanganate), Brown Mixture, Brown Mixture Without Opium, Cachous Aromatic, Camphor Phenol, Capsules Dry Filled; Calomel, Rhubarb, and Colocynth Compound; Ferrous Carbonate and Combinations; Quinine Sulphate and Bisulphate All Grainages, Thymol and Milk Sugar, Capsules Empty Gelatin All Sizes; Castor Oil Aromatic White and Red; Cataplasm of Kaolin N. F., Charcoal Pellets, Chlorodyne, American, Cholera-Infantum Mixture, Cocaine Tablets Soluble, Cod-Liver Oil and Preparations Thereof, Collodion U. S. P., Collodion Flexible U. S. P., Liquor Aurantii Dulcis, Liquor Fuscus Dulcis, Liquor Rosæ Dulcis; Corpus Luteum Powder, Capsules, and Tablets; Dobell Tablets Soluble, Elixir Catnip and Fennel, Elixir Chloro-Calcium, Emulsion Petroleum Compound with Hypophosphites of Calcium and Sodium, Ferromanganese Peptonated, Ferromanganese Peptonated with Arsenic, Ferromanganese Peptonated with Cascara, Fowler's Solution, Fowler's Solution Tablets, Glycerin Suppositories, Glycerite Hydrastine and Bismuth, Glycerole of Iron Chloride, Glycerophosphates Compound, Heliotrope Toilet Powder, Hem-Roid Cones, Hydrogen Peroxide, Hypophosphites Compound without Sugar, Liquor Cresolis Compound U. S. P., Liquor Santalva, Lithia Tablets Effervescent; Lithia and Formin Tablets Effervescent, Lithiated Sorghum Compound Lozenges Compressed all Formulæ, Losenges Cut Medicated all Formulæ, Medicated-Oil Inhalant, Menthoicone Inhaler, Mercurial Ointment U. S. P. 50% Mercury, Mercurial Ointment Diluted U. S. P., Blue Ointment 30% Mercury, Mercurial Ointment Capsules, Milk of Bismuth U. S. P., Milk of Magnesia S. and D., Mineral Oil S. and D., Nazeptic Wool, Novocain Tablets Soluble, Ovarian Substance Powder Capsules and Tablets, Ovaritone, Oxgall Purified, Oxgall Powdered Extract U. S. P., Pancreatin U. S. P., Pan-Peptic Elixir, Pan-Peptic Powder, Pan-Peptic Tablets, Paraffin Compound, Pepsin Lacticated Elixir, Pepsin Lacticated Powdered, Pepsin Saccharated, Petrol, Pills in Bulk and Packages all Formulæ, Pituitary Extract, Quinine Pills and Tablets (Sulphate or Bisulphate) all Grainages, Rennet Tablets, Rennin Root-Beer Flavor, Seidlitz Powders, Vanilla Products, Sodio-Phosphate Compound, Sodium Phosphate Granular, Spirits of Amyl Nitrite, Suppositories of Cacao Butter, Boroglyceride and Gelatin All Formulæ; Thyroid Gland Powder, Capsules, and Tablets; Tonic Beef, Tonic Hypophosphites, Unguentum, Terralis, Vanilla Extracts, and Zinc Stearate Compound Plain or Perfumed. Technical Oils Used for Tempering and Like Purposes, Starch and Starch Preparations for Dressing and Finishing Textiles, Rust Eradicators, Preparations for the Conservation of Foods, Substances for the Conservation of Wood and Medicated Plasters; Preparations for Exterminating Animals and Plants, Preparations for Glazing and Tanning, Common Salt or Sodium Chloride, Preparations for Industrial Bleaching, and Coloring Admixtures for Laundering.

Claims use since Sept. 24, 1930.

Ser. No. 319,839. VADSCO SALES CORPORATION, New York and Long Island City, N. Y. Filed Oct. 7, 1931.

Djer Lady

For Astringents, Astringent Cerates, Bleach Creams, Beauty Creams, Cold Creams, Cleansing Creams, Obesity Creams, Refreshing Creams, Obesity Astringents, Dry Rouges, Liquid Rouges, Face Bleaches, Face Packs, Eyebrow and Eyelash Grower, Eyedrops, Hand Lotions, Skin Lotions, Face Powders, Talcum Powders, Sachets, Hair Salves, Hair Elixirs, Hair Tonics, Shampoos, Hair Dyes, Bath Salts, Smelling Salts, Lip Sticks, Incense, Tooth Powders, Mouth Washes, Dentifrices, Tooth Pastes, Nail Powders, Nail Creams, Nail Bleaches, Witch-Hazel, Peroxide, Petroleum Jellies, Witch-Hazel Salves, Camphor Creams, Foot Powders, Deodorants, Disinfectants, Aspirin, Bay Rum, Perfumes, and Toilet Waters.

Claims use since May 17, 1927.

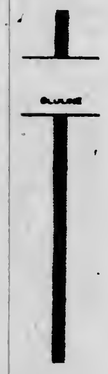
Ser. No. 319,840. VADSCO SALES CORPORATION, New York and Long Island City, N. Y. Filed Oct. 7, 1931.

Djer One

For Astringents, Astringent Cerates, Bleach Creams, Beauty Creams, Cold Creams, Cleansing Creams, Obesity Creams, Refreshing Creams, Obesity Astringents, Dry Rouges, Liquid Rouges, Rose Tints, Face Bleaches, Face Packs, Eyebrow and Eyelash Grower, Eyedrops, Hand Lotions, Skin Lotions, Face Powders, Talcum Powders, Sachets, Hair Salves, Hair Elixirs, Hair Tonics, Shampoos, Hair Dyes, Bath Salts, Smelling Salts, Lip Sticks, Incense, Tooth Powders, Mouth Washes, Dentifrices, Tooth Pastes, Nail Powders, Nail Creams, Nail Bleaches, Witch-Hazel, Peroxide, Petroleum Jellies, Witch-Hazel Salves, Camphor Creams, Foot Powders, Deodorants, Disinfectants, Aspirin, Bay Rum, Perfumes, and Toilet Waters.

Claims use since May 17, 1927.

Ser. No. 322,875. THE BLUE LINE CHEMICAL CO., St. Louis, Mo. Filed Jan. 11, 1932.



The drawing is lined for blue.

For Medicinal and Pharmaceutical Preparations and Proprietary Medicines—Namely, Benedict's Solution, Brown Mixture, Aromatic Castor Oil, Chloramine-T Surgical Cream, Chloramine-T Surgical Powder, Chloramine-T Tablets, Ephedrine Inhalant, Ephedrine Nasal Cream, Epinephrin Chloride, Essence Pepsin, Glycerine, Glycerite of Boroglycerin, Glycerite of Tannic Acid, Surgical Lubricant, Milk of Magnesia, Phenolated Camphor Compound, Quinine and Acetanilid Compound Capsules, Resorcinol Compound Ointment, Effervescent Salts of Sodium Phosphate, Yellow Oxide of Mercury Ointment, a Utero-Ovarian Tonic and Regulator Capsule, Antiseptic Powder for Douche, Antacid Stomachic and Digestant Tablets, Analgesic and Emollient Ointment, Antiseptic Astringent and Protective Ointment, Tablets for Constipation with Deficient Biliary Secretions, Cathartic and Cholagogue Tablets, Gastro-Intestinal Sedative, Antiseptic and Antifermentive Preparations in Both Liquid and Tablet Form, Diuretic and Cardiac Stimulant Tablets, Calcium Iodized Tablets, Laxative and Cathartic Tablets Containing Calomel and Phenolphthalein, Lotions and Ointments for Treatment of Eczema and Other Skin Irritations, Abrasions, Blisters, Scalds, Bruises, Cuts, Chafes, Insect Bites and Sunburn; Cough Syrups for Adults and Children, Liniments for Local Application in the Treatment of Pneumonia, Congestion of the Lungs, Rheumatism, Neuralgia, Lumbago, Soreness and Stiffness of the Muscles and as a Counter-Irritant; Ointment for Treatment of Carbuncles and Furuncles, Cardiac Stimulant Tablets, Syrup Containing Quinine Sulphate; Tablets for Treatment of Coryza, Influenza, and Common Colds; Tonic Tablets Containing Iron, Tonic Digestant and Antacid Tablets, Stimulant Expectorant Tablets for use in Treatment of Pharyngitis, Laryngitis, Bronchitis, Tonsilitis, and Spasmodic Cough Where the Secretion is Viscid; Antiseptic, Astringent and Analgesic Solutions for Use in Treating Inflammatory Conditions of the Eye; Mouth Washes and Gargles, Anodyne, Diaphoretic and Antipyretic Tablets, a Liquid Utero-Ovarian Sedative, Anodyne and Tonic, Ointment for Treatment of Hemorrhoids, Capsules for Use in Treatment of Hypertension; a Concentrated Solution of Antiseptic, Germicidal, and Astringent Preparations Used as a Mouth Wash and Also as an Injection for the Treatment of Genitro-Urinary Disorders; a Hypnotic, Sedative, and Anti-spasmodic Liquid Preparation; an Astringent and Antiseptic Preparation for Treatment of Inflammatory Conditions of the Uterus and Vaginal Mucous Membranes, Capsules for Treatment of Diabetes, Iodine Ointment; Antiphlogistic Paste for Use in Furunculosis, Chronic Ulcers, Frost Bites, and Inflammation of the Lymphatic Glands; Pills and Tablets for Use in Treatment of Diseases of the Genito-Urinary Tract, Corrective Laxative Tablets, Rubbing Alcohol, Sprays and Inhalants for Respiratory Diseases, Mineral Oil for Medicinal Purposes, Neutralizing Cordial; N. F. Having Antacid, Laxative, and Carminative Properties; Medicines for Treatment of Diseases and Irritations of the Intestines and Stomach, Tablets for Correction of Juvenile Incontinence; Capsules Containing Cell Stimulants and Tonics to the Adrenal, Sex, and Associated Synergistic Ductless Glands (with or without Iron Compound); Capsules for Treatment of Goiter; Anti-Pruritic and Emollient Ointment for Use in Scabies, Impetigo, Eczema, Urticaria, Acne, Intertrigo, Ulcers, and Other Skin Lesions; Effervescent Systemic Alkaliser Tablets, a Liquid for Treatment of Athlete's Foot and Other Fungus Infections; Tablets for Treatment of Colds, La Grippe, and Influenza; Medicines for Treatment of Rheumatic Conditions, Lotion for Treatment of Ivy Poisoning, Tonics and Medicines for Treatment of Diseases and Disorders of the Throat, Vermifuge and Cathartic Tablets, Powder Containing Silver in Colloidal Form for Use in Making Antiseptic Solutions, Tablets for Treatment of Staphlococcic Infection, Phenolphthalein Tablets; Salves and Ointments for Treatment of Burns, Ulcers, and the like; Female Genital Suppositories, Ampoules Containing a Combination of Extracts from the Thymus and the Posterior Lobe of the Pituitary Body, Embrocations, Corpeus Luteum Solution in Ampoules, Ovarian Gland Solution in Ampoules, Pituitary Extract in Ampoules, Corpus Luteum Desiccated in Capsules, Ephedrine Sulphate Capsules, Copaiba Capsules, Copaiba Cubeb and Santal Capsules, Ovarian Substance Desiccated in Capsules, Quinine Sulphate Capsules, Ergot and Apiol Compound Capsules, Methylene Blue Compound Capsules, Salol and Santol Compound in Capsules, Santal Oil in Capsules; Elixirs—Namely, Ammonium Valterate, Barbital, Buchu, Juniper and Potassium Acetate, Calisaya, Iron and Strychnine, Euphorbia Compound, Five Bromides, Gentian Glycerinated, Glycero-Phosphates Compound, Iron, Quinine, and Strychnine, Lactated Pepsin, Phenobarbital, Potassium Bromide, Sabal Compound, Salicylic Acid Compound, Sodium Bromide, Terpin Hydrate and Codeine, Terpin Hydrate Compound with Creosote; Fluid Extracts—Namely, Arnica Flowers, Buchu, Cascara Aromatic, Cascara Sagrada, Cimicifuga, Cocillana, Echinacea, Ergot, Euphorbia Pilulifera, Gentian, Ginger, Grindelia, Jamaica Dogwood, Juniper Berries, Lobelia, Nux Vomica, Rhubarb, Thyme, Viburnum Prunifolium; Camphor Liniment, Chloroform Liniment, Soap Liniment, White Camphorated Liniment; Ointments—Namely, Ammoniated Mercury, Basilicon, Belladonna, Boric Acid, Ichthyol, Sulphur and Zinc Oxide; Cascara Compound Pills, Ergotin Compound Pills; Alkaline Aromatic Solution, Antiseptic Solution, Cresol Compound Solution, Dobell's Solution, Ephedrine Sulphate Solution, Fehling's A Solution, Fehling's B Solution, Haine's Test Solution, Iron Peptonate and Manganese Solution, Lugol's Solution, Potassium Arsenite Solution, Sodium Phosphate Solution, Spirits of Ammonia Aromatic, Spirits of Camphor, Spirits of Nitrous Ether, Spirits of Peppermint, Cinchona Alkaloid Syrup, Hypophosites Compound Syrup, Ipecac Syrup, Iron Iodide Syrup, Rhubarb Aromatic Syrup, Squill Syrup, Squill Compound Syrup, Tolu Syrup, White Pine Expectorant Syrup, Wild Cherry Syrup, Yerba Santa Syrup; Tablets—Namely, Acetanilide Compound, Alkaline Aromatic, Amidopyrine, Ammonium Chloride, Antiseptic (Bernays), Aspirin, Barbital, Bismuth and Salol Compound, Bismuth Subnitrate, Blaud Tonic, Boric Acid, Calcium Lactate, Calcium Sulphide, Calomel, Calomel Ipecac and Soda, Calomel, Rhubarb, and Colocynth Compound, Calomel and Soda, Cascara Cathartic Compound, Cathartic Compound, Cathartic Compound Improved, Charcoal, Cinchophen Codeine Sulphate, Corrective Infant, Coryza Infant, Creosote and Iodine Compound, Cystitis, Emmenagogue, Fever, Flatulence, Hexamethylenamine, Menthol Throat, Mercury Protoiodide, Mixed Treatment, Nitroglycerin Compound, Normal Salt Solution, Papain Digestant, Phenacetin, Phenacetin and Salol, Phenobarbital, Potassium Chlorate, Potassium Iodide, Potassium Permanganate, Quinine Sulphate, Rhinitis, Saccharin, Salol, Soda Mint, Sodium Benzoate, Sodium Bicarbonate, Sodium Bromide, Sodium Salicylate, Sodium Succinate, Strontium

Salicylate, Strychnine Sulphate, Sulphocarbolates Compound, Thyroid, Aconite, and Binodide Compound, Triple Bromides; Hypodermic Tablets—Namely, Codeine Sulphate, Morphine Sulphate, Morphine and Atropine, Strychnine Sulphate; Tinctures—Namely, Aconite, Aloes, Arnica Flowers, Asafetida, Belladonna Leaves, Benzoin, Benzoin Compound, Capsicum, Cimicifuga, Cinchona, Cinchona Compound, Colchicum, Digitalis, Echinacea, Ferric Chloride, Gelsemium, Gentian Compound, Hydrastis, Hyoscyamus, Iodine, Lobelia, Nux Vomica, Opium, Opium Camphorated, Rhubarb, Rhubard Aromatic, Valerian Ammoniated, Viburnum Compound, and Warburg's.

Claims use since Oct. 1, 1918.

Ser. No. 323,608. CHRISTY COSMETICS, INC., New York, N. Y. Filed Jan. 30, 1932.

Christy

For Lipsticks, Face Powders, Rouges, Face Lotions, Cleansing Creams, Cold Creams, Face Creams, Filled Powder and Rouge Compacts and Vanity Cases, Facial Masque, Perfumes, and Bath Salts.

Claims use since January, 1930.

Ser. No. 324,314. GIARAMITA & NUGNES, Brooklyn, N. Y. Filed Feb. 19, 1932.



For Preparation Useful in the Treatment of Scalp to Stimulate Growth of Hair, in Liquid and Cream Form.

Claims use since Nov. 15, 1931.

Ser. No. 324,337. BONKURA PRODUCTS CO., INC., Battle Creek, Mich., assignor to Ben Sontag Co., Battle Creek, Mich. Filed Feb. 20, 1932.

BON SONTAY
SPECIAL CREAM

In the drawing the wording special cream is disclaimed apart from the mark shown.

For Toilet Cream for Absorbent Purposes in Eliminating Sagging Tissues and Eradicating Wrinkles, and for Softening and Beautifying the Skin Caused from Lack of Natural Oils.

Claims use since Jan. 1, 1932.

Ser. No. 325,173. INSTITUT DE BEAUTE, INC., New York, N. Y. Filed Mar. 16, 1932.



For Face and Body Creams, Face and Hand Lotions, Astringents, Lip Sticks, Face Powders and Rouges, Nail Polish and Liquid Finger Nail Polish Remover, Cuticle Cream, and Liquid Finger Nail Cuticle Removers.

Claims use since Sept. 15, 1931.

Ser. No. 325,500. SEMMES CORPORATION, Detroit, Mich. Filed Mar. 24, 1932.

RAYSOL

For Medicinal Water Containing Calcium, Sodium, Potassium, and Magnesium Salts for Use by Addition to Bath Water, and Indicated in the Treatment and Relief of Rheumatism, Muscular Aches, and the like.

Claims use since Jan. 7, 1932.

Ser. No. 325,524. CHARLES B. MCALISTER, doing business as O-Ren-Da Medicine Co., Cincinnati, Ohio. Filed Mar. 26, 1932.



The words "Hollywood" and "Tea" are hereby disclaimed as used separate and apart from the mark as shown for the purpose of this registration only.

For Reducing Tea.

Claims use since Nov. 1, 1931.

Ser. No. 327,409. PARFUMERIE ST. DENIS, New York, N. Y. Filed May 24, 1932.

LIEBESTRAUM

For Astringents, Astringent Cerates, Bleach Creams, Beauty Creams, Cold Creams, Cleansing Creams, Obesity Creams, Refreshing Creams, Obesity Astringents, Dry

Rouges, Liquid Rouges, Face Bleaches, Face Packs; Skin Whitener in Liquid, Cream, and Solid Form; Eyebrow and Eyelash Grower, Eye Drops, Chemical Preparations Suitable for the Darkening of Eyebrows and Eyelashes, Hand Lotions, Skin Lotions, After Shaving Lotions, Pomades, Face Powders, Talcum Powders, Body Powders, Sachets, Hair Salves, Hair Elixirs, Dandruff Preparations, Hair Tonics, Hair Oils, Shampoos, Hair Dyes, Bath Salts, Smelling Salts, Lip Sticks, Incense, Tooth Powders, Mouth Washes, Dentifrices, Tooth Pastes, Depilatories, Nail Creams, Nail Bleaches, Nail Powders, Nail Polishes, Witch Hazel, Peroxide, Petroleum Jellies, Witch Hazel Salves, Camphor Creams, Foot Powders, Corn Salves, Deodorants, Disinfectants, Bay Rum, Eyebrow Pencils, Perfumes, and Toilet Waters.

Claims use since Mar. 15, 1932.

Ser. No. 328,066. MCCROBY STORES CORPORATION, New York, N. Y. Filed June 17, 1932.

Jere'Maid

For Nail Polish and Nail Polish Remover.

Claims use since June 1, 1932.

Ser. No. 328,067. MCCROBY STORES CORPORATION, New York, N. Y. Filed June 17, 1932.



For Nail Polish and Nail Polish Remover.

Claims use since June 1, 1932.

Ser. No. 328,337. PETROLAGAR LABORATORIES, INC., Chicago, Ill. Filed June 27, 1932.

Plantagar

For Preparation for the Treatment of Constipation, Consisting of Psyllium Seed Coated with Agar-Agar.

Claims use since May 27, 1932.

Ser. No. 328,813. HOUBIGANT, INC., New York, N. Y. Filed July 15, 1932.

Floraison Houbigant

The applicant is the owner of T. M. Registration No. 147,112 for the name "Houbigant" granted under the 10-year Proviso.

For Perfumes, Toilet Water, Face Powder, Talcum Powder, Bath Salts, Brilliantine, Bandoline, Rouge, Lip Sticks, Dusting Powder, Sachet, Cold Creams, Lotion for the Skin and Hair, Powder and Rouge Compacts, and Eau Vegetal.

Claims use since July 6, 1932.

Ser. No. 329,249. ANN CLAIRE NIKIRK, doing business as Neurex Drug Co., Lynn, Mass. Filed July 30, 1932.

NEUREX

For Medicine for Use in Quieting the Nerves and Producing Sleep.

Claims use since Jan. 1, 1932.

Ser. No. 329,264. OBERMEYER & CO. A. G., Hanau on the Main, Germany. Filed Aug. 1, 1932.

PIGMENTAN

For Medicinal Ointment for Preparing the Skin for the Absorption of Pigments Produced by Light Rays.

Claims use since August, 1931.

Ser. No. 329,382. CAMILLO E. MOSSO, Newark, N. J., and New York, N. Y. Filed Aug. 6, 1932.

ARSYRON

For Iron Arsenate Sterules and Drops.

Claims use since December, 1930.

Ser. No. 329,852. LEON CHARLAMB, doing business as Lamb's Laboratory, New York, N. Y. Filed Aug. 26, 1932.

LAMBERINE

For Antiseptic, Deodorant, and Prophylatic Preparation.

Claims use since June, 1930.

Ser. No. 329,899. M. J. KLOGER, INC., New York, N. Y. Filed Aug. 27, 1932.

SURN SINGH BRAND

The word "Brand" is disclaimed apart from the mark as shown on the drawing.

For Seed Laxatives.

Claims use since July 25, 1932.

Ser. No. 330,001. SUPERIOR PRODUCTS COMPANY, doing business as S-P Laboratories, Dallas, Tex. Filed Aug. 30, 1932.



For Hair Dressing and Straightener, Hair Oil, Brilliantine, Waveset, Cold Cream, Cleansing Cream (Liquefying), Foundation Cream (Vanishing), Cocoanut Oil Shampoo, Almond Honey Cream Lotion, Astringent and Tightener for the Skin, Complexion Powder, Talcum Powder, Toilet Water, and Petroleum Jelly (Perfumed), Rose Glycerine Almond Lotion, Lemon Cream Lotion, Household Almond Cream Lotion, and Household Lemon Bleach Lotion.

Claims use since June 20, 1932.

Ser. No. 330,023. G. H. SHERMAN, M. D., INC., Detroit, Mich. Filed Aug. 31, 1932.

BIO-CREAM

The word "Cream" is disclaimed apart from the mark as shown in the drawing.

For Creams, Salves, or Skin Ointments, Externally Used as a Facial or Other Skin Treatment to Soften the Skin and/or to Relieve Irritations and Infections Thereof, and/or to Increase the Skin Resistance to Infection.

Claims use since Feb. 1, 1932.

Ser. No. 330,122. GLEN D. DAVIDSON, doing business as Etel-Ga Laboratories, Rifle, Colo. Filed Sept. 6, 1932.

Etel-Ga

For Skin Lotions.
Claims use since June 13, 1932.

Ser. No. 330,190. DANIEL HUNT, Bremerton, Wash. Filed Sept. 7, 1932.



For Facial Cleanser and Facial Cream.
Claims use since Apr. 15, 1932.

Ser. No. 330,301. ESTELLA LIND JONES, San Diego, Calif. Filed Sept. 13, 1932.

Balm De Lind

No claim is made to the word "Balm" aside from the mark shown, the name "Lind" being the autograph of applicant's middle name.

For Skin Lotion and Toilet Preparation for Softening and Beautifying the Skin.

Claims use since July 20, 1932.

Ser. No. 330,323. CHICHESTER CHEMICAL COMPANY, Philadelphia, Pa. Filed Sept. 13, 1932.

CE-CO

For Powdered Deodorant.
Claims use since Aug. 17, 1932.

Ser. No. 330,324. CHICHESTER CHEMICAL COMPANY, Philadelphia, Pa. Filed Sept. 13, 1932.



No claim is made to the word "Brand" and the expressions "The Deodorant Supreme" and "A Chichester Product" except in association with the other features shown.

For Powdered Deodorant.
Claims use since Aug. 17, 1932.

Ser. No. 330,472. E. & A. R., Binghamton, N. Y. Filed Sept. 19, 1932.

ARMELIN

For Hair Restorative.
Claims use since May, 1932.

Ser. No. 330,488. MALCOLM J. MURRAY, doing business as Dent-O-Fras Tooth Paste Co., San Bernardino, Calif. Filed Sept. 19, 1932.

DENT-O-FRAS

For Tooth Paste and an Antiseptic Preparation for Use as a Gargle and Mouth Wash.
Claims use since June 15, 1932.

Ser. No. 330,621. JOSÉ DE JESÚS, doing business as Laboratorios Farmaceuticos De Puerto Rico, New York, N. Y. Filed Sept. 24, 1932.

AROMAS de MI PATRIA

For Preparation Used as a Liniment for the Treatment of Headaches, Cold in the Head, Influensa, Affections of the Nasal Sinuses, and Similar Ailments; as a Liniment in the Treatment of Neuralgia, Sore Throat, Rheumatism, Stiff Joints, Sprains, Swollen and Sore Muscles, Bruises, Swollen and Tired Feet, and Similar Ailments; as a Skin Tonic and Toilet Water and for Use After Shaving.
Claims use since Dec. 15, 1918.

Ser. No. 330,676. FREDERICK YOUNGER, Papillion, Nebr. Filed Sept. 26, 1932.



No claim is made for the word "Fistula" except in association with the mark as shown.

For Lotion Used in the Treatment of Sores and Skin Irritations, Especially for Animals.
Claims use since Nov. 30, 1930.

Ser. No. 330,738. C. D. BURCHARD, INC., New York, N. Y. Filed Sept. 28, 1932.

Duofoam

For Antiseptics.
Claims use since Sept. 15, 1932.

Ser. No. 330,746. LEONARD B. HANNA, Caldwell, Kans. Filed Sept. 28, 1932.

HANNAREM

For Preparations for Use in the Treatment of Mange.
Claims use since July 11, 1932.

Ser. No. 330,747. HOLLAND PHARMACAL COMPANY, Philadelphia, Pa. Filed Sept. 28, 1932.

Hemiles

For Hemorrhoidal Ointment.
Claims use since Sept. 19, 1932.

Ser. No. 330,799. JACQUES ROMANO, New York, N. Y. Filed Sept. 29, 1932.

LUGULIN

For Non-Toxic Iodine for Internal Administration Wherever Iodine is Indicated.
Claims use since June, 1932.

Ser. No. 330,808. THE CALCO CHEMICAL COMPANY, INC., Bound Brook, N. J. Filed Sept. 30, 1932.

Calcoag

For Soluble Ferric Sulphate Used as a Coagulate in the Treatment of Industrial, Agricultural and Municipal Wastes and Water Supplies.
Claims use since Feb. 6, 1932.

Ser. No. 330,816. FAHLBERG-LIST AKTIENGESELLSCHAFT, CHEMISCHE FABRIKEN, Magdeburg Sudost, Germany. Filed Sept. 30, 1932.

Hadenon

For Preparation for Preserving Victuals.
Claims use since May, 1919.

Ser. No. 330,840. DUREX PRODUCTS INC., New York, N. Y. Filed Sept. 30, 1932.

DUREKOL

For Base for Antiseptic Jelly.
Claims use since Mar. 1, 1932.

Ser. No. 330,847. GENERAL DYESTUFF CORPORATION, New York, N. Y. Filed Oct. 1, 1932.

DIAZOPON

For Anxiliary Agent for Dyeing.
Claims use since Aug. 5, 1932.

Ser. No. 330,852. THOMAS KERFOOT & CO., LIMITED, Bardsley, England. Filed Oct. 1, 1932.

STIMULOIDS

For Medicinal Preparation for Use as a Tonic, Stimulant and Restorative.
Claims use since June 19, 1914.

Ser. No. 330,855. THE WM. S. MERRELL COMPANY, Cincinnati, Ohio. Filed Oct. 1, 1932.

TAMATE

For Medicinal Preparation for Treatment of Anemia.
Claims use since Sept. 22, 1932.

Ser. No. 330,889. THE CRAMER CHEMICAL CO., Gardner, Kans. Filed Oct. 3, 1932.

Nitrophen

For Germicide for Burns, Minor Clips, Cuts and Skin Abrasions.
Claims use since Sept. 13, 1932.

Ser. No. 330,916. ROBERT H. VAN SANT, doing business as The Hemafil Company, Chicago, Ill. Filed Oct. 3, 1932.

Hemafil

For Blood Invigorator and General Tonic.
Claims use since Sept. 29, 1932.

Ser. No. 330,936. CHARLES F. SLADE CO., INC., Buffalo, N. Y. Filed Oct. 4, 1932.

S-K-O SLADE'S

For Bleaching Solution Which May Also be Used as a Germicide, Disinfectant and Deodorant.
Claims use since Sept. 3, 1932.

Ser No. 331,007. PLOUGH, INC., doing business as Kiss-O-Love Perfumers, Memphis, Tenn. Filed Oct. 6, 1932.

Kiss-O-Love

For Line of Toilet and Medicinal Preparations,—Namely, Face Powder, Rubbing Alcohol Compound, Perfumes, Mouth Wash, After Shaving Lotion, Rose Water and Glycerine, Almond Lotion, Brilliantine (Liquid and Solid), Hair Oil, Wave Set, Shampoo, Quinine Hair Tonic, Bay Rum, Lemon Bleaching Cream, Peroxide Vanishing Cream, Cleansing Cream, and Cold Cream.
Claims use since July 24, 1929.

Ser. No. 331,204. JAMES F. SULLIVAN, doing business as Kitgen Laboratories, Camden, N. J. Filed Oct. 12, 1932.

KITGEN KREME

The word "Kreme" is disclaimed apart from the mark as shown.
For Cosmetic—Namely, a Hand and Face Lotion, and for Use as an After Shaving Lotion, Baby Rashes and for the Treatment of Sunburn, Windburn, Chapping and Chafing, Cracked Lips, Stings, Smarting, Itching, Prickly Heat and Tired Feet.
Claims use since Mar. 19, 1931.

Ser. No. 331,365. THE BARBASOL COMPANY, Indianapolis, Ind. Filed Oct. 19, 1932.

Barbasol

For Skin Cleansing Cream.
Claims use since Sept. 1, 1932.

CLASS 8

Smokers' Articles, Not Including Tobacco Products

Ser. No. 330,930. THE PURA-SMOKE COMPANY, INC., Burlington, N. C. Filed Oct. 4, 1932.

PURA-SMOKE

The word "Smoke" is disclaimed apart from the other features of the mark shown in the drawings.
For Pipes, Cigar and Cigarette Holders and Filter Cartridges Therefor.
Claims use since July, 1929.

CLASS 11

Inks and Inking Materials

Ser. No. 331,130. TALENS & SON, INC., Irvington, N. J. Filed Oct. 10, 1932.

REMBRANDT

For Drawing Ink, Waterproof and Non-Waterproof, Black and Colored.
Claims use since August, 1927.

Ser. No. 331,256. THE INTERNATIONAL PRINTING INK CORPORATION, New York, N. Y. Filed Oct. 14, 1932.

E-Con-O-Me

For Printing Ink.
Claims use since Apr. 1, 1911.

CLASS 12

Construction Materials

Ser. No. 330,120. CONTAINER CORPORATION OF AMERICA, Chicago, Ill. Filed Sept. 6, 1932.

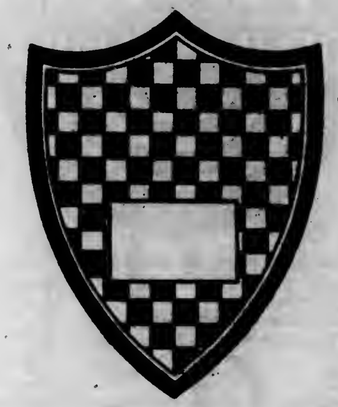
THERMO-CEL

For Thermal Insulating Board.
Claims use since Dec. 30, 1931.

CLASS 14

Metals and Metal Castings and Forgings

Ser. No. 328,680. THE BASTIAN-BLESSING COMPANY, Chicago, Ill. Filed July 11, 1932.



For Welding Metals.
Claims use since Mar. 10, 1932.

CLASS 15

Oils and Greases

Ser. No. 298,725. STANDARD OIL COMPANY OF NEW JERSEY, Wilmington, Del. Filed Apr. 11, 1930.



For Refined, Semi-Refined, and Unrefined Oils and Greases Made from Petroleum, Both with and without Admixture of Animal, Vegetable, or Mineral Substances, for Illuminating, Burning, Power, Fuel, and Lubricating Purposes.
Claims use since Dec. 7, 1929.

Ser. No. 323,152. WILL & BAUMER CANDLE CO., INC., Syracuse, N. Y. Filed Jan. 18, 1932.

SANCTOLITE

For Candles.
Claims use since Dec. 7, 1931.

Ser. No. 329,945. HARWOOD BROS., INC., Richmond, Va. Filed Aug. 29, 1932.

DIXIE SUPER MOTOR OIL

The drawing is lined for red and blue. No claim is made to the words "Motor Oil" apart from the mark shown in the drawing.
For Lubricating Oils and Greases.
Claims use since May 24, 1932.

Ser. No. 330,049. OLIXIR CORPORATION, Buffalo, N. Y. Filed Sept. 1, 1932.

OLIXIR

For Gasoline and Other Motor Fuel Oils.
Claims use since Feb. 6, 1932.

Ser. No. 330,333. THE CANFIELD OIL COMPANY, Cleveland, Ohio. Filed Sept. 14, 1932.

Wm. Penn VALVE EASE OIL 25¢

No claim is made to the wording except "Wm. Penn" apart from the mark as shown.
For Lubricating Oils and Greases.
Claims use since Aug. 27, 1931.

CLASS 16

Paints and Painters' Materials

Ser. No. 331,081. THE GOODYEAR TIRE & RUBBER COMPANY, Akron, Ohio. Filed Oct. 8, 1932.

PLIOLITE

For Ready Mixed Paint, Varnish, and Paint Enamel.
Claims use since Sept. 17, 1932.

Ser. No. 331,464. A. C. HORN COMPANY, Long Island City, N. Y. Filed Oct. 22, 1932.

LINOCREX

For Varnish Compound for the Preservation of Linoleum.
Claims use since Feb. 1, 1923.

CLASS 17

Tobacco Products

Ser. No. 331,255. TOM HUSTON PEANUT COMPANY, Columbus, Ga. Filed Oct. 14, 1932.

TOM'S

For Cigarettes.
Claims use since Oct. 4, 1932.

Ser. No. 331,281. THE FORTUNE TOBACCO COMPANY, New York, N. Y. Filed Oct. 15, 1932.

MAN o' WAR

For Cigarettes.
Claims use since Oct. 13, 1932.

Ser. No. 331,282. THE FORTUNE TOBACCO COMPANY, New York, N. Y. Filed Oct. 15, 1932.

TOP FLIGHT

For Cigarettes.
Claims use since Oct. 13, 1932.

Ser. No. 331,283. THE FORTUNE TOBACCO COMPANY, New York, N. Y. Filed Oct. 15, 1932.

Exterminator

For Cigarettes.
Claims use since Oct. 13, 1932.

CLASS 19

Vehicles, Not Including Engines

Ser. No. 328,655. RAYBESTOS-MANHATTAN, INCORPORATED, Passaic, N. J., and Bridgeport, Conn. Filed July 8, 1932.

ROYAL

For Automobile Brakes.
Claims use since Mar. 1, 1920.

CLASS 21

Electrical Apparatus, Machines, and Supplies

Ser. No. 318,234. DEUTSCHE GOLD- & SILBER-SCHEIDEANSTALT, Frankfort-on-the-Main, Germany. Filed Aug. 20, 1931.

DEGUSSA

For Armatures; Insulation Materials for Electric Wires, Electric Fans, Electric Signs, Electric Bells, Electric Lighting Plants; Outfits and Apparatus for Domestic and Industrial Purposes of All Kinds, Embracing Unitary Farm Lighting Systems, Electric Lighting Systems for Railroad Vehicles, Incandescent and Arc Electric Lamps, Flash Lights, Street Lighting Systems, Electric Light Fixtures, Yard Lamps, Sign Post Illuminators, Lanterns, Automobile Headlights, Spot Lights, Fog Lights, Search-Lights, Signal Lamps and All Parts of Such Apparatus and Outfits Such as Insulators, Lamps, Outlet Boxes, Plug Fuses, Switch Boxes, Sockets, and Bulbs; Electric Cooking Apparatus Comprising Electric Ranges, Stoves, and Ovens; Electric Toasters, Percolators, Waffle Irons, Cookers, Grills, Griddles, Hot Plates, Cooking Utensils, and Boilers; Electric Heating Apparatus for Household, Industrial, and Laboratory Uses of All Kinds, Including Residence and Factory Heating Plants, Stoves, Brooder Heaters, Garage Heaters, Air Heaters, Liquid Heaters, Fluid Heaters, and Electrical Flat Irons; Curling Irons, Air Bag Heaters, Glue Pots, Soldering Irons, Foot Warmers, Car Heaters, Heating Radiators, and Electric Controls for Heating Systems.
Claims use since Sept. 24, 1930.

Ser. No. 328,049. NACHOD & UNITED STATES SIGNAL CO., INC., Louisville, Ky. Filed June 13, 1932.

NUSICO

For Electric Block Signal Light Systems for Railways, Electric Light Signal Systems for Street Traffic, Mechanism for Actuating Signal Light Circuits and for Breaking Such Circuits, Visual and Audible Highway Crossing Signals, and Parts Thereof.
Claims use since 1927.

Ser. No. 328,693. THE MANTLE LAMP COMPANY OF AMERICA, Chicago, Ill. Filed July 11, 1932.

Aladdin

For Electric Illuminating Lamps.
Claims use since June 20, 1932.

Ser. No. 330,564. PHELPS DODGE COPPER PRODUCTS CORPORATION, Dover, Del., and New York, N. Y. Filed Sept. 15, 1932.

PHELPS DODGE COPPER PRODUCTS CORPORATION — MINE TO MARKET — P D

For Copper Wire and Cable for Electrical Use.
Claims use since July 22, 1932.

CLASS 22

Games, Toys, and Sporting Goods

Ser. No. 320,682. EMIL KNOPF, Jr., doing business as Box Golf Company, West Brighton, Staten Island, N. Y. Filed Oct. 31, 1931.

BOX GOLF



The representation of a man playing golf is fanciful. No registration rights are herein claimed for the word "Golf" except in the particular arrangement and association in which it appears with the rest of the trade-mark as shown on the drawing.
For Miniature Golf Game.
Claims use since Oct. 20, 1931.

Ser. No. 330,205. HOWARD J. MURPHY NOVELTY CO., Reading, Mass. Filed Sept. 9, 1932.

JIG-BRIDGE

For Jig-Saw Cut Out Puzzles.
Claims use since Aug. 20, 1932.

Ser. No. 331,461. JAMES HEDDON'S SONS, Dowagiac, Mich. Filed Oct. 22, 1932.

RIVER RUNT

For Artificial Baits.
Claims use since June 21, 1928.

CLASS 24

Laundry Appliances and Machines

Ser. No. 320,711. COLUMBIA PHONOGRAPH COMPANY, INC., Bridgeport, Conn. Filed Oct. 31, 1931. Under 10-year proviso.

Columbia

For Laundry Cabinet Dryers, Dry Cleaning Machines, Ironing Boards, Ironing Machines, Wash Tubs, Washing Machines and Parts Thereof, Clothes Stretchers, Wash Boards.
Claims use since July 15, 1931.

CLASS 26

Measuring and Scientific Appliances

Ser. No. 330,442. BACHMANN BROS. INC., Philadelphia, Pa. Filed Sept. 19, 1932.

Tudor

For Sun Glasses and Goggles.
Claims use since Aug. 2, 1932.

CLASS 32

Furniture and Upholstery

Ser. No. 330,433. SERVICE STATION EQUIPMENT COMPANY, Conshohocken, Pa. Filed Sept. 17, 1932.

STORETTE

For Cabinets and Parts Thereof for the Display of Merchandise for Sale.
Claims use since Aug. 20, 1932.

Ser. No. 331,173. ATLANTA CASKET COMPANY, Atlanta, Ga. Filed Oct. 12, 1932.

"ETERNA-REST"

For Innerspring Mattresses for Burial Caskets.
Claims use since June 9, 1932.

Ser. No. 331,208. JOHN WANAMAKER PHILADELPHIA, Philadelphia, Pa. Filed Oct. 12, 1932.

REDLEAF

For Photograph Frames.
Claims use since 1927.

Ser. No. 331,354. HONOR BILT PRODUCTS, INC., Philadelphia, Pa. Filed Oct. 14, 1932.

HONORBILT

For Mattresses and Box-Springs.
Claims use since Dec. 22, 1927.

CLASS 33

Glassware

Ser. No. 329,684. GERMANOW-SIMON MACHINE CO., Rochester, N. Y. Filed Aug. 18, 1932.

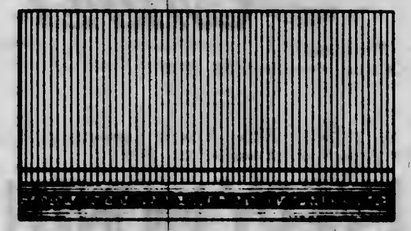
FLEXO

For Watch Crystals—Namely, Unbreakable Watch Crystals.
Claims use since 1917.

CLASS 35

Belting, Hose, Machinery Packing, and Non-metallic Tires

Ser. No. 331,095. WESTERN STATES MFG. CO., Sioux City, Iowa. Filed Oct. 8, 1932.



The trade-mark consists of a blue and yellow stripe, interposed between a red stripe and a blue stripe, the stripes being formed by the exposed edges of the four layers of rubber of the patching material, the upper layer being colored red, the intermediate colors being then blue, then yellow, and the underneath layer being colored blue, respectively. The drawing is similarly lined to indicate the colors red, blue, yellow and blue, respectively, the vertical lines indicating the color red, the horizontal lining the color blue, and the cross lining the color yellow. The right to the exclusive use of the representation of the goods upon which the mark is used is hereby disclaimed.

For Sheet Rubber Tire Patching Material and Tire Repair Kits.
Claims use since Mar. 25, 1932.

Ser. No. 331,286. JENKINS BROS., New York, N. Y. Filed Oct. 15, 1932.

BLUE TARGET

For Jar Rings.
Claims use since Sept. 27, 1932.

CLASS 37

Paper and Stationery

Ser. No. 317,029. COPY PAPERS INC., Chicago, Ill. Filed July 17, 1931.

RECORDRUN

For Book Paper, Bond Paper, Index Paper, Ledger Paper, Writing Paper, Off-Set Paper, Enamel Book Paper, Coated Bond Paper, and Coated Manila Paper.
Claims use since June 29, 1931.

Ser. No. 330,304. THE MARTIN CANTINE COMPANY, Saugerties, N. Y. Filed Sept. 13, 1932.

MARKOTE

For Clay Coated Paper.
Claims use since July 1, 1932.

Ser. No. 330,322. WEST VIRGINIA PULP & PAPER COMPANY, New York, N. Y. Filed Sept. 12, 1932.

Blendfold

For Coated Papers for Printing and Writing.
Claims use since Aug. 26, 1932.

Ser. No. 330,794. MODERN TISSUES CORPORATION, New York, N. Y. Filed Sept. 29, 1932.

MODE X WHITE



The words "Mode" and "White" are disclaimed when used apart from the mark shown.
For Toilet Tissue and Facial Tissue.
Claims use since May 15, 1929.

Ser. No. 331,279. BLAISDELL PENCIL COMPANY, Philadelphia, Pa. Filed Oct. 15, 1932.

KLENZO

For Rubber Erasers.
Claims use since February, 1923.

Ser. No. 331,374. HOUDE'S INC., Chicago, Ill. Filed Oct. 19, 1932.

DUKE

For Lead Pencils.
Claims use since Oct. 8, 1932.

CLASS 38

Prints and Publications

Ser. No. 319,624. NEW YORK AMERICAN, INC., New York, N. Y. Filed Oct. 1, 1931.

THE COMIC WEEKLY

For Newspaper Section.
Claims use since Sept. 20, 1931.

Ser. No. 328,397. GOOD HUMOR CORPORATION OF AMERICA, Cleveland, Ohio. Filed June 29, 1932.

RUMORS

For Periodicals.
Claims use since Apr. 15, 1932.

Ser. No. 328,751. WALTER J. BLACK, INC., New York, N. Y. Filed July 13, 1932.

THE COMPANION CLASSICS

No claim is made to the word "Classics" apart from and except in the association shown in the drawing.
For Book or Series of Books.
Claims use since July 5, 1932.

Ser. No. 330,590. WOODMEN OF THE WORLD, Denver, Colo. Filed Sept. 22, 1932.

THE WOODMAN PACIFIC

For Monthly Magazine.
Claims use since October, 1894.

Ser. No. 330,901. SIMMONS TOURS, INC., New York, N. Y. Filed Oct. 3, 1932.

TRAVEL TIPS

For Publication Issued Annually.
Claims use since 1900.

Ser. No. 330,947. THE EDWIN ALGER PUBLISHING COMPANY, Washington, D. C. Filed Oct. 5, 1932.

ALGER'S NEWSPAPER
FOR THE YOUTH OF AMERICA

No claim is made for the word "Newspaper" when used apart from the mark as shown in the drawing.
For Heading for a Monthly Newspaper.
Claims use since May 1, 1932.

Ser. No. 331,062. POPULAR FICTION PUBLISHING COMPANY, Indianapolis, Ind. Filed Oct. 7, 1932.

THE MAGIC CARPET

For Periodical.
Claims use since Sept. 24, 1932.

Ser. No. 331,303. EVERY MONTH PUBLISHING CO., INC., New York, N. Y. Filed Oct. 17, 1932.

EVERY MONTH

For Magazine.
Claims use since Sept. 1, 1932.

Ser. No. 331,465. INDUSTRIAL MEDICINE, INC., Chicago, Ill. Filed Oct. 22, 1932.

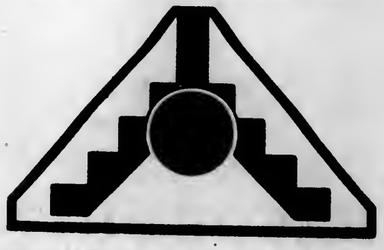
Industrial Medicine

For Publication Issued Monthly.
Claims use since Sept. 24, 1932.

CLASS 39

Clothing

Ser. No. 314,074. ROBINSON-BYNON SHOE COMPANY, INCORPORATED, Auburn, N. Y. Filed May 1, 1931.



For Women's Shoes of Leather and of Fabric and of Combinations of Leather and Fabric.
Claims use since Oct. 1, 1928.

Ser. No. 315,886. LOS ANGELES KNITTING COMPANY, Hollydale, Calif. Filed July 15, 1931.

Nattiknit
TURNIT

For Women's and Girls' Knitted Skirts.
Claims use since Jan. 2, 1931.

Ser. No. 319,131. BEAR BRAND HOSIERY CO., Kankakee and Chicago, Ill. Filed Sept. 17, 1931.

Endura

For Knitted Articles—Namely, Hosiery.
Claims use since June 15, 1905.

Ser. No. 319,885. EAGLE KNITTING MILLS, INC., Philadelphia, Pa. Filed Oct. 9, 1931.

No-Ra-Zil

For Women's Garments—Namely Sport Suits, Dresses, Skirts, Blouses.
Claims use since Dec. 18, 1930.

Ser. No. 321,326. AUGUSTIN D. BOURNEUF, Haverhill, Mass. Filed Nov. 20, 1931.

DEB-ETTE
FEMININE
FOOTWEAR

No registration rights are claimed in the words "Feminine Footwear" apart from the mark shown in the drawing.
For Women's and Girls' Boots, Shoes and Slippers of Leather, Fabric and Combinations Thereof.
Claims use since Jan. 2, 1931.

Ser. No. 323,656. A. H. GEUTING COMPANY, Philadelphia, Pa. Filed Feb. 1, 1932.

GUILD
GROUP

For Men's, Women's, and Children's Boots and Shoes, Made of Leather, Fabric, Rubber, or Any Combination of One or More of Said Materials.
Claims use since Sept. 29, 1929.

Ser. No. 326,796. WOMAN'S WEAR SERVICE, INC., Huntington, Ind. Filed May 5, 1932.

Famousform

For Foundation Garments, Girdles and Abdominal Uplift Belts.
Claims use since Jan. 1, 1931.

Ser. No. 329,404. NELSON KNITTING COMPANY, Rockford, Ill. Filed Aug. 8, 1932.

DeTecTip

For Hosiery.
Claims use since July 20, 1932.

Ser. No. 329,405. NELSON KNITTING COMPANY, Rockford, Ill. Filed Aug. 8, 1932.



The drawing consists of a heel tip of a color in the range from red to orange. The representation of a stocking shown in the drawing is disclaimed and the cross-hatching on the heel tip is to represent the color specified.
For Hosiery.
Claims use since July 20, 1932.

Ser. No. 329,517. ASSOCIATED APPAREL INDUSTRIES, INC., Chicago, Ill. Filed Aug. 12, 1932.

Line of Beauty

For Girdles, Corsets, Combinations of Corset and Brassiere.
Claims use since 1925.

Ser. No. 329,975. JACOB C. LAMM, Baltimore, Md. Filed Aug. 30, 1932.



GLENEAGLES

For Trench Coats, Men's and Boys' Top Coats, Men's and Boys' Trousers, Riding Breeches, Knickers, Jackets, Mackinaws, Men's and Boys' One and Two Piece Suits.
Claims use since Sept. 10, 1922.

Ser. No. 330,177. THE FLORSHEIM SHOE COMPANY, Chicago, Ill. Filed Sept. 8, 1932.



For Shoes Made of Leather.
Claims use since Aug. 22, 1932.

Ser. No. 330,430. HENRY POLLAK, INC., New York, N. Y. Filed Sept. 17, 1932.

TWISTEE

For Women's and Children's Knitted or Netted Caps and Hats.
Claims use since July 5, 1932.

Ser. No. 330,584. BEST & CO., INC., New York, N. Y. Filed Sept. 21, 1932.

BESMESH

For Under Shirts, Under Drawers, Union Suits; Step-Ins—Namely, Under-Drawers, and Corsets, Chemises, Brassières, Panties, Petticoats, and Bloomers for Women and Children.
Claims use since Sept. 2, 1931.

Ser. No. 330,559. WEILL & HARTMANN, New York, N. Y. Filed Sept. 21, 1932.

FIRST LADY

For Gloves Made of Rubber, Leather, Fabric, or any Combination Thereof; Corsets, Brassières, Hosiery, Stepins (Drawers), Bloomers; Underwear Made of Knitted, Netted, and Textile Fabric; Night Dresses, Slips, Panties, Kimonos, Pajamas, Hats; Shoes Made of Leather, Rubber, Fabric, or any Combination Thereof, for Women and Children.
Claims use since Jan. 1, 1930.

Ser. No. 330,587. VOGUE BRASSIERE MFG. CO., Newark, N. J. Filed Sept. 22, 1932.

Vogue-tex

No claim is made to the word "Vogue" apart from the mark as shown in the drawing.
For Corsets and Brassières and Combinations Comprising Girdles and Brassières in Combination.
Claims use since July 22, 1922.

Ser. No. 330,674. WELLS-LAMONT-SMITH CORPORATION, Minneapolis, Minn. Filed Sept. 26, 1932.



For Work Gloves of Fabric and Combined Fabric and Leather.
Claims use since Aug. 15, 1932.

Ser. No. 330,705. JARMAN SHOE COMPANY, Nashville, Tenn. Filed Sept. 27, 1932.



For Boots, Shoes, and Slippers of Leather, Fabric, or Combinations Thereof.
Claims use since Sept. 22, 1932.

Ser. No. 330,723. WELLS-LAMONT-SMITH CORPORATION, Minneapolis, Minn. Filed Sept. 27, 1932.

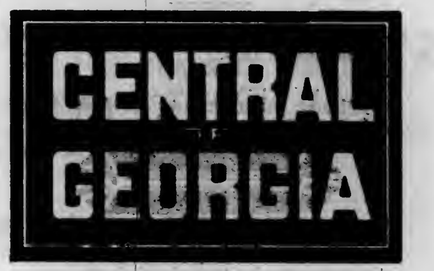


For Work Gloves of Fabric and Combined Fabric and Leather.
Claims use since Aug. 15, 1932.

Ser. No. 330,724. WELLS-LAMONT-SMITH CORPORATION, Minneapolis, Minn. Filed Sept. 27, 1932.

For Work Gloves of Fabric and Combined Fabric and Leather.
Claims use since Aug. 15, 1932.

Ser. No. 330,905. WELLS-LAMONT-SMITH CORPORATION, Minneapolis, Minn. Filed Oct. 3, 1932.



For Work Gloves of Fabric and Combined Fabric and Leather.
Claims use since Aug. 15, 1932.

Ser. No. 330,931. RAMBO & REGAR, INCORPORATED, doing business as Globe Knitting Mills, Norristown, Pa. Filed Oct. 4, 1932.



No claim is made to the word Anklets apart from the mark as shown.
For Anklets.
Claims use since Aug. 31, 1932.

Ser. No. 330,933. RYFF & CO. LTD., doing business as Ryff & Co. Ltd., A. G. Strickwarenfabrik Bern and as Ryff & Co., S. A. Fabrique de Tricotages Berne, Bern, Switzerland. Filed Oct. 4, 1932.

MUMSY

For Men's, Women's, and Children's Knitted Underwear and Bathing Suits.
Claims use since Mar. 2, 1927.

Ser. No. 330,981. THE WEISBAUM BROS. BROWER CO., Cincinnati, Ohio. Filed Oct. 5, 1932.

DRAPE'LEI

For Neckties.
Claims use since July 1, 1932.

Ser. No. 331,070. WELLS-LAMONT-SMITH CORPORATION, Minneapolis, Minn. Filed Oct. 7, 1932.



For Work Gloves of Fabric and Combined Fabric and Leather.
Claims use since Aug. 15, 1932.

Ser. No. 331,097. B. ALTMAN & CO., New York, N. Y. Filed Oct. 10, 1932.

SNOWIES

For Knitted Woolen Suits for Boys and Girls, Comprising Gloves, Caps, Coats, and Leggings.
Claims use since October, 1931.

Ser. No. 331,166. THE SELBY SHOE COMPANY, Portsmouth, Ohio. Filed Oct. 11, 1932.

Selby FEATURE SHOES

No claim is made to the exclusive use of the word "Shoes" apart from the mark as shown in the drawing.
For Women's, Misses', and Children's Shoes.
Claims use since May 15, 1931.

Ser. No. 331,194. HENRY POLLAK, INC., New York, N. Y. Filed Oct. 12, 1932.

MON ETOILE

For Women's Hats.
Claims use since Sept. 24, 1932.

CLASS 42

Knitted, Netted, and Textile Fabrics

Ser. No. 325,599. RIEGEL TEXTILE CORPORATION, New York, N. Y. Filed Mar. 28, 1932.

RIEGEL PRODUCTS

No claim being made to the exclusive use of the word "Products," apart from the mark as shown in the drawing.
For Cotton Piece Goods, Diapers, Sheets, and Pillow Cases.
Claims use since Jan. 8, 1932.

Ser. No. 330,105. SADWIN MANUFACTURING COMPANY, INC., Woonsocket, R. I. Filed Sept. 3, 1932.

Bonnie Wee

For Crib Sheets, Crib Spreads, Pillow Cases, Bolster Covers, Blankets, Knitted and Woven Crib Accessories—Namely, Comfortables and Afgans.
Claims use since Aug. 4, 1932.

Ser. No. 330,695. COMBIER & CO. INC., New York, N. Y. Filed Sept. 27, 1932.

For Piece Goods of Silk and Mixtures Thereof.
Claims use since September, 1927.

Ser. No. 330,886. SIDNEY BLUMENTHAL & CO. INC., New York, N. Y. Filed Oct. 3, 1932.

Erminpelz

For Pile Fabrics in the Piece.
Claims use since Sept. 20, 1932.

Ser. No. 330,887. SIDNEY BLUMENTHAL & CO. INC., New York, N. Y. Filed Oct. 3, 1932.

Wovenpelz

For Pile Fabrics in the Piece.
Claims use since Sept. 20, 1932.

Ser. No. 331,093. STONE MILL FABRICS CORP., New York, N. Y. Filed Oct. 8, 1932.

RUBIDIUM FINISH

No claim being made to the exclusive use of the word "Finish" apart from the mark as shown in the drawing.
For Cotton Piece Goods.
Claims use since Aug. 1, 1932.

Ser. No. 331,094. STRONG HEWAT & CO., INC., New York, N. Y. Filed Oct. 8, 1932.

GREEN MOUNTAIN HOMESPUN

No claim being made to the exclusive use of the word "Homespun" apart from the mark as shown in the drawing.
For Woolen Piece Goods.
Claims use since Aug. 24, 1932.

Ser. No. 331,218. DACOTAH COTTON MILLS, INC., Lexington, N. C. Filed Oct. 13, 1932.

DACOTAH SUPREME

For Cotton Piece Goods of the Type Used in the Making of Clothing and Draperies.
Claims use since Nov. 10, 1931.

Ser. No. 331,383. LOUIS ROESSEL & CO., INC., Hazelton, Pa., and New York, N. Y. Filed Oct. 19, 1932.

GOLD LEOPARD

For Silk Goods in the Piece.
Claims use since Sept. 22, 1932.

CLASS 44

Dental, Medical, and Surgical Appliances

Ser. No. 309,318. STOWALL AND CO., San Francisco, Calif. Filed Dec. 24, 1930.

GOLD BEATERS

For Membranous Articles for the Prevention of Contagious Diseases.
Claims use since March, 1920.

Ser. No. 323,810. THE RANSOM & RANDOLPH COMPANY, Toledo, Ohio. Filed Jan. 22, 1932.

ORA-TINT

No claim being made for the use of the word "Tint" apart from the mark as shown in the drawings.
For Denture Materials.
Claims use since Dec. 21, 1931.

Ser. No. 323,811. THE RANSOM & RANDOLPH COMPANY, Toledo, Ohio. Filed Jan. 22, 1932.

R&R

For Dental Burs, Impression Compounds, Scaling Instruments, Plaster Compounds for Dental Molds, Hypodermic Needles, Medicated Cement for Dental Use, Denture Materials, Dental Gold, Dental Alloys and the Like, Dental Varnishes, and Waxes.
Claims use since Sept. 15, 1931.

Ser. No. 330,891. AMERICAN PORCELAIN CO., Chicago, Ill. Filed Sept. 16, 1932.

APCO

For Porcelain Adapted for Use in Making Dental Restorations and the Like.
Claims use since Mar. 15, 1932.

Ser. No. 330,648. AUSTENAL LABORATORIES, INC., New York, N. Y., and Chicago, Ill. Filed Sept. 26, 1932.

VITALLIUM

For Dentures.
Claims use since July, 1932.

Ser. No. 330,856. THE WM. MEYER CO., Chicago, Ill. Filed Oct. 1, 1932.

DOCTROVAC

For Massage Machines.
Claims use since May 4, 1932.

Ser. No. 330,897. ERNEST MONNIER, INC., Boston, Mass. Filed Oct. 3, 1932.



BABIES KNOW THE DIFFERENCE

The representation of a baby appearing on the drawing is fanciful. Applicant hereby disclaims the exclusive right to the use of the words "Ingram's" and "Babies Know the Difference" except in combination with the mark as shown.

For Transparent Rubber Nursing Nipples.
Claims use since January, 1928.

Ser. No. 330,942. THE S. S. WHITE DENTAL MANUFACTURING COMPANY, Philadelphia, Pa. Filed Oct. 4, 1932.

METALBA

For Dental Supplies—Namely, Plate, Solder, Wire, Shells, Disks, Inlays, and Castings.
Claims use since Sept. 23, 1932.

CLASS 45

Beverages, Nonalcoholic

Ser. No. 322,900. UNITED DISTILLERS LIMITED, Vancouver, British Columbia, Canada. Filed Jan. 11, 1932.

Early Times

For Nonalcoholic Maltless Beverages Sold as Soft Drinks.
Claims use since May 10, 1928.

Ser. No. 322,901. UNITED DISTILLERS LIMITED, Vancouver, British Columbia, Canada. Filed Jan. 11, 1932.



For Nonalcoholic Maltless Beverages Sold as Soft Drinks.
Claims use since Oct. 31, 1929.

Ser. No. 322,902. UNITED DISTILLERS LIMITED, Vancouver, British Columbia, Canada. Filed Jan. 11, 1932.

HOSPITALITY

For Nonalcoholic Maltless Beverages Sold as Soft Drinks.
Claims use since May 10, 1928.

Ser. No. 331,050. THE JEL SERT CO., Chicago, Ill. Filed Oct. 7, 1932.

FLA-VOR-ADE

For Maltless Powder for Making Nonalcoholic Soft Drinks.
Claims use since May 2, 1932.

Ser. No. 331,157. LUDFORD FRUIT PRODUCTS, INC., Hollywood, Calif. Filed Oct. 11, 1932.



For Nonalcoholic Maltless Beverages Sold as Soft Drinks.
Claims use since Aug. 28, 1932.

Ser. No. 331,348. JOHN L. TELLER, doing business as Sovereign Mineral Spring Co., Utica, N. Y. Filed Oct. 18, 1932.

SOVEREIGN



For Ginger Ale and Spring Water.
Claims use since Aug. 15, 1932.

CLASS 46

Foods and Ingredients of Foods

Ser. No. 324,052. JULIA FRANKL, New York, N. Y. Filed Feb. 9, 1932.

GINA

For Chocolates, Caramels, Peppermints, Licorice Candies, and Bon Bons.
Claims use since Oct. 1, 1929.

Ser. No. 325,020. SOYA PRODUCTS, INC., Chicago, Ill. Filed Mar. 10, 1932.



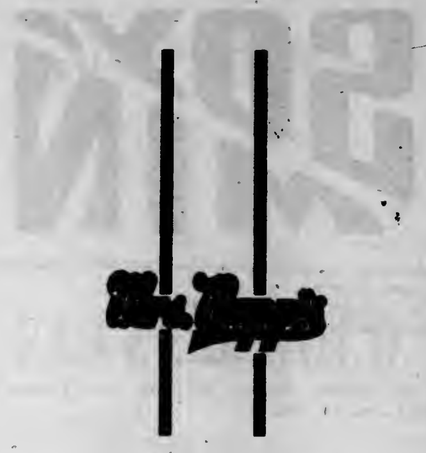
Applicant hereby disclaims the word "Soy" apart from the mark as shown.
For Commercial Feeds for Livestock.
Claims use since Jan. 19, 1932.

Ser. No. 325,643. THE DAN-DEE PRETZEL & POTATO CHIP COMPANY, Cleveland, Ohio. Filed Mar. 30, 1932.



The drawing is lined for red and blue. No claim is made to the representation of the pretzels apart from the mark as shown. Applicant is the owner of registration #261,450.
For Pretzels.
Claims use since Jan. 1, 1931.

Ser. No. 325,644. THE DAN-DEE PRETZEL & POTATO CHIP COMPANY, Cleveland, Ohio. Filed Mar. 30, 1932.



The lining shown on the drawing is to illustrate red and blue colors.
For Noodles.
Claims use since Aug. 26, 1931.

Ser. No. 325,990. THE MORBY MERCANTILE COMPANY, Denver, Colo. Filed Apr. 11, 1932.

DRIPIT

For Coffee.
Claims use since Mar. 30, 1932.

Ser. No. 326,657. EMIL F. BARTA, doing business as The "Butcher Boy" Meat Market, Phoenix, Ariz. Filed May 2, 1932.



For Sausage Meat, Link Sausage, Liver-Sausage, Bacon, Ham, Fresh Chicken, Canned Chicken, Canned Ham, Canned Pickles and Onions, Dry Pack Fresh Beans, Chicken Soup, Chicken Broth, Horse Radish, Chili Sauce and Ketchup.
Claims use since Apr. 26, 1932.

Ser. No. 327,112. SOYA PRODUCTS, INC., Chicago, Ill. Filed May 14, 1932.

SOY MIN

Applicant hereby disclaims the word "Soy" apart from the mark as shown.

For Commercial Feeds for Livestock.
Claims use since Jan. 30, 1932.

Ser. No. 327,975. ROBERT W. FUHR, New Orleans, La. Filed June 14, 1932.

Fuhr's CREOLE PEEKAHN PASTE

The words "Peekahn Paste" are disclaimed apart from the other features of the mark shown on the drawing.

For Nut Paste for Making Macaroons, Cakes, Pies, and Candy.
Claims use since May 2, 1932.

Ser. No. 327,979. HOFFMANN-HAYMAN COFFEE CO., San Antonio, Tex. Filed June 14, 1932.

Crystalure

H AND H BLEND Coffee

No claim is made to the words "Re-Usable Crystal Jar", "Blend", or "Coffee" apart from the mark as shown.

For Coffee.
Claims use since Apr. 1, 1932.

Ser. No. 330,415. S. J. BARON CORPORATION, New York, N. Y. Filed Sept. 17, 1932.

CHOCOLATE GRAN-DE-TONE

Applicant disclaims the word "Chocolate" apart from the mark as shown.

For Flavorings for Foods.
Claims use since Aug 24, 1932.

Ser. No. 330,512. GOLDBERG, BOWEN & CO., San Francisco, Calif. Filed Sept. 20, 1932.

Hawaiian Beauty

For Coffee.
Claims use since Oct. 11, 1902.

Ser. No. 330,647. THE AMERICAN DIAMALT COMPANY, Cincinnati, Ohio. Filed Sept. 26, 1932.

"OLE"

Although the main body or background of the trade-mark as shown has customarily been printed in olive brown and surrounded by a border of orange the lines shown in the drawing are not intended to be restrictively indicative of any particular colors.

For Malt Syrup.
Claims use since Sept. 1, 1919.

Ser. No. 330,781. MARY CICCARELLI, doing business as East Boston Sugar Cone Co., East Boston, Mass. Filed Sept. 29, 1932.

E. B. S. CONE

No claim is made to the word "Cone" apart from the mark as shown on the drawing.

For Ice Cream Cones.
Claims use since June 6, 1932.

Ser. No. 330,918. BALZAC BROS. & COMPANY, INC., New York, N. Y. Filed Oct. 4, 1932.

SUPERBUC

For Coffee.
Claims use since April, 1927.

Ser. No. 330,966. GEORGE T. PARR, Minneapolis, Minn. Filed Oct. 5, 1932.

LOTS A POPS

For Confections and Frozen Confections.
Claims use since July 9, 1931.

Ser. No. 331,138. CAMARILLO CITRUS ASSOCIATION, Camarillo, Calif. Filed Oct. 11, 1932.

VENTURA FORCE

For Fresh Citrus Fruits.
Claims use since Aug. 31, 1932.

Ser. No. 331,139. CAMARILLO CITRUS ASSOCIATION, Camarillo, Calif. Filed Oct. 11, 1932.

VENTURA HABIT

For Fresh Citrus Fruits.
Claims use since Aug. 30, 1932.

Ser. No. 331,140. CAMARILLO CITRUS ASSOCIATION, Camarillo, Calif. Filed Oct. 11, 1932.

VENTURA LIFE

For Fresh Citrus Fruits.
Claims use since Aug. 30, 1932.

Ser. No. 331,141. CAMARILLO CITRUS ASSOCIATION, Camarillo, Calif. Filed Oct. 11, 1932.

VENTURA VITAL

For Fresh Citrus Fruits.
Claims use since Aug. 31, 1932.

Ser. No. 331,155. LA VERNE ORANGE ASSOCIATION, La Verne, Calif. Filed Oct. 11, 1932.

LA VERNE RANCHO

For Fresh Citrus Fruits.
Claims use since Aug. 5, 1922.

Ser. No. 331,161. MOR-PAK PRESERVING CORPORATION, Stockton, Calif. Filed Oct. 11, 1932.

BLAZE O' GOLD

For Canned Fruits.
Claims use since July 20, 1932.

Ser. No. 331,168. UNITED GROCERS, LTD., San Francisco, Calif. Filed Oct. 11, 1932.

CROWN PRINCE

For Dog and Cat Food.
Claims use since Aug. 15, 1932.

Ser. No. 331,391. POLO PRODUCTS COMPANY, Chicago, Ill. Filed Oct. 17, 1932.

Polo

For Dressed Poultry.
Claims use since Sept. 1, 1932.

Ser. No. 331,427. JOSEPH J. ETTOR, Modesto, Calif. Filed Oct. 21, 1932.

REPEAL

For Fresh Grapes.
Claims use since Oct. 4, 1932.

Ser. No. 331,489. PINNACLE PACKING COMPANY, INC., Medford, Oreg. Filed Oct. 21, 1932.

401

For Fresh Deciduous Fruits.
Claims use since Aug. 19, 1931.

Ser. No. 331,453. BIEDERMANN BROTHERS, INC., Chicago, Ill. Filed Oct. 22, 1932.

Fine Cup

For Coffee.
Claims use since Mar. 12, 1930.

CLASS 47

Wines

Ser. No. 331,551. JOHN HARVEY & SONS, LIMITED, Bristol, England. Filed Oct. 25, 1932.

BRISTOL CREAM

For Sherry Wine.
Claims use since Feb. 9, 1886.

Ser. No. 331,566. SOCIEDADE DOS VINHOS DO PORTO CONSTANTINO, LTD. A, Villa Nova, de Gaya, Portugal. Filed Oct. 25, 1932.

Constantino

For Wines.
Claims use since 1897.

CLASS 48

Malt Beverages and Liquors

Ser. No. 331,592. PREMIER MALT PRODUCTS Co., Peoria Heights, Ill. Filed Oct. 26, 1932.

PREMIER

For Malt Beverage Containing Less than One-half of One Per Cent Alcohol by Volume.
Claims use since Sept. 17, 1932.

CLASS 49

Distilled Alcoholic Liquors

Ser. No. 329,629. JOHN DEWAR & SONS LIMITED, Perth, Scotland, and London, England. Filed Aug. 18, 1932.

The Victoria Vat

The very finest Old Scotch Whisky

John Dewar & Sons Ltd.
Distillers Perth, Scotland

No claim is made to any of the matter appearing on the drawing with the exception of the words "The Victoria Vat".
For Whiskey.
Claims use since 1897.

CLASS 50

Merchandise Not Otherwise Classified

Ser. No. 321,707. JOSEPH KOENIG, Philadelphia, Pa. Filed Dec. 2, 1931.



The lining of the drawing is intended to indicate shading only. The words "The Best Fly Catcher" are disclaimed apart from the mark, as shown in the drawing.
For Sticky Fly Paper.
Claims use since June 23, 1931.

TRADE-MARK REGISTRATIONS GRANTED

[ACT OF FEBRUARY 20, 1905]

NOVEMBER 29, 1932

299,262. INCINERATORS, INCINERATOR PARTS, AND HOPPER DOORS FOR INCINERATOR FLUES. EDWIN SARGENT, doing business as Sargent Building Specialties Co., New York, N. Y.
Filed December 15, 1931. Serial No. 322,139. PUBLISHED SEPTEMBER 13, 1932. Class 34.

299,263. HEAT GENERATORS OF THE GRAVITY-FEED TYPE FOR BURNING SOLID FUEL FOR DOMESTIC FURNACES, HEATING BOILERS, AND INDUSTRIAL FURNACES AND PARTS THEREOF. BE TH U CORPORATION, Salt Lake City, Utah.
Filed December 21, 1931. Serial No. 322,305. PUBLISHED SEPTEMBER 13, 1932. Class 34.

299,264. RAZORS, AND PARTICULARLY THE SO-CALLED SAFETY-RAZOR. PELLAR-BAZELON, Chicago, Ill.
Filed January 16, 1932. Serial No. 323,094. PUBLISHED SEPTEMBER 13, 1932. Class 23.

299,265. BLANKETS MADE OF COTTON OR COTTON AND WOOL. BEACON MANUFACTURING COMPANY, New Bedford, Mass.
Filed January 21, 1932. Serial No. 323,220. PUBLISHED SEPTEMBER 6, 1932. Class 42.

299,266. COAL OR ORE CLEANING OR CONCENTRATING APPARATUS. KOPPERS-RHEOLAVEUR COMPANY, Pittsburgh, Pa.
Filed February 4, 1932. Serial No. 323,819. PUBLISHED SEPTEMBER 13, 1932. Class 23.

299,267. COAL OR ORE CLEANING OR CONCENTRATING APPARATUS. KOPPERS-RHEOLAVEUR COMPANY, Pittsburgh, Pa.
Filed February 4, 1932. Serial No. 323,820. PUBLISHED SEPTEMBER 13, 1932. Class 23.

299,268. HAIR CLOTH INTERLINING IN THE PIECE. ANDREW Y. MICHIE & SONS, INC., Philadelphia, Pa.
Filed February 15, 1932. Serial No. 324,182. PUBLISHED SEPTEMBER 6, 1932. Class 42.

299,269. VENTILATING AND EXHAUST FANS AND BLOWERS. JOHN T. BELANGER, doing business as Belanger Fan & Blower Company, Detroit, Mich.
Filed February 15, 1932. Serial No. 324,208. PUBLISHED SEPTEMBER 13, 1932. Class 34.

299,270. LIQUID FLOOR POLISH. HILLYARD CHEMICAL COMPANY, St. Joseph, Mo.
Filed February 26, 1932. Serial No. 324,517. PUBLISHED SEPTEMBER 13, 1932. Class 16.

299,271. ELECTRIC COIL MAKING AND ASSEMBLING MACHINERY—NAMELY, WINDING MACHINES, WRAPPING MACHINES, STRIPPING MACHINES, POSITIONING MACHINES. LIBERTY STARTER COMPANY, Detroit, Mich., assignor to Delco-Remy Corporation, Anderson, Ind., a Corporation of Delaware.
Filed March 2, 1932. Serial No. 324,715. PUBLISHED SEPTEMBER 20, 1932. Class 23.

299,272. WOOLEN PIECE GOODS. FORSTMANN WOOLEN CO., Passaic, N. J.
Filed July 21, 1932. Serial No. 328,953. PUBLISHED SEPTEMBER 6, 1932. Class 42.

299,273. TURPENTINE AND LINSEED OIL. WILLIAM GRAHAM & COMPANY, Baltimore, Md.
Filed July 22, 1932. Serial No. 328,987. PUBLISHED SEPTEMBER 13, 1932. Class 16.

299,274. MAKE-UP LAMP-STANDS. SANDEL MANUFACTURING CO., Chicago, Ill.
Filed July 22, 1932. Serial No. 328,997. PUBLISHED SEPTEMBER 13, 1932. Class 32.

299,275. LACQUER SOLVENT. STANCO INCORPORATED, Wilmington, Del., and New York, N. Y.
Filed July 25, 1932. Serial No. 329,064. PUBLISHED SEPTEMBER 13, 1932. Class 16.

299,276. HONEY FLAVORED POPCORN. PETER FRANKE, West Haven, Conn.
Filed July 21, 1931. Serial No. 317,166. PUBLISHED SEPTEMBER 13, 1932. Class 46.

299,277. FILES AND RASPS. C. O. ÖBERG & CO:S AKTIEBOLAG, Eskilstuna, Sweden.
Filed July 27, 1931. Serial No. 317,368. PUBLISHED SEPTEMBER 13, 1932. Class 23.

299,278. WOOLEN PIECE GOODS. FORSTMANN & HUFFMANN COMPANY, Passaic, N. J.
Filed August 18, 1931. Serial No. 317,928. PUBLISHED AUGUST 23, 1932. Class 42.

299,279. TOMATO JUICE. CARNATION COMPANY, Wilmington, Del., and Milwaukee, Wis.
Filed September 30, 1931. Serial No. 319,566. PUBLISHED APRIL 19, 1932. Class 46.

299,280. A HORSE RACING GAME PLAYED WITH PICTURES, A BANKER AND COLORED MARBLES. ELEANOR F. KLAUBER, doing business as Klauber Novelty Co., Chicago, Ill.
Filed October 28, 1931. Serial No. 320,546. PUBLISHED DECEMBER 15, 1931. Class 22.

299,281. WEIGHING SCALES. DAVID C. ROCKOLA, Chicago, Ill.
Filed November 18, 1931. Serial No. 321,258. PUBLISHED SEPTEMBER 13, 1932. Class 26.

299,282. A TABLE BOARD GAME PLAYED WITH DICE AND PIECES. CLUFF COVER COMPANY, INC., New York, N. Y.
Filed November 27, 1931. Serial No. 321,526. PUBLISHED FEBRUARY 2, 1932. Class 22.

299,283. LIQUID WAX BEING A FINISHING MATERIAL FOR WOODEN COMPOSITION FLOORS, FURNITURE, AND WOODWORK. HENRY SCHEIBEL, doing business as Newco Co., Mount Vernon, N. Y., assignor to Newco Manufacturing Corporation, Mount Vernon, N. Y., a Corporation of New York.
Filed December 4, 1931. Serial No. 321,782. PUBLISHED SEPTEMBER 20, 1932. Class 16.

299,284. COAL. YORK AND COMPANY, Grand Rapids, Mich.
Filed December 11, 1931. Serial No. 322,035. PUBLISHED SEPTEMBER 13, 1932. Class 1.

299,285. FURNITURE POLISH. GRAND RAPIDS FURNITURE POLISH CO., Grand Rapids, Mich.
Filed July 20, 1932. Serial No. 328,916. PUBLISHED SEPTEMBER 13, 1932. Class 16.

299,286. DRAPERY AND UPHOLSTERY FABRICS MADE OF COTTON, SILK, LINEN, AND WOOL. MILLER BROTHERS, New York, N. Y.
Filed May 14, 1932. Serial No. 327,105. PUBLISHED SEPTEMBER 6, 1932. Class 42.

299,287. READY MIXED PAINTS, PAINT OILS, PREPARED SHELLAC, TURPENTINE, VARNISHES, AND WHITE LEAD AND RED LEAD FOR USE AS PIGMENTS. MONTAUK PAINT & WALL PAPER CO., Brooklyn, N. Y.
Filed April 28, 1932. Serial No. 326,626. PUBLISHED SEPTEMBER, 13, 1932. Class 16.

299,288. FLOOR POLISH. ROBERT HORMATS, doing business as Universal Chemical Company, Baltimore, Md.
Filed April 21, 1932. Serial No. 326,346. PUBLISHED SEPTEMBER 13, 1932. Class 16.

299,289. PAINTS AND UNDERCOATS. S. C. JOHNSON & SON, Racine, Wis.
Filed March 30, 1932. Serial No. 325,659. PUBLISHED SEPTEMBER 20, 1932. Class 16.

299,290. OPTHALMIC LENSES. RENAUD OPTICAL COMPANY, INC., Petersburg, Va.
Filed August 9, 1932. Serial No. 329,429. PUBLISHED SEPTEMBER 20, 1932. Class 26.

299,291. RAZOR BLADES. HEPPENSTALL COMPANY, Pittsburgh, Pa.
Filed August 8, 1932. Serial No. 329,308. PUBLISHED SEPTEMBER 20, 1932. Class 23.

299,292. RAZOR BLADES. HEPPENSTALL COMPANY, Pittsburgh, Pa.
Filed August 3, 1932. Serial No. 329,309. PUBLISHED SEPTEMBER 20, 1932. Class 23.

299,293. AUTOMATIC TAPING MACHINES. SAMUEL R. BURNS, Newark, N. J.
Filed July 30, 1932. Serial No. 329,220. PUBLISHED SEPTEMBER 13, 1932. Class 23.

299,294. BALL AND ROLLER BEARINGS. ASHER GOLDEN, New York, N. Y.
Filed July 29, 1932. Serial No. 329,215. PUBLISHED SEPTEMBER 13, 1932. Class 23.

299,295. MACHINE SCREWS AND THREADED METAL PLUGS HAVING SOCKETED HEAD ENDS. THE ALLEN MANUFACTURING COMPANY, Hartford, Conn.
Filed July 22, 1932. Serial No. 328,971. PUBLISHED SEPTEMBER 13, 1932. Class 13.

299,296. OIL FILTERS OF THE TYPE USED AS AN ACCESSORY TO INTERNAL COMBUSTION ENGINES AND THE LIKE. DIESEL FILTER CO., INC., Astoria, Oreg.
Filed July 20, 1932. Serial No. 328,915. PUBLISHED SEPTEMBER 13, 1932. Class 23.

299,297. GRAPH CALCULATING DEVICES. ALBERT F. SHORE, Jamaica, N. Y.
Filed July 19, 1932. Serial No. 328,895. PUBLISHED SEPTEMBER 13, 1932. Class 26.

299,298. GAUGES. UNITED STATES GAUGE COMPANY, New York, N. Y.
Filed June 30, 1932. Serial No. 328,455. PUBLISHED SEPTEMBER 20, 1932. Class 26.

299,299. GAUGES. UNITED STATES GAUGE COMPANY, New York, N. Y.
Filed June 30, 1932. Serial No. 328,454. PUBLISHED SEPTEMBER 20, 1932. Class 26.

299,300. CAMERAS AND CAMERA PARTS. PHOTO MARKETING CORPORATION, New York, N. Y.
Filed June 11, 1932. Serial No. 327,918. PUBLISHED SEPTEMBER 13, 1932. Class 26.

299,301. OIL BURNERS FOR DOMESTIC AND COMMERCIAL HEATING AND COOKING PURPOSES. MOTOR WHEEL CORPORATION, Lansing, Mich.
Filed June 8, 1932. Serial No. 327,827. PUBLISHED SEPTEMBER 13, 1932. Class 34.

299,302. VENTILATORS, PARTICULARLY VENTILATORS FOR WINDOWS AND WALLS OF BUILDINGS EACH HAVING A FAN FOR PROPELLING A CURRENT OF AIR THERETHROUGH. FRED'K N. ROSS INC., Detroit, Mich.
Filed May 26, 1932. Serial No. 327,479. PUBLISHED SEPTEMBER 20, 1932. Class 34.

299,303. PRINTER'S ROLLERS, COMPOSITION COATED ROLLERS, OFFSET AND LITHOGRAPH ROLLERS, ROTOGRAVURE ROLLERS, AND RUBBER ROLLERS. RAPID ROLLER COMPANY, Chicago, Ill.
Filed May 12, 1932. Serial No. 327,026. PUBLISHED SEPTEMBER 13, 1932. Class 23.

299,304. TAILORED VEHICLE SEAT COVERS AND SEAT PADS. THE WEDLER-SHUFORD CO., St. Louis, Mo.
Filed March 21, 1932. Serial No. 325,858. PUBLISHED SEPTEMBER 20, 1932. Class 32.

299,305. TOOL KITS FOR HAND TOOLS SUCH FOR EXAMPLE, AS A WRENCH, PLIERS, SCREW DRIVER, AND THE LIKE. CRESCENT TOOL COMPANY, Jamestown, N. Y.
Filed March 19, 1932. Serial No. 325,284. PUBLISHED SEPTEMBER 13, 1932. Class 23.

299,306. SOLE LEATHER. THE CAMDEN TANNING CO. LIMITED, Runcorn, England.
Filed July 29, 1932. Serial No. 329,176. PUBLISHED SEPTEMBER 13, 1932. Class 1.

299,307. FERTILIZER. ELBERT A. CORBIN, JR., Gradyville, Pa.
Filed July 30, 1932. Serial No. 329,222. PUBLISHED SEPTEMBER 20, 1932. Class 10.

299,308. FARM, GARDEN, AND FLOWER SEEDS. ISBELL SEED COMPANY, Jackson, Mich.
Filed July 5, 1932. Serial No. 328,591. PUBLISHED SEPTEMBER 20, 1932. Class 1.

299,309. CUT FLOWERS. THE MIDDLE ATLANTIC CARNATION GROWERS ASSOCIATION, Lancaster, Pa.
Filed July 7, 1932. Serial No. 328,615. PUBLISHED SEPTEMBER 13, 1932. Class 1.

299,310. RUBBER BASES DESIGNED FOR APPLICATION TO TELEPHONES, TO PREVENT SLIDING OF TELEPHONE TABLE OR DESK INSTRUMENTS. ANCHOR SALES COMPANY, Los Angeles, Calif.
Filed June 29, 1932. Serial No. 328,390. PUBLISHED SEPTEMBER 20, 1932. Class 50.

299,311. CHEMICAL FERTILIZER USED FOR AGRICULTURAL AND HORTICULTURAL PURPOSES. THE CONSOLIDATED MINING AND SMELTING COMPANY OF CANADA, LIMITED, Trail, British Columbia, Canada.
Filed June 23, 1932. Serial No. 328,238. PUBLISHED SEPTEMBER 13, 1932. Class 10.

299,312. TUBULAR METAL BENDS, OF WROUGHT METAL IN THE ROUGH OR SEMI-FINISHED. PITTSBURGH PIPING AND EQUIPMENT CO., Pittsburgh, Pa.
Filed June 21, 1932. Serial No. 328,183. PUBLISHED SEPTEMBER 20, 1932. Class 14.

299,313. CIGARS. M. MARSH & SON, INC., Wheeling, W. Va.
Filed June 21, 1932. Serial No. 328,178. PUBLISHED SEPTEMBER 13, 1932. Class 17.

299,314. BOOT TREES. WILLIAM OTTO WEISKOTTEN, doing business as Equitation Specialty Co., San Diego, Calif.
Filed June 20, 1932. Serial No. 328,150. PUBLISHED SEPTEMBER 20, 1932. Class 50.

299,315. BOOT TREES. WILLIAM OTTO WEISKOTTEN, doing business as Equitation Specialty Co., San Diego, Calif.
Filed June 20, 1932. Serial No. 328,149. PUBLISHED SEPTEMBER 20, 1932. Class 50.

299,316. LIVE BIRDS. BIRD HAVEN, Reseda, Calif.
Filed June 15, 1932. Serial No. 327,999. PUBLISHED SEPTEMBER 13, 1932. Class 1.

299,317. PASTE AND MUCILAGE APPLYING BRUSHES. THE AMERICAN CRAYON COMPANY, Sandusky, Ohio.
Filed June 10, 1932. Serial No. 327,862. PUBLISHED SEPTEMBER 13, 1932. Class 29.

299,318. TOOTHBRUSHES. JOHNSON & JOHNSON, New Brunswick, N. J.
Filed July 12, 1932. Serial No. 328,732. PUBLISHED SEPTEMBER 13, 1932. Class 29.

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299,319. CHAMOIS SKINS. HOWARD W. SAGER, Topeka, Kans.
Filed May 21, 1932. Serial No. 327,322. PUBLISHED SEPTEMBER 13, 1932. Class 1.

299,320. PAINT AND VARNISH BRUSHES. THE WOOSTER BRUSH COMPANY, Wooster, Ohio.
Filed May 16, 1932. Serial No. 327,178. PUBLISHED SEPTEMBER 20, 1932. Class 29.

299,321. COLLECTORS' KITS WHICH CONTAIN ALL IMPLEMENTS NECESSARY IN THE COLLECTION AND MOUNTING OF BUTTERFLIES, INSECTS, AND SIMILAR OBJECTS. STANDARD SCIENTIFIC SUPPLY CORPORATION, New York, N. Y.
Filed April 7, 1932. Serial No. 325,981. PUBLISHED SEPTEMBER 13, 1932. Class 50.

299,322. PORCELAIN ENAMELED TABLES AND TABLE TOPS, PORCELAIN ENAMELED KITCHEN CABINETS, PORCELAIN ENAMELED DISPLAY CASES, AND PORCELAIN ENAMELED SLIDES AND SHELVES FOR CABINETS. TENNESSEE ENAMEL MANUFACTURING COMPANY, Nashville, Tenn.
Filed August 12, 1932. Serial No. 329,513. PUBLISHED SEPTEMBER 20, 1932. Class 32.

299,323. PORCH SHADES. HOUGH SHADE CORPORATION, Janesville, Wis.
Filed August 10, 1932. Serial No. 329,447. PUBLISHED SEPTEMBER 13, 1932. Class 32.

299,324. READY-MIXED PAINT. CHIPMAN CHEMICAL COMPANY, INC., Bound Brook, N. J.
Filed August 1, 1932. Serial No. 329,256. PUBLISHED SEPTEMBER 20, 1932. Class 16.

299,325. LIQUID FLOOR WAX. HILLYARD CHEMICAL COMPANY, St. Joseph, Mo.
Filed July 28, 1932. Serial No. 329,143. PUBLISHED SEPTEMBER 13, 1932. Class 16.

299,326. PIECE GOODS OF SILK, RAYON, COTTON, AND WOOL AND MIXTURES OF THESE MATERIALS. F. DUCHARME SILK CO. INC., New York, N. Y.
Filed July 15, 1932. Serial No. 328,810. PUBLISHED SEPTEMBER 6, 1932. Class 42.

299,327. LACQUERS, PAINT THINNERS AND/OR LACQUER THINNERS. THE ZAPON COMPANY, Wilmington, Del.
Filed July 15, 1932. Serial No. 328,861. PUBLISHED SEPTEMBER 13, 1932. Class 16.

299,328. PILE FABRICS IN THE PIECE. SIDNEY BLUMENTHAL & CO. INC., New York, N. Y.
Filed July 19, 1932. Serial No. 328,884. PUBLISHED AUGUST 30, 1932. Class 42.

299,329. WRITING AND PRINTING PAPER. STRATHMORE PAPER COMPANY, West Springfield, Mass.
Filed August 9, 1932. Serial No. 329,433. PUBLISHED SEPTEMBER 20, 1932. Class 37.

299,330. MONTHLY PUBLICATION. THE SIMMONS MANUFACTURING CO., Cleveland, Ohio.
Filed August 6, 1932. Serial No. 329,387. PUBLISHED SEPTEMBER 13, 1932. Class 38.

299,331. NEWSPAPER SECTION. KING FEATURES SYNDICATE, INC., New York, N. Y.
Filed August 8, 1932. Serial No. 329,312. PUBLISHED SEPTEMBER 20, 1932. Class 38.

299,332. WRITING AND PRINTING PAPERS. CHEMICAL PAPER MANUFACTURING COMPANY, Holyoke, Mass.
Filed August 3, 1932. Serial No. 329,303. PUBLISHED SEPTEMBER 13, 1932. Class 37.

299,333. MACHINERY FOR DRY CLEANING OF FABRICS. RHODES-PERRY-MARTIN, INC., St. Louis, Mo.
Filed July 29, 1932. Serial No. 329,201. PUBLISHED SEPTEMBER 20, 1932. Class 24.

299,334. PLYWOOD. AIRCRAFT PLYWOOD CORPORATION, Seattle, Wash.
Filed July 25, 1932. Serial No. 329,036. PUBLISHED SEPTEMBER 6, 1932. Class 12.

299,335. LOCKS. DUDLEY LOCK CORPORATION, Chicago, Ill.
Filed July 22, 1932. Serial No. 328,980. PUBLISHED SEPTEMBER 13, 1932. Class 25.

299,336. SOUR CREAM, DRIED SKIM MILK, CHOCOLATE MILK, BUTTERMILK, AND COTTAGE CHEESE. DAIRYMAN'S LEAGUE CO-OPERATIVE ASSOCIATION, INC., Utica and New York, N. Y.
Filed July 21, 1932. Serial No. 328,969. PUBLISHED SEPTEMBER 13, 1932. Class 46.

299,337. WRAPPING PAPER. FOIL PRODUCTS CORPORATION, New York, N. Y.
Filed July 19, 1932. Serial No. 328,888. PUBLISHED SEPTEMBER 20, 1932. Class 37.

299,338. PORTLAND CEMENT. DEWEY PORTLAND CEMENT COMPANY, Kansas City, Mo.
Filed July 18, 1932. Serial No. 328,866. PUBLISHED SEPTEMBER 6, 1932. Class 12.

299,339. FACE POWDER. BOURJOIS, INC., New York, N. Y.
Filed July 16, 1932. Serial No. 328,836. PUBLISHED SEPTEMBER 27, 1932. Class 6.

299,340. FABRICS MADE WHOLLY OR PARTIALLY OF CELLULOSE DERIVATIVES. CELANESE CORPORATION OF AMERICA, New York, N. Y.
Filed July 14, 1932. Serial No. 328,777. PUBLISHED AUGUST 23, 1932. Class 42.

299,341. FABRICS MADE WHOLLY OR PARTIALLY OF CELLULOSE DERIVATIVES. CELANESE CORPORATION OF AMERICA, New York, N. Y.
Filed July 14, 1932. Serial No. 328,776. PUBLISHED AUGUST 23, 1932. Class 42.

299,342. PIECE GOODS MADE OF CELLULOSE YARNS. COURTAULDS, LIMITED, London, England.
Filed July 12, 1932. Serial No. 328,726. PUBLISHED AUGUST 23, 1932. Class 42.

299,343. PIECE GOODS MADE OF CELLULOSE YARNS. COURTAULDS, LIMITED, London, England.
Filed July 12, 1932. Serial No. 328,725. PUBLISHED AUGUST 23, 1932. Class 42.

299,344. PIECE GOODS COMPOSED WHOLLY OR IN PART OF HAIR, SILK, RAYON, COTTON, HEMP, FLAX, JUTE, ALPHA FIBRE, ALOE FIBRE, VEGETABLE FIBRE, OR MIXTURES THEREOF. BIANCHINI, FÉRIER, Lyon, France.
Filed July 9, 1932. Serial No. 328,658. PUBLISHED AUGUST 23, 1932. Class 42.

299,345. OLEOMARGARINE, EVAPORATED MILK, MAYONNAISE, SALAD DRESSING, SANDWICH SPREAD, FRENCH DRESSING, AND THOUSAND ISLAND DRESSING. JOHN F. JELKE COMPANY, Chicago, Ill.
Filed June 27, 1932. Serial No. 328,331. PUBLISHED SEPTEMBER 20, 1932. Class 46.

299,346. CHOCOLATE MALT POWDER PREPARATIONS FOR MAKING OR FLAVORING FOOD BEVERAGES. GENERAL DESSERTS CORPORATION, New York, N. Y.
Filed June 20, 1932. Serial No. 328,289. PUBLISHED SEPTEMBER 13, 1932. Class 46.

299,347. PAPER NAPKINS, FACIAL TOWELS, TISSUES, AND TOILET PAPER. FANNIE GUSMAN, doing business as Mary Ann Tissue Mills Company, Brooklyn, N. Y.
Filed May 25, 1932. Serial No. 327,435. PUBLISHED SEPTEMBER 20, 1932. Class 37.

299,348. HANDBAGS. MYRON BAG CO., INC., New York, N. Y.
Filed May 19, 1932. Serial No. 327,254. PUBLISHED SEPTEMBER 20, 1932. Class 3.

299,349. CORRESPONDENCE AND MAILING ENVELOPES. FRANK FISCHER, Whiting, Ind.
Filed May 12, 1932. Serial No. 327,083. PUBLISHED SEPTEMBER 20, 1932. Class 37.

299,350. CANNED VEGETABLES, CANNED FRUITS, CANNED BERRIES, CANNED PORK AND BEANS, CANNED CRANBERRIES, CANNED APPLESAUCE, CANNED SAUER KRAUT, CANNED SUCCOTASH, COCKTAIL SAUCE, CATSUP, CHILI SAUCE, TOMATO JUICE, KRAUT COCKTAIL, TOMATO JUICE COCKTAIL AND VINEGAR, CANNED SOUPS, SPAGHETTI, SALAD DRESSING, AND FRUIT PRESERVES. SNIDER PACKING CORPORATION, Rochester, N. Y., now by change of name Snider Liquidating Company, Inc., assignor to Snider Packing Corporation, a Corporation of New York.
Filed April 21, 1932. Serial No. 326,343. PUBLISHED SEPTEMBER 13, 1932. Class 46.

299,351. TEXTILE SHEETS. PEPPERELL MANUFACTURING COMPANY, Boston, Mass.
Filed July 20, 1932. Serial No. 328,925. PUBLISHED SEPTEMBER 6, 1932. Class 42.

299,352. WOOLEN PIECE GOODS. FORSTMANN WOOLEN CO., Passaic, N. J.
Filed July 21, 1932. Serial No. 328,935. PUBLISHED SEPTEMBER 6, 1932. Class 42.

299,353. WOOLEN PIECE GOODS. FORSTMANN WOOLEN CO., Passaic, N. J.
Filed July 21, 1932. Serial No. 328,937. PUBLISHED SEPTEMBER 6, 1932. Class 42.

299,354. WOOLEN PIECE GOODS. FORSTMANN WOOLEN CO., Passaic, N. J.
Filed July 21, 1932. Serial No. 328,939. PUBLISHED AUGUST 30, 1932. Class 42.

299,355. WOOLEN PIECE GOODS. FORSTMANN WOOLEN CO., Passaic, N. J.
Filed July 21, 1932. Serial No. 328,940. PUBLISHED AUGUST 30, 1932. Class 42.

299,356. WOOLEN PIECE GOODS. FORSTMANN WOOLEN CO., Passaic, N. J.
Filed July 21, 1932. Serial No. 328,948. PUBLISHED SEPTEMBER 6, 1932. Class 42.

299,357. WOOLEN PIECE GOODS. FORSTMANN WOOLEN CO., Passaic, N. J.
Filed July 21, 1932. Serial No. 328,942. PUBLISHED AUGUST 30, 1932. Class 42.

299,358. WOOLEN PIECE GOODS. FORSTMANN WOOLEN CO., Passaic, N. J.
Filed July 21, 1932. Serial No. 328,950. PUBLISHED SEPTEMBER 6, 1932. Class 42.

299,359. WOOLEN PIECE GOODS. FORSTMANN WOOLEN CO., Passaic, N. J.
Filed July 21, 1932. Serial No. 328,949. PUBLISHED SEPTEMBER 6, 1932. Class 42.

299,360. WOOLEN PIECE GOODS. FORSTMANN WOOLEN CO., Passaic, N. J.
Filed July 21, 1932. Serial No. 328,952. PUBLISHED SEPTEMBER 6, 1932. Class 42.

299,361. CIGARETTE PAPER, CUT, UNCUT, AND IN BOOKS OR PACKAGES. LIGGETT & MYERS TOBACCO COMPANY, New York, N. Y.
Filed March 7, 1932. Serial No. 324,844. PUBLISHED SEPTEMBER 13, 1932. Class 8.

299,362. PRINTED CARDS AND CARDBOARD SIGNS. JOHN A. BAXTER, Cambridge, Ohio.
Filed January 29, 1930. Serial No. 295,326. PUBLISHED SEPTEMBER 13, 1932. Class 38.

299,363. HOPS. J. SONNENSCHEIN HOP CO. INC., New York, N. Y.
Filed April 17, 1930. Serial No. 299,022. PUBLISHED SEPTEMBER 13, 1932. Class 1.

299,364. TOURING MAPS. FRED G. KNAPP, Lakewood, Ohio.
Filed October 29, 1930. Serial No. 307,840. PUBLISHED JUNE 28, 1931. Class 38.

299,365. CHINAWARE. MAYER CHINA COMPANY, Beaver Falls, Pa.
Filed March 2, 1931. Serial No. 311,617. PUBLISHED SEPTEMBER 13, 1932. Class 30.

299,366. WEIGHING SCALES. LINCOLN SCALE CORPORATION, Latrobe, Pa.
Filed March 24, 1931. Serial No. 312,484. PUBLISHED SEPTEMBER 13, 1932. Class 26.

299,367. CANNED TUNA. COAST FISHING CO., Wilmington, Calif.
Filed June 23, 1931. Serial No. 316,150. PUBLISHED SEPTEMBER 20, 1932. Class 46.

299,368. SOUND PICTURE APPARATUS—NAMELY, APPARATUS AND PARTS THEREOF FOR RECORDING AND REPRODUCING IN COMBINATION WITH SOUND AND LIGHT EFFECTS. GENERAL TALKING PICTURES CORPORATION, New York, N. Y.
Filed June 29, 1931. Serial No. 316,426. PUBLISHED SEPTEMBER 13, 1932. Class 26.

299,369. METAL MILK BOTTLE CAPS. ROBERT E. BRIGSTOCK, Battle Creek, Mich.
Filed June 30, 1931. Serial No. 316,545. PUBLISHED OCTOBER 18, 1931. Class 50.

299,370. WIDE KNITTED, WOVEN, AND BRAIDED ELASTIC FABRICS. THE ANSONIA O & C COMPANY, Ansonia, Conn.
Filed January 20, 1932. Serial No. 323,184. PUBLISHED AUGUST 23, 1932. Class 42.

299,371. VARNISHES, PAINT ENAMELS, STAINS, AND READY-MIXED PAINTS. BOSTON VARNISH COMPANY, Everett, Mass.
Filed July 6, 1932. Serial No. 328,574. PUBLISHED SEPTEMBER 13, 1932. Class 16.

299,372. PREPARED PAINTS, SEMI-PASTE PAINTS, PAINT AND ENAMEL FINISHES, PASTE PAINTS, PAINT DRYERS, VARNISHES, UNDERCOATERS, FLAT PAINTS, GLOSS PAINTS, VARNISH OILS, PAINT ENAMELS, PAINT REDUCERS, PAINT THINNERS, STAINS, COLORS IN OIL, PAINT AND VARNISH REMOVERS, AND PRIMERS. ACME WHITE LEAD & COLOR WORKS, Detroit, Mich.
Filed July 11, 1932. Serial No. 328,772. PUBLISHED SEPTEMBER 13, 1932. Class 16.

299,373. TEXTILE FABRICS OF SILK ONLY AND PIECE GOODS MADE OF SILK. PRINCESS FABRICS CO. INC., New York, N. Y.
Filed July 6, 1932. Serial No. 328,585. PUBLISHED SEPTEMBER 13, 1932. Class 42.

299,374. WOOL BLANKETS. PENDLETON WOOLEN MILLS, Portland, Oreg.
Filed July 14, 1932. Serial No. 328,799. PUBLISHED SEPTEMBER 13, 1932. Class 42.

[ACT OF MARCH 19, 1920, SEC. 1 (b).]

THESE REGISTRATIONS ARE NOT SUBJECT TO OPPOSITION

299,375. (CLASS 27. HOROLOGICAL INSTRUMENTS.) STANFORD PRODUCTS, LTD., San Francisco, Calif. Filed Sept. 12, 1931. Serial No. 319,000.

STANFORD

For Electric Clocks.
Claims use since Sept. 4, 1931.

299,376. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) MOORE GROCERY CO., Tyler, Tex. Filed Mar. 2, 1932. Serial No. 324,719.

Sledge's

The drawing is lined for red.
For Food Products—Namely, Coffee.
Claims use since Sept. 15, 1931.

299,377. (CLASS 34. HEATING, LIGHTING, AND VENTILATING APPARATUS, NOT INCLUDING ELECTRICAL APPARATUS.) NATIONAL ENAMELING & STAMPING COMPANY, Milwaukee, Wis. Filed Oct. 1, 1931. Serial No. 319,623.

X-CEL-ALL

For Woven Wicks.
Claims use since Sept. 22, 1931.

299,378. (CLASS 16. PAINTS AND PAINTERS' MATERIALS.) THE LOWE BROTHERS COMPANY, Dayton, Ohio. Filed Oct. 11, 1932. Serial No. 331,156.

SUPER-SEALER

For Primer and Sealer for Use on Plaster, Wall Board, Cement, and Brick.
Claims use since Nov. 6, 1930.

299,379. (CLASS 44. DENTAL, MEDICAL, AND SURGICAL APPLIANCES.) PAUL L. HEMP, doing business as Paul L. Hemp Company, Rochester, Minn. Filed Oct. 20, 1932. Serial No. 331,402.

HEMP

For Manually Operated Massaging Devices.
Claims use since Dec. 10, 1930.

299,380. (CLASS 1. RAW OR PARTLY-PREPARED MATERIALS.) FEDERAL STAR DYERS CORP., Brooklyn, N. Y. Filed Oct. 8, 1932. Serial No. 331,078.

SILVER BURGUNDY

For Dyed Fox Furs, Wolf Furs, and Lynx Furs.
Claims use since August, 1931.

299,381. (CLASS 49. DISTILLED ALCOHOLIC LIQUORS.) JOHN DEWAR & SONS LIMITED, Perth, Scotland, and London, England. Filed Aug. 18, 1932. Serial No. 329,627.

"Ne Plus Ultra"
The Very Finest
Scotch Whisky
OF GREAT AGE
Specially Reserved and Selected
BY
JOHN DEWAR & SONS LTD
PERTH,
SCOTLAND.
MADE IN SCOTLAND.

For Scotch Whisky.
Claims use since 1901.

299,382. (CLASS 42. KNITTED, NETTED, AND TEXTILE FABRICS.) BRANDLER-ROTH, INC., New York, N. Y. Filed July 20, 1932. Serial No. 328,910.

"no-sag-knit"

For Silk, Cotton, Rayon, Linen, Chints, Cretonne, Synthetic Fabric, and Mixed-Cloth Piece Goods.
Claims use since June, 1931.

299,383. (CLASS 21. ELECTRICAL APPARATUS, MACHINES, AND SUPPLIES.) THE STANDARD ELECTRIC STOVE COMPANY, Toledo, Ohio. Filed June 3, 1932. Serial No. 327,716.

Standard

For Electric Cook Stoves and Ranges.
Claims use since June, 1913.

299,384. (CLASS 50. MERCHANDISE NOT OTHERWISE CLASSIFIED.) STANTON MILLING & SALES COMPANY, LTD., Los Angeles, Calif., assignor to Atwater & Eddy, Wilmar, Calif., a Partnership composed of George B. Atwater and Wayne G. Eddy. Filed May 24, 1932. Serial No. 327,419.

KWIK-ON

For Leg Bands for Poultry and Birds.
Claims use since Oct. 1, 1931.

299,385. (CLASS 13. HARDWARE AND PLUMBING AND STEAM-FITTING SUPPLIES.) NORTHWESTERN BARB WIRE COMPANY, Sterling, Ill. Filed May 25, 1931. Serial No. 315,007.

NON SPLITZ

For Nails.
Claims use since May 2, 1931.

299,386. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) JOSEPH CARL ARENS, doing business as Stypticones (Not Incorporated), Chicago, Ill. Filed Dec. 21, 1931. Serial No. 322,349.

Stypticones

For Rectal Suppositories.
Claims use since Oct. 15, 1931.

299,387. (CLASS 21. ELECTRICAL APPARATUS, MACHINES, AND SUPPLIES.) ALL-AMERICAN MOHAWK CORPORATION, Chicago, Ill. Filed Dec. 10, 1931. Serial No. 321,979.

24-hour Self-Tuning

For Radio Receiving Sets and Component Parts Thereof Consisting of Loud Speakers, Transformers, Fixed and Variable Condensers, and Radio Television Receiving Sets.
Claims use since Aug. 29, 1930.

299,388. (CLASS 2. RECEPTACLES.) THE DETROIT STEEL BARREL COMPANY, Toledo, Ohio. Filed Oct. 30, 1931. Serial No. 320,685.

Ringlox

For Metallic Receptacles—Namely, Barrels, Drums, Shipping Tanks and Flasks and Closures Therefor.
Claims use since Oct. 19, 1931.

299,389. (CLASS 42. KNITTED, NETTED, AND TEXTILE FABRICS.) POWDRELL & ALEXANDER, INC., Danielson, Conn. Filed Oct. 10, 1931. Serial No. 319,941.

Statler

For Cotton Piece Goods and Curtains of Cotton, Linen, Silk, Rayon, and Combinations Thereof.
Claims use since March, 1931.

TRADE-MARK REGISTRATIONS RENEWED

86,371. DYES. Registered May 7, 1912. WALTER D. BAKER. Renewed May 7, 1932, to Ida S. Baker, Indianapolis, Ind., successor.

88,240. NESTABLE CORRUGATED CULVERTS. Registered September 10, 1912. THE CANTON CULVERT COMPANY, Canton, Ohio, a Corporation of Ohio. Renewed September 10, 1932.

88,752. RUBBER BOOTS, SHOES, OVERSHOES, AND RUBBER-SOLED CANVAS BOOTS AND SHOES. Registered October 22, 1912. HOOD RUBBER COMPANY, Boston, Mass. Renewed October 22, 1932, to Hood Rubber Company, Inc., Wilmington, Del., a Corporation of Delaware, assignee.

88,791. EVAPORATED MILK. Registered October 22, 1912. P. E. SHARPLESS COMPANY, Concordville and Philadelphia, Pa. Renewed October 22, 1932, to P. E. Sharpless Company, Philadelphia, Pa., a Corporation of Pennsylvania.

88,819. CERTAIN NAMED CLOTHING. Registered October 22, 1912. WOODING & TEASDALE, Leicester, England, a Firm. Renewed October 22, 1932.

88,939. ROLLED OATS, FLAKED WHEAT, AND GRANULATED WHEAT. Registered October 29, 1912. PACIFIC CEREAL ASSOCIATION, San Francisco, Calif. Renewed October 29, 1932, to Albers Bros., Milling Company, Portland, Oreg., a Corporation of Oregon, assignee.

88,970. BLENDED COFFEE. Registered October 29, 1912. ST. LOUIS COFFEE & SPICE MILLS, St. Louis, Mo., a Corporation of Missouri. Renewed October 29, 1932.

89,315. WRITING AND PRINTING PAPER AND BRISTOL-BOARD. Registered December 3, 1912. GEO. W. WHEELWRIGHT PAPER COMPANY, Boston, Mass. Renewed December 3, 1932, to Geo. W. Wheelwright Paper Company, Leominster, Mass., a Corporation of Massachusetts.

89,469. CORN-SHELLERS. Registered December 17, 1912. KING & HAMILTON CO., Ottawa, Ill., a Corporation of Illinois. Renewed December 17, 1932.

89,470. CORN-SHELLERS. Registered December 17, 1912. KING & HAMILTON CO., Ottawa, Ill., a Corporation of Illinois. Renewed December 17, 1932.

89,471. CORN-SHELLERS. Registered December 17, 1912. KING & HAMILTON CO., Ottawa, Ill., a Corporation of Illinois. Renewed December 17, 1932.

89,510. LEATHER VALVE-CUPS. Registered December 17, 1912. THE J. E. SCOTT CUP CO., Marietta, Ohio. Renewed December 17, 1932, to The J. E. Scott Cup Company, Columbus, Ohio, a Corporation of Ohio.

89,809. NEWSPAPER-DIRECTORIES PUBLISHED ANNUALLY. Registered January 14, 1913. N. W. AYER & SON, Philadelphia, Pa.; New York, N. Y.; Boston, Mass.; Chicago, Ill.; and Cleveland, Ohio. Renewed January 14, 1933, to N. W. Ayer & Son, Incorporated, Philadelphia, Pa., a Corporation of Delaware, successor.

89,910. LADIES', GENTLEMEN'S, AND CHILDREN'S HOSIERY. Registered January 21, 1913. WILLIAM BROWN COMPANY, Philadelphia, Pa., a Corporation of Pennsylvania. Renewed January 21, 1933.

90,203. WHEAT-FLOUR. Registered February 11, 1913. HECKER-JONES-JEWELL MILLING COMPANY. Renewed February 11, 1933, to Standard Milling Company, New York, N. Y., a Corporation of Delaware, assignee.

90,516. PANCAKE-FLOUR. Registered March 4, 1913. THE DAVIS MILLING COMPANY, St. Joseph, Mo. Renewed March 4, 1933, to The Quaker Oats Company, Chicago, Ill., a Corporation of New Jersey, assignee by mesne assignments.

90,587. LAGER-BEER. Registered March 4, 1913. JOS. SCHLITZ BREWING COMPANY. Renewed March 4, 1933, to Jos. Schlitz Beverage Company, Milwaukee, Wis., a Corporation of Wisconsin, assignee.

90,650. MISSES' AND CHILDREN'S BATHING-SUITS. Registered March 11, 1913. THE OCEAN BATHING SUIT CO., New York, N. Y., a Corporation of New York. Renewed March 11, 1933.

90,739. A PILE REMEDY. Registered March 18, 1913. PYRAMID DRUG CO., Marshall, Mich., a Corporation of Michigan. Renewed March 18, 1933.

90,909. MISSES' AND CHILDREN'S BATHING-SUITS. Registered April 1, 1913. THE OCEAN BATHING SUIT CO., New York, N. Y., a Corporation of New York. Renewed April 1, 1933.

91,103. MINCE-MEAT. Registered April 15, 1913. THE W. H. MARVIN COMPANY, Urbana, Ohio, a Corporation of Ohio. Renewed April 15, 1933.

91,143. GASOLENE. Registered April 15, 1913. WADHAMS OIL COMPANY, Milwaukee, Wis., a Corporation of Wisconsin. Renewed April 15, 1933.

91,147. ORANGES, LEMONS, GRAPE-FRUIT, TANGERINES, AND LIMES. Registered April 15, 1913. WINTER HAVEN CITRUS GROWERS ASSOCIATION, Winterhaven, Fla., a Corporation of Florida. Renewed April 15, 1933.

91,204. STARCH SIZING. Registered April 22, 1913. THE GUM TRAGASOL SUPPLY COMPANY LIMITED. Renewed April 22, 1933, to Tragasol Products Limited, Hooton, England, a Corporation of Great Britain, by change of name.

91,247. NOVA SCOTIA LAND-PLASTER. Registered April 22, 1913. CHAS. W. PRIDDY & COMPANY, INC., Norfolk, Va., a Corporation of Virginia. Renewed April 22, 1933.

91,325. CERTAIN NAMED READY-TO-WEAR GARMENTS. Registered April 29, 1913. DANIEL MILLER COMPANY, Baltimore, Md., a Corporation of Maryland. Renewed April 29, 1933.

LABELS

REGISTERED NOVEMBER 29, 1932

41,441.—*Title:* PLAY AWHILE, SERIES NO. 1. For Puzzles. ALL-FAIR, INC., Churchville, N. Y. Published February 8, 1932.

41,442.—*Title:* 4 IN-A-RO. For Games. ALL-FAIR, INC., Churchville, N. Y. Published February 8, 1932.

41,443.—*Title:* RACE TO THE MOON. For Games. ALL-FAIR, INC., Churchville, N. Y. Published February 8, 1932.

41,444.—*Title:* PLAY BOY TIDDLEDY WINKS. For Games. ALL-FAIR, INC., Churchville, N. Y. Published September 16, 1931.

41,445.—*Title:* DIM THOSE LIGHTS. For Games. ALL-FAIR, INC., Churchville, N. Y. Published February 8, 1932.

41,446.—*Title:* PLAY AWHILE, SERIES NO 2. For Puzzles. ALL-FAIR, INC., Churchville, N. Y. Published February 8, 1932.

41,447.—*Title:* PLAY BOY LOTTO. For Games. ALL-FAIR, INC., Churchville, N. Y. Published September 16, 1931.

41,448.—*Title:* CITIES. For Games. ALL-FAIR, INC., Churchville, N. Y. Published February 8, 1932.

41,449.—*Title:* OLD MAID. For Games. ALL-FAIR, INC., Churchville, N. Y. Published February 8, 1932.

41,450.—*Title:* STYLEADER. For Shoes. BIRD & SON, INC., East Walpole, Mass. Published June 28, 1932.

41,451.—*Title:* GOLD MEDAL SOAP POWDER. For Soap Powder. ABRAHAM BLUMBERG, doing business as Miller Soap Products, Los Angeles, Calif. Published May 1, 1932.

41,452.—*Title:* ATLAS WASHING POWDER. For Washing Powder. ABRAHAM BLUMBERG, doing business as Miller Soap Products, Los Angeles, Calif. Published May 1, 1932.

41,453.—*Title:* LAVAR BLANCO SOAP. For Soap. ABRAHAM BLUMBERG, doing business as Miller Soap Products, Los Angeles, Calif. Published May 1, 1932.

41,454.—*Title:* SA-SO. For Tooth Powder. CIRCLE X, INCORPORATED, Joplin, Mo. Published June 4, 1932.

41,455.—*Title:* SA-SO. For Tooth Brushes. CIRCLE X, INCORPORATED, Joplin, Mo. Published June 4, 1932.

41,456.—*Title:* STYLE KNIGHT. For Shoes. M. B. CLAFF & SONS, INC., Randolph, Mass. Published October 19, 1932.

41,457.—*Title:* COLEECO. For Codfish. COLLINS-LEE COMPANY, Chelsea, Mass. Published September 22, 1932.

41,458.—*Title:* TULIP BRAND. For Canned Salmon. FIDALGO ISLAND PACKING CO., Seattle, Wash. Published October 4, 1932.

41,459.—*Title:* FLORA'S CONCENTRATED ROSE WATER AND GLYCERIN CREAM. For Concentrated Rose Water and Glycerine Cream. FORREST C. FLORA, Tacoma, Wash. Published September 7, 1932.

41,460.—*Title:* LONE PINE. For Tomatoes. THE FORT LUPTON CANNING COMPANY, Fort Lupton, Colo. Published May 15, 1932.

41,461.—*Title:* RELIEF BELT. For Rupture Belts. LEWIS A. FRITSCH, Cincinnati, Ohio. Published August 30, 1932.

41,462.—*Title:* NU-MA SALVE. For Antiseptic and Penetrating Salve. GENERAL PRODUCTS CO., Philadelphia, Pa. Published September 28, 1932.

41,463.—*Title:* LA CHOY BEAN SPROUTS. For Canned Bean Sprouts. LA CHOY FOOD PRODUCTS, INC., Detroit, Mich. Published Jan. 2, 1932.

41,464.—*Title:* LA CHOY CHOW MEIN NOODLES. For Canned Chow Mein Noodles. LA CHOY FOOD PRODUCTS, INC., Detroit, Mich. Published January 2, 1932.

41,465.—*Title:* LA CHOY VEGETABLES. For Canned Mixture of Bean Sprouts, Sweet Peppers, Sliced Mushrooms, Bamboo Shoots, Etc. LA CHOY FOOD PRODUCTS, INC., Detroit, Mich. Published January 2, 1932.

41,466.—*Title:* VIGOVITE TONIC. For Stomachic and Tonic. JOSEPH LUNTZ, doing business as Vigovite Tonic Company, Brooklyn, N. Y. Published July 25, 1932.

41,467.—*Title:* LA FRANCE EXTERIOR PAINT. For Exterior Paint. PAINT-POINT PRODUCTS CO., Brooklyn, N. Y. Published October 20, 1932.

41,468.—*Title:* PERFECT HI-SPEED OIL BURNER. For Oil Burners. PERFECT BURNER CO., Lynn, Mass. Published September 27, 1932.

41,469.—*Title:* 5¢ NU-STYLE OATS. For Rolled Oats. PURITY OATS COMPANY, doing business as Chief Oats Co., Keokuk, Iowa. Published August 3, 1932.

41,470.—*Title:* VETERAN HELP A VET. For Wax Paper. HENRY C. STURMAN, Chicago, Ill. Published August 3, 1932.

41,471.—*Title:* UNION LACQUER-TONE. For Liquid for Cleaning and Polishing Lacquer and Enamel Surfaces. UNION OIL COMPANY OF CALIFORNIA, Los Angeles, Calif. Published July 15, 1932.

41,472.—*Title:* PATRONIZE INDEPENDENT HOME OWNED STORES. For Paper Bags. WORTENDYKE MANUFACTURING CO., Richmond, Va. Published October 3, 1932.

PRINTS

REGISTERED NOVEMBER 29, 1932

13,968.—*Title:* LONESOME. For Cigarettes. FRANCIS BERT CARCOT, Oakland, Calif. Published July 20, 1932.

13,969.—*Title:* SUNSET LEMON FREEZE. For a Healthful Drink. L. M. DURHAM, Mount Lebanon, Pittsburgh, Pa. Published August 3, 1932.

13,970.—*Title:* DON'T COMMAND YOUR CHILD TO EAT A HOT CEREAL! For Cereal Food. GENERAL MILLS, INC., Minneapolis, Minn. Published October 18, 1932.

13,971.—*Title:* CRANBERRY ROLY POLY. For Flour. GENERAL MILLS, INC., Minneapolis, Minn. Published October 15, 1932.

13,972.—*Title:* SPIN 'ROUND THE WORLD. For Automobile Tires. ALBERT J. HAIN, Cleveland, Ohio. Published October 27, 1932.

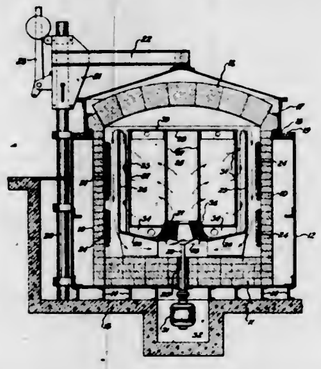
13,973.—*Title:* REX DE LUXE RANGE OIL PUMP. For Fuel-Oil Supply Systems for Range Oil Burners. REX MANUFACTURING COMPANY, Lawrence, Mass. Published August 25, 1932.

13,974.—*Title:* GIVES WINGS TO COLD MOTORS. For Motor Fuel for Internal-Combustion Engines. SUN OIL COMPANY, Philadelphia, Pa. Published December 1, 1931.

REISSUES

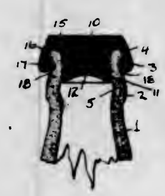
NOVEMBER 29, 1932

18,668. HEAT TREATING FURNACE. FRANK T. COPE, Salem, Ohio, assignor to The Electric Furnace Company, Salem, Ohio, a Corporation of Ohio. Original No. 1,794,151, dated Feb. 24, 1931, Serial No. 397,017, filed Oct. 3, 1929. Application for reissue filed Dec. 17, 1931. Serial No. 581,764. 12 Claims. (Cl. 263—2.)



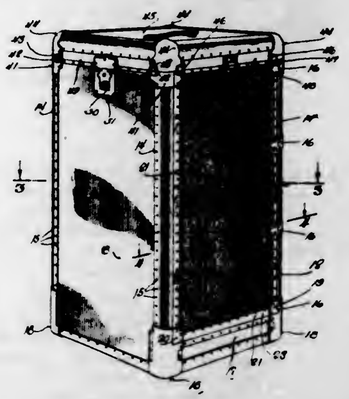
1. A furnace including a chamber, heating means at the sides of the chamber, baffle walls spaced from the heating means and from the bottom of the chamber, and terminating near the top of the chamber, a basket provided with perforated side walls for holding material within the baffle walls, and means for circulating air upward into the basket and out through the perforated side walls and downward between the heating means and baffle walls.

18,669. BOTTLE CAP AND STOPPER. JAMES U. DUFFY, Cleveland, and JAMES HOWARD RICHARDS, Carrolton, Ohio. Original No. 1,747,760, dated Feb. 18, 1930, Serial No. 220,894, filed Sept. 19, 1927. Application for reissue filed Aug. 1, 1931. Serial No. 554,559. 9 Claims. (Cl. 215—41.)



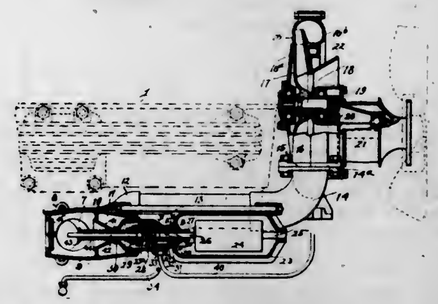
1. A combined rubber bottle cap and stopper consisting of a stopper portion in the form of an elongated slightly tapering plug, said plug having an enlarged ring adjacent the lower end, said plug having a concave bottom surface of a depth not exceeding that of said enlarged ring and an integrally formed cap member having an outwardly and downwardly depending flange terminating in an inwardly extending thickened ring portion, said flange and ring portion being adapted to be forced over and around the bottle neck to bring said ring portion into elastic engagement therewith below the upper head.

18,670. BAGGAGE CARRIER. GEORGE HENRY WHEARY, Racine, Wis., assignor to Wheary Trunk Company, Racine, Wis., a Corporation of Wisconsin. Original No. 1,720,158, dated July 9, 1929, Serial No. 197,880, filed June 8, 1927. Application for reissue filed Sept. 17, 1932. Serial No. 633,652. 36 Claims. (Cl. 190—13.)



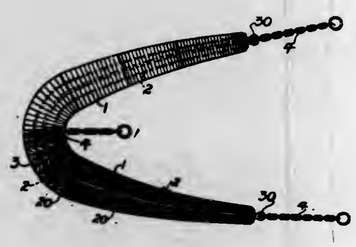
1. In a baggage carrier including side panels and corner posts between which the panels are secured, access being had to the carrier interior between two corner posts, a door for closing the space between the corner posts, and means whereby the door is flush with the corner posts when closed.

18,671. SUPERCHARGER. GILBERT C. GOODE, Detroit, Mich., assignor to The White Motor Company, Cleveland, Ohio, a Corporation of Ohio. Original No. 1,704,082, dated Mar. 5, 1929, Serial No. 609,600, filed Dec. 29, 1922. Application for reissue filed July 20, 1929. Serial No. 380,744. 14 Claims. (Cl. 123—119.)



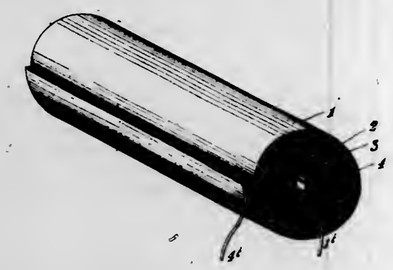
1. The combination with a carburetor having an air intake, a source of air under pressure, an air conduit connecting the source of air with said air intake, a spring-pressed valve associated with said conduit, motor means for controlling the effective pressure of the spring upon said valve, and an atmospheric pressure responsive device controlling the functioning of said motor means.

18,672. SHIP'S FENDER. CHARLES T. LYONS, Medina, Wash., assignor to Durable Mat Company, Seattle, Wash., a Corporation of Washington. Original No. 1,781,403, dated Nov. 11, 1930, Serial No. 380,280, filed July 23, 1929. Application for reissue filed Dec. 21, 1931. Serial No. 582,488. 11 Claims. (Cl. 114—219.)



5. A ship's fender comprising disks cut from rubber tire casings, and means to hold together a plurality of such disks to mutually sustain each other, to absorb pressure between opposite edges in the respective planes of the individual disks.

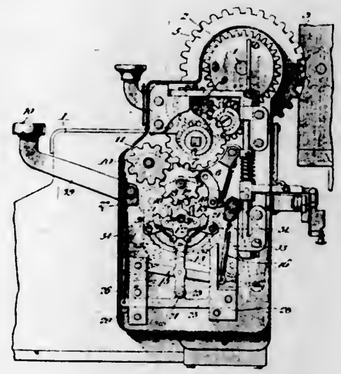
18,673. ELECTROSTATIC CONDENSER. SAMUEL RUBEN, New Rochelle, N. Y., assignor, by mesne assignments, to Ruben Condenser Company, New Rochelle, N. Y., a Corporation of Delaware. Original No. 1,714,819, dated May 21, 1929, Serial No. 214,777, filed Aug. 22, 1927. Application for reissue filed May 5, 1931. Serial No. 535,271. 9 Claims. (Cl. 175—315.)



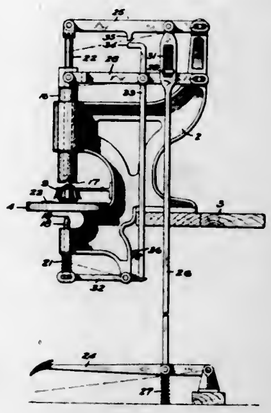
1. An electrical condenser comprising electrodes of a metal which will respond to electrolytic action in a manner to form a composite partially solid current-blocking film thereon having in surface contact therebetween a mixture of fine particles of the same metal which will respond to electrolytic action in a manner to form a current blocking film thereon and a film-forming electrolyte.

18,674. REGISTER. HARRY A. FOOTHORAP, Harrisburg, Pa., assignor to Elliott-Fisher Company, a Corporation of Delaware. Original No. 1,576,961, dated Mar. 16, 1926, Serial No. 710,803, filed May 3, 1924. Application for reissue filed Apr. 25, 1931. Serial No. 532,968. 28 Claims. (Cl. 235—137.)

1. The combination with denominational members, of carrying mechanism operative to effect a transfer from one member to the other and including normally aligned, pivotally connected members, a motor exerting its force longitudinally of said members and resisted by such relation of the members, and means operated by a denominational member to disturb the aligned relation of the members and to permit the motor to become effective to increase the angular relation of the members and effect the carrying operation.



18,675. METHOD OF AND APPARATUS FOR REMOVING PITS FROM PRUNES. THOMAS W. W. FORREST, Fresno, and THOMAS O. L. SMITH, Oakland, Calif., assignors to Sun-Maid Raisin Growers of California, Fresno, Calif., a California Cooperative Association. Original No. 1,715,700, dated June 4, 1929, Serial No. 195,534, filed May 31, 1927. Application for reissue filed Nov. 18, 1929. Serial No. 408,143. 12 Claims. (Cl. 146—17.)



1. The method of removing the pit from a dried prune which comprises making a small cut through the skin of the prune at one end and exerting pressure against the opposite end of the prune without rupturing the fruit at said opposite end whereby to expel the pit through the cut.

18,676. LUBRICATING OIL AND METHOD OF PRODUCING THE SAME. ERWIN R. LEDERER, Fort Worth, Tex., assignor to Texas Pacific Coal & Oil Co., Fort Worth, Tex., a Corporation of Texas. Original No. 1,803,941, dated May 5, 1931, Serial No. 344,605, filed Mar. 5, 1929. Application for reissue filed Apr. 16, 1932. Serial No. 605,781. 25 Claims. (Cl. 196—19.)

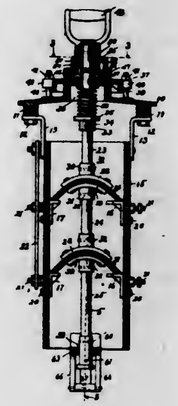
12. The low cold test unblended paraffin base lubricating oil free of wax, having a viscosity of from 50 seconds at 210° F. to 200 seconds at 210° F. on the Saybolt universal viscosimeter and a cold test of zero to 10° F. prepared from an originally residual stock containing amorphous wax and substantially free from crystalline wax by treatment of the residual stock to remove tarry and asphaltic ingredients by steps equivalent to acid treatment while maintaining the wax in an amorphous condition, treatment with filter clay to remove discoloring material while maintaining the wax in an amorphous condition, dilution of the oil with lighter hydrocarbons, chilling to —20° to —40° F., separating the wax from the chilled oil and separating the diluent from the dewaxed oil.

16. The method of producing a dewaxed paraffin base residual oil having a cold test of substantially 0° F. from an originally residual undewaxed base containing amorphous wax and substantially free of crystalline wax which comprises providing a residual oil from which the lighter fractions have been distilled so as to provide substantially all amorphous wax in the residue, removing the asphalt and tarry impurities by acid treatment, removing the discoloring material thereafter thinning the oil with a solvent, chilling to —20° F. to —40° F. to congeal the wax, separating the congealed wax from the chilled oil and separating the solvent from the dewaxed oil.

18. A low cold test, dewaxed, natural, unblended residual lubricating oil having a viscosity of 50" to 200" at 210° F. and a cold test of —15 to plus 10° F. produced from an original undewaxed residue in which the wax is in sufficiently amorphous form for centrifugal removal when precipitated by chilling, by removal of the asphalt, tarry and discoloring materials by acid and clay treatment thereafter diluting the residue with a solvent, chilling the solution to a temperature between —20° F. and —40° F. to precipitate the wax and centrifugally separating the precipitated wax from the chilled solution of the oil.

25. A series of single dewaxed paraffin base cylinder stock lubricating oils of 0° F. cold test and viscosities of 70" to 200" at 210° F. produced from a finished oil of cylinder stock characteristics, which has been distilled so as to provide an amorphous wax in the stock and from which the asphalt, tarry and discoloring materials have been removed by steps equivalent to acid and clay treatment while still maintaining the wax in amorphous condition by diluting said stock, chilling to approximately —40° F. to congeal the wax, separating the congealed wax from the chilled oil in one dewaxing step, and separating the diluent from the dewaxed oil.

18,677. ELECTRICAL PROTECTIVE SYSTEM. PERCY E. COOK, Bellevue, Pa., assignor, by mesne assignments, to Allis-Chalmers Manufacturing Company, Milwaukee, Wis., a Corporation of Delaware. Original No. 1,769,108, dated July 1, 1930, Serial No. 235,182, filed Nov. 23, 1927. Application for reissue filed Apr. 16, 1932. Serial No. 605,761. 14 Claims. (Cl. 171—97.)



1. In combination, a transformer, a switch in the high tension side of the line comprising a contact which swings in moving from one position to another, a longitudinally movable support for said contact, means necessitating the longitudinal movement of the support prior to the swinging of said contact, and electro-magnetic means located in the low tension side of the line for preventing the actuation of the switch.

14. In an electrical protective system comprising a transmission line and a ground connection, the combination of a transformer provided with a casing and provided with high and low tension windings within said casing, manually operable switch mechanism carried by said casing and comprising a movable member manually operable to one position to connect said transmission line to said high tension winding and manually operable to a second position to disconnect said primary winding from said transmission line, and manually operable to a third position to connect said transmission line to said ground connection, and a locking mechanism having a coil connected with said low tension winding and having a lock member so arranged that operation of said movable member is prevented when said coil is energized.

PLANT PATENTS

GRANTED NOVEMBER 29, 1932.

45. VARIETY OF ROSE. EMILE J. LE DUC, Danville, Pa. Filed Sept. 29, 1931. Serial No. 565,843. 1 Claim. (Cl. 47—1.)

The rose herein shown and described characterized particularly by its large, strong, almost thornless stems, the very dark crimson scarlet shading of its flower and the maintenance of the persistency of these characteristics.

46. STRAWBERRY. OLIVER C. CORDREY, deceased, Salisbury, Md., by Hannah E. Cordrey and Eastern Shore Trust Company, administrators, Salisbury, Md., and Ernest W. Townsend, Salisbury, Md., assignors to said Ernest W. Townsend. Filed Mar. 31, 1932. Serial No. 602,883. 1 Claim. (Cl. 47—1.)

The variety of strawberry as herein described and illustrated, characterized by its heavy plant growth, strong producing qualities, its early ripening of berries of superior color and shape, and having a distinctive, sprightly, aromatic flavor.

47. PECAN. WILLIAM H. BRAKE, Rocky Mount, N. C. Filed Mar. 1, 1932. Serial No. 596,128. 1 Claim. (Cl. 47—1.)

A variety of pecan as herein shown and described, characterized particularly by its extraordinarily thin shell, its regularity of shape, its plump kernels of good flavor, its superior cracking-out qualities, its regularity and sureness of fruiting and its relative freedom from diseases.

DESIGNS

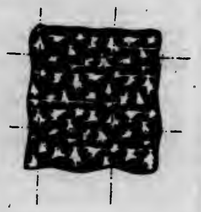
NOVEMBER 29, 1932

88,394. DISPLAY STAND. HARRY SUMNER BEST, Galva, Ill., assignor to John H. Best & Sons, Galva, Ill., a Firm composed of Charlotte Sumner Best, Don Jewell Best, Leon Henson Best, and Harry Sumner Best. Filed Sept. 24, 1932. Serial No. 45,052. Term of patent 7 years.



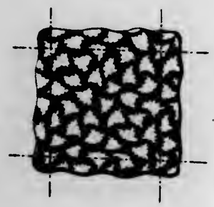
The ornamental design for a display stand as shown.

88,395. TEXTILE FABRIC OR SIMILAR ARTICLE. EMMA L. BROWN, New York, N. Y., assignor to William Willheim Co., Inc., New York, N. Y. Filed Oct. 22, 1932. Serial No. 45,458. Term of patent 3½ years.



The ornamental design for a textile fabric or similar article as shown and described.

88,396. TEXTILE FABRIC OR SIMILAR ARTICLE. EMMA L. BROWN, New York, N. Y., assignor to William Willheim Co., Inc., New York, N. Y. Filed Oct. 22, 1932. Serial No. 45,459. Term of patent 3½ years.



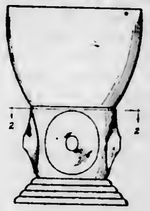
The ornamental design for a textile fabric or similar article as shown and described.

88,397. TEXTILE FABRIC OR SIMILAR ARTICLE. MARCEL CHRISTEN, Woodside, N. Y., assignor to William Willheim Co., Inc., New York, N. Y. Filed Oct. 22, 1932 Serial No. 45,456. Term of patent 3½ years.



The ornamental design for a textile fabric or similar article as shown and described.

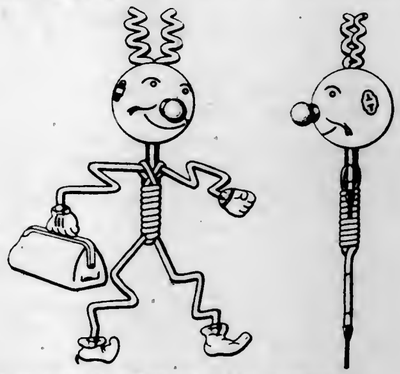
88,398. TUMBLER OR SIMILAR ARTICLE. IRA M. CLARKE, New Martinsville, W. Va., assignor to New Martinsville Glass Mfg. Co., New Martinsville, W. Va., a Corporation of West Virginia. Filed Oct. 5, 1932 Serial No. 45,230. Term of patent 7 years.





The ornamental design for a tumbler or similar article, substantially as shown.

88,399. DOLL. ASHTON B. COLLINS, Birmingham, Ala. Filed Sept. 24, 1932. Serial No. 45,053. Term of patent 14 years.



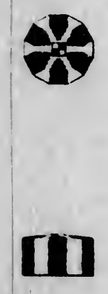
The ornamental design for a doll, as shown.

88,400. BOTTLE CAP. BENJAMIN F. CONNER, Wethersfield, Conn., assignor to Colt's Patent Fire Arms Manufacturing Co., Hartford, Conn., a Corporation of Connecticut. Filed Sept. 17, 1932. Serial No. 44,960. Term of patent 7 years.



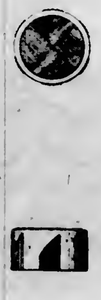
The ornamental design for a bottle cap as shown.

88,401. BOTTLE CAP. BENJAMIN F. CONNER, Wethersfield, Conn., assignor to Colt's Patent Fire Arms Manufacturing Co., Hartford, Conn., a Corporation of Connecticut. Filed Sept. 17, 1932. Serial No. 44,962. Term of patent 7 years.



The ornamental design for a bottle cap as shown.

88,402. BOTTLE CAP. BENJAMIN F. CONNER, Wethersfield, Conn., assignor to Colt's Patent Fire Arms Manufacturing Co., Hartford, Conn., a Corporation of Connecticut. Filed Sept. 17, 1932. Serial No. 44,964. Term of patent 7 years.



The ornamental design for a bottle cap as shown.

88,403. BOTTLE CAP. BENJAMIN F. CONNER, Wethersfield, Conn., assignor to Colt's Patent Fire Arms Manufacturing Co., Hartford, Conn., a Corporation of Connecticut. Filed Sept. 17, 1932. Serial No. 44,967. Term of patent 7 years.



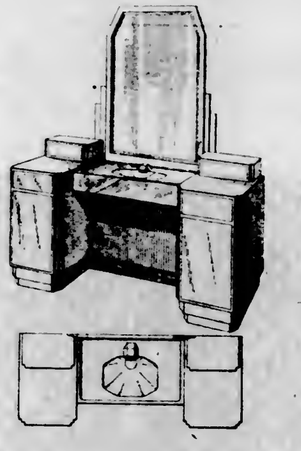
The ornamental design for a bottle cap as shown.

88,404. BOTTLE CAP. BENJAMIN F. CONNER, Wethersfield, Conn., assignor to Colt's Patent Fire Arms Manufacturing Co., Hartford, Conn., a Corporation of Connecticut. Filed Sept. 17, 1932. Serial No. 44,971. Term of patent 7 years.



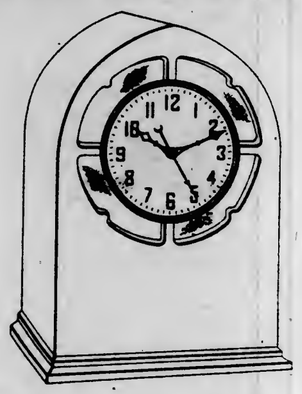
The ornamental design for a bottle cap as shown.

88,405. DRESSING TABLE OR SIMILAR ARTICLE. VAHAN HAGOPIAN, New York, N. Y., assignor to Cecil W. Farrar, Buffalo, N. Y. Filed Apr. 12, 1932. Serial No. 43,472. Term of patent 14 years.



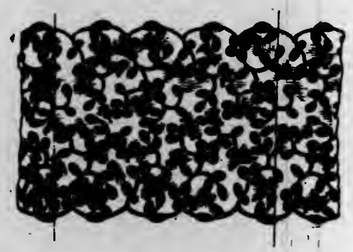
The ornamental design for a dressing table or similar article, as shown.

88,406. COMBINED CLOCK AND RADIO CASE. WILLIAM F. COX, New York, N. Y. Filed Oct. 6, 1932. Serial No. 45,248. Term of patent 14 years.



The ornamental design for a combined clock and radio case as shown.

88,407. EMBROIDERED TEXTILE FABRIC OR A SIMILAR ARTICLE. ERNEST W. FREUDENBERG, Larchmont, N. Y. Filed Oct. 18, 1932. Serial No. 45,395. Term of patent 3½ years.



The ornamental design for an embroidered textile fabric or a similar article substantially as shown and described.

88,408. TEXTILE FABRIC OR SIMILAR ARTICLE. CARL R. HELLMAN, New York, N. Y., assignor to William Willheim Co., Inc., New York, N. Y. Filed Oct. 22, 1932. Serial No. 45,466. Term of patent 3½ years.



The ornamental design for a textile fabric or similar article as shown and described.

88,409. TEXTILE FABRIC OR SIMILAR ARTICLE. CARL R. HELLMAN, New York, N. Y., assignor to William Willheim Co., Inc., New York, N. Y. Filed Oct. 22, 1932. Serial No. 45,470. Term of patent 3½ years.



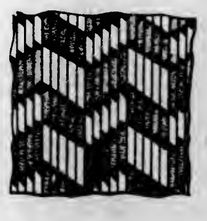
The ornamental design for a textile fabric or similar article as shown and described.

88,410. TEXTILE FABRIC OR SIMILAR ARTICLE. CARL R. HELLMAN, New York, N. Y., assignor to William Willheim Co., Inc., New York, N. Y. Filed Oct. 22, 1932. Serial No. 45,472. Term of patent 3½ years.



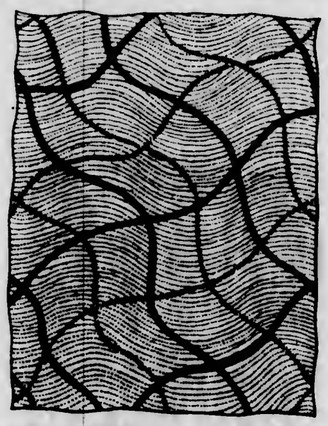
The ornamental design for a textile fabric or similar article as shown and described.

88,411. TEXTILE FABRIC OR SIMILAR ARTICLE. CARL R. HELLMAN, New York, N. Y., assignor to William Willheim Co., Inc., New York, N. Y. Filed Oct. 22, 1932. Serial No. 45,474. Term of patent 3½ years.



The ornamental design for a textile fabric or similar article as shown and described.

88,412. TEXTILE FABRIC OR SIMILAR ARTICLE. CARL R. HELLMAN, New York, N. Y., assignor to William Willheim Co., Inc., New York, N. Y. Filed Oct. 22, 1932. Serial No. 45,475. Term of patent 3½ years.



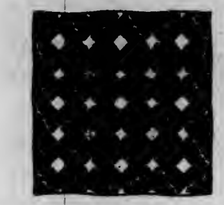
The ornamental design for a textile fabric or similar article as shown and described.

88,413. TEXTILE FABRIC OR SIMILAR ARTICLE. CARL R. HELLMAN, New York, N. Y., assignor to William Willheim Co., Inc., New York, N. Y. Filed Oct. 22, 1932. Serial No. 45,476. Term of patent 3½ years.



The ornamental design for a textile fabric or similar article as shown and described.

88,414. TEXTILE FABRIC OR SIMILAR ARTICLE. CARL R. HELLMAN, New York, N. Y., assignor to William Willheim Co., Inc., New York, N. Y. Filed Oct. 22, 1932. Serial No. 45,477. Term of patent 3½ years.



The ornamental design for a textile fabric or similar article as shown and described.

88,415. TEXTILE FABRIC OR SIMILAR ARTICLE. CARL R. HELLMAN, New York, N. Y., assignor to William Willheim Co., Inc., New York, N. Y. Filed Oct. 22, 1932. Serial No. 45,478. Term of patent 3½ years.



The ornamental design for a textile fabric or similar article as shown and described.

88,416. TEXTILE FABRIC OR SIMILAR ARTICLE. CARL R. HELLMAN, New York, N. Y., assignor to William Willheim Co., Inc., New York, N. Y. Filed Oct. 22, 1932. Serial No. 45,479. Term of patent 3½ years.



The ornamental design for a textile fabric or similar article as shown and described.

88,417. TEXTILE FABRIC OR SIMILAR ARTICLE. CARL R. HELLMAN, New York, N. Y., assignor to William Willheim Co., Inc., New York, N. Y. Filed Oct. 22, 1932. Serial No. 45,482. Term of patent 3½ years.



The ornamental design for a textile fabric or similar article as shown and described.

88,418. TEXTILE FABRIC OR SIMILAR ARTICLE. CARL B. HELLMAN, New York, N. Y., assignor to William Wilhelm Co., Inc., New York, N. Y. Filed Oct. 22, 1932. Serial No. 45,483. Term of patent 3½ years.



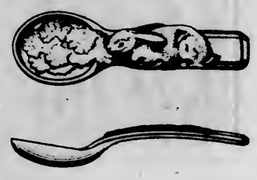
The ornamental design for a textile fabric or similar article as shown and described.

88,419. TEXTILE FABRIC OR SIMILAR ARTICLE. CARL R. HELLMAN, New York, N. Y., assignor to William Wilhelm Co., Inc., New York, N. Y. Filed Oct. 22, 1932. Serial No. 45,484. Term of patent 3½ years.



The ornamental design for a textile fabric or similar article as shown and described.

88,420. SPOON OR SIMILAR ARTICLE. JOSEPHINE KERN, Chicago, Ill., assignor to The Imperial Brass Manufacturing Company, Chicago, Ill., a Corporation of Illinois. Filed Sept. 9, 1932. Serial No. 44,788. Term of patent 7 years.



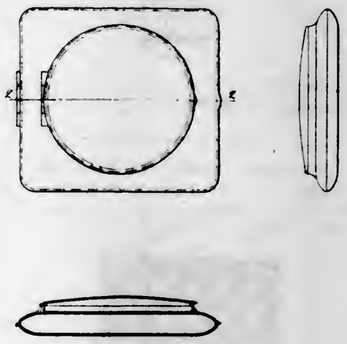
The ornamental design for a spoon or similar article substantially as shown.

88,421. TEXTILE FABRIC OR SIMILAR ARTICLE. ALEXANDER W. KOHUT, New York, N. Y., assignor to William Wilhelm Co., Inc., New York, N. Y. Filed Oct. 22, 1932. Serial No. 45,487. Term of patent 3½ years.



The ornamental design for a textile fabric or similar article as shown and described.

88,422. COMBINATION OF CIGARETTE AND VANITY CASE. SAMUEL H. LA FONTAINE, Union, N. J. Filed Sept. 12, 1932. Serial No. 44,807. Term of patent 3½ years.



The ornamental design for a combination cigarette and vanity case, substantially as shown.

88,423. WATER HEATER CASING OR LIKE ARTICLE. SIMON J. LONERGAN, La Porte, Ind. Filed Sept. 17, 1932. Serial No. 44,982. Term of patent 7 years.



The ornamental design for a water heater casing or like article, as shown.

88,424. TEXTILE FABRIC OR SIMILAR ARTICLE OF MANUFACTURE. JACQUES MAISCH, New York, N. Y. Filed Oct. 20, 1932. Serial No. 45,429. Term of patent 3½ years.



The ornamental design for a textile fabric or similar article of manufacture substantially as shown and described.

88,425. TEXTILE FABRIC OR THE LIKE. NADINE MARTINOFF, New York, N. Y., assignor to Wullschleger & Co., New York, N. Y., a Firm. Filed Oct. 24, 1932. Serial No. 45,511. Term of patent 3½ years.



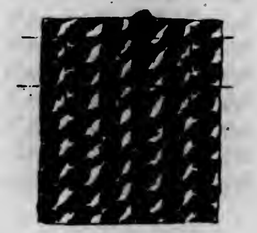
The ornamental design for a textile fabric or the like substantially as shown and described.

88,426. TEXTILE FABRIC OR THE LIKE. NADINE MARTINOFF, New York, N. Y., assignor to Wullschleger & Co., New York, N. Y., a Firm. Filed Oct. 24, 1932. Serial No. 45,514. Term of patent 3½ years.



The ornamental design for a textile fabric or the like substantially as shown and described.

88,427. TEXTILE FABRIC OR THE LIKE. NADINE MARTINOFF, New York, N. Y., assignor to Wullschleger & Co., New York, N. Y., a Firm. Filed Oct. 24, 1932. Serial No. 45,516. Term of patent 3½ years.



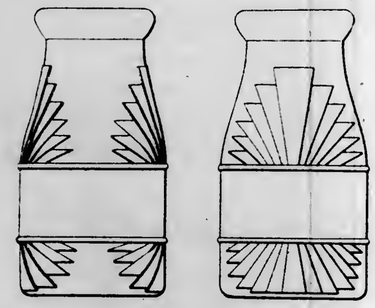
The ornamental design for a textile fabric or the like substantially as shown and described.

88,428. BOTTLE. AGUSTIN TRIGO MEZQUITA, Valencia, Spain. Filed Dec. 30, 1931. Serial No. 42,319. Term of patent 14 years.



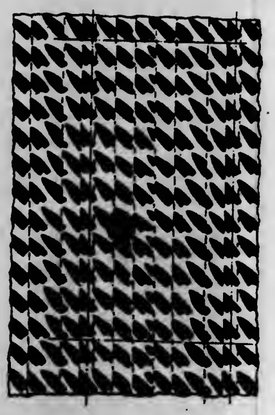
The ornamental design for a bottle, as shown and described.

88,429. BOTTLE. JOHN WILLIS MOORE, Jacksonville, Fla. Filed Sept. 6, 1932. Serial No. 44,759. Term of patent 14 years.



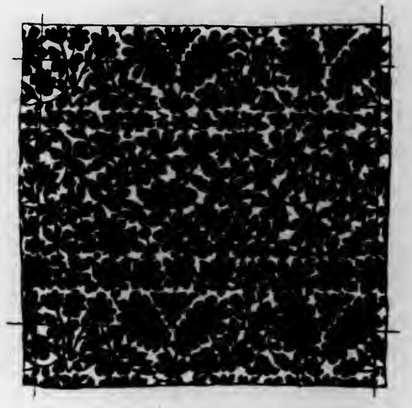
The ornamental design for a bottle, as shown.

88,430. TEXTILE FABRIC. PAUL MOUTON, Paris, France, assignor to Cheney Brothers, New York, N. Y., a Corporation of Connecticut. Filed Sept. 28, 1932. Serial No. 45,112. Term of patent 3½ years.



The ornamental design for a textile fabric, substantially as shown and described.

88,431. TEXTILE FABRIC. PAUL MOUTON, Paris, France, assignor to Cheney Brothers, New York, N. Y., a Corporation of Connecticut. Filed Sept. 28, 1932. Serial No. 45,115. Term of patent 3½ years.



The ornamental design for a textile fabric, substantially as shown and described.

88,432. TEXTILE FABRIC OR SIMILAR ARTICLE. HERMAN S. MURRAY, Woodmere, N. Y., assignor to William Willheim Co., Inc., New York, N. Y. Filed Oct. 22, 1932. Serial No. 45,494. Term of patent 3½ years.



The ornamental design for a textile fabric or similar article as shown and described.

88,433. TEXTILE FABRIC OR SIMILAR ARTICLE. HERMAN S. MURRAY, Woodmere, N. Y., assignor to William Willheim Co., Inc., New York, N. Y. Filed Oct. 22, 1932. Serial No. 45,497. Term of patent 3½ years.



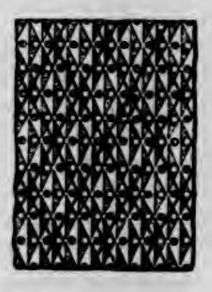
The ornamental design for a textile fabric or similar article as shown and described.

88,434. TEXTILE FABRIC OR SIMILAR ARTICLE. HERMAN S. MURRAY, Woodmere, N. Y., assignor to William Willheim Co., Inc., New York, N. Y. Filed Oct. 22, 1932. Serial No. 45,498. Term of patent 3½ years.



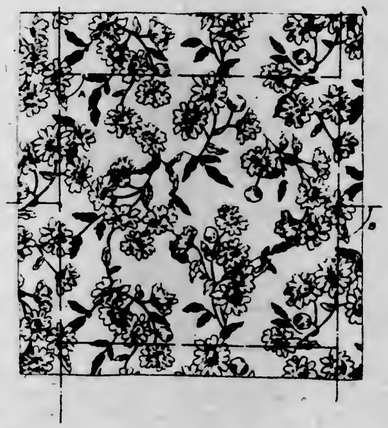
The ornamental design for a textile fabric or similar article as shown and described.

88,435. TEXTILE FABRIC OR SIMILAR ARTICLE. JOHN OVERMEYER, New York, N. Y., assignor to William Willheim Co., Inc., New York, N. Y. Filed Oct. 22, 1932. Serial No. 45,492. Term of patent 3½ years.



The ornamental design for a textile fabric or similar article as shown and described.

88,436. TEXTILE FABRIC OR THE LIKE. SOPHIE PATE, New York, N. Y. Filed Oct. 29, 1932. Serial No. 45,619. Term of patent 3½ years.



The ornamental design for a textile fabric or the like, as shown and described.

88,437. CREAMER OR SIMILAR ARTICLE. RAYMOND E. PATTEN, Oak Park, Ill., assignor to Edison General Electric Appliance Company, Inc., a Corporation of New York. Filed Sept. 29, 1932. Serial No. 45,153. Term of patent 14 years.



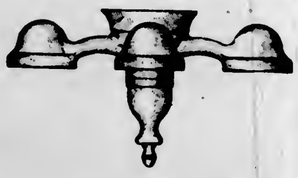
The ornamental design for a creamer or similar article substantially as shown and described.

88,438. SUGAR BOWL OR SIMILAR ARTICLE. RAYMOND E. PATTEN, Oak Park, Ill., assignor to Edison General Electric Appliance Company, Inc., a Corporation of New York. Filed Sept. 29, 1932. Serial No. 45,154. Term of patent 14 years.



The ornamental design for a sugar bowl or similar article substantially as shown and described.

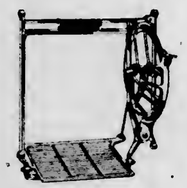
88,439. LAMP BODY. ALPHONSE F. PIEPER, Rochester, N. Y. Filed Feb. 11, 1932. Serial No. 42,815. Term of patent 7 years.

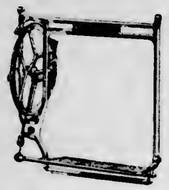




The ornamental design for a lamp body substantially as shown.

88,440. UNDERFRAME FOR A TREADLE SEWING MACHINE. ALBERT SIDNEY RAWORTH, Bearsden, Scotland. Filed Apr. 30, 1932, Serial No. 43,663, and in Great Britain Mar. 31, 1932. Term of patent 14 years.





The ornamental design for an underframe for a treadle sewing machine, as shown.

88,441. TOP FOR A GAME TABLE OR SIMILAR ARTICLE. NATHAN ROBIN, Chicago, Ill. Filed Oct. 10, 1932. Serial No. 45,284. Term of patent 3½ years.



The ornamental design for a top for a game table or similar article, as shown.

88,442. CARPET. ANTHONY E. SMIDLEIN, New York, N. Y., assignor to Bigelow Sanford Carpet Co., Inc., a Corporation of Massachusetts. Filed Oct. 28, 1932. Serial No. 45,607. Term of patent 3½ years.



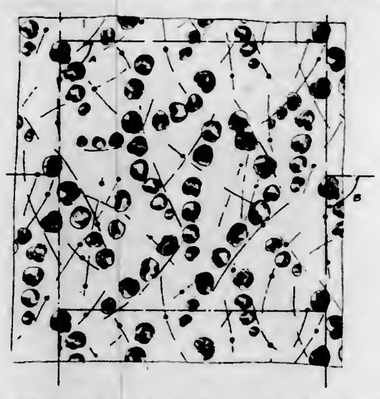
The ornamental design for a carpet substantially as shown and described.

88,443. CARPET. JOHN S. TRAVIS, Long Island City, N. Y., assignor to Bigelow Sanford Carpet Co., Inc., a Corporation of Massachusetts. Filed Oct. 5, 1932. Serial No. 45,217. Term of patent 7 years.



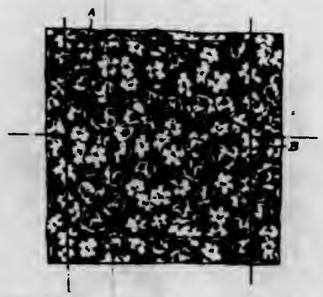
The ornamental design for a carpet substantially as shown and described.

88,444. TEXTILE FABRIC OR THE LIKE. EVELYN WAX, Briarwood, Long Island, N. Y. Filed Oct. 29, 1932. Serial No. 45,625. Term of patent 3½ years.



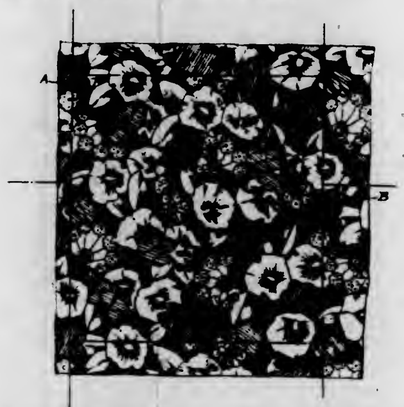
The ornamental design for a textile fabric or the like, as shown and described.

88,445. TEXTILE FABRIC OR THE LIKE. IRENE A. WEITZ, Brooklyn, N. Y. Filed Oct. 29, 1932. Serial No. 45,623. Term of patent 3½ years.



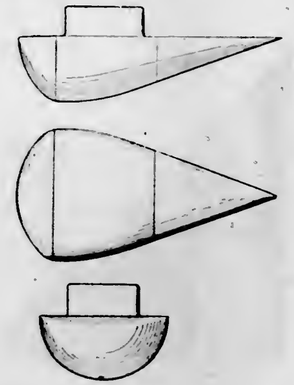
The ornamental design for a textile fabric or the like, as shown and described.

88,446. TEXTILE FABRIC OR THE LIKE. IRENE A. WEITZ, Brooklyn, N. Y. Filed Oct. 29, 1932. Serial No. 45,624. Term of patent 3½ years.



The ornamental design for a textile fabric or the like, as shown and described.

88,447. HEADLIGHT. OSCAR WERNER, Cleveland, Ohio. Filed Nov. 30, 1931. Serial No. 41,909. Term of patent 7 years.



The ornamental design for a headlight, as shown and described.

88,448. TEXTILE FABRIC OR SIMILAR ARTICLE. WILLIAM WILLHEIM, New York, N. Y. Filed Oct. 31, 1932. Serial No. 45,653. Term of patent 3½ years.



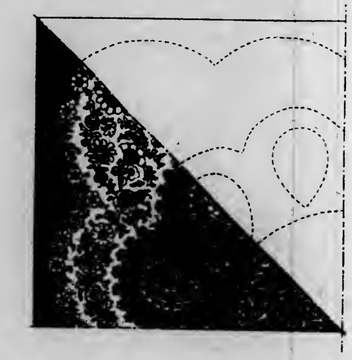
The ornamental design for a textile fabric or similar article as shown and described.

88,449. TEXTILE FABRIC OR SIMILAR ARTICLE. WILLIAM WILLHEIM, New York, N. Y. Filed Oct. 31, 1932. Serial No. 45,655. Term of patent 3½ years.



The ornamental design for a textile fabric or similar article as shown and described.

88,450. TEXTILE FABRIC OR SIMILAR ARTICLE. WILLIAM WILLHEIM, New York, N. Y. Filed Oct. 31, 1932. Serial No. 45,656. Term of patent 3½ years.



The ornamental design for a textile fabric or similar article as shown and described.

88,451. KNITTED FABRIC. MELCHIOR ZWICKY, Berkshire Heights, Pa., assignor to Berkshire Knitting Mills, Wyomissing, Pa., a Corporation of Pennsylvania. Filed Oct. 1, 1931. Serial No. 41,281. Term of patent 14 years.



The ornamental design for a knitted fabric as shown and described.

88,452. BOTTLE CAP. BENJAMIN F. CONNER, Wethersfield, Conn., assignor to Colt's Patent Fire Arms Manufacturing Co., Hartford, Conn., a Corporation of Connecticut. Filed Sept. 17, 1932. Serial No. 44,961. Term of patent 7 years.



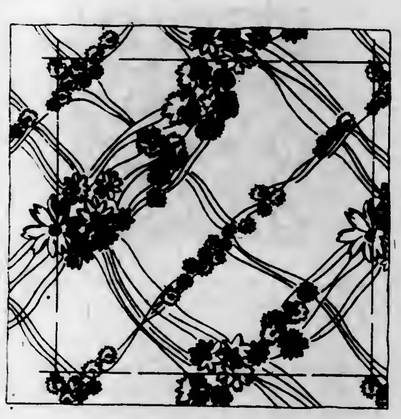
The ornamental design for a bottle cap as shown.

88,453. BOTTLE CAP. BENJAMIN F. CONNER, Wethersfield, Conn., assignor to Colt's Patent Fire Arms Manufacturing Co., Hartford, Conn., a Corporation of Connecticut. Filed Sept. 17, 1932. Serial No. 44,963. Term of patent 7 years.



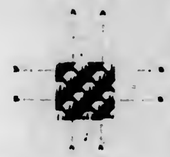
The ornamental design for a bottle cap as shown.

88,454. TEXTILE FABRIC OR THE LIKE. NATHANIEL GARFINKL, New York, N. Y. Filed Nov. 1, 1932. Serial No. 45,681. Term of patent 3½ years.



The ornamental design for textile fabric or the like, as shown and described.

88,455. TEXTILE FABRIC OR SIMILAR ARTICLE OF MAUFACTURE. ALFRED J. HEINKE, Towaco, N. J. Filed Oct. 5, 1932. Serial No. 45,232. Term of patent 3½ years.



The ornamental design for a textile fabric or similar article of manufacture substantially as shown and described.

88,456. TEXTILE FABRIC OR SIMILAR ARTICLE OF MANUFACTURE. ALFRED J. HEINKE, Towaco, N. J. Filed Oct. 19, 1932. Serial No. 45,407. Term of patent 3½ years.



The ornamental design for a textile fabric or similar article of manufacture substantially as shown and described.

88,457. TEXTILE FABRIC OR SIMILAR ARTICLE OF MANUFACTURE. ALFRED J. HEINKE, Towaco, N. J. Filed Oct. 19, 1932. Serial No. 45,410. Term of patent 3½ years.



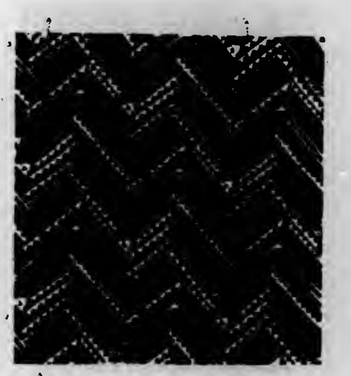
The ornamental design for a textile fabric or similar article of manufacture substantially as shown and described.

88,458. TEXTILE FABRIC OR SIMILAR ARTICLE OF MANUFACTURE. ALFRED J. HEINKE, Towaco, N. J. Filed Oct. 19, 1932. Serial No. 45,411. Term of patent 3½ years.



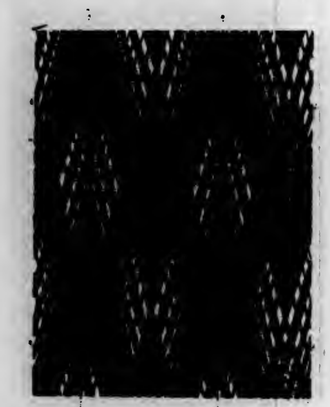
The ornamental design for a textile fabric or similar article of manufacture substantially as shown and described.

88,459. TEXTILE FABRIC OR SIMILAR ARTICLE OF MANUFACTURE. ALFRED J. HEINKE, Towaco, N. J. Filed Oct. 19, 1932. Serial No. 45,412. Term of patent 3½ years.



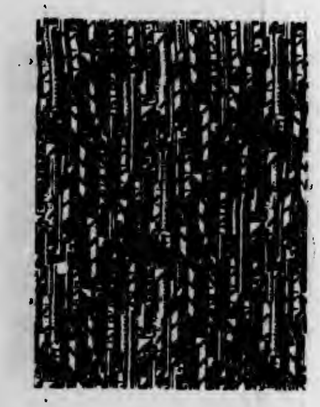
The ornamental design for a textile fabric or similar article of manufacture substantially as shown and described.

88,460. TEXTILE FABRIC OR SIMILAR ARTICLE OF MANUFACTURE. ALFRED J. HEINKE, Towaco, N. J. Filed Oct. 19, 1932. Serial No. 45,413. Term of patent 3½ years.



The ornamental design for a textile fabric or similar article of manufacture substantially as shown and described.

88,461. TEXTILE FABRIC OR SIMILAR ARTICLE OF MANUFACTURE. ALFRED J. HEINKE, Towaco, N. J. Filed Oct. 19, 1932. Serial No. 45,414. Term of patent 3½ years.



The ornamental design for a textile fabric or similar article of manufacture substantially as shown and described.

88,462. TEXTILE FABRIC OR SIMILAR ARTICLE OF MANUFACTURE. ALFRED J. HEINKE, Towaco, N. J. Filed Oct. 21, 1932. Serial No. 45,450. Term of patent 3½ years.



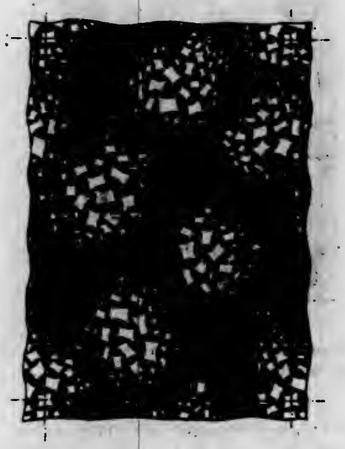
The ornamental design for a textile fabric or similar article of manufacture substantially as shown and described.

88,463. TEXTILE FABRIC OR SIMILAR ARTICLE OF MANUFACTURE. ALFRED J. HEINKE, Towaco, N. J. Filed Oct. 21, 1932. Serial No. 45,451. Term of patent 3½ years.



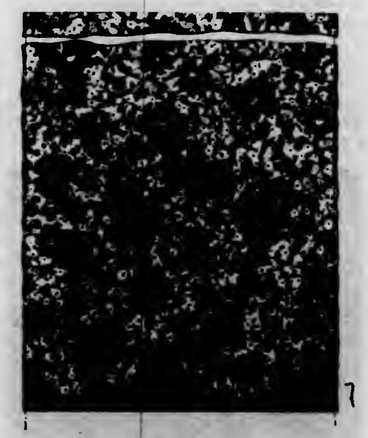
The ornamental design for a textile fabric or similar article of manufacture substantially as shown and described.

88,464. TEXTILE FABRIC OR SIMILAR ARTICLE. CARL R. HELLMAN, New York, N. Y., assignor to William Willheim Co., Inc., New York, N. Y. Filed Oct. 22, 1932. Serial No. 45,465. Term of patent 3½ years.



The ornamental design for a textile fabric or similar article as shown and described.

88,465. TEXTILE FABRIC OR SIMILAR ARTICLE. CARL R. HELLMAN, New York, N. Y., assignor to William Willheim Co., Inc., New York, N. Y. Filed Oct. 22, 1932. Serial No. 45,468. Term of patent 3½ years.



The ornamental design for a textile fabric or similar article as shown and described.

88,466. TEXTILE FABRIC OR SIMILAR ARTICLE. CARL R. HELLMAN, New York, N. Y., assignor to William Willheim Co., Inc., New York, N. Y. Filed Oct. 22, 1932. Serial No. 45,471. Term of patent 3½ years.



The ornamental design for a textile fabric or similar article as shown and described.

88,467. TEXTILE FABRIC OR SIMILAR ARTICLE. CARL R. HELLMAN, New York, N. Y., assignor to William Willheim Co., Inc., New York, N. Y. Filed Oct. 22, 1932. Serial No. 45,481. Term of patent 3½ years.



The ornamental design for a textile fabric or similar article as shown and described.

88,468. LACE SCARF OR SIMILAR ARTICLE. HAGE W. HUCKNALL, Elyria, Ohio, assignor to The American Lace Manufacturing Company, Elyria, Ohio, a Corporation of Ohio. Filed Oct. 6, 1932. Serial No. 45,236. Term of patent 3½ years.



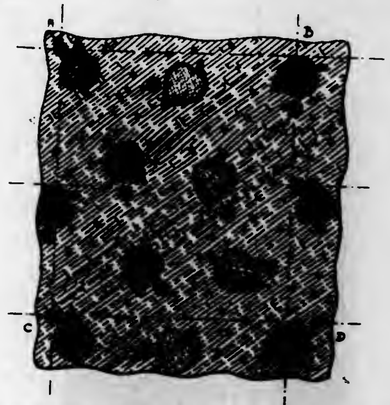
The ornamental design for a lace scarf or similar article, substantially as shown and described.

88,469. TEXTILE FABRIC OR SIMILAR ARTICLE OF MANUFACTURE. FRANCES JOHNSON, Brooklyn, N. Y. Filed Oct. 19, 1932. Serial No. 45,415. Term of patent 3½ years.



The ornamental design for a textile fabric or similar article of manufacture substantially as shown and described.

88,470. TEXTILE FABRIC OR SIMILAR ARTICLE. ALEXANDER W. KOHUT, New York, N. Y., assignor to William Willheim Co., Inc., New York, N. Y. Filed Oct. 22, 1932. Serial No. 45,488. Term of patent 3½ years.



The ornamental design for a textile fabric or similar article as shown and described.

88,471. TEXTILE FABRIC OR THE LIKE. NADINE MARTINOFF, New York, N. Y., assignor to Wullschleger & Co., New York, N. Y., a Firm. Filed Oct. 25, 1932. Serial No. 45,560. Term of patent 3½ years.



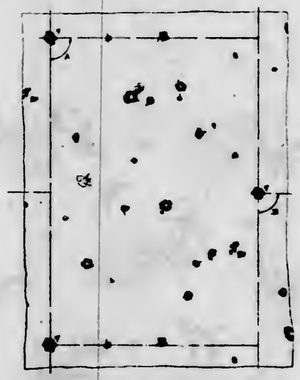
The ornamental design for a textile fabric or the like substantially as shown and described.

88,472. TEXTILE FABRIC OR THE LIKE. NADINE MARTINOFF, New York, N. Y., assignor to Wullschleger & Co., New York, N. Y., a Firm. Filed Oct. 25, 1932. Serial No. 45,561. Term of patent 3½ years.



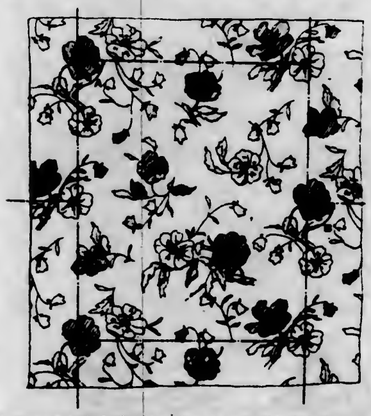
The ornamental design for a textile fabric or the like substantially as shown and described.

88,473. TEXTILE FABRIC OR THE LIKE. NADINE MARTINOFF, New York, N. Y., assignor to Wullschleger & Co., New York, N. Y., a Firm. Filed Oct. 25, 1932. Serial No. 45,564. Term of patent 3½ years.



The ornamental design for a textile fabric or the like substantially as shown and described.

88,474. TEXTILE FABRIC OR THE LIKE. NADINE MARTINOFF, New York, N. Y., assignor to Wullschleger & Co., New York, N. Y., a Firm. Filed Oct. 25, 1932. Serial No. 45,571. Term of patent 3½ years.



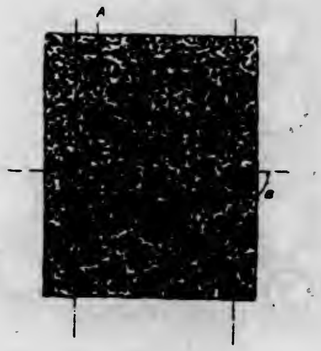
The ornamental design for a textile fabric or the like substantially as shown and described.

88,475. TEXTILE FABRIC OR THE LIKE. NADINE MARTINOFF, New York, N. Y., assignor to Wullschleger & Co., New York, N. Y., a Firm. Filed Oct. 25, 1932. Serial No. 45,572. Term of patent 3½ years.



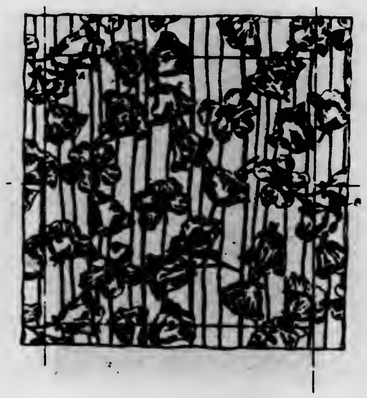
The ornamental design for a textile fabric or the like substantially as shown and described.

88,476. TEXTILE FABRIC OR THE LIKE. ELIZABETH MERRY, New York, N. Y., assignor to Combier & Co. Inc., New York, N. Y., a Corporation of Delaware. Filed Oct. 25, 1932. Serial No. 45,542. Term of patent 3½ years.



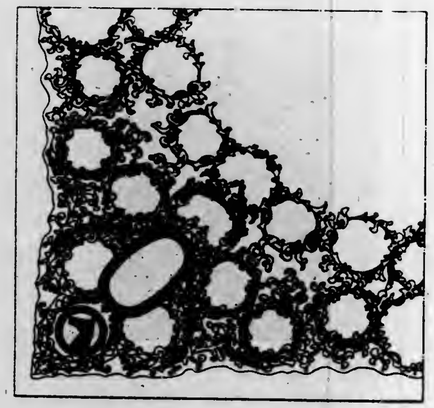
The ornamental design for a textile fabric or the like substantially as shown and described.

88,477. TEXTILE FABRIC OR THE LIKE. ELIZABETH MERRY, New York, N. Y., assignor to Combier & Co. Inc., New York, N. Y., a Corporation of Delaware. Filed Oct. 25, 1932. Serial No. 45,544. Term of patent 3½ years.



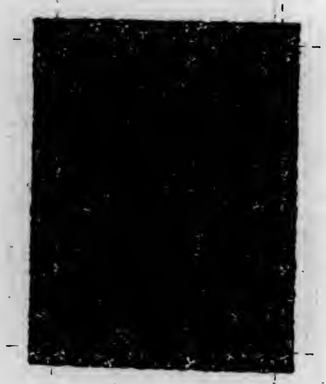
The ornamental design for a textile fabric or the like substantially as shown and described.

88,478. SCARF. FRANK ORTELL, New York, N. Y. Filed Oct. 24, 1932. Serial No. 45,538. Term of patent 3½ years.



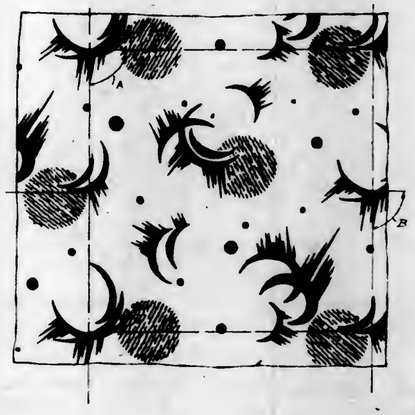
The ornamental design for a scarf as shown and described.

88,479. TEXTILE FABRIC OR SIMILAR ARTICLE. JOHN OVERMEYER, New York, N. Y., assignor to William Willhelm Co., Inc., New York, N. Y. Filed Oct. 22, 1932. Serial No. 45,491. Term of patent 3½ years.



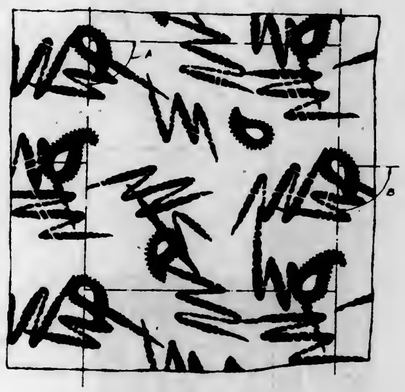
The ornamental design for a textile fabric or similar article as shown and described.

88,480. TEXTILE FABRIC OR THE LIKE. PAUL REIMAN, New York, N. Y. Filed Nov. 1, 1932. Serial No. 45,683. Term of patent 3½ years.



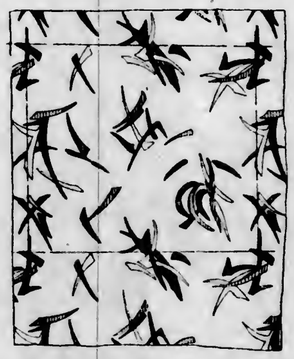
The ornamental design for a textile fabric or the like, as shown and described.

88,481. TEXTILE FABBIC OR THE LIKE. LOUIS RUBINGER, New York, N. Y. Filed Nov. 1, 1932. Serial No. 45,675. Term of patent 3½ years.



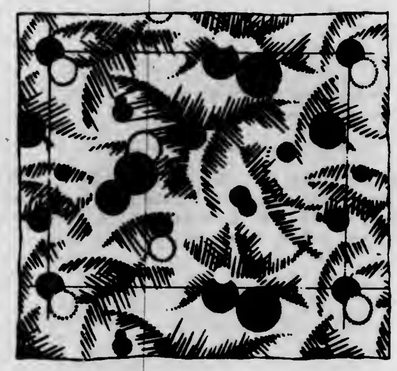
The ornamental design for a textile fabric or the like, as shown and described.

88,482. TEXTILE FABRIC OR THE LIKE. LOUIS RUBINGER, New York, N. Y. Filed Nov. 1, 1932. Serial No. 45,676. Term of patent 3½ years.



The ornamental design for a textile fabric or the like, as shown and described.

88,483. TEXTILE FABRIC OR THE LIKE. LOUIS RUBINGER, New York, N. Y. Filed Nov. 1, 1932. Serial No. 45,677. Term of patent 3½ years.



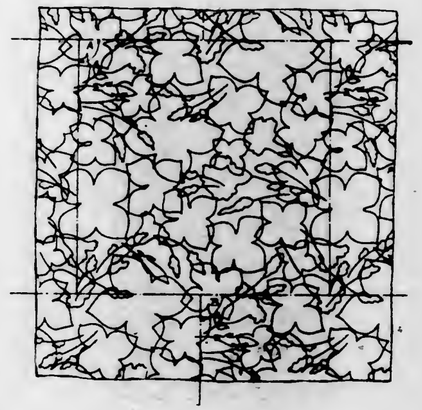
The ornamental design for a textile fabric or the like, as shown and described.

88,484. TEXTILE FABRIC OR THE LIKE. LOUIS RUBINGER, New York, N. Y. Filed Nov. 1, 1932. Serial No. 45,678. Term of patent 3½ years.



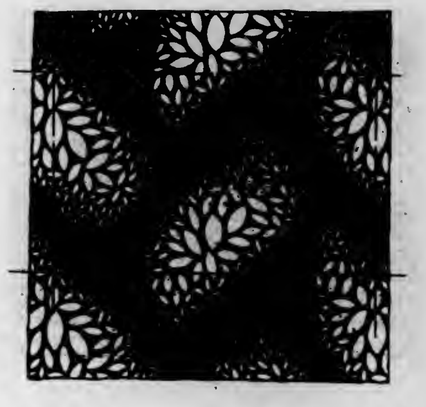
The ornamental design for a textile fabric or the like, as shown and described.

88,485. TEXTILE FABRIC OR THE LIKE. LOUIS RUBINGER, New York, N. Y. Filed Nov. 1, 1932. Serial No. 45,679. Term of patent 3½ years.



The ornamental design for a textile fabric or the like, as shown and described.

88,486. TEXTILE FABRIC OR THE LIKE. LOUIS RUBINGER, New York, N. Y. Filed Nov. 1, 1932. Serial No. 45,680. Term of patent 3½ years.



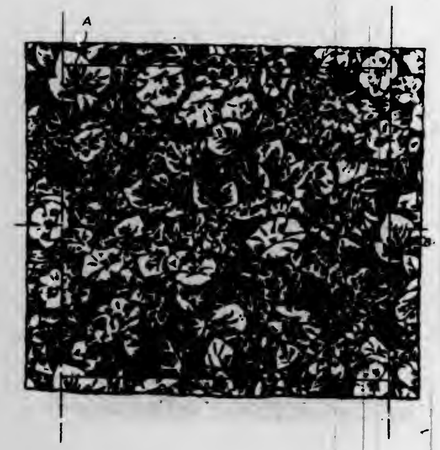
The ornamental design for a textile fabric or the like, as shown and described.

88,487. TEXTILE FABRIC OR THE LIKE. ROBERT SCHEY, New York, N. Y., assignor to Combier & Co., Inc., New York, N. Y., a Corporation of Delaware. Filed Oct. 6, 1932. Serial No. 45,246. Term of patent 3½ years.



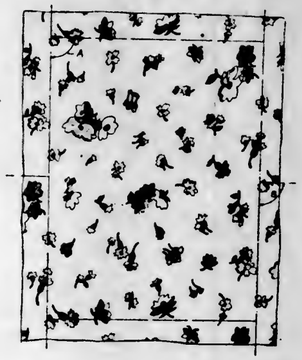
The ornamental design for a textile fabric or the like substantially as shown and described.

88,488. TEXTILE FABRIC OR THE LIKE. JACK SCHWEIKER, Rye, N. Y. Filed Oct. 29, 1932. Serial No. 45,626. Term of patent 3½ years.



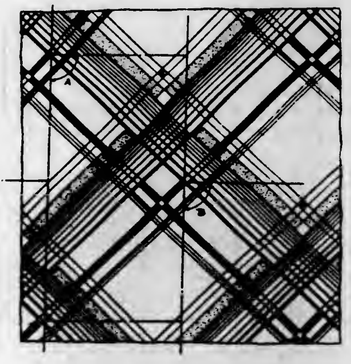
The ornamental design for a textile fabric or the like, as shown and described.

88,489. TEXTILE FABRIC OR THE LIKE. MARGARET B. SINGER, New York, N. Y., assignor to Wullschleger & Co., New York, N. Y., a Firm. Filed Oct. 25, 1932. Serial No. 45,557. Term of patent 3½ years.



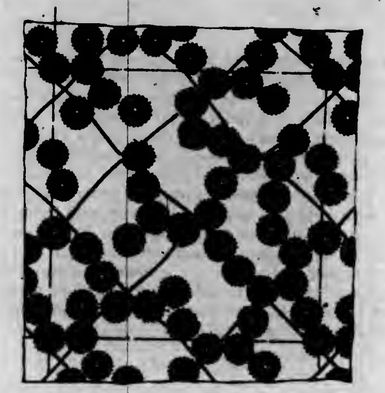
The ornamental design for textile fabric or the like, as shown and described.

88,490. TEXTILE FABRIC OR THE LIKE. MARGARET B. SINGER, New York, N. Y., assignor to Wullschleger & Co., New York, N. Y., a Firm. Filed Oct. 25, 1932. Serial No. 45,558. Term of patent 3½ years.



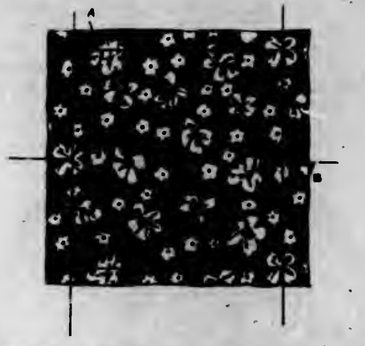
The ornamental design for a textile fabric or the like substantially as shown and described.

88,491. TEXTILE FABRIC. PHILIP A. VOGELMAN, New York, N. Y. Filed Oct. 28, 1932. Serial No. 45,616. Term of patent 3½ years.



The ornamental design for a textile fabric, substantially as shown and described.

88,492. TEXTILE FABRIC OR THE LIKE. EVELYN WAX, Briarwood, Long Island, N. Y., assignor to Combier & Co. Inc., New York, N. Y., a Corporation of Delaware. Filed Oct. 25, 1932. Serial No. 45,546. Term of patent 3½ years.

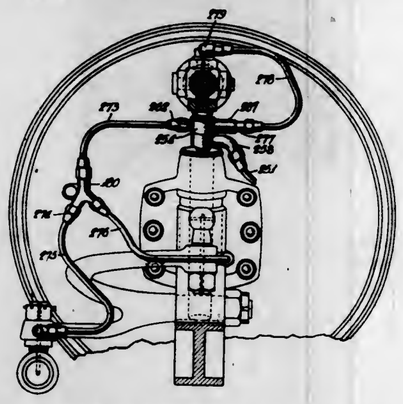


The ornamental design for a textile fabric or the like substantially as shown and described.

PATENTS

GRANTED NOVEMBER 29, 1932

1,888,970. CHASSIS LUBRICATION. JOSEPH BIJUR, New York, N. Y., assignor to Auto Research Corporation, a Corporation of Delaware. Original application filed Nov. 5, 1923, Serial No. 672,870. Divided and this application filed June 8, 1929. Serial No. 369,408. 18 Claims. (Cl. 184—7.)



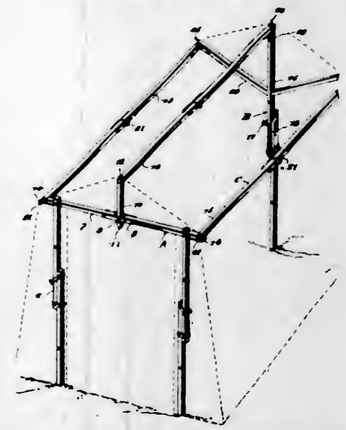
1. In a lubricating installation, in combination, a front axle, a front wheel knuckle having a pivot bearing on said axle, a brake shield mounted on said knuckle, a brake operating shaft extending transversely from the channel frame to said drum and having a bearing in said shield, said operating shaft including a universal joint contiguous to said bearing, said bearing having an integral lug extending upward therefrom, an oil distributer supported upon said lug coaxial with said king pin and above all of said bearings, an inlet to said distributer from a point on said axle and having a swiveling connection with respect to said distributer, and control means assuring predetermined distribution of lubricant through the outlets of said distributer to the various bearings supplied therefrom, one of the outlets comprising a duct through said bracket communicating with the contiguous bearing and having an outlet to one of the pins of said universal joint for supplying the latter, and a tap from said pin through the universal joint to the other pin thereof.

1,888,971. LUBRICATION SYSTEM FOR SLEEVE VALVE ENGINES. WALTER S. FISHER, Toledo, Ohio, assignor to The Willys-Overland Company, Toledo, Ohio, a Corporation of Ohio. Filed May 7, 1928. Serial No. 275,628. 2 Claims. (Cl. 123—196.)



1. In a sleeve valve internal combustion engine including a cylinder, a pair of concentric inner and outer sleeves fitted within said cylinder; said sleeves having ports therein; a cylinder head extending over the upper edges of said sleeves and downwardly therewithin to form a sealed chamber above said upper edges; a piston operating within said inner sleeve; means for lubricating the upper ends of said sleeves comprising a groove on the surface of one of said sleeves extending from the upper end thereof to a point below said ports, said inner sleeve having a second vertically arranged groove in communication with said first groove; a slot in said outer sleeve; a groove in said piston; an opening in said inner sleeve adapted for intermittent communication with the groove in said piston; and means for continuously applying suction adjacent the slot in said outer sleeve to maintain a reduced pressure in said sealed chamber and remove excess oil from the walls of said piston.

1,888,972. TENT FRAME. CARL C. CHITTIM, Springfield, Mo. Filed Apr. 22, 1931. Serial No. 532,053. 5 Claims. (Cl. 135—4.)



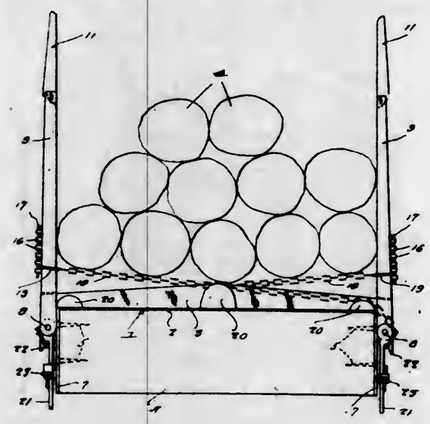
1. A collapsible and knock-down frame for tents comprising a front door assembly, a back pole assembly, a ridge pole connecting the front door assembly with the back pole assembly, a pair of similary constructed side bars, means for supporting one end of said side bars in engagement with the front door assembly, means carried by the various assemblies for securing the same to the covering of a tent, said side bars provided with downwardly inclined braces having projecting pins at their inner ends and said back pole assembly provided with apertures for receiving said pins and constituting a support for said inclined braces.

1,888,973. LOG RETAINING AND UNLOADING DEVICE. THOMAS LE ROY COOPER, Cloquet, Minn. Filed Aug. 31, 1931. Serial No. 560,484. 10 Claims. (Cl. 105—381.)

1. A log retaining and unloading device for vehicles comprising a bunk mounted transversely on the vehicle body, stakes pivotally mounted for swinging movement in a vertical plane on the end portions of the bunk, chains connected, at one end, to the stakes and extending therefrom across the vehicle body, and means on the vehicle body for detachable connection with the other ends of the chains for tightening said chains and securing the stakes in an upright position.

2. A log retaining and unloading device for vehicles comprising a bunk mounted transversely on the vehicle

body, said bunk including a base and an upstanding flange formed integrally with the base and having an anticlinal upper edge, stakes pivotally mounted for swinging movement in a vertical plane on the end portions of the bunk, chains extending transversely across the vehicle above

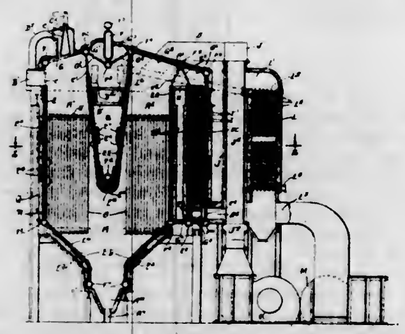


the bunk, means for adjustably connecting one end of the chains to intermediate portions of the stakes, levers pivotally mounted for swinging movement on the end portions of the bunk and engageable with the other ends of the chains for tightening said chains and securing the stakes in an upright position.

1,888,974. LUBRICATING COMPOSITION CONTAINING SULPHONATES. ARMAN E. BECKER, Elizabeth, N. J., assignor to Standard Oil Development Company, a Corporation of Delaware. Filed July 18, 1927. Serial No. 206,798. 10 Claims. (Cl. 87—9.)

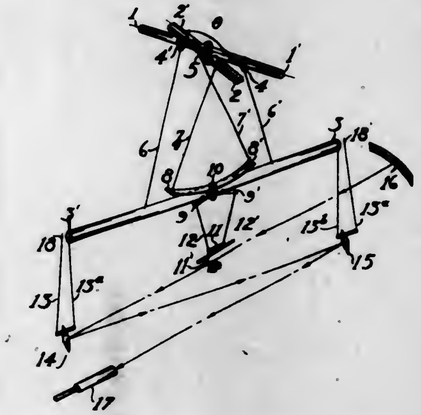
1. A lubricant comprising over 90% of a petroleum lubricating oil, an alkali soap of a fatty acid and an oil soluble alkali metal sulphonate derived from mineral oil.

1,888,975. STEAM GENERATING AND SUPERHEATING APPARATUS. JOHN E. BELL, Brookyn, N. Y.; Lola R. Bell, executrix of the estate of said John E. Bell, deceased, assignor to Foster Wheeler Corporation, New York, N. Y., a Corporation of New York. Filed Sept. 15, 1924. Serial No. 737,706. 17 Claims. (Cl. 122—235.)



1. In a boiler furnace heated by the combustion of powdered coal, the combination with a combustion chamber having roof portions oppositely inclined from a peak, of a baffle depending from said roof beneath said peak to provide a U-shaped path of flow for the heating gases, steam and water separating means, radiant heat absorbing water containing elements lining the side walls of said chamber, and radiant heat absorbing elements lining the inclined roof portions of said chamber and connecting the first mentioned elements to said means.

1,888,976. APPARATUS FOR MEASURING RELATIVE VALUES OF GRAVITY. LUDWIG W. BLAU, Houston, Tex., assignor to Standard Oil Development Company, a Corporation of Delaware. Filed Sept. 5, 1930. Serial No. 479,841. 12 Claims. (Cl. 265—1.)



1. An apparatus for measuring relative values of gravity comprising two bars attached to each other at their center at an angle, a beam, a pair of inextensible filaments for suspending the beam from one of the bars, a second pair of filaments, one end of each filament being connected to the second bar, means for yieldingly connecting the other end of the second pair of filaments to the beam and means for registering the rotational deflections of the beam due to changes in gravity.

1,888,977. MILK DRAINING TUBE. JOHN C. BOWEN, Hunters, Wash. Filed Mar. 16, 1931. Serial No. 522,826. 1 Claim. (Cl. 31—59.)

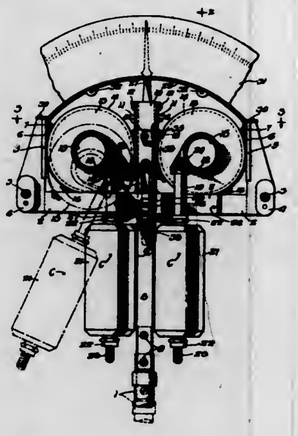


A milk draining tube comprising a tubular body adapted to be inserted into a cow's teat, a solid tapered point integral with said body, an enlarged end for said body forming a shoulder therewith which shoulder limits the entry of the tube into a cow's teat, the half portion of the tubular body adjacent the tapered point being slightly reduced, a slot extending the greater length of said reduced tubular portion, and the end of said slot farthest from the tapered point slanting inwardly and downwardly toward said tapered point.

1,888,978. METHOD OF PREPARING CATALYTIC MATERIALS. GARLAND H. B. DAVIS, Baton Rouge, La., assignor to Standard-I. G. Company. Filed Nov. 29, 1930. Serial No. 499,127. 7 Claims. (Cl. 23—22.)

1. Method of preparing an active form of molybdenum trioxide from a less active form, which comprises dissolving the acid in an alkali, precipitating molybdic acid from the alkaline solution by addition of an excess of an acidic substance, separating the precipitate, and heating it for a prolonged period at a temperature above about 750° F. and below about 1500° F.

1,888,979. WEIGHING APPARATUS. JOHAN HENDRIK DE IONGH, Wassenaar, Netherlands, assignor to Naamlooze Vennootschap Maatschappij tot Vervaardiging van Snijmachines Volgens van Berkel's Patent en van Andere Werktuigen, Rotterdam, Netherlands, a Limited Liability Company of the Netherlands. Filed Sept. 24, 1929, Serial No. 394,933, and in Great Britain Oct. 10, 1928. 20 Claims. (Cl. 265—62.)



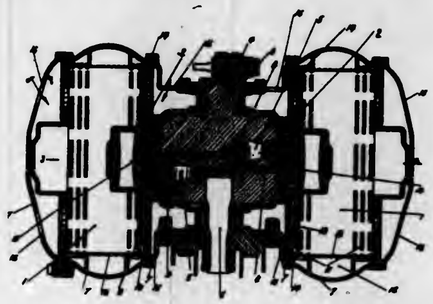
1. Weighing apparatus comprising a fixed support, a movable element responsive to variations in load placed on the load platform of said apparatus, a weight supported by said support and element adapted to move in such a manner as to vary the amount of weight supported by said support and said element corresponding to variations in the load placed on the platform of said weighing apparatus, and indicating means responsive to the movement of said weight for indicating the weight of the load on said load platform.

1,888,980. GAME. WILLIAM K. DINGLEDINE, Brooklyn, N. Y. Filed Nov. 24, 1930, Serial No. 497,793. Renewed Oct. 1, 1932. 10 Claims. (Cl. 273—134.)



5. A game comprising one or more permanently magnetised playing pieces and a board over which said pieces are movable, said board having areas of magnetic and areas of non-magnetic material, a cover over the entire playing surface that renders said areas indistinguishable by sight, a means for inclining the surface of said board during play and a means for determining the distance on the board over which the said playing pieces are to be moved.

1,888,981. COMPRESSOR FOR INTERNAL COMBUSTION ENGINES. PAUL DUGELAY, Paris, France, assignor to Societe d'Exploitation de Brevets pour l'Industrie, l'Aviation et l'Automobile (S. E. B. I. A.), Paris, France, a Corporation of France. Filed Sept. 12, 1931, Serial No. 562,594, and in France Sept. 17, 1930. 6 Claims. (Cl. 230—185.)



1. A compressor for internal combustion engines comprising in combination two cylinders, a double acting piston in the form of a plate disc disposed within each cylinder, guide-rods arranged interiorly of the cylinders to carry the said pistons sliding thereupon, a connecting rod directly pivotally connected independently of any piston-rod to each of the said pistons, means to apply a reciprocatory movement to the said connecting rods, means to admit the gas to be compressed into the cylinders and means to evacuate the compressed gas out of the said cylinders.

1,888,982. CULTIVATING TOOL. DAVID ELDER, Waverly, Mass. Filed Nov. 18, 1929. Serial No. 407,858. 3 Claims. (Cl. 97—61.)



1. In an improved hand cultivating tool of the class described comprising in combination, a handle provided at one end with obliquely disposed and perforated sides, a curved loop comprising a thin band of resilient material the two ends being perforated, perforated flanged clamps adapted to engage over the perforated ends of said loop, a binding member adapted to pass through said perforated members and bind said loop to said handle.

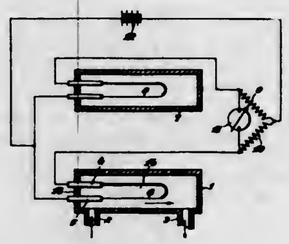
1,888,983. ROOF STRUCTURE FOR RAILWAY CARS. GARTH G. GILPIN, Riverside, Ill., assignor to P. H. Murphy Company, New Kensington, Pa., a Corporation of Pennsylvania. Filed June 23, 1930. Serial No. 463,114. 8 Claims. (Cl. 108—5.4.)

1. In a railway car, the combination of side plates, carlines supported by the side plates, a longitudinally extending load lifting beam supported by the carlines, metal roof sheets spanning the distance between adjacent carlines and resting upon said beam, said roof sheets being provided with raised panels that serve to increase the



strength of the roof and to provide spaces above the load lifting beam for attachment of a load lifting device, and means for securing said beam to the raised panels of said roof sheets.

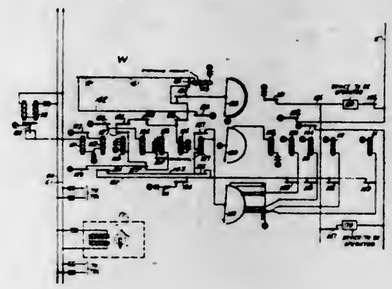
1,888,984. APPARATUS FOR THE DETERMINATION OF THE CONTENTS OF COMBUSTIBLE GASES IN GAS MIXTURES. HEINZ GRÜSS, Berlin-Staaken, and BRUNO THIEDE, Berlin-Charlottenburg, Germany, assignors to Siemens & Halske, Aktiengesellschaft, Siemensstadt, near Berlin, Germany, a Corporation of Germany. Filed Nov. 29, 1927, Serial No. 236,554, and in Germany Dec. 10, 1926. 2 Claims. (Cl. 23—255.)



1. In an apparatus for determining the combustible components of a gas mixture, the combination of a compartment having an inlet and an outlet opening in the walls thereof for permitting the gas mixture to pass through said compartment in a definite direction, a wire having when heated catalytic properties, for producing combustion of the combustible components of the gas mixture, mounted within said compartment, means for heating said wire electrically comprising a source of electricity, a pair of electrically conductive non-oxidisable supports for said wire arranged side by side so as to project over said inlet opening, and a curved tensioned wire bracket secured at one end to one of said supports and at its other end to said wire thereby serving to keep said catalytic wire under tension and prevent sagging thereof.

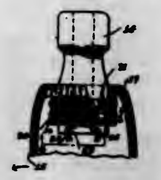
1,888,985. SELECTIVE SIGNALING SYSTEM. HARRY E. HERSHEY, Oak Park, Ill., assignor, by mesne assignments, to Associated Electric Laboratories, Inc., Chicago, Ill., a Corporation of Delaware. Original application filed Nov. 28, 1927, Serial No. 236,301. Divided and this application filed Feb. 15, 1930. Serial No. 428,664. 3 Claims. (Cl. 177—353.)

1. In an automatic switch, a motor magnet, a wiper having a normal position and a bank of contacts, certain of said contacts having operable devices connected thereto and the others having direct ground potential connected thereto, means responsive to a plurality of series of impulses for operating said magnet to move said wiper from its normal position series of steps corresponding to said series of impulses, said wiper coming to rest at the end of each impulse series in engagement with one of its bank contacts, and circuit connections including a marginal relay and said wiper completed each time said wiper comes to rest, said circuit connections operating one of said devices each time said wiper comes to rest in engagement with a contact having an operable device connected thereto and said marginal relay operating



only when said wiper comes to rest in engagement with one of the contacts to which direct ground potential is connected to prevent further operation of said magnet when subsequent series of impulses are received.

1,888,986. MOP HEAD. HARRY HERTZBERG, Brooklyn, N. Y., assignor to Hertzberg Patents Inc., New York, N. Y., a Corporation of New York. Filed June 15, 1931. Serial No. 544,462. 6 Claims. (Cl. 15—120.)



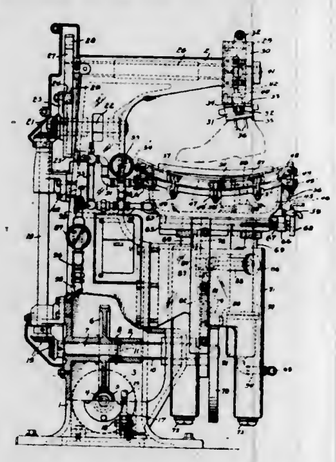
1. In a mop, a holding member having peripheral grooves, a ridge between said grooves, a mopping pad, wires encircling said pad and said holding member pressing said pad into said grooves, said wires passing over said ridge and cross each other on said holding member for securing said pad to said holding member.

1,888,987. SOLE PRESSING MACHINE. ROBERT J. KING and RALPH A. BLAKE, New Haven, Conn., assignors to The Goodyear's India Rubber Glove Mfg. Company, Naugatuck, Conn., a Corporation of Connecticut. Filed June 13, 1923. Serial No. 645,029. 26 Claims. (Cl. 12—37.)

14. In a sole pressing machine, means for engaging a lasted footwear article by its last, fluid supported sole pressing means opposed thereto and including a sponge rubber element, means for relatively moving the two to directly contact the sponge rubber element with a sole, and a rubber bridge member disposed in rear of said sole pressing means in position to press it against the shank of the sole.

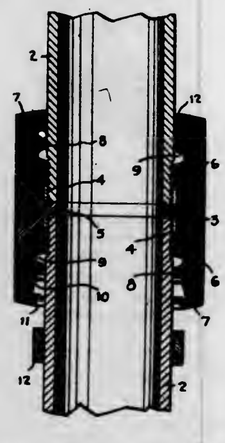
23. In a sole pressing machine, a rotatable head, a plurality of last supports carried thereby, means for intermittently rotating the head, last engaging and locking means carried by each support, and means disposed

at a fixed point in the rotation of each support for automatically disengaging the last engaging means and ejecting the last from the machine.



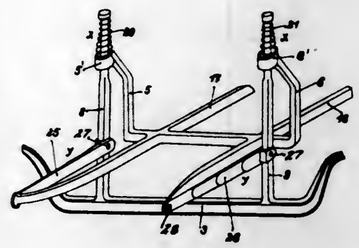
26. In a sole pressing machine, a support for a lasted footwear article, a flexible diaphragm sole pressing device opposed thereto, a mounting for said device including a slide connection therewith, a slide block, an adjustable resilient connection between said slide block and mounting, and means for actuating said slide block.

1,888,988. PIPE JOINT. JOHN F. KIRBY, Somerville, N. J. Filed Feb. 11, 1930. Serial No. 427,468. 3 Claims. (Cl. 285—159.)



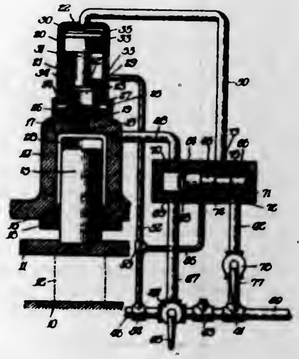
1. A pipe joint comprising a pipe member having a threaded end, and a tapped member wherein said threaded end is screwed, said tapped member having a recessed portion which extends over the plain cylindrical surface of said pipe member back of the threads and which is formed with an annular rib extending inward into proximity to but normally out of contact with the surface of said pipe member intermediate the ends of said recessed portion, and a fillet fixed into the outer recess and against said rib, forming a reinforcement which by its bearing against the plain surface of said pipe member transfers strain from the threaded portion to a comparatively remote region of the pipe member where full wall thickness obtains.

1,888,989. SPRINGING SYSTEM FOR POWER DRIVEN VEHICLES. HANS KRATKY, Vienna, Austria. Filed Dec. 5, 1929, Serial No. 411,846, and in Austria Dec. 5, 1928. 3 Claims. (Cl. 267—2.)



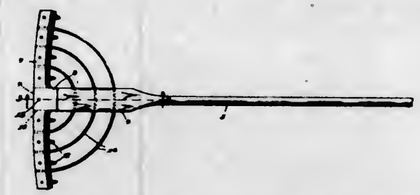
1. In a spring suspension system for power driven vehicles, resilient connecting means for the body and the running gear of the vehicle, said resilient means being disposed above the horizontal plane passing through the centre of gravity of the body portion of the vehicle and further means connecting the body and the running gear of the vehicle, whereby a rigid connection is effected in the direction of length of the vehicle and a resilient connection is effected in a transverse and an upright direction.

1,888,990. AUTOMATICALLY CONTROLLED HYDRAULIC PRESS INTENSIFIER. FRANZ KURATH, Chicago, Ill., assignor to Economy Fuse and Mfg. Co., Chicago, Ill., a Corporation of New York. Filed Aug. 16, 1929. Serial No. 386,252. 5 Claims. (Cl. 138—17.)



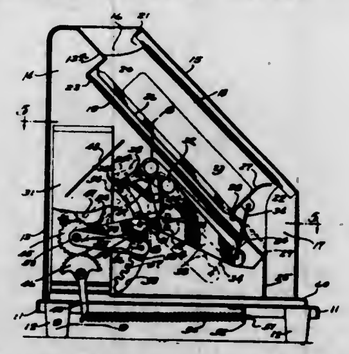
1. Apparatus for carrying out pressing operations comprising a press cylinder, a low pressure fluid supply, a fluid supply line leading from said low pressure supply to said cylinder, means in said line controlling the flow of fluid therethrough, a pressure intensifier associated with said press cylinder and arranged to transmit high pressure to said cylinder upon the admission of low pressure to said intensifier, a fluid supply line leading from said low pressure supply to said intensifier, means for controlling the flow of fluid through said last mentioned line, said last named means being associated with the fluid supply line to said cylinder to be automatically operated upon the admission of low pressure to said cylinder and additional manually adjustable means in the supply line to said intensifier to control the rate of actuation of said intensifier.

1,888,991. RAKE. JOSEPH E. LARSON, Seattle, Wash. Filed Oct. 7, 1931. Serial No. 567,493. 2 Claims. (Cl. 55—10.)



1. A rake comprising in combination a handle having a wide flat end portion with a reduced tongue end, a slightly curved cross-head having a centrally projecting socket portion for its inwardly curved side, said socket portion having a slot extending therethrough and adapted to snugly receive the tongue end of the handle, the inner and outer faces of the cross-head slanting toward the handle, a plurality of aligned teeth extending in spaced apart relation through the cross-head and in slanting disposition parallel with the slanting faces of the cross-head, and the middle one of said teeth centrally disposed with respect to the cross-head and passing through the tongue end of the handle.

1,888,992. ELECTRIC TOASTER. EINAR G. C. LOFGREN and WILLIAM M. ANDERSON, Minneapolis, Minn., assignors of six-tenths to W. A. Wright, C. K. Carlstrom, and L. J. Dawson, Minneapolis, Minn. Filed Jan. 2, 1931. Serial No. 506,206. 5 Claims. (Cl. 55—5.)

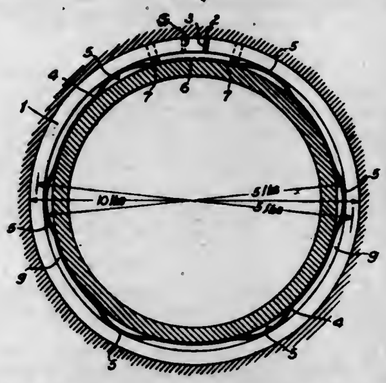


2. In an electric toaster, a casing having electric heating elements spaced and arranged to afford an inclined toasting chamber open at its upper end to receive the bread slices and open at its lower end for the discharge of the toast, inclined grid bars above the lower heating element, a hinge rod supported by the casing and supporting the lower ends of said grid bars, a detent-acting gate hinged on said hinge rod and arranged when turned upward to substantially close the lower end of inclined toasting chamber, a toast kicker intermediately pivoted on said hinge rod and arranged to be engaged and operated by said gate when the latter is dropped and then serving to lift the toast off from said grid bars, means for manually setting said gate in a chamber-closing position, and timed means for releasing and dropping said gate and thereby actuating said kicker.

1,888,993. PROCESS OF MAKING TITANIUM WHITE. SIMON J. LUBOWSKY, Jersey City, N. J., assignor to Metal & Thermit Corporation, Carteret, N. J., a Corporation of New Jersey. Filed July 10, 1928. Serial No. 291,696. 3 Claims. (Cl. 23—202.)

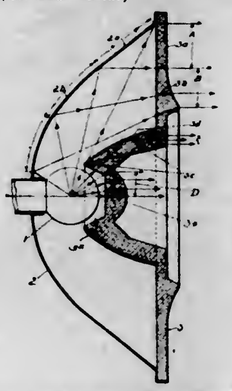
1. In the production of titanium white by a process comprising hydrolysis of a solution of titanium and magnesium salts obtained by dissolving with acid a product produced by heating together titanium oxid and magnesium oxid, the improvement which comprises heating the titanium-magnesium salt solution at a temperature above 100° C., thereby precipitating a titanium compound, and thereafter digesting the precipitate with its mother liquor for an extended time under superatmospheric pressure and at a temperature corresponding thereto, thereby increasing the opacity and improving the pigmentary covering power of the precipitated product.

1,888,994. PISTON RING. CHARLES A. MARIEN, St. Louis, Mo., assignor to Ramsey Accessories Manufacturing Corporation, St. Louis, Mo., a Corporation of Missouri. Filed June 27, 1931. Serial No. 547,225. 2 Claims. (Cl. 74—108.)



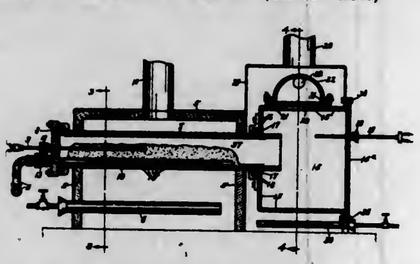
1. In combination, an outer split packing ring and an inner split expander of polygonal shape, said ring and expander being positioned relative to each other so that the gaps are in alinement, said ring having a pin at each end thereof, said pin protruding inwardly of the ring at points on the expander intermediate adjacent corners thereof to prevent substantial disalinement of the gaps in the expander and the ring.

1,888,995. HEADLIGHT. ALBERT JOHN MATTER, Park Ridge, Ill. Filed Nov. 14, 1929. Serial No. 407,075. 5 Claims. (Cl. 240—41.3.)



1. A lens for a headlight comprising a disc-like body portion having an outer annular flat portion, an intermediate annular prismatic portion adjacent the flat portion, a central rearwardly projecting concavo-convex portion having a reflecting rear surface, and a plano-convex lens portion near the rear end of the concavo-convex portion and disposed concentrically thereof.

1,888,996. APPARATUS FOR MANUFACTURING VOLATILE CHLORIDES. RALH J. MCINERNY and EUGENE F. WILLIAMS, Los Angeles, and HERBERT L. GLAZE, South Pasadena, Calif., assignors, by mesne assignments, to Minerals Increment Company, Wilmington, Del., a Corporation of Delaware. Filed Mar. 19, 1928. Serial No. 262,654. 3 Claims. (Cl. 23—264.)

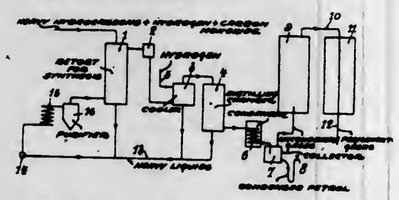


1. In an apparatus for the purposes referred to, in combination, a retort, means for heating the same, an expansion chamber in communication therewith, means for heating the same, a heated filter diaphragm covering an outlet from said expansion chamber, a receiver connected with said expansion chamber outside of said filter diaphragm, means for cooling and condensing matter passing to said receiver, and a reflux condenser connected with said receiver, with means for cooling the same.

1,888,997. INSECTICIDE. FORREST B. MCLANE, Rivera, Calif. Filed Mar. 15, 1930. Serial No. 436,250. 2 Claims. (Cl. 167—14.)

1. An insecticide comprising nicotine sulphate and sugar in solution, the same being thoroughly incorporated into a much greater proportion of a fluid carrying agent.

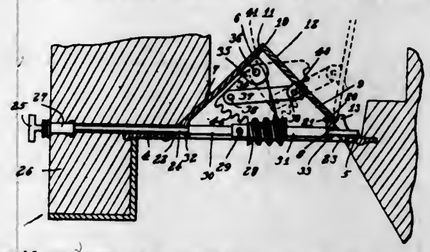
1,888,998. PROCESS FOR THE SYNTHESIS OF HYDROCARBON FUELS, AND FOR THE CRACKING AND HYDROGENATION OF HEAVY HYDROCARBONS. JEAN MERCIER, Paris, France. Filed May 23, 1929, Serial No. 365,322, and in Belgium June 2, 1928. 7 Claims. (Cl. 196—53.)



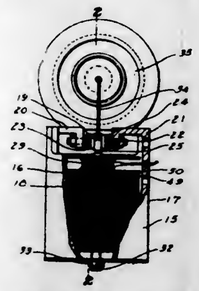
1. In a process for the manufacture of light hydrocarbons, the continuous steps of effecting the synthesis of hydrocarbons by heating to about 500° C. in the presence of hydrogenising catalysts an initial mixture including heavy hydrocarbons, carbon monoxide and hydrogen, then subjecting the whole heated mixture to a simultaneous expansion and cooling down to 180–300° C. in a most sudden, rapid and energetic way in order to prevent thus the mixture from staying a relatively long time at any intermediate temperature and immediately after said cooling hydrogenising said mixture in presence of hydrogenising catalysts at a temperature between 180° and 300° C.

1,888,999. DOME DAMPER. JOHN B. MEYER, Dubuque, Iowa, assignor to The Adams Company, Dubuque, Iowa, a Corporation of Iowa. Filed Nov. 1, 1929. Serial No. 404,107. 2 Claims. (Cl. 126—288.)

1. In a fireplace damper having a triangular dome provided with a throat opening on one side thereof, a lid positioned over said opening, means near the lower edge of said opening for rotatably supporting said lid to move between a closed and an open position, a gear segment rotatably supported within said dome near the apex and intermediate the ends thereof, an arm pivotally connecting said segment at a point intermediate the point of support and the gear surface thereof with said lid whereby said lid is caused to move with said segment, a worm for rotating said segment to open and close said lid, and means for rotating said worm from a remote point to open and close said damper.

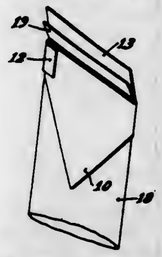


1,889,000. ELECTROMAGNETIC DEVICE. FRANK ALLEN MITCHELL, London, England, assignor to Columbia Phonograph Company, Inc., Bridgeport, Conn., a Corporation of New York. Filed Aug. 7, 1928, Serial No. 298,062, and in Great Britain Aug. 17, 1927. 6 Claims. (Cl. 179—117.)



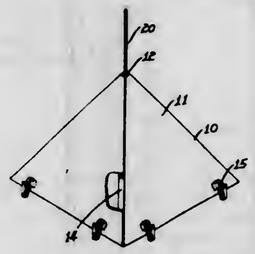
5. In combination, an electromagnet including a core and a pair of arms arranged at opposite sides of the core and extending above the same, an armature disposed above said core, means on said arms pivotally mounting the armature, pole pieces extending through said core and having their ends disposed in operative relation with the armature, and means whereby said pole pieces may be adjusted toward and from the armature.

1,889,001. BAG SEAL. BELMONT D. OSTERN, Columbus, Ga., assignor to Tom Huston Peanut Company, a Corporation of Georgia. Filed Apr. 16, 1932. Serial No. 605,766. 6 Claims. (Cl. 229—62.)



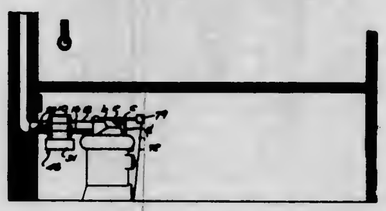
1. A sealing member for flexible bags, comprising front and rear body portions joined together and each coextensive in width to the flattened bag to be sealed, a side tab on one body portion, and an upper downwardly folding flap carried by one body portion and adapted to be folded down over the side tab and the other body portion with the open bag end interposed to seal it.

1,889,002. DISPLAY DEVICE. ROBERT C. PALICKI, Toledo, Ohio. Filed Mar. 17, 1932. Serial No. 599,522. 3 Claims. (Cl. 211—118.)



1. A display device comprising a pyramidal-shaped holder having an open outer end and a plurality of panels adapted to be folded together in flat relation, a separate member of substantially pyramidal form adapted to fit inside of said holder at the small end thereof and to contact throughout its side area with said holder, said member comprising a sheet of relatively stiff material folded to provide a bottom and side panels corresponding to the panels of said holder, and a support engaging the bottom of said member for mounting said holder in position of use.

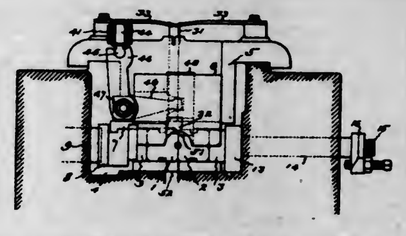
1,889,003. ELECTRICAL CONTROL SYSTEM. FREDERICK D. POTTER, Lindon, N. J. Filed May 16, 1929. Serial No. 363,428. 12 Claims. (Cl. 236—9.)



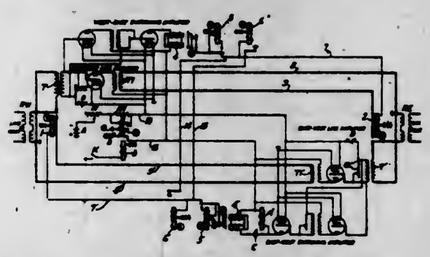
8. In a control system for heating apparatus, valvular combustion controlling means, means responsive to variations in conditions within said apparatus including a lever, a support carried by said lever, an actuating member movable on said support, a connection between said actuating member and said valvular combustion controlling means, electromagnetic means on said support for controlling the movement of said actuating member in opposite directions, and thermostatic means for controlling the operation of said electromagnetic means.

1,889,004. METAL HEADING MACHINE. JOHN E. PRACNY, Waterbury, Conn., assignor to The E. J. Manville Machine Company, Waterbury, Conn., a Corporation of Connecticut. Filed May 27, 1931. Serial No. 540,225. 5 Claims. (Cl. 10—24.)

1. A metal heading machine of the character described having complementary dies movable transversely in a die pocket that has a discharge opening in its bottom wall, means for positively moving one die between feeding position and heading position, spring actuated means for moving the other die from heading position to feeding position, means for temporarily restraining the movement of the latter die for a short interval as the former die is being withdrawn from heading position, and means having a recess with beveled edges movable transversely of and across the ends of the die cavities during the interval said die is being restrained, for wedging free and releasing any blank that has adhered to either die.



1,889,005. VOICE CURRENT REPEATER. HOWARD H. SMITH, Chicago, Ill., assignor, by mesne assignments, to Associated Electric Laboratories, Inc., Chicago, Ill., a Corporation of Delaware. Filed Sept. 2, 1930. Serial No. 479,253. 3 Claims. (Cl. 179—170.)



2. In a two-way repeater circuit, a voice current amplifier for each direction of repetition through said circuit, each amplifier having a normally open output circuit, a circuit closing device for each output circuit, means individual to each amplifier and responsive to an initial voice current in the proper direction to operate the circuit closing device of the associated amplifier to close the output circuit thereof, and other means associated with each amplifier and responsive to the operation of the first-mentioned means individual to the associated amplifier to prevent operation of the first-mentioned means individual to the other amplifier while the output circuit of the associated amplifier is closed.

1,889,006. INSTRUMENT FOR GRAPHIC CONTROL. EUGENE SZEPESI, Scarsdale, N. Y. Filed Sept. 8, 1931. Serial No. 561,617. 13 Claims. (Cl. 116—135.)

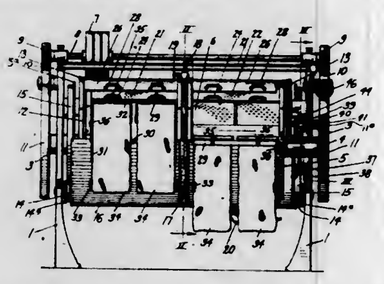


1. A graphic control device, comprising a supporting structure, graphic units carried by said supporting structure, each of said graphic units comprising a bar, end members slidable along said bar, rollers mounted in said members, an indicator ribbon mounted for movement within the bar and passing over said rollers, said ribbon having its tension adjusted by sliding movements of said end members and an indicator to which the ends of said ribbon are connected.

1,889,007. SAND CORE FOR CASTING METAL AND METHOD OF MAKING SAME. BENJAMIN F. WALLACE, Brooklyn, N. Y. Filed Feb. 26, 1931. Serial No. 518,500. 11 Claims. (Cl. 22—188.)

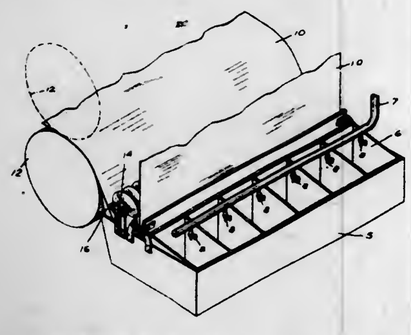
1. The method of making sand cores for metal casing which comprises increasing the alkalinity of sodium silicate until the ratio of SiO_2 to Na_2O thereof is less than 2 to 1, but above that point at which the adhesiveness of such silicate is substantially impaired by reacting upon the same with caustic soda and effecting the gelatinization of the mass by the action of a soluble salt having an alkaline reaction and then mixing sand gelatinized silicate with sand in the presence of water, the amount of sand employed being in excess of 90% of the mixture, then desiccating said sand mixture to evaporate the moisture therefrom and form a self-sustaining core without effecting the decomposition of such silicate.

1,889,008. CYLINDER LAUNDRY MACHINE. JAMES N. WHITE, Denver, Colo. Filed Oct. 7, 1927. Serial No. 224,630. 5 Claims. (Cl. 68—18.)



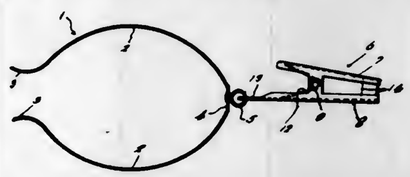
1. In a laundry machine comprising an outer cylindrical casing and a cylindrical clothes container mounted to rotate therein and having doorways, said outer casing comprising a fixed arcuate section having doorways therein and an arcuate section normally below but adapted to rotate in overlapping relation to the fixed section, means to interlock the container and the rotatable section and means to rotate the container and said section in said interlocked relation to drop clothes through the doorways of the container when brought to the bottom of the container by such rotation.

1,889,009. APPARATUS FOR THE TREATIING OF SHEET MATERIAL. HENRY A. WOODHEAD and MADISON R. KELLY, Graniteville, S. C., assignors to The Gregg Dyeing Company, Graniteville, S. C., a Corporation of South Carolina. Filed Feb. 18, 1930. Serial No. 429,440. 5 Claims. (Cl. 8—19.)



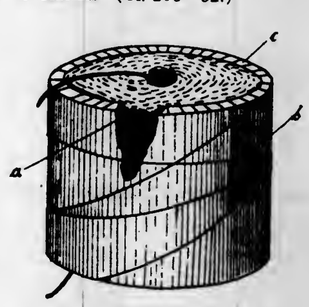
1. An apparatus of the character described including a trough to receive material treating fluid, means providing a plurality of compartments in association with said trough and having communication therewith adjacent their lower ends and below the level of fluid within said trough, and means for introducing fluid into each of said compartments.

1,889,010. COW-TAIL HOLDER. CASPER R. AARESTAD, Cooperstown, N. Dak. Filed Jan. 9, 1931. Serial No. 507,696. 2 Claims. (Cl. 119—105.)



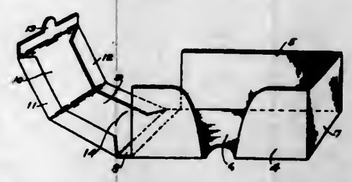
1. A cow tail holder of the character described comprising a resilient, metallic clamp for detachably mounting on the leg of a milker and including a pair of coacting, resilient arms, a flat, straight intermediate portion connecting the arms at one end, the free end portions of the arms being reversely curved, an eye swivelly mounted on the intermediate portion of the clamp, and a tail engaging clamp loosely connected to the eye and comprising a pair of spring actuated jaws and resilient pads disposed on the jaws.

1,889,011. PROTECTING ENVELOPE FOR BALLS OF STRING FOR BINDING SHEAVES. PETER BAUMHÜTER, Batenhorst, near Wiedenbruck, Germany. Filed Sept. 27, 1929, Serial No. 395,596, and in Germany Oct. 1, 1928. 5 Claims. (Cl. 206—52.)



1. A protecting envelope for string balls designed for binding sheaves, consisting of a suitable soft material, such as cardboard, entering into the unevennesses of the outer layer of the string ball, corresponding depressions being formed in the envelope acting as supports for the outer layers of the string ball.

1,889,012. COMBINATION TISSUE CONTAINER. SOL BERGER, Brooklyn, N. Y. Filed Sept. 26, 1932. Serial No. 634,898. 1 Claim. (Cl. 206—47.)



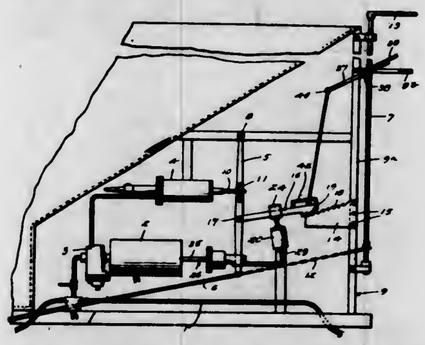
In a combination container, a rectangular shaped box with the top open and the edges of one end free, a perforated flap extending from the bottom at the open end, a folding packet with holding members at the edges extending from said perforated flap and adapted to fold to form a closure for the open end of the box, said packet adapted to be torn from said box, and a tongue on said packet adapted to be inserted in a slit therein to hold said packet closed.

1,889,013. COMPOSITE THREAD RESTORING TOOL. OTTO BERNER, New York, N. Y. Filed June 1, 1932. Serial No. 614,718. 2 Claims. (Cl. 10—1.)



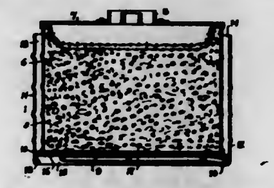
1. A composite thread restoring tool comprising an elongated spindle having a non-circular cross-section and threaded ends, a plurality of cutting blades having non-circular apertures and adapted to be mounted in longitudinal alignment and in spaced relation adjoining spacing members on said spindle, each of said cutting blades having a plurality of front and rear cutting faces with generally V-shaped cutting teeth adapted for longitudinal cutting each of said cutting blades being shaped to form a single spherical surface and the center of curvature being positioned along the longitudinal axis of the spindle and the V-shaped sides of said cutting teeth being parallel with the longitudinal axis of said spindle, and threaded members in engagement with said threaded ends for clamping said cutting blades on said spindle, the front and rear cutting faces of each blade being parallel and concentric, whereby said tool is adapted for smooth forward and backward cutting.

1,889,014. AUTOMATIC AIR-HAND BRAKE. CALVIN H. BLEDSOE, Hazard, Ky., assignor of twenty-five per cent to Grace Williams and twenty-four per cent to Fred Williams, Hazard, Ky. Filed Nov. 20, 1930. Serial No. 497,014. 3 Claims. (Cl. 303—89.)



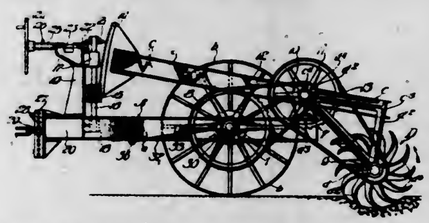
1. In a brake of the character set forth, a cylinder lever, a fixed keeper provided with upwardly directed teeth, a bolt pivoted at one end to the lever and having its free end resting upon the keeper, the free end of the bolt being provided with downwardly directed teeth adapted during the application of the brake to engage the teeth of the keeper to hold the brake applied, a loop carried by the bolt outwardly of its pivoted end, a pedal lever pivoted between its ends above the keeper, and a rod pivotally connected to one end of the lever and pivotally and slidably mounted in said loop, said pedal lever and rod providing means by which the bolt may be withdrawn from engagement with the keeper to effect the release of the brake.

1,889,015. PURIFYING CANISTER FOR BREATHING APPARATUS. ROBERT HENRY DAVIS, London, England. Filed June 25, 1930, Serial No. 463,616, and in Great Britain July 19, 1929. 5 Claims. (Cl. 128—191.)



1. In or for a self-contained breathing apparatus, a breath purifying device comprising a canister, to contain a chemical purifying reagent, having a perforated bottom wall and a breath opening in the top wall, means for coupling the said opening to a breathing tube of the apparatus, and an open ended air channel extending down the exterior of the wall of the canister from a point located below the said top wall thereof to a point located below the bottom wall where said channel communicates with an open-bottomed space provided beneath the perforated bottom wall of the canister.

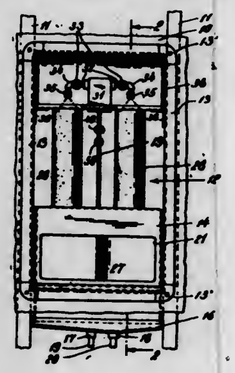
1,889,016. AGRICULTURAL IMPLEMENT. SAMUEL DINSMORE, Chicago, Ill. Filed Apr. 8, 1930. Serial No. 442,546. 4 Claims. (Cl. 97—40.)



1. In an agricultural implement for the purpose specified, the combination of a mobile vehicle consisting of a supporting frame, a single axle rotatably mounted in bearings formed therein between the ends thereof, supporting wheels on said axle including a traction wheel, means rendered operative by advancing movement of the vehicle for causing the axle to rotate with said traction wheel, a rigid auxiliary frame, means for pivotally mounting said auxiliary frame upon the main frame with its rear end overhanging the rear end of said main frame and its front end extending to within a short distance of the front end of said main frame, a soil tilling implement rotatably mounted on the overhanging rear end of the auxiliary frame, the pivot of the auxiliary frame being arranged at the rear end of the main frame and a sufficient distance above the same to provide for pivotal movement of said auxiliary frame corresponding to maximum contemplated raising and lowering movement of the soil tilling implement in operation and the application of substantially maximum leverage for so turning said auxiliary frame, means for making close-coupled tractor connections to the front end of the main frame, and self-locking means com-

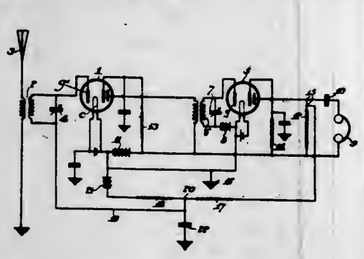
prising a manually operable member accessible for operation by the driver of a tractor coupled to the vehicle for turning the auxiliary frame pivotally to raise and lower said soil tilling implement in operation, and driving connection between the axle of the vehicle and the shaft of the soil tilling implement for rotating said implement.

1,889,017. HUMIDIFYING APPARATUS. EDWARD L. FONSECA, Newark, EDWARD MCK. HUNT, Montclair, N. J., and MARVIN C. BARNUM, Minneapolis, Minn., assignors to The Wilcolator Company, Newark, N. J., a Corporation of Delaware. Filed July 27, 1929. Serial No. 381,572. 18 Claims. (Cl. 261—116.)



1. In a humidifying apparatus, the combination of a casing adapted to be inserted in and removed at will from a recess in a wall, a ledge thereon adapted to engage the wall and forming the sole support for the casing, separate air passages communicating with the interior of the casing, and liquid spray means in said casing for creating a current of air into one of said openings, through said casing and out of the other of said openings.

1,889,018. VOLUME CONTROL. WALTER E. GILBERT, Philadelphia, Pa., assignor to Atwater Kent Manufacturing Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed July 29, 1931. Serial No. 553,723. 9 Claims. (Cl. 250—20.)



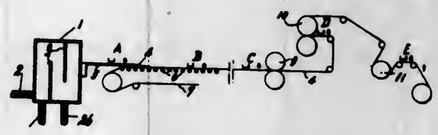
1. In a radio-receiving system comprising a radio-frequency amplifier tube and a detector tube, a source of anode current, a conductive impedance connected between a positive terminal of said source and the anode of said detector tube, means for automatically varying the sensitivity of the system comprising conductive impedance connected between the anode of said detector tube and the cathode of said amplifier tube, a connection from the grid of said amplifier tube and an intermediate point of said impedance, and a source of negative grid biasing potential included in series with said impedance between said cathode and said point.

1,889,019. BATTERY TERMINAL CLAMP. SIDNEY GORMAN, Edgewater, Colo. Filed Oct. 3, 1930. Serial No. 486,117. 2 Claims. (Cl. 173—259.)



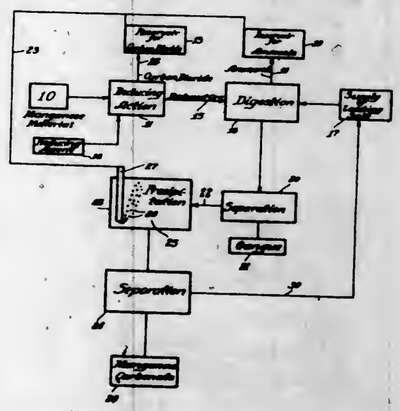
2. A battery terminal comprising: a body portion having a vertical hole for the reception of a battery post, there being a horizontal passage formed through said body portion opening through one wall of said hole; a relatively flat key slidably mounted in said passage; an angularly positioned wedge face on said key arranged to engage said battery post when the latter is in position in said hole; and a longitudinal tooth formed on said wedge face, said tooth being inclined so that, as said key is forced into said body portion, it will engage said post and wedge said body portion downwardly thereon; and means for securing a cable extremity to said battery terminal.

1,889,020. METHOD OF COLORING PAPER. WILLIAM H. GROGAN and FRANK C. LADD, Turners Falls, Mass., assignors to Keith Paper Company, Turners Falls, Mass., a Corporation of Massachusetts. Filed Dec. 24, 1931. Serial No. 582,996. 10 Claims. (Cl. 92—40.)



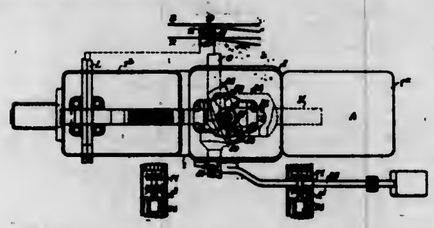
1. The method of decorating paper which comprises introducing bubbles of colored liquid to the paper stuff.

1,889,021. RECOVERY OF MANGANOUS COMPOUNDS. KENNETH A. KOBE, Minneapolis, Minn., assignor to Bradley-Fitch Company, Duluth, Minn., a Corporation of Minnesota. Filed Nov. 29, 1929. Serial No. 410,315. 4 Claims. (Cl. 23—61.)



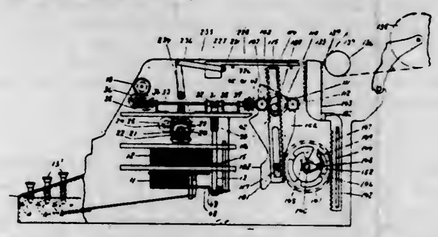
1. The process of obtaining manganous carbonate from material containing manganous oxide which comprises digesting the material with an ammonium salt solution, simultaneously removing the resulting ammonia as a gas, separating the resulting solution from residual matter, simultaneously precipitating from the solution manganous carbonate and regenerating the ammonium salt by the addition of carbon dioxide and ammonia, and recovering the precipitated manganous carbonate.

1,889,022. RAILWAY SWITCH OPERATING APPARATUS. EDWIN G. LITTLE, Wilkinsburg, Pa., assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed Aug. 15, 1931. Serial No. 557,335. 28 Claims. (Cl. 246—240.)



1. Railway switch operating apparatus comprising a switch actuating member, two movable elements, means for selectively connecting one of said elements or the other with said member, a manually operable lever movable around only one axis as a center for operating one of said elements, other means for operating the other element, and means responsive to a preliminary movement of said lever around said axis for actuating said connecting means.

1,889,023. CALCULATING MACHINE. CONRAD LUTTGOFF, Stockholm, Sweden, assignor of one-half to Anders Lindahl, Stockholm, Sweden. Filed Apr. 27, 1927, Serial No. 187,090, and in Sweden Mar. 9, 1927. 53 Claims. (Cl. 235—60.)

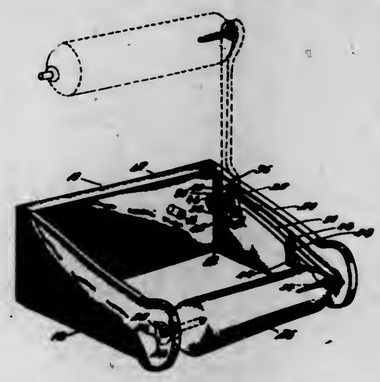


1. In a calculating machine, the combination with item mechanism, of accumulating-recording mechanism comprising a swingable carrier, a series of gear wheels mounted in said carrier adapted to be actuated by the item mechanism, a series of vertically movable type bars, a series of vertically movable racks mounted in the carrier and adapted to engage said gear wheels, and means to connect said type bars with said racks, respectively, and simultaneously move connected racks and bars in opposite directions.

52. In a calculating machine, the combination with item mechanism, of a type bar, a rack oppositely movable to said bar and opposing the movement thereof, a device between them for transmitting movements between the rack and bar and vice versa, and mechanism engageable by both the rack and item mechanism to position the rack in accordance with the item set up.

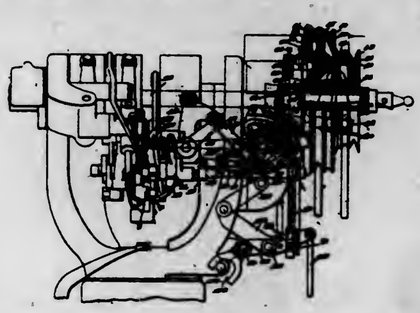
1,889,024. ROLL HOLDER. WILLIAM H. MARSH, Providence, R. I. Filed Feb. 20, 1932. Serial No. 594,231. 6 Claims. (Cl. 242—55.2.)

6. In a roll holder, a frame having a back portion adapted to be attached to a wall and forwardly projecting side arms, a roll support, means attached to one end of said roll support and pivotally mounted on said frame to raise said roll support from a lowered operative position on said frame to an upward position for replacement of said roll and means on said frame to abut said



pivoted arm to resiliently retain it in lowered operative position releasable on upward pressure on said roll to permit said roll to be raised to a roll replacement position.

1,889,025. SEWING MACHINE. FRED RICKS and WILFRID THOMAS MINETT, Leicester, England, assignors to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Mar. 15, 1930, Serial No. 435,985, and in Great Britain Apr. 30, 1929. 14 Claims. (Cl. 112—47.)

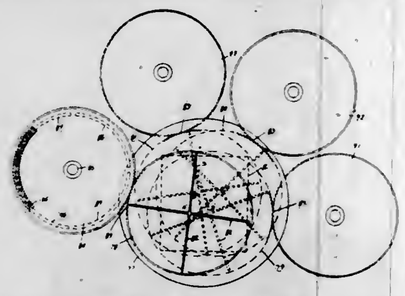


1. In a shoe sewing machine, the combination with stitch-forming and work feeding devices of a change speed device through which the machine is driven, means for varying the length of stitch formed by said stitch forming and work feeding devices, and means for controlling conjointly the change speed device and said means for varying the length of stitch.

1,889,026. APPARATUS FOR ASSISTING AIR AND SEA NAVIGATION. OLIVER C. WARRICK, Indianapolis, Ind. Filed June 13, 1930. Serial No. 460,845. 8 Claims. (Cl. 250—11.)

1. In combination with a plurality of radio receiving stations, spaced apart and each having directional receiving apparatus adapted to indicate the direction from which radio signals are received, a rotatable member for each of said stations, said members being arranged in parallel overlapping relation and rotatable about parallel axes arranged in positions corresponding in scale to the positions of the corresponding receiving stations and each of said members having a slotted opening therein passing through the rotational axis thereof, and means for ad-

justing the position of each of said members to bring said slotted openings into correspondence with the direction from which radio signals are received by its corresponding

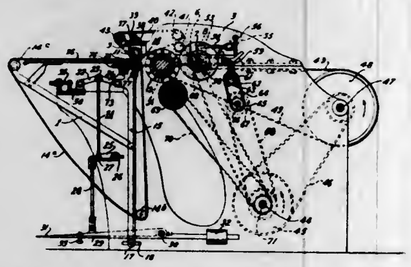


receiving station, whereby the intersection of the projections of said slotted openings indicates to scale the position of the source of said signals.

1,889,027. RECOVERY OF TITANIUM COMPOUNDS. WILLIS F. WASHBURN, St. Louis, Mo., assignor to Titanium Pigment Company, Inc., New York, N. Y., a Corporation of Maine. Filed Apr. 12, 1927. Serial No. 183,245. 25 Claims. (Cl. 23—117.)

9. In the method of recovering water soluble titanium compounds from a mixture of titaniferous materials and strong sulphuric acid, the step which consists in adding water to the mixed charge to initiate the reaction.

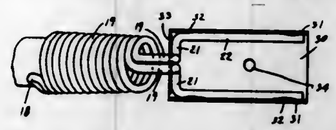
1,889,028. LEATHER SHAVING MACHINE. FRANK WAYLAND, Salem, Mass. Filed July 16, 1930. Serial No. 468,314. 20 Claims. (Cl. 149—16.)



10. A leather shaving machine comprising a frame, a rotatable cutter disposed transversely of the frame, an upper feeding roll disposed parallel to the cutter, a bed roll mounted beneath said feeding roll and movable toward and from the cutter, the feeding roll having a shaft provided with a sprocket, a driving sprocket, a chain connecting said sprockets whereby said roll is positively rotated, and guide sprockets in the path of said chain operative to tension the latter, said feeding roll being adjustable longitudinally of the frame, the respective guide pulleys being fixed in position and disposed forwardly and rearwardly and on the same side vertically of said roll, so that the tension of the chain is maintained in all adjusted positions of the feeding roll.

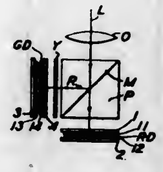
1,889,029. REVERSIBLE RESILIENT BRUSH. JESSE I. ANDERSON, Indianapolis, Ind., assignor to J. I. Holcomb Mfg. Company, Indianapolis, Ind., a Corporation. Filed Sept. 11, 1930. Serial No. 481,184. 1 Claim. (Cl. 306—20.)

In combination with a brush, a connector comprising a single strand of wire folded upon itself intermediate its ends, said folded portion formed into a double coil socket tapering toward the wire ends, and having at the end of said coil portion a portion bent into substantially U-shape, and the strands of said wire at the end of said



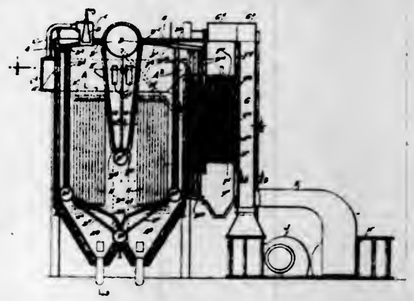
U-shape portion bent outwardly away from each other and then forwardly at right angles to form a brush engaging portion; and means to connect said ends to the brush.

1,889,030. MULTICOLOR PHOTOGRAPHY WITH BI-PACKS. JOSEPH A. BALL, Los Angeles, Calif., assignor by mesne assignments, to Technicolor, Inc., New York, N. Y., a Corporation of Delaware. Filed June 14, 1930. Serial No. 461,061. 8 Claims. (Cl. 95—2.)



1. The method of making photographs in natural colors which comprises dividing an image-bearing beam of light in two component beams, recording one color aspect in one of said component beams upon a blue sensitive transparent emulsion, selectively filtering said component beam at the emergent side of said blue sensitive emulsion, recording another color aspect upon a panchromate emulsion behind said blue sensitive emulsion, selectively filtering the other of said component beams and recording a third color aspect upon a second panchromatic emulsion which is substantially identical with the aforesaid panchromatic emulsion.

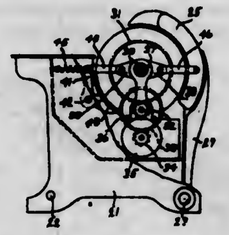
1,889,031. STEAM GENERATION AND SUPERHEATING. JOHN E. BELL, Brooklyn, N. Y.; Lola Rust Bell, Jackson Heights, N. Y., executrix of said John E. Bell, deceased, assignor to Foster Wheeler Corporation, New York, N. Y., a Corporation of New York. Filed Jan. 13, 1923. Serial No. 612,448. 39 Claims. (Cl. 122—235.)



1. The combination in a boiler furnace comprising a combustion chamber, of a baffle depending from the top of the combustion chamber and uniting with the walls of the combustion chamber to provide a U-shaped path of flow for the burning fuel and products of combustion, one

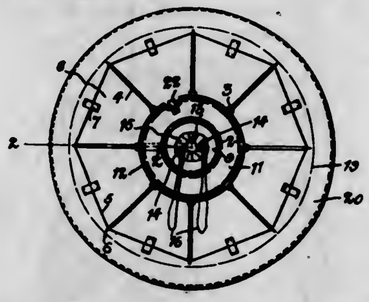
leg of which is of smaller cross section in its upper portions than in its lower portion, and provisions for supplying pulverized fuel and air for the combustion in suspension of the fuel to the combustion chamber at the top of said one leg of said path, said one leg being so elongated that combustion is largely completed therein.

1,889,032. DOMESTIC APPLIANCE. RALPH L. LEE, Dayton, Ohio, assignor to Delco-Light Company, Dayton, Ohio, a Corporation of Delaware. Filed Apr. 17, 1924. Serial No. 707,250. 10 Claims. (Cl. 68—9.)



10. An ironing machine comprising, in combination, an ironing roll member; an ironing shoe member; a motor; gears transmitting motion from the motor to the roll member for rotating said roll member; and means responsive to the reaction between the roll driving gears when the motor is operating, for urging one of said members towards the other.

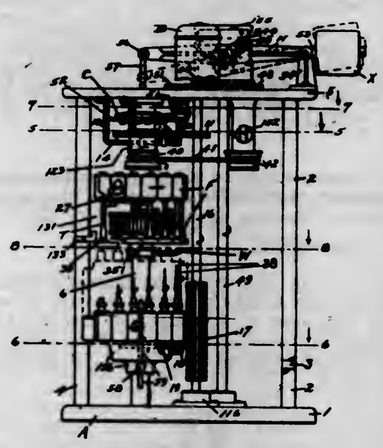
1,889,033. PORTABLE DRESSING CABINET. CHARLES HALA, Toronto, Ontario, Canada. Filed Jan. 29, 1932, Serial No. 589,664, and in Canada Apr. 29, 1931. 3 Claims. (Cl. 135—5.)



3. In a device of the class described, in combination a centrally-apertured member adapted to rest on the shoulders of the user; a plurality of sockets radially-disposed thereon and carried thereby; rods adapted to be removable supported at their inner ends, one in each of the said sockets, and elastic means coupling said rods and functioning to normally keep said rods in said socket.

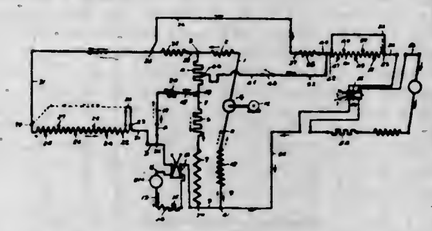
1,889,034. BOBBIN BORING MACHINE. MAURICE W. HAMBLETON, Goffstown, and BYRON F. MORRILL, Nashua, N. H.; said Morrill assignor to said Hambleton. Filed Dec. 1, 1928. Serial No. 323,121. 10 Claims. (Cl. 144—14.)

1. In a high speed multiple spindle boring machine for boring single headed wooden bobbin blanks, the combination of a work carrier supplied with a plurality of blank holding devices each adapted to revolve a blank held therein on a vertical axis; means connected therewith for imparting to said work carrier an intermittent movement to advance the blanks successively a long and endless path; with a set of boring tools each pointing upwardly in line with the axis of the work in a blank holding device; means to revolve each boring tool; and means for moving the set of boring tools upwardly into the blank holding



devices while the work carrier is stationary and while the work held in each blank holding device is revolving on its axis in the opposite direction to the boring tool at their point of contact.

1,889,035. HOIST AND CROWD COMBINED CONTROL SYSTEM FOR ELECTRIC SHOVELS. HENRY S. JACOBS, Marion, Ohio, assignor to The Marion Steam Shovel Company, Marion, Ohio, a Corporation of Ohio. Filed Apr. 26, 1929. Serial No. 358,364. 10 Claims. (Cl. 172—239.)

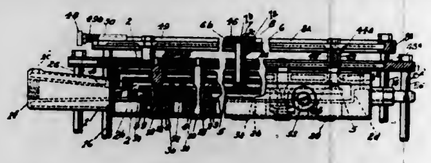


1. In a control system for electrically operated shovels, a generator, a circuit therefor including an armature, a resistance and a generator shunt field, a hoist motor, a circuit for said hoist motor including a hoist motor armature connected across said generator shunt field and a part of the resistance in said generator circuit, and also including a hoist motor series field and a variable resistor connected across another part of the resistance in said generator circuit, means for controlling said connections, a crowd motor, a circuit for said crowd motor connected with said hoist motor circuit between said hoist motor series field and said hoist motor variable resistor and with said generator circuit between said generator shunt field and said generator armature, and a variable resistor in said crowd motor circuit.

1,889,036. FILLING DEVICE. LEWIS H. LANIER, Newport, Ky., assignor to Lanier Cone Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Oct. 10, 1928, Serial No. 311,544. Renewed May 3, 1932. 15 Claims. (Cl. 107—28.)

1. A machine for dispensing measured quantities of material comprising a casing having a hollow interior with

measuring pockets tapering into narrowed discharge apertures, displacement plungers having inlet passages movable within the measuring pockets and cut-off pistons having inlet passages movable within the displacement plungers of such size as to force out material from the pocket and narrowed discharge apertures.

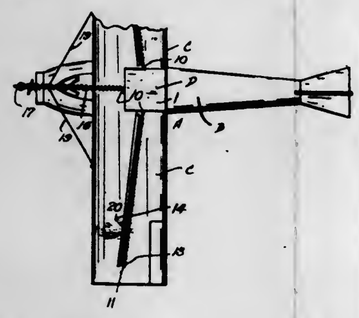


1,889,037. CLIP FOR WRITING INSTRUMENTS AND METHOD OF MAKING SAME. WILLIAM CLARKE S. MAYS, Edgewood, R. I., assignor to The Mays Manufacturing Co., Inc., a Corporation of Rhode Island. Filed Sept. 18, 1931. Serial No. 563,552. 2 Claims. (Cl. 24—11.)



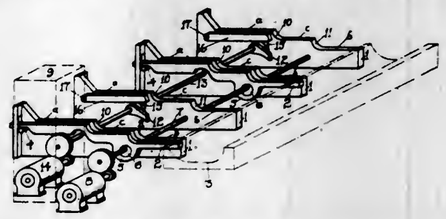
1. A clip for a writing instrument, having a straight portion to extend longitudinally along the inner surface of the instrument, said portion being adapted to be locked in position by a tube fitting within the instrument, a straight portion to extend through an opening in the wall of the instrument at right angles to the first straight portion, a third straight portion to extend longitudinally along the outer surface of the instrument parallel to the first straight portion and of approximately the same length, and a main portion curved convexly outwardly and having a clamping enlargement at its tip, whereby stressing of the main portion when the clip is in use will be counteracted by surface pressure of the first and third straight portions against the inner and outer surfaces of the instrument, respectively.

1,889,038. SAFETY PARACHUTE FOR AEROPLANES. MILTON J. NOUSLAKIS, Bingham Canyon, Utah. Filed Mar. 26, 1931. Serial No. 525,399. 2 Claims. (Cl. 244—21.)



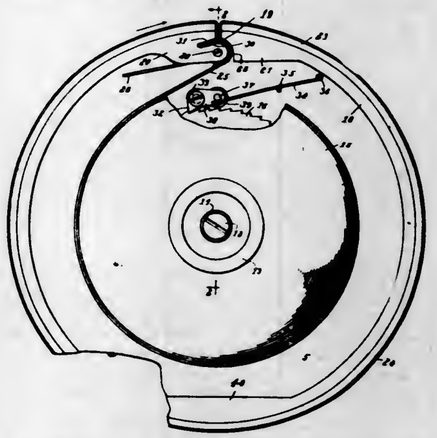
1. In a parachute the combination of a container carried in the top of the wings of a plane; eye bolts secured to three sides of the envelope of the parachute; means to secure the envelope to the container by the usual ropes; grooves through the top of three sides of the container through which the eye bolts are passed; struts mounted one on each end of the wings and one out in front of the plane; and springs adapted to have one end engaged slidably over said struts and the other end secured by a catch to said eye bolts, said springs to contact when the container is opened, drawing the envelope from the container instantly.

1,889,039. MECHANICAL HANDLING OF BILLETS AND THE LIKE. EDWARD J. QUINN, Worcester, Mass., assignor to Morgan Construction Company, Worcester, Mass., a Corporation of Massachusetts. Filed Nov. 14, 1930. Serial No. 495,706. 10 Claims. (Cl. 214—1.)



1. In apparatus of the class described, a conveyor having a receiving portion whereon the pieces to be conveyed are deposited in multiple, one above the other in a disordered pile or mass, in combination with members operable in one direction to square up said mass transversely on said receiving portion, and operable in the other direction to extricate one or more individual pieces from said mass, and means for operating said conveyor to produce broadside step-by-step movements of the pieces so extricated.

1,889,040. POLISHING WHEEL. PETER A. SOLEM, Rockford, Ill. Filed Dec. 12, 1928. Serial No. 325,445. 10 Claims. (Cl. 51—194.)



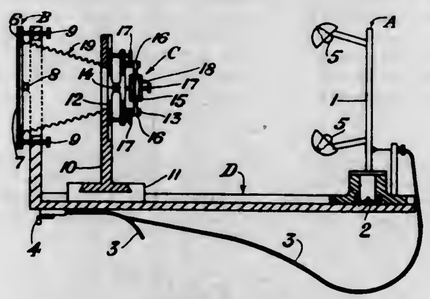
5. In combination, an abrading or polishing wheel or drum having a slot in the rim thereof, a roll of abrasive material being adapted to be mounted inside the rim and arranged to have the material extended therefrom through the slot and wound about the outside of the rim, the free end being arranged to be entered into the slot, means for clamping the free end of said material, means providing a mounting for the roll at the center of the wheel, the said roll being arranged to be turned relative to the wheel to take up slack in the material on the rim and place the same under tension, a ratchet wheel arranged to be turned with the roll, said ratchet wheel being disposed between the roll and the back wall of the wheel, and a pawl mounted on said wall and engaging the periphery of said ratchet wheel, said pawl normally having engagement with the ratchet wheel and having a part extending therefrom into an opening provided in the aforesaid wall whereby to permit release of said pawl from the other side of said wall.

1,889,041. NECKTIE PRESSER. GILBERT RUDIGER SOULÉ, San Francisco, Calif. Filed Aug. 26, 1929. Serial No. 388,415. 2 Claims. (Cl. 100—57.)



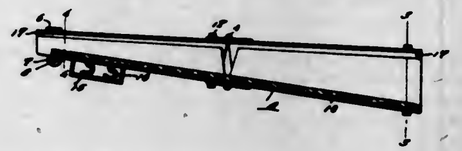
1. In a device of the class described, members, the center one of which has lateral side extensions, one of said extensions being drilled to register with a pin, two of said members having at one end thereof inwardly bent side extensions, the outer ends of said extensions being drilled to register with a spring, members registering with said extensions, said members being drilled to register with a spring, springs, said springs being secured in the holes drilled in said extensions and members, said last mentioned members being drilled at the ends thereof to register with a pin, a pin, said two first mentioned members having at the other ends thereof inwardly bent side extensions, the outer ends of said extensions being drilled to register with a spring, members registering with said extensions, said members being drilled to register with a spring, springs, said springs being secured in the holes drilled in said extentions and members, said last mentioned members being inwardly bent to form a catch over the end of the other of the lateral side extension of the said center member.

1,889,042. APPARATUS FOR PLOTTING MAPS FROM AIR PHOTOGRAPHS. ARCHIBALD BARR, Anniesland, Glasgow, Scotland, assignor to Barr and Stroud, Limited, Glasgow, Scotland. Filed July 20, 1929, Serial No. 379,798, and in Great Britain Aug. 1, 1928. 4 Claims. (Cl. 88—24.)



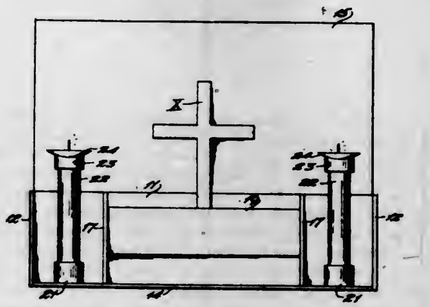
1. Apparatus of the epidiascope kind comprising a base, assumed to be horisontal, a photograph-holder, a transparen map-holder for carrying a translucent mapping surface, a lens-system mounted on the base, the lens-system being situated between the photograph-holder and the map-holder, and means for illuminating the photograph-holder on the side presented to the map-holder, to produce on the mapping material a positive visible and traceable image of a positive photograph supported by the photograph-holder, the photograph-holder and the lens-system being movable longitudinally on the base, the photograph-holder being movable angularly about a vertical axis and the map-holder being movable angularly about a horisontal transverse axis, and also about a horisontal longitudinal axis, and the lens-system being movable transversely and vertically relative to the base and movable angularly about a horizontal axis and about a vertical axis, for the purposes set forth.

1,889,043. SPRING OILER. EARL E. CRONENWETH and CHARLES G. HAMER, San Fernando, Calif. Filed June 23, 1931. Serial No. 546,390. 3 Claims. (Cl. 267—37.)



1. A device of the class described comprising a casing formed of upper and lower channel-shaped members telescopically arranged, a pad in the lower member, a clip attached to the bottom of the lower member and engaging a part of the pad, spring means for pressing the two members towards each other, the bottom of the lower member having a hook-shaped part at one end, and a clip encircling the device and having a part thereof engaged by the hook for preventing longitudinal movement of the device.

1,889,044. ECCLESIASTIC RITUAL CASE. FRANCIS JAMES DE JACO, Nicholasville, Ky. Filed Mar. 19, 1931. Serial No. 523,821. 4 Claims. (Cl. 206—19.)

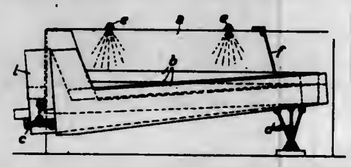


1. A case of the kind described having a bottom, a front wall hinged at its lower edge to the front edge of the bottom, candle sockets fixed to the inner face of said front wall to move automatically into erect position as said wall is folded downwardly, a rear wall, partitions extending between the rear and front walls and dividing the case into a central compartment and end compartments, said candle sockets being positioned in said end compartments, and a shelf in the central compartment extending from the back wall and spaced from the bottom to provide for holding the edge portion of a ritual between said shelf and bottom.

1,889,045. PROCESS OF EMBOSSING FABRICS AND ARTICLES CONTAINING ORGANIC DERIVATIVES OF CELLULOSE. CAMILLE DREYFUS, New York, N. Y. Filed Feb. 12, 1927. Serial No. 167,876. 8 Claims. (Cl. 18—48.)

1. A process of embossing fabrics containing organic derivatives of cellulose which consists in treating said fabric with a dilute solution of acetone, subjecting the thus treated fabric to a suitable embossing operation under heat and pressure.

1,889,046. APPARATUS FOR DECORTICATING TIMBER. PER FOSS, Velsen-Noord, Netherlands. Filed Apr. 24, 1931, Serial No. 532,680, and in Germany May 1, 1930. 12 Claims. (Cl. 144—208.)



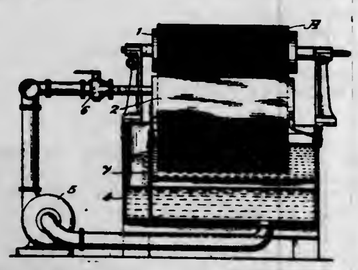
1. A device for removing bark from logs which comprises a receptacle consisting of two side members and a plurality of spaced floor members normally sloping upward toward the discharge end of the device and means for imparting to said floor members vertical oscillatory motion relative to each other.

1,889,047. COUPLING FOR TYPEWRITER LINE SPACING WHEELS. SEBASTIAN FRIEDMANN, Sommerda, Thuringia, Germany, assignor to Rheinische Metallwaaren- und Maschinenfabrik Sommerda Aktiengesellschaft, Sommerda, Thuringia, Germany, a Corporation of Germany. Filed June 19, 1931, Serial No. 545,544, and in Germany June 21, 1930. 6 Claims. (Cl. 197—128.)



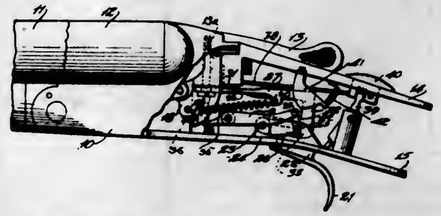
1. A coupling for line-spacing wheels of typewriting or other similar machines, comprising a platen and a cap secured to the platen, a bolt mounted in the cap, so that, when rotated about its longitudinal axis it projects beyond the interior surface of the said cap, a split ring inserted between the cap and the line-spacing wheel, one end of the said bolt being provided with flat portions parallel to its longitudinal axis to form a short bar between the end surfaces of the said split ring, by which the parts of the ring are forced apart when the bolt is rotated into its coupling position.

1,889,048. DEVICE FOR THE WET TREATMENT OF TEXTILE PRODUCTS. AUGUST HAGGENMACHER, Winterthur, Switzerland. Filed Nov. 8, 1930, Serial No. 494,426, and in Germany Nov. 16, 1929. 3 Claims. (Cl. 8—19.)



1. In a device for the wet treatment of suspended textile products with a circulating liquid, a combination of a freely rotatable member for suspending the textile products therefrom in an endless band, and a means for contacting a liquid with said textile products suspended on one side only of said rotatable member, whereby the rotatable member will turn due to the greater weight of the absorbed liquid.

1,889,049. SINGLE-TRIGGER MECHANISM FOR DOUBLE-BARRELLED FIREARMS. HARRY E. HOWLAND, Ithaca, N. Y., assignor to Ithaca Gun Company, Ithaca, N. Y. Filed Nov. 30, 1931. Serial No. 578,081. 12 Claims. (Cl. 42—42.)



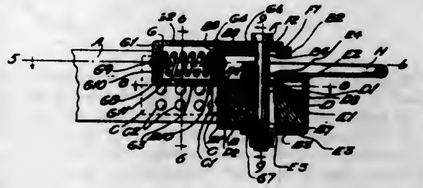
1. In double-barrelled firearms, having a separate firing mechanism for each barrel including a hammer and a sear, the combination with a single trigger operatively engaged with the sear of the first firing mechanism, and means forming communication between the trigger and the sear of the second firing mechanism and comprising a member movable into interlocking engagement with the trigger and sear after operation of the sear directly engaged by the trigger.

1,889,050. RESILIENT PADDING FOR LAUNDRY MACHINERY. WILLIAM JACK, Clydebank, Scotland, assignor of nine-tenths to D. & J. Tullis, Limited, Clydebank, Scotland, a Company of Great Britain. Filed May 10, 1932, Serial No. 610,334, and in Great Britain Oct. 30, 1931. 2 Claims. (Cl. 68—9.)



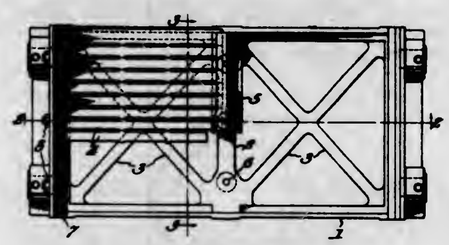
1. A padding unit for laundry ironing and pressing machinery comprising, in combination, a carrier constituted as a flexible strip and a plurality of springs wound in pairs and threaded on said strip with their connecting convolutions disposed below said strip and the adjoining convolutions located above said strip.

1,889,051. RAILWAY CAR END STRUCTURE. HARRY W. JONES, Webster Groves, Mo., assignor to Sanford Investment Company, Wilmington, Del., a Corporation of Delaware. Filed Feb. 25, 1930. Serial No. 431,158. 5 Claims. (Cl. 213—9.)



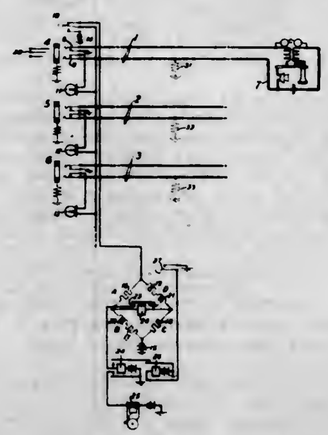
4. In a car frame end structure, the combination of a transverse metal means having an upright wall and upper and lower horizontal flanges directed away from the car, a bump resisting and cushioning means resting on the lower of said horizontal flanges, a flanged metal bumper member having an upright bumping face and having the flanged part directed toward the car frame and overlapping at least a part of said cushioning means and the flanged part of said bumper member and the flanges of the transverse metal means being apertured on a common upright axis to receive a coupling pin and larger in the direction of the length of the car than the diameter of a coupling pin, a coupling pin supporting means having two spaced-apart horisontal arms above the cushioning means and approximately parallel to the length of the car and said arms being apertured for a coupling pin on the same upright axis as the first mentioned apertures, a coupling pin through all said apertures, and spring means positioned for yieldingly resisting movement of the coupling pin supporting means away from the car.

1,889,052. SINTERING MACHINE PALLET AND GRATE BAR. HERAND K. NAJARIAN, Beaver, Pa., assignor to St. Joseph Lead Company, New York, N. Y., a Corporation of New York. Filed Feb. 12, 1932. Serial No. 592,609. 10 Claims. (Cl. 266—21.)



1. A pallet for sintering machines comprising a frame, a plurality of grate bars positioned on said frame transversely to the direction of travel of the pallet and in two parallel rows, a central member adapted to retain the inner ends of the bars of said rows and lateral members removably attached to the sides of said frame adapted to retain the outer ends of the bars.

1,889,053. ANNUNCIATOR SYSTEM. STANLEY F. NELSON, Brooklyn, N. Y., assignor to American Telephone and Telegraph Company, a Corporation of New York. Filed Mar. 22, 1932. Serial No. 600,534. 20 Claims. (Cl. 179—72.)



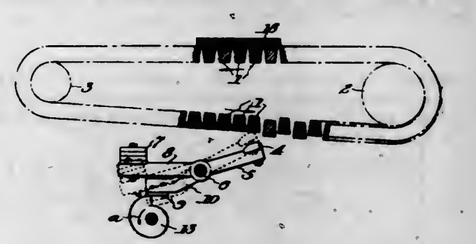
1. Means to energise a circuit in response to a change in the current flowing in another circuit comprising a first circuit, a Wheatstone bridge in series therewith, a reactive element in at least one arm of said bridge, a second circuit, and means in the detector arm of the bridge responsive to a current impulse in said arm to cause energisation of said second circuit.

1,889,054. TIE FOR PERSONAL WEAR. WILLIAM THOMAS STANLEY, London, England. Filed June 17, 1931, Serial No. 545,086, and in Great Britain June 21, 1930. 4 Claims. (Cl. 2—146.)



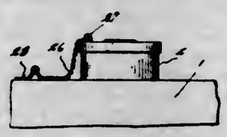
1. A necktie comprising a tubular body inclusive of extensible front and back portions, the back portion comprising two side sections, a seam connecting said sections together inwardly of their free edge portions, the free edge portions of said back sections being directed outwardly relative to the seam and being disposed between said front and back portions, and a reinforcing strip disposed between said front and back portions in overlying relation to the seam and secured to the free edge portions of the back sections outwardly of said seam, there being no connection of said strip with the back of the tie inwardly of the connections of said strip with the free edge portions of the back sections.

1,889,055. SINTERING OF METALLIFEROUS MATERIALS. GEORGE F. WHEATON and HERAND K. NAJARIAN, Beaver, Pa., assignors to St. Joseph Lead Company, New York, N. Y., a Corporation of New York. Filed Feb. 25, 1932. Serial No. 595,150. 6 Claims. (Cl. 266—21.)



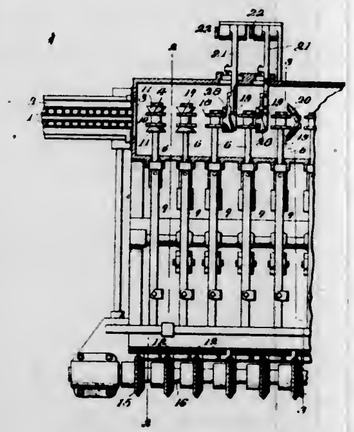
1. Apparatus for cleaning the grate bars of sintering machines comprising a striking member, and means for causing said striking member periodically to impinge against said grate bars.

1,889,056. CLOSURE CAP FOR GASOLINE TANKS. EDWARD C. BLANCHARD, Washington, D. C. Filed Sept. 27, 1930. Serial No. 484,886. 3 Claims. (Cl. 70—90.)



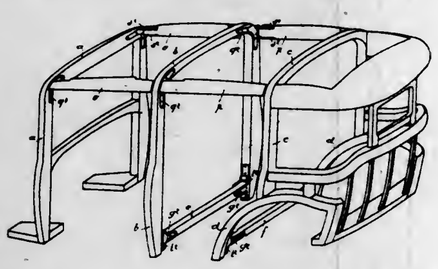
1. In a device of the character described, a lock, an eccentric member actuated by said lock, a pair of latch members, a rotatably mounted member, links pivotally connecting the latch members to said rotatable member, and said rotatable member provided with an extension adapted to be engaged by said eccentric member whereby movement of the eccentric member is transmitted to the rotatable member.

1,889,057. MACHINE FOR CUTTING GRAIN KERNELS FROM AN EAR OF CORN AND THE CUTTING BLADES THEREFOR. RALPH COVER, Baltimore, Md. Filed Aug. 5, 1929. Serial No. 383,723. 8 Claims. (Cl. 130—9.)



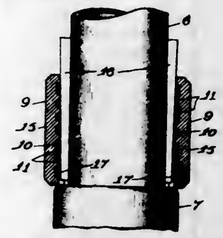
1. A cutting device for severing the grain kernels of an ear of corn, including a cutting blade having the advanced portion thereof beveled to form a cutting edge, said beveled portion being provided with grooves in the face thereof extending to the cutting edge and producing piercing points, and cutting edges between said piercing points, said piercing points being disposed in a line oblique to the longitudinal axis of the cutting blade, and said cutting edges being disposed in parallel lines at an angle to said oblique line.

1,889,058. FLEXIBLE BODY CONSTRUCTION. MARIUS JOSEPH DASTE, Courbevoie, France. Filed July 23, 1930, Serial No. 470,218, and in France Feb. 12, 1930. 9 Claims. (Cl. 296—28.)



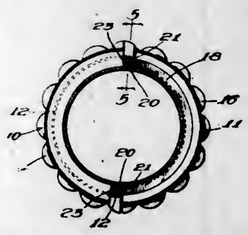
1. A flexible motor vehicle body comprising in combination, a vertical body element, an iron fitting secured to said element, two silent blocks having horizontal axes disposed one over the other whose outer members are rigidly secured to said fitting a horizontal body element, two iron fittings disposed in vertical planes secured on either side of said last mentioned element, said iron fittings having each an upwardly and a downwardly extending projection, a pin passing through the interior element of the upper silent block, means for fixing the upper ends of the upwardly extending projections of the last mentioned fittings to the corresponding ends of said pin respectively, a pin passing through the interior element of the lower silent block, means for fixing the lower ends of the downwardly extending projections of the last mentioned fittings to the corresponding ends of the last mentioned pin respectively.

1,889,059. WELL CASING PROTECTOR. HARRY E. DENNIE, Chicago, Ill. Filed Mar. 29, 1930. Serial No. 439,998. 6 Claims. (Cl. 308—4.)



1. A well-casing protector comprising a tubular body of resilient material and stiffening means for said body, said body being grooved part way therethrough to said means at its inner surface in a direction lengthwise of the protector.

1,889,060. WELL CASING PROTECTOR. HARRY E. DENNIE, Chicago, Ill. Filed Aug. 7, 1930. Serial No. 473,604. 3 Claims. (Cl. 308—4.)



1. A well-casing protector for application to a member operating in said casing comprising sections having resilient external surfaces, and means for clampingly engaging said sections to said member by relative movement of said sections lengthwise of each other, the surface of one of said sections at which it engages said member being of metal and the corresponding surface of the other of said sections being of resilient material.

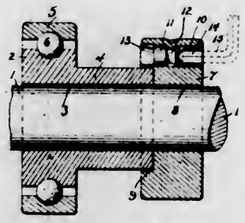
1,889,061. MANUFACTURE OF NEW OR IMPROVED FABRICS. WILLIAM ALEXANDER DICKIE and HAROLD HALKYARD, Spondon, near Derby, England, assignors to Celanese Corporation of America, a Corporation of Delaware. Filed Mar. 17, 1927, Serial No. 176,282, and in Great Britain Apr. 1, 1926. 11 Claims. (Cl. 18—48.)

1. A process for the ornamentation of fabrics containing filamenta comprising a thermoplastic cellulose derivative, which comprises wetting said fabric with a volatile swelling-liquid containing a volatile liquid which is a non-solvent for the cellulose derivative and a volatile liquid which is capable of forming a solution with the cellulose derivative, and producing a design thereon by the local application of heat and pressure to said wetted fabric.

1,889,062. PROCESS OF EMBOSSING CIRCULAR KNIT FABRICS. CAMILLE DREYFUS, New York, N. Y. Filed June 3, 1927. Serial No. 196,398. 6 Claims. (Cl. 18—48.)

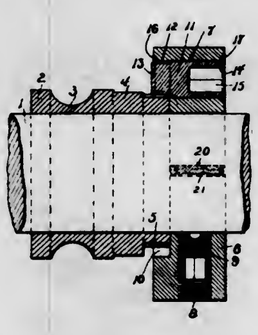
1. Process of permanently embossing circular knit fabric containing yarns of thermoplastic derivatives of cellulose with an all-over design in a single embossing step which consists in treating said fabric with a softening agent for the thermoplastic derivative of cellulose and then subjecting the fabric while it is still in double thickness to a suitable embossing operation.

1,889,063. MEANS FOR LOCKING ANTIFRICTION BEARINGS TO SHAFTS. JOHN RYER DUNHAM, New Brunswick, N. J. Filed Mar. 18, 1931. Serial No. 523,570. 17 Claims. (Cl. 287—52.09.)



1. In apparatus wherein there is provided a shaft and an apertured element to be secured thereon; a locking collar, said element and said collar being fitted on said shaft with a sliding fit, and a locking pin mounted in said collar with its axis parallel to that of the collar and having an eccentric head to engage said element, and means through which said pin may be turned to lock the parts together and unlock the same while holding the collar and said element against relative movement.

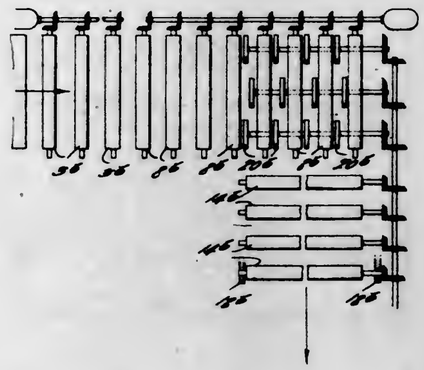
1,889,064. MEANS FOR LOCKING ANTIFRICTION BEARINGS TO SHAFTS. JOHN RYER DUNHAM, New Brunswick, N. J. Filed Aug. 28, 1931. Serial No. 560,028. 12 Claims. (Cl. 287—52.09.)



1. In apparatus wherein is provided a shaft and an element to be secured thereon; a locking collar, said element and said collar being fitted on said shaft with a sliding fit, and a locking pin mounted in said collar with its axis paralleling that of the collar, said element and said locking pin having roughened engaging portions, one of which is eccentric to the axis of rotation of its member, and means in virtue of which said pin may be turned to effect relative rotation between the collar and the element for the purposes described.

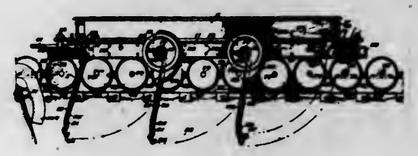
1,889,065. TAKE-OFF AND CONVEYER MECHANISM FOR INTERMITTENT SHEET GLASS FORMING MACHINES. EUGENE GENTIL, Paris, France, assignor to The American Bicheroux Company, a Corporation of Delaware. Filed Dec. 30, 1927. Serial No. 243,655. 8 Claims. (Cl. 49—3.)

3. The combination with an intermittent sheet forming machine having high speed of sheet formation, of a conveyer receiving hot sheets therefrom and comprising a series of rolls driven at approximately the same peripheral speed as the speed of sheet formation, a second series of rolls in line therewith, means for driving the same at variable speed, a third series of rolls located at right angles to the variable speed rolls, a series of



rolls interposed between certain rolls of the second series and rotated at right angles thereto, means for changing the relative vertical elevation of the last named series of rolls and the variable speed rolls of the second series, and a lehr enclosing the rollers of the third series.

1,889,066. DROP BOTTOM CAR. CHARLES A. GRIFFITH, Knoxville, Tenn. Filed Jan. 21, 1931. Serial No. 510,249. 30 Claims. (Cl. 105—364.)



1. In a drop bottom car, axles thereon, wheels on said axles, a plurality of drop bottom doors hinged to the car on axes extending transversely thereof, and wheel housings on said doors.

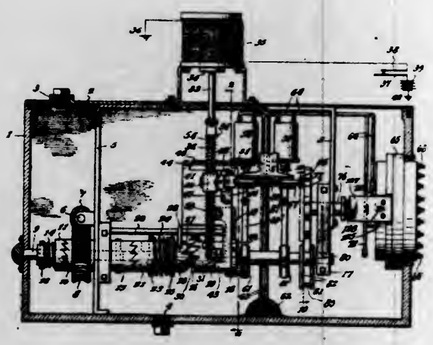
1,889,067. METHOD OF PRODUCING REVIVIFIED ULTRAVIOLET TRANSMITTING GLASSES. HARRISON P. HOOD, Corning, N. Y., assignor to Corning Glass Works, Corning, N. Y., a Corporation of New York. Filed Oct. 15, 1927. Serial No. 226,516. 4 Claims. (Cl. 49—77.)

1. The method of restoring the property of ultraviolet transmission to ultraviolet transmitting glasses that have lost their property of transparency to certain ultraviolet radiation, which consists in heating them to a temperature approximating their annealing temperature.

1,889,068. LUBRICATOR. LEROY K. HOSS, Delray Beach, Fla. Filed Sept. 5, 1931. Serial No. 561,451. 8 Claims. (Cl. 184—35.)

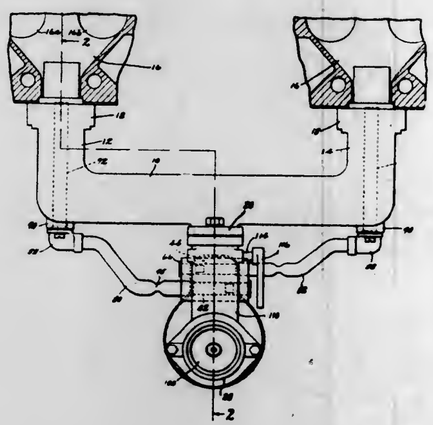
1. In apparatus for the purpose described, a supply tank, an oil-distributer, means for delivering oil from the distributer to parts to be lubricated, means controlled

by the machine to be lubricated for delivering oil from the tank to the distributer and intermittently operating the distributer, means controlled by the machine to be lubri-



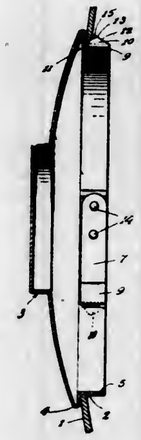
cated for periodically activating the last-mentioned means, and means for retarding movement of said activating means.

1,889,069. CHARGE FORMING DEVICE. JOHN H. HUNT, Detroit, Mich., assignor, by mesne assignments, to Delco Products Corporation, Dayton, Ohio, a Corporation of Delaware. Filed July 10, 1928. Serial No. 291,662. 11 Claims. (Cl. 123—52.)



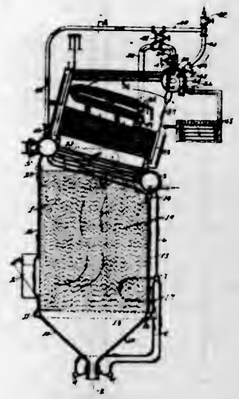
1. A charge forming device for internal combustion engines having in combination a primary mixture passage, of fixed cross sectional area, means for supplying fuel thereto, a restricted air inlet of fixed area admitting air thereto, a secondary mixing chamber into which the primary mixture passage delivers, an air passage supplying air to said secondary mixing chamber, and a manually adjustable throttle for controlling the passage of air therethrough.

1,889,070. HUB CAP FASTENER. RAYMOND D. HYATT, Columbus, Ohio, assignor to The D. L. Auld Company, Columbus, Ohio. Filed May 29, 1930. Serial No. 457,058. 3 Claims. (Cl. 301—108.)



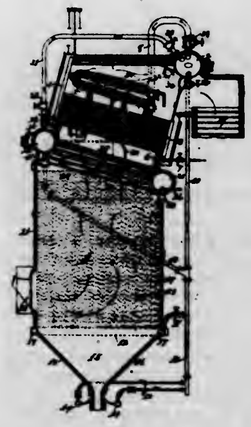
8. As a new article of manufacture, a hub cap having a flange, sheet metal spring arms fixed to the flange and having terminal lugs disposed in angular relation with respect to the arms, said lugs having long and short beveled edges, constituting, respectively, guiding and securing means for the flange.

1,889,071. STEAM GENERATING SYSTEM. HOWARD J. KERR, Westfield, N. J., assignor to The Babcock & Wilcox Company, Bayonne, N. J., a Corporation of New Jersey. Filed Feb. 2, 1929. Serial No. 337,099. 10 Claims. (Cl. 122—235.)



1. In a steam generating system, a furnace, a main boiler having a superheater, a boiler having tubes along the walls of said furnace and means to pass steam from said last named boiler through said superheater without its entering the main boiler during the starting up period, and means to pass steam from said past named boiler into said main boiler during normal operation.

1,889,072. STEAM GENERATOR. HOWARD J. KERR, Westfield, N. J., assignor to The Babcock & Wilcox Company, Bayonne, N. J., a Corporation of New Jersey. Filed July 6, 1929. Serial No. 376,297. 7 Claims. (Cl. 122—235.)



1. In a steam generator, a furnace, a boiler having furnace wall tubes and having tubes extending across the upper portion of said furnace, a boiler above said furnace, and means to establish communication between said first named boiler and the water space only of said last named boiler during the starting up period and to establish communication between the steam spaces only of said boilers during normal operation.

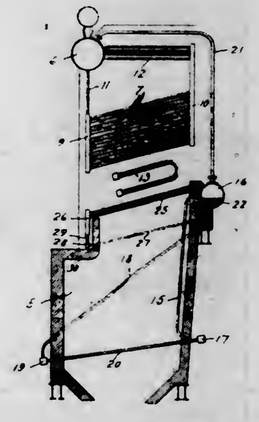
1,889,073. TOBACCO-PIPE. AXEL KLINGENSTIERNA, Karlstad, Sweden. Filed Feb. 5, 1931, Serial No. 513,700, and in Sweden Feb. 12, 1930. 6 Claims. (Cl. 131—12.)



1. In an insertion adapted to be inserted into the bowl of tobacco pipes, a bottom, flaps punched in said bottom to form adjustable holes, arms for keeping said insertion to its principal part in the lower half of said bowl and for keeping simultaneously said bottom at a certain level in said bowl to form a chamber below said bottom, in said insertion at a distance above said bottom two or more draught holes for smoke and air communicating directly with said chamber below said bottom, and an edge on said insertion to fit tight to the inner side wall of said bowl at or below the middle of the depth of said bowl to permit the air and the smoke to flow down into said chamber through said bottom holes and said draught holes only.

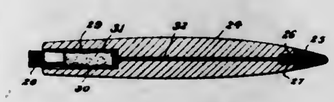
1,889,074. STEAM GENERATOR. JOHANN KÖLLING, Duisburg, Germany, assignor to The Babcock & Wilcox Company, Bayonne, N. J., a Corporation of New Jersey. Filed Jan. 13, 1927, Serial No. 160,804, and in Germany Jan. 13, 1926. 5 Claims. (Cl. 122—235.)

1. In combination, a furnace, a main boiler heated from said furnace and comprising a steam and water drum, a second boiler comprising a steam and water drum disposed outside the furnace, tubes extending in a vertical direction along the inside of a wall of the furnace, connections from the upper ends of said tubes to the steam space of said second drum, inclined tubes extending across



the bottom of the furnace and connected at one end to said wall tubes and at the other end to the water space of said second drum, a connection between the steam spaces only of said drums, and inclined tubes extending transversely of the furnace adjacent its top and connected to said second drum for water circulation.

1,889,075. COLOGNE HOLDER. JOHN SAMUEL MILLS, Kossuth, Miss. Filed Sept. 19, 1930. Serial No. 483,122. 1 Claim. (Cl. 299—24.)

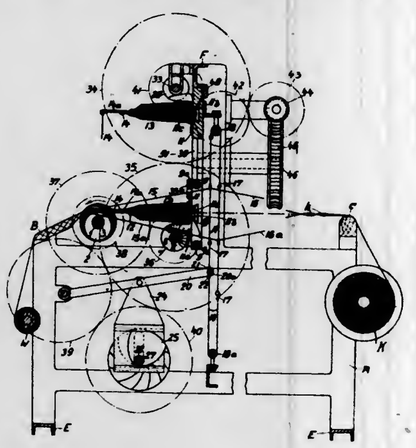


A device of the class described comprising a cigar shaped holder both ends of which are flat, there being a minute axial duct formed in the holder and having at each end a cylindrical enlargement opening through the adjacent end face of the holder, a vial in one enlargement having an outlet communicating with the duct, and a substantially conical absorbent stopper on the opposite end of the holder having an integral cylindrical stem entering the contiguous enlargement at the end of the duct, the stopper having a flat face in contact with the adjacent flat end face of the holder and being streamlined to present an outer surface forming a continuation of the outer surface of the butt end of the holder.

1,889,076. LOOM. KARL MUTTER, Triptis, Germany. Filed Apr. 28, 1930, Serial No. 448,071, and in Germany May 2, 1929. 3 Claims. (Cl. 139—12.)

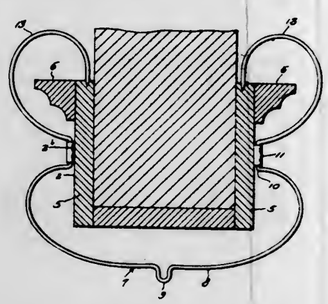
1. In a loom, a frame, a plurality of shuttles movable in said frame, means for throwing the shuttles in continuous succession over the width of the fabric, shed forming members, means to actuate the shed forming members to form a shed in advance of the moving shuttles

over the width of the fabric and to close the shed behind said shuttles, the shuttle throwing means and the actuating means for the shed forming members being of sub-



stantially helical form to time the movements of the shuttle throwing means and the actuating means for the shed forming members.

1,889,077. SUPPORT. HOMER THEODORE RUSSELL, Miami, Okla. Filed Nov. 9, 1931. Serial No. 573,956. 1 Claim. (Cl. 248—32.)

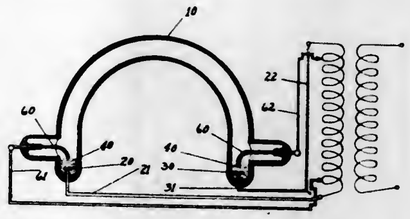


A support of the character described comprising a U-shaped member having its end portions bent inwardly and backwardly and pointed, the intermediate portions of the leg portions of the U-shaped member being converged inwardly and provided with resilient jackets, the bight portion of said U-shaped members being formed with a downwardly offset portion defining a saddle for receiving a suspension element.

1,889,078. FLOTATION PROCESS. MAXIMILIAN SCHIRCHEL, Frankfort-on-the-Main, Germany, assignor to American Lurgi Corporation, New York, N. Y., a Corporation of New York. Filed Feb. 7, 1931, Serial No. 514,315, and in Germany Feb. 19, 1930. 3 Claims. (Cl. 261—121.)

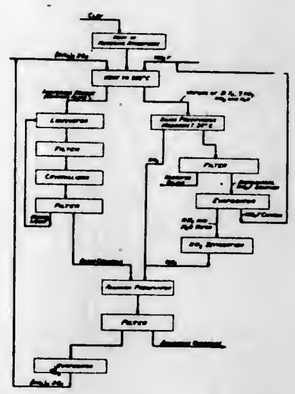
1. In a flotation process wherein air is forced through microporous materials into the ore pulp under treatment for the purpose of producing a foam of very fine bubbles, the improvement which comprises forcing a small amount of aqueous liquid through the microporous material along with the air.

1,889,079. VAPOR ARC APPARATUS. GEORGE SPERTI, Covington, Ky., assignor, by direct and mesne assignments, to Sperti Lamp Corporation, New York, N. Y., a Corporation of Delaware. Filed May 28, 1929. Serial No. 366,670. 6 Claims. (Cl. 176—45.)



1. In a vapor arc apparatus, a vessel, arc electrodes and quantities of vaporizable material in association with each thereof, a bimetallic member contacting with each of said quantities of vaporizable material, a transformer secondary and electrical connections between the terminals of such secondary and said electrodes, and electrical connections between said bimetallic elements and taps adjacent said secondary terminals so as to supply current between said bimetallic elements and the adjacent arc electrodes to heat said elements, said elements when heated by current being drawn away from the surfaces of said vaporizable materials thereby starting preliminary arcs to fill the lamp space with ionized vapor.

1,889,080. PRODUCTION OF ALUMINUM HYDROXIDE. SVEND S. SVENDSEN, Chicago, Ill., assignor to Clay Reduction Corporation, a Corporation of Illinois. Filed Sept. 7, 1928. Serial No. 304,617. 10 Claims. (Cl. 23—143.)

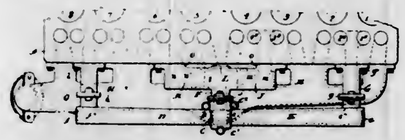


1. The method of producing aluminum hydroxide which comprises treating material containing alumina and silica with ammonium fluoride in substantially dry state, removing the silicon by volatilization from the material in the form of ammonium silicon fluorine compounds, converting alumina of said material into aluminum sulfate and converting said aluminum sulfate compounds in the presence of residual fluoride compounds into aluminum hydroxide.

1,889,081. MANIFOLDING EIGHT-CYLINDER ENGINE. JOHN W. SWAN, Cleveland, Ohio, assignor to The Swan Carburetor Company, Cleveland, Ohio, a Corporation of Ohio. Filed Apr. 27, 1925. Serial No. 26,197. 27 Claims. (Cl. 123—52.)

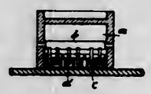
1. The combination with an eight cylinder engine having ports leading to pairs of inlet valves, of a manifold

structure through which fuel is distributed from a source of supply, comprising a distributing chamber, an intake pipe leading into said chamber, three outlet conduits leading from said chamber, two of said conduits being each connected with one of the inlet ports in said engine, a



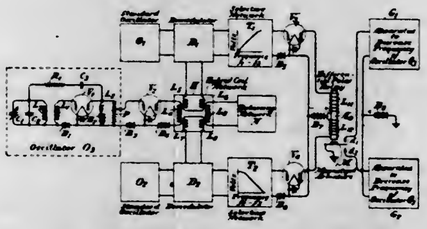
distributing chamber at the end of the other of said outlet conduits, and two outlet conduits each leading from said last mentioned chamber to an inlet port in said engine, said chambers being interiorly formed and arranged to uniformly influence the mixture passing therethrough into the conduits leading therefrom.

1,889,082. ROLLER CONVEYER FOR GLASS PLATES. LAMBERT VON REIS, Herzogenrath, Germany, assignor, by mesne assignments, to The American Bicheroux Company, a Corporation of Delaware. Filed May 28, 1928, Serial No. 281,290, and in Germany May 30, 1927. 3 Claims. (Cl. 198—127.)



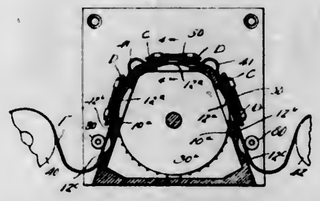
3. In a conveyer, the combination with a series of disks forming a roller support, axes carrying a plurality of said disks, and bearings for said axes between the disks thereon.

1,889,083. FREQUENCY STABILIZING SYSTEM. WILLIAM T. WINTRINGHAM, Brooklyn, N. Y., assignor to American Telephone and Telegraph Company, a Corporation of New York. Filed Feb. 17, 1930. Serial No. 429,153. 6 Claims. (Cl. 250—36.)



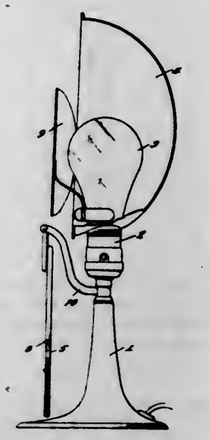
1. The method of controlling the frequency of a current of variable frequency which consists in generating two currents of the same frequencies and which are highly constant in their frequencies, producing a first direct current which varies in amplitude in accordance with the difference between the frequencies of one of the generated currents and the current to be controlled, producing a second direct current which varies in amplitude in accordance with the difference in the frequencies between the other of the generated currents and the current to be controlled, increasing the frequency of the current to be controlled when the first direct current is greater in amplitude than the second direct current, and decreasing the frequency of the current to be controlled when the amplitude of the second direct current is greater than the first direct current.

1,889,084. FILM GUIDING MECHANISM. WALTER L. WRIGHT, Santa Monica, Calif., assignor to Synchrome Corporation, Los Angeles County, Calif., a Corporation of California. Filed Feb. 29, 1928. Serial No. 258,040. 5 Claims. (Cl. 88—17.)



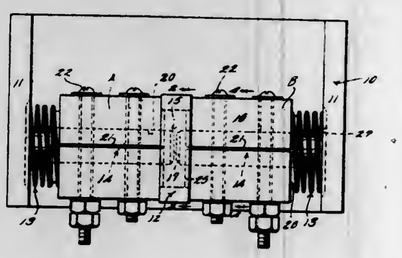
2. In combination, an aperture plate and a film guide at the aperture plate including spaced relatively fixed film engaging parts in spaced parallel planes for engaging the opposite sides of the film, the said parts being spaced apart to engage the film at points spaced longitudinally thereof and so that the film is unconfined opposite each of said points.

1,889,085. COMBINATION MIRROR AND ILLUMINATING DEVICE. ANNA SYLVIA ANZELL, New York, N. Y. Filed July 10, 1931. Serial No. 549,903. 1 Claim. (Cl. 240—4.1.)



A combination mirror and illuminating device comprising a base, a lamp socket mounted thereon, a reflector mounted on said socket, a forwardly and upwardly projecting arm on said base, a mirror hingedly mounted on said arm and so positioned as to partially close the opening of said reflector and conceal a lamp in said socket, but to permit the passage of reflected rays of light between its edge and the edge of the reflector, said mirror also being adapted, through its hinged mounting, to be swung forward and downward entirely out of the path of direct light rays from said lamp to a position below the reflector and without affecting the position of the lamp socket with respect to the reflector.

1,889,086. PROTECTIVE GAP FOR ELECTRICAL EQUIPMENT. ROY B. ASHBROOK, San Gabriel, MABEL MACFERRAN, Alhambra, ROY EDWIN QUANSTROM, Inglewood and BENJAMIN F. DENGLER, Los Angeles, Calif. Filed Dec. 30, 1929. Serial No. 417,468. 10 Claims. (Cl. 175—30.)



1. A protective gap for use in connection with an electric circuit including, an electrode having a core of high heat conducting capacity and having a flat polish silver gap face, and a metal body of large volume relative to the core and of high heat absorbing capacity directly engaged around the core.

1,889,087. ELECTRON DISCHARGE DEVICE AND METHOD OF MANUFACTURE. HENRY L. CROWLEY, East Orange, and ROBERT M. CROWLEY, Jersey City, N. J., assignors to Henry L. Crowley & Co, Inc., East Orange, N. J., a Corporation of New Jersey. Filed Apr. 6, 1929. Serial No. 352,967. 5 Claims. (Cl. 250—27.5.)



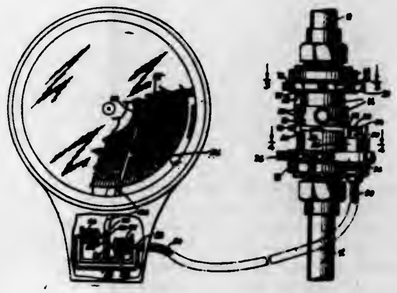
2. In combination a tubular electron emitting cathode, an insulator and spacer element fitted in one end of said tubular member and having a cylindrical body portion provided with narrow lugs.

1,889,088. COMPOSITION OF MATTER. MARC DARRIN, Pittsburgh, Pa., assignor to F. N. Burt Company, Limited, Toronto, Ontario, Canada, a Corporation of Ontario, Canada. Filed Sept. 8, 1930. Serial No. 479,583. 5 Claims. (Cl. 106—12.)

1. A composition of matter comprising a paper material impregnated with a mixture containing sulphur and chlorodiphenyl.

1,889,089. EXPANSION INDICATOR. CLARENCE A. DE GRAA, Forest Hills, N. Y., assignor to The Liquidometer Corporation, Long Island City, N. Y., a Corporation of Delaware. Filed Aug. 20, 1930. Serial No. 476,486. 3 Claims. (Cl. 33—148.)

1. Apparatus for indicating changes in the length of an object comprising, in combination, a collar attachable to one portion of the object to be measured, an hydraulic device carried by said collar, a lever for operating said hydraulic device, a second collar attachable to another portion of the object to be measured, a connection between the lever and said second collar offset from the axis of the

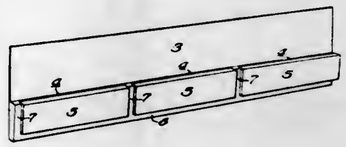


hydraulic device, a hydraulic indicator connected to said hydraulic device, and means for adjusting the connection between the lever and the second collar whereby the amplitude of movement of the indicator and hydraulic device may be co-related to obtain a correct reading on the indicator.

1,889,090. COMPOUND OF HEXAMETHYLENETETRAMINE AND DIPHOSPHORIC ACID AND PROCESS OF MAKING SAME. ERICH FREUND, Werder, Germany, assignor to the Firm Heyl & Co., Chemischpharmaseutische Fabrik, Aktiengesellschaft, Berlin, Germany. Filed Apr. 20, 1929, Serial No. 356,873, and in Germany Apr. 20, 1928. 3 Claims. (Cl. 217—70.)

1. The method which consists in combining 1 molecule of hexamethylenetetramine with 1 molecule of methylendiphosphoric acid by dissolving the components in an inert solvent, and separating the precipitating compound.

1,889,091. WALL COVERING. WILLIAM B. FRIED, Dormont, Pa., assignor, by direct and mesne assignments, to New Brick Corporation, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Nov. 14, 1931. Serial No. 575,028. 12 Claims. (Cl. 72—18.)

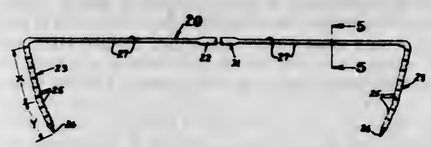


1. Wall covering material consisting of a single-like base of suitable material having an upper thin portion, a lower thickened portion divided therefrom by a transverse shoulder provided with outwardly projecting vertical cavity-defining ribs terminating at said shoulder, a lower horizontal rib, and a slab held between the vertical ribs and supported on the horizontal rib.

1,889,092. COMPRESSION STAY FOR CITRUS FRUIT BOXES. JAY L. GEORGE, Riverside, Calif. Filed Oct. 19, 1931. Serial No. 569,643. 3 Claims. (Cl. 217—70.)

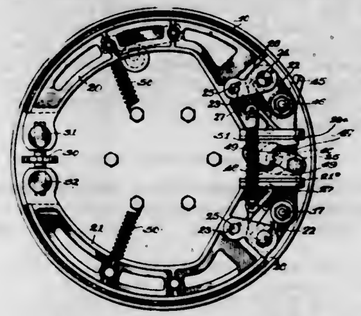
1. A compression stay for citrus fruit boxes comprising a single length of metal, bent to form two end portions,

each of which terminates in a point, said end portions each comprising a single end section which is straight and



a second single end section which is straight and is a continuation of and is arranged at an angle to said first single end section.

1,889,093. BRAKE. EARL G. GUNN, Racine, Wis., assignor to The Nash Motors Company, Kenosha, Wis., a Corporation of Maryland. Filed Sept. 13, 1928. Serial No. 305,630. 4 Claims. (Cl. 188—78.)



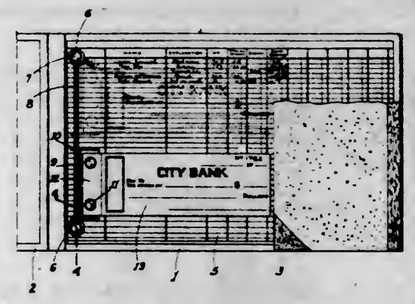
1. In a wheel brake, a drum, a pair of brake anchors closely adjacent said drum, a servo brake system arranged circumferentially between said anchors, and means connecting each of the adjacent ends of said brake system to its respective anchor including two links, one of which is substantially tangential to the adjacent end of its brake system, and affords to stop against circumferential movement relative to its anchor, but permitting limited radial adjustment of said system relative to said drum, when the brake drum is rotated toward said anchor, and both of which links permit circumferential and radial movement of said system, away from said anchor when the drum is rotated in the opposite direction.

1,889,094. TREAD STRUCTURE FOR ANTISKID CHAINS. PRESTON M. HALL, Worcester, Mass., assignor to American Chain Company, Inc., a Corporation of New York. Filed July 9, 1931. Serial No. 549,727. 2 Claims. (Cl. 152—14.)



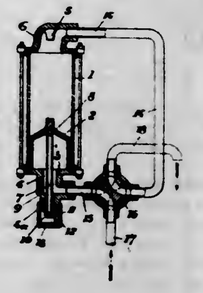
1. An anti-skid chain for vehicle wheels comprising cross chains composed of connected open links and reinforcement members each comprising a piece of wire coiled helically through the openings and around the articulated ends of two adjacent links, each of said helical reinforcements comprising more than one coil, said helical enlargements being held against rotation around said articulated ends of the connected links by the engagement of the free ends of said coils with the strands of said links.

1,889,095. BINDER. NORMAN W. HICKS, Sacramento, Calif. Filed Jan. 18, 1932. Serial No. 587,272. 5 Claims. (Cl. 281—44.)



2. A binder comprising a back member, spaced binding posts projecting upwardly from said member adjacent one side of the same, sleeves removably mounted on the posts, a rod extending between the sleeves, and a unit to support a check pad slidably mounted on the rod.

1,889,096. DEVICE FOR MEASURING LIQUIDS. ERNST HUELSBRINK, Berlin-Westend, Germany, assignor to the Firm Fabrik Explosionssicherer Gefasse Salzkotten G. m. b. H., Salzkotten, Germany. Filed Aug. 27, 1930, Serial No. 478,034, and in Germany Sept. 2, 1929. 13 Claims. (Cl. 221—102.)



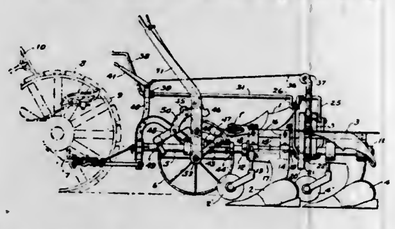
1. Device for measuring liquids, especially oil, comprising a cylinder having an upper and a lower end wall, a piston freely movable in said cylinder, means for limiting the motion of the piston in an upper and in a lower end position, a lower duct for the liquid in communication with the lower end of said cylinder, an upper duct for the liquid in communication with the upper end of said cylinder, means for controlling said ducts for the liquid and means on the lower side of said piston adapted to remove gaseous fluid-quantities arising on the lower side of said piston.

1,889,097. PLOW. PHILIP I. LEDOUX, Claremont, N. H. Filed May 16, 1928. Serial No. 278,214. 38 Claims. (Cl. 97—26.)

1. In a plow, a draft frame connectible to the rear end of a tractor, and a plurality of combined right and left plow gangs thereon each comprising right and left hand plows at right angles to one another and said gangs being one rotatable bodily relative to the other in a plane

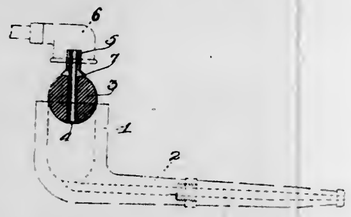
parallel thereto to bring corresponding plows into simultaneous plowing positions one on each side of the line of draft.

2. In a plow, a frame, a plurality of plow gangs, each comprising rigidly connected right and left hand plows, said gangs being pivoted on said frame for movement in transverse planes and movable transversely one relative to the other, and means for so moving both gangs.



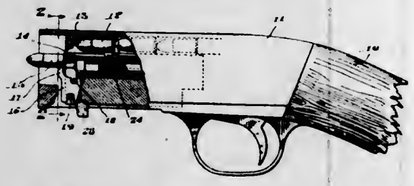
35. In a plow, a draft frame having adjustable swinging wheel carrying means only on its front end, a plow beam connected to said frame supported wholly by its plows and said frame and extending longitudinally of the latter in rear of the wheels on said frame, mechanism operatively connecting said beam and said wheel carrying means having the latter swivelled for movement about the longitudinal axis of said beam, and plows carried by the portion of said beam in rear of said swinging wheel carrying means.

1,889,098. PIPE CLEANING DEVICE. SIGURD O. MATTISON, Colfax, Wis. Filed June 25, 1931. Serial No. 546,802. 1 Claim. (Cl. 131—13.)



A cleaning device for smoking pipes comprising a tube having inner and outer portions, the outer portion being of greater diameter than the inner portion for connecting the tube with a pressure line check valve, said outer portion having an outstanding annular flange, and a soft rubber ball-shaped sealing head having a diametrically extending bore therethrough receiving the inner portion of the tube, said ball-shaped head being sprung on the tube against said flange.

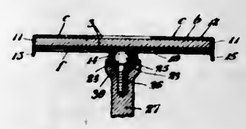
1,889,099. FIREARM. CRAWFORD C. LOOMIS, Ilion, N. Y., assignor to Remington Arms Company, Inc., a Corporation of Delaware. Filed Sept. 22, 1930. Serial No. 483,585. 12 Claims. (Cl. 42—25.)



1. In a firearm, a shell extractor, supporting means therefor proportioned and positioned to permit universal movement of the extractor in a single plane, and means including one spring only for controlling said universal movement.

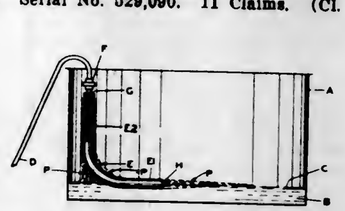
12. In a firearm, a trigger plate, a breech block, a plunger in said breech block adapted to retain said breech block in said trigger plate, a plunger holding stud, and a shell extractor in said breech block having a part adapted to prevent displacement of said plunger holding stud.

1,889,100. SAFETY RAZOR. DAVID S. MILLS, Brooklyn, N. Y. Filed May 15, 1931. Serial No. 537,547. 13 Claims. (Cl. 30—12.)



1. A safety razor comprising a supporting frame for a blade having a longitudinally disposed projection and guideways, a blade formed with a longitudinal groove on its opposite faces positioned to receive the projection to hold it against angular displacement, oppositely positioned clamps having guide portions fitted to the guide-ways and clamping portions to engage the blade within the outwardly positioned groove thereof.

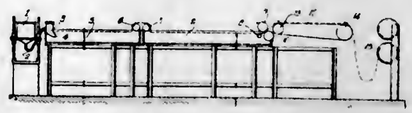
1,889,101. FOAM DISTRIBUTING MEANS. BENJAMIN A. MOELLER, Palos Verdes Estates, Calif. Filed Apr. 10, 1931. Serial No. 529,090. 11 Claims. (Cl. 169—4.)



3. Means for extinguishing oil fires in tanks comprising: a flexible tube of fire-resistant material, the upper end of said tube being in communication with an inlet for foam, the lower end of said tube being substantially open and so constructed that on passage of foam therethrough it becomes buoyant and a substantial length of the lower portion of said tube contacts with the surface of the oil in said tank.

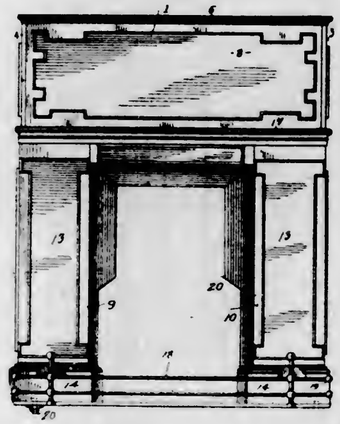
11. In the method of supplying foam to the surface of a liquid: the step which consists in flowing a partially confined foam stream horizontally on the surface of said liquid.

1,889,102. PROCESS AND DEVICE FOR THE DIRECT PRODUCTION OF FILAMENTS AND THREADS. EDWARD ARTHUR MURPHY and DOUGLAS FRANK TWISS, Sutton Coldfield, England, assignors to Dunlop Rubber Company Limited, a British Company. Filed May 26, 1930, Serial No. 455,496, and in Great Britain June 13, 1929. 11 Claims. (Cl. 18—8.)



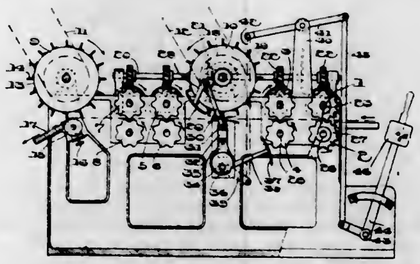
4. Apparatus for the manufacture of flat or tape like filaments or threads of rubber material comprising a bath containing a dehydrating and setting medium for dispersions of rubber material, a fluid supply means having an orifice opening into said bath below the surface of said bath, and even speed rollers spaced apart less than the diameter of said orifice and between which a partially set thread of said rubber material from said bath is passed.

1,889,103. CONVERTIBLE FIREPLACE STRUCTURE. WESLEY NAFTAL and MILTON ENSLER, New York, N. Y., assignors to Mantibar Corporation, New York, N. Y., a Corporation of New York. Filed July 7, 1930. Serial No. 466,008. 1 Claim. (Cl. 312—2.)



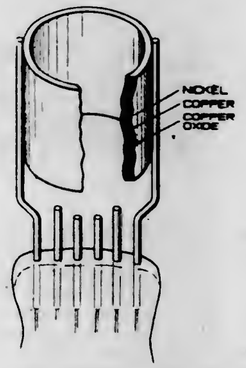
A mantelpiece buffet comprising an upper section and a lower section, said upper section provided with means for supporting it in a position spaced from a floor or other support sufficiently to allow the lower section to stand thereunder, said upper section having an open front closed by a door consisting of a panel, said lower section comprising compartment elements having opaque walls open at the rear and connected together at their upper ends by means forming a table, and adjustment means connecting the upper and lower sections, whereby the lower section may be disposed below the upper section, the whole assembly simulating a mantelpiece, or may be moved forwardly and held spaced therefrom in fixed relation.

1,889,104. MANILA HEMP BEATER. SHIN-ICHI OKI, Senju Machi, Minami Adachi Gun, Tokyo Fu, Japan, assignor to Shinzaburo Shibuya, Tokyo, Japan. Filed Sept. 18, 1931, Serial No. 563,523, and in Japan Nov. 12, 1930. 1 Claim. (Cl. 19—33.)



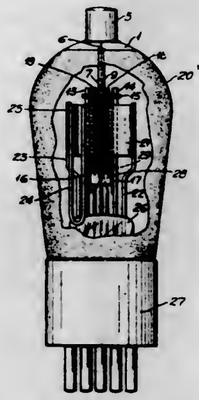
A manila hemp beater comprising two groups of fluted rolls, a main beater and an auxiliary beater each arranged behind the corresponding group of said fluted rolls, an obstruction roller cooperating with the main beater blade, a frame, an obstruction member slidably mounted in the frame, upper and lower cover members connected by link mechanism to said slidable obstruction member and means for actuating said slidable obstruction member to move the cover members into a position either to shield the material passing through the machine from the action of the auxiliary beater or to expose the material to the action of said auxiliary beater, for the purpose specified.

1,889,105. THERMIONIC TUBE. HENRY W. PARKER, Toronto, Ontario, Canada, assignor to Rogers Radio Tubes Limited, Toronto, Ontario, Canada, a Corporation of Ontario, Canada. Filed Feb. 18, 1930. Serial No. 428,102. 3 Claims. (Cl. 250—27.5.)



2. An electrode for an electron discharge device composed of a metal having a melting point above 1700° K. bearing thereon a coating of a metal having a melting point between 1300° K. and 1700° K., said metal of lower melting point having an oxidized surface capable of absorbing water vapor.

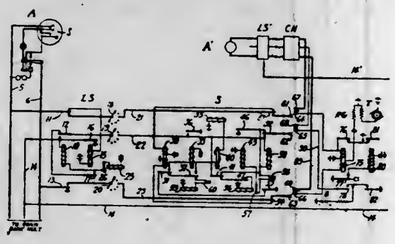
1,889,106. THERMIONIC TUBE. HENRY W. PARKER, Toronto, Ontario, Canada, assignor to Rogers Radio Tubes, Limited, Toronto, Ontario, Canada, a Corporation of Ontario, Canada. Filed Mar. 15, 1932. Serial No. 598,911. 7 Claims. (Cl. 250—27.5.)



1. An electrode assembly for thermionic tubes comprising, a cathode in the form of a metallic cylinder, electron emissive substances on a portion of the exterior thereof, a heating element within said cylinder, a control grid

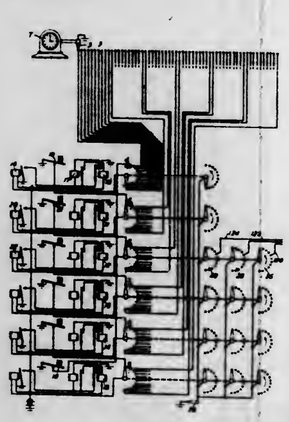
without said cylinder, a terminal for said control grid insulatingly maintained within a portion of said cylinder and means for maintaining the relative positions of said cathode and said control grid.

1,889,107. TELEPHONE SYSTEM. EDWARD S. PETERSON, Chicago, Ill., assignor, by mesne assignments, to Associated Electric Laboratories, Inc., Chicago, Ill., a Corporation of Delaware. Filed July 7, 1930. Serial No. 465,901. 18 Claims. (Cl. 179—5.5.)



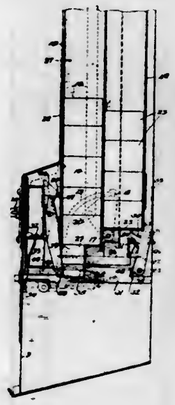
1. In a combined telephone and signalling system, a central exchange, subscribers' lines connected to said exchange, means at said exchange controlled by a calling subscriber for establishing a telephone connection with any other subscriber's line, code signalling equipment at said exchange, code relays at the exchange individual to each subscriber's line, means controlled by a calling subscriber for operating the associated code relays to start the operation of said signalling equipment, a recording office connected to said exchange, and means controlled by said signalling equipment to transmit a code characteristic of said calling subscriber over the connection to said recording office.

1,889,108. TIME ANNOUNCING SYSTEM. GERHARD RÄTTIG, Nuremberg, Germany, assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed July 14, 1931, Serial No. 550,714, and in Germany Mar. 6, 1930. 7 Claims. (Cl. 58—14.)



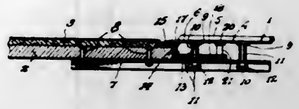
7. In an announcing system, a clock controlled contact device, a plurality of step-by-step selectors, means controlled by said contact device for operating said selectors for a number of steps each in succession, sound current reproducing means, a transmitting circuit, relays for connecting corresponding reproducing means to said transmitting circuit, other step-by-step selectors and circuit means therefor effective in response to operations of said first mentioned selectors for actuating said relays in successive combinations, one relay at the time and one combination of relays for each step of each of the first mentioned selectors.

1,889,109. VENDING MACHINE. MYRON H. RICHARDSON, Chicago, Ill., assignor to Advance Machine Company, Chicago, Ill., a Corporation of Illinois. Filed Mar. 19, 1930. Serial No. 437,211. 10 Claims. (Cl. 312—67.)



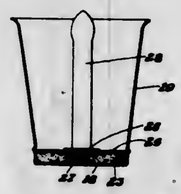
1. In a vending machine, a holder for a supply of articles to be vended, said holder fixed against bodily movement, a bodily shiftable container for holding an additional supply of articles to be vended, an ejector common to both of said supplies, means for bodily shifting said container entirely into the space occupied by the articles in said holder in the absence of articles in said holder, and means for supporting the holder while being thus shifted.

1,889,110. IRON HOLDER. HAROLD E. RIFFEY, Virden, Ill. Filed Apr. 7, 1931. Serial No. 528,387. 5 Claims. (Cl. 68—27.)



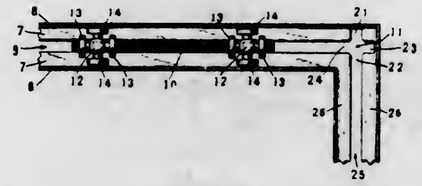
1. In combination with an ironing board having a cover, an iron support comprising a shelf, arms secured against the under face of said board and projecting longitudinally from the board beneath said shelf, means for detachably connecting the shelf with said arms and retaining the shelf spaced above the arms, and a member carried by said arms and provided with a lateral lip bearing against the cover for the entire width of the ironing board, said member serving to brace the arms against downward strain and guide an iron onto said shelf.

1,889,111. FLAVOR DISPENSER CUP. WILLIAM SEER, New York, N. Y. Filed Feb. 28, 1929. Serial No. 341,916. 10 Claims. (Cl. 206—47.)



4. In a dispensing cup having a plurality of interior transverse grooves intermediate its top and bottom, the combination of a plurality of covers disposed in said grooves, said covers being attached one to the other, and means for successively removing said covers from the cup.

1,889,112. HANGER. RAYMOND B. SHOEMAKER, New York, N. Y. Filed Mar. 19, 1930. Serial No. 437,066. 8 Claims. (Cl. 16—97.)



1. A construction of the character described comprising two intersecting track sections each having L-shaped angle irons forming a track with a central slot, a hanger having two pairs of rollers with their axes arranged permanently at right angles to each other and adapted to travel in the respective tracks and having a depending shank guided in said slot and a member swiveled upon and supported by said shank.

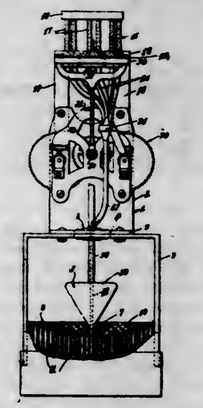
1,889,113. DROP WIRE HANGER. JAMES W. SHOPE, South Gate, Calif. Filed Dec. 16, 1931. Serial No. 581,858. 2 Claims. (Cl. 24—131.)



2. A drop wire hanger, comprising a substantially straight body portion, a loop at one end thereof, a series of fingers projecting laterally from said straight body portion, a hook projecting laterally from said body portion between said loop and said series of fingers and a pair of fingers projecting from the end of the body of the hanger opposite from the end on which said loop is formed and which pair of fingers are arranged substantially at right angles to the plane occupied by the series of fingers.

1,889,114. OIL WELL SURVEYING INSTRUMENT. WAYNE M. SMITH and KENNETH W. HALEY, Santa Barbara, Calif. Filed July 19, 1930. Serial No. 469,217. 9 Claims. (Cl. 234—1.)

1. In an instrument for measuring the angular deflection of bores, a frame to be lowered into the bore, a base member on said frame having a plurality of openings therein, a plumb-bob mounted on said frame above said base, freely movable to assume a true vertical position under the influence of gravity, said plumb-bob having an opening



therethrough, and means projectable through said plumb-bob into the openings in the base with which said plumb-bob is aligned at any given instant whereby the angular deflection of the frame from the vertical may be measured.

1,889,115. HOG CONTROLLER. FRED STANLEY, Webster County, Iowa. Filed Dec. 10, 1930. Serial No. 501,833. 2 Claims. (Cl. 119—153.)

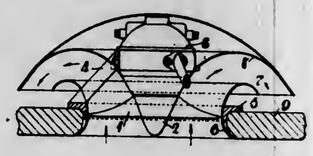


1. In a device of the class described, an elongated handle member, a metallic member on the end of said handle member having its forward end rounded, an elongated bore in said metallic member, a cable slidably mounted in said bore, and a means for securing the forward end of said cable to said metallic member.

1,889,116. PRIMING COMPOSITION. EDMUND VON HERZ, Cologne-Dellbruck, and HANS RATHSBURG, Furth, Germany, assignors, by mesne assignments, to Remington Arms Company, Incorporated, New York, N. Y., a Corporation of Delaware. Filed Feb. 20, 1930, Serial No. 430,138, and in Great Britain Mar. 3, 1929. 10 Claims. (Cl. 52—2.)

1. A priming mixture containing guanylnitrosaminoguanyltetracene in an amount not greater than 4%.

1,889,117. VENTILATING DEVICE. MYKAS ADAMCIKAS, also known as Michael Adamtchik, and GIUSEPPE MASSERA, Aldwych, London, England. Filed Oct. 28, 1929, Serial No. 402,966, and in Great Britain Nov. 1, 1928. 4 Claims. (Cl. 98—19.)



1. A weatherproof, electrically driven, ventilating fan more particularly intended for installation on the roof or wall of a vehicle and comprising in combination with an electric motor an outside protecting hood and a ventilating bladed wheel having a hub, a ventilating passage which is of annular cross-section from the suction to the streamlined exit end and into which the ventilating blades project, the said ventilating passage being constituted by two continuous curved guiding surfaces, the exit end being curved back with respect to the suction end and being of gradually increasing area and one of the said continuous curved guiding surfaces including the hub of the bladed wheel.

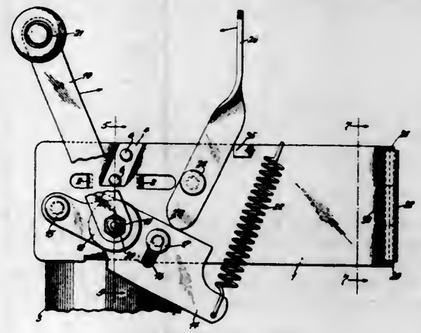
1,889,118. GEAR SHIFT LEVER KNOB. JOHN S. ANDREWS, Los Angeles, Calif., assignor to Philip Laux, Santa Ana, Calif. Filed Nov. 26, 1928. Serial No. 321,790. 11 Claims. (Cl. 224—4.)



1. In a device of the class described, the combination with a permanent support, of a supporting member having a bore at one end into which one end of the permanent support extends, a bushing positioned within the bore and secured to the end of the permanent support, a closure member for the bore secured and enclosed within the supporting member to prevent removal of the bushing, and a spring positiond between the bushing and the closure member providing considerable frictional engagement between the bushing and the walls of the supporting member against which the bushing is positioned.

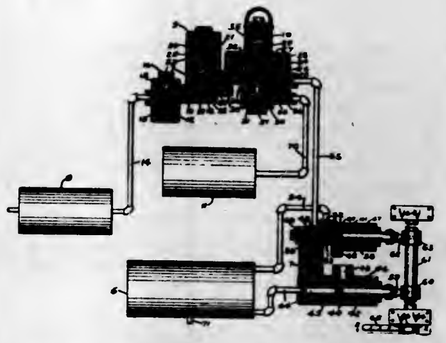
1,889,119. CAN OPENER. JOHN H. BROCKSMITH, Mehlville, Mo. Filed Dec. 26, 1931. Serial No. 583,275. 15 Claims. (Cl. 30—3.)

1. In a can opener, a support, a cutting member rigidly attached to and having its cutting portion spaced laterally from said support, an arm having one end pivoted to the opposite side of said support from said cutting member, an axle rotatively supported by said arm and extending through said support, a feeding roller attached to and rotated by said axle below said cutting member, a spring connecting said arm and said support and actuating said



arm in a direction to move said feeding roller in the general direction of said cutting member, and means for rotating said axle and thereby said feeding roller.

1,889,120. FLUID PRESSURE WATER SYSTEM. PATRICK H. DONOVAN, Chicago, Ill., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa., a Corporation of Pennsylvania. Filed May 24, 1930. Serial No. 455,411. 3 Claims. (Cl. 137—79.)

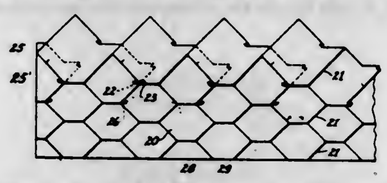


2. In a fluid pressure water supply system, the combination of two reservoirs normally charged with fluid under pressure, of another reservoir containing water and normally subject to the pressure of fluid from said first mentioned reservoirs, means operative upon a reduction in the pressure in the last mentioned reservoir for supplying fluid under pressure from said first mentioned reservoirs to said last mentioned reservoir, and means subject to the pressure of fluid in one of said first mentioned reservoirs for controlling communication between such reservoir and the other of said first mentioned reservoirs.

1,889,121. COMPOSITION SHINGLE. NORMAN P. HARSHBERGER, Chicago, Ill. Filed Sept. 22, 1926. Serial No. 136,956. 11 Claims. (Cl. 108—7.)

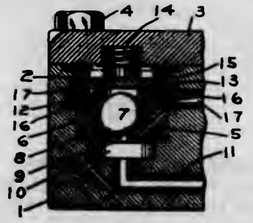
9. A shingle element comprising a body portion forming a plurality of units which are offset with relation to one another, to simulate a plurality of individual shingles, locking means in connection with the end edge of one of said units; and complementary locking means in connection with a side edge of the adjacent offset unit.

10. The method of cutting shingles of substantially parallelogram shape with tabs at corners thereof from a strip of material including forming transverse and longitudinal cuts in the material and further cuts to form the tabs, diagonally disposed shingles being out of diag-



onal alignment with each other and the complementary edges of the tabs of the shingles so diagonally disposed being in line with each other.

1,889,122. CHECK VALVE DEVICE. ELLIS E. HEWITT, Edgewood, Pa., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa., a Corporation of Pennsylvania. Filed Nov. 24, 1930. Serial No. 497,724. 2 Claims. (Cl. 277—42.)

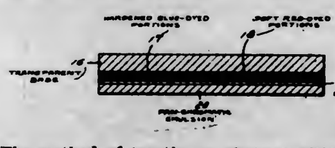


1. In a check valve construction, the combination with a casing having a single check valve receiving recess open to an inlet and an outlet passage, of a single valve seat member carried by said casing within said recess, an annular seat rib on said member, a valve seat formed on said member below said seat rib, a disc check valve adapted to seat on said seat rib, an annular sleeve surrounding said seat rib and the periphery of said disc valve and forming a guide for said valve for the full travel of the valve, and a ball check valve adapted to seat on said valve seat, said check valves when seated closing communication from the outlet passage to the inlet passage.

1,889,123. TREATMENT OF PIMIENTOS. JOHN H. JONES, Bound Brook, N. J., assignor to The Best Foods, Inc., New York, N. Y., a Corporation of New Jersey. Filed Sept. 19, 1930. Serial No. 483,134. 7 Claims. (Cl. 99—1.)

1. A method for treating pimientos comprising heating the pimientos in the presence of acetic acid and salt.

1,889,124. COLOR PHOTOGRAPHY. WILLIAM VAN DOREN KELLEY, Hollywood, Calif., assignor, by mesne assignments, to Du Chrome Film System Ltd., Hollywood, Calif., a Corporation of California. Filed Apr. 24, 1929. Serial No. 357,702. 7 Claims. (Cl. 95—81.5.)

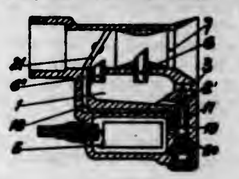


1. The method of treating a photo-sensitized silver-halide emulsion which consists in exposing, developing and bleaching it in turn, in a manner to harden the exposed portions; removing all silver and its products from the film; and dyeing the exposed portions one color; and dyeing the unexposed portions a complemental color.

1,889,125. PREPARATION OF A FERTILIZER INGREDIENT. CHARLES H. MACDOWELL, Chicago, Ill., assignor to Armour Fertilizer Works, Chicago, Ill., a Corporation of New Jersey. Original application filed Feb. 1, 1929, Serial No. 336,921. Divided and this application filed May 31, 1930. Serial No. 458,908. 6 Claims. (Cl. 23—247.)

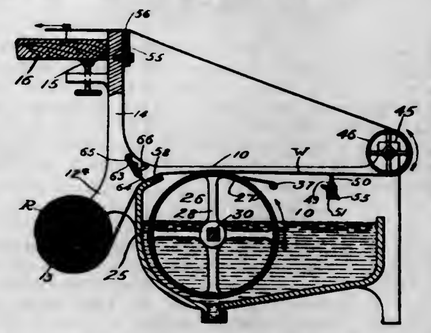
1. The process of preparing and storing a fertilizer ingredient, consisting in reducing the vapor pressure of an ammoniacal liquid having a vapor pressure substantially above atmospheric by dissolving therein a fertilizer material containing nitrogen and storing such solution under its own normal reduced vapor pressure in a sealed container of sufficient strength to withstand such reduced pressure.

1,889,126. CARBURETOR. RICHARD MALIN, Chemnitz, Germany. Filed July 3, 1930, Serial No. 465,601, and in Germany May 13, 1930. 2 Claims. (Cl. 261—121.)



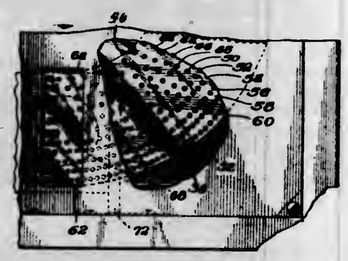
1. In a spray carburetor the combination of an air suction pipe and an atomising chamber, the latter with an air inlet channel separate from the air inlet of the suction pipe and in atomizing relationship to a jet tube, a channel connecting said atomizing chamber with said jet tube leading any fuel precipitated in the atomising chamber back into the air inlet channel for reatomisation, said atomizing chamber being connected with the suction pipe by overflow pipes, and a no load channel leading from the jet tube into said suction pipe.

1,889,127. WALL PAPER PASTING MACHINE. RUSSELL I. MANN, Coopersburg, Pa., assignor to Morris L. Sofransey, Allentown, Pa. Filed Apr. 28, 1930. Serial No. 448,014. 1 Claim. (Cl. 91—51.)



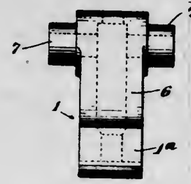
In a pasting machine, a pasting means, a paper roll holder and a paper guide roll arranged at opposite sides of the pasting means, a bar between the paper roll holder and the pasting means over which the paper from a paper roll supported by said holder is adapted to pass, said bar being normally disposed by gravity in a position such that it exerts no force tending to elevate the paper from the pasting means, means for shifting said bar to elevate the paper from engagement with the pasting means, spring latch means for maintaining the bar in its elevated position, and means for applying tension to a paper roll upon said holding means such that the pressure applied by the paper to said bar automatically disengages said spring latch to permit the bar to assume its normal position.

1,889,128. FREQUENCY METER. WILLIAM S. MCCLINTOCK, Jr., Chicago, Ill. Filed Oct. 30, 1930. Serial No. 492,174. 5 Claims. (Cl. 175—368.)



1. A portable frequency meter comprising a carrying case containing a neon lamp, a transparent sheet having a plurality of rows of alternate opaque and translucent portions, the said portions in each row being spaced equidistant and the spacing in each row differing from that of the other rows, a synchronous motor for moving said sheet at constant speed, means to connect said synchronous motor to a source of current of regulated frequency of known value, and means to connect said neon lamp to a source of current the frequency of which is to be determined.

1,889,129. HAMMER MILL. CHRISTIAN NIELSEN, Copenhagen, Denmark, assignor to F. L. Smidth & Co., New York, N. Y., a Corporation of New Jersey. Filed Nov. 28, 1930, Serial No. 498,617, and in Great Britain May 15, 1930. 1 Claim. (Cl. 83—11.)



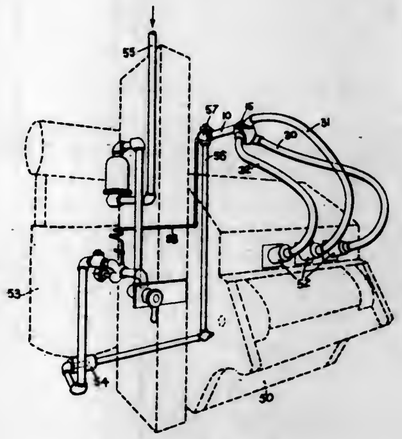
A hammer mill having a pivotally mounted and axially elongated hammer supported about a rotary shaft, the hammer having a shank portion and a head larger than the shank portion, each hammer having an axially longitudinal cavity with its volume larger in the shank of the hammer than in the head of the hammer and adjacent the point of suspension of the hammer, the cavity being open at each end.

1,889,130. STABILIZED COMPOSITION. GORDON D. PATTERSON, Wilmington, Del., assignor to E. I. du Pont de Nemours & Company, Wilmington, Del., a Corporation of Delaware. Filed Dec. 3, 1929. Serial No. 411,389. 6 Claims. (Cl. 134—39.)

1. A non-thickening coating composition, comprising a base-sensitive polyhydric alcohol-polybasic acid resin and a stabilized zinc sulfide type of pigment which contains less than 0.1% of acetic acid soluble components, calculated as zinc oxide.

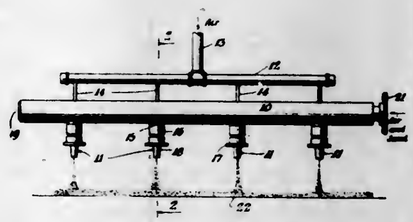
1,889,131. ABRASIVE BLASTING SYSTEM. LOUIS D. PEIK, Mishawaka, Ind., assignor to The American Foundry Equipment Company, New York, N. Y., a Corporation of Delaware. Filed May 13, 1930. Serial No. 451,903. 7 Claims. (Cl. 51—8.)

1. In an abrasive blast system, a source of carburetted abrasive and air, a single supply conduit leading therefrom, a plurality of discharge elements, a distributing device between said discharge elements and supply conduit, said discharge elements being connected to said distributing device at different levels, said distributing device having means for overcoming the tendency of the



abrasive to separate out and favor certain of said discharge elements, whereby substantially equal distribution of air and abrasive to said discharge elements is achieved.

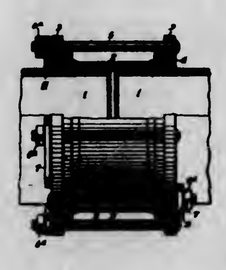
1,889,132. MULTIPLE BLAST NOZZLE. LOUIS D. PEIK, Mishawaka, Ind., assignor to The American Foundry Equipment Company, New York, N. Y., a Corporation of Delaware. Filed May 28, 1930. Serial No. 456,388. 3 Claims. (Cl. 51—11.)



1. In an abrasive blast gun, a main conduit for supplying a carburetted mixture of abrasive and a carrying fluid, a nozzle projecting laterally from main conduit and an auxiliary conduit connected to said main conduit for supplying an auxiliary fluid to said nozzle, said auxiliary conduit being substantially in line with said nozzle but offset from the axis of said nozzle in a direction opposite to the direction of flow of the abrasive and carrying fluid.

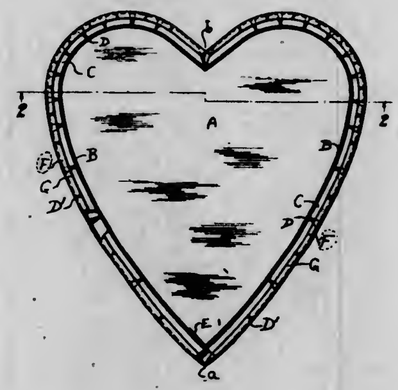
1,889,133. MEANS FOR LOCKING PLAIN END PIPE SECTIONS WITH RESPECT TO THE COUPLINGS THEREFOR. GEORGE H. PFEFFERLE, Bradford, Pa., assignor to S. B. Dresser Manufacturing Company, Bradford, Pa., a Corporation of Pennsylvania. Filed July 8, 1930. Serial No. 466,454. 13 Claims. (Cl. 285—132.)

1. Locking means for securing a plain end pipe section in respect to a pipe coupling therefor, comprising a locking plate having a pivotal aperture for pivotally connecting it with the coupling and provided with a series of cutting teeth for forming a locking notch in the ad-



jacent portion of a pipe section, said plate being provided with means for enabling it to be rotated upon its pivotal axis.

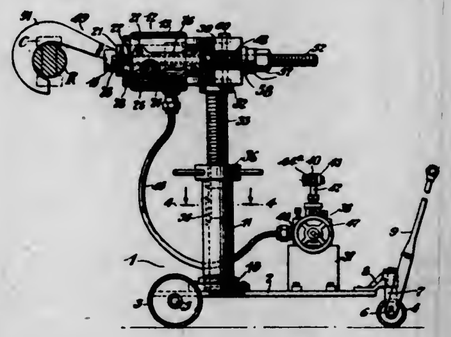
1,889,134. PAPER BOX. FRANK J. SCHLEICHER, St. Louis, Mo. Filed Nov. 10, 1930. Serial No. 494,553. 5 Claims. (Cl. 229—5.5.)



1. A cardboard box comprising a side wall and a base, said side wall having an outwardly projecting flange and said base having the marginal portion thereof extending along and outwardly beyond said flange and means for securing said flange to said marginal portion of said base.

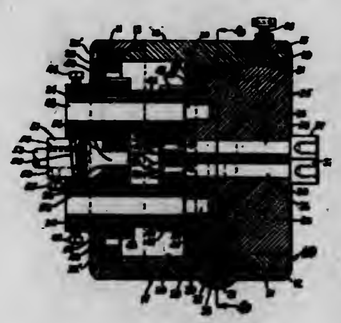
1,889,135. CROSSHEAD PIN EJECTOR. CHARLES A. SHAFFER, Chicago, Ill., assignor to The Watson-Stillman Co., New York, N. Y., a Corporation of New Jersey. Filed Oct. 9, 1929. Serial No. 398,540. 10 Claims. (Cl. 29—86.1.)

1. A hydraulic jack unit for removing the wrist pin from an engine crosshead, comprising a wheeled truck; a hydraulic jack; a mounting for said jack carried by the truck and supporting the jack elevated above the truck and disposed for operation in a lateral direction; manually operable means for adjusting the jack to different elevations; a pump mounted upon the truck for operating the jack; anchoring means connected to the jack, disposed at one side thereof and formed to anchor to the engine piston rod; and anchoring means connected to the jack disposed at the opposite side thereof and formed to anchor to the engine connecting rod, the ram of the jack being adapted to engage the wrist pin for forcing it endwise from the crosshead, and said anchoring means



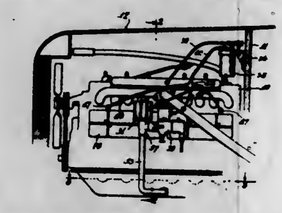
being adapted to resist the reaction of the jack and hold the latter against lateral displacement relatively to the crosshead.

1,889,136. BORING MACHINE. STEFAN WAGNER, Los Angeles, Calif. Filed May 27, 1930. Serial No. 456,146. 3 Claims. (Cl. 77—24.)



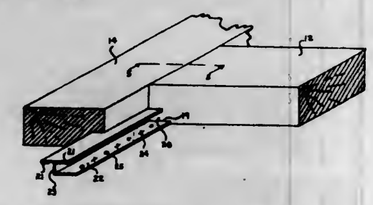
1. In a boring machine, a base, a pair of spaced supports mounted on said base, a sleeve positioned in said support, said sleeve being rotatable, means to retain said sleeve in a fixed position relative to said supports, there being a recessed chamber in said sleeve and a pair of apertures in said sleeve communicating with said chamber and extending through said sleeve, a hub rotatably journaled in each of said sleeve apertures, intermeshing gear teeth on said hubs adjacent the chamber end thereof, there being a recess in the chamber end of each of said hubs, a bore in each of said hubs, a spindle positioned in each of said bores, said spindles including chuck portions adjacent the outer face of said hubs, each of said spindles extending into said chamber and having a gear secured thereto, said gears being in mesh, a cover plate removably secured to said sleeve closing said chamber, there being a central aperture and a pair of spaced apertures in said cover, a stud positioned in each of said spaced cover apertures, means to secure said studs to said cover, said studs including reduced end portions positioned in said recesses of said hubs, a sleeve rotatably mounted on each of said studs, gears secured to said stud sleeves adjacent said hubs and meshing with said spindle gears, other gears secured to said stud sleeves adjacent said cover, a shaft positioned in said central aperture of said cover, a gear secured to said shaft, said last mentioned gear meshing with said other stud sleeve gears.

1,889,137. METHOD AND APPARATUS FOR LUBRICATING AND OPERATING INTERNAL COMBUSTION ENGINES. PHILLIP A. WHITE, St. Albans, N. Y., assignor to Wheaton Oil Clarifier Corporation, New York, N. Y., a Corporation of Nevada. Filed Nov. 7, 1927. Serial No. 231,536. 12 Claims. (Cl. 123—196.)



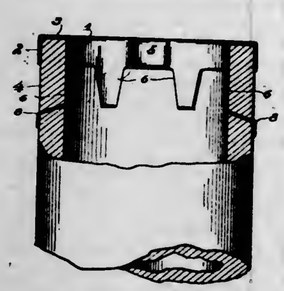
1. In an internal combustion engine, a crankcase, cylinders, pistons, and an intake manifold, a container partly filled with a washing oil, a pipe connected from the top of said container to the intake manifold and a second pipe extending under the surface of the washing oil and leading to the upper part of the engine crankcase.

1,889,138. FLOORING. SAMUEL J. WOLFSON, Everett, Mass., assignor to Concrete-Wood Floor Clip Co., Inc. Filed May 20, 1930. Serial No. 454,047. 8 Claims. (Cl. 20—75.)



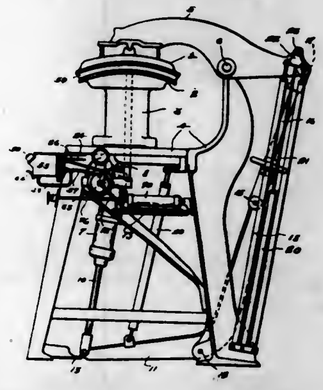
1. In combination, a unit of parquetry comprising a plurality of strips of flooring material, a second unit of parquetry comprising a plurality of strips of flooring material, said last-named strips extending in a direction transversely to said first-named strips, each of said units having a groove extending therearound, a one-piece sheet metal fastening device disposed between said units and comprising a base portion, a vertical portion disposed at one side of said base portion, and a pair of tongues, one of said tongues being disposed in the groove of one of said units, and the other of said tongues being disposed in the groove of the other unit, each of said tongues, base portion and vertical portion being continuous and longitudinally coextensive.

1,889,139. CAP FOR TUBULAR BODIES OR CORES. EDWIN WILLIAM BEBIE, Hawthorne, N. J. Filed Jan. 2, 1931. Serial No. 506,011. 11 Claims. (Cl. 242—68.)



11. In combination with a hollow core, a cap therefor including an annular web to extend over the end of the core, an annular flange connected with said web and seated against the wall of the core, and fastening prongs on the cap extending axially thereof and into said wall to confine the cap on the core.

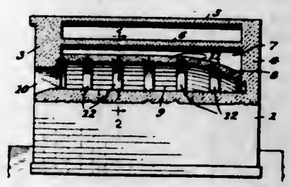
1,889,140. AIR CURRENT CREATING MEANS FOR PRESSING MACHINES. PHILIP N. BRAUN, Syracuse, N. Y., assignor to The Prosperity Company Inc., Syracuse, N. Y., a Corporation of New York. Filed Nov. 2, 1928. Serial No. 316,693. 21 Claims. (Cl. 68—9.)



1. A pressing machine including in combination cooperating pressing elements, one of which is movable toward and from the other, means for passing a current of air against the garment on one of said elements, means to blow the air during the closing of the movable element a predetermined distance toward final closed position, and means to change the direction of the air current during the final closing of the press.

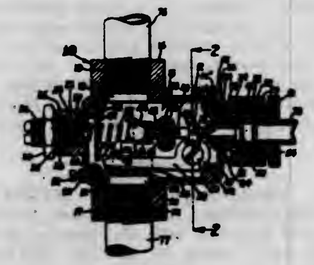
13. In a garment pressing machine in combination cooperative pressing elements, one of which is movable with respect to the other; blower means for causing a current of air to pass through the work on one of the pressing elements; operating mechanism for the movable pressing element; operating means for the blower means; and means operated by the operating mechanism for the movable pressing element to control the operation of the operating means for the blower means.

1,889,141. BAKER'S OVEN. PATRICK J. CAMPBELL, Newark, N. J. Filed Mar. 24, 1932. Serial No. 600,998. 4 Claims. (Cl. 107—55.)



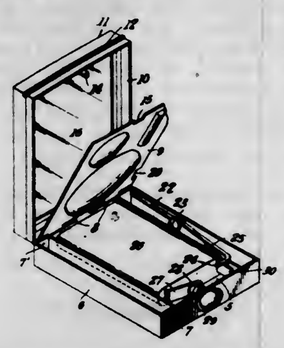
2. A baker's oven comprising a body having a baking chamber therein and an arch constituting a roof for the baking chamber, said arch comprising beams U-shaped in cross section and extending transversely of the arch with their ends embedded in side walls of the body, and blocks between the beams having their ends resting upon the beams and formed across their under faces with grooves receiving side flanges of the beams to interlock the blocks with the beams and retain the blocks upon the beams in proper relation to each other.

1,889,142. REGULATING VALVE. HOWARD H. DOUGLASS and ARTHUR H. DOUGLASS, Los Angeles, Calif., assignors to Superior Regulator Co. Inc., Los Angeles, Calif., a Corporation of California. Filed Apr. 2, 1931. Serial No. 527,160. 8 Claims. (Cl. 236—102.)



1. In a regulating valve, a housing, a chamber in said housing, said housing having an inlet aperture and an outlet aperture both communicating with said chamber, a valve seat associated with one of said apertures, a member movably mounted in said chamber, resilient means to urge said member in one direction, means to move said member in another opposite direction, a valve in said chamber adapted to coact with said valve seat, an operating arm pivotally connected to said valve, said operating arm being pivotally mounted in said housing, said arm having a notch adjacent the end opposite said valve and a collar secured to said member, said collar being positioned in said notch, the sides of said notch being rounded and engaging opposite sides of said collar.

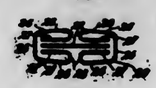
1,889,143. ELECTRIC VANITY CASE. JENNIE HIRSH, Brooklyn, N. Y., assignor to Marc F. Keller, Brooklyn, N. Y. Filed Feb. 4, 1931. Serial No. 513,294. 2 Claims. (Cl. 240—6.45.)



1. A cosmetic container comprising a body, a cover and an open frame hinged to the body, an electric battery in said body, a lamp bulb set in the walls of the body in circuit with said battery, a lever controlling the circuit and normally closing the same, and means carried by said frame to actuate said lever, said frame being separately hinged to the body and to the cover to permit raising the cover either with or without the frame and thus selectively completing the circuit to the lamp.

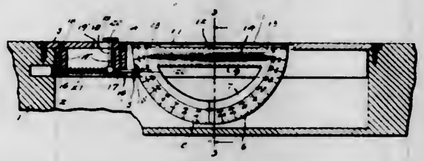
1,889,144. GASKET. CECIL R. HUBBARD and ROBERT M. WAPLES, Palmyra, N. Y., assignors to The Garlock Packing Company, Palmyra, N. Y., a Corporation of New York. Filed July 25, 1930. Serial No. 470,565. 3 Claims. (Cl. 154—45.5.)

1. A gasket comprising packing elements of folded fibrous material disposed in side-by-side relationship and intervening connecting material having portions extended between the folds of the packing elements, the connecting



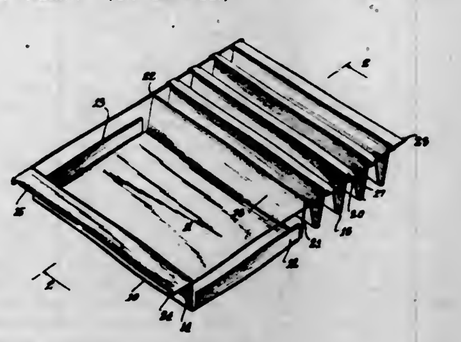
material being of a nature such as to permit fastening elements to be readily passed between the packing elements at any desired points.

1,889,145. COMBINED PROTRACTOR AND SPIRIT LEVEL. ARTHUR W. JOHNSON, Litchfield, Nebr. Filed May 2, 1931. Serial No. 534,620. 5 Claims. (Cl. 33—213.)



3. The combination with a straight edge having a pocket in one face thereof, of a face plate covering said pocket and having a pair of spaced parallel walls depending from its under side into the pocket and further having a central opening therein, a semi-circular body disposed in said pocket between said walls and having its straight side lying in said opening, pivot means between the radial center of said body and the adjacent walls of the plate, a protractor scale formed along the curved edge of the body upon one side face, a spirit tube carried by the body and extending parallel with its straight side, a pair of lugs disposed between said walls at one side of the body, a pin member reciprocably carried by said lugs and having one end normally engaging said body to retain the same in a desired position, and a button exposed upon the outer side of said face plate and connected through an aperture in the face plate with said pin whereby shifting of the pin may be effected.

1,889,146. DISH DRAINER. GODEL KALENOFF, Brooklyn, N. Y. Filed June 10, 1932. Serial No. 616,404. 2 Claims. (Cl. 141—11.)



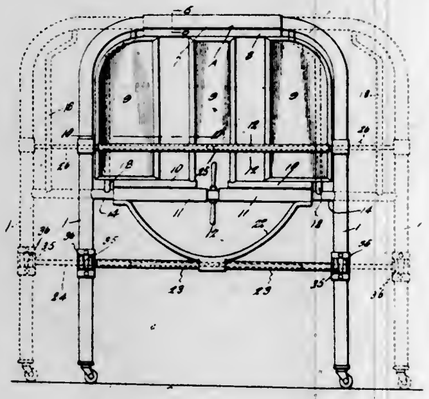
1. A dish-drainer comprising a flat front part and a corrugated rear part, wide apexes on the walls of the corrugations and the inclination of the walls arranged at such angles as to keep dishes placed into the drainer apart to prevent chipping and breakage.

1,889,147. METHOD AND MOLD FOR THE LOCAL STRENGTHENING OF THE SILVER COATING OF GALVANICALLY SILVERED SPOONS AND FORKS. HERMANN KRÜGER, Karlsruhe, Germany. Filed June 11, 1931. Serial No. 543,685, and in Germany Sept. 14, 1928. 1 Claim. (Cl. 204—6.)



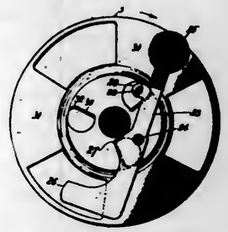
A mold for locally strengthening the silver coating of an article such as a spoon or the like and comprising a mold having back and front portions to receive the article between them, one of said portions having an opening to expose the article at the point where the same is to be reinforced, the edge wall of said opening being so shaped as to recede gradually from the exposed local surface of the article to cause the edges of a strengthening deposit applied through said opening to be gradually reduced and to merge imperceptibly into the face of the work article.

1,889,148. BED. DAVID KURKCHEE, Schenectady, N. Y. Filed Mar. 31, 1932. Serial No. 602,333. 7 Claims. (Cl. 5—183.)



1. In a bed of the class described, head and foot members each comprising a central section having a horizontally arranged tubular part at its upper end and a pair of aligned tubular parts at its lower portion, said pair of alined tubular parts being spaced apart, a pair of post members, a tubular part connected to the upper end of one post member and extending into the upper tubular part and having a horizontal partition therein, a horizontal member connected to the upper end of the other post member and having a flat lower part, the said horizontal member having sliding movement in the member provided with the partition with its flat lower part resting on the partition, said horizontal member also extending into the upper tubular member of the central section, a screw shaft provided with right and left threaded portions located in the pair of lower tubular parts of the central section, a handle attached to the central part of the shaft and located in the space between the inner ends of the lower tubular part, and an inwardly extending horizontally arranged tubular part connected at its outer end with each post member and at an intermediate portion of said post member, and extending into a tubular part at the lower portion of the central section and internally threaded to receive a threaded portion of the shaft.

1,889,149. PROJECTION LIGHT INTENSITY CONTROL MECHANISM. ISIDORE MARKS, Boston, Mass., assignor to Keystone Mfg. Co., Boston, Mass. Filed Nov. 23, 1931. Serial No. 576,779. 3 Claims. (Cl. 88—19.3.)



1. In a motion picture machine, the combination of supply and take-up reels, a continuous feed sprocket, an intermittent film feeding mechanism, a film guide with aperture opening, in alignment with a projection lens and light source, a rotatable shutter, which intermittently cuts off the light from said light source to said aperture and a light intensity control mechanism, adjacent to said shutter, having a pivotally mounted arm, carrying a light obstructing member of fine wire mesh, held by gravity, in the path of said light and operated automatically to control the intensity of light falling from said light source on said aperture, by cam shaped projections on said shutter engaging a flexible projection on said arm, all substantially as described.

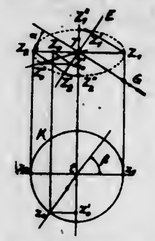
1,889,150. WALL-BOARD JOINT. DAVID MCCHESNEY, Kirkland Lake, Timiskaming, Ontario, Canada. Filed Mar. 14, 1930. Serial No. 435,901. 1 Claim. (Cl. 72—16.)



1. In a wall board joint construction, the combination with two adjacent wall board portions made from a plastic material and having edge recesses forming a groove, a metallic plate countersunk in the groove, securing nails extending through the plate adjacent each edge thereof and through the adjacent edges of the wall boards, and a filling for the groove flush with the outer face of the wall board.

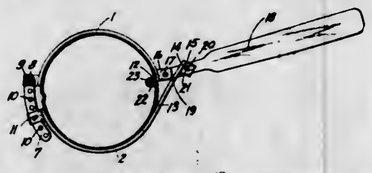
1,889,151. AIMING TELESCOPE. IGNATZ PECHAN and JOHANN SCHIER, Vienna, Austria, assignors to Actien-Gesellschaft C. P. Goerz Optische Anstalt Actiova Spolecnost K. P. Goerz Opticky Ustav, Bratislava, Czechoslovakia, a Company of Czechoslovakia. Filed Mar. 19, 1931, Serial No. 523,887, and in Germany Mar. 28, 1930. 4 Claims. (Cl. 88—2.2.)

1. An aiming telescope comprising a telescope casing with two parts the axes of such parts being perpendicular to each other, an objective and an eye piece associated to the said objective located in one of the said parts, a horizontal shaft on which the said telescope is rotatably mounted, a source of light, an illuminating set of lenses, an opaque diaphragm provided with at least one concentric circular transparent ring and a frosted plate the four last named elements being mounted to one behind the other in the other part of the telescope casing, the said



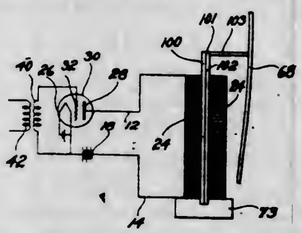
illuminating set of lenses being adapted to project a pencil of rays of light through the said transparent circular rings of the said diaphragm onto the said frosted plate the said rays of light being parallel to the said other part of the telescope casing, means for permanently holding the said diaphragm in a substantially vertical plane and means for reflecting the rays of light coming from the said frosted plate into the first named part of the telescope casing.

1,889,152. TOOL. WALTER E. PHILLIPS, Cleveland Heights, Ohio, assignor to Cleveland Metal Hose Company, Roseville, N. J., a Corporation of Ohio. Filed Aug. 14, 1931. Serial No. 557,128. 5 Claims. (Cl. 81—3.)



1. A tool of the class described comprising a split contractible work engaging member having a work engaging projection near one end thereof, and means for contracting the said member about the work, said means including a lever having pivotal connection to each end of the split member.

1,889,153. ACOUSTIC ELECTRIC ENERGY CONVERTER. GEORGE WASHINGTON PIERCE, Cambridge, Mass. Original application filed Aug. 17, 1928, Serial No. 300,248, now Patent No. 1,882,401, dated Oct. 11, 1932. Divided and this application filed Feb. 26, 1931. Serial No. 518,439. 15 Claims. (Cl. 179—110.)

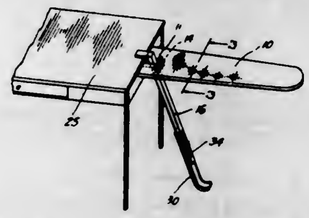


1. Apparatus for converting acoustic energy into electric energy or vice versa comprising a composite magnetostrictive core constituted of mechanically connected members of different magnetostrictive material, and a diaphragm connected with the core.

1,889,154. DISCHARGING PREPARATION. GUSTAV REDDELIEN, Leipzig, HANS LANGE, Dessau in Anhalt, ALFRED FISCHBASER, Frankfort-on-the-Main-Fechenheim, and HERMANN FREUND, Frankfort-on-the-Main, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed May 18, 1931, Serial No. 538,888, and in Germany Apr. 16, 1930. 7 Claims. (Cl. 8—6.)

1. A process for discharging dyeings which comprises treating the dyeings with a preparation containing a quaternary dialkyl-phenyl-1²-methyl-naphthalene ammonium compound.

1,889,155. IRONING BOARD. FRED J. SELLENTIN, Newark, N. J. Filed Oct. 17, 1931. Serial No. 569,883. 1 Claim. (Cl. 68—10.)



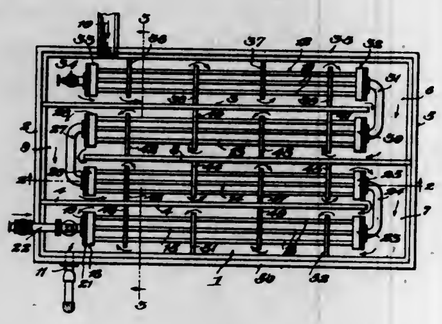
An ironing board adapted to be detachably secured to the edge of a table or other horizontal projection and comprising an elongated board member having a narrow, longitudinal, vertical slot extending inwardly from one end thereof, and having vertical apertures near the inner end of said slot, on each side thereof, extending upwards from the lower surface of the board partially through its thickness, a U-shaped member constructed from round metal being force-fitted into said apertures, the vertical portions of said U-shaped member being slightly outwardly bent in order to be locked within said apertures, the horizontal portion of the U-shaped member engaging the lower surface of the board to form a pivot member extending transversely of the longitudinal slot, an elongated supporting leg having, near its upper terminus, a transverse, circular recess adapted to receive the horizontal pivot member, a rectangular plate secured to said supporting leg adjacent to said recess and enclosing same, outwardly extending flange portions integral with the rectangular plate, said flange portions being adapted to engage the sides of the slot in the board and adapted to prevent sidewise movement of the leg when the latter is in a folded position, an angle bar secured to the upper end of said supporting leg, the upper portion of said angle bar being adapted to engage the upper side of a table, a protecting cap engaging the upper portion of said angle bar, a U-shaped leg extension member slidably carried at the lower end of the supporting leg and adapted to vary the effective length of said supporting leg.

1,889,156. APPARATUS FOR RECOVERING HEAT FROM WASTE WATER. ALLAN T. SHEPHERD and DAVID E. SERGEANT, Richmond, Va. Filed Mar. 28, 1930. Serial No. 439,691. 1 Claim. (Cl. 257—108.)

An apparatus of the character described comprising a comparatively shallow tank having a water inlet adjacent one side and an outlet adjacent the opposite side, partitions carried by the ends of the tank and forming a zigzag passage for the water in the tank, heaters arranged in the tank and between the partitions and the sides of the tank, said heaters composed of heads connected by tubes, pipes connecting the heads around the ends of the partitions, baffles carried by the tubes and adapted to cause the

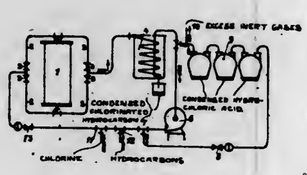
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zigzag passage of the water across the tubes and a water supply for the heaters adjacent the discharge of the tank and an outlet for the heater adjacent the hot water supply



for the tank whereby the flow of water through the heater is in opposite direction to the flow of hot water in the tank.

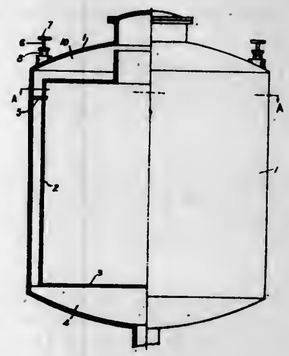
2,889,157. PROCESS OF CHLORINATING HYDROCARBONS. JULIUS SÖLL, Frankfort-on-the-Main-Schwanheim, and CURT RUNKEL, Sandersdorf, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed Oct. 18, 1929, Serial No. 400,655, and in Germany Dec. 11, 1922. 10 Claims. (Cl. 260—166.)



1. In a process of producing chlorinated hydrocarbons which comprises causing chlorine to react with hydrocarbon compounds in a reaction chamber, separating the chlorinated hydrocarbons formed from the gas issuing from the reaction chamber, mixing the remaining gas with fresh reaction gases and reintroducing said gaseous mixture into the reaction chamber, the step which consists in re-introducing the hydrochloric acid formed in the reaction and still contained in the remaining gases along with said gaseous mixture into the reaction chamber.

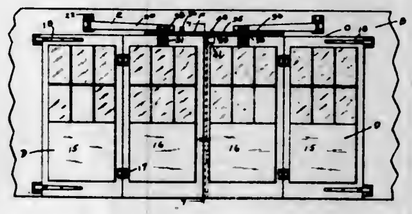
1,889,158. METHOD OF CONTROLLING THE TREATMENT OF VEGETABLE MATTER TO OBTAIN CELLULOSE THEREFROM BY MANIPULATION OF THE VOMIT PIPES. EDMONDSON SPENCER, Calcutta, British India, assignor of one-half to Edward Charles Benthall, Calcutta, British India. Filed Mar. 20, 1929, Serial No. 348,577, and in British India May 18, 1928. 3 Claims. (Cl. 92—7.)

1. A process of digestion of vegetable matter in which a container is employed in which the load is inserted and expelled from the top, together with internal vomit pipes extending substantially the entire length of the drum, and an opening for the digesting liquid in the bottom, comprising inserting the digesting liquid from the bottom and normally passing it through the vomit pipes to the top of the drum, and then showering the digesting liquid through the load, and cutting off the flow of liquid through the vomit pipes when discharging the liquid,



whereby the internal pressure in the drum substantially rids the load of its content by discharge through the said opening.

1,889,159. DEVICE FOR OPERATING AND CONTROLLING FOLDING DOORS. JOHN GREGORY STODDARD, East Falls Church, Va. Filed Apr. 18, 1931. Serial No. 531,183. 13 Claims. (Cl. 20—20.)

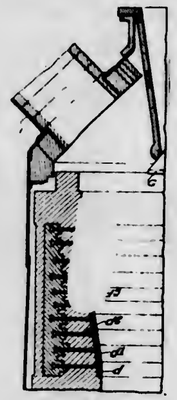


1. The combination with a pair of swinging, folding doors including pivoted guide arms arranged above the doors and hanger brackets secured to the doors slidably mounted within the guide arms, of a locking device for said doors including a latch bar mounted for movement into and out of locking engagement with the hanger brackets.

1,889,160. BLAST FURNACE. HARRY A. STRAIN and GEORGE E. STEUDEL, Chicago, Ill. Filed Jan. 21, 1930. Serial No. 422,387. 1 Claim. (Cl. 266—25.)

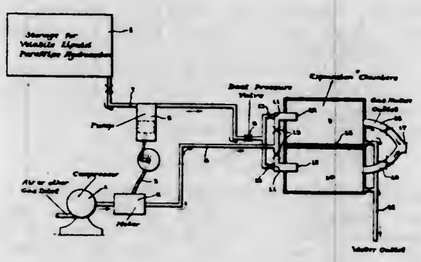
A blast furnace having a lower inwall portion sloping inwardly and upwardly, an upper stock line section sloping outwardly and upwardly, the plane of junction between the inwall section and the stock line section being of lesser furnace interior cross sectional area than planes thereabove, said plane of junction being located below the stock line, a bell located at a point materially above the plane of minimum furnace area and adapted to discharge material directly against the outwardly flaring walls of said stock line section whereby the material is directed inwardly and downwardly, said stock line

section being lined with a multiplicity of superimposed members, each provided with an upwardly and outwardly diverging wall portion and having a web portion bonded



to the brick work construction forming the outer structure of the furnace, and gas offtakes connected to the upper portion of the furnace and communicating with the space above the entire upper surface of the stock.

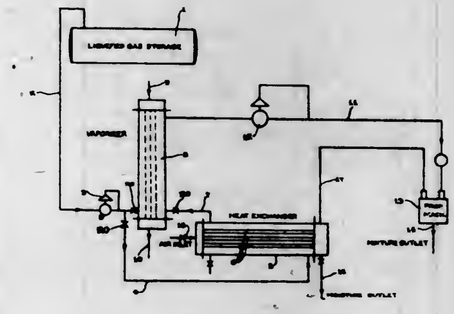
1,889,161. DEHYDRATION OR COOLING OF AIR OR OTHER GASES. ROSSWELL W. THOMAS, Bartlesville, Okla., assignor to Phillips Petroleum Company, Bartlesville, Okla., a Corporation of Delaware. Filed Aug. 29, 1929. Serial No. 389,220. 6 Claims. (Cl. 48—180.)



1. In a gas manufacturing method, pumping a stream of gas, also pumping a stream of a normally gaseous hydrocarbon fluid in liquid state, utilizing the flow of one of said streams to vary the pumping of the other stream, directly contacting the streams in such manner that the hydrocarbon fluid in vaporizing will dehydrate and refrigerate the gas stream, separating the moisture from the combined streams, and discharging the combined streams through a common passageway.

1,889,162. DEHYDRATION OF AIR OR THE LIKE AND GASEOUS MIXTURES. ROSSWELL W. THOMAS and GEORGE G. OBERFELL, Bartlesville, Okla., assignors to Phillips Petroleum Company, Bartlesville, Okla. Filed May 11, 1929. Serial No. 362,486. 6 Claims. (Cl. 48—180.)

1. In a method of the character described, vaporising a liquefied normally gaseous hydrocarbon material to absorb heat, passing air containing moisture in heat exchange relation with said material while the latter is undergoing vaporisation for the purpose of condensing



the moisture out of the air, and subsequently mixing the dehydrated air and vaporised hydrocarbon material to produce a combustible mixture.

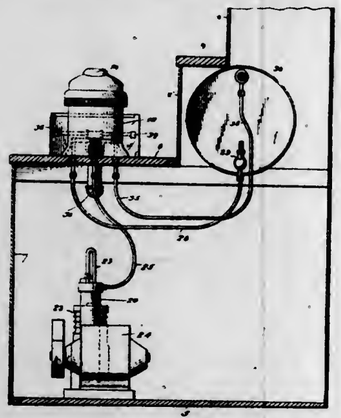
1,889,163. CONVEYING FINE-GRAINED MATERIALS. MIKAEL VOGEL-JORGENSEN, Copenhagen, Denmark, assignor to F. L. Smidth & Co., New York, N. Y., a Corporation of New Jersey. Filed July 14, 1931, Serial No. 550,699, and in Great Britain Mar. 31, 1931. 1 Claim. (Cl. 302—53.)

Apparatus for conveying fine-grained materials comprising a closed tank, means to supply air under pressure to said tank, a delivery pipe through which the material is delivered from the tank, a by-pass through which air may be delivered from the supply direct to the delivery pipe, and a safety valve interposed in the by-pass and adapted to permit air to pass from the air supply pipe directly into the delivery pipe when the pressure in the tank exceeds a predetermined degree.

1,889,164. LATHER-FORMING MEANS. ROBERT HUDSON WAGER, Jersey City, N. J. Filed Aug. 21, 1931. Serial No. 558,572. 2 Claims. (Cl. 299—83.)

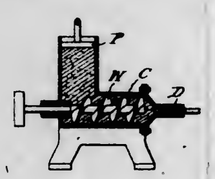
1. In a lather-forming apparatus, a compartment closed at its top by a horizontal deck, a vertical wall rising from said deck, a gas-actuated lather-forming device mounted on said deck in front of said wall, a lather receiver mounted on said deck in front of said wall and positioned to receive the lather discharged from said lather-forming device, a constant level liquid reservoir mounted behind said

wall, liquid-conducting and pressure-equalising means connecting the reservoir with the lather-forming device to maintain a constant liquid level in the latter, gas supply



means mounted in said compartment, and communicating means between said gas supply means and said lather-forming device.

1,889,165. PACKING AND PROCESS. HERBERT STANLEY WALKER, Larchmont, N. Y., assignor to The Allpax Company, Inc., Mamaroneck, N. Y. Filed Mar. 29, 1930. Serial No. 440,053. 9 Claims. (Cl. 154—2.)



1. A process of manufacturing packing rope comprising the steps of forming a dough embodying long stable fibre, extruding the fibre-carrying dough through a die and twisting said fibre-carrying dough incident to extrusion to provide a strongly bonded product.

1,889,166. HAIR WAVING DEVICE. MORRIS WIDERMAN, New York, N. Y. Filed July 12, 1932. Serial No. 622,089. 2 Claims. (Cl. 132—32.)



1. A clip for holding hair waves in place comprising a pair of jaws each in the form of a curved, elongated plate, each of said plates having a rearwardly extended angular finger-piece, a hinged connection between the plates, a spring for normally forcing the finger-pieces apart, each of the plates having a plurality of spaced teeth stamped from it, the teeth so formed being extended forwardly toward the front edge of the clip and angularly toward one another with the ends of said teeth in abutment to limit the movement of the jaws toward one another, said teeth entering between the hairs with a comb-like action to hold the clip in position without gripping or crushing the hair.

1,889,167. SPRING INSTALLATION TOOL. CARLTON ANDERSON, Chicago, Ill., assignor, by mesne assignments, to Gertrude Reinke, trustee for the estate of William T. Kirk, deceased, Orren E. Barber, Carlton Anderson, and Williams, Bradbury, McCaleb & Hinkle, a Copartnership. Filed Nov. 16, 1931. Serial No. 575,255. 10 Claims. (Cl. 29—87.1.)

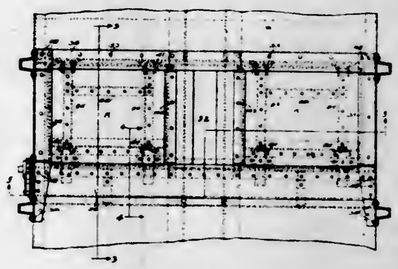


1. A tool for use in installing tension springs consisting of an elongated member having one end of a size adapted for insertion into the aperture of an apertured spring abutment, said member being provided on one face thereof with a longitudinal groove of substantial length extending to the herein-mentioned end of the tool, the other face of said member being provided adjacent said herein-mentioned end of the tool with a shoulder for engagement with a spring abutment into the aperture of which the said end of the tool is inserted.

1,889,168. LUBRICANT. HARRY T. BENNETT, Tulsa, Okla. Filed Jan. 25, 1930. Serial No. 423,558. 5 Claims. (Cl. 87—9.)

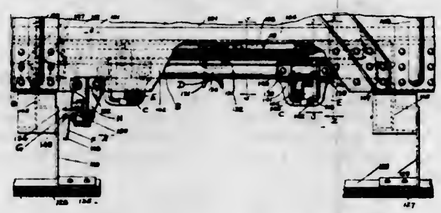
1. A flange oil comprising a high viscosity residuum resulting from fractional distillation under approximately atmospheric pressure mixed with a low viscosity residuum resulting from a cracking operation.

1,889,169. DUMP CAR CONSTRUCTION. ARGYLE CAMPBELL, Chicago, Ill., assignor to Enterprise Railway Equipment Company, Chicago, Ill., a Corporation of Illinois. Filed Nov. 27, 1929. Serial No. 410,089. 20 Claims. (Cl. 105—244.)



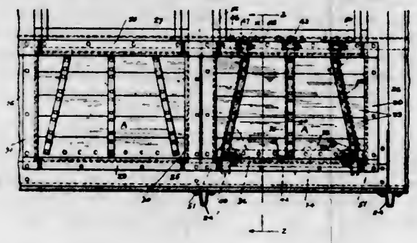
1. In a car of the character described having center sills, crossmembers outstanding from said center sills, and a floor of appreciable thickness above said center sills and crossmembers, the combination of means forming discharge door openings in transverse alignment on each side of the center sill, said means comprising a self-contained framework including edge floor plates adapted to extend around the door openings, and members extending from door to door across the plane of the center sill.

1,889,170. CAR CONSTRUCTION. ARGYLE CAMPBELL, Chicago, Ill., assignor to Enterprise Railway Equipment Company, Chicago, Ill., a Corporation of Illinois. Filed July 28, 1930. Serial No. 471,276. 8 Claims. (Cl. 105—280.)



1. As an article of manufacture in a dumping car door an integral reinforcing member having portions adapted to respectively cooperate with a door hinged butt and a door retaining device at the opposite ends of the door and having an intermediate portion adapted to cooperate with a door stop to receive the impact of the door, said portion cooperating with the door retaining means being formed with a door seat and a beveled face constituting a wedging approach to the door seat.

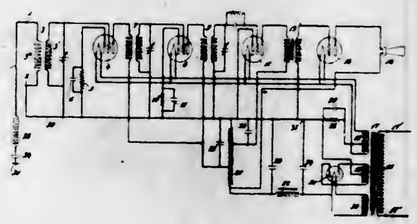
1,889,171. LOAD DISCHARGING CAR. ARGYLE CAMPBELL, Chicago, Ill., assignor to Enterprise Railway Equipment Company, Chicago, Ill., a Corporation of Illinois. Filed Oct. 26, 1931. Serial No. 571,083. 10 Claims. (Cl. 105—280.)



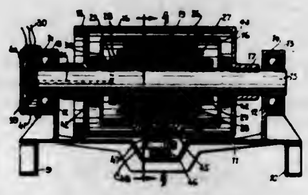
1. In a railway car, the combination with a hinged door; of bracing means for the underside of the door, including a pair of braces extending from the hinge edge of the door towards the swinging edge thereof, said braces adjacent the hinged edge of the door being spaced an appreciable distance from the side edges of the door and diverging outwardly from each other towards the free edge of the door; and a bodily movable shaft adapted to engage the said braces near the free edge of the door, said engaging portion of each brace extending substantially at right angles to the longitudinal axis of the shaft.

1,889,172. RADIO RECEIVING SYSTEM. ARTHUR B. COLE, Caldwell, N. J. Filed Dec. 26, 1930. Serial No. 504,754. 4 Claims. (Cl. 250—20.)

1. A radio receiving system comprising a radio frequency input transformer, a conductor connected with one terminal of the primary of said transformer, a power transformer having a plurality of secondaries connected with said conductor, means to connect the primary of said power transformer to an electric supply line, and means connected with the other terminal of said first named primary for receiving electromagnetic waves including a conductor connected with the last named terminal of said primary, an inductance connected with said conductor, and means to connect said inductance to ground.

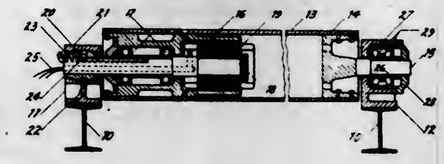


1,889,173. CONVEYER ROLLER. ERNEST DREXLER, Pittsburgh, Pa., assignor to Schloemann Engineering Company, Pittsburgh, Pa. Filed Nov. 10, 1928. Serial No. 318,532. 4 Claims. (Cl. 198—127.)



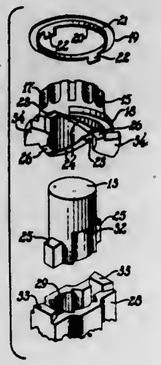
1. A conveyer roller comprising a stationary frame, a shaft journaled for rotation in said frame, a hollow shell fixed to said shaft, an electric motor within said shell inclusive of a stator and a rotor, the stator being hollow and the rotor being disposed within the stator and fixed to said shaft, and substantially stationary means independent of any other element adapted to hold the stator against rotation.

1,889,174. CONVEYER ROLLER. ERNEST DREXLER, Pittsburgh, Pa., assignor to Schloemann Aktiengesellschaft, Dusseldorf, Germany, a Corporation of Germany. Filed Apr. 4, 1930. Serial No. 441,678. 2 Claims. (Cl. 308—20.)



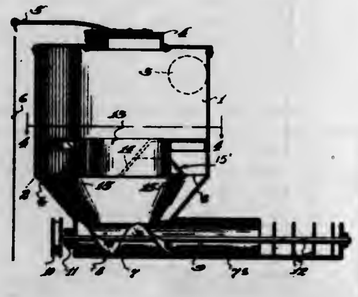
1. A conveyer roller, a vertically and laterally adjustable bearing for one end of said roller, a trunnion at the other end of said roller on which the roller is mounted for rotation, a member with an exterior spherical surface keyed on said trunnion, a bearing with an internal spherical surface receiving said member, and means between said member and said bearing permitting limited universal pivotal movement and preventing rotation of the member relative to the bearing.

1,889,175. CONTROL DEVICE. CLARENCE T. EVANS, Wauwatosa, Wis., assignor to Cutler-Hammer, Inc., Milwaukee, Wis., a Corporation of Delaware. Filed Dec. 19, 1930. Serial No. 503,377. 12 Claims. (Cl. 200—16.)



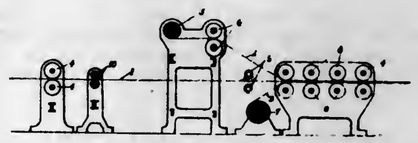
1. The combination with an electric control device having a reciprocable operating member provided with an operating push button and biased towards a given normal position, of locking mechanism associated with said operating member including a rotatable part adapted upon a given angular movement to move said operating member into another position and to lock the same against return to normal position.

1,889,176. COMMODITY HANDLING APPARATUS. JOHN T. FLETCHER, Plainview, Tex. Filed Nov. 21, 1929. Serial No. 408,772. 6 Claims. (Cl. 183—88.)



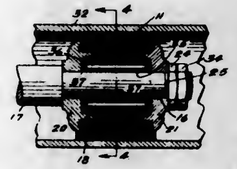
1. A separator comprising a cylindrical shell having an open frusto-conical base portion and having an air exhaust port adjacent its upper end; a curved mixture guide of inverted L-shaped cross section having its horizontal leg secured to the inner side of said shell whereby said guide forms an inverted U-shaped channel in conjunction with the wall of said shell; a downwardly inclined deflector secured to the depending member of the L adjacent its free end to partially close the opening of the U, a second deflector carried by the horizontal leg of the L at its opposite end and extending downwardly therefrom, means to introduce a heterogeneous mixture directly into one end of the guide, and means to transport the separated material from the opening of the base.

1,889,177. MAKING PAPER BOARD. CHARLES L. KELLER, Cincinnati, Ohio, assignor to The Richardson Company, Lockland, Ohio, a Corporation of Ohio. Filed Sept. 13, 1929. Serial No. 392,370. 4 Claims. (Cl. 154—40.)



1. That method of uniting outer sheets to an inner sheet which consists in coating the inner sheet with a heat plastic binder while said binder is hot and non-solid, cooling the coated sheet, softening the coating by means of a solvent, and then applying the outer sheets to the inner sheet.

1,889,178. PUMP PISTON. CHARLES LAMB, Los Angeles, Calif. Filed Aug. 4, 1930. Serial No. 473,081. 7 Claims. (Cl. 74—108.)



1. In combination: a resilient piston body having end lips surrounding angular channels, and having a central opening through which a shaft may extend; metal end plates adapted to pressurally engage the ends of said resilient piston body; and rods supported in said body to limit the pressure exerted on said body by said end plates.

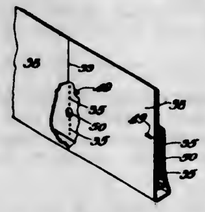
1,889,179. CASING FOR LIGHT-SIGNS AND SIGNALING APPARATUS. ARNOLD LÖBL, Vienna, Austria. Filed Mar. 10, 1930, Serial No. 434,477, and in Germany and Czechoslovakia Jan. 27, 1930. 2 Claims. (Cl. 40—136.)



1. A signal casing comprising an integral cup-shaped member, an integral partition dividing said casing into upper and lower compartments, and extending for the full depth of said cup-shaped member to entirely separate said compartments, said casing and partition being formed of translucent material having a degree of light obstruction proportional to its thickness, an integral bottom portion

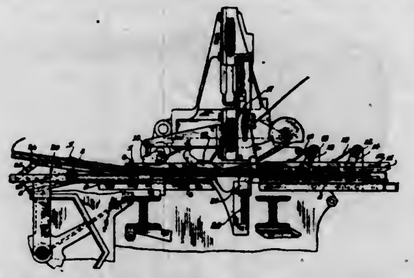
formed in the upper compartment with relatively deep depressions conforming in outline to an indicating character, the thickness of the material at the bottom of said depressions being relatively less than the portions of the casing surrounding said depressions whereby the character is rendered distinguishable from the rear when the upper compartment of the casing is illuminated, a relatively thin integral bottom portion in the lower compartment forming a relatively translucent wall, and a threaded bolt embedded in the partition to receive a securing element for securing a cover plate to the rim of the casing.

1,889,180. MATCH PACKET. RODNEY S. PULLEN, Akron, Ohio, assignor to Pullenlite Company, Philadelphia, Pa., a Corporation of Pennsylvania. Original application filed Nov. 24, 1928, Serial No. 321,597. Divided and this application filed July 7, 1930. Serial No. 466,186. 7 Claims. (Cl. 206—34.)



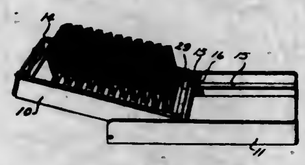
1. In a match packet, a wrap having an intermediate portion and a row of perforations along opposite sides thereof, a long flap laterally outwardly from one row of perforations and a short flap laterally outwardly from the other row of perforations, the wrap being turned up at the sides of the intermediate portion so that the perforations are perpendicular to said portion for matches inserted in the perforations with the match heads adjacent the row of perforations at the short flap, the short flap turned down upon the matches and a staple having a body extending across the short flap and across the matches below the short flap and tines penetrating the said intermediate portion at each side of the packet, the long flap bent down upon the short flap around the heads of the matches and up against the intermediate portion so that the tines of the staple penetrate the long flap adjacent the said intermediate portion, and the tines having clinched ends engaging and holding the long flap to its folded position.

1,889,181. MACHINE FOR USE IN MAKING BOXES. KENNETH W. REED, Boonton, N. J., assignor to Stapling Machines Co., a Corporation of Delaware. Filed Mar. 28, 1929. Serial No. 350,490. 23 Claims. (Cl. 1—8.2.)



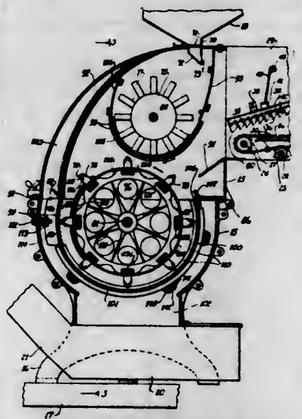
1. In a wirebound box blank machine, the combination of means to position in foldable relationship a plurality of sections of side material; means to position a cleat on each section of side material substantially parallel with the end of the section and with the cleats of the several sections in line with each other; stapling mechanism adapted to apply a binding wire to said cleats to foldably connect them; means to bow the binding wire over an interval between adjacent cleat ends to provide slack in said wire at said point; and means to cause relative progression between the stapling mechanism and the work to present the work progressively to said mechanism.

1,889,182. BRUSH. EDWIN C. ROSENBERG, Milwaukee, Wis. Filed Nov. 17, 1930. Serial No. 496,052. 5 Claims. (Cl. 15—203.)



1. The combination with a case and a slotted cover therefor, of a bristle clip mounted for oscillation in the case, a slide fitted to the slot in the cover and a hinge in connection with said slide to support the case with reference to the cover, an actuator for the bristle clip mounted within the case and connected with the hinge, whereby to oscillate the clip in coordination with the movement of the cover hingedly with reference to the case.

1,889,183. COMBINED GRAIN AND ROUGHAGE MILL. JOSEPH E. ROSENFELD, Omaha, Nebr., assignor to Badger Equipment Company, Omaha, Nebr., a Corporation of Nebraska. Filed Dec. 22, 1927. Serial No. 241,800. 2 Claims. (Cl. 146—119.)



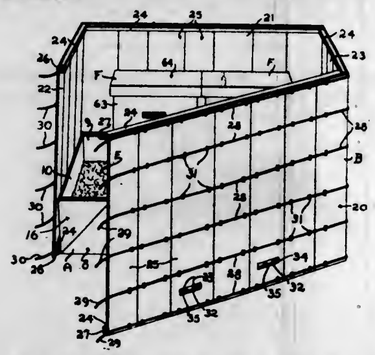
1. A mill comprising a casing, a cylinder rotatably mounted in said casing, means for rotating said cylinder, and teeth projecting from the surface of said cylinder, each of said teeth being flat and having steps in its edges at its outer end, and said teeth having V shaped flanges on their sides.

2. In a grinding mill, a casing, a toothed cylinder rotatably mounted in said casing, a grinding plate mounted between a portion of said cylinder and said casing wall, an arcuate flange projecting from said casing over the periphery of said cylinder and adjacent thereto and between said cylinder and plate, and ribs on the ends of said cylinder adapted to force air outwardly between said flange and cylinder.

1,889,184. BEEHIVE INSULATOR. EMIL J. SIEMERS, Eau Claire, Wis. Filed Aug. 17, 1931. Serial No. 557,709. 12 Claims. (Cl. 6—1.)

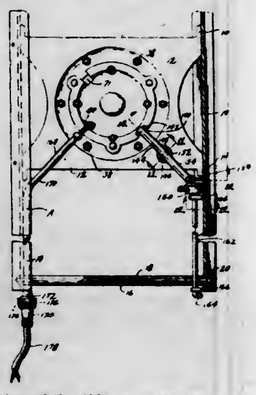
2. In a bee hive insulator a separable casing wall structure including a wall section having an end thereof

detachable from an adjacent wall section said first named section provided with an entrance aperture adjacent the bottom thereof.



12. In a bee hive insulator the combination of a bee hive having an entrance for bees, a wall structure surrounding said bee hive and spaced apart therefrom, said wall structure provided with an aperture therethrough, and a covered entrance way including a hollow rectangular body having a top wall, a bottom wall projecting at one extremity beyond the top wall and end walls projecting at said extremity beyond the top wall and projecting short of the bottom wall, said projecting bottom and end walls carried in said aperture with the extension of said top wall abutting the facing wall of the structure, and the opposite extremity of said covered entrance way carried by said bee hive at said entrance for bees.

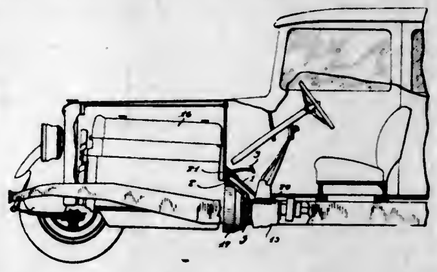
1,889,185. AUTOMOBILE LIFT. LOUIS C. STUKENBORG, Memphis, Tenn., assignor to Oildraulic Lift Company, Memphis, Tenn., a Corporation of Delaware. Filed May 29, 1929. Serial No. 366,889. 5 Claims. (Cl. 254—93.)



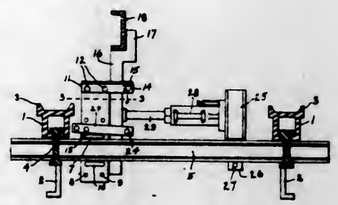
1. In an automobile lift, a cylinder, a piston therein, a head on said piston, vehicle engaging rails carried thereby, an electric motor in said piston for imparting lifting movement to said piston and said rails, said head having a groove, a conduit having one end extending through said groove and leading to said motor, a cover for said head and a plug-in connector on the other end thereof.

1,889,186. CLUTCH CONTROL. HENRY H. VALPEY, Dearborn, Mich., assignor to Long Manufacturing Company, Detroit, Mich., a Corporation of Michigan. Filed May 21, 1931. Serial No. 539,014. 10 Claims. (Cl. 192—109.)

1. In an automotive vehicle, the combination of a clutch having packing springs, a lever movable to compress the packing springs for clutch release, and a flexible stop for the lever against which the lever abuts in clutch engaged position, said flexible stop being sufficiently rigid to position the lever under normal conditions but flexing to permit shifting of lever position by power exerted thereon by the clutch packing springs.

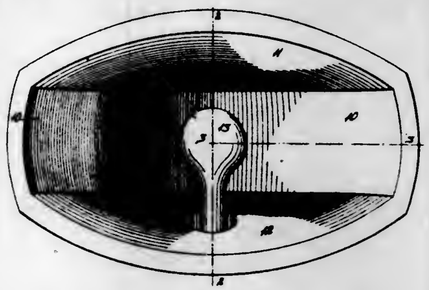


1,889,187. AUTOMOBILE FRAME STRAIGHTENING MACHINE. HENRY WOCHNER, Rock Island, Ill., assignor to Bear Manufacturing Company, Rock Island, Ill. Filed June 6, 1931. Serial No. 542,548. 2 Claims. (Cl. 153—82.)



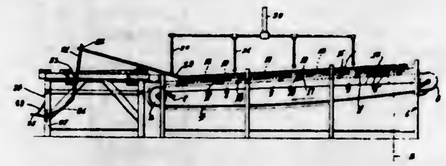
1. In combination with a suitably supported beam, having a channel longitudinally thereof, a support slidable in said channel, a guide on the upper end of said support, a frame-engaging member slidable vertically in said guide, and a gripping frame pivoted to said support, and automatically engaging said frame-engaging member in a downward movement thereof.

1,889,188. REFLECTOR. LOUIS A. BEAN, Denver, Colo. Filed May 9, 1931. Serial No. 536,210. 4 Claims. (Cl. 240—105.)



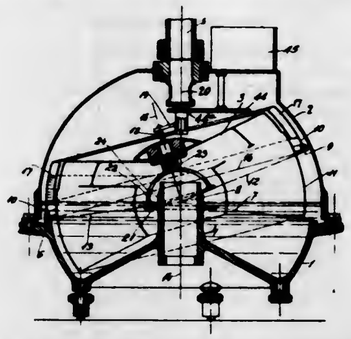
1. A light reflector comprising three concaved, rearwardly-converging reflecting surfaces in angular interrelation, two of said surfaces being identical and arranged in spaced opposition on opposite sides of and intersecting relation with said third surface, the concavity of each of said surfaces presenting different curves in perpendicularly-related planes intersecting said surface.

1,889,189. METHOD AND APPARATUS FOR SCRUBBING VEGETABLES. HENRI BERNIER, Oakland, Calif., assignor to California Packing Corporation, San Francisco, Calif., a Corporation of New York. Filed Oct. 4, 1930. Serial No. 486,410. 8 Claims. (Cl. 146—202.)



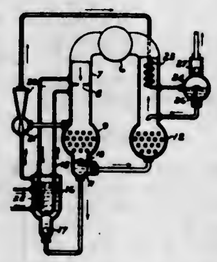
1. A method of treating asparagus comprising moving asparagus with their axes substantially transverse to the direction of movement, rotating the asparagus during such movement, and subjecting the asparagus to a scrubbing pressure during such movement and rotation.

1,889,190. WET GAS METER. HANS BRANDL and CARL MARISCHKA, Vienna, Austria, assignors to B. M. Gasmesser Aktiengesellschaft, Luxemburg, Luxemburg. Filed Aug. 1, 1929, Serial No. 382,666, and in Austria Feb. 25, 1929. 20 Claims. (Cl. 73—1.)



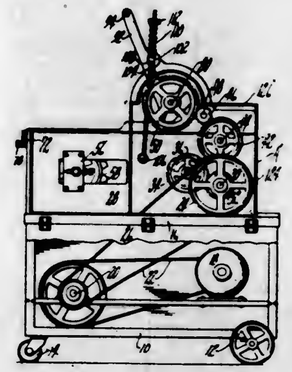
1. In a gas meter, the combination of a casing, a tumbler-bell movably arranged therein, means whereby the flow of fluid through said casing causes swashplate movement of the bell, and a pair of annular smooth surfaces adapted to roll on each other and to guide thereby the swashplate movement of the tumbler-bell, one of the annular surfaces being fixed relatively to said casing and serving as support for the tumbler-bell, the other annular surface being fixed relatively to said tumbler-bell.

1,889,191. REFRIGERATING SYSTEM. ADOLF BAUMANN, Wettingen, Switzerland. Filed Apr. 8, 1932, Serial No. 603,929, and in Germany Sept. 12, 1930. 5 Claims. (Cl. 62—115.)



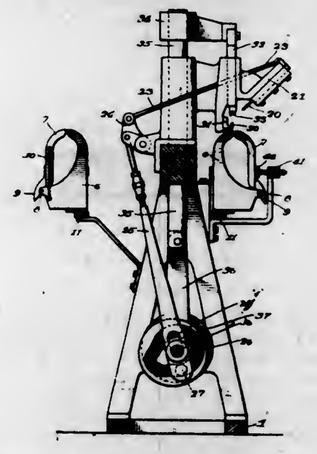
1. In a refrigerating system of the compressor type, a jet apparatus actuated by refrigerant vapor for extracting incondensable gases from the system, and means for recovering the refrigerant vapor and for venting the incondensable gases to the atmosphere.

1,889,192. MEAT FRENCHER. JOHN E. BRUCE, Des Moines, Iowa. Filed Sept. 2, 1931. Serial No. 560,775. 9 Claims. (Cl. 17—27.)



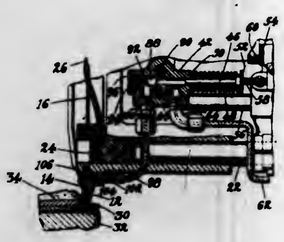
1. In a meat frencher, a conveyor, having a spiked surface, means for imparting movement to said conveyor, means above said conveyor to press meat into said surface, means to strip meat from the surface at the end of the conveyor, said last means comprising stripper wires extending longitudinally relative to said conveyor, located at the bottom of said surface and extending beyond the reception and discharge ends of the conveyor and means for anchoring the ends of said wires.

1,889,193. MACHINE FOR CLOSING CONTAINERS. EDWARD CRAIG, St. Joseph, Mich., assignor, by mesne assignments, to Saranac Bag Sealers, Inc., Benton Harbor, Mich., a Corporation of Delaware. Filed Feb. 23, 1926. Serial No. 90,087. 49 Claims. (Cl. 93—7.)



1. In a machine for closing and sealing a fibrous bag, the combination with means for reversely folding the mouth of the bag to provide a double fold therein, of means whereby said bag is disengaged from said folding means, and means for thereafter applying fastening means to maintain the double fold.

1,889,194. MACHINE FOR INSERTING FASTENINGS. FRED C. EASTMAN, Beverly, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Mar. 8, 1930. Serial No. 434,405. 12 Claims. (Cl. 1—30.)



1. A fastening inserting machine having, in combination, means for forming fastening receiving holes in a work piece, a pump constructed and arranged to force liquid into the holes, and means operative thereafter to insert in the holes fastenings the surface material of which is such that it is rendered adhesive by the action of the solvent, thereby to cement the fastenings in place.

1,889,195. IODINE PREPARATION. WILLIAM HENRY ENGELS, Rahway, N. J., assignor, by mesne assignments, to Merck & Co., Inc., Rahway, N. J., a Corporation of New Jersey. Filed May 9, 1927. Serial No. 190,140. 12 Claims. (Cl. 167—53.)

8. A vermicidal iodine composition comprising protein containing chemically combined chlorine and adsorbed iodine.

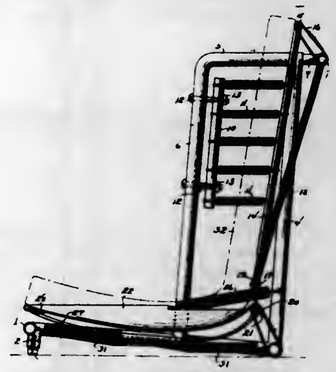
1,889,196. ART OF STIFFENING PARTS OF BOOTS AND SHOES. JOSEPH FAUSSE, Melrose, and AUGUSTUS H. BOUDROT, Boston, Mass., assignors, by mesne assignments, to The Celastic Corporation, Wilmington, Del., a Corporation of Delaware. Filed Apr. 30, 1928. Serial No. 274,138. 15 Claims. (Cl. 12—146.)



1. The method of making stiffened parts of boots and shoes which consists in treating a stiffener blank comprising a porous base containing a mass of solid particles in powdered form with a resilient substance in a liquid carrier, incorporating the blank in the upper of a shoe, conforming the upper and the blank to the last, and permitting the liquid carrier to pass out of the blank.

1,889,197. SHOCK ABSORBER FOR CARS. HERBERT FROMM, Hamburg, Wis. Filed Oct. 25, 1930. Serial No. 491,244. 8 Claims. (Cl. 155—53.)

1. A shock absorbing seat, including a frame that comprises a bottom and a back, saddle members connected by links arranged in the bottom, a number of springs connecting the saddle members to the sides and ends of the



bottom, a bottom seat plate having rockers resting on and loosely secured to the saddle members, and springs connecting the bottom plate to the back of the frame.

1,889,198. STOCKING DRIER ATTACHMENT. LESLIE W. GALLOWAY, Indianapolis, Ind. Filed Oct. 24, 1931. Serial No. 570,951. 7 Claims. (Cl. 223—17.)

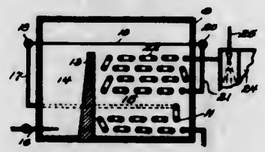


1. For a stocking drier form having a hollow interior to receive a heat conducting medium, a fixed support, a head to which the form may be secured, a hollow body depending from the head revolubly fitted in said support, a tube revolubly fitted within said body, packing means between the lower end of said tube and said body close to the lower end, intake and discharge pipes fixed to said tube, said intake pipe extending through said head, and said head having a discharge passage passing from its upper side to discharge within said tube.

1,889,199. APPARATUS FOR CRACKING HYDROCARBON OILS. AUDLEY E. HARNSBERGER and CLYDE L. SMITH, Chicago, Ill., assignors to Gyro Process Company, Detroit, Mich., a Corporation of Michigan. Filed Oct. 30, 1929. Serial No. 403,583. 3 Claims. (Cl. 196—116.)

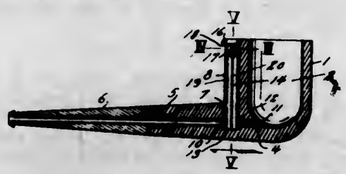
1. An oil converter comprising an enclosing wall structure, a vertical bridge extending transversely of said wall

structure and dividing the latter internally into combustion and tube chambers, said chambers communicating relatively over said bridge wall, a row of horizontally extending parallel tubes supported by said wall structure and disposed openly in the upper portion of said converter over said combustion and tube chambers and providing for parallel flow of oil vapor in a multiplicity of similarly moving adjacent streams, a header connected with the entrance ends of said tubes, a bank of serially connected tubes disposed in said tube chamber and connected with



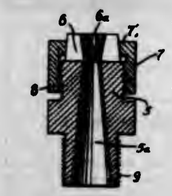
the discharge ends of said parallel tubes, said serially connected tubes possessing a greater cross sectional area than any one of said first-named parallel tubes, combustion developing means situated in said combustion chamber for producing furnace temperatures within said converter sufficiently high to heat oil vapors passing through said tubes to desired conversion temperatures, and a third bank of tubes disposed in the low temperature zone of said tube chamber, the discharge side of said third bank of tubes being connected with said header.

1,889,200. PIPE DEVICE. FRANK HOLLMAN, Toledo, Ohio. Filed May 14, 1930. Serial No. 452,408. 2 Claims. (Cl. 131—12.)



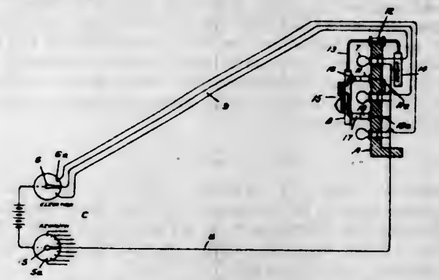
1. A pipe comprising a bowl having a tubular stem terminating in a mouthpiece, a tube having a sealed anchoring with the stem and extending upward therefrom to emerge alongside of the bowl in bowl abutting proximity, said tube having a partition with the tube in communication on one side of the partition with the bowl on the other side with the mouthpiece at the tube lower portion, said tube having an upper open end, and a removable closure for the open end.

1,889,201. SPRAY NOZZLE. JOSEPH E. HOLVECK, Pittsburgh, Pa. Filed May 9, 1931. Serial No. 536,178. 3 Claims. (Cl. 299—137.)



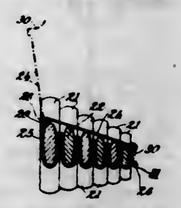
3. A spray nozzle comprising a relatively long body having a fluid delivery passage extending therethrough substantially circular in section and of gradually reducing area from the inlet end to the delivery end thereof, and a relatively thin disc removably secured to the end of said body and having a fluid delivery passage therein converging from a circular inlet end of substantially the same shape and size as the delivery end of the passageway in said body to a rectangular slit at the orifice to produce a solid jet or spray having its maximum impinging force at a point spaced from the orifice.

1,889,202. AIM REGISTERING TARGET. JAMES C. KARNES, Buffalo, N. Y. Filed May 20, 1931. Serial No. 538,789. 6 Claims. (Cl. 35—12.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)



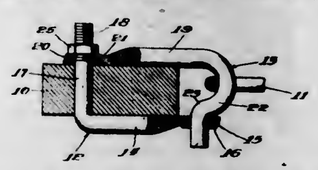
1. Apparatus for training in laying a gun including in combination, a plurality of illuminating indicators, a switch representing a gun and movable in azimuth and elevation, contacts offset with respect to the line of sight to the indicators an amount corresponding to lateral and vertical lead to be given a gun, an electrical circuit, a target movable across the indicators, and an audible signal carried by the target and energized synchronously with the indicator in line with the target.

1,889,203. WRENCH AND WRENCH HOLDER. WILLARD C. KRAUS, Kenmore, N. Y., assignor to J. H. Williams & Co., Buffalo, N. Y., a Corporation of New York. Filed June 14, 1929. Serial No. 370,908. 7 Claims. (Cl. 206—16.)



1. A wrench-holder comprising a corrugated spacing plate the corrugations of which may serve as pockets to receive the various wrenches of a set, and a restraining plate having a hinged connection with said spacing plate at one end of its series of corrugations, and means whereby it may be detachably secured to said spacing plate at the opposite end of said series of corrugations.

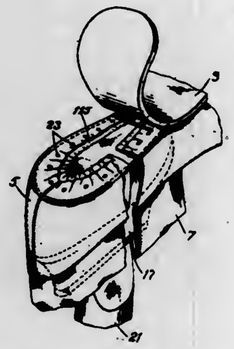
1,889,204. CLEVIS. RUDOLPH J. LANGER, Monticello, Iowa, assignor to Franklin Equipment Co., Monticello, Iowa, a Corporation of Iowa. Filed Jan. 5, 1931. Serial No. 506,656. 1 Claim. (Cl. 278—96.)



In combination with a vertically bored beam, a clevis comprising an L-shaped member having a vertically disposed, pivotal arm extending upwardly through the aper-

tured beam, and a horizontally disposed arm parallel with and adjacent to the under surface of the beam, the vertical arm having a screw threaded upper end and the horizontally disposed arm being flattened and apertured at its free end, a second substantially L-shaped member consisting of an apertured, flat ended, horizontally disposed arm and a curved downwardly directed arm terminating in a vertical extension, the latter extending loosely through the aperture of the horizontal arm of the first mentioned member, the apertured arm of the second member resting on top of the apertured beam and loosely engaging the screw threaded end of the vertical arm of the first member, and a nut on the screw threaded end for holding the two L-shaped members together, whereby the two rigid members comprising the clevis may be adjusted and secured at a single point to accommodate beams of varying thicknesses.

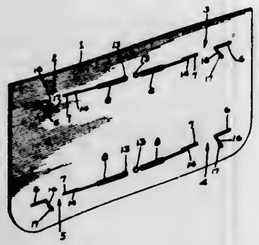
1,889,205. ART OF MAKING SHOES. EDWARD P. LIBBY, Auburn, Me., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Sept. 21, 1928. Serial No. 307,408. 5 Claims. (Cl. 12—146.)



1. A molded counter, the forward ends of the flange of which are connected by a staple having one leg anchored to one end only of said flange and the other leg anchored to the other end only of said flange.

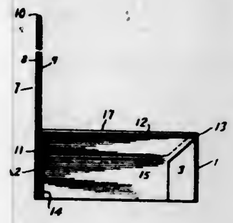
5. The method of making a molded counter for use in turn shoes which comprises providing a flanged counter holding the forward ends of the counter in the desired relation and fastening the forward ends of the flange in fixed, spaced relation to each other by a staple, one leg of which passes through one end only of the flange and the other leg of which passes through the other end only of said flange.

1,889,206. COVER. LOUIS E. LIPSCHULTZ, St. Paul, Minn. Filed May 18, 1931. Serial No. 538,197. 9 Claims. (Cl. 257—132.)



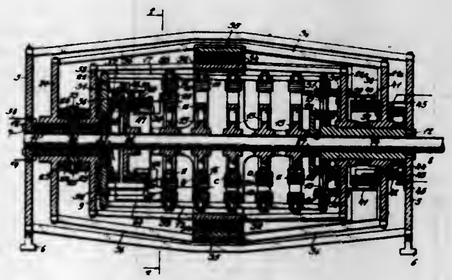
1. A cover element having pairs of slots, covering-attaching means one for each pair, each means comprising a spring secured to the cover, a wire attached to the spring and passing through one slot and then through the other, and having an attaching portion.

1,889,207. DISPLAY DEVICE. FRANK A. MARX, Cincinnati, Ohio, assignor to The Richardson Taylor-Globe Corporation, Cincinnati, Ohio, a Corporation of Ohio. Filed July 31, 1930, Serial No. 471,918. Renewed June 22, 1932. 14 Claims. (Cl. 40—126.)



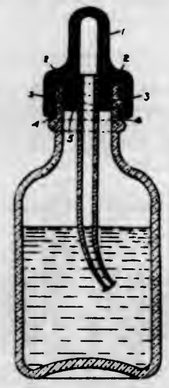
1. A flat-collapsing cardboard display dummy, comprising a circuit of vertical wall portions which is entirely open at the bottom, a back display surface simulating a box lid, and a horizontal display surface adapted to close the vertical walled enclosure at the top, this display surface being covered with a representation of a layer of articles to give the effect of an open box filled with such articles.

1,889,208. MOTOR GENERATOR. WILLIAM E. MASTERSON and HENRY PRICE, Borger, Tex., assignors of one-fifth to Harry B. Rogers, one-fifth to Joseph F. Roberts, and one-fifth to Francis L. Cowan, Borger, Tex. Filed Mar. 31, 1932. Serial No. 602,178. 7 Claims. (Cl. 172—239.)



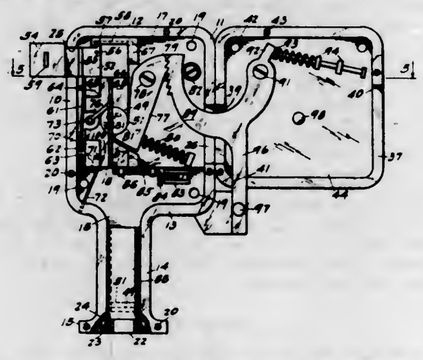
1. A motor generator comprising, in combination, a support, a motor field frame and field windings carried by the support and held against movement with respect thereto, a motor armature located within the motor field frame and mounted for rotation with respect thereto, a cylindrical generator field frame and a cylindrical generator armature surrounding the motor field frame, power transmission means interposed between the motor armature and one of the generator elements for producing simultaneous relative rotation in opposite directions, and power transmission means between the two generator elements for producing relative rotation of the parts in opposite direction.

1,889,209. COMBINATION SCREW CAP, BOTTLE STOPPER, AND DROPPER. LEON J. MAZOYER, Baldwin, N. Y., assignor to Whitall Tatum Company, New York, N. Y., a Corporation of New Jersey. Filed Nov. 30, 1931. Serial No. 577,927. 4 Claims. (Cl. 215—58.)



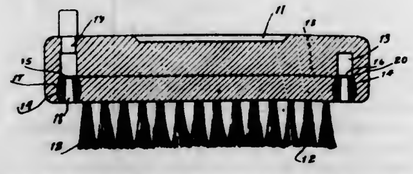
1. A device of the character described comprising a resilient bulb, a pair of concentric sleeves at the open end of said bulb, a dropper tube arranged in the inner sleeve and a screw threaded collar for a bottle fitted in the outer sleeve.

1,889,210. LOCK. FRANCIS WALTER MCFARLAND, Martinez, Calif., assignor of two thirty-seconds to Byron Decker and fifteen thirty-seconds to Ralph Hersey, Martinez, Calif. Filed Apr. 20, 1931. Serial No. 531,410. 8 Claims. (Cl. 194—4.)



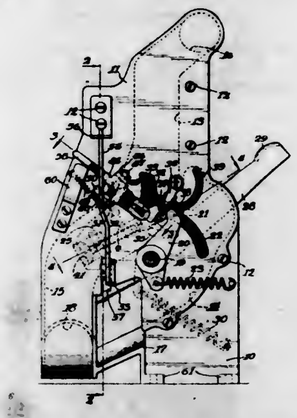
2. In combination with a combined key and slug operated lock; a slug slot, and a cover therefor, means for automatically locking said cover in closed position, said means being releasable by a key used for operation of said lock.

1,889,211. BRUSH. PHILIP MEDNICK, Brooklyn, N. Y. Filed Apr. 9, 1932. Serial No. 604,191. 4 Claims. (Cl. 15—128.)



1. In a device of the class described, a solid base-member formed with a substantially flat bottom surface, bristles arranged in the center of the said surface, and a circumferential groove formed upon the said base-member, a plate-member having apertures therein and being countersunk in the said groove, a rubber gasket mounted upon the said plate, and holes formed in the said gasket to register with the perforations of the cover-plate.

1,889,212. COIN CONTROLLED APPARATUS. EMERY MIHALEK, Chicago, Ill., assignor to O. D. Jennings & Company, Chicago, Ill., a Corporation of Illinois. Filed May 21, 1930. Serial No. 454,451. 22 Claims. (Cl. 194—97.)



1. In a coin-controlled apparatus, an operating member, a shifter arranged to engage and move inserted coins and checks edgewise and to actuate said member through the medium of interposed coins, and a switching device arranged to engage apertured checks and deflect the same as such checks are advanced edgewise by said shifter, whereby such checks are rendered inoperative upon said member.

1,889,213. HIGH TENSION CUT-OUT AND THE LIKE. ERIC N. NORDHEM, Chicago, Ill. Filed June 8, 1929. Serial No. 367,926. 17 Claims. (Cl. 200—117.)



1. A cut out device comprising in combination a tubular casing of insulating material closed at its lower end, a spiral spring within said casing having its lower end anchored to said closed end and its upper end free for movement, a movable terminal secured to said upper end of the spring and having an inwardly extending transverse notch on one side, a transverse abutment roller at the

upper end of the casing adapted to enter into and engage said notch, a fusible current carrying device having one end secured to said movable terminal and the other end extending across the abutment aforesaid and anchored to a stationary part and normally serving to prevent material movement of the movable terminal and thereby maintain engagement of the movable terminal with the abutment, and serving to release the movable terminal to permit lateral movement thereof for disengagement from said abutment when the fusible device is destroyed, and a replaceable burn-off terminal located in proximity to the path of travel of the movable terminal when released from said abutment, substantially as described.

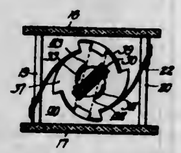
1,889,214. REFRIGERATOR. WILLIAM C. O'LEARY, Washington, D. C. Filed July 21, 1927, Serial No. 207,504. Renewed Jan. 13, 1932. 6 Claims. (Cl. 217—17.)



1. In a refrigerator formed with a hollow wall, a heat insulating element for positioning within the hollow wall, said element including a bag to provide a vacuum space, and a sectional support within the bag to brace the same against external pressure, said support including a partition dividing the bag into a pair of compartments.

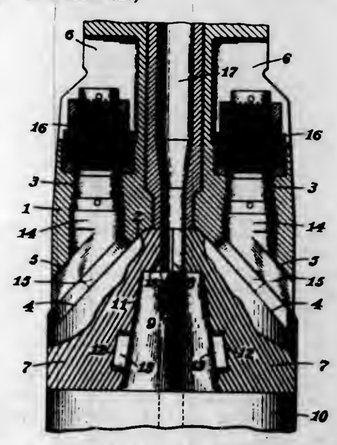
6. In a refrigerator structure, means to provide a chamber surrounded by a hollow space having opposed walls, means to provide door casings in said walls, hinged doors fitting said casings and each formed of two separate members, holdfast means for fastening said opposed walls in spaced relation, holdfast means for fastening said opposed separate members of each door together in spaced relation, said casings and said doors having open edges opposed to each other when said doors are closed thereby completing a hollow space entirely surrounding said chamber, a continuous heat insulating means within said walls and doors, and said holdfast means opposing the edges of said heat insulating means.

1,889,215. SWITCH OPERATING MECHANISM. RUDOLF POPP, Valparaiso, Ind., assignor to McGill Manufacturing Company, a Corporation of Indiana. Filed June 3, 1929. Serial No. 368,005. 5 Claims. (Cl. 173—354.)



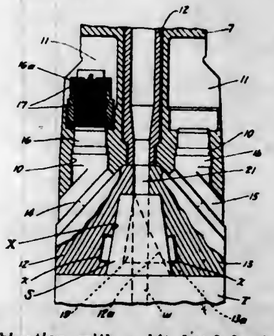
2. In a switch, stationary contacts, a body of insulating material between said contacts having a bridging contact thereon adapted in one position of said body to electrically connect said stationary contacts, a rotatable stem upon which said body is rotatably mounted, and means on said body and stem for causing said body to move with said stem in one direction of rotation, said means including internal ratchet teeth in said body and spring fingers on said stem engaging said teeth, said fingers being spirally curved in cross section where they extend into said body.

1,889,216. EARTH BORING TOOL. CLARENCE E. REED, Wichita, Kans., assignor to Chicago Pneumatic Tool Company, New York, N. Y., a Corporation of New Jersey. Filed Dec. 3, 1928. Serial No. 323,273. 8 Claims. (Cl. 255—61.)



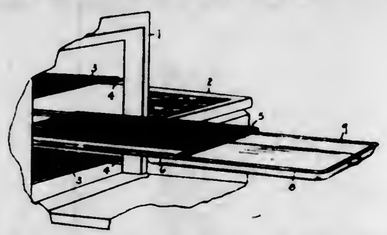
1. In combination with a bit head having an inverted V-shaped recess at its lower end with a socket disposed at each side of said recess parallel with the vertical axis of the head and opening through the downwardly and outwardly inclined walls defining said recess, a chuck for carrying a tool, said chuck fitting in said inverted V-shaped recess and having a pair of shanks to fit the said sockets and means for holding the shanks in said sockets, substantially as described.

1,889,217. EARTH BORING CHUCK. CLARENCE E. REED, Wichita, Kans., assignor to Chicago Pneumatic Tool Company, New York, N. Y., a Corporation of New Jersey. Filed June 26, 1929. Serial No. 373,715. 15 Claims. (Cl. 255—61.)



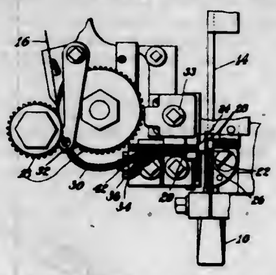
1. The combination with a bit head having a recess at its lower end with a plurality of off-center sockets opening into said recess, of a chuck comprising at least two parts and adapted when assembled for insertion into said recess, one of said parts having a shank to extend into one of said sockets, means providing an interlock between said parts, and means for securing said shank in said socket.

1,889,218. COMBINATION RACK AND PAN. ALFRED J. REEDY, Battle Creek, Mich., assignor to A-B Stove Company, Battle Creek, Mich. Filed Aug. 19, 1931. Serial No. 558,021. 6 Claims. (Cl. 312—177.)



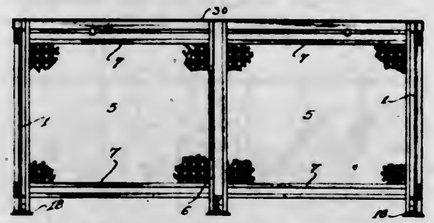
4. The combination with a rack or shelf comprising a border frame, a pan having an out-turned rim on its longitudinal edges, hanger members of channel formation embracing the side border members of the frame, the bottom flanges of the hanger members being angled to provide supporting ledges with which the pan is slidably engaged.

1,889,219. STAPLE FORMING AND INSERTING MACHINE. CHARLES A. ROBINSON, Salem, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Apr. 24, 1930. Serial No. 447,061. 10 Claims. (Cl. 1—20.)



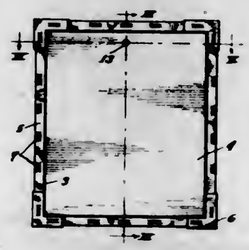
1. A staple forming and inserting machine having, in combination, staple forming and inserting instrumentalities, means for feeding wire to the staple forming and inserting instrumentalities, a flexible conduit through which the wire passes after it has left the feeding means and which serves to straighten the wire before it reaches the staple forming instrumentalities, means for flexing the conduit to vary its wire-straightening effect, and means for securing the conduit in its flexed position.

1,889,220. RADIATOR HOOD. PAUL E. SCHLEICHER and WALTER C. CALCOTT, Gary, Ind., assignors to Schleicher, Inc., a Corporation of Illinois. Filed Feb. 6, 1928. Serial No. 252,080. 3 Claims. (Cl. 237—79.)



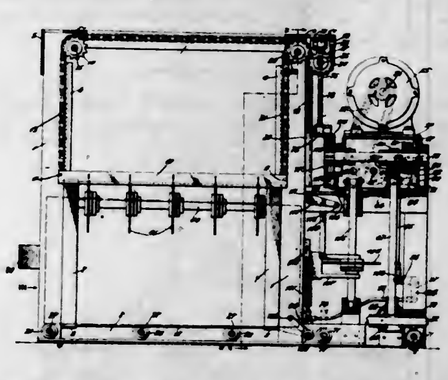
1. In a radiator hood, a pair of sheet metal posts having abutment surfaces and grooves inwardly of said surfaces, upper and lower rails secured between the abutment surfaces of said posts, said rails consisting of sheet metal members having grooves in the plane of the first mentioned grooves, and a panel confined in said grooves.

1,889,221. ACCESS STRUCTURE. PAUL E. SCHLEICHER and WALTER C. CALCOTT, Gary, Ind., assignors to Schleicher, Inc., Gary, Ind., a Corporation of Illinois. Filed Jan. 10, 1931. Serial No. 507,811. 6 Claims. (Cl. 189—46.)



6. An access structure comprising an inner frame, a stop flange integrally formed thereon, an outer frame rigidly secured around said inner frame and projecting beyond said stop flange, a flange integrally formed on said outer frame plaster retaining means formed on the flange of said outer frame, a closure panel removably engaged in said outer frame and seating against the stop flange of said inner frame, a fastener secured on the inner face of said closure panel for engagement with the stop flange of said inner frame, a bracket mounted in said inner frame, a floating nut supported by said bracket, and a back up screw bolt device rotatably supported on the inner side of said closure panel and accessible from the exterior of the closure panel to coact with the floating nut to draw the closure panel into closed position when rotated in one direction and acting to push the closure panel outwardly upon rotation of the screw bolt member in an opposite direction.

1,889,222. ICE SCORING MACHINE. JOHN H. SCHREIBER, St. Louis, Mo. Filed Nov. 25, 1929. Serial No. 409,609. 34 Claims. (Cl. 125—13.)

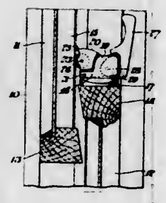


5. A machine of the character described comprising an elevator for raising and lowering a block of ice, constantly running scoring devices, and mechanism controlled by the block of ice moving into the elevator for raising and lowering the elevator and for causing the scoring devices to score the ice during its descent.

1,889,223. WINDOW SASH LOCK. RUDOLF SCHUBERT, Easton, Pa. Filed May 12, 1932. Serial No. 610,858. 8 Claims. (Cl. 292—197.)

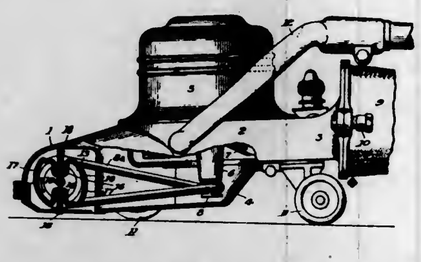
1. A window sash lock comprising a bracket member, a clamping member pivotally mounted in said bracket member, a member carried by the clamping member adapted to

bear against a portion of a window sash to lock said sash, and a finger lever pivotally mounted on the clamping member having a cam surface bearing against a portion



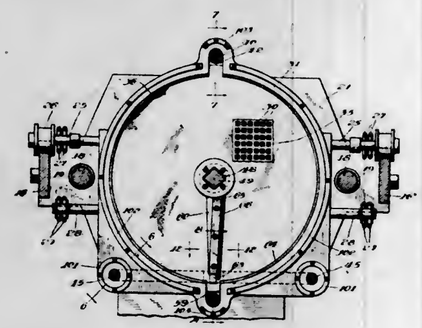
of the bracket member and adapted when actuated to swing the clamping member positively to the locking position.

1,889,224. SUCTION CLEANER. DONALD G. SMELLIE, Canton, Ohio, assignor to The Hoover Company, North Canton, Ohio, a Corporation of Ohio. Filed June 29, 1931. Serial No. 547,562. 6 Claims. (Cl. 15—179.)



1. In a rotary agitator for a suction cleaner, a body having a brush seat, a brush positioned therein, and beater elements on said body extending closely adjacent said brush and upon the opposite sides thereof.

1,889,225. FILTER PRESS. DAVID R. SPERRY, Batavia, Ill., assignor to D. R. Sperry & Co., Batavia, Ill., a Corporation of Illinois. Filed Mar. 26, 1931. Serial No. 525,546. 2 Claims. (Cl. 210—193.)



1. A filter press comprising filter plates having filter cloths, rotatably mounted stripper members for removing the deposit on the filter cloths, and guide portions at the outer ends of said members and engaging portions of said filter plates for guidance.

1,889,226. VENETIAN BLIND. LEROY J. STEFFEN, Evanston, Ill., assignor to Hough Shade Corporation, a Corporation of Connecticut. Filed July 13, 1931. Serial No. 550,407. 5 Claims. (Cl. 156—17.)



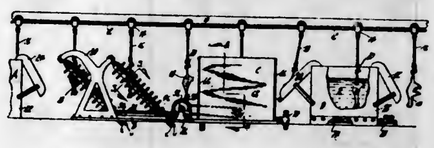
3. In a blind raising and lowering mechanism, a guide member having a curved passageway therethrough with both extremities opening in the same direction for receiving the loop of an operating cable and for guiding the same, and means for rigidly connecting said member to its support.

1,889,227. HAIR WAVER. BERNARD A. STERLING, Chicago, Ill. Filed Nov. 2, 1931. Serial No. 572,538. 19 Claims. (Cl. 132—33.)



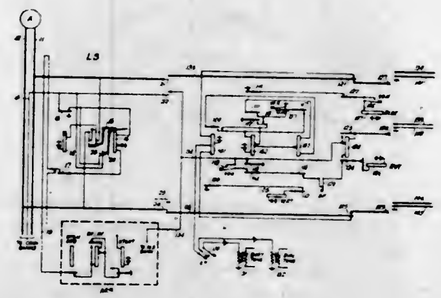
1. In a device of the class described, a spindle, two cooperating hair clamping members carried by said spindle, a screw threaded member carried by one of said clamping members, and cam means coacting therewith in the clamping of the hair.

1,889,228. FOWL FEATHER PICKING APPARATUS AND PROCESS. OSCAR W. SWANSON, Ottumwa, Iowa. Filed Nov. 3, 1930. Serial No. 493,062. 6 Claims. (Cl. 17—11.)



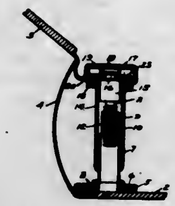
1. In a fowl picking apparatus, a pair of spaced revolving rollers, means for passing a fowl between said rollers, resilient hollow fingers projecting from said rollers, perforations in said fingers and means for exhausting air from said fingers whereby to pick feathers from said fowl and retain them against said fingers.

1,889,229. TELEPHONE SYSTEM. VICTOR S. THARP, Elmhurst, Ill., assignor, by mesne assignments, to Associated Electric Laboratories, Inc., Chicago, Ill., a Corporation of Delaware. Filed Jan. 23, 1931. Serial No. 510,680. 24 Claims. (Cl. 179—17.)



1. In an automatic switch, a line relay, a release relay, a series relay, two windings of different resistances for each of said last two relays, contacts on said line relay for closing a circuit when said line relay is operated, said circuit including the low and high resistance windings of said release relay and one winding of said series relay in series, self locking contacts on said release relay for closing a locking circuit for maintaining said release relay operated, other contacts for closing a circuit to the other winding of said series relay in series with said low resistance winding of said release relay to operate said series relay, and contacts on said line relay for completing a shunt circuit around the high resistance winding of said release relay to make it slow to release whereby said release relay operates the first time said line relay is energized and remains operated during successive operations of said line relay.

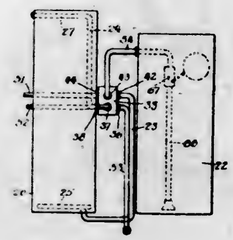
1,889,230. LOOSE LEAF BINDER. PAUL O. UNGER, Glen Ellyn, Ill., assignor to Wilson-Jones Company, Chicago, Ill., a Corporation of Massachusetts. Filed July 30, 1932. Serial No. 626,919. 8 Claims. (Cl. 129—8.)



3. In a loose leaf binder, a headed post having a pin extending from the top thereof, a tubular sheath having opposite walls slotted to receive a portion of said post and said pin, and means in said sheath to retain said post in position.

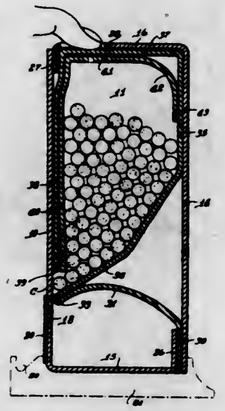
1,889,231. WATER SOFTENER. ERNEST T. WAHLDOM, LEROY C. LIND, and PHILIP C. WAHLDOM, Rockford, Ill. Filed June 14, 1929, Serial No. 370,758. Renewed Feb. 23, 1932. 7 Claims. (Cl. 210—24.)

1. A water softening apparatus comprising, in combination, a softening tank having a bed of zeolites therein, a source of brine solution, a valve having a raw water inlet connected with a source of raw water, said valve also having a soft water outlet connected to service, a raw water outlet connected to the softening tank, a



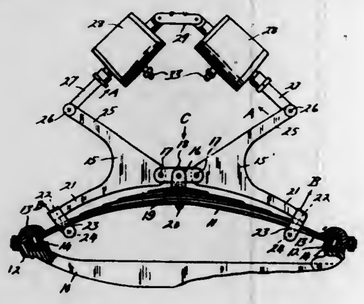
soft water inlet connected with the softening tank, a brine solution inlet connected to the source of brine solution and communicating with said raw water outlet, and a waste outlet to drainage, and means controlling the flow of fluid through said inlets and outlets.

1,889,232. CIGARETTE PACKAGE. RICHARD P. WARE, Detroit, Mich., assignor to Package Improvement Co., Inc., Detroit, Mich., a Corporation of Michigan. Filed Apr. 21, 1932. Serial No. 606,573. 13 Claims. (Cl. 206—56.)



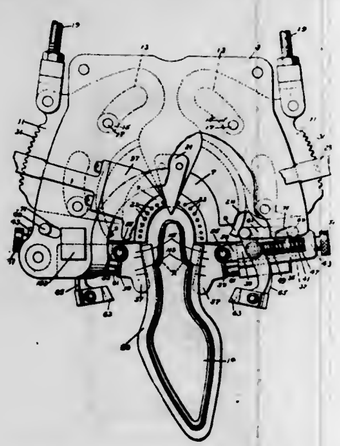
1. In a package, a container having a discharge opening, a manipulator having a slide section lying behind the container front wall and terminating near the discharge opening, the manipulator being resiliently connected to a wall of the container, and a resiliently formed transverse supporting member having a forward edge normally engaging the front wall between the lower edge of the manipulator and the opening, the objects to be dispensed being disposed above and lying on the supporting member, with one of them normally against the front wall, between the lower edge of the manipulator and the edge of the supporting member, the manipulator being in the shape of an inverted L, and being connected to the rear wall of the container.

1,889,233. ARTICLE HANDLING DEVICE. SEYMOUR A. AYRES, Lansing, Mich., assignor to Reo Motor Car Company, Lansing, Mich., a Corporation of Michigan. Filed May 14, 1928. Serial No. 277,685. 9 Claims. (Cl. 29—87.1.)



1. In a spring handling device of the nature described, the combination with a pair of articulated members adapted to engage said spring intermediate its ends and adjacent its ends, of means for actuating said members whereby said spring may be flexed to lengthen the same.

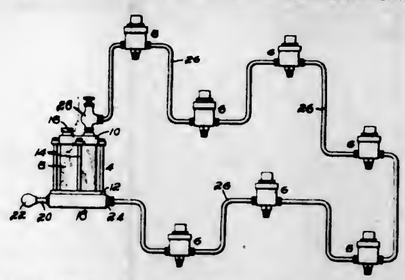
1,889,234. METHOD OF AND MACHINE FOR FORMING HEEL SEATS OF SHOES. ARTHUR BATES, Leicester, England, assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Dec. 29, 1931, Serial No. 583,625, and in Great Britain Jan. 10, 1931. 27 Claims. (Cl. 12—4.)



20. A machine for operating on the heel ends of shoes, comprising movable heel-seat wipers, an elongated welt-supporting member pivotally connected to each wiper, arranged to underlie the rear portion of the welt and to force the ends of the welt inwardly during the operation of the heel-seat wipers, swinging to maintain a position parallel to the welt seam in all positions thereof, and butting knives automatically operated when the ends of the welt have been so positioned.

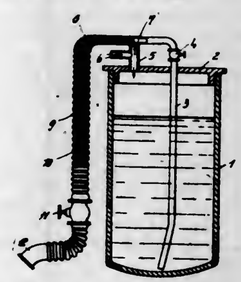
1,889,235. MEANS FOR FEEDING LUBRICANT. FREDERICK C. BLANCHARD, Detroit, Mich. Filed Dec. 13, 1921. Serial No. 522,056. 23 Claims. (Cl. 184—7.)

1. In a lubricating system, the combination of a main reservoir, one or more auxiliary reservoirs, and means for causing lubricant to be supplied from said main reservoir to said auxiliary reservoir or reservoirs until a predetermined amount has been supplied and to cause surplus lubricant to be restored to said main reservoir,



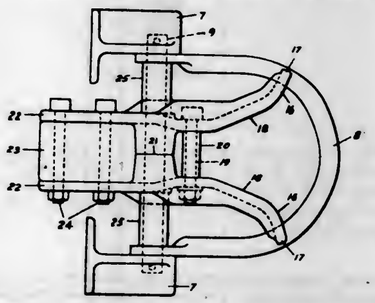
thereby to serve as an indication that the predetermined amount has been supplied to said auxiliary reservoir or reservoirs.

1,889,236. PROCESS OF PRODUCING FOAM PRODUCTS. HANS BURMEISTER, Berlin-Schmargendorf, Germany. Original application filed July 2, 1929, Serial No. 375,557, and in Germany Oct. 18, 1928. Divided and this application filed July 6, 1931. Serial No. 549,084. 5 Claims. (Cl. 99—11.)



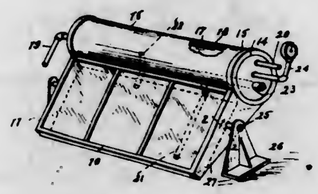
1. In the making of foams from liquids and gases, the process which comprises forcing a gas and a liquid milk product capable of producing a foam, simultaneously, through a distributing means having a large surface area of contact in such a manner that there is agitation and intimate intermingling of liquid and gas to form a foam.

1,889,237. COUPLER. SHERWOOD M. CHASE, Columbus, Ohio, assignor to The Chase Foundry and Manufacturing Company, Columbus, Ohio, a Corporation of Ohio. Original application filed Dec. 20, 1929, Serial No. 415,388. Divided and this application filed Dec. 31, 1930. Serial No. 505,880. 5 Claims. (Cl. 280—33.15.)



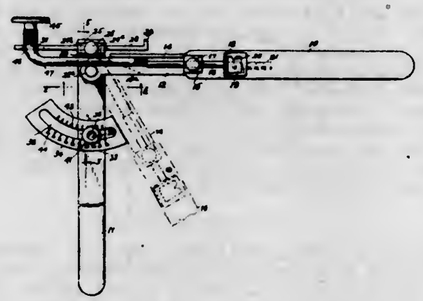
2. In combination, a shaft, a U-shaped bail on said shaft, guides pivoted on said shaft and engaging said bail, and a spacing sleeve between each end of the bail and the guides.

1,889,238. SOLAR HEATER. WARREN F. CLARK, Philadelphia, Pa., assignor to Automatic Electric Heater Company, Pottstown, Pa., a Corporation of Delaware. Filed May 7, 1927. Serial No. 189,609. 2 Claims. (Cl. 126—271.)



1. In a solar heater, a water receptacle adapted to contain a quantity of water to be heated by the rays of the sun, a storage tank adapted to contain the heated water, side members for supporting said receptacle and tank, said tank having an inlet for supplying water thereto, said tank having an outlet through which the heated water is withdrawn, means for conducting cold water from said tank to said receptacle, and means for conducting heated water from said receptacle to said tank.

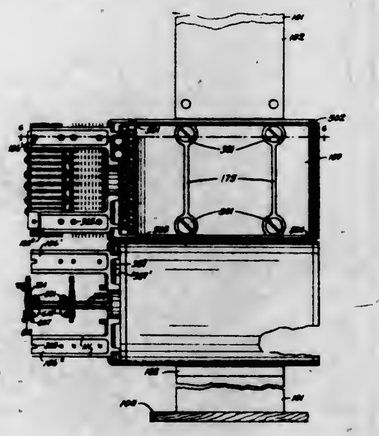
1,889,239. VALVE STEM BENDING TOOL. JOHN C. CROWLEY, Cleveland Heights, Ohio, assignor to The Dill Manufacturing Company, Cleveland, Ohio, a Corporation of Ohio. Filed Jan. 12, 1931. Serial No. 508,104. 5 Claims. (Cl. 81—15.)



1. A tool of the character described, comprising a pair of arms each having laterally extending means adapted to engage one side of the article to be bent, a pin pivotally connecting said arms and having an extension adapted to engage said article on the side thereof opposite to said first mentioned side and forming a fulcrum for the bending operation, an adjustable member carried by the laterally extending means on one of said arms and adapted to engage the article adjacent an end thereof, and means for limiting the pivotal movement of said arms in one direction.

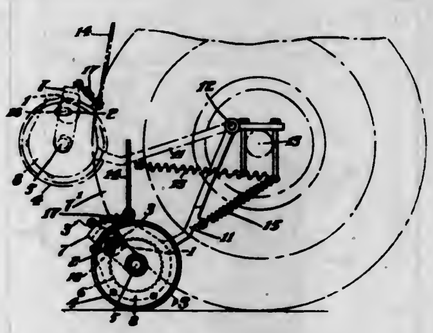
1,889,240. SWITCH MECHANISM. JOHN ERICKSON, Chicago, Ill., assignor, by mesne assignments, to Associated Electric Laboratories, Inc., Chicago, Ill., a Corporation of Delaware. Filed Sept. 29, 1930. Serial No. 485,035. 26 Claims. (Cl. 179—27.52.)

1. In a switch mechanism, a supporting frame, a shaft having bearings in said frame, means for transmitting endwise movement to said shaft, sets of contact springs having associated cams for operating them, and means



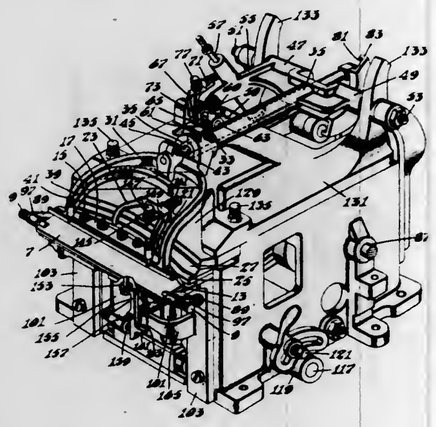
operative consequent to the endwise movement of said shaft to rotate said cams and thereby operate said springs.

1,889,241. AUTO TRACTION AND ANTISKID DEVICE. HARRY S. GIBSON and JOHN R. MCLEAN, Newton Lower Falls, Mass. Filed May 16, 1931. Serial No. 537,932. 5 Claims. (Cl. 180—15.)



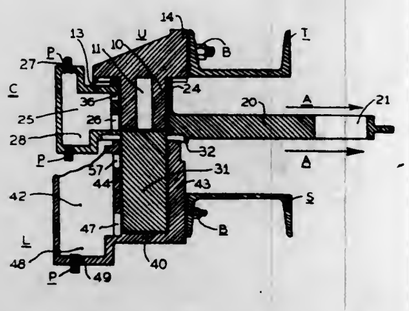
1. A traction and anti-skid device adapted to be attached to a vehicle in cooperative relation to the vehicle wheel, comprising a friction drive wheel adapted to be placed in frictional driving relation with the vehicle wheel, a relatively small traction and anti-skid wheel adapted to engage the ground, a positive driving and gear reduction mechanism interposed between the anti-skid wheel in engagement with the ground and the friction drive wheel in frictional engagement with the vehicle wheel, means for maintaining the vehicle wheel and friction drive wheel and the gear reduction mechanism in operative relation with each other for different positions of the anti skid wheel on an arc eccentric with the axis of the vehicle wheel, and means arranged to permit limited rotary movement of the friction drive wheel in an arc eccentric with the axis of the vehicle wheel, said means including a yoke for rotatably supporting the two wheels, and a casing having a slot therein to permit limited movement of the friction drive wheel through an arc eccentric with the axis of the vehicle wheel.

1,889,242. FOLDING MACHINE. PERLEY R. GLASS, Salem, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed June 13, 1929. Serial No. 370,694. 24 Claims. (Cl. 12—55.)



1. A machine of the class described having, in combination, a work support in the form of a thin flat plate, a work support carrier having means for detachably and pivotally engaging the plate, a forming plate, a folder, and means for operating the forming plate and the folder.

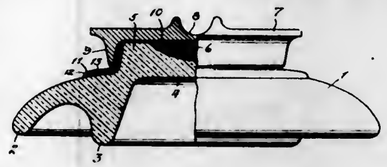
1,889,243. SELF LUBRICATING VERTICAL BEARING WITH SETTLING BASIN. BERT G. GOBLE, Tulsa, Okla., assignor to W. A. Quigley. Filed Dec. 15, 1928. Serial No. 326,264. 4 Claims. (Cl. 308—168.)



2. A bearing comprised of a stem having a cup member formed integrally therewith, a juxtaposed journal member also formed integrally therewith, reservoir means interconnected with the cup member, a pin journalled in said cup member, another cup shaped bearing surrounding and enclosing the juxtaposed journal member, and supporting means for said pin and said last mentioned cup bearing.

1,889,244. NONINTERFERING INSULATOR. KENT A. HAWLEY, Baltimore, Md., assignor to Locke Insulator Corporation, Baltimore, Md., a Corporation of Maryland. Filed Mar. 28, 1929. Serial No. 350,591. 8 Claims. (Cl. 173—318.)

1. In an insulator including a dielectric body and a metal cap secured thereupon, a metallic ring member underlying the cap and overlying the body, said ring member having physical and electrical contact with the cap and having its outer edge resting directly upon the top of



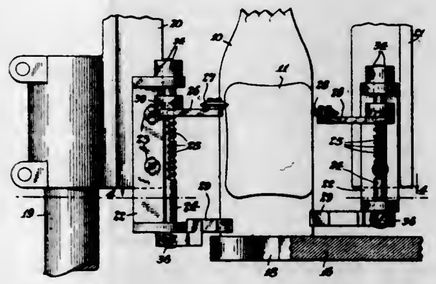
the body, the entire portion of the ring between its outer edge and its contact with the cap being spaced from the body.

1,889,245. HEEL AND HEEL COVERING AND METHOD OF MAKING THE SAME. GEORGE H. HEYS, Swampscott, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Oct. 9, 1930. Serial No. 487,530. 16 Claims. (Cl. 12—147.)



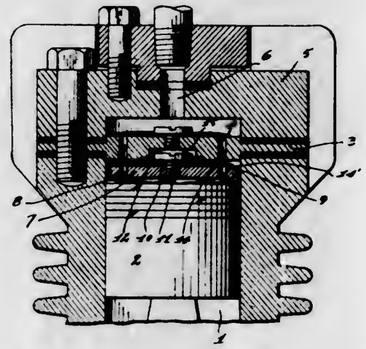
1. That improvement in methods of making heel covers of the type comprising a plurality of strips corresponding in width, arrangement and surface appearance to that of the edge faces of the lifts of a built-up leather heel, which consists in arranging between adjacent members of a plurality of layers of leather, each of a width corresponding to the width of a heel lift, relatively narrow layers of material contrasting sharply with the leather layers to accentuate the laminated appearance of the heel covers subsequently to be formed from the assembled layers and successively slicing the assembled layers in planes parallel to the edge faces of the component strips to make individual heel covers.

1,889,246. LABEL MARKER. ALBERT F. HOFFMAN, Newark, N. J., assignor to Hoffman Beverage Company, Newark, N. J., a Corporation of New Jersey. Filed Apr. 7, 1928. Serial No. 268,185. 13 Claims. (Cl 33—19.)



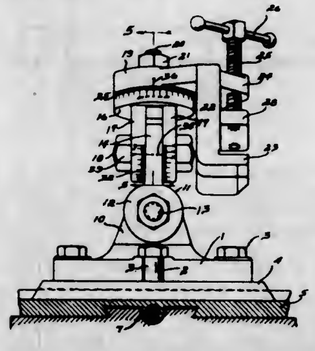
1. The method of marking a package having a label secured against its surface which comprises cutting code markings through the label and into the package wall beneath the label.

1,889,247. COMPRESSOR VALVE ASSEMBLY. OADES J. KENYON, Santa Barbara, Calif., assignor, by mesne assignments, to Instant Ice Corporation, a Corporation of Delaware. Filed July 25, 1927. Serial No. 208,376. 8 Claims. (Cl. 251—119.)



1. The combination with a member having a series of openings therein for the passage of a fluid, of a valve for controlling the flow of refrigerant through said openings, said valve comprising an annular spring metal member having a central portion thereof rigidly secured to the said member and having an annular bowed portion bridging the openings aforesaid and having edge contact with the member beyond the openings.

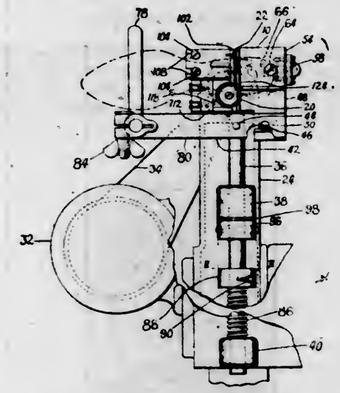
1,889,248. ADJUSTABLE TOOL SUPPORT. AUSTIN J. KILMER, Roseville, Mich., assignor to Michigan Tool Company, a Corporation of Michigan. Filed Apr. 10, 1931. Serial No. 529,165. 4 Claims. (Cl. 51—218.)



1. An adjustable tool dressing fixture including a fixed base, a turn table including a tool clamp, and a universal joint between said base and turn table including a pair of pivotal elements each having graduations thereon for indicating their inclination with respect to said base, the pivotal axes of said elements being a fixed distance apart, perpendicular to each other, and one of said axes being in all of its positions substantially tangent to a circle described about the other axis.

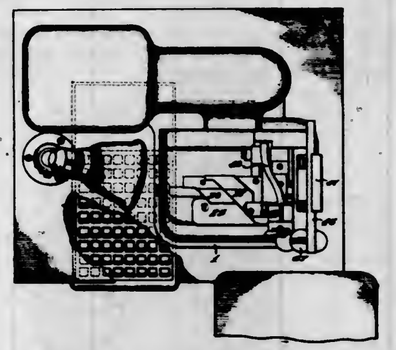
1,889,249. HEEL-BREAST-FLAP-TRIMMING MACHINE. NORWOOD H. KNOWLTON, Rockport, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Dec. 14, 1928. Serial No. 325,950. 56 Claims. (Cl. 12—17.)

1. A trimming machine having, in combination, a cutter and a work rest mounted for relative movement, said work rest being constructed and arranged to support in fixed relation therewith a substantial portion of a cover attached to a heel and extending beyond an edge of the heel and to cooperate with the cutter in progressively



trimming a portion of the cover extending beyond said edge upon relative progressive movement of the rest and the cutter.

1,889,250. MARKING MACHINE. FREDERICK KOHNLE, Dayton, Ohio, assignor to The Monarch Marking System Company, Dayton, Ohio, a Corporation of Ohio. Filed Feb. 3, 1930. Serial No. 425,431. 8 Claims. (Cl. 93—88.)



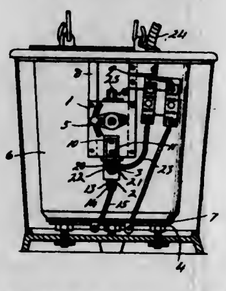
1. A machine for successively cutting marking tags from a strip and individually dispensing the tags as severed, comprising, means for severing the tag successively from the strip, and a reciprocating dispenser gripping a tag at an edge thereof as it is being severed from the strip and subsequently carry the same laterally of the feed of the strip and sustain the same for application to the goods to be ticketed.

1,889,251. PROCESS OF MANUFACTURING ORGANIC COMPOUNDS. CARL KRAUCH and KARL HOCHSCHWENDER, Ludwigshafen-on-the-Rhine, and WALTER SCHUNCK, Neu-Rossen near Merseburg, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Filed May 22, 1924, Serial No. 715,191, and in Germany May 22, 1923. 10 Claims. (Cl. 260—156.)

1. The process of manufacturing oxygenated organic compounds of a higher order than methanol which comprises passing a mixture of an oxid of carbon and a gas containing hydrogen at an elevated pressure and temperature over a contact mass capable of reacting with the said

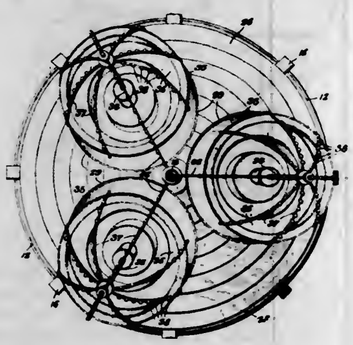
gas mixture to form methanol at a velocity so much less than that required to give substantially pure methanol, that substantially all the methanol formed is converted into higher oxygenated organic compounds.

1,889,252. THERMOSTAT. FRANK KUHN and LAURENCE H. THOMAS, Detroit, Mich., assignors to American Electrical Heater Company, Detroit, Mich., a Corporation of Michigan. Filed Feb. 13, 1928. Serial No. 254,104. 5 Claims. (Cl. 200—138.)



1. A thermostat having a support, an electrical conductor bar having one end secured to said support and having a portion of the length thereof substantially channel-shaped in cross section, a second cooperating electrical conductor bar also having one end fixed to said support and having a portion disposed in the channel-shaped portion aforesaid and cooperating electrical contacts on the free ends of said bars.

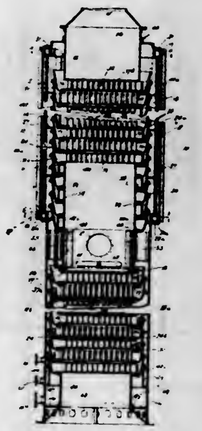
1,889,253. ROUNDABOUT. GUENTHER P. V. KURZ, Seattle, Wash. Filed Apr. 7, 1931. Serial No. 528,431. 2 Claims. (Cl. 272—37.)



1. A roundabout comprising a base, an upwardly tapered and stepped carriage rotatably supported on said base, the stepped portion of said base having a plurality of regularly spaced openings therein, a car for each of said openings each having a base rotatable in an opening, a supporting axis for each of said cars, an axis for said carriage, a connecting means between the outer ends of said axes, and means operatively connected with all of said axes for simultaneously rotating said carriage and cars.

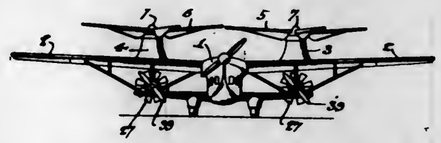
1,889,254. STILL. HENRY I. LEA, Santa Monica, Calif. Filed May 14, 1930. Serial No. 452,258. 30 Claims. (Cl. 202—180.)

1. In a distillation apparatus, a liquid carrying condenser in tubular formation which directly surrounds an inner vapor space, an elongated evaporator extending longitudinally and centrally through the vapor space, means to feed liquid to be distilled to said condenser, means to direct the liquid from one end of the condenser to one end of said evaporator, means to direct the liquid longitudinally over the evaporator to its opposite end, and means for conducting hot gases longitudinally through



the evaporator and out of contact with the liquid thereon, to heat and vaporize the liquid, vapors being liberated laterally from said evaporator along its length and passing directly through said vapor space to condense on the walls of said condenser.

1,889,255. ROTOPLANE. JOSEPH J. LERAY, West Warwick, R. I. Filed Apr. 19, 1932. Serial No. 606,801. 7 Claims. (Cl. 244—15.)

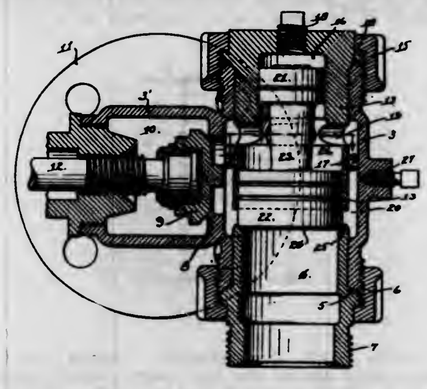


1. In rotoplanes of the airplane type, air motors or rotors with blades of the airfoil type, developing their thrust by negative and positive pressure or lift and drag, having said blades movable in their sockets and being adjusted for angle of incidence and retained by a ring carried by a slidable sleeve moving on its tubular mounting fixed to the wing directly in the slipstream of a tractor propeller, said tubular mounting carrying inside a driving shaft to which is fixed, at one end, the rotor, and having, at the other end, a driving gear connected to a suitable gear and shaft system connecting the rotors to one or several exhaust fans or blowers, said exhaust fans drawing the air through series of slots from the upper surface of the wing, and exhausting said air under the wing, also exhausting the air from the rear of the fuselage directly onto the control at close range; having said rotors and fans coupled together; and having an additional elevator hinged to the leading edge of the horizontal fin articulated and balancing the two rear elevators.

1,889,256. CHECK VALVE. ROBERT U. LIPSCOMB and EDWARD J. KUNSMAN, El Paso, Tex. Filed Aug. 7, 1931. Serial No. 555,775. 4 Claims. (Cl. 251—128.)

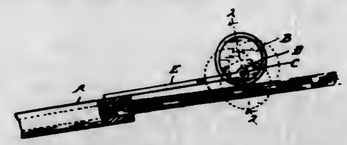
3. A check valve comprising a body having an inlet, an outlet, and a valve seat therebetween; a sleeve within and spaced from said body, said sleeve being coaxial with said seat and having its end spaced therefrom, and said sleeve forming a continuous chamber with cylindrical end

portions of different diameters and having its central portion in communication with said outlet; and connected pistons of different effective area exposed to the outlet



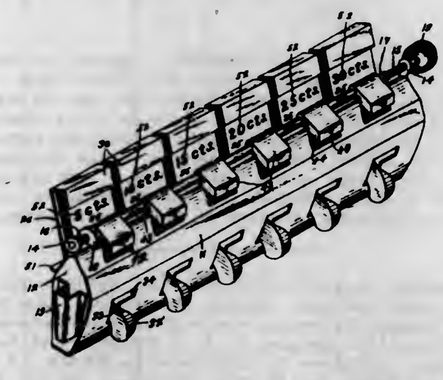
pressure and operable in said cylinder portions, one of said pistons having a valve face adapted for cooperation with said seat.

1,889,257. SPRINKLER. ALFORD S. LYNDON, Ann Arbor, Mich., assignor of one-half to Charles H. Bennett, Plymouth, Mich. Filed Oct. 12, 1931. Serial No. 568,482. 3 Claims. (Cl. 299—126.)



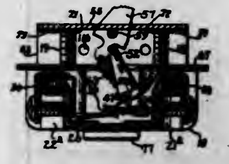
2. A sprinkler comprising a nozzle for the discharge of the liquid stream, a revoluble member mounted on said nozzle in the plane of the stream and above the same, said member having an eccentric peripheral cutting portion which extends into the path of the stream once in each revolution thereof.

1,889,258. TICKET DISPENSER. MURDOCK MACDONALD, Cleveland, Ohio. Filed Oct. 12, 1928. Serial No. 312,070. 19 Claims. (Cl. 206—40.6.)



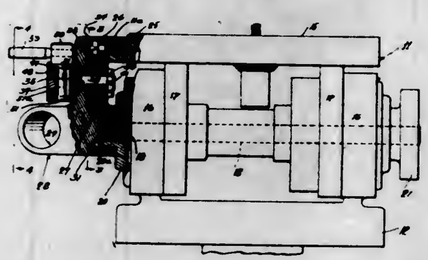
1. A ticket dispenser comprising a box, means in said box for holding a plurality of pads of tickets, each of said pads projecting from said box, the tickets of all of said pads bearing the same series of indicia, a plurality of elements mounted on said box for movement longitudinally relative thereto, one of said elements being cooperable with each of said pads and with said indicia, and means operable to shift all of said elements in unison.

1,889,259. ELECTRIC SWITCH. GEORGE J. MEUER, Milwaukee, Wis., assignor to Cutler-Hammer, Inc., Milwaukee, Wis., a Corporation of Delaware. Filed Sept. 8, 1931, Serial No. 561,572. Renewed Sept. 24, 1932. 30 Claims. (Cl. 200—76.)



19. In an electric snap switch, in combination, a punched and stamped sheet metal top plate of substantially inverted channel-shape, said top plate having a pair of alined bearing openings formed in the parallel sides thereof, a substantially U-shaped sheet metal member having angularly extending end portions adapted to bear within said openings, a punched sheet metal actuating lever, said lever having one end thereof formed to provide a spring abutment, a second plate attached to said top plate, said second plate having lugs formed integrally therewith and bent upwardly therefrom in parallel relation to each other, a trigger lever pivotally supported by said lugs, said trigger lever having spaced parallel lugs depending therefrom, a pin providing a pivotal connection between said last mentioned lugs and said actuating lever, spring means for biasing said trigger lever to a given extreme position while permitting movement thereof to its opposite extreme position against the action of said bias, and a coiled compression spring interposed between said actuating lever and said U-shaped member to effect snap movements of the latter to opposite extreme positions respectively upon opposite movements of the former.

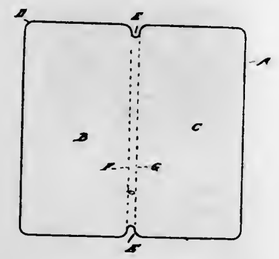
1,889,260. HANDLE MOUNTING FOR CAMERA TILTING HEADS. GEORGE A. MITCHELL, West Hollywood, Calif., assignor to Mitchell Camera Corporation, West Hollywood, Calif., a Corporation of Delaware. Filed June 9, 1931. Serial No. 543,109. 7 Claims. (Cl. 248—43.)



1. In combination with a movable camera-carrying head, a handle mounting comprising a bracket secured to said head, a handle bracket horisontally pivoted to the first mentioned bracket, said handle bracket having a socket for a handle bar, a handle bar mounted in said socket, a clamping shaft offset from the pivot axis of said brackets and passing through an aperture in one bracket and an arcuate slot in the other bracket struck from the center of said pivot axis, said arcuate slot being of a length to permit the handle bracket to be moved between a position in which the handle extends

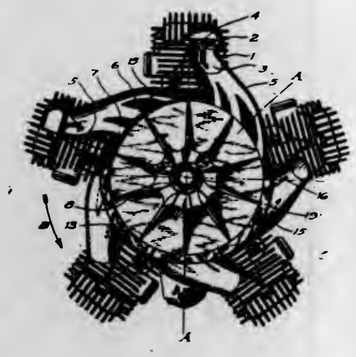
horizontally and a position in which the handle bar hangs substantially straight downwardly, and clamping means cooperating with said clamping shaft to clamp the brackets against relative movement.

1,889,261. DIE CUT CARD. ELMER G. OTTEN, Detroit, Mich., assignor to Otten Brothers Company, a Corporation of Michigan. Filed Apr. 14, 1930. Serial No. 444,334. 9 Claims. (Cl. 281—43.)



1. A card blank of an area to form two adjacent individual cards with a slight intermediate space, the outer corners of said blank being rounded and two opposite edges being notched between the individual card portions to form rounded corners therefor tangent to edges converging towards the center of the blank and which are non-parallel to the edges of the blank for the purpose described.

1,889,262. INDUCTION SYSTEM FOR INTERNAL COMBUSTION ENGINES. JAN PAVLECKA, Wyandotte, Mich. Filed Dec. 31, 1928. Serial No. 329,585. 10 Claims. (Cl. 123—55.)



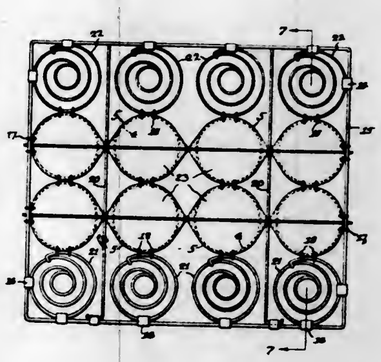
1. In combination with a series of radially disposed cylinders, an impeller housing, and a rotatable impeller therein of a series of ducts extending from said housing to said cylinders, each of said ducts having an entrance aperture angularly spanning that fraction of the periphery of said impeller which pertains to one cylinder, and at said periphery having a width substantially equal to that of said impeller thereat, and thence diminishing gradually in angular span and increasing in width from its entrance aperture toward the intake port of the associated cylinder.

1,889,263. CUSHION SPRING STRUCTURE. CLAIR S. REED, Jackson, Mich., assignor to Reynolds Spring Company, Jackson, Mich., a Corporation of Michigan. Filed Sept. 28, 1931. Serial No. 565,572. 5 Claims. (Cl. 5—353.)



5. As an article of manufacture, a spring unit comprising fabric having the free edges stitched together to form a closed casing, the lateral walls being drawn inwardly and secured together to form a partition dividing the casing into two pockets, and coil springs mounted respectively in said pockets.

1,889,264. SPRING STRUCTURE. CLAIR S. REED, Jackson, Mich., assignor to Reynolds Spring Company, Jackson, Mich., a Corporation of Michigan. Filed Oct. 19, 1931. Serial No. 569,589. 2 Claims. (Cl. 5—248.)

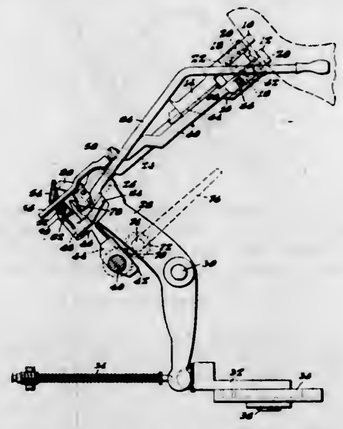


2. A spring structure comprising a plurality of rows of coil springs, alternate rows being spaced apart at least the width of the intermediate rows, the end rows being bare, cylindrical springs in certain of the interior rows, and fabric bags individually enclosing the springs in said interior rows said enclosed springs extending the entire depth of the spring structure, said interior rows of enclosed springs being fully co-extensive with the corresponding dimension of the spring structure.

1,889,265. MACHINE FOR SHAPING UPPERS OVER LASTS. WILLIAM THOMAS BUCKINGHAM ROBERTS, Leicester, England, assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Dec. 24, 1931, Serial No. 583,013, and in Great Britain Jan. 17, 1931. 26 Claims. (Cl. 12—4.)

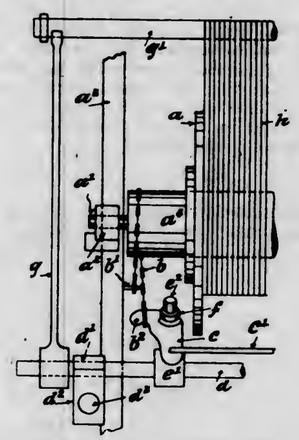
1. In a machine for shaping uppers over lasts, upper-pulling means comprising two pairs of gripper jaws for pulling an upper at the same side of a last, a single up-draw member movable in the direction of the pull of

said jaws on the upper to operate both pairs of jaws, connections between said member and the different pairs of jaws so constructed as to permit throughout the upper-pulling operation relative movement of the different pairs in accordance with differences in resistance



of different portions of the upper to the force of the pull, and means for moving one of the pairs of jaws relatively to the other pair after the pulling of the upper to increase the force of the pull applied by said one pair of jaws.

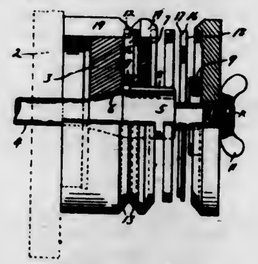
1,889,266. METHOD OF AND MEANS FOR INSURING A CONSTANT OR DESIRED LET-OFF TENSION FOR THE WARP IN LOOMS FOR WEAVING. SYDNEY ALFRED SHORTER, Didsbury, Manchester, England, assignor to The British Cotton Industry Research Association, Didsbury, Manchester, England. Filed Oct. 2, 1930, Serial No. 485,840, and in Great Britain Nov. 5, 1929. 5 Claims. (Cl. 139—109.)



1. In a device for the purpose described, a revolubly mounted warp beam provided with friction cylinders at its ends, a pair of levers arranged one at each end of the warp beam, said levers each having one end pivoted to swing on an axis common to both levers, a back rest bar carried by the free ends of both arms and positioned to have the warp sheet from said beam pass directly to and thereover, a revoluble shaft whereto the pivot ends of said arms are fixed, friction chains each extending around a respective friction cylinder and having one end fixed, a pair of rock arms fixed on said shaft, operative

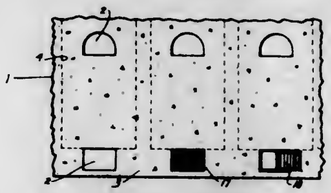
connections between the respective chains and the respective arms of said pair and including means to equalize the respective stresses on the chains, and means to urge said arms away from said cylinders whereby to tension said chains.

1,889,267. APPARATUS FOR SLOTTING PISTON RINGS. DEAN M. SOLENBERGER, Cleveland, Ohio, assignor to The Simplex Piston Ring Co. of America, Inc., Cleveland, Ohio, a Corporation of Ohio. Filed June 27, 1927. Serial No. 201,836. 12 Claims. (Cl. 90—59.)



12. A jig for supporting a piston ring comprising complementary members, each having a laterally extending annular flange bearing against the outer cylindrical face of the ring, said flanges having their outer edges arranged in opposed spaced relation and together constituting a guide for a tool to be passed therebetween, said jig and tool being relatively movable for effecting engagement of the tool with the ring, and means for preventing inward displacement of the ring under the thrust of the tool.

1,889,268. METHOD TO COOL THE INTERIOR OF A SEAMLESS BLOCK OF SETTING CONCRETE. HENRY SORENSEN, San Francisco, Calif. Filed Oct. 5, 1931. Serial No. 566,971. 10 Claims. (Cl. 61—30.)

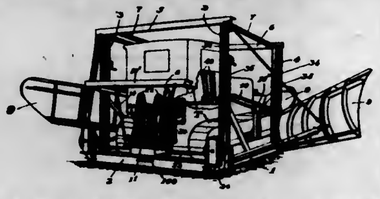


1. In the method of casting a seamless block of concrete of such size as would ordinarily crack or become weakened upon setting in the absence of heat dispelling means therein, comprising providing air intakes in the base of the block, providing vertical air shafts in said block in communication with the air intakes and extending therefrom to the top of the block, positioning said intakes and shafts throughout the block at such intervals as will enable heat generated by setting of the concrete to be conducted thereto, and passing a current of air into said intakes and upwardly through said shafts to dispel the generated heat.

1,889,269. POWER SNOWPLOW. JOHN B. WOODBURY and GEORGE C. SOULE, South Portland, Me., assignors to Maine Steel Products Company, Portland, Me., a Corporation of Maine. Filed Dec. 28, 1929. Serial No. 417,173. 19 Claims. (Cl. 37—44.)

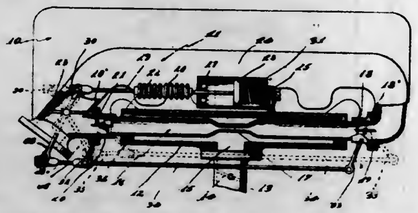
3. In a snow plow equipment, a plow comprising a frame, nose and wing members adjustable relative to said

frame, hoists for raising and lowering said members, a motor driven vehicle removably located within the plow



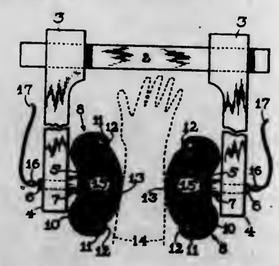
frame, a motor driven hydraulic control independent of the plow frame and mounted on the vehicle, and means for connecting the hoists and the hydraulic control.

1,889,270. MANIFOLD CONSTRUCTION. HORACE T. THOMAS, Lansing, and ANDREW L. KIMBALL, Detroit, Mich. Filed Mar. 12, 1928. Serial No. 260,976. 15 Claims. (Cl. 123—122.)



1. The combination with an internal combustion engine including an exhaust manifold, an intake manifold and a charge forming device connected thereto, of means for heating the charge passing through said intake manifold, said means including a conduit connected to said exhaust manifold and extending through said intake manifold, said conduit having means for localizing the heat at one point within said manifold.

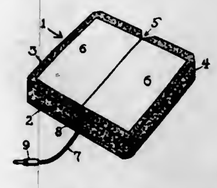
1,889,271. ELECTRICAL CONTACT PAD. GUSTAV A. ZEANE, Brooklyn, N. Y. Filed Apr. 22, 1931. Serial No. 531,998. 3 Claims. (Cl. 174—89.)



1. A contact pad for electro-therapeutic devices, including the combination, of a clamping plate having solely the ends thereof bent over to form retaining edges while the sides of said plate are open, a resilient body normally disposed upon said clamping plate between said bent over edges and having the sides thereof exposed as well as the upper portion of the same, and a resilient contact means disposed upon said resilient body having the ends caught under said bent over plate ends and the surface thereof exposed upon said resilient body between said plate ends.

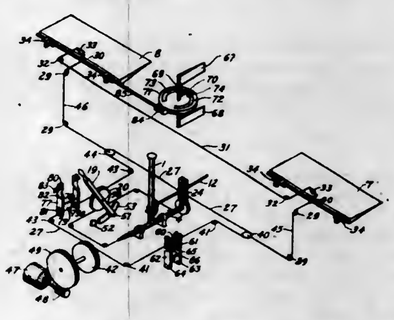
1,889,272. DIATHERMIC ELECTRODE AND APPLICATOR. GUSTAV A. ZEANE, Brooklyn, N. Y. Filed Sept. 29, 1931. Serial No. 565,733. 2 Claims. (Cl. 174—89.)

1. An electrical applicator including the combination, with a flexible backing, of a pair of flexible cushion members secured upon said backing in adjacent positions, and a conducting cord associated with said applicator having an uninsulated portion thereof releasably disposed upon said backing between said cushion members, there being a



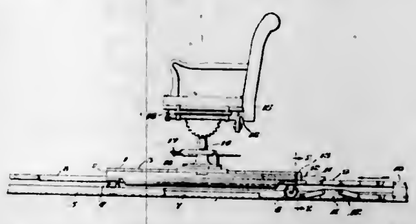
flexible metallic sheet conductor interposed between the uninsulated portion of said conducting cord and said backing between said cushion members and extend from between said members upon the surfaces thereof.

1,889,273. AUTOMATIC BANKING CONTROL. HAROLD T. AVERY, Oakland, Calif. Filed Aug. 24, 1927. Serial No. 215,126. 35 Claims. (Cl. 244—29.)



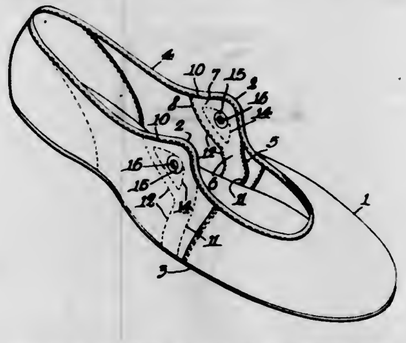
1. In a vehicle adapted to move through a fluid medium, the combination of means adapted to rotate the vehicle about its longitudinal axis, a vane adapted to automatically align itself parallel to the lines of fluid flow with respect to it and mechanism actuated by said vane and operating upon said first mentioned means in a manner adapted to eliminate lateral motion of the vehicle with respect to the medium.

1,889,274. FURNITURE CONVEYER. GEORGE L. DAHMS, Columbiana, Ohio. Filed Feb. 21, 1930. Serial No. 430,160. 7 Claims. (Cl. 104—172.)



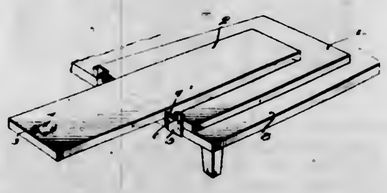
1. A furniture conveyer comprising in combination, a movable supporting element, continuous driving means therefor, engaging members on said means, a removable engaging element adapted to provide engagement with said supporting member and said engaging members, guides for said supporting and said driving means, and an adjustable frame for holding and securing an article of furniture thereon.

1,889,275. BALLET SLIPPER. JOSEPH JOHN DOMAHOSKI, La Crosse, Wis. Filed Apr. 10, 1931. Serial No. 529,170. 1 Claim. (Cl. 36—8.8.)



An article of footwear of the ballet slipper type, comprising a sole and an upper, the sole being slightly curved in an upward direction, intermediate its ends, to form a ball and a heel, oppositely disposed strips on the upper and extended from the sole to the top edge of the upper, the strips having rearwardly extended heads, and a single transverse tie connecting the heads: there being but one strip on each side of the slipper, so that the upper and the sole will be freely flexible, longitudinally, both in front of and behind the strips, the lower ends of the strips being farther from the heel than from the part of the ball that contacts with the floor, and the strips being disposed substantially at right angles to the sole, thereby giving the strips a direct upward pull on the ball when the rear part of the slipper is flexed upwardly and forwardly, in dancing, the said upward and forward movement of the rear part of the slipper serving to carry the tie forwardly toward a position directly above the strips, as said upward and forward movement of the rear part of the slipper increases thereby to increase the upward pull upon the ball.

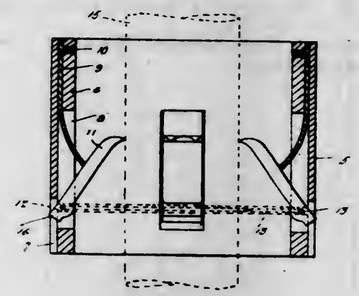
1,889,276. DOMESTIC RODENT EXTERMINATOR. LIEBERT W. V. DORRIEN, Mexico, Mexico. Filed Aug. 10, 1931. Serial No. 556,229. 4 Claims. (Cl. 43—69.)



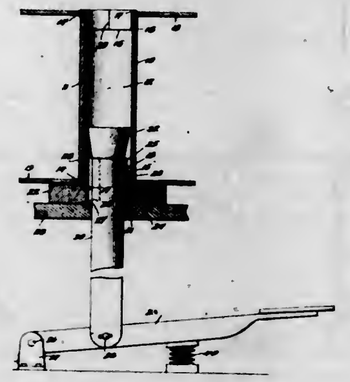
4. An animal trap comprising a flat plate having a cut-away portion, brackets secured to the end of the plate on each side of said cut-away portion, said brackets being extended downwardly to form stop members arranged to engage a support for properly positioning the trap, flanges carried by said brackets and being provided with journals, a platform having a portion disposed normally in said cut-away portion, the top of the platform being normally flush with the top of the plate and trunnions carried by the platform and engaging said journals for permitting the tilting of the platform by the weight of the animal.

1,889,277. CORE CATCHER. RAYMOND J. DRAPER, Los Angeles, Calif. Filed Mar. 23, 1932. Serial No. 600,804. 3 Claims. (Cl. 255—72.)

1. A core catcher comprising a cylindrical member through which a core can move, inwardly urged pawls on the cylindrical member for engaging the core to prevent return motion thereof, a snugly fitting sleeve on the cylindrical member, and leaf springs interposed between the cylindrical member and the sleeve, and having free end portions for engaging the pawls to urge the same inwardly.



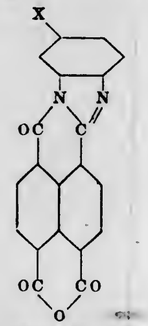
1,889,278. WINDING SPOOL. CHARLES K. DUNLAP, Hartsville, S. C., assignor to Sonoco Products Company, Hartsville, S. C., a Corporation of South Carolina. Filed Nov. 7, 1930. Serial No. 494,111. 3 Claims. (Cl. 242—118.)



1. In a spool, in combination, a tubular barrel, a pair of end disks disposed in contact with either end of said barrel and each provided with a central aperture registering with the bore of said barrel, curved metallic securing elements of considerable arcuate extent disposed within said disk apertures and the ends of said barrel, each of said elements snugly contacting the periphery of one of said apertures and having a flange adapted to overlie and retain the margin of said aperture and another flange adapted to be embedded in the material of said barrel, said elements being of definite longitudinal cross-sectional configuration and of an original diameter smaller than the diameter of said apertures, and adapted to be moved radially into position during the application of said end disks without longitudinal distortion of said elements, and wooden plugs disposed with a driving fit within the ends of the bore of said barrel centrally of said securing elements.

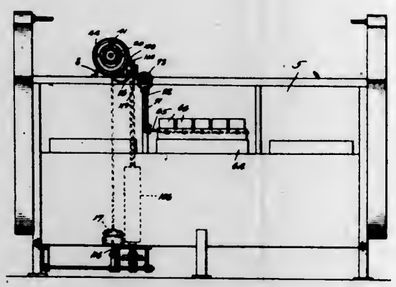
1,889,279. VAT DYESTUFFS AND PROCESS OF PREPARING THEM. WILHELM ECKERT and OTTO BRAUNSDORF, Frankfort-on-the-Main-Hochst, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed May 29, 1929, Serial No. 367,114, and in Germany June 18, 1928. 15 Claims. (Cl. 260—44.)

1. The process which comprises condensing a compound of the following formula:



wherein X stands for hydrogen or methyl, with an aromatic ortho-diamine of the group consisting of those of the benzene, naphthalene and acenaphthene series while heating in the presence of an inert diluent.

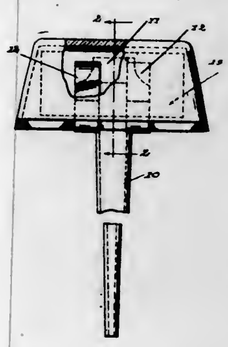
1,889,280. DEVICE FOR AUTOMATICALLY SUPPLYING WASHING SOLUTIONS TO WASHING MACHINES. ERNST DAVID EDGREN, Los Angeles, Calif. Filed Dec. 4, 1930. Serial No. 500,123. 7 Claims. (Cl. 68—18.)



1. In a washing machine, a body portion, a plurality of containers pivotally supported adjacent to the body portion for delivering material to the body portion, cams supported under the containers and disposed at various angles with respect to each other, said cams adapted to rotate to successively move the containers to their dumping positions to deliver washing material to the body portion, and electrically controlled means for controlling the passage of steam and water to the body portion.

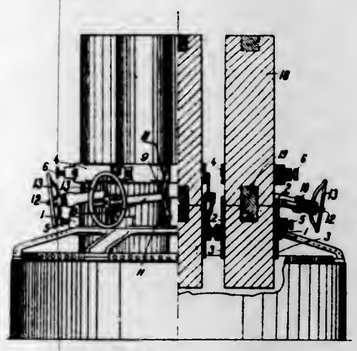
1,889,281. CARD DISPLAYING OR PLANT MARKING DEVICE. FRANCIS H. FITZGERALD, Duluth, Minn. Filed Oct. 1, 1931. Serial No. 566,346. 8 Claims. (Cl. 40—10.)

1. A card displaying or plant marking device comprising vertical supporting means, a seamless transparent card container carried thereby and open at its bottom, said container having a flat front face at an angle to



said supporting means, and means for holding a card against said face.

1,889,282. DEVICE FOR MOUNTING AND OPERATING ELECTRODES. ALFRED FRANCHINI and PAUL GIROD, Cannes, France; said Franchini assignor to said Girod. Filed Nov. 4, 1929, Serial No. 404,816, and in France Aug. 27, 1929. 1 Claim. (Cl. 13—14.)



Apparatus for mounting electrodes comprising an apertured horizontal main plate, a side section plate having an aperture therethrough and pivoted to said main plate so as to swing laterally thereof, a plurality of vertical tubular members extending from said main plate and side section plate arranged concentric with said apertures for receiving the electrodes, and independent means associated with each electrode and its mounting for supporting and adjustably raising and lowering each electrode, said pivotally mounted side plate adapted for swinging movement laterally of said main plate when its electrode is raised by its supporting and raising and lowering means to an elevated position.

1,889,283. ROTARY JAR. JOHN ARTHUR FRANCIS, Grass Creek, Wyo. Filed Apr. 23, 1931. Serial No. 532,366. 1 Claim. (Cl. 255—27.)

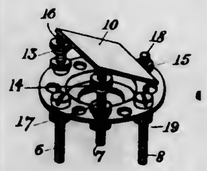
A rotary jar comprising an elongated tubular casing, a guide plug screwed into the lower end of said casing, a second guide plug screwed into the upper end of said casing, a tubular liner immovably fixed in said casing in spaced relation to said guide plugs, a mandrel extending

through the first guide plug and into the bore of the liner, interlocking means on the mandrel and interior of the liner engageable and disengageable by rotative movement of the mandrel in the liner whereby the mandrel and liner may be held against relative reciprocation and per-



mitted relative reciprocation respectively, and a collar on said mandrel between the first guide plug and the liner and movable by reciprocation of the mandrel to strike the plug and liner at respective ends of its movement.

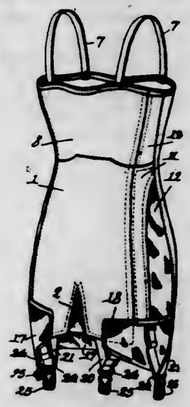
1,889,284. OPTICAL APPARATUS. CARL WILLIAM HANSEL, Bedford, England. Filed Jan. 23, 1931, Serial No. 510,795, and in Great Britain Jan. 23, 1930. 8 Claims. (Cl. 35—12.)



1. In a set of mechanical and optical elements capable of association to provide various different forms of optical apparatus, screwed rods, a carrier element, said carrier element being constructed to accommodate at least one other element of the set, and means for adjustably mounting the carrier element on the screwed rods, the said screwed rods being arranged in spaced parallel relation.

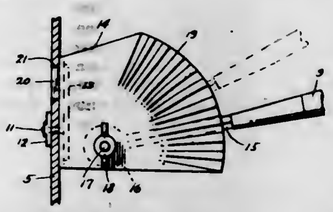
1,889,285. CORSELET. EMOGENE HART, Santa Cruz, Calif. Filed July 21, 1931. Serial No. 552,245. 1 Claim. (Cl. 2—26.)

A corselet including front and back panels adapted to extend across the back, front and one side of the wearer, means for joining them detachably at the other side, and an elastic apron overlying the lower portions of said panels and sewn thereto, said apron hanging well below the panels and extending without break from one side of the front panel along both sides and the back of the corselet, one end of the apron being sewn to the side portion of the front panel and the other end thereof being left free to provide a flap for lapping the other side portion of the front panel, and means for detachably securing said flap to the side portion of the front panel,



and two ends of the apron being spaced apart at the front of the garment and said apron gradually decreasing in size from the center of its back to its front ends.

1,889,286. HOE. LEO T. KAIPUST, Platte Center, Nebr. Filed Oct. 12, 1931. Serial No. 568,483. 2 Claims. (Cl. 306—2.)



1. In a tool of the class described, a blade provided with a series of radial slots, a U-shaped member having its bight portion pivoted to the blade and provided with a lateral projection adapted to be engaged in a selected one of said slots, means for securing the member at the desired angular adjustment; a handle pivoted between the sides of said member, and inter-engaging means on said sides and said handle for retaining the handle at the desired adjustment.

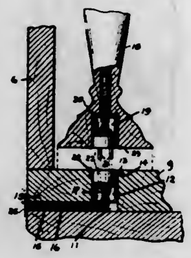
1,889,287. PACKING AND METHOD FOR FORMING THE SAME. CLARENCE D. MCPHERSON, Philadelphia, Pa., assignor to Clarence D. McPherson and Eugene S. Heiberger, trading as The Tar-Rid Chemical Company, Philadelphia, Pa. Filed July 17, 1930. Serial No. 468,643. 3 Claims. (Cl. 106—8.)



1. The herein described method for forming a loose packing material, which comprises heating lead to a molten condition, dropping the molten lead upon the

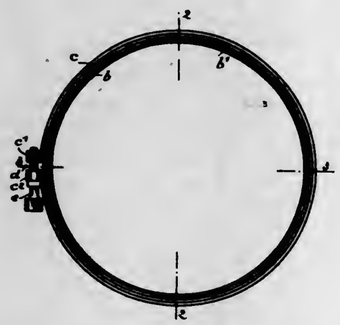
surface of a body of liquid to cause the highly heated molten lead to spread out to an attenuated and porous form having irregular and ragged edges, highly heating heavy lubricating oil, pouring such highly heated oil upon shredded asbestos undergoing agitation under mild heat conditions whereby the asbestos will rapidly take up great quantities of the heavy oil, and adding graphite and the attenuated porous lead pieces to the oil saturated asbestos during agitation under mild heat.

1,889,288. LIGHTING FIXTURE. JOHN H. PATTERSON, Corry, Pa. Filed June 4, 1931. Serial No. 542,046. 3 Claims. (Cl. 45—5.)



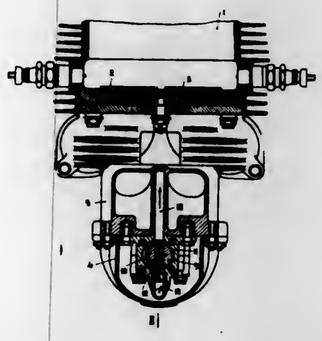
1. As an article of manufacture, a shoe adapted to seat on the top of a dresser or the like and support a mirror frame or standard, forwardly extending offset portions at opposite ends of said shoe, standard plug-in electric sockets arranged within said offset portions for receiving standard electric plugs and a concealed groove in the rear face of said shoe communicating through transverse grooves with said sockets and forming a channel for lead-in wires.

1,889,289. STRETCHING DEVICE, PARTICULARLY APPLICABLE TO THIN PHONOGRAPHIC DISKS. ARMANDO ALVARES PENTEADO, Paris, France. Original application filed July 8, 1929, Serial No. 376,698, and in France June 12, 1929. Divided and this application filed Aug. 18, 1930. Serial No. 476,223. 1 Claim. (Cl. 18—5.3.)



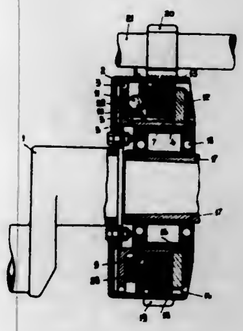
Stretching device for thin phonographic disks comprising a ring for receiving the softened disk provided with a circumferential groove in one of its plane annular faces and a ring of slightly larger diameter adapted to be forced on the other ring so as to engage the overlapping edge of the disk, whereby the disk is stretched and the recording effected thereon, the disk then dried, and cut by any cutting member inserted in the circumferential groove.

1,889,290. LUBRICATING DEVICE FOR INTERNAL COMBUSTION ENGINES WITH INVERTED CYLINDERS. GUGLIELMO PIRINOLI, Turin, Italy, assignor to Fiat Società Anonima, Turin, Italy. Filed Apr. 7, 1931, Serial No. 528,881, and in Italy Apr. 18, 1930. 2 Claims. (Cl. 184—6.)



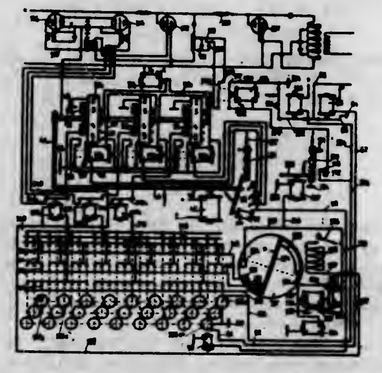
1. In an internal combustion engine having inverted cylinders, in combination with the head of the cylinders, a cam shaft mounted on said head and a cover on said head for enclosing said cam shaft, an auxiliary blade pump on an extension of said cam shaft, a suction pipe for said pump arranged in said cover so as to suck the lubricating oil collected in the cover bottom and a discharge pipe for said pump formed in the head of the cylinders for returning the lubricating oil into the cycle.

1,889,291. FRICTION CLUTCH. GUGLIELMO PIRINOLI, Turin, Italy, assignor to Fiat Società Anonima, Turin, Italy. Filed Sept. 23, 1931, Serial No. 564,656, and in Italy July 15, 1931. 2 Claims. (Cl. 192—103.)



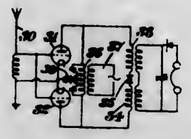
1. Friction clutch comprising, in combination, a driving drum provided with a flange, a driven drum arranged concentrically about the driving drum, slidable friction discs alternatively keyed on said driving and driven drums, a slidable pressure disc acting on said friction discs, said pressure disc having its outer face conically recessed and being keyed on the driven drum, a ring loosely mounted between said pressure disc and the flange of the driving drum, said ring having notches on its outer periphery, balls in said notches and spring members for producing a slight pressure between the friction discs and for pressing the balls between the flange of the driving drum and the pressure disc.

1,889,292. RADIO SIGNALING SYSTEM. PIER CARLO RICCHIARDI, Turin, Italy, assignor to S. A. Brevetti Italiani Esteri S. A. B. I. E., Turin, Italy, a Joint-Stock Company of Italy. Filed Mar. 30, 1931, Serial No. 526,530, and in Italy Apr. 9, 1930. 16 Claims. (Cl. 250—2.)



1. A radio-signaling system comprising in combination with an oscillating circuit at a transmitting station and an oscillating circuit at a receiving station, means at the transmitting station for superposing at will in turn on a carrying wave of constant frequency two waves of different high frequencies, means for superposing on the carrying wave modulated to one of said high frequency waves groups of frequencies for the call of the receiving station and for superposing on the carrying wave modulated to the other high frequency wave groups of frequencies constituting the signals and means at the receiving station for passing automatically from the call-receiving condition to the message-receiving condition.

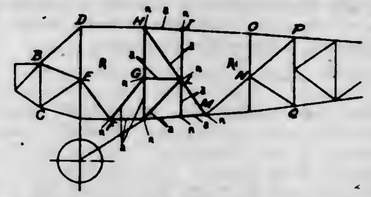
1,889,293. WAVE SIGNALING SYSTEM. JAMES ROBINSON, Mill Hill, England, assignor, by mesne assignments, to British Radiostat Corporation, Limited, a Corporation of Canada. Filed July 30, 1929, Serial No. 382,258, and in Great Britain Aug. 10, 1928. 15 Claims. (Cl. 250—6.)



1. A receiver for wave signals comprising a resonant apparatus that is stable but has less damping than is usual for true reproduction so that oscillations tend to persist therein after the signal ceases, in combination with means for rhythmically altering the phase of the energy in the said resonant apparatus at a frequency lower than the carrier frequency of the received energy and higher than the highest modulation frequency of the received energy in order to subdue the persisting oscillations in the said resonant apparatus.

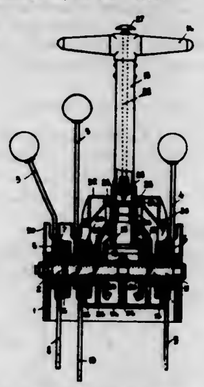
1,889,294. TRIANGULAR PLANE GIRDER FOR AEROPLANES. CELESTINO ROSATELLI, Turin, Italy, assignor to Fiat Società Anonima, Turin, Italy. Filed Dec. 11, 1930, Serial No. 501,711, and in Italy Sept. 23, 1930. 1 Claim. (Cl. 244—30.)

In an aircraft body having lateral openings for the doors extending a substantial portion of the height of the body, a longitudinal truss at a side of the body and having openings corresponding with the body openings, said truss comprising upper and lower beams extending continuously throughout the portion of the body in which said door openings are located, uprights connecting said beams between said openings, a horizontal member for connecting intermediate points of said uprights, diagonal struts between said uprights converging towards the connecting



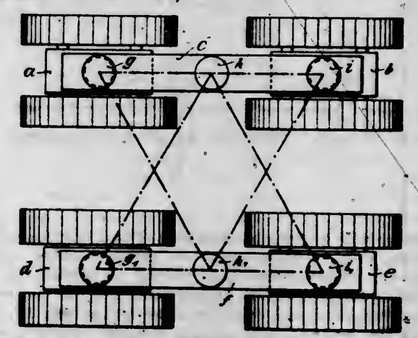
point of this horizontal member with one of said uprights, and struts between the connecting points of said horizontal member and the lower beam.

1,889,295. DIFFERENTIAL AND SIMULTANEOUS CONTROL FOR THE ENGINES OF MULTIPLE ENGINE MACHINES. CELESTINO ROSATELLI, Turin, Italy, assignor to Fiat Società Anonima, Turin, Italy. Filed Dec. 11, 1930, Serial No. 501,713, and in Italy Oct. 9, 1930. 9 Claims. (Cl. 74—89.)



1. Engine control for multiple engine aeroplanes comprising levers for adjusting each engine, handles for operating said levers, a friction lock device inserted between each of said levers and their respective handles, a main lever connected with one member of said lock devices for simultaneously actuating said adjusting levers.

1,889,296. SUPPORTING MEANS FOR CONVEYING AND TRANSPORTING VEHICLES. HERMANN RUNTE, Lubeck, Germany, assignor to Lübecker Maschinenbau-Gesellschaft, Lubeck, Germany. Filed Jan. 25, 1929, Serial No. 335,101, and in Germany Jan. 27, 1928. 4 Claims. (Cl. 280—51.)



1. In a vehicle of the character referred to, trucks, a frame for conveying appliances or the like adapted to be

supported by said trucks at three points, at least four supporting means disposed between the said trucks and the said frame, and means for selectively raising and lowering said supporting means whereby to form by groups of three a particular supporting triangle while disconnecting the rest of the supporting means.

1,889,297. DRAWBAR FOR VEHICLES. FREDERICK VERNON RUSSELL, Leytonstone, England, assignor to The Monarch Door Controller Company Limited, and Frederick Vernon Russell. Filed Dec. 29, 1931, Serial No. 583,783, and in Great Britain Jan. 24, 1931. 8 Claims. (Cl. 280—33.15.)



1. A coupling device of the kind referred to, comprising a draw-bar having ball shaped ends each divided in a direction at right angles to the length of said draw-bar and divided sockets in which said divided ball-shaped ends are fitted so as to be embraced closely and directly thereby and permit of swivelling motion between them, said sockets being adapted externally to be attached to vehicles to be coupled.

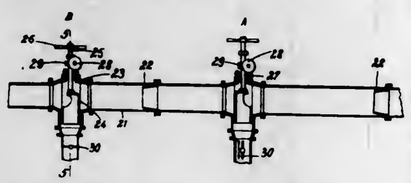
1,889,298. SOLID DIAZOAZOMETAL HALIDE DOUBLE SALT. KARL SCHNITZSPAHN, Offenbach-on-the-Main, Germany, assignor to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Sept. 29, 1927, Serial No. 222,943, and in Germany Oct. 5, 1926. 6 Claims. (Cl. 260—11.)

1. Solid diazoazo metallic halide double salts corresponding probably to the general formula:

$$\left[R_1\text{—}N\text{=}N\text{—}R \begin{matrix} \diagup (O\text{—alkyl})_n \\ \diagdown N_2\text{—} \end{matrix} \right]_2 .Me(halogen)_{x+2}$$

wherein R and R_1 mean aryl radicals not containing a sulfonic or carboxylic acid group, n stands for a number being at least 1, and x for a number corresponding to the valence of the metal signified by Me, which solid diazoazo double salts are orange to reddish-brown powders, soluble in water with a yellowish to reddish-brown color.

1,889,299. PULVERIZED FUEL DISTRIBUTING SYSTEM. CHARLES M. STEIN, Paris, France, assignor to Societe Anonyme des Appareils de Manutention et Fours Stein, Paris, France, a Corporation of France. Filed May 6, 1929, Serial No. 360,970, and in France Oct. 26, 1928. 1 Claim. (Cl. 302—28.)



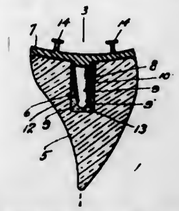
In a system for supplying powdered fuel in suspension to burners, a fuel supply main, an offtake conduit leading from the supply main to a burner, a tubular member extending into the offtake conduit and into the fuel supply main being open on one side only in the supply main, means for rotating said tubular member from a position where the open side thereof will intercept the flow of fuel in the supply main to a position opposite thereto and to intermediate points therebetween for regulating the amount of fuel supplied through the offtake conduit to the burner without effecting the passageway in the offtake conduit, and means for moving said tubular member crosswise of the supply main for adjusting the position at which the opening in the side of the tubular member will intercept the flow of fuel in the fuel supply main.

1,889,300. ANTISKID TIRE CHAIN. GEORGE E. THIMMES, Mechanicsville, Iowa. Filed Mar. 26, 1931. Serial No. 525,547. 1 Claim. (Cl. 152—14.)



An anti-skid device for the links of cross chains, such links having side members round in cross section, said device comprising a pair of cubical blocks spaced apart and situated directly over the round members of the cross links and extending beyond the outer side edges of said members, said cubical blocks having tread surfaces bounded by four straight lines forming sharp edges with the adjoining side faces of the cubes, the tread surface of each cube bounded by said sharp edges being entirely flat throughout, and a third non-cubical block offset from the two spaced apart cubical blocks and being of a length to extend across the gap between the two cubical blocks and to overlap said cubical blocks by approximately one-half the width of said cubical blocks and lying against a portion of the under faces of said blocks and being integrally united therewith, the ends of said third block forming right angle shoulders with the lower free faces of the cubical blocks being adapted to partially rest upon the round members of the chain links and to extend outwardly therebeyond, the third block lying wholly between the side members of the link and the straight ends of said third block engaging the inner rounded walls of the side members of the link.

1,889,301. ARTIFICIAL TOOTH. FRANK S. TRUSLER, Vernon, Tex. Filed June 13, 1930. Serial No. 460,985. 1 Claim. (Cl. 32—9.)

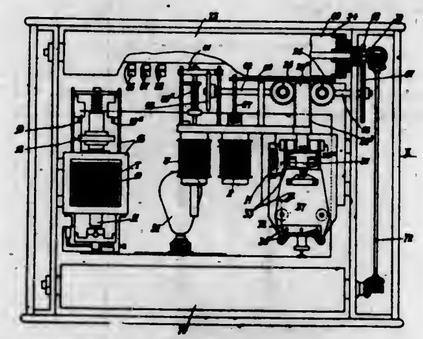


In an artificial denture, a tooth having a socket opening inwardly from one face thereof, a backing plate adapted to be secured to the tooth, a pin projecting from said backing plate, a tube arranged in the socket of said tooth, said pin adapted to extend into said socket thru said tube, shoulders formed on said pin adjacent the free end of the pin for engaging the inner edge of said tube, said tube at said inner end being slit, said pin adapted to expand said tube in said socket when said pin is passed through said tube, cement in said socket about said tube, and said tube at said inner end provided with outstanding flanges adapted to be embedded in the cement upon expansion of said tube.

1,889,302. MOVING OR CHANGING ADVERTISING AND DISPLAY APPARATUS OR SIGN. JOHN WHITFIELD and DAVID BRANDER, Glasgow, Scotland. Filed Jan. 17, 1930, Serial No. 421,559, and in Great Britain Jan. 31, 1929. Renewed Apr. 28, 1932. 12 Claims. (Cl. 40—55.)

1. In advertising or display apparatus of the type referred to, the combination of, a display band carrying the

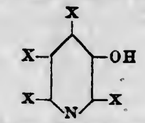
matter to be displayed or advertised, an electric circuit controlling solenoid, a solenoid device for moving the band carrying the matter to be displayed or advertised, driving mechanism through which the display band is driven from said solenoid device, an unlocking device for temporarily



unlocking said driving mechanism which is normally locked against rotation by said solenoid device, thereby allowing movement of said band to take place, and automatic means for rendering inoperative said solenoid device for moving the band.

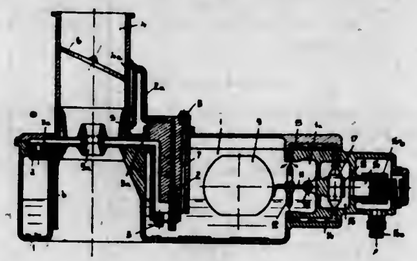
1,889,303. NITRO-β-HYDROXYPYRIDINE AND NITRO-β-HYDROXYALKYLPYRIDINE AND PROCESS OF PREPARING THEM. OTTO WULFF, Hofheim-in-Taunus, Germany, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Filed Sept. 29, 1930, Serial No. 485,311, and in Germany Nov. 7, 1929. 10 Claims. (Cl. 260—42.)

1. The process which comprises causing a nitrating agent to act upon a compound of the following formula:



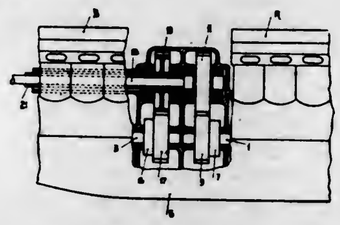
wherein at the most two X's may stand for alkyl groups, the other X's being hydrogen atoms being dissolved in an inorganic acid capable of binding water.

1,889,304. CARBURETOR OF AIRCRAFT ENGINES FOR INSURING THE REGULAR ENGINE WORKING IN INVERTED LOAD CONDITIONS. TRANQUILLO ZERBI, Turin, Italy, assignor to Fiat Società Anonima, Turin, Italy. Filed May 28, 1930, Serial No. 456,470, and in Italy Nov. 29, 1929. 3 Claims. (Cl. 137—68.)



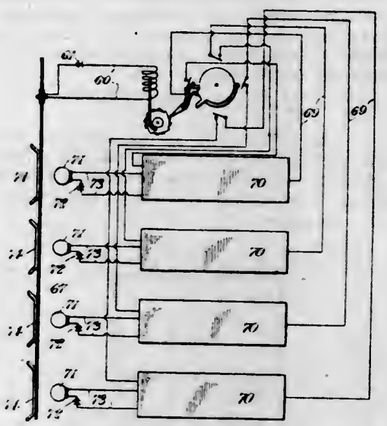
1. A carburetor for aircraft engines comprising in combination with a constant level chamber, a distributing chamber connected with said constant level chamber through two separate conduits, a float in said constant level chamber and means carried by said float for closing alternatively one end of said conduits and a slide in said distributing chamber for closing alternatively the other ends of said conduits.

1,889,305. ENGINE DRIVE FOR AIRCRAFT PROPELLERS. TRANQUILLO ZERBI, Turin, Italy, assignor to Fiat Società Anonima, Turin, Italy. Filed Oct. 14, 1930, Serial No. 488,678, and in Italy Apr. 26, 1930. 2 Claims. (Cl. 74—7.)



1. A power transmission unit for aircraft comprising in combination, a single engine casing, two sets of working cylinders mounted in tandem and in longitudinal alignment in said casing and having separate crank-shafts, two coaxial propeller shafts mounted in the casing, transmission gears mounted on adjacent ends of the said crank-shaft inside the said casing and means for connecting each transmission gear with a separate propeller shaft, whereby lubricating oil in the lower part of said casing may flow freely from one end thereof to the other for lubrication of the said unit.

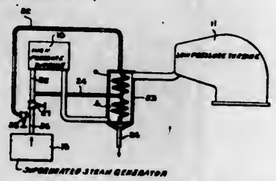
1,889,306. LIGHT CONTROL FOR PHOTOGRAPHIC PRINTING MACHINES. ALBERT L. ADATTE, North Plainfield, N. J., assignor to Pathe Exchange, Inc., Boundbrook, N. J., a Corporation of New York. Filed Mar. 21, 1928. Serial No. 263,393. 7 Claims. (Cl. 95—75.)



1. A photographic printing machine in which a negative motion picture film and positive motion picture films are fed in unison through the machine with the positives contacting with the negative at spaced intervals along the negative, comprising a plurality of lights arranged in back of the negative and positives and spaced with a light in back of each positive where it contacts with the negative, electric circuits for the lights, switches in the circuits, and means for operating the switches in timed relation to the travel of the film, said means comprising a movable element for successively operating the switches upon movement, means tending to produce movement of said element, means operating to normally hold said ele-

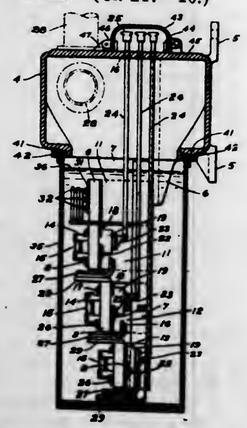
ment against movement, and a single device for releasing the movable element, said releasing means being operated by a means of control at a predetermined place on the negative film.

1,889,307. SYSTEM OF REHEATING IN A POWER PLANT. KARL BAUMANN, Urmston, England, assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Oct. 26, 1928, Serial No. 315,301, and in Great Britain Nov. 7, 1927. 1 Claim. (Cl. 60—73.)



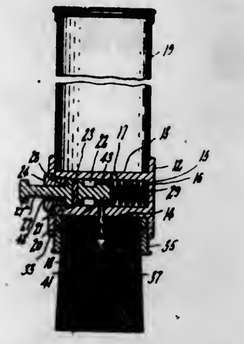
In an elastic fluid power plant, the combination of a source of superheated elastic motive fluid, a prime mover comprising a high pressure portion and a low pressure portion, a conduit providing communication between said source and the inlet of the high pressure portion of the prime mover, a valve in said conduit, means for reheating the motive fluid flowing from the high pressure portion of the prime mover to the low pressure portion comprising a lower temperature reheater stage having a heating unit and a higher temperature reheater stage having a heating unit through which said motive fluid flows successively, a second conduit communicating with the first conduit intermediate said source of motive fluid and said valve and with the heating unit of the higher temperature reheater stage for supplying superheated motive fluid to the latter, a third conduit communicating with the discharge end of said heating unit and the first conduit intermediate the valve therein and the inlet of the prime mover for returning a portion of the motive fluid flowing through said heating unit to the motive fluid supply of the prime mover, the heating unit of the lower temperature reheater stage communicating with the heating unit of the higher temperature reheater stage and receiving the remaining portion of the fluid discharged therefrom, the fluid flowing through the heating unit of the lower temperature reheater stage being condensed therein.

1,889,308. OIL-IMMERSED DISTRIBUTING PANEL. HAROLD G. BAXTER, Baldwin, N. Y., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed May 13, 1929. Serial No. 362,685. 10 Claims. (Cl. 247—10.)



1. A liquid-immersed panel comprising a cover, a supporting frame suspended therefrom, panel units mounted in superimposed and offset relation on the frame, current-controlling devices on the units having operating means extending vertically and supported by the cover and operable exteriorly thereof and a tank for containing fluid in which the panels are immersed and adapted to be closed by the said cover and to be moved downward to expose the said panels.

1,889,309. FOUNTAIN BRUSH. RICHARD E. BECKERT, Revere, Mass. Filed June 7, 1932. Serial No. 615,799. 1 Claim. (Cl. 15—138.)



A fountain brush structure including a head, a liquid reservoir above the head, a brush socket below the head holding a bristle brush, a cylindrical force pump barrel in the head having a closed end and an open end, an upper duct connecting the reservoir with the barrel, a lower duct out of alinement with the upper duct, connecting the barrel with the socket, a cylindrical slide in the barrel including a piston having longitudinal passages and a peripheral groove communicating with said passages, a helical spring between the piston and the closed end of the barrel normally maintaining the piston in the mid length portion of the barrel, a bushing engaged with the open end of the barrel, a plunger movable in the bushing and normally projected from the head by the force of the spring, and adapted to be pushed inward to cause a spring-compressing movement of the piston, the arrangement being such that when the plunger is projected from the head, the upper duct is opened, the lower duct is closed, and liquid from the reservoir accumulates in the spring-containing end of the barrel, and when the plunger is pushed inward the upper duct is closed, and the lower duct opened, and the accumulated liquid is forced by the piston under pressure through the piston passages, the peripheral groove, and the lower duct, to the brush socket, the slide and plunger being provided at their adjacent ends with washer-pressing disks having a sliding fit in the barrel, the structure including a discoidal washer interposed between said disks, and peripherally expanded into sealing contact with the barrel by the force of the spring, so that leakage of the forced liquid across the periphery of the washer is prevented.

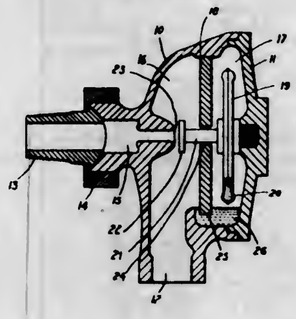
1,889,310. ELECTRICAL MEASURING INSTRUMENT. IVAR W. BROGGER, Meriden, Conn., assignor to Connecticut Telephone & Electric Corporation, Meriden, Conn. Filed Feb. 11, 1930. Serial No. 427,575. 8 Claims. (Cl. 171—95.)



1. An electrical measuring instrument including; a casing, a pair of circuit terminal studs carried by the casing

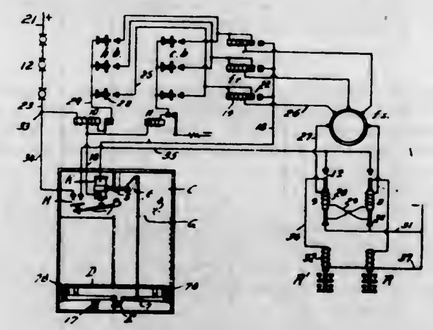
and at least one being insulated therefrom, a dial supported by said studs and forming the only electrical circuit therebetween, said dial having an arm formed to support a movable system, a movable system including an armature and a pointer pivotally mounted on parts of said arm, said dial being slotted so all the current is forced to flow through the dial over the armature, thereby setting up a flux which will act on said armature to move it and the pointer for the purpose described.

1,889,311. AUTOMATIC VALVE. ALFRED L. BROWNE, South Orange, N. J. Filed Apr. 14, 1930. Serial No. 444,010. 6 Claims. (Cl. 236—58.)



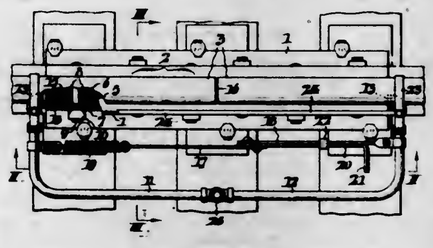
1. A return trap comprising, in combination, a casing having an inlet port adapted to receive steam, air, and condensate, and an outlet port adapted to discharge air and condensate to a return pipe, a valve within said casing and controlling communication between said ports, said casing having two chambers, one of said chambers having direct communication with the inlet and outlet ports, a thermostat in the other of said chambers and connected to said valve for operating it, a port connecting said chambers for admitting elastic fluid from the first mentioned chamber to the second mentioned chamber containing the thermostat, and a liquid seal port also connecting said chambers.

1,889,312. ELEVATOR CONTROL SYSTEM. ERNEST L. GALE, Yonkers, N. Y., assignor to Gurney Elevator Company, Inc., New York, N. Y., a Corporation of Pennsylvania. Filed Mar. 29, 1927. Serial No. 179,243. 53 Claims. (Cl. 187—29.)



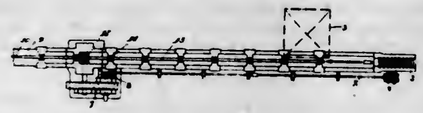
1. A system of control for elevators comprising in combination, a car having a gate, a car gate switch, closable when the car is occupied only by the car gate, and magnetic means for closing said switch with the car unoccupied.

1,889,313. RAIL JOINT LUBRICATING DEVICE. FREDERICK M. GRAHAM, Hollidaysburg, Pa. Filed Mar. 31, 1930. Serial No. 440,266. 9 Claims. (Cl. 184—3.)



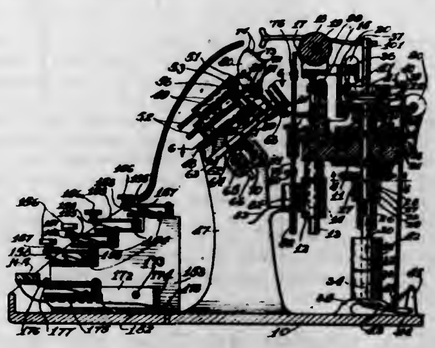
1. An apparatus for lubricating rail joints at the joint bars comprising means for supplying a lubricant under pressure to the area between rails near their ends and a joint bar, and accompanying interconnected means gripping the ends of said joint bar to effect substantial temporary closure of said area.

1,889,314. TUBE DRAWING BENCH. HEINRICH HEETKAMP, Duisburg, Germany, assignor to Demag Aktiengesellschaft, Duisburg, Germany. Filed Apr. 25, 1930. Serial No. 447,300, and in Germany Feb. 20, 1930. 2 Claims. Cl. 205—7.)



1. A tube draw bench provided with a plurality of draw rings, a mandrel, means for propelling the mandrel through the draw rings, an elongated tubular guide through which said mandrel is guided, a mandrel position indicator disposed adjacent the draw bench, an index movable in relation to said indicator, and a mechanism driven from the mandrel moving mechanism for operating the said index relatively to the indicator.

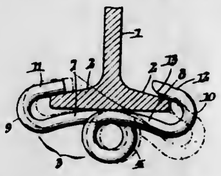
1,889,315. ELECTRICAL TYPEWRITING MACHINE. ELIAS H. HENDERSON, Chicago, Ill. Filed Sept. 18, 1929. Serial No. 393,335. 18 Claims. (Cl. 197—27.)



1. In a typewriting machine, the combination of a platen, a plurality of type plates each carrying a plurality of pairs of printing characters, bars having straight line movement and pivotally connected respectively with said plates to move them to printing posi-

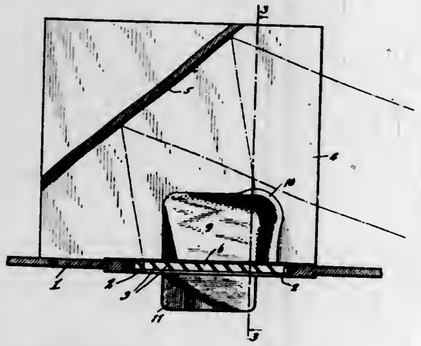
tion, devices for selectively turning an operated plate on its said pivotal connection to print one of a desired pair of said characters carried by it and so selected, and electric solenoid mechanisms respectively connected with said bars to operate them.

1,889,316. RAIL ANCHOR. KARL E. HOFAMMANN and LOUIS H. SCHLATTER, Altoona, Pa. Filed Dec. 18, 1930. Serial No. 503,126. 13 Claims. (Cl. 238—330.)



1. A rail anchor comprising a bar formed with a closed loop transverse to the longitudinal axis of the rail and contacting with the bottom of the rail base at the central portion thereof, and having ends in the form of hooks spring-gripping the top of the rail base at each side of the rail and curving outward and downward to clear the edges of said rail base and inward to merge with said looped portion.

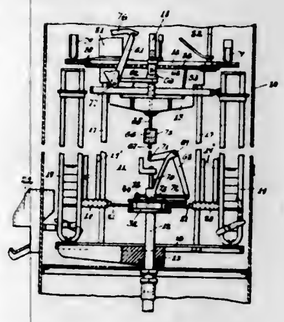
1,889,317. BANDIT-PROOF WINDOW PROTECTOR. FRANCES ROCKEFELLER KING, Nyack, N. Y., assignor to Safety King Corporation, New York, N. Y., a Corporation of New York. Filed July 10, 1931. Serial No. 549,838. 5 Claims. (Cl. 133—13.)



1. A bandit-proof exchange plate adapted to be disposed at the bottom of a restricted opening in a cashier's grille, said exchange plate comprising portions presented outwardly and inwardly from the grille, said plate being provided with a flat-surfaced area extending across both of said portions of the plate, said inwardly-presented portion being provided with a raised flange extending along one edge and around an inner corner thereof, the upper surface of said portion merging into said flat-surfaced area, a corner of the outwardly-presented portion of the plate being raised above said flat-surfaced area on the side of said restricted opening opposite to the edge along which said raised flange extends.

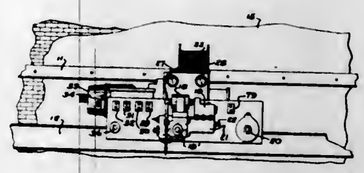
1,889,318. DELIVERY MECHANISM FOR ARTICLE DISPENSING MACHINES. LOUIS H. LARSEN, Union City, N. J., and CLIFTON W. NIXON, New York, N. Y. Filed July 11, 1928. Serial No. 291,912. 9 Claims. (Cl. 312—66.)

5. The combination of an axis shaft, an article holding magazine structure mounted to turn thereon, a reciprocating article ejector carried by said magazine structure, an actuating slide operatively supported on said shaft and engageable by said ejector, and means



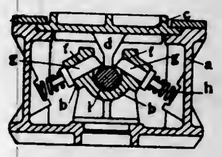
upon said shaft arranged to restrain the reciprocating movements of said ejector except when the latter is in engagement with said slide.

1,889,319. WELDING MACHINE. JAMES D. MCKIERNAN, Brooklyn, N. Y., assignor to Earl C. Maxwell Co., Inc., a Corporation of New York. Filed Apr. 21, 1927. Serial No. 185,377. 5 Claims. (Cl. 219—8.)



1. In a welding machine, a longitudinal track, devices movable upon said track including welding apparatuses having depending welding terminals, a plurality of aligned work supports arranged at a lower level than said apparatus and having rotational elements, means for moving said devices along said track, means for feeding a welding rod through said terminal, means for causing a difference of electrical potential between said rod and said work supports conjointly with the feeding thereof, and means for rotating said elements of the work supports and a control board mounted on each of said devices having arrangements for adjusting the actuation of all of said means individually.

1,889,320. PUSH BENCH MANDREL GUIDE. MATHIAS PETERS, Dusseldorf, Germany, assignor to Demag Aktiengesellschaft, Duisburg, Germany. Filed May 1, 1930, Serial No. 448,922, and in Germany Feb. 22, 1930. 5 Claims. (Cl. 205—7.)



1. In tube drawing benches comprising a mandrel, mandrel shaft, operating rack and operating arm connecting said rack with the mandrel shaft, a guide consisting of a stationary channel of a cross-section approximating to that of the mandrel and mandrel shaft and having a narrow slot through which the operating arm enters the channel to move the mandrel and mandrel shaft, said narrow slot being formed of the full width of the channel at the position of introduction of the mandrel and mandrel shaft to allow them to be introduced into and removed from the guide, and movable elements disposed in positions transverse to the said full width slot and adapted to project into the slot for the retention of the mandrel and mandrel shaft, the said elements remaining undisturbed during the operation of the drawing bench.

1,889,321. PIPE CUTTING TOOL. ROWLAND O. PICKIN, Los Angeles, Calif. Filed Dec. 26, 1928. Serial No. 328,471. 13 Claims. (Cl. 81—189.)



1. In a pipe cutting tool, a body, a plurality of cutters, each cutter being pivotally secured upon a bearing in said body, an annular cutter operating sleeve, a normally compressed coil spring, a threaded annular spring compressing member, and an annular slidable cutter restraining sleeve for temporarily locking said cutters in in-operative position, and for releasing said cutters into operation, said cutter restraining sleeve being operated by contact with the pipe to be cut.

1,889,322. PRONGED FASTENER SLIDE. DANIEL I. REITER, New York, N. Y. Filed Feb. 3, 1931. Serial No. 513,084. 3 Claims. (Cl. 24—77.)

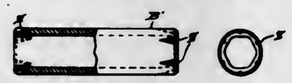


3. In a socket fastener slide, a slide member provided with opposed arcuate ends and with a central circular opening midway between said ends, and further provided with a substantially rectangular belt-receiving transverse slot between the opening and each of said ends, a flange depending from each of the edges of the slide member, a series of teeth projecting downwardly from one of the edges of at least one of the slots, and a one-piece socket member open at both ends thereof and passed through the opening and flanged at one end on to one face of the slide member, and beaded at its other end, and a spring ring yieldingly supported in said beaded end and inwardly overhanging the opening in said end to engage a stud passed into the socket member.

1,889,323. METHOD OF MANUFACTURING IMINO-ETHERS. KARL FRIEDRICH SCHMIDT and PHILIPP ZUTAVERN, Ludwigshafen-on-the-Rhine, Germany, assignors to Knoll Aktiengesellschaft, Chemische Fabriken, Ludwigshafen-on-the-Rhine, Germany, a Firm of Germany. Filed Jan. 7, 1929, Serial No. 330,958, and in Germany Feb. 26, 1926. 4 Claims. (Cl. 260—127.)

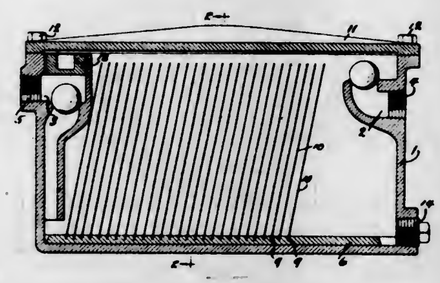
4. The method of manufacturing imino-ethers comprising reacting hydrazoic acid with ketones in the presence of an inorganic chloride to evolve hydrochloric acid during the reaction, and of alcohol, both initially present at the beginning of the reaction.

1,889,324. METHOD OF FORMING GROOVES IN THE ENDS OF TUBULAR ARTICLES. WILLIAM A. TATON, Elmira, N. Y. Filed Jan. 27, 1931. Serial No. 511,497. 4 Claims. (Cl. 29—156.)



1. A method of forming a hollow tubular pin having an inwardly tapered extremity provided with circumferentially spaced substantially axially extending oil grooves, each of greatest width at its end adjacent the end of the pin, which comprises the steps of indenting a tubular blank adjacent one end by application of radial inwardly directed rolling pressure at circumferentially spaced diametrically opposed points thereby to form in its surface a plurality of V-shaped depressions with their apexes remote from the adjacent end of the blank and their points of greatest width adjacent thereto, and then inwardly tapering the indented extremity of the blank and narrowing said depressions simultaneously by application of radial and axial pressure to said extremity.

1,889,325. STRAINER. RALPH S. WHALEY, Seattle, Wash., assignor to Petroleum Heat and Power Company, New York, N. Y., a Corporation of Delaware. Filed July 9, 1930. Serial No. 466,651. 4 Claims. (Cl. 210—165.)

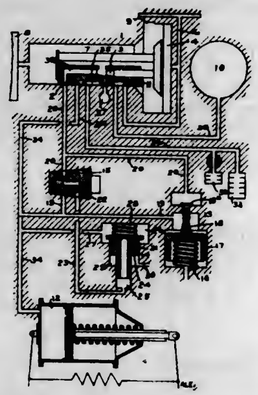


1. Screening apparatus comprising in combination a housing, slotted screen holding plates along the bottom and sides of the housing, and a screen in each of the slots in said plates, said screens being independently removable.

1,889,326. FLUID PRESSURE BRAKE. ALEXANDRE ANDRIKIDIS, Athens, Greece. Filed Nov. 14, 1930, Serial No. 495,664, and in Germany Sept. 8, 1930. 9 Claims. (Cl. 303—22.)

2. In an empty and load fluid pressure brake, the combination with a brake cylinder and a fluid pressure

sonrce, of a normally closed maximum pressure limiting valve device interposed between said source and said

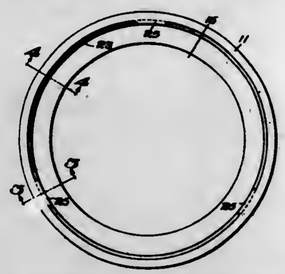


brake cylinder and operated by the pressure of fluid supplied from said source for opening communication from said source to the brake cylinder.

1,889,327. TREATMENT OF RUBBER. JOHANN A. BEATSCH, St. Louis, Mo., assignor to The Rubber Service Laboratories Company, Akron, Ohio, a Corporation of Ohio. Filed Oct. 10, 1930. Serial No. 487,917. 14 Claims. (Cl. 18—50.)

1. The process of treating rubber which comprises heating a rubber-sulfur mix in the presence of a cyclohexyl substituted aryl amine wherein the cyclohexyl group is attached to the nitrogen atom of said amine.

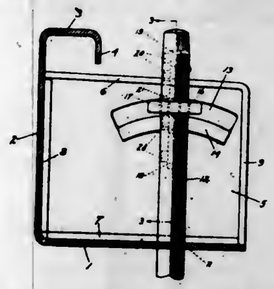
1,889,328. COVER FASTENING FOR WOODEN CONTAINERS AND METHOD OF MAKING THE SAME. ROBERT G. FESSENDEN, Townsend, Mass. Filed July 1, 1931. Serial No. 548,066. 8 Claims. (Cl. 217—80.)



6. A wooden container formed of a series of staves and having a cover for one end thereof, certain staves only presenting a croze in which the edges of the cover are adapted to be inserted and the intermediate staves having an open seating shoulder on which the cover is adapted to seat, said croze-presenting-staves being so distributed with reference to said open-shoulder-presenting staves that removal of less than half the overhanging shoulders of the crozes eliminates obstruction to removal of the cover throughout more than half of its periphery and thus permits removal of the cover.

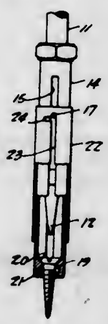
8. The method of constructing a covered wooden container adapted to be opened as hereinafter set forth which consists in forming an open seating shoulder around the major part of the inner periphery of the open end of a container, forming at a plurality of widely separated areas, distributed as hereinafter set forth, a croze adapted to receive the cover and having an overlying shoulder and so distributing said areas that less than half the shoulders thus formed lie within an extent of more than half the periphery of the container, so that removal of said less than half the shoulders will permit removal of the cover, and forcibly depressing the cover against the walls of said shoulders compressing the said walls and forcing the cover within the croze against the underlying seating shoulder.

1,889,329. STAKE LOCKING DEVICE FOR ROAD FORMS OR RAILS. HARRY E. HOLFORD, Binghamton, N. Y., assignor to Binghamton Foundry & Machine Co. Inc., Binghamton, N. Y., a Corporation of New York. Filed May 25, 1931. Serial No. 539,861. 10 Claims. (Cl. 25—118.)



6. A road form comprising a flanged rail, a flanged plate secured thereto and extending laterally therefrom, an arcuately adjustable stake receiving member on said plate adjustable toward and away from said rail, a stake adapted to pass through said member and a flange of said rail, and means for locking said stake in adjusted position, said member being captive on said plate and said locking means being carried by said member.

1,889,330. SCREW HOLDING ATTACHMENT FOR SCREW DRIVERS. HOMER C. HUMES and GEORGE L. ROBINSON, Los Angeles, Calif. Filed Feb. 28, 1932. Serial No. 594,436. 8 Claims. (Cl. 145—52.)

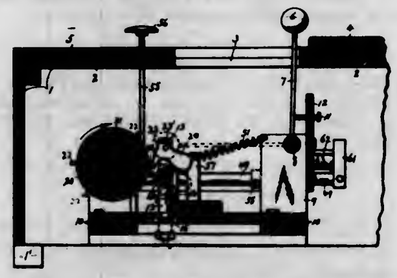


1. The combination of a screw driver, a lateral stop on the shank thereof; a screw holding attachment comprising an inner sleeve of resilient material mounted on said shank for free sliding movement longitudinally in relation thereto, said inner sleeve being longitudinally slit from its outer end to a point short of its inner end whereby to provide a way for said stop and to be radially expansible at its outer end enabling introduction of the head and shank of a screw into the bore of said inner sleeve, and an outer clamping sleeve slidably mounted over said inner sleeve so as to be disposable to contract said inner sleeve, said outer sleeve having a slot providing a way for said stop whereby the latter may be engaged with the inner end of said slot and the clamping sleeve be retracted from clamping position.

1,889,331. AGE RESISTING VULCANIZED RUBBER PRODUCT AND PROCESS OF MANUFACTURING SAME. JOSEPH R. INGRAM, Nitro, W. Va., assignor to The Rubber Service Laboratories Company, Akron, Ohio, a Corporation of Ohio. Filed Oct. 10, 1930. Serial No. 487,912. 8 Claims. (Cl. 18—50.)

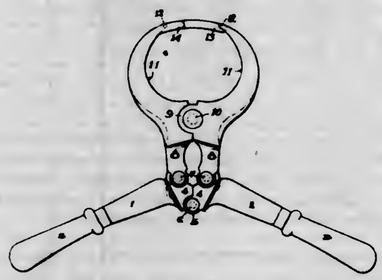
2. The process of vulcanizing rubber which comprises heating rubber and sulfur in the presence of an antioxidant comprising a reaction product of a diazotized aryl amine and diphenylamine prepared at a temperature below the decomposition point of said diazotized amine.

1,889,332. GOLF PRACTISING APPARATUS. WILLIS C. JONES and JOHN C. PIMM, Syracuse, N. Y., assignors of one-third to Loyd S. Pierce, Auburn, N. Y. Filed Mar. 7, 1931. Serial No. 520,863. 1 Claim. (Cl. 265—20.)



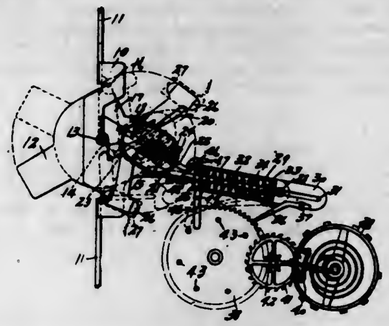
In a golf practise apparatus, a rocker-arm movable about a fixed axis to and from a normal position of rest and provided with a ball adapted to be driven in one direction from its normal position by means of a golf club, a movable member in the path of the driven ball and actuated thereby, a rotary element, means for transmitting motion from said movable member to the rotary element to cause the latter to rotate and to continue its rotation under its own momentum, a movable indicator, means for transmitting motion from the rotary element to the indicator, and releasable means for locking the rocker-arm in its driven position.

1,889,333. CORD SEVERING IMPLEMENT. PHILIP A. KLIPSTEIN, Bakersfield, Calif. Filed Feb. 24, 1931. Serial No. 517,919. 4 Claims. (Cl. 128—306.)



2. A funis severing implement comprising a pair of shanks having inwardly disposed jaws at adjacent ends thereof, pivotal means joining the shanks together, a projection extending from one of the jaws, which said projection extends along side and beyond the other jaw when the jaws are either separated for the maximum distance permitted during the operation thereof or are in close proximity to one another, and means for actuating the shanks, whereby the jaws may be moved toward or away from each other.

1,889,334. ELECTRIC SWITCH. FRANK O. KUHN, South Bend, Ind. Filed Mar. 25, 1929. Serial No. 349,761. 12 Claims. (Cl. 200—39.)



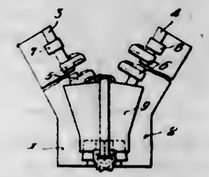
2. The combination with an electric switch having a shift button, of means controlling said switch to provide a delayed action thereof upon movement of the shift button in one direction, said means comprising a member latching said switch, a coil spring having a connection with said shift button whereby said spring will be stressed upon movement of the button in one direction, a longitudinally shiftable member carrying said spring and adapted to be shifted thereby, a pawl carried by said shiftable member, and an escapement governed gear wheel actuated by said pawl and adapted upon a predetermined rotation thereof to trip said latching member, said latching member being adapted to relatch said switch upon movement of the shift button in the other direction.

1,889,335. SLIDER. ROBERT C. LEGAT, New Britain, Conn., assignor to G. E. Prentice Manufacturing Company, New Britain, Conn., a Corporation of Connecticut. Filed Jan. 6, 1932. Serial No. 584,995. 5 Claims. (Cl. 24—205.)



1. A slider for fasteners of the class described, said slider having front and rear wings united at one end by a neck, a loop member secured to the neck portion of the slider and disposed within the plane of the slider body, a loop member integrally united to the lower end of one of the wings and projecting downwardly therefrom, and flexible pull members secured to the respective loop members.

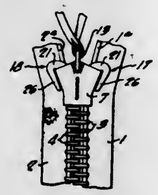
1,889,336. SEPARABLE FASTENER. ROBERT C. LEGAT, New Britain, Conn., assignor to G. E. Prentice Manufacturing Company, New Britain, Conn., a Corporation of Connecticut. Filed Apr. 6, 1931. Serial No. 527,997. 9 Claims. (Cl. 24—205.)



1. An end stop for use in separable fasteners of the kind having opposed series of fastener elements and flexible stringers supporting said series of elements, said stop com-

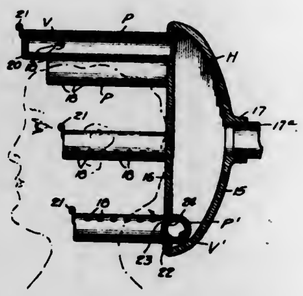
prising two sets of substantially parallel front and rear walls extending longitudinally of the stringer, the walls of each set being integrally united along their inner edges by inner walls, thereby providing sockets for the reception of the edges of the respective stringers, said walls having inner surfaces which are spaced a predetermined and fixed distance apart and adapted to engage the extreme edges of the stringers, and a connecting member uniting said inner walls at the lower end of the stop.

1,889,337. LOCKING END STOP FOR FASTENERS. ROBERT C. LEGAT, New Britain, Conn., assignor to G. E. Prentice Manufacturing Company, New Britain, Conn., a Corporation of Connecticut. Filed Jan. 6, 1932. Serial No. 584,998. 19 Claims. (Cl. 24—205.)



11. A fastener of the kind having stringers carrying opposed series of interengaging fastener elements and a slider for moving the elements of the opposed series into and out of engaging relation, and a stop secured to one of the stringers adjacent to one end of the series of fastener elements carried by the latter, said stop having an overhanging leg extending downwardly along the slider body and operative by engagement with the slider body to prevent tipping of the stop.

1,889,338. HAIR DRYING APPARATUS. GUST W. PETERSON, Long Beach, Calif., assignor, by direct and meane assignments, to William H. H. Davis, San Francisco, Calif. Filed July 22, 1929. Serial No. 380,049. 10 Claims. (Cl. 34—26.)



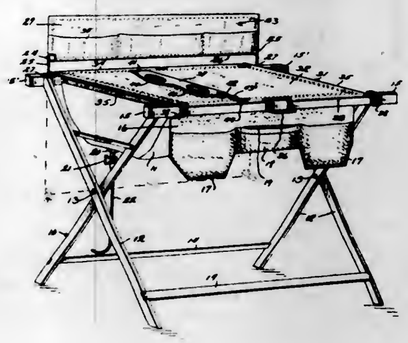
4. A hair drying apparatus comprising an air supply head, pipes extending from one side of the head in such arrangement that the head when in a vertical position may be presented to the human head with the pipes disposed horizontally about the head, and ports in the pipes at intervals throughout the length thereof.

1,889,339. COLLAR STUD AND NECKTIE RETAINER. ERNST WEISS, Dusseldorf, Germany. Filed Sept. 26, 1931, Serial No. 565,308, and in Germany Mar. 7, 1931. 9 Claims. (Cl. 24—61.)

2. A collar stud adapted to have a neck-tie retainer affixed to it, comprising in combination: a base plate; a shank on said base plate; a tilting head on said shank comprising a double-armed lever having one arm of U-shaped cross section constructed so as to form a recess to guide and hold the neck-tie retainer in position on three sides above the axis of rotation of said head; and recessed portions on the outer end of said shank of such form that the U-shaped arm of said lever rests in said recessed portions when said head is in the upwardly tilted position whereby said head forms an extension of said shank of substantially the same cross section.



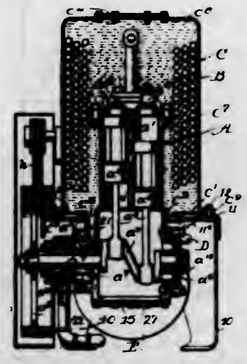
1,889,340. FOLDING COMBINATION BATHTUB AND DRESSING TABLE. EDWARD W. ANDERSEGG, Algoma, Wis. Filed May 16, 1931. Serial No. 537,927. 1 Claim. (Cl. 4—177.)



In a device as described including a supporting frame, a table member carried by said frame and movable into operative or inoperative position, said member comprising a wire frame, a webbing mounted within the wire frame, said wire frame comprising parallel front and rear members, parallel end members, and L-shaped members carried by the wire frame having one leg thereof disposed at substantially right angles to said front and end members and the other leg disposed in parallel outwardly extended position to said front members, said L-shaped members extending over the supporting frame and maintaining said wire frame against movement in one direction on said supporting frame upon movement of the wire frame into operative position, and holding said wire frame in depending position on said supporting frame when said wire frame is moved into inoperative position.

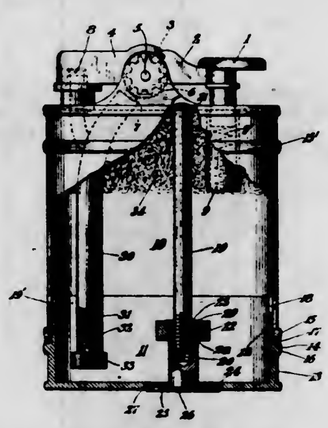
1,889,341. REFRIGERATING MACHINE. AUGUST P. ANDERSON, Chicago, Ill., assignor to Anderson-Rees Refrigerating Machine Co., Chicago, Ill., a Corporation of Illinois. Filed Aug. 30, 1930. Serial No. 478,906. 7 Claims. (Cl. 62—115.)

1. In a refrigerating machine, the combination of a compressor having a casing provided with a continuous flange therearound, a cylinder above the flange, and a crank-case below said flange, said flange, cylinder, and case being integral, a condenser coil around the compressor-cylinder, a water jacket with an open bottom, enclosing the condenser coil and cylinder and terminating at the flange, a supporting structure for the machine extending around the compressor crank-case, and compressor supporting



means to which said flange is secured, forming a closed bottom for the water jacket and a water-tight closure between the crank-case and the supporting structure.

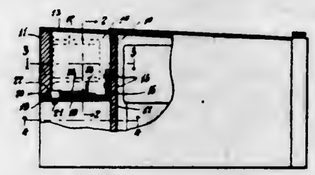
1,889,342. POCKET LIGHTER. LOUIS V. ARONSON, Newark, N. J., assignor to Art Metal Works, Inc., a Corporation of New Jersey. Filed Dec. 26, 1928. Serial No. 328,333. 6 Claims. (Cl. 67—7.1.)



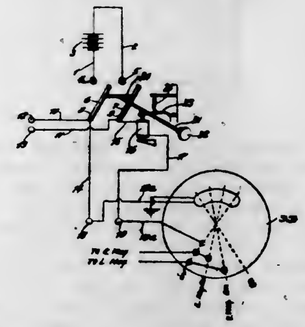
5. The combination with a fuel container adapted to carry pyrophoric lighting mechanism at one end thereof, of a closure member detachably related to the other end of said container, said closure member having a sleeve-like extension telescopically disposed with respect to the open end of said container, and means for retaining said closure member in closing position, said means comprising a threaded member having a disk-like face coacting with said closure member on the exterior surface thereof.

1,889,343. IGNITION SWITCH PROTECTOR. CHARLES L. BAHNYAK, Chicago, Ill. Filed May 4, 1932. Serial No. 609,216. 3 Claims. (Cl. 180—82.)

1. In combination with an ignition switch on a vehicle, means coacting with the vehicle structure forming a casing about the switch and including a pivoted closure, means under lock control to normally maintain the closure in closed position, an attaching plate secured to the vehicle structure within the space containing said switch and pivoting said closure, said closure having an opening therethrough to accommodate the passage of a cable therethrough, and a slide on said closure operable to vary the size of said opening.

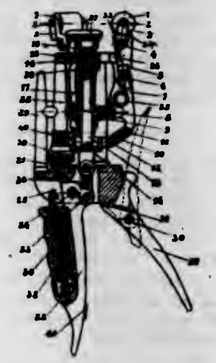


1,889,344. SAFETY SWITCH. BENJAMIN W. BELL, St. Louis County, Mo. Filed Sept. 29, 1930. Serial No. 485,120. 11 Claims. (Cl. 123—146.5.)



1. A device of the class described including a battery, a service circuit from said battery, a closed switch in said service circuit, an ignition switch, and means under the influence of the ignition switch adapted to automatically open closed switch upon the operation of the ignition switch to off position.

1,889,345. MASSAGING DEVICE. MICHEL CHARLES BLONDIN, Meudon, France. Filed June 20, 1931, Serial No. 545,734, and in France Aug. 19, 1930. 10 Claims. (Cl. 128—57.)



1. A massaging apparatus comprising a reciprocating pad, a set of rollers disposed around the pad, and adapted to bear on the skin, means for causing said rollers to

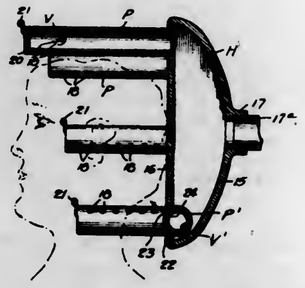
prising two sets of substantially parallel front and rear walls extending longitudinally of the stringer, the walls of each set being integrally united along their inner edges by inner walls, thereby providing sockets for the reception of the edges of the respective stringers, said walls having inner surfaces which are spaced a predetermined and fixed distance apart and adapted to engage the extreme edges of the stringers, and a connecting member uniting said inner walls at the lower end of the stop.

1,889,337. LOCKING END STOP FOR FASTENERS. ROBERT C. LEGAT, New Britain, Conn., assignor to G. E. Prentice Manufacturing Company, New Britain, Conn., a Corporation of Connecticut. Filed Jan. 6, 1932. Serial No. 584,998. 19 Claims. (Cl. 24—205.)



11. A fastener of the kind having stringers carrying opposed series of interengaging fastener elements and a slider for moving the elements of the opposed series into and out of engaging relation, and a stop secured to one of the stringers adjacent to one end of the series of fastener elements carried by the latter, said stop having an overhanging leg extending downwardly along the slider body and operative by engagement with the slider body to prevent tipping of the stop.

1,889,338. HAIR DRYING APPARATUS. GUST W. PETERSON, Long Beach, Calif., assignor, by direct and mesne assignments, to William H. H. Davis, San Francisco, Calif. Filed July 22, 1929. Serial No. 380,049. 10 Claims. (Cl. 34—26.)



4. A hair drying apparatus comprising an air supply head, pipes extending from one side of the head in such arrangement that the head when in a vertical position may be presented to the human head with the pipes disposed horisontally about the head, and ports in the pipes at intervals throughout the length thereof.

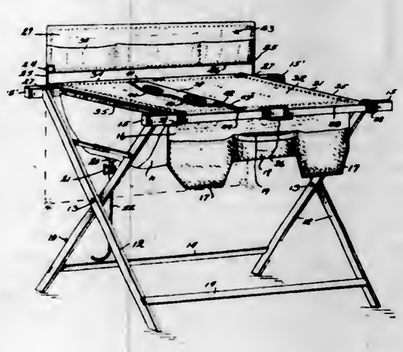
1,889,339. COLLAR STUD AND NECKTIE RETAINER. ERNST WEISS, Dusseldorf, Germany. Filed Sept. 26, 1931, Serial No. 565,308, and in Germany Mar. 7, 1931. 9 Claims. (Cl. 24—61.)

2. A collar stud adapted to have a neck-tie retainer affixed to it, comprising in combination: a base plate; a shank on said base plate; a tilting head on said shank comprising a double-armed lever having one arm of U-shaped cross section constructed so as to form a recess to guide and hold the neck-tie retainer in position on three sides above the axis of rotation of said head; and re-



cessed portions on the outer end of said shank of such form that the U-shaped arm of said lever rests in said recessed portions when said head is in the upwardly tilted position whereby said head forms an extension of said shank of substantially the same cross section.

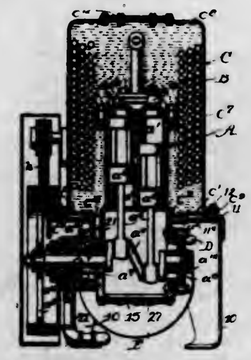
1,889,340. FOLDING COMBINATION BATHTUB AND DRESSING TABLE. EDWARD W. ANDERSEGG, Algoma, Wis. Filed May 16, 1931. Serial No. 537,927. 1 Claim. (Cl. 4—177.)



In a device as described including a supporting frame, a table member carried by said frame and movable into operative or inoperative position, said member comprising a wire frame, a webbing mounted within the wire frame, said wire frame comprising parallel front and rear members, parallel end members, and L-shaped members carried by the wire frame having one leg thereof disposed at substantially right angles to said front and end members and the other leg disposed in parallel outwardly extended position to said front members, said L-shaped members extending over the supporting frame and maintaining said wire frame against movement in one direction on said supporting frame upon movement of the wire frame into operative position, and holding said wire frame in depending position on said supporting frame when said wire frame is moved into inoperative position.

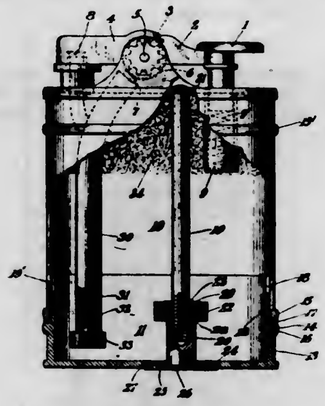
1,889,341. REFRIGERATING MACHINE. AUGUST P. ANDERSON, Chicago, Ill., assignor to Anderson-Rees Refrigerating Machine Co., Chicago, Ill., a Corporation of Illinois. Filed Aug. 30, 1930. Serial No. 478,906. 7 Claims. (Cl. 62—115.)

1. In a refrigerating machine, the combination of a compressor having a casing provided with a continuous flange therearound, a cylinder above the flange, and a crank-case below said flange, said flange, cylinder, and case being integral, a condenser coil around the compressor-cylinder, a water jacket with an open bottom, enclosing the condenser coil and cylinder and terminating at the flange, a supporting structure for the machine extending around the compressor crank-case, and compressor supporting



means to which said flange is secured, forming a closed bottom for the water jacket and a water-tight closure between the crank-case and the supporting structure.

1,889,342. POCKET LIGHTER. LOUIS V. ARONSON, Newark, N. J., assignor to Art Metal Works, Inc., a Corporation of New Jersey. Filed Dec. 26, 1928. Serial No. 328,333. 6 Claims. (Cl. 67—7.1.)

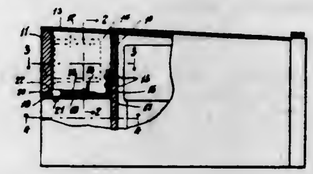


5. The combination with a fuel container adapted to carry pyrophoric lighting mechanism at one end thereof, of a closure member detachably related to the other end of said container, said closure member having a sleeve-like extension telescopically disposed with respect to the open end of said container, and means for retaining said closure member in closing position, said means comprising a threaded member having a disk-like face coacting with said closure member on the exterior surface thereof.

1,889,343. IGNITION SWITCH PROTECTOR. CHARLES L. BAHNYAK, Chicago, Ill. Filed May 4, 1932. Serial No. 609,216. 3 Claims. (Cl. 180—82.)

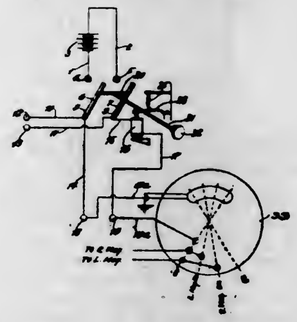
1. In combination with an ignition switch on a vehicle, means coacting with the vehicle structure forming a casing about the switch and including a pivoted closure, means under lock control to normally maintain the closure in

closed position, an attaching plate secured to the vehicle structure within the space containing said switch and pivoting said closure, said closure having an opening there-



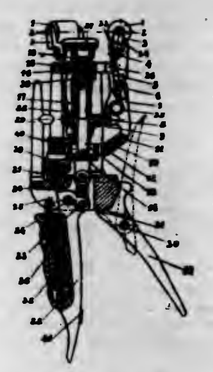
through to accommodate the passage of a cable therethrough, and a slide on said closure operable to vary the size of said opening.

1,889,344. SAFETY SWITCH. BENJAMIN W. BELL, St. Louis County, Mo. Filed Sept. 29, 1930. Serial No. 485,120. 11 Claims. (Cl. 123—146.5.)



1. A device of the class described including a battery, a service circuit from said battery, a closed switch in said service circuit, an ignition switch, and means under the influence of the ignition switch adapted to automatically open closed switch upon the operation of the ignition switch to off position.

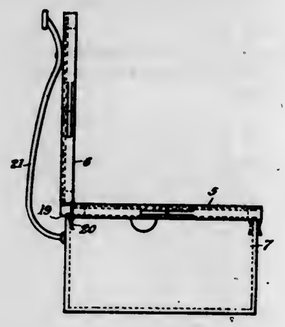
1,889 345. MASSAGING DEVICE. MICHEL CHARLES BLONDIN, Meudon, France. Filed June 20, 1931, Serial No. 545,734, and in France Aug. 19, 1930. 10 Claims. (Cl. 128—57.)



1. A massaging apparatus comprising a reciprocating pad, a set of rollers disposed around the pad, and adapted to bear on the skin, means for causing said rollers to

move inwardly without rolling for forming a swelling of the skin, means for pressing the pad against the skin after formation of the swelling for kneading it and means for rolling the rollers outwardly over the skin for smoothing it after application of the pad.

1,889,346. FRAME FOR DISPLAY CONTAINERS. HARRY C. BRILL, Newark, N. J. Filed June 13, 1930. Serial No. 460,972. 8 Claims. (Cl. 217—58.)



1. An attachment for boxes comprising primary and auxiliary closures hingedly connected to each other at their rear edges, the primary closure having a frame to rest upon walls of a box and being adjustable to fit the box, a transparent sheet carried by said frame to permit inspection of contents of the box, said auxiliary closure being adjustable to correspond to dimensions of the primary closure, and a stop at the rear edge of the auxiliary closure to engage the upper edge of the rear wall of the box and rear edge of the primary closure when the auxiliary closure is in an elevated position and cause the primary closure to be tilted upwardly to an open position when the auxiliary closure is moved rearwardly beyond a perpendicular position.

1,889,347. PROCESS FOR PREPARING ORGANIC ACIDS AND PRODUCTS. HERMAN ALEXANDER BRUSON, Philadelphia, Pa., assignor to The Resinous Products & Chemical Company, a Corporation of Delaware. Filed May 5, 1930. Serial No. 450,061. 16 Claims. (Cl. 260—64.)

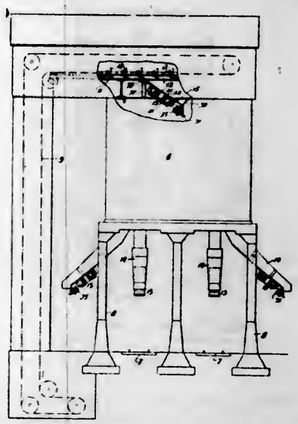
7. In the process for preparing ketonic acids, the step which comprises condensing a substance of the class consisting of aromatic hydrocarbons, phenols, and halogenated aromatic hydrocarbons, in the presence of a Friedel–Crafts type of condensing agent with a compound of the group consisting of aliphatic olefines and alkyl monohalides, and an anhydride of a dicarboxylic acid.

1,889,348. PROCESS OF MAKING HEPTALDEHYDE AND UNDECYLENIC ACID. HERMAN A. BRUSON, Germantown, Pa., and JACK D. ROBINSON, Audubon, N. J., assignors to The Resinous Products & Chemical Co. Inc., Philadelphia, Pa. Filed May 9, 1931. Serial No. 536,304. 10 Claims. (Cl. 260—169.)

2. A process for making heptaldehyde and undecylenic acid which comprises distilling a mixture of raw castor oil and an acidic resin under vacuum at a temperature above the decomposition point of the castor oil, and condensing the vapors.

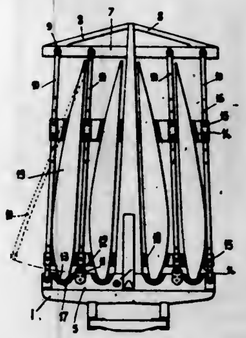
7. The process for making heptaldehyde and undecylenic acid which comprises destructively distilling a mixture of raw castor oil and ester gum under vacuum at a temperature of 300–340° C. and condensing the vapors.

1,889,349. MAGNETIC SEPARATOR. WILLARD C. BUTTON, Albany, N. Y., assignor to General Electric Company, a Corporation of New York. Filed May 14, 1928. Serial No. 277,594. 11 Claims. (Cl. 209—223.)



1. In apparatus for separating magnetically attractable materials from other materials, the combination of an inclined magnetizable plate having a pair of apertures therein, a pair of electromagnets below said plate having cores extending into said apertures and associated therewith to provide effective magnetic contact therebetween and a non-magnetic insert in said plate between said apertures, together with an extension of said plate extending at an angle from an end thereof and other electromagnets associated with said extension.

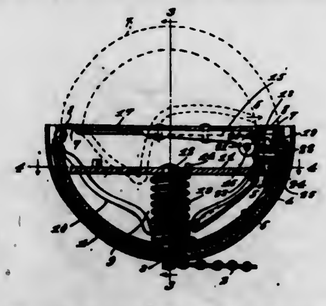
1,889,350. AEROFOIL-CARRYING RACK. CARLO COHEN-VENEZIAN, Turin, Italy. Filed May 21, 1930. Serial No. 454,437, and in Italy May 28, 1929. 8 Claims. (Cl. 211—60.)



1. Means for carrying aircraft planes and wings, comprising a number of supporting structures, rods extending across each of said structures and having one end pivotally connected therewith, means for releasably locking the opposite end of each rod on its cooperating structure, and means on each rod for engaging wings in position.

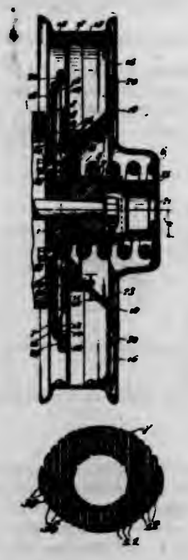
1,889,351. ANIMAL TRAP. HARRY COOPER, Carrollton, Mo. Filed Aug. 25, 1931. Serial No. 559,272. 4 Claims. (Cl. 43—63.)

1. A trap comprising a semi-spherical shaped support, anchoring means for the support, jaws pivoted to said support and disposed within the latter when in a set position, a treadle means for holding said jaws in a set position, means under the influence of said treadle means for urging the jaws outwardly of the support into gripping position, and semi-spherical shaped shields carried



by the jaws and confined within the support when said jaws are in a set position and substantially close the space between the support and the jaws when the latter are in gripping position.

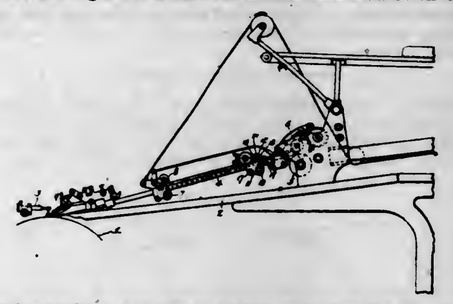
1,889,352. TRANSMISSION FOR VEHICLE WHEELS. ELBERT A. CORBIN, Jr., Swarthmore, Pa., assignor of one-third to William C. Biddle, Lansdowne, Pa., and one-third to William A. Brown, Philadelphia, Pa. Filed Mar. 26, 1928. Serial No. 264,805. 3 Claims. (Cl. 64—98.)



1. The herein described power transmitting member in the form of a sectional disc having projecting from opposite faces spaced driving elements arranged in rows with the rows on one face disposed at an angle to the rows on the opposite face in combination with a driving and driven member in splined relation with said driving elements.

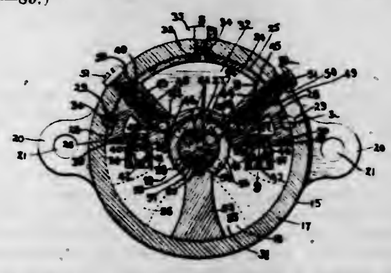
1,889,353. SHEET STRAIGHTENING CONVEYING MECHANISM. FRANK L. CROSS, Port Washington, N. Y., assignor to Cross Paper Feeder Company, Boston, Mass., a Corporation of Massachusetts. Filed June 27, 1930. Serial No. 464,224. 12 Claims. (Cl. 271—46.)

1. Sheet conveying mechanism having in combination, successively acting high speed conveying surfaces and slow-down conveying surfaces for advancing sheets, cooperating rollers for holding sheets against said surfaces, sheet straightening devices associated with said slow-down con-



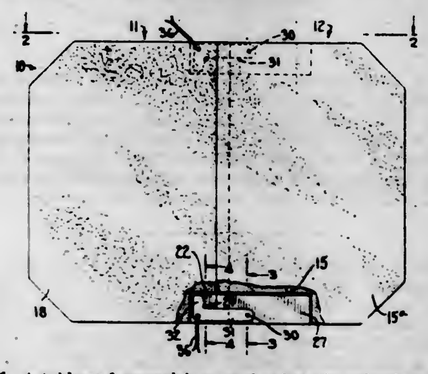
veying surfaces, and means jointly controlling the operative relation of said rollers with said slow-down conveying surfaces and the action of said sheet straightening devices.

1,889,354. SHOCK ABSORBER. MICHAEL FIELDMAN, Philadelphia, Pa. Filed June 28, 1927, Serial No. 200,812. Renewed May 14, 1931. 13 Claims. (Cl. 188—89.)



1. A shock absorber comprising a closed cylindrical body, a valve housing within the body dividing the interior thereof into two compartments, two sets of check valve controlled inlets and outlets forming communications between said compartments at separated points, a piston within one of the compartments, said inlets and outlets permitting a flow of fluid within the body from one compartment to the other at opposite sides of the piston, and means providing for a limited flow of fluid from one side of the piston to the other within its compartment.

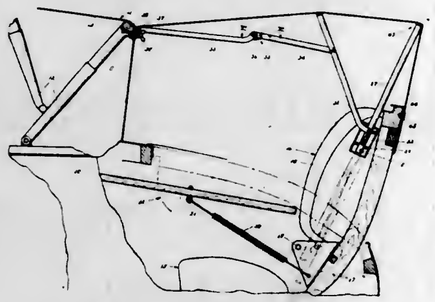
1,889,355. TABLE TOP. CHARLES W. GREENHILL, New York, N. Y. Filed Dec. 17, 1931. Serial No. 581,609. 10 Claims. (Cl. 45—684.)



1. A table pad comprising a pair of sections having meeting edges, and means for attaching said sections together

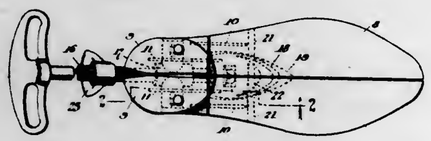
comprising a member pivoted to one of said sections, said sections being provided with means for housing said attaching means including a recess for receiving said pivoted member in unattached position whereby said attaching means will be unexposed when the sections are attached together.

1,889,356. AUXILIARY SEAT TOP. GEORGE E. GRIMM, Toledo, Ohio, assignor to The Willys-Overland Company, Toledo, Ohio, a Corporation of Ohio. Filed Feb. 20, 1928. Serial No. 255,622. 3 Claims. (Cl. 296—99.)



1. In an automobile having a rumble seat including a substantially horizontal seat portion and a laterally indentured pivoted seat back portion spaced therefrom; a foldable top for said seat comprising a U-shaped frame member; plates mounted at each end of said pivoted seat back portion, said plates having longitudinally arranged slots and projecting portions, the extremities of said U-shaped member being pivotally arranged in said slots and serrations in said U-shaped member engageable with the projections on said plates for positively securing said U-shaped member in raised position; and manual means for clamping the extremities of said U-shaped member into engagement with said plates.

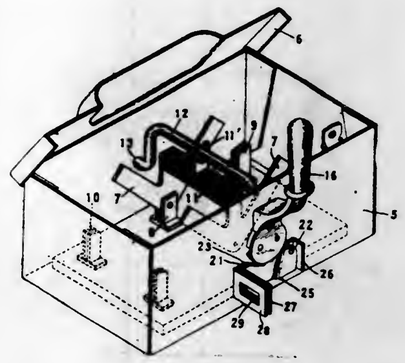
1,889,357. SHOE STRETCHER. GAETANO GUIFFRE, Washington, D. C. Filed Oct. 14, 1931. Serial No. 568,804. 6 Claims. (Cl. 12—128.3.)



1. In a shoe stretcher the combination of laterally adjustable side portions, a wedge block cooperable therewith, a screw threaded bar carrying the wedge block, a shoe heel piece mounting the screw bar, and means for locking the wedge block to said side portions whereby turning of the screw bar operates to lengthwise adjust said side portions relative to said heel piece, substantially as set forth.

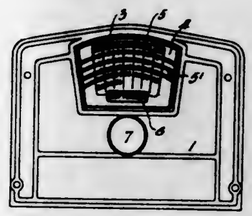
1,889,358. DOUBLE THROW SWITCH. HERMAN J. HAMMERLY, Wallingford, Conn., assignor to The Trumbull Electric Manufacturing Company, Plainville, Conn., a Corporation of Connecticut. Filed Apr. 18, 1931. Serial No. 531,057. 5 Claims. (Cl. 200—169.)

1. A double-throw switch including a box, a switch within said box, an external operating handle having operable connection with said switch and having a number of angular sided lug-receiving recesses corresponding with the usual central "off" position and the two respective "on" positions of the switch, a bracket mounted outside of said box and having a lock-receiving slot, a pivoted latch member mounted outside of said box and having an



angular sided lug for engagement with any one of the recesses in said handle, said latch also having a projecting portion provided with a lock-receiving slot arranged to register with the slot in said bracket when the lug on said latch is engaged in one of the recesses on said handle.

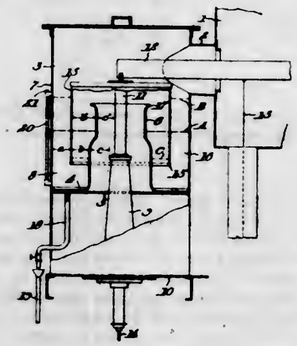
1,889,359. PERPETUAL CALENDAR. HARCOURT CORY HANROTT, Westminster, London, England. Filed Jan. 27, 1931, Serial No. 511,609, and in Great Britain Feb. 5, 1930. 10 Claims. (Cl. 40—107.)



1. In a perpetual calendar of the type set out, the combination of a casing, said casing having an aperture in the front thereof, a detachable back on the casing alignment lugs on the casing, a month sheet visible through the aperture in the casing, a cancellation disc having cancelling lines arranged in a series of interrupted concentric circles, mounted between the wall of the casing and the month sheet, a month name disc rotatably mounted in the casing, and means for rotating the cancellation disc, said month sheet and back having cut away portions for engagement with the alignment lugs on the casing.

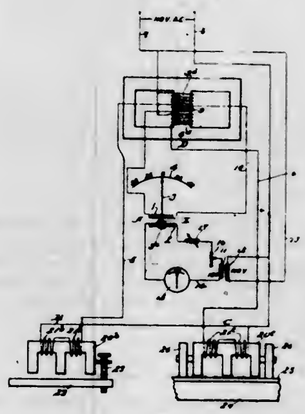
1,889,360. LIQUID SEAL. PIERRE HERBER, Middlesex, N. J., assignor to Research Corporation, New York, N. Y., a Corporation of New York. Filed May 26, 1931. Serial No. 540,129. 9 Claims. (Cl. 173—318.)

1. In an electrical apparatus, the combination with a chamber having an opening in one wall thereof, and supporting means in said chamber and extending through said opening, of a liquid insulating seal for closing said opening, said seal comprising coaxial walls spaced from said supporting means and providing a trough for the reception of a liquid insulating medium, a hood carried by said



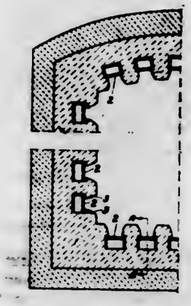
supporting means and depending into said trough to divide the same into two annular interconnected sections of substantially equal horizontal cross-section.

1,889,361. ELECTRICAL MEASURING INSTRUMENT. ROBERT D. HICKOK, Cleveland, Ohio, assignor to The Magnetic Gauge Company, Akron, Ohio, a Corporation of Ohio. Filed Oct. 24, 1927. Serial No. 228,404. 7 Claims. (Cl. 171—95.)



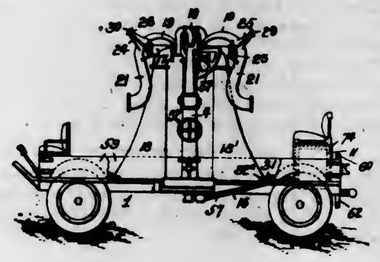
1. Apparatus for measuring the value of a resultant electric current representing the difference in alternating currents flowing through two circuits, comprising an indicating dynamometer having fixed and movable coils, one energized by such resultant current and the other independently from the same course, the fixed coil having its windings continued substantially to its center, and the movable coil being a light annulus embracing the fixed coil, and one of them having means for adjusting it along its own plane to center the magnetic fields of the coils.

1,889,362. ELECTRIC RESISTANCE FURNACE. LENNART HÖGEL, Vasteras, Sweden, assignor to Allmanna Svenska Elektriska Aktiebolaget, Vasteras, Sweden, a Corporation of Sweden. Filed Sept. 23, 1931, Serial No. 564,575, and in Sweden June 14, 1929. 5 Claims. (Cl. 13—25.)



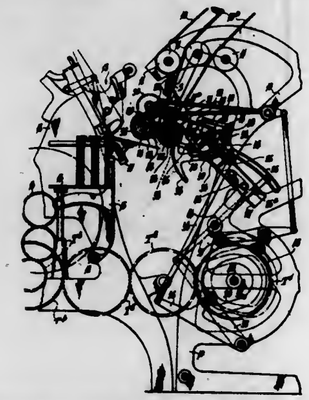
1. An electric resistance furnace consisting of refractory walls and resistance elements in the shape of corrugated bands arranged along said walls and directly supported by them in such a manner that one broad side of the band is free to radiate to the interior of the furnace.

1,889,363. SOUND LOCATOR. FRANK R. HOUSE, Baldwin Harbor, N. Y., assignor to Sperry Gyroscope Company, Inc., Brooklyn, N. Y., a Corporation of New York. Filed Mar. 23, 1931. Serial No. 524,664. 12 Claims. (Cl. 181—26.)



1. In a sound locator, a pair of spaced standards, a hollow shaft journalled therein, a pair of sound locator horns, each horn having a double U bend therein, and means for securing a horn to each end of said shaft adjacent but within the upper inverse bend.

1,889,364. METHOD OF AND MECHANISM FOR OPENING SHEETS IN SHEET-HANDLING MACHINES. OSCAR KLEINSCHMIT and RUDOLF KLEMM, Leipsig-Plagwitz, Germany, assignors to Gebruder Brehmer, Leipzig-Plagwitz, Germany, a Limited Partnership of Germany. Filed Dec. 15, 1931, Serial No. 581,230, and in Germany Feb. 7, 1931. 19 Claims. (Cl. 270—53.)



1. A method of opening and feeding folded sheets to the movable sheet-carrier of a book-binding machine, which includes causing a sheet-opening device during each operative period thereof to move with the said sheet-carrier through some part of the travel of the latter.

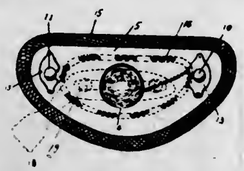
1,889,365. PROCESS FOR THE MANUFACTURE OF ASPHALT. ALBERT LOEBEL, Amsterdam, Netherlands, assignor to Naamlooze Vennootschap de Bataafsche Petroleum Maatschappij, The Hague, Netherlands. Filed Apr. 19, 1930, Serial No. 445,818, and in the Netherlands Dec. 9, 1927. 2 Claims. (Cl. 196—74.)

1. A process of manufacturing asphalt from crude asphaltic oil or asphaltic residuum, comprising the steps of extracting a hydrocarbon oil having an initial boiling point of at least 250° C. with liquid sulphur dioxide, then adding to the asphaltic oil or residuum that portion of the hydrocarbon oil subjected to the extraction treatment which is insoluble in the liquid sulphur dioxide, and blowing the mixture to form an oxidized asphalt.

1,889,366. MAGNESIUM HYDRATE TABLETS AND PROCESS OF MAKING THE SAME. WILLIAM C. MCGOWAN, Cincinnati, Ohio, assignor, by mesne assignments, to Milnesia Laboratories, Inc., New York, N. Y., a Corporation of Delaware. Filed May 3, 1928. Serial No. 274,970. 5 Claims. (Cl. 167—72.)

1. The process which comprises hydrating magnesium oxide to form water moist magnesium hydrate and granulating the magnesium hydrate while still water moist after having been mixed with a diluent and a binder.

1,889,367. TRUSS. JOHN MCNULTY, Cincinnati, Ohio, assignor to The Ohio Truss Company, a Corporation of Ohio. Filed May 29, 1931. Serial No. 540,849. 3 Claims. (Cl. 128—104.)



1. In a truss, a pad comprising an inner plate, an outer plate, a removable fabric cover for said pad, draw-strings for tightening said cover on said pad, a countersunk spool on said inner plate for securing the ends of said draw-strings, and means for clamping the edges of said cover between said plates.

1,889,368. BOAT. LEWIS PAUL MESSENGER, Santa Barbara, Calif., assignor of one-half to Lester Montgomery, Santa Barbara, Calif. Filed June 18, 1931. Serial No. 545,289. 9 Claims. (Cl. 9—6.)



1. A boat of the character described comprising a sheet metal hull, a channel formed throughout the edges of the gunwales of the hull, a sheet metal deck covering said hull, inturned flanges formed throughout the edges of the deck and having water-tight engagement in said channels, means to provide an air and water-tight chamber in each end of the boat, said deck having a central opening formed therethrough, and a guard collar surrounding said opening and standing up from the deck.

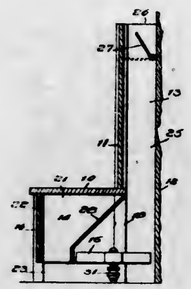
1,889,369. HAND CARD. HERBERT MIDGLEY, Worcester, Mass.; Worcester Bank & Trust Company executor of said Herbert Midgley, deceased. Filed Dec. 21, 1931. Serial No. 582,230. 4 Claims. (Cl. 119—93.)



1. As an article of manufacture, a hand card having a back, a layer of card-clothing on the front surface of the back comprising a foundation, and a strip of sheet metal having teeth extending into the front surface of the foundation, said strip being located along the edge of said back, the rear edge of the sheet metal extending into a saw kerf in the back to hold it in position.

1,889,370. COMBINED RADIATOR COVER AND SEAT. ARTHUR B. MODINE, Racine, Wis., assignor to Modine Manufacturing Company, Racine, Wis., a Corporation of Wisconsin. Original application filed Mar. 25, 1927, Serial No. 178,486. Divided and this application filed May 8, 1930. Serial No. 450,728. 7 Claims. (Cl. 257—136.)

3. In a combined radiator cover and seat having a body supporting portion and a back, the body supporting portion being arranged to provide a space below said portion for the reception of a heat exchange unit, the back having rearwardly extending side walls for cooperation with a wall of the room in which said article is located, to thereby provide a duct for conveying heated air into the room and a member extending downwardly relatively to

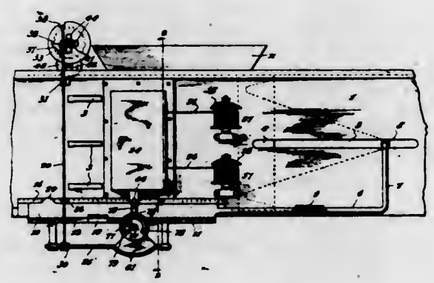


said body supporting portion and into the space below said portion, said member providing means for directing heated air toward said duct.

1,889,371. PROCESS OF PRODUCING ANILINE-2:5-DISULPHONIC ACID. WILHELM NEELMEIER, Leverkusen-on-the-Rhine, and EDMUND VAN HULLE, Cologne-Deutz, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Feb. 3, 1928, Serial No. 251,734, and in Germany Feb. 18, 1927. 3 Claims. (Cl. 260—129.)

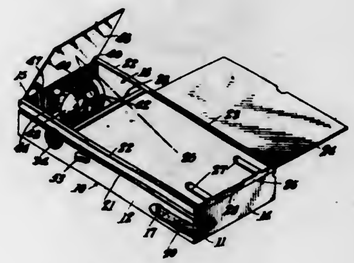
1. In the process for the manufacture of aniline-2:5-disulphonic acid, the steps which comprise sulphonating aniline-3-sulphonic acid with oleum until the monosulphonic acid has disappeared and boiling the resulting mixture of di- and tri-sulphonic acids with a dilute mineral acid until all trisulphonic acid is dissociated.

1,889,372. BALE-TYING MECHANISM. RUDOLPH Z. NOLAN, Godfrey, Ill. Filed May 23, 1930. Serial No. 455,068. 15 Claims. (Cl. 100—20.)



1. The combination with a baling chamber, of means for feeding tie wires into the chamber, tying the wires together and severing the ties, a vertically disposed trip rod on the side of the baling chamber arranged to shift said means into operative or inoperative position, a disk on top of the baling chamber arranged to have its periphery support said trip rod whereby the first-mentioned means will be maintained in inoperative position, said disk being provided with a peripheral notch to receive the upper end of the trip rod and permit the rod to drop and move the first-mentioned means to operative position, means controlled by the movement of material through the baling chamber to rotate said disk for releasing the trip rod, and means actuated by the trip rod for setting the disk to support the rod in raised position.

1,889,373. COMBINATION WRITING PAD AND FLASH LIGHT. LEONARD PEREIRA, New York, N. Y. Filed Jan. 19, 1932. Serial No. 587,465. 6 Claims. (Cl. 240—6.4.)



5. In a device of the character described, a casing, a cover for one portion of said casing hinged to a longitudinal wall thereof, a cover plate for the remainder of the casing hinged to an end wall thereof, and having a reflective inner surface, a diffusing lens in said end wall, a tiltable lamp supported in the latter portion of the casing, and arranged to lie wholly within the casing when the latter cover plate is closed, and when in such position to direct its rays through the lens, and means to simulaneously raise the latter cover plate and tilt the lamp, so that the light rays are reflected by the latter cover plate to illuminate the first mentioned portion of the casing.

1,889,374. METHOD AND MEANS FOR RENEWING INK-REPELLENT SURFACES ON MERCURY PRINTING PLATES. HEINRICH RENCK, Hamburg, Germany. Original application filed Feb. 15, 1930, Serial No. 428,723, and in Germany Nov. 26, 1929. Divided and this application filed May 5, 1931. Serial No. 535,272. 5 Claims. (Cl. 101—147.)

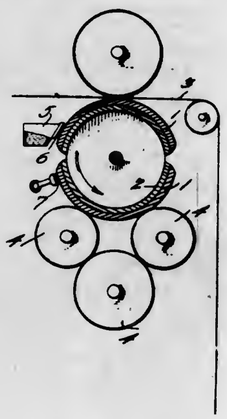


1. A method of renewing the mercury to the ink-repellent parts of mercury printing plates during the use of such plates in printing consisting in delivering the mercury in finely atomized form to the surface of a non-inking roller operating in contact with the plate.

1,889,375. METHOD AND MEANS FOR RENEWING INK-REPELLENT SURFACES ON MERCURY PRINTING PLATES. HEINRICH RENCK, Hamburg, Germany. Original application filed Feb. 15, 1930. Serial No. 428,723, and in Germany Nov. 26, 1929. Divided and this application filed May 5, 1931. Serial No. 535,273. 3 Claims. (Cl. 101—147.)

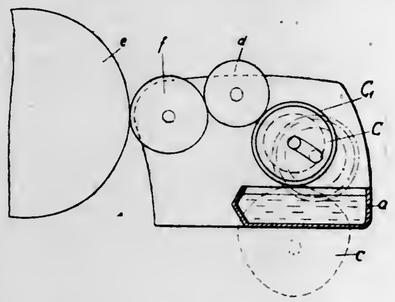
1. A method of renewing the amalgam-coated surface of mercury printing plates during the printing process

consisting in applying to the plate prior to its being inked a watery solution of mercury salts, and immedi-



ately thereafter wiping the watery content of such solution from the surface of the plate.

1,889,376. PROCEDURE FOR FRESHENING UP AMALGAMATED PRINTING SPOTS. HEINRICH RENCK, Hamburg, Germany. Filed May 5, 1931. Serial No. 535,274. 5 Claims. (Cl. 101—148.)

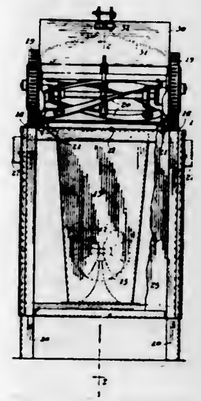


1. The herein described process of refreshening the color-repelling amalgam spots of amalgam printing plates, consisting in depositing mercurial salts on a rotating element to form an amalgam thereon, transferring the available portion of such amalgam onto a second rotating element moving in contact and synchronism with the printing plate, and transferring such available portion of the amalgam to the printing plate through such contact whereby to refreshen the color-repellent amalgam spots of the printing plate.

1,889,377. ARTIFICIAL WOOL AND ART OF MAKING SAME. GINO M. ROSSATI, New York, N. Y. Filed Oct. 6, 1931, Serial No. 567,302, and in Germany Oct. 9, 1930. 17 Claims. (Cl. 92—13.)

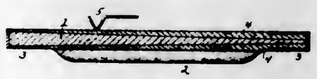
1. The method of treating vegetable fibres to convert said fibres into material resembling natural wool in quality and in appearance, consisting of treating the cut fibres with an alkali solution until substances holding the fibres together are dissolved and the individual fibres become separated, and thereafter drying the fibres until they begin to crinkle, bleaching the fibres, neutralising the alkali therein, impregnating the fibres with a fatty acid made from wool grease and then again drying the fibres in a heated tumbler.

1,889,378. DISPLAY STAND FOR LAWN MOWERS. LESTER B. ROTH, Prophetstown, Ill., assignor to Eclipse Lawn Mower Company, Prophetstown, Ill., a Corporation of Illinois. Filed July 11, 1932. Serial No. 621,886. 15 Claims. (Cl. 35—12.)



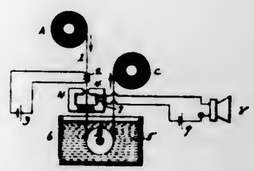
1. A display stand comprising a supporting frame provided with means for supporting a lawn mower; an air duct in said frame arranged to discharge air substantially tangentially against the cutter blades of the cutter reel of a lawn mower held by said supporting means; and means for discharging a blast of air through said duct against said blades.

1,889,379. METHOD OF MAKING AN ELECTRICAL RESISTANCE ELEMENT. SAMUEL RUBEN, New Rochelle, N. Y. Filed Apr. 1, 1931. Serial No. 526,894. 8 Claims. (Cl. 201—76.)



1. The method of making a resistance element which consists in heating a copper body in an oxidizing atmosphere until it is converted into a vitreous mass of cuprous oxide, applying to the element a solution of phosphoric acid, coating the surface with sulphur and converting a portion of the cuprous oxide element into cupric sulphide by heat, and cooling said element when a predetermined resistance value is reached.

1,889,380. DEVICE AND METHOD FOR RECORDING SOUND WAVES. SAMUEL RUBEN, New Rochelle, N. Y. Filed July 14, 1931. Serial No. 550,707. 10 Claims. (Cl. 179—100.2.)

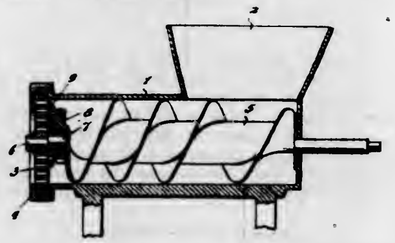


1. The method of recording audio frequency oscillations which consists in varying the intensity of the field of an electro-magnet, by impressing electrical oscillations

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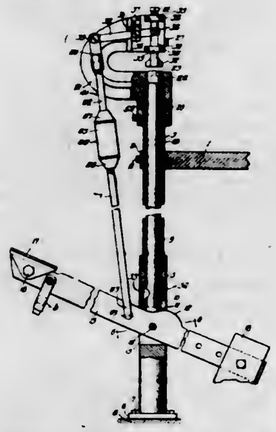
of audio frequency upon the circuit controlling said field and transposing magnetically permeable particles suspended in a mixture coated upon a magnetically permeable metal base within said field in accordance with said oscillations.

1,889,381. FOOD CHOPPER. WILLIAM R. RUSH, Mulberry, Kans. Filed Oct. 21, 1930. Serial No. 490,284. 3 Claims. (Cl. 146—181.)



1. In a food chopper or grinding machine and in combination with the usual screw conveyer provided with a forward extension, a cutter removably fitted upon said extension and rotatable with the conveyer and comprising a holder having forward projections and lateral lugs adjacent their outer ends, and disk cutters formed with central openings to receive the projections of the holder, and having notches at a side of the openings to clear the lugs of said projections to admit of readily removing or placing the disk cutters in position.

1,889,382. PUNCH PRESS. ERNEST SAAS, Aurora, Ill. Filed May 27, 1929. Serial No. 366,207. 6 Claims. (Cl. 164—110.)

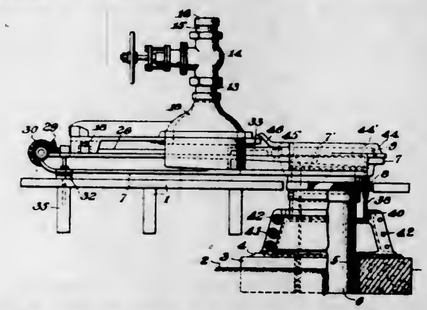


3. In a punch press, a standard, a tubular column mounted in the standard, an operating lever mounted in the standard, a plunger mounted in the column for vertical reciprocation therein and provided at its lower end with a pressure receiving element, the lever being provided with an upwardly extending cam contacting said element for raising the plunger when the lever is operated in proper direction, a head mounted on the column, a die mounted in the head for vertical movement and having its under face in contact with the upper end of the plunger, a punch mounted in the head above and in alignment with the die, a stripper mounted on the head for vertical reciprocation and having stripping elements at opposite sides of and adjacent the punch, and operating connections between the lever and the stripper acting to raise the stripper into inoperative position as the die is raised into operative relation to the punch and to move the stripper downwardly along the punch as the die approaches the end of its return movement.

1,889,383. METAL COMPLEX COMPOUND. HANS SCHMIDT, Wuppertal/Vohwinkel, Germany, assignor to Winthrop Chemical Company, Inc., New York, N. Y., a Corporation of New York. Filed June 4, 1931, Serial No. 542,191, and in Germany June 8, 1930. 20 Claims. (Cl. 260—11.)

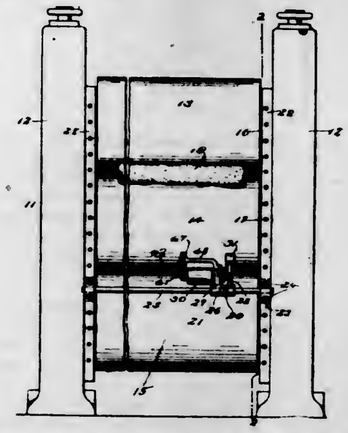
10. As new products complex compounds of trivalent antimony with pyrocatechol disulfonic acid, containing, calcium and sodium as neutralizing bases, said complex compounds being whitish powders, soluble in water with neutral reaction.

1,889,384. CONTROL VALVE EQUIPMENT FOR OIL AND GAS WELLS. EUGENE HENRY SCHNEIDER, Denver, Colo. Filed May 22, 1931. Serial No. 539,289. 18 Claims. (Cl. 166—15.)



1. The combination of a valve seat and a valve frame with guideways lower than the said seat and at a slight angle thereto, with means to attach them to a well casing, a valve cap carried by the valve frame and engaging said guideways, and means carried by the valve frame to move the valve cap to a tight seat in alignment with said seat due to the angle between said seat and said guideways.

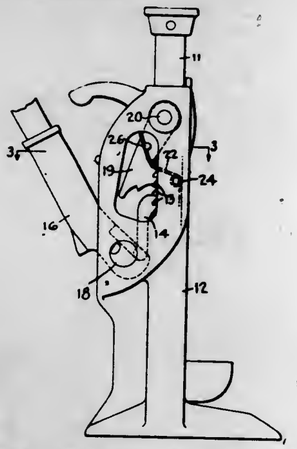
1,889,385. METHOD OF AND APPARATUS FOR INDICATING TEMPERATURES OF MOVING BODIES. PAUL B. SCHUSTER, Akron, Ohio, assignor to The Magnetic Gauge Company, Akron, Ohio, a Corporation of Ohio. Filed Jan. 9, 1929. Serial No. 331,357. 13 Claims. (Cl. 18—2.)



9. Apparatus for progressively indicating the temperature of a layer or web of sheet material progressively ad-

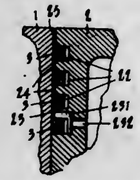
vanced through the apparatus, comprising a heat conducting roller, means for supporting said roller yieldingly in rolling contact with one surface of the sheet material whereby to transfer heat therefrom, and temperature indicating means responsive to temperature changes in said heat conducting roller.

1,889,386. RATCHET JACK. FRANK H. SCHWEBIN, Bellevue, Pa., assignor to The Duff-Norton Manufacturing Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Mar. 24, 1932. Serial No. 600,838. 7 Claims. (Cl. 254—108.)



2. A jack including, in combination, a frame; a rack slidably mounted in the frame; a lifting pawl; lever means for operating the lifting pawl; a holding pawl pivotally mounted on the frame; and a spring tensioned between the jack frame and the holding pawl in such position that the spring urges the holding pawl into engagement with the rack with a force which decreases as the holding pawl is moved away from the rack.

1,889,387. PISTON FOR INTERNAL COMBUSTION ENGINES. LAVERN A. SEGER, Grand Rapids, Mich., assignor of one-half to Frederick W. Kramer, Grand Rapids, Mich. Filed May 4, 1931. Serial No. 534,911. 4 Claims. (Cl. 74—108.)

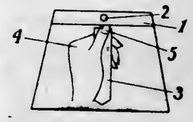


1. A piston having the usual skirt and ring grooves with lands therebetween, the land next succeeding the skirt being formed with notches facing the skirt and extending to the bottom and across the bottom of the ring groove, the said groove being provided with perforations at the bottom of the notches for the by-pass and delivery of the lubricating oil into the body of the piston.

1,889,388. TREATMENT OF HYDROCARBON OILS. MARVIN SMITH, Chicago, Ill., assignor to Universal Oil Products Company, Chicago, Ill., a Corporation of South Dakota. Filed Dec. 5, 1931. Serial No. 579,339. 3 Claims. (Cl. 196—24.)

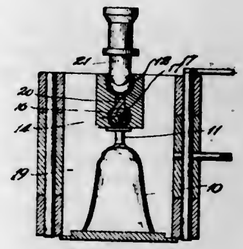
1. A process for refining hydrocarbon oils which consists in subjecting the oil in heated vaporous condition to the action of hydrogen while in contact with a chromite of a metal for the purpose of desulphurizing such oil.

1,889,389. HAND BAG. BERTIE ROHR THORNHILL, Lynchburg, Va. Filed June 30, 1932. Serial No. 620,267. 7 Claims. (Cl. 150—28.)



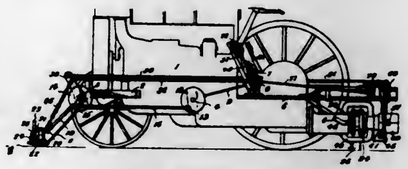
1. A handbag comprising front and back sides, a flap closure for the front side and adapted to fold over the top of the bag on to the back side, and a strap handle provided entirely on the back side so that the upper part of the strap is adjacent the flap to permit the thumb of the hand grasping the strap to be pushed up between the flap and the back side to open the handbag and the flap being releasable by moving the flap away from the strap.

1,889,390. METHOD TO PRODUCE A CRYSTAL ARTICLE. ALBERT J. THROM, Grapeville, Pa. Filed May 26, 1930. Serial No. 455,856. 3 Claims. (Cl. 49—82.)



1. The method of incorporating a design in a crystal article which comprises molding the same in sections by first pressing one section in a mold containing the design so that the latter is superficially formed in and from the material of the pressed section, and thereafter placing this section in a second mold and molding the remainder of the article by pressing a molten layer of glass over the design carried portion.

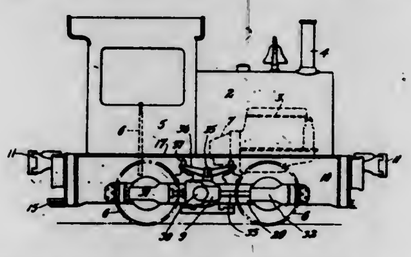
1,889,391. MOWER. JAMES H. TODD, Marion, Ohio. Filed Aug. 5, 1931. Serial No. 555,337. 13 Claims. (Cl. 56—232.)



1. In a mowing apparatus, an arcuate cutter, means for supporting said cutter upon a tractor, and means for reciprocating the cutter in an arcuate path.

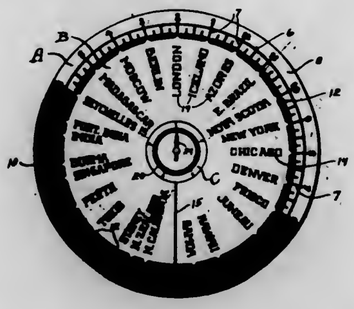
1,889,392. LOCOMOTIVE. ALBERT J. TOWNSEND, Lima, Ohio. Filed Apr. 3, 1930. Serial No. 441,208. 20 Claims. (Cl. 105—172.)

1. In a railway vehicle having a power plant for its propulsion, a main frame comprising transverse end members, outside longitudinal side members, inside longitudinal members for transmitting pull and buff from end



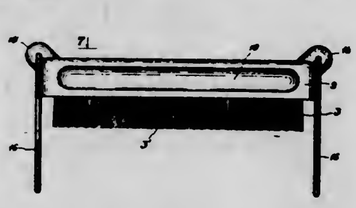
to end and spaced apart to accommodate the power-plant between them, and a deck plate extending over and interbracing all of said members.

1,889,393. DIALING APPLIANCE. JACOB E. WILSON, Yoncalla, Oreg. Filed Apr. 2, 1930. Serial No. 441,113. 1 Claim. (Cl. 58—43.)



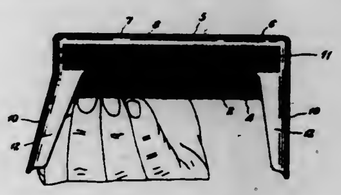
In a time piece of the class described, a rear most dial having a round depression in its face side and a time scale delineated on the dial about the periphery of the depression and divided by hour indication lines into twenty-four units each indicating one hour of time, means for rotating the dial, a front most dial arranged in the depression and held against rotation, said front most dial being provided with pointers for coacting with the time scale and a location marking for each pointer, a divider dial delineated upon the face of the front most dial, and a rotatable hand for movement over the divider dial.

1,889,394. BRUSH. OSCAR U. ZERK, Cleveland, Ohio. Filed Sept. 8, 1931. Serial No. 561,545. 20 Claims. (Cl. 15—248.)



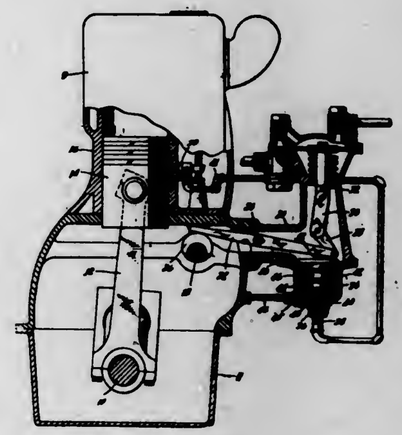
1. A brush comprising a back, bristles, a pair of wings hinged to the back, and resilient yieldable means to either maintain the wings in a position overlapping and extending beyond the free ends of the bristles, or in a position above the bristle free ends.

1,889,395. BRUSH. OSCAR U. ZERK, Cleveland, Ohio. Filed Sept. 8, 1931. Serial No. 561,546. 20 Claims. (Cl. 15—248.)



1. A bristle brush provided with a spatter-shield overlapping and extending beyond the ends of the bristles at each end of the brush.

1,889,396. PUMP COMBINATION. ABRAHAM M. BARITCH, Flint, Mich., assignor to A C Spark Plug Company, Flint, Mich., a Company of Michigan. Filed Dec. 12, 1927, Serial No. 239,477. Renewed Mar. 23, 1932. 9 Claims. (Cl. 123—196.)

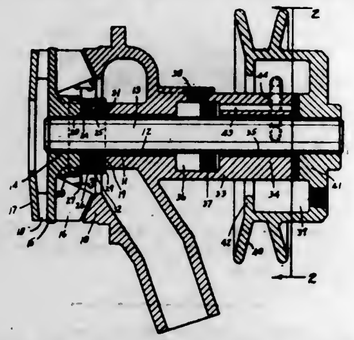


1. In combination with an internal combustion engine including a crankcase and a reciprocable piston, a groove about said piston, an opening in the cylinder connecting with the groove in one position of the piston, a valve in said opening, means for advancing a fluid therethru when said valve is open, a port in said groove angularly spaced from said opening, and means rendering reciprocation of said piston effective in opening and closing said valve by direct engagement thereof.

1,889,397. WATER PUMP PACKING. WILLIAM M. BAUMHECKEL, Connersville, Ind., assignor, by direct and mesne assignments, to B B B Corporation, Detroit, Mich. Filed Apr. 25, 1930. Serial No. 447,370. 3 Claims. (Cl. 286—7.)

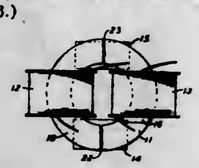
1. In a device of the character described, a seal assembly for a revoluble shaft having an outer casing, a shaft bearing and a shoulder end bearing associated therewith, said seal assembly including a housing spaced from said shaft; a yieldable packing material disposed within said housing and adapted to contact with said shaft; a fluid sealing means located within said housing adapted to contact with said end bearing, said sealing means comprising a member of phenol condensation product adapted to form and maintain a fluid tight joint with said shoulder bearing; and a spring means for urging said seal against

said shoulder bearing; and means whereby the end sealing means of said assembly is movably connected and driven through said housing from means associated with



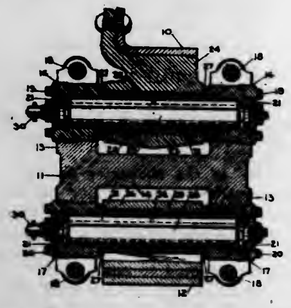
said shaft so as to provide a uniform contact between said sealing means and said shoulder bearing irrespective of slight variation in shaft position.

1,889,398. ELECTRICAL COIL AND A METHOD OF MANUFACTURING IT. JOHN S. BISHOP, Cranford, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Mar. 5, 1932. Serial No. 596,917. 5 Claims. (Cl. 175—356.)



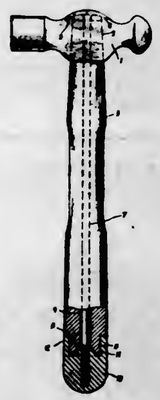
1. The method of manufacturing electrical coils which consists in forming a core, dividing the core into a plurality of substantially identical sections, placing windings thereon in sections, assembling the core sections in spaced relation, varying the space between the core sections until a definite predetermined effect is obtained in the coil, and adjusting the position of a piece of a magnetic material adjacent one of said windings until a definite predetermined effect is obtained in said one winding.

1,889,399. SPRING CONNECTION FOR VEHICLES. HAROLD D. CHURCH, Cleveland, Ohio, assignor to The White Motor Company, Cleveland, Ohio, a Corporation of Ohio. Filed Apr. 17, 1929. Serial No. 355,716. 1 Claim. (Cl. 267—54.)



A mechanism for connecting one end of a spring to the frame of a vehicle comprising an eye on one of the aforesaid members, a pair of rigidly connected arms attached to the other of the aforesaid members, screw-threaded bushings adjustably mounted in screw-threaded apertures formed in said arms, means for adjustably clamping said bushings within the aforesaid apertures, and a pin floating in said bushings and extending through the aforesaid eye, said bushings having unthreaded portions which bear against unthreaded portions of the interior walls of the aforesaid apertures.

1,889,400. TOOL HEAD RETAINER. ALBERT DORFMAN, Hackensack, N. J. Filed Dec. 14, 1928. Serial No. 326,076. 1 Claim. (Cl. 306—38.)



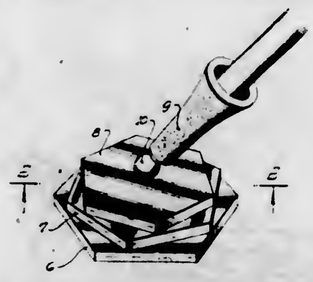
In combination, a tool head having a tapered handle-receiving eye flaring from the distal side of said head to the proximal side of said head and being bounded by smooth surfaces and having a substantially similar cross-section throughout; a handle having a head end provided with a tapered eye engaging portion of similar cross-section to said handle-receiving eye but free from shoulder formation to permit adjustable takeup and of sufficient size that when tightly engaged in said eye it does not extend entirely therethrough and said handle having a central bore throughout its length; a bolt extending through said bore and having a bolt head straddling the distal end of said eye and a threaded extension at the other end adapted to extend out of said bore; and a tightening nut having threaded engagement with said bolt, frictional engagement with said handle, and shaped substantially to conform with and form an extension of said handle.

1,889,401. SAFETY RAZOR. ERIC W. ERICSSON, Brooklyn, N. Y. Filed Jan. 26, 1931. Serial No. 511,244. 5 Claims. (Cl. 30—12.)



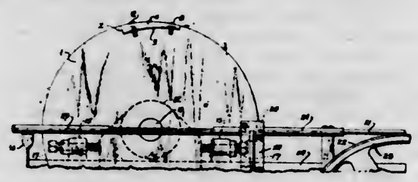
5. In razors of the class described an elongated double edged blade the corner portions of said blade adjacent the side edges thereof having within the boundary edges of the blade transverse apertures and centrally intersecting longitudinal apertures, the transverse apertures of one side edge of the blade being in alinement with those at the opposite side edge thereof and the longitudinal apertures at one end of the blade being in alinement with those at the other end thereof.

1,889,402. WRITING INSTRUMENT HOLDER. JOHN W. FITZ GERALD, Milwaukee, Wis., assignor to Briggs & Stratton Corporation, Milwaukee, Wis., a Corporation of Delaware. Filed Aug. 15, 1931. Serial No. 557,850. 4 Claims. (Cl. 120—108.)



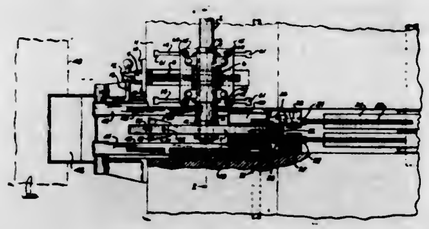
1. In a desk set of the character described, a plurality of polygonal laminations, a headed member, a writing instrument holder mounted on said member and means on said member to hold said laminations in assembled relationship.

1,889,403. HIGH SPEED CIGARETTE CUTTER. WILLIAM G. FORBES, New York, N. Y. Filed Jan. 26, 1926. Serial No. 83,831. Renewed Mar. 16, 1928. 16 Claims. (Cl. 131—37.)



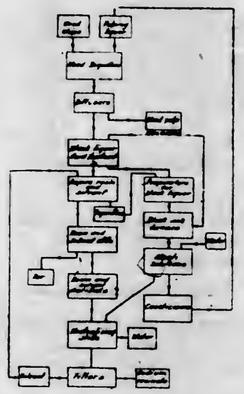
1. In a high speed cigarette cutter, the combination of a rotary cutter disc provided with an arcuate knife of substantially uniform thickness extending from its side.

1,889,404. HIGH SPEED CIGARETTE CUTTER. WILLIAM G. FORBES, New York, N. Y. Filed Aug. 20, 1926. Serial No. 130,366. 5 Claims. (Cl. 131—37.)



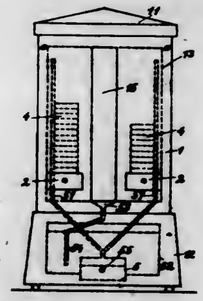
1. A cigarette cut-off mechanism including in combination a knife revolving in a circular path and having a cutting edge eccentric to the center of said path, means for feeding a cigarette rod across the face of the circle described by the knife and in a plane intersected by the cutting edge of the knife, knife grinding means mounted adjacent said circular path and means for yieldingly maintaining the grinding means in continuous grinding contact with the eccentric cutting edge of the knife during the passage of the knife by the grinding means.

1,889,405. PROCESS FOR PRODUCING WATER-SOLUBLE RESINATES. EDWARD H. FRENCH, Columbus, Ohio. Filed Mar. 4, 1927. Serial No. 172,821. 21 Claims. (Cl. 87—16.)



1. The process of producing a water soluble resinate from rosin which comprises dissolving the rosin in a water-insoluble volatile solvent, adding sufficient of an alkaline alkali metal cimpound to neutralise at least the major portion of the rosin in the presence of water in amounts insufficient to cause the formation of an emulsion, distilling off the water present while replacing any solvent distilling off therewith, and separating from the remaining liquid the resinate thus precipitated.

1,889,406. AUTOMATIC VENDING MACHINE. SVEN HARALD GOLDSCHMIDT, Copenhagen, Denmark. Filed Jan. 10, 1930, Serial No. 419,970, and in Denmark Jan. 21, 1929. 1 Claim. (Cl. 219—19.)

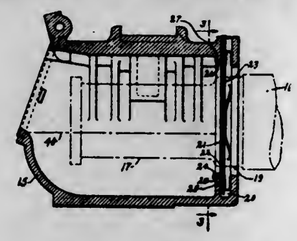


Automatic vending machine comprising in combination a heat-insulated chamber adapted to contain parcels of goods to be sold, means to withdraw from the chamber a single parcel at a time after insertion of a coin in the vending machine, and electric heating bodies, a steam generator with electric heating bodies being provided outside of the said chamber, and steam pipes leading from the steam-generator to the said chamber in the vending machine.

1,889,407. JOURNAL BOX SEALING DEVICE. LEONARD D. GRISBAUM, WILLIAM L. DWYER, and EDWIN S. PEARCE, Indianapolis, Ind., assignors to Railway Service & Supply Corporation, Indianapolis, Ind., a Corporation of Indiana. Filed July 14, 1931. Serial No. 550,640. 9 Claims. (Cl. 286—6.)

1. In a sealing device for the dust guard cavity of an axle journal box, the combination of an oil sealing plate,

a follower plate, said plates being fixed in the box with respect to motion in a direction transverse of the axle,



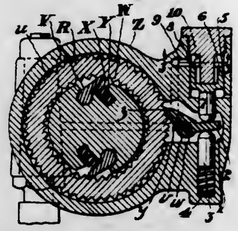
a dust guard between said plates movable with the axle, and means for yieldingly pressing the follower plate against said dust guard.

1,889,408. FRETTED STRINGED MUSICAL INSTRUMENT. AUGUST LARSON, Chicago, Ill. Filed Sept. 8, 1930 Serial No. 480,334. 4 Claims. (Cl. 84—298.)



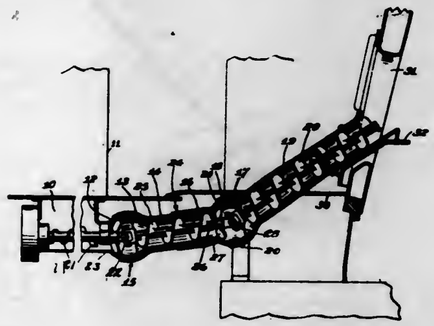
1. In a stringed musical instrument having a body and a neck, means for adjusting the strings in different relations with the body comprising an adjustable thrust receiving rod disposed longitudinally of the body and parallel to the top thereof to receive a portion of the thrust from the neck in combination with a tensioning rod extending upwardly toward the top of the instrument from the neck to the tailpiece end and adjustably secured to the neck.

1,889,409. SAFETY DEVICE FOR ROCK DRILLS. EARL B. LEAR, Phillipsburg, N. J., assignor to Ingersoll-Rand Company, Jersey City, N. J., a Corporation of New Jersey. Filed July 2, 1931. Serial No. 548,367. 1 Claim. (Cl. 121—7.)



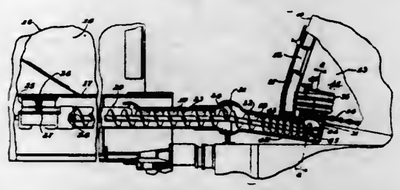
In a safety device, the combination with a rock drill having a hammer piston and rotation mechanism for the piston comprising a rifle bar wherewith said piston is slidably interlocked, a pawl carried by the rifle bar, of a ratchet ring to serve as an abutment for the pawl and being rotatable with respect to the rifle bar, a locking device for the ratchet ring, a plunger for actuating the locking device out of engagement from the ratchet ring, a pressure area on the plunger and being in constant communication with a source of pressure fluid supply, an atmospheric vent for the pressure area, valve means to control the vent and being normally held open to afford communication between the pressure area and the atmosphere, and means to close the valve means upon release thereof, thereby entrapping pressure fluid in the vent to act against the pressure area for releasing the locking device from the ratchet ring.

1,889,410. LOCOMOTIVE STOKER. NATHAN M. LOWER, Baltimore, Md., assignor to The Standard Stoker Company, Incorporated, a Corporation of Delaware. Original application filed July 2, 1928, Serial No. 289,774. Divided and this application filed Oct. 5, 1929. Serial No. 397,681. 3 Claims. (Cl. 110—110.)



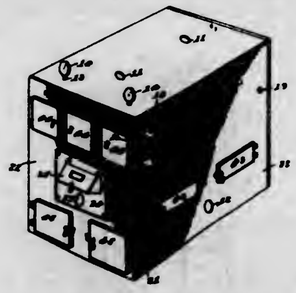
2. In a locomotive having a firebox provided with a backhead having a firing opening therein, a cab having a deck, and a tender provided with a deck; nozzles for producing fluid jets positioned adjacent said opening, a stoker conduit assuming a general direction forwardly and upwardly from beneath the tender deck to said nozzles and comprising conduit sections arranged angularly in relation to each other, said stoker conduit having a conduit section securely attached to the backhead in communication with said opening and sloping forwardly and upwardly from a point adjacent the cab deck to said nozzles and having its bottom inside surface substantially straight along the medial vertical plane of the conduit section, a conduit section rigidly mounted in the tender, an intermediate conduit section flexibly connecting the first two named conduit sections, and a fuel conveyor within said stoker conduit composed of screw sections, universally jointed together substantially adjacent the respective junctions of the angularly arranged conduit sections, said conveyor extending substantially throughout the entire length of said stoker conduit.

1,889,411. INSIDE FEED STOKER. NATHAN M. LOWER and DAVID F. CRAWFORD, Pittsburgh, Pa., and EDWIN ARCHER TURNER, New York, N. Y., assignors to The Standard Stoker Company, Incorporated, New York, N. Y., a Corporation of Delaware. Original application filed Jan. 8, 1926, Serial No. 79,977. Divided and this application filed Sept. 27, 1929. Serial No. 395,498. 5 Claims. (Cl. 110—101.)



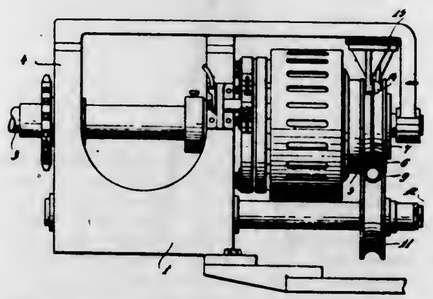
1. In a stoker, a conveyer casing, a pair of transfer conduits extending laterally in opposite directions in the same horizontal plane with, and substantially at right angles from, the forward end of said casing, said conduits having their outer ends curved upwardly and a conveyer screw in said casing, said screw extending forwardly into the juncture formed by said conduits and said casing for conveying fuel along said casing and forcing the same laterally through said conduits.

1,889,412. SECTIONAL BOILER. PAUL M. LUKOMSKE, Fairfield, Conn. Filed Apr. 25, 1932. Serial No. 607,239. 6 Claims. (Cl. 122—225.)



1. A water heater comprising a series of metal sections secured together to form a common water container and having a centrally positioned elongated combustion chamber extended through all the sections, a central flue extended from front to rear above the combustion chamber, return flues also in the upper portion of the sections and on both sides of the central flue, two longitudinal side flues extending through the outer base portion of the united sections, a series of vertical flues on opposite sides of the combustion chamber and connecting the longitudinal side flues with the return flues, intermediate longitudinal flues communicating with the two longitudinal side flues, and also extending through the central portion of the base portions and terminating in a smoke outlet.

1,889,413. ELECTRIC WELDING MACHINE. GEORGE A. LUTZ, Cranford, N. J., assignor to American Circular Loom Company, Inc., Dover, Del., a Corporation of Delaware. Filed Aug. 22, 1929. Serial No. 387,625. 4 Claims. (Cl. 219—4.)



1. In an electric welding machine a pair of spaced annular terminal electrodes having a common axis and having peripheral grooves and inner flat surfaces, and means maintained in contact with the grooves and flat surfaces of said electrodes and bearing against said grooves and surfaces to prevent expanding of the electrodes toward each other to resist reduction of spacing between the electrodes due to heat and pressure on the work during welding.

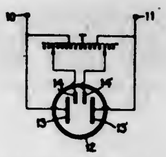
1,889,414. WELDING APPARATUS. GEORGE A. LUTZ, Cranford, N. J., assignor to American Circular Loom Company, Inc., Dover, Del., a Corporation of Delaware. Filed May 13, 1930. Serial No. 451,896. 11 Claims. (Cl. 219—6.)

1. A welding apparatus comprising means to offset a marginal portion of a blank with respect to adjacent metal thereof, means to lap said offset portion against another marginal portion, and compress the lapped portions to a



definite thickness, means to traverse the blank, and means to heat said overlapped marginal portions while the tube is traveling.

1,889,415. EXCITED ELECTROLYTIC CONDENSER. RALPH D. MERSHON, New York, N. Y. Filed Nov. 6, 1928. Serial No. 317,610. 13 Claims. (Cl. 175—318.)



1. An electrolytic condenser and an electrolytic rectifier electrically connected thereto, having filmed electrodes, the condenser films being resistant to breakdown and the rectifier films being readily broken down, and electrolyte means of the same chemical composition in which said electrodes are immersed to re-form thereon films of the same characteristics after break-down, the electrode metal of the rectifier being an aluminum alloy.

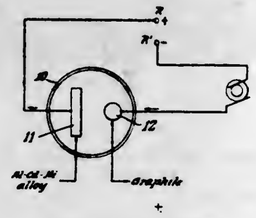
6. An electrolytic rectifier comprising at least one rectifying electrode of aluminum-copper alloy, and a borax-boric acid electrolyte devoid of phosphate.

1,889,416. ELECTROLYTIC CONDENSER. RALPH D. MERSHON, New York, N. Y. Filed Nov. 9, 1929. Serial No. 405,872. 5 Claims. (Cl. 175—315.)



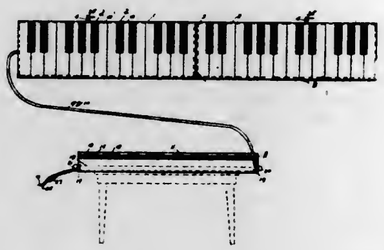
1. An anode assembly for electrolytic condensers, comprising a group of plates of filming metal arranged side by side and connected at the top at alternate side edges by strips of the same metal, integral with the plates and set back from the adjacent side edges thereof, and a like group with its integral connecting strips at the bottom, the two groups being interleaved by insertion of one into the other.

1,889,417. ELECTROLYTIC RECTIFIER. RALPH D. MERSHON, New York, N. Y. Filed Dec. 4, 1931. Serial No. 578,993. 15 Claims. (Cl. 175—318.)



1. An electrolytic rectifier having an electrode made of an aluminum-cadmium alloy.

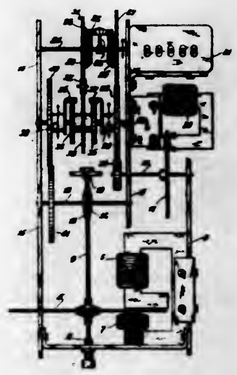
1,889,418. PIANO INSTRUCTION DEVICE. GLEN O. PIERCE, Detroit, Mich. Filed July 20, 1931. Serial No. 551,951. 11 Claims. (Cl. 84—478.)



4. A piano instruction device, comprising an operating key board box having operating keys pivotally mounted therein and arranged like the keys of a piano key board, each of said keys being provided with spring means for retaining the key in a horizontal position, also with separate electric switch means capable of locking when closed, an enlarged instruction wall board of transparent material designed as a replica of a piano key board and provided with a separated light compartment and an electric light bulb positioned beneath each of the key positions and capable of radiating light therethrough when the bulb is lighted electrically, and means mounted thereon for connecting each key light bulb electrically to the correspondingly positioned key of the operating key board box, and means for connecting said light bulbs each in a separate electric circuit passing through the individual switch means of the correspondingly positioned key of the operating key board box and capable of lighting the bulb behind any transparent key position of the wall board when the corresponding key of the operating key board box is depressed and means for releasing the depressed key board box keys.

1,889,419. ELECTRICITY METER. RICCARD PUDELKO, Zug, Switzerland, assignor to Landis & Gyr, A.-G., a Corporation of Switzerland. Filed Sept. 16, 1930. Serial No. 482,180, and in Switzerland Oct. 9, 1929. 3 Claims. (Cl. 171—264.)

1. An excess demand meter including in combination a register, a differential gear having its planet wheel coupled with the register, a meter disc driven proportionally to energy consumption, constant speed mechanism for driving one of the sun wheels of the differential, and an over-



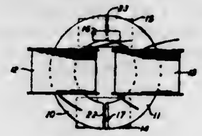
running clutch connected with the other sun wheel to drive the sun wheel alternatively by the meter disc or constant speed mechanism.

1,889,420. NOTEBOOK COVER AND SUPPORT. CHARLES E. RUBICAM, Jr., St. Louis, Mo. Filed Dec. 5, 1930. Serial No. 500,225. 3 Claims. (Cl. 281—33.)



1. A notebook cover and support comprising a stiff front panel and a stiff back panel hingedly connected together, and a stiff extension hingedly connected to one of said panels, said extension being formed of a plurality of panels hinged together and one of such sections of said extensions being arranged for telescoping association with a portion of the panel other than that to which said extension is connected, said telescoping arrangement being accomplished by providing one of the telescoping portions with a cavity into which the other telescoping portion is extended, said notebook cover and support being foldable to provide a cover for a notebook at which time said stiff extension encloses an end portion of said notebook and being movable to an easel-like position where it serves as a support for said notebook, one of the sections of said extension serving as a base for the structure when same is in its easel-like position.

1,889,421. ELECTRICAL COIL AND METHOD OF MANUFACTURING IT. HARRY SCHWARTZMANN, Westfield, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Mar. 5, 1932. Serial No. 596,918. 14 Claims. (Cl. 175—356.)



1. The method of manufacturing electrical coils comprising placing a winding on a divided core, positioning a non-magnetic solid material on one side of said core and over the ends of the core which provide an air gap between the core sections, and adjusting the air gap, with a cementing material between the core and said non-magnetic material, until predetermined electrical properties are obtained.

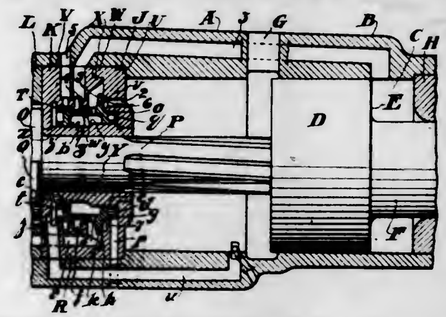
1,889,422. DUSTLESS ROCK DRILL. JAMES F. SHOOK, Phillipsburg, N. J., assignor to Ingersoll-Rand Company, Jersey City, N. J., a Corporation of New Jersey. Filed Aug. 22, 1929. Serial No. 387,641. 1 Claim. (Cl. 121—10.)



In a fluid actuated rock drill, the combination of a cylinder and a piston therein, a front head for the cylinder having a recess communicating with the atmosphere and being located adjacent the front end of the front head, a chuck in the front head having a bore, a hollow working implement extending into the bore, a vent leading from the bore adjacent the working implement to the recess, and a passage in the cylinder and the front head opening into the recess for directing a jet of fluid across the outlet opening of the vent to withdraw pressure fluid leaking from the cylinder into the bore and thus prevent the admission of such pressure fluid into the working implement and to maintain a sub-atmospheric pressure in the bore.

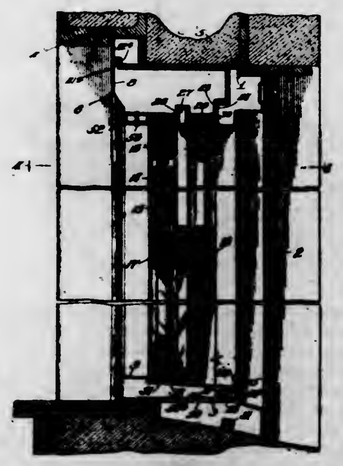
1,889,423. VALVE FOR ROCK DRILLS. WILLIAM A. SMITH, Sr., Easton, Pa., assignor to Ingersoll-Rand Company, Jersey City, N. J., a Corporation of New Jersey. Filed June 6, 1931. Serial No. 542,514. 5 Claims. (Cl. 121—19.)

1. In a fluid actuated rock drill, the combination of a cylinder and a piston in the cylinder, a valve chest having a supply passage and a valve chamber comprising an enlarged portion, inlet passages leading from the valve chamber to the cylinder, a distributing valve in the valve chamber having a pair of opposed differential pressure areas constantly exposed to pressure fluid, an actuating surface intermittently exposed to compression from the cylinder to augment the pressure fluid acting against the smaller pressure area for actuating the valve to one limiting position and being subjected to live pressure fluid to assist the pressure fluid acting against the smaller pressure area in holding the valve, a second actuating surface inter-



mittently exposed to live pressure fluid to augment the pressure fluid acting against the larger pressure area for actuating the valve to another limiting position, and a flange on the valve lying in the enlarged portion and over which pressure fluid flows from the supply passage to both ends of the cylinder.

1,889,424. WINDOW FRAME. WILLIAM W. SMITH, Newton, Iowa. Filed Apr. 1, 1929. Serial No. 351,594. 9 Claims. (Cl. 189—68.)

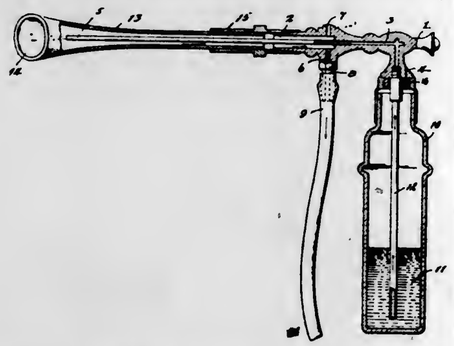


1. In a window construction having a stationary and a movable frame, a sill for said stationary frame, a base for said movable frame, an angle secured to said sill and provided with a longitudinal opening therein, projecting parts on said base member adapted to seat in said opening and overlap said angle for providing a weather-tight construction, and addifional sealing means comprising complementary portions on said frame and sill.

1,889,425. MEDICAL DOUCHE. GEORGE L. SORENSEN, Long Island City, N. Y., assignor to C. M. Sorensen Co. Inc., Long Island City, N. Y., a Corporation of New York. Filed Mar. 2, 1931. Serial No. 519,646. 4 Claims. (Cl. 128—248.)

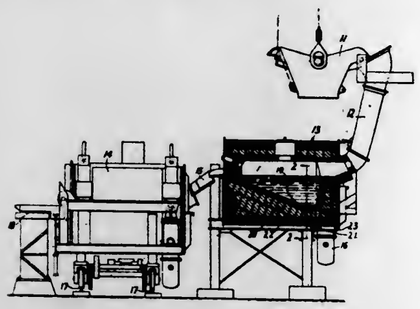
1. A medical douche comprising a body portion having a longitudinal channel and a suction valve extending trans-

versely through said channel, a removable hollow tube rotatably mounted on said body portion in communication with said channel and having its outer end bent and formed



to engage the surface to be treated, and a straight spray pipe extending through said tube and said channel and having its end adjacent the bend in the tube.

1,889,426. VESSEL FOR FIRE REFINING. HARRY H. STOUT, Ardsley-on-Hudson, N. Y., assignor to Copper Deoxidation Corporation, New York, N. Y., a Corporation of New York. Filed June 26, 1931. Serial No. 547,013. 2 Claims. (Cl. 266—43.)

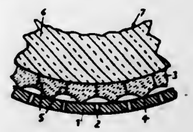


1. A vessel for treating molten metal comprising an inner basic refractory lining extending over the entire inner walls of the vessel, surrounded by a layer of acid or neutral refractory material, and an outer layer of heat-insulating material, the relation of the thickness of the layers of different materials being such that the temperature at the junction between the layer of neutral or acid refractory material and the layer of heat-insulating material is maintained below the melt point of the metal treated.

1,889,427. CONCENTRATION OF VITAMINS. BARNETT SURE, Fayetteville, Ark. Filed Mar. 19, 1930. Serial No. 437,272. 2 Claims. (Cl. 167—81.)

1. The method of making a vitamin concentrate which comprises treating a crude vitamin B extract with glacial acetic acid, adding acetone as a diluent to form a mixed solvent capable of dissolving the vitamin and incapable of dissolving some impurities in said crude extract, removing the vitamin solution from the solid impurities, volatilising the acetic acid and acetone at a temperature not destructive of the vitamin, suspending the residue in water, adjusting the hydrogen ion concentration to permit selective adsorption of the vitamin by adsorbent carbon, adding adsorbent carbon at said hydrogen ion concentration, separating the carbon containing the vitamin from the liquid, washing the vitamin from the carbon first with hydrochloric acid and then with alcohol, combining the two washing liquids, and volatilizing the liquid from the vitamin.

1,889,428. MOLD FOR MANUFACTURING HOLLOW BODIES OF CEMENT BY THE CENTRIFUGAL METHOD. GEORGES WALTER, Perroy, Switzerland. Filed Apr. 28, 1931, Serial No. 533,414, and in Germany May 8, 1930. 3 Claims. (Cl. 25—30.)



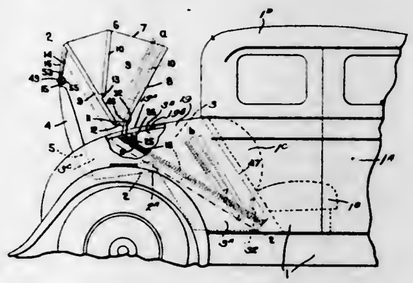
1. In a rotary mold for manufacturing hollow bodies by centrifugal action, a flexible lining having slits dividing its wall into a plurality of sections, the opposing edges of adjacent sections being normally in contact with each other, and means between said lining and the mold and effective to cause progressive separation of said edges as the speed of rotation of the mold increases.

1,889,429. CARBON BLACK AND PROCESS OF MAKING SAME. WILLIAM B. WIEGAND, South Beach, Conn., and LOUIS J. VENUTO, New York, N. Y. Filed Dec. 2, 1927. Serial No. 237,880. 10 Claims. (Cl. 134—80.)

2. As an article of manufacture, a pellet of approximately one-sixteenth of an inch in diameter and formed of a porous mass of substantially pure carbon black.

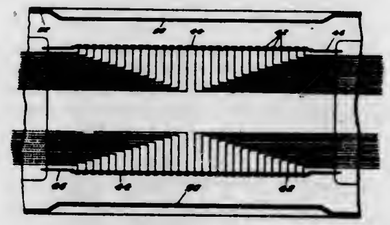
6. A process of treating carbon black which consists in agitating it in the presence of two immiscible liquids and having dissolved or incorporated in one or the other of said liquids, accelerators, softeners, anti-oxidants or other useful ingredients, whereby the carbon black forms pellets in or with one of said liquids absorbing during this process, the accelerators, softeners, anti-oxidants or other useful ingredient from one or the other of said liquids.

1,889,430. TOP FOR RUMBLE SEATS OF AUTOMOBILES. EDWARD H. BENN, Boston, Mass., assignor to Rumbletop Corporation, Boston, Mass., a Corporation of Massachusetts. Filed Nov. 1, 1929. Serial No. 404,121. 19 Claims. (Cl. 296—99.)



1. The combination with an automobile having a rear deck compartment provided with an opening thereto and equipped with a forwardly faced rumble seat in said compartment, of guides obliquely disposed within said compartment of which the respective uppermost ends extend rearwardly over the forward seat edge and the lowermost ends extend downwardly and forwardly therefrom, runners slidably mounted on said guides, a folding rumble seat top pivotally connected to the runners and adapted to be opened to provide shelter for the occupants of the rumble seat when the runners are in their uppermost position, and means to lock the runners to their respective forwardly extended guide ends, said runners when unlocked being slidable to the lower ends of the guides when the top is folded, thereby to permit the folded top to be stored in the forward portion of said compartment.

1,889,431. PHOTO-ELECTRIC TUBE. FREDERICK A. BERG and WILLIAM W. HARPER, Chicago, Ill. Filed July 12, 1929. Serial No. 377,880. 1 Claim. (Cl. 250—27.5.)



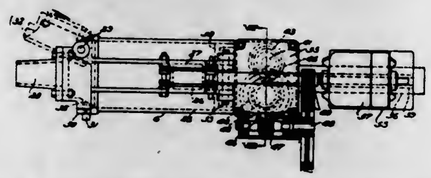
A photo electric tube having an interior anode coating and a plurality of photo-sensitive cathodes, said cathodes mounted in two groups, and a window in the vessel for each group, each group of cathodes facing its respective window.

1,889,432. CREASING APPARATUS. ROLAND R. BOLLMAN, Cincinnati, Ohio, assignor to The Munny Manufacturing Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Mar. 23, 1931. Serial No. 524,604. 3 Claims. (Cl. 219—21.)



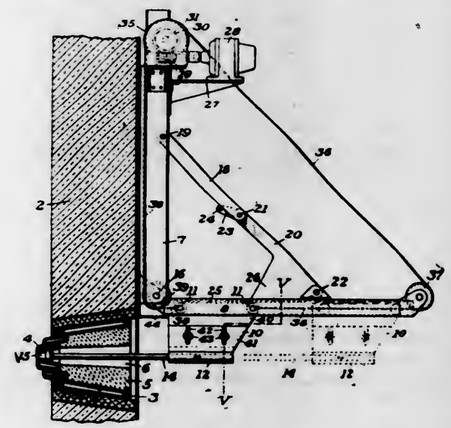
3. A creasing apparatus, comprising, a cylindrical electrical heater element having a hand hold at one longitudinal end thereof, a pair of creasing blades extending radially from the heater element, one blade rigid therewith and the other hingedly mounted thereon and urged toward the other blade, said hingedly mounted blade having a handle for swinging the same to separate the blades, and means for limiting the depth of introduction of the material between the blades and guarding the same from contact with the heater element.

1,889,433. MUD GUN. EDGAR E. BROSIUS, Pittsburgh, Pa. Filed Feb. 10, 1932. Serial No. 592,094. 23 Claims. (Cl. 266—42.)



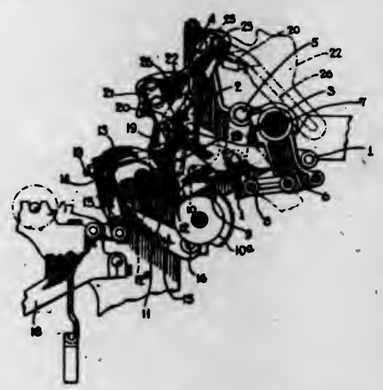
8. In a mud gun, a clay barrel, a piston therein, operating means for the piston including a gear housing detachably secured to said barrel, a motor bracket projecting rearwardly from said housing, a motor mounted on said bracket, and a piston rod comprising a rack movable through said housing and bracket below the motor, said bracket constituting a protective enclosure for said rack.

1,889,434. CINDER NOTCH STOPPER. EDGAR E. BROSIUS, Pittsburgh, Pa. Filed Feb. 10, 1932. Serial No. 592,095. 15 Claims. (Cl. 266—42.)



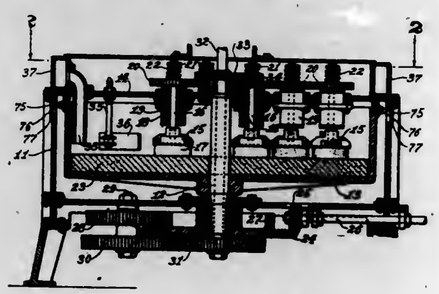
15. In a cinder notch stopper, a botting arm, and a single means for initially imparting to said botting arm a swinging movement followed by a straight line movement during movement of the botting arm from inoperative to operative position.

1,889,435. TOP COMB MOTION. FRANK L. CROCKETT, East Douglas, Mass., assignor to Whitin Machine Works, Whitinsville, Mass., a Corporation of Massachusetts. Filed June 21, 1929, Serial No. 372,614. Renewed Mar. 21, 1931. 17 Claims. (Cl. 19—121.)



1. In a Heilman-type comber, the combination of the nipper-frame, comb cylinder, detaching mechanism including a member moving back and forth, and a top comb structure mounted on the frame so as to be capable of being manually moved away from its working position for cleaning the comb needles thereof, said top comb structure having a part near its needle-carrying end which is normally in engagement with the aforesaid member of the detaching mechanism and being thereby adapted to preserve a constant relation to said detaching-mechanism.

1,889,436. METHOD AND APPARATUS FOR PULVERIZING MATERIALS. WILLIAM DE COURSEY, St. Louis, Mo. Filed Oct. 28, 1926. Serial No. 143,600. 9 Claims. (Cl. 83—45.)

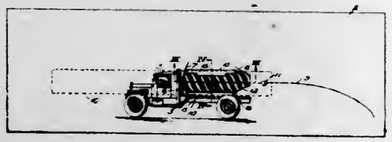


1. In the art of pulverizing materials, the process comprising, grinding the material in a pan in order to pulverize the same, withdrawing the fine material from the upper part of the pan, and maintaining a fixed level of the material in the pan so as to provide uniform fineness of the material withdrawn.

1,889,437. PROCESS FOR THE MANUFACTURE OF A BITUMINOUS CEMENT MORTAR, CEMENT CONCRETE AND THE LIKE. ALBERT JOHAN DE LANGE, Amsterdam, Netherlands, assignor, by mesne assignments, to The Flintkote Corporation, Boston, Mass., a Corporation of Massachusetts. Filed Nov. 15, 1929, Serial No. 407,575, and in the Netherlands Nov. 17, 1928. 4 Claims. (Cl. 106—31.)

1. A process for the manufacture of bituminous cement mortar, consisting in mixing water with the dry constituents of the mortar and after the mixture is partly bound, adding a predetermined quantity of asphalt dispersed in an aqueous medium.

1,889,438. DISPLAY CARD. ARCHIBALD H. GAMES, Pittsburgh, Pa., assignor to McCrady, Rodgers Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Nov. 19, 1930. Serial No. 496,675. 8 Claims. (Cl. 40—126.)



1. A display card having a pictorial representation thereon, the card having spaced apart slots therein juxtaposed with reference to the pictorial representation, an elongated strip having its opposite ends passed through the slots whereby only the intermediate portion of the strip is exposed, the exposed portion of the strip complementing the pictorial representation on the card, and means for moving the strip longitudinally and arcuately with respect to the pictorial representation to create an illusion.

1,889,439. REFRIGERATOR DOOR GASKET. HAROLD A GREENWALD, Detroit, Mich. Filed Oct. 16, 1931. Serial No. 569,242. 8 Claims. (Cl. 20—69.)



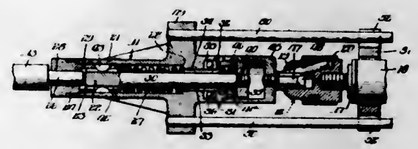
1. A gasket for refrigerator and similar doors, comprising a strip flexible in the direction of its width, a longitudinal enlargement forming a cushion intermediate of the width of the said strip, and a longitudinal tongue extending from said enlargement and parallel to one of the marginal portions of said strip.

1,889,440. ORNAMENTAL GRILL FOR AUTOMOBILE RADIATORS. OTTO J. GROSHN, Grosse Pointe Park, Mich., assignor to Clayton and Lambert Manufacturing Company, Detroit, Mich., a Corporation of Delaware. Filed Feb. 5, 1931. Serial No. 513,468. 6 Claims. (Cl. 293—54.)



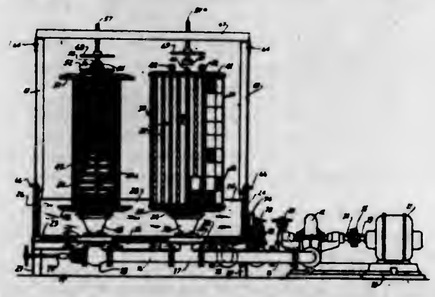
1. A radiator unit comprising a shell, a flange forming the front opening of said shell, and an ornamental grill directly and integrally secured to said flange by distorting said flange.

1,889,441. COMBINED ROTARY AND RECIPROCATORY DRILL. JOSEPH F. HAAS, Forest Park, Ill., assignor to Wodack Electric Tool Corporation, Chicago, Ill., a Corporation of Illinois. Filed Aug. 30, 1930. Serial No. 479,069. 9 Claims. (Cl. 255—36.)



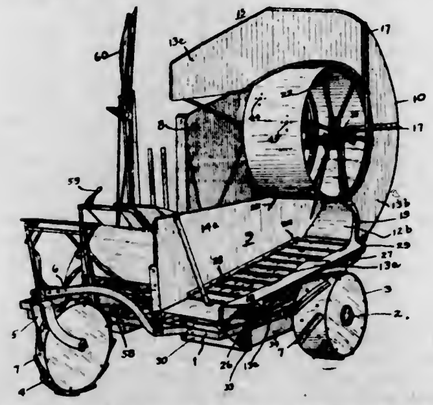
1. A tool of the class described comprising an elongated cylindrical casing, a hammer mounted in one end of said casing for limited reciprocation longitudinally thereof, means providing a mounting for a drill bit at said end of the casing in the path of said hammer, means acting between said casing and said hammer to prevent relative rotation in one direction, a coiled spring acting between said hammer and said casing to force said hammer toward said drill bit, a rod non-rotatably fixed to said hammer and projecting through said spring and out of the other end of said casing, a cam member surrounding the projecting end of said rod, a bearing sleeve connected to said cam member and projecting along said rod substantially to the adjacent end of said spring, said casing having a bearing formed therein to rotatably support said bearing sleeve, a thrust bearing acting between said cam member and said casing to receive the longitudinal thrust of the cam member, and a cam follower detachably secured on the projecting end of said rod to cooperate with said cam to periodically withdraw said hammer upon relative rotation of said cam member and said casing.

1,889,442. BLEACHING APPARATUS. WILLIAM P. HORNBUCKLE and ROBERT F. CRAIG, Stanley, N. C. Filed Mar. 26, 1931. Serial No. 525,518. 6 Claims. (Cl. 8—19.)



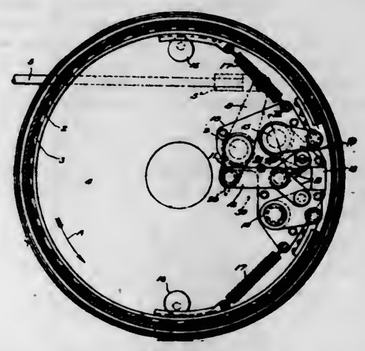
1. In a bleaching machine for yarn and the like, a pump, and means for driving the pump, a pipe leading from one side of the pump, a vat, connections leading from said pipe thru the bottom of said vat, each connection having thereon a seat member adapted to serve as a seat for a yarn beam, package holder and the like, a cover for the upper end of the beam, a collapsible frame disposed above the vat, clamping means in the frame for engaging said cover on the beam, the upper end of the package holder and the like to hold the same on said seats, an out-going pipe connected to the bottom of the vat and leading to the other side of the pump, and a strainer member mounted in said outgoing pipe.

1,889,443. GRAIN SAVER. GEORGE INNES, Davenport, Iowa, assignor to Innes Manufacturing Company, Bettendorf, Iowa, a Corporation of Delaware. Filed Feb. 24, 1927, Serial No. 170,526. Renewed Dec. 18, 1929. 18 Claims. (Cl. 56—417.)



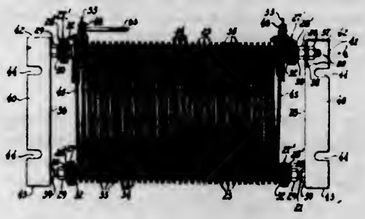
1. In grain shocking apparatus, in combination, a grain bundle receiving receptacle, means in said receptacle for conveying bundles rearwardly, and means rearwardly of said receptacle for reversing grain bundles end for end and simultaneously conveying said bundles upwardly to adjacent the top of a shocker basket.

1,889,444. BRAKE. JULIAN KENNEDY, Jr., Sewickley, Pa. Filed Oct. 26, 1929. Serial No. 402,603. 15 Claims. (Cl. 188—79.5.)



1. A brake comprising a drum, a cooperating band, a bell crank lever operatively connected to the band, and means for changing the effective angular distance between the bell crank arms.

1,889,445. ELECTRICAL RESISTANCE DEVICE. EDWIN N. LIGHTFOOT, Wauwatosa, Wis., assignor to Cutler-Hammer, Inc., Milwaukee, Wis., a Corporation of Delaware. Filed Feb. 19, 1930. Serial No. 429,575. 21 Claims. (Cl. 201—69.)



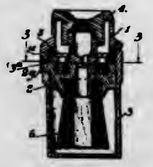
7. As an article of manufacture, a supporting element for a resistor of the ribbon type, said element consisting of a flat sheet metal punching having a relatively large opening adjacent to one end thereof to provide for stringing thereof upon a suitable support, said element having a relatively wide and relatively deep notch adjacent to the other end to provide a shouldered support for the reflexed portion of a resistor, and a pair of relatively smaller openings located on opposite sides of said notch, for the purpose set forth.

11. In combination, a metal rod and a resistor supporting member carried thereby but insulated therefrom, said supporting member consisting of a flat punched sheet metal piece having a relatively deep notch formed in an edge thereof to receive and retain the bent portion of a resistor of the ribbon type while permitting free expansion and contraction of said resistor, said supporting member having perforations on opposite sides of said notch, and a clamping terminal device comprising a pair of punched sheet metal plates respectively provided with portions adapted for interlocking engagement with the walls of said perforations and said notch when said plates are drawn toward each other by their common fastening means, each of said plates also having portions adapted for

clamping engagement with said bent portion of the resistor, to thereby provide a good mechanical support for said terminal device and to provide a good electrical connection between the latter and the resistor.

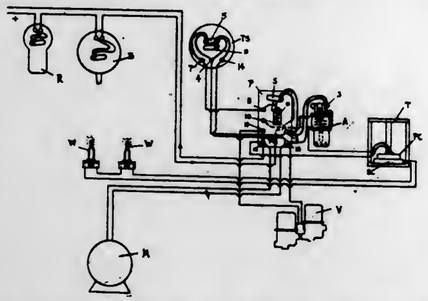
19. In a resistance unit, the combination with a strip resistor bent flatwise at intervals to provide an element of zigzag form, of supporting means for said resistor comprising a pair of metal rods and a plurality of sets of one-piece flat punched sheet metal supports carried thereby, the individual supports of each set being insulated from said rods and from each other, the formed resistor being freely insertable over said sets of supports for engagement of the alternate bends of the former with one set of the latter, and means providing for movement of the other set of supports into engagement with the other bends of said resistor to secure the latter in position.

1,889,446. FOUNTAIN BRUSH. JAY WILL LYSONS, New York, N. Y. Filed Dec. 28, 1929. Serial No. 417,081. 4 Claims. (Cl. 15—138.)



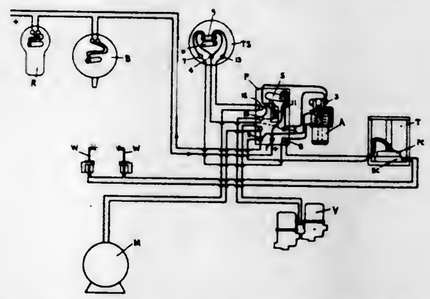
1. In creaming devices of the character described, the combination of an upper head member, a rotatable lower head member, a pair of radially disposed stationary screw-joining members to hold the oppositely positioned engaging surfaces of said upper and lower head members in intimate yet movable rotary alignment, an interiorly positioned port provided within said upper head member, another interiorly positioned port provided within said lower head member, said ports provided with centrally and axially located depressions terminating in sector shaped perforations, and said sector shaped perforation of each of said upper and lower head member oppositely and correspondingly positioned to serve as an opening and closing valve actuated and operated by said relative rotary movements of said upper and lower head members.

1,889,447. CONTROL SYSTEM FOR FLUID FUEL BURNERS OF THE HOT WIRE IGNITION TYPE. IRA E. MCCABE, Chicago, Ill. Filed Feb. 7, 1930. Serial No. 426,520. 2 Claims. (Cl. 158—28.)



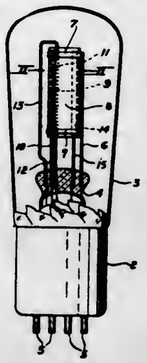
1. A control system for an electrically operated fluid fuel burner of the hot wire ignition type, including a source of commercial electricity having a safety switch therein; a preheating circuit having a normally closed thermal switch responsive to combustion to open, a safety switch actuator, a slow acting solenoid, and a transformer all connected in series to said safety switch; a hot wire igniter in the secondary circuit of said transformer; a starting circuit in parallel with said preheating circuit having therein in series a switch actuated to close by said solenoid and a burner motor; a means connected to said solenoid to cause its slow action and delay operation of its switch for a predetermined time; an additional normally open switch responsive to combustion to close before said first switch opens; and a running circuit in shunt around said solenoid actuated switch and having therein said normally open combustion responsive switch.

1,889,448. SAFETY CONTROL SYSTEM FOR HOT WIRE IGNITION IN FLUID FUEL BURNERS. IRA E. MCCABE, Chicago, Ill. Filed Feb. 7, 1930. Serial No. 426,521. 3 Claims. (Cl. 158—28.)



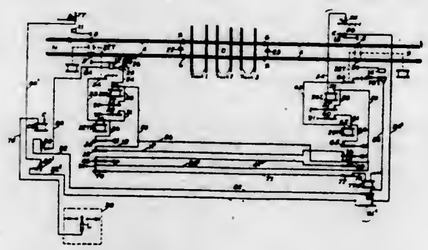
2. A control system for an electrically operated fluid fuel burner of the hot wire ignition type, including a source of commercial electricity having a safety switch therein, a pre-heating circuit having a normally closed thermal switch responsive to combustion to open, a slow acting solenoid and a transformer all connected in series to said safety switch, a hot wire igniter in the secondary circuit of the transformer, a starting circuit in parallel with said pre-heating circuit having therein in series a switch actuated to close by said solenoid, a safety switch actuator and a burner motor, a means connected to said solenoid to cause its slow action to delay operation of its switch for a predetermined time, an additional normally open switch responsive to combustion to close before said first switch opens, a running circuit in shunt around the safety switch actuator and having therein said normally open combustion responsive switch.

1,889,449. THERMIONIC TUBE. FREDERICK S. MCCULLOUGH, Edgewood, Pa. Filed Nov. 24, 1926. Serial No. 150,546. 2 Claims. (Cl. 250—27.5.)



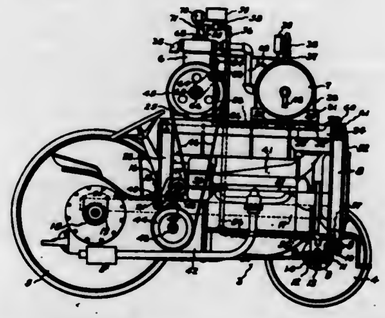
1. A thermionic tube comprising a sleeve formed of insulating material, a cathode inside the sleeve, a grid inside the sleeve substantially enclosing the cathode, and an anode in the sleeve outside the grid, the surface area of the anode being considerably less than the area outlined by the grid.

1,889,450. TRAP CIRCUIT FOR RAILWAY SIGNALING SYSTEMS. DONALD W. MERSEREAU, Rochester, N. Y., assignor to General Railway Signal Company, Rochester, N. Y. Filed Mar. 12, 1931. Serial No. 521,905. 11 Claims. (Cl. 246—3.)



10. A trap circuit for railway signaling systems comprising; a block including a track-circuited section including one track relay, an intermediate non-track-circuited section and a track-circuited section including another track relay; a block relay; and means for deenergising said block relay effective upon deenergization of said one track relay, and effective to reenergise said block relay upon deenergization followed by reenergization of said another track relay.

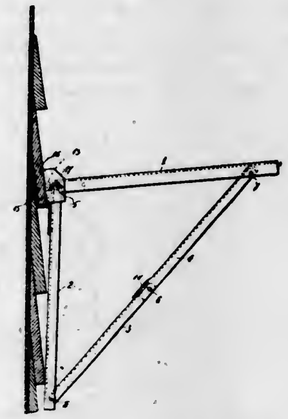
1,889,451. AIR COMPRESSOR PLANT. JUSTUS F. NE PAGE, Seattle, Wash., assignor to Ne Page McKenny Company, Seattle, Wash., a Corporation of Washington. Filed May 3, 1927. Serial No. 188,511. 4 Claims. (Cl. 180—53.)



1. The combination with a tractor having the usual front and rear axles connected by a tractor frame and having a tractor mechanism mounted thereon, said tractor mechanism embodying an upright dash portion located forwardly of the rear axle to afford room to the rear of said dash portion for the steering and control mechanism of the tractor, of an auxiliary frame affording a platform above said tractor mechanism for the reception of tractor driven devices, suspension means pivoted to the central portion of the front axle and supporting the front end of said platform and other suspension means secured to said tractor dash and supporting the rear end of said platform.

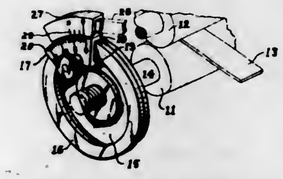
1,889,452. BRACKET. WILFRED L. PORTER, Reading, Mass. Filed Oct. 30, 1931. Serial No. 572,065. 5 Claims. (Cl. 304—38.)

1. A bracket comprising a frame having a base bar, a supporting bar, means pivotally connecting the base bar and supporting bar at a point removed from the inner end of the supporting bar whereby the supporting bar may function as a lever when turned, brace-forming bars pivoted to one another and to said base bar and supporting bar respectively, a clamp member fixed to the base bar, a movable complementary clamp member, and means for



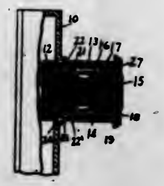
securing said movable clamp member to the frame whereby it may be moved in the direction of said fixed clamp member by said supporting bar on moving the frame from its collapsed form into its extended form.

1,889,453. VERNIER FEED SETTING MECHANISM. ARTHUR A. RICHARDSON, Meriden, Conn. Filed Feb. 11, 1931. Serial No. 515,024. 7 Claims. (Cl. 271—2.4.)



1. In a roll feed setting mechanism for a stamping press, a wheel for attachment to the roll feed shaft, a main plate adjustably carried by said wheel, and a vernier plate mounted on a stationary part of the press adjacent said main plate.

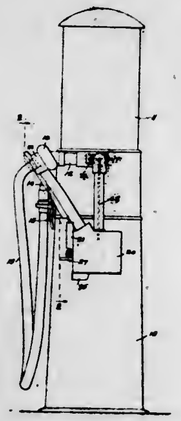
1,889,454. LOCK. JOHN H. SHAW, New Haven, Conn., assignor to Sargent & Company, New Haven, Conn. Filed June 20, 1930. Serial No. 462,627. 13 Claims. (Cl. 70—46.)



1. In a cylinder lock having a casing shaped to be received within an opening in a locking mechanism, a lock core in said casing, a face plate mounted on said casing and securing the core therein, said face plate being separable from said casing independently of the core, means in the casing adapted to engage the locking mechanism

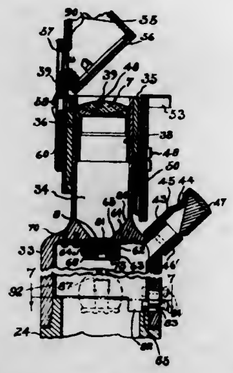
to secure the casing against movement in the opening, said means being accessible on removal of the face plate from the cylinder lock while the core remains in the casing.

1,889,455. DISPENSING PUMP FOR GASOLINE AND THE LIKE. ARTHUR C. SMITH, Pasadena, Calif., assignor, by mesne assignments, to Automatic Machine Products Corp., Ltd., South Pasadena, Calif., a Corporation of Nevada. Filed May 28, 1930. Serial No. 456,534. 10 Claims. (Cl. 221—101.)



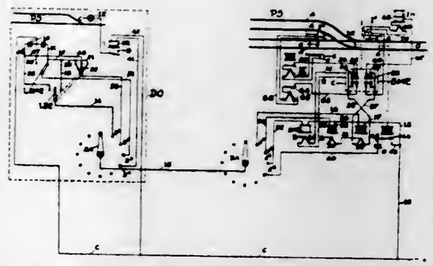
1. A gasoline dispensing pump having a valve, coin controlled means for opening the valve, a meter adapted to be actuated upon the discharge of gasoline, a cam shaft adapted to release the coin controlled means causing the valve to close, means including a ratchet providing a driving connection between the meter and the cam shaft, and means operable upon the closing of the valve for returning the cam shaft to its initial position.

1,889,456. DIAGNOSTIC INSTRUMENT. EDGAR D. TILLYER, Southbridge, Mass., assignor to American Optical Company, Southbridge, Mass., a Voluntary Association of Massachusetts. Filed Jan. 5, 1928. Serial No. 244,646. 11 Claims. (Cl. 88—22.)



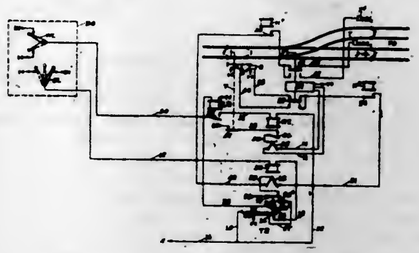
1. In an instrument for throwing a beam of light, a source of light, a member having a light conducting chamber leading from the light source, a movable member in the light chamber having two slits arranged at right angles to each other and mounted to slide in a direction transverse to the axis of the light conducting chamber, a lens in the light conducting chamber beyond the movable member, means to change the distance between the lens and movable member to focus the light, a reflector in line with the light conducting chamber to reflect the light, said light issuing through a slit in the movable member, and means for diffusing the light beyond the movable member, the said light source being adjustable relative to the slits.

1,889,457. TRAIN DISPATCHING SYSTEM FOR RAILROADS. SEDGWICK N. WIGHT, Rochester, N. Y., assignor to General Railway Signal Company, Rochester, N. Y. Filed Nov. 22, 1928. Serial No. 321,185. 14 Claims. (Cl. 246—3.)



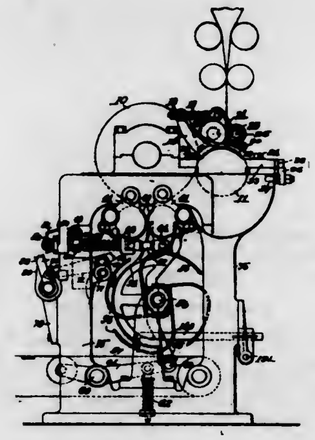
6. Control means for controlling a starting signal governing the entrance of traffic into a single track section and controlling a leaving signal governing the movement of traffic out of such single track section comprising, a double throw contactor cooperating with two stationary contacts connected respectively with said starting signal and with said leaving signal, a second contactor for applying energy to said double throw contactor, a selector system operatively connecting said contactors with a remote point for controlling said contactors to one or the other of their positions sequentially in the same operating cycle.

1,889,458. RAILWAY TRAFFIC CONTROLLING SYSTEM. SEDGWICK N. WIGHT, Rochester, N. Y., assignor to General Railway Signal Company, Rochester, N. Y. Filed July 24, 1931. Serial No. 552,884. 12 Claims. (Cl. 246—8.)



1. In combination, a track switch of a railway system, a switch machine for operating said switch, a signal associated with said switch for governing movement of traffic over said switch, and a relay having a contact which if in its attracted position closes a circuit for clearing said signal and when its control circuit is open and said contact assumes its retracted position it closes a circuit for controlling said switch machine, whereby said switch machine cannot be operated unless said signal is at stop.

1,889,459. FOLDING MACHINE. HENRY A. WISE WOOD, New York, N. Y., assignor to Wood Newspaper Machinery Corporation, New York, N. Y., a Corporation of Virginia. Filed June 12, 1928, Serial No. 284,728. Renewed Nov. 5, 1931. 35 Claims. (Cl. 270—60.)



1. In a machine for delivering products, the combination with a throw-out device, and mechanism for operating the throw-out device, of means automatically actuated at a definite period in the cycle of operations of the machine for starting said operating mechanism, and means for automatically restoring the throw-out mechanism to normal inactive position during the same cycle of operations.

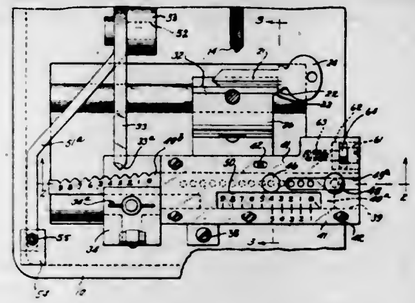
1,889,460. STEREOTYPE PRINTING PLATE. HENRY A. WISE WOOD, New York, N. Y., assignor to Wood Newspaper Machinery Corporation, New York, N. Y., a Corporation of Virginia. Filed Nov. 18, 1931. Serial No. 575,729.. 5 Claims. (Cl. 101—375.)



3. As an article of manufacture, a concave stereotype printing plate having inner circumferential ribs on the concave back adapted to be shaved to the desired radius and another set of ribs, alternating with the first set, and projecting from the back of the plate only far enough to insure that they will not be shaved off by the means used for shaving off the first set of ribs.

1,889,461. KEY CUTTING APPARATUS. HERMAN HANSEN, New York, N. Y., assignor to Francis Keil & Son, Inc., a Corporation of New York. Filed Mar. 27, 1928, Serial No. 265,081. Renewed Dec. 21, 1931. 35 Claims. (Cl. 90—13.2.)

1. In a key cutting machine, in combination, a rotating cutter having a peripheral cutting edge, a table movable toward and away from said cutter in a direction transverse to its axis and movable in a direction lengthwise of said axis, means on said table adapted to hold a key blank to be notched by said cutter, a bar on said table having a plurality of notches, a guide adapted to coact with said notches to limit the movement of said table toward said cutter, guiding means on said table for slidably supporting said bar for movement in a direction lengthwise of the cutter axis and relative to said key-holding means, means for determining the position of said bar so that any selected notch therein corresponds to



a certain station on the key blank held in said key-holding means, and means for holding said bar in the selected position.

1,889,462. METHOD OF PRODUCING SMOKELESS GUNPOWDER. EUGENIUSZ BAZYLEWICZ-KNIAZYKOWSKI and KAZIMIERZ PARTYKA, Sochaczew, Poland. Filed June 25, 1930, Serial No. 463,816, and in Poland Feb. 24, 1927. 12 Claims. (Cl. 52—20.)

1. Method of manufacturing smokeless practice and sporting powder consisting in gelatinising explosive material with gelatinising solvents, extruding the gelatinised material in the form of cylindrical threads, superficially drying the extruded threads, plunging the threads in a fluid bath having a temperature above the boiling temperature of at least one of the ingredients in the thread so that said ingredient evaporates and ejects the explosive material contained in the cylindrical-shaped hardened exterior leaving a tubular-shaped thread, partially drying the tubular-shaped thread thus formed, cutting the partially dried threads so as to form thin-walled tubular grains, drying, soaking, polishing and coating, as set forth.

1,889,463. CATALYZER FOR THE OXIDATION OF AMMONIA WITH OXYGEN OR WITH GASES CONTAINING OXYGEN. IVAR WALFRID CREMBERG, Dahlem, near Berlin, Germany, assignor to Oxyammon Aktiengesellschaft, Zurich, Switzerland. Filed Apr. 23, 1931, Serial No. 532,392, and in Germany Apr. 30, 1930. 6 Claims. (Cl. 23—284.)

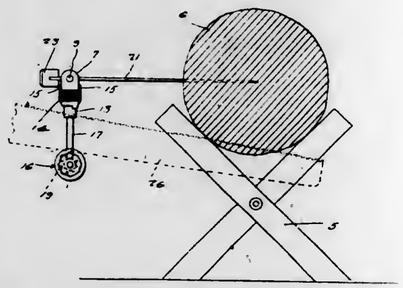


1. A catalyzer containing metals of the platinum group for the catalytic oxidation of ammonia with oxygen or oxygeneous gases, characterised in this, that it consists of a galloon netting.

1,889,464. SAW GUIDE. ROY L. COBLE, Shelton, Wash. Filed Feb. 16, 1932. Serial No. 593,372. 1 Claim. (Cl. 143—163.)

The herein described saw guide of the undercutter support type, consisting essentially of a member having an upright portion with a lateral arm at its lower end and a head at its upper end, said head being provided with a vertical bifurcation and with a horizontal bore intersecting said bifurcation, an upright circumferentially

grooved revolubie saw guide mounted on said lateral arm of the member, a toothed disk turnable in said upright bifurcation of the head, a ferrule movable on the upright portion of said member, pawls mounted in the head and adapted to be urged inwardly by said ferrule to engage the teeth of said ratchet disk, a yoke disposed at the opposite



side of the vertical plane of the head, with reference to said saw guide, and having a horizontal bifurcation open at its outer end and also having a shank turnable in the horizontal bore of the head and fixed to said ratchet disk, and a blade pinned in the horizontal bifurcation of the yoke and having a forward sharp end and also having a head at its rear end and disposed in rear of said yoke.

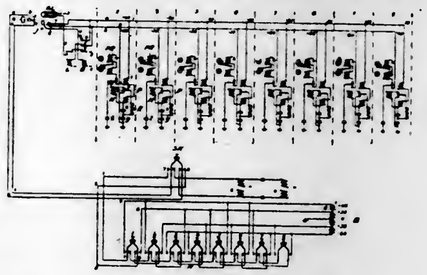
1,889,465. DEVICE FOR THE AUTOMATIC STOP OF THE FILM IN A CINEMATOGRAPH. MAURICE COUADE, Paris, France. Filed Feb. 28, 1930, Serial No. 432,186, and in France Feb. 28, 1929. 8 Claims. (Cl. 88—18.)



1. In automatic stop mechanism for a notch film in a cinematograph, a pusher to move the film out of reach of the claw, a guide member, a bolt guided by the guide member and having a camming edge to operate the pusher, said bolt also having a member for engagement in a notch of the film so that said bolt is controlled in its pusher actuating movement by said notch.

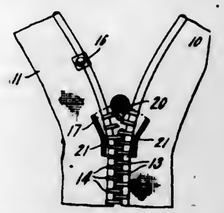
1,889,466. TELEPHONE PLANT. DOUGLAS CORMACK CROWE, Stockholm, Sweden, assignor to Telefonaktiebolaget L. M. Ericsson, Stockholm, Sweden, a Company of Sweden. Filed July 6, 1931, Serial No. 549,032, and in Sweden July 26, 1930. 7 Claims. (Cl. 179—86.)

1. In a selective system a line, a number of marginal adjusted polarized relays each being connected between any of the branches of said line and earth over two series-connected condensers, means to actuate the polarized relays selectively by current impulses of different magnitudes and directions, means to shunt one of the said two



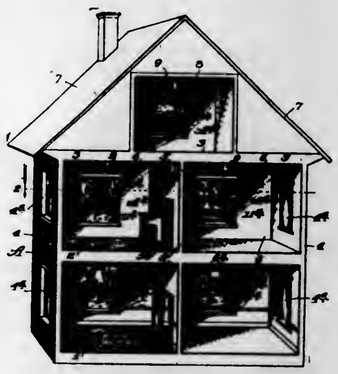
condensers when the polarized relay is at rest, and means to connect the other condenser in parallel with a resistance when the said relay is energized.

1,889,467. SEPARABLE FASTENER. DANIEL F. DALTON, Waterbury, Conn., assignor to The Shoe Hardware Company, Waterbury, Conn., a Corporation of Connecticut. Filed Sept. 14, 1931. Serial No. 562,615. 13 Claims. (Cl. 24—205.)



1. The combination with a Y-channeled slider, of a pair of stringers movable therethrough and provided with elements engageable and disengageable by means of the slider, and means on said stringers adjacent the last of said elements for engaging the slider to permit the latter to be slid from complete disengagement with said elements into engagement therewith, said means being freely movable through the channels of the slider.

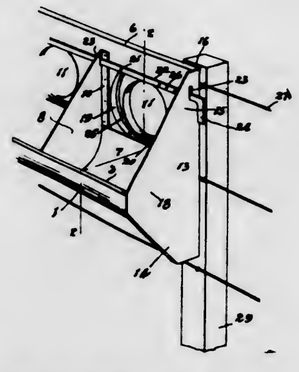
1,889,468. TOY EDIFICE. JOHN L. FLANNERY, Greenwich, Conn. Filed Jan. 18, 1932. Serial No. 587,851. 6 Claims. (Cl. 46—37.)



1. A toy-edifice comprising an open-front room having floor, ceiling, side-walls and rear wall, one of said walls

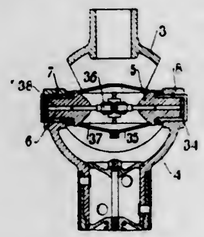
having a window therein, a relatively narrow picture-compartment of small depth adjacent said room and viewable through said window, a picture in said compartment presented toward said window, and a concealed light in front of and serving to illuminate said picture.

1,889,469. CALF FEEDER. ROBERT E. GARDINER, Golden Stream, Manitoba, Canada, assignor of one-fourth to Beryl Clifford Mills, Winnipeg, Manitoba, Canada. Filed June 29, 1931. Serial No. 547,613. 6 Claims. (Cl. 119—61.)



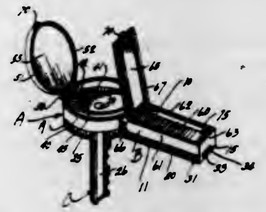
1. A portable calf feeder comprising a horizontally disposed sheet metal trough having closed ends, spaced metal partitions crossing the trough and permanently secured thereto and forming therewith a plurality of liquid tight feeding compartments, said partitions being extended above the trough to provide guard wings between compartments and a back board rising from the rear side of the trough and secured to the rear edges of the wings, said board being provided with a number of similar spaced openings therein, each of a size to permit an animal to pass its head therethrough to feed from the adjoining compartment.

1,889,470. UNIVERSAL JOINT. FRANCIS ALBERT GARRETT, Ipswich, England, assignor to Ransomes, Sims & Jefferies, Limited, Orwell Works, Ipswich, England. Original application filed July 30, 1930, Serial No. 471,780, and in Great Britain Aug. 29, 1929. Divided and this application filed June 15, 1931. Serial No. 544,603. 3 Claims. (Cl. 64—102.)



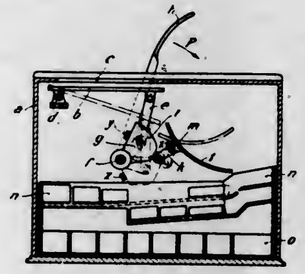
1. A universal joint comprising a torque ring, a valve box carried by the torque ring, a check valve in said box, and a closing spring for said valve, said valve being adapted under oscillation of said torque ring to open and to close intermittently to control the passage of oil into said box, substantially as and for the purpose hereinbefore set forth.

1,889,471. COMPACT. JULES GLAENZER, New York, N. Y. Filed July 7, 1931. Serial No. 549,282. 6 Claims. (Cl. 132—83.)



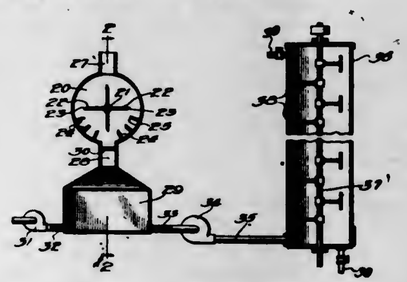
1. In a device of the class described, an elongate flat key-shaped casing including a disc-shaped head portion and a shank extending radially therefrom, said casing having a cosmetic receiving compartment in the head and a cosmetic receiving compartment in the shank opening to one face of the casing, and a key-shaped compartment beneath said first and second mentioned compartments conforming substantially to the shape of the head portion and shank and opening at another portion of the casing.

1,889,472. CASH TILL WITH A COIN ASSORTER. ARMAND GODEFROID, Berlin, Germany. Filed Nov. 17, 1931, Serial No. 575,622, and in Germany June 29, 1931. 13 Claims. (Cl. 133—1.)



1. In a cash till, a coin assorter, a coin receiver adapted to deliver coins directly to said assorter, means for operating said receiver, and an intercepter adapted to deliver to said assorter the coins not delivered directly.

1,889,473. METHOD OF AND APPARATUS FOR FIBRATING EMULSIONS. EDWIN O. GROSKOFF, Rutherford, N. J., assignor, by mesne assignments, to The Flintkote Corporation, Boston, Mass., a Corporation of Massachusetts. Filed Apr. 22, 1929. Serial No. 357,166. 6 Claims. (Cl. 134—1.)



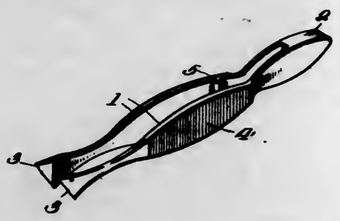
1. The method of incorporating fibrous material in aqueous dispersions of substances normally immiscible with water, which comprises disintegrating fibrous material to

thereby render the same substantially individualized, and introducing said fibers into the dispersion in a stream while maintaining the individualized condition of the fibers.

1,889,474. ENGINE FUEL. NILS HARRY GULLANDER, Malmo, Sweden, assignor to the Firm C. & S. Clementson, Malmo, Sweden. Filed Feb. 26, 1931, Serial No. 518,595, and in Sweden Feb. 14, 1931. 1 Claim. (Cl. 44—9.)

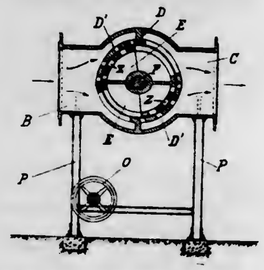
In a conventional engine fuel, the addition of a mixture consisting of suitable lubricating oil, hydrogenated naphthalene and hydrogenated phenol.

1,889,475. TWEEZERS. AUGUST HENKEL, Keene, N. H. Filed Jan. 18, 1932. Serial No. 587,408. 1 Claim. (Cl. 128—354.)



Tweezers comprising opening and closing spring jaws, and a stop bar on the interior surface of one of said jaws extending substantially the entire width thereof whereby to prevent the jaws from tilting and the points from spreading apart when pressure is applied.

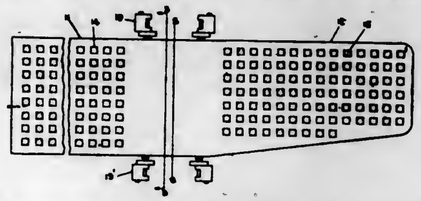
1,889,476. AIR ALTERNATOR APPLICABLE TO BLAST FURNACES PRODUCING CAST IRON, SMELTING FURNACES AND THE LIKE. EDWARD HICKMAN Y EMPARAN, Sestao, Spain. Filed Apr. 29, 1929, Serial No. 359,152, and in Spain May 8, 1928. 3 Claims. (Cl. 137—146.)



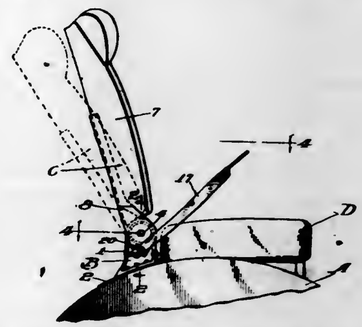
2. An air alternator including a casing having an air inlet and an air outlet, a cylinder within the casing, the cylinder being connected to the casing to divide the cylinder into a portion open to the inlet air and a portion open to the outlet air, each of said portions of the cylinder being formed with openings of relatively different areas for the passage of the air, and means within the cylinder to continually vary the size of the openings whereby air under constant pressure admitted through the inlet is delivered through the outlet in a continually varying series of streams of air under relatively different speeds and pressures.

1,889,477. SAFETY SURFACE FOR AEROFOILS. SAMUEL E. HITT, Elyria, Ohio. Filed Nov. 11, 1931. Serial No. 574,264. 6 Claims. (Cl. 244—12.)

1. In a seaplane, aeroship or similar craft, an aerofoil having a frame constructed with beam members parallel to the lateral axis and extending the full length of the aerofoil wing, upper and lower supporting surfaces carried by the said frame, the said surfaces having perforations disposed in rows parallel to the lateral axis and between the said lateral beam members, perforated cover strips to undercover the said perforations in the upper surface, perforated cover strips to cover the said perforations in the lower surface, the said cover strips having side bars, the said lateral beam members having guides to suit the said cover strip side bars, and forced oil feed lubrication for contact surfaces of the said cover strip side bars and the said lateral beam guides.

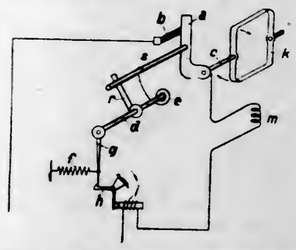


1,889,478. ADJUSTABLE-BACK CHAIR. CHARLES R. HULTGREN, Chicago, Ill., assignor to S. Karpen & Bros., Chicago, Ill., a Corporation of West Virginia. Filed July 24, 1930. Serial No. 470,516. 3 Claims. (Cl. 155—160.)



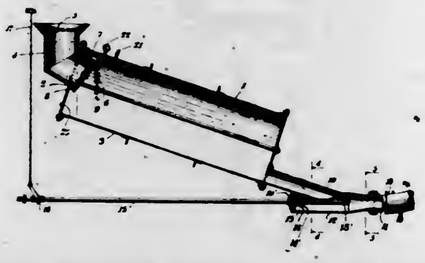
1. In combination with a frame adapted to support a seat, a swinging back pivotally supported in said frame, said back being provided with a sector arm having locking indentations therein, and a lock shaft supported by said frame and having a portion cut away to provide an edge adapted to engage said indentations.

1,889,479. ELECTRIC SWITCH. ROBERT KELLER, Ennetbaden, Switzerland, assignor to Aktiengesellschaft Brown, Boveri and Cie., Baden, Switzerland. Filed May 3, 1928, Serial No. 274,898, and in Switzerland May 7, 1927. 9 Claims. (Cl. 200—98.)



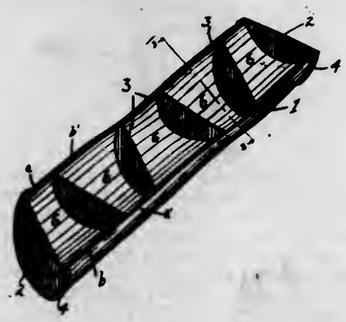
1. A switch adapted for quick release including a fixed contact, a movable switch member carrying a movable contact, resilient means tending to force apart said contacts, a locking device holding said contacts together against the force of the said resilient means and additional means independent of said locking device and tending to force apart said contacts in dependence upon the rate of change of current through said contacts.

1,889,480. CONTINUOUS FEED GUN FOR CONCRETE OR PLASTIC MATERIALS. CHARLES F. KELLEY, Jackson Heights, N. Y. Filed Jan. 21, 1931. Serial No. 510,242. 10 Claims. (Cl. 302—52.)



1. In a device of the class described, the combination with an outlet pipe of a material supply conduit communicating therewith, a pipe communicating with the outlet pipe and adapted to discharge air under pressure into the same to force the material through the outlet pipe, and means operative under the action of the air to close the material supply conduit upon the occurence of a stoppage in the outlet pipe.

1,889,481. ICE TRAY FOR MECHANICAL REFRIGERATORS. GEORGE H. KENNEDY, Jr., Worcester, Mass. Filed Oct. 3, 1929. Serial No. 397,085. 19 Claims. (Cl. 62—108.5.)

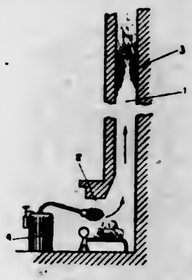


1. An ice tray for mechanical refrigerators, having ice block cavities each bounded by a surface of revolution and by two substantially upright surfaces whose upper edges are non-parallel.

1,889,482. STEEL HAVING A HIGH YIELD POINT AND A GOOD NOTCH TOUGHNESS. ADOLF KLINKENBERG, Wittbraucke, near Herdecke, Germany, assignor to the Firm Vereinigte Stahlwerke Aktiengesellschaft, Dusseldorf, Germany. Filed Jan. 29, 1931, Serial No. 512,194, and in Germany Jan. 8, 1930. 3 Claims. (Cl. 75—1.)

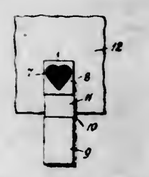
1. A steel having a high yield point and a good notch toughness, a low carbon content from about 0.1% to 0.3%, a small amount of sulphur not exceeding 0.05%, a phosphorus content ranging between 0.1 and 0.4% and a copper content of between 0.1 and 1% and the remainder substantially iron.

1,889,483. METHOD FOR EXTINGUISHING CHIMNEY FIRES. BÉNIGNE PIERRE MARIE LE GOUZ, DE SAINT SEINE, Paris, France. Filed June 18, 1929, Serial No. 371,914, and in France June 26, 1928. 1 Claim. (Cl. 169—2.)



A method of extinguishing chimney fires wherein a fire is capable of producing a natural drought, which method consists in injecting into said drought a liquid in such a fine state of atomization that it will be carried by said draught to the seat of the chimney fire where it will be gasified by the heat of said chimney fire, the gasification of the liquid effecting the lowering of the temperature and a zone of non-combustible atmosphere at the seat of the chimney fire.

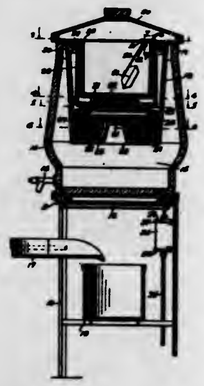
1,889,484. DECALCOMANIA. PRESTON W. MARSHBURN, New York, N. Y., assignor to Northam Warren Corporation, New York, N. Y., a Corporation of New York. Filed Mar. 30, 1931. Serial No. 526,875. 5 Claims. (Cl. 41—33.)



1. A decalcomania transfer comprising a backing sheet, a plurality of transparent films secured to said backing sheet by a water soluble adhesive, each film carrying a design, said backing sheet extending a considerable distance beyond the design to provide a tab portion sufficiently large in area to be grasped between the fingers, each film being separated from the adjoining film, but all the films being carried by said backing, the backing having weakened portions near the point of separation of each film, whereby each design, and the section of the backing immediately therebeneath, may be separated from the entire backing and immersed in water to soften the water soluble adhesive and the portion of the film carrying the design slid upon an object to be decorated, the adhesive on the underside of the film being adapted for use to secure the film upon the object to be decorated.

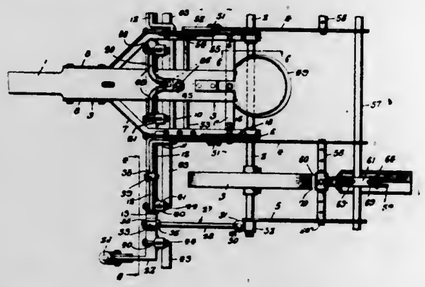
5. A method of decorating articles consisting in applying a design to a film of transparent material, cutting a backing of larger area than the portion of the film carrying said design, securing said film to said backing with an adhesive capable of being softened to permit said adhesive to set, grasping said backing at the portion thereof beyond the portion carrying the design, immersing the portion of the film carrying the design and said backing in a material capable of softening said adhesive, sliding the portion of the film carrying said design upon the object to be decorated, utilizing the adhesive carried along with said film to secure the film to the object, and applying a protective coating over the exposed surface of the film.

1,889,485. WATER PURIFIER AND SOFTENER. EDWARD T. MARTIN, Long Beach, Calif., assignor to C. E. Chenoweth, Glendale, E. T. Martin, Long Beach, and Guido J. Wiggenhorn, South Pasadena, Calif., as trustees. Filed Dec. 25, 1930. Serial No. 504,668. 4 Claims. (Cl. 210—105.)



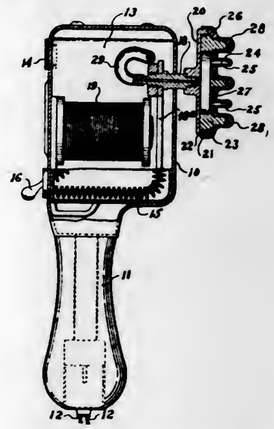
8. In combination with an olla, a supply pipe for delivering water to the olla, a jar therein, a bracket having downwardly extending ends spaced at less than the length of the diameter of the mouth of the olla, an arm pivoted to the bracket having a downwardly extending end adapted to engage said jar to maintain the bracket in applied position, and a float operated valve to which the supply pipe is connected suspended by the bracket in the mouth of the olla.

1,889,486. AGRICULTURAL MACHINE. EUGENE L. McGREGOR, Montrose, Colo. Filed Apr. 28, 1931. Serial No. 532,291. 12 Claims. (Cl. 97—154.)



1. In a machine of the character described having supporting wheels, an axle and a center draft beam supported by the axle, a pair of elongated members disposed longitudinally of the machine, one at each side thereof, pivotal connecting means between the rear end of each member and the machine axle whereby both vertical and horizontal movement of each member may be obtained, a beam disposed transversely of the machine between said members and having pivotal connection with the members for permitting movement in a horizontal plane therewith, a caster wheel supporting each end of the transverse beam, means carried by the transverse beam for attaching earth working elements thereto, an oscillatable member carried by the draft beam and having connection with the transverse beam for effecting lateral shifting of the transverse beam, a shaft mounted transversely of the first mentioned beam, means for rocking said shaft, and connecting means between said shaft and the transverse beam for effecting a lift of the transverse beam upon the rocking of the shaft.

1,889,487. FOUNTAIN VIBRATOR. HARRY NACHISS, Canton, Ohio. Filed Mar. 11, 1931. Serial No. 521,648. 2 Claims. (Cl. 128—65.)



1. A vibrator including a casing, an oil reservoir within the casing, an electric heating element within the reservoir, a hollow vibratable stem located through one side of the casing, electric means within the casing for vibrating said stem, a hose connecting the reservoir to said stem, an applicator upon the stem provided with nipples to distribute the oil, and independent switches for controlling the heating element and the vibrating means.

1,889,488. RENEWABLE THERMOUNIT. JOSEPH O'BRIEN, Baltimore, Md. Filed July 6, 1931. Serial No. 549,055. 1 Claim. (Cl. 200—116.)

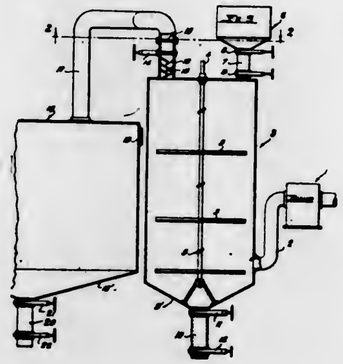


A fuse plug comprising a body of insulating material having an opening therethrough, a base member closing one end of the opening, a metallic sleeve threadedly connected with the body and having a circular flange engaged with the base member for holding the base member in position, a spring contact having one end clamped between the sleeve and body, and a free end extending into the opening, a contact member mounted on the base, a thermal member located in the body and having one end connected to the contact member on the base, a pivot pin traversing the opening in the body, an arm carried thereby, the free end of the spring contact extending between the pivot pin and a wall of the body for engaging the pivot pin of the arm, spring means urging the pin to rotate in one direction, to hold said arm against the free end of the thermal member, an exterior actuating knob on one end of the pin, and a cap fitted on the body closing the remaining end of the opening, said cap and said knob provided with cooperating means for visually indicating the conditions of the circuit.

1,889,489. PROCESS OF EXTRACTING GOLD FROM SOLUTIONS. HERSCHEL C. PARKER, Los Angeles, Calif. Filed Jan. 5, 1932. Serial No. 584,821. 3 Claims. (Cl. 75—18.)

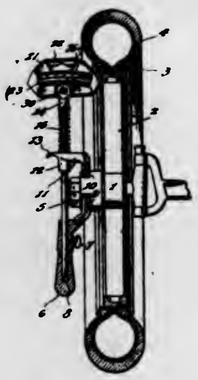
1. A process of extracting gold from solutions comprising passing a gold bearing solution through a container

in the presence of granular ferrous sulphide, agitating the solution for a time sufficient for the ferrous sulphide to



extract an appreciable percentage of gold from the solution, and separating the gold enriched ferrous sulphide from the solution.

1,889,490. TOOL FOR MEASURING CAMBER OF WHEELS AND CASTER AND KING-PIN TILT. CLYDE H. PHELPS, Binghamton, N. Y., assignor to The Reiss Manufacturing Company, Kokomo, Ind., a Corporation of Indiana. Filed Aug. 7, 1928. Serial No. 298,006. 8 Claims. (Cl. 33—203.)

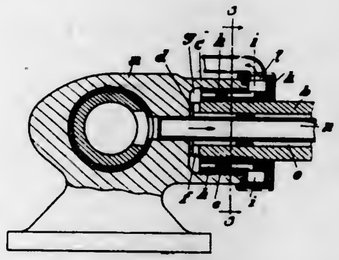


5. A tool for measuring camber of a wheel comprising a head, means for pivotally supporting the head on the side of a wheel adjacent the wheel rim to turn therewith, means for adjusting the head to a horizontal position at the low point of the wheel and at a right angle to the wheel, and an inclinometer carried by the head and operable upon turning of the wheel to indicate camber when said head is at the high point of the wheel.

1,889,491. DYE COMPOSITION. LOUIS PHILIPPE, New York, N. Y. Filed July 11, 1929. Serial No. 377,621. 4 Claims. (Cl. 8—6.)

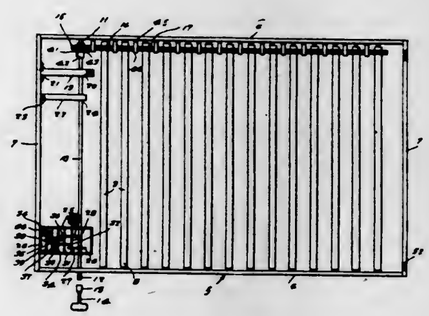
1. A stable dry composition for silk dyeing comprising an acid dye, a hygroscopic acid salt capable of hydrolysing in water to release free acid for combination with the dye, and an anti-hydroscopic agent coating the particles of hydroscopic acid salt.

1,889,492. PISTON COOLING FOR COMBUSTION POWER ENGINES. GUSTAV PIELSTICK, Augsburg, Germany, assignor to Maschinenfabrik Augsburg-Nürnberg A. G., Augsburg, Germany, a Corporation of Germany. Filed June 24, 1931, Serial No. 546,500, and in Germany July 25, 1930. 5 Claims. (Cl. 123—176.)



1. In an internal combustion engine, a crosshead having a hollow rod portion, a piston rod having a longitudinal passage for the return flow of cooling fluid from the piston and having a conduit through which the cooling fluid may be supplied to the piston, and means connecting the piston rod to the rod portion of the crosshead comprising a hollow attaching part in engagement with the rod portion of the crosshead and in engagement with the piston rod, said attaching part having longitudinal passages in communication with the passage in the piston rod for leading off the cooling fluid.

1,889,493. INCUBATOR TRAY. ERNEST POCKRANDT, Minden, Nebr. Filed May 2, 1929. Serial No. 359,875. 1 Claim. (Cl. 119—44.)

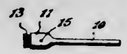


An egg turning tray comprising in combination a frame, a plurality of relatively spaced transverse rollers journalled in the frame, means for simultaneously rotating all of said rollers in one direction, an egg positioning frame arranged in the first mentioned frame and resting on said rollers, and said first mentioned frame having an end member provided with a slot extending transversely of the frame in a plane above the rollers and through which an adjacent end of said positioning frame is projectable.

1,889,494. DENTAL POLISHER. HARRY R. PRIEST, Loudonville, Ohio. Filed Sept. 12, 1930. Serial No. 481,552. 1 Claim. (Cl. 15—180.)

A dentist's tooth cleaning and polishing tool comprising a shank adapted to be received in the chuck of a dental engine and terminating in a socket, a single short wide unitary cylindrical tuft of stiff bristles, a hardened plastic base for said tuft disposed in said socket and

permanently clamping said bristles in intimate contact with each other throughout their entire length, said tuft projecting about $\frac{1}{32}$" to $\frac{1}{16}$" beyond the socket



and being about the same in width as the length of the projecting portion whereby spreading apart of the bristles at their exposed ends under great pressure is prevented.

1,889,495. TOOTH CLEANING AND POLISHING ELEMENT. HARRY R. PRIEST, Loudonville, Ohio. Filed Apr. 10, 1931. Serial No. 529,194. 4 Claims. (Cl. 15—167.)



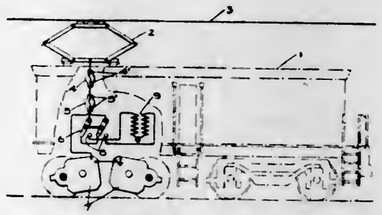
1. A tooth cleaning and polishing tool comprising a grip terminating in a substantially hemispherical head having an axial threaded opening in the flat face thereof, a substantially hemispherical brush head having its flat face provided with a reduced axial screw-threaded stem engaged in said opening, the brush head flat face at the base of the stem forming a stop shoulder disposed in contact with the flat face of the grip head and limiting insertion of the stem into said opening, the assembled grip head and brush head being substantially a ball, there being an axial opening extending throughout the brush head and stem thereof, and a single cylindrical rigid tuft of bristles confined for the major portion of its length in said opening and extending from end to end of the opening and projecting with its free end a short distance beyond the rounded surface of the socket.

1,889,496. SHAVING BRUSH KIT. HARRY R. PRIEST, Loudonville, Ohio. Filed Aug. 17, 1931. Serial No. 557,619. 5 Claims. (Cl. 132—81.)



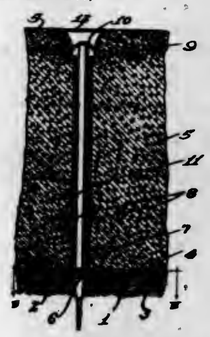
1. A shaving kit comprising a hollow handle forming a magazine, a bristle tuft, a rubber base anchoring the bristles of the tuft, a single ferrule having a bore vulcanized to the base, the bore being provided at one end with a retaining flange projecting over the end edge of the base, the ferrule being provided with a reduced exteriorly threaded neck remote from the retaining flange adapted to be threaded into the open end of the handle, and a pair of set screws threaded through said neck at diametrically opposite points therein and engaged in said base, said set screws coacting with said flange in permanently assembling said base to said ferrule.

1,889,497. VACUUM FUSE SYSTEM. DAVID C. PRINCE, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Oct. 1, 1929. Serial No. 396,547. 5 Claims. (Cl. 175—294.)



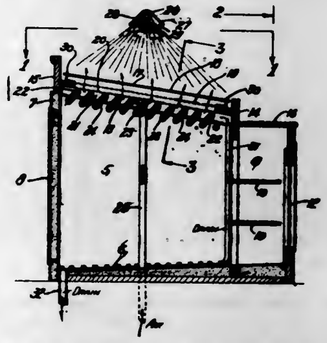
1. In a protective system for apparatus adapted to operate on either direct or alternating current, an alternating current fuse and a direct current fuse connected in series with said apparatus.

1,889,498. EXPANSION JOINT. ROBERT R. ROBERTSON, Chicago, Ill. Filed Jan. 5, 1931. Serial No. 506,510. 8 Claims. (Cl. 94—17.)



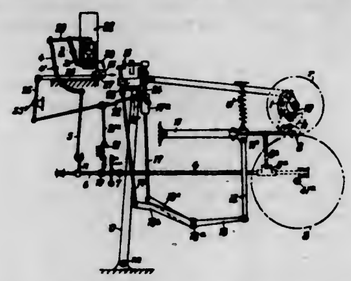
1. An expansion joint comprising an apertured base, a hollow web secured thereon, a channel formed on said hollow web, an apertured arched cap seated in said channel, staking members projecting through said apertured arched cap, said hollow web and through said base to secure the expansion joint in position, and a removable mould cap supported by said channel to enclose said cap.

1,889,499. APPARATUS AND METHOD FOR REFRIGERATION. CHARLES E. ROBERR and ALBERT R. MITTERER, Denver, Colo. Filed Feb. 17, 1930. Serial No. 429,086. 25 Claims. (Cl. 62—89.5.)



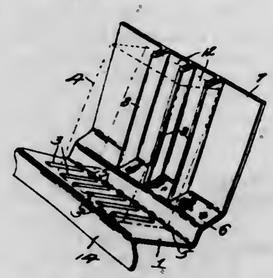
1. A show case having a closed merchandise chamber and an open bin above the same, and means to circulate a cooling medium through a closed section about opposite sides of the wall between the chamber and the bin for their simultaneous refrigeration.

1,889,500. LOOM. PAUL SCHMIDT, Sorau, Germany. Filed Jan. 31, 1930, Serial No. 424,995, and in Germany Mar. 27, 1929. 14 Claims. (Cl. 139—236.)



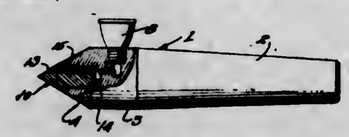
1. A shuttle changing device for over-pick and under-pick looms in which the full shuttle is introduced on one side of the lay and at the same time the empty shuttle is ejected on the other side, comprising a crank shaft, shuttle boxes, movable front walls for the shuttle boxes, and a rotatable member driven by the crank shaft and adapted to move the front walls of the shuttle boxes upwards and forwards at an inclination to the vertical and then to lower them, the lowering taking place in two successive stages.

1,889,501. SOAP HOLDER. AUGUST C. SCHNAKE, Centralia, Ill. Filed Sept. 19, 1931. Serial No. 563,862. 3 Claims. (Cl. 45—28.)



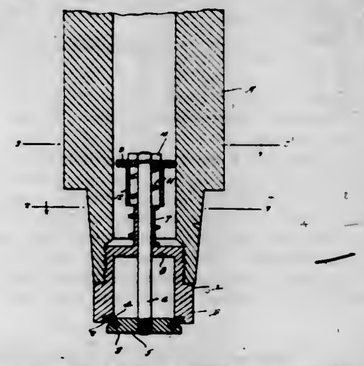
1. A soap holder comprising a rearwardly inclined bottom, said bottom terminating in an upwardly and rearwardly inclined flange, said flange terminating in an upwardly and rearwardly inclined back, spaced ribs carried by said upwardly extending flange and back and extending forwardly, said ribs being positioned whereby they will engage the rear side of a cake of soap resting on the bottom at the upper end of the soap and ribs, thereby allowing a free circulation of air between the soap, ribs and back, said ribs being of sufficient depth and distance apart whereby the fingers of a person will be received therebetween for gripping the upper end of the cake of soap when removing the same from the holder.

1,889,502. CENTER. JOHN HUGO SMITH, Detroit, Mich. Filed Sept. 30, 1929. Serial No. 396,047. 3 Claims. (Cl. 82—38.)



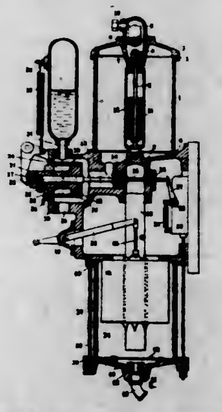
1. A center tool of the class described, comprising a shank and a cone shaped end portion of a material relatively easy to work, an aperture formed in the end of said cone shaped portion and having a countersunk end communicating with an oil conduit, a short insert formed of tungsten carbide shaped to fit and braced within said aperture and having a cone shaped portion on the end thereof for registering with the cone shaped portion in said main body, and an oil conduit formed in said insert for conducting oil from said first named conduit, through said insert, to the work receiving surfaces formed by said cone.

1,889,503. ROTARY TYPE FLOAT VALVE. JACK LEE THOMAS, Oklahoma City, Okla., assignor of one-fourth to Emmett T. Bruce, one-fourth to William D. Fawcett, and one-fourth to Elmer F. Ross, Oklahoma City, Okla. Filed Dec. 27, 1930. Serial No. 505,179. 2 Claims. (Cl. 137—69.)



1. In combination with the tool joint of a rotary drilling line, a valve-body connected to the lower end of the male part of the joint and having a valve seat at its lower end, a valve engaging the seat, a stem connected with the valve and passing through the top part of the body which has an opening therein, a plate on the upper end of the stem of slightly less diameter than the bore of the joint to increase the velocity of the fluid passing the plate over that of the fluid passing the valve and a spring for normally holding the valve on its seat but permitting the valve to open under the pressure of fluid in the line acting on said plate.

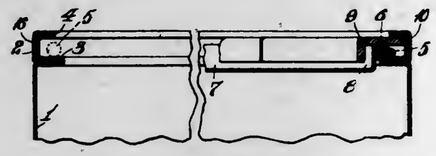
1,889,504. GASOLINE DISTRIBUTING APPARATUS. ADRIEN MARCEL LUCIEN TRIBOUT, Paris, France, assignor to Societe d'Etude des Distributeurs Automatiques (S. E. D. A.), Paris, France. Filed May 15, 1930, Serial No. 452,708, and in France May 29, 1929. 18 Claims. (Cl. 221—100.)



1. In a dispensing apparatus, a measuring device, a dispensing conduit, an enclosure between the measuring de-

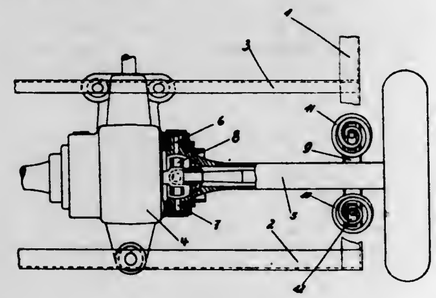
vice and the conduit, means for retarding the rate of liquid outflow from the enclosure with respect to the inflow thereto, a float in said enclosure, a two-part distributing element subjected to and operated by the pressure of liquid admitted to the measuring device, and means controlled by said float for coupling and uncoupling the parts of said dispensing element.

1,889,505. UNITARY CHIME FOR METALLIC CONTAINERS. LOUIS B. WACKMAN, St. Louis, Mo. Filed Feb. 2, 1932. Serial No. 590,426. 8 Claims. (Cl. 220—74.)



1. A chime for a container comprising a metallic sheet having a part folded on one end and rolled into a cylindrical body; the cylindrical body having a circumferential channel formed therein at the free end of said folded part, with the free end pressed into the channel; one side of the wall of said channel forming a cover seat, and the folding edge of said folded part being angularly bent to form a locking flange above said seat.

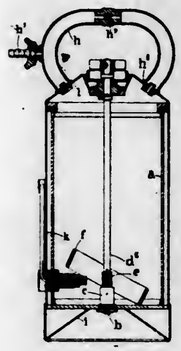
1,889,506. SPRINGING FOR VEHICLES. MAX WAGNER, Stuttgart, Germany, assignor to Daimler Benz Aktiengesellschaft, Stuttgart-Unterturkheim, a Company of Germany. Filed Nov. 28, 1931, Serial No. 577,848, and in Germany Nov. 25, 1930. 3 Claims. (Cl. 180—70.)



1. In a power driven vehicle, a chassis frame consisting of lateral longitudinal girders and transverse girders, a differential housing which is secured to the transverse girders of the chassis frame, a half axle receiving the drive for a vehicle wheel, a joint by which the half axle is jointed to the differential housing in such a manner that it can swing in a vertical plane and a helical spring substantially unguided having one end bearing against the axle and the other end directly against a longitudinal girder from below.

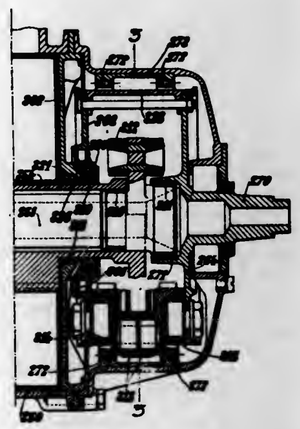
1,889,507. APPARATUS FOR SPRAYING PARAFFIN WAX AND THE LIKE. THOMAS WATSON, London, England. Filed Aug. 8, 1930, Serial No. 474,012, and in Great Britain Oct. 24, 1929. 5 Claims. (Cl. 91—44.)

1. Apparatus of the character described comprising a heat insulated vessel, an atomizing device at one end of the vessel embodying a container mounted through the wall of the vessel and having a chamber therein provided with an inlet and an outlet, a nozzle associated with the outlet, a valve associated with the inlet of the chamber, the inlet of the chamber being spaced inwardly from the wall of the casing, an electric heating element surrounding the chamber, a hollow handle connected with the casing at a point opposite the container for supplying gas or



air under pressure to the casing, and the ends of the handle being curved and connected with the casing so that the incoming pressure medium will strike the walls of the casing prior to contacting with the fluid within the casing.

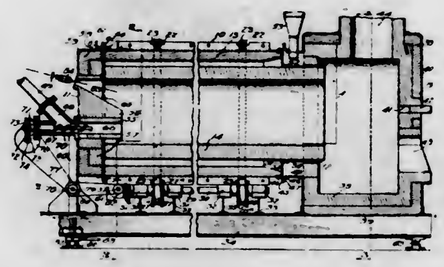
1,889,508. PUMP OR COMPRESSOR. PIERRE ZENS, Paris, France. Filed June 18, 1930, Serial No. 462,095, and in France June 28, 1929. 4 Claims. (Cl. 103—129.)



1. In a compressor or pump comprising a cylindrical body provided with suction and delivery ports, shafts coaxial with the cylindrical bodies for receiving radial blades and which have at their ends cranks and means for entraining the said cranks and consequently the coaxial shafts and the blades in rotation with a variable movement for varying the volume of the chambers limited by the said cylindrical body and the said blades for effecting the desired suction and delivery, the combination of links designed as a fork at one of their ends for engaging on the said cranks so as to prevent the overhanging of the link axles, eccentric journals or crank pins for constituting link axles for the other ends of the said

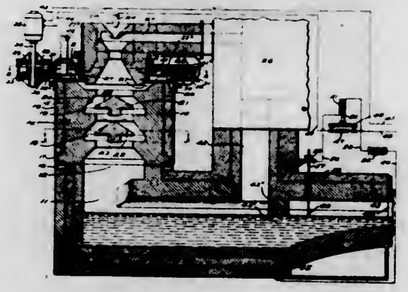
links, externally toothed wheel strengthened by cheeks through the said eccentric journals or crank pins, a movable casing or support bearing link axles of the said externally toothed wheels, the said movable casing being united with the driving shaft of a fixed and internally toothed crown for engaging with the said cheeked externally toothed wheels so that the said latter wheels are entrained in gyration by the said casing and in rotation by the said internally toothed double crown.

1,889,509. ROTARY TANK. WALTER O. AMSLER, Toledo, Ohio, assignor to Hartford-Empire Company, Hartford, Conn., a Corporation of Delaware. Filed Sept. 28, 1927. Serial No. 222,528. 20 Claims. (Cl. 49—54.)



16. The method of making glass comprising continuously feeding glass batch into one end of a rotary container, melting the batch therein and kneading the melted glass within the container by rotating the container about a substantially horizontal axis and continuously delivering molten glass from the other end of the container.

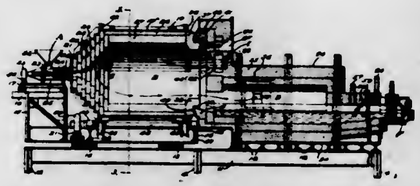
1,889,510. APPARATUS FOR MELTING GLASS. WALTER O. AMSLER, Hartford, Conn., assignor to Hartford-Empire Company, Hartford, Conn., a Corporation of Delaware. Filed Apr. 19, 1928. Serial No. 271,179. 11 Claims. (Cl. 49—54.)



3. Batch feeding apparatus for a glass melting tank, comprising a horizontal shelf adapted for rotation, a plow disposed above said shelf and also adapted for rotation, and means for rotating said shelf and said plow at different speeds.

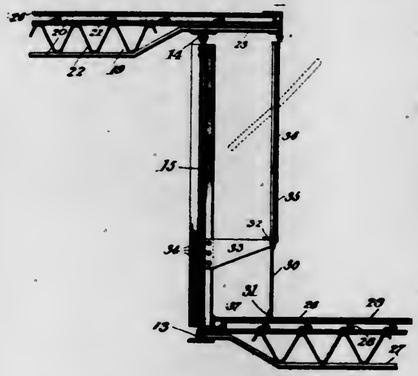
6. A glass melting tank structure, comprising a glass melting chamber with a substantially vertically disposed wall, a recess extending into said wall and having its upper wall inclined inwardly and upwardly, a baffle disposed substantially centrally of said chamber and extending into said recess, and means for passing a flame over said baffle and through said recess.

1,889,511. ROTARY GLASS MELTING FURNACE. WALTER O. AMSLER, Hartford, Conn., assignor to Hartford-Empire Company, Hartford, Conn., a Corporation of Delaware. Filed July 26, 1928. Serial No. 295,600. 15 Claims. (Cl. 49—54.)



1. Apparatus for continuously melting glass comprising a melting chamber of cylindrical form, means for rotating said chamber about its axis, means for introducing batch into one end of said chamber, and means for introducing and removing the heating medium through the other end of said chamber.

1,889,512. BUILDING STRUCTURE. CLAUDE I. AUTEN, Youngstown, Ohio, assignor to Truscon Steel Company, Youngstown, Ohio, a Corporation of Michigan. Filed Oct. 8, 1930. Serial No. 487,802. 7 Claims. (Cl. 108—1.)

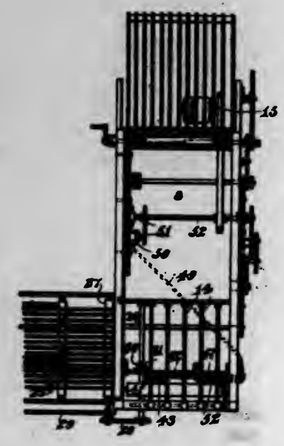


1. In a building structure, spaced inclined roof supporting trusses having upper and lower inclined chords, a set of transversely disposed rafters mounted on the upper chords of certain of the trusses, including a truss on which the ends of said rafters are supported, a roof carried by said rafters, another set of rafters supported on the lower chords of certain trusses, and having their ends on the lower chord of that tuss on the upper chord of which the ends of the first set are mounted, a roof supported on the second set of rafters, the ends of one of said set of rafters projecting beyond the truss on which they rest, and a vertical side wall extending from the projecting ends of the rafters of one set beneath the same to the othe rafters.

1,889,513. SHEET DIRECTING MEANS. ALBERT BROADMEYER, Harrisburg, Pa., assignor to The W. O. Hickok Manufacturing Company, Harrisburg, Pa., a Corporation of Pennsylvania. Original application filed June 10, 1927, Serial No. 197,977. Divided and this application filed Dec. 4, 1929. Serial No. 411,629. 25 Claims. (Cl. 271—50.)

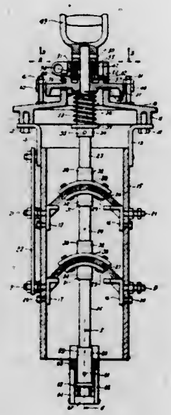
1. In apparatus of the character set forth, the combination with a constantly moving and normally inoperative

sheet moving means, of means normally inactive for making said sheet moving means operative to move a sheet, controlled by one portion of the sheet that is to be moved



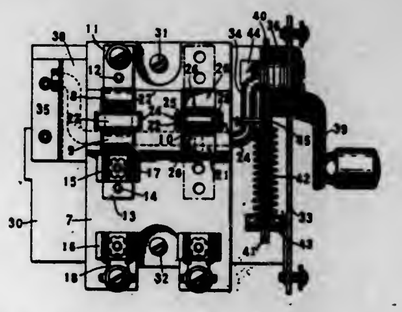
for causing said sheet moving means to become operative on another portion of such sheet to move it out of coaction with the actuating means.

1,889,514. SWITCH. PERCY E. COOK, Haddonfield, N. J., assignor, by mesne assignments, to Allis-Chalmers Manufacturing Company, Milwaukee, Wis., a Corporation of Delaware. Original application filed Nov. 23, 1927, Serial No. 235,182. Divided and this application filed Jan. 27, 1930. Serial No. 423,629. 12 Claims. (Cl. 200—16.)



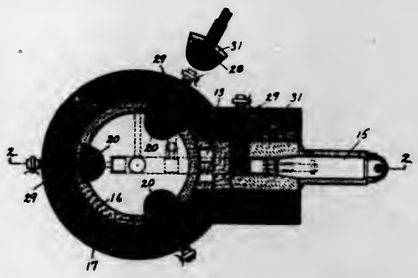
1. In switch apparatus, a switch member supported for movement in different directions, means operable to prevent movement of said member in one of said directions independently of movement of the same first in another of said directions, and means operable to lock said member against movement in said last-mentioned direction.

1,889,515. ELECTRIC SWITCH. HERMAN J. HAMMERLY, New Britain, Conn., assignor to The Trumbull Electric Manufacturing Company, Plainville, Conn., a Corporation of Connecticut. Filed June 11, 1932. Serial No. 616,605. 10 Claims. (Cl. 200—163.)



1. In an electric switch, an insulating base having a transversely extending passage from front to rear with a recess at each side of the passage, a spring contact mounted in each of said recesses, a flat plate guided in the base between said recesses and a roller loosely supported in said plate between said spring contacts.

1,889,516. ELECTRODE FOR USE IN MELTING FURNACES AND METHOD OF FORMING THE SAME. HAROLD W. MCINTOSH, Windsor, Conn., assignor to Hartford-Empire Company, Hartford, Conn., a Corporation of Delaware. Filed Feb. 5, 1931. Serial No. 513,688. 7 Claims. (Cl. 13—6.)

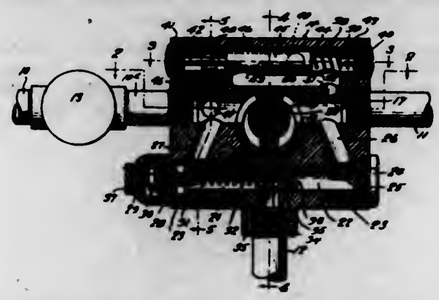


1. In an electric furnace for melting glass, an electrode adapted to be immersed in the melting glass comprising a carbon head, a stem attached to said head, a refractory block encircling said stem and a layer of glass surrounding said electrode and the portion of said stem extending through the refractory block, said layer of glass having a higher softening and melting temperature than the glass to be melted in said furnace.

1,889,517. FUEL PUMP. AMANDUS C. ROESSLER, Lakewood, Ohio, assignor to The Rotary Machine & Engineering Company, a Corporation of Ohio. Filed July 7, 1930. Serial No. 465,872. 5 Claims. (Cl. 103—42.)

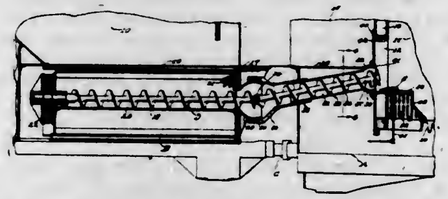
1. A pumping system including a power pump assembly and an emergency hand pump in tandem with said power pump, said power pump assembly including a block, a main passage through said block modified in one region to form the stationary portion of said power pump, a second passage in said block, a spring pressed piston valve in said second passage, ports establishing communication between the main passage and said second passage and a tank return pipe communicating with said second passage between

said ports, one of said ports being normally closed and the tank return pipe being controlled by said valve, said second passage extending entirely through said block, one



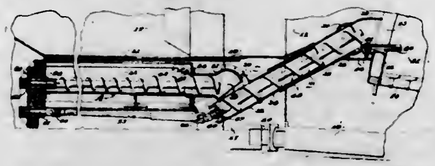
end thereof being closed by a sealing plug and the other end receiving a plug adapted to seal the end thereof and the adjacent port.

1,889,518. LOCOMOTIVE STOKER. EDWIN ARCHER TURNER, New York, N. Y., assignor to The Standard Stoker Company, Incorporated, a Corporation of Delaware. Filed Aug. 14, 1928. Serial No. 299,494. 16 Claims. (Cl. 110—101.)



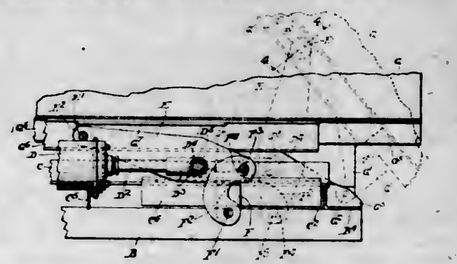
6. In a firebox having grates and a backhead provided with a firing opening; a stoker delivering to said opening, the discharge end of said stoker terminating at said opening, a fuel scattering table extending in said firebox and receiving fuel downwardly from said stoker, a wall positioned between the underside of said table and said grates for preventing coal from lodging beneath said table.

1,889,519. LOCOMOTIVE STOKER. EDWIN ARCHER TURNER, New York, N. Y., assignor to The Standard Stoker Company, Incorporated, a Corporation of Delaware. Filed July 29, 1929. Serial No. 381,934. 4 Claims. (Cl. 198—15.)



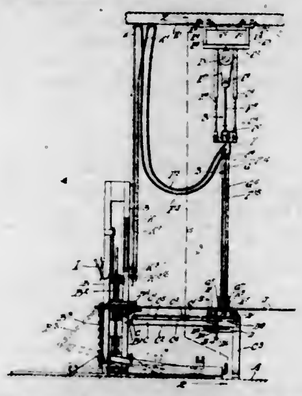
1. In a stoker comprising a flexible fuel feeding conduit system, a conveyer section and an elevator section, said conveyer section including a rearward open mouthed trough portion and a forward tubular extension having formed therewith at its forward end a spherical shell opening downwardly, said elevator section extending forwardly from a point immediately beneath said extension and at its forward end adapted to deliver fuel to a furnace, the lower end of said elevator section being located immediately beneath said forward extension and said elevator section at its lower portion opening upwardly to communicate with the opening of said spherical shell, and a spherical coupling member for attaching the lower portion of said elevator section to said forward extension to form a flexible connection there between, said spherical coupling member fitting over and contacting the outer spherical surface of the wall of said spherical shell member.

1,889,520. DUMPING BODY. WILLIAM C. ANTHONY, Streator, Ill., assignor to Anthony Company, Streator, Ill., a Corporation of Illinois. Filed Mar. 27, 1931. Serial No. 525,714. 15 Claims. (Cl. 298—22.)



1. In combination in a dumping body, a support, a body mounted thereon for motion with respect thereto, a movable pivot member, means for moving it, levers pivoted intermediate their ends on said pivot member and links attached each at one end upon said support and attached each at its other end to an end of one of said levers, there being a shifting pivotal connection between said links and said levers, said pivotal connection including means to cause relative shifting in addition to relative pivoting of the links and levers.

1,889,521. MATERIAL HANDLING MEANS. WILLIAM C. ANTHONY and LESTER WACHTER, Streator, Ill., assignors to Anthony Development Company, Streator, Ill., a Syndicate. Filed Apr. 6, 1931. Serial No. 527,953. 20 Claims. (Cl. 153—16.)



1. In combination in a material handling apparatus, a carriage, a material supporting frame supported therefrom, said frame including a part mounted upon the frame and carrying a plurality of material gripping means, and a guiding assembly, a carriage movably mounted on said assembly, means on said frame for engaging said carriage.

1,889,522. ELECTRICAL CAPACITOR. WILLIAM M. BAILEY, Lynn, Mass., assignor, by mesne assignments, to General Electric Company, a Corporation of New York. Filed Aug. 22, 1928. Serial No. 301,681. 16 Claims. (Cl. 175—41.)

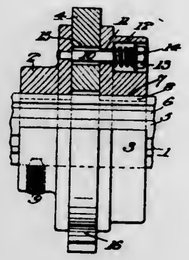
1. A capacitor comprising a pair of elongated insulating face plates, conductive and insulating material posi-

tioned to form a stack centrally of the plates, and terminal members electrically connected to the opposite polar members of the stack and extending outwardly from the stack between the face plates, said terminal members be-



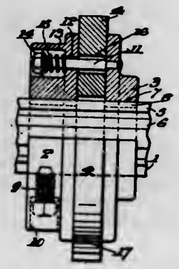
ing curved around and upon the ends of the plate to form exposed terminals, and clamping means passing through the terminal members and the insulating face plates and adapted to clamp the latter upon the stack members to hold them in their optimum cooperative relationship.

1,889,523. SELF-ADJUSTING FEED ROLL. HOWARD M. BARBER, Pawcatuck, Conn., assignor to C. B. Cottrell & Sons Company, Westerly, R. I., a Corporation of Delaware. Filed Dec. 19, 1931. Serial No. 582,064. 3 Claims. (Cl. 271—51.)



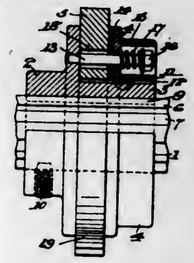
1. A feed roll shaft and a feed roller unit carried thereby comprising a collar fixed to the shaft, a collar slidable on the shaft, an interposed self-adjusting roller and tension means carried by the fixed collar and yieldingly engaging the slidable collar to frictionally clamp the feed roller between said collars.

1,889,524. SELF-ADJUSTING FEED ROLL. HOWARD M. BARBER, Pawcatuck, Conn., assignor to C. B. Cottrell & Sons Company, Westerly, R. I., a Corporation of Delaware. Filed Dec. 19, 1931. Serial No. 582,065. 4 Claims. (Cl. 271—51.)



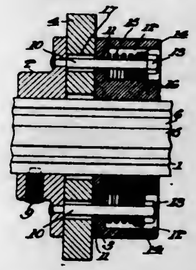
1. A feed roll shaft and a feed roller unit carried thereby comprising a collar fixed to the shaft, a collar slidable on the shaft, an interposed self-adjusting roller and tension means carried by the slidable collar and yieldingly engaging the fixed collar to frictionally clamp the feed roller between said collars, said tension means including bolts projecting from the slidable collar into the fixed collar, tension adjusting nuts threaded on said bolts and coil springs interposed between said nuts and fixed collar.

1,889,525. SELF-ADJUSTING FEED ROLL. HOWARD M. BARBER, Pawcatuck, Conn., assignor to C. B. Cottrell & Sons Company, Westerly, R. I., a Corporation of Delaware. Filed Dec. 19, 1931. Serial No. 582,066. 8 Claims. (Cl. 271—51.)



1. A feed roll shaft and a feed roller unit carried thereby comprising a collar fixed to the shaft, said collar being provided with a sleeve, another collar slidable on said sleeve, a self-adjusting roller interposed between said collars and tension means carried by the fixed collar and yieldingly engaging the slidable collar to frictionally clamp the feed roller between said collars, said tension means including bolts projecting from the fixed collar into the slidable collar, tension adjusting nuts threaded on said bolts and coil springs interposed between said nuts and slidable collar.

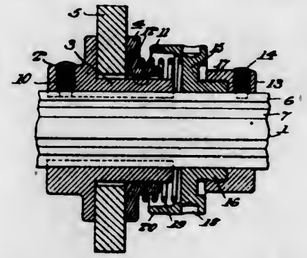
1,889,526. SELF-ADJUSTING FEED ROLL. HOWARD M. BARBER, Pawcatuck, Conn., assignor to C. B. Cottrell & Sons Company, Westerly, R. I., a Corporation of Delaware. Filed Dec. 19, 1931. Serial No. 582,068. 4 Claims. (Cl. 271—51.)



1. A feed roll shaft and a feed roller unit carried thereby comprising a collar fixed to the shaft, a collar slidable on the shaft, an interposed self-adjusting roller and tension means carried by the fixed collar and yieldingly engaging the slidable collar to frictionally clamp the feed roller between said collars, said tension means including bolts projecting from the fixed collar into the slidable collar, tension adjusting nuts threaded on said bolts, an annular follower slidable on the bolts and engaged by said nuts and a coil spring interposed between the follower and the slidable collar.

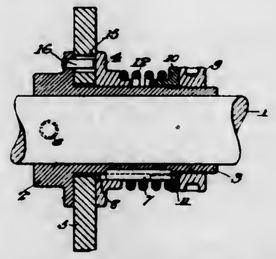
1,889,527. SELF-ADJUSTING FEED ROLL. HOWARD M. BARBER, Pawcatuck, Conn., assignor to C. B. Cottrell & Sons Company, Westerly, R. I., a Corporation of Delaware. Filed Dec. 19, 1931. Serial No. 582,069. 3 Claims. (Cl. 271—51.)

1. A feed roll shaft and a feed roller unit carried thereby comprising a collar fixed to the shaft, said collar being provided with a sleeve, another collar slidable on the sleeve, a self-adjusting roller interposed between said collars and tension means carried by the said shaft and yieldingly engaging the slidable collar to frictionally clamp the



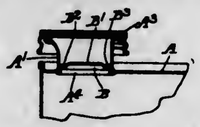
feed roller between said collars, said tension means including a ring fixed to the shaft, an annular follower adjustable longitudinally with respect to the ring and a coil spring interposed between the follower and the slidable collar.

1,889,528. SELF-ADJUSTING FEED ROLL. HOWARD M. BARBES, Pawcatuck, Conn., assignor to C. B. Cottrell & Sons Company, Westerly, R. I., a Corporation of Delaware. Filed Dec. 19, 1931. Serial No. 582,070. 2 Claims. (Cl. 271—51.)



1. A feed roll shaft and a feed roller unit carried thereby comprising a collar fixed to the shaft and provided with a sleeve, another collar slidable on the sleeve and interlocked therewith, a self-adjusting feed roller interposed between said collars, tension means yieldingly engaging the slidable collar to frictionally clamp the roller between the collars, said means including an adjusting nut threaded on the sleeve, an annular follower slidable on the sleeve and interlocked therewith, said follower being engaged by said nut and a coil spring surrounding the sleeve and interposed between the follower and the slidable collar and means preventing rotative movement of the roller with respect to its collars.

1,889,529. POURING NOZZLE. HENRY E. BARROLL, Chicago, Ill., assignor to Henry Barroll & Co., Inc., Chicago, Ill., a Corporation of New York. Filed Jan. 31, 1929. Serial No. 336,492. 2 Claims. (Cl. 220—24.)



1. The combination with a dispensing container having a nozzle and a closure cap for said nozzle, of a sealing member adapted to be inserted within said nozzle, to a level beneath the closure cap, said sealing member including a central portion having a channel about the edge thereof, said channel being bounded on its outer side by a peripheral flange or wall inclined in relation to the central portion of the sealing member.

1,889,530. PROCESS FOR THE MANUFACTURE OF HYDROGEN. JOHN S. BEEKLEY, Charleston, W. Va., assignor, by mesne assignments, to E. I. du Pont de Nemours & Company, Wilmington, Del., a Corporation of Delaware. Filed Nov. 8, 1930. Serial No. 494,449. 8 Claims. (Cl. 23—212.)

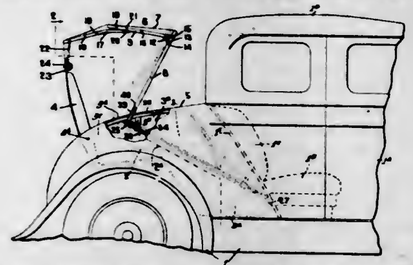
1. A process for the preparation of hydrogen by the interaction of steam and a gaseous hydrocarbon which comprises conducting the conversion of the hydrocarbon in a plurality of separate catalytic reaction stages, the space velocity in each stage being substantially proportional to the reaction rate in that stage.

1,889,531. RACE GAME. NORMAN BEL GEDDES, New York, N. Y. Filed June 20, 1929. Serial No. 372,297. 29 Claims. (Cl. 273—86.)



1. A game device comprising a race course a plurality of pieces movable over said course, propelling means individual to each of said pieces, driving means forming a part of each propelling means, and chance-controlled means to vary the speed of operation of various ones of said driving means.

1,889,532. TOP FOR RUMBLE SEATS OF AUTOMOBILES. EDWARD H. BENN, Boston, Mass., assignor to Rumbletop Corporation, Boston, Mass., a Corporation of Massachusetts. Filed Nov. 1, 1929, Serial No. 404,120. Renewed Oct. 25, 1932. 4 Claims. (Cl. 296—99.)

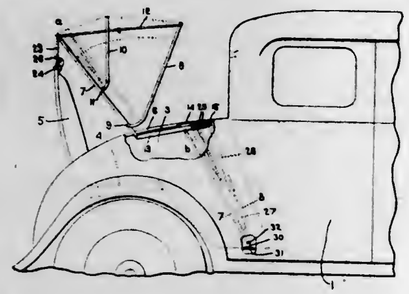


1. The combination with an automobile equipped with a rumble seat having a back, of a top for the rumble seat comprising an upstanding front bow, a second rearwardly-extending bow, links connecting the second bow to the front bow near the top thereof, the ends of the second bow engaging the front bow below the link connection, a third bow linked to the second bow and also extending rearwardly, the ends of the third bow engaging the second bow in front of the link connection, whereby said second and third bows are braced against downward pressure, and means for detachably connecting the rear bow to the back of the rumble seat, said second and rear bows being foldable against the front bow when disconnected from the rumble seat.

1,889,533. TOP FOR RUMBLE SEATS OF AUTOMOBILES. EDWARD H. BENN, Boston, Mass., assignor to Rumbletop Corporation, Boston, Mass., a Corporation of Massachusetts. Filed Nov. 15, 1929, Serial No. 407,503. Renewed Apr. 22, 1932. 5 Claims. (Cl. 296—99.)

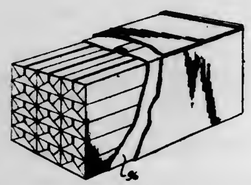
1. The combination with an automobile body having a main top for the driver's seat, a rear deck back of the main

top, a rear compartment beneath said deck, an opening in the rear deck leading to said compartment and a rumble seat within said compartment, of two supporting members pivoted at their front ends to the automobile body at the upper part of said compartment and in front of said opening and swingable from a raised operative position in which they extend substantially horizontally beneath said deck to an inoperative substantially vertical position in



front of the rumble seat, a folding top separate and independent from the main top and pivotally connected to the rear ends of said supporting members, said top when extended and held in raised position by the raised supporting members operating to shelter the rumble seat and when folded being movable bodily through said opening into the compartment in a position in front of the rumble seat by the swinging movement of the supporting members from their operative to their inoperative position.

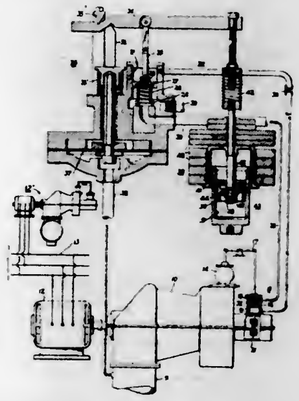
1,889,534. WRAPPING PACKAGES. LEON BENOIT and E. JOSEPH KANABAY, Chicago, Ill.; said Kanabay assignor to said Benoit. Filed Feb. 18, 1930. Serial No. 429,407. 4 Claims. (Cl. 93—2.)



1. A machine for wrapping packages comprising a table, plates pivotally mounted thereon and adapted to be positioned and releasably held flat on the table, and means normally urging said plates to move into vertical position.

1,889,535. REGULATING MECHANISM. OZRO N. BRYANT, Moores, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Dec. 30, 1930. Serial No. 505,608. 8 Claims. (Cl. 60—64.)

1. The combination with apparatus to be regulated, of mechanism for regulating said apparatus in response to a variable operating condition thereof comprising a movable element, means for biasing said element with a force varying with the operating condition, a weight member for biasing the movable element in opposition to said force, a spring for connecting the weight member to the movable element and serving upon variation in said force to provide a temporary scale for the movable element to determine the extent of initial movement thereof, means for retarding the rate of movement of the weight mem-



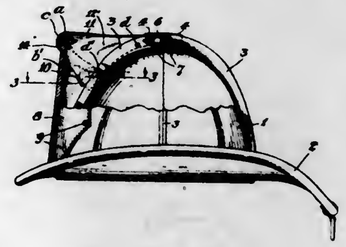
ber, a fluid pressure relay controlled by the position of the movable element, and means controlled by said relay for effecting the regulation of said apparatus.

1,889,536. BINDER AND METHOD OF MAKING THE SAME. HUGH G. BUCHAN, Philadelphia, Pa. Filed June 18, 1930. Serial No. 461,929. 5 Claims. (Cl. 129—38.)



3. The herein described method of making a binder consisting of forming a cover, superposing a metal channel along the center line of said cover, attaching said metal channel to said cover, inserting a pamphlet-holding plate in said channel and folding the flanges of said channel over said plate.

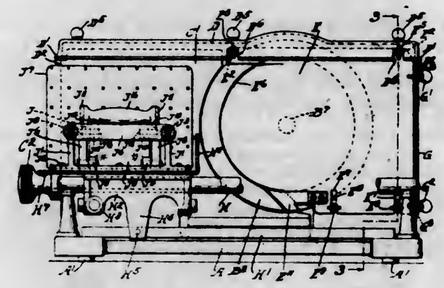
1,889,537. HELMET. EDWARD CAIRNS, Montclair, N. J. Filed May 6, 1932. Serial No. 609,621. 5 Claims. (Cl. 2—5.)



1. In a helmet, the combination comprising a crown having converging ribs and having a central comb cover at the point of juncture of the ribs, one of said ribs projecting forwardly and centrally, an upward extending shield member secured to the front of the crown and a sheet metal bridge member having a closed top and depending, substantially parallel sides embracing that portion of the edge of such rib which would otherwise be

visible between the top edge of the shield and the comb cover and said bridge member having a hollow hooked portion in ngagement with the extreme top of said shield and said bridge member being secured to said forwardly projecting rib.

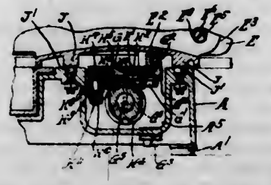
1,889,538. SLICING MACHINE. WILLIAM J. CAMPBELL, Indianapolis, Ind., assignor to American Slicing Machine Company, Chicago, Ill., a Corporation of New York. Filed May 10, 1929. Serial No. 361,917. 16 Claims. (Cl. 146—102.)



1. In a slicing machine, a base, a supporting structure upwardly extending therefrom, a rotary knife mounted upon said supporting structure, the supporting structure substantially enclosing the rear of the knife, a guard plate, a cover member overlying the supporting structure and surrounding the upper edge of the guard plate when the guard plate is in operative position, said guard plate being provided adjacent its lower edge with securing apertures, securing members penetrating said apertures and adapted to hold the guard plate fixed against movement in relation to the supporting structure, the apertures being such size as to permit the upper edge of the guard plate to clear the cover member when the securing members are loosened, and the guard plate drops for the full height of the apertures.

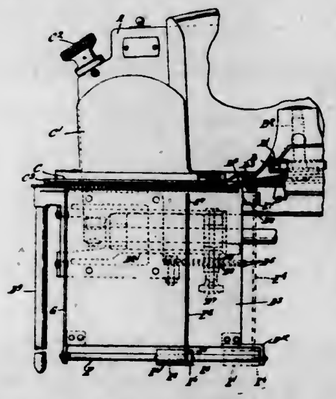
8. In a slicing machine including a rotary knife and a work supporting carriage, a pusher plate and a support therefor, the pusher plate being pivoted to said support, guiding means for guiding support and pusher plate for movement toward and away from the cutting plane of the knife, said guiding means including a sleeve mounted upon the carriage and a member slidable in said sleeve, and a linkage connection between said slidable member and said pusher plate, in engagement with said pusher plate at a point spaced away from the axis of rotation of the pusher plate.

1,889,539. SLICING MACHINE. WILLIAM J. CAMPBELL, Indianapolis, Ind., assignor to American Slicing Machine Company, Chicago, Ill., a Corporation of New York. Filed July 5, 1929. Serial No. 375,961. 14 Claims. (Cl. 146—102.)



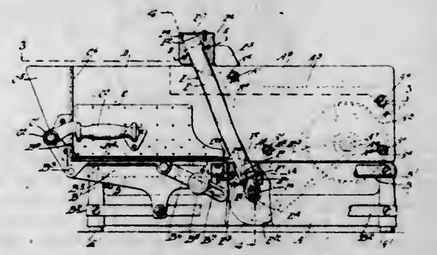
1. In a slicing machine which includes a rotary knife and means for rotating it and a work support and means for guiding said work support across the face and past the cutting edge of the knife, a gauge plate and a support therefor, means for moving said gauge plate and support toward and away from the cutting plane of the knife, including a shaft and means for rotating it, a worm on said shaft and a segmental nut, movably mounted on the gauge plate support for floating movement about transverse axes, yielding means for thrusting said nut into operative engagement with the worm, and means for preventing transverse movement of said nut in relation to said worm and shaft.

1,889,540. SLICING MACHINE. WILLIAM J. CAMPBELL, Indianapolis, Ind., assignor to American Slicing Machine Company, Chicago, Ill., a Corporation of New York. Filed Dec. 16, 1929. Serial No. 414,266. 5 Claims. (Cl. 146—102.)



1. In a slicing machine having a knife and means for actuating it, a work supporting carriage and means for guiding it across the face and past the cutting edge of the knife, and a plurality of work guides upstanding above the surface of the carriage and generally perpendicular to the path of movement of the carriage, one of said guides being freely slidable, in relation to the carriage, along a path generally parallel with the path of movement of the carriage, and guiding means for said work guide, including a track member mounted upon said carriage along the edge remote from the cutting plane and below the plane of the work supporting portion of the carriage, a sleeve slidable along said track member, and a rigid supporting connection between said sleeve and said guide.

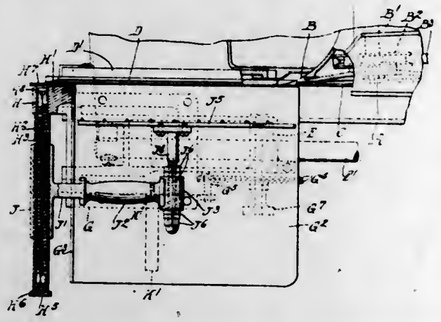
1,889,541. SLICING MACHINE. WILLIAM J. CAMPBELL, Indianapolis, Ind., assignor to American Slicing Machine Company, Chicago, Ill., a Corporation of New York. Filed Feb. 12, 1930. Serial No. 427,691. 8 Claims. (Cl. 146—158.)



1. In a slicing machine a base, a generally plane guard plate mounted upon said base, a gauge plate mounted on said base and lying in a plane generally parallel to the plane of the guard plate, means for moving said gauge plate toward and away from the plane of said guard plate while maintaining it constantly in general parallelism with the

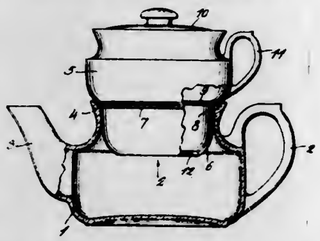
guard plate, a work support and means for guiding it across the faces of the gauge and the guard plate along a path generally parallel with said faces and a reciprocating knife positioned between the opposed edges of gauge and guard plate, and guiding means on the upper and lower ends of said knife, said guiding means being positioned respectively above and below the normal cutting edge or zone opposed to the work.

1,889,542. SLICING MACHINE. WILLIAM J. CAMPBELL, Indianapolis, Ind., assignor to American Slicing Machine Company, Chicago, Ill., a Corporation of New York. Filed May 10, 1930. Serial No. 451,311. 11 Claims. (Cl. 146—102.)



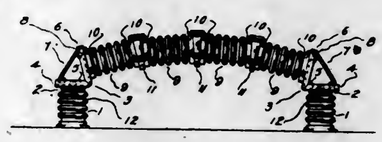
1. In a slicing machine which includes a knife and means for actuating it, a carriage, and means for guiding it past the cutting edge of the knife, a pusher plate mounted upon said carriage and a telescoping guide therefor, said guide including a fixed member and a member longitudinally movable therealong, the pusher plate being slidably mounted in relation to said movable member, a stop on said movable member adapted to be engaged by the pusher plate upon withdrawal of the pusher plate a predetermined distance from the cutting plane, said movable member being extensible a sufficient distance to permit the pusher plate to be withdrawn from above the carriage.

1,889,543. COFFEE MAKER. ADOLPH COORS, Golden, Colo., assignor to Coors Porcelain Company, Golden, Colo., a Corporation of Colorado. Filed Dec. 5, 1930. Serial No. 500,260. 2 Claims. (Cl. 53—3.)



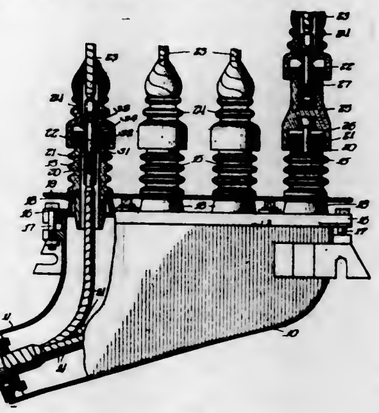
1. In a coffee maker, the combination of a container in the form of a water bowl of relatively large diameter, said bowl having an extension of reduced diameter at its lower end constituting a receptacle for the ground coffee and adapted to be received in an opening of a receptacle that receives the made coffee from said coffee maker, said reduced extension having a bottom whose upper surface is flat and which is provided with a number of substantially cylindrical perforations of small diameter and of a length slightly less than one-half the thickness of the bottom, the lower ends of the perforations terminating in the bottoms of annular grooves which have outwardly flared walls adapted to facilitate the formation of large drops.

1,889,544. INSULATING CASING CONDENSER ASSEMBLY. EDWARD J. COWAN, Dedham, Mass., assignor, by mesne assignments, to General Electric Company, a Corporation of New York. Filed Mar. 13, 1929. Serial No. 346,525. 7 Claims. (Cl. 175—41.)



1. A capacitor assembly, including a plurality of insulating bases, angularly disposed channel shaped supports rigidly secured to each base, and a plurality of capacitor units mechanically and electrically connected at their ends to the supports and arched between said supports.

1,889,545. POTHEAD AND CONDUCTOR PROTECTING MEANS. GEORGE P. EDMONDS, Chicago, Ill., assignor to G. & W. Electric Specialty Company, Chicago, Ill., a Corporation of Illinois. Filed July 10, 1925. Serial No. 42,675. 2 Claims. (Cl. 173—353.)

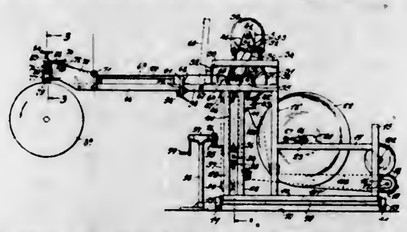


2. In a pothead arrangement, the combination of a metal pothead body, an insulating tube extending therefrom, an electrical conductor extending from the said body into said tube, an electrical connector connected to said conductor, a removable top carried by said tube, an electrical terminal carried by said top whereby it may be electrically connected to and disconnected from said connector, and a dummy member which may be interposed between said connector and terminal for protecting them when they are electrically disconnected.

1,889,546. MATERIAL RACK. CHARLES C. GATES, Denver, Colo. Filed Dec. 4, 1931. Serial No. 579,065. 6 Claims. (Cl. 242—75.)

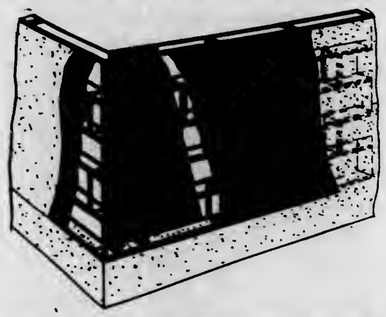
1. A mechanism for use in supplying a strip of fabric, or the like, under a predetermined tension to another machine comprising, in combination, a frame, means on the frame for supporting a roll of material, one side of the frame having a projecting arm, two rollers carried by the arm and mounted for rotation about spaced horizontal axes, means comprising a variable speed motor for turning the roller nearest the material, the other roller being freely rotatable, a third roller located below the other two and movable towards and away from them, the third roller being supported by a loop of material that depends from the two upper rollers and are supported by them, a speed control mechanism associated with the motor and means operated by the vertically movable roller for moving the

speed control device in a direction to increase the speed of the motor when the supporting loop shortens and for decreasing the speed when the loop lengthens, said means comprising a drum having two sections of different diame-



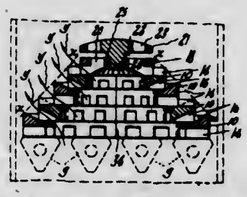
ters, means for turning the drum when the third roller moves in a vertical direction, and a flexible member having one end connected with the larger section and the other with the smaller section, the bight of the flexible member being connected with the motor speed controller.

1,889,547. BUILDING STRUCTURE. FREDERICK L. GREEN, Irvington-on-Hudson, N. Y. Filed Apr. 28, 1929. Serial No. 357,403. 4 Claims. (Cl. 72—16.)



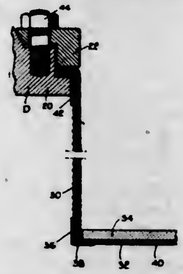
1. A house comprising a wall of steel skeleton bricks, rigidly joined by welding contiguous edges of said bricks along the inside and outside surfaces of said wall, each vertically succeeding layer of said steel skeleton bricks being adapted to support the entire wall structure surmounting the same, said bricks having the form of parallelepipedons and this form being defined only by terminal members forming the edges of the brick.

1,889,548. GRATE. JOSEPH VICTOR GUAY, Haverhill, Mass., assignor to Superior Coal Combustion Company, Haverhill, Mass., a Corporation of Massachusetts. Filed Aug. 4, 1931. Serial No. 555,012. 2 Claims. (Cl. 126—163.)



1. A grate comprising a body composed of a group of units collectively forming a fuel supporting outer surface and an inner surface, an air chamber defined by said inner surface, each of said surfaces being stepped and sloping inward and upward from the body base, each unit including an annular web and lugs projecting from the top and bottom surfaces thereof, said body having air passages formed by grooves in the webs and lugs of said units and communicating with and extending outward and upward from the air chamber to the outer surface of the body, and arranged to conduct air from said chamber into a fuel bed on the body, and a terminal at the summit of said body formed to support the central portion of a fuel bed resting on the body, and having horizontal and vertical air passages arranged to direct air horizontally outward and vertically upward into the central portion of said fuel bed, said units bearing loosely on and being separably interengaged with each other so that a great body of any desired area and height may be provided by varying the number of units.

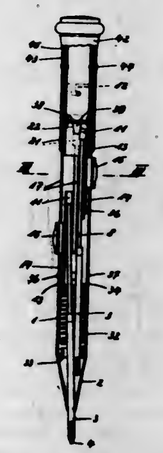
1,889,549. CONVERTER. INGENUIN HECHENBLEIKNER and NICOLAY TITLESTAD, Charlotte, N. C., assignors to Chemical Construction Corporation, Charlotte, N. C., a Corporation of Delaware. Filed Feb. 25, 1930. Serial No. 431,176. 14 Claims. (Cl. 23—288.)



3. A catalytic converter including a platinum gauze basket comprising a multi-layer cylindrical gauze, a single layer gauze bottom, and an imperforate disc of refractory material placed on the bottom of the basket.

5. A catalytic converter including a platinum gauze basket comprising a multi-layer cylindrical gauze, a gauze bottom, an imperforate disc of refractory material on the bottom of the basket, and a reinforcing strip of platinum foil welded around the lower peripheral edge of the bottom and side walls of the basket, the cylindrical portion of said reinforcing strip being greater in width than the thickness of the disc, so as to discourage the accumulation of dust in the corner of the basket.

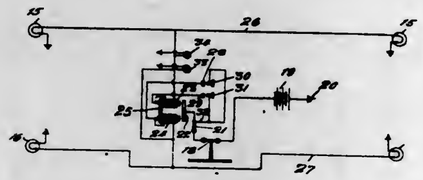
1,889,550. MAGAZINE PENCIL. ALBERT HIRTH, Heiden, Rosenberg, Switzerland. Filed Feb. 26, 1932, Serial No. 595,675, and in Germany Dec. 19, 1930. 19 Claims. (Cl. 120—14.)



1. A magazine pencil comprising a barrel, lead carriers in said barrel, means for moving said carriers into and

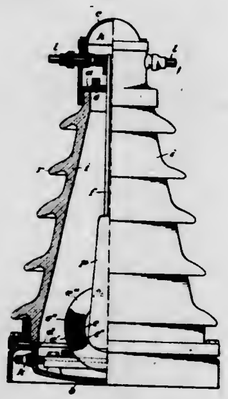
out of active position, and a return spring in said barrel common to and surrounding all said lead carriers which is so positioned as to be engaged and compressed by that carrier which is moved into active position.

1,889,551. SIGNAL LIGHT CONTROL. JESSE HOLLINS and ABRAHAM HOLLINS, Brooklyn, N. Y. Filed Jan. 25, 1929. Serial No. 334,957. 2 Claims. (Cl. 177—337.)



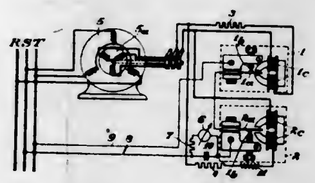
2. The combination with a pair electro-responsive signals and separate circuits therefor, a casing, a pair of coils in said casing each connected with one of said circuits and having their cores disposed adjacent to and parallel with each other, an armature pivoted intermediate its ends between said coils and having its ends disposed adjacent the ends of said cores, the said armature included in both of said circuits, a normally open switch in each of said circuits, a push button on said casing for each of said switches, and a normally closed push button switch in said casing common to both of said circuits.

1,889,552. HIGH-TENSION CURRENT TRANSFORMER. GEORG KEINATH, Berlin-Charlottenburg, and JOSEPH SCHWEMMER, Falkensee, Germany, assignors to Siemens & Halske, Aktiengesellschaft, Siemensstadt, near Berlin, Germany, a Corporation of Germany. Filed Mar. 14, 1929, Serial No. 346,847, and in Germany Mar. 14, 1928. 6 Claims. (Cl. 175—358.)



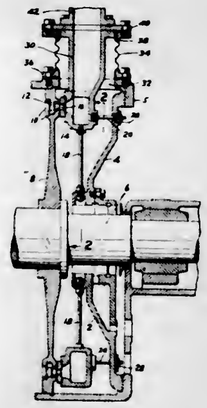
1. A high-tension current transformer, comprising in combination, a hollow spreader oil insulator, and iron core with primary and secondary winding immersed in the oil, a metal bottom fixed in an oil-tight manner at the foot of said insulator and adapted to support the iron core of said transformer, said metal bottom being countersunk along the edge to form an annular cavity serving for bringing out the low-tension terminals, the high-tension connecting leads of the primary winding traversing said insulator longitudinally and being brought out at the top.

1,889,553. ARRANGEMENT FOR OBTAINING INSTANTANEOUS VALUES. GEORG KEINATH, Berlin-Charlottenburg, and HANS PFANNENMÜLLER, Berlin-Siemensstadt, Germany, assignors to Siemens & Halske Aktiengesellschaft, Berlin-Siemensstadt, Germany, a Corporation of Germany. Filed Mar. 16, 1932, Serial No. 599,200, and in Germany Mar. 21, 1931. 17 Claims. (Cl. 234—5.5.)



1. In an arrangement of the kind described, an electric circuit adapted to be connected to a periodically varying alternating voltage, two synchronous switches connected in series in said circuit, and means adapted to effect the displacement of the connected phase of the one synchronous switch in relation to that of the other synchronous switch.

1,889,554. STEAM CHEST CONSTRUCTION FOR STEAM TURBINES. FRANK W. KENNEDY, Trenton, N. J., assignor to De Laval Steam Turbine Company, Trenton, N. J., a Corporation of New Jersey. Filed June 27, 1930. Serial No. 464,140. 15 Claims. (Cl. 253—70.)

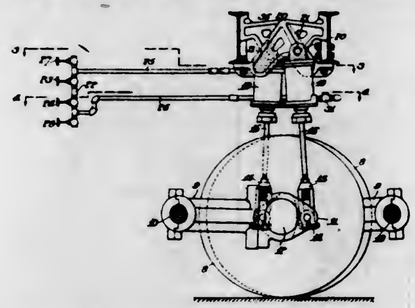


1. A turbine comprising a casing, a rotor within the casing, a chest within the casing provided with means arranged to direct driving vapor to the rotor, and rods securing the chest to the casing, said rods being readily longitudinally distortable by reason of deviation of portions thereof from straight lines joining their points of engagement with the shaft and casing.

1,889,555. AIR PRESSURE DRY PAN. HOWARD K. KING, Philadelphia, Pa., assignor to Chambers Brothers Company, a Corporation of Pennsylvania. Filed Aug. 29, 1931. Serial No. 560,136. 4 Claims. (Cl. 83—45.)

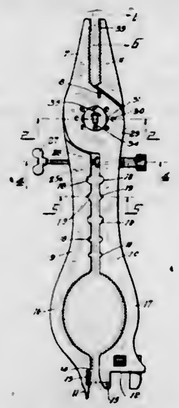
1. In a device of the character described, means, having a substantial range of adjustment, for determining the crushing power of the roller from below that exerted due to gravity to above that due to gravity, comprising a movable roller bearing, a cylinder having a piston operating

therein, means establishing operative relationship between the piston and the bearing, means for connecting the cylinder on each side of the piston wwith a source of



compressed elastic medium, and means for controlling the delivery of the medium to either end of the cylinder as reqired.

1,889,556. TOOL. GEORGE W. LANE, Boulder, Colo., assignor of one-fourth to D. V. Tribby, Denver, Colo. Filed Mar. 30, 1931. Serial No. 526,397. 3 Claims. (Cl. 81—44.)



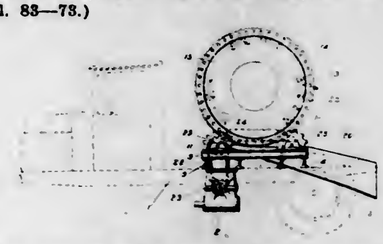
1. A tool comprising pivoted handles, stop means for the handles comprising a member having a threaded connection with one handle, and a bolt having a threaded connection with said member and limiting the movement of the other handle.

1,889,557. DELIVERY DEVICE. HELLMUTH LANGE, Dusseldorf, Germany. Filed Apr. 25, 1931, Serial No. 532,868, and in Germany Apr. 30, 1930. 6 Claims. (Cl. 221—11.)



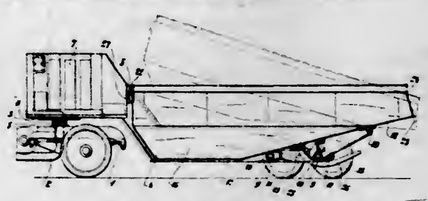
3. A delivery device for insertion into a paper or cardboard container for pulverulent or granular materials, consisting in a spout and comprising in combination: a tubular, laterally slotted main body having a delivery opening; a conical end member on said main body formed integrally therewith and terminating in a single point adapted to pierce the material of the container; a lateral flange formed integrally with said main body at the extremity of the other end thereof and resting tightly against the side of the container when the device is inserted therein, whereby said flange forms an outer stop; and inner stop members integral with said tubular member, located closely adjacent to said lateral flange and retaining the device within the container, substantially as described.

1,889,558. MIXER. ROSCOE F. LEE, Indianapolis, Ind. Filed Jan. 8, 1930. Serial No. 419,231. 5 Claims. (Cl. 83—73.)



1. In combination, a drum, a port located in the peripheral surface of said drum, a door pivoted on said drum for closing said port, a chute mounted adjacent said drum and registering with said door, said door being proportioned to lie, when opened, with its free end in said chute, and means for oscillating said drum about its axis whereby the free end of said door is caused to reciprocate in said chute.

1,889,559. CLOSED VEHICLE FOR COLLECTING REFUSE. ALFRED F. MASURY, New York, N. Y., assignor to International Motor Company, New York, N. Y., a Corporation of Delaware. Filed June 10, 1930. Serial No. 460,119. 1 Claim. (Cl. 280—124.)



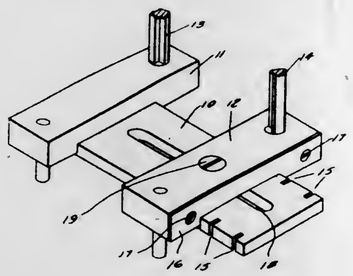
A trailer frame having side members, aligned shafts, arms on the opposite ends of the shafts, wheels journaled on the arms, journal bearings for the shafts secured to the frame adjacent the arms, a sleeve on the frame in the central section thereof to journal the shafts independently at the adjacent ends thereof, and coil springs about the respective shafts secured to the shaft and one of the bearings and between the first bearings and the sleeve to cushion relative movement between the shafts and frame.

1,889,560. RING BOOK. HENRY B. MCCLEARY, Oak Park, Ill., assignor to Wilson Jones Company, a Corporation of Massachusetts. Filed Dec. 17, 1927. Serial No. 240,913. 2 Claims. (Cl. 129—4.)



2. A leaf flipper comprising a member having a flat portion provided with slots, said flat portion being bent adjacent the lower portions of said slots to provide a rest, the outer end of said rest terminating in a downwardly directed portion for the purpose set forth.

1,889,561. BUILDING STAND. CHARLES MORSE, Boston, Mass., assignor, by mesne assignments, to General Electric Company, a Corporation of New York. Filed Aug. 21, 1930. Serial No. 476,927. 10 Claims. (Cl. 29—89.)



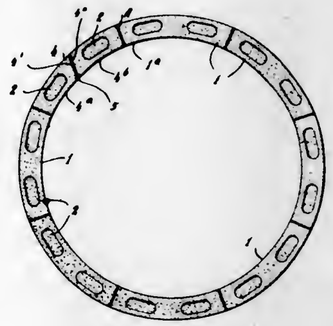
1. A capacitor stack-building stand comprising a foundation member, at least two stack-supporting members, each provided with a positioning guide for the dielectrics and armatures during stack assembly; and mechanism for adjusting the separation of said stack-supporting members which includes means for interlocking the members in adjusted position, and means for clamping the members in their interlocked positions.

1,889,562. METHOD OF AND APPARATUS FOR TRANSPORTING PULVERIZED SUBSTANCES. WILLEY H. MOULTHROP, San Francisco, Calif. Filed Aug. 27, 1929. Serial No. 388,711. 4 Claims. (Cl. 214—83.)



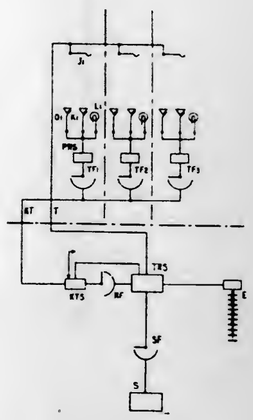
1. A tank for transporting cement including an elongated, horizontally disposed, wheel mounted container, provided with an opening in the top and a centrally disposed opening in the bottom thereof, a pair of parallely disposed screw conveyors with horizontally aligned axes mounted in the bottom of the container superjacent said central opening and extending from end to end of the container, said screw conveyors arranged and adapted to force the cement from the ends of the container to said central opening and an inverted V-shaped baffle positioned above and covering said pair of screw conveyors from end to end arranged and adapted to support part of the weight of the cement in the container and to divide the cement in the container for delivery to lateral outer side of each of said screw conveyors respectively.

1,889,563. TUNNEL OR CONDUIT LINING. JOHN F. O'ROURKE, New York, N. Y. Filed Dec. 16, 1930. Serial No. 502,659. 20 Claims. (Cl. 61—45.)



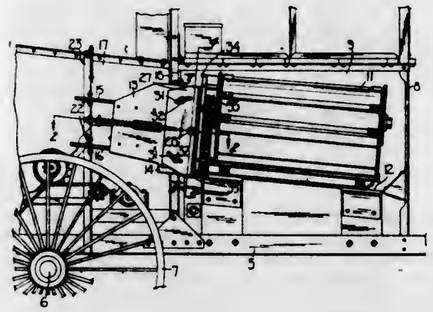
1. A tunnel ring comprising a plurality of substantially similar blocks, and a two-part key-block, each of said key-block parts having radial outer ends and inclined inner ends.

1,889,564. TELEPHONE SYSTEM. JOHN ELLIS OSTLINE, Chicago, Ill., REGINALD TAYLOR, Liverpool, and CHARLES EDMUND BEALE, London, England, assignors to Associated Telephone and Telegraph Company, Chicago, Ill., a Corporation of Delaware. Filed Apr. 14, 1930, Serial No. 444,022, and in Great Britain May 1, 1929. 16 Claims. (Cl. 179—27.)



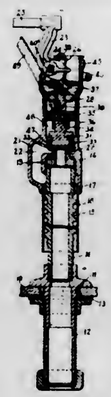
1. In a telephone system, a manual exchange and a plurality of automatic exchanges, an operator's position in said manual exchange equipped with a numerical keyset, a key corresponding to each of said automatic exchanges, a control trunk extending from said manual exchange to each of said automatic exchanges, a finder switch, and means responsive to the operation of one of said exchange keys for operating said switch to connect said keyset with the control trunk extending to the exchange designated by the operated key.

1,889,565. COMBINE. LOUIS A. PARADISE, Moline, Ill., assignor to Deere & Company, Moline, Ill., a Corporation of Illinois. Filed Dec. 28, 1931. Serial No. 583,428. 18 Claims. (Cl. 56—20.)



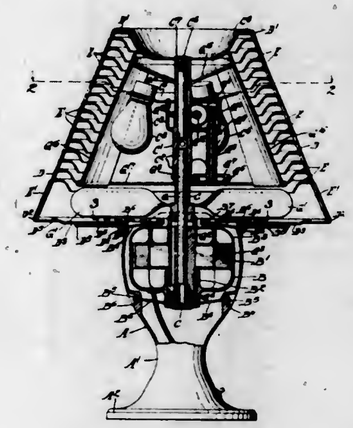
1. In a combine, the combination of a harvester, a thresher, a conveyor movable with respect to the thresher for delivering grain from the harvester to the thresher, and a shield movably mounted on the thresher to conform to the movement of said conveyor to prevent loss of grain between the conveyor and the thresher.

1,889,566. BALL COCK. ABRAM N. PASMAN, Waterbury, Conn., assignor to Scovill Manufacturing Company, Waterbury, Conn. Filed May 12, 1930. Serial No. 451,698. 6 Claims. (Cl. 137—104.)



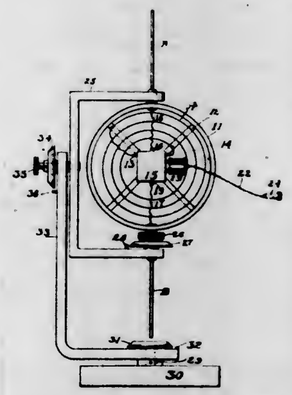
1. A ball cock comprising a casing having a chamber therein, an inlet pipe communicating with said chamber, a valve within said chamber controlling the communication between it and the inlet pipe, a stem secured to said valve, a packing member surrounding the stem through which the stem moves, said packing member being secured in the casing and contacting with the wall thereof, means for holding said packing member in place comprising a cup-shaped member secured in the mouth of the casing and having its lower portion bearing against the upper face of the packing, a lever to operate the valve, and common means for pivoting said lever to the casing and holding said cup-shaped member in place.

1,889,567. FAN. LAURENCE M. PERSONS, St. Louis, Mo., assignor to Emerson Electric Manufacturing Co., St. Louis, Mo., a Corporation of Missouri. Filed Aug. 4, 1930. Serial No. 472,848. 8 Claims. (Cl. 230—249.5.)



1. In a combined lamp and fan, a base, a motor associated with said base, an air-pervious lamp shade, a fan, associated with said motor, adapted to direct a current of air laterally outwardly through said shade, and illuminating means positioned within said shade.

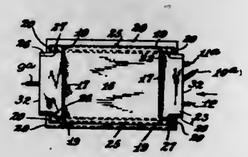
1,889,568. UNIVERSALLY ADJUSTABLE RADIO APPARATUS FOR AIRCRAFT. GREENLEAF WHITTIER PICKARD, Newton Centre, Mass., assignor, by mesne assignments, to General Electric Company, a Corporation of New York. Filed June 22, 1929. Serial No. 372,971. 1 Claim. (Cl. 250—11.)



The improved directive radio apparatus of the general type including a frame, and an antenna and loop combination carried by the frame in a relation wherein the antenna extends in the plane of the loop, the improved apparatus including a primary frame-support in which said frame is mounted for rotation about the antenna as an axis, and means indicating angular positions of the frame resulting from such rotation; a second support in which said primary frame-support is mounted for rota-

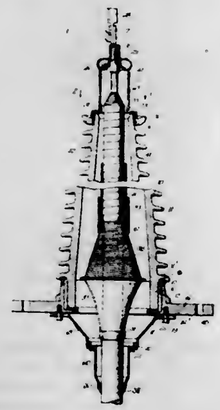
tion of the frame in a plane of revolution of the antenna about the center of the loop as an axis, and means indicating angular positions of the frame resulting from such rotation; and a third support in which said second support is mounted for rotation of the frame about the antenna as an axis while the frame is in any position resulting from the above rotations, and means indicating angular positions of the frame resulting from such third rotation; said three indicating means providing three coordinates as a basis for accurate determination of the desired information.

1,889,569. ELECTRICAL CONDENSER. WILLIAM H. PRIEBS, Upper Montclair, N. J., assignor, by mesne assignments, to General Electric Company, a Corporation of New York. Original application filed Jan. 6, 1922, Serial No. 527,449. Divided and this application filed Sept. 18, 1926. Serial No. 136,210. 33 Claims. (Cl. 175—41.)



1. An electrical condenser comprising armature sheets arranged in a stack with an interposed dielectric sheet; a box-like casing of insulating material open at opposite ends and otherwise enclosing the condenser sheets; and a box-like metal casing partially enclosing and rigidly supporting said insulating casing and open at opposite ends registering with the open ends of the insulating casing, the open ends of the insulating casing extending beyond the open ends of the metal casing; the metallic casing holding the insulating casing in clamping relation with the stack of condenser sheets; and the condenser terminals extending out thru said open ends of the insulating and metal casings.

1,889,570. POTHEAD. JOSEPH RAH, Chicago, Ill., assignor to G and W Electric Specialty Company, Chicago, Ill., a Corporation of Illinois. Filed May 31, 1927. Serial No. 195,360. 1 Claim. (Cl. 173—353.)



In a cap for an insulating bushing the combination of a substantially cylindrical body portion having a conical portion forming a substantial closure for one end of said cap, annular supporting and securing portions integral with said body portion said annular supporting portion being angularly disposed with respect thereto, and a stress relieving protuberance formed at the junction of the body portion and said annular supporting portion.

1,889,571. MILL CHUCK. JOSEPH M. REDINGER, Johnston, R. I. Filed May 26, 1932. Serial No. 613,634. 1 Claim. (Cl. 279—99.)



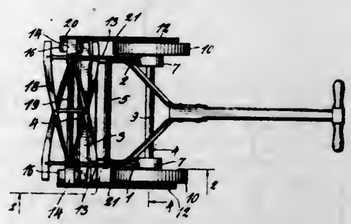
An adaptor for attaching vari-sized double ended tools to a shank having a threaded recess therein and a bore rearwardly of the recess, the recess being of uniform diameter throughout and having threads of 150°, which adaptor comprises a body having a through bore formed with an internally threaded portion of uniform diameter and having its periphery formed with a portion of uniform diameter with external threads, said adaptor body also having a reduced bore portion providing an abutment shoulder for a portion of the tool, said internal and external threads of the adaptor being each of 150°.

1,889,572. LINING BAG AND METHOD OF PRODUCING THE SAME. FRANCIS T. ROBINSON, Rockville Center, N. Y., assignor to Arkell Safety Bag Company, New York, N. Y., a Corporation of New York. Filed July 25, 1928. Serial No. 295,163. 4 Claims. (Cl. 229—53.)



1. A bag having a preformed bottom suitable for lining containers comprising a bag tube closed by a seam at one end with the ends of the seam tucked inwardly so as to be within said bag and overlie the inner sides of intermediate portions of said seam, the bottom of the bag thus formed being creased along a line conforming to the shape of the container to be lined preliminary to the insertion of the bag in the container.

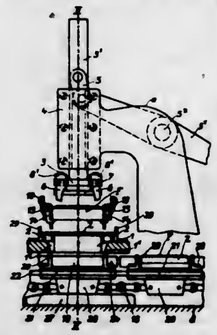
1,889,573. LAWN MOWER. HARRY R. ROGERS, Denver, Colo. Filed May 19, 1931. Serial No. 538,464. 1 Claim. (Cl. 56—252.)



In a lawn mower, in combination, two drive wheels, a shaft connecting the same, two parallel frame members located on the shaft, one adjacent the inner surface of each drive wheel, each frame member having its front

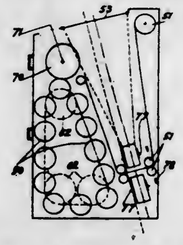
end provided with a bracket that is provided with an outwardly extending U-bend near its end, the ends having bearings for supporting a rotary cutter having cutter blades, the ends of the blades projecting into the U-shaped bends and means for transmitting motion from the drive wheels to the cutter.

1,889,574. FOLDING MACHINE. JOHANNES SCHMIEDEL, Dresden, Germany, assignor to Universelle Cigarettenmaschinen-Fabrik J. C. Muller & Co., Dresden, Germany. Filed Feb. 19, 1932, Serial No. 594,017, and in Germany Feb. 28, 1931. 10 Claims. (Cl. 93—51.)



1. In a machine for folding packages from blanks having gluing flaps, a folding gauge, a folding slide adapted to force a folding block through an opening in said gauge together with the blank, an abutment for supporting the block and the folded blank, a resiliently supported pressure plate on said folding slide for holding said block on said blank and said abutment, and fingers on said slide for applying said gluing flaps to the corresponding walls of the folded blank.

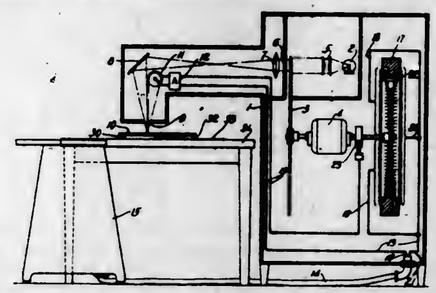
1,889,575. METHOD AND APPARATUS FOR READING BOOKS AND THE LIKE. GEORGES SEBILLE, Paris, France. Filed July 23, 1929, Serial No. 380,303, and in France Aug. 2, 1928. 21 Claims. (Cl. 88—24.)



1. The herein described method of examining and reading printed and engraved works and the like, which consists in reproducing microscopic photographs of said work by successive pages on a film, placing indications of the paging of said work on said film, advancing said film at a speed at which it is impossible to read the text of said work, projecting said film and stopping said film under the control of said indications at the desired page.

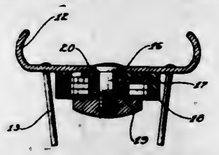
1,889,576. APPARATUS TO ENABLE THE BLIND TO READ. HOMER C. SNOOK, South Orange, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Nov. 9, 1928. Serial No. 318,125. 6 Claims. (Cl. 250—41.5.)

1. A device for enabling a blind person to read, comprising light sensitive means, optical means for scanning a field of view in which the matter to be read is placed and for affecting said light sensitive means in accordance with the tone values of the elemental areas of said field of view to set up current variations, a large number of compactly arranged movable elements in the form of a



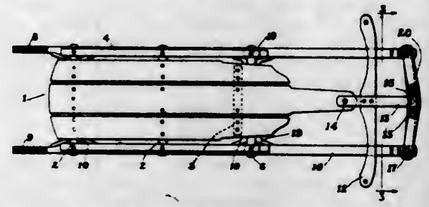
bank and means controlled by said variable current for displacing selected ones of said movable elements in accordance with the variations in said current to produce a representation in the form of the characters scanned which may be read by touch.

1,889,577. MOTOR VEHICLE. MILTON TIBBETTS, Detroit, Mich., assignor to Packard Motor Car Company, Detroit, Mich., a Corporation of Michigan. Filed Aug. 4, 1928. Serial No. 297,501. 2 Claims. (Cl. 301—5.)



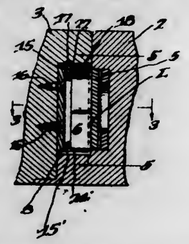
2. In a balancing device for a wheel, a stud on the wheel, a plurality of washers having unbroken peripheries and axial bores of a diameter to fit closely on the stud, said washers having slots therein of such character as to vary the weights of the washers, and means for clamping the washers together axially on the stud.

1,889,578. SLED. WILLIAM C. WARREN, Philadelphia, Pa., assignor to S. L. Allen & Co., Inc., Philadelphia, Pa., a Corporation of Pennsylvania. Filed Aug. 21, 1931. Serial No. 558,427. 2 Claims. (Cl. 280—22.)



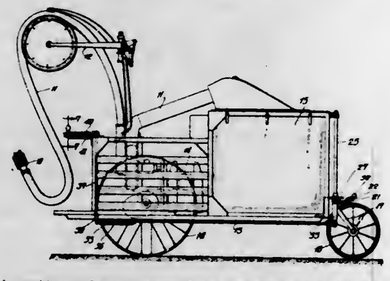
1. A buffer for a steering sled having laterally bendable runners and side bars disposed above the forward portions thereof, comprising a flat metal bar extending between the front ends of the runners and having arms oppositely divergent from its center and slots in the extremities of said arms, the center portion of said bar being vertically upwardly offset, and pivots extending through the slots in said arms and the front ends of the runners operative to maintain pivotal connection between the buffer and the runners to support the buffer in operative relation with the sled with its forward edge in advance of all portions of the sled in any position of the runners thereof.

1,889,579. ANTIVIBRATION DEVICE. JOHANNES FRIEDRICH WERNER, Hartford, Wis. Filed Aug. 30, 1929. Serial No. 389,359. 3 Claims. (Cl. 16—85.)



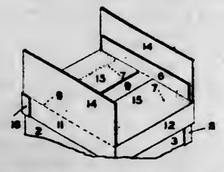
1. In a device of the character described, the combination with a socket member adapted to be carried by one of two members swinging relative to each other to open or closed position and having a transverse slot therein, of a lug carried by the other member and adapted to interfit in the slot when the members are in closed position, and means for mounting the lug thereon for angular adjustment whereby one of said members is elevated upon approaching the other member.

1,889,580. GUIDE MECHANISM FOR COTTON PICKERS. WALLACE R. WILLETT, New York, N. Y., and HARVEY E. BROWN, St. Louis, Mo., assignors to American Cotton Picker Corporation, St. Louis, Mo., a Corporation of Delaware. Filed Oct. 10, 1930. Serial No. 487,660. 8 Claims. (Cl. 280—92.)



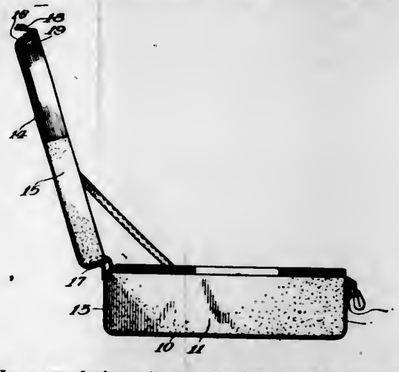
1. A cotton picker comprising a vehicle having driving wheels, a guide wheel, means to pivotally mount said guide wheel on an upright axis, a plate pivoted to said guide wheel about said vertical axis and in fixed relation thereto, a guide plate in superposed relation to said wheel plate, said wheel and guide plates having notches positioned to be brought into alignment, a locking bar positioned to drop into said notches when in alignment, a pivoted direction pointer, and means connecting said direction pointer to said guide plate to swing the latter on its pivotal axis proportional to the swing of said pointer.

1,889,581. CARTON. BENJAMIN M. WILLIAMS, New Orleans, La., assignor to Robert Gaylord Incorporated, St. Louis, Mo., a Corporation of Missouri. Filed Jan. 6, 1932. Serial No. 584,925. 4 Claims. (Cl. 229—23.)



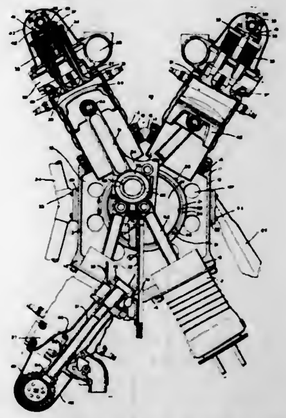
1. A carton comprising a tubular body having an inwardly projecting locking flap, a removable cover provided with an inwardly projecting flap positioned below said locking flap, and a sealing flap carried by the cover and extending over the locking flap, whereby the body and cover are locked together by fastening the sealing flap.

1,889,582. BRACKET FOR CLOTHES HANGERS. ELMER ELLSWORTH WILT, Chicago, Ill. Filed Feb. 24, 1930. Serial No. 430,893. 4 Claims. (Cl. 190—41.)



1. In a wardrobe suit case having a main section and a cover hingedly connected thereto, a suspension device for clothes hangers secured in the upper portion of the cover, said device consisting of a body member for carrying clothes hangers, and a tongue rigidly depending from the body member for limiting the transverse movement of the hanger when the cover is moved on its hinges toward the main section.

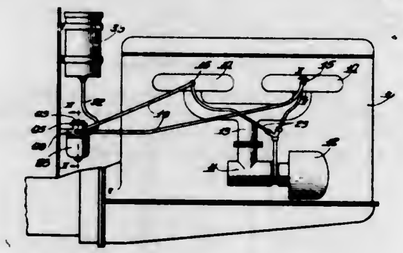
1,889,583. INTERNAL COMBUSTION ENGINE. LIONEL M. WOOLSON, Detroit, Mich., assignor to Packard Motor Car Company, Detroit, Mich., a Corporation of Michigan. Filed July 28, 1928. Serial No. 295,937. 2 Claims. (Cl. 244—31.)



1. In an aeroplane, an engine having a crank case, and landing gear struts secured rigidly and directly to the sides of the crank case.

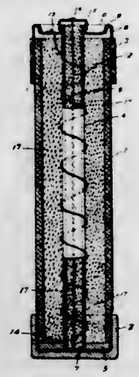
1,889,584. INTERNAL COMBUSTION ENGINE HUMIDIFIER. MARK E. ZIMMERER, Kokomo, Ind., assignor to Kingston Products Corporation, Kokomo, Ind., a Corporation of Indiana. Filed May 26, 1930. Serial No. 455,590. 5 Claims. (Cl. 123—25.)

1. In combination, an internal combustion engine including an intake duct for fuel mixture, a venturi through which air may be introduced into said duct at high velocity, a water receptacle, means affording communication between said water receptacle and said venturi to exert sub-



atmospheric pressure on the water in said receptacle, and valved means operated by said sub-atmospheric pressure for controlling the flow of water from said receptacle.

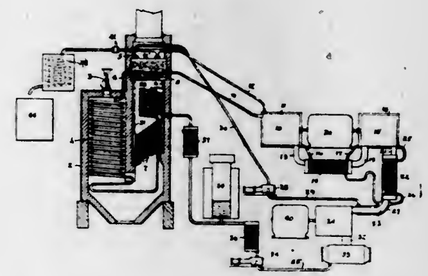
1,889,585. MULTIPLE CONDUCTOR FUSE. FRANZ ZODROW, Reinickendorf-Ost, and ERWIN SCHRANK, Kalkberge, Germany, assignors to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed May 20, 1930, Serial No. 453,902, and in Germany May 24, 1929. 7 Claims. (Cl. 200—127.)



1. In a fuse structure, the combination with a plurality of concentrically associated tubes supported in fixed relation to each other, of independent fusible elements positioned in the respective tubes and connected in parallel relation, said elements being ruptured successively upon the occurrence of an overload condition, and separable conducting closure members for the respective tubes connected in circuit with their respective fuse elements, the closure member connected to the fusible element which is first ruptured being separable independently of the other closure member.

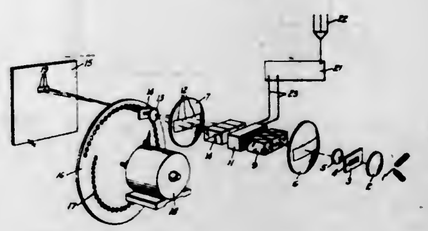
1,889,586. HEAT-ENERGY SYSTEM. JOHN J. GREBE, Midland, Mich., assignor to The Dow Chemical Company, Midland, Mich., a Corporation of Michigan. Filed Jan. 26, 1927. Serial No. 163,609. 8 Claims. (Cl. 60—27.)

1. In apparatus of the character described, the combination of a vapor generator, a drum for a higher-boiling point agent, a duct for conducting vapor from said generator immediately after generation through said drum, means for heating the higher-boiling point agent, means for abstracting energy from the vapor delivered from said



vapor generator, and a heating jacket about said means, said jacket being supplied with the heated higher-boiling point agent.

1,889,587. TELEVISION RECEIVER. ERNST F. W. ALEXANDERSON, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Sept. 19, 1931. Serial No. 563,825. 5 Claims. (Cl. 178—6.)

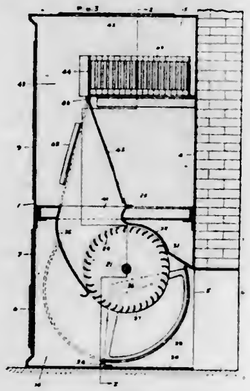


1. A television receiver comprising a light source, a receiving member, means for simultaneously scanning the member with a plurality of light beams from said source, comprising Kerr cells for controlling all of said beams by the same received signal, and means for causing a delay in the response of one of said cells over that of another cell equal to the time interval required for the advance of one spot to the position previously occupied by a spot in the lead thereof.

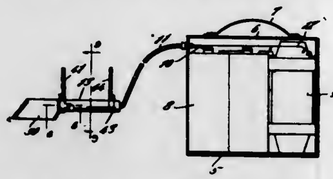
1,889,588. UNIT HEATER AND VENTILATOR. EDWARD L. ANDERSON, Grosse Ile, Mich., assignor to American Blower Corporation, Detroit, Mich., a Corporation of Delaware. Filed June 12, 1930. Serial No. 460,617. 8 Claims. (Cl. 257—137.)

5. In a unit heater and ventilator, a casing having an inlet opening, a recirculation opening and an exit opening, a line flow fan adapted to receive air through one side and discharge it through the other side while the air moves in the same plane, means of selecting whether the air will enter through the inlet opening or through the recirculation opening, means for controlling the air so selected, a casing adjacent to said fan serving to guide the air

to it and from it, and a swinging damper above said casing, a radiator in one side of said casing, a partition separating said radiator from the other side of the casing forming a by-pass passageway whereby said air from the fan may be diverted either over the radiator, around it or both around it and through it.

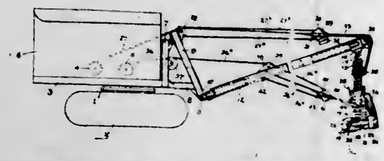


1,889,589. IGNITER FOR GAS BURNERS. WILLIAM FRANK BARBSCH, College Point, N. Y. Filed Feb. 24, 1930. Serial No. 431,015. 3 Claims. (Cl. 175—91.)



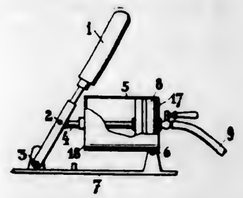
1. In an igniter of the character described comprising a handle, a pair of electrodes disposed through the handle, said electrodes being adapted to project beyond one end of the handle, one of said electrodes being spaced a substantial distance from the other electrode at their projecting ends and manual means for moving the first mentioned electrode into sparking relation with respect to the other, the said last mentioned electrode being constructed of a pair of sections, and means whereby one of said sections may be shifted to vary the sparking gap between the electrodes, said means comprising a screw having a laterally disposed pin thereon, said pin being engageable in an opening in the outer section of the said electrode so that when the screw is turned, the said section is shifted.

1,889,590. EXCAVATING MACHINE. HENRY C. BECKWITH, Ravenna, Ohio, assignor to The Byers Machine Company, Ravenna, Ohio, a Corporation of Maryland. Filed Sept. 27, 1929. Serial No. 395,587. 4 Claims. (Cl. 214—138.)



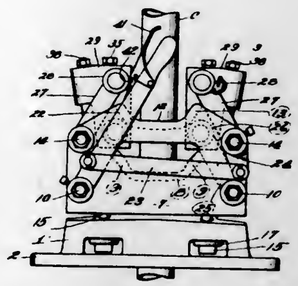
1. In a machine of the character described, the combination of a platform, a boom pivotally mounted thereon for rotation, a stick pivoted to said boom, a shovel carried by said stick, and a mast stationarily mounted on said platform and comprising a vertical member, a horisontal member secured to the foot of said vertical member, and an inclined member secured to the upper end of said vertical member and to the outer end of said horizontal member and extending below the plane of said platform, said inclined member being formed to provide a pivotal mounting for said boom.

1,889,591. RECIPROCATING PISTON LUBRICATION FOR PUMPS. JOHANN BOZELAGE, Wiesbaden, Germany. Filed Oct. 23, 1930, Serial No. 490,656, and in Germany July 11, 1929. 3 Claims. (Cl. 230—206.)



1. An air pump for producing underpressure and overpressure for medical and cosmetic purposes, comprising in combination with the piston rod, leather cups forming the piston shiftable in an axial direction on said piston rod, a wick element such as a felt ring saturated with lubricant between said cups, the pressure impacts, occurring from both sides during the working of the pump, exerting an axial pressure on said wick element and causing said wick element to give up lubricant in radial direction.

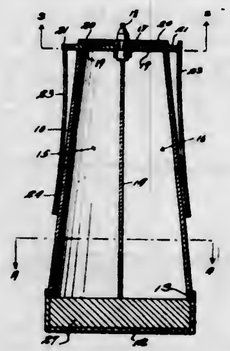
1,889,592. ROD OR PIPE CLAMP. FOKKO BRANDT, Kansas City, Mo. Filed Mar. 4, 1927. Serial No. 172,653. 19 Claims. (Cl. 24—249.)



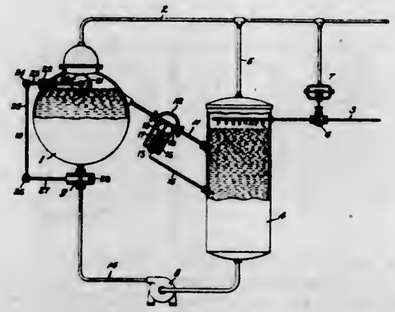
1. An apparatus comprising a frame having spaced tracks, swinging arms mounted on the frame for movement toward and from each other, a pair of clamping devices carried by said arms; the frame tracks being in a plane above the points of connection of the arms with the frame and being adapted for engagement with the arms when the latter are in approached or operative position.

1,889,593. CONDIMENT SHAKER. HARRY S. DAVIS, San Antonio, Tex. Filed Feb. 25, 1931. Serial No. 518,232. 2 Claims. (Cl. 65—45.)

1. A condiment shaker comprising a casing having an open bottom, a closure member for said bottom, an apertured top for said casing, said apertures in said top being arranged in series, an inner wall member mounted in said casing and adapted to divide the casing into a plurality of compartments, a pivot secured to said top, a rotatable apertured closure member mounted on said pivot and positioned within said casing, said rotatable closure member having outwardly extending pawl members, said pawl members extending outwardly through the casing, and resilient pawl engaging members carried by the casing.



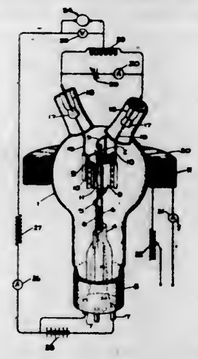
1,889,594. ELASTIC FLUID POWER PLANT. PAUL DETTENBORN, Berlin-Friedenau, Germany, assignor to General Electric Company, a Corporation of New York. Filed Feb. 28, 1930, Serial No. 432,242, and in Germany Mar. 7, 1929. 4 Claims. (Cl. 122—35.)



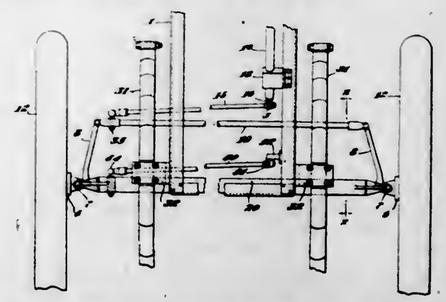
4. In combination, an elastic fluid generator, an elastic fluid discharge conduit for the generator, an accumulator connected to the discharge conduit, means for supplying feed fluid to the generator comprising a conduit between the generator and the accumulator, and means for regulating the flow in the last named conduit in terms of level conditions in the generator, another conduit between the generator and the accumulator for supplying heated fluid from the generator to the accumulator, and means for regulating the flow of fluid in the last named conduit in terms of fluid conditions in the accumulator.

1,889,595. ELECTRON DISCHARGE APPARATUS. KENNETH C. DE WALT, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Oct. 8, 1929. Serial No. 398,249. 5 Claims. (Cl. 250—36.)

1. In a device for generating oscillations, an evacuated envelope containing a cathode, a plurality of curvilinear anodes separated by oppositely disposed slots and arranged about the cathode, an oscillating circuit connected between the anodes and cathode, means for producing a magnetic field which threads the space between the anodes and cathode, means for supplying energy to the cathode and to said circuit, said cathode being constituted of a filament having a plurality of legs arranged substantially in line with the slots between the anodes.



1,889,596. VEHICLE CONSTRUCTION. JOHN FABIEN DUBY, Boston, Mass. Filed Oct. 7, 1930. Serial No. 486,958. 8 Claims. (Cl. 280—93.)

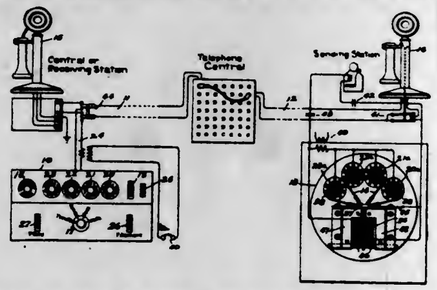


1. In combination a vehicle frame, an axle, stub axles carrying dirigible wheels and mounted on the axle, yieldable connections between the axle and frame permitting appreciable movement of the axle longitudinally of the frame in response to horisontal thrust upon the axles, steering mechanism including a movable control member mounted on the frame, a link having its respective ends connected to the stub axles and control member, said link being disposed transversely of the vehicle and extending in the same general direction as the axle, and a transverse radius member having opposite ends articulated to the axle and the frame and being arranged to define an arc of axle movement in relation to the frame generally corresponding to the arc described by the end of the link connected to the stub axles swinging about its end connected to the control member, whereby movement of the axle longitudinally of the frame does not cause the link to vary the positions of the stub axles.

1,889,597. TELEMETERING METHOD AND APPARATUS. ALAN S. FITZ GERALD, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed May 29, 1929. Serial No. 367,078. 4 Claims. (Cl. 177—351.)

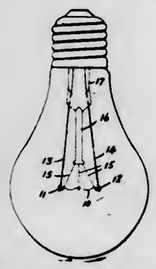
1. In an electric position signalling system, a movable device adapted to assume any one of a number of selected positions, a selective frequency responsive mechanical vibrator for each such position, said vibrators being arranged to respond to different selected frequencies, the movable

device having parts consecutively moved into close proximity with the respective vibrators such that a vibrator corresponding to the position of the movable device will contact therewith when in vibration, an electromagnet for all of said vibrators having a coil short-circuited by



contact between a vibrator and the movable device, a circuit connected to said coil, means at a remote point for transmitting selected frequencies over said circuit to said coil, and means at said remote point for detecting when said coil is short-circuited.

1,889,598. INCANDESCENT ELECTRIC LAMP. JONATHAN FORCE, Cleveland Heights, Ohio, assignor to General Electric Company, a Corporation of New York. Filed June 4, 1928. Serial No. 282,591. 4 Claims. (Cl. 176—16.)



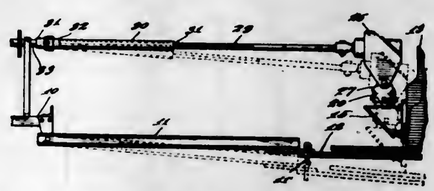
4. In an incandescent electric lamp, the combination of a tungsten filament, leading-in conductors united to the ends of said filament and a quantity of a metal of the tungsten class in the powdered state and substantially free from other ingredients surrounding the junction of said filament and leading-in conductors.

1,889,599. METHOD OF FILLING VOIDS IN SOIL. JOHN B. GOLDSBOROUGH, Brooklyn, N. Y. Filed May 10, 1930. Serial No. 451,485. 6 Claims. (Cl. 61—35.)



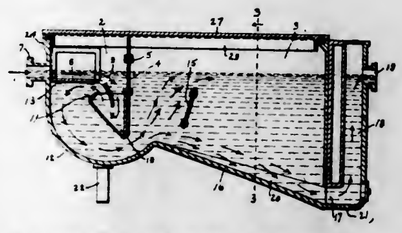
1. The method of filling voids in the soil adjacent to structural elements which consists in forcing substantially incompressible material into the soil beyond the voids under sufficient pressure to cause it to displace the soil in the direction of the voids to fill the latter.

1,889,600. POWER TRANSMISSION MECHANISM. CHARLES W. HANSEN, Racine, Wis., assignor to J. I. Case Company, Racine, Wis., a Corporation. Filed Feb. 8, 1930. Serial No. 425,867. 4 Claims. (Cl. 180—14.)



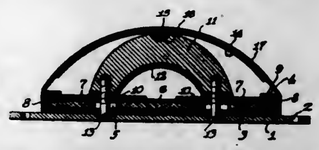
1. In a device of the character described, a casing, means for attaching the same to a tractor, a support mounted upon and in which said casing revolves, a vertical shaft in the casing, a universal joint telescopically mounted on said shaft and having a gear at its upper end, a vertically swinging housing enclosing said gear and pivotally connected to said support, a horizontal shaft supported in said housing, a gear on said shaft engaging the gear of said vertical shaft, and means extending rearwardly through a tractor for driving the vertical shaft to rotate said horizontal shaft.

1,889,601. GREASE INTERCEPTOR. JOHN HEINKEL, Rock Island, Ill. Filed Dec. 11, 1930. Serial No. 501,490. 2 Claims. (Cl. 210—56.)



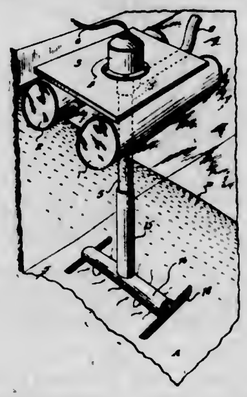
1. A grease-trap comprising a receptacle provided in one end with an intake for liquids, and at the other end with a discharge opening, a partition dividing said receptacle into two compartments communicating beneath said partition, a pocket supported by said partition and removable therewith, an apron for directing the movement of a stream of liquid from said inlet into said pocket, and an inclined corrugated floor in the opposite end of the receptacle having an incline in the direction of the discharge opening.

1,889,602. TREAD SWITCH. GLENN G. HILL, Detroit, Mich., assignor to The Electrodor Company, Detroit, Mich., a Corporation of Michigan. Filed Dec. 26, 1929. Serial No. 416,553. 4 Claims. (Cl. 200—86.)



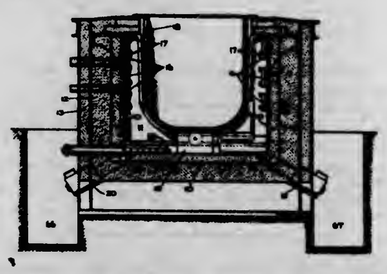
4. A tread switch comprising a pair of mutually insulated switch contacts, an arched support mounted therebetween, a resilient conductor mounted on the crown of said support and having its ends normally spaced from said contacts and adapted to be bent into engagement therewith, said conductor having a longitudinal rib received in said support and permitting a rocking movement of said conductor, and a flexible covering over said conductor and holding the same in a flexed condition.

1,889,603. DEVICE AND APPARATUS FOR CLEANING TANKS AND THE LIKE. JORDIN J. JOHNSTON, Abilene, Tex. Filed Mar. 20, 1931. Serial No. 524,192. 1 Claim. (Cl. 210—207.)



An apparatus for cleaning swimming pools without emptying the pools, comprising the combination of a platform, float means for supporting the platform in the water of the pool, a motor on the platform, a pump shaft connected to the motor, a pump barrel traversed by said shaft, propeller blades on the shaft; a plurality of vertically-disposed elongated flanges connected to the inside of the pump barrel and spaced between the propellers to cut up any solid matter present in the water; and a suction pipe arranged to slide telescopically with said pump barrel according to water depth; said suction pipe having an elongated member with an inverted trough-like mouth for directing the suction, said member supported upon runners resting upon the floor of the pool, leaving a space between the floor and member for suction.

1,889,604. PROTECTIVE APPARATUS FOR FURNACES. NORMAN B. JONES, Scotia, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Oct. 15, 1931. Serial No. 568,995. 7 Claims. (Cl. 13—1.)



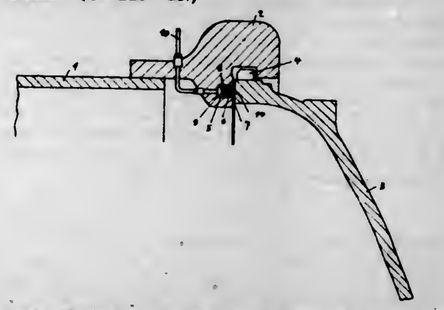
1. In combination with a receptacle for molten metal, of means for conducting molten metal escaping from said receptacle away from said receptacle comprising outlet passageways arranged in metal receiving positions below said receptacle, heating means for said passageways, and means responsive to said escaping metal for controlling said heating means.

1,889,605. RUNNING BOARD FOR RAILWAY CARS. J RAYMOND JONES, Spring House, Pa., assignor to Alan Wood Steel Company, a Corporation of Pennsylvania. Filed July 23, 1930. Serial No. 469,963. 4 Claims. (Cl. 105—457.)



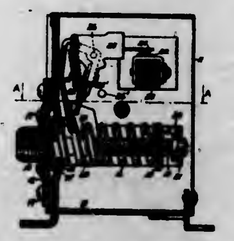
1. A running board for railway tank cars comprising a continuous series of horizontal metal plates with vertical flanged edges, certain of said plates extending at right angles to each other and an outer flanged edge of one of said plates overlapping an end of an adjacent plate.

1,889,606. COVER CLOSING FOR STEAM BARRELS, HEATING BOILERS, AND THE LIKE. HERMANN LANGE, Garbeen, Germany, assignor to the Firm "Hartsteinwerk Niedersachsen, Gesellschaft mit beschränkter Haftung," Hanover, Germany. Filed Apr. 24, 1931, Serial No. 532,605, and in Germany Sept. 10, 1929. 1 Claim. (Cl. 220—46.)



A cover closing for steam barrels, heating boilers, and the like, in combination with the packing ring proper and an interposed elastic ring, a circumferential groove provided in the boiler collar and into which both rings are fitted, the said elastic ring causing by means of fluid pressure, said packing ring to be pressed against the cover, the said groove comprising one portion with parallel side walls and another open portion the walls of which converge toward the opening, the elastic ring constituting a body made of solid india-rubber and provided with wedge-shaped lips fitting into said portion of the groove having parallel side walls, the packing-ring made of heat resistant material, such as asbestos, fitting into said portion of said groove having its walls converging toward the opening and contacting loosely with said body made of india-rubber.

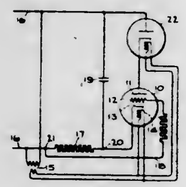
1,889,607. AUTOMATIC PRESSURE REGULATOR. VINCENT W. LEONARD, Saugus, Mass., assignor to General Electric Company, a Corporation of New York. Filed Dec. 16, 1931. Serial No. 581,849. 8 Claims. (Cl. 200—83.)



1. A regulator including an electric switch, a device operated in accordance with variations in pressure operably

connected with said switch for opening and closing the same at different pressures, a resilient member opposing the actuation of said switch by said device, and means for varying the resilient gradient of said member to change the range between the pressures at which said switch is opened and closed.

1,889,608. STROBOSCOPIC APPARATUS. HAROLD W. LORD, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed June 19, 1931. Serial No. 545,613. 7 Claims. (Cl. 176—124.)



1. In combination with an alternating current source of supply, means for producing instantaneous current impulses which are synchronous with the frequency of said source, comprising vapor electric discharge apparatus, said apparatus having a cathode connected to one side of the source, a resistance included in said connection, a grid for the discharge apparatus connected to the line side of said resistance, a plate electrode for said apparatus connected to the other side of the line, and a condenser connected between said cathode and plate electrodes.

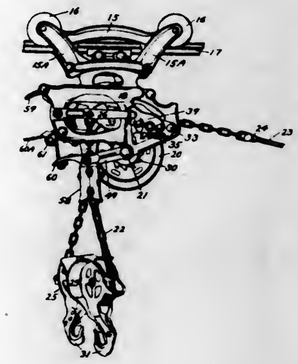
1,889,609. ELECTRIC SYSTEM FOR ENERGIZING CUTTING ELECTRODES. ARTHUR MUTSCHELLER, New York, N. Y., assignor to Wappler Electric Company, Inc., a Corporation of New York. Filed July 21, 1928. Serial No. 294,412. 5 Claims. (Cl. 174—177.)



1. In a system of the character described the combination, with a cutting electrode, and a circuit connected with said cutting electrode for energizing the same, of a spark gap bridged across said circuit and a suitable measure of inductance and capacity included in said circuit and coacting with said spark gap for developing trains of damped oscillations, said spark gap being adjustable by the operator for the purpose of bringing the oscillations of one train into phase with the oscillations of another train, in order to energize said cutting electrode by means of oscillations practically free from effects of damping.

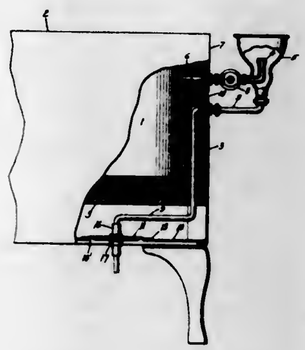
1,889,610. OVERHEAD CARRIER. ALBERT H. NELLES, Fairfield, Iowa, assignor to The Louden Machinery Company, Fairfield, Iowa, a Corporation of Iowa. Filed Mar. 9, 1929. Serial No. 345,726. 10 Claims. (Cl. 212—115.)

1. In elevating carriers adapted to run on an overhead trackway and convey elevated loads, a carrier frame, a sheave mounted on the frame having a ratchet on its side, elevating tackle comprising a chain and a flexible member of stranded material and of substantially uniform cross section secured thereto to pass over the sheave, said sheave having a groove to receive the flexible stranded member, locking means comprising a latch member slidably mounted in the carrier frame and a movable member having a pawl mounted thereon engageable with said ratchet to hold the sheave from rotating backwards, and means associated in



fixed relation with the groove of the sheave for holding the links of the chain thereon when the sheave is locked, whereby the load is held in elevated position.

1,889,611. WATER COOLER. AMBROSE D. OLDS, Wichita, Kans., assignor to Edison General Electric Appliance Company, Inc., Chicago, Ill., a Corporation of New York. Filed July 10, 1931. Serial No. 549,962. 3 Claims. (Cl. 62—141.)

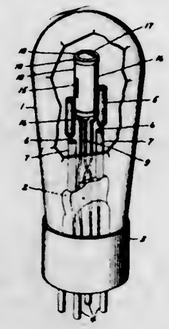


1. A water cooler including a cooling unit and an outer enclosing metal shell thermally insulated therefrom, a cold water pipe extending from said cooling unit through an opening in a wall of said shell, and means for substantially preventing the flow of heat from said shell to said water pipe, said means including a thin flat strip of material of high thermal resistance attached to the wall and to said pipe for forming a closure between them.

1,889,612. RECTIFYING APPARATUS. LAURENCE F. PERROTT, Revere, Mass., assignor to General Electric Company, a Corporation of New York. Filed July 16, 1931. Serial No. 551,214. 8 Claims. (Cl. 250—27.5.)

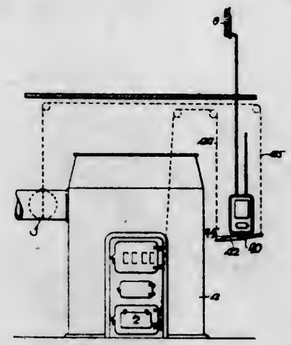
1. A rectifier comprising an envelope which terminates in a stem, a cathode and anode supported from said stem, a condensible ionizable medium in said envelope adapted to be heated to a pressure sufficiently high to support an

arc-like discharge at the impressed voltages, a shield mounted about the cathode and adapted to be maintained at a fixed potential with respect thereto, said shield hav-



ing a discharge opening at the periphery in the plane of the anode and cathode and having another opening at the end remote from said stem.

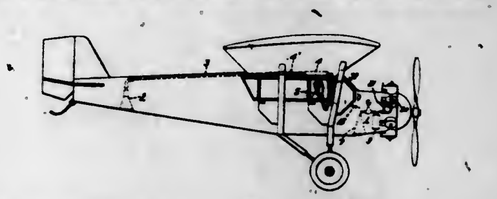
1,889,613. ELECTRIC DRAFT CONTROLLER. LAWRENCE M. PERSONS, Chicago, Ill., assignor to Cook Electric Company, Chicago, Ill., a Corporation of Illinois. Filed Dec. 5, 1927. Serial No. 237,626. 7 Claims. (Cl. 236—16.)



1. In a heater having an inlet damper and a check damper, the combination with means responsive to temperature variations, of an electrically operated draft controller for said dampers and in circuit with and adapted to be controlled by said temperature responsive means including an expansible and contractible vessel and a heat coil which are relatively arranged whereby the heat developed by the current flow in said heat coil serves to actuate and continuously maintain said vessel at a predetermined limit of expansion until the circuit is broken by said temperature responsive means.

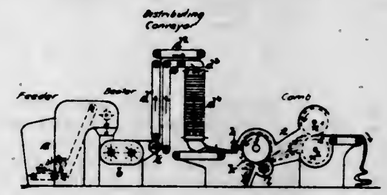
1,889,614. SOUND WAVE APPARATUS. CHESTER W. RICE, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed June 16, 1930. Serial No. 461,620. 27 Claims. (Cl. 181—0.5.)

1. The combination, in a system for determining altitude from aircraft, of means for producing sound waves having a predetermined frequency which is outside of the range of frequencies of the principal sounds produced by the craft, means for transmitting said sound waves of predetermined frequency toward the earth, a sound indicating device, a sound wave receiver upon the craft arranged to receive said sound waves after being reflected from the earth and to transmit said sound waves acoustically to said sound indicating device and means including an acoustic filter associated with said receiver to attenuate to a substantial degree sounds received by said receiver



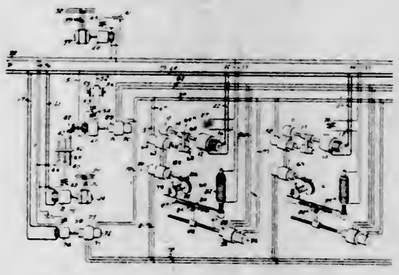
having frequencies corresponding to the frequencies of the principal sounds of the craft and at the same time to permit efficient transmission to said sound indicating device of sound waves having the frequency of said first means.

1,889,615. WASTE COMBING MACHINE, EXPRESS-CARD. LUDWIG SCHORSCH, Goerkau, Czechoslovakia. Filed June 15, 1928, Serial No. 285,669, and in Germany June 18, 1927. 3 Claims. (Cl. 19—65.)



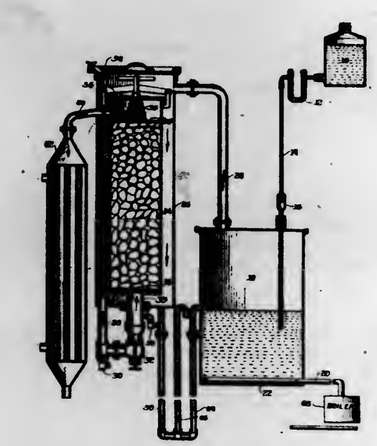
1. Apparatus of the class described comprising means for beating loose dirt out of fibrous material, means for combing the material including a rotary toothed drum, a brush for doffing the drum, and means for directing an air current between the drum and the brush to convey away the cleaned material.

1,889,616. CONTROL SYSTEM. LOUIS W. THOMPSON, Schenectady, N. Y., and EDWARD H. HORSTKOTTE, Erie, Pa., assignors to General Electric Company, a Corporation of New York. Filed Dec. 16, 1930. Serial No. 502,738. 20 Claims. (Cl. 172—293.)



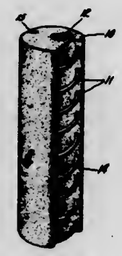
1. A control system comprising in combination a dynamo electric machine, means for adjusting an operating characteristic of said machine to a plurality of values, regulating means comprising a pressure responsive resistance and actuating means for said resistance responsive to an operating condition of said machine for maintaining said characteristic substantially constant at a desired value, and means for modifying the action of said actuating means in accordance with adjustments in the value of said characteristic.

1,889,617. VAPOR PURIFICATION PROCESS. EMIL TRUOG, Madison, Wis. Filed Aug. 17, 1929. Serial No. 386,725. 3 Claims. (Cl. 202—67.)



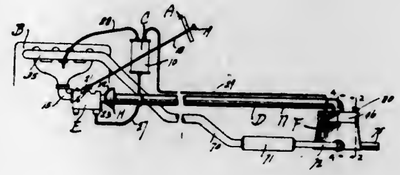
1. A process for purifying a liquid which consists in vaporizing the liquid by the application of heat, passing the vapors through a dilute acid solution to remove basic impurities, passing the washed vapors around a body of charcoal to heat the charcoal, and conducting the vapors through the body to contact with the heated charcoal to remove physical impurities, whereby condensation of the vapors is prevented and purification of the vapors is materially increased.

1,889,618. RESISTANCE UNIT. DOW O. WHELAN, Scotia, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Mar. 8, 1929. Serial No. 345,457. 5 Claims. (Cl. 201—75.)



4. The method of making a resistance unit or the like which consists in providing a substantially helical electrical conductor, embedding said helical conductor in a bar of carbon composition so that the ends of said conductor project from the ends of said bar to provide end terminal members therefor, milling a slot lengthwise of said bar so as to sever each turn of said helical conductor and then brushing the carbon composition free from a portion of each turn of said conductor so as to provide terminal members spaced longitudinally of said bar.

1,889,619. APPARATUS FOR GENERATING FUEL FUMES. CHARLES O. GROSZ, Wilkes-Barre, Pa. Filed July 15, 1930. Serial No. 468,177. 6 Claims. (Cl. 261—12.)



1. In combination an internal combustion engine having an intake and a conventional needle valve control carburetor conected therewith provided with an air intake, means for closing the needle valve to shut off normal fuel feed to the engine intake through the carburetor, a gasoline tank, means for feeding air through the gasoline tank for the production of fuel fumes, means connecting the gasoline tank with the normal air intake of the carburetor for feed of gasoline fumes from the gasoline tank to said air intake and means connected with said engine for transmittal of hot exhaust gases from said engine, through said gasoline tank.

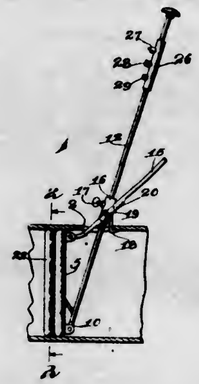
1,889,620. SHOE SHINING APPARATUS. LOUIS ANGYAL, San Francisco, Calif. Filed Nov. 11, 1931. Serial No. 574,432. 1 Claim. (Cl. 15—266.)



In a device of the character described, a portable shoe shining pad having the general contour of a shoe sole, a plate positioned on said pad, said plate having a pair of side ears formed thereon and provided with a forwardly extending front ear, a wire secured to said side ears and adapted to be supported by said front ear, said wire being spaced from the edge of said plate, a plurality of spaced rollers rotatable on said wire and adapted to be contacted by a polishing strap in its movement over a shoe positioned on said pad.

1,889,621. GAS MAIN STOPPER. GEORGE S. ANKARLO, Milwaukee, Wis. Filed Nov. 13, 1930. Serial No. 495,459. 3 Claims. (Cl. 137—76.)

1. A device of the class described including a flexible supporting member, retaining members having pivotal connection with said supporting member, a pneumatic tube supported at one side of the supporting member, a



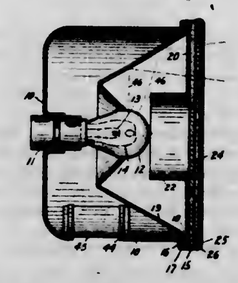
diaphragm arranged over the tube, and means whereby to inflate said tube for urging the diaphragm into intimate contact with the interior of a gas main.

1.889,622. DENTAL IMPRESSION WAX COMPOSITION. ANGELO C. ANTONUCCI, Philadelphia, Pa. Filed Mar. 1, 1932. Serial No. 596,156. 7 Claims. (Cl. 18—47.)

1. A dental wax composition consisting of

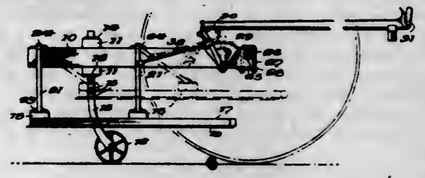
Shellac	About 45 percent by weight;
Filler	About 30 percent by weight;
Coloring matter	Sufficient to produce desired shade;
A polyhydric alcohol	About 2.5 percent by weight;
Mixed acids, including one or more fatty acids, and resin acids	Remainder.

1,889,623. COMBINED LIGHT AND SIGNAL. SAMUEL F. ARBUCKLE, Detroit, Mich., assignor to S. F. Arbuckle Corp., a Corporation of Delaware. Filed Apr. 11, 1922. Serial No. 551,646. 21 Claims. (Cl. 177—329.)



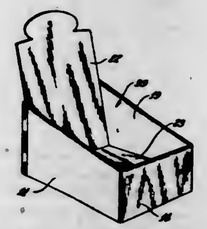
2. The combination with a vehicle tail and signal light, a housing, a closure for said housing having a light penetrable area, a bulb having a plurality of filaments therein positioned in said housing, one of which is capable of producing a light operable to signal a change in movement of the vehicle and another of which is capable of producing light to give a tail light indication at night and arranged to directly illuminate said area with any one of said filaments, and a separate circuit for each of said filaments operable at will whereby the intensity of illumination of said area may be varied for signal purposes.

1,889,624. CUTTER. SAMUEL C. ATKINSON, Columbus, N. J. Filed Feb. 2, 1932. Serial No. 590,490. 2 Claims. (Cl. 56—25.)



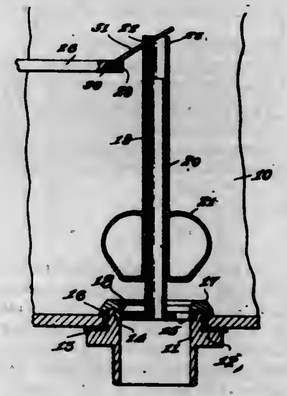
1. A tractor cutter attachment comprising, a main frame, means for securing said frame to a tractor axle, a ground bearing wheel in said frame, a movable frame, links pivotally suspending the movable frame from said main frame and pivotally connected to both frames, means for moving said movable frame through a vertical arc relative to said main frame, and blade means on said movable frame.

1,889,625. DISPLAY STAND. FRANKLIN D. BARTER, Chicago, Ill., assignor to Purity Bakeries Service Corp., Chicago, Ill., a Corporation of Illinois. Filed Sept. 22, 1931. Serial No. 564,415. 8 Claims. (Cl. 206—44.)



1. An article display stand comprising a frame, and an article supporting member within the frame and providing therewith a well for the reception of a quantity of articles to be displayed and supported by said member, said member including a base inclined at an angle to the horizontal and downwardly toward the rear of the frame.

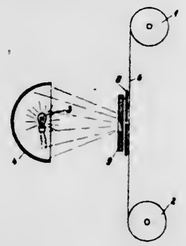
1,889,626. TOILET FLUSH VALVE. WILLIAM E. BELL, Honolulu, Territory of Hawaii, assignor of one-half to L. L. McCandless, Honolulu, Hawaii. Filed Apr. 30, 1931. Serial No. 534,064. 2 Claims. (Cl. 4—58.)



1. A valve mechanism for a closet flush tank, comprising a flanged tubular casting received by an opening in

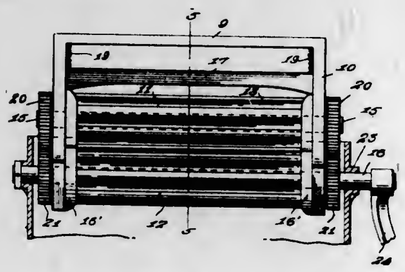
the bottom of the tank and exteriorly threaded, a web supported within the casting, a valve seat threaded on said casting and holding the web positioned therein, an overflow pipe rising centrally from said web and terminating above the valve seat, a sleeve slidably mounted on the pipe and projecting above the latter, a float valve carried by the lower end of the sleeve and normally engaging said seat, a rock shaft journaled within the tank, and means including a pivoted rod connecting the rock shaft with the projecting end of the sleeve for unseating the valve, and to permit opening of the valve independently of the shaft.

1,889,627. METHOD OF AND APPARATUS FOR MAKING PHOTOPHONOGRAMS. SVEN A: SON BERGLUND, Berlin-Lankwitz, Germany, assignor to N. V. Kuchenmeisters Internationale Maatschappij Voor Sprekende Films, Amsterdam, Netherlands. Filed Feb. 27, 1930, Serial No. 431,940, and in Germany Nov. 29, 1928. 2 Claims. (Cl. 179—100.3.)



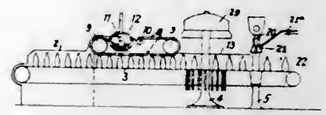
1. In an apparatus for the production of photographic sound records of variable form and intensity upon a film, a diaphragm with an opening adapted to move in the direction of film travel under the control of sound waves, a body in said opening the transparency of which varies in the direction in which said diaphragm moves, a light source on the side of said diaphragm opposite to that facing the film, and a fixed diaphragm with a light aperture extending across the width of the film between said light source and the film.

1,889,628. COMBINED WASHING MACHINE AND WRINGER. JOSEPH BORNING, Macklin, Saskatchewan, Canada. Filed Oct. 4, 1930. Serial No. 486,485. 1 Claim. (Cl. 68—22.)



A washer and wringer comprising a shaft having spaced gear wheels thereon, an inverted U-shaped frame mounted upon the shaft between the gear wheels and having its legs provided with vertical grooves, an elongated roller carried by the shaft and located between the legs of the frame, yieldingly mounted pressure plates disposed in said grooves, a roller journalled in the pressure plates and terminally provided with gear wheels in mesh with the first mentioned gear wheels, said rollers having spaced longitudinally extending peripheral grooves, the spaces between which are of greater width than the width of said grooves, the grooves in each roller being directly opposite those portions of the face of the other roller comprehended between its grooves, and means for rotating the first said gear wheels.

1,889,629. METHOD OF FILLING AND SEALING BOTTLES, VESSELS, AND THE LIKE. ADAM BÖHMER and GEORG GEBHARDT, Bad Kreuznach, Germany, assignors to Seitz-Werke G. m. b. H., Bad Kreuznach, Germany, a Corporation. Filed Jan. 17, 1930, Serial No. 421,545, and in Germany July 19, 1928. 13 Claims. (Cl. 226—68.)



1. A method for the germ-free filling and sealing of bottles, vessels and the like in a continuous manner by means of a sterilizing medium and in the absence of heat which comprises cleaning and sterilizing the vessels, passing them in an endless row to be filled, blowing the residual sterilizing medium from the vessels, filling said vessels, sealing the vesels with sterilized sealing means and maintaining the vessels free from germs, from the time they are cleaned until they are sealed.

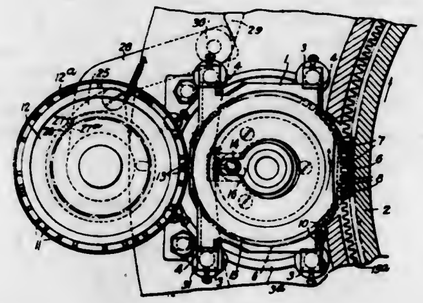
1,889,630. BLADE SHARPENER. HARRY C. BOWDEN, Los Angeles, Calif. Filed Jan. 26, 1931. Serial No. 511,404. 1 Claim. (Cl. 51—205.)



A blade sharpener and edge aligner comprising a handle consisting of a flat piece of material provided at its end with an enlargement, said enlargement having an opening leading in from the edge thereof, said opening having converging side walls, and an aligning element fitting in the opening of the head portion and having an edge disposed beyond the edge of the head portion, said element having end portions disposed beyond the side surfaces of said head portion and the aligning element having a pocket recess receiving an edge of the opening of the enlargement.

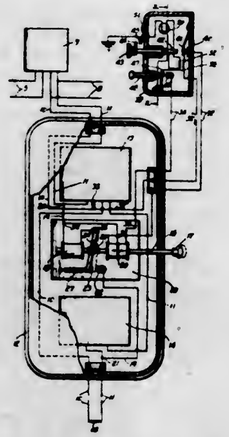
1,889,631. PATTERNING MECHANISM FOR KNITTING MACHINES. THOMAS CHARLES BROMLEY and ARTHUR SHORTLAND, Leicester, England, assignors to Mellor Bromley & Company Limited, Leicester, England, a British Company. Filed Jan. 18, 1930, Serial No. 421,687, and in Great Britain Feb. 16, 1929. 21 Claims. (Cl. 66—50.)

1. For a knitting machine wherein elements are to be controlled for patterning, pattern mechanism comprising a plurality of pattern devices each constituted by a driven rotary member for action selectively upon said elements, and a movable carrier, said carriers being associated so as to form a unitary assemblage in which they are movable individually towards and from the elements to be acted upon, means for selectively moving said carriers whereby the associated members are rendered operative and



inoperative in a predetermined manner, and means including a part common to all of said rotary members for rotating same in their carriers.

1,889,632. MULTIPLE RATE METER. IVAN C. BUSHONG, Lawrence, Kans., assignor of three-fifths to Henry H. Kuhn and one-fifth to Harold Howery, Kansas City, Mo. Filed Feb. 21, 1931. Serial No. 517,511. 12 Claims. (Cl. 171—268.)



1. Individual consumers' multiple rate metering equipment comprising, in combination with the consumer's distributing circuit, a standard rate meter for metering all the current supplied to the consumer through said circuit, a tap circuit supplied with current after passing through said meter, said tap circuit being provided with an auxiliary special rate meter and time-switch controlling the circuit through said auxiliary meter, a by-pass circuit around said switch and auxiliary meter, and a local switch device for opening and closing said by-pass circuit.

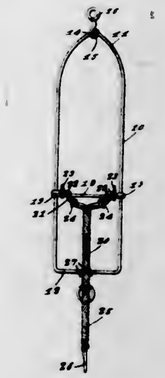
1,889,633. AUTOMOBILE TIE-DOWN. SAMUEL D. BUTTERWORTH, Detroit, Mich., assignor, by direct and mesne assignments, to Evans Products Company, Detroit, Mich., a Corporation of Delaware. Filed Apr. 12, 1932. Serial No. 604,821. 3 Claims. (Cl. 24—116.)

3. A hook-member for tie-down chains comprising a central body portion having a circular opening therein, a loop extension at one side of the body portion with a narrow slot communicating with the circular opening and a hook bill at the other side of the body portion having a narrow entrance slot, the hook bill being substantially within the



side limits of the hook member with the entrance slot disposed at an angle to the longitudinal axis of the hook member.

1,889,634. PELT OR FUR STRETCHER. CLARENCE E. CARROLL, Ged, La. Filed Feb. 5, 1932. Serial No. 591,190. 2 Claims. (Cl. 149—21.)



1. A stretcher of the kind described comprising an elongated open frame having a bullet-shaped end and an opposite straight end, a hanger swingingly connected with the bullet-shaped end and having a hook, a slide movable on the frame and having hooks, a lever swingingly connected to the slide and having hooks, and a spring clip at the straight end of said frame and accommodating the lever.

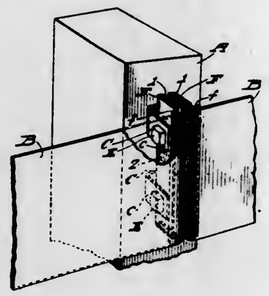
1,889,635. CARD INDEX SYSTEM. DENNIS A. CASEY, New Orleans, La. Filed Apr. 17, 1930. Serial No. 445,032. 10 Claims. (Cl. 129—16.1.)



1. In a device for selecting a desired card from a group of filed cards, a casing for receiving the group of filed

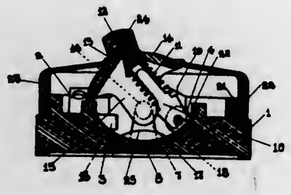
cards, a pair of master key bars movable in the casing for raising all of the filed cards simultaneously, a plurality of selective key bars movable in the casing, and means for tilting a selected card.

1,889,636. ROAD GUARD. CHARLES V. CLARK, Jr., Louisville, Ga. Filed Aug. 25, 1932. Serial No. 630,464. 5 Claims. (Cl. 256—13.1.)



1. A road-guard comprising a shock absorbing sheet metal panel bent at its end to form a flange extending at an angle to the longitudinal axis of the panel, a reinforcing member lying substantially parallel with the flange of the panel and permanently secured thereto, a support for the panel, a bracket secured to the support and having a portion extending towards the panel, a bolt passed through the bracket extension, the flange to the panel and the reinforcement, and a nut on the bolt for securing the panel flange and reinforcement to the bracket extension.

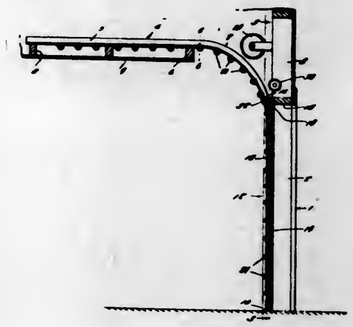
1,889,637. ELECTRIC SWITCH MECHANISM. FREDERICK LEONARD COOK, South Melbourne, Victoria, Australia. Filed Apr. 3, 1931, Serial No. 527,571, and in Australia Apr. 17, 1930. 5 Claims. (Cl. 200—67.)



1. The combination, in an electric switch, of a base member, a rocking member, a fulcrum rockably connecting said rocking member to said base member, an expansible thrust member pivoted to said rocking member, an insulated track on said base member, a contact-making member carried along said track by said thrust member, said fulcrum of said rocking member being situated below the lowest position of the pivot point of said thrust member on said rocking member and also being situated on a line drawn radially through the middle point of said track.

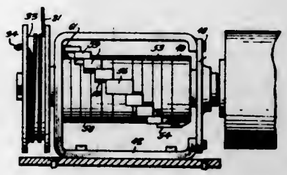
1,889,638. DOOR. FRED V. COOPER, Cadillac, Mich. Filed Jan. 22, 1931. Serial No. 510,563. 1 Claim. (Cl. 20—20.)

A structure of the class described comprising, in combination, a door frame, including side members, a pair of angle iron tracks having vertical portions secured to the frame and forming with the inner edges of said side members, channels and said tracks having horizontal portions extending substantially at right angles to the door frame and intermediate arcuate portions connecting the horizontal portions to the vertical portions, rollers carried by the arcuate and horizontal portions for supporting a door in spaced relation from said track portion, a door mounted for travel on the tracks and comprising a plurality of horizontally disposed sections, the ends of the sections fitting in the channels when the door is in closed position, guide rollers adjacent the arcuate track parts for directing the door sections upon the arcuate parts during movement of



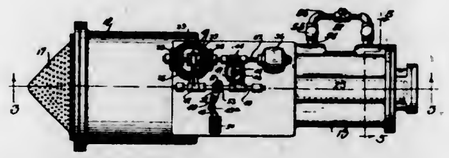
the door, hinge straps secured to the door sections adjacent the ends thereof, pivotally connecting said sections together, each strap extending entirely across the section with its ends pivoted to the straps of adjacent sections, the upper ends of the straps on the topmost section being bent outwardly to form cams, and projections at the upper ends of the vertical portions of the tracks for engaging said cams for forcing the topmost section against the top of the door frame, pulleys located above the vertical track parts, cables passing over said pulleys and each having one end connected to the lowermost door section, and weights on the other ends of said cables.

1,889,639. WINDOW SHADE CONTROL. ROBERT E. COLTON, Chattanooga, Tenn. Filed Feb. 8, 1932. Serial No. 591,749. 5 Claims. (Cl. 156—28.)



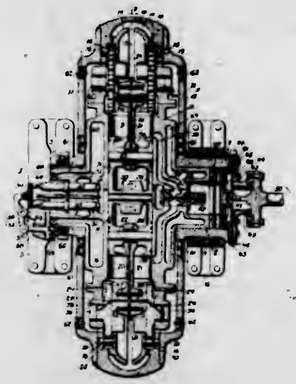
1. A shade control mechanism, comprising a bracket, means rotatably secured in said bracket adapted to be keyed to a shade roller, a shaft, one end of said shaft being rotatably mounted in said means and the other end of said shaft being rotatably secured in said bracket, a drum fixedly secured to one end of said shaft, spring means tending to rotate said drum in one direction, flexible means serving to rotate said drum in the opposite direction, cog means secured on said shaft and a plurality of other cog means rotatably mounted on said shaft, each of said cog means being in the path of movement of the adjacent cog means whereby said shaft may transmit motion to said roller through said cog means.

1,889,640. COMPRESSOR APPARATUS. ARTHUR JOSEPH COURTOIS, Montague City, Mass., assignor of one-fourth to Jan P. Clary, Hartford, Conn. Filed May 25, 1931. Serial No. 539,925. 3 Claims. (Cl. 230—200.)



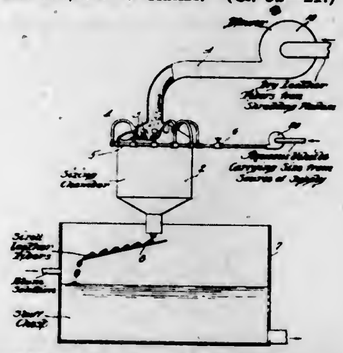
1. In an air compressor of the type described, a pair of alined cylinders and an intermediate connecting housing, a partition separating an end and the intermediate housing, a reciprocating piston in each end cylinder with one piston separating the intermediate housing and an end cylinder, a check valve in the last named piston and partition, an air intake in the cylinder having the valved piston therein, an outlet in the other end cylinder, a rod connecting the pistons, and means for reciprocating the pistons.

1,889,641. INTERNAL COMBUSTION ENGINE. FRANCIS M. DAINTON, New York, N. Y., assignor of one-half to Alfred St. James, Brooklyn, N. Y. Filed Nov. 6, 1930. Serial No. 493,869. 9 Claims. (Cl. 123—47.)



1. In an internal combustion engine, the combination with an engine block, an air-tight hollow casing mounted to turn thereon, and check valves controlling the passage of air into and from the casing, of radially positioned cylinders in the block communicating at their inner ends, reciprocating pistons in the cylinders, means operatively connecting the pistons to the casing which transform the reciprocating movements of the pistons into rotary movement of the casing, said block having air passages normally closed by the pistons and opened by the pistons when the latter are at the ends of their inward strokes, a check valve opening into the space between the pistons and admitting air from the passages to said space, and exhaust valves communicating with said space.

1,889,642. SIZED FIBROUS PRODUCT AND METHOD OF AND APPARATUS FOR PRODUCING THE SAME. GEORGE F. DAVIS, Waltham, Mass. Filed Jan. 22, 1931. Serial No. 510,403. 9 Claims. (Cl. 92—21.)



1. A process which comprises suspending dry, bulk fiber in a gaseous medium, spraying a sizing agent onto the fiber while thus suspended, forming an aqueous stock of the sized fibers, and forming the stock into the desired article.

1,889,643. FIBROUS SHEET MATERIAL, COMPOSITION THEREFOR, AND PROCESS OF MAKING. GEORGE F. DAVIS, Waltham, Mass. Filed Feb. 19, 1931. Serial No. 517,115. 7 Claims. (Cl. 92—21.)

1. A composite fiber furnish comprising waterproofed, previously-tanned leather fiber in substantially unbeaten condition co-mingled with well-beaten, sized cellulose fiber.

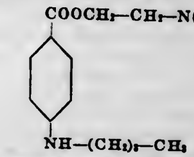
6. A process which comprises beating cellulose fiber in water until it is well-hydrated, sizing the resulting aqueous fiber suspension, and co-mingling therewith sized, previously-tanned leather fiber while keeping associated with such latter fiber substantially all of its water-soluble constituent, including tanning agent.

1,889,644. METHOD OF REFRACTORY COVERING IRON AND METAL STRUCTURES. HANS RUDOLPH SCHMEDES DE LA ROCHE, Bremen, Germany. Filed Jan. 30, 1931, Serial No. 512,509, and in Germany Sept. 8, 1930. 4 Claims. (Cl. 91—68.)

1. The method of protecting structural ferrous material which consists in coating the material with a rust proofing compound, covering the rust proof coating with a coating of Sorrel cement containing a calcium compound wherein the calcium is free to unite with fluorine, and treating the exterior of the cement with a fluorine compound capable of uniting with the calcium of the calcium compound to form calcium fluoride.

1,889,645. BETA-DIMETHYLAMINOETHYL ESTER OF PARA-BUTYLAMINO-BENZOIC ACID. OTTO EISLEB, Hofheim-on-Taunus, Germany, assignor to Winthrop Chemical Company, Inc., New York, N. Y., a Corporation of New York. Filed June 22, 1932, Serial No. 618,811, and in Switzerland Dec. 22, 1930. 1 Claim. (Cl. 260—105.)

The beta-dimethylaminoethylester of para-butylaminobensoic acid, which compound has the following probable constitution



and forms colorless crystals melting at 43° C., said compound forming a monohydrochloride being a colorless

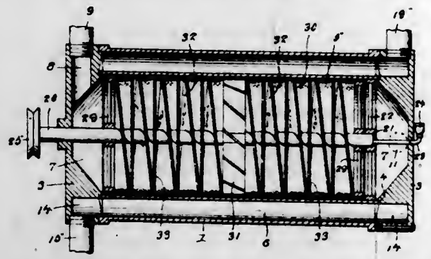
crystalline powder, easily soluble in water and melting at 147° C.–148° C. and a mononitrate melting at 131° C.–132° C.

1,889,646. LAWN CHAIR. CHARLES ERNST, New Orleans, La. Filed Feb. 25, 1930. Serial No. 431,221. 1 Claim. (Cl. 155—109.)



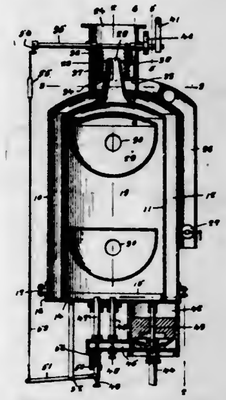
In a reclining chair, a supporting base having a seat, a back rest pivotally mounted to said seat, said seat having a forwardly projecting portion and a rearwardly projecting portion, said rearwardly projecting portion having grooves formed therein, a foot rest, said foot rest comprising side members pivotally connected to said forwardly projecting portion of said seat and projecting thereabove, arm rests pivotally connected to respective projecting portions of said side members and to said back rest, rigid leg members connected to said arm rests and depending therefrom and movable with said arm rests to engage the supporting surface for said base when said back and foot rest are moved to a reclining position, and respective pin members carried by said arm rests for engagement in said grooves for limiting backward movement of said back and arm rests.

1,889,647. VAPORIZER AND SUPERCHARGER FOR INTERNAL COMBUSTION ENGINES. LOUIS M. FABBRO, Cleveland, Ohio, assignor, by direct and mesne assignments, of forty-five per cent to Anna M. Fabbro, and forty per cent to E. C. Balshiser, Cleveland, Ohio, and fifteen per cent to Charles Di Lorenzio. Filed May 21, 1930. Serial No. 454,390. 1 Claim. (Cl. 48—180.)



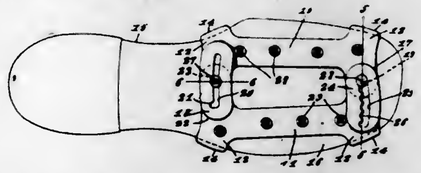
A mixing device for an explosive mixture, comprising inner and outer cylinders spaced apart to form an annular chamber, end plates closing the ends of the cylinders, each plate being formed with a central recess forming a continuation of the inner cylinder and a pair of passages, one passage being in communication with the annular chamber and the other with the recess, whereby exhaust gases can be passed through the annular chamber and explosive mixture through the inner cylinder, a cylindrical screen in the inner cylinder, a shaft passing through one of the end plates, bearing means for the other end of the shaft arranged in the inner cylinder, a fan connected with the shaft and with the cylindrical screen, baffles of foraminous material connected with the shaft and cylindrical screen, spirals of foraminous material connected with the shaft and with the cylindrical screen and means for rotating the shaft.

1,889,648. FUEL VAPORIZER. LOUIS M. FABBRO, Cleveland, Ohio, assignor of one-half to E. C. Balshiser, Cleveland, Ohio. Filed Dec. 15, 1930. Serial No. 502,567. 3 Claims. (Cl. 123—133.)



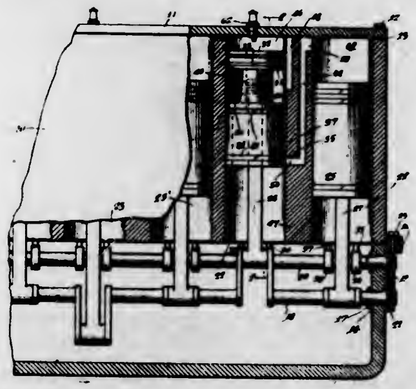
1. A fuel vaporizer comprising spaced outer and inner casings forming a heat circulating chamber therebetween coextensive with the sides and top thereof, means for conveying exhaust gases into the heat circulating chamber, means for delivering the exhaust gases from said chamber, a mixing collar rising centrally from the outer casing and having an air conduit thereto and opening into the same at opposite sides thereof, a nozzle rising from the inner casing into the mixing collar, superposed heat drums in the inner casing and opening into the heat circulating chamber, a hollow valve slidable axially in the mixing collar between the end of the nozzle and the communication of the air conduit with said collar, and float valve controlled fuel inlet means communicating with the inner casing remote from the nozzle.

1,889,649. ADJUSTABLE SPUR PLATE FOR SHOES. HOWARD W. FORBES and EUBIE MITCHELL, Swanton, Ohio. Filed Nov. 17, 1931. Serial No. 575,664. 2 Claims. (Cl. 36—64.)



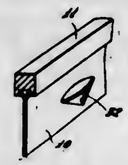
1. A device for the purpose indicated comprising complemental plates formed with shoe sole engaging clips, each plate being formed with lateral extensions overlapping that of the other plate, one of said plates being provided with a stud adjacent one extremity of one extension and an arcuate slot extending substantially the length of the other extension and formed with the stud as a center, the lower edge of said slot being formed with a series of stud engaging seats, the other plate having that extension overlapping the stud carrying extension of the first plate having an arcuate slot with a lateral extension at one end, said stud traversing said arcuate slot and seating in said extension, the other extension of said second plate having a stud traversing the arcuate slot in the extension of the first plate and being engageable in any one of said seats therein when the stud on the first plate is in any position in the slot of the second plate, the stud on the second plate being disengaged from said seats when the stud of the first plate is in the lateral extension of the slot on the second plate.

1,889,650. INTERNAL COMBUSTION ENGINE. JOHN C. FREDRICKSEN, Gary, Ind. Filed Sept. 7, 1927. Serial No. 218,020. 4 Claims. (Cl. 60—15.)



1. An internal combustion engine including a body having cylinders therein, pistons reciprocable in said cylinders, the piston in one of said cylinders being arranged to provide a chamber between the skirt thereof and the walls of said cylinder, said body including a passage adapted to establish communication between the cylinder space above said piston and said chamber during and following an explosion of fuel in said cylinder in order to conduct gases from said explosion space into said chamber, said body including means for conducting the gases from said chamber into another cylinder for expansion therein so as to motivate the piston therein.

1,889,651. EXPANSION STRIP. PASQUALE GALASSI, New York, N. Y. Filed Dec. 11, 1929. Serial No. 413,270. 3 Claims. (Cl. 94—17.)

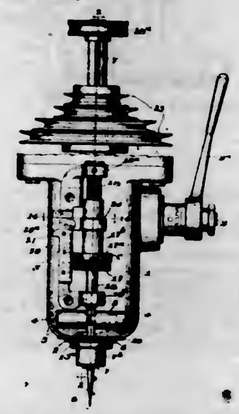


1. A floor strip of the character described, comprising an upper and a lower longitudinal section, one of said sections being provided along its inner edge with a continuous dovetailed groove, and the other section having its inner edge slit at spaced intervals to form a series of adjoining lips, said lips being alternately bent to one side and then to the other of said section to form a Y-structure, said lips being inserted within said groove and abutting against the sides thereof.

1,889,652. PROCESS FOR THE DISTILLATION OF MIXED SUBSTANCES OF WHICH SOAP IS A CONSTITUENT. WILHELM GENSECKE, Gonzenheim near Frankfort-on-the-Main, Germany. Filed Oct. 24, 1929, Serial No. 402,322, and in Germany Oct. 31, 1928. 3 Claims. (Cl. 87—12.)

1. In the refining of mixtures of neutral oils and free fatty acids by treating a solution of the oil in a solvent for oil which is a non-solvent for soaps with a neutralising agent to convert the free fatty acid into soaps, separating the soaps from the solution of oil, and washing the soaps with said oil solvent until they are substantially free of neutral oil, the improved method of removing the said oil solvent remaining in admixture with soap from said mixture which comprises converting the fatty acid soaps in the mixture into free fatty acids and thereafter removing the oil solvent from the mixture by distillation.

1,889,653. CUTTER HEAD ASSEMBLY FOR ROUTING AND OTHER MACHINE TOOLS. GEORGE GORTON, Racine, Wis. Filed Aug. 21, 1929. Serial No. 387,330. 19 Claims. (Cl. 90—14.)



1. A cutter head assembly embodying a supporting housing having a longitudinal guide slot; a barrel provided with and carrying a rotary cutter head spindle, said barrel longitudinally arranged and slidable in said housing and provided with a stop lug rigid therewith and projecting outwardly through and beyond said slot; a normally-fixed screw threaded shaft parallel with said slot and spaced outwardly therefrom; and an internally-threaded rotary sleeve on said shaft and meshing with the thread thereof and provided with a portion of increased diameter forming an annular top stop abutment below and adapted to abut the bottom edge of said lug to predetermine the cutting depth of the cutter carried by said spindle, a fixed longitudinal scale being provided along the path of movement of said enlarged diameter portion, said enlarged portion having a scale around the circumference thereof.

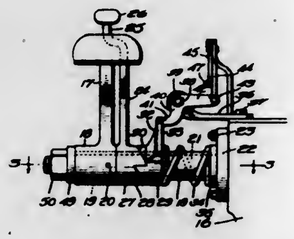
1,889,654. FERTILIZER. ROBERT GRIESBACH, Ludwigshafen-on-the-Rhine, and HANS WEISS, Mannheim, Germany, assignors, by mesne assignments, to The Ohio Sanitary Engineering Corporation, Columbus, Ohio, a Corporation of Ohio. Filed Dec. 20, 1928, Serial No. 327,469, and in Germany Jan. 14, 1928. 2 Claims. (Cl. 71—9.)

1. The process for the production of fertilisers which comprises heating a solid siliceous material with an amount of phosphoric acid, calculated on acid of 60 per cent strength, corresponding to from 1½ to 8 times the weight of silica present to a temperature about 250° centigrade and treating the product obtained, after cooling, with ammonia.

1,889,655. TISSUE FILLER. ERLING H. HAARSTAD, Philadelphia, Pa., assignor to Hydrol Chemical Company, Inc., Philadelphia, Pa., a Corporation of Pennsylvania. Filed Apr. 24, 1931. Serial No. 532,710. 4 Claims. (Cl. 27—21.)

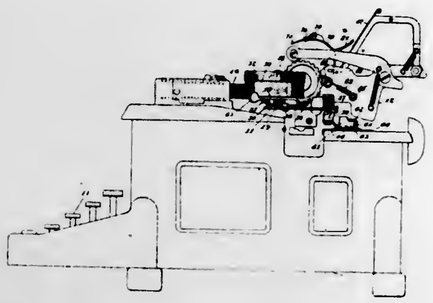
1. A tissue filler for corpses comprising a solution of normally water insoluble cellulosic material in a highly water soluble solvent of the character of methanol, such solution being hypodermically injectible into tissues of an emaciated corpse to precipitate said cellulosic material by solution of said water soluble solvent in the tissue fluids and thereby build up said tissues.

1,889,656. CONTROL DEVICE FOR MOTOR VEHICLES. LEWIS V. HASS, Chariton, Iowa. Filed Mar. 28, 1932. Serial No. 601,703. 18 Claims. (Cl. 74—81.)



1. The combination with a pivoted control member of a motor vehicle, of an accelerator pedal pivoted to swing about the pivot axis of the control member, operating means for the throttle of the vehicle engine, and means for transmitting movement to said operating means upon movement of the accelerator pedal about its pivot axis independently of the control member, said last named means being inoperative upon simultaneous swinging movement of said accelerator pedal and control member about their pivot axis.

1,889,657. DUPLICATING DEVICE FOR TYPEWRITING MACHINES. BEULAH LOUISE HENRY, New York, N. Y., assignor of one-half to Edwin A. Guinzburg, New York, N. Y. Filed Dec. 3, 1928. Serial No. 323,346. 5 Claims. (Cl. 197—153.)



1. In a typewriting machine, the combination of a revoluble platen, pressure rolls which cooperate with the platen to impart movement to sheets of paper, a curved plate positioned with respect to said platen to guide said sheets around said platen, an ink-ribbon, said plate having a ledge to support a portion of said ribbon spaced from said platen disposed lengthwise and in registry with the typing line thereof, a second ink-ribbon having a portion spaced from the supported portion of the other ribbon, and said plate having means to deflect one or more of said sheets between said ribbon portions.

1,889,658. DETERGENT. CHARLES RUSSELL HINCHMAN, Haverford Township, Delaware County, Pa. Filed Feb. 7, 1929. Serial No. 338,329. 2 Claims. (Cl. 87—5.)

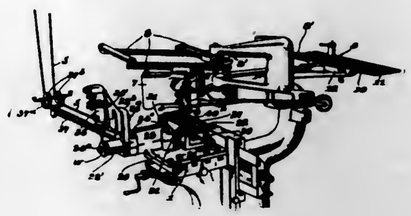
1. A detergent composition comprising a homogenous mixture consisting approximately of soap, 20% to 25%, cocoanut oil, 1%; calcium carbonate (precipitated chalk), 25%; kieselguhr, 8%, and glycerine 40% to 45%, together with a small proportion of a flavoring ingredient.

1,889,659. DRESS FORM. NORA HOFFMAN, New York, N. Y. Filed Jan. 20, 1928, Serial No. 248,201. Renewed June 17, 1931. 3 Claims. (Cl. 223—18.)



1. A dress form comprising in combination with a platform, a fabric member having an outer tubular wall and an inner tubular wall, said fabric joined at the top between said walls, the inner walls thereby providing a tube open at the top, the bottom edge of said inner wall turned outwardly and removably attached to the top of said platform, the bottom edge of said outer wall turned inwardly and removably attached to the periphery of said platform, a rod rising from said platform and disposed within the tube of the inner wall to support the latter, and a continuous inflatable member having also outer and inner tubular walls and disposed within said first tubular walls, said latter member having a valve therein, the latter projecting through said fabric member, whereby said inner member is inflatable, substantially as and for the purpose described.

1,889,660. ENGRAVING AND OTHER MACHINE. GEORGE HORNER, Racine, Wis., assignor to George Gorton Machine Company, Racine, Wis., a Corporation of Wisconsin. Filed Feb. 16, 1928. Serial No. 254,741. 16 Claims. (Cl. 90—13.6.)



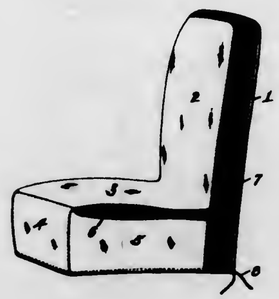
16. In combination; a cutter, and mechanisms including a pantograph for causing relative universal lateral movements between said cutter and the circumferential surface of round work while held in operative cutting relationship to reproduce copy in scaled relation longitudinally and circumferentially on said work surface as the pantograph traces said copy, said mechanisms including a work-holder carriage for wholly supporting and carrying the work and embodying means wholly mounted therein for holding and for rotating round work on its longitudinal axis with the circumferential surface of said work in operative cutting relation to said cutter, said carriage confined to a straight line path of movement while wholly carrying said work.

1,889,661. BASKET HANDLE. ROBERT E. HUSTON, Trinity, Tex. Filed Aug. 21, 1931. Serial No. 558,581. 1 Claim. (Cl. 217—125.)



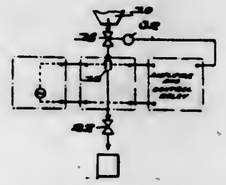
A device of the character set forth comprising a container having spaced openings in the wall thereof, a band surrounding the container and closing one of the openings and having an opening aligning with the other opening of the container, and a handle having a semi-circular shaped portion extending through the aligned openings of the band and the container with the end of said semi-circular portion movable in the other opening of the container and adapted to abut the band for limiting the movement of the handle away from the container and always occupying a position within the last named opening regardless of the inclination of the handle relative to the container.

1,889,662. SEAT COVER. SOLOMON E. HYMAN, Fremont, Ohio, assignor to The S. E. Hyman Company, Fremont, Ohio, a Corporation of Ohio. Filed May 18, 1931. Serial No. 538,082. 3 Claims. (Cl. 155—182.)



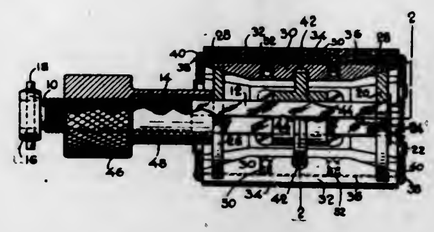
3. A cover of the class described having a seat panel, a skirt panel attached to and depending from the forward edge of the seat panel, a wing attached to and projecting rearwardly from each end of the skirt panel and being substantially equal in depth thereto, means connecting the rear ends of said wing across the seat-back, an elastic strip at each side of the seat panel connecting the side edge thereof to the top edge of the respective wing and extending substantially the length of the side edge of the seat and being yieldable in a direction transverse to the wings, and means for drawing the lower edges of the skirt panel and wings closely around the lower edge of the seat to which attached, said skirt panel and wings being of non-yielding material.

1,889,663. ELECTRICAL WEIGHING AND MEASURING DEVICE. EDMUND BURWELL ILYUS, Newark, N. J., assignor to Arenco Machine Company, Inc., New York, N. Y., a Corporation of New York. Filed Aug. 29, 1930. Serial No. 478,771. 11 Claims. (Cl. 221—95.)



1. The method of dispensing material, which consists in mechanically and completely segregating the material in unit quantities and controlling the segregation electrically by the dielectric characteristic of the material.

1,889,664. GRINDING MECHANISM. FRANK J. JESCHKE, Detroit, Mich., assignor to Micromatic Hone Corporation, Detroit, Mich., a Corporation of Michigan. Filed Dec. 14, 1927, Serial No. 239,858. Renewed Oct. 17, 1932. 28 Claims. (Cl. 51—184.1.)

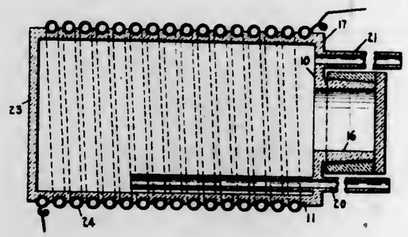


1. In a grinding device, a body, a series of abrasive elements extending substantially parallel with the axis thereof and arranged in circumferential spaced relation thereabout, oppositely disposed camming surfaces carried by the body for varying the radial distance of the faces of the abrasives from the axis of the body, said surfaces being relatively fixed in the adjusted position and positively supporting the abrasive elements against contraction in any of the adjusted positions and coupling the abrasives with the body to rotate therewith.

1,889,665. ELECTRIC FURNACE. CLYDE R. JOHNSON, Princeton, N. J., assignor to Amerail Company, Inc., New York, N. Y., a Corporation of New York. Filed Sept. 9, 1931. Serial No. 561,828. 1 Claim. (Cl. 219—36.)

In an electric furnace, the combination comprising a heating chamber made wholly of fused silica and terminating at one side into a tapered neck, a cap, of fused silica

and having a top of transparent quarts, ground in on aforesaid neck so as to hermetically close aforesaid chamber, passageways for conducting a gas into and withdrawing same from aforesaid chamber, and an electrically conductive resistance wire operatively arranged around the body of aforesaid chamber.

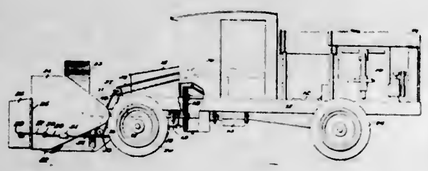


1,889,666. MEMORANDUM PAD FOR DESK TELEPHONES. SIEGFRIED KAHN, Albuquerque, N. Mex. Filed June 6, 1931. Serial No. 542,663. 6 Claims. (Cl. 281—15.)



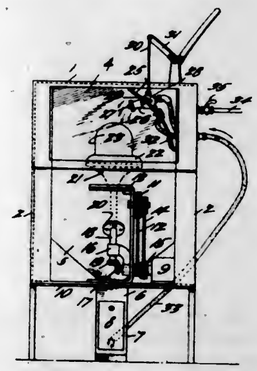
1. A pad holder for telephones comprising a plate having a standard encircling opening with an entrance slit leading from said opening through the edge of the plate.

1,889,667. STEERING MEANS FOR SNOWPLOWS. WALTER E. KLAUER, Dubuque, Iowa. Filed Aug. 20, 1928. Serial No. 300,865. 11 Claims. (Cl. 37—43.)



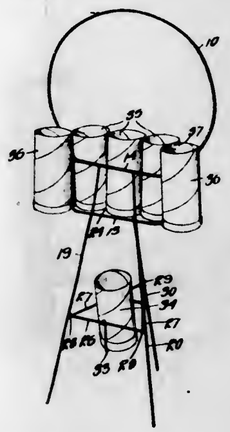
1. In a snow plow, a casing having forwardly extending sides, and means mounted on each of said sides for movement into trailing relation thereto to contact with the snow to stabilize the path of said plow.

1,889,668. APPARATUS FOR CLEANING HATS. FERDINAND R. KLINO, New York, N. Y. Filed Mar. 17, 1930. Serial No. 436,440. 6 Claims. (Cl. 223—26.)



1. An apparatus for cleaning hats including a casing, a hat form rotatable therein, nozzle guides carried by the casing, a nozzle movable longitudinally of the guides, a source of communication between the nozzle and a supply of sand, a source of communication between the nozzle and a supply of air under pressure, means operative from beyond the casing for moving the nozzle lengthwise of the guides, and means carried by the guides for tilting the nozzle at a determined point in the movement of the nozzle.

1,889,669. FLORAL DISPLAY STAND. THOMAS L. KNIPE, Kokomo, Ind. Filed Jan. 13, 1931. Serial No. 508,507. 6 Claims. (Cl. 211—71.)



1. A flower display stand comprising a pair of loops having a pair of legs secured thereto, a loop secured to said first named loops to hold them in spaced apart position, said loop serving as a handle for the stand, a third leg hinged to the lowermost of said loops, a bracket slidably securing the leg but spacing it apart from the pair of legs, substantially as set forth.

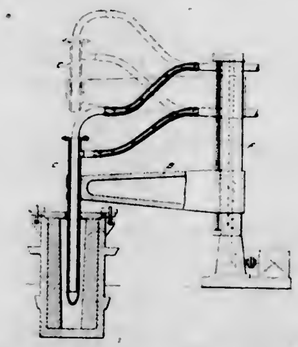
1,889,670. FLORAL DISPLAY STAND. THOMAS L. KNIPE, Kokomo, Ind. Filed Jan. 30, 1931. Serial No. 512,435. 2 Claims. (Cl. 211—71.)

1. A flower display stand comprising inclined legs, cross-bars and receptacle-like supports for flower containers which supports are formed separate from the stand and are provided with hooks for hanging them upon any one of said cross-bars of the stand, said supports being so positioned that their bottom edge will rest against and



be supported by said legs and each of said supports being provided with means adapted to be engaged by and to support similar supports for flower containers, substantially as set forth.

1,889,671. METHOD FOR COOLING CENTRIFUGALLY CAST HOLLOW METAL BLOOMS. WILHELM KOEHN, Gelsenkirchen, Germany. Filed Aug. 26, 1931, Serial No. 559,578, and in Germany Jan. 13, 1931. 2 Claims. (Cl. 22—212.)



1. A method of cooling a centrifugally cast hollow metal bloom which comprises introducing a cooling body into the space within the bloom and maintaining the cooling body out of contact with the said bloom.

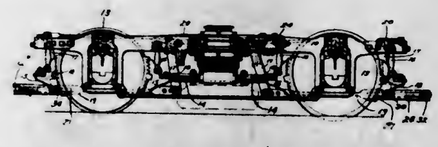
1,889,672. MANUFACTURE OF HYDROGEN. ALFRED T. LARSON, Wilmington, Del., assignor, by mesne assignments, to E. I. du Pont de Nemours & Company, Wilmington, Del., a Corporation of Delaware. Filed May 15, 1928. Serial No. 278,043. 12 Claims. (Cl. 23—213.)

1. The process of producing hydrogen which comprises submitting steam and carbon monoxide to the action of a catalyst at a temperature sufficiently elevated to effect the reaction

$$H_2O + CO = H_2 + CO_2,$$

said catalyst containing copper and an oxide of an element selected from the group consisting of tungsten, molybdenum, cerium, vanadium, manganese, and magnesium.

1,889,673. TRUCK BRAKE RIGGING. ELMER LATSHAW, Philadelphia, Pa., assignor to The J. G. Brill Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed May 21, 1931. Serial No. 539,079. 2 Claims. (Cl. 188—46.)



1. In a car truck clasp brake rigging consisting of brake shoes mounted on each side of each wheel, paired vertical levers at each wheel to apply such brake shoes to the wheel, correspondingly positioned levers of each pair being fulcrumed to the truck frame, a single floating equaliser associated with the remaining levers of said pairs which are disposed at the same side of the truck, said other levers being directly connected to said floating equalizer and an equalizer beam extending transversely of the truck for shifting said floating equalizers.

1,889,674. TRUSS. GEORGES LEMARINIER, Paris, France. Filed Sept. 4, 1929, Serial No. 391,989, and in France Dec. 1, 1928. 2 Claims. (Cl. 128—121.)



1. A connecting device for attaching truss pads and the like to a flexible pad supporting band, comprising a plate on which said pad is adapted to be mounted, said plate having a laterally projecting flange provided with an aperture for receiving said supporting band, a headed pin fixed to said plate, and a further pin resiliently mounted on said plate in spaced relation to said first mentioned pin, said resiliently mounted pin being movable to depressed and projected position, said band being provided with spaced apertures, one of said apertures being in the form of a bayonet slot for engaging said fixed headed pin on the plate when said band is passed through the aperture in said lateral flange on the plate, and the other of the said apertures in the band being adapted to engage said resiliently mounted pin to lock said fixed pin in said bayonet slot.

1,889,675. TOILET ARTICLE AND METHOD OF MANUFACTURING THE SAME. ARTHUR F. LINDEWALL, Brooklyn, N. Y. Filed Feb. 19, 1931. Serial No. 517,078. 4 Claims. (Cl. 15—105.)

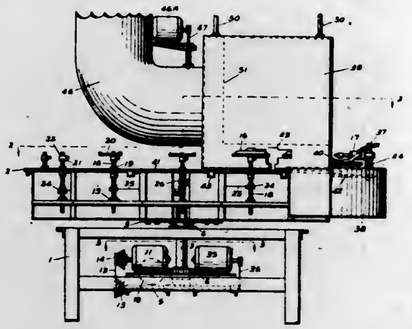


1. In a toilet article, a back of powdered pumice bound with silicate of soda and having a cavity therein, and a non-expansible brush back secured to the pumice back in the cavity.

1,889,676. PAINT APPLYING MACHINE. EARL W. LITTLE, Indianapolis, Ind. Filed July 5, 1929. Serial No. 375,988. 6 Claims. (Cl. 91—44.)

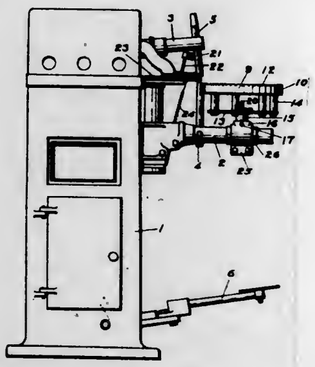
1. A means for applying paint or the like to articles comprising a platform, means for constantly rotating the same, means for carrying a plurality of articles on said

platform, means for constantly rotating said articles independently of said platform, means for applying paint or the like to said articles as they pass a given point, a hood



through which said articles pass when being treated, a partition hinged within said hood, and a suction means for removing fumes and the like from said hood.

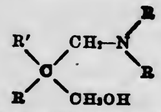
1,889,677. WELDING MEANS. EARL W. LITTLE, Indianapolis, Ind. Filed Mar. 8, 1930. Serial No. 434,188. 9 Claims. (Cl. 219—4.)



1. Means for supporting an assemblage of wires in position to be welded comprising a form structure, means for centering the assemblage of wires for causing them to radiate from the center of said form and project over the edge of the form, and means on the form for holding said wires in spaced relation.

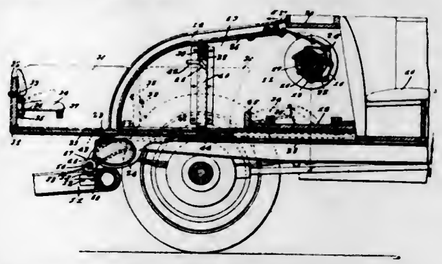
1,889,678. AROMATIC ESTERS OF AMINO ALCOHOLS AND PROCESS OF MANUFACTURE. CHARLES MANNICH, Berlin-Steglitz, Germany. Filed Oct. 3, 1930, Serial No. 486,289, and in Germany Nov. 1, 1929. 7 Claims. (Cl. 260—105.)

1. The esters of alcohol bases of the general formula



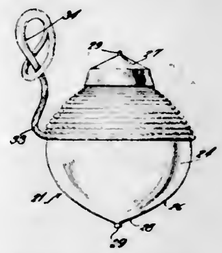
where R represents hydrogen or an alkyl radical, R' representing an alkyl radical, and aromatic carboxylic acids containing a benzene nucleus, the new products forming well crystallised hydrochlorides, which are stable in hot water and have very strong anæsthetic properties.

1,889,679. AUTOMOBILE BODY. JOHN B. MARIN, Douglas, Alaska. Filed Oct. 6, 1930. Serial No. 486,836. 1 Claim. (Cl. 296—65.)



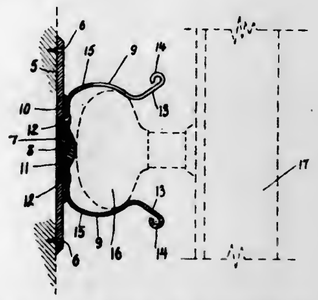
In combination with the tonneau end of an automobile body forming an open compartment, of a slidable floor section movable within and without the compartment, side pieces on the slidable floor, an end piece hinged to the outer end edge of said slidable floor, hangers on the side and end pieces, a seat removably supported by said hangers, a hinged back on the seat and a chain loosely anchored in the end piece and connecting the seat therewith for effecting the release of the latter when the seat is removed from the hangers and brought to rest upon the slidable floor within the compartment.

1,889,680. SPINNING TOP. THOMAS ARABIJO MARMITO, New York, N. Y. Filed Oct. 24, 1931. Serial No. 570,918. 3 Claims. (Cl. 46—32.)



3. A cord for spinning a top, said cord being tapered gradually from one end to the other, the smaller end being initially wound on the top.

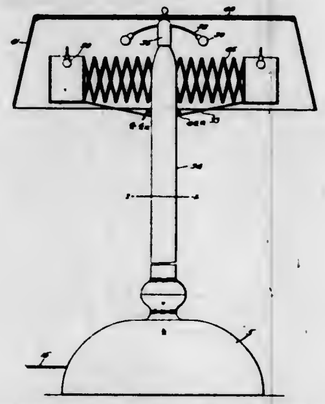
1,889,681. DOOR OR WINDOW CASEMENT CATCH. WILLIAM C. MARSHALL and JOHN H. TURNER, Niceville, Fla. Filed Mar. 30, 1931. Serial No. 526,524. 1 Claim. (Cl. 292—17.)



A door or window casement catch comprising a flat base plate having a central substantially circular-shaped seat in the outer face thereof, a resilient buffer engaged in said seat and having a convexed exposed outer face, an open resilient clip having a medial portion provided with an opening of less diameter than the seat and accommodating a major portion of the convexed outer surface of said buffer and also superimposed upon the base plate with the opening matching the seat to retain the buffer therein, means detachably securing the clip to the base plate and disposed at opposite sides of the seat therein, and outwardly flared terminals on the clip at the open side thereof and having outwardly and inwardly curled free ends.

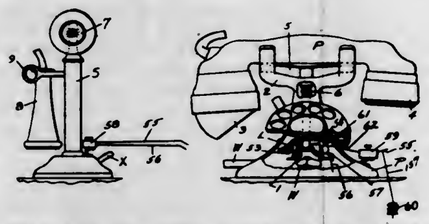
CARNEGIE LIBRARY OF ATLANTA

1,889,682. COMBINATION LAMP AND STAND. RAGNAR E. MATHIASEN, Philadelphia, Pa. Filed Aug. 8, 1931. Serial No. 555,988. 3 Claims. (Cl. 240—4.)



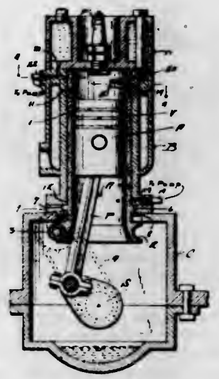
1. In combination, a lamp including a shade and a post for supporting the shade, an article holder, a lazy tong structure between the article holder and the post, and a slidable connection between the lazy tong structure and the post whereby the lazy tong structure can be disposed within the confines of the shade when collapsed.

1,889,683. TELEPHONE SYSTEM. JAMES F. MCELHOLM, Lowell, Mass. Filed May 19, 1932. Serial No. 612,239. 3 Claims. (Cl. 179—42.)



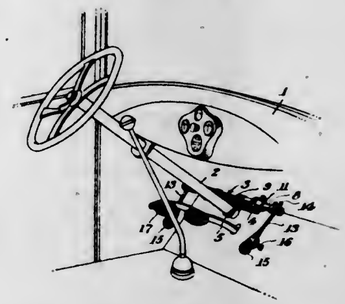
1. The combination with a telephone system which includes a plurality of stations connected by electrical conductors, one of such stations being a primary station provided with a transmitter, a receiver, a stand, a receiver holder vertically movable on the stand and means to keep the holder normally raised, all of such character that the weight of the receiver depresses the receiver holder and keeps the primary station open to receive calls, and a secondary station having suitable electrical connections with the primary station and including a transmitter and a receiver; of mechanism to automatically hold the receiver holder at the primary station in the raised position; and electrical devices for releasing the locking mechanism and to allow the holder with the receiver to drop, said electrical devices being electrically connected with the secondary station and being operative therefrom by a manually operable switch and from the primary station by a manually operable switch.

1,889,684. ROTARY VALVE FOR INTERNAL COMBUSTION ENGINES. WAYNE H. MCGLADE, Wellington, Kans. Filed July 14, 1931. Serial No. 550,742. 1 Claim. (Cl. 123—80.)



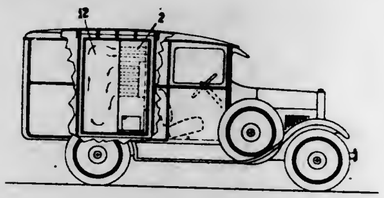
An internal combustion engine, the combination with a casing, a plate mounted upon the casing provided with an opening, the upper portion of the wall of the opening being provided with a rabbet, an elongated sleeve valve extending within the casing through the opening in the plate, said sleeve valve having an outstanding flange seating within the rabbet of the plate, a block having an engine bore in which the sleeve valve is snugly and rotatably received, said block resting upon the plate and overlying the flange of the sleeve valve within the rabbet, a piston working within the sleeve valve, said sleeve valve having a port, the block having an inlet port and an exhaust port with which the port of the sleeve valve is adapted to register in time sequence, means for igniting the charge within the sleeve valve, and means for rotating the sleeve valve at proper speed.

1,889,685. DOUBLE FOOT FEED. HARRY MCINTYRE, L'Anse, Mich. Filed Jan. 18, 1932. Serial No. 587,361. 1 Claim. (Cl. 74—39.)



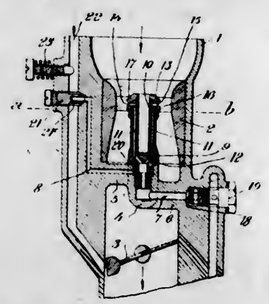
An attachment for automobiles comprising an operating element having end and intermediate sections adjustably connected to permit the length of the element to be varied, a bracket having angularly disposed apertured ends slidably and rotatably receiving the element, collars adjustably secured to the element and engaging the ends of the bracket to permit adjustment of the element endwise relative to the bracket, means detachably and adjustably securing the bracket to the steering post of an automobile, and treadles adjustably connected to the element and extending angularly thereto and one of said treadles adapted to engage and overlie the accelerator of the automobile.

1,889,686. REFRIGERATOR. HARRY H. MCKEE, Chicago, Ill., assignor, by mesne assignments, to Industrial Patents Corporation, Chicago, Ill., a Corporation of Delaware. Filed Sept. 29, 1930. Serial No. 485,029. 1 Claim. (Cl. 62—13.)



In combination with a vehicle provided at one side with an operator's seat and having an open space at the other side, a refrigerator including a storage compartment extending across the said vehicle, an upright refrigerating unit located at one corner of the storage compartment at the front thereof directly in rear of the operator's seat, said storage compartment being provided at the other front corner with a door located at the said open space of the vehicle, said refrigerating unit comprising an upper ice tank from which water from the tank drips, air inlet ducts extending from the storage compartement and traversing the said tank, air discharge ducts traversing the drip from the said tank and discharging into the storage compartment, and means connected with the said ducts for producing a circulation of air through the same.

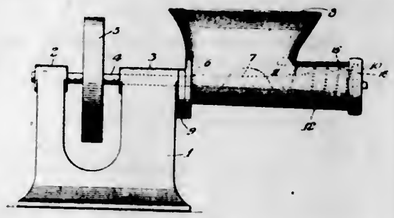
1,889,687. CARBURETOR. MARCEL MENNESSON, Neuilly-sur-Seine, France, assignor to "Societe Anonyme Solex," Neuilly-sur-Seine, France, a Corporation of France. Filed Mar. 19, 1931, Serial No. 523,912, and in Belgium Apr. 1, 1930. 4 Claims. (Cl. 261—41.)



1. In a down-draft carburetor assembly, including an air intake, a venturi, and a mixing chamber provided with a valve, a nozzle assembly comprising a pair of tubes positioned in spaced relation to one another and adapted to receive liquid fuel in the space therebetween, and a cap coacting with said pair of tubes and having a discharge orifice formed therein, said discharge orifice being limited by a surface extending into the mixing chamber beyond the outer of said pair of tubes.

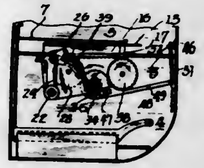
1,889,688. MEAT HASHER. THOMAS P. MIDDLETON, East St. Louis, Ill., assignor, by mesne assignments, to Industrial Patents Corporation, Chicago, Ill., a Corporation of Delaware. Filed Feb. 13, 1930. Serial No. 428,205. 4 Claims. (Cl. 146—182.)

1. A meat hasher of the class described comprising in associated relationship a bowl having a tubular housing associated therewith and leading therefrom, a worm journaled for rotation within said bowl, and a cutter located at the forward delivery end of the housing, said bowl having a discharge opening or throat leading to a rear section of the worm, the worm consisting of a shaft or core having at the rear receiving section of the worm a receiving convolution that is provided by a spiral blade element which in cross section is straight, is of uniform thickness from the shaft to the peripheral edge of the blade so as to present relatively plane faces to the material being operated upon, and has a rearward and inward inclination, the worm having at the forward delivery end a delivering convolution into which the receiving convolution



gradually merges, which delivering convolution has a pitch substantially less than that of the receiving convolution and has a depth less than that of the receiving convolution, and which delivering convolution in cross section gradually increases in thickness in passing inwardly from the outer peripheral edge thereof towards the shaft or core of the worm, the arrangement being such that the initial receiving convolution is provided by said spiral blade which is of uniform cross section, and has a pitch equal to the length of the discharge opening or throat leading to the rear section of the worm.

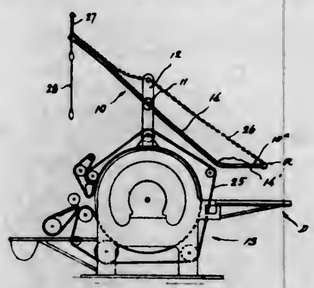
1,889,689. DISPENSING DEVICE. LOREN G. MILLIS, Santa Ana, Calif. Filed Jan. 20, 1932. Serial No. 587,777. 1 Claim. (Cl. 312—55.)



In a dispensing cabinet of the character described, a floor positioned therein, a platform positioned above said floor and spaced therefrom, said platform having a less area than said floor whereby a plurality of seat covers may be supported thereon in such a manner that a flap formed on the under-surface of said seat covers will successively pass below the plane of said platform, a dispensing slide positioned between said platform and said floor, means for actuating said slide whereby said slide will engage said flap extending below said platform for the purpose of ejecting the lower-most seat cover from said cabinet, said actuating means including a rack secured to said dispensing slide, gears engaging said rack and means for rotating said gears, said means including a shaft, a handle connected to said shaft, and spring means interposed between said casing and said shaft for returning said shaft to initial position after its actuation, a dispensing door pivoted to said casing, a forked pivoted lever connected to said door, said lever having a bifurcated end and a pin positioned in one of said gears and engaging said bifurcated end whereby said ejector and said door will be simultaneously actuated.

1,889,690. RETURN DAMP WORK CONVEYER. CLARENCE V. MORRIS, Neptune City, N. J. Filed Dec. 12, 1930. Serial No. 501,963. 3 Claims. (Cl. 193—17.)

1. A conveyer comprising a frame including side members carrying aligned pivoting elements, a cross piece joining said side members at the delivery end of said conveyer, a cross piece joining said side members at the receiving end of said conveyer, said frame having an angularly offset end portion at the receiving end thereof, there being another cross-piece marking the commencement of



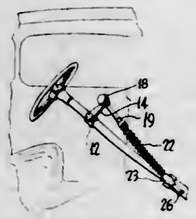
such offset, and a plurality of relatively closely spaced wires forming a bed upon said frame, each of said wires having its opposite ends secured to the two first-mentioned cross pieces and all of said wires engaging the last-mentioned cross piece to maintain all of said wires in substantial parallelism with said side members.

1,889,691. HAIR STRAIGHTENING DEVICE. ALPHONSE J. NAVARRE DE REQUESENS, New York, N. Y. Filed May 12, 1932. Serial No. 610,921. 4 Claims. (Cl. 132—33.)



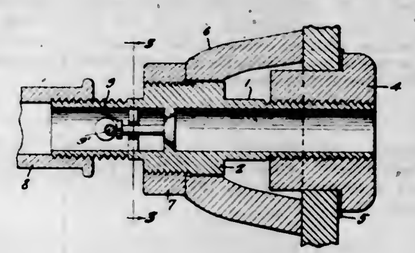
4. A hair straightening device comprising a flat elongated body, sets of spaced hooks formed in opposite sides of said body, the set of hooks on one side being staggered with respect to the hooks on the opposite side, the respective hooks of each set extending outwardly toward the adjacent end of said body, and a handle extending from one end of said body, and means on the opposite end of said body by which the same may be attached to a hank of hair to be straightened.

1,889,692. MANUAL BRAKE CONTROL. EMIL A. NELSON, Detroit, Mich. Filed Oct. 2, 1931. Serial No. 566,513. 9 Claims. (Cl. 74—89.)



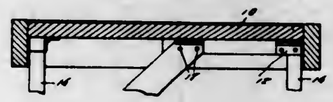
1. Brake actuating mechanism including, in combination, a steering post, an applying lever, a sleeve telescoped about said steering post and slidable longitudinally thereof to effect an application of the brakes, and a yieldable connection from said lever to said sleeve.

1,889,693. FLUID EQUALIZER FOR BOILERS. ALONSO C. OUTLAW, Tonkawa, Okla. Filed Oct. 20, 1928. Serial No. 313,852. 1 Claim. (Cl. 285—50.)



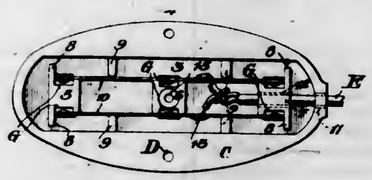
A device of the class described comprising a plug adapted to be inserted in a container and having a central threaded hole therein, a tube having oppositely threaded ends with one end thereof threaded in said hole, said tube having an annular exterior enlargement intermediate its threaded ends with the major portion of the enlargement threaded and the remaining portion of the enlargement unthreaded, a skeleton spacer comprising a member having a central part and legs extending from the central part, the legs bearing against the container in embracing relation with respect to the plug and the central part having an opening therein and receiving the unthreaded part of the enlargement, a nut on the threaded part of the enlargement and bearing against the spacer to slide the latter on the unthreaded portion of the enlargement and force the legs of the spacer against the container.

1,889,694. FOLDING TABLE. CHARLES G. PASSANANTE, Jersey City, N. J. Filed Aug. 13, 1931. Serial No. 556,896. 6 Claims. (Cl. 45—11.)



1. In combination, a top member, a plurality of cleats hinged to said top, a leg carried by each cleat, a two-part folding brace for each leg, one part of said brace slidably pivoted to the leg and the other part of said brace fixed to the cleat of the next adjacent leg, whereby the movement of one leg is transmitted through the brace to the next adjacent leg.

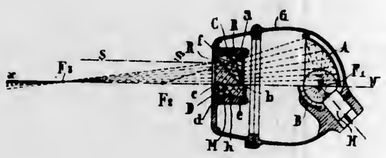
1,889,695. TABLE TAP. CARL M. PETERSEN, Trenton, N. J., assignor to Circle F Mfg. Co., Trenton, N. J., a Corporation of New Jersey. Filed Apr. 16, 1929. Serial No. 355,535. 3 Claims. (Cl. 173—334.)



1. A device of the class described including a body made of molded insulated material and having a recess opening at one face thereof, a plurality of spaced posts

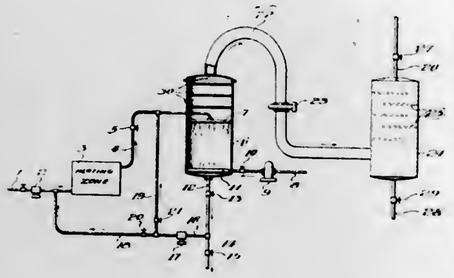
within the recess, said posts having guiding grooves communicating with prong receiving openings in one face of the body, laterally projecting flanges formed on the posts located at the ends of the recess, a pair of flat spring contact strips arranged on opposite sides of the posts and overlying said guiding grooves, the ends of said contact strips abutting against said flanges, and means engaging the strips between the posts for placing the springs under tension between the posts.

1,889,696. PROJECTOR. JACQUES PIERRON, Vaux-sur-Seine, France. Filed June 27, 1931, Serial No. 547,318, and in France July 30, 1930. 3 Claims. (Cl. 240—41.3.)



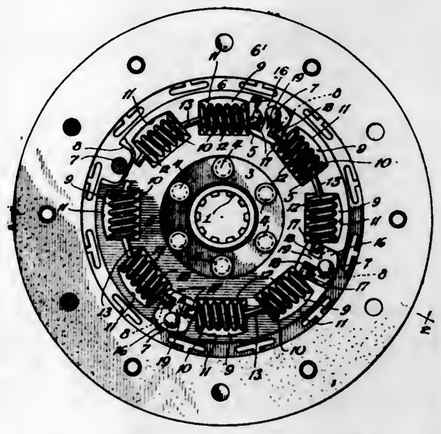
1. In a headlight, a casing, a source of light therein, and means in front of said casing to propagate the light and to prevent dazzling, said means comprising a pair of right angle prisms placed in juxtaposition along the inclined faces thereof, one of said prisms being provided with an extension of parallelepiped form, and an opaque sheath surrounding said extension.

1,889,697. PROCESS FOR PRODUCING ASPHALT. HAROLD B. PULLAR, Chicago, Ill. Filed June 10, 1929. Serial No. 369,641. 2 Claims. (Cl. 196—74.)



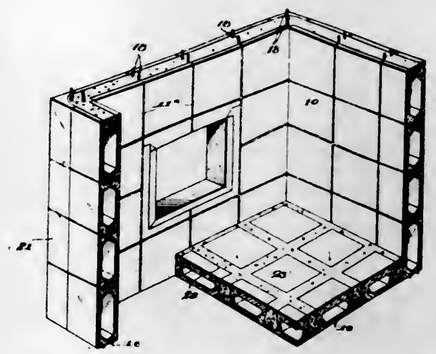
1. A continuous process for blowing or oxidizing residuum oil for the production of asphalt therefrom, which comprises heating a continuously moving body of oil and reducing it to finely divided condition, then bringing it into intimate contact with a plurality of finely divided streams of air introduced under relatively low pressure in an enlarged reaction sone to cause a reaction between the particles of the oil and the streams of air, separately removing the resultant volatile matter and the desired reaction product and controlling the volume and pressure of the introduced air relative to the pressure of the oil so that said pressures are substantially equalized.

1,889,698. FRICTION CLUTCH. HAROLD V. REED, Chicago, Ill., assignor to The Borg & Beck Company, Chicago, Ill., a Corporation of Illinois. Filed Apr. 8, 1931. Serial No. 528,520. 19 Claims. (Cl. 192—68.)



1. A clutch plate comprising a hub member and a driven disk member having registered openings therein, coil springs arranged in said openings, and means passing through said springs and engaging one of said members on opposite sides thereof for retaining the springs in the openings.

1,889,699. MASONRY WALL AND WALL UNIT. ESTA W. RANCK, Central Aguirre, P. R. Filed Jan. 27, 1931. Serial No. 511,630. 4 Claims. (Cl. 72—30.)

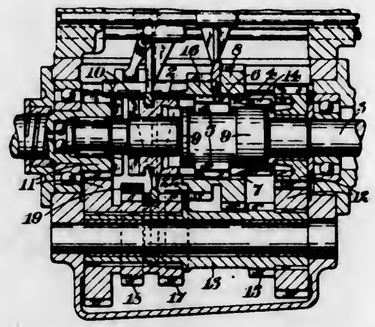


1. A building unit comprising a rectangular body, a continuous flange formed with said body and extending outwardly from the back thereof, said flange being spaced inwardly from the top and side edges of said body and disposed substantially flush with the bottom edge thereof, and a projection extending from the side of said flange which is flush with said bottom edge of said body.

1,889,700. CHANGE SPEED GEAR MECHANISM. PERCY RILEY, Coventry, England. Filed Mar. 3, 1932, Serial No. 596,591, and in Great Britain Aug. 27, 1931. 4 Claims. (Cl. 74—57.)

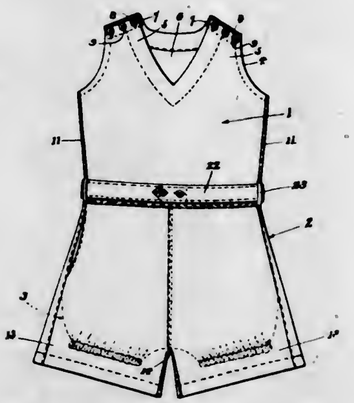
1. In change speed gear mechanism, a driven shaft, a clutch sleeve on the shaft and having longitudinal splined

slots therein, spline keys carried by the driven shaft and having longitudinal portions slidably engaging in said slots of the sleeve to interlock the driven shaft and the sleeve for turning together, a gear slidably mounted on



the sleeve and having internal helical spline slots, said keys having outer end helical splines projecting through the slots of the sleeve and engaging the helical slots within the gear for directly engaging the gear and the driven shaft independently of the clutch sleeve.

1,889,701. COMBINATION GYMNASIUM SUIT FOR FEMALE WEAR. MAURICE J. ROSENBERG, Baltimore, Md. Filed Jan. 20, 1932. Serial No. 587,782. 2 Claims. (Cl. 2—78.)



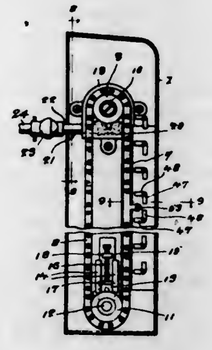
1. A combination gymnasium suit comprising a waist, a pair of outer shorts, a pair of inner shorts encompassed by the outer pair of shorts, said waist and two pair of shorts being permanently connected together at the waist line of the suit, each pair of shorts including a pair of leg parts, a body part and a crotch, the lower ends of the leg parts of the inner pair of shorts being contractible and expandible, that part of the inner pair of shorts from the upper end of the latter being free of connection throughout from said outer pair of shorts, the crotch of the outer pair of shorts in cross section being materially deeper than the crotch of the inner pair of shorts in cross section, the leg parts of the outer pair of shorts being of materially greater length and width than that of the leg parts of the inner pairs of shorts, and the leg parts of the outer pair of shorts depending below the lower ends of the leg parts of the inner pair of shorts.

1,889,702. PLASTIC COMPOUND. VICTOR SCHOLS, Leipzig-Molkau, Germany, assignor of one-half to the Firm Atlas Ago Chemische Fabrik, Aktiengesellschaft, Leipzig, Germany. Filed Mar. 27, 1929, Serial No. 350,432, and in Germany May 22, 1925. 6 Claims. (Cl. 106—37.)

1. The method which comprises stirring a mixture having, as one constituent, a linoxyn which is free of any solvents and having, as another constituent, a swelling of nitrocellulose in a volatile solvent, said stirring being continued until said mixture assumes a homogeneous viscous liquid state.

5. As a new composition of matter a solution of linoxyn in a swelling of nitrocellulose.

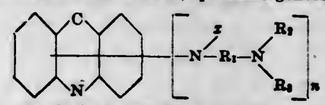
1,889,703. RADIATOR SHUTTER OPERATOR. DAVID SCHON, Red Oak, Iowa. Filed Mar. 12, 1930. Serial No. 435,240. 1 Claim. (Cl. 268—96.)



A shutter operating means comprising spaced compartments, a series of shafts journaled in the compartments and bridging the space between them, a shutter carried by each shaft, each shaft having at one end a single crank arm housed in one compartment and at its other end a double crank arm housed in the other compartment, an endless chain mounted for movement in one compartment and having a projection adapted to engage the double crank arms successively to turn the shafts and spring means connected with the single crank arms and adapted to hold the shafts at positions at which they are turned.

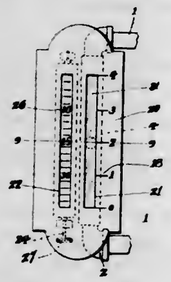
1,889,704. COMPOUNDS OF THE ACRIDINE SERIES AND PROCESS OF MAKING THEM. WERNER SCHULEMANN, Vohwinkel near Elberfeld, FRITZ MIETZSCH, Elberfeld, Germany, and AUGUST WINGLER, Westfield, N. J., assignors to Winthrop Chemical Company, Inc., New York, N. Y., a Corporation of New York. Filed Nov. 15, 1929, Serial No. 407,560, and in Germany Dec. 24, 1925. 7 Claims. (Cl. 260—36.)

1. Acridine derivatives of the probable general formula:



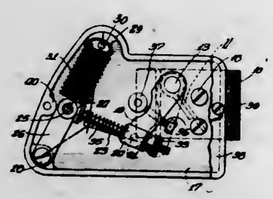
wherein a stands for a substituent of the group consisting of hydrogen and alkyl, R_1 stands for an alkylene radical which may be substituted by a hydroxy group, and R_2 and R_3 stands for alkyl groups which may be substituted by an amino group, "n" stands for one of the numbers one and two, and wherein all nuclei may be further substituted by substituents of the group consisting of alkyl, alkoxy, phenyl and halogen, said products being pharmaceutically valuble substances.

1,889,705. FLOW METER. CARROLL P. SHERWOOD, Camden, N. J. Filed Mar. 16, 1931. Serial No. 523,064. 3 Claims. (Cl. 73—167.)



1. In a flow meter, a vertically disposed transparent tube adapted for connection with a fluid line and having a downwardly tapering inner diameter, a buoyant sphere disposed within the tube for indicating relative rates of flow of fluid through the tube, said sphere having an opening extending diametrically therethrough, a pair of stop members extending across the tube at its points of minimum and maximum inner diameters respectively, and a guide wire extending longitudinally of the tube and through said sphere and having its ends anchored to said stop members, said sphere having a circumferentially extending indicating line midway between the ends of the opening through the sphere.

1,889,706. GOVERNOR. FREDERICK O. SINGER, Chicago, Ill., assignor, by mesne assignments, to National Governor Corporation, Chicago, Ill., a Corporation of Illinois. Filed Jan. 7, 1931. Serial No. 507,063. 5 Claims. (Cl. 137—152.)



1. A speed governor for hydrocarbon engines comprising a frame having a passage therethrough for inclusion in the fuel feed path to an engine, a valve extending transversely in said passage, a shaft secured to said valve adjacent to one edge thereof whereby said valve may swing in response to intake flow in said passage and cause rotation of said shaft, an arm secured to and extending from said shaft, link members pivoted at their outer ends and extending toward each other and joined at their inner ends, one of said link members being elastic and extensible, the end of said arm being movable in a path extending transversely of a line connecting the pivotal points of said link members, a connecting link connecting the end of said arm with the inner ends of said link members whereby when said arm is swung by said valve when responding to intake flow said link members will be swung to cause extension of said extensible link member to resist the swing of said arm and said valve in response to intake flow.

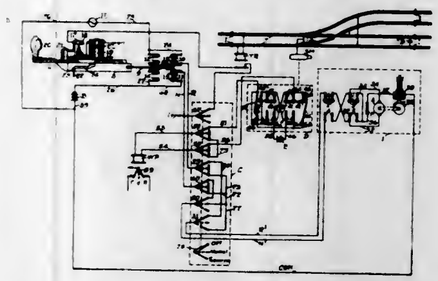
1,889,707. TROLLING DEVICE. JOSEPH SOLTIS, Plains, and CHARLES RINDGEN, Wilkes-Barre, Pa. Filed Aug. 25, 1931. Serial No. 559,310. 5 Claims. (Cl. 43—40.)

1. In a trolling device, a swivel, a semi-rigid, one-piece supporting member common to a plurality of hooks, a loop connecting the hook supporting member with the swivel, a spinner inserted through and secured to said loop, a pair of hooks rigidly secured to the free end of the hook supporting member and projecting laterally therefrom in



opposite directions, and a pair of spaced hooks rigidly secured to and extended laterally from one side of the hook supporting member, in alignment with each other and in spaced alignment with one of the hooks secured to the free end of the hook supporting member.

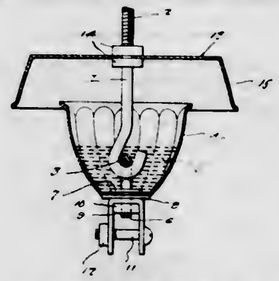
1,889,708. INTERLOCKING SYSTEM FOR RAILROADS. JAMES E. STEPHENSON, Rochester, N. Y., assignor to General Railway Signal Company, Rochester, N. Y. Filed Sept. 4, 1930. Serial No. 479,668. 11 Claims. (Cl. 246—135.)



1. In a power operated interlocking system, the combination with a central source of energy, a power operated switch machine, a tower control lever for said switch machine, control wires for said switch machine, a field source of energy at said switch machine, a tower signal control means, indication wires for said switch machine, means at said switch machine for applying the field source of energy to said signal control means to repeat the operation of the switch machine of a manually operable field controller for said switch machine, said field controller being adapted to operate the switch machine by energy from said central source of energy, said field controller being operable to either of two switch controlling positions or a neutral position.

1,889,709. SWING HANGER. OLIVER H. STOTLER, Uniontown, Pa. Filed May 18, 1932. Serial No. 612,080. 2 Claims. (Cl. 248—64.)

2. A hanger comprising a supporting member, an eye screw connected to the supporting member, spaced collars mounted on the eye screw, a cup, for the reception of a lubricant, mounted on the eye screw between the collars, a substantially U-shaped bracket mounted on the eye screw, and a nut threadedly mounted on the eye screw and



engaged with the bight portion of the bracket, the legs of said bracket being engaged with opposite sides of the nut.

1,889,710. PROCESS FOR MAKING METALLIC SULPHATES. SVEND S. SVENDSEN, Chicago, Ill., assignor to Clay Reduction Company, a Corporation of Illinois. Filed Feb. 5, 1930. Serial No. 426,183. 25 Claims. (Cl. 23—124.)

1. The method of sulphating the metallic oxide of a silicious oxygen compound containing such oxide which comprises reacting on said compound with ammonium fluoride, heating to form and volatilize silicon diammino tetrafluoride therefrom, thereby volatilizing any water present, and heating the residue with a reactive sulphate in a quantity not greater than that needed to sulphate completely said metallic oxide.

1,889,711. EXTENSION JOINT FOR STOVE PIPES. ROBERT H. TALLEY and CHARLES L. PRITCHETT, Burnside, Miss. Filed Apr. 17, 1931. Serial No. 530,932. 1 Claim. (Cl. 285—185.)

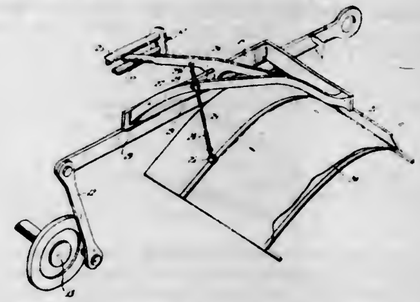


In a pipe joint, a pair of telescopically engaged stovepipe sections, longitudinally spaced and aligned bendable tongues struck from the inner pipe section in an outwardly inclined direction and thence in an upwardly straight direction upon diametrically opposite sides of the said inner pipe section disposed beneath the straight upper portion of the tongue and abutting with the inclined portion thereof, and diametrically disposed longitudinally arranged elongated strips of a contour conforming with the inner contour of the inner pipe section and contacting with the latter and riveted thereto at a point flush with the adjacent end thereof and over the slits around the tongues and reinforcing the inner end of the inner pipe section.

1,889,712. FERTILIZER. JOHN T. TRAVERS and OLIVER M. URBAIN, Columbus, Ohio, assignors, by direct and mesne assignments, to The Ohio Sanitary Engineering Corporation, Columbus, Ohio, a Corporation of Ohio. Filed Aug. 25, 1928. Serial No. 302,152. 3 Claims. (Cl. 71—9.)

2. In a fertilizer composition, the ingredient $SiO_2.P_2O_5$ together with an inorganic fertilizer ingredient containing nitrogen.

1,889,713. FLYING MACHINE. HENRY JAMES TURNER, Forest Gate, England, assignor of one-half to Frederick William Mattison, Seven Kings, Essex, England. Filed Apr. 25, 1932, Serial No. 607,467, and in Great Britain May 4, 1931. 12 Claims. (Cl. 244—17.)

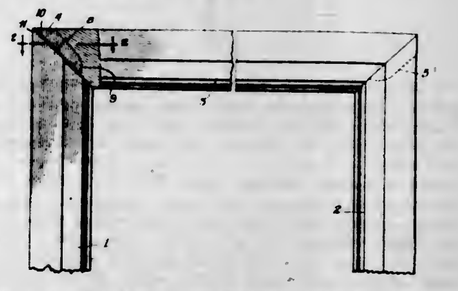


1. An aircraft of the ornithopter type comprising in combination a fuselage, a rocking member pivoted at its forward end to the fuselage on an axis extending transversely thereto, wings on opposite sides of the fuselage connected to the rocking member at points spaced away from and to the rear of its pivot and movable with respect to the rocking member about axes extending fore and aft of the aircraft, and means for oscillating the rocking member about its pivot.

1,889,714. PROCESS FOR RELEASING NASCENT HYDROGEN. OLIVER M. URBAIN, Columbus, Ohio, assignor to Charles H. Lewis, Harpster, Ohio. Filed Nov. 29, 1929. Serial No. 410,657. 1 Claim. (Cl. 23—211.)

The process for liberating nascent hydrogen in an aqueous medium which comprises bringing together in said medium a positively charged colloid and an electrolyte in the form of a salt of an alkali metal, which releases anions for adsorption by the colloids and cations for reaction with the water of the solution.

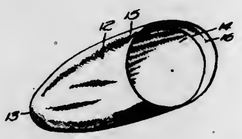
1,889,715. TRIMMING JOINT. CHARLES G. VOIGT, Hicksville, N. Y. Filed Apr. 22, 1931. Serial No. 532,064. 1 Claim. (Cl. 20—92.)



In a joint for door trim and the like, the combination with the upper end of a pair of upright members and a top member connecting the upright members, each

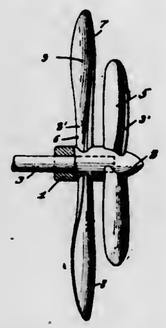
of the upright members having a diagonally positioned upper edge and the top member having a mating edge at each end, one of said uprights having an integral tongue extending from said diagonal edge, the other having a socket, said top member having at one end a socket for the accommodation of said tongue and the opposite end a projecting tongue fitting into the socket of the upright, said tongues and sockets being formed to properly aline the top piece with the uprights when the respective tongues are snugly fitted within their respective sockets, said tongues and sockets extending across only part of the edges of said members whereby there is presented interlocking and aligning members and abutting shoulders adjacent thereto.

1,889,716. HOSIERY PROTECTOR. SAMUEL H. WALKER, Joplin, Mo. Filed Aug. 12, 1931. Serial No. 556,696. 1 Claim. (Cl. 2—61.)



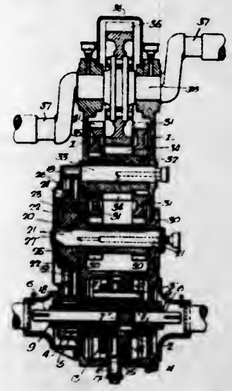
A protector for hosiery comprising a body formed of a fabric having a substantial degree of elasticity in all directions and being of normal substantially circular cross sectional shape throughout its length, said body having one end closed and the other open to receive the forward end of the foot, said body being tapered to increase in diameter from its closed end to a point adjacent and spaced from its open end and being substantially cylindrical from such point to its open end, and a band carried by and entirely encircling said body at its open end to reinforce the latter and reduce its circumferential elasticity.

1,889,717. AIRCRAFT PROPELLER. WILLIAM F. WARFEL, Wendling, Oreg. Filed Sept. 22, 1930. Serial No. 483,051. 1 Claim. (Cl. 170—165.)



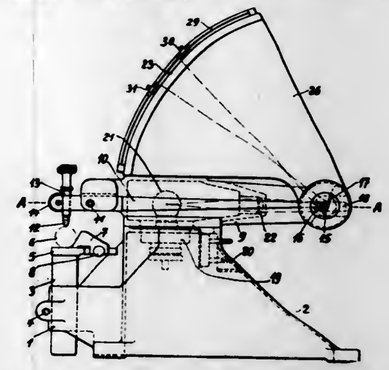
A propeller of the type described, comprising a hub having a pointed nose, and having spaced pairs of extending front and rear blades, and which pairs of front and rear blades are arranged at angles with respect to each other so that the trailing edges of the blades are spaced a greater distance away from each other than are the leading edges of the blades, the front blades being of an equal width throughout and having their trailing edges, adjacent to their outer ends, curved toward their tips, and said tips being rounded and the inner faces of the said outer blades being dished throughout the length thereof, the inner blades being of a greater length than that of the outer blades, and having reduced cross sectionally rounded portions at their juncture with the hub and from said rounded portions being substantially spoon-shaped and the concaved inner faces of the said inner blades terminating at the juncture of the rounded and spoon-shaped portions of said blades.

1,889,718. GEARING FOR STOKERS. ANTHONY E. WEINGARTNER, Philadelphia, Pa., assignor to American Engineering Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Sept. 16, 1922. Serial No. 588,541. 12 Claims. (Cl. 74—34.)



1. The combination in a gear unit of driving and driven shafts; a train of gears connecting said shafts and including a plurality of orbit gears and a corresponding plurality of planet gears, the former including two adjacent gears having shoulders on their adjacent sides; with a cam mounted between said adjacent gears and movable at will into holding engagement therewith from a neutral position.

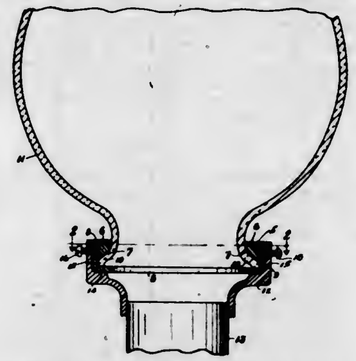
1,889,719. MEASURING APPARATUS. FRANZ WENDE, Berlin, Germany, assignor to Fritz Werner Aktiengesellschaft, Berlin-Marienfelde, Germany. Filed Dec. 30, 1930, Serial No. 505,643, and in Germany Feb. 7, 1929. 8 Claims. (Cl. 33—148.)



1. An apparatus for measuring a dimension of a work piece comprising a frame, a work support thereon, a double-armed lever and a reflector, both swingably mounted on said frame about horizontal axes disposed in substantially the same plane, said lever having an arm extending above said support and adapted to be set by a work piece positioned thereon and having its other arm projecting toward said reflector, the latter being provided with a projection arranged in direct contact with the end of said arm at a point normally situated substantially in said plane whereby said reflector will be

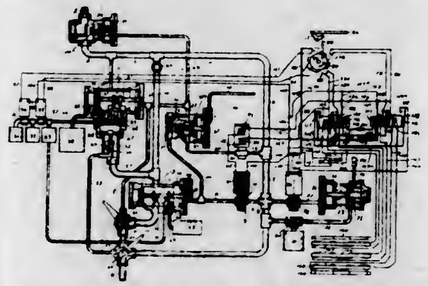
angularly set in dependence on the dimension of the work piece, a projector mounted on said frame to cast a light beam on said reflector and an arc-shaped screen mounted on said frame at the front of the apparatus and in the neighborhood of said first-mentioned arm with said reflector at its center to receive from the latter the reflection of the beam at a point depending on the setting of said reflector and, therefore, giving visible indication of the dimension of the work piece.

1,889,720. HOLDING MEANS FOR GLASS GLOBES. GEORGE J. WILLMAN, Cincinnati, Ohio, assignor to The Cincinnati Advertising Products Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Dec. 16, 1931. Serial No. 581,281. 4 Claims. (Cl. 240—135.)



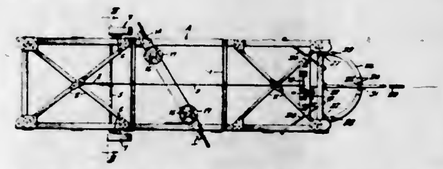
1. A cushion member adapted to be positioned between the attachable portion of a light globe or the like and the retaining screws of a holder, said member comprising an elongated body of rubber or like material adapted to embrace the attachable portion of the globe and to have the retaining screws tightened thereagainst, and a metal band imbedded and enclosed in said body adjacent the outer face thereof and co-extensive in length therewith, said band being adapted to equalize pressure of said screws, and the ends of the cushion-member being adapted to abut one another upon tightening of said screws for precluding breaking of the globe by application of excess pressure thereon.

1,889,721. AUTOMATIC TRAIN CONTROL SYSTEM. LEONARD WORK, Philadelphia, Pa., assignor to Sprague Safety Control and Signal Corporation, New York, N. Y., a Corporation of Virginia. Filed Nov. 23, 1916, Serial No. 132,972. Renewed Apr. 20, 1932. 46 Claims. (Cl. 246—63.)



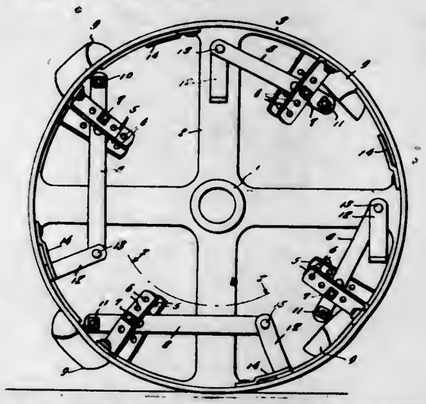
1. In a train control system, an inductance carried by the train, an inductor in the path of the train, a circuit including the inductor, a relay for normally controlling said circuit, means acting upon the initial energization of said circuit for maintaining the circuit closed independently of the relay during the passage of a train past the inductor.

1,889,722. ROAD GRADER. THOMAS P. WRIGHT, Atlanta, Ga., assignor to Multiwheel Road Machine Company, Inc., Atlanta, Ga., a Corporation of Georgia. Filed Jan. 18, 1932. Serial No. 587,413. 3 Claims. (Cl. 37—181.)



1. A road grading machine comprising a frame of considerable weight and length, a plurality of pairs of wheels for supporting the frame, means for swivelling the front wheels to the frame, a blade carried by the frame, a pair of extra wheels located rearwardly of the central part of the frame, and means for raising and lowering the said wheels, said extra pair of wheels, when lowered, lifting the frame with all but the front pair of wheels off the ground.

1,889,723. VEHICLE WHEEL. DAVID FRANKLIN ERRETT, Weston, Ohio. Filed Nov. 2, 1931. Serial No. 572,654. 3 Claims. (Cl. 301—50.)

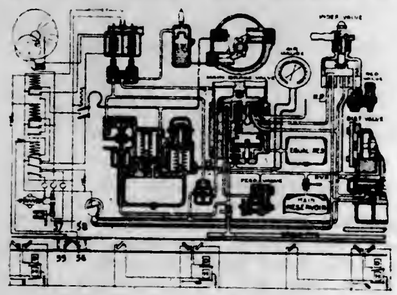


2. A wheel including a rim having circumferentially spaced, diagonally extending openings therein, pairs of diagonally disposed brackets rigidly mounted on the inner periphery of the rim adjacent the openings and extending inwardly from said rim, said brackets having series of openings therein, pivot pins extending between the pairs of brackets and selectively insertable in the bracket openings, levers mounted for swinging movement on the pivot pins, said pivot pins extending through intermediate portions of the levers, lugs of substantially triangular cross section, pivotally connected to one end portion of the levers and operable through the openings in the rims, said lugs conforming substantially in shape to the openings and extending diagonally relative to the rims, hooks mounted on the inner periphery of the ring, and angular keepers pivotally mounted for swinging movement on the other end portions of the levers, and engageable beneath the hooks for releasably securing the levers against swinging movement.

1,889,724. METHOD OF AND APPARATUS FOR CONTROL OF TRAIN MOVEMENTS. FRANK J. SPRAGUE, Sharon, Conn., assignor to Sprague Safety Control and Signal Corporation, New York, N. Y., a Corporation of Virginia. Filed Aug. 7, 1919, Serial No. 315,880. Renewed Apr. 20, 1932. 66 Claims. (Cl. 246—63.)

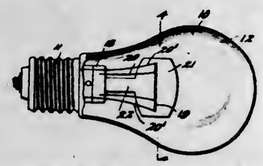
1. In a train control system the combination with a braking system on the train, of means for imparting im-

pulses thereto from the right of way, comprising a compound magnet located along the track for causing a brake application, said compound magnet consisting of a permanently magnetized yoke, stabilizing poles therefor, working poles for causing a brake application, and neu-



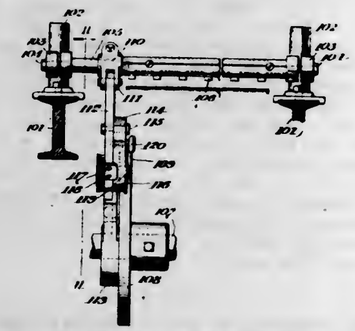
tralizing coils on said working poles, an electro-magnet also located along the right of way and in advance of the permanent magnet for resetting parts on the train, and a common control for simultaneously energizing the coils on the compound and electro-magnets.

1,889,725. ELECTRIC SIGNAL LAMP. CHARLES ADLER, Jr., Baltimore, Md. Filed Apr. 6, 1932. Serial No. 603,627. 14 Claims. (Cl. 176—26.)



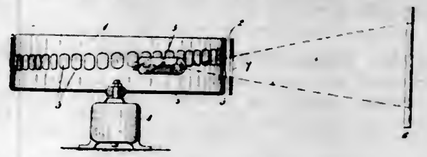
1. An electric indicator lamp comprising a plurality of transversely spaced filaments and an indicator screen therebetween, the lamp having the filaments permanently and completely electrically connected in parallel and screened from each other by the indicator screen.

1,889,726. OPERATING MECHANISM FOR RULING PEN GATES. ALBERT BROADMEYER, Harrisburg, Pa., assignor to W. O. Hickok Manufacturing Company, Harrisburg, Pa., a Corporation of Pennsylvania. Filed Nov. 19, 1929. Serial No. 408,332. 7 Claims. (Cl. 271—60.)



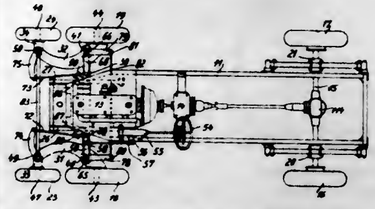
1. The combination with a sheet controlling gate, of a cam member for operating the same, and mechanism operated by the cam and actuating the gate, said mechanism including a movable carrier link having a back and forth movement, an abutment member mounted on and moving the link and movable thereon to and from a position to be engaged by the cam to operate the link and the gate, and means carried solely by the link and abutment member for maintaining the latter both in and out of said cam engaged position.

1,889,727. TELEVISION RECEIVER. CALLO D. FAHRNEY, Cambridge, Mass. Filed Sept. 3, 1931. Serial No. 560,891. 8 Claims. (Cl. 178—6.)



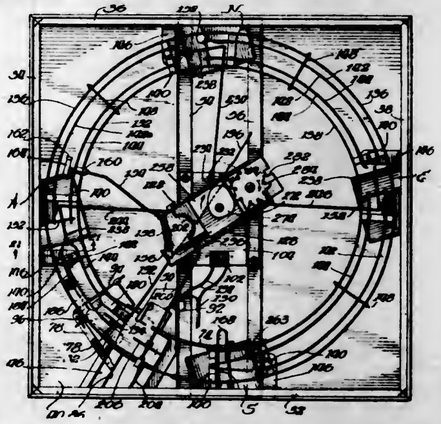
1. In a television receiver a rotatable member of drum type provided in its peripheral section with a convolution of apertures arranged in accordance with the order of line scanning employed in transmission with means sustaining in line with each of said apertures unlike lenses of different focal lengths.

1,889,728. STEERING GEAR FOR VEHICLES. ANTON FLETTNER, Berlin, Germany. Filed June 27, 1929, Serial No. 374,247, and in Germany July 5, 1928. 9 Claims. (Cl. 280—91.)



1. Automotive vehicle comprising a vehicle main frame, a main wheel oscillatable about substantially vertical axis relative to said frame, a steering member oscillatable about the same vertical axis as said main wheel and forming a double-armed lever having arms of different length, an auxiliary wheel oscillatably mounted near the end of the longer arm of said steering member and hand steering gear operatively connected with said auxiliary wheel.

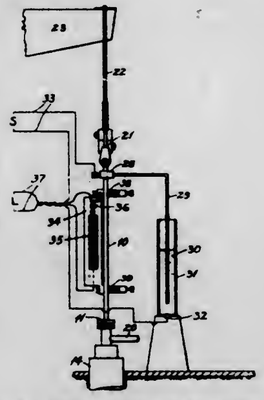
1,889,729. CARD TABLE WITH AUTOMATIC DEALING MECHANISM. LAURENS HAMMOND, Chicago, Ill. Filed Oct. 12, 1932. Serial No. 637,402. 51 Claims. (Cl. 273—149.)



16. In a device of the class described, the combination of a card deck tray movable into and out of operative position, dealing mechanism operable to remove cards successively from said tray and distribute them into separate hands, an electric motor for driving said mechanism, a switch for connecting said motor to a source of electric power, means for closing said switch upon movement of said tray into operative position, and means operable upon completion of a dealing operation of said mechanism to open said switch.

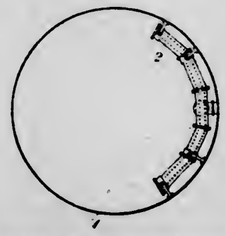
49. A portable folding card table comprising a box-like top having rigid side walls, supporting legs hinged to said walls, a relatively light weight bottom secured to said walls, and a card dealing mechanism mounted within said box-like top and resiliently supported from said side walls.

1,889,730. COMPUTING AND RECORDING DYNAMOMETER AND STROKE METER. FRANCIS W. LAKE, Whittier, Calif. Filed Aug. 21, 1928. Serial No. 301,012. 4 Claims. (Cl. 265—2.)



1. An electrical dynamometer for an elastic member undergoing movement and elastic deformation, comprising a source of current, a solenoid operatively connected to said source of current, means for varying said current in response to said motion, and means for imposing a balancing flux on said solenoid.

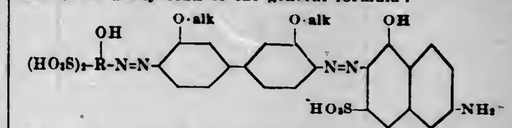
1,889,731. ARRANGEMENT IN SIEVES FOR CELLULOSE DIGESTERS AND THE LIKE. TORSTEN SAMSON, Stockholm, Sweden, assignor to Aktiebolaget Nordiska Armaturfabrikerna, Stockholm, Sweden, a Company of Sweden. Filed May 11, 1932, Serial No. 610,727, and in Sweden Nov. 10, 1930. 6 Claims. (Cl. 92—7.)



1. Sieves arranged in cellulose digesters and connected with outlet pipes for digesting liquor and consisting of horizontally placed tubes located at some distance from and extending along the whole or a part of the circumference of the digester, characterised by the fact that the sieve consists of a plurality of straight tube parts, arranged at an angle with each other, one or more of said tube parts being supported in brackets extending from the wall of the digester in such a way as to allow the tube part or tube parts to be displaced in relation to the wall of the digester at variations of temperature in the digester.

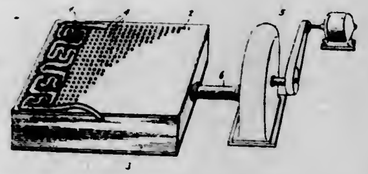
1,889,732. COPPER CONTAINING DISAZODYESTUFFS. RICHARD STÜSSER, Cologne-Deutz, and KARL WIEDEMANN, Cologne-Mulheim, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Mar. 6, 1931, Serial No. 520,639½, and in Germany Mar. 11, 1930. 9 Claims. (Cl. 260—12.)

1. The process which comprises heating a water soluble salt of an azodyestuff of the general formula:



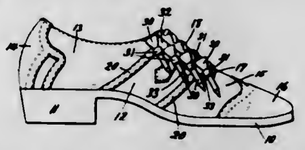
wherein R stands for a naphthalene nucleus in which the hydroxy group stands in o-position to the azo bridge, "alk" stands for an alkyl group and wherein all nuclei may be further substituted by substituents of the group consisting of halogen, alkyl, oxalkyl, alkyloxy, the nitro group, the sulfonic acid group, the carboxylic acid group, the hydroxy group, and the amino group may be substituted by acyl or a hydrocarbon radical, in aqueous solution with a compound of divalent copper, yielding copper, until the shade of the dyestuff no longer changes.

1,889,733. PROCESS OF MAKING FABRICS. ABRAHAM UNGER, New York, N. Y., assignor to Concord Chenille Company, Inc., New York, N. Y., a Corporation of New York. Filed Sept. 13, 1932. Serial No. 632,957. 5 Claims. (Cl. 41—34.)



5. The process of making imitation fur which comprises the steps of laying chenille upon a support in accordance with a predetermined design, applying suction to maintain the position of said chenille in said design, cementing said chenille to a suitable backing, removing said suction and subsequently applying a pressure to said chenille and backing.

1,889,734. SPORT SHOE. MARGARET C. STEVENSON, Dunkirk, N. Y. Filed Mar. 26, 1932. Serial No. 601,308. 4 Claims. (Cl. 36—45.)

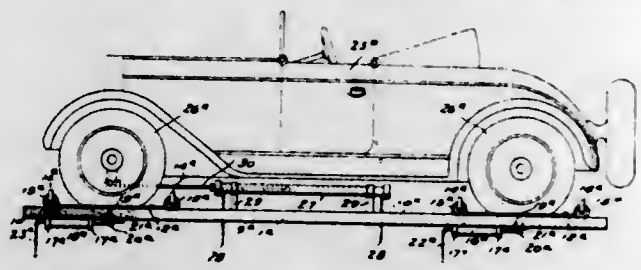


1. A sport shoe having a front closure and a plurality of loops of flexible material mounted on the shoe upper at one side of the front closure and adapted to receive and grippingly hold golf tees, said loops being obliquely disposed relative to said closure and the longer dimension of the shoe.

1,889,735. AUTO BRAKE TESTING MACHINE. RALPH K. CADWELL, Glendale, Calif., assignor to Cadwell-Baird Iron Works, a Copartnership, Los Angeles, Calif. Filed Oct. 7, 1927. Serial No. 224,681. 14 Claims. (Cl. 265—47.)

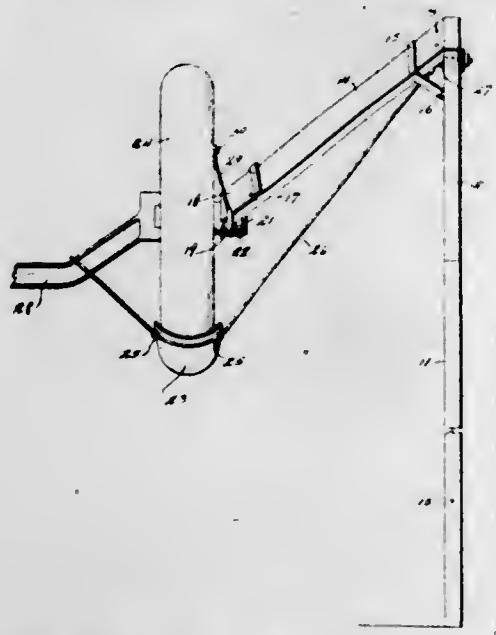
2. In a device for testing brakes of a vehicle: a structure for supporting the vehicle and having a movable mem-

ber on which the wheel of a vehicle may be brought to rest; controllable means independent of the vehicle and engageable therewith for applying to said vehicle a force operative to move said vehicle from rest and in the direction of movement of said movable member; and means for measuring the reaction of said movable member against the translational forces imparted to it by said wheel.



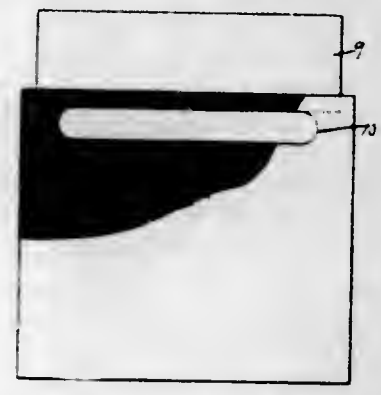
3. In a device for testing the brakes of a vehicle: a plurality of movable wheel supporting members arranged to support the respective wheels of a vehicle brought to rest thereon; means for supporting said members; controllable means independent of the vehicle and engageable therewith for starting said vehicle from rest and in the direction of movement of said movable members; means operative in conjunction with said movable members for yieldably resisting movement of said movable members under influence of forces imparted thereto by said wheels; and an indicating device associated with each of said resisting means for showing the relative reaction with which each movable member is held against movement under the translational forces imparted to them by said wheels.

1,889,736. LOADING DECK FOR AUTOMOBILES. SHERMAN HICE, Detroit, Mich., assignor, by mesne assignments, to Evans Products Company, a Corporation of Delaware. Filed May 13, 1930, Serial No. 452,052. Renewed Nov. 12, 1931. 26 Claims. (Cl. 105—368.)



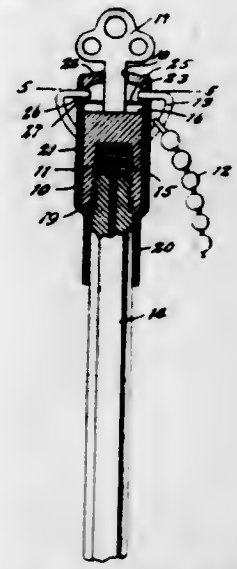
1. A loading deck of the character described comprising a frame, vehicle supporting means secured to said frame and engaging the frame of a motor vehicle whereby to support the vehicle from the frame, and bracing means outstanding from the frame and engaging the vehicle whereby to hold the vehicle in spaced relation to the frame.

1,889,737. TELEPHONE DIRECTION PLATE. GEORGE A. LOXO, Hartford, Conn., assignor to The Gray Telephone Pay Station Company, Hartford, Conn., a Corporation of Connecticut. Filed Jan. 25, 1930. Serial No. 423,395. 2 Claims. (Cl. 40—135.)



1. A direction plate assembly adapted for telephone or similar service wherein direction reading is required under the conditions of reflected light, said assembly including a face plate of transparent sheet material of frangible characteristic such as to produce sharp edges when broken, a backing sheet of tough transparent material tenaciously secured to the rear of the face plate and serving to maintain the position of face plate fragments when the face plate is broken, the rear face of the backing sheet carrying the direction indicia, said indicia being provided by successive coatings of contrasting color characteristic with the first coating of stencil-like arrangement to present the indicia characters as uncoated portions of the backing sheet, the second coating being exposed through both sheets solely as the characters forming the indicia, whereby the indicia is readable through both sheets and will be unaffected by breaking of the frangible face plate while the first coating will provide a definite and uniform color background for the indicia characters.

1,889,738. ATTACHING DEVICE. OLE G. NELSON, Bridgeport, Conn., assignor to The Bead Chain Manufacturing Company, Bridgeport, Conn., a Corporation of Connecticut. Filed May 6, 1932. Serial No. 609,735. 11 Claims. (Cl. 120—84.)



6. An attaching device comprising in combination a member having a nut swiveled thereto, in combination with means on said member and means on said nut engageable by a key for locking the swivel.

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327376

LIST OF TRADE-MARK APPLICANTS

PUBLISHED FOR OPPOSITION

[Act of Feb. 20, 1905, Sec. 6, as amended Mar. 2, 1907]

American Brass Company, The, Waterbury, Conn. Seamless copper and brass tubes. Serial No. 330,879; Dec. 6. Class 18.

Anglo-American Importing Company. (See Crawford, Carlton.)

Antoine de Paris, Inc., New York, N. Y. Cleansing cream, massage cream, skin tonic, etc. Serial No. 329,617; Dec. 6. Class 6.

Asael Farr & Sons Company, Ogden, Utah. Ice cream, ices, and frozen confections. Serial No. 330,615; Dec. 6. Class 46.

Automatic Drive & Transmission Company. (See Twin Coach Company, assignor.)

Bachrach-Feld Company, Inc., The, doing business as Wortex Concentrated Malt Co., Cincinnati, Ohio. Malt syrup. Serial No. 331,423; Dec. 6. Class 46.

Band-Tex Company, The, Chicago, Ill. Surgical bandages. Serial No. 331,182; Dec. 6. Class 44.

Bauer's, August, Sons, Inc., New York, N. Y. Prepared mustard and horseradish mustard. Serial No. 330,807; Dec. 6; Class 46.

Bell, Wm. M., Company, Chicago, Ill. Ice cream confection. Serial No. 330,773; Dec. 6. Class 46.

Bid-Rite Playing Card Corporation, New York, N. Y. Playing cards. Serial No. 329,621; Dec. 6. Class 22.

Birdsall & Wilcox, New Haven, Conn. Salad dressing. Serial No. 328,154; Dec. 6. Class 46.

Bohemia Keramische Werke, Aktiengesellschaft Neurohlau, near Karlsbad, Czechoslovakia. Hotel china ware. Serial No. 330,888; Dec. 6. Class 30.

Borden's Milk Products Company, Inc., assignor to Borden's Quality Inc., New York, N. Y. Creamery products. Serial No. 316,693; Dec. 6. Class 46.

Bowers, Edward C., and C. L. Feldman, receivers for Wickwire Spencer Steel Company, New York, N. Y. Steel and wire fences. Serial No. 330,592; Dec. 6. Class 18.

Bowl-Lo Chemical Company, Canton, Ohio. Preparation for cleaning toilet bowls. Serial No. 325,706; Dec. 6. Class 4.

Burnet Company, The, New York, N. Y. Billiard accessories. Serial No. 330,535; Dec. 6. Class 22.

California Packing Corporation, San Francisco, Calif. Canned and dried fruit, prunes, raisins, canned vegetables, etc. Serial No. 307,259; Dec. 6. Class 46.

California Packing Corporation, San Francisco, Calif. Canned and dried fruit, prunes, raisins, canned vegetables, etc. Serial No. 307,264; Dec. 6. Class 46.

Capsuloids (1909) Limited, doing business as The Clefa Co., London, England. Preparation for the treatment of indigestion. Serial No. 329,736; Dec. 6. Class 6.

Chiarello, Joseph, doing business as Lido Chemical Co., Los Angeles, Calif. Medicated ointment. Serial No. 330,919; Dec. 6. Class 6.

Clefa Co., The. (See Capsuloids (1909) Limited.)

Cluett, Peabody & Co., Inc., Troy, N. Y. Underwear. Serial No. 331,544; Dec. 6. Class 39.

Crawford, Carlton, doing business as Anglo-American Importing Company, Galveston, Tex. Malt syrups. Serial No. 330,339; Dec. 6. Class 46.

Crosse & Blackwell Company, The, Baltimore, Md. Marmalades, jellies, preserves, etc. Serial No. 329,346; Dec. 6. Class 46.

Crown Overall Mfg. Co., The, Cincinnati, Ohio. Coats, vest coats, sleeveless vest coats, etc. Serial No. 330,365; Dec. 6. Class 39.

Cupid's Inn, Springfield, Mass. Sandwiches. Serial No. 320,744; Dec. 6. Class 46.

Darsio, John, New York, N. Y. General tonic. Serial No. 330,540; Dec. 6. Class 6.

Davis & Lawrence Co., New York, N. Y. Pills. Serial No. 330,922; Dec. 6. Class 6.

De Silhouette Hosiery. (See Schweizer, Harry W.)

Distillers Corporation Limited, Montreal, Quebec, Canada. Potable spirits, whiskey, and liquors. Serial No. 331,728; Dec. 6. Class 49.

Durst Manufacturing Company, Inc., The, New York, N. Y. Radiator siphon valves. Serial No. 322,282; Dec. 6. Class 13.

Eichenberg, Jennie S., doing business as Mme. Jenné, New York, N. Y. Cosmetic preparations. Serial No. 328,301; Dec. 6. Class 6.

Ellsworth, Kathryn, New York, N. Y. Medicines. Serial No. 329,598; Dec. 6. Class 6.

Emerol Manufacturing Co., New York, N. Y. Lubricator. Serial No. 314,326; Dec. 6. Class 23.

Englander Spring Bed Co., Brooklyn, N. Y. Springs, mattresses, beds, etc. Serial No. 329,913; Dec. 6. Class 32.

Esmond Mills, The, Esmond, Smithfield, R. I. Textile blankets. Serial No. 329,111; Dec. 6. Class 42.

Faxon, John H., jr., New York, N. Y. Ink solvent. Serial No. 329,226; Dec. 6. Class 6.

Flager, Charles E., Lima, Ohio. Lubricating oil. Serial No. 331,223; Dec. 6. Class 15.

Fonderies de Bronze de Nanterre, Societe Anonyme, Nanterre, France. Bronze articles. Serial No. 330,543; Dec. 6. Class 14.

Fort Howard Paper Company, Green Bay, Wis. Toilet paper, paper towels, crepe paper, etc. Serial No. 331,678; Dec. 6. Class 37.

Franklin Pottery, Incorporated, Lansdale, Pa. Wall and floor tiles. Serial No. 319,816; Dec. 6. Class 12.

Freeman, William B., doing business as Haltiwanger-Taylor Drug Company, Atlanta, Ga. Medicinal compound. Serial No. 327,587; Dec. 6. Class 6.

French Lick Springs Hotel Co., French Lick, Ind. Laxative mineral water. Serial No. 317,830; Dec. 6. Class 45.

Gallaher Drug Company, The, Dayton, Ohio. Shaving cream. Serial No. 331,429; Dec. 6. Class 4.

Gibson Electric Refrigerator Corporation, Greenville, Mich. Refrigerators and refrigerating units. Serial No. 330,725; Dec. 6. Class 31.

Gladding's Inc., Providence, R. I. Gauze curtains and curtaining. Serial No. 330,814; Dec. 6. Class 42.

Goldsmith, William M., Wichita, Kans. Books. Serial No. 331,640; Dec. 6. Class 38.

Gooderham & Worts, Ltd., Toronto, Ontario, Canada. Whisky. Serial No. 330,813; Dec. 6. Class 49.

Greenhill & Daniel, Inc., Brooklyn, N. Y. Bathing suits. Serial No. 328,579; Dec. 6. Class 39.

Grets & Schwartz, Philadelphia, Pa. Rompers, dresses, play suits, etc. Serial No. 329,918; Dec. 6. Class 39.

Grist Mill, The, Los Angeles, Calif. Seasoning and flavoring vegetable compound. Serial No. 325,788; Dec. 6. Class 46.

Guadagno, Vincenzo, doing business as Reliable Manufacturing Co., Cleveland, Ohio. Washing fluid. Serial No. 330,745; Dec. 6. Class 4.

Gunite Foundries Corporation, Rockford, Ill. Ferrous metal castings. Serial No. 325,789; Dec. 6. Class 14.

Hagler, Sam, doing business as Leeds, Ltd., New York, N. Y. Cosmetics and toilet preparations. Serial No. 329,377; Dec. 6. Class 6.

Halcomb Steel Company, Geddes, Syracuse, N. Y. Steel. Serial No. 331,498; Dec. 6. Class 14.

Haltiwanger-Taylor Drug Company. (See Freeman, William B.)

Hance Brothers & White, Inc., Philadelphia, Pa. Medicinal preparation, cod liver oil, etc. Serial No. 297,597; Dec. 6. Class 6.

Health Developing Apparatus Co., Inc., New York, N. Y. Rowing machines. Serial No. 331,680; Dec. 6. Class 22.

Health Developing Apparatus Co., Inc., New York, N. Y. Rowing machines. Serial No. 331,682; Dec. 6. Class 22.

Health Developing Apparatus Co., Inc., New York, N. Y. Rowing machines. Serial Nos. 331,684–5; Dec. 6. Class 22.

Holden-Leonard Company Inc., New York, N. Y. Worsted and woolens in the piece. Serial No. 331,463; Dec. 6. Class 42.

Hollins, William, and Company, Limited, Nottingham, England. Clothing. Serial No. 329,637; Dec. 6. Class 39.

Holyoke Company, Inc., The, Holyoke, Mass. Aerial and lead-in wires. Serial No. 285,973; Dec. 6. Class 21.

Horn, A. C., Company, Long Island City, N. Y. Liquid dye-soap. Serial No. 331,182; Dec. 6. Class 6.

Houghton, E. F., & Co., Philadelphia, Pa. Lubricating greases. Serial No. 331,184; Dec. 6. Class 15.

Independent Milwaukee Brewery, Milwaukee, Wis. Malt beverage. Serial No. 331,376; Dec. 6. Class 48.

Jacobs, John, Company, Canon City, Colo. Melons. Serial No. 331,154; Dec. 6. Class 46.

Johnson, S. C., & Son, Racine, Wis. Wax. Serial No. 325,330; Dec. 6. Class 16.

Kats, Jack, Los Angeles, Calif. Frozen chocolate-covered fruits. Serial No. 330,326; Dec. 6. Class 46.

Koret, Inc., New York, N. Y. Purses, pocket books, and hand bags. Serial No. 331,309; Dec. 6. Class 3.

Laganas, George, Boston, Mass. Shoes. Serial No. 330,481; Dec. 6. Class 39.

Leeds, Ltd. (See Hagler, Sam.)

Lermann, Carl A., East Orange, N. J. Medicinal preparation. Serial No. 330,406; Dec. 6. Class 6.

Lido Chemical Co. (See Chiarello, Joseph.)

Mac-Dell's, Superior, Wis. Tooth picks. Serial No. 329,749; Dec. 6. Class 44.

Mantia, John, & Sons, Boston, Mass. Fish fillets. Serial No. 321,210; Dec. 6. Class 46.

(Manufacturers). (See Nova Bonsheen, Inc.)

Marathon Rubber Products, Inc., Wausau, Wis. Sport goods. Serial No. 320,096; Dec. 6. Class 39.

Master Laboratories, Inc., Omaha, Nebr. Dentrifice. Serial No. 326,058; Dec. 6. Class 6.

PUBLISHED FOR OPPOSITION

[Act of Feb. 20, 1905, Sec. 6, as amended Mar. 2, 1907]

Maxine Products Company, Inc., Detroit, Mich. Perfume. Serial Nos. 330,959–63; Dec. 6. Class 6.
Maxwell Home Supply Corp, New York, N. Y. Malt syrup. Serial No. 331,380; Dec. 6. Class 46.
May Department Stores Company, The, St. Louis, Mo. Ties. Serial No. 320,003; Dec. 6. Class 39.
Metal Specialties Manufacturing Company, Chicago, Ill. Bicycles. Serial No. 330,017; Dec. 6. Class 19.
Minot, Hooper & Co., New York, N. Y. Sheets and pillow cases. Serial No. 330,861; Dec. 6. Class 42.
Missouri State Chickeries, Jefferson City, Mo. Dressed chickens. Serial No. 320,129; Dec. 6. Class 46.
Mme. Jenné. (See Eichenberg, Jennie S.)
Motley, Elizabeth, doing business as Motley's Beauty Parlor, Washington, D. C. Preparation for the hair. Serial No. 330,929; Dec. 6. Class 6.
Moyer Manufacturing Company, The, Youngstown, Ohio. Coats, vests, trousers, outer wear, sport coats, etc. Serial No. 330,579; Dec. 6. Class 39.
Nashua Package Sealing Co. Inc., Nashua, N. H. Machines and tools for moistening, serving, etc., adhesive or gummed tape, etc. Serial Nos. 330,664–5; Dec. 6. Class 23.
National Dairy Products Company, Inc., Baltimore, Md. Malted milk powder. Serial Nos. 330,069–70; Dec. 6. Class 46.
Nova-Bonsheen, Inc., doing business as (Manufacturers), Chicago, Ill. Creme lotion, nail polish, cuticle oil, etc. Serial No. 329,752; Dec. 6. Class 6.
Nu-Di Company, Cleveland, Ohio. Cleaning fluid and dry cleaner. Serial No. 326,907; Dec. 6. Class 4.
Okonite Company, The, Passaic, N. J. Electric cords and cables. Serial No. 330,798; Dec. 6. Class 21.
Palmers Limited, Montreal, Quebec, Canada. Toilet preparations. Serial No. 326,312; Dec. 6. Class 6.
Paris Laboratories, Inc., New York, N. Y. Astringents, astringent cerates, bleach creams, etc. Serial No. 308,654; Dec. 6. Class 6.
Philadelphia Malt Extract Co., Philadelphia, Pa. Malt syrup. Serial No. 311,003; Dec. 6. Class 46.
Pike, Mathilda, New York, N. Y. Facial preparation. Serial No. 330,000; Dec. 6. Class 6.
Pioneer Laboratory & Mfg. Corp., Chicago, Ill. Adhesive cement compound. Serial No. 329,867; Dec. 6. Class 5.
Pittsburgh Plate Glass Company, Pittsburgh, Pa. Flat glass. Serial No. 331,562; Dec. 6. Class 33.
Pure Oil Company, The, Chicago, Ill. Petroleum coke. Serial No. 331,117; Dec. 6. Class 1.
Quaker City Chocolate & Confectionery Co., Inc., Philadelphia, Pa. Candy. Serial No. 330,218; Dec. 6. Class 46.
Quaker Oats Company, The, Chicago, Ill. Pancake flour. Serial No. 330,100; Dec. 6. Class 46.
Radiolek Company, The, Chicago, Ill. Radio receiving sets, radio transmitting sets, and parts thereof. Serial No. 329,773; Dec. 6. Class 21.
Raffetto, G. B., Inc., New York, N. Y. Diced pineapples. Serial No. 331,197; Dec. 6. Class 46.
Reliable Manufacturing Co. (See Guadagno, Vincenzo.)
Riegel Paper Corporation, Riegelsville, N. J., and New York, N. Y. Glassine paper. Serial No. 331,120; Dec. 6. Class 37.
Robertson & Company, Glasgow, Scotland. Port. Serial No. 331,790; Dec. 6. Class 47.
Roll, Walter H., Kansas City, Mo. Boxes, cases, cartons, etc. Serial No. 325,117; Dec. 6. Class 2.
S. & S. Cone Corporation, New York, N. Y. Ice cream cones. Serial No. 327,261; Dec. 6. Class 46.
Sandeman, Geo. G., Sons & Co. Limited, London, England. Wines. Serial No. 331,704; Dec. 6. Class 47.
Sandeman, Geo. G., Sons & Co. Limited, London, England. Wines. Serial No. 331,706; Dec. 6. Class 47.
Sanitary Mop Cabinet Co. (See Weisswasser, Peter.)
Saunders, Joseph E., doing business as Saunders Company, Kansas City, Mo. Prepared chili. Serial No. 331,124; Dec. 6. Class 46.
Schwabe, S., & Söhne Leder-U. Treibriemenfabriken A.-G., Varel/Oldenburg, Germany. Driving belts and fasteners. Serial No. 320,514; Dec. 6. Class 35.
Schweizer, Harry W., doing business as De Silhouette Hosiery, Philadelphia, Pa. Hosiery. Serial No. 326,955; Dec. 6. Class 39.
Sentell, Douglas, Keyport, N. J. Maltless ginger cordial. Serial No. 331,357; Dec. 6. Class 45.
Shapiro, Mandel, New York, N. Y. Preparation to prevent runs in hosiery and lingerie. Serial No. 331,011; Dec. 6. Class 6.
Silk, Fred J., doing business as Silk Packing Company, Los Angeles, Calif. Spanish style rice. Serial No. 326,236; Dec. 6. Class 46.
Societe des Marques Robin, Societe a Responsabilite Limitee, Paris, France. Internal medicines. Serial No. 330,870; Dec. 6. Class 6.
Society of Chemical Industry in Basle, Basel, Switzerland. Tooth paste. Serial No. 330,937; Dec. 6. Class 6.
Sonneborn, L., Sons, Inc., New York, N. Y. Deodorized kerosene. Serial No. 331,126; Dec. 6. Class 15.
Sopkin, Louis, Company, Chicago, Ill. Frocks and aprons. Serial No. 331,127; Dec. 6. Class 39.
Southwest Laboratories, Inc., St. Louis, Mo. Hygienic powder and a special liquid germicide. Serial No. 331,067; Dec. 6. Class 6.
Stantest Lamp Corporation, New York, N. Y. Incandescent lamps. Serial No. 330,025; Dec. 6. Class 21.
State Young Men's Christian Association of Pennsylvania, Harrisburg, Pa. Emblems and badges. Serial No. 314,586; Dec. 6. Class 28.
Strathmore Paper Company, Mittineague, Mass. Writing and printing paper. Serial Nos. 331,597–8; Dec. 6. Class 37.
Superior Products Company, Dallas, Tex. Petrolatum, rubbing alcohol, bay rum, etc. Serial No. 330,584; Dec. 6. Class 6.
Sutton's Mills, Incorporated, North Andover and Boston, Mass. Woolen piece goods. Serial No. 328,999; Dec. 6. Class 42.
Sweet Mfg. & Sales Co., The, Phoenix, N. Y. Toilet tissues, paper napkins, wax paper, etc. Serial No. 331,716; Dec. 6. Class 37.
Terminal Barber Shops, Inc., New York, N. Y. Cold creams and facial creams. Serial No. 325,488; Dec. 6. Class 6.
Thomas, William G., doing business as W. G. Thomas, Pharmacist, Varina, N. C. Medicinal preparation. Serial No. 331,029; Dec. 6. Class 6.
Twin Coach Company, Kent, Ohio, assignor to Automatic Drive & Transmission Company, New York, N. Y. Automatic clutches. Serial No. 331,015; Dec. 6. Class 23.
United Cork Companies of Delaware, Lyndhurst, N. J. Corkboard, cork bricks, cork seam fillers, etc. Serial No. 330,185; Dec. 6. Class 12.
Universal Button Fastening & Button Company, Detroit, Mich. Buttons. Serial No. 330,585; Dec. 6. Class 40.
Wapler, Nicholas, Company, New York, N. Y. Fish parasiticidal preparation and water plants nutritive salt. Serial No. 330,581; Dec. 6. Class 6.
Weisswasser, Peter, doing business as Sanitary Mop Cabinet Co., Detroit, Mich. Mop cabinet. Serial No. 327,956; Dec. 6. Class 32.
Wells-Lamont-Smith Corporation, Minneapolis, Minn. Gloves. Serial No. 330,497; Dec. 6. Class 39.
Whitcomb Locomotive Co., The, Rochelle, Ill. Gasoline, oil, Diesel and mechanical locomotives and parts therefor. Serial Nos. 316,396–7; Dec. 6. Class 23.
Wickwire Spencer Steel Company. (See Bowers, Edward C., and C. L. Feldman, receivers.)
Williamson Candy Company, Chicago, Ill. Candy. Serial No. 331,096; Dec. 6. Class 46.
Wilson, Thomas, & Co., Inc., New York, N. Y. Laces. Serial No. 328,897; Dec. 6. Class 42.
Winthrop Chemical Company, Inc., New York, N. Y. Water-soluble organic iodine compound. Serial No. 330,804; Dec. 6. Class 6.
Wood Hydraulic Hoist and Body Company, Detroit, Mich. Heating boilers and oil burners. Serial No. 330,503; Dec. 6. Class 34.
Wortex Concentrated Malt Co. (See Bachrach-Feld Company, Inc., The.)

LIST OF REGISTRANTS OF TRADE-MARKS

Adam, J. N., & Co., Buffalo, N. Y. Coats, suits, hats, caps, etc. 299,494; Dec. 6; Serial No. 319,601; published Mar. 1, 1932. Class 39.
Allen, Mark W., & Co., Detroit, Mich. Cleansing cream, face powder, brilliantine, etc. 299,470; Dec. 6; Serial No. 312,684; published Sept. 13, 1932. Class 6.
Allied Grease & Oil Co., Chicago, Ill. Lubricating greases. 299,477; Dec. 6; Serial No. 317,447; published Sept. 13, 1932. Class 15.
Altman, Samuel, New York, N. Y. Dresses, coats, and suits. 299,397; Dec. 6; Serial No. 322,280; published Feb. 23, 1932. Class 39.
American Advertised Products, Incorporated, Chicago, Ill. Shampoo. 299,447; Dec. 6; Serial No. 329,127; published Sept. 13, 1932. Class 6.
American Manufacturing Company, Boston, Mass., and Brooklyn, N. Y. Manila, sisal, hemp, and other vegetable fibre rope. 299,529–30; Dec. 6; Serial Nos. 329,171–2; published Sept. 27, 1932. Class 7.
American Stationery Mfg. Co., New York, N. Y., and Habana, Cuba. Lubricating oils and greases. 299,503; Dec. 6; Serial No. 325,864; published Aug. 23, 1932. Class 15.
Anthracite Equipment Corporation, New York, N. Y. Filtering media. 299,526; Dec. 6; Serial No. 328,931; published Sept. 27, 1932. Class 31.
Arnold, M. N., Shoe Company, North Abington, Mass. Shoes. 299,396; Dec. 6; Serial No. 324,691; published Sept. 20, 1932. Class 39.

Ascher, Simon, & Co., Inc., New York, N. Y. Sweaters. 299,441; Dec. 6; Serial No. 329,438; published Sept. 27, 1932. Class 39.
Atkinson, Harry H. (See Economy Lubricating Co.)
Ballard Oil Company of Worcester, Inc., Worcester, Mass. Lubricating oils, greases, and gasoline. 299,411; Dec. 6; Serial No. 329,251; published Sept. 20, 1932. Class 15.
Barlow-Moore Tobacco Company, Inc., Bowling Green, Ky. Tobacco. 299,440; Dec. 6; Serial No. 329,439; published Sept. 27, 1932. Class 17.
Bates, Edward L., doing business as Novo Mfg. Co., Modesto, Calif. Liquid preparation for cleaning paint or varnished surfaces, mirrors and glass, etc. 299,515; Dec. 6; Serial No. 328,982; published Sept. 27, 1932. Class 4.
Bausch & Lomb Optical Company, Rochester, N. Y. Ophthalmic lenses. 299,433; Dec. 6; Serial No. 329,518; published Sept. 27, 1932. Class 26.
Bellanca Aircraft Corporation, New Castle, Del. Airplanes and airplane structural parts. 299,475; Dec. 6; Serial No. 302,230; published Mar. 24, 1931. Class 19.
Bickum, Dorothy, New York, N. Y. Bandettes, brassières, corselettes, etc. 299,429; Dec. 6; Serial No. 328,974; published Sept. 6, 1932. Class 39.
Bloomingdale Bros., Inc., New York, N. Y. Ginger ale. 299,525; Dec. 6; Serial No. 329,762; published Sept. 27, 1932. Class 45.
Blumenthal, Sidney, & Co. Inc., New York, N. Y. Pile fabrics. 299,420; Dec. 6; Serial No. 328,519; published Aug. 23, 1932. Class 42.
Bradley, Smith Co., The, New Haven, Conn. Candy. 299,484; Dec. 6; Serial No. 328,909; published Sept. 27, 1932. Class 46.
Breslauer, A., Inc., New York, N. Y. Face powder, rouge, and compacts, etc. 299,517; Dec. 6; Serial No. 324,773; published Sept. 13, 1932. Class 6.
Brighton Ladies Hat Co. Inc., New York, N. Y. Hats. 299,425; Dec. 6; Serial No. 328,911; published Sept. 13, 1932. Class 39.
Budd Wheel Company, Philadelphia, Pa. Wheel spoke shrouds. 299,492; Dec. 6; Serial No. 320,777; published Sept. 13, 1932. Class 19.
Burns Bros., New York, N. Y. Solid fuel consisting of a mixture of petroleum coke and anthracite coal. 299,443; Dec. 6; Serial No. 329,301; published Sept. 27, 1932. Class 1.
CO_2 Appliance Company, Tulsa, Okla. Generators for vaporizing solid carbon dioxide. 299,401; Dec. 6; Serial No. 327,680; published Sept. 27, 1932. Class 23.
Calavo Growers of California, Los Angeles, Calif. Food oils. 299,481; Dec. 6; Serial No. 329,253; published Sept. 27, 1932. Class 46.
California Products Company. (See Pagliaro, Luigi.)
Campbell, S., & Son Limited, Glasgow, Scotland. Scotch whisky and gin. 299,534; Dec. 6; Serial No. 329,622; published Sept. 27, 1932. Class 49.
Campbell Soup Company, Camden, N. J. Canned tomato juice. 299,495; Dec. 6; Serial No. 318,487; published Sept. 27, 1932. Class 46.
Casterline Bros., Milwaukee, Wis. Cosmetics used for removing cuticle, polishing nails, and removing nail polish. 299,453; Dec. 6; Serial No. 328,767; published Sept. 13, 1932. Class 6.
Centennial Mill Co., Spokane and Seattle, assignor to Centennial Flouring Mills Company, Seattle, Wash. Wheat flour. 88,897; renewed Sept. 17, 1932.
Certex Corporation, Kansas City, Mo. Prophylactic rubber articles. 299,460; Dec. 6; Serial No. 329,250; published Sept. 27, 1932. Class 44.
Cervelli, Blanche, San Francisco, Calif. Skin lotion. 299,459; Dec. 6; Serial No. 329,278; published Sept. 20, 1932. Class 6.
Chase & Co., Sanford, Fla. Fertilizers. 299,485; Dec. 6; Serial No. 329,133; published Sept. 27, 1932. Class 10.
Citrasol Laboratories. (See Silverberg, Samuel.)
Clark & Host Company, Milwaukee, Wis. Tea, blended coffee, cocoa, and flavoring extracts. 91,171; renewed Apr. 22, 1933.
Classroom Teacher, Inc., The, Chicago, Ill. Hectograph ink, rubber stamp ink, and inking pads. 299,439; Dec. 6; Serial No. 329,442; published Sept. 27, 1932. Class 11.
Clawson Machine Co., Flagtown, N. J. Ice chipping machines. 299,438; Dec. 6; Serial No. 329,466; published Sept. 27, 1932. Class 23.
Clayton Magazines, Inc., The, New York, N. Y. Periodical. 299,478; Dec. 6; Serial No. 317,161; published Aug. 9, 1932. Class 38.
Col-Tex Refining Company, Wilmington, Del., and Oklahoma City, Okla. Gasoline, furnace oils, and fuel oils. 299,509; Dec. 6; Serial No. 328,721; published Sept. 13, 1932. Class 15.
Concord Silversmiths, Inc., Concord, N. H. Silver articles. 299,390; Dec. 6; Serial No. 321,459; published Sept. 13, 1932. Class 28.
Continental Oil Company, Ponca City, Okla. Lubricating oil. 299,471; Dec. 6; Serial No. 310,119; published Mar. 10, 1931. Class 15.
Cosgrove, Thos. C., doing business as The Cosgrove Bakers, Vineyard Haven, Mass. Whole wheat wafers. 299,480; Dec. 6; Serial No. 329,257; published Sept. 27, 1932. Class 46.
Costa, Vito, & Sons, Chicago, Ill. Macaroni. 299,538; Dec. 6; Serial No. 325,321; published May 17, 1932. Class 46.
Darsky, N. H., doing business as Golden Age Ginger Ale Co. of America, Youngstown, Ohio. Mineral and carbonated water, maltless beverages, and extracts for making the same. 299,523; Dec. 6; Serial No. 328,263; published Sept. 27, 1932. Class 45.
Davis, John H., Company, doing business as Sunset Line & Twine Company, San Francisco, Calif. Fishing lines. 299,522; Dec. 6; Serial No. 327,935; published Sept. 27, 1932. Class 22.
Davis Presto-Pak Company, Los Angeles, Calif. Cigarette cases. 299,537; Dec. 6; Serial No. 326,935; published Sept. 27, 1932. Class 8.
Davis & Scanlan Co., Boston, Mass. Color remover. 299,458; Dec. 6; Serial No. 328,326; published Sept. 13, 1932. Class 6.
Defiance Spark Plugs, Incorporated, Toledo, Ohio. Spark plugs. 299,541; Dec. 6. Class 21.
Densten Felt & Hair Company, Inc., Philadelphia, Pa. Carpet and rug cushions. 299,403; Dec. 6; Serial No. 328,057; published Sept. 27, 1932. Class 50.
Dewar, John, & Sons Limited, Perth, Scotland, and London, England. Scotch whisky. 299,532; Dec. 6; Serial No. 329,628; published Sept. 27, 1932. Class 49.
Duemmer, Maxon H., Kansas City, Mo. Catamenial belts or sanitary napkin holders. 299,446; Dec. 6; Serial No. 329,552; published Sept. 27, 1932. Class 44.
Economy Lubricating Co., to Harry H. Atkinson, doing business as Economy Lubricating Company, Boston, Mass. Lubricating grease. 88,561; renewed Oct. 1, 1932.
El Dorado Refining Company, The, Eldorado, Kans. Gasoline. 299,513; Dec. 6; Serial No. 329,225; published Sept. 20, 1932. Class 15.
Elkton Pharmaceutical Co. (See Greenwald, Jacob J.)
Emvir Manufacturing Company. (See Moore, Emmett B.)
Esmond Mills, The, Esmond, R. I. Blankets. 90,823; renewed Mar. 25, 1933.
Exhibit Supply Company, The. (See Meyer, John F.)
Fankhauser, Walter A., doing business as Walters Shoe Company, New York, N. Y. Shoes. 299,428; Dec. 6; Serial No. 328,982; published Sept. 20, 1932. Class 39.
Fashion Park Associates, Inc., Rochester, N. Y. Sweaters, hats, caps, necktles, etc. 299,419; Dec. 6; Serial No. 328,394; published Aug. 23, 1932. Class 39.
Fashion Park Associates, Inc., doing business as Weber & Heilbroner, Rochester and New York, N. Y. Sweaters, hats, caps, etc. 299,548; Dec. 6. Class 39.
Firestone Footwear Company, Hudson, Mass. Footwear. 299,423; Dec. 6; Serial No. 328,784; published Sept. 13, 1932. Class 39.
Fisher Flouring Mills Company, Seattle, to Fisher Flouring Mills Co., Harbor Island, Seattle, Wash. Wheat flour. 90,185; renewed Feb. 11, 1933.
Freeman Shoe Corporation, Beloit, Wis. Boots and shoes. 299,416; Dec. 6; Serial No. 326,285; published Sept. 13, 1932. Class 39.
Frozen Confections, Inc., New York, N. Y. Frozen confections. 299,479; Dec. 6; Serial No. 329,016; published Sept. 27, 1932. Class 46.
Gemsco, Inc., New York, N. Y. Embroidered emblems. 299,426; Dec. 6; Serial No. 328,954; published Sept. 6, 1932. Class 40.
General Tire & Rubber Company, The, Akron, Ohio. Tires and tubes. 299,525; Dec. 6; Serial No. 326,818; published Sept. 20, 1932. Class 35.
Giordano, Angelo, Westerly, R. I. Cream for scabs, sores, pimples, etc.; herb liniment and medicinal herbs. 299,451; Dec. 6; Serial No. 328,868; published Sept. 13, 1932. Class 6.
Glenader Textile Co., New York, N. Y. Scarfs. 299,408; Dec. 6; Serial No. 322,967; published Apr. 5, 1932. Class 39.
Gold, Arthur, Jersey City, N. J. Cold, cleansing, and vanishing cream; rouge, face powder, etc. 299,455; Dec. 6; Serial No. 328,422; published Sept. 20, 1932. Class 6.
Goldbaum, Samuel, doing business as Lily Hat Company, New York, N. Y. Ladies' hats. 299,394; Dec. 6; Serial No. 323,993; published Mar. 29, 1932. Class 39.
Golden Age Ginger Ale Co. of America. (See Darsky, N. H.)
Golo Slipper Company, Inc., New York, N. Y. Sandals. 299,393; Dec. 6; Serial No. 323,745; published May 31, 1932. Class 39.
Gonsáles, Rosalino, San Juan de la Arena, Spain. Preserved fish. 299,482; Dec. 6; Serial No. 329,233; published Sept. 27, 1932. Class 46.
Goodrich, B. F., Company, The, New York, N. Y. Footwear. 299,414; Dec. 6; Serial No. 326,100; published Sept. 13, 1932. Class 39.
Gordon Distributing Co. Inc., West New York, N. J. Maltless herb beverage, extracts, and concentrates therefor. 299,556; Dec. 6. Class 45.
Gorton, Thomas S., jr., doing business as Slade Gorton Co., Chicago, Ill. Smoked herring. 299,405; Dec. 6; Serial No. 324,877; published Sept. 27, 1932. Class 46.
Gottlieb, David, doing business as D. Gottlieb & Co., Chicago, Ill. Coin controlled table board game played with pieces. 299,493; Dec. 6; Serial No. 320,824; published Feb. 23, 1932. Class 22.
Gra-Storative. (See Sulkie, Margaret M.)

Greenwald, Jacob J., doing business as Elkton Pharmaceutical Co., Elkton, Md. Preparations for the treatment of coughs or hoarseness. 299,450; Dec. 6; Serial No. 328,889; published Sept. 13, 1932. Class 6.
H. P. Sauce Limited. (See Midland Vinegar Company Limited, The, assignor.)
Haber, Jos. B., Inc., Philadelphia, Pa. Sweaters and sweater coats. 299,434; Dec. 6; Serial No. 329,505; published Sept. 20, 1932. Class 39.
Harzfeld's, Inc., Kansas City, Mo. Astringent, skin tonic, tissue cream, etc. 299,518; Dec. 6; Serial No. 324,511; published Sept. 27, 1932. Class 6.
Hat Corporation of America, South Norwalk, Conn. Caps and hats, overcoats, trousers, etc. 299,547; Dec. 6. Class 39.
Hat Corporation of America, South Norwalk, Conn. Hats, caps, gloves, suits, etc. 299,548; Dec. 6. Class 39.
Hat Corporation of America, South Norwalk, Conn. Hats, caps, dresses, and coats. 299,549; Dec. 6. Class 39.
Heckel Bros., Kansas City, Mo. Medicated oil. 299,514; Dec. 6; Serial No. 321,536; published Sept. 20, 1932. Class 6.
Holeproof Hosiery Co., Milwaukee, Wis. Hosiery. 299,399; Dec. 6; Serial No. 328,812; published Sept. 20, 1932. Class 39.
Holmstrom-Pilcher Co., Lockport, Ill. Rolled oats and macaroni. 299,485; Dec. 6; Serial No. 329,048; published Sept. 27, 1932. Class 46.
Hood Rubber Company, Inc., Wilmington, Del., and Watertown, Mass. Footwear. 299,415; Dec. 6; Serial No. 326,103; published Sept. 13, 1932. Class 39.
Hudson Motor Car Company, Detroit, Mich. Gasoline passenger automobiles. 299,512; Dec. 6; Serial No. 329,190; published Sept. 13, 1932. Class 19.
Ideal Novelty & Toy Co., Brooklyn, N. Y. Dolls. 299,540; Dec. 6; Serial No. 329,715; published Sept. 27, 1932. Class 22.
International Silver Company, Meriden, Conn. Flat-ware and hollow-ware made of or plated with precious metals. 299,410; Dec. 6; Serial No. 329,235; published Sept. 20, 1932. Class 28.
Isabella Sugar Company, Mount Pleasant, Mich. Granulated sugar. 299,488; Dec. 6; Serial No. 328,716; published Sept. 27, 1932. Class 46.
Ivory Clasp & Garter Co., New Orleans, La., to A. Stein & Company, successor, Chicago, Ill. Garters. 87,542; renewed July 23, 1932.
Johns-Manville Corporation, New York, N. Y. Flax packing for glands, stuffing boxes, valve stems, etc. 299,524; Dec. 6, Serial No. 328,641; published Sept. 27, 1932. Class 35.
Johnson Oil Refining Company, Chicago, Ill. Lubricating oils. 299,510; Dec. 6; Serial No. 328,769; published Sept. 20, 1932. Class 15.
Jordan, Kathryn S., assignor to Van Raalte Co. Inc., New York, N. Y. Headgear in the nature of a cap-veil. 299,421; Dec. 6; Serial No. 328,669; published Sept. 20, 1932. Class 39.
Joyia, Sam, Los Angeles, Calif. Liquid preparation especially compounded for exterminating insects. 299,552; Dec. 6. Class 6.
Karge, Maxwell R., doing business as Monroe Refrigeration Engineering Co., Brockport, N. Y. Refrigerating units, cooling units, etc. 299,551; Dec. 6. Class 31.
Kayser, Julius, & Co., New York, N. Y. Underwear. 299,554; Dec. 6. Class 39.
Keystone Varnish Company, Brooklyn, N. Y. Paint. 90,345; renewed Feb. 18, 1933.
Keystone Varnish Company, Brooklyn, N. Y. Enamel paint. 90,346; renewed Feb. 18, 1933.
Kidd, Mrs. E. G., Incorporated, Richmond, Va. Vegetable pickles. 299,489; Dec. 6; Serial No. 328,400; published Sept. 27, 1932. Class 46.
Killian Manufacturing Co., The, Akron, Ohio. Prophylactic rubber articles. 299,500–1; Dec. 6; Serial Nos. 329,531–2; published Sept. 27, 1932. Class 44.
King, Dobbs & Company, Chattanooga, Tenn. Coffee. 299,486; Dec. 6; Serial No. 328,957; published Sept. 27, 1932. Class 46.
Klemm Automotive Products Company, Chicago, Ill. Governors for internal combustion engines. 299,542; Dec. 6. Class 23.
Knickerbocker Case Company, Chicago, Ill. Sample cases and bags. 91,354; renewed Apr. 29, 1933.
Kops Brothers, Inc., New York, N. Y. Girdles, brassières, and combinations of girdles and brassières. 299,496; Dec. 6; Serial No. 317,810; published Sept. 13, 1932. Class 39.
Kresge Department Store Corp., Newark, N. J. Alum, antiseptic preparations, aspirin, etc. 299,466; Dec. 6; Serial No. 327,514; published Sept. 13, 1932. Class 6.
Latex Laboratories, New York, N. Y. Prophylactic rubber articles. 299,431; Dec. 6; Serial No. 325,175; published Sept. 27, 1932. Class 44.
Lily Hat Company. (See Goldbaum, Samuel.)
Lily Mill and Power Company, Shelby, N. C. Sewing thread. 299,445; Dec. 6; Serial No. 329,021; published Sept. 20, 1932. Class 43.
Lincoln Bag Company, Chicago, Ill. Moth proof storage bags. 299,520–1; Dec. 6; Serial Nos. 327,615–16; published Sept. 27, 1932. Class 2.
Lite-Watchman Corporation, New York, N. Y. Electric lighting. 299,469; Dec. 6; Serial No. 312,729; published Sept. 13, 1932. Class 21.
Lockwood Brackett Co., Waltham and Boston, Mass. Powdered soap. 299,474; Dec. 6; Serial No. 305,714; published Sept. 27, 1932. Class 4.
Lonji Company, Des Moines, Iowa. Liquid substance for tinting or dyeing lingerie, rayon, linen, etc. 299,457; Dec. 6; Serial No. 328,334; published Sept. 20, 1932. Class 6.
Lowe, Joe, Corporation, Brooklyn, N. Y. Food products. 299,518; Dec. 6; Serial No. 293,587; published June 14, 1932. Class 46.
Luckett, Thomas D., Clarksville, Tenn., assignor to Luckett-Ware Tobacco Co., Louisville, Ky. Leaf tobacco. 40,211; renewed Apr. 28, 1933.
Macy, R. H., & Co., Inc., New York, N. Y. Hats. 299,427; Dec. 6; Serial No. 328,991; published Sept. 6, 1932. Class 39.
Maer, Peter, doing business as Mayrose Laboratories, New York, N. Y., Insecticides, capsules, salves, etc. 299,461; Dec. 6; Serial No. 328,246; published Sept. 13, 1932. Class 6.
Magnus, Mabee & Reynard, Inc., New York, N. Y. Olive oil. 299,398; Dec. 6; Serial No. 322,053; published Mar. 1, 1932. Class 46.
Malrov Hat and Cap Co., Minneapolis, Minn. Caps and fur felt hats. 299,422; Dec. 6; Serial No. 328,796; published Sept. 20, 1932. Class 39.
Marenus, Samuel, doing business as Union County Pickle Works, Elizabeth, N. J. Preserved pickles, chow chow, pickled relishes, etc. 299,472; Dec. 6; Serial No. 307,501; published Sept. 27, 1932. Class 46.
Markell, Maurice J., Brooklyn, N. Y. Shoes. 299,424; Dec. 6; Serial No. 328,797; published Sept. 13, 1932. Class 39.
Mayrose Laboratories. (See Maer, Peter.)
Meinhardt, Henry B., Chicago, Ill. Canvas dividing and doorway curtains for refrigerator cars, etc. 299,437; Dec. 6; Serial No. 329,558; published Sept. 27, 1932. Class 50.
Meyer, John F., doing business as The Exhibit Supply Company, Chicago, Ill. Coin-controlled amusement device. 299,531; Dec. 6; Serial No. 329,381; published Sept. 27, 1932. Class 22.
Midland Vinegar Company Limited, The, assignor to H. P. Sauce Limited, Birmingham, England. Sauce and pickles. 91,004; renewed Apr. 8, 1933.
Monroe Refrigeration Engineering Co. (See Karge, Maxwell R.)
Moore, Emmett B., doing business as Emvir Manufacturing Company, Chicago, Ill. Air inflation valve cap. 299,558; Dec. 6. Class 18.
Moran, Victor, Bradford, Pa. Picture puzzles. 299,527; Dec. 6; Serial No. 329,644; published Sept. 27, 1932. Class 22.
Morgan Hosiery Mills, Indianapolis, Ind. Hosiery. 299,406; Dec. 6; Serial No. 323,902; published Mar. 15, 1932. Class 39.
Morrell, John & Co., Ottumwa, Iowa. Coffee. 299,491; Dec. 6; Serial No. 328,276; published Sept. 27, 1932. Class 46.
Nagy Bros. Motor Company, Bethlehem, Pa. Gasoline, motor lubricating oils, fuel oils, etc. 299,412; Dec. 6; Serial No. 329,263; published Sept. 20, 1932. Class 15.
Narol Co. (See Sinaiko, A. Arlie.)
National Carbon Company, Cleveland, Ohio, assignor to National Carbon Company, Inc., New York, N. Y. Dry cells. 91,118; renewed Apr. 15, 1933.
Newton Products Company, The, Cincinnati, Ohio. Nuts, peanut butter, vinegar, etc. 299,519; Dec. 6; Serial No. 301,054; published July 28, 1931. Class 46.
North American Dye Corporation, New York, N. Y. Cosmetics. 299,464; Dec. 6; Serial No. 327,917; published Sept. 13, 1932. Class 6.
Northbilt Manufacturing Co., Minneapolis, Minn. Children's play suits and snow suits. 299,432; Dec. 6; Serial No. 329,561; published Sept. 27, 1932. Class 39.
Novo Mfg. Co. (See Bates, Edward L.)
Okonite Company, The, Passaic, N. J. Insulated wires and cables. 299,502; Dec. 6; Serial No. 325,721; published Sept. 20, 1932. Class 21.
Optische Anstalt C. P. Goerz Aktiengesellschaft, Friedenau, near Berlin, to Zeiss Ikon Aktiengesellschaft, Dresden, Germany, successor. Scientific appliances. 88,938; renewed Oct. 29, 1932.
Oxo, Limited, London, England. Maltless beverages, syrups, and extracts and concentrates. 299,535; Dec. 6; Serial No. 329,455; published Sept. 27, 1932. Class 45.
Pagliaro, Luigi, doing business as California Products Company, Pittsburgh, Pa. General tonic. 299,452; Dec. 6; Serial No. 328,819; published Sept. 20, 1932. Class 6.
Pennway Manufacturing Company, Harrisburg, Pa. Children's clothing. 299,400; Dec. 6; Serial No. 328,996; published Sept. 20, 1932. Class 39.
Pfaffman Egg Noodle Company, The, Cleveland, Ohio. Macaroni. 299,407; Dec. 6; Serial No. 323,806; published Sept. 27, 1932. Class 46.
Phillips Petroleum Company, Bartlesville, Okla. Oils and greases. 299,505–6; Dec. 6; Serial No. 328,505; published Sept. 20, 1932. Class 15.
Pioneer Susnender Company, Philadelphia, Pa. Buckles. 299,417; Dec. 6; Serial No. 328,015; published Sept. 6, 1932. Class 40.

Pitman-Moore Company, Indianapolis, Ind. Medicinal product for treatment of anemia. 299,449; Dec. 6; Serial No. 329,026; published Sept. 13, 1932. Class 6.
Plastold Products Inc., Los Angeles, Calif. Plaster board and plaster wall board. 299,533; Dec. 6; Serial No. 238,024; published July 20, 1926.
Premier Mill Corporation, Geneva, N. Y. Skin lotion, cold cream, zinc oxide, etc. 299,465; Dec. 6; Serial No. 327,805; published Sept. 13, 1932. Class 6.
RCA Victor Company, Inc., Camden, N. J. Sound recording apparatus. 299,504; Dec. 6; Serial No. 326,617; published Sept. 13, 1932. Class 36.
Raytheon Production Corporation, Newton, Mass. Electrical space discharge tubes. 299,507; Dec. 6; Serial No. 328,618; published Sept. 13, 1932. Class 21.
Rice-Stix Dry Goods Co., St. Louis, Mo. Wearing apparel. 299,536; Dec. 6; Serial No. 327,169; published Sept. 20, 1932. Class 39.
Richfield Oil Corporation of New York, New York, N. Y. Petroleum products. 299,391; Dec. 6; Serial No. 321,821; published Sept. 20, 1932. Class 15.
Riegel, G. Frederic, New York, N. Y. Cigars. 299,436; Dec. 6; Serial No. 329,586; published Sept. 27, 1932. Class 17.
Robins, Martha E., doing business as A. H. Robins Co., Richmond, Va. Antacid, diuretic, and alkaline laxative. 299,467; Dec. 6; Serial No. 327,234; published Sept. 13, 1932. Class 6.
Roland, W. H., Bloomington, Ill. Wearing apparel. 299,404; Dec. 6; Serial No. 327,452; published Sept. 27, 1932. Class 39.
Russeks Fifth Avenue, Inc., New York, N. Y. Clothing. 299,545; Dec. 6. Class 39.
Ruth, Carol, Inc., New York, N. Y. Liquid and solid brilliantine, cleansing cream, lotion, etc. 299,476; Dec. 6; Serial No. 302,223; published Sept. 13, 1932. Class 6.
Ryan, Matthew W., Sons & Co. Inc., New York, N. Y. Cotton piece goods. 299,546; Dec. 6. Class 42.
Safeway Stores, Incorporated, Oakland, Calif. Bread. 299,487; Dec. 6; Serial No. 328,894; published Sept. 27. Class 46.
San Dee Company, The, Evansville, Ind. Ointment. 299,462; Dec. 6; Serial No. 328,076; published Sept. 20, 1932. Class 6.
San-Nap-Pak Mfg. Co., Inc., New York, N. Y. Absorbent cotton, gauze, and sanitary napkins. 299,559; Dec. 6. Class 44.
Scannell, F. A., & Company, Boston, Mass. Medicinal preparation for the treatment of skin diseases. 299,499; Dec. 6; Serial No. 329,459; published Sept. 27, 1932. Class 6.
Scott Paper Company, Chester, Pa. Tissue, creped, and absorbent papers. 299,557; Dec. 6. Class 37.
Seamless Rubber Company, Inc., The, New Haven, Conn. Folding fountain syringe. 299,553; Dec. 6. Class 44.
Silverberg, Samuel, doing business as Citrasol Laboratories, New York, N. Y. Liquid laxative. 299,454; Dec. 6; Serial No. 328,589; published Sept. 20, 1932. Class 6.
Silverite-Gutterman Co., Boston, Mass. Leather patches. 299,402; Dec. 6; Serial No. 328,648; published Sept. 20, 1932. Class 39.
Sinaiko, A. Arlie, doing business as Narol Co., Stevens Point, Wis. Nasal oil. 299,448; Dec. 6; Serial No. 329,035; published Sept. 13, 1932. Class 6.
Snider Packing Corporation, Rochester, now by change of name Snider Liquidating Company, Inc., assignor to Snider Packing Corporation, New York, N. Y. Canned vegetables, canned fruits, canned berries, etc. 299,490; Dec. 6; Serial No. 326,344; published Sept. 27, 1932. Class 46.
Société à Responsabilité Limitée le Monnier, Paris, France. Hats. 299,550; Dec. 6. Class 39.
Société à Responsabilité Limitée Mainbocher, Paris, France. Gowns, scarfs, gloves, etc. 299,555; Dec. 6. Class 39.
Societe Anonyme des Etablissements André Gillier, Troyes, France. Clothing. 299,892; Dec. 6; Serial No. 323,548; published Aug. 16, 1932. Class 39.
Société des Usines Chimiques Rhone-Poulenc, Paris, France. Tonic. 299,430; Dec. 6; Serial No. 326,897; published Sept. 27, 1932. Class 6.
Softknit Hat Co., New York, N. Y. Hats. 299,418; Dec. 6; Serial No. 328,229; published Sept. 13, 1932. Class 39.
Standard Oil Company of New Jersey, Wilmington, Del. Coal dust controlling mineral oil. 299,508; Dec. 6; Serial No. 326,673; published Sept. 20, 1932. Class 15.
Stein, A., & Company. (See Ivory Clasp & Garter Co.)
Stephenson Mfg. Co., Inc., Springfield, Mass. Spray or inhalant. 299,497; Dec. 6; Serial No. 329,159; published Sept. 13, 1932. Class 6.
Stephenson Mfg. Co., Inc., Springfield, Mass. Antiseptic or germicide. 299,498; Dec. 6; Serial No. 329,160; published Sept. 27, 1932. Class 6.
Storms, H. M., Company, Brooklyn, N. Y. Carbon paper. 299,442; Dec. 6; Serial No. 328,406; Published Sept. 27, 1932. Class 11.
Sulkie, Margaret M., doing business as Gra-Storative, Niagara Falls, N. Y. Hair tonics. 299,468; Dec. 6; Serial No. 326,992; published Sept. 13, 1932. Class 6.
Sun Oil Company, Philadelphia, Pa. Lubricating oil. 299,511; Dec. 6; Serial No. 328,880; published Sept. 13, 1932. Class 15.
Sunset Line & Twine Company. (See Davis, John H., Company.)
Swift and Company, Chicago, Ill. Ice cream. 299,483; Dec. 6; Serial No. 329,204; published Sept. 27, 1932. Class 46.
Thylard Company, The, Fort Wayne, Ind. Skin ointment. 299,463; Dec. 6; Serial No. 327,924; published Sept. 13, 1932. Class 6.
Tuttle, Jason H., Brooklyn, N. Y. Indicating device for automobiles and analogous motor vehicles to indicate when the automobile has to be oiled, greased, etc. 299,544; Dec. 6. Class 26.
Union County Pickle Works. (See Marenus, Samuel.)
Van Raalte Co. Inc. (See Jordan, Kathryn S., assignor.)
Van Rooy Coffee Co., Inc., Cleveland, Ohio. Coffee. 299,473; Dec. 6; Serial No. 307,241; published Sept. 27, 1932. Class 46.
Virginia Dare Extract Company, Inc., Brooklyn, N. Y. Maltless beverages, syrups, and extracts for making the same. 299,539; Dec. 6; Serial No. 329,758; published Sept. 27, 1932. Class 45.
Walters Shoe Company. (See Fankhauser, Walter A.)
Wapler, Nicholas, Company, New York, N. Y. Feed for fish. 299,444; Dec. 6; Serial No. 329,268; published Sept. 27, 1932. Class 46.
Weber & Heilbroner. (See Fashion Park Associates, Inc.)
Webster, F. S., Company, Cambridge, Mass. Carbon paper. 299,409; Dec. 6; Serial No. 322,411; published Sept. 27, 1932. Class 11.
Westinghouse Lamp Company, Bloomfield, N. J. Vacuum or gas-filled tubes and particularly for X-ray tubes. 299,395; Dec. 6; Serial No. 324,416; published Sept. 20, 1932. Class 21.
Wienner, Jacob M., doing business as J. M. Wienner & Co., Baltimore, Md. Laxatives. 299,456; Dec. 6; Serial No. 328,342; published Sept. 27, 1932. Class 6.
Witherbee Storage Battery Co., Inc., Belleville, N. J. Storage batteries. 299,413; Dec. 6; Serial No. 329,393; published Sept. 20, 1932. Class 21.
Zeiss Ikon Aktiengesellschaft. (See Optische Anstalt C. P. Goerz Aktiengesellschaft.)

LIST OF REGISTRANTS OF LABELS

Albert Lea Bottling Works. (See Wiegand, K., & Sons.)
All-Fair, Inc., Churchville, N. Y. Pipers—3. For Games. 41,478; Dec. 6.
American Asphalt Paint Co., Chicago, Ill. High Heat Resisting Aluminum. For High Heat Resisting Aluminum Paint. 41,474; Dec. 6.
American Asphalt Paint Co., Chicago, Ill. Valdura Decorative Undercoat. For Valdura Decorative Undercoat Paint. 41,475; Dec. 6.
American Dairy Supply Co., Washington, D. C. Banquet Selected Milk Hi-Test. For Milk. 41,476; Dec. 6.
American Dairy Supply Co., Washington, D. C. Cultured Buttermilk. For Buttermilk. 41,477; Dec. 6.
American Dairy Supply Co., Washington, D. C. Grade A Whipping Cream. For Whipping Cream. 41,478; Dec. 6.
American Dairy Supply Co., Washington, D. C. Pasteurized Milk. For Milk. 41,479; Dec. 6.
American Dairy Supply Co., Washington, D. C. Whole Milk Pasteurized. For Whole Milk. 41,480; Dec. 6.
American Dairy Supply Co., Washington, D. C. Milk Pasteurized and Filtered. For Milk. 41,481; Dec. 6.
American Dairy Supply Co., Washington, D. C. Pasteurized Coffee Cream. For Cream. 41,482; Dec. 6.
American Dairy Supply Co., Washington, D. C. Pasteurized Milk Grade A A. For Milk. 41,483; Dec. 6.
American Dairy Supply Co., Washington, D. C. Pure Cream. For Cream. 41,484; Dec. 6.
American Dairy Supply Co., Washington, D. C. Raw Milk from Tested Cows. For Raw Milk. 41,485; Dec. 6.
Bloomer Bros. Company, Newark, N. Y. Design No. 309. For Ice Cream. 41,486; Dec. 6.
Buchanan, R. M., doing business as Raggedy Ann Provisioners, Evanston, Ill. Raggedy Ann Fine Foods. For Peaches. 41,487 Dec. 6.
Canteen Service Co., Portland, Oreg. My Buddy. For Tomato Juice. 41,488; Dec. 6.
Duff, P., & Sons, Inc., Pittsburgh, Pa. Duff's Spice Cake Mix. For Spice Cake Mixture. 41,489; Dec. 6.
Frontenac Breweries, Limited, Montreal, Canada. Frontenac—Special. For Lager Beer. 41,490; Dec. 6.
Greenwood Products Company, Albany, Calif. Scram Paint Cleaner. For Paint Cleaner. 41,491; Dec. 6.
Hannan, A., & Bro., Pittsburgh, Pa. Hannan's Slims. For Cigars. 41,492; Dec. 6.
Hoague-Sprague Corporation, Lynn, Mass. Modish Shoes. For Boxes. 41,493; Dec. 6.

Hoague-Sprague Corporation, Lynn, Mass. B & R. For Boxes. 41,494; Dec. 6.
Hoague-Sprague Corporation, Lynn, Mass. Good Shoes. For Boxes. 41,495; Dec. 6.
Hoague-Sprague Corporation, Lynn, Mass. Soft Shoes for Tender Feet. For Boxes. 41,496; Dec. 6.
Kewpee Dress Co. Inc., New York, N. Y. Kewpie Dress. For Dresses. 41,497; Dec. 6.
Kohler, G. A., & Co., Yoe, Pa. Garcia Superior. For Cigars. 41,498; Dec. 6.
Long, Zella, Chicago, Ill. Zella's New Thought Products. For Watermelon Rind Preserves. 41,499; Dec. 6.
Mac-Dell's, Superior, Wis. Mac-Dell's Dainty Flavored Picks. For Tooth-Picks. 41,500; Dec. 6.
Middleton & Co., Ltd., New York, N. Y. Exela. For Flour. 41,501; Dec. 6.
Paul, Peter, Inc., Naugatuck, Conn. Mounds. For Chocolate and Cocoanut Confection. 41,502; Dec. 6.
Paul, Peter, Inc., Naugatuck, Conn. Thin Mints. For Mint Flavored Confection. 41,503; Dec. 6.
Raggedy Ann Provisioners. (See Buchanan, R. M.)
Rentschler, John F., doing business as Trux-O Chemical Co., Kansas City, Mo. Trux-O Klenser. For Washing and Cleansing Compound. 41,504; Dec. 6.
Sutherland Paper Company, Kalamazoo, Mich. Creamery Butter. For Butter. 41,505; Dec. 6.
Trux-O Chemical Co. (See Rentschler, John F.)
Waggoner, Norman L., Inc., San Francisco, Calif. Sacramento. For Peaches. 41,506; Dec. 6.
Wiegand, K., & Sons, doing business as Albert Lea Bottling Works, Albert Lea, Minn. Lithiated Lemon Soda. For Lithiated Lemon Soda. 41,507; Dec. 6.

LIST OF REGISTRANTS OF PRINTS

Carroccio, T. A., & Sons, New York, N. Y. Carroccio's Spaghetti. For Spaghetti. 13,975; Dec. 6.
Cream of Wheat Corporation, The, Minneapolis, Minn. I Couldn't Confess that to our Doctor. For Wheat Breakfast Food. 13,976; Dec. 6.
Fitler, Edwin H., Co., The, Philadelphia, Pa. Fitler Sea Gold Manila Rope. For Rope. 13,977; Dec. 6.
General Mills, Inc., Minneapolis, Minn. Women! Accept Free this Set of Betty Crocker's New Bonnyware Biscuit Cutters. For Biscuit Flour. 13,978; Dec. 6.

CLASSIFIED LIST OF TRADE-MARKS REGISTERED

CLASS 1

Fuel, Solid. Burns Bros. 299,443; Dec. 6; Serial No. 329,301; published Sept. 27, 1932.

CLASS 2

Bags, Mothproof storage. Lincoln Bag Company. 299,520–1; Dec. 6; Serial Nos. 327,615–16; published Sept. 27, 1932.

CLASS 3

Cases and bags, Sample. Knickerbocker Case Company. 91,354; renewed Apr. 29, 1933.

CLASS 4

Preparation for cleaning painted or varnished surfaces, mirrors and glass, Liquid. E. L. Bates. 299,515; Dec. 6; Serial No. 323,982; published Sept. 27, 1932.
Soap, Powdered. Lockwood Brackett Co. 299,474; Dec. 6; Serial No. 305,714; published Sept. 27, 1932.

CLASS 6

Alum, antiseptic preparations, aspirin, etc. Kresge Department Store Corp. 299,466; Dec. 6; Serial No. 327,514; published Sept. 13, 1932.
Antiseptic or germicide. Stephenson Mfg. Co. 299,498; Dec. 6; Serial No. 329,160; published Sept. 27, 1932.
Astringent, skin tonic, tissue cream, etc. Harnfeld's, Inc. 299,516; Dec. 6; Serial No. 324,511; published Sept. 27, 1932.
Brilliantine, cleansing cream, lotions, etc., Liquid and solid. Carol Ruth, Inc. 299,476; Dec. 6; Serial No. 302,223; published Sept. 13, 1932.
Color remover. Davis & Scanlan Co. 299,458; Dec. 6; Serial No. 328,326; published Sept. 13, 1932.
Cosmetics. North American Dye Corporation. 299,464; Dec. 6; Serial No. 327,917; published Sept. 13, 1932.
Cosmetics used for removing cuticle, etc. Casterline Bros. 299,458; Dec. 6; Serial No. 328,767; published Sept. 13, 1932.
Cream, face powder, brilliantine, etc., Cleansing. Mark W. Allen & Co. 299,470; Dec. 6; Serial No. 312,684; published Sept. 13, 1932.
Cream for scabs, sores, pimples, etc.; herb liniment and medicinal herbs. A. Giordano. 299,451; Dec. 6; Serial No. 328,868; published Sept. 13, 1932.
Cream, rouge, face powder, etc., Cold, cleansing, vanishing. A. Gold. 299,455; Dec. 6; Serial No. 328,422; published Sept. 20, 1932.
Insecticides, capsules, salve, etc. P. Maer. 299,461; Dec. 6; Serial No. 328,246; published Sept. 13, 1932.
Laxative. S. Silverberg. 299,454; Dec. 6; Serial No. 328,559; published Sept. 20, 1932.
Laxative, Antacid, diuretic and alkaline. M. E. Robins. 299,467; Dec. 6; Serial No. 327,234; published Sept. 13, 1932.
Laxatives. J. M. Wienner. 299,456; Dec. 6; Serial No. 328,342; published Sept. 27, 1932.
Liquid preparation for exterminating insects. S. Joyia. 299,552; Dec. 6.
Liquid substance for dyeing. Lonji Company. 299,457; Dec. 6; Serial No. 328,334; published Sept. 20, 1932.
Medicated oil. Heckel Bros. 299,514; Dec. 6; Serial No. 321,536; published Sept. 20, 1932.
Medicinal preparation. F. A. Scannell & Company. 299,499; Dec. 6; Serial No. 329,459; published Sept. 27, 1932.
Medicinal product for treatment of anemia. Pitman-Moore Company. 299,449; Dec. 6; Serial No. 329,026; published Sept. 13, 1932.
Nasal oil. A. A. Sinsiko. 299,448; Dec. 6; Serial No. 329,035; published Sept. 13, 1932.
Ointment. San Dee Company. 299,462; Dec. 6; Serial No. 328,076; published Sept. 20, 1932.
Ointment, Skin. Thylard Company. 299,463; Dec. 6; Serial No. 327,924; published Sept. 13, 1932.
Powder, rouge and compacts, etc., Face. A. Breslauer, Inc. 299,517; Dec. 6; Serial No. 324,773; published Sept. 13, 1932.
Preparations for the treatment of coughs or hoarseness. J. J. Greenwald. 299,450; Dec. 6; Serial No. 328,889; published Sept. 13, 1932.
Shampoo. American Advertised Products, Incorporated. 299,447; Dec. 6; Serial No. 329,127; published Sept. 13, 1932.
Skin lotion. B. Cervelli. 299,459; Dec. 6; Serial No. 329,278; published Sept. 20, 1932.
Skin lotion, cold cream, zinc oxide, etc. Premier Mill Corporation. 299,465; Dec. 6; Serial No. 327,805; published Sept. 13, 1932.
Spray or inhalant. Stephenson Mfg. Co. 299,497; Dec. 6; Serial No. 329,159; published Sept. 13, 1932.
Tonic. L. Pagliaro. 299,452; Dec. 6; Serial No. 328,819; published Sept. 20, 1932.
Tonic. Société des Usines Chimiques Rhone-Poulenc. 299,430; Dec. 6; Serial No. 326,397; published Sept. 27, 1932.
Tonics, Hair. M. M. Sulkie. 299,468; Dec. 6; Serial No. 326,992; published Sept. 13, 1932.

CLASS 7

Rope, Manila, sisal, hemp, etc. American Manufacturing Company. 299,529–30; Dec. 6; Serial Nos. 329,171–2; published Sept. 27, 1932.

CLASS 8

Cigarette cases. Davis Presto-Pak Company. 299,587; Dec. 6; Serial No. 326,935; published Sept. 27, 1932.

CLASS 10

Fertilizers. Chase & Co. 299,435; Dec. 6; Serial No. 329,133; published Sept. 27, 1932.

CLASS 11

Carbon paper. H. M. Storms Company. 299,442; Dec. 6; Serial No. 328,406; published Sept. 27, 1932.
Carbon paper. F. S. Webster Company. 299,409; Dec. 6; Serial No. 322,411; published Sept. 27, 1932.
Ink, rubber stamp ink, and inking pads, Hectograph. Classroom Teacher, Inc. 299,439; Dec. 6; Serial No. 329,442; published Sept. 27, 1932.

CLASS 12

Plaster board and plaster wall board. Plastoid Products Inc. 299,533; Dec. 6; Serial No. 233,024; published July 20, 1926.

CLASS 13

Valve cap, Air inflation. E. B. Moore. 299,558; Dec. 6.

CLASS 15

Gasoline. El Dorado Refining Company. 299,513; Dec. 6; Serial No. 329,225; published Sept. 20, 1932.
Gasoline, furnace oils, fuel oils. Col-Tex Refining Company. 299,509; Dec. 6; Serial No. 328,721; published Sept. 13, 1932.

Gasoline, motor lubricating oils, etc. Nagy Bros. Motor Company. 299,412; Dec. 6; Serial No. 329,263; published Sept. 20, 1932.
Grease, Lubricating, Economy Lubricating Co. 88,561; renewed Oct. 1, 1932.
Greases, Lubricating. Allied Grease & Oil Co. 299,477; Dec. 6; Serial No. 317,447; published Sept. 13, 1932.
Oil, Lubricating. Continental Oil Company. 299,471; Dec. 6; Serial No. 310,119; published Mar. 10, 1931.
Oil, Lubricating. Sun Oil Company. 299,511; Dec. 6; Serial No. 328,880; published Sept. 13, 1932.
Oil, Mineral. Standard Oil Company of New Jersey. 299,508; Dec. 6; Serial No. 328,873; published Sept. 20, 1932.
Oils and greases. Phillips Petroleum Company. 299,505–6; Dec. 6; Serial Nos. 328,505–6; published Sept. 20, 1932.
Oils and greases, Lubricating. American Stationery Mfg. Co. 299,503; Dec. 6; Serial No. 325,864; published Aug. 23, 1932.
Oils, greases, and gasoline, Lubricating. Ballard Oil Company of Worcester, Inc. 299,411; Dec. 6; Serial No. 329,251; published Sept. 20, 1932.
Oils, Lubricating. Johnson Oil Refining Company. 299,510; Dec. 6; Serial No. 328,769; published Sept. 20, 1932.
Petroleum products. Richfield Oil Corporation of New York. 299,391; Dec. 6; Serial No. 321,821; published Sept. 20, 1932.

CLASS 16

Paint. Keystone Varnish Company. 90,345; renewed Feb. 18, 1933.
Paint, Enamel. Keystone Varnish Company. 90,346; renewed Feb. 18, 1933.

CLASS 17

Cigars. G. F. Riegel. 299,436; Dec. 6; Serial No. 329,586; published Sept. 27, 1932.
Tobacco. Barlow-Moore Tobacco Company. 299,440; Dec. 6; Serial No. 329,439; published Sept. 27, 1932.
Tobacco, Leaf. T. D. Luckett. 40,211; renewed Apr. 28, 1933.

CLASS 19

Airplanes and airplane structural parts. Bellanca Aircraft Corporation. 299,475; Dec. 6; Serial No. 302,280; published Mar. 24, 1931.
Automobiles, Gasoline passenger. Hudson Motor Car Company. 299,512; Dec. 6; Serial No. 329,190; published Sept. 13, 1932.
Wheel spoke shrouds. Budd Wheel Company. 299,492; Dec. 6; Serial No. 320,777; published Sept. 13, 1932.

CLASS 21

Batteries, Storage. Witherbee Storage Battery Co. 299,413; Dec. 6; Serial No. 329,393; published Sept. 20, 1932.
Dry cells. National Carbon Company. 91,118; renewed Apr. 15, 1933.
Electric lighting. Lite-Watchman Corporation. 299,469; Dec. 6; Serial No. 312,729; published Sept. 13, 1932.
Electrical space discharge tubes. Raytheon Production Corporation. 299,507; Dec. 6; Serial No. 328,618; published Sept. 13, 1932.
Insulated wires and cables. Okonite Company. 299,502; Dec. 6; Serial No. 325,721; published Sept. 20, 1932.
Spark plugs. Defiance Spark Plugs, Incorporated. 299,541; Dec. 6.
Vacuum or gas-filled tubes. Westinghouse Lamp Company. 299,395; Dec. 6; Serial No. 324,416; published Sept. 20, 1932.

CLASS 22

Amusement device. J. F. Meyer. 299,531; Dec. 6; Serial No. 329,381; published Sept. 27, 1932.
Dolls. Ideal Novelty & Toy Co. 299,540; Dec. 6; Serial No. 329,715; published Sept. 27, 1932.
Fishing lines. John H. Davis Company. 299,522; Dec. 6; Serial No. 327,935; published Sept. 27, 1932.
Game played with pieces, Coin controlled table board. D. Gottlieb. 299,493; Dec. 6; Serial No. 320,824; published Feb. 23, 1932.
Puzzles, Picture. V. Moran. 299,527; Dec. 6; Serial No. 329,644; published Sept. 27, 1932.

CLASS 23

Generators for vaporising solid carbon dioxide. CO_2 Appliance Company. 299,401; Dec. 6; Serial No. 327,680; published Sept. 27, 1932.
Governors. Klemm Automotive Products Company. 299,542; Dec. 6.
Ice chipping machines. Clawson Machine Co. 299,438; Dec. 6; Serial No. 329,466; published Sept. 27, 1932.

CLASS 26

Indicating device for automobiles and analogous motor vehicles to indicate when the automobile has to be oiled, greased, etc. J. H. Tuttle. 299,544; Dec. 6.
Ophthalmic lenses. Bausch & Lomb Optical Company. 299,433; Dec. 6; Serial No. 329,518; published Sept. 27, 1932.
Scientific appliances. Optische Anstalt C. P. Goerz Aktiengesellschaft. 88,988; renewed Oct. 29, 1932.

CLASS 28

Flat-ware and hollow-ware. International Silver Company. 299,410; Dec. 6; Serial No. 329,235; published Sept. 20, 1932.
Silver articles. Concord Silversmiths, Inc. 299,390; Dec. 6; Serial No. 321,459; published Sept. 13, 1932.

CLASS 31

Filtering media. Anthracite Equipment Corporation. 299,526; Dec. 6; Serial No. 328,981; published Sept. 27, 1932.
Refrigerating units, cooling units, etc. M. R. Karge. 299,551; Dec. 6.

CLASS 35

Packing for glands, stuffing boxes, valve stems, etc., Flax. Johns-Manville Corporation. 299,524; Dec. 6; Serial No. 328,641; published Sept. 27, 1932.
Tires and tubes. General Tire & Rubber Company. 299,525; Dec. 6; Serial No. 326,818; published Sept. 20, 1932.

CLASS 36

Sound recording apparatus. RCA Victor Company. 299,504; Dec. 6; Serial No. 326,617; published Sept. 13, 1932.

CLASS 37

Papers, Tissue, creped, and absorbent. Scott Paper Company. 299,557; Dec. 6.
Periodical. Clayton Magazines, Inc. 299,478; Dec. 6; Serial No. 317,161; published Aug. 9, 1932.

CLASS 39

Apparel, Wearing. Rice-Stix Dry Goods Co. 299,536; Dec. 6; Serial No. 327,166; published Sept. 20, 1932.
Apparel, Wearing. W. H. Roland. 299,404; Dec. 6; Serial No. 327,452; published Sept. 27, 1932.
Bandettes, brassières, corselettes, etc. D. Bickum. 299,429; Dec. 6; Serial No. 328,974; published Sept. 6, 1932.
Boots and shoes. Freeman Shoe Corporation. 299,416; Dec. 6; Serial No. 326,285; published Sept. 13, 1932.
Caps and fur felt hats. Malrov Hat and Cap Co. 299,422; Dec. 6; Serial No. 328,796; published Sept. 20, 1932.
Caps and hats, overcoats, trousers, etc. Hat Corporation of America. 299,547; Dec. 6.
Clothing. Russeks Fifth Avenue, Inc. 299,545; Dec. 6.
Clothing. Societe Anonyme Des Etablissements André Gillier. 299,392; Dec. 6; Serial No. 323,548; published Aug. 16, 1932.
Clothing, Children's. Pennway Manufacturing Company. 299,400; Dec. 6; Serial No. 328,996; published Sept. 20, 1932.
Coats, suits, hats, caps, etc. J. N. Adam & Co. 299,494; Dec. 6; Serial No. 319,601; published Mar 1, 1932.
Dresses, coats, and suits. S. Altman. 299,397; Dec. 6; Serial No. 322,280; published Feb. 23, 1932.
Footwear. Firestone Footwear Company. 299,423; Dec. 6; Serial No. 328,784; published Sept. 13, 1932.
Footwear. B. F. Goodrich Company. 299,414; Dec. 6; Serial No. 326,100; published Sept. 13, 1932.
Footwear. Hood Rubber Company. 299,415; Dec. 6; Serial No. 326,103; published Sept. 13, 1932.
Garters. Ivory Clasp & Garter Co. 87,542; renewed July 23, 1932.
Girdles, brassières, and combinations of girdles and brassières. Kops Brothers, Inc. 299,496; Dec. 6; Serial No. 317,810; published Sept. 13, 1932.
Gowns, scarfs, gloves, etc. Société à Responsabilité Limitée Maimbocher. 299,555; Dec. 6.
Hats. Brighton Ladies Hat Co. Inc. 299,425; Dec. 6; Serial No. 328,911; published Sept. 13, 1932.
Hats. R. H. Macy & Co. 299,427; Dec. 6; Serial No. 328,991; published Sept. 6, 1932.
Hats. Société à Responsabilité Limitée le Monnier. 299,550; Dec. 6.
Hats. Softknit Hat Co. 299,418; Dec. 6; Serial No. 328,229; published Sept. 13, 1932.
Hats, caps, dresses, and coats. Hat Corporation of America. 299,549; Dec. 6.
Hats, caps, gloves, suits, etc. Hat Corporation of America. 299,548; Dec. 6.
Hats, Ladies'. S. Goldbaum. 299,394; Dec. 6; Serial No. 323,993; published Mar. 29, 1932.
Headgear in the nature of a cap-veil. K. S. Jordan. 299,421; Dec. 6; Serial No. 328,669; published Sept. 20, 1932.
Hosiery. Holeproof Hosiery Co. 299,399; Dec. 6; Serial No. 328,812; published Sept. 20, 1932.
Hosiery. Morgan Hosiery Mills. 299,406; Dec. 6; Serial No. 323,902; published Mar. 15, 1932.
Patches, Leather. Silverite-Gutterman Co. 299,402; Dec. 6; Serial No. 328,648; published Sept. 20, 1932.
Playsuits and snow suits, Children's. Northbilt Manufacturing Co. 299,432; Dec. 6; Serial No. 329,561; published Sept. 27, 1932.
Sandals. Golo Slipper Company. 299,393; Dec. 6; Serial No. 328,745; published May 31, 1932.

Scarfs. Glenader Textile Co. 299,408; Dec. 6; Serial No. 322,957; published Apr. 5, 1932.
Shoes. M. N. Arnold Shoe Company. 299,391; Dec. 6; Serial No. 324,691; published Sept. 20, 1932.
Shoes. W. A. Fankhauser. 329,428; Dec. 6; Serial No. 328,982; published Sept. 20, 1932.
Shoes. M. J. Markell. 299,424; Dec. 6; Serial No. 328,797; published Sept. 13, 1932.
Sweaters. Simon Ascher & Co. 299,441; Dec. 6; Serial No. 329,438; published Sept. 27, 1932.
Sweaters and sweater coats. Jos. B. Haber, Inc. 299,434; Dec. 6; Serial No. 329,505; published Sept. 20, 1932.
Sweaters, hats, caps, etc. Fashion Park Associates, Inc. 299,543; Dec. 6.
Sweaters, hats, caps, neckties, etc. Fashion Park Associates, Inc. 299,419; Dec. 6; Serial No. 328,394; published Aug. 23, 1932.
Underwear. Julius Kayser & Co. 299,554; Dec. 6.

CLASS 40

Buckles. Pioneer Suspender Company. 299,417; Dec. 6; Serial No. 328,015; published Sept. 6, 1932.
Embroidered emblems. Gemsco, Inc. 299,426; Dec. 6; Serial No. 328,954; published Sept. 6, 1932.

CLASS 42

Blankets. Esmond Mills. 90,823; renewed Mar. 25, 1933.
Cotton piece goods. Matthew W. Ryan Sons & Co. Inc. 299,546; Dec. 6.
Pile fabrics. Sidney Blumenthal & Co. Inc. 299,420; Dec. 6; Serial No. 328,519; published Aug. 23, 1932.

CLASS 43

Thread. Lily Mill and Power Company. 299,445; Dec. 6; Serial No. 329,021; published Sept. 20, 1932.

CLASS 44

Absorbent cotton and gauze and sanitary napkins. San-Nap-Pak Mfg. Co. 299,559; Dec. 6.
Catamenial belts. M. H. Duemmer. 299,446; Dec. 6; Serial No. 329,552; published Sept. 27, 1932.
Prophylactic rubber articles. Certex Corporation. 299,460; Dec. 6; Serial No. 329,250; published Sept. 27, 1932.
Prophylactic rubber articles. Killian Manufacturing Co. 299,500–01; Dec. 6; Serial Nos. 329,531–2; published Sept. 27, 1932.
Prophylactic rubber articles. Latex Laboratories. 299,431; Dec. 6; Serial No. 325,175; published Sept. 27, 1932.
Syringe. Seamless Rubber Company. 299,553; Dec. 6.

CLASS 45

Beverage, extracts and concentrates therefor, Maltless herb. Gordon Distributing Co. Inc. 299,556; Dec. 6.
Beverages, syrups, and extracts, Maltless. Virginia Dare Extract Company. 299,539; Dec. 6; Serial No. 329,758; published Sept. 27, 1932.
Beverages, syrups, extracts, and concentrates, Maltless. Oxo, Limited. 299,535; Dec. 6; Serial No. 329,455; published Sept. 27, 1932.
Ginger ale. Bloomingdale Bros., Inc. 299,528; Dec. 6; Serial No. 329,762; published Sept. 27, 1932.
Water, maltless beverages and extracts, Mineral and carbonated. N. H. Darsky. 299,523; Dec. 6; Serial No. 328,263; published Sept. 27, 1932.

CLASS 46

Bread. Safeway Stores, Incorporated. 299,487; Dec. 6; Serial No. 328,894; published Sept. 27, 1932.
Candy. Bradley, Smith Co. 299,484; Dec. 6; Serial No. 328,909; published Sept. 27, 1932.
Canned tomato juice. Campbell Soup Company. 299,495; Dec. 6; Serial No. 318,437; published Sept. 27, 1932.
Canned vegetables, canned fruits, canned berries, etc. Snider Packing Corporation. 299,490; Dec. 6; Serial No. 326,344; published Sept. 27, 1932.
Coffee. King, Dobbs & Company. 299,486; Dec. 6; Serial No. 328,957; published Sept. 27, 1932.
Coffee. John Morrell & Co. 299,491; Dec. 6; Serial No. 328,276; published Sept. 27, 1932.
Coffee. Van Rooy Coffee Co. 299,473; Dec. 6; Serial No. 307,341; published Sept. 27, 1932.
Coffee, cocoa, and flavoring extracts; Tea, blended. Clark & Host Company. 91,171; renewed Apr. 22, 1933.
Confections, Frozen. Frozen Confections, Inc. 299,479; Dec. 6; Serial No. 329,016; published Sept. 27, 1932.
Feed for fish. Nicholas Wapler Company. 299,444; Dec. 6; Serial No. 329,268; published Sept. 27, 1932.
Fish, Preserved. R. Gonzalez. 299,482; Dec. 6; Serial No. 329,233; published Sept. 27, 1932.
Flour, Wheat. Centennial Mill Co. 88,397; renewed Sept. 17, 1932.
Flour, Wheat. Fisher Flouring Mills Company. 90,185; renewed Feb. 11, 1933.
Food oils. Calavo Growers of California. 299,481; Dec. 6; Serial No. 329,253; published Sept. 27, 1932.
Food products. Joe Lowe Corporation. 299,518; Dec. 6; Serial No. 293,587; published June 14, 1932.
Herring, Smoked. T. S. Gorton, jr. 299,405; Dec. 6; Serial No. 324,377; published Sept. 27, 1932.
Ice cream. Swift and Company. 299,483; Dec. 6; Serial No. 329,204; published Sept. 27, 1932.
Macaroni. Pfaffman Egg Noodle Company. 299,407; Dec. 6; Serial No. 323,306; published Sept. 27, 1932.
Macaroni. Vito Costa & Sons. 299,538; Dec. 6; Serial No. 325,321; published May 17, 1932.
Nuts, peanut butter, vinegar, etc. Newton Products Company. 299,519; Dec. 6; Serial No. 301,054; published July 28, 1931.
Oats and macaroni, Rolled. Holmstrom-Pilcher Co. 299,485; Dec. 6; Serial No. 329,048; published Sept. 27, 1932.
Olive oil. Magnus, Mabee & Raynard, Inc. 299,398; Dec. 6; Serial No. 322,053; published Mar. 1, 1932.
Pickles, chow chow, pickled relishes, etc., Preserved. S. Marenus. 299,472; Dec. 6; Serial No. 307,501; published Sept. 27, 1932.
Pickles, Vegetable. Mrs. E. G. Kidd, Incorporated. 299,489; Dec. 6; Serial No. 328,400; published Sept. 27, 1932.
Sauce and pickles. Midland Vinegar Company Limited. 91,004; renewed Apr. 8, 1933.
Sugar, Granulated. Isabella Sugar Company. 299,488; Dec. 6; Serial No. 328,716; published Sept. 27, 1932.
Wafers, Whole wheat. T. C. Cosgrove. 299,480; Dec. 6; Serial No. 329,257; published Sept. 27, 1932.

CLASS 49

Whisky and gin, Scotch. S. Campbell & Son Limited. 299,534; Dec. 6; Serial No. 329,622; published Sept. 27, 1932.
Whisky, Scotch. John Dewar & Sons Limited. 299,532; Dec. 6; Serial No. 329,628; published Sept. 27, 1932.

CLASS 50

Carpet and rug cushions. Densten Felt & Hair Company. 299,403; Dec. 6; Serial No. 328,057; published Sept. 27, 1932.
Curtains for refrigerating cars, etc., Canvas dividing and doorway. H. B. Meinhardt. 299,437; Dec. 6; Serial No. 329,558; published Sept. 27, 1932.

LIST OF LABELS

B & R. For Boxes. Hoague-Sprague Corporation. 41,494; Dec. 6.
Banquet Selected Milk Hi-Test. For Milk. American Dairy Supply Co. 41,476; Dec. 6.
Creamery Butter. For Butter. Sutherland Paper Company. 41,505; Dec. 6.
Cultured Buttermilk. For Buttermilk. American Dairy Supply Co. 41,477; Dec. 6.
Design No. 509. For Ice Cream. Bloomer Bros. Company. 41,486; Dec. 6.
Duff's Spice Cake Mix. For Spice Cake Mixture. P. Duff & Sons, Inc. 41,489; Dec. 6.
Exela. For Flour. Middleton & Co. 41,501; Dec. 6.
Frontenac-Special. For Lager Beer. Frontenac Breweries, Limited. 41,490; Dec. 6.
Garcia Superior. For Cigars. G. A. Kohler & Co. 41,498; Dec. 6.
Good Shoes. For Boxes. Hoague-Sprague Corporation. 41,495; Dec. 6.
Grade A Whipping Cream. For Whipping Cream. American Dairy Supply Co. 41,478; Dec. 6.
Hannan's Slims. For Cigars. A. Hannan & Bro. 41,492; Dec. 6.
High Heat Resisting Aluminum. For High Heat Resisting Aluminum Paint. American Asphalt Paint Co. 41,474; Dec. 6.
Kewpie Dress. For Dresses. Kewpee Dress Co. Inc. 41,497; Dec. 6.
Lithiated Lemon Soda. For Lithiated Lemon Soda. K. Wiegand & Sons. 41,507; Dec. 6.
Mac-Dell's Dainty Flavored Picks. For Tooth-Picks. Mac-Dell's. 41,500; Dec. 6.
Milk Pasteurized & Filtered. For Milk. American Dairy Supply Co. 41,481; Dec. 6.
Modish Shoes. For Boxes. Hoague-Sprague Corporation. 41,493; Dec. 6.
Mounds. For Chocolate and Cocoanut Confection. Peter Paul, Inc. 41,502; Dec. 6.
My Buddy. For Tomato Juice. Canteen Service Co. 41,488; Dec. 6.
Pasteurized Coffee Cream. For Cream. American Dairy Supply Co. 41,482; Dec. 6.
Pasteurized Milk. For Milk. American Dairy Supply Co. 41,479; Dec. 6.
Pasteurized Milk Grade A A. For Milk. American Dairy Supply Co. 41,483; Dec. 6.
Pipers—3. For Games. All-Fair, Inc. 41,473; Dec. 6.

Pure Cream. For Cream. American Dairy Supply Co. 41,484; Dec. 6.
Raggedy Ann Fine Foods. For Peaches. R. M. Buchanan. 41,487; Dec. 6.
Raw Milk from Tested Cows. For Raw Milk. American Dairy Supply Co. 41,485; Dec. 6.
Sacramento. For Peaches. Norman L. Waggoner, Inc. 41,506; Dec. 6.
Scram Paint Cleaner. For Paint Cleaner. Greenwood Products Company. 41,491; Dec. 6.
Soft Shoes for Tender Feet. For Boxes. Hoague-Sprague Corporation. 41,496; Dec. 6.
Thin Mints. For Mint Flavored Confection. Peter Paul, Inc. 41,503; Dec. 6.
Trux-O Klenser. For Washing and Cleaning Compound. J. F. Rentschler. 41,504; Dec. 6.
Valdura Decorative Undercoat. For Valdura Decorative Undercoat Paint. American Asphalt Paint Co. 41,475; Dec. 6.
Whole Milk Pasteurized. For Whole Milk. American Dairy Supply Co. 41,480; Dec. 6.
Zella's New Thought Products. For Watermelon Rind Preserves. Z. Long. 41,499; Dec. 6.

LIST OF PRINTS

Carroccio's Spaghetti. For Spaghetti. T. R. Carroccio & Sons. 13,975; Dec. 6.
Fitler Sea Gold Manila Rope. For Rope. Edwin H. Fitler Co. 13,977; Dec. 6.
I Couldn't Confess That To Our Doctor. For Wheat Breakfast Food. Cream of Wheat Corporation. 13,976; Dec. 6.
Women! Accept Free This Set of Betty Crocker's New Bonnyware Biscuit Cutters. For Biscuit Flour. General Mills, Inc. 13,978; Dec. 6.

LIST OF PATENTEES

TO WHOM

PATENTS WERE ISSUED ON THE 6TH DAY OF DECEMBER, 1932

NOTE.—Arranged in accordance with the first significant character or word of the name (in accordance with city and telephone directory practice). Includes patents, reissues, and designs.

Abbotts Dairies, Inc. (See Policastro, C. M., and Morrison, assignors.)

Ackerman, Jay, New York, N. Y., assignor to The Chase Companies, Incorporated, Waterbury, Conn. Combined tray and receptacles for smokers. Des. 88,493; Dec. 6.

Adell, John A., Orange, Mass. Jack. 1,889,941; Dec. 6.

Ahlburg, Frank, assignor to Electric Fruit Marking Co., Los Angeles, Calif. Fruit marker. 1,889,967; Dec. 6.

Aktiengesellschaft Brown Boveri et Cie. (See Widmer, S., and Hürlimann, assignors.)

Aldrich, Loyd I., assignor to Preferred Oil Burners, Inc., Peoria, Ill. Spark ignition mechanism for domestic oil burners. 1,889,968; Dec. 6.

Alfaro, Heraclio, East Cleveland, Ohio. Airplane. 1,890,012; Dec. 6.

Altieri, Alexander, Philadelphia, Pa. Safety device for airplanes. 1,889,766; Dec. 6.

Altieri, Alexander, Philadelphia, Pa. Propeller. 1,889,767; Dec. 6.

Aluminum Company of America. (See Churchill, Harry V., assignor.)

American Bosch Magneto Corporation. (See Schwarsman, Wolfgang E., assignor.)

American Crayon Company, The. (See Cooney, F. B., and Spore, assignors.)

American Cyanamid Company. (See Barsky, George, assignor.)

American Cyanamid Company. (See Barsky, G., and Heuser, assignors.)

American Cyanamid Company. (See Clark, Cyril B., assignor.)

American Cyanamid Company. (See Cooper, Kenneth F., assignor.)

American Cyanamid Company. (See Cox, George E., assignor.)

American Cyanamid Company. (See Falter, Philip H., assignor.)

American Cyanamid Company. (See Heuser, Ralph V., assignor.)

American Engineering Company. (See Bennett, Joseph S., assignor.)

American Gypsum Co., The. (See Taylor, Roy J., assignor.)

American Laundry Machinery Company, The. (See Singiser, John P., assignor.)

American Lurgi Corporation. (See Baron von Girsewald, C., Weidmann, and Roesner, assignors.)

American Machine & Foundry Company. (See Diedericha, Paul O., assignor.)

American Telephone and Telegraph Company. (See Chapman, A. G., and McCurdy, assignors.)

American Telephone and Telegraph Company. (See Edwards, Paul G., assignor.)

Amity Leather Products Co. (See Wege, John P., assignor.)

Anderson-Barngrover Mfg. Co. (See Thompson, Albert R., assignor.)

Anderson, George, Battle Creek, Mich. Magazine rack. Des. 88,494; Dec. 6.

Anderson, William E., Tillamook, Oreg. Swing for children. 1,890,353; Dec. 6.

Andresen, George, assignor to W. B. Parkyn, Chicago, Ill. Refrigerating apparatus. 1,890,205; Dec. 6.

Andreskovich, George A. (See Cicconi, Giulio, assignor.)

Andrews, Leonard, Holborn, London, England. Classification of materials by elutriation. 1,890,206; Dec. 6.

Andrie, Michael B., assignor to W. B. Jarvis Company, Grand Rapids, Mich. Closure for radiator necks and the like. 1,889,848; Dec. 6.

Apple Electrical Manufacturing Company. (See Kessler, John J., assignor.)

Arcade Manufacturing Company. (See Tscherning, Henry, assignor.)

Arizona Grocery Company. (See Hamm, R. H., and Champion, assignors.)

Armacost, Wilbur H., assignor to The Superheater Company, New York, N. Y. Desuperheater. 1,889,739; Dec. 6.

Armacost, Wilbur H., and D. W. Rudorff, assignors to The Superheater Company, New York, N. Y. High-capacity boiler. 1,889,740; Dec. 6.

Armour, Earl, Richmond, and J. Kremer, St. Louis County, Mo. Airplane. 1,890,354; Dec. 6.

Aronson, Louis V., Newark, N. J., assignor to Art Metal Works, Inc. Cigar lighter. 1,889,849; Dec. 6.

Arrow-Hart & Hegeman Electric Company, The. (See Garrett, John D., assignor.)

Art Metal Works, Inc. (See Aronson, Louis V., assignor.)

Ascher, Simon, & Co. (See Grumbach, Harry, assignor.)

Aschkenas, David. (See Rudolph, J., Rosensweig, and Aschkenas.)

Associated Electric Laboratories, Inc. (See Gardner, John E., assignor.)

Associated Electric Laboratories, Inc. (See Ostline, John E., assignor.)

Associated Electric Laboratories, Inc. (See Wicks, John, assignor.)

Associated Merchandising Corporation. (See Milgrim, Sally, assignor.)

Associated Parts, Inc. (See Hadley, Harold F., assignor.)

Atlas Valve Company. (See Davis, Verner F., assignor.)

Atwater Kent Manufacturing Company. (See MacNabb, Vernon C., assignor.)

Auburn, Hubert, Mount Healthy, Ohio. Book or binder. 1,890,139; Dec. 6.

Audiffren, Marcel, Cannes, and A. Singrün, Epinal, France. Rotary refrigerating machine. 1,889,817; Dec. 6.

Automatic Brake Corporation. (See Libbey, Frederick I., assignor.)

Babcock & Wilcox Company, The. (See Black, John E., assignor.)

Babcock & Wilcox Company, The. (See Lucke, Charles E., assignor.)

Badger, Arthur C., Newton, Mass. Fire extinguisher. 1,890,140; Dec. 6.

Bailey, Henry O., Baltimore, Md. Hedge shears. 1,890,355; Dec. 6.

Baehr, Hans, Ludwigshafen-on-the-Rhine, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Purification of sulphur bearing gases and recovery of sulphates and sulphur. 1,889,942; Dec. 6.

Baker, Herbert K., Detroit, Mich. Manufacture of expanded metal. 1,890,178; Dec. 6.

Baker, Herbert K., Detroit, Mich. Apparatus for the manufacture of expanded metal. 1,890,276; Dec. 6.

Baker, Herbert K., Detroit, Mich., assignor to Penn Metal Company, Parkersburg, W. Va. Expanded metal lathing. 1,890,141; Dec. 6.

Baker, Herbert K., Detroit, Mich., assignor to Penn Metal Company, Parkersburg, W. Va. Apparatus for slitting and forming metal sheets. 1,889,969; Dec. 6.

Baker Oil Tools, Inc. (See Baker, Reuben C., assignor.)

Baker, Reuben C., Coalinga, assignor to Baker Oil Tools, Inc., Huntington Park, Calif. Pitman bearing. 1,890,207; Dec. 6.

Baker, Reuben C., Coalinga, assignor to Baker Oil Tools, Inc., Huntington Park, Calif. Walking beam swivel. 1,890,208; Dec. 6.

Baldwin, George E., Lima, Ohio, assignor to J. Robinson, New York, N. Y. Automatic train pipe coupling. 1,890,356; Dec. 6.

Bales, James E., assignor to Lyon Metal Products, Incorporated, Aurora, Ill. Desk tray. 1,890,143; Dec. 6.

Ballantine, Stuart, White Haven, Pa., assignor, by mesne assignments, to Radio Corporation of America, New York, N. Y. Reducing retroactive currents in audion amplifiers. 1,889,741; Dec. 6.

Bancroft, Albert F., West Newton, assignor to Bancroft-Walker Company, Boston, Mass. Footwear. 1,890,209; Dec. 6.

Bancroft-Walker Company. (See Bancroft, Albert F., assignor.)

Barber, James G., Mill Hill, London, England. Valve or cock. 1,890,357; Dec. 6.

Barcalo, Edward J., Buffalo, N. Y. Pillow or cushion. 1,890,358; Dec. 6.

Barceló, Andrés P., Santiago, Cuba. Egg opener. 1,889,912; Dec. 6.

Barclay, Robert H., New York, N. Y. Message holder for telephones. 1,889,742; Dec. 6.

Barkelew, James T., Pasadena, Calif., assignor to Paramount Publix Corporation, New York, N. Y. Film developing system. 1,890,026; Dec. 6.

Baron von Girsewald, Conway. (See von Girsewald, C., Wiedmann, Roesner.)

Barrett Company, The. (See Miller, Stuart P., assignor.)

Barrett Company, The. (See Weiss, John M., assignor.)

Barrett, Lawrence A., and J. P. Ferris, Milwaukee; said Ferris assignor to The Oilgear Company, Milwaukee, Wis. Pump rig. 1,890,244; Dec. 6.

Barsky, George, assignor to American Cyanamid Company, New York, N. Y. Making urea. 1,889,944; Dec. 6.

Barsky, George, New York, N. Y., and R. V. Heuser, Cranford, N. J., assignors to American Cyanamid Company, New York, N. Y. Making dithiophosphates. 1,889,943; Dec. 6.

Bartel, Rudolph F., New York, N. Y. Lacing tab. 1,889,850; Dec. 6.

Bassett, Harry P., Cynthiana, Ky. Recovery of tin. 1,890,359; Dec. 6.

Battin, Cora B., New York, N. Y. assignor to G. F. Braithwaite, Woodridge, N. J. Garment supporter. 1,889,768; Dec. 6.

Bauer, Walter, assignor to Rohm & Haas Aktiengesellschaft, Darmstadt, Germany. Producing acrylic acid esters. 1,890,277; Dec. 6.

Bauermeister, Wilhelm, Brunswick, Germany. Rotary shutter for Röntgen apparatus. 1,890,360; Dec. 6.

Baum, Leo, Estate, The. (See Kessler, Frank, assignor.)

Bausch & Lomb Optical Company. (See Bausch, W., and Powell, assignors.)

Bausch & Lomb Optical Company. (See Sabel, John C., assignor.)

Bausch, William, and J. R. Powell, assignors to Bausch & Lomb Optical Company, Rochester, N. Y. Apparatus for fusing multifocal lenses. 1,889,769; Dec. 6.

Beattie, James, Sydney, New South Wales, Australia. Two-way elevating truck. 1,890,361; Dec. 6.

Bedford Armstrong Corporation. (See Zachert, Arthur R., assignor.)

Bedur, George K., Akron, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y. Flexible coupling. 1,890,278; Dec. 6.

Beech-Nut Packing Company. (See McBean, Douglas M., assignor.)

Beidler, George C., Rochester, N. Y. Photographic developing apparatus. 1,889,818; Dec. 6.

Bellow, Edward A., St. Leonards-on-Sea, England. Golf and like bag. 1,890,362; Dec. 6.

Belmont Casket Manufacturing Company, The. (See Neff, Harry A., assignor.)

Beloit Iron Works. (See Berry, Earl E., assignor.)

Bemberg, Otto E., Paris, France. Automatic aerodynamic stabilizer for airplanes. 1,890,363; Dec. 6.

Bendix-Cowdrey Brake Tester, Inc. (See Graham, L. L., and Flood, assignors.)

Bendixen, Niels, assignor to J. C. Vredenburg, London, England. Apparatus for emulsification of immiscible ingredients. 1,890,106; Dec. 6.

Bennett, Joseph S., assignor to American Engineering Company, Philadelphia, Pa. Air-cooled furnace wall. 1,890,364; Dec. 6.

Bennis, Alfred W., Bolton, England. Furnace grate. 1,890,210; Dec. 6.

Bennis, Alfred W., Bolton, England. Furnace grate. 1,890,211; Dec. 6.

Benson, Lee H., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Cooled electron discharge device. 1,890,310; Dec. 6.

Berno, Karl E., Detroit, Mich. Clock frame. Des. 88,496; Dec. 6.

Berry, Earl E., assignor to Beloit Iron Works, Beloit, Wis. Delivering stock for web forming. 1,889,819; Dec. 6.

Berry, Harold O. (See White, F. E., Berry, and Bradbury.)

Berry, Harold O., Gardner, Mass., and W. T. Bradbury, Kankakee, Ill., assignors to Florence Stove Company, Gardner, Mass. Valve stand for liquid fuel burners. Des. 88,495; Dec. 6.

Berry, Harold O., and F. E. White, assignors to Florence Stove Company, Gardner, Mass. Combined liquid fuel reservoir and bowl. Des. 88,497; Dec. 6.

Bessmer, William A., Erie, Pa. Extinguisher for cigarettes and the like. 1,889,801; Dec. 6.

Best Foods, Inc. (See Schaub, Jacob, assignor.)

Best, Norman A., Midland, Mich. Jack. 1,890,144; Dec. 6.

Bethlehem Steel Company. (See Froelich, C. H., and McCarty, assignors.)

Bettencourt, Theodore R., assignor to John I. Paulding, Inc., New Bedford, Mass. Lighting fixture. Des. 88,498; Dec. 6.

Bettencourt, Theodore R., assignor to John I. Paulding, Inc., New Bedford, Mass. Lighting fixture. Des. 88,499; Dec. 6.

Bettencourt, Theodore R., assignor to John I. Paulding, Inc., New Bedford, Mass. Lighting fixture. Des. 88,500; Dec. 6.

Billner, Karl P., New York, N. Y. Building construction and making the same. 1,890,432; Dec. 6.

Bills, Claud H., and G. G. Griswold, Los Angeles, Calif. Cooling system. 1,890,072; Dec. 6.

Birum, Herbert L., sr., and H. L. Birum, jr., Trenton, N. J. Apparatus for making stuffed bars. 1,889,913; Dec. 6.

Birum, Herbert L., jr. (See Birum, Herbert L., sr., and H. L., jr.)

Black, George E., Sewickley, assignor to H. H. Robertson Company, Pittsburgh, Pa. Fastening device or clip. 1,889,770; Dec. 6.

Black, John E., Rumson, assignor to The Babcock & Wilcox Company, Bayonne, N. J. Steam temperature regulator. 1,890,245; Dec. 6.

Black, Jotham F., Butler, Pa., assignor to Hartford-Empire Company, Hartford, Conn. Forehearth. 1,890,174; Dec. 6.

Blair, William M. (See Miller, Royal R., assignor.)

Blake, Dennis B. D., assignor of one-half to D. E. Willard, Danville, Ill. Shock absorber. 1,890,311; Dec. 6.

Blanchard, Robert L., assignor to Van Kannel Revolving Door Company, New York, N. Y. Full collapsible panic-proof revolving door. 1,890,365; Dec. 6.

Boehner, Georg. (See Lüttringhaus, A., Neresheimer, Eichhols, Boehner, and Schneider.)

Bollam, Richard E., Portland, Oreg. Elevator bomb rack for aeroplanes. 1,890,142; Dec. 6.

Bonardi, Joseph, Rock Falls, Ill. Brush lock. 1,889,970; Dec. 6.

Bond, A. Russell, executor. (See Kessler, Frank.)

Boone, Harry S., assignor to McClintic-Marshall Company, Pottstown, Pa. Template holding device. 1,890,073; Dec. 6.

Bowker, John E., Ivanhoe, near Melbourne, Victoria, Australia. Developing unit for X-ray and other photographic films. 1,890,366; Dec. 6.

Bowman, Hyman D., Pittsburgh, Pa. Air-conditioner for internal combustion engines. 1,890,107; Dec. 6.

Bracke, Robert F., Chicago, assignor to C. B. Camp, trustee, Glencoe, Ill. Carburetor. 1,890,145; Dec. 6.

Bradbury, William T. (See Berry, H. O., and Bradbury.)

Bradbury, William T. (See White, F. E., Berry, and Bradbury.)

Braithwaite, G. Forest. (See Battin, Cora B., assignor.)

Brandt, Edgar W., Paris, France. Projectile having guide tails. 1,890,175; Dec. 6.

Brandt, Edgar W., Paris, France. Mechanical delay fuse for rotative projectiles. 1,890,176; Dec. 6.

Bridgham, Arthur L., Boston, assignor to C. H. Sherburne, Boston, Mass. Whistle and the like. 1,890,212; Dec. 6.

Briechle, Ambrosius, Brooklyn, F. W. Lutz, Floral Park, and G. Rattray, Mineola, assignors to Fairchild Aerial Camera Corporation, New York, N. Y. Multilens aerial camera. 1,890,074; Dec. 6.

Briney, Ottis R., Pontiac, Mich. Machining apparatus. 1,890,146; Dec. 6.

Brinkmann, Theodor, Haspe, Germany. Casting runner. 1,890,027; Dec. 6.

Britton, Edgar C., and R. D. Holmes, assignors to The Dow Chemical Company, Midland, Mich. Separating N-monoalkyl and N-dialkyl aromatic amines of the benzene series. 1,890,246; Dec. 6.

Britton, Edgar C., and W. C. Stoesser, assignors to The Dow Chemical Company, Midland, Mich. Separating chlorodiphenyls. 1,890,427; Dec. 6.

Brode, Johannes, Ludwigshafen-on-the-Rhine, and A. Johannsen, Mannheim, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Production of monocarboxylic acids. 1,889,945; Dec. 6.

Bronish, George M., assignor to F. A. Hall, Eagle River, Wis. Selflocking ignition and safety switch. 1,890,367; Dec. 6.

Brooklyn Metal Stamping Corporation, The. (See Hollister, Clarence P., assignor.)

Brouhard, Edward J., Des Moines, Iowa. Attachable adapter for use in connection with grease guns. 1,889,971; Dec. 6.

Brousman Mfg. Co. (See Hills, John H., assignor.)

Brown-Lipe Gear Company. (See Fawick, Thomas L., assignor.)

Bryant Electric Company, The. (See Webster, Benjamin C., assignor.)

Buckeye Blower Company, The. (See Henshall, Percival P., assignor.)

Buckeye Twist Drill Company, The. (See Rodman, C. J., and Dunmire, assignors.)

Budd Wheel Company. (See Eksergian, Carolus L., assignor.)

Budd Wheel Company. (See Eksergian, C. L., and Davenport, assignors.)

Buhrke, Alfred E., and A. F. Heeter, Chicago, Ill., assignors to R. H. Buhrke Company. Golf club. 1,889,743; Dec. 6.

Buhrke, R. H., Company. (See Buhrke, A. E., and Heeter, assignors.)

Builders' Patent Scaffolding Company. (See Kingston, Thomas H., assignor.)

Bullis, Henry C., Franklin, Pa., assignor, by mesne assignments, to Sound Picture Patent Company, Chicago, Ill. Apparatus for reproducing sound and pictures. 1,889,798; Dec. 6.

Burgess & Blacher Co. (See Burgess, Pearl M., assignor.)

Burgess, Pearl M., Reading, assignor to Burgess & Blacher Co., Boston, Mass. Metal flashing. 1,889,771; Dec. 6.

Butts, Jean G., Cato, N. Y. Transplanting device. 1,889,820; Dec. 6.

Cadwell, Leslie E., assignor to Headless Multiple Motor Corporation, Indianapolis, Ind. Gas engine. 1,889,946; Dec. 6.

Caine, Charles H., assignor to Tung-Sol Condensers Inc., Chicago, Ill. Condenser. 1,890,312; Dec. 6.

Caine, Charles H., assignor to Tung-Sol Condensers Inc., Chicago, Ill. Making condensers. 1,890,313; Dec. 6.

Cameron, Frederick S., Dorchester, and A. B. Jones, Brookline, assignors to J. H. Dodge, H. R. Sinclair, Worcester, and L. C. Smith, Newton, Mass., trustees. Open-ended reversible ratchet wrench. 1,890,213; Dec. 6.

Camp, Curtiss B., trustee. (See Bracke, Robert F., assignor.)

Campbell, Earl E., assignor of one-half to A. J. McClelland, Gillette, Wyo. Demountable rim. 1,890,028; Dec. 6

Campbell, Edward H., Edmonton, Alberta, Canada. Formation testing and well flowing device. 1,889,772; Dec. 6

Card, Frederic M., Bridgeport, Conn., assignor to The Singer Manufacturing Company, Elisabeth, N. J. Sewing machine work-support. 1,890,075; Dec. 6.

Carlson, Edwin G., East Providence, assignor to A. E. R. Speidel, Providence, R. I., doing business as Speidel Brothers. Bracelet structure. 1,889,972; Dec. 6.

Carlson, George H., assignor to Ekstrom, Carlson & Co., Rockford, Ill. Frictional drive for a router or the like. 1,889,947; Dec. 6.

Carpentier, Pascal J. (See Pellerin, E., Hector, and Carpentier.)

Carstens, Carl C., Michigan City, Ind. Automobile signaling device. 1,889,744; Dec. 6.

Chamberlain, George L., Chicago, Ill. Joining telescoped tubular members. 1,889,974; Dec. 6.

Chamberlin, Clarence P., Detroit, Mich. Making annular objects. 1,889,773; Dec. 6.

Chamberlin, Clarence P., Detroit, Mich. Construction of annular objects, such as tire covers. 1,889,774; Dec. 6.

Champion Fibre Company, The. (See Helder, Horatio A., assignor.)

Champion, John H. W. (See Hamm, R. H., and Champion.)

Chapman, Arthur G., Butler, and R. G. McCurdy, Englewood, N. J., assignors to American Telephone and Telegraph Company. Prevention of overhearing in program circuits. 1,889,821; Dec. 6.

Chapman, Cloyd M., Douglaston, N. Y. Structural unit and making same. 1,889,745; Dec. 6.

Chase Companies, The. (See Ackerman, Jay, assignor.)

Chase Companies, The. (See Cornell, Edward S., jr., assignor.)

Chase Companies, The. (See Mitchell, August, assignor.)

Chatain, Henri G., Erie, Pa., assignor to Northern Laboratories, Inc., Cleveland, Ohio. Heat transfer device. 1,890,108; Dec. 6.

Chatillon, George E., assignor to John Chatillon & Sons, New York, N. Y. Protective device for scales. 1,889,948; Dec. 6.

Chatillon, John, & Sons. (See Chatillon, George E., assignor.)

Chemical Works (formerly Sandoz). (See Gutzwiller, Ernst, assignor.)

Cheney Brothers. (See George, Robert, assignor.)

Chesler, Chaim, Cleveland Heights, assignor to The Metallic Gripper Company, Cleveland, Ohio. Grommet-fastened metallic gripper. 1,890,368; Dec. 6.

Chicago Curled Hair Company. (See Mudd, Garrett W., assignor.)

Chicago Pump Company. (See Durdin, Augustus C., jr., assignor.)

Chirex, Henri, Paris, France. Device for electric sound transmission. 1,889,975; Dec. 6.

Chisholm, Clifton, Cleveland, Ohio, assignor, by mesne assignments, to Multigraph Company, Wilmington, Del. Typesetting machine. 1,889,914; Dec. 6.

Churchill, Harry V., Parnassus, assignor to Aluminum Company of America, Pittsburgh, Pa. Cleaning composition. 1,890,214; Dec. 6.

Cicconi, Giulio, Smock, assignor of one-half to G. A. Andreskovich, Monessen, Pa. Clothes hanger. 1,890,046; Dec. 6.

Clapp, E. H., Rubber Company. (See Thomas, Arthur V., assignor.)

Clapp, Kenneth S., and T. H. Eickhoff, Cleveland, Ohio. Pump. 1,889,822; Dec. 6.

Clark, Cyril B., Scarsdale, assignor to American Cyanamid Company, New York, N. Y. Concentration of weak phosphoric acid. 1,889,949; Dec. 6.

Clark, John T., Salt Lake City, Utah. Automobile tire. 1,889,799; Dec. 6.

Cody, Marie D., Frostproof, Fla. Fruit juice extractor. 1,889,883; Dec. 6.

Cohen, David, Brooklyn, N. Y. Ventilated shoe. 1,890,433; Dec. 6.

Cole, Amos G., Burnham, assignor to Standard Steel Works, Company, Philadelphia, Pa. Tire mold manufacture. 1,889,823; Dec. 6.

Cole, Clarence H., U. S. Navy. Valve spring retaining device. 1,889,915; Dec. 6.

Cole, Ira E. (See Kendall, Earl, assignor.)

Colt's Patent Fire Arms Manufacturing Co. (See Whitworth, Harry, assignor.)

Columbus Dental Manufacturing Company, The. (See Shaw, Ernest P., assignor.)

Colwell, Archie T., assignor to Thompson Products, Incorporated, Cleveland, Ohio. Making composite valves. 1,889,916; Dec. 6.

Combier & Co. Inc. (See Kaufmann, Werner B., assignor.)

Combier & Co. Inc. (See Lukas, Julia, assignor.)

Combier & Co. Inc. (See Weitz, Irene A., assignor.)

Comins, Arthur C., Worcester, Mass. Designing frame. 1,889,976; Dec. 6.

Commonwealth & Southern Corporation of Maryland, The. (See Umbricht, Emil, assignor.)

Comstock & Wescott, Inc. (See Troland, Leonard T., assignor.)

Connery, James R., Springfield, Mass. Refreshment stand or similar article. Des. 88,501; Dec. 6.

Contact Filtration Company. (See Fuller, Ira K., assignor.)

Continental Can Company. (See Punte, William F., assignor.)

Continental Steel Corporation. (See Harter, William G., assignor.)

Conway, Baron von Girsewald, H. Weidmann, and G. Roesner, Frankfort-on-the-Main, Germany, assignors to American Lurgi Corporation, New York, N. Y. Production of phosphates. 1,890,204; Dec. 6.

Cook, Charles R., Canton, N. Y. Tool for removing terminal clamps from storage battery binding posts. 1,890,369; Dec. 6.

Cooley-Wright Manufacturing Company. (See Falardeau, Victor W., assignor.)

Cooney, Frank B., and J. P. Spore, assignors to The American Crayon Company, Sandusky, Ohio. Vial. 1,889,963; Dec. 6.

Cooper-Bessemer Corporation. (See Gehres, Hewitt A., assignor.)

Cooper, George A. S., administrator. (See Cox, John W.)

Cooper, Kenneth F., Great Neck, assignor to American Cyanamid Company, New York, N. Y. Fumigation composition and process. 1,889,950; Dec. 6.

Cordes, Edward C., assignor to The Hyde Park Lumber Company, Cincinnati, Ohio. Knock down shelving. 1,890,076; Dec. 6.

Cornell, Edward S., jr., Watertown, assignor to The Chase Companies, Incorporated, Waterbury, Conn. Tube straightening-and-sizing tool. 1,889,775; Dec. 6.

Cotti, Aldo, Milan, Italy. Hand apparatus for roughing cloth. 1,890,147; Dec. 6.

Cox, Albert E., and J. B. Hall, Hardwick, Vt. Stone sawing machine. 1,890,109; Dec. 6.

Cox, George P., Niagara Falls, assignor to American Cyanamid Company, New York, N. Y. Cooling calcium carbide. 1,889,951; Dec. 6.

Cox, John W., deceased, by G. A. S. Cooper, Newark, N. J., administrator, assignor to The Nestle-Lemur Company, New York, N. Y. Hair-waving machine. 1,890,047; Dec. 6.

Cox, Wesley S. (See Frech, Jacob B. and E. J., and Cox.)

Crane, Frank G., Montague, Mich. Making and treating paper. 1,889,851; Dec. 6.

Crane, Stanley A., Norwood, assignor to The Hennegan Company, Cincinnati, Ohio. Advertising display device. 1,890,314; Dec. 6.

Crescent China Company, The, et al. (See McMaster, Harry J., assignor.)

Crocker, Robert R., Dearborn, assignor to T. J. McCormick, Detroit, Mich. Tire cover. 1,889,776; Dec. 6.

Crowley, Henry L., East Orange, assignor to Henry L. Crowley & Company, Inc., West Orange, N. J. Heater for electron discharge devices. 1,889,884; Dec. 6.

Crowley, Henry L., & Company. (See Crowley, Henry L., assignor.)

Crull, Harold L. (See Ferris, W. and J. P., and Crull.)

Crump, Claude R., Los Angeles, Calif. Combination woodworking machine. 1,889,977; Dec. 6.

Cullen, Ernest E., San Diego, Calif. Holder for collapsible tubes. 1,889,885; Dec. 6.

Curtis Companies, Incorporated. (See Madsen, Sern, assignor.)

Cusson, Sylvain, New York, N. Y. Textile fabric or the like. Des. 88,502; Dec. 6.

Dach, Max. (See Schramm, F. C., and Dach.)

Dankert, Carl, Ludwigshafen-on-the-Rhine, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Colored effect paper. 1,889,953; Dec. 6.

Davenport, Talmon A. (See Eksergian, C. L., and Davenport.)

David, Sara, Pittsburgh, Pa. Securing device for clothing. 1,889,954; Dec. 6.

Davis, Chester L., Keokuk, Iowa, assignor to Wired Radio, Inc., New York, N. Y. Television system. 1,889,852; Dec. 6.

Davis & Furber Machine Company. (See Owen, Henry A., assignor.)

Davis, Verner F., West Orange, assignor to Atlas Valve Company, Newark, N. J. Steam flow regulation. 1,889,800; Dec. 6.

Dawson, James F., Galveston, Tex., assignor to Triple "XXX" Company. Carbonating device. 1,889,886; Dec. 6.

Dayton Rubber Manufacturing Company, The. (See Freedlander, Abraham L., assignor.)

Dean, Reginald S., Riverside, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y. Lead alloy. 1,890,013; Dec. 6.

Dean, Reginald S., Washington, D. C., assignor to Western Electric Company, Incorporated, New York, N. Y. Lead alloy. 1,890,014; Dec. 6.

Dean, Ruth A., Boston, Mass., assignor to Harrington & King Perforating Company, Chicago, Ill. Grille panel. Des. 88,503; Dec. 6.

De Cressey, Haswell R., San Francisco, Calif., assignor to The Visking Corporation, Chicago, Ill. Sausage casing. 1,890,215; Dec. 6.

De Falco, Achille, North Adams, Mass. Hanger. 1,890,370; Dec. 6.

Delaize, Paul C., assignor to D'Orsay Perfumeries Corporation, New York, N. Y. Bottle. Des. 88,504; Dec. 6.

Delfs, John, West Springfield, Mass. Scaffold. 1,890,029; Dec. 6.
De Lisle, Harold L., Chicago, Ill. Shallow drawer container for sheets. 1,890,216; Dec. 6.
Dennis, Arthur W., Jacksonville, Fla. Marking apparatus. 1,890,371; Dec. 6.
Derriey, Lizzie, New York, N. Y. Textile fabric or the like. Des. 88,505; Dec. 6.
Derry, William R., Augusta, Ga. Invalid's bed. 1,890,177; Dec. 6.
De Wit, Leonard, Chicago, Ill. Gas or electric range or analogous article. Des. 88,507; Dec. 6.
De Wit, Leonard, Chicago, assignor to Moore Bros., Joliet, Ill. Gas or electric range or analogous article. Des. 88,506; Dec. 6.
De Witt, William J., assignor to Shoe Form Co., Inc., Auburn, N. Y. Side form. 1,889,887; Dec. 6.
Diamond Match Company, The. (See Paridon, Michael, assignor.)
Diamond Match Company, The. (See Wright, Charles F., assignor.)
Dickey, Jonathan A., Memphis, Tenn. Universal lamp. 1,889,978; Dec. 6.
Diederichs, Paul O., Chicago, Ill., assignor, by mesne assignments, to American Machine & Foundry Company, New York, N. Y. Roller mill. 1,889,777; Dec. 6.
Dieterich, Francis L., Newark, N. J. Tank car valve. 1,890,247; Dec. 6.
Divekey, Harvey J., assignor to Illinois Supply Company, Aurora, Ill. Air circulator and heater. 1,890,279; Dec. 6.
Divekey, Harvey J., assignor to Illinois Supply Company, Aurora, Ill. Identifying band for birds. 1,890,280; Dec. 6.
Dobbins, Harry, Sankey, near Warrington, assignor to Tilling Gray and Company Limited, Warrington, England. Spring clip plant support. 1,890,217; Dec. 6.
Dobrick, August C., Chicago, Ill. Compression coupling. 1,889,778 Dec. 6.
Dodge, John H., et al., trustees. (See Cameron, F. S., and Jones, assignors.)
Doepke, Edward R., Fairfield, Wash. Water-cooled refrigerator. 1,890,110; Dec. 6.
Dognin, Jean, Paris, France, assignor to The Lace Net Importing Co. Inc., New York, N. Y. Lace. Des. 88,508; Dec. 6.
Dollinger, Lewis L., Rochester, N. Y. Valve. 1,890,281; Dec. 6.
Donohue, A. J., Corporation, The. (See Jacobs, Joseph, assignor.)
D'Orsay Perfumeries Corporation. (See Delaize, Paul C., assignor.)
Douglas, Frederic E., assignor to Draper Corporation, Hopedale, Mass. Shuttle spring. 1,890,815; Dec. 6.
Dow Chemical Company, The. (See Britton, E. C., and Holmes, assignors.)
Dow Chemical Company, The. (See Britton, E. C., and Stoesser, assignors.)
Dow Chemical Company, The. (See Grether, Ernest F., assignor.)
Dow Chemical Company, The. (See Griswold, Thomas, jr., assignor.)
Dow Chemical Company, The. (See Perkins, R. P., and Petrie, assignors.)
Drake Bakeries Incorporated. (See Woods, Robert M., assignor.)
Draper Corporation. (See Douglas, Fredric E., assignor.)
Drill Guide Incorporated. (See Jakosky, John J., assignor.)
Droescher, Le Roy A., Willow Grove, assignor to C. H. Wheeler Manufacturing Company, Philadelphia, Pa. Refrigerating system. 1,890,282; Dec. 6.
Dryer, Charles G. (See Lowry, C. D., jr., and Dryer.)
Dubbs, Carbon P., Wilmette, assignor to Universal Oil Products Company, Chicago, Ill. Apparatus for producing lower boiling point hydrocarbons. 1,890,316; Dec. 6.
Duby, John F., Boston, Mass. Vehicle tire scuff detector. 1,890,218; Dec. 6.
Dudley Lock Corporation. (See Full, George D., assignor.)
Dunmire, Russell P. (See Rodman, C. J., and Dunmire.)
Du Pont, E. I., de Nemours & Company. (See Lawson, Walter E., assignor.)
Du Pont, E. I., de Nemours & Company. (See Tinker, J. M., and Spiegler, assignors.)
Durdin, Augustus C., jr., assignor to Chicago Pump Company, Chicago, Ill. Priming apparatus for pumps. 1,890,317; Dec. 6.
Durdin, Augustus C., jr., Chicago, Ill. Vacuum condensation pump. 1,890,318; Dec. 6.
Dutton, Chauncey A., Shaker Heights Village, assignor, by mesne assignments, to Ferro Enamel Corporation, Cleveland, Ohio. Furnace. 1,889,955; Dec. 6.
Eaton, Harrison H., assignor to The Electric Anto-Lite Company, Toledo, Ohio. Automatic armature winding machine. 1,890,111; Dec. 6.
Eaton, Horace M., Swampscott, assignor to Excel Taping Machine Co., Lynn, Mass. Taping machine. 1,889,888; Dec. 6.
Ebert, Charles, Leonia, N. J., W. B. Newkirk, Riverside, Ill., and M. Moskowits, Spring Valley, N. Y., assignors to International Patents Development Company, Wilmington, Del. Purifying sugar solutions. 1,889,779; Dec. 6.
Eckstein, Jacob E., Pittsburgh, Pa. Fountain brush. 1,890,319; Dec. 6.
Edwards, Frank W., assignor to The Ohio Injector Company, Chicago, Ill. Locking device for rotatable members. 1,890,080 Dec. 6.
Edwards, Frank W., assignor to The Ohio Injector Company, Chicago, Ill. High pressure self-grinding valve. 1,890,248; Dec. 6.
Edwards, Homer A., Nampa, Idaho. Sausage preparing apparatus. 1,890,249; Dec. 6.
Edwards, Paul G., Millburn, N. J., assignor to American Telephone and Telegraph Company. Testing system. 1,889,824; Dec. 6.
Eggert, Frits. (See Mueller-Cunradi, M., and Eggert.)
Eichhols, Willy. (See Lüttringhaus, A., Neresheimer, Eich-hols, Boehner, and Schneider.)
Eickhoff, Theodore H. (See Clapp, K. S., and Eickhoff.)
Eisenmann, Karl. (See Pungs, W., Eisenmann, and Kuckenbuch.)
Eisenwerk, Wülfel. (See Müller-Keuth, Wilhelm, assignor.)
Eksergian, Carolus L., Detroit, Mich., assignor to Budd Wheel Company, Philadelphia, Pa. Artillery wheel. Des. 88,509; Dec. 6.
Eksergian, Carolus L., and T. A. Davenport, Detroit, Mich., assignors to Budd Wheel Company, Philadelphia, Pa. Artillery wheel. Des. 88,510; Dec. 6.
Eksergian, Carolus L., and T. A. Davenport, Detroit, Mich., assignors to Budd Wheel Co., Philadelphia, Pa. Wheel. Des. 88,511; Dec. 6.
Ekstrom, Carlson & Co. (See Carlson, George H., assignor.)
Electric Auto-Lite Company. (See Eaton, Harrison H., assignor.)
Electric Fruit Marking Co. (See Ahlburg, Frank, assignor.)
Electrogear Corporation. (See Neuland, Alfons H., assignor.)
Electrolux Corporation. (See Eriksson-Jons, Anders, assignor.)
Ellison, Melvin I. (See Gewecke, J. G., Ellison, and Menking.)
Elting, August O., Chicago, Ill. Making tubing. 1,890,077; Dec. 6.
Emden, Victor C. (See Hughes, John R., assignor.)
English, Victor J., Verdun, Quebec, Canada. Compartment guard. 1,889,853; Dec. 6.
Ennis, George H., assignor of one-half to R. V. Funk, Long Beach, Calif. Testing open wells. 1,889,889; Dec. 6.
Enochs, Robert E., and H. W. Lawrence, Natches, Miss. Liquid measuring and recording machine. 1,890,078; Dec. 6.
Erickson, Albert N., Elmhurst, N. Y., assignor to Union Carbide Company. Method and apparatus for detecting the presence of inflammable constituents in gas mixtures. 1,889,890; Dec. 6.
Erickson, Oscar H., Puyallup, Wash. Internal combustion engine. 1,890,148; Dec. 6.
Eriksson-Jons, Anders, Stockholm, Sweden, assignor, by mesne assignments, to Electrolux Corporation. Vacuum cleaner. 1,890,283; Dec. 6.
Essex, Jesse L. (See Morrell, J. C., and Essex.)
Ettinger, Joe J., Warsaw, Ind. Leg splint. 1,890,372; Dec. 6.
Evans, Archibald D., Warren, Ohio, and J. K. Lamoree, Mount Lebanon, Pa. Method of and apparatus for handling tin plate. 1,890,250; Dec. 6.
Evans, Ralph L., assignor to Zotos Corporation, New York, N. Y. Permanently waving hair. 1,889,746; Dec. 6.
Excel Magneto Company. (See Reis, Curt F., assignor.)
Excel Taping Machine Co. (See Eaton, Horace M., assignor.)
Fair, Alvan S., Socorro, N. Mex. Service station or similar building structure. Des. 88,512; Dec. 6.
Fairchild Aerial Camera Corporation. (See Briechle, A., Lutz, and Rattray, assignors.)
Fairfield Specialties Corporation. (See Hoban, Fairfield W., assignor.)
Falardeau, Victor W., assignor to Cooley-Wright Manufacturing Company Incorporated, Waterbury, Vt. Sand blast nozzle. 1,889,979; Dec. 6.
Falter, Philip H., Orange, N. J., assignor to American Cyanamid Company, New York, N. Y. Producing ammonia. 1,889,956; Dec. 6.
Farley, George E., assignor to Service Equipment Company, South Gate, Calif. Swiveled tire inflating chuck. 1,889,980; Dec. 6.
Farnam, Julian P., assignor to Page & Hill Co., Minneapolis, Minn. Light post. Des. 88,513; Dec. 6.
Farrell, Anna E., Seattle, Wash. Hair waver. 1,889,854; Dec. 6.
Favre, Pierre A., Crosne, France. Method and apparatus for making glass tubing and rods. 1,889,891; Dec. 6.
Fawick, Thomas L., Racine, Wis., assignor to Brown-Lipe Gear Company, Syracuse, N. Y. Transmission. 1,889,957; Dec. 6.
Faslo, Antonio, Portland, Oreg. Seeding attachment for tractors. 1,889,981; Dec. 6.
Feltz, Lloyd C. (See Griesser, Raymond, assignor.)
Ferris, Ervie A., Westwood, Calif. Retard device. 1,889,802; Dec. 6.
Ferris, John P. (See Barrett, L. A., and Ferris.)
Ferris, John P. (See Ferris, W. and J. P., and Crull.)

Ferris, Walter and J. P., Milwaukee, Wis., and H. L. Crull, Tulsa, Okla., assignors to The Oilgear Company, Milwaukee, Wis. Pump rig. 1,890,428; Dec. 6.
Ferro Enamel Corporation. (See Dutton, Chauncey A., assignor.)
Ferro Enamel Corporation. (See Manion, Leo W., assignor.)
Fessel, Gumal, assignor to Technische Chemikalien Compagnie G. m. b. H., Halle-Saale, Germany. Manufacture of rubber goods. 1,889,825; Dec. 6.
Field, Walter E., Providence, R. I. Device for detachably securing interchangeable ornaments to strap ends. 1,890,320; Dec. 6.
Fields, Pauline E., New York, N. Y. Dress. Des. 88,514; Dec. 6.
Firma Magyar Fém-és Lámpa-Aru-Gyár Részvénytársasag - Ungarische Metallwaren- und Lampenfabrike Actien-Gesellschaft. (See Weszycki, Josef, assignor.)
Fisher, Lloyd H., Kenvil, N. J., assignor to Hercules Powder Company, Wilmington, Del. Igniter charge for blasting caps. 1,890,112; Dec. 6.
Fisher, William, Dearborn, Mich. Operating attachment for toggle switches. 1,889,826; Dec. 6.
Fiske, Bradley A., New York, N. Y. Reading machine. 1,890,149; Dec. 6.
Fitts, George McK., Siler City, N. C. Brake. 1,890,031; Dec. 6.
Fitz Gerald, Alan S., Schenectady, N. Y., assignor to General Electric Company. Control and protection of electric circuits. 1,890,321; Dec. 6.
Flintermann, Gerhard, West Orange, N. J. Adjustable seat. 1,890,048; Dec. 6.
Flood, Oscar S. (See Graham, L. L., and Flood.)
Florence Stove Company. (See Berry, H. O., and Bradbury, assignors.)
Florence Stove Company. (See Berry, H. O., and White, assignors.)
Florence Stove Company. (See White, F. E., Berry, and Bradbury, assignors.)
Flory, Andrew, Grantwood, N. J. Textile fabric or the like. Des. 88,515; Dec. 6.
Focke, Henrich, Bremen, Germany. Aircraft wing. 1,890,079; Dec. 6.
Foreman, Edwin H., New York, N. Y. Swim suit. 1,889,855; Dec. 6.
Fowler, Gilbert J., Bangalore, India. Filter. 1,890,251; Dec. 6.
Fox, John H., Pittsburgh, Pa., assignor to Pittsburgh Plate Glass Company. Apparatus for making plate glass. 1,890,322; Dec. 6.
Fox, Maud C. (See Scott, I. G., and Fox.)
Fraenkel, Sigmund, Vienna, Austria, assignor to Firm of Society of Chemical Industry in Basle, Basel, Switzerland. Hormone and obtaining same. 1,890,373; Dec. 6.
Frambach, Ralph W., Maplewood, N. J. Textile fabric or the like. Des. 88,516; Dec. 6.
Frambach, Ralph W., Maplewood, N. J. Textile fabric or the like. Des. 88,517; Dec. 6.
Frambach, Ralph W., Maplewood, N. J. Textile fabric or the like. Des. 88,518; Dec. 6.
Frambach, Ralph W., Maplewood, N. J. Textile fabric or the like. Des. 88,519; Dec. 6.
Frambach, Ralph W., Maplewood, N. J. Textile fabric or the like. Des. 88,520; Dec. 6.
Frank, Samuel, St. Paul, Minn. Antifrost shield. 1,890,252; Dec. 6.
Frasier, Anna K., Leavenworth, Kans. Darning last. 1,890,032; Dec. 6.
Frech, Elmer J. (See Frech, Jacob B. and E. J., and Cox.)
Frech, Jacob B., and E. J., and W. S. Cox, Cincinnati Ohio. Machine for preparing mailable matter. 1,889,958; Dec. 6.
Frederickson, Otto A., Ben Avon, Pa., assignor to National Electric Products Corporation, New York, N. Y. Weatherproof wire and making same. 1,890,253; Dec. 6.
Frederickson, Otto A., Ben Avon, Pa., assignor to National Electric Products Corporation, New York, N. Y. Weatherproof wire. 1,890,254; Dec. 6.
Freedlander, Abraham L., Dayton, Ohio. Double cog belt. 1,890,080; Dec. 6.
Freedlander, Abraham L., Dayton, Ohio. Line contact belt. 1,890,082; Dec. 6.
Freedlander, Abraham L., assignor to The Dayton Rubber Manufacturing Company, Dayton, Ohio. Making a puncture proof inner tube. 1,890,081; Dec. 6.
French Battery Company. (See Shannon, James L., assignor.)
Freund, Herman R., Brooklyn, assignor to Intertype Corporation, New York, N. Y. Cleaning machine for magazines and matrices. 1,890,374; Dec. 6.
Frey, Karl. (See Gams, A., Widmer, and Frey.)
Frickey, Royal E., assignor to Welding Service, Inc., San Francisco, Calif. Welding process. 1,889,780; Dec. 6.
Frigidaire Corporation. (See Hull, Harry B., assignor.)
Frigidaire Corporation. (See Hull, H. B., and Reeves, assignors.)
Froelich, Clarence H., and E. J. McCarty, jr., Bethlehem, Pa., assignors to Bethlehem Steel Company. Driving mechanism. 1,890,049; Dec. 6.
Fruin, Robert E., Chicago, Ill. Horseshoe. 1,889,856; Dec. 6.

Fulcher, Charles E. R. (See Hayes, Rolff M., assignor.)
Full, George D., Winnetka, assignor to Dudley Lock Corporation, Chicago, Ill. Toy aeroplane bank. 1,889,982; Dec. 6.
Fuller Company. (See Morrow, Joseph H., assignor.)
Fuller Company. (See Pfeiffer, César, assignor.)
Fuller, Ira K., Olean, N. Y., assignor, by mesne assignments, to Contact Filtration Company. Treating spent adsorbents. 1,890,255; Dec. 6.
Fuller, Ira K., assignor, by mesne assignments, to Contact Filtration Company, Olean, N. Y. Treating spent adsorbents. 1,890,284; Dec. 6.
Fuller, Leo H., Inc. (See Hinson, Jay B., assignor.)
Fuller, Leonard, Grand Rapids, and K. F. Schmidt, Ada, Mich. Nursery furniture panel. Des. 88,521; Dec. 6.
Fuller, Leonard, Grand Rapids, and K. F. Schmidt, Ada, Mich. Nursery furniture panel. Des. 88,522; Dec. 6.
Fuller, Leonard, Grand Rapids, and K. F. Schmidt, Ada, Mich. Nursery furniture panel. Des. 88,523; Dec. 6.
Fuller, Leonard, Grand Rapids, and K. F. Schmidt, Ada, Mich. Nursery furniture panel. Des. 88,524; Dec. 6.
Fuller, Leonard, Grand Rapids, and K. F. Schmidt, Ada, Mich. Nursery furniture panel. Des. 88,525; Dec. 6.
Fuller, Leonard, Grand Rapids, and K. F. Schmidt, Ada, Mich. Nursery furniture panel. Des. 88,526; Dec. 6.
Fullman, James M. G., Sewickley, assignor to National Electric Products Corporation, Pittsburgh, Pa. Service head. 1,890,050; Dec. 6.
Fulton, Edwin W., Oswego, N. Y. Vise. 1,890,114; Dec. 6.
Funk, Robert V. (See Ennis, George H., assignor.)
Gaffney, John J., assignor to National Folding Box Company, New Haven, Conn. Packing and display container. 1,890,285; Dec. 6.
Gagnier, George E. (See Place, Bion C., assignor.)
Gallagher, W. Neal, Newton, Iowa. Washing machine. 1,889,747; Dec. 6.
Gams, Alphonse, G. Widmer, and K. Frey, assignors to "Society of Chemical Industry in Basle", Basel, Switzerland. Manufacture of condensation products from formaldehyde, thiourea, and urea. 1,890,033; Dec. 6.
Gardner, Clarence V., assignor to Hydraulic Brake Company, Detroit, Mich. Master cylinder piston. 1,889,857; Dec. 6.
Gardner, John E., Clarendon Hills, assignor, by mesne assignments, to Associated Electric Laboratories, Inc., Chicago, Ill. Automatic telephone system. Re18,686; Dec. 6.
Garrett, John D., assignor to The Arrow-Hart & Hegeman Electric Company, Hartford, Conn. Plural switch operating means. 1,890,375; Dec. 6.
Garrison, Patrick C., Wheeling, W. Va. Self-folding top for rumble seats. 1,889,827; Dec. 6.
Gaubert, John Q., assignor to General Motors Radio Corporation, Dayton, Ohio. Variable condenser drive for radio apparatus. 1,889,781; Dec. 6.
Gavard, George A., Index, Wash., assignor to Gavard Stone Saw Company. Stone saw. 1,889,983; Dec. 6.
Gavard Stone Saw Company. (See Gavard, George A., assignor.)
Gebhard, Louis A., Washington, D. C., assignor, by mesne assignments, to Wired Radio, Inc., New York, N. Y. Electrical coupling system. 1,890,034; Dec. 6.
Geer, William C., Ithaca, N. Y. Device for preventing accumulation of ice on aeroplane propellers. 1,889,782; Dec. 6.
Geer, William C., Ithaca, N. Y. Deicer for acroplanes and the like. 1,890,286; Dec. 6.
Gehres, Hewitt A., assignor to Cooper-Bessemer Corporation, Mount Vernon, Ohio. Valve mechanism. 1,890,051; Dec. 6.
Gehrman, Otto C., assignor to Paxton-Mitchell Company, Omaha, Nebr. Split joint ring. 1,889,828; Dec. 6.
General Aniline Works Inc. (See Lüttringhaus, A., Neresheimer, Eichholz, Boehner, and Schneider, assignors.)
General Electric Company. (See Fitz Gerald, Alan S., assignor.)
General Electric Company. (See Gosling, Joseph W., assignor.)
General Electric Company. (See Huber, H. J. H., and Kellogg, assignors.)
General Electric Company. (See Johnson, Eric M., assignor.)
General Electric Company. (See Kearsley, William K., assignor.)
General Electric Company. (See Kienle, Roy H., assignor.)
General Electric Company. (See Lane, Francis J., assignor.)
General Electric Company. (See Ostermeier, Johannes, assignor.)
General Electric Company. (See Römhild, Edgar, assignor.)
General Electric Company. (See Taylor, Hamilton D., assignor.)
General Motors Radio Corporation. (See Gaubert, John Q., assignor.)
General Zeolite Co. (See Hughes, Walter J., assignor.)
George, Robert, Paris, France, assignor to Cheney Brothers, New York, N. Y. Textile fabric. Des. 88,527; Dec. 6.
George, Robert, Paris, France, assignor to Cheney Brothers, New York, N. Y. Textile fabric. Des. 88,528; Dec. 6.

George, Robert, Paris, France, assignor to Cheney Brothers, New York, N. Y. Textile fabric. Des. 88,529; Dec. 6.
George, Robert, Paris, France, assignor to Cheney Brothers, New York, N. Y. Textile fabric. Des. 88,530; Dec. 6.
George, Robert, Paris, France, assignor to Cheney Brothers, New York, N. Y. Textile fabric. Des. 88,531; Dec. 6.
George, Robert, Paris, France, assignor to Cheney Brothers, New York, N. Y. Textile fabric. Des. 88,532; Dec. 6.
George, Robert, Paris, France, assignor to Cheney Brothers, New York, N. Y. Textile fabric. Des. 88,533; Dec. 6.
German, Abraham J., assignor to Scovill Manufacturing Company, Waterbury, Conn. Grooving tool. 1,890,052; Dec. 6.
Gesellschaft für Electrische Apparate m. b. H. (See Hort, Hermann, assignor.)
Gewecke, Joseph G., M. I. Ellison, and W. H. Menking, Geneva, Nebr. Pressure operated switch. 1,890,376; Dec. 6.
Gibbs, Walter A., Holly Oak, Del. Animal trap. 1,890,377; Dec. 6.
Gibson Refrigerator Company. (See Smith, Russell T., and C. H., assignors.)
Gibson, Wm. D., Company, The. (See Shaller, P. B., and Troendly, assignors.)
Giese, August F., jr., Gary, Ind. Slag ladle and carrier. 1,890,150; Dec. 6.
Gillette Safety Razor Company. (See Muros, Joseph, assignor.)
Givens, Howard M., Abington, Pa. Machine for straightening metal bars. 1,890,287; Dec. 6.
Glaeser, Carl W., Youngstown, Ohio. Bottle protector. 1,890,323; Dec. 6.
Glasier, Harold H., Los Angeles, Calif. Lever spade. 1,889,984; Dec. 6.
Gleason, Stuart B. (See Schadell, G. P., and Gleason.)
Godoy, John G., New York, N. Y. Lighting fixture. 1,890,378; Dec. 6.
Goetzman, Louis B., assignor of one-half to J. H. Rightmyer, East St. Louis, Ill. Alcohol condenser for use with internal combustion engines. 1,889,892; Dec. 6.
Goldberg, Jack, et al. (See Schlesinger, Harry, assignor.)
Goodrich, B. F., Company, The. (See Bedur, George K., assignor.)
Goodrich, B. F., Company, The. (See Taylor, Joseph I., assignor.)
Gosling, Joseph W., Schenectady, N. Y., assignor to General Electric Company. Lighting standard. Des. 88,534; Dec. 6.
Goss Printing Press Company. (See Smith, Ernest J., assignor.)
Gough, Harry E., Ozone Park, N. Y. Hat block construction. 1,890,272; Dec. 6.
Govier, Charles W., Brooklyn, and J. W. Reid, Queens Village, N. Y., assignors to Mergenthaler Linotype Company. Printer's collating stand. 1,889,829; Dec. 6.
Graeff, Charles M., Harrisburg, Pa. Mail-bag parachute. 1,890,083; Dec. 6.
Graf, Arthur J., Fond du Lac, Wis. Snap gun. 1,890,288; Dec. 6.
Graham, Leon L., and O. S. Flood, Chicago, Ill., assignors to Bendix-Cowdrey Brake Tester, Inc., South Bend, Ind. Testing automobile brakes. 1,890,219; Dec. 6.
Granberg, Bengt. (See Nelson, John, assignor.)
Grant, John. (See Santiago, James J., assignor.)
Gravely, Benjamin F., Dunbar, W. Va. Lawn-mower device. 1,889,830; Dec. 6.
Great Northern Paper Company. (See Norman, Harry T., assignor.)
Greene, Edgeworth, and W. H. Swenarton, Montclair, N. J. Apparatus for dishwashing. 1,889,858; Dec. 6.
Greene, John S., Rochester, N. Y., assignor to Photostat Corporation, Providence, R. I. Photographic roll holder. 1,890,324; Dec. 6.
Greene, John S., Rochester, N. Y., assignor to Photostat Corporation, Providence, R. I. Photographic developing method and apparatus. 1,890,325; Dec. 6.
Grether, Ernest F., assignor to The Dow Chemical Company, Midland, Mich. Preparing amino-diaryl ethers. 1,890,256; Dec. 6.
Grieser, Raymond, assignor of one-half to L. C. Felts, Detroit, Mich. Curtain tie-back or similar article. Des. 88,535; Dec. 6.
Griswold, Glenn G. (See Bills, C. H., and Griswold.)
Griswold, Thomas, jr., assignor to The Dow Chemical Company, Midland, Mich. Mercury boiler. 1,890,429; Dec. 6.
Grot, Anton, Brentwood Heights, Calif. Photographic stage setting. 1,890,053; Dec. 6.
Grot, Anton, Brentwood Heights, Calif. Photographic stage setting. 1,890,054; Dec. 6.
Groves, David W., Coeur D'Alene, Idaho. Boiler tube cleaner. 1,889,859; Dec. 6.
Grumbach, Harry, assignor to Simon Ascher & Co., Inc., New York, N. Y. Beret. 1,890,055; Dec. 6.
Gruschke, Georg, Berlin-Wilmersdorf, assignor to Siemens & Halske, Aktiengesellschaft, Siemensstadt, near Berlin, Germany. Loud speaker with actuating systems of different types. 1,889,748 Dec. 6.
Guhl, Maclyn, assignor to Moss-Still, Inc., New York, N. Y. Textile fabric. Des. 88,536; Dec. 6.
Guhl, Maclyn, assignor to Moss-Still, Inc., New York, N. Y. Textile fabric. Des. 88,537; Dec. 6.
Gurné, Jean, Rouen, France. Gauge-recording device for wire-drawing machines. 1,889,893; Dec. 6.
Guthrie, James M., et al. (See Lee, Leffman H., assignor.)
Gutzwiller, Ernst, assignor to the Firm of Chemical Works formerly Sandoz, Basel, Switzerland. Manufacture of anthraquinone derivatives. 1,889,831; Dec. 6.
Haddad, Abraham F., Cranbrook, British Columbia, Canada. Automobile direction indicator. 1,890,379; Dec. 6.
Hadley, Harold F., assignor to Associated Parts, Inc., Toledo, Ohio. Muffler mounting. 1,890,151; Dec. 6.
Hafner, Louis S., and E. H Hautz, Lakewood, Ohio. Truck body construction. 1,890,257; Dec. 6.
Hall, Frank A. (See Bronish, George M., assignor.)
Hall, John B. (See Cox, A. E., and Hall.)
Hall, Randolph F., Rochester, N. Y. Airplane. 1,890,035; Dec. 6.
Hallward, Michael, Pasadena, Calif. Child's toy chest. Des. 88,538; Dec. 6.
Hallward, Michael, Pasadena, Calif. Child's toy chest. Des. 88,539; Dec. 6.
Hallward, Michael, Pasadena, Calif. Child's chair. Des. 88,540; Dec. 6.
Hallward, Michael, Pasadena, Calif. Child's chest of drawers. Des. 88,541; Dec. 6.
Hallward, Michael, Pasadena, Calif. Child's play table. Des. 88,612; Dec. 6.
Halpin, Abraham, New York, N. Y. Money bag. 1,889,860; Dec. 6.
Hamm, Eugène, Strasbourg, France. Safety device for use with earthing circuits in alternating current systems. 1,889,832 Dec. 6.
Hamm, Ray H., and J. H. W. Champion, assignors to Arizona Grocery Company, Phoenix, Ariz. Fruit and vegetable stand spray. 1,890,084; Dec. 6.
Hammeth, B. W. (See McConahay, Ray H., assignor.)
Hansen, Christian J., Essen-Ruhr, Germany, assignor, by mesne assignments, to The Koppers Company of Delaware, Pittsburgh, Pa. Recovering hydrogen sulphide from gas mixtures. 1,889,894; Dec. 6.
Hansen, Sern L., Cleveland, Ohio. Valve structure for gas engines. 1,890,326; Dec. 6.
Hansen's, Chr., Laboratory, Inc. (See Spence, Byron, assignor.)
Hargreaves, George A., assignor of one-half to W. T. Owens, Evanston, Ill. Fire hose coupling. 1,890,290; Dec. 6.
Harman, Frank B., Kenosha, Wis., assignor to Simmons Company, New York, N. Y. Hospital table. 1,889,783; Dec. 6.
Harrington & King Perforating Company. (See Dean, Ruth A., assignor.)
Harrison, Frank L., Coogee, New South Wales, Australia. Drop down table or seat. 1,890,289; Dec. 6.
Hart, George B., Brighton, N. Y. Plant or rosebush. Pl. Pt. 48; Dec. 6.
Harter, William G., assignor to Continental Steel Corporation, Kokomo, Ind. Roofing sheet. 1,889,784; Dec. 6.
Hartfield, August J., assignor to Pacific Gas Radiator Company, Huntington Park, Calif. Adjustable thermostat for radiators. 1,889,833; Dec. 6.
Hartford-Empire Company. (See Black, Jotham F., assignor.)
Haug, John S., Philadelphia, assignor to U. G. I. Contracting Company, Philadelphia, Pa. Gas producer. 1,890,056; Dec. 6.
Hautz, Edward H. (See Hafner, L. S., and Hautz.)
Hays, Rolfe M., assignor of one-half to C. E. R. Fulcher, Los Angeles, Calif. Carton or container. 1,889,985; Dec. 6.
Haywood, Percy W., Toronto, assignor to International Silver Company of Canada Limited, Hamilton, Ontario, Canada. Centering device. 1,889,986; Dec. 6.
Headless Multiple Motor Corporation. (See Cadwell, Leslie E., assignor.)
Hector, Marcel. (See Pellerin, E., Hector, and Carpentier.)
Heeter, Allen F. (See Buhrke, A. E., and Heeter.)
Heidloff, Joseph R., assignor to Hydraulic Brake Company, Detroit, Mich. Master cylinder piston for hydraulic brake systems. 1,889,987; Dec. 6.
Heinke, Alfred J., Towaco, N. J. Textile fabric or the like. Des. 88,542; Dec. 6.
Heinke, Alfred J., Towaco, N. J. Textile fabric or the like. Des. 88,543; Dec. 6.
Heinke, Alfred J., Towaco, N. J. Textile fabric or the like. Des. 88,544; Dec. 6.
Heinke, Alfred J., Towaco, N. J. Textile fabric or similar article of manufacture. Des. 88,545; Dec. 6.
Heinke, Alfred J., Towaco, N. J. Textile fabric or similar article of manufacture. Des. 88,546; Dec. 6.
Heinke, Alfred J., Towaco, N. J. Textile fabric or similar article of manufacture. Des. 88,547; Dec. 6.
Heise, George W., Bayside, and E. A. Schumacher, Brooklyn, N. Y., assignors to National Carbon Company, Inc. Dry cell of the flat type. 1,890,178; Dec. 6.

Helder, Horatio A., assignor to The Champion Fibre Company, Canton, N. C. Preparing refined bleached pulp. 1,890,179; Dec. 6.
Hellman, Carl R., assignor to William Willheim Co., Inc., New York, N. Y. Textile fabric or similar article. Des. 88,548; Dec. 6.
Hellman, Carl R., assignor to William Willheim Co., Inc., New York, N. Y. Textile fabric or similar article. Des. 88,549; Dec. 6.
Hellman, Carl R., assignor to William Willheim Co., Inc., New York, N. Y. Textile fabric or similar article. Des. 88,550; Dec. 6.
Hellman, Carl R., assignor to William Willheim Co., Inc., New York, N. Y. Textile fabric or similar article. Des. 88,551; Dec. 6.
Hellman, Carl R., assignor to William Willheim Co., Inc., New York, N. Y. Textile fabric or similar article. Des. 88,552; Dec. 6.
Henkels, Hugo, Wuppertal-Elberfeld, Germany. Device for the manufacture of separable fasteners. 1,889,803; Dec. 6.
Hennegan Company, The. (See Crane, Stanley A., assignor.)
Henshall, Percival P., assignor to The Buckeye Blower Company, Columbus, Ohio. Cross flow radiator. 1,889,895; Dec. 6.
Hercules Glue Company. (See Lindstaedt, Frank F., assignor.)
Hercules Glue Company. (See Shatto, D. L., and Lindstaedt, assignors.)
Hercules Powder Company. (See Fisher, Lloyd H., assignor.)
Hercules Powder Company. (See Humphrey, Irvin W., assignor.)
Hercules Powder Company. (See Rile, James H., assignor.)
Hess, Goldsmith & Co. (See Roberson, Willard D., assignor.)
Heuser, Ralph V. (See Barsky, G., and Heuser.)
Heuser, Ralph V., Cranford, N. J., assignor to American Cyanamid Company, New York, N. Y. Producing thiourea. 1,889,959; Dec. 6.
Hickman, Charles V., and R. L. Jeffery, Seattle, Wash. Closures for collapsible tubes. 1,890,441; Dec. 6.
Hild, William F., East Rutherford, N. J. Lock socket. 1,889,804; Dec. 6.
Hilger, George, Chicago, Ill. Refrigerating system. 1,889,917; Dec. 6.
Hilger, George, Chicago, Ill. Refrigerating system. 1,889,988; Dec. 6.
Hill, C. V., & Co. (See Hill, Clement V., assignor.)
Hill, Clement V., assignor to C. V. Hill & Co., Inc., Trenton, N. J. Defrosting device for refrigerating cases. 1,890,085; Dec. 6.
Hill, Frederick A., Ealing, London, England. Liquid composition for preserving materials, particularly timber. 1,890,220; Dec. 6.
Hills, John H., Grand Rapids, Mich., assignor to Brousman Mfg. Co. Vacuum still. 1,890,152; Dec. 6.
Hinsky, Anthony P., assignor to E. T. Trotter & Co., Brooklyn, N. Y. Insulated electric conductor and applying colored surfaces thereto. 1,890,291; Dec. 6.
Hinsky, Anthony P., assignor to E. T. Trotter & Co., Brooklyn, N. Y. Applying coatings to insulated wires and the like. 1,890,292; Dec. 6.
Hinson, Jay B., Little Neck, assignor to Leo H. Fuller, Inc., Long Island City, N. Y. Advertising or display device. 1,890,258; Dec. 6.
Hintzmann, Karl, Leverkusen, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Increasing the solubility of water-soluble salts. 1,889,960; Dec. 6.
Hitt, Samuel E., Elyria, Ohio. Aeroship. 1,890,113; Dec. 6.
Hoban, Fairfield W., assignor to Fairfield Specialties Corporation, New York, N. Y. Coin testing apparatus. 1,890,380; Dec. 6.
Hoban, Fairfield W., assignor to Fairfield Specialties Corporation, New York, N. Y. Testing coins or other tokens for genuineness. 1,890,381; Dec. 6.
Hoffman, Frederick H., Columbus, Ohio. Food compound. 1,890,180; Dec. 6.
Hoffman, Laurence N., assignor to Shelby Metal Products Company, Shelby, Ohio. Hardware display card. 1,890,181; Dec. 6.
Hollister, Clarence P., Cold Spring, assignor to The Brooklyn Metal Stamping Corporation, Brooklyn, N. Y. Locally controlled radio receiving apparatus. Re18,689; Dec. 6.
Hollywood Knitting Mills, Inc. (See Karahadian, Kay, assignor.)
Holmes, Henry S., Rockville Center, N. Y. Electric welding machine. 1,890,057; Dec. 6.
Holmes, Ray D. (See Britton, E. C., and Holmes.)
Holzapfel, George L., Houston, Tex., assignor to Richfield Oil Company of California, Los Angeles, Calif. Gas carburetor and method of carburetion. 1,890,058; Dec. 6.
Hoppe, Gotthold, Copenick-Wendenschloss, Germany. Intermittently acting feeding device. 1,889,785; Dec. 6.
Hort, Hermann, Berlin, Neuwestend, assignor to Gesellschaft für Elektrische Apparate, m. b. H., Berlin-Marienfelde, Germany. Steering gear for water and air vehicles. 1,890,293; Dec. 6.
Hotchkiss, Harry G. (See Wirs, H., and Hotchkiss.)
Hotchner, Fred, Chicago, Ill. Discharge tube display. Re18,679; Dec. 6.
Howell, Joseph C., Fort Lee, N. J. Adjustable arch support. 1,890,382; Dec. 6.
Howell, Joseph C., Fort Lee, N. J. Adjustable arch support. 1,890,383; Dec. 6.
Howell, Joseph C., Fort Lee, N. J. Flexible arch support. 1,890,384; Dec. 6.
Howser, Harry B., jr., Washington, D. C., assignor to The Lionel Corporation, New York, N. Y. Sound attachment for toy locomotives. 1,889,918; Dec. 6.
Huber, Herman J. H., Upper Darby, Pa., and C. R. Kellogg, Scotia, N. Y., assignors to General Electric Company. Explosion chamber for liquid break switches. 1,890,327; Dec. 6.
Huber, Paul J., assignor of one-third to F. W. Peterson and one-third to W. H. Wallraff, Minneapolis, Minn. Automobile case clamp. 1,890,328; Dec. 6.
Huet, André. (See Magis, A., and Huet.)
Huet, André, Paris, France, assignor to The Superheater Company, New York, N. Y. Baffle arrangement. 1,889,861; Dec. 6.
Hughes, John R., Lynwood, assignor to V. C. Emden, Los Angeles, Calif. Separating borax. 1,889,989; Dec. 6.
Hughes, Walter J., assignor to General Zeolite Co., Chicago, Ill. Fluid purifying device. 1,890,294; Dec. 6.
Hull, Harry B., Dayton, Ohio, assignor, by mesne assignments, to Frigidaire Corporation. Refrigerating apparatus. Re18,685; Dec. 6.
Hull, Harry B., and D. H. Reeves, assignors to Frigidaire Corporation, Dayton, Ohio. Refrigerating apparatus. 1,889,896; Dec. 6.
Hult, Warner G., and H. Kingsmill, Cleveland, Ohio. Clutch brake control device for motor vehicles. 1,890,153; Dec. 6.
Humphrey, Irvin W., assignor to Hercules Powder Company, Wilmington, Del. Refining rosin. 1,890,086; Dec. 6.
Hunt, Clifford C., assignor to Reynolds Spring Company, Jackson, Mich. Spoon or similar article. Des. 88,553; Dec. 6.
Hunt, William H., National City, Calif. Fish dorsal fin centering means. 1,889,919; Dec. 6.
Hunter, Albert M., Philadelphia, Pa. Interest calculating device. 1,890,182; Dec. 6.
Hürlimann, Max. (See Widmer, S., and Hürlimann.)
Hurns, Thomas E., and A. Y. Leslie, Detroit, Mich., assignors to Remington Rand Inc., Buffalo, N. Y. Card interpreter. 1,889,920; Dec. 6.
Hutt, George A. (See Hutt, Robert J., and G. A.)
Hutt, Robert J., and G. A. Hutt, Brooklyn, N. Y. Doily. Des. 88,554; Dec. 6.
Hyde Park Lumber Company, The. (See Cordes, Edward C., assignor.)
Hydraulic Brake Company. (See Gardner, Clarence V., assignor.)
Hydraulic Brake Company. (See Heidloff, Joseph R., assignor.)
I. G. Farbenindustrie Aktiengesellschaft. (See Baehr, Hans, assignor.)
I. G. Farbenindustrie Aktiengesellschaft. (See Brode, J. and Johannsen, assignors.)
I. G. Farbenindustrie Aktiengesellschaft. (See Dankert, Carl, assignor.)
I. G. Farbenindustrie Aktiengesellschaft. (See Hintzmann, Karl, assignor.)
I. G. Farbenindustrie Aktiengesellschaft. (See Krauch, C., and Pier, assignors.)
I. G. Farbenindustrie Aktiengesellschaft. (See Mueller-Cunradi, M., and Eggert, assignors.)
I. G. Farbenindustrie Aktiengesellschaft. (See Pongratz, E. V., and Zorn, assignors.)
I. G. Farbenindustrie Aktiengesellschaft. (See Pungs, W., Eisenmann, and Kuchenbuch, assignors.)
Illinois Supply Company. (See Divekey, Harvey J., assignor.)
Imperial Paper Box Corporation. (See Triolo, Louis, assignor.)
Ingram, Joseph R., Nitro, W. Va., assignor to The Rubber Service Laboratories Company, Akron, Ohio. Antioxidant for vulcanised rubber products. 1,890,154; Dec. 6.
International Combustion Engineering Corporation. (See Van Brunt, John, assignor.)
International Patents Development Company. (See Ebert, C., Newkirk, and Moskowitz, assignors.)
International Silver Company. (See Haywood, Percy W., assignor.)
International Silver Company. (See Prout, Benjamin H., assignor.)
Intertype Corporation. (See Freund, Herman R., assignor.)
Israelson, Peder, Hillman, Minn. Potato planter. 1,890,155; Dec. 6.
Iversen, Lorens, assignor to Mesta Machine Company, Pittsburgh, Pa. Method and apparatus for leveling and shearing metal stock. 1,890,221; Dec. 6.
Jackson, Charles L., Chula Vista, Calif. Insect destroying device. 1,890,118; Dec. 6.
Jacobs, Joseph, Bridgeport, assignor to The A. J. Donahue Corporation, Milford, Conn. Dispensing-package for powder puffs. 1,890,295; Dec. 6.

Jaeger, Alphons O., Mount Lebanon, assignor, by mesne assignments, to The Selden Research & Engineering Corporation, Pittsburgh, Pa. Purification of phthalide. 1,889,961; Dec. 6.

Jakosky, John J., assignor to Drill Guide Incorporated, Los Angeles, Calif. Apparatus for measuring deviation of rotary drills from the vertical. 1,889,921; Dec. 6.

Janus, Bernard, assignor to Sarnia Air Equipment Limited, Sarnia, Ontario, Canada. Gauge for tire inflation air lines and the like. 1,890,036; Dec. 6.

Jarvis, W. B., Company. (See Andrie, Michael B., assignor.)

Jeffery, Raymond L. (See Hickman, C. N., and Jeffery.)

Jeffreys, Oliver B., Outwood, Ky. Calendar. 1,890,117; Dec. 6.

Jennings, James W., Providence, R. I., assignor to Quaker Silver Company, Attleboro, Mass. Shaker for salt, etc. 1,890,222; Dec. 6.

Jennings, O. D. & Company. (See Vaughn, John L., assignor.)

Jobst, Günther, J. Richter and W. Wehnert, assignors to Telefunken Gesellschaft fur Drahtlose Telegraphie m. b. H., Berlin, Germany. Gas tube amplifier. 1,889,749; Dec. 6.

Johannsen, Adolf. (See Brode, J., and Johannsen.)

Johansson, Carl E., Detroit, Mich. Surface plate. 1,889,897; Dec. 6.

Johnson Brothers Engineering Corporation. (See Johnson, Harry L. and L. J., assignors.)

Johnson, Charles E., Whitman, assignor to Augustus E. Tuerten, Belmont, Mass. Boot or shoe sole. 1,890,118; Dec. 6.

Johnson, Earl M., Audobon, Iowa. Trap. 1,890,183; Dec. 6.

Johnson, Eric M., Westminster, England, assignor to General Electric Company. Power system. 1,890,329; Dec. 6.

Johnson, Frances, Brooklyn, N. Y. Textile fabric or similar article of manufacture. Des. 88,555; Dec. 6.

Johnson, Harry L., Waukegan, Ill., and L. J. Johnson, assignors to Johnson Brothers Engineering Corporation, South Bend, Ind. Marine motor. 1,889,964; Dec. 6.

Johnson, Herbert B., Larchmont, N. Y. Rubber covered article. 1,890,037; Dec. 6.

Johnson, Louis J. (See Johnson, Harry L. and L. J.)

Johnson, Samuel S., Harrisburg, Pa. Meter protector. 1,889,805; Dec 6.

Johnson, Stanley G., Grosse Pointe Village, Mich. Loose leaf binder. 1,889,962; Dec. 6.

Johnson, Stephen, jr. (See McCune, J. C., and Johnson.)

Jones, Allan B. (See Cameron, F. S., and Jones.)

Judd, H. L., Company. (See Whitehead, Oscar N., assignor.)

Jungholm, Karl J., Stockholm, Sweden. Electrical switch. 1,890,038; Dec. 6.

Justheim, Clarence L., Salt Lake City, Utah. Fueling system. 1,889,922; Dec. 6.

Kaplan, Reuben A., assignor to Owatonna Tool Company, Owatonna, Minn. Method of and apparatus for removing hubs. 1,889,750; Dec. 6.

Karahadian, Kay, Los Angeles, Calif., assignor to Hollywood Knitting Mills, Inc. Knitted sweater. 1,890,385; Dec. 6.

Karolus, August, Leipzig, Germany, assignor to Radio Corporation of America. Television system. 1,889,990; Dec. 6.

Kasantzeff, Florentin, Berlin, Germany. Triple valve for automatic railway brakes. 1,890,087; Dec. 6.

Kasantzeff, Florentin, Berlin, Germany. Triple valve for direct acting railway brakes. 1,890,088; Dec. 6.

Katzman, Herbert, assignor to William Willheim Co., Inc., New York, N. Y. Textile fabric or similar article. Des. 88,556; Dec. 6.

Kaufmann, Werner R., East Elmhurst, Long Island, assignor to Combier & Co. Inc., New York, N. Y. Textile fabric or the like. Des. 88,557; Dec. 6.

Kayser, Julius & Co. (See Mutchler, A. W., and Leopold, assignors.)

Kearsley, William K., Schenectady, N. Y., assignor to General Electric Company. Apparatus for and method of operating rectifying load devices. 1,890,330; Dec. 6.

Kellermann, Heinrich, Berlin-Lichtenberg, Germany. Pyrophoric lighter. 1,889,898; Dec. 6.

Kendall, Earl, assignor of one-half to I. E. Cole, Melrose Park, Ill. Wheel puller. 1,889,965; Dec. 6.

Kessler, Frank, Brooklyn, assignor to the Leo Baum estate, A. Russell Bond, executor, New York, N. Y. Interchangeable jewel mounting. 1,889,862; Dec. 6.

Kessler, John J., St. Louis, Mo., assignor to Apple Electrical Manufacturing Company, Dayton, Ohio. Making phenol-aldehyde condensation products. 1,889,751; Dec. 6.

Kienle, Roy H., Schenectady, N. Y., assignor to General Electric Company. Resinous condensation product. 1,889,923; Dec. 6.

Kiesel, William F., jr., Altoona, Pa. Locomotive exhaust piping and feed water heater. 1,889,924; Dec. 6.

Kilzer, James E., assignor to John J. Larkin, St. Louis, Mo. Drill pipe float coupling. 1,890,223; Dec. 6.

Kingsmill, Harry. (See Hult, W. G., and Kingsmill.)

Kingston, Thomas H., assignor to Builders' Patent Scaffolding Company, West Somerville, Mass. Ledger clamp. 1,890,386; Dec. 6.

Kitsée, Isidor, assignor to Mineralite Corporation, Philadelphia, Pa. Producing board-like material with the aid of mineral wool. 1,890,184; Dec. 6.

Kjellander, Gustaf L., Sodertalje, Sweden. Lumber elevator. 1,890,887; Dec. 6.

Klein, George, Centralia, Ill. Carbon brush. 1,889,834; Dec. 6.

Klinckmuller, Karl, Boston, Mass. Oil burner control system. 1,890,119; Dec. 6.

Klinger, Ralph, Riverside, Calif. Propeller. 1,890,120; Dec. 6.

Knickerbocker Silver Co. Inc. (See Sperling, Morris, assignor.)

Kohut, Alexander, assignor to William Willheim Co., Inc., New York, N. Y. Textile fabric or similar article. Des. 88,559; Dec. 6.

Kohut, Alexander, assignor to William Willheim Co., Inc., New York, N. Y. Textile fabric or similar article. Des. 88,560; Dec. 6.

Kollman, Bartley H., Indianapolis, Ind. Sign. Des. 88,558; Dec. 6.

König, Wenzel, Leipzig, Germany. Shower rose. 1,890,156; Dec. 6.

Koopmeiners, Alois. (See Thelen, N. J., and H. and A. Koopmeiners.)

Koopmeiners, Henry. (See Thelen, N. J., and H. and A. Koopmeiners.)

Koppers Company of Delaware, The. (See Hansen, Christian J., assignor.)

Koun, Young H., New York, N. Y. Automatic control system for aeroplanes. 1,890,115; Dec. 6.

Kramlik, Sebastian, Kenilworth, N. J. Golf club handle. 1,890,388; Dec. 6.

Krauch, Carl, Ludwigshafen-on-the-Rhine, and M. Pier, Heidelberg, Germany, assignors, by mesne assignments, to Standard-I. G. Company, Linden, N. J. Conversion of solid fuels and products derived therefrom or other materials into valuable liquids. 1,890,434; Dec. 6.

Krauch, Carl, Ludwigshafen-on-the-Rhine, and M. Pier, Heidelberg, assignors to I. G. Farbenindustrie Aktiengeselischaft, Frankfort-on-the-Main, Germany. Production of valuable liquid products from tars, mineral oils, and the like carbonaceous materials. 1,890,435; Dec. 6.

Krauch, Carl, Ludwigshafen-on-the-Rhine, and M. Pier, Heidelberg, Germany, assignors, by mesne assignments, to Standard-I. G. Company, Linden, N. J. Conversion of solid fuels and products derived therefrom or other materials into valuable liquids. 1,890,436; Dec. 6.

Kreidel, Hans, Wiesbaden, Germany. Wick lubricator. 1,890,157; Dec. 6.

Kremer, John. (See Armour, E., and Kremer.)

Krokenberger, Adolph, Paulsboro, N. J. Foot lift for tractor plows. 1,890,389; Dec. 6.

Kronheim, Jacob, Cleveland, Ohio. Resilient bottom. 1,890,089; Dec. 6.

Kronheim, Jacob, Cleveland, Ohio. Chair and couch. 1,890,090; Dec. 6.

Kuchenbuch, Johann. (See Pungs, W., Eisenmann, and Kuchenbuch.)

Lace Net Importing Co. Inc., The. (See Dognin, Jean, assignor.)

La Chance, Fred W., Chicago, Ill. Price posting machine. 1,890,395; Dec. 9.

La Gasse, Anthony M., assignor to S. G. Turnbull, Arlington, N. J. Bleaching soap stock. 1,890,121; Dec. 6.

Lake, Thomas A. E., Milford, Conn. Flying machine. 1,890,059; Dec. 6.

Lamb, Charles, D. R. Redford, and C. H. Riley, Los Angeles, Calif. Wear preventer for drill pipe. 1,889,806; Dec. 6.

Lamb, James C., Warsaw, Va. Radiator truck. 1,890,390; Dec. 6.

Lambert, Thomas M. (See Millerchip, J., and Lambert.)

Lamoree, James K. (See Evans, A. D., and Lamoree.)

Land, Arthur A. G., Chicago, Ill. Chain link wire fabric. 1,890,224; Dec. 6.

Lane, Charles F., San Jose, Calif. Rodent feeder. 1,890,391; Dec. 6.

Lane, Francis J., London, England, assignor to General Electric Company. Protective arrangement. 1,890,331; Dec. 6.

Lange, Paul H., assignor to The Max Ams Machine Company, Bridgeport, Conn. Shaping and flanging machine. 1,890,039; Dec. 6.

Langenhaun, Max, Arnstadt in Thuringia, Germany. Billiard table. 1,889,899; Nov. 5.

Larkin, John J. (See Kilzer, James E., assignor.)

Larsen, John M., Grand Rapids, Mich. Electric welding tool. 1,889,991; Dec. 6.

Lavarack, William H. B., Pine Bush, assignor to Railroad Accessories Corporation, New York, N. Y. Railway signaling track diagram. 1,890,122; Dec. 6.

Lawrence, Harvy W. (See Enochs, R. E., and Lawrence.)

Lawson, Axel A., Beverly, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Machine for operating upon sheet material. 1,889,992; Dec. 6.

Lawson, Walter E., assignor to E. I. du Pont de Nemours & Company, Wilmington, Del. Polymerising vinyl derivatives. 1,890,060; Dec. 6.

Leahy, Herbert V., Los Angeles, Calif. Furnace construction. 1,889,993; Dec. 6.

Ledoux, John W., Swarthmore, Pa. Meter. 1,889,994; Dec. 6.

Lee, Leffman H., Bellevue, assignor of one-sixth to W. B. Wharton and one-sixth to J. M. Guthrie, Pittsburgh, Pa. Fastening device. 1,889,807; Dec. 6.

Lefkowitz, Emanuel, Carteret, N. J. Hose coupling. 1,890,061; Dec. 6.

Leininger, Lillie, Modesto, Calif. Invalid conveyer. 1,889,925; Dec. 6.

Lentz, Joseph A., Baltimore, Md. Valve. 1,889,900; Dec. 6.

Leopold, Allen L. (See Mutchler, A. W., and Leopold.)

Leslie, Arthur V. (See Hurns, T. E., and Leslie.)

Levi, Joseph H., Washington, D. C. Finger ring. Des. 88,561; Dec. 6.

Libbey, Frederick I., Bronxville, assignor to Automatic Brake Corporation, New York, N. Y. Control means for a brake system power unit. 1,890,259; Dec. 6.

Lilienfeld, Leon, Vienna, Austria. Dyed cellulose ether product and making same. 1,890,392; Dec. 6.

Lilienfeld, Leon, Vienna, Austria. Water soluble compounds of Cellulose-xantho-fatty acids and producing them. 1,890,393; Dec. 6.

Lily-Tulip Cup Corporation. (See Wikstrom, Frank G., assignor.)

Limoges China Company et al. (See McMaster, Harry J., assignor.)

Lincoln Machine Company. (See Pullan, James F., assignor.)

Linde Air Products Company, The. (See Obert, Casin W., assignor.)

Lindstaedt, Frank F. (See Shatto, D. L., and Lindstaedt.)

Lindstaedt, Frank F., Oakland, assignor to Hercules Glue Company, San Francisco, Calif. Spreader and emulsifier for spray compositions. 1,890,158; Dec. 6.

Linn, Robert E., Detroit, Mich. Tire cover. 1,890,123; Dec. 6.

Lionel Corporation, The. (See Howser, Harry R., assignor.)

Littman, Evelyn, New York, N. Y. Textile fabric or the like. Des. 88,562; Dec. 6.

Long, Leslie E., Chicago, Ill. Machine for removing heads and feet of fowl. 1,890,394; Dec. 6.

Lonza Elektrizitatswerke und Chemische Fabriken Aktiengesellschaft. (See Lüscher, Emil, assignor.)

Lorimer, John W., Oakland, Calif. Diesel engine speed governor and apparatus to relieve fuel oil pressure accumulation. 1,890,225; Dec. 6.

Lowry, Charles D., jr., and C. G. Dryer, assignors to Universal Oil Products Company, Chicago, Ill. Treatment of motor fuel. 1,889,835; Dec. 6.

Lowry, Charles D., jr., and C. G. Dryer, assignors to Universal Oil Products Company, Chicago, Ill. Treatment of motor fuel. 1,889,836; Dec. 6.

Lucke, Charles E., New York, N. Y., assignor to The Babcock & Wilcox Company, Bayonne, N. J. Heat transfer device. 1,890,185; Dec. 6.

Lucke, Charles E., New York, N. Y., assignor to The Babcock & Wilcox Company, Bayonne, N. J. Heat transfer device. 1,890,186; Dec. 6.

Luckey, George P., Lancaster, Pa., assignor to Pioneer Instrument Company, Incorporated, Brooklyn, N. Y. Sensitive altimeter. Re18,681; Dec. 6.

Lukas, Julia, assignor to William Willheim Co., Inc., New York, N. Y. Textile fabric or similar article. Des. 88,563; Dec. 6.

Lukas, Julia, New York, N. Y. Textile fabric or the like. Des. 88,564; Dec. 6.

Lukas, Julia, assignor to Combier & Co. Inc., New York, N. Y. Textile fabric or the like. Des. 88,565; Dec. 6.

Lurcott, Winfred N., Elizabeth, N. J. Draft regulating apparatus for furnaces. 1,890,296; Dec. 6.

Lüscher, Emil, assignor to Lonza Elektrizitatswerke und Chemische Fabriken Aktiengesellschaft, Basel, Switzerland. Preparation of double salts of calcium nitrate. 1,889,863; Dec. 6.

Luther, Martin, Mannheim, and M. Müller-Cunradi Ludwigshafen-on-the-Rhine, Germany, assignors, by mesne assignments, to Standard-I. G. Company, Linden, N. J. Recovery of oils of high boiling point. 1,889,926; Dec. 6.

Lüttringhaus, Arthur Mannheim, H. Neresheimer, Ludwigshafen-on-the-Rhine, W. Eichholz, Mannheim, George Boehner, Edingen-on-the-Neckar, and Wilhelm Schneider, Ludwigshafen-on-the-Rhine, Germany, assignors to General Aniline Works Inc., New York, N. Y. Production of anthraquinone and derivatives thereof. 1,890,040; Dec. 6.

Luts, Frederick W. (See Briechle, A., Lutz, and Rattray.)

Lyon Metal Products, Incorporated. (See Bales, James E., assignor.)

MacCallum, Daniel W., Caseyville, Ill. Boat. 1,889,927; Dec. 6.

MacDonald, Chester R., Monroe, Mich., assignor, by mesne assignments, to The Patent and Licensing Corporation, Boston, Mass. Method of and machine for making thick butt roofing. 1,890,017; Dec. 6.

MacDonald, James A., assignor to W. Warne, Los Angeles, Calif. Expansion joint. 1,890,260; Dec. 6.

MacNabb, Vernon C., assignor to Atwater Kent Manufacturing Company, Philadelphia, Pa. Radio receiving system. 1,890,426; Dec. 6.

Madden, Frank A., Salina, Kans. Vending machine. 1,890,062; Dec. 6.

Madsen, Sern, assignor to Curtis Companies, Incorporated, Clinton, Iowa. Spring hung sash construction. 1,889,752; Dec. 6.

Madsen, Sern, assignor to Curtis Companies, Incorporated, Clinton, Iowa. Closure fastener. 1,889,753; Dec. 6.

Maestro, Giovanni, New Kensington, Pa. Cheese grating machine. 1,890,091; Dec. 6.

Magis, Auguste, and A. Huet, Paris, France, assignors to The Superheater Company, New York, N. Y. Fire box for locomotives or other steam vehicles. 1,889,754; Dec. 6.

Manaster, Ben B., Chicago, Ill. Belt buckle connecter or the like. Des. 88,566; Dec. 6.

Manion, Leo W., Canton, assignor, by mesne assignments, to Ferro Enamel Corporation, Cleveland, Ohio. Furnace. 1,889,928; Dec. 6.

Mann, William B. W. (See Talbot, Frank A., assignor.)

Maphet, Nancy E., Wichita, Kans. Invalid's support. 1,890,396; Dec. 6.

Martin, John F., assignor to United American Bosch Corporation, Springfield, Mass. Ignition governor. 1,889,755; Dec. 6.

Martin, William S., assignor to The North Carolina Granite Corporation, Mount Airy, N. C. Apparatus for rifting granite or analogous stone. 1,890,187; Dec. 6.

Mathis, Eugene, assignor to New York Blower Company, Chicago, Ill. Blower. 1,890,226; Dec. 6.

Max Ams Machine Company, The. (See Lange, Paul H., assignor.)

McBean, Douglas M., assignor to Beech-Nut Packing Company, Canajoharie, N. Y. Testing apparatus and method. 1,890,063; Dec. 6.

McCarthy, Ernest, Orlando, Fla. Fruit drier. 1,890,397; Dec. 6.

McCarty, Richard J., jr. (See Froelich, C. H., and McCarty.)

McClelland, A. J. (See Campbell, Earl E., assignor.)

McClintic-Marshall Company. (See Boone, Harry S., assignor.)

McCollum, Henry J. D., and J. H. K. McCollum, Long Branch, N. J. Clutch controlling mechanism. 1,890,398; Dec. 6.

McCollum, James H. K. (See McCollum, Henry J. D. and J. H. K.)

McConahay, Ray H., Wooster, Ohio, assignor of one-half to B. W. Hammeth. Well-depth measuring device. 1,890,159; Dec 6.

McCormick, Thomas J. (See Crocker, Robert R., assignor.)

McCune, Joseph C., Edgewood, and S. Johnson, jr., Pittsburgh, assignors to The Westinghouse Air Brake Company, Wilmerding, Pa. Vacuum operated horn. Re18,682; Dec. 6.

McCurdy, Ralph G. (See Chapman, A. G., and McCurdy.)

McKee, Weldon W., Wooster, Ohio. Auto crank shaft wrench. 1 890,227; Dec. 6.

McLeod, Robert J., West Drayton, Middlesex, England. Metal milling machine. 1,890,399; Dec. 6.

McLeod, Thomas, Elisabeth, N. J. Steering apparatus or the like. 1,890,041; Dec. 6.

McMaster, Harry J., assignor of one-fourth to The Sebring Pottery Company, one-fourth to The Limoges China Company, one-fourth to The Crescent China Company, Sebring, and one-fourth to The Salem China Company, Salem, Ohio. Earthen ware dishes and glaze therefor. 1,890,297; Dec. 6.

McNamara, Frank J., Seattle, Wash. Securing means for artificial teeth. 1,889,756; Dec. 6.

McNulty, Martin J., jr., Tulsa, Okla. System and apparatus for elevating and lowering oil well piping. 1,889,808; Dec. 6.

Medvedeff, Nicholas J., Larchmont, N. Y. Airplane. 1,890,064; Dec. 6.

Meeder, Herbert L., Denver, Colo. Motor starter. 1,889,995; Dec. 6.

Meehan, Paul A., Cleveland, Ohio, assignor, by mesne assignments, to Swindell-Dressler Corporation, Pittsburgh, Pa. Method and apparatus for heat treating sheet metal. 1,890,065; Dec. 6.

Mekler, Valentine A. (See Morrell, J. C., and Mekler.)

Menking, William H. (See Gewecke, J. G., Ellison, and Menking.)

Mergenthaler Linotype Company. (See Govier, C. W., and Reid, assignors.)

Merrill Aircraft Company. (See Merrill, Albert A., assignor.)

Merrill, Albert A., Jamaica, assignor, by mesne assignments, to Merrill Aircraft Company, Long Island City, N. Y. Airplane. 1,889,864; Dec. 6.

Mesta Machine Company. (See Iversen, Lorenz, assignor.)

Metallic Gripper Company, The. (See Chesler, Chaim, assignor.)

Michelin André J., Paris, assignor to Michelin & Cie., Clermont-Ferrand, France. Securing removable wheels to a hub. 1,889,837; Dec. 6.

Michelin & Cie. (See Michelin, André J., assignor.)

Milgrim, Sally, Woodmere, N. Y., assignor to Associated Merchandising Corporation, New York, N. Y. Dress. Des. 88,567; Dec. 6.

Millard, Mabel, Oak Park, Ill. Interconvertible dining table and shelf cupboard. 1,889,901; Dec. 6.

Miller, Andrew J., Massillon, Ohio. Attachment for plows. 1,890,261; Dec. 6.

Miller, Carl D., Chicago, Ill. Measurement of viscosity. 1,889,996; Dec. 6.
Miller, Ernest B., assignor to The Silica Gel Corporation, Baltimore, Md. Chamber process of manufacturing sulphuric acid. 1,889,973; Dec. 6.
Miller, George W., Sapulpa, Okla. Clean-out bit for sand pumps. 1,889,865; Dec. 6.
Miller, Joseph J., West Allis, Wis. Fish lure. 1,890,400; Dec. 6.
Miller, Royal R., Elkhart, Ind., assignor to W. M. Blair, Chicago, Ill. Hydraulic bulldozer. 1,890,228; Dec. 6.
Miller, Stuart P., Englewood, N. J., assignor to The Barrett Company, New York, N. Y. Operating cupola furnaces. 1,889,757; Dec. 6.
Millerchip, John, Lane Cove, and T. M. Lambert, Artarmon, New South Wales, Australia. Screw cutting die. 1,890,124; Dec. 6.
Mills, Bert E., Oak Park, assignor to Mills Novelty Company, Chicago, Ill. Automatic cut-off switch. 1,889,786; Dec. 6.
Mills Novelty Company. (See Mills, Bert E., assignor.)
Mineralite Corporation. (See Kitsis, Isidor, assignor.)
Minor, Burt S., San Pedro, Calif. Device for controlling pressures in oil wells. 1,889,787; Dec. 6.
Mitchell, August, New York, N. Y., assignor to The Chase Companies, Incorporated, Waterbury, Conn. Portable battery lamp. 1,889,788; Dec. 6.
Mitchell, James R., Montpelier, Vt. Emery or abrading wheel. 1,890,401; Dec. 6.
Mnookin, Nathan M. (See Patrick, J. C., and Mnookin.)
Montgomery, Gustavus A., Dallas, Tex. Tubular coupling. 1,889,866; Dec. 6.
Montgomery, Gustavus A., Dallas, Tex. Tubular coupling. 1,889,867; Dec. 6.
Montgomery, Gustavus A., Dallas, Tex. Double box rotary tool joint. 1,889,868; Dec. 6.
Montgomery, Gustavus A., Dallas, Tex. Tube coupling. 1,889,869; Dec. 6.
Montgomery, Gustavus A., Dallas, Tex. Interior shoulder single piece tool joint. 1,889,870; Dec. 6.
Montgomery, Gustavus A., Dallas, Tex. Rotary drill stem, its tube and collar. 1,889,871; Dec. 6.
Montgomery, Gustavus A., Dallas, Tex. Inserted joint rotary drill stem. 1,889,872; Dec. 6.
Montgomery, Gustavus A., Dallas, Tex. Well tube and rotary drill pipe. 1,889,873; Dec. 6.
Montgomery, James M., Piqua, Ohio. Automatic measuring mechanism. 1,890,160; Dec. 6.
Monz, Herta. (See Monz, Mathey and H.)
Monz, Mathey and H., Brooklyn, N. Y. Collapsible pocket umbrella. 1,890,440; Dec. 6.
Moore Bros. (See De Wit, Leonard, assignor.)
Moore, David P., Avon Park, Fla. Finishing knitted pile fabrics. 1,889,902; Dec. 6.
Moore, George F., Tampa, Fla., assignor to U. S. Phosphoric Products Corporation, New York, N. Y. Purifying phosphoric acid. 1,889,929; Dec. 6.
Moore, George L., and J. R. Steele, Oswego, N. Y. Rail anchor. 1,890,066; Dec. 6.
Moore, Thomas F., Morris Plains, N. J. Hydraulic pumping apparatus. 1,890,125; Dec. 6.
Moore, Thomas F., Morris Plains, N. J. Float-controlled diaphragm valve for hydraulic pumping systems. 1,890,126; Dec. 6.
Morandi, Antonio, Munich, Germany. Clamping means. 1,890,042; Dec. 6.
Morin, Louis A., Westfield, Mass. Fuel burning apparatus. Re18,684; Dec. 6.
Morrell, Jacque C., and V. A. Mekler, assignors to Universal Oil Products Company, Chicago, Ill. Method and apparatus for producing lampblack. 1,890,188; Dec. 6.
Morrell, Jacque C., and J. L. Essex, assignors to Universal Oil Products Company, Chicago, Ill. Refining of hydrocarbon oil. 1,890,229; Dec. 6.
Morrell, Jacque C., and J. L. Essex, assignors to Universal Oil Products Company, Chicago, Ill. Refining of hydrocarbon oil. 1,890,230; Dec. 6.
Morris, Melvin G., Houston, Tex., assignor, by mesne assignments, to Claude Neon Lights, Inc., New York, N. Y. Mercury luminescent tube electrode. 1,890,402; Dec. 6.
Morrison, George W. (See Policastro, C. M., and Morrison.)
Morrow, Joseph H., Hokendauqua, assignor to Fuller Company, Catasauqua, Pa. Portable pump. 1,890,298; Dec. 6.
Morton, Henry E., Muskegon Heights, Mich. Draw-cut shaper table. 1,889,930; Dec. 6.
Moskowitz, Meyer. (See Ebert, C., Newkirk, and Moskowitz.)
Moss-Still, Inc. (See Guhl, Maclyn, assignor.)
Moss-Still, Inc. (See Pulitzer, Gustav M., assignor.)
Moss-Still, Inc. (See Schweizer, Jack, assignor.)
Motsinger, Newell H., Marion, Ind. Lawn mower. 1,889,931; Dec. 6.
Mudd, Garrett W., assignor, by mesne assignments, to Chicago Curled Hair Company, Chicago, Ill. Producing an upholstery pad. 1,889,997; Dec. 6.
Mueller-Cunradi, Martin, Ludwigshafen-on-the-Rhine, and F. Eggert, Mannheim, assignors to I. G. Farbenindustrie, Aktiengesellschaft, Frankfort-on-the-Main, Germany. Polymerization products of γ butylenes. 1,889,952; Dec. 6.
Mulhollen, Harold S., Los Angeles, Calif. Traffic alarm for highways. 1,890,092; Dec. 6.
Müller-Cunradi, Martin. (See Luther, M., and Müller-Cunradi.)
Müller-Keuth, Wilhelm, Hanover, assignor to Firm Eisenwerk Wülfel, Hanover-Wulfel, Germany. Flexible elastic coupling. 1,890,332; Dec. 6.
Multigraph Company. (See Chisholm, Clifton, assignor.)
Murdock, Clifford J., Mayer, Ariz. Toy gun. 1,890,403; Dec. 6.
Murdock, George J., Newark, N. J. Position indicator for micrometer calipers and gauges. 1,890,404; Dec. 6.
Muros, Joseph, New York, N. Y., assignor, by mesne assignments, to Gillette Safety Razor Company, Boston, Mass. Safety razor. 1,890,333; Dec. 6.
Muros, Joseph, New York, N. Y., assignor to Gillette Safety Razor Company, Boston, Mass. Safety razor. 1,890,334; Dec. 6.
Murphree, James M., Troy, Ala. Top spinner. 1,890,043; Dec. 6.
Mutchler, Arthur W., and A. L. Leopold, Brooklyn, assignors to Julius Kayser & Co., New York, N. Y. Stocking and knitting same. 1,890,299; Dec. 6.
Nägele, Karl F., Berlin-Neukölln, Germany. Device for automatically arranging the elements of sliding clasp fasteners. 1,890,300; Dec. 6.
Nakken Patents Corporation. (See Nakken, Theodorus H., assignor.)
Nakken, Theodorus H., Brooklyn, N. Y., assignor to Nakken Patents Corporation. Transforming light impulses into current impulses. 1,889,758; Dec. 6.
National Carbon Company. (See Heise, G. W. and Schumacher, assignors.)
National Electric Products Corporation. (See Frederickson, Otto A., assignor.)
National Electric Products Corporation. (See Fullman, James M. G., assignor.)
National Folding Box Company. (See Gaffney, John J., assignor.)
National Laundry Machinery Company. (See Reeps, Charles O., assignor.)
National Malleable and Steel Castings Company. (See Schmidt, Ernest H., assignor.)
National Marking Machine Co., The. (See Peters, Edward F., assignor.)
Neff, Harry A., Bellaire, assignor to The Belmont Casket Manufacturing Company, Columbus, Ohio. Casket. 1,890,093; Dec. 6.
Nelson, B. F., Manufacturing Company, The. (See Pratt, Henry T., assignor.)
Nelson, John, Chicago, assignor of one-half to B. Granberg, Rockford, Ill. Clutch. 1,889,998; Dec. 6.
Neon, Claude, Lights, Inc. (See Morris, Melvin G., assignor.)
Nereshelmer, Heinrich. (See Lüttringhaus, A., Neresheimer, Eichholz, Boehner, and Schneider.)
Nestle-Lemur Company, The. (See Cox, John W., assignor.)
Neuland, Alfons H., Irvington, N. J., assignor, by mesne assignments, to Electrogear Corporation. Motor vehicle power and transmission apparatus. 1,890,015; Dec. 6.
Newkirk, William B. (See Ebert, Newkirk, and Moskowitz.)
New York Blower Company. (See Mathis, Eugene, assignor.)
Nichols, Malcolm P., trustee. (See Phillips, Ross M. G., assignor.)
Nickles, Clair A., Ponca City, Okla. Bearing babitting device. 1,889,999; Dec. 6.
Nielsen, Otto H., Chicago, Ill. Golf ball washer. 1,889,809; Dec. 6.
Nodine, Frank E., Meadville, Pa. Separable fastener and making same. 1,890,335; Dec. 6.
Nodine, Frank E., Meadville, Pa. Locking means. 1,890,336; Dec. 6.
Nolte, Albert C. (See Schwab, Gustav, assignor.)
Norman, Albert T., East Millinocket, assignor to Great Northern Paper Company, Millinocket, Me. Cleaning apparatus for the rolls of papermaking machines. 1,889,838; Dec. 6.
North Carolina Granite Corporation, The. (See Martin, William S., assignor.)
Northern Laboratories, Inc. (See Chatain, Henri G., assignor.)
Oakes, Lucian R., Tipton, Ind. Weed exterminator. 1,890,301; Dec. 6.
Oakley, Emily, Los Angeles, Calif. Rubber base for telephones and the like. 1,890,000; Dec. 6.
Obert, Casin W., Mount Vernon, N. Y., assignor to The Linde Air Products Company. Nozzle mounting. 1,889,874; Dec. 6.
Oftedahl, John, Chicago, Ill. Artificial snow. 1,890,127; Dec. 6.
O'Gallagher, E., administrator. (See Peters, Edward F.)
Ohio Injector Company, The. (See Edwards, Frank W., assignor.)
Oilgear Company, The. (See Barrett, L. A., and Ferris, assignors.)
Oilgear Company, The. (See Ferris, W. and J. P., and Crull, assignors.)
Oneida Community, Limited. (See Pardew, Arthur H., assignor.)
Ord, John W., Cleveland, Ohio. Irrigation system. 1,890,337; Dec. 6.

Ostermeier, Johannes, Althegnenberg, Germany, assignor, by mesne assignments, to General Electric Company. Flash lamp. Re18,678; Dec. 6.
Ostline, John E., Berwyn, assignor, by mesne assignments, to Associated Electric Laboratories, Inc., Chicago, Ill. Multioffice telephone system. Re18,688; Dec. 6.
Oswald, Louis J., Chicago, Ill. Floating deck for oil storage tanks. 1,890,189; Dec. 6.
Otten, Lawrence S., Cincinnati, Ohio. Necktie. 1,890,001; Dec. 6.
Overbury, Frederick C., Hillsdale, N. J., assignor, by mesne assignments, to The Patent and Licensing Corporation, Boston, Mass. Method of and machine for vertically coating continuous strips of roofing material. 1,890,018; Dec. 6.
Owatonna Tool Company. (See Kaplan, Reuben A., assignor.)
Owen, Henry A., Lawrence, assignor to Davis & Furber Machine Company, North Andover, Mass. Spool stand. 1,889,839; Dec 6.
Owens, Freeman H., New York, N. Y. Combined motion picture and sound camera. 1,889,840; Dec. 6.
Owens, William T. (See Hargreaves, George A., assignor.)
Pacific Gas Radiator Company. (See Hartfield, August J., assignor.)
Page & Hill Co. (See Farnam, Julian P., assignor.)
Palmieri, John, New York, N. Y. Submarine salvage apparatus. 1,890,405; Dec. 6.
Pangborn Corporation. (See Rosenberger, William A., assignor.)
Papp, Louis R., Cleveland, Ohio. Parachute attachment for aeroplanes. 1,890,190; Dec. 6.
Paque, Edward J., assignor to The Pollak Steel Company, Cincinnati, Ohio. Winged channel post and clip. 1,890,338; Dec. 6.
Paramount Publix Corporation. (See Barkelew, James T., assignor.)
Pardew, Arthur H., Sherrill, assignor to Oneida Community, Limited, Oneida, N. Y. Soldering apparatus. 1,890,262; Dec. 6.
Parent, Emile J., Hartford, assignor to The Whitlock Coil Pipe Company, West Hartford, Conn. Water heating system. 1,890,263; Dec. 6.
Paridon, Michael, Barberton, Ohio, assignor to The Diamond Match Company, Baltimore, Md. Machine for packing matches. 1,889,841; Dec. 6.
Paris, Hugh P., near Kirkland, King County, assignor to Paris Transit Mixer Company, Seattle, Wash. Baffle plate arrangement and design for concrete mixers. 1,890,002; Dec. 6.
Paris Transit Mixer Company. (See Paris, Hugh P., assignor.)
Parker, James R., Russellville, Ark. Milk cap dispenser. 1,889,875; Dec. 6.
Parkyn, W. B. (See Andresen, George, assignor.)
Parr, Thomas C., Shaker Heights, Ohio. Composition of matter. 1,889,842; Dec. 6.
Patent and Licensing Corporation, The. (See MacDonald, Chester R., assignor.)
Patent and Licensing Corporation, The. (See Overbury, Frederick C., assignor.)
Patrick, Joseph C., Trenton, N. J. Making plastic substances and products obtained thereby. 1,890,191; Dec. 6.
Patrick, Joseph C., and N. M. Mnookin, Kansas City, Mo. Vulcanizable compounds and vulcanized products derived therefrom. 1,890,231; Dec. 6.
Patterson, William G., assignor to Siemens Brothers & Company Limited, London, England. Telephone system. 1,889,759; Dec. 6.
Paulding, John I., Inc. (See Bettencourt, Theodore R., assignor.)
Paulding, John I., Inc. (See Wack, Henry K., assignor.)
Paxton-Mitchell Company. (See Gehrman, Otto C., assignor.)
Peacock Laboratories, Inc. (See Peacock, William, jr., assignor.)
Peacock, William, jr., assignor to Peacock Laboratories, Inc., Philadelphia, Pa. Copper plating. 1,890,094; Dec. 6.
Pearlman, Victor S., assignor to The Vicbridge Lamp Company, Chicago, Ill. Combined card table lamp and tray. Des. 88,568; Dec. 6.
Pellerin, Eric, M. Hector, and P. J. Carpentier, Vincennes, France. Apparatus for indicating the mean speed of a vehicle. 1,889,876; Dec. 6.
Penn Metal Company. (See Baker, Herbert K., assignor.)
Pennock, Edward M., assignor to G. H. Tennant Company, Minneapolis, Minn. Crate corners and rail bottom. 1,890,161; Dec. 6.
Penote, Augustus J., Shaker Heights, Ohio. Excess pressure relieving device. 1,889,810; Dec. 6.
Perez, Louis P., Philadelphia, Pa. Cigarette and match container. 1,889,789; Dec. 6.
Perkins, Albert G., Buffalo, N. Y. Track for pipe joint sealing tools. 1,889,790; Dec. 6.
Perkins, Ralph P., and P. S. Petrie, assignors to The Dow Chemical Company, Midland, Mich. Production of primary aromatic amines of the benzene series by hydrogenation of their corresponding azo ethers. 1,890,430; Dec. 6.
Peters, Edward F., deceased; E. O'Gallagher, administrator, assignor to The National Marking Machine Co., Cincinnati, Ohio. Convertible shipping and storage chest. 1,889,760; Dec. 6.
Peterson, Frank W., et al. (See Huber, Paul J., assignor.)
Petrie, Peter S. (See Perkins, R. P., and Petrie.)
Pfeiffer, César, Asnieres, France, assignor to Fuller Company. Compressor and vacuum pump. 1,890,003; Dec. 6.
Pfeiffer, Max, Schwenningen-on-the-Neckar, Germany. Apparatus for applying paint. 1,890,192; Dec. 6.
Phillips, Nary H., assignor to J. H. Wise, St. Louis, Mo. Gun port. 1,890,232; Dec. 6.
Phillips, Ross M. G., West Haven, assignor to M. P. Nichols, trustee, New Haven, Conn. Automatic circuit-breaking apparatus. 1,890,233; Dec. 6.
Photostat Corporation. (See Greene, John S., assignor.)
Pickering, Percy, Birmingham, England. Device for cutting sheets of tough or hard material. 1,890,234; Dec. 6.
Pier, Mathias. (See Krauch, C., and Pier.)
Pier, Mathias, Heidelberg, Germany, assignor, by mesne assignments, to Standard-I. G. Company, Linden, N. J. Production of valuable hydrocarbons from carbonaceous materials, tars, mineral oils, and the like. 1,890,437; Dec. 6.
Pier, Mathias, Heidelberg, Germany, assignor, by mesne assignments, to Standard-I. G. Company, Linden, N. J. Conversion of carbonaceous materials into fuels of relatively low boiling point range. 1,890,438; Dec. 6.
Pier, Mathias, Heidelberg, Germany, assignor, by mesne assignments, to Standard-I. G. Company, Linden, N. J. Destructive hydrogenation of carbonaceous materials. 1,890,439; Dec. 6.
Pioneer Instrument Company. (See Luckey, George P., assignor.)
Pittsburgh Plate Glass Company. (See Fox, John H., assignor.)
Pittsburgh Plate Glass Company. (See Swartzlander, Thomas H., assignor.)
Place, Bion C., assignor of one-half to G. E. Gagnier, Detroit, Mich. Edging for trim panels. 1,889,903; Dec. 6.
Policastro, Charles M., Philadelphia, and G. W. Morrison, Upper Darby, assignors to Abbotts Dairies, Inc., Philadelphia, Pa. Manufacturing pre-portioned molds of edible substances and the resulting products. 1,890,044; Dec. 6.
Pollak Steel Company. (See Paque, Edward J., assignor.)
Pollard, E., & Company Limited. (See Pollard, Harold E., assignor.)
Pollard, Harold E., assignor to E. Pollard & Company Limited, London, England. Awning. 1,890,406; Dec. 6.
Pongratz, Emmerich V., Oppau, and H. Zorn, Mannheim, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Recovery of oils from industrial residues. 1,889,932; Dec. 6.
Poore, Fred M., Seattle, Wash. Burner. 1,889,843; Dec. 6.
Popper, Max, New York, N. Y. Ventilating strip for hats. 1,890,407; Dec. 6.
Powell, John R. (See Bausch, W., and Powell.)
Prat-Daniel Corporation. (See Whiton, Louis C., jr., assignor.)
Pratt, Henry T., assignor to The B. F. Nelson Manufacturing Company, Minneapolis, Minn. Carton. 1,889,933; Dec. 6.
Preferred Oil Burners, Inc. (See Aldrich, Loyd I., assignor.)
Prout, Benjamin H., assignor to International Silver Company, Meriden, Conn. Holder for a baby spoon or similar article. Des. 88,569; Dec. 6.
Pulitzer, Gustav M., assignor to Moss-Still, Inc., New York, N. Y. Textile fabric. Des. 88,570; Dec. 6.
Pullan, James F., assignor to Lincoln Machine Company, Pawtucket, R. I. Yarn or fiber cutting machine. 1,890,095; Dec. 6.
Pungs, Wilhelm, K. Eisenmann and J. Kuchenbuch, Ludwigshafen-on-the-Rhine, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Production of artificial resins. 1,889,791; Dec. 6.
Punte, William F., Syracuse, assignor to Continental Can Company, Inc., New York, N. Y. Sealing metal container. 1,890,193; Dec. 6.
Punte, William F., Syracuse, assignor to Continental Can Company, Inc., New York, N. Y. Dispensing closure for cans. 1,890,194; Dec. 6.
Punte, William F., Syracuse, assignor to Continental Can Company, Inc., New York, N. Y. Nozzle closure for metal containers. 1,890,235; Dec. 6.
Quaker Silver Company. (See Jennings, James W., assignor.)
Radford, Douglas R. (See Lamb, C., Radford, and Riley.)
Radio Corporation of America. (See Ballantine, Stuart, assignor.)
Radio Corporation of America. (See Karolus, August, assignor.)
Railroad Accessories Corporation. (See Lavarack, William H. B., assignor.)
Rattray, George. (See Briechle, A., Lutz, and Rattray.)
Raule, Clifford T., Brookline, Pa. Ironing machine for coils. 1,890,162; Dec. 6.

Raymond Concrete Pile Company. (See Smith, Herman R., assignor.)
Redington-Drager, Regina T., White Plains, N. Y. Bottle holder. 1,889,877; Dec. 6.
Reeps, Charles O., deceased, by H. E. Reeps, executrix, Waukegan, Ill., assignor to National Laundry Machinery Company, Inc., Syracuse, N. Y. Sleeve press. 1,890,264; Dec. 6.
Reeps, Harriette E., executrix. (See Reeps, Charles O.)
Reeves, Donald H. (See Hull, H. B., and Reeves.)
Reid, John W. (See Govier, C. W., and Reid.)
Reis, Curt F., assignor to Excel Magneto Company, Chicago, Ill. Ignition dynamo. 1,889,878; Dec. 6.
Remington Rand Inc. (See Hurns, T. E., and Leslie, assignors.)
Reynolds Spring Company. (See Hunt, Clifford C., assignor.)
Reynolds Wire Co. (See Thompson, Herbert L., assignor.)
Rheinische Metallwaaren- und Maschinenfabrik. (See Westphälinger, Hermann, assignor.)
Richardson, Bayard E., Grand Rapids, Mich. Wood desk construction. 1,889,811; Dec. 6.
Richardson, Ralph S., Teaneck, N. J. Purification of nitrogen-hydrogen mixtures for ammonia synthesis. 1,889,934; Dec. 6.
Richfield Oil Company of California. (See Holzapfel, George L., assignor.)
Richmond, Henry, Frenchwood, Preston, England. Weaver's shuttles for pirns and rewound wefts. 1,890,195; Dec. 6.
Richter, Johannes. (See Jobst, G., Richter, and Wehnert.)
Rightmyer, John H. (See Goetzman, Louis B., assignor.)
Rile, James H., Newport, assignor to Hercules Powder Company, Wilmington, Del. Floor covering. 1,890,128; Dec. 6.
Riley, Clarence H. (See Lamb, C. Radford, and Riley.)
Ringel, Albert L. C., Altoona, Pa. Radio receiving set. 1,890,408; Dec. 6.
Ritchie, Walter M., Rahway, N. J. Treating and filling cavities in trees. 1,890,019; Dec. 6.
Roberson, Willard D., assignor to Hess, Goldsmith & Co., Inc., New York, N. Y. Textile fabric. Des. 88,571; Dec. 6.
Roberson, Willard D., assignor to Moss-Still, Inc., New York, N. Y. Textile fabric. Des. 88,572; Dec. 6.
Roberts, Fred T., Malone, N. Y. Making inner tubes and air bags. 1,889,904; Dec. 6.
Roberts, Walter J., Brooklyn, N. Y. Table. 1,890,409; Dec. 6.
Robertson, H. H., Company. (See Black, George E., assignor.)
Robinson, Joseph. (See Baldwin, George E., assignor.)
Robinson, Joseph, New York, N. Y. Automatic train pipe connecter lock. 1,890,096; Dec. 6.
Robinson, Joseph, New York, N. Y. Automatic train pipe connecter head. 1,890,410; Dec. 6.
Robinson, Joseph, New York, N. Y. Automatic train pipe connecter head. 1,890,411; Dec. 6.
Robinson, William W., Chattanooga, Tenn. Crate. 1,890,067; Dec. 6.
Rodman, Clarence J., and R. P. Dunmire, assignors to The Buckeye Twist Drill Company, Alliance, Ohio. Liquid treating apparatus. 1,890,265; Dec. 6.
Roesner, Gerhard. (See Baron von Girsewald, C., Weidmann, and Roesner.)
Roessner, William L., Denver, Colo. Fire extinguisher. 1,889,844; Dec. 6.
Rogers, Arthur R., Jonesport, Me. Fish cutting machine. 1,889,879; Dec. 6.
Rogers, John P., San Diego, Calif. Device for laying plastic pavements. 1,890,412; Dec. 6.
Rohm & Haas Aktiengesellschaft. (See Bauer, Walter, assignor.)
Rohrer, Karl G. (See Steffan, J. F., and Rohrer.)
Römhild, Edgar, Berlin-Steglitz, Germany, assignor to General Electric Company. Cathode structure. 1,890,339; Dec. 6.
Rookstool, Omer V., McCracken, Kans. Incubator. 1,890,236; Dec. 6.
Rose, Bennie A., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Fastening retaining rings on turbogenerator rotors. 1,890,340; Dec. 6.
Rose, Charles M., Louisville, Ky. Animal bed construction. 1,890,163; Dec. 6.
Rosebush, Waldo E., Millwood, Wash. Log loading apparatus. 1,890,413; Dec. 6.
Rosenberger, William A., assignor to Pangborn Corporation, Hagerstown, Md. Sand blasting method and apparatus. 1,890,164; Dec. 6.
Rosenburgh, Durwood D., assignor to Taylor Instrument Companies, Rochester, N. Y. Capillary fluid transmission system. 1,889,792; Dec. 6.
Rosenzweig, Joseph. (See Rudolph, J., Rosenzweig, and Aschkenas.)
Ross, Nanine, Santa Ana, Calif. Convertible seat and table. 1,890,129; Dec. 6.
Routtenberg, Zacharia, Los Angeles, Calif. Sewing machine needle-plate. 1,890,237; Dec. 6.
Rubber Service Laboratories Company, The. (See Ingram, Joseph R., assignor.)
Rubber Service Laboratories Co., The. (See Scott, Winfield, assignor.)
Rubin, Herman H., New York, N. Y. Grip strap. 1,889,793; Dec. 6.
Rubinger, Louis, New York, N. Y. Textile fabric or the like. Des. 88,573; Dec. 6.
Ruby, George H. A., Linden, N. J. Plaster block machine. 1,889,935; Dec. 6.
Rudolph, Joseph, J. Rosenzweig, and D. Aschkenas, New York, N. Y. Hand bag. 1,890,020; Dec. 6.
Rudorff, Dagobert W. (See Armacost, W. H., and Rudorff.)
Rumpel, Joseph, Nampa, Idaho. Automatic meter-lid operated wiper. 1,890,414; Dec. 6.
Rundquist, Carl A., Chicago, Ill. Coffee urn bag. 1,889,845; Dec. 6.
Runge, Wilhelm, assignor to Telefunken Gesellschaft fur Drahtlose Telegraphie mit beschrankter Haftung, Berlin, Germany. Arrangement for oscillation circuits. 1,890,302; Dec. 6.
Rüping, Max, Munich, Germany. Device for stressing springs. 1,890,415; Dec. 6.
Sabel, John C., assignor to Bausch & Lomb Optical Company, Rochester, N. Y. Microscope objective. 1,889,794; Dec. 6.
Saeger, Charles M., jr., Bowmanstown, Pa. Core or mold binder, coating or paste. 1,889,905; Dec. 6.
Saftlas, Joseph, Philadelphia, Pa. Tubular knit ribbed fabric. 1,890,416; Dec. 6.
Saftlas, Joseph, Philadelphia, Pa. Producing tubular knit ribbed fabric. 1,890,417; Dec. 6.
Salem China Company, The, et al. (See McMaster, Harry J., assignor.)
Salvi, Allessandro, Milan, Italy. Antivibrating self-balanced suspension clamp. 1,889,812; Dec. 6.
Sanders, Johann A. et al. (See Sanders, Ludwig A., assignor.)
Sanders, Ludwig A., assignor to J. A. Sanders, Voorburg, and F. L. Stoot, The Hague, Netherlands. Flying boat. 1,890,021; Dec. 6.
Santiago, James J., assignor to J. Grant, Los Angeles, Calif. Hole straightener. 1,890,022; Dec. 6.
Sarnia Air Equipment Limited. (See Janus, Bernard, assignor.)
Scardina, Jack A., Baton Rouge, La. Headlight lens protector. 1,890,130; Dec. 6.
Schadell, George P., Paterson and S. B. Gleason, Passaic, N. J. Fish lure. 1,890,266; Dec. 6.
Schaetzel, François J., Staten Island, N. Y. Textile fabric or the like. Des. 88,574; Dec. 6.
Schall, Jacques, Paris, France. Lip stick, eyebrow pencil, and the like. 1,890,068; Dec. 6.
Schaub, Jacob, Westfield, N. J., assignor to Best Foods, Inc., New York, N. Y. Machine for cutting off pieces of material from a strip and carrying them forward. 1,890,131; Dec. 6.
Schlesinger, Harry, asignor of seventy-four one-hundred-and-eighty-thirds to A. F. Yoerg, and thirty-five one-hundred-and-eighty-thirds to J. Goldberg, Des Moines, Iowa. Hat cleaning and drying machine. 1,889,761; Dec. 6.
Schmidt, Ernest H., Cleveland Heights, assignor to National Malleable and Steel Castings Company, Cleveland, Ohio. Draft attachment for railway vehicles. 1,889,762; Dec. 6.
Schmidt, Ernest H., Cleveland Heights, assignor to National Malleable and Steel Castings Company, Cleveland, Ohio. Draft attachment for railway vehicles. 1,890,303; Dec. 6.
Schmidt, Ernst, Danzig, Free City of Danzig. Heat insulation. 1,890,418; Dec. 6.
Schmidt, Karl F. (See Fuller, L., and Schmidt.)
Schneider, Wilhelm. (See Lüettringhaus, A., Neresheimer, Eichholz, Boehner, and Schneider.)
Scholler, Heinrich, Munich, Germany. Process and device for the saccharification of cellulose and the like. 1,890,304; Dec. 6.
Schramm, Frederick C., and M. Dach, Flushing, N. Y. Carburetor. 1,890,196; Dec. 6.
Schröder, Carl, sr., Viersen, Germany. Covering plaster carrying wire netting. 1,890,023; Dec. 6.
Schubert, George A., Chicago, Ill. Mixing colors. 1,890,004; Dec. 6.
Schumacher, Erwin A. (See Heise, G. W., and Schumacher.)
Schwab, Gustav, Townley-Elizabeth, N. J., assignor of one-third to Albert C. Nolte, New York, N. Y. Heat treating apparatus. 1,890,431; Dec. 6.
Schwarzman, Wolfgang E., Longmeadow, assignor to American Bosch Magneto Corporation, Springfield, Mass. Magneto. 1,890,305; Dec. 6.
Schwarzman, Wolfgang E., Longmeadow, assignor to American Bosch Magneto Corporation, Springfield, Mass. Magneto. 1,890,306; Dec. 6.
Schweizer, Jack, assignor to William Willheim Co., Inc., New York, N. Y. Textile fabric or similar article. Des. 88,575; Dec. 6.
Schweizer, Jack, Rye, N. Y. Textile fabric or the like. Des. 88,576; Dec. 6.
Schweizer, Jack, Rye, N. Y. Textile fabric or the like. Des. 88,577; Dec. 6.
Schweizer, Jack, assignor to William Willheim Co., Inc., New York, N. Y. Textile fabric or similar article. Des. 88,578; Dec. 6.
Schweizer, Jack, assignor to Moss-Still, Inc., New York, N. Y. Textile fabric. Des. 88,579; Dec. 6.

Schweizer, Jack, assignor to Moss-Still, Inc., New York, N. Y. Textile fabric. Des. 88,580; Dec. 6.
Schweyer, Daniel H., Easton, Pa. Automatic train control. 1,890,419; Dec. 6.
Scott, Irving G., and M. C. Fox, New York, N. Y. Flower stand. Des. 88,581; Dec. 6.
Scott, Irving G., and M. C. Fox, New York, N. Y. Flower stand. Des. 88,582; Dec. 6.
Scott, Irving G., and M. C. Fox, New York, N. Y. Flower stand. Des. 88,583; Dec. 6.
Scott, William M., Treddyfrin Township, Chester County, Pa. Time element device. Re18,683; Dec. 6.
Scott, Winfield, Nitro, W. Va., assignor to The Rubber Service Laboratories Co., Akron, Ohio. Vulcanizing rubber. 1,890,165; Dec. 6.
Scottish Dyes, Limited. (See Smith, W., and Thomas, assignors.)
Scovill Manufacturing Company. (See German, Abraham J., assignor.)
Sebring Pottery Company, The, et al. (See McMaster, Harry J., assignor.)
Selden Research & Engineering Corporation, The. (See Jaeger, Alphons O., assignor.)
Service Equipment Company. (See Farley, George E., assignor.)
Shaller, Philip B., and H. P. Troendly, assignors to The Wm. D. Gibson Company, Chicago, Ill. Mixing device. 1,890,307; Dec. 6.
Shannon, James L., Longmeadow, Mass., assignor, by mesne assignments, to French Battery Company, Madison, Wis. Electric flash light. 1,889,936; Dec. 6.
Shara, Frank, Brooklyn, assignor to William Willheim Co., Inc., New York, N. Y. Textile fabric or similar article. Des. 88,584; Dec. 6.
Shatto, David L., Berkeley, and F. F. Lindstaedt, Oakland, assignors to Hercules Glue Company, San Francisco, Calif. Mirror construction. 1,890,166; Dec. 6.
Shaw, Ernest P., San Antonio, Tex., assignor to The Columbus Dental Manufacturing Company, Columbus, Ohio. Porcelain root tooth. 1,890,132; Dec. 6.
Sheely, Joseph H., St. Louis, Mo. Light. 1,890,167; Dec. 6.
Shelby Metal Products Company. (See Hoffman, Laurence N., assignor.)
Sherburne, Charles H. (See Bridgham, Arthur L., assignor.)
Shoe Form Co. (See De Witt, William J., assignor.)
Shoemaker, Alvin H., Seattle, Wash. Expanding core and mold for pneumatic tires. 1,890,133; Dec. 6.
Siemens Brothers & Company Limited. (See Patterson, William C., assignor.)
Siemens & Halske, Aktiengesellschaft. (See Gruschke, Georg, assignor.)
Siemens-Schuckertwerke Aktiengesellschaft. (See Ziegler, Georg, assignor.)
Silica Gel Corporation, The. (See Miller, Ernest B., assignor.)
Simmons Company. (See Harman, Frank B., assignor.)
Simplex Piston Ring Company of America, The. (See Thompson, Ralph C., assignor.)
Sinclair, Harry R., et al., trustees. (See Cameron, F. S., and Jones, assignors.)
Singer Manufacturing Company, The. (See Card, Frederic M., assignor.)
Singiser, John P., Chicago, Ill., assignor to The American Laundry Machinery Company, Cincinnati, Ohio. Pressing machine. 1,890,341; Dec. 6.
Singrün, Albert. (See Andiffren, M., and Singrün.)
Skoog, Gottfrid A., Chicago, Ill. Pencil holder. 1,890,134; Dec. 6.
Slonimsky, Samuel E., Sawtelle, Calif. Airplane propeller. 1,890,097; Dec. 6.
Smith, B. D., Inc. (See Smith, Blanchard D., assignor.)
Smith, Blanchard D., assignor to B. D. Smith, Inc., New Orleans, La. Golf driving device. 1,889,813; Dec. 6.
Smith, Charles H. (See Smith, Russell T. and C. H.)
Smith, David U., Woburn, Mass. Apparatus for drying gelatin and the like. 1,889,880; Dec. 6.
Smith, Ernest J., Fleet Street, London, England, assignor to Goss Printing Press Company. Web controlling apparatus. 1,890,267; Dec. 6.
Smith, Frank D., Kew, assignor to Zero Heat Cone Containers Proprietary Limited, Melbourne, Victoria, Australia. Ice cream cone supporting device for use with refrigerating safes. 1,890,420; Dec. 6.
Smith, Frank H., Philadelphia, Pa., and H. A. Stringfellow, Akron, Ohio. Joining pipes. 1,889,795; Dec. 6.
Smith, Frank H., Hoboken, N. J., and H. A. Stringfellow, Philadelphia, Pa. Cable compacting press. 1,890,016; Dec. 6.
Smith, Herman R., Douglaston, assignor to Raymond Concrete Pile Company, New York, N. Y. Method and apparatus for forming composite piles. 1,890,268; Dec. 6.
Smith, Louis C., et al., trustees. (See Cameron, F. S., and Jones, assignors.)
Smith, Russell T., and C. H. Smith, assignors to Gibson Refrigerator Company, Greenville, Mich. Compressor. 1,890,238; Dec. 6.
Smith, William, and J. Thomas, assignors to Scottish Dyes, Limited, Grangemouth, Scotland. Production of flavanthrone dyestuff intermediates. 1,890,098; Dec. 6.
Smith, William, and J. Thomas, assignors to Scottish Dyes, Limited, Grangemouth, Scotland. Production of dyestuff intermediates of the anthraquinone series. 1,890,099; Dec. 6.
Snyder, Jacob B., Cleveland, Ohio. Shock absorber. 1,889,796; Dec. 6.
Society of Chemical Industry in Basle. (See Fraenkel, Sigmund, assignor.)
"Society of Chemical Industry in Basle." (See Gams, A., Widmer, and Frey, assignors.)
Souligne, Raymond J., Goodland, Ind. Supply-controlling float for milk drying machines. 1,890,024; Dec. 6.
Sound Picture Patent Company. (See Bullis, Henry C., assignor.)
Speidel, Albert E. R. (See Carlson, Edwin G., assignor.)
Speidel Brothers. (See Carlson, Edwin G., assignor.)
Spence, Byron, Wauwatosa, Wis., assignor to Chr. Hansen's Laboratory, Inc., Little Falls, N. Y. Spigot. 1,889,937; Dec. 6.
Sperling, Morris, assignor to Knickerbocker Silver Co. Inc., Port Jervis, N. Y. Container. Des. 88,585; Dec. 6.
Spiegler, Louis. (See Tinker, J. M., and Spiegler.)
Spikes, Richard B., San Francisco, Calif. Automatic gear shift. 1,889,814; Dec. 6.
Spiro, Ada J. (See Spiro, Harry, assignor.)
Spiro, Harry, San Francisco, Calif., assignor to A. J. Spiro. Fountain pen. 1,890,100; Dec. 6.
Spore, Judson P. (See Cooney, F. B., and Spore.)
Square D Company. (See Van Valkenburg, Hermon L., assignor.)
Standard Crossing Gate Corporation. (See Wilson, Mercer D., assignor.)
Standard-I. G. Company. (See Krauch, C., and Pier, assignors.)
Standard-I. G. Company. (See Luther, M., and Müller-Cunradi, assignors.)
Standard-I. G. Company. (See Pier, Mathias, assignor.)
Standard Mailing Machines Company. (See Storck, Frederick W., assignor.)
Standard Steel Works Company. (See Cole, Amos G., assignor.)
Stayton, William H., sr, Smyrna, Del. Display device. 1,889,763; Dec. 6.
Steele, James R. (See Moore, G. L., and Steele.)
Steffan, Jacob F., and K. G. Rohrer, San Francisco, Calif. Blowtorch. Des. 88,586; Dec. 6.
Steffens, Edna F., Cleveland Heights, Ohio. Humidifier. Des. 88,587; Dec. 6.
Steffens, Edna F., Cleveland Heights, Ohio. Humidifier. 88,588; Dec. 6.
Steffens, Edna F., Cleveland, Ohio. Humidifier. Des. 88,589; Dec. 6.
Stewart, William H., Jacksonville, Fla. Plaiting device. 1,890,101; Dec. 6.
Stickel, Ralph E., Seminole, Okla. Beam hanger. 1,890,135; Dec. 6.
Stickney, Fernald S., West Orange, N. J., assignor to Westinghouse Electric & Manufacuring Company. Instrument pointer structure. 1,889,764; Dec. 6.
Stiennon, Louis, assignor, by mesne assignments, to Winchester Repeating Arms Company, New Haven, Conn. Single-trigger mechanism for multiple-barrel firearms. 1,890,005; Dec. 6.
Stoesser, Wesley C. (See Britton, E. C., and Stoesser.)
Stolz, Otto, Berlin, Germany. Dummy rifle. 1,890,168; Dec. 6.
Stoot, Frans L., et al. (See Sanders, Ludwig A., assignor.)
Storck, Frederick W., Somerville, assignor to Standard Mailing Machines Company, Everett, Mass. Moistening device. 1,889,911; Dec. 6.
Stringfellow, Henry A. (See Smith, F. H., and Stringfellow.)
Superheater Company, The. (See Armacost, Wilbur H., assignor.)
Superheater Company, The. (See Armacost, W. H., and Rudorff, assignors.)
Superheater Company, The. (See Huet, André, assignor.)
Superheater Company, The. (See Magis, A., and Huet, assignors.)
Susmuth, John J., Fort Lee, N. J. Warper. 1,890,197; Dec. 6.
Sutton Engineering Company. (See Sutton, J. B., and Wise, assignors.)
Sutton, John B., and G. A. Wise, Pittsburgh, Pa., assignors to Sutton Engineering Company. Sheet flattener. 1,890,342; Dec. 6.
Svancara, Lumir, Buhl, Idaho. Trouser hanger. 1,890,169; Dec. 6.
Swan, William W., Frankfort, S. Dak. Steering gear for tractors. 1,889,906; Dec. 6.
Swanson, Carl E., Chicago, Ill. Toy construction unit. 1,890,269; Dec. 6.
Swartzlander, Thomas H., Aspinwall, Pa., assignor to Pittsburgh Plate Glass Company. Process and apparatus for grinding glass. 1,890,343; Dec. 6.
Swenarton, Waitstill H. (See Greene, E., and Swenarton.)
Swift, Lewis B., assignor to Taylor Instrument Companies, Rochester, N. Y. Sanitary fitting for industrial thermometers. 1,890,006; Dec. 6.

Swindell-Dressler Corporation. (See Meehan, Paul A., assignor.)
Switkes, Leon, Brooklyn, assignor to Travelers Efficiency Case Co., Inc., New York, N. Y. Combination traveling case and portfolio. 1,889,765; Dec. 6.
Synchrome Corporation. (See Wright, Walter L., assignor.)
Takaoka, Shotaro, Gardena, Calif. Electric cauterizer. 1,890,270; Dec. 6.
Talbot, Benjamin, Middlesbrough, England, assignor to The Talbot Non-Corrosive Linings Company, Philadelphia, Pa. Lining or coating of pipes and other tubular bodies. 1,890,007; Dec. 6.
Talbot, Frank A., assignor of one-half to W. B. W. Mann, Baltimore, Md. Nonrefillable receptacle. 1,890,421; Dec. 6.
Talbot Non-Corrosive Linings Company, The. (See Talbot, Benjamin, assignor.)
Taylor, George N., East Providence, R. I., assignor to Universal Winding Company, Boston, Mass. Supply-holder. 1,889,815; Dec. 6.
Taylor, Hamilton D., Schenectady, N. Y., assignor to General Electric Company. Dynamo electric machine. 1,890,344; Dec. 6.
Taylor Instrument Companies. (See Rosenburgh, Durwood D., assignor.)
Taylor Instrument Companies. (See Swift, Lewis B., assignor.)
Taylor, John C., Hermansville, Mich. Bowling pin rejuvenator. 1,890,422; Dec. 6.
Taylor, Joseph I., Akron, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y. Channel strip and making same. 1,890,308; Dec. 6.
Taylor, Roy J., Ashtabula County, assignor of one-half to The American Gypsum Co., Port Clinton, Ohio. Metal clip for holding expanded or other metal angle corners in walls. 1,890,239; Dec. 6.
Taylor, Roy J., Ashtabula, assignor of one-half to The American Gypsum Co., Port Clinton, Ohio. Fastening clip for applying plastic lath or the like to wood studding. 1,890,240; Dec. 6.
Teagarden, William B., San Antonio, Tex. Rifle rest. 1,890,423; Dec. 6.
Technische Chemikalien Compagnie G. m. b. H. (See Fessel, Gumal, assignor.)
Telefunken Gesellschaft fur Drahtlose Telegraphie m. b. H. (See Jobst, G., Richter, and Wehnert, assignors.)
Telefunken Gesellschaft fur Drahtlose Telegraphie mit beschrankter Haftung. (See Runge, Wilhelm, assignor.)
Tennant, G. H., Company. (See Pennock, Edward M., assignor.)
Terry, Joseph T., Glendale, Calif. Electric arc furnace. 1,889,907; Dec. 6.
Thelen, Nicholas J., St. Cloud, and H. and A. Koopmeiners, Freeport, Minn. Corn planter. 1,890,136; Dec. 6.
Thierfelder, Guido, Auerbach, Germany. Flat hosiery frame. 1,890,200; Dec. 6.
Thomas, Arthur V., Hanover, assignor to E. H. Clapp Rubber Company, Boston, Mass. Attaching rubber to leather. 1,890,345 Dec. 6.
Thomas & Betts Co., The. (See Yanchenko, Basil J., assignor.)
Thomas, Carl C., Pasadena, Calif. Steam separator. 1,889,938; Dec. 6.
Thomas, David R., Cleveland, Ohio. Trailer. 1,889,939; Dec. 6.
Thomas, Frederick C., Cleveland, Ohio. Aircraft. 1,890,198; Dec. 6.
Thomas, John. (See Smith, W., and Thomas.)
Thompson, Albert R., assignor to Anderson-Barngrover Mfg. Co., San Jose, Calif. Can feeder for vertical coolers. 1,889,908; Dec. 6.
Thompson, Herbert L., Elgin, assignor to Reynolds Wire Co., Dixon, Ill. Shuttle structure for wire cloth looms and handling weft wire. 1,890,008; Dec. 6.
Thompson Products, Incorporated. (See Colwell, Archie T., assignor.)
Thompson, Ralph C., assignor to The Simplex Piston Ring Company of America, Incorporated, Cleveland, Ohio. Bending glass. 1,889,881; Dec. 6.
Thorsten, Thorleif, Pittsburgh, Pa. Method and apparatus for sampling material. 1,890,199; Dec. 6.
Tietz, Paul C., Chicago, Ill. Clock case. Des. 88,590; Dec. 6.
Tilling Gray and Company Limited. (See Dobbins, Harry, assignor.)
Tinker, John M., and L. Spiegler, South Milwaukee, Wis., assignors to E. I. du Pont de Nemours & Company, Wilmington, Del. Preparation of arylides of 2,3-hydroxy-naphthoic acid. 1,890,201; Dec. 6.
Tinker, John M., and L. Spiegler, South Milwaukee, Wis., assignors to E. I. du Pont de Nemours & Company, Wilmington, Del. Purifying arylides of 2,3-hydroxy-naphthoic acid. 1,890,202; Dec. 6.
Travelers Efficiency Case Co. (See Switkes, Leon, assignor.)
Traver, Harry G., Beaver Falls, Pa. Amusement railway. 1,890,137; Dec. 6.
Triolo, Louis, assignor to Imperial Paper Box Corporation, Brooklyn, N. Y. Charlotte russe cup filling machine. 1,890,069; Dec. 6.
Triple "XXX" Company. (See Dawson, James F., assignor.)
Troendly, Harry P. (See Shaller, P. B., and Troendly.)
Troland, Leonard T., Cambridge, assignor to Comstock & Wescott, Inc., Boston, Mass. Color photography. Re18,680; Dec. 6.
Trotter, E. T., & Co. (See Hinsky, Anthony P., assignor.)
Tscherning, Henry, deceased, Freeport, by H. K. Tscherning, executor, assignor to Arcade Manufacturing Company, Freeport, Ill. Molding machine. 1,890,203; Dec. 6.
Tscherning, Hugo K., executor. (See Tscherning, Henry.)
Tudhope, David R., North Hero, Vt. Antiskidding device. 1,890,346; Dec. 6.
Tuerten, Augustus E. (See Johnson, Charles E., assignor.)
Tung-Sol Condensers Inc. (See Caine, Charles H., assignor.)
Turnbull, Stockton G. (See Lagasse, Anthony M., assignor.)
U. G. I. Contracting Company. (See Haug, John S., assignor.)
Umbricht, Emil, Jackson, Mich., assignor, by mesne assignments, to The Commonwealth & Southern Corporation of Maryland, Baltimore, Md. Basket type anchor. 1,890,271; Dec. 6.
Union Carbide Company. (See Erickson, Albert N., assignor.)
United American Bosch Corporation. (See Martin, John F., assignor.)
United Shoe Machinery Corporation. (See Lawson, Axel A., assignor.)
U. S. Phosphoric Products Corporation. (See Moore, George F., assignor.)
Universal Oil Products Company. (See Dubbs, Carbon P., assignor.)
Universal Oil Products Company. (See Lowry, C. D., jr., and Dryer, assignors.)
Universal Oil Products Company. (See Morrell, J. C., and Mekler, assignors.)
Universal Oil Products Company. (See Morrell, J. C., and Essex, assignors.)
Universal Winding Company. (See Taylor, George N., assignor.)
Upton, Roy M., Miami, Fla. Reverse gear and clutch operating mechanism. 1,889,909; Dec. 6.
Urquhart, Ernest C., Oakland, Calif. Armrest attachment for vehicle seats. 1,890,102; Dec. 6.
Van Brunt, John Flushing, N. Y., assignor to International Combustion Engineering Corporation. Furnace wall construction. 1,890,170; Dec. 6.
Van Kannel Revolving Door Company. (See Blanchard, Robert L., assignor.)
Van Valkenburg, Hermon L., Wauwatosa, Wis., assignor to Square D Company, Detroit, Mich. Pressure switch. 1,890,009; Dec. 6.
Vaughn, John L., Cicero, assignor to O. D. Jennings & Company, Chicago, Ill. Coin operated time controlled switch mechanism. 1,890,309; Dec. 6.
Vicbridge Lamp Company, The. (See Pearlman, Victor S., assignor.)
Vickers, Harry F., Detroit, Mich. Hydraulic apparatus for motor vehicles. 1,890,010; Dec. 6.
Visking Corporation, The. (See De Cressey, Haswell R., assignor.)
Vogelman, Philip A., New York, N. Y. Textile fabric. Des. 88,611; Dec. 6.
Voss, Walter, Berlin-Neukolln, Germany. Drop closure for bottles, receptacles, and the like. 1,890,347; Dec. 6.
Vredenburg, J. C. (See Bendixen, Niels, assignor.)
Wack, Henry K., assignor to John I. Paulding, Inc., New Bedford, Mass. Lighting fixture. Des. 88,591; Dec. 6.
Wagner, William E., assignor to Western Cartridge Company, East Alton, Ill. Making double base powders. 1,890,241; Dec. 6.
Wallenbeck, William G., Chicago, Ill. Razor strop. 1,889,797; Dec. 6.
Wallin, Oscar H., Stockholm-Lidingo, Sweden. Heating apparatus for fluid circulation systems. 1,890,025; Dec. 6.
Wallraff, William H., et al. (See Huber, Paul J., assignor.)
Wangelin, Walter H., St. Louis, Mo. Jolter. 1,890,171; Dec. 6.
Warne, Willard. (See MacDonald, James A., assignor.)
Watson, Hugh W., Seattle, Wash. Slicer. 1,890,103; Dec. 6.
Weamer, Leo A., Altoona, Pa. Sign board. 1,889,910; Dec. 6.
Weatherhead, Albert J., jr., Cleveland, Ohio. Fastening device. 1,890,348; Dec. 6.
Webster, Benjamin C., Southport, assignor to The Bryant Electric Company, Bridgeport, Conn. Strain relief fitting. 1,890,350; Dec. 6.
Wege, John P., assignor to Amity Leather Products Co., West Bend, Wis. Bill fold. Des. 88,592; Dec. 6.
Wehnert, Waldemar. (See Jobst, G., Richter, and Wehnert.)
Weidmann, Hans. (See Baron von Girsewald, C., Weidmann, and Roesner.)

Weiss, John M., assignor, by mesne assignments, to The Barrett Company, New York, N. Y. Disposal of coal tar pitch. 1,890,349; Dec. 6.
Weitz, Irene A., Brooklyn, assignor to Combier & Co. Inc., New York, N. Y. Textile fabric or the like. Des. 88,598; Dec. 6.
Welding Service, Inc. (See Frickey, Royal E., assignor.)
Wells, William H., Concord, Mass. Carpenter's tool. 1,890,273; Dec. 6.
Western Cartridge Company. (See Wagner, William E., assignor.)
Western Electric Company. (See Dean Reginald S., assignor.)
Westinghouse Air Brake Company, The. (See McCune, J. C., and Johnson, assignors.)
Westinghouse Electric & Manufacturing Company. (See Benson, Lee H., assignor.)
Westinghouse Electric & Manufacturing Company. (See Rose, Bennie A., assignor.)
Westinghouse Electric & Manufacturing Company. (See Stickney, Fernald S., assignor.)
Westphälinger, Hermann, Dusseldorf, assignor to Rheinische Metallwaaren- und Maschinenfabrik, Dusseldorf-Derendorf, Germany. Sighting device for ordnance. 1,890,351; Dec. 6.
Weszycki, Josef, assignor to Firma Magyar Fém-ás Lámpa-Aru-Gyar Részvénytársaság Ungarische Metallwaren- und Lampenfabriks Actien-Gesellschaft, Budapest, Hungary. Hand grenade. 1,890,274; Dec. 6.
Wharton, William B., et al. (See Lee, Leffman H., assignor.)
Wheeler, C. H., Manufacturing Company. (See Droescher, Le Roy A., assignor.)
White, Ell, Detroit, Mich. Magnetic induction machine. 1,890,104; Dec. 6.
White, Fred E. (See Berry, H. O., and White.)
White, Fred E., H. O. Berry, Gardner, Mass., and W. T. Bradbury, Kankakee, Ill., assignors to Florence Stove Company, Gardner, Mass. Combination liquid fuel reservoir, bowl, and support therefor. Des. 88,594; Dec. 6.
White, William A., assignor to White's Marine Engineering Company, Limited, Hebburn-on-Tyne, England. Distributor. 1,889,816; Dec. 6.
Whitehead, Oscar N., assignor to H. L. Judd Company, Inc., Wallingford, Conn. Packaging device. 1,889,966; Dec. 6.
White's Marine Engineering Company, Limited. (See White, William A., assignor.)
Whitlock Coil Pipe Company, The. (See Parent, Emile J., assignor.)
Whiton, Louis C., jr., assignor to Prat-Daniel Corporation, New York, N. Y. Dust separator control. 1,890,070; Dec. 6.
Whitworth, Harry, assignor to Colt's Patent Fire Arms Manufacturing Co., Hartford, Conn. Brake lining and method of making. 1,890,424; Dec. 6.
Whitworth, Harry, assignor to Colt's Patent Fire Arms Manufacturing Co., Hartford, Conn. Brake lining and method of making. 1,890,425; Dec. 6.
Wicks, John, assignor, by mesne assignments, to Associated Electric Laboratories, Inc., Chicago, Ill. Semi-automatic telephone system. Re18,687; Dec. 6.
Widmer, Gustave. (See Gams, A., Widmer, and Frey.)
Widmer, Stefan, and M. Hürlimann, assignors to Aktiengesellschaft Brown Boveri et Cie., Baden, Switzerland. Transformer structure. 1,890,045; Dec. 6.
Wikstrom, Frank G., Brooklyn, assignor to Lily-Tulip Cup Corporation, New York, N. Y. Paper working machine. 1,890,071; Dec. 6.
Willard, Donald E. (See Blake, Dennis B. D., assignor.)
Willheim, William, New York, N. Y. Textile fabric or similar article. Des. 88,595; Dec. 6.
Willheim, William, New York, N. Y. Textile fabric or similar article. Des. 88,596; Dec. 6.
Willheim, William, New York, N. Y. Textile fabric or similar article. Des. 88,597; Dec. 6.
Willheim, William, New York, N. Y. Textile fabric or similar article. Des. 88,598; Dec. 6.
Willheim, William, New York, N. Y. Textile fabric or similar article. Des. 88,599; Dec. 6.
Willheim, William, New York, N. Y. Textile fabric or similar article. Des. 88,600; Dec. 6.
Willheim, William, New York, N. Y. Textile fabric or similar article. Des. 88,601; Dec. 6.
Willheim, William, New York, N. Y. Textile fabric or similar article. Des. 88,602; Dec. 6.
Willheim, William, New York, N. Y. Textile fabric or similar article. Des. 88,603; Dec. 6.
Willheim, William, New York, N. Y. Textile fabric or similar article. Des. 88,604; Dec. 6.
Willheim, William, New York, N. Y. Textile fabric or similar article. Des. 88,605; Dec. 6.
Willheim, William, New York, N. Y. Textile fabric or similar article. Des. 88,606; Dec. 6.
Willheim, William, New York, N. Y. Textile fabric or similar article. Des. 88,607; Dec. 6.
Willheim, William, New York, N. Y. Textile fabric or similar article. Des. 88,608; Dec. 6.
Willheim, William, New York, N. Y. Textile fabric or similar article. Des. 88,609; Dec. 6.
Willheim, William, New York, N. Y. Textile fabric or similar article. Des. 88,610; Dec. 6.
Willheim, William, Co. (See Hellman, Carl R., assignor.)
Willheim, William Co. (See Katsman, Herbert, assignor.)
Willheim, William, Co. (See Kohut, Alexander, assignor.)
Willheim, William, Co. (See Lukas, Julia, assignor.)
Willheim, William, Co. (See Schweizer, Jack, assignor.)
Willheim, William, Co. (See Shara, Frank, assignor.)
Wilson, Mercer D., assignor to Standard Crossing Gate Corporation, Phoenix, Ariz. Crossing signal. 1,890,352; Dec. 6.
Winchester Repeating Arms Company. (See Stiennon, Louis, assignor.)
Wired Radio, Inc. (See Davis, Chester L., assignor.)
Wired Radio, Inc. (See Gebhard, Louis A., assignor.)
Wirth, Carl, Rochester, N. Y. Antirattling device. 1,890,275; Dec. 6.
Wirs, Henry, and H. G. Hotchkiss, Los Angeles, Calif. Coupling device. 1,890,011; Dec. 6.
Wise, George A. (See Sutton, J. B., and Wise.)
Wise, Julius H. (See Phillips, Nary H., assignor.)
Wood, William H., South Euclid, Ohio. Electrolytic diaphragm. 1,890,242; Dec. 6.
Woods, Robert M., Cleveland, Ohio, assignor to Drake Baker ies Incorporated, Brooklyn, N. Y. Container for food products. 1,889,882; Dec. 6.
Wright, Charles F., Akron, Ohio, assignor to The Diamond Match Company, Baltimore, Md. Mechanism for stacking packages. 1,889,846; Dec. 6.
Wright, Charles F., Akron, Ohio, assignor to The Diamond Match Company, Baltimore, Md. Transfer-tray filling mechanism for match machines. 1,889,847; Dec. 6.
Wright, Walter L., Santa Monica, assignor to Synchrome Corporation, Los Angeles County, Calif. Film handling mechanism. 1,890,172; Dec. 6.
Yanchenko, Basil J., New York, N. Y., assignor to The Thomas & Betts Co., Elizabeth, N. J. Grounding connecter. 1,890,105; Dec. 6.
Yoerg, Alfred F., et al. (See Schlesinger, Harry, assignor.)
Young, Hugh H., Baltimore, Md. Soap dispenser and support therefor. 1,890,138; Dec. 6.
Zachert, Arthur R., New York, N. Y., assignor to Bedford Armstrong Corporation, Bedford, Va. Ribbon transfer machine. 1,890,248; Dec. 6.
Zero Heat Cone Containers Propietary Limited. (See Smith, Frank D., assignor.)
Ziegler, Georg, Nuremberg, assignor to Siemens-Schuckertwerke Aktiengesellschaft, Berlin-Siemensstadt, Germany. Winding for electrical machines. 1,889,940; Dec. 6.
Zorn, Hermann. (See Pongrats, E. V., and Zorn.)
Zotos Corporation. (See Evans, Ralph L., assignor.)

LIST OF INVENTIONS

FOR WHICH

PATENTS WERE ISSUED ON THE 6TH DAY OF DECEMBER, 1932

NOTE.—Arranged in accordance with the first significant character or word of the name (in accordance with city and telephone directory practice). Includes patents, reissues, and designs.

Acid, Chamber manufacturing sulphuric. E. B. Miller. 1,889,973; Dec. 6.
Acid, Concentration of weak phosphoric. C. B. Clark. 1,889,949; Dec. 6.
Acid esters, Producing acrylic. W. Bauer. 1,890,277; Dec. 6.
Acid, Purifying phosphoric. G. F. Moore. 1,889,929; Dec. 6.
Acids, Production of monocarboxylic. J. Brode and A. Johannsen. 1,889,945; Dec. 6.
Adapter for use in connection with grease guns, Attachable. E. J. Brouhard. 1,889,971; Dec. 6.
Adjustable seat. G. Flintermann. 1,890,048; Dec. 6.
Adsorbents, Treating spent. I. K. Fuller. 1,890,255; Dec. 6.
Adsorbents, Treating spent. I. K. Fuller. 1,890,284; Dec. 6.
Advertising display device. S. A. Crane. 1,890,314; Dec. 6.
Advertising or display device. J. B. Hinson. 1,890,258; Dec. 6.
Aeroship. S. E. Hitt. 1,890,113; Dec. 6.
Air circulator and heater. H. J. Divekey. 1,890,279; Dec. 6.
Air-conditioner for internal combustion engines. H. D. Bowman. 1,890,107; Dec. 6.
Aircraft. F. C. Thomas. 1,890,198; Dec. 6.
Aircraft wing. H. Focke. 1,890,079; Dec. 6.
Airplane. H. Alfaro. 1,890,012; Dec. 6.
Airplane. E. Armour and J. Kremer. 1,890,354; Dec. 6.
Airplane. R. F. Hall. 1,890,035; Dec. 6.
Airplane. N. J. Medvedeff. 1,890,064; Dec. 6.
Airplane. A. A. Merrill. 1,889,864; Dec. 6.
Airplane propeller. S. E. Slonimsky. 1,890,097; Dec. 6.
Alloys, Lead. R. S. Dean. 1,890,013–14; Dec. 6.
Altimeter, Sensitive. G. P. Luckey. Re18,681; Dec. 6.
Amines of the benzene series by hydrogenation of their corresponding azo ethers, Production of primary aromatic. R. P. Perkins and P. S. Petrie. 1,890,430; Dec. 6.
Amino-diaryl ethers, Preparing. E. F. Grether. 1,890,256; Dec. 6.
Ammonia, Producing. P. H. Falter. 1,889,956; Dec. 6.
Amplifier, Gas tube. G. Jobst, J. Richter, and W. Wehnert. 1,889,749; Dec. 6.
Amusement railway. H. G. Traver. 1,890,187; Dec. 6.
Anchor, Basket type. E. Umbricht. 1,890,271; Dec. 6.
Anchor, Rail. G. L. Moore and J. R. Steele. 1,890,066; Dec. 6.
Animal trap. W. A. Gibbs. 1,890,377; Dec. 6.
Annular objects, Making. C. P. Chamberlin. 1,889,773; Dec. 6.
Annular objects, such as tire covers, Construction of. C. P. Chamberlin. 1,889,774; Dec. 6.
Anthraquinone and derivatives thereof, Production of. A. Luttringhaus, H. Neresheier, W. Eichholz, G. Boehner, and W. Schneider. 1,890,040; Dec. 6.
Anthraquinone derivatives, Manufacture of. E. Gutzwiller. 1,889,831; Dec. 6.
Antioxidant for vulcanized rubber products. J. R. Ingram. 1,890,154; Dec. 6.
Antirattling device. C. Wirth. 1,890,275; Dec. 6.
Anti-skidding device. D. R. Tudhope. 1,890,346; Dec. 6.
Apparatus for splitting and forming metal sheets. H. K. Baker. 1,889,969; Dec. 6.
Armrest attachment for vehicle seats. E. C. Urquhart. 1,890,102; Dec. 6.
Armature winding machine, Automatic. H. H. Eaton. 1,890,111; Dec. 6.
Artillery wheel. C. L. Eksergian. Des. 88,509; Dec. 6.
Artillery wheel. C. L. Eksergian and T. A. Davenport. Des. 88,510; Dec. 6.
Arylides of 2,3-hydroxy-naphthoic acid, Preparation of. J. M. Tinker and L. Spiegler. 1,890,201; Dec. 6.
Arylides of 2,3-hydroxy-naphthoic acid, Purifying. J. M. Tinker and L. Spiegler. 1,890,202; Dec. 6.
Automobile signaling device. C. C. Carstens. 1,889,744; Dec. 6.
Awning. H. E. Pollard. 1,890,406; Dec. 6.
Baffle arrangement. A. Huet. 1,889,861; Dec. 6.
Baffle plate arrangement and design for concrete mixers. H. D. Paris. 1,890,002; Dec. 6.
Bag: *See*—
  Hand bag. Golf and like bag.
  Coffee urn bag. Money bag.
Band for birds, Identifying. H. J. Divekey. 1,890,280; Dec. 6.
Bars, Apparatus for making stuffed. H. L. Birum, sr., and H. L. Birum, jr. 1,889,913; Dec. 6.

Base for telephones and the like, Rubber. E. Oakley. 1,890,000; Dec. 6.
Beam hanger. R. E. Stickel. 1,890,135; Dec. 6.
Beam swivel, Walking. R. C. Baker. 1,890,208; Dec. 6.
Bearing babbitting device. C. A. Nickles. 1,889,999; Dec. 6.
Bearing, Pitman. R. C. Baker. 1,890,207; Dec. 6.
Bed construction, Animal. C. M. Rose. 1,890,163; Dec. 6.
Bed, Invalid's. W. R. Derry. 1,890,177; Dec. 6.
Belt, Double cog. A. L. Freedlander. 1,890,080; Dec. 6.
Belt, Line contact. A. L. Freedlander. 1,890,082; Dec. 6.
Beret. H. Grumbach. 1,890,055; Dec. 6.
Bill fold. J. P. Wege. Des. 88,592; Dec. 6.
Billiard table. M. Langenhaun. 1,889,899; Dec. 6.
Binder, coating or paste, Core or mold. C. N. Saeger, jr. 1,889,905; Dec. 6.
Binder, Loose leaf. S. G. Johnson. 1,889,962; Dec. 6.
Bit for sand pumps, Clean-out. G. W. Miller. 1,889,865; Dec. 6.
Blowtorch. J. F. Steffan and K. G. Rohrer. Des. 88,586; Dec. 6.
Blower. E. Mathis. 1,890,226; Dec. 6.
Board: *See*—
  Sign board.
Boat. D. W. MacCallum. 1,889,927; Dec. 6.
Boat, Flying. L. A. Sanders. 1,890,021; Dec. 6.
Boiler: *See*—
  High capacity boiler. Mercury boiler.
Boiler tube cleaner. D. W. Groves. 1,889,859; Dec. 6.
Bomb rack for aeroplanes, Elevator. R. E. Bollam. 1,890,142; Dec. 6.
Book or binder. H. Auburn. 1,890,139; Dec. 6.
Borax, Separating. J. R. Hughes. 1,889,989; Dec. 6.
Bottle. P. C. Delaize. Des. 88,504; Dec. 6.
Bottle protector. C. W. Glaeser. 1,890,323; Dec. 6.
Bottom, Resilient. J. Kronheim. 1,890,089; Dec. 6.
Bowling pin rejuvenator. J. C. Taylor. 1,890,422; Dec. 6.
Bracelet structure. E. G. Carlson. 1,889,972; Dec. 6.
Brake. G. McK. Fitts. 1,890,031; Dec. 6.
Brake control device for motor vehicles, Clutch. W. G. Hult and H. Klingsmill. 1,890,153; Dec. 6.
Brake lining and method of making. H. Whitworth. 1,890,424–5; Dec. 6.
Brakes, Testing automobile. L. L. Graham and O. S. Flood. 1,890,219; Dec. 6.
Brush, Carbon. G. Klein. 1,889,834; Dec. 6.
Brush, Fountain. J. E. Eckstein. 1,890,319; Dec. 6.
Brush lock. J. Bonardi. 1,889,970; Dec. 6.
Buckle connector or the like, Belt. B. B. Manaster. Des. 88,566; Dec. 6.
Building construction and making the same. K. P. Billner. 1,890,432; Dec. 6.
Bulldozer, Hydraulic. R. R. Miller. 1,890,228; Dec. 6.
Burner. F. M. Poore. 1,889,843; Dec. 6.
Burner control system, Oil. K. S. Klinckmuller. 1,890,119; Dec. 6.
Cable compacting press. F. H. Smith and H. A. Stringfellow. 1,890,016; Dec. 6.
Calcium carbide, Cooling. G. E. Cox. 1,889,951; Dec. 6.
Calendar. O. B. Jeffreys. 1,890,117; Dec. 6.
Camera, Combined motion picture and sound. F. H. Owens. 1,889,840; Dec. 6.
Camera, Multilens aerial. A. Briechle, F. W. Lutz, and G. Rattray. 1,890,074; Dec. 6.
Can feeder for vertical coolers. A. R. Thompson. 1,889,908; Dec. 6.
Carbonating device. J. F. Dawson. 1,889,886; Dec. 6.
Carburetor. R. F. Brakce. 1,890,145; Dec. 6.
Carburetor. F. C. Schramm and M. Dach. 1,890,196; Dec. 6.
Carburetor and method of carburetion, Gas. G. L. Holsapfel. 1,890,058; Dec. 6.
Card, Hardware display. L. N. Hoffman. 1,890,181; Dec. 6.
Card interpreter. T. E. Hurns and A. Y. Leslie. 1,889,920; Dec. 6.
Carton. H. T. Pratt. 1,889,933; Dec. 6.
Carton or container. R. M. Hays. 1,889,985; Dec. 6.
Case and portfolio, Combination traveling. L. Switkes. 1,889,765; Dec. 6.
Case clamp, Automobile. P. J. Huber. 1,890,328; Dec. 6.
Casket. H. A. Neff. 1,890,093; Dec. 6.
Cathode structure. E. Römhild. 1,890,389; Dec. 6.
Cavities in trees, Treating and filling. W. M. Ritchie. 1,890,019; Dec. 6.
Centering device. P. W. Haywood. 1,889,986; Dec. 6.
Chair and couch. J. Kronheim. 1,890,090; Dec. 6.

Channel strip and making same. J. I. Taylor. 1,890,308; Dec. 6.
Cheese grating machine. G. Maestro. 1,890,091; Dec. 6.
Chest: *See*—
  Shipping and storage chest.
Chest of drawers, Child's. M. Hallward. Des. 88,541; Dec. 6.
Child's chair. M. Hallward. Des. 88,540; Dec. 6.
Chlorodiphenyls, Separating. E. C. Britton and W. C. Stoesser. 1,890,427; Dec. 6.
Chuck, Swiveled tire inflating. G. E. Farley. 1,889,980; Dec. 6.
Circuit-breaking apparatus, Automatic. R. M. G. Phillips. 1,890,233; Dec. 6.
Circuits, Arrangement for oscillation. W. Runge. 1,890,302; Dec. 6.
Circuits, Control and protection of electric. A. S. Fitz Gerald. 1,890,321; Dec. 6.
Circuits, Prevention of overbearing in program. A. G. Chapman and R. G. McCurdy. 1,889,821; Dec. 6.
Clamp: *See*—
  Case clamp. Suspension clamp.
  Ledger clamp.
Clamping means. A. Morandi. 1,890,042; Dec. 6.
Classification of materials by elutriation. L. Andrews. 1,890,206; Dec. 6.
Cleaner: *See*—
  Boiler tube cleaner. Vacuum cleaner.
Cleaning apparatus for the rolls of papermaking machines. H. T. Norman. 1,889,838; Dec. 6.
Cleaning composition. H. V. Churchill. 1,890,214; Dec. 6.
Cleaning machine for magazines and matrices. H. R. Freund. 1,890,374; Dec. 6.
Clip for applying plastic lath or the like to wood studding, Fastening. R. J. Taylor. 1,890,240; Dec. 6.
Clip for holding expanded or other metal angle corners in walls, Metal. R. J. Taylor. 1,890,239; Dec. 6.
Clock case. P. C. Tietz. Des. 88,590; Dec. 6.
Clock frame. K. E. Berno. Des. 88,496; Dec. 6.
Closure for bottles, receptacles and the like, Drop. W. Voss. 1,890,347; Dec. 6.
Closure fastener. S. Madsen. 1,889,753; Dec. 6.
Closure for cans, Dispensing. W. F. Punte. 1,890,194; Dec. 6.
Closures for collapsible tubes. C. V. Hickman and R. L. Jeffery. 1,890,441; Dec. 6.
Closures for radiator necks and the like. M. B. Andrie. 1,889,848; Dec. 6.
Clothes hanger. G. Cicconi. 1,890,046; Dec. 6.
Clutch. J. Nelson. 1,889,998; Dec. 6.
Clutch controlling mechanism. H. J. D. and J. H. K. McCollum. 1,890,398; Dec. 6.
Coal tar pitch, Disposal of. J. M. Weiss. 1,890,349; Dec. 6.
Coatings to insulated wires and the like, Applying. A. P. Hinsky. 1,890,292; Dec. 6.
Coffee urn bag. C. A. Rundquist. 1,889,845; Dec. 6.
Coin testing apparatus. F. W. Hoban. 1,890,380; Dec. 6.
Coins or other tokens for genuineness, Testing. F. W. Hoban. 1,890,381; Dec. 6.
Color photography. L. T. Troland. Re18,680; Dec. 6.
Colors, Mixing. G. A. Schubert. 1,890,004; Dec. 6.
Composition of matter. T. C. Parr. 1,889,842; Dec. 6.
Compounds of cellulose-xantho-fatty acids and producing them, Water soluble. L. Lilienfeld. 1,890,393; Dec. 6.
Compression coupling. A. C. Dobrick. 1,889,778; Dec. 6.
Compressor. R. T. and C. H. Smith. 1,890,238; Dec. 6.
Compressor and vacuum pump. C. Pfeiffer. 1,890,003; Dec. 6.
Condensation products from formaldehyde, thiourea, and urea. A. Gams, G. Widmer, and K. Frey. 1,890,033; Dec. 6.
Condenser. C. H. Caine. 1,890,312; Dec. 6.
Condenser for use with internal combustion engines, Alcohol. L. B. Goetzman. 1,889,892; Dec. 6.
Condensers, Making. C. H. Caine. 1,890,313; Dec. 6.
Conductor and applying colored surfaces thereto, Insulated electric. A. P. Hinsky. 1,890,291; Dec. 6.
Connecter, Grounding. B. J. Yanchenko. 1,890,105; Dec. 6.
Connecter lock, Automatic train pipe. J. Robinson. 1,890,096; Dec. 6.
Container. M. Sperling. Des. 88,585; Dec. 6.
Container, Cigarette and match. L. P. Perez. 1,889,789; Dec. 6.
Container for food products. R. M. Woods. 1,889,882; Dec. 6.
Container for sheets, Shallow drawer. H. L. De Lisle. 1,890,216; Dec. 6.
Container, Packing and display. J. J. Gaffney. 1,890,285; Dec. 6.
Container, Sealing metal. W. F. Punte. 1,890,193; Dec. 6.
Control means for a brake system power unit. F. I. Libbey. 1,890,259; Dec. 6.
Control system for aeroplanes, Automatic. Y. H. Koun. 1,890,115; Dec. 6.
Conveyer, Invalid. L. Leininger. 1,889,925; Dec. 6.
Cooling system. C. H. Bills and G. G. Griswold. 1,890,072; Dec. 6.
Copper plating. W. Peacock, jr. 1,890,094; Dec. 6.
Core and mold for pneumatic tires, Expanding. A. H. Shoemaker. 1,890,133; Dec. 6.

Coupling: *See*—
  Compression coupling. Pipe coupling.
  Flexible coupling. Pipe float coupling.
  Flexible elastic coupling. Tube coupling.
  Hose coupling. Tubular coupling.
Coupling device. H. Wirs and H. G. Hotchkiss. 1,890,011; Dec. 6.
Cover, Tire. R. R. Crocker. 1,889,776; Dec. 6.
Cover, Tire. R. E. Linn. 1,890,123; Dec. 6.
Covering plaster carrying wire netting. C. Schröder, sr. 1,890,023; Dec. 6.
Crank shaft wrench, Auto. W. W. McKee. 1,890,227; Dec. 6.
Crate. W. W. Robinson. 1,890,067; Dec. 6.
Crate corners and rail bottom. E. M. Pennock. 1,890,161; Dec. 6.
Crossing signal. M. D. Wilson. 1,890,352; Dec. 6.
Cup filling machine, Charlotte russe. L. Triolo. 1,890,069; Dec. 6.
Currents in audion amplifiers, Reducing retroactive. S. Ballantine. 1,889,741; Dec. 6.
Curtain tie back or similar article. R. Grieser. Des. 88,535; Dec. 6.
Cut-off switch, Automatic. B. E. Mills. 1,889,786; Dec. 6.
Deck for oil storage tanks, Floating. L. J. Oswald. 1,890,189; Dec. 6.
Defrosting device for refrigerating cases. C. V. Hill. 1,890,085; Dec. 6.
Designing frame. A. C. Comins. 1,889,976; Dec. 6.
Desk construction, Wood. B. E. Richardson. 1,889,811; Dec. 6.
Desuperheater. W. H. Armacost. 1,889,739; Dec. 6.
Detector: *See*—
  Tire scuff detector.
Device for automatically arranging the elements of sliding clasp fasteners. K. F. Nägele. 1,890,300; Dec. 6.
Devices for aeroplanes and the like. W. C. Geer. 1,890,286; Dec. 6.
Diaphragm, Electrolytic. W. H. Wood. 1,890,242; Dec. 6.
Die, Screw cutting. J. Millerchip and T. M. Lambert. 1,890,124; Dec. 6.
Direction indicator, Automobile. A. F. Haddad. 1,890,379; Dec. 6.
Dishes and glaze therefor, Earthenware. H. J. McMaster. 1,890,297; Dec. 6.
Dishwashing. Apparatus for. E. Greene and W. H. Swenarton. 1,889,858; Dec. 6.
Dispenser and support therefor, Soap. H. H. Young. 1,890,138; Dec. 6.
Dispensing-package for powder puffs. J. Jacobs. 1,890,295; Dec. 6.
Display device. W. H. Stayton. 1,889,763; Dec. 6.
Distributor. W. A. White. 1,889,816; Dec. 6.
Dithiophosphates, Making. G. Barsky and R. V. Heuser. 1,889,943; Dec. 6.
Dolly. R. J. and G. A. Hutt. Des. 88,554; Dec. 6.
Door, Full collapsible panicproof revolving. R. L. Blanchard. 1,890,365; Dec. 6.
Draft attachment for railway vehicles. E. H. Schmidt. 1,889,762; Dec. 6.
Draft attachment for railway vehicles. E. H. Schmidt. 1,890,303; Dec. 6.
Draft regulating apparatus for furnaces. W. N. Lurcott. 1,890,296; Dec. 6.
Draw-cut shaper table. H. E. Morton. 1,889,930; Dec. 6.
Dress. P. E. Fields. Des. 88,514; Dec. 6.
Dress. S. Milgrim. Des. 88,567; Dec. 6.
Drier: *See*—
  Fruit drier.
Drill stem, Inserted joint rotary. G. A. Montgomery. 1,889,872; Dec. 6.
Drill stem, its tube and collar, Rotary. G. A. Montgomery. 1,889,871; Dec. 6.
Drills from the vertical, Apparatus for measuring deviation of rotary. J. J. Jakosky. 1,889,921; Dec. 6.
Drive for a router or the like, Frictional. G. H. Carlson. 1,889,947; Dec. 6.
Drive for radio apparatus, Variable condenser. J. Q. Gaubert. 1,889,781; Dec. 6.
Driving mechanism. C. H. Froelich and R. J. McCarty, jr. 1,890,049; Dec. 6.
Dry cell of the flat type. G. W. Heise and E. A. Schumacher. 1,890,178; Dec. 6.
Dust separator control. L. C. Whiton, jr. 1,890,070; Dec. 6.
Dyestuff intermediates of the anthraquinone series, Production of. W. Smith and J. Thomas. 1,890,099; Dec. 6.
Dyestuff intermediates, Production of flavanthrone. W. Smith and J. Thomas. 1,890,098; Dec. 6.
Dynamo electric machine. H. D. Taylor. 1,890,344; Dec. 6.
Dynamo, Ignition. C. F. Reis. 1,889,878; Dec. 6.
Edging for trim panels. B. C. Place. 1,889,903; Dec. 6.
Electric arc furnace. J. T. Terry. 1,889,907; Dec. 6.
Electric cauterizer. S. Takaoka. 1,890,270; Dec. 6.
Electric flash light. J. L. Shannon. 1,889,936; Dec. 6.
Electric welding machine. H. S. Holmes. 1,890,057; Dec. 6.
Electrical coupling system. L. A. Gebhard. 1,890,034; Dec. 6.
Electrical switch. K. J. Jungholm. 1,890,038; Dec. 6.
Electrode, Mercury luminescent tube. M. G. Morris. 1,890,402; Dec. 6.

Electron discharge device, Cooled. L. H. Benson. 1,890,310; Dec. 6.
Elevating and lowering oil well piping, System and apparatus for. M. J. McNulty, jr. 1,889,808; Dec. 6.
Elevator: *See*—
Lumber elevator.
Emery or abrading wheel. J. R. Mitchell. 1,890,401; Dec. 6.
Emulsification of immiscible ingredients, Apparatus for. N. Bendixen. 1,890,106; Dec. 6.
Engine: *See*—
Gas engine. Internal-combustion engine.
Ether product and making same, Dyed cellulose. L. Lilienfeld. 1,890,392; Dec. 6.
Expansion joint. J. A. MacDonald. 1,890,260; Dec. 6.
Explosion chamber for liquid break switches. H. J. H. Huber and R. Kellogg. 1,890,327; Dec. 6.
Extinguisher for cigarettes and the like. W. A. Bessmer. 1,889,801; Dec. 6.
Extractor: *See*—
Fruit juice extractor.
Fabric: *See*—
Textile fabric. Wire fabric
Tubular knit ribbed fabric.
Fabric, Producing tubular knit ribbed. J. Saftlas. 1,890,417; Dec. 6.
Fastener and making, Separable. F. C. Nodine. 1,890,335; Dec. 6.
Fasteners, Device for the manufacture of separable. H. Henkels. 1,889,803; Dec. 6.
Fastening device. L. H. Lee. 1,889,807; Dec. 6.
Fastening device. A. J. Weatherhead, jr. 1,890,348; Dec. 6.
Fastening device or clip. G. E. Black. 1,889,770; Dec. 6.
Feeder, Rodent. C. F. Lane. 1,890,391; Dec. 6.
Feeding device, Intermittently acting. G. Hoppe. 1,889,785; Dec. 6.
Film developing system. J. T. Barkelew. 1,890,026; Dec. 6.
Film handling mechanism. W. L. Wright. 1,890,172; Dec. 6.
Films, Developing unit for X-ray and other photographic. J. E. Bowker. 1,890,366; Dec. 6.
Filter. G. J. Fowler. 1,890,251; Dec. 6.
Finger ring. J. H. Levi. Des. 88,561; Dec. 6.
Fire box for locomotives or other steam vehicles. A. Magis and A. Huet. 1,889,754; Dec. 6.
Fire extinguisher. A. C. Badger. 1,890,140; Dec. 6.
Fire extinguisher. W. L. Roessner. 1,889,844; Dec. 6.
Fish cutting machine. A. R. Rogers. 1,889,879; Dec. 6.
Fish dorsal fin centering means. W. H. Hunt. 1,889,919; Dec. 6.
Fish lure. J. J. Miller. 1,890,400; Dec. 6.
Fish lure. G. P. Schadell and S. B. Gleason. 1,890,266, Dec. 6.
Fitting for industrial thermometers, Sanitary. L. B. Swift. 1,890,006; Dec. 6.
Flexible coupling. G. K. Bedur. 1,890,278; Dec. 6.
Flexible elastic coupling. W. Müller-Keuth. 1,890,332; Dec. 6.
Float for milk drying machines, Supply-controlling. R. J. Souligne. 1,890,024; Dec. 6.
Floor covering. J. H. Rile. 1,890,128; Dec. 6.
Flower stand. I. G. Scott and M. C. Fox. Des. 88,581–3; Dec. 6.
Fluid purifying device. W. J. Hughes. 1,890,294; Dec. 6.
Fluid transmission system, Capillary. D. D. Rosenburgh. 1,889,792; Dec. 6.
Flying machine. T. A. E. Lake. 1,890,059; Dec. 6.
Food compound. F. H. Hoffman. 1,890,180; Dec. 6.
Foot lift for tractor plows. A. Krokenberger. 1,890,389; Dec. 6.
Footwear. A. F. Bancroft. 1,890,209; Dec. 6.
Forehearth. J. F. Black. 1,890,174; Dec. 6.
Form, Side. W. J. De Witt. 1,889,887; Dec. 6.
Formation testing and well flowing device. E. H. Campbell. 1,889,772; Dec. 6.
Frame: *See*—
Designing frame. Hosiery frame.
Fruit drier. E. McCarthy. 1,890,397; Dec. 6.
Fruit juice extractor. M. D. Cody. 1,889,883; Dec. 6.
Fuel burning apparatus. L. A. Morin. Re18,684; Dec. 6.
Fuel, Treatment of motor. C. D. Lowry, jr., and C. G. Dryer. 1,889,835–6; Dec. 6.
Fueling system. C. I. Justheim. 1,889,922; Dec. 6.
Fuels and products derived therefrom or other materials into valuable liquids, Conversion of solid. C. Krauch and M. Pier. 1,890,434; Dec. 6.
Fuels and products derived therefrom or other materials into valuable liquids, Conversion of solid. C. Krauch and M. Pier. 1,890,436; Dec. 6.
Fuels of relatively low boiling point range, Conversion of carbonaceous materials into. M. Pier. 1,890,438; Dec. 6.
Fumigation compositions and process. K. F. Cooper. 1,889,950; Dec. 6.
Furnace: *See*—
Electric arc furnace.
Furnace. C. A. Dutton. 1,889,955; Dec. 6.
Furnace. L. W. Manion. 1,889,928; Dec. 6.
Furnace construction. H. V. Leahy. 1,889,993; Dec. 6.
Furnace wall, Air-cooled. J. S. Bennett. 1,890,364; Dec. 6.
Furnace wall construction. J. Van Brunt. 1,890,170; Dec. 6.
Furnaces, Operating cupola. S. P. Miller. 1,889,757; Dec. 6.
Furniture panel, Nursery. L. Fuller and K. F. Schmidt. Des. 88,521–6; Dec. 6.
Fuse for rotative projectiles, Mechanical delay. E. W. Brandt. 1,890,176; Dec. 6.
Gas engine. L. E. Cadwell. 1,889,946; Dec. 6.
Gas mixtures, Method and apparatus for detecting the presence of inflammable constituents in. A. N. Erickson. 1,889,890; Dec. 6.
Gas producer. J. S. Haug. 1,890,056; Dec. 6.
Gases and recovery of sulphates and sulphur, Purification of sulphur bearing. H. Baehr. 1,889,942; Dec. 6.
Gauge for tire inflation air lines and the like. B. Janus. 1,890,036; Dec. 6.
Gauge-recording device for wire-drawing machines. J. Gurne. 1,889,893; Dec. 6.
Gear and clutch operating mechanism, Reverse. R. M. Upton. 1,889,909; Dec. 6.
Gear for tractors, Steering. W. W. Swan. 1,889,906; Dec. 6.
Gear for water and air vehicles, Steering. H. Hort. 1,890,293; Dec. 6.
Gear shift, Automatic. R. B. Spikes. 1,889,814; Dec. 6.
Gelatin and the like, Apparatus for drying. D. U. Smith. 1,889,880; Dec. 6.
Glass, Apparatus for making plate. J. H. Fox. 1,890,322; Dec. 6.
Glass, Bending. R. C. Thompson. 1,889,881; Dec. 6.
Glass, Process and apparatus for grinding. T. H. Swartzlander. 1,890,343; Dec. 6.
Golf and like bag. E. A. Bellow. 1,890,362; Dec. 6.
Golf ball washer. O. H. Nielsen. 1,889,809; Dec. 6.
Golf club. A. E. Buhrke and A. F. Heeter. 1,889,743; Dec. 6.
Golf club handle. S. Kramlik. 1,890,388; Dec. 6.
Golf driving device. B. D. Smith. 1,889,813; Dec. 6.
Governor and apparatus to relieve fuel oil pressure accumulation, Diesel engine speed. J. W. Lorimer. 1,890,225; Dec. 6.
Governor, Ignition. J. F. Martin. 1,889,755; Dec. 6.
Granite or analogous stone, Apparatus for rifting. W. S. Martin. 1,890,187; Dec. 6.
Grate, Furnace. A. W. Bennis. 1,890,210–11; Dec. 6.
Grenade, Hand. J. Weszycki. 1,890,274; Dec. 6.
Grille panel. R. A. Dean. Des. 88,503; Dec. 6.
Grip strap. H. H. Rubin. 1,889,793; Dec. 6.
Guard, Compartment. V. J. English. 1,889,853; Dec. 6.
Gun port. N. H. Phillips. 1,890,232; Dec. 6.
Hair, Permanently waving. R. L. Evans. 1,889,746; Dec. 6.
Hair waver. A. E. Farrell. 1,889,854; Dec. 6.
Hair waving machine. J. W. Cox. 1,890,047; Dec. 6.
Hand apparatus for roughing cloth. A. Cotti. 1,890,147; Dec. 6.
Hand bag. J. Rudolph, J. Rosenzweig, and D. Aschkenas. 1,890,020; Dec. 6.
Handle: *See*—
Golf club handle.
Hanger: *See*—
Beam hanger. Trousers hanger.
Clothes hanger.
Hanger. A. De Falco. 1,890,370; Dec. 6.
Hat block construction. H. E. Gough. 1,890,272; Dec. 6.
Hat cleaning and drying machine. H. Schlesinger. 1,889,761; Dec. 6.
Hats, Ventilating strip for. M. Popper. 1,890,407; Dec. 6.
Heat insulation. E. Schmidt. 1,890,418; Dec. 6.
Heat transfer device. H. G. Chatain. 1,890,108; Dec. 6.
Heat transfer device. C. E. Lucke. 1,890,185–6; Dec. 6.
Heat treating apparatus, G. Schwab. 1,890,431; Dec. 6.
Heat treating sheet metal, Method and apparatus for. P. A. Meehan. 1,890,065; Dec. 6.
Heater for electron discharge devices. H. L. Crowley. 1,889,884; Dec. 6.
Heating apparatus for fluid circulation systems. O. H. Wallin. 1,890,025; Dec. 6.
Hedge shears. H. O. Bailey. 1,890,355; Dec. 6.
High-capacity boiler. W. H. Armacost and D. W. Rudorff. 1,889,740; Dec. 6.
Holder, Bottle. R. T. Redington-Drager. 1,889,877; Dec. 6.
Holder for a baby spoon or similar article. B. H. Prout. Des. 88,569; Dec. 6.
Holder for collapsible tubes. E. E. Cullen. 1,889,885; Dec. 6.
Holder for telephones, Message. R. H. Barclay. 1,889,742; Dec. 6.
Holder, Pencil. G. A. Skoog. 1,890,134; Dec. 6.
Holder, Photographic roll. J. S. Greene. 1,890,324; Dec. 6.
Holder, Supply. G. N. Taylor. 1,889,815; Dec. 6.
Hole straightener. J. J. Santiago. 1,890,022; Dec. 6.
Hormone and obtaining same. S. Fraenkel. 1,890,373; Dec. 6.
Horn, Vacuum operated. J. C. McCune and S. Johnson, jr. Re18,682; Dec. 6.
Horseshoe. R. E. Fruin. 1,889,856; Dec. 6.
Hose coupling. E. Lefkowitz. 1,890,061; Dec. 6.
Hose coupling, Fire. G. A. Hargreaves. 1,890,290; Dec. 6.

Hosiery frame, Flat. G. Thierfelder. 1,890,200; Dec. 6.
Hospital table. F. B. Harman. 1,889,783; Dec. 6.
Hubs, Method of and apparatus for removing. R. A. Kaplan. 1,889,750; Dec. 6.
Humidifier. E. F. Steffens. Des. 88,587–9; Dec. 6.
Hydraulic apparatus for motor vehicles. H. F. Vickers. 1,890,010; Dec. 6.
Hydrocarbon, Apparatus for producing lower boiling point. C. P. Dubbs. 1,890,316; Dec. 6.
Hydrocarbons from carbonaceous materials, tars, mineral oils, and the like, Production. M. Pier. 1,890,437; Dec. 6.
Hydrogen sulphide from gas mixtures, Recovering. C. J. Hansen. 1,889,894; Dec. 6.
Hydrogenation of carbonaceous materials, Destructive. M. Pier. 1,890,439; Dec. 6.
Ice cream cone supporting device for use with refrigerating safes. F. D. Smith. 1,890,420; Dec. 6.
Ice on aeroplane propellers, Device for preventing the accumulation of. W. C. Geer. 1,889,782; Dec. 6.
Igniter charge for blasting caps. L. H. Fisher. 1,890,112; Dec. 6.
Ignition and safety switch, Self-locking. G. M. Bronish. 1,890 367; Dec. 6.
Ignition mechanism for domestic oil burners, Spark. L. I. Aldrich. 1,889,968; Dec. 6.
Incubator. O. V. Rookstool. 1,890,236; Dec. 6.
Indicator: *See*—
Direction indicator.
Inner tubes and air bags, Making. F. T. Roberts. 1,889,904; Dec. 6.
Insect destroying device. C. L. Jackson. 1,890,116; Dec. 6.
Instrument pointer structure. F. S. Stickney. 1,889,764; Dec. 6.
Interest calculating device. A. M. Hunter. 1,890,182; Dec. 6.
Internal combustion engine. O. H. Erickson. 1,890,148; Dec. 6.
Ironing machine for coils. C. T. Raule. 1,890,162; Dec. 6.
Irrigating system. J. W. Ord. 1,890,337; Dec. 6.
Jack. J. A. Adell. 1,889,941; Dec. 6.
Jack. N. A. Best. 1,890,144; Dec. 6.
Jewel mounting, Interchangeable. F. Kessler. 1,889,862; Dec. 6.
Joining telescoped tubular members. G. L. Chamberlain. 1,889,974; Dec. 6.
Joint: *See*—
Expansion joint. Tool joint.
Joint ring, Split. O. C. Gehrman. 1,889,828; Dec. 6.
Jolter. W. H. Wangelin. 1,890,171; Dec. 6.
Lace, J. Dognin. Des. 88,508; Dec. 6.
Lacing tab. R. F. Bartel. 1,889,850; Dec. 6.
Ladle and carrier, Slag. A. F. Giese, jr. 1,890,150; Dec. 6.
Lamp and tray, Combined card table. V. S. Pearlman. Des. 88,568; Dec. 6.
Lamp black, Method and apparatus for producing. J. C. Morrell and V. A. Mekler. 1,890,188; Dec. 6.
Lamp, Flash. J. Ostermeier. Re18,678; Dec. 6.
Lamp, Portable battery. A. Mitchell. 1,889,788; Dec. 6.
Lamp, Universal. J. A. Dickey. 1,889,978; Dec. 6.
Last, Darning. A. K. Frasier. 1,890,032; Dec. 6.
Lathing, Expanding metal. H. K. Baker. 1,890,141; Dec. 6.
Ledger clamp. T. H. Kingston. 1,890,386; Dec. 6.
Lenses, Apparatus for fusing multifocal. W. Bausch and J. R. Powell. 1,889,769; Dec. 6.
Light: *See*—
Electric flash light.
Light. J. H. Sheely. 1,890,167; Dec. 6.
Light impulses into current impulses, Transforming. T. H. Nakken. 1,889,758; Dec. 6.
Light post. J. P. Farnam. Des. 88,513; Dec. 6.
Lighter, Cigar. L. V. Aronson. 1,889,849; Dec. 6.
Lighter, Pyrophoric. H. Kellermann. 1,889,898; Dec. 6.
Lighting fixture. T. R. Bettencourt. Des. 88,498–500; Dec. 6.
Lighting fixture. J. G. Godoy. 1,890,378; Dec. 6.
Lighting fixture. H. K. Wack. Des. 88,591; Dec. 6.
Lighting standard. J. W. Gosling. Des. 88,534; Dec. 6.
Lining or coating of pipes and other tubular bodies. B. Talbot. 1,890,007; Dec. 6.
Lip stick, eyebrow pencil, and the like. J. Schall. 1,890,068; Dec. 6.
Liquid compositoin for preserving materials, particularly timber. F. A. Hill. 1,890,220; Dec. 6.
Liquid products from tars, mineral oils and the like carbonaceous materials, Production of valuable. C. Krauch and M. Pier. 1,890,435; Dec. 6.
Liquid treating apparatus. C. J. Rodman and R. P. Dunmire. 1,890,265; Dec. 6.
Load devices, Apparatus for and method of operating, Rectifying. W. K. Kearsley. 1,890,330; Dec. 6.
Lock: *See*—
Brush lock. Connecter lock.
Locking device for rotatable members. F. W. Edwards. 1,890,030; Dec. 6.
Locking means. F. E. Nodine. 1,890,336; Dec. 6.
Locomotive exhaust piping and feed water heater. W. F. Kiesel, jr. 1,889,924; Dec. 6.
Log loading apparatus. W. E. Rosebush. 1,890,413; Dec. 6.
Loud speaker with actuating systems of different types. G. Gruschke. 1,889,748; Dec. 6.
Lumber elevator. G. L. Kjellander. 1,890,387; Dec. 6.
Machine for cutting off pieces of material from a strip and carrying them forward. J. Schaub. 1,890,181; Dec. 6.
Machine for making thick butt roofing, Method of and. C. R. MacDonald. 1,890,017; Dec. 6.
Machine for operating upon sheet material. A. A. Lawson. 1,889,992; Dec. 6.
Machine for packing matches. M. Paridon. 1,889,841; Dec. 6.
Machine for preparing mailable matter. J. B. and E. J. Frech, and W. S. Cox. 1,889,958; Dec. 6.
Machine for removing heads and feet of fowl. L. E. Long. 1,890,394; Dec. 6.
Machine for straightening metal bars. H. M. Givens. 1,890,287; Dec. 6.
Machine for vertically coating continuous strips of roofing material, Method of and. F. C. Overbury. 1,890,018; Dec. 6.
Machining apparatus. O. R. Briney. 1,890,146; Dec. 6.
Magazine rack. G. Anderson. Des. 88,494; Dec. 6.
Magnetic induction machine. E. White. 1,890,104; Dec. 6.
Magneto. W. E. Schwarzman. 1,890,305; Dec. 6.
Magneto. W. E. Schwarzman. 1,890,306; Dec. 6.
Marine motor. H. L. and L. J. Johnson. 1,889,964; Dec. 6.
Marker, Fruit. F. Ahlburg. 1,889,967; Dec. 6.
Marking apparatus. A. W. Dennis. 1,890,371; Dec. 6.
Material, Method and apparatus for sampling. T. Thorsten. 1,890,199; Dec. 6.
Material with the aid of mineral wool, Producing board-like. I. Kitsee. 1,890,184; Dec. 6.
Measurement of viscosity. C. D. Miller. 1,889,998; Dec. 6.
Measuring and recording machine, Liquid. R. E. Enochs and H. W. Lawrence. 1,890,078; Dec. 6.
Measuring device, Well-depth. R. H. McConahay. 1,890,159; Dec. 6.
Measuring mechanism, Automatic. J. M. Montgomery. 1,890,160; Dec. 6.
Mercury boiler. T. Griswold, jr. 1,890,429; Dec. 6.
Metal, Apparatus for the manufacture of expanded. H. K. Baker. 1,890,276; Dec. 6.
Metal flashing. P. M. Burgess. 1,889,771; Dec. 6.
Metal, Manufacture of expanded. H. K. Baker. 1,890,173; Dec. 6.
Metal milling machine. R. J. McLeod. 1,890,399; Dec. 6.
Metal stock, Method and apparatus for leveling and shearing. L. Iversen. 1,890,221; Dec. 6.
Metallic gripper, Grommet-fastened. C. Chesler. 1,890,368; Dec. 6.
Meter. J. W. Ledoux. 1,889,994; Dec. 6.
Meter protector. S. S. Johnson. 1,889,805; Dec. 6.
Microscopic objective. J. C. Sabel. 1,889,794; Dec. 6.
Milk cap dispenser. J. R. Parker. 1,889,875; Dec. 6.
Mill: *See*—
Roller mill.
Mirror construction. D. L. Shatto and F. F. Lindstaedt. 1,890,166; Dec. 6.
Mixing device. P. B. Shaller and H. P. Troendly. 1,890,307; Dec. 6.
Moistening device. F. W. Storck. 1,889,911; Dec. 6.
Molding machine. H. Tscherning. 1,890,203; Dec. 6.
Molds of edible substances and the resulting products, Manufacturing pre-portioned. C. M. Policastro and G. W. Morrison. 1,890,044; Dec. 6.
Money bag. A. Halpin. 1,889,860; Dec. 6.
Motor: *See*—
Marine motor.
Mounting, Muffler. H. F. Hadley. 1,890,151; Dec. 6.
Mower device, Lawn. B. F. Gravely. 1,889,830; Dec. 6.
Mower, Lawn. N. H. Motsinger. 1,889,931; Dec. 6.
N-monoalkyl and N-dialkyl aromatic amines of the benzene series, Separating. E. C. Britton and R. D. Holmes. 1,890,246; Dec. 6.
Necktie. L. S. Otten. 1,890,001; Dec. 6.
Nitrogen-hydrogen mixtures for ammonia synthesis, Purification of. R. S. Richardson. 1,889,934; Dec. 6.
Nozzle closure for metal containers. W. F. Punte. 1,890,235; Dec. 6.
Nozzle mounting. C. W. Obett. 1,889,874; Dec. 6.
Nozzle, Sand blast. V. W. Falardeau. 1,889,979; Dec. 6.
Oil, Refining of hydrocarbon. J. C. Morrell and J. L. Essex. 1,890,229–30; Dec. 6.
Oils from industrial residues, Recovery of. E. V. Pongrats and H. Zorn. 1,889,932; Dec. 6.
Oils of high boiling point, Recovery of. M. Luther and M. Müller-Cunradi. 1,889,926; Dec. 6.
Opener, Egg. A. P. Barceló. 1,889,912; Dec. 6.
Ornaments to strap ends, Device for detachably securing interchangeable. W. E. Field. 1,890,320; Dec. 6.
Packages, Mechanism for stacking. C. F. Wright. 1,889,846; Dec. 6.
Packaging device. O. N. Whitehead. 1,889,966; Dec. 6.
Paint, Apparatus for applying. M. Pfeiffer. 1,890,192; Dec. 6.
Paper, Colored effect. C. Dankert. 1,889,953; Dec. 6.
Paper, Making and treating. F. G. Crane. 1,889,851; Dec. 6.
Paper working machine. F. G. Wikstrom. 1,890,071; Dec. 6.

Parachute attachment for aeroplanes. L. R. Papp. 1,890,190; Dec. 6.
Parachute, Mail-bag. C. M. Graeff. 1,890,083; Dec. 6.
Pavements, Device for laying plastic. J. P. Rogers. 1,890,412; Dec. 6.
Pen, Fountain. H. Spiro. 1,890,100; Dec. 6.
Phenol-aldehyde condensation products, Making. J. J. Kessler. 1,889,751; Dec. 6.
Phosphates, Production of. Conway, B. v. G., H. Weidmann, and G. Roesner. 1,890,204; Dec. 6.
Photographic developing apparatus. G. C. Beidler. 1,889,818; Dec. 6.
Photographic developing method and apparatus. J. S. Greene. 1,890,325 Dec. 6.
Phthalide, Purification of. A. O. Jaeger. 1,889,961; Dec. 6.
Pile fabrics, Finishing knitted. D. P. Moore. 1,889,902; Dec. 6.
Piles, Method and apparatus for forming composite. H. B. Smith. 1,890,268; Dec. 6.
Pillow or cushion. E. J. Barcalo. 1,890,358; Dec. 6.
Pipe connecter head, Automatic train. J. Robinson. 1,890,410; Dec. 6.
Pipe connecter head, Automatic train. J. Robinson. 1,890,411; Dec. 6.
Pipe, coupling, Automatic train. G. E. Baldwin. 1,890,356; Dec. 6.
Pipe float coupling, Drill. J. E. Kilzer. 1,890,223; Dec. 6.
Pipes, Joining. F. H. Smith and H. A. Stringfellow. 1,889,795; Dec. 6.
Piston for hydraulic brake systems, Master cylinder. J. R. Heidloff. 1,889,987; Dec. 6.
Piston, Master cylinder. C. V. Gardner. 1,889,857; Dec. 6.
Plaiting device. W. H. Stewart. 1,890,101; Dec. 6.
Plant or rosebush. G. B. Hart. Pl. Pt. 48; Dec. 6.
Planter, Corn. M. J. Thelen, H. Koopmeiners and A. Koopmeiners. 1,890,136; Dec. 6.
Planter, Potato. P. Israelson. 1,890,155; Nov. 6.
Plaster block machine. G. H. A. Ruby. 1,889,935; Dec. 6.
Plastic substances and products obtained thereby, Making. J. C. Patrick. 1,890,191; Dec. 6.
Play table, Child's. M. Hallward. Des. 88,612; Dec. 6.
Plows, Attachment for. A. J. Miller. 1,890,261; Dec. 6.
Polymerization products of gamma butylenes. M. Mueller-Cunradi and F. Eggert. 1,889,952; Dec. 6.
Position indicator for micrometers calipers and gauges. G. J. Murdock. 1,890,404; Dec. 6.
Post and clip, Winger channel. E. J. Paque. 1,890,338; Dec. 6.
Powders, Making double base. W. E. Wagner. 1,890,241; Dec. 6.
Power and transmission apparatus, Motor vehicle. A. H. Neuland. 1,890,015; Dec. 6.
Power system. E. M. Johnson. 1,890,329; Dec. 6.
Press: *See*—
Cable compacting press. Sleeve press.
Pressing machine. J. P. Singiser. 1,890,341; Dec. 6.
Pressure operated switch. J. G. Gewecke, M. I. Ellison, and W. H. Menking. 1,890,376; Dec. 6.
Pressure relieving device, Excess. A. J. Penote. 1,889,810; Dec. 6.
Pressure switch. H. L. Van Valkenburg. 1,890,009; Dec. 6.
Pressures in oil wells, Device for controlling. B. S. Minor. 1,889,787; Dec. 6.
Price posting machine. F. W. La Chance. 1,890,395; Dec. 6.
Printer's collating stand. C. W. Govier and J. W. Reid. 1,889,829; Dec. 6.
Projectile having guide tails. E. W. Brandt. 1,890,175; Dec. 6.
Propeller. A. Altieri. 1,889,767; Dec. 6.
Propeller. R. Klinger. 1,890,120; Dec. 6.
Protective arrangement. F. J. Lane. 1,890,331; Dec. 6.
Protective device for scales. G. E. Chatillon. 1,889,948; Dec. 6.
Protector, Headlight lens. J. A. Scardina. 1,890,130; Dec. 6.
Puller: *See*—
Wheel puller.
Pulp, Preparing refined bleached. H. A. Helder. 1,890,179; Dec. 6.
Pump. K. S. Clapp and T. H. Eickhoff. 1,889,822; Dec. 6.
Pump, Portable. J. H. Morrow. 1,890,298; Dec. 6.
Pump rig. L. A. Barrett and J. P. Ferris. 1,890,244; Dec. 6.
Pump rig. W. and J. P. Ferris, and H. L. Crull. 1,890,428; Dec. 6.
Pump, Vacuum condensation. A. C. Durdin. 1,890,318; Dec. 6.
Pumping apparatus, Hydraulic. T. F. Moore. 1,890,125; Dec. 6.
Pumps, Priming apparatus for. A. C. Durdin, jr. 1,890,317; Dec. 6.
Radiator, Cross flow. P. P. Hensball. 1,889,895; Dec. 6.
Radio receiving apparatus, Locally controlled. C. P. Hollister. Re18,689; Dec. 6.
Radio receiving set. A. L. C. Ringel. 1,890,408; Dec. 6.
Radio receiving system. V. C. MacNabb. 1,890,426; Dec. 6.
Railway signaling track diagram. W. H. B. Lavarack. 1,890,122; Dec. 6.
Range or analogous article, Gas or electric. L. De Witt. Des. 88,506–7; Dec. 6.
Ratchet wrench, Open-ended reversible. F. S. Cameron and A. B. Jones. 1,890,213; Dec. 6.
Razor, Safety. J. Muros. 1,890,333–4; Dec. 6.
Reading machine. B. A. Fiske. 1,890,149; Dec. 6.
Receptacle, Nonrefillable. F. A. Talbot. 1,890,421; Dec. 6.
Refrigerating apparatus. G. Andresen. 1,890,205; Dec. 6.
Refrigerating apparatus. H. B. Hull. Re18,685; Dec. 6.
Refrigerating apparatus. H. B. Hull and D. H. Reeves. 1,889,896; Dec. 6.
Refrigerating machine, Rotary. M. Audiffren and A. Singrün. 1,889,817; Dec. 6.
Refrigerating system. Le R. A. Droescher. 1,890,282; Dec. 6.
Refrigerating system. G. Hilger. 1,889,917; Dec. 6.
Refrigerating system. G. Hilger. 1,889,988; Dec. 6.
Refrigerator, Water cooled. E. R. Doepke. 1,890,110; Dec. 6.
Regulator: *See*—
Steam temperature regulator.
Reservoir and bowl, Combined liquid fuel. H. O. Berry and F. E. White. Des. 88,497; Dec. 6.
Reservoir, bowl, and support therefor, Combination liquid fuel. F. E. White, H. O. Berry, and W. T. Bradbury. Des. 88,594; Dec. 6.
Resinous condensation product. R. H. Kienle. 1,889,923; Dec. 6.
Resins, Production of artificial. W. Pungs, K. Eisenmann, and J. Kuchenbuch. 1,889,791; Dec. 6.
Retard device. E. A. Ferris. 1,889,802; Dec. 6.
Ribbon transfer machine. A. R. Zachert. 1,890,243; Dec. 6.
Rifle, Dummy. O. Stolz. 1,890,168; Dec. 6.
Rifle rest. W. B. Teagarden. 1,890,423; Dec. 6.
Rim, Demountable. E. E. Campbell. 1,890,028; Dec. 6.
Ring: *See*—
Joint ring.
Rings on turbo-generator rotors, Fastening retaining. B. A. Rose. 1,890,340; Dec. 6.
Roller mill. P. O. Diederichs. 1,889,777; Dec. 6.
Roofing sheet. W. G. Harter. 1,889,784; Dec. 6.
Rose, Shower. W. König. 1,890,156; Dec. 6.
Rosin, Refining. I. W. Humphrey. 1,890,086; Dec. 6.
Rubber covered article. H. B. Johnson. 1,890,037; Dec. 6.
Rubber goods, Manufacture of. G. Fessel. 1,889,825; Dec. 6.
Rubber to leather, Attaching. A. V. Thomas. 1,890,345; Dec. 6.
Rubber, Vulcanizing. W. Scott. 1,890,165; Dec. 6.
Runner, Casting. T. Brinkmann. 1,890,027; Dec. 6.
Saccharification of cellulose and the like, Process and device for the. H. Scholler. 1,890,304; Dec. 6.
Safety device for airplanes. A. Altieri. 1,889,766; Dec. 6.
Safety device for use with earthing circuits in alternating current systems. E. Hamm. 1,889,832; Dec. 6.
Salts, Increasing the solubility of water-soluble. K. Hintzmann. 1,889,960; Dec. 6.
Salts of calcium nitrate, Preparation of double. E. Lüscher. 1,889,863; Dec. 6.
Sand blasting method and apparatus. W. A. Rosenberger. 1,890,164; Dec. 6.
Sash construction, Spring hung. S. Madsen. 1,889,752; Dec. 6.
Sausage casing. H. R. De Cressey. 1,890,215; Dec. 6.
Sausage preparing apparatus. H. A. Edwards. 1,890,249; Dec. 6.
Saw, Stone. G. A. Gavard. 1,889,983; Dec. 6.
Scaffold. J. Delfs. 1,890,029; Dec. 6.
Seat: *See*—
Adjustable seat.
Seat and table, Convertible. N. Ross. 1,890,129; Dec. 6.
Securing device for clothing. S. David. 1,889,954; Dec. 6.
Securing means for artificial teeth. F. J. McNamara. 1,889,756; Dec. 6.
Seeding attachment for tractors. A. Fazio. 1,889,981; Dec. 6.
Separator: *See*—
Steam separator.
Service head. J. M. G. Fullman. 1,890,050; Dec. 6.
Service station or similar building structure. A. S. Fair. Des. 88,512; Dec. 6.
Sewing machine needle-plate. Z. Routtenberg. 1,890,237; Dec. 6.
Sewing machine work-support. F. M. Card. 1,890,075; Dec. 6.
Shaker for salt, etc. J. W. Jennings. 1,890,222; Dec. 6.
Shaping and flanging machine. P. H. Lange. 1,890,039; Dec. 6.
Shears: *See*—
Hedge shears.
Sheet flattener. J. B. Sutton and G. A. Wise. 1,890,342; Dec. 6.
Sheets of tough or hard material, Device for cutting. P. Pickering. 1,890,234; Dec. 6.
Shelving, Knockdown. E. C. Cordes. 1,890,076; Dec. 6.
Shield, Antifrost. S. Frank. 1,890,252; Dec. 6.
Shipping and storage chest, Convertible. E. F. Peters. 1,889,760; Dec. 6.
Shock absorber. D. B. Blake. 1,890,311; Dec. 6.
Shock absorber. J. R. Snyder. 1,889,796; Dec. 6.

Shoe, Ventilated. D. Cohen. 1,890,433; Dec. 6.
Shutter for Röntgen apparatus, Rotary. W. Bauermeister. 1,890,360; Dec. 6.
Shuttle spring. F. E. Douglas. 1,890,315; Dec. 6.
Shuttle structure for wire cloth looms and handling weft wire. H. L. Thompson. 1,890,008; Dec. 6.
Shuttles for pirns and rewound wefts, Weaver's. 1,890,195; Dec. 6.
Sighting device for ordnance. H. Westphälinger. 1,890,351; Dec. 6.
Sign. B. H. Kollman. Des. 88,558; Dec. 6.
Sign board. L. A. Weamer. 1,889,910; Dec. 6.
Signal: *See*—
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Sleeve press. C. O. Reeps. 1,890,264; Dec. 6.
Slicer. H. W. Watson. 1,890,103; Dec. 6.
Snap gun. A. J. Graf. 1,890,288; Dec. 6.
Snow, Artificial. J. Oftedahl. 1,890,127; Dec. 6.
Soap stock, Bleaching. A. M. LaGasse. 1,890,121; Dec. 6.
Socket, Lock. W. F. Hild. 1,889,804; Dec. 6.
Soldering apparatus. A. H. Pardew. 1,890,262; Dec. 6.
Sole, Boot or shoe. C. E. Johnson. 1,890,118; Dec. 6.
Sound and pictures, Apparatus for reproducing. H. C. Bullis. 1,889,798; Dec. 6.
Sound attachment for toy locomotives. H. R. Howser, jr. 1,889,918; Dec. 6.
Sound transmission, Device for electric. H. Chirex. 1,889,975; Dec. 6.
Spade, Lever. H. H. Glassier. 1,889,984; Dec. 6.
Speed of a vehicle, Apparatus for indicating the mean. E. Pellerin, M. Hector, and P. J. Carpentier. 1,889,876; Dec. 6.
Spigot. B. Spence. 1,889,937; Dec. 6.
Splint, Leg. J. J. Ettinger. 1,890,372; Dec. 6.
Spool stand. H. A. Owen. 1,889,839; Dec. 6.
Spoon or similar article. C. C. Hunt. Des. 88,553; Dec. 6.
Spray, Fruit and vegetable stand. R. H. Hamm and J. H. W. Champion. 1,890,084; Dec. 6.
Spreader and emulsifier for spray compositions. F. F. Lindstaedt. 1,890,158; Dec. 6.
Spring: *See*—
Shuttle spring.
Springs, Device for stressing. M. Rüping. 1,890,415; Dec. 6.
Stabiliser for airplanes, Automatic aerodynamic. O. E. Bemberg. 1,890,363; Dec. 6.
Stage settings, Photographic. A. Grot. 1,890,053–4; Dec. 6.
Stand: *See*—
Printer's collating stand. Spool stand.
Stand or similar article, Refreshment. J. R. Connery. Des. 88,501; Dec. 6.
Starter, Motor. H. L. Meeder. 1,889,995; Dec. 6.
Steam flow regulation. V. F. Davis. 1,889,800; Dec. 6.
Steam separator. C. C. Thomas. 1,889,938; Dec. 6.
Steam temperature regulator. J. E. Black. 1,890,245; Dec. 6.
Steering apparatus or the like. T. McLeod. 1,890,041; Dec. 6.
Still, Vacuum. J. H. Hills. 1,890,152; Dec. 6.
Stock for web forming, Delivering. E. E. Berry. 1,889,819; Dec. 6.
Stocking and knitting same. A. W. Mutchler and A. L. Leopold. 1,890,299; Dec. 6.
Stone sawing machine. A. E. Cox and J. B. Hall. 1,890,109; Dec. 6.
Strain relief fitting. B. C. Webster. 1,890,350; Dec. 6.
Strap: *See*—
Grip strap.
Strop, Razor. W. G. Wallenbeck. 1,889,797; Dec. 6.
Structural unit and making same. C. M. Chapman. 1,889,745; Dec. 6.
Submarine salvage apparatus. J. Palmieri. 1,890,405; Dec. 6.
Sugar solutions, Purifying. C. Ebert, W. B. Newkirk, and M. Moskowitz. 1,889,779; Dec. 6.
Suit, Swim. E. H. Foreman. 1,889,855; Dec. 6.
Support, Adjustable arch. J. C. Howell. 1,890,382–3; Dec. 6.
Support, Flexible arch. J. C. Howell. 1,890,384; Dec. 6.
Support, Invalid's. N. E. Maphet. 1,890,396; Dec. 6.
Support, Spring clip plant. H. Dobbins. 1,890,217; Dec. 6.
Supporter, Garment. C. B. Battin. 1,889,768; Dec. 6.
Surface plate. C. E. Johansson. 1,889,897; Dec. 6.
Suspension clamp, Antivibrating self-balanced. A. Salvi. 1,889,812; Dec. 6.
Sweater, Knitted. K. Karahadian. 1,890,385; Dec. 6.
Swing for children. W. T. Anderson. 1,890,353; Dec. 6.
Switch: *See*—
Cut-off switch. Pressure operated switch.
Electrical switch. Pressure switch.
Ignition and safety switch.
Switch operating means, Plural. J. D. Garrett. 1,890,375; Dec. 6.
Switches, Operating attachment for toggle. 1,889,826; Dec. 6.
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Billiard table. Hospital table.
Draw-cut shaper table.
Table. W. J. Roberts. 1,890,409; Dec. 6.
Table and shelf cupboard, Interconvertible dining. M. Millard. 1,889,901; Dec. 6.
Table or seat, Drop down. F. L. Harrison. 1,890,289; Dec. 6.
Taping machine. H. M. Eaton. 1,889,888; Dec. 6.
Telephone system. W. G. Patterson. 1,889,759; Dec. 6.
Telephone system, Automatic. J. E. Gardner. Re18,686; Dec. 6.
Telephone system, Multioffice. J. E. Ostline. Re18,688; Dec. 6.
Telephone system, Semiautomatic. J. Wicks. Re18,687; Dec. 6.
Television system. C. L. Davis. 1,889,852; Dec. 6.
Television system. A. Karolus. 1,889,990; Dec. 6.
Template holding device. H. S. Boone. 1,890,073; Dec. 6.
Testing apparatus and method. D. M. McBean. 1,890,063; Dec. 6.
Testing system. P. G. Edwards. 1,889,824; Dec. 6.
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Textile fabric. M. Guhl. Des. 88,536–7; Dec. 6.
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Textile fabric or similar article. J. Schweizer. Des. 88,578; Dec. 6.
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Textile fabric or similar article of manufacture. A. J. Heinke. Des. 88,545–7; Dec. 6.
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Textile fabric or the like. S. Cusson. Des. 88,502; Dec. 6.
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Textile fabric or the like. L. Rubinger. Des. 88,573; Dec. 6.
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Textile fabric or the like. J. Schweizer. Des. 88,576–7; Dec. 6.
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Thermostat for radiators, Adjustable. A. J. Hartfield. 1,889,833; Dec. 6.
Thiourea, Producing. R. V. Heuser. 1,889,959; Dec. 6.
Time controlled switch mechanism, Coin operated. J. L. Vaughn. 1,890,309; Dec. 6.
Time element device. W. M. Scott. Re18,683; Dec. 6.
Tin plate, Method of and apparatus for handling. A. D. Evans and J. K. Lamoree. 1,890,250; Dec. 6.
Tin, Recovery of. H. P. Bassett. 1,890,359; Dec. 6.
Tire, Automobile. J. T. Clark. 1,889,799; Dec. 6.
Tire mold manufacture. A. G. Cole. 1,889,823; Dec. 6.
Tire scuff detector, Vehicle. J. F. Duby. 1,890,218; Dec. 6.
Tool, Carpenter's. W. H. Wells. 1,890,273; Dec. 6.
Tool, Electric welding. J. M. Larsen. 1,889,991; Dec. 6.
Tool for removing terminal clamps from storage battery binding posts. C. R. Cook. 1,890,369; Dec. 6.
Tool, Grooving. A. J. German. 1,890,052; Dec. 6.
Tool joint, Double box rotary. G. A. Montgomery. 1,889,868; Dec. 6.
Tool joint, Interior shoulder single piece. G. A. Montgomery. 1,889,870; Dec. 6.
Tool, Tube-straightening-and-sizing. E. S. Cornell, jr. 1,889,775; Dec. 6.
Tooth, Porcelain root. E. P. Shaw. 1,890,132; Dec. 6.
Top for rumble seat, Self-folding. P. C. Garrison. 1,889,827; Dec. 6.
Top spinner. J. M. Murphree. 1,890,043; Dec. 6.
Toy aeroplane bank. G. D. Full. 1,889,982; Dec. 6.
Toy chest, Child's. M. Hallward. Des. 88,538–9; Dec. 6.
Toy construction unit. C. E. Swanson. 1,890,269; Dec. 6.
Toy gun. C. J. Murdock. 1,890,403; Dec. 6.
Tracks for pipe joint sealing tools. A. G. Perkins. 1,889,790; Dec. 6.
Traffic alarm for highways. H. S. Mulhollen. 1,890,092; Dec. 6.
Trailer. D. R. Thomas. 1,889,939; Dec. 6.

Train control, Automatic. D. H. Schweyer. 1,890,419; Dec. 6.
Transfer-tray filling mechanism for match machines. C. F. Wright. 1,889,847; Dec. 6.
Transformer structure. S. Widmer and M. Hürlimann. 1,890,045; Dec. 6.
Transmission. T. L. Fawick. 1,889,957; Dec. 6.
Transplanting device. J. G. Butts. 1,889,820; Dec. 6.
Trap: *See*—
Animal trap.
Trap. E. M. Johnson. 1,890,183; Dec. 6.
Tray and receptacles for smokers, Combined. J. Ackerman. Des. 88,493; Dec. 6.
Tray, Desk. J. E. Bales. 1,890,143; Dec. 6.
Trigger mechanism for multiple-barrel fire arms, Single. L. Stiennon. 1,890,005; Dec. 6.
Trouser hanger. L. Svancara. 1,890,169; Dec. 6.
Truck body construction. L. S. Hafner and E. H. Hautz. 1,890,257; Dec. 6.
Truck, Radiator. J. C. Lamb. 1,890,390; Dec. 6.
Truck, Two-way elevating. J. Beattie. 1,890,361; Dec. 6.
Tube and rotary drill pipe, Well. G. A. Montgomery. 1,889,873; Dec. 6.
Tube coupling. G. A. Montgomery. 1,889,869; Dec. 6.
Tube display, Discharge. F. Hotchner. Re18,679; Dec. 6.
Tube, Making a punctureproof inner. A. L. Freedlander. 1,890,081; Dec. 6.
Tubing and rods, Method and apparatus for making glass. P. A. Favre. 1,889,891; Dec. 6.
Tubing, Making. A. O. Elting. 1,890,077; Dec. 6.
Tubular coupling. G. A. Montgomery. 1,889,866–7; Dec. 6.
Tubular knit ribbed fabric. J. Saftlas. 1,890,416; Dec. 6.
Typesetting machine. C. Chisholm. 1,889,914; Dec. 6.
1,890,440; Dec. 6.
Umbrella, Collapsible pocket. M. and H. Monz. 1,890,440; Dec. 6.
Upholstery pad, Producing an. G. W. Mudd. 1,889,997; Dec. 6.
Urea, Making. G. Barsky. 1,889,944; Dec. 6.
Vacuum cleaner. A. Eriksson-Jons. 1,890,283; Dec. 6.
Valve. L. L. Dollinger. 1,890,281; Dec. 6.
Valve. J. A. Lentz. 1,889,900; Dec. 6.
Valve for automatic railway brakes, Triple. F. Kasantseff. 1,890,087; Dec. 6.
Valve for direct acting railway brakes, Triple. F. Kasantzeff. 1,890,088; Dec. 6.
Valve for hydraulic pumping systems, Float-controlled diaphragm. T. F. Moore. 1,890,126; Dec. 6.
Valve, High pressure self-grinding. F. W. Edwards. 1,890,248; Dec. 6.
Valve mechanism. H. A. Gebres. 1,890,051; Dec. 6.
Valve or cock. J. G. Barber. 1,890,357; Dec. 6.
Valve spring retaining device. C. H., Cole. 1,889,915; Dec. 6.
Valve stand for liquid fuel burners. H. O. Berry and W. T. Bradbury. Des. 88,495; Dec. 6.
Valve structure for gas engines. S. L. Hansen. 1,890,326; Dec. 6.
Valve, Tank car. F. L. Dieterich. 1,890,247; Dec. 6.
Valves, Making composite. A. T. Colwell. 1,889,916; Dec. 6.
Vending machine. F. A. Madden. 1,890,062; Dec. 6.
Vial. F. B. Cooney. 1,889,963; Dec. 6.
Vinyl derivatives, Polymerizing. W. E. Lawson. 1,890,060; Dec. 6.
Vise. E. W. Fulton. 1,890,114; Dec. 6.
Vulcanizable compounds and vulcanized products derived therefrom. J. C. Patrick and N. M. Mnookin. 1,890,231; Dec. 6.
Warper. J. J. Sussmuth. 1,890,197; Dec. 6.
Washer: *See*—
Golf ball washer.
Washing machine. W. N. Gallagher. 1,889,747; Dec. 6.
Water heating system. E. J. Parent. 1,890,263; Dec. 6.
Wear preventer for drill pipe. C. Lamb, D. R. Radford and C. H. Riley. 1,889,806; Dec. 6.
Web controlling apparatus. E. J. Smith. 1,890,267; Dec. 6.
Weed exterminator. L. R. Oakes. 1,890,301; Dec. 6.
Welding process. R. E. Frickey. 1,889,780; Dec. 6.
Wells, Testing open. G. H. Ennis. 1,889,889; Dec. 6.
Wheel: *See*—
Emery or abrading wheel.
Wheel. C. L. Eksergian and T. A. Davenport. Des. 88,511; Dec. 6.
Wheel puller. E. Kendall. 1,889,965; Dec. 6.
Wheels to a hub, Securing removable. A. J. Michelin. 1,889,837; Dec. 6.
Whistle and the like. A. L. Bridgham. 1,890,212; Dec. 6.
Wick lubricator. H. Kreidel. 1,890,157; Dec. 6.
Winding for electrical machines. G. Ziegler. 1,889,940; Dec. 6.
Wiper, Automatic meter-lid operated. J. Rumpel. 1,890,414; Dec. 6.
Wire and making same, Weatherproof. O. A. Frederickson. 1,890,253; Dec. 6.
Wire fabric, Chain link. A. A. G. Land. 1,890,224; Dec. 6.
Wire netting, Covering plaster carrying. C. Schroder, sr. 1,890,023; Dec. 6.
Wire, Weatherproof. O. A. Frederickson. 1,890,254; Dec. 6.
Woodworking machine, Combination. C. R. Crump. 1,889,977; Dec. 6.
Wrench: *See*—
Crank shaft wrench. Ratchet wrench.
Yarn or fiber cutting machine. J. F. Pullan. 1,890,095; Dec. 6.

CLASSIFICATION OF PATENTS

ISSUED DECEMBER 6, 1932

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LIST OF TRADE-MARK APPLICANTS

PUBLISHED FOR OPPOSITION

[Act of Feb. 20, 1905, Sec. 6, as amended Mar. 2, 1907]

Aktiebolaget Skånska Spisbrödsfabriken, Kristianstad, Sweden. Hard bread. Serial No. 330,736; Dec. 13. Class 46.

Albers Bros. Milling Co., Portland, Oreg. Breakfast food made of wheat. Serial No. 327,622; Dec. 13. Class 46.

American Kitchens, Inc., Chicago, Ill. Chop suey. Serial No. 319,713; Dec. 13. Class 46.

American Noxpain Laboratories. (See Kern, Robert.)

American Sponge & Chamois Co., Inc., New York, N. Y. Sponges and chamois. Serial No. 331,172; Dec. 13. Class 1.

Aroesty, Hyman J., doing business as Aroesty Products, Rochester, N. Y. Mayonnaise, sandwich spread, Russian dressing, etc. Serial No. 331,215; Dec. 13. Class 46.

Atlantic Seed Company, Inc., The, Philadelphia, Pa. Seeds. Serial No. 330,735; Dec. 13. Class 1.

Barnstead Still and Sterilizer Co. Inc., Boston, Mass. Water stills. Serial No. 331,035; Dec. 13. Class 28.

Beier, Mrs. William F., Kenmore, N. Y. Candy. Serial No. 328,287; Dec. 13. Class 46.

Bloch Bros., Glasgow, Scotland. Whiskey. Serial No. 332,023; Dec. 13. Class 49.

Bloch Bros., Glasgow, Scotland. Port wine. Serial No. 332,024; Dec. 13. Class 47.

Bloch Bros., Glasgow, Scotland. Whiskey. Serial Nos. 332,026–7; Dec. 13. Class 49.

Bloch Bros., Glasgow, Scotland. Whiskey. Serial No. 332,029; Dec. 13. Class 49.

Boron Alloy Tool Corporation, New York, N. Y. Machinists' tools, and wire dies. Serial No. 331,099; Dec. 13. Class 23.

Brady Conveyors Corporation, The, Chicago, Ill. Steam jet ash conveyors. Serial Nos. 329,933–4; Dec. 13. Class 23.

Braun Baking Company, Pittsburgh, Pa. Cakes. Serial No. 330,692; Dec. 13. Class 46.

Brillo Manufacturing Company, Brooklyn, N. Y. Bluing. Serial No. 330,568; Dec. 13. Class 6.

British Ropes Limited, London, England. Rope of jute and hemp. Serial No. 331,917; Dec. 13. Class 7.

California Vineyards Company, Inc., Chicago, Ill. Grape juice and grape concentrate. Serial No. 326,669; Dec. 13. Class 45.

Cantor, Marvin, doing business as Continental Asbestos & Refining Co., New York, N. Y. Protective coating. Serial No. 330,335; Dec. 13. Class 12.

Carman & Co., Inc., New York, N. Y. Laundry cleaning compounds. Serial No. 331,143; Dec. 13. Class 4.

Champion Fibre Company, The, Canton, N. C. Paper for tag and/or folder stock. Serial No. 330,809; Dec. 13. Class 37.

Cohen, Goldman & Co., Inc., New York, N. Y. Coats, vests, pants, etc. Serial No. 331,388; Dec. 13. Class 39.

Columbus Dental Manufacturing Co., The, Columbus, Ohio. Artificial teeth. Serial No. 329,830; Dec. 13. Class 44.

Concrete Treatment Materials, Inc., Philadelphia, Pa. Material for dust proofing, hardening, etc., concrete floors, etc. Serial Nos. 330,537–9; Dec. 13. Class 12.

Conserveries, Emile Chemin, Societe a Responsabilite Limitee, Paris, France. Canned fish and canned fish roe. Serial No. 331,101; Dec. 13. Class 46.

Continental Asbestos & Refining Co. (See Cantor, Marvin.)

Crossley, Henry, Bolton, England. Fiber packing. Serial No. 330,620; Dec. 13. Class 35.

Danville Brick Company, Danville, Ill. Building block, building brick, etc. Serial No. 326,127; Dec. 13. Class 12.

Davis Welding & Manufacturing Company, The, Cincinnati, Ohio. Metal buckets and bulk delivery cans. Serial No. 326,906; Dec. 13. Class 2.

Dexter Brothers Boat Company, South Manchester, Conn. Sail boats, row boats, ice boats, etc. Serial No. 331,367; Dec. 13. Class 19.

Dieterle, Paul, doing business as Museums Supplies Company, Binghamton, N. Y. Framed prints and pictures. Serial No. 320,160; Dec. 13. Class 38.

Dominion Stucco Co. Limited, St. Boniface, Canada. Thermal insulating material. Serial No. 317,912; Dec. 13. Class 12.

D'Orsay Perfumeries Corporation, New York, N. Y. Perfumes, toilet waters, rouge compacts, etc. Serial No. 331,043; Dec. 13. Class 6.

Draper, William R., doing business as Ozalts Company, Sulphur Springs, Ark. Medical preparation for making mineral water. Serial No. 329,831; Dec. 13. Class 6.

Dunwoody, Esl., Co., Philadelphia, Pa. Poultry and dairy feeds, fish meal, cod liver oil, etc. Serial No. 328,887; Dec. 13. Class 46.

Emery Industries, Inc., Cincinnati, Ohio. Dry cleaning absorbefacient. Serial No. 329,853; Dec. 13. Class 6.

Empire Twine and Yarn Co., Inc., New York, N. Y. Twine and cordage. Serial No. 329,599; Dec. 13. Class 7.

Engel, Albert W., doing business as Engel Art Corners Mfg. Co., Chicago, Ill. Picture or sheet mounting corners. Serial No. 330,123; Dec. 13. Class 37.

Enro Shirt Company, Inc., The, Louisville, Ky. Pajamas. Serial No. 330,784; Dec. 13. Class 39.

Europa Sales Corporation, New York, N. Y. Candies, chocolates, and cocoa. Serial No. 331,044; Dec. 13. Class 46.

Federal Star Dyers Corp., New York, N. Y. Dyed fox furs, wolf furs, and lynx furs. Serial No. 331,079; Dec. 13. Class 1.

Filoon, V. & F. W., Company, Brockton, Mass. Leather innersoles and counters for shoes and other footwear. Serial No. 322,844; Dec. 13. Class 39.

Firestone Tire & Rubber Company, The, Akron, Ohio. Mica, talc, and soapstone. Serial Nos. 331,675–6; Dec. 13. Class 1.

Foremost Dairy Products Incorporated, Jacksonville, Fla. Fresh milk, buttermilk, cream, etc. Serial No. 300,714; Dec. 13. Class 46.

French, R. T., Company, The, Rochester, N. Y. Bird gravel. Serial No. 331,105; Dec. 13. Class 1.

Funk & Klein, Inc., New York, N. Y. Coats. Serial No. 331,638; Dec. 13. Class 39.

Gilbert, A. C., Company, The, New Haven, Conn. Humidifiers. Serial No. 331,579; Dec. 13. Class 34.

Goldner, David, New York, N. Y. Furs and pelts. Serial No. 330,596; Dec. 13. Class 1.

GoMel Korn Shop, The. (See Gommels, John P.)

Gommels, John P., doing business as The GoMel Korn Shop, Quincy, Ill. Pop corn confections. Serial No. 331,497; Dec. 13. Class 46.

Goodall Worsted Co., Sanford, Me. Coats, pants, vests, etc. Serial Nos. 331,738–9; Dec. 13. Class 39.

Hampshire Paper Company, South Hadley Falls, Mass. Paper. Serial Nos. 331,895–6; Dec. 13. Class 37.

Harrington & Waring, New York, N. Y. Hosiery. Serial No. 329,832; Dec. 13. Class 39.

Hawaiian Pineapple Company, Ltd., San Francisco, Calif., and Honolulu, Hawaii. Canned pineapple. Serial No. 319,176; Dec. 13. Class 46.

Hickok Oil Corporation, doing business as Hi-Speed Tire and Accessory Co., Toledo, Ohio. Batteries, bulbs, spark plugs, etc. Serial No. 331,403; Dec. 13. Class 21.

Hi-Speed Tire and Accessory Co. (See Hickok Oil Corporation.)

Hoff, John L., Chicago, Ill. Periodical or newspaper column. Serial No. 331,359; Dec. 13. Class 38.

Holeproof Hosiery Co., Milwaukee, Wis. Hosiery. Serial No. 331,617; Dec. 13. Class 39.

Hollander, A., & Son, Inc., Newark, N. J. Fur skins. Serial No. 330,954; Dec. 13. Class 1.

Hollander, A., & Son, Inc., Newark, N. J. Fur skins. Serial No. 331,108; Dec. 13. Class 1.

Hudson Motor Car Company, Detroit, Mich. Gasoline passenger automobiles. Serial No. 330,996; Dec. 13. Class 19.

I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Threads and yarns. Serial No. 331,584; Dec. 13. Class 48.

Ingram-Richardson Manufacturing Company, Beaver Falls, Pa., and Frankfort, Ind. Frit. Serial No. 330,704; Dec. 13. Class 1.

International Shoe Co., St. Louis, Mo. Boots and shoes. Serial No. 330,748; Dec. 13. Class 39.

Jelke, John F., Company, Chicago, Ill. Chocolate spread and flavoring compound. Serial No. 331,642; Dec. 13. Class 46.

Jelke, John F., Company, Chicago, Ill. Chocolate flavored evaporated milk. Serial No. 331,688; Dec. 13. Class 46.

Johnson, S. C., & Son, Racine, Wis. Polishing wax. Serial No. 319,449; Dec. 13. Class 16.

Joltcrete Inc. (See Nepperhan Concrete Products Corporation, assignor.)

Joseph & Andersch, Auburn, Calif. Packets of cleansing tissue. Serial No. 331,975; Dec. 13. Class 37.

Kahn's Pickery, New Orleans, La. Cotton batting. Serial Nos. 329,165–6; Dec. 13. Class 1.

Katagiri Corporation, New York, N. Y. Cameras. Serial No. 331,585; Dec. 13. Class 26.

Kern, Robert, doing business as American Noxpain Laboratories, Baltimore, Md. Pharmaceutical preparations. Serial No. 330,479; Dec. 13. Class 6.

Kirk, Samuel B., Philadelphia, Pa. Preparation for coagulating or congealing milk. Serial No. 331,643; Dec. 13. Class 46.

Koch, F. A., & Co., Inc., New York, N. Y. Razors and barber shears. Serial No. 331,469; Dec. 13. Class 23.

Koenigsberg, M., New York, N. Y. Periodical. Serial No. 331,794; Dec. 13. Class 38.

Kress, S. H., & Co., New York, N. Y. Linen towels, sheets, napkins, etc. Serial No. 326,550; Dec. 13. Class 42.

Larkwood Silk Hosiery Mills, Inc., Charlotte, N. C. Hosiery. Serial No. 331,899; Dec. 13. Class 39.

LIST OF TRADE-MARK APPLICANTS

PUBLISHED FOR OPPOSITION

[Act of Feb. 20, 1905, Sec. 6, as amended Mar. 2, 1907]

Larus & Brother Company, Incorporated, Richmond, Va. Tobacco and cigarettes. Serial No. 331,558; Dec. 13. Class 17.

Leadway Stores Corporation, The, Wilmington, Del. Canned fruits. Serial No. 330,095; Dec. 13. Class 46.

Light Grain & Milling Co., The, Liberal, Kans. Self-rising pancake flour. Serial No. 331,310; Dec. 13. Class 46.

Loeb, H., & Co. Inc., New York, N. Y. Underwear, bathing suits, sport coats, etc. Serial No. 324,716; Dec. 13. Class 39.

Ludlow Valve Manufacturing Company, The, Troy, N. Y. Gate valves, fire hydrants, air valves, etc. Serial Nos. 320,236–7; Dec. 13. Class 13.

Mallory Electric Corporation, Detroit, Mich. Ignition distributors. Serial No. 329,054; Dec. 13. Class 21.

Malmstead, Lilyan, Worcester, Mass. Corsets, girdles, brassières, and underwear. Serial No. 326,728; Dec. 13. Class 39.

McManus, Leo P., doing business as Sky-Top Company, Philadelphia, Pa. Tops. Serial No. 326,384; Dec. 13. Class 22.

Mellenthin, Michael A., doing business as Mellinthin Laboratories, Los Angeles, Calif. Medicinal compound. Serial No. 330,064; Dec. 13. Class 6.

Mid-West Confection Equipment Company, Kearney, Nebr. Candy coated ice cream confection. Serial No. 327,163; Dec. 13. Class 46.

Millers Products Corp., New York, N. Y. Wheat flour. Serial No. 331,436; Dec. 13. Class 46.

Molzberger, Valentine J., doing business as Molzberger Battery Company, Antigo, Wis. Storage batteries. Serial No. 331,381; Dec. 13. Class 21.

Montgomerie & Co. Ltd., Glasgow, Scotland. Bread, cakes, biscuits, etc. Serial No. 326,334; Dec. 13. Class 46.

Museums Supplies Company. (See Dieterle, Paul.)

Naamlooze Vennootschap Droste's Cacao-En Chocoladefabrieken, Haarlem, Netherlands. Cocoa. Serial No. 330,307; Dec. 13. Class 46.

Needles, Miriam, Atlantic City, N. J. Ladies' undergarments. Serial No. 330,796; Dec. 13. Class 39.

Nelson Associates, Ltd., Los Angeles, Calif. Canned fruit juices with pulp for food purposes. Serial No. 327,735; Dec. 13. Class 46.

Nepperhan Concrete Products Corporation, assignor to Joltcrete Inc., Yonkers, N. Y. Building block machines. Serial No. 331,002; Dec. 13. Class 23.

Ozalts Company. (See Draper, William R.)

Page Steel and Wire Company, Adrian, Mich., and Bridgeport, Conn. Wire fabric for fencing. Serial No. 320,507; Dec. 13. Class 13.

Penn-Jay Corporation, The, Akron, Ohio, and New York, N. Y. Lubricating oils. Serial No. 326,338; Dec. 13. Class 15.

Pillsbury Flour Mills Company, Minneapolis, Minn. Wheat flour. Serial No. 331,903; Dec. 13. Class 46.

Pioneer Paper Stock Company, Chicago, Ill. Excelsior packing pads. Serial No. 330,830; Dec. 13. Class 50.

Plee-Zing, Inc., Chicago, Ill., Dog food. Serial No. 329,384; Dec. 13. Class 46.

Pollak, Henry, Inc., New York, N. Y. Hats. Serial No. 331,265; Dec. 13. Class 39.

Queen Stove Works Incorporated, Albert Lea, Minn. Oil burners. Serial No. 331,514; Dec. 13. Class 34.

Reading Poultry Food Company, Reading, Pa. Peat moss. Serial No. 329,464; Dec. 13. Class 1.

Rhodes, James H., & Company, Chicago, Ill. Steel wool. Serial No. 328,704; Dec. 13. Class 4.

Ricker, Hiram, & Sons, Poland Springs, South Poland, Me. Mineral spring water. Serial No. 331,419; Dec. 13. Class 45.

Riegel Textile Corporation, New York, N. Y. Cotton piece goods. Serial No. 330,967; Dec. 13. Class 42.

Roberts, A. C., Kimberton, Pa. Plant foods. Serial No. 331,530; Dec. 18. Class 10.

Rohrsen, George F., Chicago, Ill. Card game. Serial No. 331,564; Dec. 13. Class 22.

Royal Novelty Co., The, New York, N. Y. Skirts and pants. Serial No. 331,123; Dec. 13. Class 39.

Ruberoid Co., The, Bound Brook, N. J., and New York, N. Y. Asbestos-cement shingles. Serial No. 331,846; Dec 13. Class 12.

Saul's Seed Store, Inc., Syracuse, N. Y. Seeds. Serial No. 326,509; Dec. 13. Class 1.

Seagram, Joseph E., & Sons Limited, Waterloo, Ontario, Canada. Whiskey and potable spirits. Serial No. 330,493; Dec. 13. Class 49.

Shultz, Floyd P., Des Moines, Iowa. Oil burners. Serial No. 330,726; Dec. 13. Class 34.

Sibley, Erwin, Milledgeville, Ga. Maltless beverages and syrups therefor. Serial No. 330,934; Dec. 13. Class 45.

Sibley, Erwin, Milledgeville, Ga. Malt beverage. Serial No. 331,478; Dec. 13. Class 48.

Singer, Philip A., & Bro. Inc., Newark, N. J. Furs. Serial No. 330,713; Dec. 13. Class 1.

Sky-Top Company. (See McManus, Leo P.)

Smith, Allen V., Inc., Marcellus Falls, N. Y. Pearl barley, whole and split dried peas, dried beans, etc. Serial No. 328,565; Dec. 13. Class 46.

Soebbing, Edward G., Kansas City, Mo. Tablets, composition and note books, loose leaf note book fillers, etc. Serial No. 329,755; Dec. 13. Class 37.

Solo Products Co., Chicago, Ill. Malt syrup. Serial No. 323,964; Dec. 13. Class 46.

Standard Brands Incorporated, New York, N. Y. Invertase preparation suitable for use in the conversion of sucrose. Serial No. 331,877; Dec. 13. Class 46.

Standard Nut Margarine Co., Indianapolis, Ind. Oleomargarine. Serial No. 330,525; Dec. 13. Class 46.

Standard Nut Margarine Co., Indianapolis, Ind. Oleomargarine. Serial No. 330,527; Dec. 13. Class 46.

Standard Oil Company, Whiting, Ind., and Chicago, Ill. Lubricating oils. Serial No. 329,065; Dec. 13. Class 15.

Supreme Council of Scarab, Lawrence, Kans. Pins, keys, and medals. Serial No. 321,176; Dec. 13. Class 28.

Talens & Son, Inc., Irvington, N. J. Picture varnish and paint medium. Serial No. 331,760; Dec. 13. Class 16.

Tanqueray, Gordon & Co., Limited, London, England. Alcoholic cocktails. Serial No. 329,658; Dec. 13. Class 49.

Tennessee Corporation, New York, N. Y. Fertilizers and soil conditioners. Serial No. 331,711; Dec. 13. Class 10.

Thermax Corporation, Chewelah, Wash. Insulating building board. Serial No. 331,656; Dec. 13. Class 12.

Tung-Sol Lamp Works, Inc., Newark, N. J. Incandescent electric bulbs. Serial No. 329,541; Dec. 13. Class 21.

Unión Española De Explósivos Sociedad Anónima, Bilbao, Spain. Fertilizers. Serial No. 328,146; Dec. 13. Class 10.

Vereinigte Stahlwerke Aktiengesellschaft, Dusseldorf, Germany. Fabricated structural shapes. Serial No. 302,974; Dec. 13. Class 12.

Vereinigte Stahlwerke Aktiengesellschaft, Dusseldorf, Germany. Anchors, rails, metal ties, etc. Serial No. 302,976; Dec. 13. Class 14.

Vereinigte Stahlwerke Aktiengesellschaft, Dusseldorf, Germany. Frames for electric switches, wire lightning conductors, etc. Serial No. 315,219; Dec. 13. Class 21.

Waffled Steak Machines, Inc., Buffalo, N. Y. Meat tendering machines. Serial No. 331,017; Dec. 13. Class 23.

Wells-Lamont-Smith Corporation, Minneapolis, Minn. Gloves. Serial Nos. 331,326–7; Dec. 13. Class 39.

Wells-Lamont-Smith Corporation, Minneapolis, Minn. Gloves. Serial No. 331,480; Dec. 13. Class 39.

Wilson Brothers, Chicago, Ill. Shirts, pajamas, underwear, and necktles. Serial No. 326,766; Dec. 13. Class 39.

Wolf, August, Eisenwarenfabrik Ges. m. beschr. Haftung, Betzdorf, (Sieg), Germany. Garden and agricultural tools. Serial No. 331,523; Dec. 13. Class 23.

LIST OF REGISTRANTS OF TRADE-MARKS

Abel & Asher Co., assignor to Frank Grocery Co., Inc., Shreveport, La. Compound of coffee, chicory, and cereals. 89,524; renewed Dec. 24, 1932.

Ackermann, G. A., Paper Mills, Inc., Chicago, Ill. Paper used for printing, binding, and wrapping. 299,565; Dec. 13; Serial No. 310,507; published Sept. 27, 1932. Class 37.

Adams, Harry E., doing business as Northlake Products Company, Peoria, Ill. Metallic liquid cement. 299,682; Dec. 13; Serial No. 328,515; published Sept. 27, 1932. Class 5.

Ajax Quilting & Manufacturing Co., Chicago, Ill. Textile mattress protectors or pads, table pads, quilts, etc. 299,702. Dec. 13. Class 42.

Aktiebolaget Svenska Kullagerfabriken, Gottenborg, Sweden. Gauges for gauging bore limits. 299,591; Dec. 13; Serial No. 326,074; published Oct. 4, 1932. Class 26.

Allen, S. L., & Co., Inc., Philadelphia, Pa. Roller coasters and see-saw merry-go-rounds. 299,578; Dec. 13; Serial No. 329,491; published Oct. 4, 1932. Class 22.

American Bemberg Corporation, New York, N. Y. Fabrics of artificial silk. 299,627; Dec. 13; Serial No. 328,204; published Sept. 20, 1932. Class 42.

Associated London Flour Millers Limited, London, England. Chemical substances used for veterinary purposes. 299,623; Dec. 13; Serial No. 325,674; published Sept. 27, 1932. Class 6.

CARNEGIE LIBRARY OF ATLANTA

B. E. F. News Company. (See McCafferty, Scott B.)

Baird & McGuire, Inc., Holbrook, Mass. Insecticides. 299,639; Dec. 13; Serial No. 329,009; published Sept. 27, 1932. Class 6.

Baked Products Company. (See Schaefer, George E.)

Ball Chemical Company, Pittsburgh, Pa. Paint oils, baking varnishes, lacquers, etc. 299,567; Dec. 13; Serial No. 324,950; published May 31, 1932. Class 16.

Barnstable Feed & Supply Co's Inc., The, doing business as The Barnstable-Schaper-Ware Feed & Supply Companies, Inc., Nokomis, Ill. Wheat flour and corn meal. 299,566; Dec. 13; Serial No. 324,648; published Oct. 4, 1932. Class 46.

Battle Creek Biscuit Company, Battle Creek, Mich. Cakes and biscuits of various forms filled with cheese. 299,698; Dec. 13. Class 46.

Bentz, Frank J., doing business as Fixsit System, Miami, Fla. Compound for stopping boiler leaks, compound for cleaning waste matter from pipes, etc. 299,649; Dec. 13; Serial No. 312,736; published Oct. 4, 1932. Class 6.

Beverly Dairies, Ltd., Los Angeles, Calif. Ice cream. 299,699; Dec. 13. Class 46.

Bissell Carpet Sweeper Company, Grand Rapids, Mich. Carpet sweepers. 39,921; renewed Mar. 10, 1933.

Bissell Carpet Sweeper Company, Grand Rapids, Mich. Carpet sweepers. 89,908; renewed Jan. 21, 1933.

Bissell Carpet Sweeper Company, Grand Rapids, Mich. Portable carpet-cleaning machines. 90,090; renewed Feb. 4, 1933.

Bloch Bros., Glasgow, Scotland. Whiskey. 299,580; Dec. 13; Serial No. 329,572; published Oct. 4, 1932. Class 49.

Bonat, Samuel, & Bro., New York, N. Y. Face powder, lipstick, rouge, eye shadow, etc. 299,633; Dec. 13; Serial No. 329,109; published Sept. 27, 1932. Class 6.

Boyle, John, & Company, Incorporated, New York, N. Y. Cotton ducks and drills, awning stripe and ticking. 299,630; Dec. 13; Serial No. 329,174; published Oct. 4, 1932. Class 42.

Brampton Brothers Limited, Birmingham, England. Parts of vehicles. 89,813; renewed Jan. 14, 1933.

Cabot, Godfrey L., Inc., Boston, Mass. Carbon black. 299,573; Dec. 13; Serial No. 329,465; published Sept. 27, 1932. Class 16.

Cabot, Godfrey L., Inc., Boston, Mass. Carbon black for inks. 299,681; Dec. 13; Serial No. 328,681; published Oct. 4, 1932. Class 11.

California Redwood Association, San Francisco, Calif. Lumber. 299,575; Dec. 13; Serial No. 329,255; published Sept. 13, 1932. Class 12.

Castelló, Alejandro G., Barcelona, Spain. Preparation for use in the treatment of stomach complaints. 299,615; Dec. 13; Serial No. 327,179; published Sept. 27, 1932. Class 6.

Celanese Corporation of America, New York, N. Y. Fabrics of silk and cellulose derivatives. 299,657; Dec. 13; Serial No. 317,160; published Oct. 27, 1931. Class 42.

Celanese Corporation of America, New York, N. Y. Fabrics. 299,659; Dec. 13; Serial No. 317,159; published Oct. 27, 1931. Class 42.

Cellulose Products Corporation, Shamokin, Pa., and New York, N. Y. Handkerchiefs, cleansing and polishing tissues, napkins, etc. 299,676; Dec. 13; Serial No. 329,527; published Sept. 27, 1932. Class 37.

Centennial Flouring Mills Company, Seattle, Wash. Stock and poultry feed, and pancake and waffle flour. 299,563; Dec. 13; Serial No. 328,159; published Oct. 4, 1932. Class 46.

Centennial Flouring Mills Company, Seattle, Wash. Stock and poultry feed. 299,588; Dec. 13; Serial No. 328,417; published Oct. 4, 1932. Class 46.

Chanel, Inc., New York, N. Y. Perfume. 299,640; Dec. 13; Serial No. 328,865; published Sept. 27, 1932. Class 6.

Chase Brass & Copper Co. Incorporated, Waterbury, Conn. Bathroom fixtures. 299,605; Dec. 13; Serial No. 329,302; published Oct. 4, 1932. Class 13.

Chemical Foundation, Incorporated, The. (See Farbwerke vorm. Meister Lucius & Brüning, assignor.)

Chemical Foundation, Incorporated, The. (See Gebrüder Schubert, assignor.)

Christodoulou, Konstantin, Bronx, N. Y. Compound for the treatment of burns, sores, wounds, etc. 299,648; Dec. 13; Serial No. 308,325; published Oct. 4, 1932. Class 6.

Clarou Products Incorporated, Philadelphia, Pa. Candy laxative. 299,642; Dec. 13; Serial No. 328,808; published Sept. 27, 1932. Class 6.

Cohen, Harry S., Hartford, Conn. Handkerchiefs. 299,650; Dec. 13; Serial No. 320,338; published Oct. 4, 1932. Class 42.

Comstock Canneries, Inc., Newark, N. J. Canned foods. 299,696; Dec. 13. Class 46.

Coryell, L. L., & Son, Lincoln, Nebr. Gasoline, lubricating and fuel oils, etc. 299,692; Dec. 13. Class 15.

Coudurier, Fructus & Descher, Lyon, France. Silk piece goods. 299,660; Dec. 13; Serial No. 329,784; published Oct. 4, 1932. Class 42.

Crystal Home Filter Co. Inc., Brooklyn, N. Y. Compound used in the filtration of liquids and beverages. 299,624; Dec. 13; Serial No. 328,809; published Oct. 4, 1932. Class 6.

Deep Sea Sponge Company. (See Russell, Chris.)

Delta Manufacturing Company, doing business as Delta Specialty Company, Milwaukee, Wis. Drill presses, scroll saws, band saws, etc. 299,602; Dec. 13; Serial No. 329,675; published Oct. 4, 1932. Class 23.

Distillers Corporation Limited, Montreal, Quebec, Canada. Potable spirits, whiskey and liquors. 299,690–1; Dec. 13. Class 49.

Dorros, Marie, Inc., New York, N. Y. Bridal veils. 299,612; Dec. 13; Serial No. 328,410; published Sept. 20, 1932. Class 42.

Douglass, Horton M., Seattle, Wash. Stomachic home treatment for stomach disorders, bowel, liver, disorders, etc. 299,658; Dec. 13; Serial No. 317,427; published Sept. 27, 1932. Class 6.

Drugkraft, Inc., doing business as Sabrol Laboratories, New York, N. Y. Tooth paste. 299,647; Dec. 13; Serial No. 328,481; published Sept. 27, 1932. Class 6.

Drury, Fred L., administrator. (See Warner, C. D., Co.)

Du Pont Film Manufacturing Corporation, New York, N. Y. Photographic film. 299,601; Dec. 13; Serial No. 329,724; published Oct. 4, 1932. Class 26.

Durfee & Canning, Inc., Fall River, Mass. Fuel oils. 299,695; Dec. 13. Class 15.

E. P. Remedy Co., Inc., The. (See Jones, Joseph W.)

Evening Herald Publishing Company, Los Angeles, Calif. Newspaper article. 299,673–4; Dec. 13; Serial Nos. 329,553–4; published Sept. 27, 1932. Class 38.

Express Rubber Co. Limited, The, assignor to Nobility Limited, London, England. Water or rain proof wearing-apparel. 90,799; renewed Mar. 25, 1933.

Farbwerke vorm. Meister Lucius & Brüning, Höchst-on-the-Main, Germany, assignor, by mesne assignments, to The Chemical Foundation, Incorporated, Wilmington, Del., and New York, N. Y. Internal antiseptic. 89,917; renewed Jan. 21, 1933.

Fixsit System. (See Bentz, Frank J.)

Forstmann & Huffmann Company, Passaic, N. J. Woolen piece goods. 299,654; Dec. 13; Serial No. 317,925; published Sept. 27, 1932. Class 42.

Forstmann Woolen Co., Passaic, N. J. Woolen piece goods. 299,666; Dec. 13; Serial No. 329,332; published Oct. 4, 1932. Class 42.

Frank Grocery Co., Inc. (See Abel & Asher Co., assignor.)

Gebrüder Schubert, Berlin, Germany, assignor, by mesne assignments, to The Chemical Foundation, Incorporated, Wilmington, Del., and New York, N. Y. Antiseptic solution of rosin. 89,957; renewed Jan. 21, 1933.

Glemby Company, Inc., The, New York, N. Y. Hair nets. 299,629; Dec. 13; Serial No. 329,183; published Sept. 20, 1932. Class 42.

Glock, Charles A., Chatham, Ontario, Canada. Golf tee holding wristlets. 299,583; Dec. 13; Serial No. 329,795; published Oct. 4, 1932. Class 22.

Graemiger Bros. Inc., New York, N. Y. Handkerchiefs. 299,661; Dec. 13; Serial No. 329,376; published Oct. 4, 1932. Class 42.

Hall, Constance A., doing business as The Keratin Company, Forest Hills, N. Y. Hair tonic. 299,645; Dec. 13; Serial No. 328,608; published Sept. 27, 1932. Class 6.

Hammond-Homberger Co., Silver Creek, N. Y., assignor, by mesne assignments, to Swiss Silk Bolting Cloth Manufacturing Company, Limited, Thal, Switzerland. Silk bolting cloth. 90,017; renewed Jan. 28, 1933.

Hanson-Gates Co., Inc., Wakefield, Mass. Range oil burners and stoves. 299,590; Dec. 13; Serial No. 327,753; published Oct. 4, 1932. Class 34.

Haram, Sevrin A., doing business as S. A. Haram, New York, N. Y. Bread. 299,584; Dec. 13; Serial No. 329,856; published Oct. 4, 1932. Class 46.

Hart Manufacturing Co., The, assignor to The Hart Manufacturing Company, Hartford, Conn. Electrical appliances. 39,856; renewed Feb. 24, 1933.

Hartmann, Milford W., doing business as M. W. Hartmann Manufacturing Company, Hutchinson, Kans. Liquid pumps. 299,600; Dec. 13; Serial No. 329,726; published Oct. 4, 1932. Class 23.

Hayman Oil Co., Los Angeles, Calif. Preparation for treatment of psoriasis, eczema, and other skin diseases; an alterative and discutient; etc. 299,626; Dec. 13; Serial No. 328,354; published Oct. 4, 1932. Class 6.

Herrlinger Paper Company, The, Cincinnati, Ohio. Paper sealing tape. 299,672; Dec. 13; Serial No. 329,581; published Sept. 27, 1932. Class 37.

Hillerich & Bradsby Co., Louisville, Ky. Baseball bats. 299,587; Dec. 13; Serial No. 329,949; published Oct. 4, 1932. Class 22.

Holliston Mills, Inc., The, Norwood, Mass. Cotton piece goods and filled and finished cotton piece goods. 299,667; Dec. 13; Serial No. 329,322; published Oct. 4, 1932. Class 42.

Hydrex Asphalt Products Corporation, New York, N. Y. Sound-deadening and insulating felt. 299,562; Dec. 13; Serial No. 328,293; published Sept. 13, 1932. Class 12.

I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Hypnotic. 299,634; Dec. 13; Serial No. 329,085; published Sept. 27, 1932. Class 6.

Iles, Thomas J., New York, N. Y. Therapeutic preparation. 299,625; Dec. 13; Serial No. 328,555; published Oct. 4, 1932. Class 6.

Ilon Aktiengesellschaft, Basel, Switzerland. Chemical and pharmaceutical products. 299,656; Dec. 13; Serial No. 317,669; published Sept. 27, 1932. Class 6.

Inecto, Inc., New York, N. Y. Hair tonic. 299,609; Dec. 13; Serial No. 328,427; published Sept. 27, 1932. Class 6.

Inecto, Inc., New York, N. Y. Hair dye. 299,610–11; Dec. 13; Serial Nos. 328,425–6; published Sept. 27, 1932. Class 6.

Inecto, Inc., New York, N. Y. Hair dye. 299,646; Dec. 13; Serial No. 328,428; published Sept. 27, 1932. Class 6.

International Nickel Company, Inc., The, New York, N. Y. Nickel, nickel ingots and alloys, etc. 299,596; Dec. 13; Serial No. 319,579; published Oct. 4, 1932. Class 14.

International Oil Heating Co., St. Louis, Mo. Oil and gas burners. 299,693; Dec. 13. Class 34.

Jackson, Byron, Co., Los Angeles, Calif. Plate valves, orifice fittings, and parts therefor. 299,589; Dec. 13; Serial No. 328,576; published Oct. 4, 1932. Class 23.

Jones, Joseph W., doing business as The E. P. Remedy Co., Inc., Bristol, Tenn. Preparation for the relief of headaches, neuralgia, etc. 299,614; Dec. 13; Serial No. 328,387; published Sept. 27, 1932. Class 6.

K-D Manufacturing Company, Lancaster, Pa. Kitchen or frying forks and food choppers and attachments. 299,701; Dec. 13. Class 23.

Kabushiki-Kaisha Takeda-Chobei Shoten, Osaka, Japan. Preparations of camphor used as a cardio tonic. 299,628; Dec. 13; Serial No. 328,005; published Oct. 4, 1932. Class 6.

Kehrer, Bertram F., doing business as Kiddipak Mfg. Co., Seattle, Wash. Packaged ready-cut strips, blocks, and round wood, for children's use in making toys. 299,579; Dec. 13; Serial No. 329,557; published Oct. 4, 1932. Class 22.

Kellogg Company, Battle Creek, Mich. Printed chart. 299,679; Dec. 13; Serial No. 329,311; published Sept. 27, 1932. Class 38.

Keppy Island Lime and Transport Company, The, Cleveland, Ohio. Finishing hydrated lime. 299,570; Dec. 13; Serial No. 329,051; published Sept. 27, 1932. Class 12.

Keratin Company, The. (See Hall, Constance A.)

Kern, Joseph, doing business as Oriole Drug Company, Baltimore, Md. Aqueous and tablet preparation for simple coughs from head colds, etc. 299,651; Dec. 13; Serial No. 321,062; published Oct. 4, 1932. Class 6.

Kiddipak Mfg. Co. (See Kehrer, Bertram F.)

Knight, Victor W., Chicago, Ill. Handkerchiefs. 299,635; Dec. 13; Serial No. 329,052; published Sept. 27, 1932. Class 42.

Kyffhäuser-Laboratorium, Fabrikation Chem.-Pharm. Präparate Hermann Quincke, Bad Frankenhausen A. K., Frankenhausen, Germany. Medicines. 299,622; Dec. 13; Serial No. 327,443; published Sept. 27, 1932. Class 6.

Lasar, William, Los Angeles, Calif. Meat and bone cutting machines. 299,603; Dec. 13; Serial No. 329,477; published Oct. 4, 1932. Class 23.

Lefton, Al P., Company, Inc., Philadelphia, Pa. Tabloid newspaper. 299,686; Dec. 13; Serial No. 328,130; published Oct. 4, 1932. Class 38.

Leitz, E., Inc., New York, N. Y. Cameras. 299,606–7; Dec. 13; Serial Nos. 328,793–4; published Oct. 4, 1932. Class 26.

Leitz, Ernst, Optische Werke, G. m. b. H., Wetzlar, Germany. Microscopes, magnifying glasses, telescopes and their accessories. 299,608; Dec. 13; Serial No. 328,734; published Oct. 4, 1932. Class 26.

Lincoln Electric Company, The, Cleveland, Ohio. Welding wire for metals. 299,703; Dec. 13. Class 14.

Long-Bell Lumber Sales Corporation, Kansas City, Mo., and Longview, Wash. Lumber products. 299,585; Dec. 13; Serial No. 329,748; published Oct. 4, 1932. Class 12.

Loose-Wiles Biscuit Company, Boston, Mass. Biscuits, cakes and cookies. 89,043; renewed Nov. 5, 1932.

Lowe, Joe, Corporation, Brooklyn, N. Y. Doughnuts and doughnut flour. 299,595; Dec. 13; Serial No. 323,786; published Oct. 4, 1932. Class 46.

Master Builders Company, The, Cleveland, Ohio. Composition of matter for waterproofing concrete and cement mortar. 299,571; Dec. 13; Serial No. 329,148; published Sept. 13, 1932. Class 12.

McCafferty, Scott B., assignor to B. E. F. News Company, Washington, D. C. Publication. 299,683; Dec. 13; Serial No. 328,444; published Sept. 27, 1932. Class 38.

Miller, J. H., Chicago, Ill. Liniments. 299,644; Dec. 13; Serial No. 328,717; published Sept. 27, 1932. Class 6.

Minerva Wax Paper Company, Minerva, Ohio. Packages of wax paper. 299,689; Dec. 13; Serial No. 327,560; published Sept. 27, 1932. Class 37.

Mintzer, Edward D., doing business as The Standard Peroxide Co., Chicago, Ill. Hair bleach. 299,619; Dec. 13; Serial No. 328,221; published Sept. 27, 1932. Class 6.

Morgan, Walter, Company Inc., Washington, D. C. Showcard paints. 299,561; Dec. 13; Serial No. 328,962; published Sept. 27, 1932. Class 16.

National Society of Puritan Descendants, Boston, Mass. Loose leaf publication. 299,688; Dec. 13; Serial No. 327,828; published Sept. 27, 1932. Class 38.

National Sulphur Co., Inc., New York, N. Y. Sulphur for dusting purposes. 299,638; Dec. 13; Serial No. 329,023; published Sept. 27, 1932. Class 6.

National Tube Company, Pittsburgh, Pa. Pipes, tubes, and casings. 90,828; renewed Mar. 25, 1933.

Neer, Homer, and William D. Morgan, Springfield, Ohio. Maltless beverages and sirups and extracts for making the same. 299,576; Dec. 13; Serial No. 329,291; published Oct. 4, 1932. Class 45.

Nobility Limited. (See Express Rubber Co. Limited, The, assignor.)

Northlake Products Company. (See Adams, Harry E.)

Onondaga Silk Company, Inc., Syracuse and New York, N. Y. Silk fabrics in the piece. 299,631; Dec. 13; Serial No. 329,152; published Sept. 20, 1932. Class 42.

Orange-Crush Company, Chicago, Ill. Mineral water and carbonated water. 299,574; Dec. 13; Serial No. 328,697; published Oct. 4, 1932. Class 45.

Oriole Drug Company. (See Kern, Joseph.)

Paine Lumber Company, Limited, Oshkosh, Wis., assignor to Nathan Paine, Washington, D. C. Doors. 89,693; renewed Dec. 31, 1932.

Penick, S. B., & Company, Inc., New York, N. Y. Concentrated moth proofing solution. 299,636; Dec. 13; Serial No. 329,025; published Sept. 27, 1932. Class 6.

Penick, S. B., & Company, Inc., New York, N. Y. Extract of cube root or derris root. 299,637; Dec. 13; Serial No. 329,024; published Sept. 27, 1932. Class 6.

Pentz, William E., doing business as Wep Chemical Co., St. Joseph, Mo. Vaginal ointment, perspiration powder, dental cream, etc. 299,613; Dec. 13; Serial No. 328,404; published Sept. 27, 1932. Class 6.

Permutit Company, The, New York, N. Y. Base exchange silicates used as purifying and treating materials for water. 299,632; Dec. 13; Serial No. 329,121; published Sept. 27, 1932. Class 6.

Plastergon Wall Board Company, Buffalo, N. Y. Wall board. 299,581–2; Dec. 13; Serial Nos. 329,651–2; published Oct. 4, 1932. Class 12.

Podhorsky, Valeria Ing., Bucharest, Rumania. Medicine. 299,617; Dec. 13; Serial No. 325,897; published Sept. 27, 1932. Class 6.

Post Printing and Publishing Company, The, Denver, Colo. Section or column appearing in a newspaper. 299,680; Dec. 13; Serial No. 329,240; published Sept. 27, 1932. Class 38.

Poughkeepsie Mineral Water Works, The. (See Schlachter, Joseph.)

Preservaline Manufacturing Co., The, Brooklyn, N. Y. Ingredients used in food products. 91,372; renewed Apr. 29, 1933.

Rath Packing Company, The, Waterloo, Iowa. Bacon and hams. 89,699; renewed Dec. 31, 1932.

Reilly, Frank C., New York, N. Y. Astringents, astringent cerates, bleach creams, beauty creams, etc. 299,618; Dec. 13; Serial No. 325,725; published Sept. 27, 1932. Class 6.

Richardson, Edw. & Jas., assignor to Edward & James Richardson Limited, Newcastle-upon-Tyne, England. Leather for bookbinding, upholstering, and like purposes. 90,244; renewed Feb. 11, 1933.

Richmond, Charlotte, Tudor City, New York, N. Y. Toilet cases. 299,687; Dec. 13; Serial No. 327,888; published Oct. 4, 1932. Class 3.

Roberts and Oake, Inc., Chicago, Ill. Meat products. 299,694; Dec. 13. Class 46.

Rossie Velvet Company, Mystic, Conn. Velvets. 299,662; Dec. 13; Serial No. 329,360; published Oct. 4, 1932. Class 42.

Rossie Velvet Company, Mystic, Conn. Pile fabrics. 299,663–5; Dec. 13; Serial Nos. 329,357–9; published Oct. 4, 1932. Class 42.

Royal Baking Powder Company, New York, N. Y. Baking powder. 299,621; Dec. 13; Serial No. 327,890; published Sept. 27, 1932. Class 6.

Russell, Caris, doing business as Deep Sea Sponge Company, Tarpon Springs, Fla. Rock Island sheep wool sponges. 299,685; Dec. 13; Serial No. 328,252; published Oct. 4, 1932. Class 1.

Sabrol Laboratories. (See Drugkraft, Inc.)

Schaefer, George E., doing business as Baked Products Company, Newark, N. J. Laxative. 299,643; Dec. 13; Serial No. 328,743; published Sept. 27, 1932. Class 6.

Schlachter, Joseph, doing business as The Poughkeepsie Mineral Water Works, Poughkeepsie, N. Y. Maltless beverages and sirups and extracts for making the same. 299,586; Dec. 13; Serial No. 329,903; published Oct. 4, 1932. Class 45.

Schreitmüller, Gottfried, doing business as Shavol Corp. of America, New York, N. Y. Hair remover. 299,655; Dec. 13; Serial No. 317,780; published Sept. 27, 1932. Class 6.

Schwan-Bleistift-Fabrik A. G., Nuremberg, Germany. Lead pencils and colored pencils. 299,675; Dec. 13; Serial No. 329,539; published Oct. 4, 1932. Class 37.

"Semperit" Oesterreichisch-Amerikanische Gummiwerke Aktiengesellschaft, Vienna, Austria. Cleaners for school slates, pen wipers, and stamp moisteners. 299,597; Dec. 13; Serial No. 318,723; published Sept. 27, 1932. Class 37.

Shavol Corp. of America. (See Schreitmüller, Gottfried.)

Sherwin-Williams Company, The, Cleveland, Ohio. Paints. 299,560; Dec. 13; Serial No. 329,027; published Sept. 27, 1932. Class 16.

Silten, Dr. Ernst, Berlin, Germany. Inhalant for asthma and bronchial catarrh. 299,610; Dec. 13; Serial No. 326,763; published Sept. 27, 1932. Class 6.

Smith, Joseph, New York, N. Y. Razor blades, razors, and mechanical razor blade stroppers. 299,700; Dec. 13. Class 23.

Société des Caves des Producteurs Réunis de Roquefort, (Aveyran), Roquefort, France. Cheese. 40,159; renewed Apr. 21, 1933.

Staedtler, J. S., Inc., New York, N. Y. Eyebrow and eyelash coloring pencils, eye shadows pencils, and make-up pencils. 299,620; Dec. 13; Serial No. 327,923; published Sept. 27, 1932. Class 6.

Standard Peroxide Co., The. (See Mintzer, Edward D.)

Sterilized Razor Blade Co., Inc., New York, N. Y. Razor blades. 299,604; Dec. 13; Serial No. 329,339; published Oct. 4, 1932. Class 23.

Stone-Mueller Company, Chicago, Ill. Typewriter ribbon revivifying liquid. 299,678; Dec. 13; Serial No. 329,508; published Oct. 4, 1932. Class 11.

Strohmeyer & Arpe Company, New York, N. Y. Mineral wax. 90,390; renewed Feb. 18, 1933.

Strohmeyer & Arpe Company, New York, N. Y. Mineral wax. 91,430; renewed Apr. 29, 1933.

Swiss Silk Bolting Cloth Manufacturing Company, Limited. (See Hammond-Homberger Co., assignor.)

Tajmal Limited, Hamilton, Ontario, Canada. Tile, bricks, building blocks, etc. 299,572; Dec. 13; Serial No. 328,192; published Sept. 13, 1932. Class 12.

Tatum, Samuel C., Company, The, Cincinnati, Ohio, assignor to Wilson-Jones Company, Chicago, Ill. Perforating and punching machinery. 90,758; renewed Mar. 18, 1933.

Thomas Flexible Coupling Company, Warren, Pa. Flexible machinery couplings. 299,599; Dec. 13; Serial No. 318,351; published Oct. 4, 1932. Class 23.

Troy Blanket Mills, Troy, N. H. Piece goods and blankets. 299,668; Dec. 13; Serial No. 329,246; published Sept. 20, 1932. Class 42.

United States Envelope Company, Springfield, Mass. Paper and envelopes, particularly book papers, etc. 299,568; Dec. 13; Serial No. 324,634; published Oct. 4, 1932. Class 37.

United States Envelope Company, Springfield, Mass. Correspondence papers and envelopes. 299,592–3; Dec. 13; Serial Nos. 324,632–3; published Oct. 4, 1932. Class 37.

United States Envelope Company, Springfield, Mass. Paper and envelopes. 299,594; Dec. 13; Serial No. 324,631; published Oct. 4, 1932. Class 37.

United States Gypsum Company, Chicago, Ill. Wall board, plaster board, and plaster. 299,598; Dec. 13; Serial No. 318,607; published Sept. 20, 1932. Class 12.

Vail-Ballou Press Inc., Binghamton, N. Y. Finished printing plates. 299,684; Dec. 13; Serial No. 328,408; published Oct. 4, 1932. Class 50.

Velsicol Corporation, Chicago, Ill. Lacquer, varnish, stain, and paint. 299,564; Dec. 13; Serial No. 325,669; published Sept. 27, 1932. Class 16.

Velsicol Corporation, Chicago, Ill. Lacquer, varnish, stain and paint. 299,670; Dec. 13; Serial No. 325,668; published Sept. 27, 1932. Class 16.

Vogt, F. G., & Sons, Incorporated, Philadelphia, Pa. Sausage. 299,577; Dec. 13; Serial No. 329,362; published Oct. 4, 1932. Class 46.

Wallace, R., & Sons Manufacturing Company, Wallingford, Conn. Kitchen and household tools or utensils. 299,669; Dec. 13; Serial No. 320,287; published Jan. 12, 1932. Class 23.

Wanamaker, John, Philadelphia, Philadelphia, Pa. Hat boxes, over-night cases, week-end cases, etc. 299,677; Dec. 13; Serial No. 329,364; published Sept. 27, 1932. Class 3.

Warner, C. D., Co., to Fred L. Drury, administrator of the estate of Hiram E. Warner, Coldwater, Mich., successor. Liniment. 89,169; renewed Nov. 12, 1932.

Wep Chemical Co. (See Pentz, William E.)

Western Lime & Cement Co., The, Milwaukee, Wis. Lime. 299,569; Dec. 13; Serial No. 329,033; published Sept. 20, 1932. Class 12.

Wieboldt Stores, Inc., Chicago, Ill. Cold cream. 299,652; Dec. 13; Serial No. 322,664; published Sept. 27, 1932. Class 6.

Wiegand, Edwin L., Company, Pittsburgh, Pa. Electric heating units, electric heating elements and parts therefor. 299,697; Dec. 13. Class 21.

Wildroot Company, Inc., The, Buffalo, N. Y. Hair tonics, wave sets, shampoos, etc. 299,653; Dec. 13; Serial No. 323,107; published Oct. 4, 1932. Class 6.

Wilson-Jones Company. (See Tatum, Samuel C., Company, The, assignor.)

Wilson-Jones Company, Chicago, Ill. Filing and mailing envelopes, filing folders, etc. 299,671; Dec. 13; Serial No. 329,759; published Sept. 27, 1932. Class 37.

Wojtasinski, Wladyslaw, doing business as W. Wojtasinski Drug Co., Dorchester, Mass. Cathartic medicine. 299,641; Dec. 13; Serial No. 328,857; published Sept. 27, 1932. Class 6.

Yarnall Paint Company, Philadelphia, Pa. Painters' materials. 90,151; renewed Feb. 4, 1933.

LIST OF REGISTRANTS OF LABELS

American Dairy Supply Co., Washington, D. C. grAde Pasteurized Milk. For Milk. 41,508; Dec. 13.

American Dairy Supply Co., Washington, D. C. Milk Pasteurized T. B. Tested. For Milk. 41,509; Dec. 13.

Araban Coffee Co., Inc., Boston, Mass. Golden Packet. For Tea. 41,510; Dec. 13.

Circle Foods, Inc., New York, N. Y. Goody Chocolate Flavored Malted Milk. For Malted Milk. 41,511; Dec. 13.

Curtiss Candy Company, Chicago, Ill. Baby Ruth. For Orange Drops. 41,512; Dec. 13.

Eastern Trading Company, Chicago, Ill. Oriental Garden Incense. For Incense. 41,513; Dec. 13.

Engel Art Corners Mfg. Co., Chicago, Ill. Artitle Labels. For Decorative Gummed Labels. 41,514; Dec. 13.

La-Mo Laboratories Co., The, Cleveland, Ohio. Velv Shaving Cream. For Shaving Cream. 41,515; Dec. 13.

Lipton, Thomas J., Inc., Hoboken, N. J., Chicago, Ill., and San Francisco, Calif. Lipton's Tea (Yellow Label). For Tea. 41,516; Dec. 13.

Lipton, Thomas J., Inc., Hoboken, N. J., Chicago, Ill., and San Francisco, Calif. Lipton's Tea (Green Label). For Tea. 41,517–18; Dec. 13.

Lipton, Thomas J., Inc., Hoboken, N. J., Chicago, Ill., and San Francisco, Calif. Lipton's Tea (Red Label). For Tea. 41,519; Dec. 13.

Lipton, Thomas J., Inc., Hoboken, N. J., Chicago, Ill., and San Francisco, Calif. Lipton's Tea (Yellow Label). For Tea. 41,520; Dec. 13.

Lipton, Thomas J., Inc., Hoboken, N. J., Chicago, Ill., and San Francisco, Calif. Lipton's Tea (Green Label). For Tea. 41,521; Dec. 13.

Lipton, Thomas J., Inc., Hoboken, N. J., Chicago, Ill., and San Francisco, Calif. Lipton's Tea (Yellow Label). For Tea. 41,522; Dec. 13.

Lipton, Thomas J., Inc., Hoboken, N. J., Chicago, Ill., and San Francisco, Calif. Lipton's Tea (Green Label)—Pure Imperial Gunpowder Tea. For Tea. 41,523; Dec. 13.

Lipton, Thomas J., Inc., Hoboken, N. J., Chicago, Ill., and San Francisco, Calif. Lipton's Tea (Green Label)—Black and Green Tea. For Tea. 41,524; Dec. 13.

Manischewitz, B., Company, The, Cincinnati, Ohio. Whole Wheat Matzos. For Matzos. 41,525; Dec. 13.

Menihan Company, The, Rochester, N. Y. Menihan Arch-Aid Shoes. For Shoe Boxes. 41,526; Dec. 13.

Millar, E. B., Coffee Company, The, Denver, Colo. Millar's Drip Coffee. For Coffee. 41,527; Dec. 13.

Millers Products Corp., New York, N. Y. Medalist. For Flour. 41,528; Dec. 13.

Mount Vernon Milling Company, Mount Vernon, Ind. Snofluf. For Flake Hominy. 41,529; Dec. 13.

Onyx Blouse Co. Inc., New York, N. Y. Wm. Penn Shirt. For Shirts. 41,530; Dec. 13.

Saunders, Joseph E., doing business as Saunders Company, Kansas City, Mo. Chicken Chili. For Chicken Chili. 41,531; Dec. 13.

Savarese, James, New York, N. Y. Savarese. For Tomato Sauce. 41,532; Dec. 13.

Standard Brands Incorporated, New York, N. Y. Chase & Sanborn's Seal Brand. For Tea. 41,533; Dec. 13.

Standard Brands Incorporated, New York, N. Y. Our Special. For Coffee. 41,534; Dec. 13.

Sterling Products Company, Evansville, Ind. Culmbacher. For Malt Extract. 41,535; Dec. 13.

Strombeck-Becker Mfg. Co., Moline, Ill. Reflectograph. For an Instructive Toy. 41,536; Dec. 13.

Sutherland Paper Co., Kalamazoo, Mich. Finest Quality. For Butter. 41,537; Dec. 13.

Sutherland Paper Co., Kalamazoo, Mich. Jersey Maid Ice Cream. For Ice Cream. 41,538; Dec. 13.

Universal Gypsum & Lime Co., Chicago, Ill. Universal Patching Plaster. For Patching Plaster. 41,539; Dec. 13.

Waterproof Paint & Varnish Co., Watertown, Mass. Waterproof 100% Pure Asphalt-Asbestos Roof Coating. For Roof Coating. 41,540; Dec. 13.

White & Wyckoff Mfg. Co., Holyoke, Mass. Endura Bond Filler. For Fillers for Loose Leaf Books. 41,541; Dec. 13.

LIST OF REGISTRANTS OF PRINTS

Cream of Wheat Corporation, The, Minneapolis, Minn. A Turn in His Life . . . Take Care! For Wheat Breakfast Food. 13,979; Dec. 13.

Hills Bros., San Francisco, Calif. Another Eclipse of the Sun!—Adform 127. For Coffee. 13,980; Dec. 13.

CLASSIFIED LIST OF TRADE-MARKS REGISTERED

CLASS 1

Leather for bookbinding, upholstering, and like purposes. Edw. & Jas. Richardson. 90,244; renewed Feb. 11, 1933.

Sponges, Rock Island sheep wool. C. Russell. 299,685; Dec. 13; Serial No. 328,252; published Oct. 4, 1932.

CLASS 3

Boxes, over-night and week-end cases, etc., Hat. John Wanamaker Philadelphia. 299,677; Dec. 13; Serial No. 329,364; published Sept. 27, 1932.

Cases, Toilet. C. Richmond. 299,687; Dec. 13; Serial No. 327,888; published Oct. 4, 1932.

CLASS 4

Handkerchiefs. V. W. Knight. 299,635; Dec. 13; Serial No. 329,052; published Sept. 27, 1932.

CLASS 5

Cement, Metallic liquid. H. E. Adams. 299,682; Dec. 13; Serial No. 328,515; published Sept. 27, 1932.

CLASS 6

Antiseptic, Internal. Farbwerke vorm. Meister Lucius & Brüning. 89,917; renewed Jan. 21, 1933.

Antiseptic solution of rosin. Gebrüder Scaubert. 89,957; renewed Jan. 21, 1933.

Aqueous and tablet preparation for simple coughs from head colds, etc. J. Kern. 299,651; Dec. 13; Serial No. 321,062; published Oct. 4, 1932.

Astringents, astringent cerates, bleach creams, beauty creams, etc. F. C. Reilly. 299,618; Dec. 13; Serial No. 325,725; published Sept. 27, 1932.

Baking powder. Royal Baking Powder Company. 299,621; Dec. 13; Serial No. 327,890; published Sept. 27, 1932.

Base exchange of silicates. Permutit Company. 299,632; Dec. 13; Serial No. 329,121; published Sept. 27, 1932.

Chemical and pharmaceutical products. Ilon Aktiengesellschaft. 299,656; Dec. 13; Serial No. 317,669; published Sept. 27, 1932.

Chemical substances used for veterinary purposes. Associated London Flour Millers Limited. 299,623; Dec. 13; Serial No. 325,674; published Sept. 27, 1932.

Coloring pencils, eye shadow pencils and make-up pencils, Eyebrow and eyelash. J. S. Staedtler, Inc. 299,620; Dec. 13; Serial No. 327,923; published Sept. 27, 1932.

Compound for stopping boiler leaks, compound for cleaning waste matter from pipes, etc. F. Bentz. 299,649; Dec. 13; Serial No. 312,736; published Oct. 4, 1932.

Compound for the treatment of burns, wounds, pimples, etc. K. Christodoulou. 299,648; Dec. 13; Serial No. 308,325; published Oct. 4, 1932.

Compound used in the filtration of liquids and beverages. Crystal Home Filter Co. Inc. 299,624; Dec. 13; Serial No. 328,809; published Oct. 4, 1932.

Cream, Cold. Wieboldt Stores, Inc. 299,652; Dec. 13; Serial No. 322,664; published Sept. 27, 1932.

Extract of cube root or derris root. S. B. Penick & Company. 299,637; Dec. 13; Serial No. 329,024; published Sept. 27, 1932.

Hair bleach. E. D. Mintzer. 299,619; Dec. 13; Serial No. 328,221; published Sept. 27, 1932.

Hair dye. Inecto, Inc. 299,610–11; Dec. 13; Serial Nos. 328,425–6; published Sept. 27, 1932.

Hair dye. Inecto, Inc. 299,646; Dec. 13; Serial No. 328,428; published Sept. 27, 1932.

Hair remover. G. Schreitmüller. 299,655; Dec. 13; Serial No. 317,780; published Sept. 27, 1932.

Hair tonic. C. A. Hall. 299,645; Dec. 13; Serial No. 328,608; published Sept. 27, 1932.

Hair tonic. Inecto, Inc. 299,609; Dec. 13; Serial No. 328,427; published Sept. 27, 1932.

Hair tonics, wave sets, shampoos, etc. Wildroot Company. 299,653; Dec. 13; Serial No. 323,107; published Oct. 4, 1932.

Home treatment for stomach disorders, bowel, liver disorders etc., Stomachic. H. M. Douglass. 299,658; Dec. 13; Serial No. 317,427; published Sept. 27, 1932.

Hypnotic. I. G. Farbenindustrie Aktiengesellschaft. 299,634; Dec. 13; Serial No. 329,085; published Sept. 27, 1932.

Inhalant for asthma and bronchial catarrh. Dr. E. Silten. 299,616; Dec. 13; Serial No. 326,763; published Sept. 27, 1932.

Insecticides. Baird & McGuire, Inc. 299,639; Dec. 13; Serial No. 329,009; published Sept. 27, 1932.

Lacquer, varnish, stain, and paint. Velsicol Corporation. 299,670; Dec. 13; Serial No. 325,668; published Sept. 27, 1932.

Laxative. G. E. Schaefer. 299,643; Dec. 13; Serial No. 328,743; published Sept. 27, 1932.

Laxative, Candy. Claron Products Incorporated. 299,642; Dec. 13; Serial No. 328,808; published Sept. 27, 1932.

Liniment. C. D. Warner Co. 89,169; renewed Nov. 12, 1932.

Liniments. J. H. Miller. 299,644; Dec. 13; Serial No. 328,717; published Sept. 27, 1932.

Medicine. V. I. Podhorsky. 299,617; Dec. 13; Serial No. 325,897; published Sept. 27, 1932.

Medicine. W. Wojtasinki. 299,641; Dec. 13; Serial No. 328,857; published Sept. 27, 1932.

Medicines. Kyffhäuser-Laboratorium, Fabrikation Chem.-Pharm. Präparate Hermann Quincke, Bad Frankenhausen A. K. 299,622; Dec. 13; Serial No. 327,443; published Sept. 27, 1932.

Moth proofing solution, Concentrated. S. B. Penick & Company. 299,636; Dec. 13; Serial No. 329,025; published Sept. 27, 1932.

Ointment, perspiration powder, dental cream, etc., Vaginal. W. E. Pentz. 299,613; Dec. 13; Serial No. 328,404; published Sept. 27, 1932.

Perfume. Chanel, Inc. 299,640; Dec. 13; Serial No. 328,865; published Sept. 27, 1932.

Powder, lipstick, rouge, eye shadow, etc., Face. Samuel Bonat & Bro. 299,633; Dec. 13; Serial No. 329,109; published Sept. 27, 1932.

Preparation for the relief of headaches, neuralgia, etc. J. W. Jones. 299,614; Dec. 13; Serial No. 328,387; published Sept. 27, 1932.

Preparation for treatment of psoriasis, eczema, and other skin diseases; an alterative and discutient, etc. Hayman Oil Co. 299,626; Dec. 13; Serial No. 328,354; published Oct. 4, 1932.

Preparation for use in the treatment of stomach complaints. A. G. Castello. 299,615; Dec. 13; Serial No. 327,179; published Sept. 27, 1932.

Preparations of camphor used as a cardio tonic. Kabushiki-Kaisha Takeda-Gaobei Shoten. 299,628; Dec. 13; Serial No. 328,005; published Oct. 4, 1932.

Sulphur for dusting purposes. National Sulphur Co. 299,638; Dec. 13; Serial No. 329,023; published Sept. 27, 1932.

Therapeutic preparation. T. J. Iles. 299,625; Dec. 13; Serial No. 328,555; published Oct. 4, 1932.

Tooth paste. Drugkraft, Inc. 299,647; Dec. 13; Serial No. 328,481; published Sept. 27, 1932.

CLASS 11

Carbon black for inks. Godfrey L. Cabot, Inc. 299,681; Dec. 13; Serial No. 328,681; published Oct. 4, 1932.

Typewriter ribbon revivifying liquid. Stone-Mueller Company. 299,678; Dec. 13; Serial No. 329,508; published Oct. 4, 1932.

CLASS 12

Composition of matter for waterproofing concrete and cement. Master Builders Company. 299,571; Dec. 13; Serial No. 329,148; published Sept. 13, 1932.

Doors. Paine Lumber Company. 89,693; renewed Dec. 31, 1932.

Felt, Sound-deadening and insulating. Hydrex Asphalt Products Corporation. 299,562; Dec. 13; Serial No. 328,293; published Sept. 13, 1932.

Lime. Western Lime & Cement Co. 299,569; Dec. 13; Serial No. 329,033; published Sept. 20, 1932.

Lime, Finishing hydrated. Kelly Island Lime and Transport Company. 299,570; Dec. 13; Serial No. 329,051; published Sept. 27, 1932.

Lumber. California Redwood Association. 299,575; Dec. 13; Serial No. 329,255; published Sept. 13, 1932.

Lumber products. Long-Bell Lumber Sales Corporation. 299,585; Dec. 13; Serial No. 329,748; published Oct. 4, 1932.

Tile, bricks, building blocks, etc. Tajmal Limited. 299,572; Dec. 13; Serial No. 328,192; published Sept. 13, 1932.

Wall board. Plastergon Wall Board Company. 299,581–2; Dec. 13; Serial Nos. 329,651–2; published Oct. 4, 1932.

Wall board, plaster board, and plaster. United States Gypsum Company. 299,598; Dec. 13; Serial No. 318,607; published Sept. 20, 1932.

CLASS 13

Bathroom fixtures. Chase Brass & Copper Co. Incorporated. 299,605; Dec. 13; Serial No. 329,302; published Oct. 4, 1932.

Pipes, tubes, and casings. National Tube Company. 90,828; renewed Mar. 25, 1933.

CLASS 14

Nickel, nickel ingots and alloys, etc. International Nickel Company. 299,596; Dec. 13; Serial No. 319,579; published Oct. 4, 1932.

Wire for metals, Welding. Lincoln Electric Company. 299,703; Dec. 13.

CLASS 15

Gasoline, lubricating and fuel oils, etc. L. L. Coryell & Son. 299,692; Dec. 13.

Oils, Fuel. Durfee & Canning, Inc. 299,695; Dec. 13.

Wax, Mineral. Strohmeyer & Arpe Company. 90,390; renewed Feb. 18, 1933.

Wax, Mineral. Strohmeyer & Arpe Company. 91,430; renewed Apr. 29, 1933.

CLASS 16

Carbon black. Godfrey L. Cabot, Inc. 299,573; Dec. 13; Serial No. 329,465; published Sept. 27, 1932.

Lacquer, varnish, stain, and paint. Velsicol Corporation. 299,564; Dec. 13; Serial No. 325,669; published Sept. 27, 1932.

Paint oils, baking varnishes, lacquers, etc. Ball Chemical Company. 299,567; Dec. 13; Serial No. 324,950; published May 31, 1932.

Painters' materials. Yarnall Paint Company. 90,151; renewed Feb. 4, 1933.

Paints, paint enamels, lacquers, etc. Sherwin-Williams Company. 299,560; Dec. 13; Serial No. 329,027; published Sept. 27, 1932.

Paints, showcard. Walter Morgan Company Inc. 299,561; Dec. 13; Serial No. 328,962; published Sept. 27, 1932.

CLASS 19

Vehicles, Parts of. Brampton Brothers Limited. 89,813; renewed Jan. 14, 1933.

CLASS 21

Electric heating units, elements, and parts therefor. Edwin L. Wiegand Company. 299,697; Dec. 13.

Electrical appliances. Hart Manufacturing Co. 39,856; renewed Feb. 24, 1933.

CLASS 22

Baseball bats. Hillerich & Bradsby Co. 299,587; Dec. 13; Serial No. 329,949; published Oct. 4, 1932.

Golf tee holding wristlets. C. A. Glock. 299,583; Dec. 13; Serial No. 329,795; published Oct. 4, 1932.

Roller coasters and see-saw merry-go-rounds. S. L. Allen & Co. 299,578; Dec. 13; Serial No. 329,491; published Oct. 4, 1932.

Strips, blocks, and round wood, for making toys, Packaged ready-cut. B. F. Kehrer. 299,579; Dec. 13; Serial No. 329,557; published Oct. 4, 1932.

CLASS 23

Carpet cleaning machines, Portable. Bissel Carpet Sweeper Company. 90,090; renewed Feb. 4, 1933.

Forks and food choppers and attachments. K-D Manufacturing Company. 299,701; Dec. 13.

Machinery couplings, Flexible. Thomas Flexible Coupling Company. 299,599; Dec. 13; Serial No. 318,381; published Oct. 4, 1932.

Meat and bone cutting machines. W. Iasar. 299,603; Dec. 13; Serial No. 329,477; published Oct. 4, 1932.

Perforating and punching machinery. Samuel C. Tatum Company. 90,758; renewed Mar. 18, 1933.

Presses, scroll saws, band saws, etc., Drill. Delta Manufacturing Company. 299,602; Dec. 13; Serial No. 329,675; published Oct. 4, 1932.

Pumps, Liquid. M. W. Hartmann. 299,600; Dec. 13; Serial No. 329,726; published Oct. 4, 1932.

Razor blades. Sterilized Razor Blade Co. 299,604; Dec. 13; Serial No. 329,339; published Oct. 4, 1932.

Razor blades, razors, and stroppers. J. Smith. 299,700; Dec. 13.

Sweepers, Carpet. Bissell Carpet Sweeper Company. 89,921; renewed Mar. 10, 1933.

Sweepers, Carpet. Bissell Carpet Sweeper Company. 89,908; renewed Jan. 21, 1933.

Tools or utensils, Kitchen and household. R. Wallace & Sons Manufacturing Company. 299,669; Dec. 13; Serial No. 320,287; published Jan. 12, 1932.

Valves, orifice fittings, and parts therefor, Plate. Byron Jackson Co. 299,589; Dec. 13; Serial No. 328,576; published Oct. 4, 1932.

CLASS 26

Cameras. E. Leitz, Inc. 299,606–7; Dec. 13; Serial Nos. 328,793–4; published Oct. 4, 1932.

Film, Photographic. Du Pont Film Manufacturing Corporation. 299,601; Dec. 13; Serial No. 329,724; published Oct. 4, 1932.

Gauges. Aktiebolaget Svenska Kullagerfabriken. 299,591; Dec. 13; Serial No. 326,074; published Oct. 4, 1932.

Microscopes, magnifying glasses, telescopes and their accessories. E. Leitz, Optische Werke, G. m. b. H. 299,608; Dec. 13; Serial No. 328,734; published Oct. 4, 1932.

CLASS 34

Burners and stoves, Range oil. Hanson-Gates Co. 299,590; Dec. 13; Serial No. 327,753; published Oct. 4, 1932.

Burners, Oil and gas. International Oil Heating Co. 299,693; Dec. 13.

CLASS 37

Cleaners for school slates, pen wipers, and stamp moisteners. "Semperit" Oesterreichisch-Amerikanische Gummiwerke Aktiengesellschaft. 299,597; Dec. 13; Serial No. 318,723; published Sept. 27, 1932.

Envelopes and folders, Filing and mailing. Wilson-Jones Company. 299,671; Dec. 13; Serial No. 329,759; published Sept. 27, 1932.

Handkerchiefs, cleansing and polishing tissues, napkins, etc. Cellulose Products Corporation. 299,676; Dec. 13; Serial No. 329,527; published Sept. 27, 1932.

Packages of wax paper. Minerva Wax Paper Company. 299,689; Dec. 13; Serial No. 327,560; published Sept. 27, 1932.

Paper. G. A. Ackermann Paper Mills, Inc. 299,565; Dec. 13; Serial No. 310,507; published Sept. 27, 1932.

Paper and envelopes. United States Envelope Company. 299,568; Dec. 13; Serial No. 324,634; published Oct. 4, 1932.

Paper and envelopes. United States Envelope Company. 299,594; Dec. 13; Serial No. 324,631; published Oct. 4, 1932.

Paper sealing tape. Herrlinger Paper Company. 299,672; Dec. 13; Serial No. 329,581; published Sept. 27, 1932.

Papers and envelopes, Correspondence. United States Envelope Company. 299,592–3; Dec. 13; Serial Nos. 324,632–3; published Oct. 4, 1932.

Pencils. Schwan-Bleistift-Fabrik A. G. 299,675; Dec. 13; Serial No. 329,539; published Oct. 4, 1932.

CLASS 38

Chart. Kellogg Company. 299,679; Dec. 13; Serial No. 329,311; published Sept. 27, 1932.

Newspaper article. Evening Herald Publishing Company. 299,673–4; Dec. 13; Serial Nos. 329,553–4; published Sept 27, 1932.

Newspaper, Tabloid. A. P. Lefton Company. 299,686; Dec. 13; Serial No. 328,130; published Oct. 4, 1932.

Publication. S. B. McCafferty. 299,683; Dec. 13; Serial No. 328,444; published Sept. 27, 1932.

Publication. National Society of Puritan Descendants. 299,688; Dec. 13; Serial No. 327,828; published Sept. 27, 1932.

Section or column in a newspaper. Post Printing and Publishing Company. 299,680; Dec. 13; Serial No. 329,240; published Sept. 27, 1932.

CLASS 39

Apparel, Water or rain proof wearing. Express Rubber Co. Limited. 90,799; renewed Mar. 25, 1933.

CLASS 42

Cotton ducks and drills, awning stripe and ticking. John Boyle & Company. 299,630; Dec. 13; Serial No. 329,174; published Oct. 4, 1932.

Cotton piece goods and filled and finished cotton piece goods. Holliston Mills, Inc. 299,667; Dec. 13; Serial No. 329,322; published Oct. 4, 1932.

Fabrics. Celanese Corporation of America. 299,657; Dec. 13; Serial No. 317,160; published Oct. 27, 1931.

Fabrics of artificial silk. American Bemberg Corporation. 299,627; Dec. 13; Serial No. 328,204; published Sept. 20, 1932.

Fabrics of silk and cellulose derivatives. Celanese Corporation of American. 299,659; Dec. 13; Serial No. 317,159; published Oct. 27, 1931.

Handkerchiefs. H. S. Cohen. 299,650; Dec. 13; Serial No. 320,338; published Oct. 4, 1932.

Handkerchiefs. Graemiger Bros. Inc. 299,661; Dec. 13; Serial No. 329,376; published Oct. 4, 1932.

Nets, Hair. Glemby Company. 299,629; Dec. 13; Serial No. 329,183; published Sept. 20, 1932.

Piece goods and blankets. Troy Blanket Mills. 299,668; Dec. 13; Serial No. 329,246; published Sept. 20, 1932.

Pile fabrics. Rossie Velvet Company. 299,663–5; Dec. 13; Serial Nos. 329,357–9; published Oct. 4, 1932.

Silk bolting cloth. Hammond-Homberger, Co. 90,017; renewed Jan. 28, 1933.

Silk fabrics in the piece. Onondaga Silk Company. 299,631; Dec. 13; Serial No. 329,152; published Sept. 20, 1932.

Silk piece goods. Coudurier, Fructus & Deacher. 299,660; Dec. 13; Serial No. 329,784; published Oct. 4, 1932.

Textile mattress protectors or pads, table pads, quilts, etc. Ajax Quilting & Manufacturing Co. 299,702; Dec. 13.

Veils, Bridal. Marie Dorros, Inc. 299,612; Dec. 13; Serial No. 328,410; published Sept. 20, 1932.

Velvets. Rossie Velvet Company. 299,662; Dec. 13; Serial No. 329,360; published Oct. 4, 1932.

Woolen piece goods. Forstmann & Huffmann Company. 299,654; Dec. 13; Serial No. 317,925; published Sept. 27, 1932.
Woolen piece goods. Forstmann Woolen Co. 299,666; Dec. 13; Serial No. 329,332; published Oct. 4, 1932.

CLASS 45

Beverages, and sirups and extracts for making the same, Maltless. Homer Neer and William D. Morgan. 299,576; Dec. 13; Serial No. 329,291; published Oct. 4, 1932.
Beverages and sirups and extracts for making the same, Maltless. J. Schlachter. 299,586; Dec. 13; Serial No. 329,903; published Oct. 4, 1932.
Water, Mineral and carbonated. Orange-Crush Company. 299,574; Dec. 13; Serial No. 328,697; published Oct. 4, 1932.

CLASS 46

Bacon and hams. Rath Packing Company. 89,699; renewed Dec. 31, 1932.
Biscuits, cakes, and cookies. Loose-Wiles Biscuit Company. 89,043; renewed Nov. 5, 1932.
Bread. S. A. Haram. 299,584; Dec. 13; Serial No. 329,856; published Oct. 4, 1932.
Cakes and biscuits filled with cheese. Battle Creek Biscuit Company. 299,698; Dec. 13.
Canned foods. Comstock Canneries, Inc. 299,696; Dec. 13.
Cheese. Société des Caves et des Producteurs Reunis de Roquefort, (Aveyron). 40,159; renewed Apr. 21, 1933.
Compound of coffee, chicory, and cereals. Abel & Asher Co. 89,524; renewed Dec. 24, 1932.
Doughnuts and doughnut flour. Joe Lowe Corporation. 299,595; Dec. 13; Serial No. 323,786; published Oct. 4, 1932.
Feed, and pancake and waffle flour, Stock and poultry. Centennial Flouring Mills Company. 299,563; Dec. 13; Serial No. 328,159; published Oct. 4, 1932.
Feed, Stock and poultry. Centennial Flouring Mills Company. 299,588; Dec. 13; Serial No. 328,417; published Oct. 4, 1932.
Flour and corn meal, Wheat. Barnstable Feed & Supply Co's Inc. 299,566; Dec. 13; Serial No. 324,648; published Oct. 4; 1932.
Ice cream. Beverly Dairies, Ltd. 299,699; Dec. 13.
Ingredients used in food products. Preservaline Manufacturing Co. 91,372; renewed Apr. 29, 1933.
Meat products. Roberts and Oake, Inc. 299,694; Dec. 13.
Sausage. F. G. Vogt & Sons, Incorporated. 299,577; Dec. 13; Serial No. 329,362; published Oct. 4, 1932.

CLASS 49

Portable spirits, whiskey and liquors. Distillers Corporation Limited. 299,690–1; Dec. 13.
Whiskey. Bloch Bros. 299,580; Dec. 13; Serial No. 329,572; published Oct. 4, 1932.

CLASS 50

Printing plates, Finished. Vail-Ballou Press Inc. 299,684; Dec. 13; Serial No. 328,408; published Oct. 4, 1932.

LIST OF LABELS

Artitle Labels. For Decorative Gummed Labels. Engel Art Corners Mfg. Co. 41,514; Dec. 13.
Baby Ruth. For Orange Drops. Curtiss Candy Company. 41,512; Dec. 13.
Chase & Sanborn's Seal Brand. For Tea. Standard Brands Incorporated. 41,533; Dec. 13.
Chicken Chili. For Chicken Chili. J. E. Saunders. 41,531; Dec. 13.
Culmbacher. For Malt extract. Sterling Products Company. 41,535; Dec. 13.
Endura Bond Filler. For Fillers for Loose Leaf Books. White & Wyckoff Mfg. Co. 41,541; Dec. 13.
Finest Quality. For Butter. Sutherland Paper Co. 41,537; Dec. 13.
Golden Packet. For Tea. Araban Coffee Co. 41,510; Dec. 13.
Goody Chocolate Flavored Malted Milk. For Malted Milk. Circle Foods, Inc. 41,511; Dec. 13.
GrAde Pasteurized Milk. For Milk. American Dairy Supply Co. 41,508; Dec. 13.
Jersey Maid Ice Cream. For Ice Cream. Sutherland Paper Co. 41,538; Dec. 13.
Lipton's Tea (Green Label). For Tea. Thomas J. Lipton, Inc. 41,517–18; Dec. 13.
Lipton's Tea (Green Label). For Tea. Thomas J. Lipton, Inc. 41,521; Dec. 13.
Lipton's Tea (Green Label)—Pure Imperial Gunpowder Tea. For Tea. Thomas J. Lipton, Inc. 41,523; Dec. 13.
Lipton's Tea (Green Label)—Black and Green Tea. For Tea. Thomas J. Lipton, Inc. 41,524; Dec. 13.
Lipton's Tea (Red Label). For Tea. Thomas J. Lipton, Inc. 41,519; Dec. 13.
Lipton's Tea (Yellow Label). For Tea. Thomas J. Lipton, Inc. 41,516; Dec. 13.
Lipton's Tea (Yellow Label). For Tea. Thomas J. Lipton, Inc. 41,520; Dec. 13.
Lipton's Tea (Yellow Label). For Tea. Thomas J. Lipton, Inc. 41,522; Dec. 13.
Medalist. For Flour. Millers Products Corp. 41,528; Dec. 13.
Menihan Arch-Aid Shoes. For Shoe Boxes. Menihan Company. 51,526; Dec. 13.
Milk Pasteurized T. B. Tested. For Milk. American Dairy Supply Co. 41,509; Dec. 13.
Millar's Drip Coffee. For Coffee. E. B. Millar Coffee Company. 41,527; Dec. 13.
Oriental Garden Incense. For Incense. Eastern Trading Company. 41,513; Dec. 13.
Our Special. For Coffee. Standard Brands Incorporated. 41,534; Dec. 13.
Reflectograph. For an Instructive Toy. Strombeck-Becker Mfg. Co. 41,536; Dec. 13.
Savarese. For Tomato Sauce. J. Savarese. 41,532; Dec. 13.
Sno-Fluf. For Flake Hominy. Mount Vernon Milling Company. 41,529; Dec. 13.
Universal Patching Plaster. For Patching Plaster. Universal Gypsum & Lime Co. 41,539; Dec. 13.
Velv Shaving Cream. For Shaving Cream. La-Mo Laboratories Co. 41,515; Dec. 13.
Waterproof 100% Pure Asphalt-Asbestos Roof Coating. For Roof Coating. Waterproof Paint & Varnish Co. 41,540; Dec. 13.
Whole Wheat Matsos. For Matsos. B. Manischewitz Company. 41,525; Dec. 13.
Wm. Penn Shirt. For Shirts. Onyx Blouse Co. Inc. 41,530; Dec. 13.

LIST OF PRINTS

Another Eclipse of the Sun!—Adform 127. For Coffee. Hills Bros. 13,980; Dec. 13.
A Turn in his Life . . . Take Care! For Wheat Breakfast Food. Cream of Wheat Corporation. 13,979; Dec. 13.

LIST OF PATENTEES

TO WHOM

PATENTS WERE ISSUED ON THE 13TH DAY OF DECEMBER, 1932

NOTE.—Arranged in accordance with the first significant character or word of the name (in accordance with city and telephone directory practice). Includes patents, reissues, and designs.

Abbotts, Arthur, Fairfield, Conn. Heating radiator. 1,890,665; Dec. 13.
Abraham, Lewis C., Auderghem, Belgium. Apparatus for manufacturing artificial sponges. 1,890,555; Dec. 13.
Ackerman, William, Towners, N. Y., assignor to Mergenthaler Linotype Company. Typographical composing machine. 1,891,075; Dec. 13.
Adams, Frank J., Brighton, Victoria, Australia. Mounting the steered wheels of road vehicles. 1,890,766; Dec. 13.
Adams, Mac B., Hobart, Okla. Skylight lifter. 1,890,767; Dec. 13.
Adams, William H., assignor to Eastern Finishing Works, Kenyon, R. I. Mildewproof fabric and making the same. 1,890,717; Dec. 13.
Aflague, Manuel, Detroit, Mich., assignor to American Car and Foundry Motors Company, New York, N. Y. Stabilizing spring suspension system. 1,890,892; Dec. 13.
Ahrens-Fox Fire Engine Company, The. (See Fox, Charles H., assignor.)
Aircraft Control Corporation. (See Barthel, Erich H., assignor.)
Air-Way Electric Appliance Corporation. (See Mack, Walter L., assignor.)
Ajax Electrothermic Corporation. (See Eibi, Frans, assignor.)
Albert, Karl. (See Kurz, H., and Albert.)
Albits, Benjamin F., Minneapolis, Minn. Lens for eyeglasses and making same. 1,891,036; Dec. 13.
Aldeborgh, Erik H., and C. E. Ruf, assignors to Standard Gage Company, Inc., Poughkeepsie, N. Y. Combination dial indicator. 1,891,196; Dec. 13.
Alden, Carroll R., assignor to Ex-Cell-O Aircraft & Tool Corporation, Detroit, Mich. Slip bushing. 1,890,664; Dec. 13.
Alden, Carroll R., and C. A. Birkebak, assignors to Ex-Cell-O Aircraft and Tool Corporation, Detroit, Mich. Slip bushing. 1,890,663; Dec. 13.
Alder, Kurt. (See Diels, O., and Alder.)
Alexander, Oscar C. (See Kelsall, A. H., and Alexander.)
Allen, Chauncey D., Philadelphia, Pa., assignor to Consolidated Ashcroft Hancock Company, New York, N. Y. Valve. Des. 88,613; Dec. 13.
Allen, Grosvenor N., and E. H. Kreps, assignors to Oneida Community, Limited, Oneida, N. Y. Cup or similar article. Des. 88,614; Dec. 13.
Allen, Grosvenor N., and E. H. Kreps, assignors to Oneida Community, Limited, Oneida, N. Y. Dish or similar article. Des. 88,615; Dec. 13.
Allen Sherman-Hoff Company, The. (See Hoff, Leigh P., assignor.)
Allenic, Paul, Paris, France. Electric plug. 1,890,484; Dec. 13.
Allington, William E., Highland Park, Ill. Automatic delivery storage vault. 1,890,925; Dec. 13.
Allith-Prouty Company. (See Scott, John E., assignor.)
Altgelt, Herman E., South Bend, Ind., assignor, by mesne assignments, to Oliver Farm Equipment Company. Tractor implement. 1,890,450; Dec. 13.
Altuna, Pedro, San Sebastian, Spain. Shock-absorbing apparatus for massive wheels. 1,890,442; Dec. 13.
Altvater, Arthur W., University City, assignor to Western Supplies Company, St. Louis, Mo. Gauge. 1,890,714; Dec. 13.
Altvater, Arthur W., University City, assignor to Western Supplies Company, St. Louis, Mo. Unitary die assembly. 1,890,715; Dec. 13.
Ambros, Otto, and H. Reindel, Ludwigshafen-on-the-Rhine, and J. Eisele and J. Stoebrel, Mannheim, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Polymerization of unsaturated organic compounds. 1,891,203; Dec. 13.
Ambrosia Chocolate Company. (See Schoenleber, Gretchen B., assignor.)
Amco, Incorporated. (See Morton, W. A., and Geer, assignors.)
American Bosch Magneto Corporation. (See Lang, G. J., and Martin, assignors.)
American Car and Foundry Motors Company. (See Aflague, Manuel, assignor.)
American Cyanamid Company. (See Bradley, Theodore F., assignor.)
American Lithographic Company. (See Phelps, Erastus R., assignor.)
American Optical Company. (See Baker, Nelson M., assignor.)
American Oxythermic Corporation. (See Fränkl, Mathias, assignor.)
American Radiator & Standard Sanitary Corporation. (See Bennett, Irving T., assignor.)
American Stove Company. (See Stockstrom, Arthur, assignor.)
American Telephone and Telegraph Company. (See Cash, Claude C., assignor.)
American Telephone and Telegraph Company. (See Holden, William H. T., assignor.)
Amsler, Walter O., Toledo, Ohio, assignor to P. E. Caruthers, trustee, Glenshaw, Pa. Treating metal. 1,890,485; Dec. 13.
Anderson, William T., jr., Newark, and H. D. Fraser, Verona, assignors to Hanovia Chemical and Manufacturing Company, Newark, N. J. Electrode for vapor gas electric devices. 1,890,926; Dec. 13.
Andreasen, Claude G., Oakland, and R. N. Andreasen, San Leandro, Calif. Lateral transfer of automotive vehicles. 1,890,716; Dec. 13.
Andreasen, Raymond N. (See Andreasen, Claude G. and R. N.)
Andres, Charles M., Yonkers, assignor to Otis Elevator Company, New York, N. Y. Indicator and method of manufacturing parts thereof. 1,890,893; Dec. 13.
Andrews, Frank W., Dayton, Ohio, assignor, by mesne assignments, to Frigidaire Corporation. Refrigerating apparatus. 1,890,451; Dec. 13.
Andrews, George G., assignor to The Goodyear Tire & Rubber Company, Akron, Ohio. Cleaning molds. 1,891,197; Dec. 13.
Angier, Edward H., Framingham, Mass. Building construction. 1,890,486; Dec. 13.
Angle, Edward H., Pasadena, Calif. Orthodontic appliance. 1,890,487; Dec. 13.
Annicq, Joseph, Renaix, Belgium. Machine for dyeing textile materials in bundles. 1,890,556; Dec. 13.
Anstice, Josiah, & Co. Inc. (See Anstice, M. R., and Ross, assignors.)
Anstice, Mortimer R., and C. C. Ross, assignors to Josiah Anstice & Co. Inc., Rochester, N. Y. Burnishing machine. 1,890,448; Dec. 13.
Anton, Christ S., Chicago, Ill. Egg carton. 1,890,801; Dec. 13.
Apple, Vincent G., Dayton, Ohio. Automatic molding method and machine. 1,890,802; Dec. 13.
Apple, Vincent G., Dayton, Ohio. Dynamo electric machine. 1,891,076; Dec. 13.
Armington, Arthur P., Willoughby, Ohio. Tread link. 1,890,444; Dec. 13.
Armington, Arthur P., Willoughby, assignor to The Euclid Road Machinery Company, Euclid, Ohio. Dumping vehicle. 1,891,019; Dec. 13.
Arnold, Henry B., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Remote control system. 1,890,488; Dec. 13.
Arnold, S. M., Inc. (See Arnold, S. M., and Erber, assignors.)
Arnold, Sandford M., St. Louis, and A. Erber, University City, assignors to S. M. Arnold, Inc., St. Louis, Mo. Sponge brush. 1,890,894; Dec. 13.
Arnold, William W., jr., Knoxville, Tenn. Combination blade and pin beater. 1,891,132; Dec. 13.
Arrow-Hart & Hegeman Electric Company. (See Gates, Frederic P., assignor.)
Arvey Corporation. (See Horwath, Julius, assignor.)
Asbury, Dorsey F., Broomes Island, Md. Radio apparatus. 1,890,768; Dec. 13.
Ashtabula Corrugated Box Company, The. (See Sherman, Elroy P., assignor.)
Asire, Horace W., and W. W. Perkins, Detroit, and E. J. Martin, Ferndale, Mich., assignors to E. I. du Pont de Nemours & Company, Wilmington, Del. Electric blasting machine. 1,890,445; Dec. 13.
Aston, James, and A. H. Beale, assignors, by mesne assignments, to A. M. Byers Company, Pittsburgh, Pa. Making wrought iron. 1,890,687; Dec. 13.
Athimon, Francis, Paris, France. Servo-brake. 1,890,446; Dec. 13.
Atlas Powder Company. (See Farren, William R., assignor.)
Atwell, Harold V., et al., trustees. (See Hamblen, J. B., and Kay, assignors.)
Auburn, Hubert, Mount Healthy, Ohio. Binder for loose leaves or sheets. 1,891,037; Dec. 13.
Austin, Arthur O., near Barberton, assignor, by mesne assignments, to The Ohio Brass Company, Mansfield, Ohio. Hygrometer. 1,890,565; Dec. 13.
Automatic Gas Steam Radiator Company. (See Blackmore, James S., assignor.)
Autoyre Company, The. (See Mosgrove, Charles A., assignor.)
Aviation Patent and Research Corporation, The. (See Markey, Roscoe I., assignor.)

Babcock & Wilcox Company, The. (See Jacobus, David S., assignor.)
Bacharach Industrial Instrument Company. (See Stein, J. A., and Vayda, assignors.)
Bahnson Company, The. (See Bahnson, Frederic F., assignor.)
Bahnson, Frederic F., assignor to The Bahnson Company, Winston-Salem, N. C. Humidity controlled valve. 1,891,133; Dec. 13.
Bailey, R. W., et al. (See Schurtz, Ralph E., assignor.)
Baird, John L., assignor to Television Limited, London, England. Television or like system and apparatus. 1,890,558; Dec. 13.
Baker, Judd O., Hastings-on-Hudson, N. Y., assignor to General Electric Company. Amplifying system. 1,890,489; Dec. 13.
Baker, Nelson M., assignor to American Optical Company, Southbridge, Mass. Ophthalmic mounting. Des. 88,616; Dec. 13.
Baker, Nelson M., assignor to American Optical Company, Southbridge, Mass. Bridge for an ophthalmic mounting. Des. 88,617; Dec. 13.
Baker, Nelson M., assignor to American Optical Company, Southbridge, Mass. Ophthalmic mounting. Des. 88,618; Dec. 13.
Baker, Thomas T., Hatch End, Middlesex, assignor to Spicers Limited, London, England. Sound-record cinematograph film. 1,890,557; Dec. 13.
Balduf, Bruno E., Chicago, Ill. Sound insulating floor construction. 1,891,189; Dec. 13.
Ball, Charles F. (See Foster, A., jr., and Ball.)
Bankers Electric Protective Association. (See Flagg, Clarence L., assignor.)
Barkelew, James T., Pasadena, Calif., assignor to Paramount Publix Corporation, New York, N. Y. Film developing system. 1,890,490; Dec. 13.
Barnes, Frank J., Detroit, Mich. Coat and trousers press. 1,890,895; Dec. 13.
Barr, William, Philadelphia, Pa. Lockable regulating device. 1,890,896; Dec. 13.
Barros, Ramón, Cordova, Argentina. Automatic filler. 1,891,088; Dec. 13.
Barthel, Erich H., Darby, Pa., assignor to Aircraft Control Corporation. Indicating apparatus. 1,891,134; Dec. 13.
Bartholomew, Charles H. (See Simpson, L. E., and Bartholomew.)
Bartky, Walter, assignor to Wilson-Western Sporting Goods Company, Chicago, Ill. Ball. 1,890,566; Dec. 13.
Barton, Roger, Chicago, Ill. Radiant heat apparatus. 1,891,039; Dec. 13.
Bauer, Wilhelm, and J. Haller, Leverkusen-Wiesdorf, and G. Rösch, Cologne-Mulheim, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Vat dyestuff of the thionaphthene-indigoid series. 1,890,718; Dec. 13.
Baumberger, Ernst, and E. Heusser, assignors to Fabrik Electrischer Apparate Sprecher & Schuh, Aktien-Gesellschaft, Aarau, Switzerland. Time limit relay. 1,891,135; Dec. 13.
Baverey, François, assignor to Etablissements Lyonnais Rochet-Schneider, Lyon, France. Internal combustion engine feeding arrangement. 1,890,567; Dec. 13.
Baylis, Robert N., Caldwell, assignor to Smokador Manufacturing Co., Inc., Bloomfield, N. J. Smoker's stand. Des. 88,619; Dec. 13.
Beach, Henry L., New York, N. Y. Coaster. 1,891,077; Dec. 13.
Beale, Addison H. (See Aston, J., and Beale.)
Bebb, Harry T., assignor to The Canton Stamping & Enameling Company, Canton, Ohio. Continuous enamel ware manufacture. 1,890,897; Dec. 13.
Beck, Harvey W., and R. M. Bell, Danville, Pa. Single needle joining folder. 1,890,447; Dec. 13.
Beck, Morris B., New York, and J. D. Whittaker, Babylon, N. Y., assignors to Welsbach Street Lighting Company of America, Philadelphia, Pa. Street illumination. 1,891,136; Dec. 13.
Beck, Morris B., New York, and J. D. Whittaker, Babylon, N. Y., assignors to Welsbach Street Lighting Company of America, Philadelphia, Pa. Street illumination. 1,891,137; Dec. 13.
Beeh, Louis, and W. E. Schwarzmann, Longmeadow, assignors to United American Bosch Corporation, Springfield Mass. Flywheel magneto. 1,890,898; Dec. 13.
Bell, Robert M. (See Beck, H. W., and Bell.)
Bell Telephone Laboratories, Incorporated. (See Arnold, Henry B., assignor.)
Bell Telephone Laboratories, Incorporated. (See Bruce, Edmond, assignor.)
Bell Telephone Laboratories, Incorporated. (See Gent, Edgar W., assignor.)
Bell Telephone Laboratories, Incorporated. (See Marshall, Tola A., assignor.)
Belluche, Frank R., assignor to Christensen Machine Company, Racine, Wis. Bronzing machine. 1,890,666; Dec. 13.
Benn, Edward H., assignor to Rumbletop Corporation, Boston, Mass. Top for rumble seats of automobiles. 1,891,040; Dec. 13.
Bennett, Irving T., Brooklyn, N. Y., assignor, by mesne assignments, to American Radiator & Standard Sanitary Corporation. Heating apparatus. 1,890,667; Dec. 13.
Bennett, Reuel W., Indianapolis, Ind. Irodometer. 1,891,041; Dec. 13.
Benninghoff, William G., Cleveland Heights, Ohio. Boring bar for use upon pipe coupling blanks or the like. 1,890,452; Dec. 13.
Benoit, Joseph F., Wells, Me. Chicken feeder. 1,891,042; Dec. 13.
Berg, John T., Pequannock, N. J. Folding ironing board. 1,890,448; Dec. 13.
Bergen, William V., Hillsboro, and A. C. Shute, assignors to Niterday Signal Co., Portland, Oreg. Reflector and fastening therefor. 1,891,138; Dec. 13.
Bergius, Friedrich, F. Koch, and E. Faerber, assignors to the Firm Holzhydrolyse Aktiengesellschaft, Heidelberg, Germany. Consolidated lignin and producing the same. 1,890,491; Dec. 13.
Bernstein, Joseph, Chicago, Ill. Guard for gas stoves. 1,891,078; Dec. 13.
Berry, William, Passaic, N. J. Clip for tentering machines and the like. 1,890,449; Dec. 13.
Bertsch, Heinrich, assignor to H. Th. Böhme A.-G., Chemnitz, Germany. Improving the efficiency of refining baths of the textile art, the refining bath, and the process of refining textile material. 1,890,492; Dec. 13.
Bettendorf Company, The. (See Claser, Claus J. W., assignor.)
Bevier, Abram M., Duluth, Minn. Portable power unit. 1,890,927; Dec. 13.
Bigelow Sanford Carpet Co. (See Murphy, Francis, assignor.)
Bigelow Sanford Carpet Co. (See Smidlein, Anthony E., assignor.)
Bigelow Sanford Carpet Co. (See Travis, John S., assignor.)
Birkebak, Christian A. (See Alden, C. R., and Birkebak.)
Bishop, Howard M., Toronto, Ontario, Canada. Securing together slats, staves, or other sectional devices. 1,890,597; Dec. 13.
Black, Edward R., assignor to Black Systems, Inc., Chicago, Ill. Building covering. 1,890,928; Dec. 13.
Black, Joseph J., Akron, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y. Tire. Des. 88,620; Dec. 13.
Black, Joseph J., and C. F. Ofensend, Akron, Ohio, assignors to The B. F. Goodrich Company, New York, N. Y. Tire. Des. 88,621; Dec. 13.
Black Systems, Inc. (See Black, Edward R., assignor.)
Blackmore, James S., assignor to Automatic Gas Steam Radiator Company, Pittsburgh, Pa. Vent pipe. 1,890,930; Dec. 13.
Blair, Robert S., Stamford, Conn., assignor to Evans Case Company, North Attleboro, Mass. Lighter construction. 1,891,020; Dec. 13.
Blaisdell, Sidney B., Wyncote, assignor to Fidelity Machine Company, Philadelphia, Pa. Braided product and making the same. 1,891,211; Dec. 13.
Blakeslee, Henry J., Marlboro, assignor to The States Company, Hartford, Conn. Electrical terminal block. 1,891,212; Dec. 13.
Blaw-Knox Company. (See Venable, William M.)
Bleibler, Ernst, Winterthur, Switzerland, assignor to Sylvania Industrial Corporation, Fredericksburg, Va. Apparatus for drying webs, strips, films, or sheets as manufactured from cellulose products. 1,890,568; Dec. 13.
Bloomsburg Silk Mill. (See Gentile, Robert, assignor.)
Board of Trustees of Leland Stanford Junior University, The. (See Hanslik, Paul J., assignor.)
Boeye, Paul F., assignor to Waldorf Paper Products Company, St. Paul, Minn. Box. 1,890,965; Dec. 13.
Böhme, H. Th., A.-G. (See Bertsch, Heinrich, assignor.)
Bonsiakos, Michael N., San Francisco, Calif. Washing machine. 1,890,493; Dec. 13.
Borden, Perry A., assignor to The Bristol Company, Waterbury, Conn. Valve device. 1,890,494; Dec. 13.
Bordman, Morris, Philadelphia, Pa. Packaged antimoth cake and deodorant. Des. 88,622; Dec. 13.
Borgeson, Sidney E., Rome, assignor to General Cable Corporation, New York, N. Y. Apparatus for serving stranded material. 1,890,929; Dec. 13.
Boss, Edward. (See Wood, A. A., and Boss.)
Boston Gear Works, Inc. (See Johnson, Karl E., assignor.)
Bouwers, Albert, assignor to N. V. Phillips' Gloeilampenfabrieken, Eindhoven, Netherlands. Portable high tension transformer. 1,891,139; Dec. 13.
Bowman, Frederic C., assignor to A. R. Maas Chemical Co., Los Angeles, Calif. Trisodium phosphate-sodium nitrate. 1,890,453; Dec. 13.
Boyer, Frederick G. L., Dayton, Ohio. Transfer machine. 1,890,598; Dec. 13.
Bradford, Gustavus A., Bemidji, Minn. Lens for line casting machines. 1,890,638; Dec. 13.
Bradley, Theodore F., Westfield, N. J., assignor to American Cyanamid Company, New York, N. Y. Polyhydric alcohol-polybasic acid resin. 1,890,668; Dec. 13.
Brearley, Walter E. (See Sutton, William V., assignor.)
Brewer, Alice L., East Hartford, Conn. Pad holder. 1,890,840; Dec. 13.
Bridgeman, Frank J., assignor to The Lake Erie Chemical Company, Cleveland, Ohio. Gun. 1,890,669; Dec. 13.

Bridgeman, Frank J., assignor to The Lake Erie Chemical Company, Cleveland, Ohio. Mechanical gas gun protective system. 1,890,670; Dec. 13.
Bridgeman, Frank J., assignor to The Lake Erie Chemical Company, Cleveland, Ohio. Foot control for mechanically operated gas and smoke discharge systems for daylight holdup robberies. 1,890,671; Dec. 13.
Bridier, Fernand, Paris, France. Textile fabric or similar article. Des. 88,625; Dec. 13.
Bridier, Fernand, Paris, France, assignor to William Wilhelm Co., Inc., New York, N. Y. Textile fabric or similar article. Des. 88,623; Dec. 13.
Bridier, Fernand, Paris, France, assignor to William Wilhelm Co., Inc., New York, N. Y. Textile fabric or similar article. Des. 88,624; Dec. 13.
Bridier, Fernand, Paris, France, assignor to William Wilhelm Co., Inc., New York, N. Y. Textile fabric or similar article. Des. 88,626; Dec. 13.
Bright Star Battery Company. (See Koretzky, H., Horowits, and Desimone, assignors.)
Briner, Emil A., East Orange, N. J. Aircraft and method of flight. 1,890,931; Dec. 13.
Briner, Emil A., East Orange, N. J. Variable-pitch propeller. 1,890,932; Dec. 13.
Bristol Company, The. (See Borden, Perry A., assignor.)
British Insulated Cables Limited. (See Bullock, Thomas W., assignor.)
Brown Company. (See Richter, George A., assignor.)
Brown, Francis L., et al. (See Dalgliesh, Herbert V., assignor.)
Brown, George H., Willow Grove, Pa. Hat holder. 1,890,559; Dec. 13.
Brown Instrument Company. (See Harrison, Thomas R., assignor.)
Brown, Richard D., Olean, N. Y. Knife and flash light. 1,890,841; Dec. 13.
Brownlee, Dalmar T. (See Drexler, C., and Brownlee.)
Bruce, Edmond, Red Band, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Automatic gain control. 1,890,454; Dec. 13.
Bruning, Clarence A., Colfax, Wash. Floral rack or similar article. Des. 88,627; Dec. 13.
Buck, Dewitt. (See Williams, Joah F., assignor.)
Bull, Arthur A., and W. A. Wood, assignors to Handy Governor Corporation, Detroit, Mich. Electric switch. 1,890,842; Dec. 13.
Bullis, John R., Silver Spring, Md. Shoring. 1,890,966; Dec. 13.
Bullock, Thomas W., Rainhill, assignor to British Insulated Cables Limited, Prescot, England. Foundry molding machine of roll-over type. 1,890,933; Dec. 13.
Bur, Philip W., assignor to Proctor & Schwartz, Incorporated, Philadelphia, Pa. Conveyer. 1,891,140; Dec. 13.
Burdotti, Paul, New York, N. Y. Metal shoe. 1,891,021; Dec. 13.
Burke, Charles E., assignor to E. I. du Pont de Nemours & Company, Wilmington, Del. Coating composition. 1,890,769; Dec. 13.
Burkheiser, Adam C., assignor to The Standard Computing Scale Company, Detroit, Mich. Scale. 1,890,569; Dec. 13.
Burn, Lewis, Longparish, assignor of one-half to Thompson Brothers, (Bilston) Limited, Bilston, Staffordshire, England. Rotary pump and the like. 1,890,560; Dec. 13.
Burnham, Richard W. (See Pasternack, R., and Burnham.)
Burrows, Sidney V. (See Harding, W. H., and Burrows.)
Busby, Junius E., Jackson, assignor of one-half to B. Coomer, Beattyville, Ky. Device for facilitating the breaking of metallic rails. 1,890,843; Dec. 13.
Busch, Vern W., South Bend, Ind. Horn. 1,890,719; Dec. 13.
Byers, A. M., Company. (See Aston, J., and Beale, assignors.)
Byers, A. M., Company. (See Wille, Fredrik H., assignor.)
Cabell, Martha O., San Diego, Calif. Doll. Des. 88,628; Dec. 13.
Canaday, Miron S., Rochester, Minn., assignor to Reid, Murdock & Co., Chicago, Ill. Table. 1,890,967; Dec. 13.
Canton Stamping & Enameling Company, The. (See Bebb, Harry T., assignor.)
Capek, Alois, and F. Van den Broecke, Antwerp, Belgium, assignors to Western Electric Company, Incorporated, New York, N. Y. Telephone system. 1,890,899; Dec. 13.
Capezio, Salvatore, East Paterson, N. J. Ballet slipper or toe shoe and making the same. 1,891,022; Dec. 13.
Capital Machine Company. (See Koss, Louis F., jr., assignor.)
Carlson, Raymond A., assignor to Rockford Drilling Machine Company, Rockford, Ill. Hydraulically operated machine tool. 1,890,495; Dec. 13.
Carmichael, Delia, Woodside, N. Y. Textile fabric or the like. Des. 88,629; Dec. 13.
Carson, George C., Los Angeles, Calif. Producing sulphates from mixed sulphide materials and the recovery of values therefrom. 1,890,934; Dec. 13.
Carter, Edward B., Lexington, Mass. Heel mold. 1,890,968; Dec. 13.
Caruthers, Paul R., trustee. (See Amsler, Walter O., assignor.)
Cash, A. W., Company. (See Temple, Paul C., assignor.)
Cash, Claude C., New York, N. Y., assignor to American Telephone and Telegraph Company. Telephone circuit. 1,890,561; Dec. 13.
Celanese Corporation of America. (See Ellis, G. H., and Olpin, assignors.)
Central Scientific Company. (See Dubrovin, John, assignor.)
Central Scientific Company. (See Klopsteg, Paul E., assignor.)
Chain Belt Company. (See Foster, A., jr., and Ball, assignors.)
Chamberlain Laboratories, Inc. (See de Vaulchier, Simon, assignor.)
Chaney, Newcomb K., Lakewood, Ohio, assignor to National Carbon Co., Inc. Treating water. 1,890,969; Dec. 13.
Chemische Fabrik von Heyden, A. G. (See Feibelmann, Richard, assignor.)
Chemische Fabrik von Heyden, A. G. (See von Hoesslé, C. H., and Schade, assignors.)
Chenault, Roy L., assignor to Gulf Production Company, Pittsburgh, Pa. Pneumatic pumping apparatus. 1,890,720; Dec. 13.
Cheney Brothers. (See George, Robert, assignor.)
Chicago Pneumatic Tool Company. (See Reed, Clarence E., assignor.)
Chittick, Martin B., assignor to The Pure Oil Company, Chicago, Ill. Varnish and paint oil manufacture. 1,891,079; Dec. 13.
Christ, Bruno. (See Schumann, C., Muench, and Christ.)
Christensen Machine Company. (See Belluche, Frank R., assignor.)
Christie, Howard E., and K. W. Couse, Bronx, N. Y. Indicator for cooling systems of automobiles. 1,890,900; Dec. 13.
Christie, Howard E., and K. W. Couse, Bronx, N. Y. Compensating hydrometer float. 1,890,901; Dec. 13.
Clark, Stuart B. (See Daniel, E. E., Haughton, and Clark.)
Clasen, Claus J. W., Davenport, assignor to The Bettendorf Company, Bettendorf, Iowa. Railway side frame. Re18,690; Dec. 13.
Click, Walter E. (See Good, J. L., and Click.)
Clifford, Albert M., assignor to The Goodyear Tire & Rubber Company, Akron, Ohio. Manufacturing mercaptobenzothiazole. 1,891,198; Dec. 13.
Cloutier, Arthur N. (See Lawson, R. H., and Cloutier.)
Clute, Harvey D., Rocky Ford, Colo. Elevator. 1,890,562; Dec. 13.
Cobb, James F., Portland, Oreg. Dry kiln. 1,891,060; Dec. 13.
Cobello, Joseph F., assignor of one-third to Albert H. Friedman, one-third to Norman Friedman, and one-third to Joseph F. Cobello, Philadelphia, Pa. Applicator for collapsible reservoirs. 1,890,599; Dec. 13.
Coco, Joseph, Ozone Park, N. Y. Door saddle. 1,890,672; Dec. 13.
Coe, George B., Waterbury, Conn., assignor to Tube Reducing Corporation, Wilmington, Del. Method and apparatus for working metal. 1,890,803; Dec. 13.
Cohan, Morris J., Brooklyn, assignor to Reliance Specialties Mfg. Co., Inc., New York, N. Y. Container for moving advertising signs and the like. 1,890,600; Dec. 13.
Coley, Samuel G. (See Flory, H. G., and Coley.)
Combe, Louis J., Los Angeles, Calif. Testing device. 1,891,141; Dec. 13.
Combler & Co. Inc. (See Megros, Georges, assignor.)
Commercial Shearing & Stamping Company, The. (See Proctor, Robert V., assignor.)
Consolidated Ashcroft Hancock Company. (See Allen, Chauncey D., assignor.)
Consorti, John, assignor of sixty one-hundredths to L. Gordon, Brooklyn, N. Y. Laundry apparatus. 1,890,455; Dec. 13.
Continental Motors Corporation. (See Wolfe, H. M., and Nichol, assignors.)
Convertible Duplex Die Corporation, The. (See McTague, Edward V., assignor.)
Conway, Edith J. (See Morrison, Vandolah, assignor.)
Coomer, Bradley. (See Busby, Junius E., assignor.)
Copeland & Thompson, Incorporated. (See Thompson, Sidney E., assignor.)
Coplen, Clarence W. (See Coplen, Millicent V. and C. W., and Majors.)
Coplen, Millicent V. and C. W., Nine Mile Falls, and W. B. Majors, Spokane, Wash. Game apparatus. 1,890,770; Dec. 13.
Copony Auto Loading Company et al. (See Stipes, R. W., and Hoose, assignors.)
Corradino, Ernesto, New York, N. Y. Mechanical floating device. 1,890,970; Dec. 13.
Cottrell, C. B., & Sons Company. (See Cundall, Constant T., assignor.)
Coupland, Richard C., U. S. Army, Norfolk, Va. Ammunition feed box. 1,890,639; Dec. 13.
Courtaulds Limited. (See Diamond, Claude, assignor.)
Couse, Kibbey W. (See Christie, H. E., and Couse.)
Cox, Adam M., assignor to Lynchburg Hosiery Mills, Lynchburg, Va. Knitting machine. 1,891,023; Dec. 13.
Cox, Claude E., Detroit, Mich. Internal combustion indicator. 1,890,601; Dec. 13.
Crane Co. (See LeDuc, Fred C., assignor.)
Creagmile, John C., Berkeley, and F. H. Reiman, San Francisco, Calif. Camber correcting device. 1,890,935; Dec. 13.

Creveling, John L., Oracle, Ariz. Appliance for automobiles. 1,890,496; Dec. 13.

Cruger, Harold, Ridgewood, N. J. Textile fabric or the like. Des. 88,630; Dec. 13.

Cruger, Harold, Ridgewood, N. J. Textile fabric or the like. Des. 88,631; Dec. 13.

Cruger, Harold, Ridgewood, N. J. Textile fabric or the like. Des. 88,632; Dec. 13.

Cruger, Harold, Ridgewood, N. J. Textile fabric or the like. Des. 88,633; Dec. 13.

Cruger, Harold, Ridgewood, N. J. Textile fabric or the like. Des. 88,634; Dec. 13.

Cruger, Harold, Ridgewood, N. J. Textile fabric or the like. Des. 88,635; Dec. 13.

Cundall, Constant T., Pawcatuck, Conn., assignor to C. B. Cottrell & Sons Company, Westerly, R. I. Signature folding machine. 1,890,971; Dec. 13.

Curo Process Company. (See Lerch, William B., assignor.)

Currier, Hiram D., assignor to Kellogg Switchboard and Supply Company, Chicago, Ill. Tuning apparatus. 1,890,721; Dec. 13.

Cushman, H. T., Mfg. Co. (See Cushman, William C. H., assignor.)

Cushman, William C. H., assignor to H. T. Cushman Mfg. Co., North Bennington, Vt. Article of furniture. 1,890,456; Dec. 13.

Daimler-Benz Aktiengesellschaft. (See Porsche, Ferdinand, assignor.)

Dalgliesh, Herbert V., deceased, Atlanta, Ga.; S. A. Love, administrator of said H. V. Dalgliesh, assignor of one-half to F. L. Browne and N. J. Jewett, Washington, D. C. Apparatus for affecting the physical condition of gases. 1,890,497; Dec. 13.

Daniel, Robert E., and R. K. Haughton, Birmingham, Ala., and S. B. Clark, Riverton, assignors to United States Pipe and Foundry Company, Burlington, N. J. Runway for pipes. 1,890,498; Dec. 13.

Danziger, Harold I., New York, N. Y. Electrical condenser and making same. 1,891,080; Dec. 13.

Davies, Charles, New York, N. Y. Filter. 1,890,499; Dec. 13.

Davis, Charles H., Dayton, Ohio. Necktie. 1,890,722; Dec. 13.

Davis, Durrell H., assignor to Highway Trailer Company, Edgerton, Wis. Jack for semitrailer. 1,890,972; Dec. 13.

Davis, Ernest, assignor to The Prosperity Company Inc., Syracuse, N. Y. Automatic pressure control mechanism for fluid motors. 1,890,673; Dec. 13.

Davis, Merrill, Detroit, Mich. Refrigerating machine. 1,890,457; Dec. 13.

Davis, Robert H., London, England. Diving apparatus. 1,890,570; Dec. 13.

Dean, Le Roy L., Longview, Tex. Excavating mechanism. 1,891,142; Dec. 13.

De Boer, Jan. H. (See van Arkel, A. E., de Boer, and Koopman, assignors.)

De Ferranti, Sebastian Z., Hollinwood, England, assignor to Ferranti Inc., New York, N. Y. Induction electricity meter. 1,891,143; Dec. 13.

De Ferranti, Sebastian Z., Hollinwood, England, assignor to Ferranti Inc., New York, N. Y. Alternating current electricity meter. 1,891,144; Dec. 13.

Degener, Gustave O., San Francisco, Calif., assignor to Royal Typewriter Company, Inc., New York, N. Y. Manifolding device. 1,890,563; Dec. 13.

Dehuff, Walter F., Glen Rock, Pa. Equalizing tension device for variable speed drives. 1,890,500; Dec. 13.

Deisch, Noel, Washington, D. C. Method of and apparatus for sound recording and reproduction. 1,890,640; Dec. 13.

Delaney, Ada W. (See Delaney, J. H., assignor.)

Delaney, John H., assignor to A. W. Delaney, Los Angeles, Calif. Making wall covering. 1,890,674; Dec. 13.

Delaney, Thomas W., St. Paul, Minn. Integrated furnace control. 1,891,081; Dec. 13.

Delaval-Crow, Thomas C., assignor to The New Departure Manufacturing Company, Bristol, Conn. Shaft mounting and lubricator. 1,890,844; Dec. 13.

Dellert, Louis, New York, N. Y. Nested chair. 1,891,145; Dec. 13.

Delzer, William F., assignor to Western Specialty Company, Milwaukee, Wis. Soda fountain and ice cream cabinet. 1,890,641; Dec. 13.

Deseniss, Max, and Andreas Nielsen, assignor to New-York Hamburger Gummiwaaren Compagnie, Hamburg, Germany. Coating material. 1,890,723; Dec. 13.

Desimone, Anthony J. (See Koretsky, H., Horowtis, and Desimone.)

Detroit Aluminum & Brass Company. (See Fobert, Phillip J., assignor.)

Deutsche Gasglublicht-Auer-Gesellschaft m. b. H. (See Meyer, Hans, assignor.)

De Vaulchier, Simon, New York, N. Y., assignor to Chamberlain Laboratories, Inc., Des Moines, Iowa. Bottle. Des. 88,690; Dec. 13.

De Witt, William H., assignor of one-half to J. Glenn Marks, Los Angeles, Calif. Fire control for film utilizing machines. 1,890,804; Dec. 13.

Diamond, Claude, Leamington, assignor to Courtaulds Limited, London, England. Manufacture and production of artificial threads and filaments and products therefrom. 1,891,146; Dec. 13.

Di Bitetto, Carlo C. F., Paris, France. Convertible vehicle body. 1,890,501; Dec. 13.

Diels, Otto, and K. Alder, Kiel, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Hydro-aromatic ketones. 1,891,043; Dec. 13.

Divine, Bradford H., Utica, N. Y. Buffing wheel. 1,890,502; Dec. 13.

Dodge, Adiel Y., South Bend, Ind. Air compressor. 1,891,083; Dec. 13.

Dodson, Edward, Streatham, London, England. Fuel injection device for internal combustion engines. 1,891,082; Dec. 13.

Doerr, Justin J. (See Doerr, Louis J. and J. J.)

Doerr, Louis J. and J. J., assignors of four-fifths to Louis J. Doerr Motor Works Company, St. Louis, Mo. Cylinder grinding and honing machine. 1,890,675; Dec. 13.

Doerr, Louis J., Motor Works Company. (See Doerr, Louis J. and J. J., assignors.)

Donaldson Manufacturing Company. (See Hadden, William J., assignor.)

Doughnut Machine Corporation. (See Hunter, Herbert T., assignor.)

Douglas Aircraft Company. (See Douglas, Donald W., assignor.)

Douglas, Donald W., assignor to Douglas Aircraft Company, Inc., Santa Monica, Calif. Amphibian air vehicle. 1,890,902; Dec. 13.

Douglass, Henry J., San Francisco, Calif. Forming flanged can ends with curled edges. 1,890,986; Dec. 13.

Dowd, Barnard J., West Hartford, Conn., assignor to Royal Typewriter Company, New York, N. Y. Typewriting machine. 1,890,564; Dec. 13.

Dowling, Philip H., assignor to The Union Switch & Signal Company, Swissvale, Pa. Electrical translating apparatus. 1,891,044; Dec. 13.

Drexler, Charles, and D. T. Brownlee, assignors to L. G. S. Devices Corporation, Indianapolis, Ind. Anti-reverse brake mechanism. 1,890,973; Dec. 13.

Drummond, Donald W., New Rochelle, assignor to Solid Carbonic Company, Ltd., New York, N. Y. Transportation and display package and methods. 1,890,771; Dec. 13.

Dubbs, Carbon P., Wilmette, assignor to Universal Oil Products Company, Chicago, Ill. Converting hydrocarbons. 1,890,974; Dec. 13.

Dubbs, Carbon P., Wilmette, assignor to Universal Oil Products Company, Chicago, Ill. Treating hydrocarbons. 1,891,199; Dec. 13.

Dubrovin, John, assignor to Central Scientific Company, Chicago, Ill. Pump. 1,890,571; Dec. 13.

Dubrovin, John, Chicago, Ill., assignor to Central Scientific Company. Pump. 1,890,572; Dec. 13.

Dubrovin, John, Chicago, Ill., assignor to Central Scientific Company. Vacuum pump. 1,890,573; Dec. 13.

Dubrovin, John, assignor to Central Scientific Company, Chicago, Ill. Vacuum pump. 1,890,574; Dec. 13.

Dubus, Gustave R., Mobile, Ala. Collapsible winder shaft. 1,891,147; Dec. 13.

Duncan, Robert D., jr., East Orange, N. J., assignor to Wired Radio, Inc., New York, N. Y. System of electrical distribution. 1,891,190; Dec. 13.

Dunham, Franklin, Brooklyn, N. Y., assignor to Radio Corporation of America. Practice keyboard and producing the same. 1,890,724; Dec. 13.

Dunham, George W., assignor, by mesne assignments, to The Whiridry Corporation, New Haven, Conn. Gearing. 1,890,602; Dec. 13.

Dunlop Rubber Company Limited. (See Hayes, C., Madge, and Jennings, assignors.)

Du Pont, E. I., de Nemours & Company. (See Asire, H. W., Perkins, and Martin, assignors.)

Du Pont, E. I., de Nemours & Company. (See Burke, Charles E., assignor.)

Du Pont, E. I., de Nemours & Company. (See Dykstra, Harry B., assignor.)

Du Pont, E. I., de Nemours & Company. (See Engelmann, Max, assignor.)

Durand, Arthur F., Ravinia, Ill., assignor to Saranac Machine Company, Benton Harbor, Mich. Basket and construction thereof. 1,890,534; Dec. 13.

Dykstra, Harry B., Wilmington, Del., assignor to E. I. du Pont de Nemours & Company. Chlorination of meta styrene. 1,890,772; Dec. 13.

Dziedsic, Nickolas J., assignor to Swift and Company, Chicago, Ill. Food press. 1,890,458; Dec. 13.

Eastern Finishing Works. (See Adams, William H., assignor.)

Eaton, Harrison H., assignor to The Electric Auto-Lite Company, Toledo, Ohio. Coil retaining means. 1,891,200; Dec. 13.

Ebling, Walter E., New York, assignor to E. P. Reed & Company, Rochester, N. Y. Shoe. Des. 88,636; Dec. 13.

Echols, Luther H., Lexington, Ky. Eyeglass lens fastening. 1,890,725; Dec. 13.

Eckert, Wilhelm, and H. Sieber, Frankfort-on-the-Main-Hochst, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Halogenation product of the ketimides of acenaphth-peri-indandione and its derivatives. 1,891,148; Dec. 13.

Eclipse Machine Company. (See McGrath, William L., assignor.)

Edmonds, George P., assignor to G & W Electric Specialty Co., Chicago, Ill. Pothead device. 1,891,213; Dec. 13.

Edwards, James M., Chicago, Ill. Coffee roaster. 1,890,642; Dec. 13.

Egler, Niklas F., Monessen, Pa. Open-hearth furnace. 1,890,805; Dec. 13.

Ehling, Reuben W., et al. (See Scott, William E., assignor.)

Ehlinger, Marcel, assignor to Societe Alsacienne de Constructions Mecaniques, Mulhouse, France. Feed water regulator for boilers and the like. 1,890,575; Dec. 13.

Ehrman, Clarence D., Petersburg, Va. Ash tray. Des. 88,637; Dec. 13.

Eibl, Franz, Pinow, Germany, assignor to Ajax Electrothermic Corporation, Ajax Park, N. J. Induction electric furnace construction. 1,890,773; Dec. 13.

Eisele, Julius. (See Ambros, O., Reindel, Eisele, and Stoehrel.)

Eisler Electric Corporation. (See Laise, Clemens A., assignor.)

Electric Auto-Lite Company, The. (See Eaton, Harrison H., assignor.)

Electrical Products Associates. (See Joost, William E., assignor.)

Elger, Franz, Basel, Switzerland, assignor to Hoffman-LaRoche Inc., Nutley, N. J. Manufacture of protocatechuic aldehyde and its substitution products. 1,891,149; Dec. 13.

Elkonin, Aaron, San Pedro, Calif. Clock face. Des. 88,638; Dec. 13.

Ellis, George H., and H. C. Olpin, Spondon, near Derby, England, assignors to Celanese Corporation of America. Manufacture or treatment of textile or other material. 1,890,643; Dec. 13.

Elston, William H., Marietta, Ohio. Nail bin. 1,890,845; Dec. 13.

Engelmann, Max, assignor to E. I. du Pont de Nemours & Company, Wilmington, Del. Making dust disinfectants. 1,890,774; Dec. 13.

Enos, Alexander, New York, N. Y. Click lock. 1,890,806; Dec. 13.

Eppler, Andrew, Lynn, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Machine for use in the manufacture of shoes. 1,890,644; Dec. 13.

Erber, Arnold. (See Arnold, S. M., and Erber.)

Erdahl, Nicholai M., assignor to Highway Trailer Company, Edgerton, Wis. Tie-member linkage for crawler tractors. 1,890,975; Dec. 13.

Erickson, Edward S., Salem, Ohio, assignor to The International Nickel Company, Inc., New York, N. Y. Adjustable bracket for sinks. 1,890,937; Dec. 13.

Erickson, Oscar G., Detroit, Mich. Slide valve for engines. 1,890,976; Dec. 13.

Ericsson, John E. (See Lindgren, Waldemar L., assignor.)

Ern, Carl F., Solingen-Wald, Germany. Safety device for razor blades. 1,890,535; Dec. 13.

Etablissements Lyonnais Rochet-Schneider. (See Baverey, Francois, assignor.)

Euclid Road Machinery Company. (See Armington, Arthur P., assignor.)

Eustis, J. P., Manufacturing Company. (See Keefe, Thomas M., assignor.)

Evans, Auto Loading Co. Inc., The. (See Snyder, Clifford L., assignor.)

Evans Auto Loading Company, The, et al. (See Stipes, R. W., and Hoose, assignors.)

Evans Case Company. (See Blair, Robert S., assignor.)

Ex-Cell-O Aircraft & Tool Corporation. (See Alden, Carroll R., assignor.)

Ex-Cell-O Aircraft and Tool Corporation. (See Alden, C. R., and Birkebak, assignors.)

Excelsior Hardware Co., The. (See Komenak, Albert J., assignor.)

Faber, Arthur L., Pine Bluff, Ark. Method of and apparatus for pumping wells. 1,890,807; Dec. 13.

Fabric Electrischer Apparate Sprecher & Schuh, Aktien-Gesellschaft. (See Baumberger, E., and Heusser, assignors.)

Faerber, Eduard. (See Bergius, F., Koch, and Faerber.)

Fabrney, Emery H., Chicago, Ill. Protecting the propellers and rudders of boats. 1,890,938; Dec. 13.

Fabrney, Emery H., Chicago, Ill. Supporting rack structure. 1,890,939; Dec. 13.

Fairfield Manufacturing Company, The. (See Ross, David E., assignor.)

Faith, Stephen, Chicago, Ill. Vehicle ornament. Des. 88,639; Dec. 13.

Falk, Morris, Leominster, assignor to Independent Lock Co., Fitchburg, Mass. Lock. 1,891,214; Dec. 13.

Fancher, Howard M., assignor to The Rochester Folding Box Co., Rochester, N. Y. Toy cabinet. 1,890,846; Dec. 13.

Farnham, Paul O., Boonton, N. J., assignor to Radio Corporation of America. Tunable dynatron amplifier. 1,890,503; Dec. 13.

Farren, William R., Tamaqua, Pa., assignor to Atlas Powder Company, Wilmington, Del. Water-tight explosive cartridge. 1,890,726; Dec. 13.

Fear, Harry E., Lakewood, assignor to New Castle Refractories Company, New Castle, Pa. Kiln car superstructure. 1,890,978; Dec. 13.

Federal Laboratories, Inc. (See Reynolds, Robert B., assignor.)

Feibelmann, Richard, assignor to Chemische Fabrik von Heyden, A. G., Radebeul, near Dresden, Germany. Composition of bleaching agents. 1,890,603; Dec. 13.

Fellows, Homer F., Springfield, Mo. Vehicle bolster center bearing. 1,890,576; Dec. 13.

Fennone, William, San Francisco, Calif. Press blanket. 1,891,150; Dec. 13.

Ferguson Brothers Manufacturing Company. (See Hanley, William, assignor.)

Ferguson, Harley B., jr., Norfolk, Va. Playing card. 1,890,504; Dec. 13.

Ferranti Inc. (See De Ferranti, Sebastian Z.)

Ferranti Inc. (See Porter, Graham L., assignor.)

Ferrettle, Conrad. (See Van Dinter, G. L., and Ferrettle.)

Ferris, Eugene C., et al., executors. (See Ferris, Henry L.)

Ferris, Henry L., deceased; H. J. and E. C. Ferris, executors, assignors to Starline, Inc., Harvard, Ill. Grapple fork. 1,890,979; Dec. 13.

Ferris, Henry L., deceased; H. J. and E. C. Ferris, executors, assignors to Starline, Inc., Harvard, Ill. Animal stall. 1,890,980; Dec. 13.

Ferris, Howard J., et al., executors. (See Ferris, Henry L.)

Fidelity Machine Company. (See Blaisdell, Sidney B., assignor.)

Fielding, Edgar C., Walsall, England. Sand molding machine. 1,890,808; Dec. 13.

Finkl, A. & Sons Company. (See Finkl, Fred, assignor.)

Finkl, A. & Sons Company. (See Lane, Aubrey E., assignor.)

Finkl, Fred, assignor to A. Finkl & Sons Company, Chicago, Ill. Forged dipper tooth. 1,890,981; Dec. 13.

Fisher, Harry L., Akron, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y. Heat plastic composition and making same. 1,890,903; Dec. 13.

Fits Gerald, Alan S., Wynnewood, Pa., assignor to General Electric Company. Electric power converting apparatus. 1,891,084; Dec. 13.

Flagg, Clarence L., Atlantic, assignor to Bankers Electric Protective Association, Boston, Mass. Night vault. 1,890,941; Dec. 13.

Flake, Eugene A., Marshall, Mo. Glare shield. 1,890,577; Dec. 13.

Flanders, George S., and M. A. ap Rhys Pryce, Maracaibo, Venezuela, assignors to Naamloose Vennootschap de Bataafsche Petroleum Maatschappij, The Hague, Netherlands. Flow beam. 1,890,536; Dec. 13.

Florang, Emil A., Burlington, Iowa. Cover for containers. 1,891,151; Dec. 13.

Florman, Irving, New York, N. Y. Card dealing device. 1,891,085; Dec. 13.

Flory, Harry G., and S. G. Coley, Luton, assignors to George Kent, Limited, London, England. Valve. 1,890,847; Dec. 13.

Fluck, Richard, Berlin, and A. Theil, Berlin-Schmargendorf, assignors to Wilhelm von Radowitz, Berlin, Germany. Making fertiliser from feces or the like. 1,890,459; Dec. 13.

Fobert, Phillip J., assignor to Detroit Aluminum & Brass Company, Detroit, Mich. Bearing dividing machine. 1,890,848; Dec. 13.

Forbes, John S., assignor to Kerotest Manufacturing Company, Pittsburgh, Pa. Valve. 1,890,505; Dec. 13.

Forman, Paris B., Rahway, N. J., assignor to National Pneumatic Company, New York, N. Y. Sensitive door edge switch. 1,890,809; Dec. 13.

Forstner Chain Corporation. (See Schoeninger, Adolf, assignor.)

Foster, Alexander, jr., Philadelphia, Pa., and C. F. Ball, assignors to Chain Belt Company, Milwaukee, Wis. Discharge and distributing mechanism for concrete mixers. 1,890,982; Dec. 13.

Fournier, Aimé B., assignor to Union d'Electricite, Paris, France. Instantaneous selective protective arrangement for direct current networks. 1,890,775; Dec. 13.

Fox, Charles H., assignor to The Ahrens-Fox Fire Engine Company, Cincinnati, Ohio. Fire engine. 1,890,940; Dec. 13.

Fox, John L., Sonoma, Calif. Fruit trimming and slicing apparatus. 1,890,676; Dec. 13.

Frambach, Ralph W., Maplewood, N. J. Textile fabric or the like. Des. 88,640; Dec. 13.

Frambach, Ralph W., Maplewood, N. J. Textile fabric or the like. Des. 88,641; Dec. 13.

Frank, Armin, Ilberstedt, Germany. Hoe. 1,890,537; Dec. 13.

Frank, Earl L., and J. D. Kibbey, International Falls, Minn. Self-sharpening knife. 1,890,506; Dec. 13.

Fränkl, Mathias, Augsburg, Germany, assignor to American Oxythermic Corporation, New York, N. Y. Separation of gas-mixtures especially of air. 1,890,646; Dec. 13.

Fraser, Hugh D. (See Anderson, W. T., jr., and Fraser.)

Frease, Hurxthal F., Canton, Ohio. Joist and tile construction for floors and the like. 1,891,086; Dec. 13.

Freeman, Benjamin W., Cincinnati, Ohio, W. S. Herschel, St. Louis, Mo., and H. E. Patterson, Columbus, assignors to The Louis G. Freeman Company, Cincinnati, Ohio. Marking and cementing shoes. 1,891,087; Dec. 13.

Freeman, Louis G., Company, The. (See Freeman, B. W., Herschel, and Patterson, assignors.)

Freygang, Walter H., Weehawken, N. J., assignor to Walter Kidde & Company. Safety disk cutter. 1,891,045; Dec. 13.

Friden, Carl M. F., Oakland, assignor to Marchant Calculating Machine Company, Emeryville, Calif. Calculating machine. 1,890,776; Dec. 13.
Fried. Krupp Grunsonwerk Aktiengesellschaft. (See Ullrich, Georg, assignor.)
Friedman, Albert H., et al. (See Cobello, Joseph F., assignor.)
Friedman, Norman, et al. (See Cobello, Joseph F., assignor.)
Friend, Edward K., Jamaica Plain, Mass. Direction indicating device. 1,890,677; Dec. 13.
Friend, Robert O., and J. A. Montgomery, Chicago, Ill. Water treating device. 1,891,061; Dec. 13.
Frigidaire Corporation. (See Andrews, Frank W., assignor.)
Fuchs, Frits E., Maplewood, N. J., assignor to Samuel J. Singer, New York, N. Y. Use of pine oil in emulsion breakers. 1,890,849; Dec. 13.
Fundom, Earl H., Kenton, assignor, by mesne assignments, to The Marion Steam Shovel Company, Marion, Ohio. Excavator construction. 1,890,727; Dec. 13.
Fundom, Earl H., Kenton, assignor, by mesne assignments, to The Marion Steam Shovel Company, Marion, Ohio. Power excavator. 1,890,728; Dec. 13.
G & W Electric Specialty Co. (See Edmonds, George P., assignor.)
Gammeter, John R., Akron, Ohio. Mold filling machine. 1,891,088; Dec. 13.
Ganson, Jesse L., Wallace, Kans. Foldable stand for musical instruments. 1,890,729; Dec. 13.
Garton, Joseph G., New York, N. Y. Refreshment wagon. Des. 88,642; Dec. 13.
Gast, Ernest A., Cincinnati, Ohio. Attachment for lawn mowers. 1,890,810; Dec. 13.
Gast, Ernest A., Cincinnati, Ohio. Lawn trimming device. 1,890,811; Dec. 13.
Gates, Frederic P., West Hartford, assignor, by mesne assignments, to The Arrow-Hart & Hegeman Electric Company, Hartford, Conn. Plug receptacle. 1,891,153; Dec. 13.
Gathmann, Emil, Baltimore, Md. Ingot mold. 1,890,777; Dec. 13.
Gebhard, Carl, Los Angeles, Calif. Temporary cap for cups, etc. 1,890,460; Dec. 13.
Geer, Paul L. (See Morton, W. A., and Geer.)
General Aniline Works, Inc. (See Bauer, W., Haller, and Rösch, assignors.)
General Aniline Works, Inc. (See Eckert, W., and Sieber, assignors.)
General Aniline Works, Inc. (See Luettringhaus, A., Nereshelmer, and Schnejder, assignors.)
General Aniline Works, Inc. (See Schwenk, Erwin, assignor.)
General Aniline Works, Inc. (See Wollemann, Johannes, assignor.)
General Cable Corporation. (See Borgeson, Sidney E., assignor.)
General Cable Corporation. (See Potter, F. M., and Traxel, assignors.)
General Electric Company. (See Baker, Judd O., assignor.)
General Electric Company. (See Fits Gerald, Alan S., assignor.)
General Electric Company. (See Graf, Fritz, assignor.)
General Electric Company. (See Kraft, Hans, assignor.)
General Electric Company. (See Krauss, Walther, assignor.)
General Electric Company. (See LeCount, George E., assignor.)
General Electric Company. (See Marquis, Charles F., assignor.)
General Electric Company. (See Prince, David C., assignor.)
General Electric Company. (See Sabbah, Camil A., assignor.)
General Electric Company. (See Trencham, H., and Heath, assignors.)
General Electric Company. (See Tyrrell, Laurance E., assignor.)
General Electric Company. (See Winter, William F., jr., assignor.)
General Motors Corporation. (See Hutchinson, Philip H., assignor.)
General Motors Corporation. (See Young, Otto W., assignor.)
Gent, Edgar W., Morristown, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Translating device. 1,890,904; Dec. 13.
Gentile, Robert, assignor to Bloomsburg Silk Mill, New York, N. Y. Textile fabric. Des. 88,643; Dec. 13.
George, Robert, Paris, France, assignor to Cheney Brothers, New York, N. Y. Textile fabric. Des. 88,644; Dec. 13.
George, Robert, Paris, France, assignor to Cheney Brothers, New York, N. Y. Textile fabric. Des. 88,645; Dec. 13.
German, Delmar L., Glen Elder, Kans. Poultry feeder. 1,890,778; Dec. 13.
Gesellschaft für Elektrische Apparate m. b. H. (See Vopel, J., and Oetker, assignors.)
Getas, James L., Maryville, Tenn., assignor to Scott & Williams, Incorporated, New York, N. Y. Circular knitting machine. 1,891,204; Dec. 13.
Getas, James L., Maryville, Tenn., assignor to Scott & Williams, Inc., New York, N. Y. Circular knitting machine. 1,891,215; Dec. 13.
Gettleman, Fredrick, Milwaukee, Wis. Snowplow. 1,891,046; Dec. 13.
Gibbons, Willis A., Montclair, N. J., assignor to The Naugatuck Chemical Company, Naugatuck, Conn. Modifying vulcanizable material and product. Re18,691; Dec. 13.
Gifford, Jane C., New York, N. Y. Bust supporter. 1,890,507; Dec. 13.
Gifford-Wood Company. (See Hallenbeck, Harold E., assignor.)
Ginsburg, Joseph M. (See Headlee, T. J., and Ginsburg.)
Glascodine, Richard T., London, England. Central buffing and draw gear. 1,890,779; Dec. 13.
Globe Automatic Sprinkler Company. (See Rowley, Arthur C., assignor.)
Godfrey Conveyor Co. (See Good, J. L., and Click, assignors.)
Goertz, August, & Co. Inc. (See Momm, Albert, assignor.)
Goldberg, David D., Chicago, Ill. Valve. 1,890,678; Dec. 13.
Gonsett, Robert R., Los Angeles, Calif. Pivot means for shears and the like. 1,890,850; Dec. 13.
Good, Jacob L., and W. E. Click, assignors to The Godfrey Conveyor Co., Elkhart, Ind. Automatic pit gate and operating means therefor. 1,890,905; Dec. 13.
Goodman, Herman E., Providence, R. I. Bottle package. 1,890,942; Dec. 13.
Goodman Manufacturing Company. (See Lindgren, Frank A., assignor.)
Goodrich, B. F., Company, The. (See Black, Joseph J., assignor.)
Goodrich, B. F., Company, The. (See Black, J. J., and Ofensend, assignors.)
Goodrich, B. F., Company, The. (See Fisher, Harry L., assignor.)
Goodrich, B. F., Company, The. (See Semon, Waldo L., assignor.)
Goodrich, B. F., Company, The. (See Winkelmann, Herbert A., assignor.)
Goodyear Tire & Rubber Company, The. (See Andrews, George G., assignor.)
Goodyear Tire & Rubber Company, The. (See Clifford, Albert M., assignor.)
Goodyear Tire & Rubber Company, The. (See Lewis, Warren K., assignor.)
Goodyear Tire & Rubber Company, The. (See Morse, Herman E., assignor.)
Goodyear Tire & Rubber Company, The. (See Shively, Jess A., assignor.)
Gordon, Louis. (See Consorti, John, assignor.)
Gottmanns, Karl, Hilden, Germany. Bearing. 1,890,604; Dec. 13.
Graf, Fritz, Annaberg, Germany, assignor to General Electric Company. Snap switch. 1,891,089; Dec. 13.
Graham, Frederick M., Hollidaysburg, and J. B. McWilliams, Pittsburgh, Pa. Rail lubricating device. 1,890,605; Dec. 13.
Grant, John. (See Santiago, James J., assignor.)
Gray, Percy, Jefferson, Iowa. Heating element structure and making the same. 1,890,780; Dec. 13.
Greene, Frank C., Milwaukee, Wis. Gas generator. 1,890,606; Dec. 13.
Greene, Frank C., Chicago, Ill. Apparatus for carbonizing coal and the like material. 1,890,661; Dec. 13.
Greene, Frank C., Oconomowoc, Wis. Heat treating material. 1,890,662; Dec. 13.
Griffith, Anna, administratrix. (See Griffith, William P.)
Griffith, William P., deceased; Anna Griffith, Minneapolis, Minn., administratrix. Metal folding crate. 1,890,983; Dec. 13.
Grove, Roy H., Vandergrift, Pa. Roll polishing rig. 1,891,152; Dec. 13.
Grulich, Anton, Glen Ridge, N. J., assignor to William Willheim Co., Inc., New York, N. Y. Textile fabric or similar article. Des. 88,646; Dec. 13.
Grulich, Anton, Glen Ridge, N. J., assignor to William Willheim Co., Inc., New York, N. Y. Textile fabric or similar article. Des. 88,647; Dec. 13.
Guastavino, Alberto M. (See Sueta, J., and Guastavino.)
Gulf Production Company. (See Chenault, Roy L., assignor.)
Gulick, Edward J., Elkhart, Ind. Engine lubricating device. 1,890,984; Dec. 13.
Gwaltney, Charles, Oklahoma City, Okla. Wall and partition stove. 1,891,047; Dec. 13.
Hacker Manufacturing Co. (See Trotter, Henry R., assignor.)
Hadden, William J., assignor to Donaldson Manufacturing Company Limited, Glasgow, Scotland. Shaft for golf clubs. 1,890,538; Dec. 13.
Hall, Louis M., Fort Thomas, Ky., assignor to The Monarch Tool & Manufacturing Company, Cincinnati, Ohio. Package opener. 1,891,090; Dec. 13.
Hall, Norman G. (See Hall, Wilbur G. and N. G.)
Hall, Wilbur G. and N. G., Port Angeles, Wash.; said said Norman G. Hall assignor to said Wilbur G. Hall. Pump jack. 1,890,781; Dec. 13.
Hallenbeck, Harold E., assignor to Gifford-Wood Company, Hudson, N. Y. Electrical control means for trolley buckets. 1,890,539; Dec. 13.
Hallenbeck, Harold E., assignor to Gifford-Wood Company, Hudson, N. Y. Traversing hoist. 1,890,679; Dec. 13.
Haller, Josef. (See Bauer, W., Haller, and Rösch.)

Hamblen, Jennings B., et al., trustees. (See Hamblen, J. B., and Kay, assignors.)
Hamblen, Jennings B., Whiting, Ind., and W. B. Kay, Chicago, Ill., assignors to J. B. Hamblen, H. V. Atwell, and W. B. Kay, trustees. Motor-efficiency-indicating device. 1,890,985; Dec. 13.
Hamburg Brothers. (See Hamburg, Elmer A., assignor.)
Hamburg, Elmer A., assignor to the Firm of Hamburg Brothers, Pittsburgh, Pa. Refrigerator equipment. 1,890,461; Dec. 13.
Hammond, Grant, assignor of one-eighth to H. P. Sage, and one-eighth to W. A. McLean, New Haven, Conn. Carburetor. 1,890,732; Dec. 13.
Handley, George F. (See Myers, L. C., and Handley.)
Handwerk, Otto T. (See Spitzglass, A. F., and Handwerk.)
Handy Governor Corporation. (See Bull, A. A., and Wood, assignors.)
Hanley, William, East Orange, assignor to Ferguson Brothers Manufacturing Company, Hoboken, N. J. Folding leg support for tables. 1,890,986; Dec. 13.
Hanovia Chemical and Manufacturing Company. (See Anderson, W. T., jr., and Fraser, assignors.)
Hansford, Walter H., Earlwood, near Sydney, New South Wales, Australia. Motor suspension spring rebound damper. 1,890,967; Dec. 13.
Hanson, Adolph M., Faribault, Minn., assignor to Parke, Davis & Company, Detroit, Mich. Extract of parathyroid gland and preparing the same. 1,890,851; Dec. 13.
Hanzlik, Paul J., San Mateo, Calif., assignor to The Board of Trustees of Leland Standford Junior University. Materials for treatment of neurosyphilis and manufacture. 1,890,508; Dec. 13.
Harase, Hansaburo, Los Angeles, Calif. Gas and vacuum tube electrode socket. 1,890,680; Dec. 13.
Harden, Ralph L., North Attleboro, assignor to The Mason Box Company, Attleboro Falls, Mass. Combination package. 1,890,988; Dec. 13.
Harding, William H., Flushing, N. Y., and S. V. Burrows, Boston, Mass., assignor to The Kalbfleisch Corporation, New York, N. Y. Resin size. 1,890,462; Dec. 13.
Harling, John W. (See Neese, William A., assignor.)
Harney, Francis W., assignor to The Upson Company, Lockport, N. Y. Insulating bat. 1,890,906; Dec. 13.
Harrison, Charles F. R., Norton-on-Tees, assignor to Imperial Chemical Industries Limited, London, England. Separation of gaseous and liquid products. 1,890,852; Dec. 13.
Harrison, Thomas R., assignor to The Brown Instrument Company, Philadelphia, Pa. Manometer. 1,891,154; Dec. 13.
Harrison, Thomas R., assignor to The Brown Instrument Company, Philadelphia, Pa. Metering. 1,891,155; Dec. 13.
Harrison, Thomas R., assignor to The Brown Instrument Company, Philadelphia, Pa. Manometer. 1,891,156; Dec. 13.
Harshberger, Russell P., Chicago, Ill. Safety razor. 1,890,647; Dec. 13.
Hart, Harry S., Barrington, Ill. Brake beam safety support. 1,890,989; Dec. 13.
Hartwell, Ralf L., Orange, assignor to Metal Textile Corporation, West Orange, N. J. Scouring device. 1,890,612; Dec. 13.
Haselton, Merton L., Rye, assignor, by mesne assignments, to The Teleregister Corporation, New York, N. Y. Electrical signaling. 1,890,876; Dec. 13.
Haselton, Merton L., Rye, assignor to The Teleregister Corporation, New York, N. Y. Electrical signaling. 1,890,877; Dec. 13.
Haselton, Merton L., Rye, N. Y., and P. S. Haselton, Montclair, N. J., assignors, by mesne assignments, to The Teleregister Corporation, New York, N. Y. Electrical indicating system. 1,890,878; Dec. 13.
Haselton, Page S. (See Haselton, Merton L. and P. S.)
Haughton, Richard K. (See Daniel, R. E., Haughton, and Clark.)
Hawkins, Orville J., assignor to Mueller Co., Decatur, Ill. Combined meter hanger and template. 1,890,540; Dec. 13.
Hawley, Luther W., New Rochelle, assignor to International Fire Equipment Corporation, West New Brighton, N. Y. Fire extinguisher. 1,890,541; Dec. 13.
Hayes, Cecil, S. Coldfield, E. W. Madge, and F. C. Jennings, Erdington, England, assignors to Dunlop Rubber Company Limited. Manufacture of goods of rubber or similar material. 1,890,578; Dec. 13.
Hayn, Georg, Essen, assignor to Richard Roosen, Kassel, Prussia, Germany. Controlling coal-dust furnaces. 1,890,542; Dec. 13.
Headlee, Thomas J., Dayton, and J. M. Ginsburg, New Brunswick, N. J., assignors to Tobacco By-Products & Chemical Corporation, Louisville, Ky. Insecticide spray. 1,891,091; Dec. 13.
Heath, Herbert C. (See Trencham, H., and Heath.)
Heinke, Alfred J., Towaco, N. J. Textile fabric or the like. Des. 88,648; Dec. 13.
Heinke, Alfred J., Towaco, N. J. Textile fabric or the like. Des. 88,649; Dec. 13.
Heinke, Alfred J., Towaco, N. J. Textile fabric or similar article. Des. 88,650; Dec. 13.
Heinke, Alfred J., Towaco, N. J. Textile fabric or the like. Des. 88,651; Dec. 13.
Heinzelmann, Hans, Kusnacht, Switzerland. Four-stroke internal combustion engine. 1,890,813; Dec. 13.
Hellman, Carl R., assignor to William Willheim Co., Inc., New York, N. Y. Textile fabric or similar article. Des. 88,652; Dec. 13.
Hemphill Company. (See Lawson, R. H., and Cloutier.)
Herman, Joseph L., assignor to Keystone Steel & Wire Company, Peoria, Ill. Metal coated iron or steel articles and method and apparatus for producing same. 1,890,463; Dec. 13.
Herschel, William W. (See Freeman, B. W., Herschel, and Patterson.)
Hess, Edward B., Orlando, Fla., assignor to Royal Typewriter Company, Inc., New York, N. Y. Typewriting machine. 1,890,990; Dec. 13.
Hess Goldsmith & Company. (See Roberson, Willard D., assignor.)
Heuer, Wilbur J., Milwaukee, Wis. Portable bar. 1,891,157; Dec. 13.
Heusser, Emil. (See Baumberger, E., and Heusser.)
Highway Trailer Company. (See Davis, Durrel H., assignor.)
Highway Trailer Company. (See Erdahl, Nicholai M., assignor.)
Hilpman, John H., Hollis, N. Y., assignor to Mergenthaler Linotype Company. Typographical casting machine. 1,891,158; Dec. 13.
Hinman, Charles P., Honolulu, Hawaii. Exact weight recorder. 1,890,648; Dec. 13.
Hinsky, Anthony P., Brooklyn, N. Y. Radio receiving apparatus. 1,891,092; Dec. 13.
Hite, Samuel V., Seminole, Okla. Depth indicator and inclinometer. 1,890,607; Dec. 13.
Hoff, Leigh P., assignor to The Allen-Sherman-Hoff Company, Philadelphia, Pa. Centrifugal pump. 1,891,201; Dec. 13.
Hoffman, Jacob S., New York, N. Y. Toothbrush. 1,890,948; Dec. 13.
Hoffman-La Roche Inc. (See Elger, Franz, assignor.)
Hoffmann, Ulrich. (See Reppe, W., and Hoffmann.)
Holden, William H. T., Brooklyn, N. Y., assignor to American Telephone and Telegraph Company. Current-suppressor. 1,890,543; Dec. 13.
Holmes, Theodore D., Brooklyn, N. Y. Toy. 1,890,944; Dec. 13.
Holshydrolyse Aktiengesellschaft. (See Bergius, F., Koch, and Faerber, assignors.)
Hooley, Leonard J., and J. Thomas, assignors to Scottish Dyes, Limited, Grangemouth, Scotland. Manufacture of amides of the benzene, naphthalene and acenaphthene series. 1,891,159; Dec. 13.
Hoose, William M. (See Stipes, R. W., and Hoose.)
Hoover, John E., Elmhurst, Ill. Skewer. 1,890,907; Dec. 13.
Hopkins, William E., Oakland, Calif. Cargo hook. 1,890,509; Dec. 13.
Hoppe, Friedrich A., assignor to Schmidt Securities Company, Chicago, Ill. Bake oven. 1,890,681; Dec. 13.
Hormal, Charles C., Denver, Colo. Reel for metallic tapes. 1,890,945; Dec. 13.
Horowitz, Max. (See Koretsky, H., Horowitz, and Desimone.)
Horwath, Julius, assignor to Arvey Corporation, Chicago, Ill. Self-supported display device. 1,890,682; Dec. 13.
Hotchkiss, E. H., Company, The. (See Polzer, Fridolin, assignor.)
Hotchner, Fred, Los Angeles, Calif. Switch. 1,890,510; Dec. 13.
Hough, Clinton W., assignor to Wired Radio, Inc., New York, N. Y. System for projecting light in variant colors. 1,891,216; Dec. 13.
Howard Hosiery Company. (See Stenvenson, Frank, assignor.)
Howard, Walter, Detroit, Mich. Vehicle suspension spring. 1,890,853; Dec. 13.
Howes, Raymond T., Long Reach, assignor of one-half to J. W. Weir, Los Angeles, Calif. Return bend or header construction for tubular stills or boilers or pipe connections. 1,890,464; Dec. 13.
Hubbs, Henry E., assignor to The Shelby Spring Hinge Company, Shelby, Ohio. Checking door hinge. 1,890,814; Dec. 13.
Hudson, Wilbur G., Newark, N. J. Typewriter-ribbon cleaner. Des. 88,653; Dec. 13.
Huebner, Franz, Zwittau, Czechoslovakia, assignor to Smyrna Automat G. m. b. H., Zittau, Saxony, Germany. Machine for the manufacturing of knotted carpets and the like. 1,890,783; Dec. 13.
Hughes, Owen J., Stamford, Conn. Foot valve. 1,890,683; Dec. 13.
Hull, Harry E., Washington, D. C. Motor vehicle control. 1,890,544; Dec. 13.
Hunt, Herbert R., Cottonwood, S. Dak. Snow removing device. 1,890,730; Dec. 13.
Hunter, Herbert T., Baltimore, Md., assignor to Doughnut Machine Corporation, New York, N. Y. Forming means for cooking apparatus. 1,890,991; Dec. 13.
Hurtado, Carlos, New York, N. Y. Watering device. 1,890,608; Dec. 13.
Hutchinson, Philip H., Montclair, N. J., assignor to General Motors Corporation, Detroit, Mich. Grinding machine. 1,890,854; Dec. 13.
Hydraulic Press Manufacturing Company. (See Thoreson, Reider, assignor.)

Hyman, Julius, assignor to The Pure Oil Company, Chicago, Ill. Artificially colored motor fuel. 1,891,093; Dec. 13.

I. G. Farbenindustrie Aktiengesellschaft. (See Ambros, O., Reindel, Eisele, and Stoehrel, assignors.)

I. G. Farbenindustrie Aktiengesellschaft. (See Diels, O., and Alder, assignors.)

I. G. Farbenindustrie Aktiengesellschaft. (See Noack, E., and Nitzschke, assignors.)

I. G. Farbenindustrie Aktiengesellschaft. (See Reppe, W., and Hoffman, assignors.)

I. G. Farbenindustrie Aktiengesellschaft. (See Schumann, C., Muench, and Christ, assignors.)

I. G. Farbenindustrie Aktiengesellschaft. (See Wolff, Hans, assignor.)

I-T-E Circuit Breaker Company. (See Krips, James A. C., assignor.)

Imperial Chemical Industries Limited. (See Harrison, Charles F. R., assignor.)

Independent Lock Co. (See Falk, Morris, assignor.)

Ingersoll-Rand Company. (See Parsons, Frederick W., sr., assignor.)

Insolo Holding Company. (See Skolnik, Max, assignor.)

International Fire Equipment Corporation. (See Hawley, Luther W., assignor.)

International Nickel Company, The. (See Erickson, Edward S., assignor.)

International Patents Development Company. (See Newkirk, William B., assignor.)

International Products Corporation. (See Smith, Jesse C., assignor.)

Jacobus, David S., Jersey City, assignor to The Babcock & Wilcox Company, Bayonne, N. J. Superheater steam boiler. 1,890,784; Dec. 13.

Janssen, Charles F., Astoria, N. Y. Tackle block. 1,890,992; Dec. 13.

Jarmin, James B., assignor to Servis Equipment Company, Dallas, Tex. Road machine. 1,890,649; Dec. 13.

Jasper, Tobias G., Brooklyn, N. Y. Pressing machine. 1,890,579; Dec. 13.

Jennings, Frederick C. (See Hayes, C., Madge, and Jennings.)

Jespersen, Carsten F., Bangkok, Siam, assignor to Svend F. Jespersen, Copenhagen, Denmark. Sliding form for casting columnar or box-shaped concrete structures such as chimneys, silos, and the like. 1,891,160; Dec. 13.

Jespersen, Svend F. (See Jespersen, Carsten F., assignor.)

Jewett, Nelson J., et al. (See Dalgliesh, Herbert V., assignor.)

Jobes, C. T., et al. (See Schurts, Ralph E., assignor.)

Johnson, Axel, Oakland, Calif. Can opener. 1,890,731; Dec. 13.

Johnson Brothers Engineering Corporation. (See Johnson, Louis J. and H. L., assignors.)

Johnson, Frank L., Akron, Ohio. Collapsible tire building form. 1,890,785; Dec. 13.

Johnson, Harry L. (See Johnson, Louis J. and H. L.)

Johnson, John W., Chicopee, Mass. Necktie device. 1,890,684; Dec. 13.

Johnson, Karl E., assignor to Boston Gear Works, Inc., Quincy, Mass. Compound speed reducer. 1,890,685; Dec. 13.

Johnson, Louis J., South Bend, Ind., and H. L. Johnson, Waukegon, Ill., assignors, by mesne assignments, to Johnson Brothers Engineering Corporation, South Bend, Ind. Outboard motor assembly. 1,890,879; Dec. 13.

Johnston, Clarence S., Amarillo, Tex. Expansible piston. 1,890,511; Dec. 13.

Johnston, John A., Provo, Utah. Trap nest. 1,891,161; Dec. 13.

Johnston, William S., Akron, Ohio. Radio distance or location finder. 1,890,786; Dec. 13.

Jones, Bradley, Cincinnati, Ohio. Ground speed indicator. 1,891,162; Dec. 13.

Jones & Laughlin Steel Corporation. (See Sturges, Frederic D., assignor.)

Joost, William E., Oakland, assignor to Electrical Products Associates, Los Angeles, Calif. Neon flash sign. 1,890,732; Dec. 13.

Joy, Charles H., sr. (See Sauer, Louis J., assignor.)

Joyner, George O., St. Louis, Mo. Spring motor. 1,890,609; Dec. 13.

Kabele, Benedict A., Schenectady, N. Y. Fishing rod holder. 1,891,163; Dec. 13.

Kalbfleisch Corporation, The. (See Harding, W. H., and Barrows, assignors.)

Karfiol, Edward, New York, N. Y. Dolly. Des. 88,654; Dec. 13.

Karibo, Edmond C. (See Pearce, E. S., and Karibo.)

Karthaus, Leonardus J. G., Neerbosch, Netherlands. Air moistening apparatus for incubators. 1,890,610; Dec. 13.

Kawneer Company, The. (See Kneeshaw, George R., assignor.)

Kawneer Company, The. (See Plym, Francis J., assignor.)

Kay, Webster B. (See Hamblen, J. B., and Kay.)

Kazowski, John, assignor to J. Silverman, Chicago, Ill. Kneeling bench. 1,890,815; Dec. 13.

Keefe, Thomas M., Boston, assignor to J. P. Eustis Manufacturing Company, Cambridge, Mass. Supporting device. 1,891,048; Dec. 13.

Keele, Ralph M., assignor to United States Appliance Corporation, San Francisco, Calif. Hair waving tool. 1,890,512; Dec. 13.

Kehr, Ernest, Dixon, Mo. Auto mechanic's accessory. 1,890,686; Dec. 13.

Keith, George, London, England, assignor to The Surface Combustion Company, Incorporated, New York, N. Y. Gas heating system. 1,890,816; Dec. 13.

Keller, Georg, assignor to the Firm Paul Strobach, Goerlitz, Germany. Multiphase protective system. 1,890,993; Dec. 13.

Kelley, Leonard O., assignor to The Standard Computing Scale Company, Detroit, Mich. Dashpot for scales. 1,890,580; Dec. 13.

Kelley, Leonard O., assignor to The Standard Computing Scale Company, Detroit, Mich. Pendulum type scale. 1,890,977; Dec. 13.

Kellogg Switchboard and Supply Company. (See Currier, Hiram D., assignor.)

Kellogg Switchboard and Supply Company. (See Wallace, Bert A., assignor.)

Kelsall, Albert H., and O. C. Alexander, San Diego, Calif. Composition and process for treating wood. 1,890,650; Dec. 13.

Kempthorne, James L., Montclair, N. J. Engine. 1,890,611; Dec. 13.

Kempthorne, James L., Montclair, N. J. Engine. 1,890,612; Dec. 13.

Kent, George, Limited. (See Flory, H. G., and Coley, assignors.)

Kerchner, Howard G. and R. F., near Belleville, Ill. Carburetor. 1,890,994; Dec. 13.

Kerchner, Roy F. (See Kerchner, Howard G. and R. F.)

Kerotest Manufacturing Company. (See Forbes, John S., assignor.)

Kesselring, Roman. (See Novák, J., and Kesselring.)

Kessler, George M., Madison, N. J. Check valve. 1,890,513; Dec. 13.

Keystone Mfg. Co. (See Swarts, Edward M., assignor.)

Keystone Steel & Wire Company. (See Herman, Joseph L., assignor.)

Kibbey, John D. (See Frank, E. L., and Kibbey.)

Kidde & Company, Walter. (See Freygang, Walter H., assignor.)

Killman, Thomas A., Nashville, Tenn. Cigarette making device. 1,891,094; Dec. 13.

King Holdings, Inc., The. (See King, John L., assignor.)

King, John L., New York, N. Y., assignor to The King Holdings, Inc. Safety razor. 1,890,733; Dec. 13.

Kinnaman, Emma L., Gillette, Wyo. Reflective attachment for cameras. 1,890,995; Dec. 13.

Kirk, Edward C., St. Albans, W. Va., assignor, by mesne assignments, to The Ohio Brass Company, Mansfield, Ohio. Attachable cross or joint bond welding terminal. 1,890,561; Dec. 13.

Klopsteg, Paul E., assignor to Central Scientific Company, Chicago, Ill. Eccentric pump. 1,890,614; Dec. 13.

Klopsteg, Paul E., Chicago, Ill., assignor to Central Scientific Company. Density demonstration apparatus. 1,891,049; Dec. 13.

Klüglein, Theobald, New York, N. Y. Nail and tack puller. 1,891,164; Dec. 13.

Kneeshaw, George R., assignor to The Kawneer Company, Niles, Mich. Store front construction. 1,890,615; Dec. 13.

Knowles, Bernard A., Azalia, Mich. Windshield heater. 1,891,095; Dec. 13.

Knüpffer, Paul R. V., Berlin-Friedenau, Germany. Roller mill. 1,891,165; Dec. 13.

Koch, Charles N., Kane, Pa. Charge forming mechanism. 1,890,651; Dec. 13.

Koch, Friedrich. (See Bergius, F., Koch, and Faerber.)

Köhler, Gustav, Mulheim-Ruhr, assignor to Siemens-Schuckertwerke Aktiengesellschaft, Berlin-Siemenstadt, Germany. Blades for turbine rotors. 1,890,581; Dec. 13.

Kohut, Alexander, assignor to William Willheim Co., Inc., New York, N. Y. Textile fabric or similar article. Des. 88,655; Dec. 13.

Kohut, Alexander, assignor to William Willheim Co., Inc., New York, N. Y. Textile fabric or similar article. Des. 88,656; Dec. 13.

Komenak, Albert J., assignor to The Excelsior Hardware Co., Stamford, Conn. Trunk lock. 1,891,217; Dec. 13.

Koopman, Wilhelmus. (See van Arkel, A. S., de Boer, and Koopman, assignors.)

Koretzky, H., Jersey City, N. J., M. Horowitz, Brooklyn, N. Y., and A. J. Desimone, Lyndhurst, N. J., assignors to Bright Star Battery Company, Hoboken, N. J. Flash light. 1,891,024; Dec. 13.

Koss, Louis F., jr., assignor to Capital Machine Company, Indianapolis, Ind. Veneer machine knife clamp. 1,890,582; Dec. 13.

Koubek, Lillian M. (See Powers, C. R., and Koubek.)

Kraft, Hans, Schenectady, N. Y., assignors to General Electric Company. Speed governing mechanism. 1,891,096; Dec. 13.

Krause, Paul, assignor of part interest to William E. Sprague, deceased, Lucy A. Sprague, administratrix, and part interest to Harry Taylor, Babylon, N. Y. Coin controlled liquid dispensing device. 1,890,616; Dec. 13.

Krauss, Walther, Berlin-Zehlendorf, Germany, assignor to General Electric Company. Copper iodide rectifier. 1,891,097; Dec. 13.

Kreps, Elmer H. (See Allen, G. N., and Kreps.)

Krieg, Alfred, Racine, Wis., assignor, by mesne assignments to Oliver Farm Equipment Company, Wilmington, Del. Drive means for corn harvesters. 1,890,465; Dec. 13.

Krips, James A. C., Haddonfield, N. J., assignor to I-T-E Circuit Breaker Company, Philadelphia, Pa. Switch apparatus. 1,890,514; Dec. 13.

Kroesen, Jay C. (See Richardson, Frank H., assignor.)

Kuberka, Frank, Virginia, Minn. Lifting hook. 1,890,734; Dec. 13.

Kuhn, William C., et al. (See Richman, Charles T., assignor.)

Kunard, Harry, Chicago, Ill. Auto rim. 1,890,515; Dec. 13.

Kurth, Richard A., Boston, Mass. Device for operating rear curtains of cars. 1,891,098; Dec. 13.

Kurz, Hans, and K. Albert, Vienna, Austria. Ink for intaglio printing and improvement in the production of such inks. 1,890,996; Dec. 13.

L. G. S. Devices Corporation. (See Drexler, C., and Brownlee, assignors.)

Lachman, Arthur, Berkeley, assignor to Richfield Oil Company of California, Los Angeles, Calif. Treating gasoline stock. 1,890,516; Dec. 13.

Laengel, Henri C., assignor to Societe Anonyme Assuro, Paris, France. Fire extinguisher. 1,890,517; Dec. 13.

Laise, Clemens A., North Bergen, N. J., assignor to Eisler Electric Corporation, Wilmington, Del. Electrical contact. 1,891,050; Dec. 13.

Lake Erie Chemical Company, The. (See Briegeman, Frank J., assignor.)

Lake, William B., Mount Place, Braintree, England. Brake. 1,890,735; Dec. 13.

Lamer, Louis, Ramsey, N. J. Store front construction. 1,890,787; Dec. 13.

Lamy, Georges, assignor to Claude Neon General Advertising Limited, Montreal, Quebec, Canada. Housings and mountings for the electrode chambers of luminescent tubes and the like. 1,890,617; Dec. 13.

Land, Ross P., Milton, Fla. Bottle napkin holder. 1,891,099; Dec. 13.

Landis, Jesse A., Eaton, Ohio. Dental floss holder. 1,890,788; Dec. 13.

Landis & Gyr, A.-G. (See Peter, Adolf, assignor.)

Lane, Aubrey R., assignor to A. Finkl & Sons Company, Chicago, Ill. Forged dipper tooth. 1,890,997; Dec. 13.

Lane Company, The. (See Loftin, Lawrence K., assignor.)

Lang, Gustav J., Longmeadow, and J. F. Martin, assignors to American Bosch Magneto Corporation, Springfield, Mass. Magneto. 1,890,518; Dec. 13.

Langford, George, assignor to McKenna Process Company of Illinois, Joliet, Ill. Rail joint bar. 1,890,687; Dec. 13.

Larsson, Ernst A., assignor to The Ohio Brass Company, Mansfield, Ohio. Trolley head. 1,890,946; Dec. 13.

Lauterbur, Edward J. (See Lauterbur, Frank X. and E. J., assignor.)

Lauterbur, Frank X. and E. J., Sidney, Ohio. Furnace and furnace draft control. 1,891,100; Dec. 13.

Lawson, Robert H., Pawtucket, and A. N. Cloutier, Lonsdale, assignors to Hemphill Company, Central Falls, R. I. Method of and attachment for running-on knitting fabrics. 1,890,880; Dec. 13.

Layton, Horace E., Franklin, Pa. Wrench for screw caps for jars and like containers. 1,890,908; Dec. 13.

Lasow, Morris, Brooklyn, N. Y. Cardboard cigar box. 1,890,817; Dec. 13.

Leaming, David C., Spokane, Wash. Speed indicator switch. 1,890,855; Dec. 13.

LeCount, George E., Pittsfield, Mass., assignor to General Electric Company. Spring drive. 1,891,101; Dec. 13.

Leduc, Fred C., Minneapolis, Minn, assignor, by mesne assignments, to Crane Co. Stop box for the curb valves of watermains. 1,890,618; Dec. 13.

Lemmerman, Howard E., assignor to The Simmons Manufacturing Company, Cleveland, Ohio. Valve spring lifter. 1,890,466; Dec. 13.

Lenz, Herman O., Seattle, Wash. Combination reel. 1,890,736; Dec. 13.

Leray, Joseph J., West Warwick, R. I. Helicoplane. 1,890,519; Dec. 13.

Lerch, William B., assignor to Curo Process Company, Bartlesville, Okla. Process and product for treating emulsions of mineral oils or the like. 1,890,789; Dec. 13.

Lesser, Paul, Brooklyn, N. Y. Textile fabric or the like. Des. 88,657; Dec. 13.

Lesser, Paul, Brooklyn, N. Y. Textile fabric or the like. Des. 88,658; Dec. 13.

Leupold, Mathias, Jamaica, N. Y. Tilting-engine wing plane. 1,891,166; Dec. 13.

Leweke, Harold A., Greenville, Mich. Electric automatic peanut cooker. 1,890,737; Dec. 13.

Lewin, Tannie, University City, Mo. Clarification of electrolyte. 1,890,856; Dec. 13.

Lewis Differential Company. (See Tatter, John W., assignor.)

Lewis, Warren K., Newton, Mass., assignor to The Goodyear Tire & Rubber Company, Akron, Ohio. Method of and apparatus for preparing gas black. 1,891,202; Dec. 13.

Lewis, William, Utica, N. Y. Interlocking coiled springs. 1,890,738; Dec. 13.

L'Helice Metallique Brevets Paulhan-Pillard, Societe Anonyme. (See Pillard, Marcel, assignor.)

Limbrick, Charles B., Fort William, Ontario, Canada. Moisture measuring device. 1,890,645; Dec. 13.

Limited Company, Firm (formerly Skoda Works). (See Valenta, Emanuel, assignor.)

Lincoln, Paul M., Ithaca, N. Y. Thermostatic element. 1,890,909; Dec. 13.

Lindgren, Frank A., Western Springs, assignor to Goodman Manufacturing Company, Chicago, Ill. Mining machine. 1,891,191; Dec. 13.

Lindgren, Waldemar L., Waukegan, assignor of one-half to J. E. Ericsson, Chicago, Ill. Dishwashing machine. 1,890,520; Dec. 13.

Lindquist, David E., assignor to Mueller Brass Co., Port Huron, Mich. Joint. 1,890,998; Dec. 13.

Lobl, Frederick, Middleboro, Mass. Combined menthol pencil and inhaler. Des. 88,659; Dec. 13.

Lockwood, Hiram A., Phoenix, Ariz. Air cooler. 1,891,167; Dec. 13.

Loftin, Lawrence K., Altavista, Va., assignor to The Lane Company, Inc. Mothproof receptacle. 1,890,857; Dec. 13.

Loftin, Lawrence K., Altavista, Va., assignor to The Lane Company, Inc. Cedar chest. 1,890,999; Dec. 13.

Lonergan, Edward A., New York, N. Y. Electric water heater. 1,891,000; Dec. 13.

Lotter, Adolph G., assignor to H. C. Miller Company, Milwaukee, Wis. Loose leaf binder. 1,890,688; Dec. 13.

Louis, Lucienne J., Oakland, Calif. Bed-spring cover. 1,890,689; Dec. 13.

Love, S. A., administrator. (See Dalgliesh, Herbert V.)

Lowe, Herbert J., Galesburg, Ill. Printer's roller. 1,890,858; Dec. 13.

Lowitz, Frank, New York, N. Y. Recording device. 1,890,619; Dec. 13.

Lucie, Andrew R., Cleveland, Ohio. Hood lock. 1,890,818; Dec. 13.

Luettringhaus, Arthur, Mannheim, and H. Neresheimer and W. Schneider, Ludwigshafen-on-the-Rhine, Germany, assignors to General Aniline Works Inc. Production of derivatives of naphthalene. 1,891,168; Dec. 13.

Lukas, Julia, assignor to Moss-Still, Inc., New York, N. Y. Textile fabric. Des. 88,660; Dec. 13.

Lunt, Gordon B., assignor to Pittsburgh-Des Moines Steel Company, Des Moines, Iowa. Apparatus for wrapping cable. 1,890,739; Dec. 13.

Luttmann, Joseph A., Cincinnati, assignor to The Mandel-Drucker Company, Norwood, Ohio. Traveling case. 1,891,025; Dec. 13.

Lynchburg Hosiery Mills. (See Cox, Adam M., assignor.)

Lyon, George A., Allenhurst, N. J. Ornamenting ring for wheel rims. 1,891,192; Dec. 13.

Mass, A. R., Chemical Co. (See Bowman, Frederic C., assignor.)

Mack, Walter L., assignor, by mesne assignments, to Air-Way Electric Appliance Corporation, Toledo, Ohio. Apparatus for heating rooms. 1,890,521; Dec. 13.

Madge, Evelyn W. (See Hayes, C., Madge, and Jennings.)

Magill, Paul La F., Niagara Falls, N. Y., assignor, by mesne assignments, to The Roessler & Hasslacher Chemical Company. Treating hydrocarbons. 1,890,881; Dec. 13.

Magnolia Petroleum Company. (See Rather, James B., assignor.)

Maillard, Joseph E. B., Nogent-le-Roy, France. Container for pulverulent or granulated substances. 1,890,522; Dec. 13.

Maisch, Jacques, New York, N. Y. Textile fabric or the like. Des. 88,661; Dec. 13.

Majors, Williams B. (See Coplen, Millicent V. and C. W., and Majors.)

Malcom, Robert, Chicago, Ill. Goggles. 1,890,690; Dec. 13.

Mandalian, Sahatiel G., North Attleboro, Mass. Sound transmitting and light reflecting screen. 1,890,819; Dec. 13.

Marasso, Fred, assignor to Union Machinery Company, Joliet, Ill. Loading apparatus for proofers. 1,890,740; Dec. 13.

Marchant Calculating Machine Company. (See Friden, Carl M. F., assignor.)

Marion Steam Shovel Company, The. (See Fundom, Earl H., assignor.)

Markey, Roscoe I., Nassau County, assignor to The Aviation Patent and Research Corporation, New York, N. Y. Airplane. 1,890,820; Dec. 13.

Marks, J. Glenn. (See DeWitt, William H., assignor.)

Marquis, Charles F., Schenectady, N. Y., assignor to General Electric Company. Machine tool dead center. 1,891,102; Dec. 13.

Marshall, Adam, Newark, N. J. Arch support. 1,890,910; Dec. 13.

Marshall, Frederick, Pittsburgh, Pa. Heating bag. 1,891,001; Dec. 13.

Marshall, Tola A., Floral Park, assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Telephone system. 1,890,523; Dec. 13.

Martin, Edward J. (See Asire, H. W., Perkins, and Martin.)

Martin, Jesse C., jr., San Francisco, Calif., assignor to Walworth Patents Inc., Boston, Mass. Plug cock and means for turning same. 1,890,524; Dec. 13.

Martin, John F. (See Lang, G. J., and Martin.)

Martin, Paul N., assignor to The Union Switch & Signal Company, Swissvale, Pa. Electrical relay. 1,890,525; Dec. 13.

Martin, Paul N., assignor to The Union Switch & Signal Company, Swissvale, Pa. Electrical relay. 1,891,026; Dec. 13.
Mason Box Company, The. (See Harden, Ralph L., assignor.)
Maurer, John F., jr., North Bergen, N. J. Bottle crate brace. 1,891,103; Dec. 13.
Mavrogenis, Aristote, Milwaukee, Wis. Cathode for electron discharge devices. 1,890,859; Dec. 13.
McCarroll, Walker W., New Haven, Conn. Shipping-container for printing plates, electrotypers' mats, etc. 1,890,467; Dec. 13.
McCombie, Earle D., Marquette, Mich. Portable draft screen. 1,891,002; Dec. 13.
McEwing, Luther B., New York, N. Y. Folding shelf. 1,890,526; Dec. 13.
McFarlin, Charles J., Keeling, Tenn. Building embankments. 1,891,003; Dec. 13.
McGowen, William R., assignor to The McKay Company, Pittsburgh, Pa. Glider seat. Des. 88,662; Dec. 13.
McGrath, William L., assignor to Eclipse Machine Company, Elmira, N. Y. Engine starter drive. 1,890,741; Dec. 13.
McKay Company, The. (See McGowen, William R., assignor.)
McKemie, Will, sr. (See Scheurer, Paul P., assignor.)
McKenna Process Company of Illinois. (See Langford, George, assignor.)
McKenzie, Angus D., assignor to The Ohio Brass Company, Mansfield, Ohio. Current collector. 1,891,205; Dec. 13.
McLaughlin, James, Glen Cove, N. Y. Reenforce rod and wall plug. 1,891,104; Dec. 13.
McLaurin, Arthur, Boston, Mass. Chair frame or similar article. Des. 88,663; Dec. 13.
McLaurin, Arthur, Boston, Mass. Sofa frame or similar article. Des. 88,664; Dec. 13.
McLean, William A., et al. (See Hammond, Grant, assignor.)
McTague, Edward V., assignor to The Convertible Duplex Die Corporation, Millville, N. J. Pressing machine. 1,890,882; Dec. 13.
McWilliams, James B. (See Graham, F. M., and McWilliams, assignor.)
Meehan, John P., Los Angeles, Calif. Knock-down table. 1,890,583; Dec. 13.
Megros, Georges, Bronxville, assignor to Combier & Co. Inc., New York, N. Y. Textile fabric or the like. Des. 88,665; Dec. 13.
Mendel-Drucker Company, The. (See Luttmann, Joseph A., assignor.)
Mergenthaler Linotype Company. (See Ackerman, William, assignor.)
Mergenthaler Linotype Company. (See Hilpman, John H., assignor.)
Mergentheim, Rose H., Winnetka, Ill. Milk bottle cap. 1,890,691; Dec. 13.
Messinger, Lester H., jr., Bridgeport, Conn. Braking attachment for internal combustion engines. 1,890,790; Dec. 13.
Messinger, Lester H., jr., Bridgeport, and A. L. Riker, Fairfield, Conn. Attachment for internal combustion engines. 1,890,791; Dec. 13.
Messmer, Rudolphe, Montreal, Quebec, Canada. Microphone and loud speaker system for churches, public halls and the like. 1,890,742; Dec. 13.
Metal Textile Corporation. (See Hartwell, Ralf L., assignor.)
Metropolitan Engineering Company. (See Murray, Thomas E., assignor.)
Meyer, Friedrich W., Vienna, Austria. Chain saw structure for portable motor tree saws. 1,891,105; Dec. 13.
Meyer, Hans, Kiel-Wellingdorf, assignor to Deutsche Gasgluhlic-Auer-Gesellschaft m. b. H., Berlin, Germany. Pressure reducing valve. 1,890,821; Dec. 13.
Michelin, André J., Paris, assignor to Michelin et Cie, Clermont-Ferrand, France. Vehicle wheel. 1,890,546; Dec. 13.
Michelin, et Cie. (See Michelin, André J., assignor.)
Miessner, Benjamin F., assignor to Miessner Inventions Inc., Short Hills, N. J. Electron tube. 1,890,911; Dec. 13.
Miessner Inventions Inc. (See Miessner, Benjamin F., assignor.)
Miller, Alvin L. and R. H., Detroit, Mich. Gauge device. 1,891,185; Dec. 13.
Miller, H. C., Company. (See Lotter, Adolph G., assignor.)
Miller, Russell H. (See Miller, Alvin L. and R. H.)
Mishawaka Rubber and Woolen Manufacturing Company. (See Van Dinter, G. L., and Ferrettie, assignors.)
Molins, Walter E., Deptford, London, England. Packet making machine. 1,890,652; Dec. 13.
Molins, Walter E., Deptford, London, England. Cigarette packing machinery. 1,890,653; Dec. 13.
Momm, Albert, Irvington, N. J., assignor to August Goertz & Co. Inc. Snap fastener. 1,890,912; Dec. 13.
Monarch Tool & Manufacturing Company, The. (See Hall, Louis M., assignor.)
Monitor Controller Company. (See Whittingham, George H., assignor.)
Montgomery, John A. (See Friend, R. O., and Montgomery.)
Moore Dry Kiln Company of Oregon. (See Steel, Joseph L., assignor.)
Morrison, Vandolah, assignor to E. J. Conway, Cleveland, Ohio. Welding machine. 1,890,792; Dec. 13.
Morse, Herman E., assignor to The Goodyear Tire & Rubber Company, Akron, Ohio. Hose. Des. 88,666; Dec. 13.
Morton, William A., Pittsburgh, and P. L. Geer, Bellevue, assignors to Amco, Incorporated, Pittsburgh, Pa. Ware transferring mechanism. 1,890,883; Dec. 13.
Mosgrove, Charles A., Waterbury, assignor to The Autoyre Company, Inc., Oakville, Conn. Overall loop. 1,890,692; Dec. 13.
Moss-Still, Inc. (See Lukas, Julia, assignor.)
Mueller Brass Co. (See Lindquist, David E., assignor.)
Mueller Co. (See Hawkins, Orville J., assignor.)
Mueller Co. (See Mueller, Frank H., assignor.)
Mueller, Frank H., assignor to Mueller Co., Decatur, Ill. Meter hanger. 1,891,193; Dec. 13.
Muench, Eduard. (See Schumann, C., Muench, and Christ.)
Mulder, Peter J. (See Rasek, J., and Mulder.)
Mundorf Heating Systems Company, The. (See Mundorf, James J., assignor.)
Mundorf, James J., assignor to The Mundorf Heating Systems Company, Sharon, Pa. Radiator casing. 1,891,169; Dec. 13.
Munro, Alexander C., Britannia Beach, British Columbia, Canada. Ball forming machine. 1,890,693; Dec. 13.
Murphy, Francis, New York, N. Y., assignor to Bigelow Sanford Carpet Co., Inc. Carpet. Des. 88,667; Dec. 13.
Murphy, Levi J., and E. L. Stauffer, Spokane, Wash. Foldable extension counter shelf. 1,890,743; Dec. 13.
Murray, Christopher W, Tonawanda, assignor to Niagara Falls Smelting & Refining Corporation, Buffalo, N. Y. Contact device. 1,890,822; Dec. 13.
Murray, Herman S., Woodmere, N. Y., assignor to William Willheim Co., Inc., New York, N. Y. Textile fabric or similar article. Des. 88,668; Dec. 13.
Murray, John F., et al., executors. (See Murray, Thomas E., assignor.)
Murray, Joseph B., et al., executors. (See Murray, Thomas E., assignor.)
Murray, Thomas E., jr., et al., executors. (See Murray, Thomas E., assignor.)
Murray, Thomas E., deceased, Brooklyn, N. Y.; J. B. Murray, T. E. Murray, jr., and J. F. Murray, executors, assignors to Metropolitan Engineering Company. Radiator and the like. 1,890,620; Dec. 13.
Muszynski, Antoni, Easthampton, Mass. Oil tank pedestal. Des. 88,669; Dec. 13.
Myers, Lewis C., Freeport, and G. F. Handley, Glendale, assignors to Royal Typewriter Company, Inc., New York, N. Y. Manifolding device. 1,890,547; Dec. 13.
Myers, Rolland D., Edgewood Arsenal, Md. Apparatus for drying hexachlorethane. 1,890,654; Dec. 13.
N. V. Nederlandsche Linoleumfabriek. (See van der Willigen, Paul C., assignor.)
N. V. Philips', Gloeilampenfabrieken. (See Bouwers, Albert, assignor.)
N. V. Philips' Gloeilampenfabrieken. (See van Arkel, A. E., de Boer, and Koopman, assignors.)
N. V. Philips' Gloeilampenfabrieken. (See van Gessel, Johannes A., assignor.)
Naamlooze Vennootschap de Bataafsche Petroleum Maatschappij. (See Flanders, George S., and ap Rhys Pryce, assignors.)
Nardin, Celestin F., Ozone Park, N. Y. Internal combustion motor. 1,890,584; Dec. 13.
National Carbon Co. (See Chaney, Newcomb K., assignor.)
National Pneumatic Company. (See Forman, Paris R., assignor.)
Naugatuck Chemical Company, The. (See Gibbons, Willis A., assignor.)
Neeley, George S., Hartford, assignor of one-half to G. Watkins, Alton, Ill. Preventing scaling and corrosion of metal units. 1,891,004; Dec. 13.
Neeley, George S., Hartford, assignor of one-half to G. Watkins, Alton, Ill. Preventing scaling, corrosion or like action in metallic bodies. 1,891,005; Dec. 13.
Neese, William A., assignor of one-half to J. W. Harling, Hartland, Wis. Operating mechanism for doors. 1,891,051; Dec. 13.
Neon, Claude, General Advertising Limited. (See Lamy, Georges, assignor.)
Neresheimer, Heinrich. (See Luettringhaus, A., Neresheimer, and Schneider.)
New Castle Refractories Company. (See Fear, Harry E., assignor.)
New Departure Manufacturing Company. (See Delaval-Crow, Thomas C., assignor.)
Newhouse, George A., Yorktown, Ind. Cultivating implement. 1,890,621; Dec. 13.
Newkirk, William B., Western Springs, Ill., assignor to International Patents Development Company, Wilmington, Del. Manufacture of hydrous dextrose from high purity solutions. 1,890,913; Dec. 13.
Newton, Roy C., and W. D. Richardson, assignors to Swift & Company, Chicago, Ill. Stabilizing fats and oils. 1,890,585; Dec. 13.
New-York Hamburger Gummiwaaren Compagnie. (See Desenies, M., and Nielsen, assignors.)

Niagara Falls Smelting & Refining Corporation. (See Murray, Christopher W., assignor.)
Nichol, Corrington A. (See Wolfe, H. M., and Nichol.)
Nielsen, Andreas. (See Desenies, M., and Nielsen.)
Niterday Signal Co. (See Bergen, W. V., and Shute, assignors.)
Nitzschke, Oswin. (See Noack, E., and Nitzschke.)
Noack, Erich, Wiesdorf-on-the-Rhine, and O. Nitzschke, Leverkusen-on-the-Rhine, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Execution of gas reactions. 1,890,793; Dec. 13.
Noack, Walter G., Baden, Switzerland. Steam generator. 1,890,468; Dec. 13.
Noonan, Thomas F., assignor to Fred H. Rix, Chicago, Ill. Lock. 1,890,744; Dec. 13.
Norman, Otto D., Parkersburg, W. Va. Lubrication cooler for gas engines. 1,891,006; Dec. 13.
North American Chemical Company. (See Thoma, Andrew, assignor.)
Nose, Toichi, Kamakura Machi, Kamakura Gun Kanagawa Ken, Japan. Aeroplane. 1,891,170; Dec. 13.
Novak, Josef, and Roman Kesselring, Oderburg, Czechoslovakia. Prealloys. 1,890,548; Dec. 13.
Nuhring, Charles, Cincinnati, Ohio. Hose reel. 1,890,828; Dec. 13.
O'Brien, William A., San Francisco, Calif. Bridge table top. Des. 88,670; Dec. 13.
O'Connor, Alexander T., Detroit, assignor of one-half to G. Yeoman, Birmingham, Mich. Automobile heater. 1,890,745; Dec. 13.
O'Dell, Charles B., McMinnville, Oreg. Hydraulic tire press. 1,890,746; Dec. 13.
Odendahl, Henry A., Little Falls, N. J. Vaporizer. 1,891,171; Dec. 13.
Oetker, Rudolf. (See Vopel, J., and Oetker.)
Ofensend, Chase F. (See Black, J. J., and Ofensend.)
Offutt, John W., Ellwood City, Pa. Bloom planer. 1,890,824; Dec. 13.
Ogren, Carl F., assignor to Thermoid Rubber Company, Trenton, N. J. Brake lining. 1,891,186; Dec. 13.
Ohio Brass Company, The. (See Austin, Arthur O., assignor.)
Ohio Brass Company, The. (See Kirk, Edward C., assignor.)
Ohio Brass Company, The. (See Larsson, Ernst A., assignor.)
Ohio Brass Company, The. (See McKenzie, Angus D., assignor.)
O'Leary, William C., Washington, D. C. Vacuum wall receptacle. 1,890,655; Dec. 13.
Oliver Farm Equipment Company. (See Altgelt, Herman E., assignor.)
Oliver Farm Equipment Company. (See Krieg, Alfred, assignor.)
Olpin, Henry C. (See Ellis, G. H., and Olpin.)
Omohundro, Allen L., assignor to Frederick Stearns & Company, Detroit, Mich. Therapeutic agent. 1,890,860; Dec. 13.
Oneida Community, Limited. (See Allen, G. N., and Kreps, assignors.)
Osnos, Mendel, assignor to Telefunken Gesellschaft fur Drahtlose Telegraphie m. b. H., Berlin, Germany. Frequency multiplication. 1,890,527; Dec. 13.
Osterstrom, Rudolph C., assignor to The Pure Oil Company, Chicago, Ill. Polymerising unsaturated hydrocarbon oils. 1,891,106; Dec. 13.
Osterstrom, Rudolph C., assignor to The Pure Oil Company, Chicago, Ill. Polymerising hydrocarbon oils. 1,891,107; Dec. 13.
Osterstrom, Rudolph C., assignor to The Pure Oil Company, Chicago, Ill. Oil purifying system. 1,891,109; Dec. 13.
Osterstrom, Rudolph C., and C. R. Wagner, assignors to The Pure Oil Company, Chicago, Ill. Treating cracked petroleum distillates. 1,891,108; Dec. 13.
Otis Elevator Company. (See Andres, Charles M., assignor.)
Otis Elevator Company. (See Sanford, Selden B., assignor.)
Ott, Harvey N., assignor to Spencer Lens Company, Buffalo, N. Y. Adjusting mechanism for microscope stages and the like. 1,891,052; Dec. 13.
Otto, Theodore H., Brooklyn, N. Y. Display rack. 1,890,947; Dec. 13.
Overton, Valdy C., Houston, Tex. Musical instrument. 1,890,861; Dec. 13.
Ow-Eschingen, Max, Vienna, Austria. Metallizing. 1,890,645; Dec. 13.
Palazzo, Francesco C., Florence, Italy. Producing calcium phosphates rich in phosphoric acid soluble in water. 1,891,007; Dec. 13.
Paramount Publix Corporation. (See Barkelew, James T., assignor.)
Parke, Davis & Company. (See Hanson, Adolph M., assignor.)
Parker, Clara B., executrix. (See Parker, George D.)
Parker, George D., deceased, Riverside, Calif., Clara B. Parker, executrix. Machine for making crates. 1,890,586; Dec. 13.
Parsons, Frederick W., sr., Corning, N. Y., assignor to Ingersoll-Rand Company, Jersey City, N. J. Engine. 1,890,914; Dec. 13.
Paschall, Frederick O., Brooklyn, N. Y. Radio grid leak. 1,891,053; Dec. 13.
Pasternack, Richard, and E. W. Burnham, assignors to Charles Pfizer & Company, Brooklyn, N. Y. Cheese and processing same. 1,890,948; Dec. 13.
Patterson, Herbert E. (See Freeman, B. W., Herschel, and Patterson.)
Paulsen, Carl, St. Louis, Mo. Three wheeled wagon or coaster. 1,890,656; Dec. 13.
Paulus, Charles L., Dayton, Ohio. Parachute flare. 1,891,172; Dec. 13.
Peake, Charles W., et al. (See Wood, Jesse N., assignor.)
Pearce, Edwin S., and E. C. Karibo, Indianapolis, Ind. Pressure impulse dampener. 1,891,008; Dec. 13.
Penning, Cornelius J. H., Victorias, Negros Occidental, Philippine Islands. Internal combustion engine of the oppositely-moving piston type. 1,890,794; Dec. 13.
Perazzoli, Henry, Philadelphia, Pa. Railway track grinder. 1,891,173; Dec. 13.
Perazzoli, Henry, Philadelphia, Pa. Railway track grinder. 1,891,174; Dec. 13.
Perkins, Wallace W. (See Asire, H. W., Perkins, and Martin.)
Peter, Adolf, Zug, Switzerland, assignor to Landis & Gyr, A.-G. Meter calibrating apparatus. 1,890,884; Dec. 13.
Petersen, Christian, Golf, Ill. Combination vacuum cleaner and floor waxing machine. 1,891,175; Dec. 13.
Peterson, Emil A., assignor to Valley Iron Works Company, Appleton, Wis. Jordan engine. 1,890,622; Dec. 13.
Petranovich, George, Clawson, Mich. Moistener. 1,891,110; Dec. 13.
Pfaudler Co., The. (See Smith, Harold E., assignor.)
Pfaudler Co., The. (See Todd, Ulysses G., assignor.)
Pfizer, Charles & Company. (See Pasternack, R., and Burnham, assignors.)
Phelps, Arthur F., assignor to West Virginia Armature Co., Bluefield, W. Va. Locomotive journal box. 1,890,825; Dec. 13.
Phelps, Erastus B., Chicago, Ill., assignor to American Lithographic Company, Inc., New York, N. Y. Advertising device. 1,891,009; Dec. 13.
Picard, John B., Toledo, Ohio. Power pump. 1,890,826; Dec. 13.
Pilkington Brothers Limited. (See Smith, Harry, assignor.)
Pillard, Marcel, assignor to L'Helice Metallique, Brevets Paulhan-Pillard, Societe Anonyme, Marseille, France. Making hollow metallic air screws. 1,890,747; Dec. 13.
Pitman, Louis K., New York, N. Y. Surgical instrument. 1,891,054; Dec. 13.
Pittsburgh-Des Moines Steel Company. (See Lunt, Gordon R., assignor.)
Plym, Francis J., assignor to The Kawneer Company, Niles, Mich. Tilting receptacle. 1,890,587; Dec. 13.
Plym, Francis J., assignor to Kawneer Company, Niles, Mich. Bulkhead construction. 1,891,187; Dec. 13.
Polzer, Fridolin, South Norwalk, assignor to The E. H. Hotchkiss Company, Norwalk, Conn. Tacker. 1,890,694; Dec. 13.
Pomeranz, Jacob J., Brooklyn, and V. Tanasso, Harrison, N. Y. Joint for the eye-wires of ophthalmic mountings. 1,891,176; Dec. 13.
Pomerans, Jacob J., Brooklyn, and V. Tanasso, Harrison, N. Y. Box stud and nose guard for ophthalmic mountings. 1,891,177; Dec. 13.
Porsche, Ferdinand, assignor to Daimler-Benz Aktiengesellschaft, Stuttgart-Unterturkheim, Germany. High speed Diesel oil engine. 1,891,010; Dec. 13.
Porter, Graham L., Hollinwood, England, assignor to Ferranti Inc., New York, N. Y. Electric transformer. 1,891,178; Dec. 13.
Potter, Frank M., and C. E. Traxel, Rome, assignors to General Cable Corporation, New York, N. Y. Method of and apparatus for serving strands. 1,891,194; Dec. 13.
Powell, Herbert S., Utica, N. Y. Sheet metal bending machine. 1,890,588; Dec. 13.
Powers, Cornelius R., and L. M. Koubek, assignors to The Singer Manufacturing Company, Elizabeth, N. J. Decalcomania transfer sheet. Des. 88,671; Dec. 13.
Powers, Joseph J., Roosevelt, assignor of one-twentieth to W. J. Steele, Baldwin, N. Y. Perambulator. 1,890,469; Dec. 13.
Powers, Milton A., assignor to The Timken Silent Automatic Company, Detroit, Mich. Igniter. 1,890,862; Dec. 13.
Pratt, Frederick J., Ferndale, Mich. Grinding gauge. 1,890,827; Dec. 13.
Pratt, George W., Oakland, Calif. Handcuff. 1,890,748; Dec. 13.
Prentice, George E., Berlin, Conn. Locking slider for fasteners. 1,890,749; Dec. 13.
Prime, Edward J., Groveland, Mass. Closure for jars and the like. 1,890,885; Dec. 13.
Prince, David C., Schenectady, N. Y., assignor to General Electric Company. High vacuum fuse. 1,891,111; Dec. 13.
Proctor, Robert V., assignor to Commercial Shearing & Stamping Company, Youngstown, Ohio. Method and apparatus for bending. 1,890,949; Dec. 13.
Proctor & Schwartz, Incorporated. (See Bur, Philip W., assignor.)
Progressive Corrugated Paper Machinery Co. Inc. (See Wagner, Joshua, assignor.)

Prosperity Company Inc. (See Davis, Ernest, assignor.)
Pruden, Leigh, Los Angeles, Calif. Metal fire resisting ironing board. 1,891,179; Dec. 13.
Purdy, Frederick I., Columbus, Ohio. Toy house. 1,891,011; Dec. 13.
Pure Oil Company, The. (See Chittick, Martin B., assignor.)
Pure Oil Company, The. (See Hyman, Julius, assignor.)
Pure Oil Company, The. (See Osterstrom, Rudolph C., assignor.)
Pure Oil Company, The. (See Osterstrom, R. C., and Wagner, assignors.)
Pysel, Daniel, Piedmont, Calif., assignor, by mesne assignments, to Universal Oil Products Company. Cracking for hydrocarbon oils. 1,891,218; Dec. 13.
Radio Corporation of America. (See Dunham, Franklin, assignor.)
Radio Corporation of America. (See Farnham, Paul O., assignor.)
Radiovisor Foreign & Colonial Limited. (See Whalen, Francis C., assignor.)
Ralston Purina Company. (See Scanlan, Robert W., assignor.)
Randall, Louis G., Milwaukee, assignor to E. R. Wagner Mfg. Co., North Milwaukee, Wis. Fastening device for automobile hoods. 1,890,695; Dec. 13.
Rather, James B., Brooklyn, N. Y., assignor to Magnolia Petroleum Company, Dallas, Tex. Still and fire-box. 1,890,886; Dec. 13.
Ratzlaff, Rudolph, Dearborn, Mich. Jar cover wrench. 1,890,528; Dec. 13.
Ravlin, Frederick F., South Miami, Fla. Combination support for serving trays for use on automobiles. 1,891,180; Dec. 13.
Raymond, Clarence C., Detroit, Mich. Signal operating mechanism. 1,890,863; Dec. 13.
Raynor, Frank B., Baldwin, N. Y. Display device. 1,891,012; Dec. 13.
Razek, Joseph, Upper Darby, and P. J. Mulder, Drexel Hill, Pa. Method and apparatus for securing high amplification in electrical circuits. 1,890,750; Dec. 13.
Reed, Clarence E., Wichita, Kans., assignor to Chicago Pneumatic Tool Company, New York, N. Y. Earth boring apparatus. 1,890,887; Dec. 13.
Reed, E. P., & Company. (See Ebling, Walter E., assignor.)
Reid, Murdock & Co. (See Canaday, Miron S., assignor.)
Reiman, Fred H. (See Creagmile, J. C., and Reiman.)
Reindel, Hans. (See Ambros, O., Reindel, Eisele, and Stoehrel.)
Reiter, Daniel I., New York, N. Y. Pronged socket. 1,891,013; Dec. 13.
Reliance Specialties Mfg. Co. (See Cohan, Morris J., assignor.)
Remington, Walter B., Big Springs, Nebr. Guiding attachment for tractors. 1,891,014; Dec. 13.
Reppe, Walter, and U. Hoffmann, Ludwigshafen-on-the-Rhine, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Production of saturated fatty acid nitriles. 1,891,055; Dec. 13.
Republic Flow Meters Company. (See Spitzglass, A. F., and Handwerk, assignors.)
Reynolds, Robert B., assignor to Federal Laboratories, Inc., Pittsburgh, Pa. Bank protective method and apparatus. 1,890,589; Dec. 13.
Rhinehart, Alvin, Chicago, Ill. Strap support. 1,891,112; Dec. 13.
Ribar, Louis, Plymouth, Mich. Windshield attachment. 1,890,864; Dec. 13.
Rich, Claude R., assignor to Teesdale Manufacturing Company, Grand Rapids, Mich. Switch. 1,891,015; Dec. 13.
Richardson, Frank H., South Lyme, Conn., and J. C. Kroesen, Belleville, N. J. Projection screen. 1,890,828; Dec. 13.
Richardson, William D. (See Newton, R. C., and Richardson.)
Richfield Oil Company of California. (See Lachman, Arthur, assignor.)
Richman, Charles T., assignor, by direct and mesne assignments, of one-third to W. C. Kuhn and one-third to P. J. Smith, Philadelphia, Pa. Motor fuel. 1,891,181; Dec. 13.
Richter, George A., assignor to Brown Company, Berlin, N. H. Artificial leather and manufacturing same. 1,891,027; Dec. 13.
Riker, Andrew L. (See Messinger, L. H., and Riker.)
Rix, Fred H. (See Noonan, Thomas F., assignor.)
Roberson, Willard D., New York, N. Y. Textile fabric or similar article. Des. 88,672; Dec. 13.
Roberson, Willard D., assignor to Hess Goldsmith & Company, Inc., New York, N. Y. Textile fabric. Des. 88,673; Dec. 13.
Rochester Folding Box Co., The. (See Fancher, Howard M., assignor.)
Rockford Drilling Machine Company. (See Carlson, Raymond A., assignor.)
Roessler & Hasslacher Chemical Company, The. (See Magill, Paul L., assignor.)
Roessler & Hasslacher Chemical Company, The. (See Weston, Paul E., assignor.)
Roessler & Hasslacher Chemical Company. (See Zisch, Walter, assignor.)
Roosen, Richard. (See Hayn, Georg, assignor.)
Rösch, Georg. (See Bauer, W., Haller, and Bösch.)
Rosenhahn, Carl, Hillside, N. J. Punching bag apparatus. 1,890,696; Dec. 13.
Rosenthal, Leon W., New York, N. Y. Apparatus for toy electric railways. 1,891,059; Dec. 13.
Ross, Cleland C. (See Anstice, M. R., and Ross.)
Ross, David E., assignor to The Fairfield Manufacturing Company, La Fayette, Ind. Clutch mechanism for planetary gearing. 1,891,182; Dec. 13.
Rottum, Charles. (See Stonequist, L. W., and Rottum.)
Rowley, Arthur C., assignor to Globe Automatic Sprinkler Company, Philadelphia, Pa. Fire extinguishing system. 1,891,113; Dec. 13.
Rowley, Arthur C., assignor to Globe Automatic Sprinkler Company, Philadelphia, Pa. Automatic heat responsive unit. 1,891,183; Dec. 13.
Royal Typewriter Company. (See Degener, Gustave O., assignor.)
Royal Typewriter Company. (See Dowd, Bernard J., assignor.)
Royal Typewriter Company. (See Hess, Edward B., assignor.)
Royal Typewriter Company. (See Myers, L. C., and Handley, assignors.)
Ruben Condenser Company. (See Ruben, Samuel, assignor.)
Ruben Rectifier Corporation. (See Ruben, Samuel, assignor.)
Ruben, Samuel, New York, N. Y., assignor to Ruben Rectifier Corporation, Englewood, N. J. Electric current rectifier. 1,890,470; Dec. 13.
Ruben, Samuel, assignor, by mesne assignments, to Ruben Condenser Company, New Rochelle, N. Y. Polarized electrolytic couple. 1,891,206; Dec. 13.
Ruben, Samuel, assignor, by mesne assignments, to Ruben Condenser Company, New Rochelle, N. Y. Electrolytic condenser. 1,891,207; Dec. 13.
Ruf, Christian E. (See Aldeborgh, E. H., and Ruff.)
Rumbletop Corporation. (See Benn, Edward H., assignor.)
Rundell, Raymond R., Waterville, Conn. Rope tightener. 1,890,829; Dec. 13.
Russell, Wallace W., Kansas City, Mo. Highway guard rail. 1,890,751; Dec. 13.
Rutherford, Eugene W., New Haven, assignor to The Shoe Hardware Company, Waterbury, Conn. Making fastener elements. 1,890,471; Dec. 13.
Sabbah, Camil A., Schenectady, N. Y., assignor to General Electric Company. Electric translating circuit. 1,891,114; Dec. 13.
Safe Deposit and Trust Company of Baltimore et al., executors. (See Whittinham, George H.)
Sage, Henry P., et al. (See Hammond, Grant, assignor.)
Sager, John L., Los Angeles, Calif. Well drilling structure. 1,891,062; Dec. 13.
St. Clair, William M., Chicago, Ill. Light proof fabric for window shades and the like. 1,890,869; Dec. 13.
Salomon, Ivan J., Baltimore, Md. Umbrella and case therefor. 1,891,184; Dec. 13.
Sandelin, Carl, New York, N. Y. Textile fabric or the like. Des. 88,674; Dec. 13.
Sanford, Selden B., Yonkers, assignor to Otis Elevator Company, New York, N. Y. Switching mechanism. 1,890,752; Dec. 13.
Santiago, James J., assignor to John Grant, Los Angeles, Calif. Drill stem bearing. 1,890,529; Dec. 13.
Santiago, James J., assignor to John Grant, Los Angeles, Calif. Drill stem bearing. 1,890,530; Dec. 13.
Saranac Machine Company. (See Durand, Arthur F., assignor.)
Sauer, Louis J., Oak Park, assignor to Charles H. Joy, sr., Chicago, Ill. Duplicating means and method. 1,890,915; Dec. 13.
Scanlan, Robert W., assignor to Ralston Purina Company, St. Louis, Mo. Manufacturing puffed cereal food. 1,890,697; Dec. 13.
Schade, Otto M. (See von Hoessle, C. H., and Schade.)
Schers, Emil, Wilkes-Barre, Pa. Eyeshield. 1,890,865; Dec. 13.
Scheurer, Paul P., assignor to Will McKemie, sr., Wichita Falls, Tex. Merchandise vending apparatus. 1,890,753; Dec. 13.
Schlicht, Otto A., Chicago, Ill. Action for a concertina. 1,890,830; Dec. 13.
Schmidt Securities Company. (See Hoppe, Friedrich A., assignor.)
Schneider, Wilhelm. (See Luettringhaus, A., Neresheimer, and Schneider.)
Schoeninger, Adolf, Glen Ridge, N. J., assignor to Forstner Chain Corporation. Ornamental chain construction. 1,891,056; Dec. 13.
Schoenleber, Gretchen B., assignor to Ambrosia Chocolate Company, Milwaukee, Wis. Candy confection. Des. 88,675; Dec. 13.
Schreiber, John H., St. Louis, Mo. Ice scoring machine. 1,890,698; Dec. 13.
Schuetz, Hermine. (See Schuetz, Robert C., assignor.)
Schuetz, Robert C., Detroit, assignor to Hermine Schuetz, Dexter, Mich. Steering gear. 1,891,208; Dec. 13.
Schuls, Hans I. (See Weingand, R., and Schuls, assignors.)

Schumann, Curt, E. Muench, and B. Christ, Ludwigshafen-on-the-Rhine, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Production of indole and derivatives thereof. 1,891,057; Dec. 13.
Schurtz, Ralph E., assignor, by mesne assignments, of one-half to R. W. Bailey and C. T. Jobes, Kansas City, Mo. Automatic weak liquor control. 1,890,581; Dec. 13.
Schurtz, Ralph E., assignor, by mesne assignments, of one-half to R. W. Bailey and C. T. Jobes, Kansas City, Mo. Refrigerating system. 1,891,028; Dec. 13.
Schwarzmann, Wolfgang E. (See Beeh, L., and Schwarzmann.)
Schweizer, Jack, assignor to William Willheim Co., Inc., New York, N. Y. Textile fabric or similar article. Des. 88,678; Dec. 13.
Schweizer, Jack, assignor to William Willheim Co., Inc., New York, N. Y. Textile fabric or similar article. Des. 88,679; Dec. 13.
Schweizer, Jack, Rye, N. Y. Textile fabric or the like. Des. 88,680; Dec. 13.
Schweizer, Jack, Rye, N. Y. Textile fabric or the like. Des. 88,681; Dec. 13.
Schweizer, Jack, Rye, N. Y. Textile fabric or the like. Des. 88,682; Dec. 13.
Schwenk, Erwin, Berlin-Westend, Germany, assignor, by mesne assignments to General Aniline Works, Inc., New York, N. Y. Making anthraquinone-sulphonic acids. 1,890,866; Dec. 13.
Scott, John E., assignor to Allith-Prouty Company, Danville, Ill. Hand brake rigging. 1,890,623; Dec. 13.
Scott, William E., Philadelphia, assignor of one-half to R. W. Ehling, Norristown, and one-half to W. T. Scott, Philadelphia, Pa. Elevator tackle. 1,891,115; Dec. 13.
Scott, William T., et al. (See Scott, William E., assignor.)
Scott & Williams, Inc. (See Getaz, James L., assignor.)
Scottish Dyes, Limited. (See Hooley, L. J., and Thomas, assignors.)
Searles, Wayne S., assignor to Universal Optical Corporation, Providence, R. I. Ophthalmic frame. 1,891,016; Dec. 13.
Semon, Waldo L., Silver Lake Village, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y. Rubber composition and preserving rubber. 1,890,916; Dec. 13.
Semon, Waldo L., Silver Lake Village, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y. Rubber composition and preserving rubber. 1,890,917; Dec. 13.
Sen, Fong Y., Shanghai, China. Manufacture of glutamic acid compounds. 1,890,590; Dec. 13.
Servis Equipment Company. (See Jarmin, James B., assignor.)
Shadish, Frank, Bridgeville, Pa. Toy vehicle. 1,890,624; Dec. 13.
Shamas, Joseph M., Lowell, Mass. Apparatus for use in treating peanuts. 1,890,867; Dec. 13.
Shank, Charles L., North Canton, Ohio. Steam trap. 1,890,591; Dec. 13.
Sharp, Charles L., Pittsburgh, Pa., assignor of one-half to I. T. Sharp. Game board. 1,890,950; Dec. 13.
Sharp, I. T. (See Sharp, Charles L., assignor.)
Shaukis, Arthur J., Haverhill, Mass. Neckband. 1,891,063; Dec. 13.
Shaw, Harold N., Milwaukee, Wis. Radiator. 1,890,625; Dec. 13.
Shekter, Abraham J., Jamaica, N. Y. Periodic electric time switch. 1,891,017; Dec. 13.
Shelby Spring Hinge Company, The. (See Hubbs, Henry E., assignor.)
Shen Manufacturing Company. (See Warager, Leonard C., assignor.)
Shepard, Oscar F., Cincinnati, Ohio. Motor control. 1,890,754; Dec. 13.
Shepherd, Howard F., Los Angeles, Calif. Scooter. 1,890,755; Dec. 13.
Sherman, Elroy P., assignor to The Ashtabula Corrugated Box Company, Ashtabula, Ohio. Shipping carton. 1,890,951; Dec. 13.
Sherman, John Q., Dayton, Ohio. Air cooling apparatus. 1,890,626; Dec. 13.
Sherman, John Q., Dayton, Ohio. Air cooling apparatus. 1,890,888; Dec. 13.
Shifman Bros. (See Shifman, Milton L., assignor.)
Shifman, Milton L., East Orange, assignor to Shifman Bros., Newark, N. J. Mattress making machinery. 1,891,018; Dec. 13.
Shindel, Harry F., assignor to Willson Products, Inc., Reading, Pa. Elbow fitting for respirators. Des. 88,683; Dec. 13.
Shively, Jess A., assignor to The Goodyear Tire & Rubber Company, Akron, Ohio. Machine for applying gum strips to beads. 1,890,982; Dec. 13.
Shoe Hardware Company, The. (See Rutherford, Eugene W., assignor.)
Shoemaker, Joseph J., Clawson, Mich. Exercising apparatus. 1,890,699; Dec. 13.
Shute, Arthur C. (See Bergen, W. V., and Shute.)
Sieber, Heinrich. (See Eckert W., and Sieber.)
Siemens-Schuckertwerke Aktiengesellschaft. (See Köhler, Gustav, assignor.)
Signorelli, Dominick J., New Orleans, La. Washboard. 1,890,549; Dec. 13.
Silverman, Joseph. (See Kasowski, John, assignor.)
Simmons Manufacturing Company, The. (See Lemmerman, Howard E., assignor.)
Simonovits, Morris, Garfield, N. J. Shoe. 1,891,064; Dec. 13.
Simpson, Lewis E., and C. H. Bartholomew, Wichita, Kans. Attachment for parachutes. 1,890,868; Dec. 13.
Singer Manufacturing Company, The. (See Powers, C. R., and Koubek, assignors.)
Singer, Samuel J. (See Fuchs, Fritz E., assignor.)
Sitton, Thomas E., Edgewood Arsenal, Md. Eyelet. 1,891,065; Dec. 13.
Skolnik, Max, Chicago, Ill., assignor to Insolo Holding Company. Building block and wall form. 1,890,532; Dec. 13.
Sky Specialties Corporation. (See Stover, Frank B., assignor.)
Smidlein, Anthony E., New York, N. Y., assignor to Bigelow Sanford Carpet Co., Inc. Carpet. Des. 88,684; Dec. 13.
Smidlein, Anthony E., New York, N.Y., assignor to Bigelow Sanford Carpet Co., Inc. Carpet. Des. 88,685; Dec. 13.
Smith, Harold E., Brighton, assignor to The Pfawdler Co., Rochester, N. Y. Heat transfer device. 1,891,058; Dec. 13.
Smith, Harry, St. Helens, assignor to Pilkington Brothers, Limited, Liverpool, England. Rolling of composite glass strips. 1,891,116; Dec. 13.
Smith, Jesse C., assignor to International Products Corporation, New York, N. Y. Measuring-dispensing apparatus for fluids. 1,890,700; Dec. 13.
Smith, John H. (See Sturni, C., and Smith.)
Smith, Lloyd, Paris, Tenn. Lawn trimmer. 1,891,066; Dec. 13.
Smith, Lowell J., assignor to Stant Manufacturing Co., Connersville, Ind. Radiator ornament. Des. 88,676; Dec. 13.
Smith, Peter J., et al. (See Richman, Charles T., assignor.)
Smith, Samuel B., Cleveland, Ohio. Valve. 1,890,953; Dec. 13.
Smith, William B., assignor of one-half to C. T. Weber, Baltimore, Md. Ball ear and method therefor. 1,891,209; Dec. 13.
Smokador Manufacturing Co. (See Baylis, Robert N., assignor.)
Smyrna Automat G. m. b. H. (See Huebner, Frans, assignor.)
Smyth, Rodrigo M., San Jose, Costa Rica. Liquid gyroscopic compass. 1,890,831; Dec. 13.
Snyder, Clifford L., assignor to The Evans Auto Loading Co., Inc., Detroit, Mich. Filler strip for floors and other constructions. 1,890,964; Dec. 13.
Societe Alsacienne de Constructions Mecaniques. (See Ehlinger, Marcel, assignor.)
Societe Anonyme Assuro. (See Laengel, Henri C., assignor.)
Solid Carbonic Company. (See Drummond, Donald W., assignor.)
Sollich, Robert, Rostock, Germany. Process and apparatus for manufacturing sugar sweetmeats and the like. 1,890,533; Dec. 13.
Spencer, Alexander, London, England. India-rubber spring. 1,890,795; Dec. 13.
Spencer Lens Company. (See Ott, Harvey N., assignor.)
Spengler, Harold C., Rockford, Ill. Punch. 1,890,955; Dec. 13.
Spengler, Harold C., Rockford, Ill. Bench punch. 1,890,956; Dec. 13.
Spicers Limited. (See Baker, Thomas T., assignor.)
Spira, Leopold, Zurich, Switzerland. Paint pulverizer. 1,891,067; Dec. 13.
Spitzglass, Albert F., and O. T. Handwerk, assignors to Republic Flow Meters Company, Chicago, Ill. Pyrometer. 1,890,701; Dec. 13.
Sprague, Lucy A., administratrix. (See Krause, Paul.)
Sprague, William E., et al. (See Krause, Paul, assignor.)
Squier, Arthur H., Reno, Pa. Antiskid device. 1,890,957; Dec. 13.
Stahl, Harry R., sr., Trenton, N. J. Compass. 1,891,068; Dec. 13.
Stalb, Arthur R., jr., Detroit, Mich. Airplane landing gear. 1,891,188; Dec. 13.
Standard Computing Scale Company, The. (See Burkheiser, Adam C., assignor.)
Standard Computing Scale Company, The. (See Kelley, Leonard O., assignor.)
Standard Gage Company. (See Aldeborgh, E. H., and Ruf, assignors.)
Stant, Kyle R., Connersville, Ind. Filler cap. Des. 88,677; Dec. 13.
Stant Manufacturing Co. (See Smith, Lowell J., assignor.)
Starline, Inc. (See Ferris, Henry I., assignor.)
States Company, The. (See Blakeslee, Henry J., assignor.)
Stauffer, Ernest L. (See Murphy, L. J., and Stauffer.)
Stearns, Frederick, & Company. (See Omohundro, Allen L., assignor.)
Stearns, Marcus C., Chicago, Ill. Storage apparatus. 1,890,796; Dec. 13.
Steel, Joseph I., Portland, Oreg., assignor to Moore Dry Kiln Company of Oregon. Kiln for drying lumber and other substances. 1,890,756; Dec. 13.

Steele, William J. (See Powers, Joseph J., assignor.)
Stein, Joseph A., Pittsburgh, and L. L. Vayda, Aspinwall, Pa., assignors to Bacharach Industrial Instrument Company. 1,890,592; Dec. 13.
Stein, Joseph A., Pittsburgh, and L. L. Vayda, Aspinwall, Pa., assignors to Bacharach Industrial Instrument Company. Sampling tube. 1,890,627; Dec. 13.
Stein, Joseph N., Dorchester, Mass. Self-adjusting trimming attachment for sewing machines. 1,891,029; Dec. 13.
Steiner, Hans, assignor to the Firm of Sulzer Freres Societe Anonyme, Winterthur, Switzerland. Fuel injection device for internal combustion engines. 1,890,702; Dec. 13.
Stenglemeir, George, Woodward, Okla. Lubricated structure. 1,890,550; Dec. 13.
Stevenson, Frank, West Lawn, assignor to Howard Hosiery Company, Inc., Sinking Springs, Pa. Shifting point for full-fashion knitting machine. 1,891,117; Dec. 13.
Stipes, Reese W., and W. M. Hoose, assignors of one-third to The Evans Auto Loading Company, Inc., one-third to Copony Auto Loading Company, Detroit, Mich., and one-third to The Studebaker Corporation, South Bend, Ind. Automobile decking device. 1,890,918; Dec. 13.
Stockstrom, Arthur, assignor to American Stove Company, St. Louis, Mo. Range. 1,891,116; Dec. 13.
Stockton, Jack P., Spring Lake, N. J., assignor to Stromberg-Carlson Telephone Manufacturing Company. Automatic control for phonographs. 1,890,797; Dec. 13.
Stoehrel, Johannes. (See Ambros, O., Reindel, Eisele, and Stoehrel.)
Stonequist, Lawrence W., and C. Rottum, Chicago, Ill. Advertising device. 1,890,657; Dec. 13.
Stover, Frank B., assignor to Sky Specialties Corporation, Detroit, Mich. Safety valve. 1,891,119; Dec. 13.
Strahan, Ida W., Montclair, N. J. Clothes scrubbing device. 1,891,120; Dec. 13.
Straus, Alexander H., Woodmere, N. Y. Shroud. 1,890,919; Dec. 13.
Strawn, James A., Brooklyn, N. Y. Smoking pipe. 1,890,920; Dec. 13.
Strickler, Arthur C., Long Beach, Calif. Concrete reinforcing steel tie. 1,890,757; Dec. 13.
Strohach, Paul, Firm. (See Keller, Georg, assignor.)
Stromberg-Carlson Telephone Manufacturing Company. (See Stockton, Jack P., assignor.)
Studebaker Corporation, The, et al. (See Stipes, R. W., and Hoose, assignors.)
Sturges, Frederic D., assignor to Jones & Laughlin Steel Corporation, Pittsburgh, Pa. Floor system. 1,890,921; Dec. 13.
Sturni, Charles, Pittsburgh, and J. H. Smith, Camp Hill, Pa. Expansion bit. 1,890,889; Dec. 13.
Suciu, Mary N., Flint, Mich. Portable rubbish consumer. 1,891,069; Dec. 13.
Sueta, Julian, and A. M. Guastavino, Buenos Aires, Argentina. Molder for painting the lips. 1,890,628; Dec. 13.
Sulzer Freres Societe Anonyme. (See Steiner, Hans, assignor.)
Surface Combustion Company, The. (See Keith, George, assignor.)
Sutton, William V., assignor to Walter E. Brearley, Rockford, Ill. Scale. Des. 88,686; Dec. 13.
Svendsen, Svend E., Seattle, Wash. Tobacco pipe. 1,890,703; Dec. 13.
Swarts, Edward M., assignor to Keystone Mfg. Co., Boston, Mass. Toy vehicle. Des. 88,687; Dec. 13.
Swarts, Edward M., assignor to Keystone Mfg. Co., Boston, Mass. Ridable vehicular toy. 1,890,658; Dec. 13.
Swenson, Joseph W., Summit, N. J. Bottle cap remover. 1,891,030; Dec. 13.
Swift and Company. (See Dziedzic, Nickolas J., assignor.)
Swift & Company. (See Newton, R. C., and Richardson, assignors.)
Sylvania Industrial Corporation. (See Bleibler, Ernst, assignor.)
Symington, Edith R., et al. (See Symington, Thomas H., assignor.)
Symington, Thomas H., Baltimore, Md., assignor, by mesne assignments, of one-half to Edith R. Symington, and one-half to Thomas R. Symington, Baltimore, Md. Plank or rail fence. 1,890,629; Dec. 13.
Symington, Thomas H., assignor, by mesne assignments, of one-half to Edith R. Symington, and one-half to Thomas R. Symington, Baltimore, Md. Board fence. 1,890,630; Dec. 13.
Symington, Thomas H., assignor, by mesne assignments, of one-half to Edith R. Symington, and one-half to Thomas R. Symington, Baltimore, Md. Board fence. 1,890,631; Dec. 13.
Symington, Thomas R., et al. (See Symington, Thomas H., assignor.)
Synchrome Corporation. (See Wright, Walter L., assignor.)
Tanasso, Vincent. (See Pomeranz, J. J., and Tanasso.)
Tasman, George, Brooklyn, N. Y. Vehicle body. 1,890,704; Dec. 13.
Tatham, Norman, Los Angeles, Calif. Scale mechanism. 1,890,706; Dec. 13.
Tatter, John W., Detroit, Mich., assignor to Lewis Differential Company, Chicago, Ill. Brake drum. 1,890,705; Dec. 13.
Tatum, John J., Baltimore, Md. Vehicle spring. 1,890,958; Dec. 13.
Taylor, Harry, et al. (See Krause, Paul, assignor.)
Teesdale Manufacturing Company. (See Rich, Claude R., assignor.)
Telefunken Gesellschaft fur Drahtlose Telegraphie m. b. H. (See Osnos, Mendel, assignor.)
Teleregister Corporation, The. (See Haselton, Merton L., assignor.)
Teleregister Corporation, The. (See Haselton, Merton L. and P. S., assignors.)
Television Limited. (See Baird, John L., assignor.)
Temple, Paul C., assignor to A. W. Cash Company, Decatur, Ill. Regulating apparatus. 1,890,472; Dec. 13.
Texas Company, The. (See Titus, Leon D., assignor.)
Theil, Alfred. (See Fluck, R., and Theil.)
Thermoid Rubber Company. (See Ogren, Carl F., assignor.)
Thibert, Napoleon R., Worcester, Mass. Liquid fuel burner. 1,890,593; Dec. 13.
Thoma, Andrew, Cambridge, assignor to North American Chemical Company, Boston, Mass. Shoe filling method. 1,890,473; Dec. 13.
Thomas, John. (See Hooley, L. J., and Thomas.)
Thompson Brothers (Bilston) Limited. (See Burn, Lewis, assignor.)
Thompson, Sidney E., West Englewood, N. J., assignor to Copeland & Thompson, Incorporated, New York, N. Y. Plate or similar article of pottery. Des. 88,688; Dec. 13.
Thorell, Edwin, West Hartford, Conn., assignor to Underwood Elliott Fisher Company, New York, N. Y. Type-soldering device. 1,890,659; Dec. 13.
Thoreson, Reider, assignor to Hydraulic Press Manufacturing Company, Mount Gilead, Ohio. Drawing press or the like. 1,891,121; Dec. 13.
Tietig, Chester, Los Angeles, Calif. Process for the activation of clay and manufacture of hydrochloric acid. 1,890,474; Dec. 13.
Timken Silent Automatic Company, The. (See Powers, Milton A., assignor.)
Titus, Leon D., Port Arthur, Tex., assignor to The Texas Company, New York, N. Y. Can feeding machine. 1,891,195; Dec. 13.
Tobacco By-Products & Chemical Corporation. (See Headlee, T. J., and Ginsburg, assignors.)
Todd, Ulysses G., assignor to The Pfaudler Co., Rochester, N. Y. Treating products. 1,890,475; Dec. 13.
Tokheim, John J., Cedar Rapids, Iowa. Control valve for volatile liquid storage tanks. 1,890,870; Dec. 13.
Townsend, John R., Lake Bluff, Ill. Ventilator. 1,890,758; Dec. 13.
Travis, John S., Long Island City, N. Y., assignor to Bigelow Sanford Carpet Co., Inc. Carpet. Des. 88,689; Dec. 13.
Traxel, Charles E. (See Potter, F. M., and Traxel.)
Trencham, Henry, Ruislip, and H. C. Heath, Wembley, England, assignors to General Electric Company. Electric circuit breaker. 1,891,070; Dec. 13.
Trott, Rolland S., Denver, Colo. Automotive vehicle. 1,890,871; Dec. 13.
Trotter, Henry R., assignor to Hacker Manufacturing Co., Chicago, Ill. Printing press. 1,890,760; Dec. 13.
Trulock, Robert S., Oklahoma City, Okla. Shoe-shining chair. 1,891,071; Dec. 13.
Tube Reducing Corporation. (See Coe, George B., assignor.)
Turner, Archibald J., assignor to Wilson-Western Sporting Goods Co., Chicago, Ill. Inflatable ball. 1,890,594; Dec. 13.
Tyrrell, Laurance E., Erie, Pa., assignor to General Electric Company. Generator excitation system. 1,891,072; Dec. 13.
Ullrich, Georg, Magdeburg, assignor to the Firm Fried. Krupp Grusonwerk Aktiengesellschaft, Magdeburg, Buckau, Germany. Apparatus for magnetic separation of materials. 1,890,551; Dec. 13.
Underwood Elliott Fisher Company. (See Thorell, Edwin, assignor.)
Union d'Electricite. (See Fournier, Aimé B., assignor.)
Union Machinery Company. (See Marasso, Fred, assignor.)
Union Switch & Signal Company, The. (See Dowling, Philip H., assignor.)
Union Switch & Signal Company, The. (See Martin, Paul N., assignor.)
United American Bosch Corporation. (See Beeh, L., and Schwarzmann, assignors.)
United Shoe Machinery Corporation. (See Eppler, Andrew, assignor.)
United States Appliance Corporation. (See Keel, Ralph M., assignor.)
United States Hoffman Machinery Corporation. (See Zeidler, William A., assignor.)
United States Pipe and Foundry Company. (See Daniel, R. E., Haughton, and Clark, assignors.)
Universal Oil Products Company. (See Dubbs, Carbon P., assignor.)
Universal Oil Products Company. (See Pyzel, Daniel, assignor.)
Universal Optical Corporation. (See Searles, Wayne S., assignor.)
"Universelle" Cigarettenmaschinen-fabrik, J. C. Müller & Co. (See Voigt, Robert W., assignor.)
Upson Company, The. (See Harney, Francis W., assignor.)
Urch, Marion W., Council Bluffs, Iowa. Portable mixing machine. 1,891,122; Dec. 13.

Utrevis, Lula, Newark, Ohio. Light attachment for irons. 1,891,128; Dec. 13.
Valenta, Emanual, assignor to Firm Limited Company, formerly Skoda Works, Pilsen, Czechoslovakia. Acid-proof alloys. 1,890,595; Dec. 13.
Valley Iron Works Company. (See Peterson, Emil A., assignor.)
Van Arkel, Anton E., and J. H. de Boer and W. Koopman, assignors to N. V. Philips' Gloeilampenfabrieken, Eindhoven, Netherlands. Precipitating metals on an incandescent body. 1,891,124; Dec. 13.
Van Arsdale, Henry, New Rochelle, N. Y. Closure for containers and receptacles. 1,891,031; Dec. 13.
Van den Broecke, Frans. (See Capek, A., and Van den Broecke.)
Van der Willigen, Paul C., assignor of one-half to N. V. Nederlandsche Linoleumfabriek, Krommenie, Netherlands. Production of flexible floor-, wall- and like covers. 1,890,476; Dec. 13.
Van Dinter, George L., and C. Ferrettie, assignors to Mishawaka Rubber and Woolen Manufacturing Company, Mishawaka, Ind. Form fitting rubber boot and making same. 1,890,890; Dec. 13.
Van Gessel, Johannes A., assignor to N. V. Philips' Gloeilampenfabrieken, Eindhoven, Netherlands. Separating mixed gases. 1,891,125; Dec. 13.
Van Kleeck, Leland S., Montgomery, N. Y. Antiskid device. 1,890,872; Dec. 13.
Varaud, André, Geneva, Switzerland. Time fuse mechanism for projectiles. 1,890,552; Dec. 13.
Vayda, Louis L. (See Stein, J. A., and Vayda.)
Veillette, Alfred, Attleboro, Mass. Bridge member for an ophthalmic mounting. Des. 88,691; Dec. 13.
Venable, William M., assignor to Blaw-Knox Company, Pittsburgh, Pa. Material handling and measuring apparatus. 1,891,032; Dec. 13.
Vickers (Aviation) Limited. (See Wallis, Barnes N., assignor.)
Villani, James, Ridgewood, N. J. Textile fabric or the like. Des. 88,692; Dec. 13.
Villani, James, Ridgewood, N. J. Textile fabric or the like. Des. 88,693; Dec. 13.
Virgile, Gabriel, Long Beach, N. Y. Textile fabric or the like. Des. 88,694; Dec. 13.
Vogelman, Philip A., assignor to William Wilheim Co., Inc., New York, N. Y. Textile fabric or similar article. Des. 88,695; Dec. 13.
Vogelman, Philip A., New York, N. Y. Textile fabric. Des. 88,696; Dec. 13.
Vogelman, Philip A., New York, N. Y. Textile fabric. Des. 88,697; Dec. 13.
Vogt, Arthur H., Aurora, Ill. Aerial toy. 1,890,759; Dec. 13.
Vohs, Norbert, Munchen-Gladbach, Germany. Woven fabric. 1,890,959; Dec. 13.
Voigt, Robert W., assignor to the Firm "Universelle" Cigarettenmaschinen-Fabrik, J. C. Müller & Co., Dresden, Germany. Arranging oval cigarettes. 1,890,707; Dec. 13.
Von Hoessle, Carl H., and O. M. Schade, assignors to Chemische Fabrik von Heyden, A. G., Radebeul Dresden, Germany. Drying thin cellulose sheets. 1,890,832; Dec. 13.
Von Hoessle, Carl H., and O. M. Schade, Radebeul-Dresden, assignors to Chemische Fabrik Von Heyden, A. G., Radebeul, near Dresden, Germany. Drying long webs of thin cellulose. 1,890,833; Dec. 13.
Von Radowitz, Wilhelm. (See Fluck, R., and Theil, assignors.)
Vopel, Johannes, Berlin-Zehlendorf-Mitte, and R. Oetker, Berlin, assignors to Gesellschaft für Elektrische Apparate m. b. H., Marienfelde near Berlin, Germany. Electrical remote control system. 1,890,891; Dec. 13.
Wackman, Louis B., St. Louis, Mo. Sealing cap for the plugs of metallic drums and the like. 1,891,083; Dec. 13.
Wagner, Cary R. (See Osterstrom, R. C., and Wagner.)
Wagner, E. R., Mfg. Co. (See Randall, Louis G., assignor.)
Wagner, Frank, Laurel Hill, Long Island, N. Y. Pencil. 1,890,873; Dec. 13.
Wagner, Joshua, assignor to Progressive Corrugated Paper Machinery Co. Inc., Brooklyn, N. Y. Taping machine. 1,890,477; Dec. 13.
Wagner, Lawrence L., Shirleysburg, Pa. Signaling apparatus. 1,891,126; Dec. 13.
Waldorf Paper Products Company. (See Boeye, Paul F., assignor.)
Walker, Herbert E., Bremerton, Wash. Gun sight. 1,890,478; Dec. 13.
Walker, James E., Wapello, Iowa. Vending machine and money changer. 1,890,761; Dec. 13.
Wallace, Bert A., assignor to Kellogg Switchboard and Supply Company, Chicago, Ill. Telephone system. 1,890,479; Dec. 13.
Wallace, Bert A., assignor to Kellogg Switchboard and Supply Company, Chicago, Ill. Telephone system. 1,890,480; Dec. 13.
Waller, Edward A., Chicago, Ill. Multicolor printing press. 1,890,922; Dec. 13.
Wallis, Barnes N., assignor to Vickers (Aviation) Limited, Weybridge, England. Apparatus for assembling and securing strengthening sleeves to the ends of tubular members. 1,891,127; Dec. 13.
Walsh, Dudley A., New Orleans, La. Sugar crystallizer. 1,890,632; Dec. 13.
Walsh, Mathew J., Milwaukee, Wis. Dressing tool. 1,890,481; Dec. 13.
Waltz, Elmer J., Riverside, N. J. Chromium plating. 1,890,633; Dec. 13.
Walworth Patents Inc. (See Martin, Jesse C., jr., assignor.)
Warager, Leonard C., Floral Park, N. Y., assignor to Shen Manufacturing Company, Germantown, Pa. Display and dispensing hook. 1,890,834; Dec. 13.
Warner, Jacob M., Bryn Mawr, Pa. Automatic water shed for inside casements. 1,891,073; Dec. 13.
Warren, William W., Knoxville, Tenn. Artificial stone. 1,890,798; Dec. 13.
Watkins, Griffin. (See Neeley, George S., assignor.)
Watlington, William H., Denver, Colo. Windshield for vehicles. 1,891,128; Dec. 13.
Webb, George C., Buffalo, N. Y. Table. 1,890,835; Dec. 13.
Webb, John O., Tulsa, Okla. Globe valve. 1,890,836; Dec. 13.
Weber, Carl T. (See Smith, William B., assignor.)
Weingand, Richard, and H. I. Schuls, Bomlits, near Walsrode, Germany. Manufacturing smokeless powder. 1,890,960; Dec. 13.
Weir, James W. (See Howes, Raymond T., assignor.)
Weisberg, Hyman D., New York, N. Y. Combined nursing bottle and nipple holder. 1,890,482; Dec. 13.
Weitz, Irene A. Brooklyn, N. Y. Textile fabric or the like. Des. 88,698; Dec. 13.
Wells, Harold D., Glens Falls, N. Y. Paper stock regulator. 1,890,799; Dec. 13.
Welsbach Street Lighting Company of America. (See Beck, M. B., and Whittaker, assignors.)
Wenzel, Max, Neidhardtsthal, Germany. Flow rectifier for paper stock. 1,890,634; Dec. 13.
West, Ernest, assignor to West's Gas Improvement Company, Limited, Manchester, England. Coke extractor for vertical carbonisation retorts. 1,891,129; Dec. 13.
West Virginia Armature Co. (See Phelps, Arthur F., assignor.)
Western Electric Company, Incorporated. (See Capek, A., and Van den Broecke, assignors.)
Western Specialty Company. (See Deiser, William F., assignor.)
Western Supplies Company. (See Altvater, Arthur W., assignor.)
Weston, Paul E., Sewaren, N. J., assignor, by mesne assignments, to The Roessler & Hasslacher Chemical Company. Manufacture of hydrogen iodide. 1,890,874; Dec. 13.
West's Gas Improvement Company. (See West, Ernest, assignor.)
Whalen, Francis C., assignor to Radiovisor Foreign & Colonial Limited, London, England. Instrument for the comparison of the intensity of light rays. 1,890,837; Dec. 13.
Whicher, George H. (See Wood, Jesse N., assignor.)
Whirldry Corporation, The. (See Dunham, George W., assignor.)
White, Ernest M., Los Angeles, Calif. Supercharger. 1,890,708; Dec. 13.
White, Wiley L., Calwa, Calif. Train order hoop holding means. 1,890,709; Dec. 13.
Whittaker, John D. (See Beck, M. B., and Whittaker.)
Whittingham, Eleanor V. D., et al., executors. (See Whittingham, George H.)
Whittingham, George H.; Safe Deposit and Trust Company of Baltimore, and Eleanor V. D. Whittingham, executors, assignors to Monitor Controller Company, Baltimore, Md. Motor control switch mechanism. 1,890,838; Dec. 13.
Whyte, John N., London, England. Conveying apparatus. 1,890,762; Dec. 13.
Wignall, Joseph S., Payson, Utah. Direction signal for vehicles. 1,890,961; Dec. 13.
Wiley, Samuel, Metuchen, N. J. Parachute for illuminating flares. 1,890,962; Dec. 13.
Wille, Fredrik H., Chicago, Ill., assignor to A. M. Byers Company, Pittsburgh, Pa. Making wrought iron. 1,890,660; Dec. 13.
Willheim, William, New York, N. Y. Textile fabric or similar article. Des. 88,699; Dec. 13.
Willheim, William, New York, N. Y. Textile fabric or similar article. Des. 88,700; Dec. 13.
Willheim, William, Co. (See Bridier, Fernand, assignor.)
Willheim, William, Co. (See Grollich, Anton, assignor.)
Willheim, William, Co. (See Hellman, Carl R., assignor.)
Willheim, William, Co. (See Kohnt, Alexander, assignor.)
Willheim, William, Co. (See Murray, Herman S., assignor.)
Willheim, William, Co. (See Schweiner, Jack, assignor.)
Willheim, William, Co. (See Vogelman, Philip A., assignor.)
Williams, Josh F., assignor of one-half to D. Buck, Lexington, Miss. Automobile lift. 1,890,963; Dec. 13.
Williams, Lewis S., Berrien Springs, Mich. Folding table. 1,890,710; Dec. 13.
Williams, Ward, Brandon, Wis. Electric motor. 1,890,800; Dec. 13.
Willson Products, Inc. (See Shindel, Harry F., assignor.)

Wilson, Charles H., Oakland, Calif. Game piece. 1,891,130; Dec. 13.
Wilson, Charles H., Pelham, assignor to Wilson Mechanical Instrument Co. Inc., New York, N. Y. Test piece support for hardness testers. 1,890,928; Dec. 13.
Wilson Mechanical Instrument Co. Inc. (See Wilson, Charles H.)
Wilson, Russell C., Detroit, Mich. Portable step for a ladder. 1,890,763; Dec. 13.
Wilson-Western Sporting Goods Company. (See Bartky, Walter, assignor.)
Wilson-Western Sporting Goods Co. (See Turner, Archibald J., assignor.)
Winkelmann, Herbert A., Akron, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y. Composition of matter and making same. 1,890,924; Dec. 13.
Winter, William F., jr., Schenectady, N. Y., assignor to General Electric Company. Cathode for electric discharge devices. 1,891,074; Dec. 13.
Wintrich, Evelyn, New York, N. Y. Textile fabric or the like. Des. 88,701; Dec. 13.
Wintrich, Evelyn, New York, N. Y. Textile fabric or the like. Des. 88,702; Dec. 13.
Wintrich, Evelyn, New York, N. Y. Textile fabric or the like. Des. 88,703; Dec. 13.
Wired Radio, Inc. (See Duncan, Robert D., jr., assignor.)
Wired Radio, Inc. (See Hough, Clinton W., assignor.)
Wolfe, Henry M., and C. A. Nichol, Muskegon, assignors to Continental Motors Corporation, Detroit, Mich. Twisting crank shafts. 1,890,635; Dec. 13.
Wolff, Hans, Ludwigshafen-on-the-Rhine, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Green mineral pigments. 1,891,210; Dec. 13.
Wollemann, Johannes, Offenbach-on-the-Main, Germany, assignor to General Aniline Works, Inc., New York, N. Y. Manufacture of 6-bromo-2-hydroxy-naphthalene and its substitution products. 1,890,711; Dec. 13.
Wood, Austin A., and Edward Boss, Columbus, Ohio. Sign. 1,890,483; Dec. 13.
Wood, Jesse N., assignor of forty-nine per cent to G. H. Whicher, Venice, and C. W. Peake, Granite City, Ill. Automatic release valve. 1,891,034; Dec. 13.
Wood, Walter A. (See Bull, A. A., and Wood.)
Wright, Walter L., Santa Monica, assignor to Synchrome Corporation, Los Angeles County, Calif. Producing motion pictures. 1,890,764; Dec. 13.
Yeoman, George. (See O'Connor, Alexander T., assignor.)
Young, Archer E., Pittsburgh, Pa. Measuring apparatus. 1,891,035; Dec. 13.
Young, Charles D., Haverford, Pa. Supporting and retaining means for rails. 1,890,636; Dec. 13.
Young, Hugh H., Baltimore, Md. Airplane. 1,890,553; Dec. 13.
Young, Otto W., East Orange, N. J., assignor to General Motors Corporation, Detroit, Mich. Seal or guard. 1,890,839; Dec. 13.
Zahorik, Frank, Racine, Wis. Golf bag supporting device. 1,890,964; Dec. 13.
Zeidler, William A., Bronxville, assignor to The United States Hoffman Machinery Corporation, New York, N. Y. Valve for garment presses. 1,890,554; Dec. 13.
Zeits, Arthur H., Kansas City, Mo. Apparatus for clarifying liquids. 1,890,712; Dec. 13.
Zent, Wayne P., Troy, N. Y. Amusement device. 1,890,765; Dec. 13.
Zisch, Walter, Frankfort-on-the-Main, Germany, assignor, by mesne assignments, to The Roessler & Hasslacher Chemical Company. Preparations which give off oxygen and manufacture of same. 1,890,875; Dec. 13.
Zivkovic, Zaharije, Belgrade Yugoslavia. Rocking horse, rocking chair, and the like. 1,891,131; Dec. 13.
Zographos, George, Rieth, Oreg. Remedy for hemorrhoids. 1,890,596; Dec. 13.
Zuber, Ludwig, Mannheim-Feudenheim, Germany. Shock absorber. 1,890,718; Dec. 13.

LIST OF INVENTIONS

FOR WHICH

PATENTS WERE ISSUED ON THE 13TH DAY OF DECEMBER, 1932

NOTE.—Arranged in accordance with the first significant character or word of the name (in accordance with city and telephone directory practice). Includes patents, reissues, and designs.

Acid compounds, Manufacture of glutamic. F. Y. Sen. 1,890,590; Dec. 13.
Acids, Making anthraquinone-sulphonic. R. Schwenk. 1,890,866; Dec. 13.
Advertising device. E. R. Phelps. 1,891,009; Dec. 13.
Advertising device. L. W. Stonequist and C. Rottum. 1,890,657; Dec. 13.
Aeroplane. T. Nose, K. Machi. 1,891,170; Dec. 13.
Air compressor. A. Y. Dodge. 1,891,083; Dec. 13.
Air cooler. H. A. Lockwood. 1,891,167; Dec. 13.
Air cooling apparatus. J. Q. Sherman. 1,890,626; Dec. 13.
Air cooling apparatus. J. Q. Sherman. 1,890,888; Dec. 13.
Aircraft and method of flight. E. A. Briner. 1,890,931; Dec. 13.
Air moistening apparatus for incubators. L. J. G. Karthaus. 1,890,610; Dec. 13.
Airplane. R. I. Markey. 1,890,820; Dec. 13.
Airplane. H. H. Young. 1,890,553; Dec. 13.
Alcohol-polybasic acid resins, Polyhydric. T. F. Bradley. 1,890,668; Dec. 13.
Alloys, Acid-proof. E. Valenta. 1,890,595; Dec. 13.
Amides of the benzene, naphthalene, and acenaphthene series, Manufacture of. L. J. Hooley and J. Thomas. 1,891,159; Dec. 13.
Ammunition feed box. R. C. Coupland. 1,890,639; Dec. 13.
Amplifier, Tunable dynatron. P. O. Farnham. 1,890,503; Dec. 13.
Amplifying system. J. O. Baker. 1,890,489; Dec. 13.
Amusement device. W. P. Zent. 1,890,765; Dec. 13.
Antimoth cake and deodorant, Packaged. M. Bordman. Des. 88,622; Dec. 13.
Antiskid device. A. H. Squier. 1,890,957; Dec. 13.
Antiskid device. L. S. Van Kleeck. 1,890,872; Dec. 13.
Apparatus for heating rooms. W. L. Mack. 1,890,521; Dec. 13.
Appliance for automobiles. J. L. Creveling. 1,890,496; Dec. 13.
Applicators for collapsible reservoirs. J. F. Cobello. 1,890,599; Dec. 13.
Arch support. A. Marshall. 1,890,910; Dec. 13.
Article of furniture. W. C. H. Cushman. 1,890,456; Dec. 13.
Ash tray. C. D. Ehrman. Des. 88,637; Dec. 13.
Auto mechanic's accessory. E. Kehr. 1,890,686; Dec. 13.
Automobile decking device. R. W. Stipes and W. M. Hoose. 1,890,918; Dec. 13.
Automobile heater. A. T. O'Connor. 1,890,745; Dec. 13.
Bag: *See*—
Heating bag.
Bail ear and method therefor. W. B. Smith. 1,891,209; Dec. 13.
Ball: *See*—
Inflatable ball.
Ball. W. Bartky. 1,890,566; Dec. 13.
Ball forming machine. A. C. Munro. 1,890,693; Dec. 13.
Bank protective method and apparatus. R. B. Reynolds. 1,890,589; Dec. 13.
Bar: *See*—
Portable bar. Rail joint bar.
Basket and construction thereof. A. F. Durand. 1,890,534; Dec. 13.
Bat, Insulating. F. W. Harney. 1,890,906; Dec. 13.
Baths of the textile art, the refining bath, and the process of refining textile material, Improving the efficiency of refining. H. Bertsch. 1,890,492; Dec. 13.
Bean, Flow. G. S. Flanders and M. A. ap Rhys Pryce. 1,890,536; Dec. 13.
Bearing. K. Gottmanns. 1,890,604; Dec. 13.
Bearing dividing machine. P. J. Fobert. 1,890,848; Dec. 13.
Bearing, Drill stem. J. J. Santiago. 1,890,529-30; Dec. 13.
Bearing, Vehicle bolster center. H. F. Fellows. 1,890,576; Dec. 13.
Beater, Combination blade and pin. W. W. Arnold, jr. 1,891,132; Dec. 13.
Bench: *See*—
Kneeling bench.
Bend or header construction for tubular stills or boilers or pipe connections, Return. R. T. Howes. 1,890,464; Dec. 13.
Bending, Method and apparatus for. R. V. Proctor. 1,890,949; Dec. 13.
Bin: *See*—
Mail bin.
Binder for loose leaves or sheets. H. Auburn. 1,891,037; Dec. 13.
Binder, Loose leaf. A. G. Lotter. 1,890,688; Dec. 13.
Bit: *See*—
Expansion bit.
Blades for turbine rotors. G. Köhler. 1,890,581; Dec. 13.
Blanket, Press. W. Fennone. 1,891,150; Dec. 13.
Bleaching agents, Composition of. R. Feibelmann. 1,890,608; Dec. 13.
Block: *See*—
Tackle block. Terminal block.
Board: *See*—
Game board. Ironing board.
Boiler: *See*—
Steam boiler.
Boot and shoe making same, Form fitting rubber. G. L. Van Dinter and C. Ferrettie. 1,890,890; Dec. 13.
Boring bar for use upon pipe coupling blanks or the like. W. G. Benninghoff. 1,890,452; Dec. 13.
Bottle. S. de Vaulchier. Des. 88,690; Dec. 13.
Bottle and nipple holder, Combined nursing. H. D. Weissberg. 1,890,482; Dec. 13.
Bottle cap, Milk. R. H. Mergentheim. 1,890,691; Dec. 13.
Bottle cap remover. J. W. Swenson. 1,891,030; Dec. 13.
Bottle package. H. E. Goodman. 1,890,942; Dec. 13.
Box: *See*—
Ammunition feed box. Journal box.
Cigar box.
Box. P. F. Boeye. 1,890,965; Dec. 13.
Box for the curb valves of watermains, Stop. F. C. LeDuc. 1,890,618; Dec. 13.
Box stud and nose guard for ophthalmic mountings. J. J. Pomerans and V. Tanasso. 1,891,177; Dec. 13.
Brace: *See*—
Crate brace.
Bracket for sinks, Adjustable. E. S. Erickson. 1,890,937; Dec. 13.
Braided product and making the same. S. B. Blaisdell. 1,891,211; Dec. 13.
Brake: *See*—
Servo-brake.
Brake. W. B. Lake. 1,890,735; Dec. 13.
Brake drum. J. W. Tatter. 1,890,705; Dec. 13.
Brake lining. C. F. Ogren. 1,891,186; Dec. 13.
Brake mechanism, Antireverse. C. Drexler and D. T. Brownlee. 1,890,973; Dec. 13.
Brake rigging, Hand. J. E. Scott. 1,890,623; Dec. 13.
Braking attachment for internal combustion engines. L. H. Messinger, jr. 1,890,790; Dec. 13.
Bridge for ophthalmic mounting. N. M. Baker. Des. 88,617; Dec. 13.
Bridge member for an ophthalmic mounting. A. Veillette. Des. 88,691; Dec. 13.
Bronzing machine. F. R. Belluche. 1,890,666; Dec. 13.
Brush, Sponge. S. M. Arnold and A. Erber. 1,890,894; Dec. 13.
Buffing and drawgear, Central. R. T. Glascodine. 1,890,779; Dec. 13.
Buffing wheel. B. H. Divine. 1,890,502; Dec. 13.
Building construction. E. H. Angier. 1,890,486; Dec. 13.
Bulkhead construction. F. J. Plym. 1,891,187; Dec. 13.
Burner: *See*—
Fuel burner.
Burnishing machine. M. R. Anstice and C. C. Ross. 1,890,443; Dec. 13.
Bushing, Slip. C. R. Alden. 1,890,664; Dec. 13.
Bushing, Slip. C. R. Alden and C. A. Birkebak. 1,890,663; Dec. 13.
Cable, Apparatus for wrapping. G. R. Lunt. 1,890,739; Dec. 13.
Calcium phosphates rich in phosphoric acid soluble in water, Producing. F. C. Palasso. 1,891,007; Dec. 13.
Calculating machine. C. M. F. Friden. 1,890,776; Dec. 13.
Camber correcting device. J. C. Creagmile and F. H. Reiman. 1,890,935; Dec. 13.
Cameras, Reflective attachment for. E. L. Kinnaman. 1,890,995; Dec. 13.
Can ends with curled edges, Forming flanged. H. J. Douglass. 1,890,936; Dec. 13.
Can feeding machine. L. D. Titus. 1,891,195; Dec. 13.
Cap, Filler. K. E. Stant. Des. 88,677; Dec. 13.
Cap for cups, etc., Temporary. C. Gebhard. 1,890,460; Dec. 13.
Car superstructure, Kiln. H. B. Fuar. 1,890,978; Dec. 13.
Carburetor. G. Hammond. 1,890,752; Dec. 13.
Carburetor. H. G. and R. F. Kerchner. 1,890,994; Dec. 13.
Card dealing device. I. Florman. 1,891,085; Dec. 13.
Card, Playing. H. B. Ferguson, jr. 1,890,504; Dec. 13.
Cargo hook. W. E. Hopkins. 1,890,509; Dec. 13.
Carpet. F. Murphy. Des. 88,667; Dec. 13.
Carpet. A. E. Smidlein. Des. 88,684-5; Dec. 13.

Carpet. J. S. Travis. Des. 88,689; Dec. 13.
Carton, Egg. C. S. Anton. 1,890,801; Dec. 13.
Carton, Shipping. E. P. Sherman. 1,890,951; Dec. 13.
Cartridge, Water-tight explosive. W. R. Farren. 1,890,726; Dec. 13.
Case: *See*—
Traveling case.
Casing, Radiator. J. J. Mundorf. 1,891,169; Dec. 13.
Cathode for electric discharge devices. W. F. Winter, jr. 1,891,074; Dec. 13.
Cathode for electron discharge devices. A. Mavrogenis. 1,890,859; Dec. 13.
Cedar chest. L. K. Loftin. 1,890,999; Dec. 13.
Cellulose sheets, Drying thin. C. H. von Hoessle and O. M. Schade. 1,890,832; Dec. 13.
Chain construction, Ornamental. A. Schoeninger. 1,891,056; Dec. 13.
Chair: *See*—
Nested chair. Shoe-shining chair.
Chair frame or similar article. A. McLaurin. Des. 88,663; Dec. 13.
Charge forming mechanism. C. N. Koch. 1,890,651; Dec. 13.
Cheese and processing same. R. Pasternack and R. W. Burnham. 1,890,948; Dec. 13.
Chest: *See*—
Cedar chest.
Chromium plating. E. J. Waltz. 1,890,683; Dec. 13.
Cigar box, Cardboard. M. Lazow. 1,890,817; Dec. 13.
Cigarette making device. T. A. Killman. 1,891,094; Dec. 13.
Cigarette packing machinery. W. E. Molins. 1,890,653; Dec. 13.
Cigarettes, Arranging oval. R. W. Voigt. 1,890,707; Dec. 13.
Circuit breaker, Electric. H. Trencham and H. C. Heath. 1,891,070; Dec. 13.
Circuit, Electric translating. C. A. Sabbah. 1,891,114; Dec. 13.
Circuits, Method and apparatus for securing high amplification in electrical. J. Razek and P. J. Mulder. 1,890,750; Dec. 13.
Clamp: *See*—
Knife clamp.
Clay and manufacture of hydrochloric acid, Activation of. C. Tietig. 1,890,474; Dec. 13.
Click lock. A. Enos. 1,890,806; Dec. 13.
Clip for tentering machines and the like. W. Berry. 1,890,449; Dec. 13.
Clock face. A. Elkonin. Des. 88,638; Dec. 13.
Closure for containers and receptacles. H. Van Arsdale. 1,891,031; Dec. 13.
Closure for jars and the like. E. J. Prime. 1,890,885; Dec. 13.
Clothes scrubbing device. I. W. Strahan. 1,891,120; Dec. 13.
Clutch mechanism for planetary gearing. D. E. Ross. 1,891,182; Dec. 13.
Coal and like material, Apparatus for carbonizing. F. C. Greene. 1,890,661; Dec. 13.
Coaster. H. L. Beach. 1,891,077; Dec. 13.
Coat and trousers press. F. J. Barnes. 1,890,895; Dec. 13.
Coating composition. C. E. Burke. 1,890,769; Dec. 13.
Coating material. M. Deseniss and A. Nielsen. 1,890,723; Dec. 13.
Cock and turning same, Plug. J. C. Martin, jr. 1,890,524; Dec. 13.
Coffee roaster. J. M. Edwards. 1,890,642; Dec. 13.
Coil retaining means. H. H. Eaton. 1,891,200; Dec. 13.
Coke extractor for vertical carbonization retorts. E. West. 1,891,129; Dec. 13.
Combination reel. H. O. Lenz. 1,890,736; Dec. 13.
Compass. H. E. Stahl, sr. 1,891,068; Dec. 13.
Compass, Liquid gyroscopic. R. M. Smyth. 1,890,831; Dec. 13.
Composition and process for treating wood. A. H. Kelsall and O. C. Alexander. 1,890,650; Dec. 13.
Composition of matter and making same. H. A. Winkelmann. 1,890,924; Dec. 13.
Concertina, Action for a. O. A. Schlicht. 1,890,830; Dec. 13.
Condenser and making the same, Electrical. H. I. Danziger. 1,891,080; Dec. 13.
Condenser, Electrolytic. S. Ruben. 1,891,207; Dec. 13.
Confection, Candy. G. B. Schoenleber. Des. 88,675; Dec. 13.
Contact device. C. W. Murray. 1,890,822; Dec. 13.
Container for moving advertising signs and the like. M. J. Cohan. 1,890,600; Dec. 13.
Container for printing plates, electrotypers' mats, etc., Shipping. W. W. McCarroll. 1,890,467; Dec. 13.
Container for pulverulent or granulated substances. J. E. B. Maillard. 1,890,522; Dec. 13.
Control for phonographs, Automatic. J. P. Stockton. 1,890,797; Dec. 13.
Conveyer. P. W. Bur. 1,891,140; Dec. 13.
Conveying apparatus. J. N. Whyte. 1,890,762; Dec. 13.
Cooker, Electric automatic peanut. H. A. Leweke. 1,890,737; Dec. 13.
Cooking apparatus, Forming means for. H. T. Hunter. 1,890,991; Dec. 13.
Cooler: *See*—
Air cooler.
Copper iodide rectifier. W. Krauss. 1,891,097; Dec. 13.
Couple, Polarized, Electrolytic. S. Ruben. 1,891,206; Dec. 13.
Cover, Bed-spring. L. J. Louis. 1,890,689; Dec. 13.
Cover for containers. E. A. Florang. 1,891,151; Dec. 13.
Cover wrench, Jar. R. Ratsiaff. 1,890,528; Dec. 13.
Covering, Building. E. R. Black. 1,890,928; Dec. 13.
Covering, Making wall. J. H. Delaney. 1,890,674; Dec. 13.
Covers, Production of flexible floor-, wall- and like. P. C. van der Willigen. 1,890,476; Dec. 13.
Cracking process for hydrocarbon oils. D. Pysel. 1,891,218; Dec. 13.
Crank shafts, Twisting. H. M. Wolfe and C. A. Nichol. 1,890,635; Dec. 13.
Crate brace, Bottle. J. F. Maurer, jr. 1,891,103; Dec. 13.
Crate, Metal folding. W. P. Griffith. 1,890,983; Dec. 13.
Cultivating implement. G. A. Newhouse. 1,890,621; Dec. 13.
Cup or similar article. G. N. Allen and E. H. Kreps. Des. 88,614–15; Dec. 13.
Current collector. A. D. McKenzie. 1,891,205; Dec. 13.
Current electricity meter, Alternating. S. Z. De Ferranti. 1,891,144; Dec. 13.
Current rectifier, Electric. S. Ruben. 1,890,470; Dec. 13.
Current-suppressor. W. H. T. Holden. 1,890,543; Dec. 13.
Cutter: *See*—
Disk cutter.
Cylinder grinding and honing machine. L. J. and J. J. Doerr. 1,890,675; Dec. 13.
Damper, Motor suspension spring rebound. W. H. Hansford. 1,890,987; Dec. 13.
Dashpot for scales. L. O. Kelley. 1,890,580; Dec. 13.
Decalcomania transfer sheet. C. R. Powers and L. M. Koubek. Des. 88,671; Dec. 13.
Density demonstrating apparatus. P. E. Klopsteg. 1,891,049; Dec. 13.
Depth indicator and inclinometer. S. V. Hite. 1,890,607; Dec. 13.
Derivatives of naphthalene, Production of. A. Luettringhaus, H. Nereshelmer, and W. Schneider. 1,891,168; Dec. 13.
Device for facilitating the breaking of metallic rails. J. E. Busby. 1,890,843; Dec. 13.
Device for operating rear curtains of cars. R. A. Kurth. 1,891,098; Dec. 13.
Dextrose from high purity solutions, Manufacture of hydrous. W. B. Newkirk. 1,890,913; Dec. 13.
Dial indicator, Combination. E. H. Aldeborgh and C. E. Ruf. 1,891,196; Dec. 13.
Die assembly, Unitary. A. W. Altvater. 1,890,715; Dec. 13.
Diesel oil engine, High speed. F. Porsche. 1,891,010; Dec. 13.
Dipper tooth, Forged. F. Finkl. 1,890,981; Dec. 13.
Dipper tooth, Forged. A. R. Lane. 1,890,997; Dec. 13.
Direction indicating device. E. K. Friend. 1,890,677; Dec. 13.
Discharge and distributing mechanism for concrete mixers. A. Foster, jr., and C. F. Ball. 1,890,982; Dec. 13.
Dishwashing machine. W. L. Lindgren. 1,890,520; Dec. 13.
Disinfectants, Making dust. M. Engelmann. 1,890,774; Dec. 13.
Disk cutter, Safety. W. H. Freygang. 1,891,045; Dec. 13.
Display and dispensing hook. L. C. Warager. 1,890,884; Dec. 13.
Display device. F. B. Raynor. 1,891,012; Dec. 13.
Display device, Self-supported. J. Horwath. 1,890,682; Dec. 13.
Display rack. T. H. Otto. 1,890,947; Dec. 13.
Diving apparatus. R. H. Davis. 1,890,570; Dec. 13.
Dolly. E. Karfiol. Des. 88,654; Dec. 13.
Doll. M. O. Cabell. Des. 88,628; Dec. 13.
Door edge switch, Sensitive. P. R. Forman. 1,890,809; Dec. 13.
Door saddle. J. Coco. 1,890,672; Dec. 13.
Doors, Operating mechanism for. W. A. Neese. 1,891,051; Dec. 13.
Draft screen, Portable. E. D. McCombie. 1,891,002; Dec. 13.
Drawing press or the like. R. Thoreson. 1,891,121; Dec. 13.
Drive, Engine starter. W. L. McGrath. 1,890,741; Dec. 13.
Drive means for corn harvesters. A. Krieg. 1,890,465; Dec. 13.
Duplicating means and method. L. J. Sauer. 1,890,915; Dec. 13.
Dyestuff of the thionaphthene-indigoid series, Vat. W. Bauer, J. Haller, and G. Rosch. 1,890,718; Dec. 13.
Earth boring apparatus. C. E. Reed. 1,890,887; Dec. 13.
Electric blasting machine. H. W. Asire, W. W. Perkins, and E. J. Martin. 1,890,445; Dec. 13.
Electric machine, Dynamo. V. G. Apple. 1,891,076; Dec. 13.
Electric motor. W. Williams. 1,890,800; Dec. 13.

Electric switch. A. A. Bull and W. A. Wood. 1,890,842; Dec. 13.
Electrical contact. C. A. Laise. 1,891,050; Dec. 13.
Electrical control means for trolley buckets. H. E. Hallenbeck. 1,890,539; Dec. 13.
Electrical distribution, System of. R. D. Duncan, jr. 1,891,190; Dec. 13.
Electrical indicating system. M. L. and P. S. Haselton. 1,890,878; Dec. 13.
Electrical relay. P. N. Martin. 1,890,525; Dec. 13.
Electrical relay. P. N. Martin. 1,891,026; Dec. 13.
Electrical remote control system. J. Vopel and R. Oetker. 1,890,891; Dec. 13.
Electrical signaling. M. L. Haselton. 1,890,876; Dec. 13.
Electrical signaling. M. L. Haselton. 1,890,877; Dec. 13.
Electrical translating apparatus. P. H. Dowling. 1,891,044; Dec. 13.
Electricity meter, Induction. S. Z. De Ferranti. 1,891,143; Dec. 13.
Electrode for vapor gas electric devices. W. T. Anderson, jr., and H. D. Fraser. 1,890,926; Dec. 13.
Electrolyte, Clarification of. T. Lewin. 1,890,856; Dec. 13.
Electron tube. B. F. Miessner. 1,890,911; Dec. 13.
Elevator. H. D. Clute. 1,890,562; Dec. 13.
Elevator tackle. W. E. Scott. 1,891,115; Dec. 13.
Embankments, Building. C. J. McFarlin. 1,891,008; Dec. 13.
Emulsions of mineral oils or the like, Process and product for treating. W. B. Lerch. 1,890,789; Dec. 13.
Enamelware manufacture, Continuous. H. T. Bebb. 1,890,897; Dec. 13.
Engine: *See*—
Diesel oil engine. Internal combustion engine
Fire engine. Jordan engine.
Engine. J. L. Kempthorne. 1,890,611–12; Dec. 13.
Engine. F. W. Parsons, sr. 1,890,914; Dec. 13.
Engine feeding arrangement, Internal combustion. F. Baverey. 1,890,567; Dec. 13.
Engine lubricating device. E. J. Gulick. 1,890,984; Dec. 13.
Engine of the oppositely-moving piston type, Internal combustion. C. J. H. Penning. 1,890,794; Dec. 13.
Engines, Attachment for internal combustion. L. H. Messinger, jr., and A. L. Riker. 1,890,791; Dec. 13.
Excavating mechanism. L. L. Dean. 1,891,142; Dec. 13.
Excavator construction. E. H. Fundom. 1,890,727; Dec. 13.
Excavator, Power. E. H. Fundom. 1,890,728; Dec. 13.
Exercising apparatus. J. J. Shoemaker. 1,890,699; Dec. 13.
Expansion bit. C. Sturni and J. H. Smith. 1,890,889; Dec. 13.
Extract of parathyroid gland and preparing the same. A. M. Hanson. 1,890,851; Dec. 13.
Eyeglass lens fastening. L. H. Echols. 1,890,725; Dec. 13.
Eyelet. T. E. Sitton. 1,891,065; Dec. 13.
Eyeshield. E. Schers. 1,890,865; Dec. 13.
Fabric: *See*—
Woven fabric.
Fabric and making the same, Mildewproof. W. H. Adams. 1,890,717; Dec. 13.
Fabric for window shades and the like, Lightproof. W. M. St. Clair. 1,890,869; Dec. 13.
Fabrics, Method of and attachment for running-on knitting. R. H. Lawson and A. N. Cloutier. 1,890,880; Dec. 13.
Fastener elements, Making. E. W. Rutherford. 1,890,471; Dec. 13.
Fastener, Snap. A. Momm. 1,890,912; Dec. 13.
Fastening device for automobile hoods. L. G. Randall. 1,890,695; Dec. 13.
Fats and oils, Stabilizing. R. C. Newton and W. D. Richardson. 1,890,585; Dec. 13.
Feeder, Chicken. J. F. Benoit. 1,891,042; Dec. 13.
Feeder, Poultry. D. L. German. 1,890,778; Dec. 13.
Fence, Board. T. H. Symington. 1,890,630–1; Dec. 13.
Fence, Plank or rail. T. H. Symington. 1,890,629; Dec. 13.
Fertilizers from feces and the like, Making. R. Fluck and A. Theil. 1,890,459; Dec. 13.
Filler, Automatic. R. Barros. 1,891,038; Dec. 13.
Filler strip for floors and other constructions. C. L. Snyder. 1,890,954; Dec. 13.
Film developing system. J. T. Barkelew. 1,890,490; Dec. 13.
Film, Sound-record cinematograph. T. T. Baker. 1,890,557; Dec. 13.
Filter. C. Davies. 1,890,499; Dec. 13.
Fire control for film utilising machines. W. H. De Witt. 1,890,804; Dec. 13.
Fire engine. C. H. Fox. 1,890,940; Dec. 13.
Fire extinguisher. L. W. Hawley. 1,890,541; Dec. 13.
Fire extinguisher. H. C. Laengel. 1,890,517; Dec. 13.
Fire extinguishing system. A. C. Rowley. 1,891,113; Dec. 13.
Fitting for respirators, Elbow. H. F. Shindel. Des. 88,683; Dec. 13.
Flare, Parachute. C. L. Panius. 1,891,172; Dec. 13.
Flashlight. H. Koretsky, M. Horowitz, and A. J. Desmone. 1,891,024; Dec. 13.
Floating device, Mechanical. E. Corradino. 1,890,970; Dec. 13.
Floor construction, Sound insulating. B. E. Balduf. 1,891,189; Dec. 13.
Floor system. F. D. Sturges. 1,890,921; Dec. 13.
Floral rack or similar article. C. A. Bruning. Des. 88,627; Dec. 13.
Flow rectifier for paper stock. M. Wensel. 1,890,634; Dec. 13.
Folder, Single needle joining. H. W. Beck and R. M. Bell. 1,890,447; Dec. 13.
Folding table. L. S. Williams. 1,890,710; Dec. 13.
Food, Manufacturing puffed cereal. R. W. Scanlan. 1,890,697; Dec. 13.
Food press. N. J. Dziedzic. 1,890,458; Dec. 13.
Foot control for mechanically operated gas and smoke discharge systems for daylight holdup robberies. F. J. Bridgeman. 1,890,671; Dec. 13.
Fork: *See*—
Grapple fork.
Form, Building block and wall. M. Skolnik. 1,890,532; Dec. 13.
Form, Collapsible tire building. F. L. Johnson. 1,890,785; Dec. 13.
Form for casting columnar or boxed shaped concrete structures such as chimneys, silos and the like, Sliding. C. F. Jespersen. 1,891,160; Dec. 13.
Foundry molding machine of roll-over type. T. W. Bullock. 1,890,933; Dec. 13.
Fountain and ice cream cabinet, Soda. W. F. Deiser. 1,890,641; Dec. 13.
Frame: *See*—
Ophthalmic frame. Railway side frame.
Frequency multiplication. M. Osnos. 1,890,527; Dec. 13.
Fruit trimming and slicing apparatus. J. L. Fox. 1,890,676; Dec. 13.
Fuel, Artificially colored motor. J. Hyman. 1,891,093; Dec. 13.
Fuel burner, Liquid. N. R. Thibert. 1,890,593; Dec. 13.
Fuel injection device for internal combustion engines. E. Dodson. 1,891,082; Dec. 13.
Fuel injection device for internal combustion engines. H. Steiner. 1,890,702; Dec. 13.
Fuel, Motor. C. T. Richman. 1,891,181; Dec. 13.
Furnace: *See*—
Open-hearth furnace.
Furnace and furnace draft control. F. X. and E. J. Lauterbur. 1,891,100; Dec. 13.
Furnace construction, Induction electric. F. Eibl. 1,890,773; Dec. 13.
Furnace control, Integrated. T. W. Delaney. 1,891,081; Dec. 13.
Furnaces, Controlling coal-dust. G. Hayn. 1,890,542; Dec. 13.
Fuse, High vacuum. D. C. Prince. 1,891,111; Dec. 13.
Gain control, Automatic. E. Bruce. 1,890,454; Dec. 13.
Game apparatus. M. V. and C. W. Coplen. 1,890,770; Dec. 13.
Game board. C. L. Sharp. 1,890,950; Dec. 13.
Game piece. C. H. Wilson. 1,891,130; Dec. 13.
Gas black, Method of and apparatus for preparing. W. K. Lewis. 1,891,202; Dec. 13.
Gas generator. F. C. Greene. 1,890,606; Dec. 13.
Gas gun protective system, Mechanical. F. J. Bridgeman. 1,890,670; Dec. 13.
Gas-mixtures especially of air, Separation of. M. Frankl. 1,890,646; Dec. 13.
Gas reactions, Execution of. E. Noack and O. Nitzschake. 1,890,793; Dec. 13.
Gaseous and liquid products, Separation of. C. F. Harrison. 1,890,852; Dec. 13.
Gases, Apparatus for affecting the physical condition of. H. V. Dalglieah. 1,890,497; Dec. 13.
Gases, Separating mixed. J. A. van Gessel. 1,891,125; Dec. 13.
Gasoline stock, Treating. A. Lachman. 1,890,516; Dec. 13.
Gate and operating means therefor, Automatic pit. J. L. Good and W. E. Click. 1,890,905; Dec. 13.
Gauge: *See*—
Grinding gauge.
Gauge. A. W. Altvater. 1,890,714; Dec. 13.
Gauge device. A. L. and R. H. Miller. 1,891,185; Dec. 13.
Gear, Airplane landing. A. R. Stalb, jr. 1,891,188; Dec. 13.
Gear, Steering. R. C. Schuetz. 1,891,208; Dec. 13.
Gearing. G. W. Dunham. 1,890,602; Dec. 13.
Generator: *See*—
Gas generator. Steam generator.
Generator excitator system. L. E. Tyrrell. 1,891,072; Dec. 13.
Glider seat. W. R. McGowen. Des. 88,662; Dec. 13.
Goggles. R. Malcom. 1,890,690; Dec. 13.
Golf bag supporting device. F. Zaborik. 1,890,964; Dec. 13.
Goods of rubber or similar material, Manufacture of. C. Hayes, E. W. Madge, and F. C. Jennings. 1,890,578; Dec. 13.
Grapple fork. H. L. Ferris. 1,890,979; Dec. 13.
Grinder, Railway track. H. Perassoli. 1,891,173–4; Dec. 13.
Grinding gauge. F. J. Pratt. 1,890,827; Dec. 13.
Grinding machine. P. H. Hutchinson. 1,890,554; Dec. 13.
Guard for gas stoves. J. Bernstein. 1,891,078; Dec. 13.

Gun. F. J. Bridgeman. 1,890,669; Dec. 13.
Gun sight. H. R. Wale. 1,890,478; Dec. 13.
Halogenation products of the ketimides of acenaphth-perindandione and its derivatives. W. Eckert and H. Sieber. 1,891,148; Dec. 13.
Handcuff. G. W. Pratt. 1,890,748; Dec. 13.
Hanger: *See*—
Meter hanger.
Heat apparatus, Radiant. R. Barton. 1,891,039; Dec. 13.
Heat plastic composition and making same. H. L. Fisher. 1,890,903; Dec. 13.
Heat responsive unit, Automatic. A. C. Rowley. 1,891,183; Dec. 13.
Heat transfer device. H. E. Smith. 1,891,058; Dec. 13.
Heat treating materials. F. C. Greene. 1,890,662; Dec. 13.
Heater: *See*—
Automobile heater. Windshield heater.
Water heater.
Heating apparatus. I. T. Bennett. 1,890,667; Dec. 13.
Heating bag. F. Marshall. 1,891,001; Dec. 13.
Heating element structure and making the same. P. Gray. 1,890,780; Dec. 13.
Heating system, Gas. G. Keith. 1,890,816; Dec. 13.
Heel mold. E. B. Carter. 1,890,968; Dec. 13.
Helicoplane. J. J. Leray. 1,890,519; Dec. 13.
Hexachlorethane, Apparatus for drying. B. D. Myers. 1,890,654; Dec. 13.
Hinge, Checking floor. H. E. Hubbs. 1,890,814; Dec. 13.
Hoe. A. Frank. 1,890,537; Dec. 13.
Hoist, Traversing. H. E. Hallenbeck. 1,890,679; Dec. 13.
Holder, Bottle napkin. R. P. Land. 1,891,099; Dec. 13.
Holder, Dental floss. J. A. Landis. 1,890,788; Dec. 13.
Holder, Fishing rod. B. A. Kabele. 1,891,163; Dec. 13.
Holder, Hat. G. H. Brown. 1,890,559; Dec. 13.
Holder, Pad. A. L. Brewer. 1,890,840; Dec. 13.
Hood lock. A. R. Lucie. 1,890,818; Dec. 13.
Hook: *See*—
Cargo hook. Lifting hook.
Display and dispensing hook.
Horn. V. W. Busch. 1,890,719; Dec. 13.
Horse, rocking chair, and the like, Rocking. Z. Zivkovic. 1,891,131; Dec. 13.
Hose. H. E. Morse. Des. 88,666; Dec. 13.
Hose reel. C. Nuhring. 1,890,823; Dec. 13.
House: *See*—
Toy house.
Housing and mounting for the electrode chambers of luminescent tubes and the like. G. Lamy. 1,890,617; Dec. 13.
Hydrocarbon, Treating. C. P. Dubbs. 1,891,199; Dec. 13.
Hydrocarbons, Converting. C. P. Dubbs. 1,890,974; Dec. 13.
Hydrocarbons, Treating. P. L. Magill. 1,890,881; Dec. 13.
Hydrogen iodide, Manufacture of. P. E. Weston. 1,890,874; Dec. 13.
Hydrometer float, Compensating. H. E. Christie and K. W. Couse. 1,890,901; Dec. 13.
Hygrometer. A. O. Austin. 1,890,565; Dec. 13.
Ice scoring machine. J. H. Schreiber. 1,890,698; Dec. 13.
Igniter. M. A. Powers. 1,890,862; Dec. 13.
India-rubber spring. A. Spencer. 1,890,795; Dec. 13.
Indicating apparatus. E. H. Barthel. 1,891,134; Dec. 13.
Indicator: *See*—
Dial indicator. Speed indicator.
Internal combustion indicator.
Indicator and manufacturing parts thereof. C. M. Andres. 1,890,893; Dec. 13.
Indicator for cooling systems of automobiles. H. E. Christie and K. W. Couse. 1,890,900; Dec. 13.
Indole and derivatives thereof, Production of. C. Schumann, E. Muench, and B. Christ. 1,891,057; Dec. 13.
Inflatable ball. A. J. Turner. 1,890,594; Dec. 13.
Ingot mold. E. Gathmann. 1,890,777; Dec. 13.
Ink for intaglio printing and improvement in production of such inks. H. Kurs and K. Albert. 1,890,996; Dec. 13.
Insecticide spray. T. J. Headlee and J. M. Ginsburg. 1,891,091; Dec. 13.
Instrument for the comparison of the intensity of light rays. F. C. Whalen. 1,890,837; Dec. 13.
Internal combustion engine, Four-stroke. 1,890,818; Dec. 13.
Internal combustion indicator. C. E. Cox. 1,890,601; Dec. 13.
Internal combustion motor. C. F. Nardin. 1,890,584; Dec. 13.
Iridometer. R. W. Bennett. 1,891,041; Dec. 13.
Iron, Making wrought. J. Aston and A. H. Beale. 1,890,637; Dec. 13.
Iron, Making wrought. F. H. Wille. 1,890,660; Dec. 13.
Iron or steel article and method and apparatus for producing same, Metal coated. J. L. Herman. 1,890,463; Dec. 13.
Ironing board, Folding. J. T. Berg. 1,890,448; Dec. 13.
Ironing board, Metal fire resisting. L. Pruden. 1,891,179; Dec. 13.
Jack: *See*—
Pump jack.
Jack for semitrailers. D. H. Davis. 1,890,972; Dec. 13.
Joint. D. E. Lindquist. 1,890,998; Dec. 13.
Joint for the eye-wires of ophthalmic mountings. J. J. Pomerans and V. Tanasso. 1,891,176; Dec. 13.
Joist and tile construction for floors and the like. H. F. Frease. 1,891,086; Dec. 13.
Jordan engine. E. A. Peterson. 1,890,622; Dec. 13.
Journal box, Locomotive. A. F. Phelps. 1,890,825; Dec. 13.
Ketones, Hydro-aromatic. O. Diels and K. Alder. 1,891,043; Dec. 13.
Keyboard and producing the same, Practice. F. Dunham. 1,890,724; Dec. 13.
Kiln, Dry. J. F. Cobb. 1,891,060; Dec. 13.
Kiln for drying lumber and other substances. J. I. Steel. 1,890,756; Dec. 13.
Kneeling bench. J. Kasowski. 1,890,815; Dec. 13.
Knife and flash light. R. D. Brown. 1,890,841; Dec. 13.
Knife clamp, Veneer machine. L. F. Koss, jr. 1,890,582; Dec. 13.
Knife, Self-sharpening. E. L. Frank and J. D. Kibbey. 1,890,506; Dec. 13.
Knitting machine. A. M. Cox. 1,891,023; Dec. 13.
Knitting machine, Circular. J. L. Getaz. 1,891,204; Dec. 13.
Knitting machine, Circular. J. L. Getaz. 1,891,215; Dec. 13.
Knitting machine, Shifting point for full-fashion. F. Stevenson. 1,891,117; Dec. 13.
Knock-down table. J. P. Meehan. 1,890,583; Dec. 13.
Laundry apparatus. J. Consorti. 1,890,455; Dec. 13.
Lawn trimmer. L. Smith. 1,891,066; Dec. 13.
Lawn trimming device. E. A. Gast. 1,890,811; Dec. 13.
Leather and manufacturing the same, Artificial. G. A. Richter. 1,891,027; Dec. 13.
Lens for eyeglasses and making same. B. F. Albits. 1,891,086; Dec. 13.
Lens for line casting machines. G. A. Bradford. 1,890,638; Dec. 13.
Lift, Automobile. J. F. Williams. 1,890,963; Dec. 13.
Lifter: *See*—
Skylight lifter. Spring lifter.
Lifting hook. F. Kuberka. 1,890,734; Dec. 13.
Light attachment for irons. L. Utrevis. 1,891,123; Dec. 13.
Light in variant colors, System for projecting. C. W. Hough. 1,891,216; Dec. 13.
Lighter construction. R. S. Blair. 1,891,020; Dec. 13.
Lignin and producing the same, Consolidated. F. Bergius, F. Koch, and E. Faerber. 1,890,491; Dec. 13.
Linkage for crawler tractors, Tie-member. N. M. Erdahl. 1,890,975; Dec. 13.
Liquid dispensing device, Coin controlled. P. Krause. 1,890,616; Dec. 13.
Liquids, Apparatus for clarifying. A. H. Zeltz. 1,890,712; Dec. 13.
Liquor control, Automatic weak. R. E. Schurts. 1,890,531; Dec. 13.
Loading apparatus for proofers. F. Marasso. 1,890,740; Dec. 13.
Lock: *See*—
Click lock. Trunk lock.
Hood lock.
Lock. M. Falk. 1,891,214; Dec. 13.
Lock. T. F. Noonan. 1,890,744; Dec. 13.
Locking slider for fasteners. G. E. Prentice. 1,890,749; Dec. 13.
Lubricated structure. G. Stenglemeir. 1,890,550; Dec. 13.
Lubrication cooler for gas engines. O. D. Norman. 1,891,006; Dec. 13.
Machine for dyeing textile materials in bundles. J. Annicq. 1,890,556; Dec. 13.
Machine for making crates. G. D. Parker. 1,890,586; Dec. 13.
Machine for supplying gum strips to beads. J. A. Shively. 1,890,952; Dec. 13.
Machine for the manufacturing of knotted carpets and the like. F. Huebner. 1,890,783; Dec. 13.
Machine for use in the manufacture of shoes. A. Eppler. 1,890,644; Dec. 13.
Machine tool dead center. C. F. Marquis. 1,891,102; Dec. 13.
Magneto. G. J. Lang and J. F. Martin. 1,890,518; Dec. 13.
Magneto, Flywheel. L. Beeh and W. E. Schwarzmann. 1,890,898; Dec. 13.
Manifolding device. G. O. Degener. 1,890,563; Dec. 13.
Manifolding device. L. C. Myers and G. F. Handley. 1,890,547; Dec. 13.
Manometer. T. R. Harrison. 1,891,154; Dec. 13.
Manometer. T. R. Harrison. 1,891,156; Dec. 13.
Material and products, Modifying vulcanizable. W. A. Gibbons. Re18,691; Dec. 13.
Material, Apparatus for serving stranded. S. E. Borgeson. 1,890,929; Dec. 13.
Material handling and measuring apparatus. W. M. Venable. 1,891,032; Dec. 13.
Materials for treatment of neurosyphilis and manufacture. P. J. Hanzlik. 1,890,508; Dec. 13.
Mattress making machinery. M. I. Shifman. 1,891,018; Dec. 13.
Measuring apparatus. A. E. Young. 1,891,035; Dec. 13.

Measuring-dispensing apparatus for fluids. J. C. Smith. 1,890,700; Dec. 13.
Menthol pencil and inhaler, Combined. F. Lobl. Des. 88,659; Dec. 13.
Mercaptobenzothiasole, Manufacturing. A. M. Clifford. 1,891,198; Dec. 13.
Merchandise vending apparatus. P. P. Scheurer. 1,890,753; Dec. 13.
Meta styrene, Chlorination of. H. B. Dykstra. 1,890,772; Dec. 13.
Metal bending machine, Sheet. H. S. Powell. 1,890,588; Dec. 13.
Metal, Method and apparatus for working. G. B. Coe. 1,890,803; Dec. 13.
Metal, Treating. W. O. Amsler. 1,890,485; Dec. 13.
Metallizing, Process of. M. Ow-Hechingen. 1,890,645; Dec. 13.
Metals on an incandescent body, Precipitating. A. E. Van Arkel, J. H. De Boer, and W. Koopman. 1,891,124; Dec. 13.
Meter: *See*—
Current electricity meter. Electricity meter.
Meter calibrating apparatus. A. Peter. 1,890,884; Dec. 13.
Meter hanger. F. H. Mueller. 1,891,193; Dec. 13.
Meter hanger and template, Combined. O. J. Hawkins. 1,890,540; Dec. 13.
Metering. T. R. Harrison. 1,891,155; Dec. 13.
Microphone and loud-speaker system for churches, public halls and the like. R. Messmer. 1,890,742; Dec. 13.
Microscope stages and the like, Adjusting mechanism for. H. N. Ott. 1,891,052; Dec. 13.
Mill: *See*—
Rolling mill.
Mining machine. F. A. Lindgren. 1,891,191; Dec. 13.
Mixing machine, Portable. M. W. Urch. 1,891,122; Dec. 13.
Moistener. G. Petranovich. 1,891,110; Dec. 13.
Moisture measurieg device. C. B. Limbrick. 1,890,545; Dec. 13.
Mold: *See*—
Heel mold. Ingot mold.
Mold filling machine. J. R. Gammeter. 1,891,088; Dec. 13.
Molder for painting the lips. J. Sueta and A. M. Guastavino. 1,890,628; Dec. 13.
Molding method and machine, Automatic. V. G. Apple. 1,890,802; Dec. 13.
Molds, Cleaning. G. G. Andrews. 1,891,197; Dec. 13.
Motor: *See*—
Electric motor. Spring motor.
Internal combustion motor.
Motor assembly, Outboard. L. J. and H. L. Johnson. 1,890,879; Dec. 13.
Motor control. O. F. Shepard. 1,890,754; Dec. 13.
Motor-efficiency indicating device. J. B. Hambien and W. B. Kay. 1,890,985; Dec. 13.
Mounting and lubricators, Shaft. T. C. Delaval-Crow. 1,890,844; Dec. 13.
Mowers, Attachment for lawn. E. A. Gast. 1,890,810; Dec. 13.
Musical instrument. V. C. Overton. 1,890,861; Dec. 13.
Nail and tack puller. T. Klüglein. 1,891,164; Dec. 13.
Nail bin. W. H. Elston. 1,890,845; Dec. 13.
Neckband. A. J. Shaukis. 1,891,063; Dec. 13.
Necktie. C. H. Davis. 1,890,722; Dec. 13.
Necktie device. J. W. Johnson. 1,890,684; Dec. 13.
Nested chair. L. Deliert. 1,891,145; Dec. 13.
Nitrate, Trisodium phosphate-sodium. F. C. Bowman. 1,890,453; Dec. 13.
Nitriles, Production of saturated fatty acid. W. Reppe and U. Hoffmann. 1,891,055; Dec. 13.
Oil purifying system. R. C. Osterstrom. 1,891,109; Dec. 13.
Oils, Polymerizing hydrocarbon. R. C. Osterstrom. 1,891,107; Dec. 13.
Oils, Polymerizing unsaturated hydrocarbon. R. C. Osterstrom. 1,891,106; Dec. 13.
Opener, Can. A. Johnson. 1,890,731; Dec. 13.
Opener, Package. L. M. Hall. 1,891,090; Dec. 13.
Open-hearth furnace. M. F. Egler. 1,890,805; Dec. 13.
Ophthalmic frame. W. S. Searles. 1,891,016; Dec. 13.
Ophthalmic mounting. N. M. Baker. Des. 88,616; Dec. 13.
Ophthalmic mounting. N. M. Baker. Des. 88,618; Dec. 13.
Organic compounds, Polymerization of unsaturated. O. Ambros, H. Reindel, J. E. Eisele, and J. Stoebrel. 1,891,203; Dec. 13.
Ornament, Radiator. L. J. Smith. Des. 88,676; Dec. 13.
Ornament, Vehicle. S. Faith. Des. 88,639; Dec. 13.
Ornamenting ring for wheel rims. G. A. Lyon. 1,891,192; Dec. 13.
Orthodontic appliance. E. H. Angle. 1,890,487; Dec. 13.
Oven, Bake. F. A. Hoppe. 1,890,681; Dec. 13.
Overall loop. C. A. Mosgrove. 1,890,692; Dec. 13.
Package and method, Transportation and display. D. W. Drummond. 1,890,771; Dec. 13.
Package, Combination. R. L. Harden. 1,890,988; Dec. 13.
Packet making machine. W. E. Molins. 1,890,652; Dec. 13.
Paint pulveriser. L. Spira. 1,891,067; Dec. 13.
Paper stock regulator. H. D. Wells. 1,890,799; Dec. 13.
Parachute for illuminating flares. S. Wiley. 1,890,562; Dec. 13.
Parachutes, Attachment for. L. E. Simpson and C. H. Bartholomew. 1,890,868; Dec. 13.
Peanuts, Apparatus for use in treating. J. M. Shamas. 1,890,867; Dec. 13.
Pedestal, Oil tank. A. Mussynski. Des. 88,669; Dec. 13.
Pencil. F. Wagner. 1,890,878; Dec. 13.
Perambulator. J. J. Powers. 1,890,469; Dec. 13.
Petroleum distillates, Treating cracked. R. C. Osterstrom and C. R. Wagner. 1,891,108; Dec. 13.
Pictures, Producing motion. W. L. Wright. 1,890,764; Dec. 13.
Pigments, Green mineral. H. Wolff. 1,891,210; Dec. 13.
Pine oil in emulsion breakers, Use of. F. E. Fucha. 1,890,849; Dec. 13.
Pipe: *See*—
Smoking pipe. Vent pipe.
Tobacco pipe.
Piston, Expansible. C. S. Johnston. 1,890,511; Dec. 13.
Plane, Tilting-engine wing. M. Leupold. 1,891,166; Dec. 13.
Planer, Bloom. J. W. Offutt. 1,890,824; Dec. 13.
Plate or similar article of pottery. S. E. Thompson. Des. 88,688; Dec. 13.
Plug, Electric. P. Allenic. 1,890,484; Dec. 13.
Plug, Reenforce rod and wall. J. McLaughlin. 1,891,104; Dec. 13.
Portable bar. W. J. Heuer. 1,891,157; Dec. 13.
Pothead device. G. P. Edmonds. 1,891,213; Dec. 13.
Powder, Manufacturing smokeless. R. Weingand and H. I. Schuls. 1,890,960; Dec. 13.
Power converting apparatus, Electric. A. S. FitsGerald. 1,891,084; Dec. 13.
Power unit, Portable. A. M. Bevier. 1,890,927; Dec. 13.
Prealloys. J. Novák and R. Kesselring. 1,890,548; Dec. 13.
Preparations which give off oxygen and manufacture of same. W. Zisch. 1,890,875; Dec. 13.
Press: *See*—
Coat and trousers press. Printing press.
Food press. Tire press.
Pressing machine. T. G. Jasper. 1,890,579; Dec. 13.
Pressing machine. E. V. McTague. 1,890,882; Dec. 13.
Pressure control mechanism for fluid motors, Automatic. E. Davis. 1,890,678; Dec. 13.
Pressure impulse dampener. E. S. Pearce and E. C. Karibo. 1,891,008; Dec. 13.
Printer's roller. H. J. Lowe. 1,890,858; Dec. 13.
Printing press. H. R. Trotter. 1,890,760; Dec. 13.
Printing press, Multicolor. E. A. Waller. 1,890,922; Dec. 13.
Projection screen. F. H. Richardson and J. C. Kroesen. 1,890,828; Dec. 13.
Propeller, Varible-pitch. E. A. Briner. 1,890,982; Dec. 13.
Propellers and rudders of boats, Protecting the. E. H. Fahrney. 1,890,938; Dec. 13.
Protective arrangement for direct current networks, Instantaneous selective. A. B. Fournier. 1,890,775; Dec. 13.
Protective system, Multiphase. G. Keller. 1,890,993; Dec. 13.
Protocatechuic aldehyde and its substitution products, Manufacture of. F. Elger. 1,891,149; Dec. 13.
Puller: *See*—
Nail and tack puller.
Pump. J. Dubrovin. 1,890,571–2; Dec. 13.
Pump, and the like, Rotary. L. Burn. 1,890,560; Dec. 13.
Pump, Centrifugal. L. P. Hoff. 1,891,201; Dec. 13.
Pump, Eccentric. P. E. Klopsteg. 1,890,614; Dec. 13.
Pump jack. W. G. Hall and N. G. Hall. 1,890,781; Dec. 13.
Pump, Power. J. B. Picard. 1,890,826; Dec. 13.
Pump, Vacuum. J. Dubrovin. 1,890,572–4; Dec. 13.
Pumping apparatus, Pneumatic. E. L. Chenault. 1,890,720; Dec. 13.
Pumping wells, Method of and apparatus for. A. L. Faber. 1,890,807; Dec. 13.
Punch. H. C. Spengler. 1,890,955; Dec. 13.
Punch, Bench. H. C. Spengler. 1,890,956; Dec. 13.
Punching bag apparatus. C. Rosenhahn. 1,890,696; Dec. 13.
Pyrometer. A. F. Spitzglass and O. T. Handwerk. 1,890,701; Dec. 13.
Rack: *See*—
Display rack.
Radiator. H. N. Shaw. 1,890,625; Dec. 13.
Radiator and the like. T. E. Murray. 1,890,620; Dec. 13.
Radiator, Heating. A. Abbotts. 1,890,665; Dec. 13.
Radio apparatus. D. F. Asbury. 1,890,768; Dec. 13.
Radio distance or location finder. W. S. Johnston. 1,890,786; Dec. 13.
Radio grid leak. F. O. Paschall. 1,891,053; Dec. 13.
Radio receiving apparatus. A. P. Hinsky. 1,891,092; Dec. 13.
Rail, Highway guard. W. W. Russell. 1,890,751; Dec. 13.
Rail joint bar. G. Langford. 1,890,687; Dec. 13.
Rail lubricating device. F. M. Graham and J. B. McWilliams. 1,890,605; Dec. 13.
Railway side frame. C. J. W. Clasen. Re18,690; Dec. 13.
Range. A. Stockstrom. 1,891,118; Dec. 13.
Razor, Safety. R. P. Harshberger. 1,890,647; Dec. 13.
Razor, Safety. J. L. King. 1,890,783; Dec. 13.

Receptacle, Mothproof. L. K. Loftin. 1,890,857; Dec. 13.
Receptacle, Plug. F. P. Gates. 1,891,158; Dec. 13.
Receptacle, Tilting. F. J. Plym. 1,890,587; Dec. 13.
Receptacle, Vacuum wall. W. C. O'Leary. 1,890,655; Dec. 13.
Recorder: *See*—
Weight recorder.
Recording device. F. Lowitz. 1,890,619; Dec. 13.
Reel: *See*—
Combination reel. Hose reel.
Reel for metallic tapes. C. C. Hormel. 1,890,945; Dec. 13.
Reflector and fastening therefor. W. V. Bergen and A. C. Shute. 1,891,138; Dec. 13.
Refrigerating apparatus. F. W. Andrews. 1,890,451; Dec. 13.
Refrigerating machine. M. Davis. 1,890,457; Dec. 13.
Refrigerating system. R. E. Schurtz. 1,891,028; Dec. 13.
Refrigerator equipment. E. A. Hamburg. 1,890,461; Dec. 13.
Regulating apparatus. P. C. Temple. 1,890,472; Dec. 13.
Regulating device, Lockable. W. Barr. 1,890,896; Dec. 13.
Regulator: *See*—
Paper stock regulator.
Regulator for boilers and the like, Feed water. M. Ehlinger. 1,890,575; Dec. 13.
Relay, Time-limit. E. Baumberger and E. Heusser. 1,891,135; Dec. 13.
Remedy for hemorrhoids. G. Zographos. 1,890,596; Dec. 13.
Remote control system. H. B. Arnold. 1,890,488; Dec. 13.
Rim, Auto. H. Kunard. 1,890,515; Dec. 13.
Road machine. J. B. Jarmin. 1,890,649; Dec. 13.
Roaster: *See*—
Coffee roaster.
Roll polishing rig. R. H. Grove. 1,891,152; Dec. 13.
Roller: *See*—
Printer's roller.
Roller mill. P. R. V. Knüpffer. 1,891,165; Dec. 13.
Rolling of composite glass strips. H. Smith. 1,891,116; Dec. 13.
Rope tightener. R. R. Rundell. 1,890,829; Dec. 13.
Rosin size. W. H. Harding and S. V. Burrows. 1,890,462; Dec. 13.
Rubber composition and preserving rubber. W. L. Semon. 1,890,916–17; Dec. 13.
Rubbish consumer, Portable. M. N. Suciu. 1,891,069; Dec. 13.
Runway for pipes. R. E. Daniel, R. K. Haughton, and S. B. Clark. 1,890,498; Dec. 13.
Safety device for razor blades. C. F. Ern. 1,890,535; Dec. 13.
Sampling tube. J. A. Stein and L. L. Vayda. 1,890,592; Dec. 13.
Sampling tube. J. A. Stein and L. L. Vayda. 1,890,627; Dec. 13.
Sand molding machine. E. C. Fielding. 1,890,808; Dec. 13.
Saw structure for portable motor tree saws, Chain. F. W. Meyer. 1,891,105; Dec. 13.
Scale. A. C. Burkheiser. 1,890,569; Dec. 13.
Scale. W. V. Sutton. Des. 88,686; Dec. 13.
Scale mechanism. N. Tatham. 1,890,706; Dec. 13.
Scale, Pendulum type. L. O. Kelley. 1,890,977; Dec. 13.
Scaling and corrosion of metal units, Preventing. G. S. Neeley. 1,891,004–5; Dec. 13.
Scooter. H. F. Shepherd. 1,890,755; Dec. 13.
Scouring device. E. L. Hartwell. 1,890,812; Dec. 13.
Screen: *See*—
Draft screen. Sound transmitting and
Projection screen. light reflecting screen.
Screws, Making hollow metallic air. M. Pillard. 1,890,747; Dec. 13.
Seal or guard. O. W. Young. 1,890,839; Dec. 13.
Sealing cap for the plugs of metallic drums and the like. L. B. Wackman. 1,891,033; Dec. 13.
Separation of materials, Apparatus for magnetic G. Ullrich. 1,890,551; Dec. 13.
Servo-brake. F. Athimon. 1,890,446; Dec. 13.
Sewing machines, Self-adjusting, trimming attachment for. J. N. Stein. 1,891,029; Dec. 13.
Shaft for golf clubs. W. J. Hadden. 1,890,538; Dec. 13.
Shears and the like, Pivot means for. E. R. Gonsett. 1,890,850; Dec. 13.
Shelf, Foldable extension counter. L. J. Murphy and E. L. Stauffer. 1,890,743; Dec. 13.
Shelf, Folding. L. B. McEwing. 1,890,526; Dec. 13.
Shield, Glare. E. A. Flake. 1,890,577; Dec. 13.
Shock absorber. L. Zuber. 1,890,713; Dec. 13.
Shock-absorbing apparatus for massive wheels. P. Altuna. 1,890,442; Dec. 13.
Shoe. W. E. Ebling. Des. 88,636; Dec. 13.
Shoe. M. Simonovits. 1,891,064; Dec. 13.
Shoe filling method. A. Thoma. 1,890,473; Dec. 13.
Shoe, Metal. P. Burdotti. 1,891,021; Dec. 13.
Shoe-shining chair. R. S. Trulock. 1,891,071; Dec. 13.
Shoes, Marking and cementing. B. W. Freeman, W. S. Herschel and H. E. Patterson. 1,891,087; Dec. 13.
Shoring. J. R. Bullis. 1,890,966; Dec. 13.
Shroud. A. H. Straus. 1,890,919; Dec. 13.
Sign. A. A. Wood and E. Boss. 1,890,483; Dec. 13.
Sign, Neon flash. W. E. Joost. 1,890,732; Dec. 13.
Signal for vehicles, Direction. J. S. Wignall. 1,890,961; Dec. 13.
Signal operating mechanism. C. C. Raymond. 1,890,863; Dec. 13.
Signalling apparatus. L. L. Wagner. 1,891,126; Dec. 13.
Signature folding machine. C. T. Cundall. 1,890,971; Dec. 13.
6-bromo-2- hydroxy-naphthalene and its substitution products, Manufacture of. J. Wollemann. 1,890,711; Dec. 13.
Skewer. J. E. Hoover. 1,890,907; Dec. 13.
Skylight lifter. M. B. Adams. 1,890,767; Dec. 13.
Slats, staves, or other sectional devices, Securing together. H. M. Bishop. 1,890,597; Dec. 13.
Sleeves to the ends of tubular members, Apparatus for assembling and securing strengthening. B. N. Wallis. 1,891,127; Dec. 13.
Slipper or toe shoe and making the same, Ballet. S. Capezio. 1,891,022; Dec. 13.
Smoker's stand. R. N. Baylis. Des. 88,619; Dec. 13.
Smoking pipe. J. A. Strawn. 1,890,920; Dec. 13.
Snap switch. F. Graf. 1,891,089; Dec. 13.
Snowplow. F. Gettleman. 1,891,046; Dec. 13.
Snow removing device. H. R. Hunt. 1,890,730; Dec. 13.
Socket, Gas and vacuum tube electrode. H. Harase. 1,890,680; Dec. 13.
Socket, Pronged. D. I. Reiter. 1,891,013; Dec. 13.
Sofa frame or similar article. A. McLaurin. Des. 88,664; Dec. 13.
Sound recording and reproduction, Method of and apparatus for. N. Deisch. 1,890,640; Dec. 13.
Sound transmitting and light reflecting screen. S. G. Mandalian. 1,890,819; Dec. 13.
Speed governing mechanism. H. Kraft. 1,891,096; Dec. 13.
Speed indicator, Ground. B. Jones. 1,891,162; Dec. 13.
Speed indicator switch. D. C. Leaming. 1,890,855; Dec. 13.
Speed reducer, Compound. K. E. Johnson. 1,890,685; Dec. 13.
Sponges, Apparatus for manufacturing artificial. L. C. Abraham. 1,890,555; Dec. 13.
Spring: *See*—
India-rubber spring. Vehicle suspension spring.
Vehicle spring.
Spring drive. G. E. LeCount. 1,891,101; Dec. 13.
Spring lifter, Valve. H. E. Lemmerman. 1,890,466; Dec. 13.
Spring motor. G. O. Joyner. 1,890,609; Dec. 13.
Spring suspension system, Stabilizing. M. Aflague. 1,890,892; Dec. 13.
Springs, Interlocking coiled. W. Lewis. 1,890,738; Dec. 13.
Stall, Animal. H. L. Ferris. 1,890,980; Dec. 13.
Stand for musical instruments, Foldable. J. L. Ganson. 1,890,729; Dec. 13.
Steam boiler, Superheater. D. S. Jacobus. 1,890,784; Dec. 13.
Steam generator. W. G. Noack. 1,890,468; Dec. 13.
Steam trap. C. L. Shank. 1,890,591; Dec. 13.
Steel tie, Concrete reenforcing. A. C. Strickler. 1,890,757; Dec. 13.
Step for a ladder, Portable. R. C. Wilson. 1,890,763; Dec. 13.
Still and fire box. J. B. Rather. 1,890,886; Dec. 13.
Stone, Artificial. W. W. Warren. 1,890,798; Dec. 13.
Storage apparatus. M. C. Stearns. 1,890,796; Dec. 13.
Store front construction. G. R. Kneeshaw. 1,890,615; Dec. 13.
Store front construction. L. Lamer. 1,890,787; Dec. 13.
Stove, Wall and partition. C. Gwaltney. 1,891,047; Dec. 13.
Strands, Method of and apparatus for serving. F. M. Potter and C. E. Traxel. 1,891,194; Dec. 13.
Street illumination. M. B. Beck and J. D. Whittaker. 1,891,136–7; Dec. 13.
Sugar crystalliser. D. A. Walsh. 1,890,632; Dec. 13.
Sugar sweetmeats and the like, Process of and apparatus for manufacturing. R. Sollich. 1,890,533; Dec. 13.
Sulphates from mixed sulphide materials and the recovery of values therefrom, Producing. G. C. Carson. 1,890,934; Dec. 13.
Supercharger. E. M. White. 1,890,708; Dec. 13.
Support, Brake beam safety. H. S. Hart. 1,890,989; Dec. 13.
Support for hardness testers, Test piece. C. H. Wilson. 1,890,923; Dec. 13.
Support for serving trays for use on automobiles, Combination. F. F. Ravlin. 1,891,180; Dec. 13.
Support for tables, Folding leg. W. Hanley. 1,890,986; Dec. 13.
Support, Strap. A. Rhinehart. 1,891,112; Dec. 13.
Supporter, Bust. J. C. Gifford. 1,890,507; Dec. 13.
Supporting and retaining means for rails. C. D. Young. 1,890,636; Dec. 13.
Supporting device. T. M. Keefe. 1,891,048; Dec. 13.
Supporting rack structure. E. H. Fahrney. 1,890,939; Dec. 13.

Surgical instrument. L. K. Pitman. 1,891,054; Dec. 13.
Switch: *See*—
Door edge switch. Speed indicator switch.
Electric switch. Time switch.
Snap switch.
Switch. F. Hotchner. 1,890,510; Dec. 13.
Switch. C. R. Rich. 1,891,015; Dec. 13.
Switch apparatus. J. A. C. Krips. 1,890,514; Dec. 13.
Switch mechanism, Motor control. G. H. Whittingham. 1,890,888; Dec. 13.
Switching mechanism. S. B. Sanford. 1,890,752; Dec. 13.
Table: *See*—
Folding table. Knock-down table.
Table. M. S. Canaday. 1,890,967; Dec. 13.
Table. G. C. Webb. 1,890,835; Dec. 13.
Table top, Bridge. W. A. O'Brien. Des. 88,670; Dec. 13.
Tacker. F. Pelser. 1,890,694; Dec. 13.
Tackle block. C. F. Janssen. 1,890,992; Dec. 13.
Taping machine. J. Wagner. 1,890,477; Dec. 13.
Telephone circuit. C. C. Cash. 1,890,561; Dec. 13.
Telephone system. A. Capek and F. Van den Broecke. 1,890,599; Dec. 13.
Telephone system. T. A. Marshall. 1,890,523; Dec. 13.
Telephone system. B. A. Wallace. 1,890,479–80; Dec. 13.
Television or like system and apparatus. J. L. Baird. 1,890,558; Dec. 13.
Tension device for variable speed drives, Equalising. W. F. Dehuff. 1,890,500; Dec. 13.
Terminal block, Electrical. H. J. Blakeslee. 1,891,212; Dec. 13.
Terminals, Attachable cross or joint bond welding. E. C. Kirk. 1,890,613; Dec. 13.
Testing device. L. J. Combe. 1,891,141; Dec. 13.
Textile fabric. R. Gentile. Des. 88,648; Dec. 13.
Textile fabric. R. George. Des. 88,644–5; Dec. 13.
Textile fabric. J. Lukas. Des. 88,660; Dec. 13.
Textile fabric. W. D. Roberson. Des. 88,673; Dec. 13.
Textile fabric. P. A. Vogleman. Des. 88,696–7; Dec. 13.
Textile fabric or similar article. F. Bridier. Des. 88,623–6; Dec. 13.
Textile fabric or similar article. A. Grulich. Des. 88,646–7; Dec. 13.
Textile fabric or similar article. C. R. Hellman. Des. 88,652; Dec. 13.
Textile fabric or similar article. A. Kohut. Des. 88,655–6; Dec. 13.
Textile fabric or similar article. H. S. Murray. Des. 88,668; Dec. 13.
Textile fabric or similar article. J. Schweizer. Des. 88,678; Dec. 13.
Textile fabric or similar article. J. Schweizer. Des. 88,679; Dec. 13.
Textile fabric or similar article. P. A. Vogleman. Des. 88,695; Dec. 13.
Textile fabric or similar article. W. Willhelm. Des. 88,699–700; Dec. 13.
Textile fabric or the like. D. Carmichael. Des. 88,629; Dec. 13.
Textile fabric or the like. H. Cruger. Des. 88,630–5; Dec. 13.
Textile fabric or the like. R. W. Frambach. Des. 88,640–1; Dec. 13.
Textile fabric or the like. A. J. Heinke. Des. 88,648–51; Dec. 13.
Textile fabric or the like. P. Lesser. Des. 88,657–8; Dec. 13.
Textile fabric or the like. J. Maisch. Des. 88,661; Dec. 13.
Textile fabric or the like. G. Megros. Des. 88,665; Dec. 13.
Textile fabric or the like. W. D. Roberson. Des. 88,672; Dec. 13.
Textile fabric or the like. C. Sandelin. Des. 88,674; Dec. 13.
Textile fabric or the like. J. Schweizer. Des. 88,680–2; Dec. 13.
Textile fabric or the like. J. Villani. Des. 88,692–3; Dec. 13.
Textile fabric or the like. G. Virgile. Des. 88,694; Dec. 13.
Textile fabric or the like. I. A. Weitz. Des. 88,698; Dec. 13.
Textile fabric or the like. E. Wintrich. Des. 88,701–3; Dec. 13.
Textile or other material, Manufacture or treatment of. G. H. Ellis and H. C. Olpin. 1,890,648; Dec. 13.
Therapeutic agent. A. L. Omobundro. 1,890,860; Dec. 13.
Thermostatic element. P. M. Lincoln. 1,890,909; Dec. 13.
Threads and filaments and products therefrom, Manufacture and production of artificial. C. Diamond. 1,891,146; Dec. 13.
Tie: *See*—
Steel tie.
Time fuse mechanism for projectiles. A. Varaud. 1,890,552; Dec. 13.
Time switch, Periodic electric. A. J. Shekter. 1,891,017; Dec. 13.
Tire. J. J. Black. Des. 88,620; Dec. 13.
Tire. J. J. Black and C. F. Ofensend. Des. 88,621; Dec. 13.
Tire press, Hydraulic. C. B. O'Dell. 1,890,746; Dec. 13.
Tobacco pipe. S. E. Svendsen. 1,890,708; Dec. 13.
Tool, Dressing. M. J. Walsh. 1,890,481; Dec. 13.
Tool, Hair waving. R. M. Keele. 1,890,512; Dec. 13.
Tool, Hydraulically operated machine. R. A. Carlson. 1,890,495; Dec. 13.
Toothbrush. J. S. Hoffman. 1,890,943; Dec. 13.
Top for rumble seats of automobiles. E. H. Bean. 1,891,040; Dec. 13.
Toy. T. D. Holmes. 1,890,944; Dec. 13.
Toy, Aerial. A. H. Vogt. 1,890,759; Dec. 13.
Toy cabinet. H. M. Fancher. 1,890,846; Dec. 13.
Toy electric railways, Apparatus for. L. W. Rosenthal. 1,891,059; Dec. 13.
Toy house. F. L. Purdy. 1,891,011; Dec. 13.
Toy, Ridable vehicular. E. M. Swartz. 1,890,658; Dec. 13.
Toy vehicle. F. Shadish. 1,890,624; Dec. 13.
Toy vehicle. E. M. Swartz. Des. 88,687; Dec. 13.
Tractor implement. H. E. Altgelt. 1,890,450; Dec. 13.
Tractors, Guiding attachment for. W. E. Remington. 1,891,014; Dec. 13.
Train order hoop holding means. W. L. White. 1,890,709; Dec. 13.
Transfer machine. F. G. L. Boyer. 1,890,598; Dec. 13.
Transformer, Electric. G. L. Porter. 1,891,178; Dec. 13.
Transformer, Portable high tension. A. Bouwers. 1,891,139; Dec. 13.
Translating device. E. W. Gent. 1,890,904; Dec. 13.
Trap: *See*—
Steam trap.
Trap, nest. J. A. Johnston. 1,891,161; Dec. 13.
Traveling case. J. A. Luttmann. 1,891,025; Dec. 13.
Tread link. A. P. Armington. 1,890,444; Dec. 13.
Treating products. U. G. Todd. 1,890,475; Dec. 13.
Trimmer: *See*—
Lawn trimmer.
Trolley head. E. A. Larrson. 1,890,946; Dec. 13.
Trunk lock. A. J. Komenak. 1,891,217; Dec. 13.
Tube: *See*—
Electron tube. Sampling tube.
Tuning apparatus. H. D. Currier. 1,890,721; Dec. 13.
Type-soldering device. E. Thorell. 1,890,659; Dec. 13.
Typewriter-ribbon cleaner. W. G. Hudson. Des. 88,653; Dec. 13.
Typewriting machine. B. J. Dowd. 1,890,564; Dec. 13.
Typewriting machine. E. B. Hess. 1,890,990; Dec. 13.
Typographical casting machine. J. H. Hilpman. 1,891,158; Dec. 13.
Typographical composing machine. W. Ackerman. 1,891,075; Dec. 13.
Umbrella and case therefor. I. J. Salomon. 1,891,184; Dec. 13.
Vacuum cleaner and floor waxing machine, Combination. C. Petersen. 1,891,175; Dec. 13.
Valve. C. D. Allen. Des. 88,613; Dec. 13.
Valve. H. G. Flory and S. G. Coley. 1,890,847; Dec. 13.
Valve. J. S. Forbes. 1,890,505; Dec. 13.
Valve. D. D. Goldberg. 1,890,678; Dec. 13.
Valve. S. B. Smith. 1,890,953; Dec. 13.
Valve, Automatic release. J. N. Wood. 1,891,034; Dec. 13.
Valve, Check. G. M. Kessler. 1,890,513; Dec. 13.
Valve device. P. A. Borden. 1,890,494; Dec. 13.
Valve, Foot. O. J. Hughes. 1,890,688; Dec. 13.
Valve for engines, Slide. O. G. Erickson. 1,890,976; Dec. 13.
Valve for garment presses. W. A. Zeidler. 1,890,554; Dec. 13.
Valve for volatile liquid storage tanks, Control. J. J. Tokheim. 1,890,870; Dec. 13.
Valve, Globe. J. O. Webb. 1,890,836; Dec. 13.
Valve, Humidity controlled. F. F. Bahnson. 1,891,138; Dec. 13.
Valve, Pressure reducing. H. Meyer. 1,890,821; Dec. 13.
Valve, Safety. F. B. Stover. 1,891,119; Dec. 13.
Vaporizer. H. A. Odendahl. 1,891,171; Dec. 13.
Varnish and paint oil manufacture. M. B. Chittick. 1,891,079; Dec. 13.
Vault, Automatic delivery storage. W. E. Allington. 1,890,925; Dec. 13.
Vault, Night. C. L. Flagg. 1,890,941; Dec. 13.
Vehicle, Amphibian air. D. W. Douglas. 1,890,902; Dec. 13.
Vehicle, Automotive. R. S. Trott. 1,890,871; Dec. 13.
Vehicle body. G. Tasman. 1,890,704; Dec. 13.
Vehicle body, Convertible. C. C. F. di Bitetto. 1,890,501; Dec. 13.
Vehicle control, Motor. H. E. Hull. 1,890,544; Dec. 13.
Vehicle, Dumping. A. P. Armington. 1,891,019; Dec. 13.
Vehicle spring. J. J. Tatum. 1,890,958; Dec. 13.
Vehicle suspension spring. W. Howard. 1,890,853; Dec. 13.
Vehicle wheel. A. J. Michelin. 1,890,546; Dec. 13.
Vehicles, Lateral transfer of automotive. C. G. and R. N. Andreasen. 1,890,716; Dec. 13.
Vending machine and money changer. J. E. Walker. 1,890,761; Dec. 13.
Vent pipe. J. S. Blackmore. 1,890,930; Dec. 13.
Ventilator. J. R. Townsend. 1,890,758; Dec. 13.
Wagon or coaster, Three wheeled. C. Paulsen. 1,890,656; Dec. 13.
Wagon, Refreshment. J. G. Garton. Des. 88,642; Dec. 13.
Ware transferring mechanism. W. A. Morton and P. L. Geer. 1,890,883; Dec. 13.
Washboard. D. J. Signorelli. 1,890,549; Dec. 13.
Washing machine. M. N. Bonsiakos. 1,890,493; Dec. 13.

Water heater, Electric. E. A. Lonergan. 1,891,000; Dec. 13.
Water shed for inside casements, Automatic. J. M. Warner. 1,891,073; Dec. 13.
Water, Treating. N. K. Chaney. 1,890,969; Dec. 13.
Water treating device. R. O. Friend and J. A. Montgomery. 1,891,061; Dec. 13.
Watering device. C. Hurtado. 1,890,608; Dec. 13.
Webs of thin cellulose sheets, Drying long. C. H. von Hoessle and O. M. Schade. 1,890,833; Dec. 13.
Webs, strips, films or sheets as manufactured from cellulose products, Apparatus for drying. E. Bleibler. 1,890,568; Dec. 13.
Weight recorder, Exact. C. P. Hinman. 1,890,648; Dec. 13.
Welding machine. V. Morrison. 1,890,792; Dec. 13.
Well drilling structure. J. L. Sager. 1,891,062; Dec. 13.
Wheel: *See*—
Buffing wheel. Vehicle wheel.
Wheels of road vehicles, Mounting the steered. F. J. Adams. 1,890,766; Dec. 13.
Winder shaft, Collapsible. G. R. Dubus. 1,891,147; Dec. 13.
Windshield attachment. L. Ribar. 1,890,864; Dec. 13.
Windshield for vehicles. W. H. Watlington. 1,891,128; Dec. 13.
Windshield heater. B. A. Knowles. 1,891,095; Dec. 13.
Woven fabric. N. Vohs. 1,890,959; Dec. 13.
Wrench: *See*—
Cover wrench.
Wrench for screw caps for jars and like containers. H. E. Layton. 1,890,908; Dec. 13.

CLASSIFICATION OF PATENTS

ISSUED DECEMBER 13, 1932

NOTE.—First number—class, second number—subclass, third number—patent number

1— 10: 1,890,586
49: 1,890,694
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303— 80: 1,891,034
305— 10: 1,890,444
308— 6: 1,890,529
1,890,530
70: 1,890,604
88: 1,890,825
131: 1,890,844
187: 1,890,839
312— 35: 1,890,753
185: 1,891,025

U. S. GOVERNMENT PRINTING OFFICE: 1932

LIST OF TRADE-MARK APPLICANTS

PUBLISHED FOR OPPOSITION

[Act of Feb. 20, 1905, Sec. 6, as amended Mar. 2, 1907]

Abbott Laboratories, Chicago, Ill. Calomel, thyroid, calcium, etc. Serial No. 326,929; Dec. 20. Class 6.

Actomint Company, The. (See Appleton, Vivian L.)

Aeronautical Industries Research. (See Sabor, Russell.)

Aktiebolaget Imoindustri, Stockholm, Sweden. Liquid meters. Serial No. 331,238; Dec. 20. Class 26.

Alasco Oil Burner Co. Inc., The, Winchendon, Mass. Oil burners for stoves and ranges and parts thereof. Serial No. 331,486; Dec. 20. Class 34.

Allen & Hanburys, Limited, London, England. Medicinal laxative preparation. Serial No. 330,507; Dec. 20. Class 6.

American Air Filter Company, Inc., Louisville, Ky. Automatic endless-chain impingement or open baffle type of ventilating units. Serial No. 327,460; Dec. 20. Class 34.

American Can Company, New York, N. Y. Advertising cases and cabinets. Serial No. 307,083; Dec. 20. Class 32.

American Disinfecting Company, Sedalia, Mo. Detergents. Serial No. 331,634; Dec. 20. Class 4.

American Oak Leather Company, The, Cincinnati, Ohio. Sole leather. Serial No. 331,570; Dec. 20. Class 1.

American Safety Razor Corporation, Brooklyn, N. Y. Safety razors and safety razor blades. Serial No. 330,152; Dec. 20. Class 23.

Ammonol Chemical Company, The, New York, N. Y. Disinfectant, antiseptic, and deodorant. Serial No. 331,717; Dec. 20. Class 6.

Appleton, Vivian L., doing business as The Actomint Company, St. Louis, Mo. Medicinal preparation. Serial No. 330,882; Dec. 20. Class 6.

Arden, Elizabeth, Inc., New York, N. Y. Perfumes and perfumery. Serial No. 331,239; Dec. 20. Class 6.

Arden, Elizabeth, Inc., New York, N. Y. Liquid soaps. Serial No. 331,240; Dec. 20. Class 4.

Arnold Bros., Incorporated, Chicago, Ill. Sausage. Serial No. 330,883; Dec. 20. Class 46.

Bar-Ba-Sal Distributing Corporation, New York, N. Y. Razor and razor blades. Serial No. 331,664; Dec. 20. Class 23.

Barcalo Manufacturing Company, Buffalo, N. Y. Pillows, cushions, and bed mattresses. Serial No. 331,538; Dec. 20. Class 32.

Beacon Manufacturing Company, New Bedford, Mass. Blankets. Serial No. 331,944; Dec. 20. Class 42.

Beck, Koller & Company, Inc., Detroit, Mich. Synthetic resin. Serial No. 329,928; Dec. 20. Class 6.

Berliner, Edwin E., & Co., New York, N. Y. Linen dress goods in the piece. Serial No. 321,488; Dec. 20. Class 42.

Bevillite Company, Ltd., The, Los Angeles, Calif. Chemical compound. Serial No. 331,098; Dec. 20. Class 6.

Blair Laboratories. (See Morton Manufacturing Corporation.)

Bloch Bros., Glasgow, Scotland. Whiskey. Serial No. 332,028; Dec. 20. Class 49.

Bloomingdale Bros. Inc., New York, N. Y. Dresses. Serial No. 331,489; Dec. 20. Class 39.

Brady & Schmidgall, Vienna, Austria. Purgament and preparation for treating obesity. Serial No. 330,195; Dec. 20. Class 6.

Bristol Aeroplane Company Limited, The, Bristol, England. Aircraft engines. Serial No. 330,445; Dec. 20. Class 23.

Bullock's, Inc., Los Angeles, Calif. Pillows. Serial No. 330,118; Dec. 20. Class 32.

Buzze's Pharmaceutical Company. (See Herbert, Norval S.)

C. W. Mfg. Co. (See Williams, Charles B.)

Capital Chemical Drug Company, Inc., Montgomery, Ala. Insecticides. Serial No. 330,290; Dec. 20. Class 6.

Cavendish Chemical Corporation, New York, N. Y. Antiseptic preparation. Serial No. 330,418; Dec. 20. Class 6.

Christie & Hoover, Houston, Tex. Malt beverages and extracts therefor. Serial No. 331,723; Dec. 20. Class 48.

Cincinnati Varnish Company, The, Cincinnati, Ohio. Ready mixed paints, stains, varnishes, etc. Serial No. 330,991; Dec. 20. Class 16.

Cockshutt Plow Company Limited, Brantford, Ontario, Canada. Implements and parts of such implements. Serial No. 329,221; Dec. 20. Class 25.

Cohn Hall Marx Co., New York, N. Y. Silk piece goods. Serial No. 331,575; Dec. 20. Class 42.

Columbian Enameling & Stamping Co., Terre Haute, Ind. Rectangular enameled dish pans. Serial No. 328,883; Dec. 20. Class 13.

Continental Stove Corporation, Ironton, Ohio. Radiant gas heaters. Serial No. 330,948; Dec. 20. Class 34.

Cooper, Charles, & Company, Newark, N. J., and New York, N. Y. Liquid ammonia cleaning compound. Serial No. 329,704; Dec. 20. Class 4.

Coty, Inc., Wilmington, Del., and New York, N. Y. Perfumes and face powder. Serial No. 331,247; Dec. 20. Class 6.

Cronin, William B., doing business as Cronin's Drug Store, Hartford City, Ind. Medicine. Serial No. 331,102; Dec. 20. Class 6.

Dennis, Martin, Company, Newark, N. J. Mild adhesive preparation. Serial No. 331,727; Dec. 20. Class 5.

Detroit Stoker Company, Monroe and Detroit, Mich. Stokers. Serial No. 331,299; Dec. 20. Class 34.

Dow Pharmacal Co. (See Downs, R. F.)

Downs, R. F., doing business as Dow Pharmacal Co., Dallas, Tex. Antacid and indigestion preparation. Serial No. 329,273; Dec. 20. Class 6.

Duart Manufacturing Co. Ltd., formerly Pacific Hair Goods Company, Ltd., San Francisco, Calif. Permanent waving solution. Serial No. 329,398; Dec. 20. Class 6.

Ely & Walker Dry Goods Company, St. Louis, Mo. Dresses, aprons, pajamas. Serial No. 331,496; Dec. 20. Class 39.

Equitable Service Corporation, now by change of name to Esco Service Corporation, Providence, R. I. Letter heads and blank forms. Serial No. 325,964; Dec. 20. Class 37.

Equitable Service Corporation, now by change of name to Esco Service Corporation, Providence, R. I. Brochures, circulars, and newspaper advertising. Serial No. 325,965; Dec. 20. Class 38.

Equitable Service Corporation, now by change of name to Esco Service Corporation, Providence, R. I. Letter heads and blank forms. Serial No. 325,966; Dec. 20. Class 37.

Escalante Jose, & Co., Chicago, Ill. Cigars. Serial No. 330,572; Dec. 20. Class 17.

Esco Service Corporation. (See Equitable Service Corporation.)

Firestone Tire & Rubber Company, The, Akron, Ohio. Anti-freeze solution. Serial No. 331,179; Dec. 20. Class 6.

Freeman and Sweet. (See Sweet, Donald H.)

Frosted Fruit Corporation, Chicago, Ill. Frozen confections. Serial No. 326,677; Dec. 20. Class 46.

Frozen Sponges, Inc., Brooklyn, N. Y. Ice cream. Serial No. 331,332; Dec. 20. Class 46.

Furniture City Polish Company, Grand Rapids, Mich. Polishing material and preparation. Serial No. 331,306; Dec. 20. Class 16.

Garber-Engle Oil Corp., Brooklyn, N. Y. Bleaching and washing solution. Serial No. 330,949; Dec. 20. Class 6.

General Mills, Inc., Minneapolis, Minn. Cake flour. Serial No. 325,220; Dec. 20. Class 46.

Globe Automatic Sprinkler Company, Philadelphia, Pa. Water motors and fire extinguishers. Serial No. 330,441; Dec. 20. Class 23.

Globe Bottling Co., The. (See Kanner, Abe.)

Goldberg, Bowen & Co., San Francisco, Calif. Canned fruits and vegetables. Serial No. 331,307; Dec. 20. Class 46.

Guio, Henry S., Los Angeles, Calif. Razor strops. Serial No. 328,168; Dec. 20. Class 4.

Hart Drug Corporation, Miami, Fla. Medicinal powder preparation. Serial No. 331,107; Dec. 20. Class 6.

Heller, Samuel, doing business as Karsal Laboratories, Brooklyn, N. Y. Palatable effervescent preparations. Serial No. 330,849; Dec. 20. Class 6.

Herbert, Norval S., doing business as Buzze's Pharmaceutical Company, Washington, D. C. Preparation recommended for athlete's foot and other fungi infections. Serial No. 330,734; Dec. 20. Class 6.

Herradora, Marco A., doing business as Unite Pharmaceutique Francaise, New York, N. Y. Medicine. Serial No. 331,180; Dec. 20. Class 6.

Howard, James A., jr., Dallas, Tex. Condensed brick chili. Serial No. 330,575; Dec. 20. Class 46.

Huisking, Chas. L., & Co., Inc., New York, N. Y. Milk sugar U. S. P., coal tar disinfectant, extract witch hazel, etc. Serial No. 329,288; Dec. 20. Class 6.

Hyg-A-Tabs Laboratories. (See Micell, John N.)

Ice Cream Cake Company, Philadelphia, Pa. Ice cream cake. Serial No. 330,997; Dec. 20. Class 46.

Ice Cream Cake Company, Philadelphia, Pa. Edible food product. Serial No. 330,998; Dec. 20. Class 46.

Ivey, John R., Littleton, N. C. Preparation for relief of boils. Serial No. 331,153; Dec. 20. Class 6.

Jackson, Willard E., Indianapolis, Ind. Attachments to weighing scales and similar devices. Serial No. 331,086; Dec. 20. Class 26.

Jaffe, Isadore, Cleveland, Ohio. Human heel and toe plates. Serial No. 330,999; Dec. 20. Class 13.

LIST OF TRADE-MARK APPLICANTS

PUBLISHED FOR OPPOSITION

[Act of Feb. 20, 1905, Sec. 6, as amended Mar. 2, 1907]

Kanner, Abe, doing business as The Globe Bottling Co., Los Angeles, Calif. Maltless beverages, syrups, and extracts used in making the same. Serial No. 331,112; Dec. 20. Class 45.

Karsal Laboratories. (See Heller, Samuel.)

Kresge Department Store Corp., Newark, N. J. Shoes. Serial No. 330,956; Dec. 20. Class 39.

L & M Manufacturing Co., Cleveland, Ohio. Scrapers, rollers, groovers, etc. Serial No. 327,823; Dec. 20. Class 23.

Les Parfums de Molyneux (Societe a Responsabilite Limitee), Paris, France. Perfumes, toilet water, face powder, etc. Serial No. 329,146; Dec. 20. Class 6.

Levine, Theodore, doing business as The Myalora Company, Brooklyn, N. Y. Preparation used in the treatment of rheumatism and gouty conditions. Serial No. 331,261; Dec. 20. Class 6.

Liberty Mills, San Antonio, Tex. Wheat flour. Serial No. 331,958; Dec. 20. Class 46.

Lillenfeld Bros. & Co., Chicago, Ill. Cigars. Serial No. 330,576; Dec. 20. Class 17.

Louisiana State Rice Milling Company, Inc., Abbeville, La. Rice. Serial No. 331,505; Dec. 20. Class 46.

Lunchour Food Products Co. (See Milani's, Inc.)

Mata-Hara, Incorporated, Washington, D. C. Cosmetics. Serial No. 329,971; Dec. 20. Class 6.

McNeil, Robert, Philadelphia, Pa. Cardiac stimulant and diuretic. Serial No. 326,886; Dec. 20. Class 6.

Micell, John N., doing business as Hyg-A-Tabs Laboratories, Brooklyn, N. Y. Antiseptic vaginal tablets. Serial No. 327,803; Dec. 20. Class 6.

Micky Malto Products Co., San Francisco, Calif. Powdered composition used as a base for food beverages. Serial No. 331,312; Dec. 20. Class 46.

Milani's, Inc., doing business as Lunchour Food Products Co., Seattle, Wash. Chicken broth with rice. Serial No. 331,977; Dec. 20. Class 46.

Miles, H. G., Limited, London, England. Device in the form of a flexible strap or band. Serial No. 329,335; Dec. 20. Class 3.

Miraclo Drug Company, Celoron, N. Y. Herb preparation. Serial No. 329,641; Dec. 20. Class 6.

Morton Manufacturing Corporation, doing business as Blair Laboratories, Lynchburg, Va. Hair beautifying cream. Serial No. 323,956; Dec. 20. Class 6.

Mosse, Incorporated, New York, N. Y. Textile bath towels. Serial No. 321,143; Dec. 20. Class 42.

Myalora Company, The. (See Levine, Theodore.)

Naamlooze Vennootschap Chemisch-Pharmaceutische Fabriek "Menoline" (Menoline Drug Company), The Hague, Netherlands. Pharmaceutical products. Serial No. 330,206; Dec. 20. Class 6.

Naar, Benjamin, doing business as Rev. Naar & Sons, New Brunswick, N. J. Preparation for treating epilepsy. Serial No. 331,314; Dec. 20. Class 6.

Nason Manufacturing Company, New York, N. Y. Steam traps and parts thereof. Serial No. 321,775; Dec. 20. Class 13.

Neher-Whitehead & Company, St. Louis, Mo. Printed labels. Serial No. 331,748; Dec. 20. Class 37.

New Life Medicine Co., Hollywood, Calif. Medicinal tablets. Serial No. 327,887; Dec. 20. Class 6.

Newman, I., & Sons, Inc., New Haven, Conn. Corsets and brassières. Serial No. 331,163; Dec. 20. Class 39.

Northern Indiana Brass Company, Elkhart, Ind. Water pipes, valves, controls, etc. Serial No. 331,116; Dec. 20. Class 13.

Odora Company, Inc., New York, N. Y. Moth repellant. Serial No. 331,693; Dec. 20. Class 6.

Olminol. (See Parker, Frederick H.)

Otis Elevator Company, Jersey City, N. J., and New York, N. Y. Door closers. Serial No. 331,695; Dec. 20. Class 13.

Otis Elevator Company, Jersey City, N. J., and New York, N. Y. Door closers and hangers. Serial No. 331,698; Dec. 20. Class 13

Pacific Hair Goods Company, Ltd. (See Duart Manufacturing Co. Ltd.)

Pac-Kups Incorporated, Easton, Pa. Containers of paper or cardboard-like material for frozen confections. Serial No. 324,353; Dec. 20. Class 2.

Parker, Frederick H., doing business as Olminol, North Arlington, N. J. Hand cleanser. Serial No. 331,342; Dec. 20. Class 4.

Parker-Young Company, The, Boston, Mass. Bond paper. Serial No. 331,518; Dec. 20. Class 37.

Penn Surgical Mfg. Co. Inc., Philadelphia, Pa. Blood lancets, inhalers and masks, curettes, etc. Serial No. 330,439; Dec. 20. Class 44.

Pictorial Review Company, New York, N. Y. Paper dress patterns. Serial No. 324,396; Dec. 20. Class 26.

R. D. R. Manufacturing Co. (See Richardson, Edward.)

Ray Day Piston Corporation of Detroit, Detroit, Mich. Pistons for internal combustion engines. Serial Nos. 331,343–4; Dec. 20. Class 23.

Raynorshyne Products, Inc., San Antonio, Tex. Automobile top dressing, leather dressing, shoe polish, etc. Serial No. 329,153; Dec. 20. Class 4.

Reaves, Robert G., Knoxville, Tenn. Medicinal preparation. Serial No. 330,411; Dec. 20. Class 6.

Resseguie, Earl H., Flint, Mich. Necktie fasteners. Serial No. 331,118; Dec. 20. Class 40.

Richardson, Edward, doing business as R. D. R. Manufacturing Co., Maywood, Ill. Cleaning preparation. Serial No. 329,202; Dec. 20. Class 4.

Richel Company, Inc., Upper Darby, Pa. Cosmetics. Serial No. 330,835; Dec. 20. Class 6.

Roberts, Harry, & Co. Inc., New York, N. Y. Hats. Serial No. 330,637; Dec. 20. Class 39.

Roethlisberger & Co. Inc., New York, N. Y. Canned sardines. Serial No. 330,232; Dec. 20. Class 46.

Rosa, Thomas, New York, N. Y. Preparation of a tonic for anemia. Serial No. 330,382; Dec. 20. Class 6.

Rosenberg, Desider, doing business as Seboline Chemical Company, Kansas City, Mo. Preparation for skin diseases. Serial No. 322,601; Dec. 20. Class 6.

Roth, Chester H., Co., Inc., New York, N. Y. Hosiery. Serial No. 331,594; Dec. 20. Class 39.

Sabor, Russell, doing business as Aeronautical Industries Research, Minneapolis, Minn. Soaps, scouring powders, detergents, etc. Serial No. 326,161; Dec. 20. Class 4.

Saks & Company, New York, N. Y. Perfumes. Serial No. 331,229; Dec. 20. Class 6.

Schlesser Brothers, Portland, Oreg. Foods for dogs, cats, etc., and for human consumption. Serial No. 331,565; Dec. 20. Class 46.

Scruggs-Vandercoort-Barney Dry Goods Company, St. Louis, Mo. Shoes and dresses. Serial No. 328,310; Dec. 20. Class 39.

Seagram, Joseph E., & Sons Limited, Waterloo, Ontario, Canada. Whiskey and potable spirits. Serial No. 332,104; Dec. 20. Class 49.

Seboline Chemical Company. (See Rosenberg, Desider.)

Seliger, Benno, Chicago, Ill. Packing. Serial No. 331,443–4; Dec. 20. Class 35.

Smith, Kline & French Laboratories, Philadelphia, Pa. Medicinal preparation. Serial No. 331,268; Dec. 20. Class 6.

Sprague Specialties Company, North Adams, Mass. Synchronized sound and picture projector with phonograph and radio set features in combination. Serial No. 321,039; Dec. 20. Class 26.

Stanley, Wm. H., Inc., New York, N. Y. Canned fish. Serial No. 327,172; Dec. 20. Class 46.

Streker, Joseph A., doing business as Twoclaimz Mfg. Co., Providence, R. I. Medicinal preparations. Serial No. 330,938; Dec. 20. Class 6.

Sweet, Donald H., doing business as Freeman and Sweet, Chicago, Ill. Game. Serial No. 331,709; Dec. 20. Class 22.

Tobias, B., Inc., New York, N. Y. Dresses. Serial No. 330,765; Dec. 20. Class 39.

Togo Chemical Company, The, Denver, Colo. Cleaner and polish for automobiles. Serial No. 331,998; Dec. 20. Class 16.

Twoclaimz Mfg. Co. (See Streker, Joseph A.)

Union Fork & Hoe Company, The, Columbus, Ohio. Cutters, harvesters, chisels, etc. Serial No. 311,496; Dec. 20. Class 23.

Unite Pharmaceutique Francaise. (See Herradora, Marco A.)

Urbana Laboratories, The, Urbana, Ill. Chemical reagents. Serial No. 326,444; Dec. 20. Class 6.

Vereinigte Stahlwerke Aktiengesellschaft, Dusseldorf, Germany. Wire goods, kettles of sheet metal, etc. Serial No. 302,975; Dec. 20. Class 13.

Vincennes Packing Corporation, Vincennes, Ind. Canned or bottled tomato juice, tomato catsup, pork and beans, etc. Serial No. 327,175; Dec. 20. Class 46.

Walker, Corp & Co. Inc., Syracuse, N. Y. Vaginal antiseptic. Serial No. 330,641; Dec. 20. Class 6.

Wells-Lamont-Smith Corporation, Minneapolis, Minn. Gloves. Serial No. 330,721; Dec. 20. Class 39.

Wells-Lamont-Smith Corporation, Minneapolis, Minn. Gloves. Serial No. 330,906; Dec. 20. Class 39.

West Point Manufacturing Company, Langdale, Ala. Towelling. Serial No. 331,840; Dec. 20. Class 42.

Williams, Charles B., doing business as C. W. Mfg. Co., Cleveland, Ohio. Cleaning compounds for white shoes. Serial No. 331,393; Dec. 20. Class 4.

Williams, Theodore, Syracuse, N. Y. Exercising machines. Serial No. 330,718; Dec. 20. Class 22.

Wolk, August, Eisenwarenfabrik Ges. m. beschr. Haftung, Betzdorf (Sieg), Germany. Garden and agricultural tools. Serial No. 331,524; Dec. 20. Class 23.

Wolosky, Nathan, New York, N. Y. Frozen confection. Serial No. 330,188; Dec. 20. Class 46.

Zeeman, Isidor I., New York, N. Y. Cigarettes. Serial No. 330,675; Dec. 20. Class 17.

LIST OF REGISTRANTS OF TRADE-MARKS

Alhambra Cigar & Cigarette Mfg. Co., Manila, P. I. Cigars and cigarettes. 299,751–2; Dec. 20; Serial Nos. 329,416–17; published Oct. 11, 1932. Class 17.

Alpine Electric Corporation, Schenectady, N. Y. Fuse plugs. 299,798; Dec. 20; Serial No. 329,418; published Sept. 27, 1932. Class 21.

Animal Foods Company. (See Coan, N. C.)

Apfel, M., & Bro., Inc., New York, N. Y. Ladies' hats. 299,763; Dec. 20; Serial No. 329,173; published Oct. 4, 1932. Class 39.

Archer, Rubber Company, Milford, Mass. Raincoats, jackets, shoes, etc. 299,762; Dec. 20; Serial No. 329,011; published Oct. 4, 1932. Class 39.

Asael Farr & Sons Company, Ogden, Utah. Ice cream, ices and frozen confections. 299,809; Dec. 20. Class 46.

Atlas Supply Company, Newark, N. J. Automobile polishing cloths, mechanics' hand soap, powdered soap, etc. 299,746; Dec. 20; Serial No. 324,941; published Oct. 4, 1932. Class 4.

Autocar Company, The, Ardmore, Pa. Automobile business cars, and motor trucks and parts thereof. 299,712; Dec. 20; Serial No. 323,118; published Sept. 27, 1932. Class 19.

B. & B. Shoe Company, Chicago, Ill. Slippers. 299,760; Dec. 20; Serial No. 328,972; published Oct. 4, 1932. Class 39.

Badorf Shoe Company, Lititz, Pa. Shoes. 299,757; Dec. 20; Serial No. 328,292; published Oct. 4, 1932. Class 39.

Bausch & Lomb Optical Company, Rochester, N. Y. Abrasives for grinding lenses. 299,736; Dec. 20; Serial No. 329,519; published Oct. 11, 1932. Class 4.

Becker's Bakery, Spartanburg, S. C. Bread. 299,804; Dec. 20. Class 46.

Bennett & Layton, Inc., Susanville, Calif. Ice cream, candy, cookies, frozen confections and frozen malted milk. 299,772; Dec. 20; Serial No. 327,932; published Oct. 4, 1932. Class 46.

Bissell Carpet Sweeper Co., assignor to Bissell Carpet Sweeper Company, Grand Rapids, Mich. Carpet sweepers. 39,919; renewed Mar. 10, 1933.

Blumenthal, Sidney, & Co. Inc., New York, N. Y. Pile fabrics. 299,786; Dec. 20; Serial No. 329,826; published Oct. 4, 1932. Class 42.

Bradstone Rubber Company, Woodbine, N. J. Rubber heels, soles, and half soles. 299,775; Dec. 20; Serial No. 329,277; published Oct. 4, 1932. Class 39.

Bradstone Rubber Company, Woodbine, N. J. Rubber heels, soles, and half soles. 299,777–8; Dec. 20; Serial Nos. 329,594–5; published Oct. 4, 1932. Class 39.

Bulls-Eye Electric Manufacturing Company, The, Torrington, Conn. Electrical fuse plugs and parts thereof. 299,801; Dec. 20; Serial No. 329,132; published Oct. 4, 1932. Class 21.

Burd Piston Ring Company, Rockford, Ill. Piston rings. 299,776; Dec. 20; Serial No. 329,323; published Oct. 4, 1932. Class 35.

Canoga Citrus Association, Canoga Park, Calif. Fresh citrus fruit. 299,755; Dec. 20; Serial No. 329,501; published Oct. 4, 1932. Class 46.

Century Ribbon Mills, Inc. (Ernest & Herman Levy). (See Levy, Ernest & Herman.)

Chase & Co., Sanford, Fla. Insecticides. 299,770; Dec. 20; Serial No. 329,134; published Sept. 27, 1932. Class 6.

Coan, N. C., doing business as Animal Foods Company, assignor to Animal Foods Company, San Jose, Calif. Dog food. 299,715; Dec. 20; Serial No. 322,357; published Apr. 5, 1932. Class 46.

Cocks, Aagut S., doing business as Cocks Manufacturing Company, New York, N. Y. Portable colonic irrigator. 299,789; Dec. 20; Serial No. 328,662; published Oct. 11, 1932. Class 44.

Cohn & Rosenberger, Inc., New York, N. Y. Empty vanity cases. 299,708; Dec. 20; Serial No. 327,845; published Oct. 11, 1932. Class 2.

Cokesbury Press. (See Lamar & Whitmore, Book Agents, Publishing House, M. E. Church, South.)

Colgate & Co., Jersey City, N. J., and New York, N. Y., assignor to Colgate-Palmolive-Peet Company, Chicago, Ill. Soap. 91,322; renewed Apr. 20, 1933.

Coryell, L. L., & Son, Lincoln, Nebr. Automobile and radio storage batteries. 299,790; Dec. 20; Serial No. 329,739; published Oct. 4, 1932. Class 21.

Crane, Willard G., Auburn, N. Y., assignor, by mesne assignments, to Luxor, Limited, Chicago, Ill. White laundry soap. 40,024; renewed Mar. 31, 1933.

Cuccia, G., & Sons, Inc., New York, N. Y. Olive oil, canned tuna fish, dried split peas and rice, and lentils. 299,727; Dec. 20; Serial No. 315,301; published Dec. 22, 1931. Class 46.

Dammann, Ietrich. Chicago, Ill. Scouring pads. 299,744; Dec. 20; Serial No. 327,208; published Oct. 11, 1932. Class 4.

Deane Plaster Co., The, Yonkers, N. Y. Surgical gauze in the piece and in cut lengths, bandages, slings, etc. 299,738; Dec. 20; Serial No. 329,081; published Oct. 4, 1932. Class 44.

Detroit Dental Manufacturing Co., Detroit, Mich. Dental investment compounds. 299,735; Dec. 20; Serial No. 329,551; published Oct. 11, 1932. Class 44.

Detroit Vapor Stove Company, Detroit, Mich. Burner box linings. 299,706; Dec. 20; Serial No. 324,549; published Oct. 11, 1932. Class 34.

Devon Bakeries, Inc., New York, N. Y. Toast. 297,766; Dec. 20; Serial No. 329,574; published Oct. 4, 1932. Class 46.

Durfee & Canning, Inc., Fall River, Mass. Automatic oil burners. 299,806; Dec. 20. Class 34.

Electro Anti-Corrosion Corporation, New York, N. Y. Anodes. 299,800; Dec. 20; Serial No. 329,140; published Sept. 27, 1932. Class 21.

Empresa Mate Larangeira Sociedad Anonima, Buenos Aires, Argentina. Yerba mate. 297,773; Dec. 20; Serial No. 328,393; published Oct. 11, 1932. Class 46.

Farbenfabriken of Elberfeld Company, assignor, by mesne assignments, to Winthrop Chemical Company, Inc., New York, N. Y. Hematinic tonic. 91,419; renewed Apr. 29, 1933.

Fenton, John, assignor to The Fenton Corporation, Los Angeles, Calif. Cushion inserts for shoe insoles. 299,774; Dec. 20; Serial No. 329,227; published Oct. 4, 1932. Class 39.

Floriorange Canneries, Inc., Mount Dora, Fla. Canned citrus fruits and juices. 299,716; Dec. 20; Serial No. 321,333; published June 21, 1932. Class 46.

Foot Form Shoe Shops, Inc., New York, N. Y. Arch supports, foot pads, and cushions to be used in shoes. 299,733; Dec. 20; Serial No. 329,633; published Oct. 11, 1932. Class 44.

Friedr, Herder Abr. Sohn, Solingen, Germany. Knives, can openers, razors, etc. 299,726; Dec. 20; Serial No. 315,401; published Nov. 24, 1931. Class 23.

Goodyear Tire & Rubber Company, The, Akron, Ohio. Storage batteries. 299,791; Dec. 20; Serial No. 329,580; published Sept. 27, 1932. Class 21.

Graham, Charles H., doing business as Magnator Company, Syracuse, N. Y. Electro-therapeutical apparatus. 299,740; Dec. 20; Serial No. 328,271; published Oct. 11, 1932. Class 44.

Great Atlantic & Pacific Tea Company, The, New York, N. Y. Canned salmon. 299,771; Dec. 20; Serial No. 328,317; published Oct. 11, 1932. Class 46.

Gro-Flex Corporation, Indianapolis, Ind. Massage devices. 299,737; Dec. 20; Serial No. 329,445; published Oct. 11, 1932. Class 44.

Hayman Oil Co., Los Angeles, Calif. Gasoline, lubricating oils, and crude oil. 299,803; Dec. 20; Serial No. 328,353; published Oct. 4, 1932. Class 15.

Heister, Louis. Company, The, Cincinnati, Ohio. Russian oil for medicinal use. 299,729; Dec. 20; Serial No. 315,199; published May 31, 1932. Class 6.

Hess Warming and Ventilating Company, Chicago, Ill. Coal, wood, coke, etc., furnaces. 299,711; Dec. 20; Serial No. 328,424; published Oct. 11, 1932. Class 34.

Hessel, Frederick A., doing business as Marfred Laboratories, New York, N. Y. Hand and skin cleaners. 299,742; Dec. 20; Serial No. 328,462; published Oct. 4, 1932. Class 4.

Ideal Steel Products Corporation, Chicago, Ill. Ball-projecting table board game. 299,704; Dec. 20; Serial No. 327,148; published Oct. 11, 1932. Class 22.

India Tire and Rubber Company, Akron and Mogadore, Ohio. Tires, inner tubes, hook-on boots, etc. 299,758; Dec. 20; Serial No. 328,731; published Oct. 11, 1932. Class 35.

Jackson, O. W., & Co., Inc., New York, N. Y. Rubber mats and matting. 299,722; Dec. 20; Serial No. 317,917; published Oct. 11, 1932. Class 50.

Johnson, John E., Pittsburgh, Pa. Gasoline. 299,795; Dec. 20; Serial No. 329,475; published Oct. 4, 1932; Class 15.

Kabushikikaisha Honkano Shoten. (See Shoten, Hon K.)

Katz, William, St. Louis, Mo. Hats. 299,761; Dec. 20; Serial No. 328,990; published Oct. 4, 1932. Class 39.

Kayser, Julius, & Co., New York, N. Y. Hosiery. 299,785; Dec. 20; Serial No. 329,530; published Sept. 27, 1932. Class 39.

Kents Orderphone Co. (See Walton, Kenneth B.)

Kerr, James, Jenners, Pa. Radio interference and noise eliminator. 299,721; Dec. 20; Serial No. 318,514; published Sept. 27, 1932. Class 21.

Keystone Lubricating Company, Philadelphia, Pa. Cleaning preparation. 299,741; Dec. 20; Serial No. 329,286; published Oct. 4, 1932. Class 4.

King, Dobbs & Company, Chattanooga, Tenn. Coffee. 299,754; Dec. 20; Serial No. 329,476; published Oct. 4, 1932. Class 46.

Kingan & Company, Limited, Belfast, Ireland, and Indianapolis, Ind., assignor to Kingan & Co. Incorporated, Indianapolis, Ind. Hams and sausages. 89,855; renewed Jan. 14, 1933.

Kingan & Company, Limited, Belfast, Ireland; Indianapolis, Ind.; Richmond and Norfolk, Va.; Jacksonville, Fla.; San Francisco, Calif.; Washington, D. C.; Atlanta, Ga.; Baltimore, Md.; Atlantic City, N. J.; New York and Syracuse, N. Y.; Columbus, Ohio; Pittsburgh, Philadelphia, and Harrisburg, Pa., assignor to Kingan & Co. Incorporated, Indianapolis, Ind. Butter. 90,546; renewed Mar. 4, 1933.

Klaus & Moersen, Columbus, Nebr. Canned sweet corn and tomatoes. 299,731; Dec. 20; Serial No. 287,706; published Oct. 4, 1932. Class 46.

Kress, S. H., & Co., New York, N. Y. Hand sprayer for liquid and powder insecticides. 299,713; Dec. 20; Serial No. 323,559; published Oct. 11, 1932. Class 23.

Kress, S. H., & Co., New York, N. Y. Dusting mittens, whisk brooms, etc. 299,781; Dec. 20; Serial No. 326,549; published Oct. 11, 1932. Class 29.

Lamar & Whitmore, Book Agents, Publishing House, M. E. Church, South, doing business as Cokesbury Press, Nashville, Tenn. Religious periodical. 299,724; Dec. 20; Serial No. 317,521; published Sept. 22, 1931. Class 38.

La Mode Chea Tappe, Inc., New York, N. Y. Hats, dresses, and coats. 299,759; Dec. 20; Serial No. 327,911; published Oct. 4, 1932. Class 39.

Lehigh Steel Company, New York, N. Y. Tool steel. 299,769; Dec. 20; Serial No. 329,996; published Oct. 11, 1932. Class 14.

Levy, Ernest & Herman, to Century Ribbon Mills, Inc. (Ernest & Herman Levy), New York, N. Y., successor. Ribbons. 39,756; renewed Feb. 10, 1933.

Leyse Aluminum Company, Kewaunee, Wis. Electrical coffee makers. 299,802; Dec. 20; Serial No. 328,556; published Oct. 4, 1932. Class 21.

Lily of France Corset Co., New York, N. Y. Corsets. 91,359; renewed Apr. 29, 1933.

Lily of France Corset Co., New York, N. Y. Corsets. 91,494; renewed May 6, 1933.

Loft, George W., New York, assignor, by mesne assignments, to Loft, Inc., Long Island City, N. Y. Candy. 89,123; renewed Nov. 12, 1932.

Luxor, Limited. (See Crane, Willard G., assignor.)

Magnator Company. (See Graham, Charles H.)

Marfred Laboratories. (See Hessel, Frederick A.)

McLellan, Wm. L., Co., The, Norwalk, Conn. Rod and sheet packing, rubber hose, etc. 299,707; Dec. 20; Serial No. 323,901; published Oct. 4, 1932. Class 35.

Mendes, Francisco, & Compañia Limitada, Buenos Aires, Argentina. Yerba mate. 299,749; Dec. 20; Serial No. 328,395; published Oct. 11, 1932. Class 46.

Merck, E., Darmstadt, Germany, assignor, by mesne assignments, to Winthrop Chemical Company, Inc., New York, N. Y. Chemical product. 40,115; renewed Apr. 14, 1933.

Methodist Book Concern, The, New York, N. Y. Periodical. 299,728; Dec. 20; Serial No. 315,601; published July 21, 1931. Class 38.

Michigan Alkali Company, Wyandotte, Mich. Coke. 299,767; Dec. 20; Serial No. 329,804; published Oct. 11, 1932. Class 1.

Midland Flour Milling Company, The, Kansas City, Mo. Wheat flour. 299,768; Dec. 20; Serial No. 330,098; published Oct. 11, 1932. Class 46.

Milch & Harrison, Minneapolis, Minn. Ice cream confections. 299,782; Dec. 20; Serial No. 326,643; published Oct. 4, 1932. Class 46.

Mueller Electric Company, Cleveland, Ohio. Battery carriers. 299,796; Dec. 20; Serial No. 329,451; published Sept. 27, 1932. Class 19.

Nason Manufacturing Company, New York, N. Y. Steam traps and parts thereof. 299,808; Dec. 20. Class 13.

Nordmark-Werke G. m. b. H., Hamburg, Germany. Maltless beverages and water. 299,709; Dec. 20; Serial No. 327,599; published Oct. 11, 1932. Class 45.

Nordmark-Werke G. m. b. H., Hamburg, Germany. No. 299,779; Dec. 20; Serial No. 325,235; published Oct. 11, 1932. Class 1.

Norge Corporation, Detroit, Mich. Refrigerators and parts thereof. 299,710; Dec. 20; Serial No. 328,562; published Oct. 11, 1932. Class 31.

Norris Run Coal Mining Company, Wilkes-Barre, Pa. Coal. 299,753; Dec. 20; Serial No. 329,479; published Oct. 11, 1932. Class 1.

Nu-Pak Corporation, New York, N. Y. Cartons, packages, boxes, and blanks therefor. 299,747; Dec. 20; Serial No. 329,837; published Oct. 4, 1932. Class 2.

Oilrite Corporation, Red Bank, N. J. Lubricating oils and greases. 299,789; Dec. 20; Serial No. 327,000; published July 5, 1932. Class 15.

Okonite Company, The, Passaic, N. J. Insulated wires and cables. 299,792–4; Dec. 20; Serial Nos. 329,533–5; published Oct. 4, 1932. Class 21.

Opler, E. & A., Inc., Chicago, Ill. Cocoa malted milk. 299,750; Dec. 20; Serial No. 328,924; published Oct. 11, 1932. Class 46.

Orphan Annie Greaseless Doughnut Shop, Clearwater, Fla. Doughnuts, cakes, pies, etc. 299,725; Dec. 20; Serial No. 317,439; published Sept. 29, 1931. Class 46.

Oswego Falls Corporation, Fulton, N. Y. Bottle caps. 299,780; Dec. 20; Serial No. 325,074; published Oct. 11, 1932. Class 50.

Petty Shoe Company, Pittsburgh, Pa. Shoes. 299,723; Dec. 20; Serial No. 317,532; published Oct. 4, 1932. Class 39.

Powers, Patrick A., New York, N. Y. Silent and/or sound or talking motion-picture films. 299,765; Dec. 20; Serial No. 329,097; published Oct. 11, 1932. Class 26.

Reliance Piece Dye Works, Paterson, N. J. Piece goods. 299,784; Dec. 20; Serial No. 329,337; published Oct. 4, 1932. Class 42.

Ridal Products Co., The. (See Schumacher, Emil J.)

Rubin Bros. Foot-wear Inc., Long Island City, N. Y. Shoes. 299,719; Dec. 20; Serial No. 319,944; published Oct. 4, 1932. Class 39.

Schumacher, Emil J., doing business as The Ridal Products Co., Erie, Pa. Dry cleaning liquid. 299,734; Dec. 20; Serial No. 329,587; published Oct. 4, 1932. Class 4.

Scientific Laboratories, Inc., Chicago, Ill. Chemical compound for the preservation of threads. 299,807; Dec. 20. Class 6.

Sharpless, P. E., Company, Concordville, to P. E. Sharpless Company, Philadelphia, Pa. Butter. 90,062; renewed Jan. 28, 1933.

Shoten, Hon K., to Kabushikikaisha Honkano Shoten, Mikage Town, Japan, successor. Japanese sake. 90,333; renewed Feb. 18, 1933.

Smith-Junior Company, Inc., Rochester, N. Y. Acidulous compound for flavoring soft drinks. 299,720; Dec. 20; Serial No. 319,344; published Oct. 11, 1932. Class 45.

Societa Anonima Lucchese Olii E Vini, Lucca, Italy. Olive oil. 299,718; Dec. 20; Serial No. 320,012; published Oct. 4, 1932. Class 46.

Solvay Process Company, The, Geddes, N. Y. Cleansing and scouring compound and for a cleaning compound. 299,745; Dec. 20; Serial No. 325,697; published June 14, 1932. Class 4.

Standard Brands Incorporated, New York, N. Y. Salad dressing. 299,705; Dec. 20; Serial No. 324,853; published Oct. 4, 1932. Class 46.

Standard Oil Company of New Jersey, Wilmington, Del. Lubricating oils. 299,797; Dec. 20; Serial No. 329,430; published Sept. 27, 1932. Class 15.

Sunical Packing Company, San Francisco, Calif. Canned fruits. 299,756; Dec. 20; Serial No. 329,509; published Oct. 4, 1932. Class 46.

Takahashi, Kotaro, Tokyo Fu, Japan. Maltless syrup. 299,717; Dec. 20; Serial No. 320,380; published Oct. 11, 1932. Class 45.

Taylor, Thomas D., Philadelphia, Pa. Classified advertising. 299,805; Dec. 20. Class 38.

Taylor, William W., Los Angeles, Calif. Soap. 299,743; Dec. 20; Serial No. 328,022; published Oct. 11, 1932. Class 4.

Triplex Products Corporation, Clifton, N. J., and New York, N. Y. Domestic hot water heaters, electric or electrically operated time switches, and electric flashes for sign lights. 299,788; Dec. 20; Serial No. 327,993; published Oct. 4, 1932. Class 21.

Volckman, William J. C., doing business as Volckman Furniture Manufacturing Company, Clinton, Iowa. Upholstered chairs. 299,810; Dec. 20. Class 32.

Walton, Kenneth B., doing business as Kents Orderphone Co., Atlantic City, N. J. Electric audible annunciator equipment. 299,730; Dec. 20; Serial No. 304,265; published Oct. 4, 1932. Class 21.

Weber Costello Company, Chicago Heights, Ill. Blackboards. 90,069; renewed Jan. 28, 1933.

Wernik, Morris, Metuchen, N. J. Syrup concentrates. 299,764; Dec. 20; Serial No. 328,765; published Oct. 11, 1932. Class 45.

West Branch Novelty Company, Milton, Pa. Cedar chests and cabinets. 299,748; Dec. 20; Serial No. 329,964; published Oct. 11, 1932. Class 32.

Whisk-Brush Vacuum Machine Co., Inc., New York, N. Y. Vacuum cleaners and attachments therefor. 299,799; Dec. 20; Serial No. 329,248; published Sept. 27, 1932. Class 21.

White, S. S., Dental Manufacturing Company, The, Philadelphia, Pa. Base plates. 299,732; Dec. 20; Serial No. 329,695; published Oct. 4, 1932. Class 44.

Winthrop Chemical Company, Inc. (See Farbenfabriken of Elberfeld Company, assignor.)

Winthrop Chemical Company, Inc. (See Merck, E., assignor.)

Wollner & Smith, New York, N. Y. Wearing apparel. 299,714; Dec. 20; Serial No. 322,840; published Oct. 4, 1932. Class 39.

Woolsey, C. A., Paint & Color Co., Jersey City, N. J. Paint. 299,787; Dec. 20; Serial No. 328,766; published Oct. 11, 1932. Class 16.

Yorke Shirt Co., The, Glens Falls and New York, N. Y. Articles of men's clothing. 91,055; renewed Apr. 8, 1933.

Yost Company, The, St. Louis, Mo. Humidifiers. 299,783; Dec. 20; Serial No. 329,271; published Oct. 11, 1932. Class 34.

LIST OF REGISTRANTS OF LABELS

Araban Coffee Co., Inc., Boston, Mass. Golden Packet. For Tea. 41,542; Dec. 20.

Badger Glove & Mitten Company, Milwaukee, Wis. Kumfo Lounging Slippers. For Slippers. 41,543; Dec. 20.

Ballantine, P., & Sons, Newark, N. J. Royal Mountie. For Malt Syrup. 41,544; Dec. 20.

Bloomer Bros. Company, Newark, N. Y. Design No. 306. For Ice Cream. 41,545; Dec. 20.

Bloomer Bros. Company, Newark, N. Y. Design No. 506. For Ice Cream. 41,546; Dec. 20.

Burgess Battery Company, Freeport, Ill. Burgess Sound Projection Battery. For Batteries. 41,547; Dec. 20.

Burnee Corporation, New York, N. Y. Nedick's Orange Drink. For Orange Drink. 41,548; Dec. 20.

California Date Growers Association, Los Angeles, Calif. Desert Gold Dates. For Dates. 41,549; Dec. 20.

Dickinson, E. E., Co., The, Essex, Conn. Dickinson's Witch Hazel. For Witch Hazel. 41,550; Dec. 20.

Gold Seal Baking Corporation, Baltimore, Md. Tip-A-Topper Cakes. For Cakes. 41,551; Dec. 20.

Keebler Weyl Baking Company, Philadelphia, Pa. Club. For Crackers. 41,552; Dec. 20.

Kramer, L. H., Lake Wales, Fla. Kramer. For Oranges, Grapefruit, and Tangerines. 41,553; Dec. 20.

Lyon, Marcia, Portland, Oreg. Tang. For Mustard with Horse Radish. 41,554; Dec. 20.

National Breweries, Limited, The, Montreal, Quebec, Canada. Club Kingsbeer Special. For Lager Beer. 41,555; Dec. 20.

Neumann, Morton G., doing business as Valmor Products Company, Chicago, Ill. Luck Fortune Teller Incense. For Incense. 41,556; Dec. 20.

Pratt-Low Preserving Company, Santa Clara, Calif. Pratt-low Brand Stewed Ready to Serve Prunes. For Canned Prunes. 41,557; Dec. 20.

Pratt-Low Preserving Company, Santa Clara, Calif. Pratt-low Brand Solid Pack Tomatoes. For Canned Tomatoes. 41,558; Dec. 20.

Standard Brands Incorporated, New York, N. Y. Fleischmann's. For Refined Invertase. 41,559; Dec. 20.

Valmor Products Company. (See Neumann, Morton G.)

LIST OF REGISTRANTS OF PRINTS

Arden, Elizabeth, of New York, Ltd., doing business as Elizabeth Arden, New York, N. Y. Gifts of Beauty That Keep On Giving Beauty. For Powder, Lipstick, Perfume, Etc. 13,981; Dec. 20.

General Mills, Inc., Minneapolis, Minn. Kris Kringle Stollen. For Flour. 13,982; Dec. 20.

General Tire & Rubber Company, The, Akron, Ohio. It's Human Mileage That Counts. For Automobile Tires. 13,983; Dec. 20.

Ramona Food Products Co., San Antonio, Tex. Ramona Chili Square. For Food Seasoning. 13,984; Dec. 20.

CLASSIFIED LIST OF TRADE-MARKS REGISTERED

CLASS 1

Coal. Norris Run Coal Mining Company. 299,753; Dec. 20; Serial No. 329,479; published Oct. 11, 1932.

Coke. Michigan Alkali Company. 299,767; Dec. 20; Serial No. 329,804; published Oct. 11, 1932.

Ice. Nordmark-Werke G. m. b. H. 299,779; Dec. 20; Serial No. 325,235; published Oct. 11, 1932.

CLASS 2

Cartons, packages, boxes, and blanks therefor. Nu-Pak Corporation. 299,747; Dec. 20; Serial No. 329,837; published Oct. 4, 1932.

Cases, Empty vanity. Cohn & Rosenberger, Inc. 299,708; Dec. 20; Serial No. 327,845; published Oct. 11, 1932.

CLASS 4

Abrasive for grinding lenses. Bausch & Lomb Optical Company. 299,736; Dec. 20; Serial No. 329,519; published Oct. 11, 1932.

Cleaners, Hand and skin. F. A. Hessel. 299,742; Dec. 20; Serial No. 328,462; published Oct. 4, 1932.

Cleaning liquid, Dry. E. J. Schumacher. 299,734; Dec. 20; Serial No. 329,587; published Oct. 4, 1932.

Cleansing and scouring compound and for a cleaning compound. Solvay Process Company. 299,745; Dec. 20; Serial No. 325,697; published June 14, 1932.

Cleansing preparation. Keystone Lubricating Company. 299,741; Dec. 20; Serial No. 329,236; published Oct. 4, 1932.

Polishing cloths, mechanics' hand soap, powdered soap, etc. Atlas Supply Company. 299,746; Dec. 20; Serial No. 324,941; published Oct. 4, 1932.

Scouring pads. D. Dammann. 299,744; Dec. 20; Serial No. 327,208; published Oct. 11, 1932.

Soap. Colgate & Co. 91,322; renewed Apr. 29, 1933.

Soap. W. W. Taylor. 299,743; Dec. 20; Serial No. 328,022; published Oct. 11, 1932.

Soap, White laundry. W. G. Crane. 40,024; renewed Mar. 31, 1933.

CLASS 6

Chemical compound for the preservation of threads. Scientific Laboratories, Inc. 299,807; Dec. 20.

Chemical product. E. Merck. 40,115; renewed Apr. 14, 1933.

Insecticides. Chase & Co. 299,770; Dec. 20; Serial No. 329,134; published Sept. 27, 1932.

Oil for medicinal use, Russian. Louis Heister Company. 299,729; Dec. 20; Serial No. 315,199; published May 31, 1932.

Tonic, Hematinic. Farbenfabriken of Elberfeld Company. 91,419; renewed Apr. 29, 1933.

CLASS 13

Traps and parts thereof, Steam. Nason Manufacturing Company. 299,808; Dec. 20.

CLASS 14

Steel, Tool. Lehigh Steel Company. 299,769; Dec. 20; Serial No. 329,996; published Oct. 11, 1932.

CLASS 15

Gasoline. J. E. Johnson. 299,795; Dec. 20; Serial No. 329,475; published Oct. 4, 1932.

Gasoline, lubricating oils, and crude oil. Hayman Oil Co. 299,803; Dec. 20; Serial No. 328,353; published Oct. 4, 1932.

Oils and greases, Lubricating. Oilrite Corporation. 299,789; Dec. 20; Serial No. 327,000; published July 5, 1932.

Oils, Lubricating. Standard Oil Company of New Jersey. 299,797; Dec. 20; Serial No. 329,430; published Sept. 27, 1932.

CLASS 16

Paint. C. A. Woolsey Paint & Color Co. 299,787; Dec. 20; Serial No. 328,766; published Oct. 11, 1932.

CLASS 17

Cigars and cigarettes. Alhambra Cigar & Cigarette Mfg. Co. 299,751–2; Dec. 20; Serial Nos. 329,416–17; published Oct. 11, 1932.

CLASS 19

Automobile business cars, and motor trucks and parts thereof. Autocar Company. 299,712; Dec. 20; Serial No. 323,118; published Sept. 27, 1932.

Battery carriers. Mueller Electric Company. 299,796; Dec. 20; Serial No. 329,451; published Sept. 27, 1932.

CLASS 21

Anodes. Electro Anti-Corrosion Corporation. 299,800; Dec. 20; Serial No. 329,140; published Sept. 27, 1932.

Batteries, Storage. L. L. Coryell & Son. 299,790; Dec. 20; Serial No. 329,739; published Oct. 4, 1932.

Batteries, Storage. Goodyear Tire & Rubber Company. 299,791; Dec. 20; Serial No. 329,580; published Sept. 27, 1932.

Electric audible annunciator equipment. K. B. Walton. 299,730; Dec. 20; Serial No. 304,265; published Oct. 4, 1932.

Electrical coffee makers. Leyse Aluminum Company. 299,802; Dec. 20; Serial No. 328,556; published Oct. 4, 1932.

Fuse plugs. Alpine Electric Corporation. 299,798; Dec. 20; Serial No. 329,418; published Sept. 27, 1932.

Fuse plugs and parts thereof, Electric. Bulls-Eye Electric Manufacturing Company. 299,801; Dec. 20; Serial No. 329,132; published Oct. 4, 1932.

Heaters, time switches and flashers for sign lights, Domestic hot water. Triplex Products Corporation. 299,788; Dec. 20; Serial No. 327,993; published Oct. 4, 1932.

Insulated wires and cables. Okonite Company. 299,792–4; Dec. 20; Serial Nos. 329,533–5; published Oct. 4, 1932.
Radio interference and noise eliminator. J. Kerr. 299,721; Dec. 20; Serial No. 318,814; published Sept. 27, 1932.
Vacuum cleaners and attachments therefor. Whisk-Brush Vacuum Machine Co. 299,799; Dec. 20; Serial No. 329,248; published Sept. 27, 1932.

CLASS 22

Game, Table board. Ideal Steel Products Corporation. 299,704; Dec. 20; Serial No. 327,148; published Oct. 11, 1932.

CLASS 23

Knives, can openers, razors, etc. Friedr. Herder Abr. Sohn. 299,726; Dec. 20; Serial No. 315,401; published Nov. 24, 1931.
Sprayer, Hand. S. H. Kress & Co. 299,713; Dec. 20; Serial No. 323,559; published Oct. 11, 1932.
Sweepers, Carpet. Bissell Carpet Sweeper Co. 39,919; renewed Mar. 10, 1933.

CLASS 26

Films, Picture. P. A. Powers. 299,765; Dec. 20; Serial No. 329,097; published Oct. 11, 1932.

CLASS 29

Dusting mittens, whisk brooms, etc. S. H. Kress & Co. 299,781; Dec. 20; Serial No. 326,549; published Oct. 11, 1932.

CLASS 32

Chairs, Upholstered. W. J. C. Volckman. 299,810; Dec. 20.
Chests and cabinets, Cedar. West Branch Novelty Company. 299,748; Dec. 20; Serial No. 329,964; published Oct. 11, 1932.

CLASS 34

Burner box linings. Detroit Vapor Stove Company. 299,706; Dec. 20; Serial No. 324,549; published Oct. 11, 1932.
Burners, Automatic oil. Durfee & Canning, Inc. 299,806; Dec. 20.
Furnaces. Hess Warming and Ventilating Company. 299,711; Dec. 20; Serial No. 328,424; published Oct. 11, 1932.
Humidifiers. Yost Company. 299,783; Dec. 20; Serial No. 329,271; published Oct. 11, 1932.
Refrigerators and parts thereof. Norge Corporation. 299,710; Dec. 20; Serial No. 328,562; published Oct. 11, 1932.

CLASS 35

Packing, rubber hose, etc., Rod and sheet. Wm. L. McLellan Co. 299,707; Dec. 20; Serial No. 323,901; published Oct. 4, 1932.
Piston rings. Burd Piston Ring Company. 299,776; Dec. 20; Serial No. 329,323; published Oct. 4, 1932.
Tires, inner tubes, hook-on boots, etc. India Tire and Rubber Company. 299,758; Dec. 20; Serial No. 328,731; published Oct. 11, 1932.

CLASS 38

Advertising, Classified. T. D. Taylor. 299,805; Dec. 20.
Periodical. Methodist Book Concern, The. 299,728; Dec. 20; Serial No. 315,601; published July 21, 1931.
Periodical, Religious. Lamar & Whitemore, Book Agents, Publishing House, M. E. Church, South. 299,724; Dec. 20; Serial No. 317,521; published Sept. 22, 1931.

CLASS 39

Apparel, Wearing. Wollner & Smith. 299,714; Dec. 20; Serial No. 322,840; published Oct. 4, 1932.
Articles of men's clothing. Yorke Shirt Co. 91,055; renewed Apr. 8, 1933.
Corsets. Lily of France Corset Co. 91,359; renewed Apr. 29, 1933.
Corsets. Lily of France Corset Co. 91,494; renewed May 6, 1933.
Cushion inserts for shoe insoles. J. Fenton. 299,774; Dec. 20; Serial No. 329,227; published Oct. 4, 1932.
Hats. W. Katz. 299,761; Dec. 20; Serial No. 328,990; published Oct. 4, 1932.
Hats, dresses, and coats. La Mode Chez Tappe, Inc. 299,759; Dec. 20; Serial No. 327,911; published Oct. 4, 1932.
Hats, Ladies'. M. Apfel & Bro., Inc. 299,763; Dec. 20; Serial No. 329,173; published Oct. 4, 1932.
Heels, soles, and half soles, Rubber. Bradstone Rubber Company. 299,775; Dec. 20; Serial No. 329,277; published Oct. 4, 1932.
Heels, soles, and half soles, Rubber. Bradstone Rubber Company. 299,777–8; Dec. 20; Serial Nos. 329,594–5; published Oct. 4, 1932.
Hosiery. Julius Kayser & Co. 299,785; Dec. 20; Serial No. 329,530; published Sept. 27, 1932.
Raincoats, jackets, shoes, etc. Archer Rubber Company. 299,762; Dec. 20; Serial No. 329,011; published Oct. 4, 1932.
Shoes. Badorf Shoe Company. 299,757; Dec. 20; Serial No. 328,292; published Oct. 4, 1932.
Shoes. Petty Shoe Company. 299,723; Dec. 20; Serial No. 317,532; published Oct. 4, 1932.
Shoes. Rubin Bros. Foot-Wear Inc. 299,719; Dec. 20; Serial No. 319,944; published Oct. 4, 1932.
Slippers. B. & B. Shoe Company. 299,760; Dec. 20; Serial No. 328,972; published Oct. 4, 1932.

CLASS 42

Piece goods. Reliance Piece Dye Works. 299,784; Dec. 20; Serial No. 329,337; published Oct. 4, 1932.
Pile fabrics. Sidney Blumenthal & Co. Inc. 299,786; Dec. 20; Serial No. 329,826; published Oct. 4, 1932.
Ribbons. Ernest & Herman Levy. 39,756; renewed Feb. 10, 1933.

CLASS 44

Arch supports, foot pads, and cushions to be used in shoes. Foot Form Shoe Shops, Inc. 299,733; Dec. 20; Serial No. 329,633; published Oct. 11, 1932.
Base plates. S. S. White Dental Manufacturing Company. 299,732; Dec. 20; Serial No. 329,695; published Oct. 4, 1932.
Dental investment compounds. Detroit Dental Manufacturing Co. 299,735; Dec. 20; Serial No. 329,551; published Oct. 11, 1932.
Electro-therapeutical apparatus. C. H. Graham. 299,740; Dec. 20; Serial No. 328,271; published Oct. 11, 1932.
Gauze, bandages, slings, etc., Surgical. Deane Plaster Co. 299,738; Dec. 20; Serial No. 329,081; published Oct. 4, 1932.
Irrigator, Portable Colonic. A. S. Cocks. 299,739; Dec. 20; Serial No. 328,662; published Oct. 11, 1932.
Massage devices. Gro-Flex Corporation. 299,737; Dec. 20; Serial No. 329,445; published Oct. 11, 1932.

CLASS 45

Beverages and water, Maltless. Nordmark-Werke G. m. b. H. 299,709; Dec. 20; Serial No. 327,599; published Oct. 11, 1932.
Compounds for flavoring soft drinks, Acidulous. Smith-Junior Company. 299,720; Dec. 20; Serial No. 319,344; published Oct. 11, 1932.
Concentrates, Syrup. M. Wernik. 299,764; Dec. 20; Serial No. 328,765; published Oct. 11, 1932.
Maltless syrup. K. Takahashi. 299,717; Dec. 20; Serial No. 320,380; published Oct. 11, 1932.

CLASS 46

Bread. Becker's Bakery. 299,804; Dec. 20.
Butter. Kingan & Company. 90,546; renewed Mar. 4, 1933.
Butter. P. E. Sharpless Company. 90,062; renewed Jan. 26, 1933.
Candy. G. W. Loft. 89,123; renewed Nov. 12, 1932.
Canned citrus fruits and juices. Floriorange Canneries, Inc. 299,716; Dec. 20; Serial No. 321,333; published June 21, 1932.
Canned fruits. Sunical Packing Company. 299,756; Dec. 20; Serial No. 329,509; published Oct. 4, 1932.
Canned salmon. Great Atlantic & Pacific Tea Company. 299,771; Dec. 20; Serial No. 328,317; published Oct. 11, 1932.
Canned sweet corn and tomatoes. Klaus & Moersen. 299,731; Dec. 20; Serial No. 287,706; published Oct. 4, 1932.
Cocoa malted milk. E. & A. Opler, Inc. 299,750; Dec. 20; Serial No. 328,924; published Oct. 11, 1932.
Coffee. King, Dobbs & Company. 299,754; Dec. 20; Serial No. 329,476; published Oct. 4, 1932.
Doughnuts, cakes, pies, etc. Orphan Annie Greaseless Doughnut Shop. 299,725; Dec. 20; Serial No. 317,439; published Sept. 29, 1931.
Flour, Wheat. Midland Flour Milling Company. 299,768; Dec. 20; Serial No. 330,098; published Oct. 11, 1932.
Food, Dog. N. C. Coan. 299,715; Dec. 20; Serial No. 322,357; published Apr. 5, 1932.
Fruit, Fresh citrus. Canoga Citrus Association. 299,755; Dec. 20; Serial No. 329,501; published Oct. 4, 1932.
Hams and sausages. Kingan & Company. 89,855; renewed Jan. 14, 1933.
Ice cream, candy, cookies, etc. Bennett & Layton Inc. 299,772; Dec. 20; Serial No. 327,932; published Oct. 4, 1932.
Ice cream confections. Milch & Harrison. 299,782; Dec. 20; Serial No. 326,643; published Oct. 4, 1932.
Ice cream, ices, and frozen confections. Asael Farr & Sons Company. 299,809; Dec. 20.
Olive oil. Societa Anonima Lucchese Olii E Vini. 299,718; Dec. 20; Serial No. 320,012; published Oct. 4, 1932.
Olive oil, canned tuna fish, dried split peas and rice, and lentils. G. Cuccia & Sons, Inc. 299,727; Dec. 20; Serial No. 315,301; published Dec. 22, 1931.
Salad dressing. Standard Brands Incorporated. 299,705; Dec. 20; Serial No. 324,853; published Oct. 4, 1932.
Toast. Devon Bakeries, Inc. 299,766; Dec. 20; Serial No. 329,574; published Oct. 4, 1932.

Yerba mate. Empresa Mate Larangeira Sociedad Anonima. 299,773; Dec. 20; Serial No. 328,393; published Oct. 11, 1932.
Yerba mate. Francisco Mendes & Compania Limited. 299,749; Dec. 20; Serial No. 328,395; published Oct. 11, 1932.

CLASS 48

Sake, Japanese. H. K. Shoten. 90,333; renewed Feb. 18, 1933.

CLASS 50

Blackboards. Weber Costello Company. 90,069; renewed Jan. 28, 1933.
Bottle caps. Oswego Falls Corporation. 299,780; Dec. 20; Serial No. 325,074; published Oct. 11, 1932.
Mats and matting, Rubber. O. W. Jackson & Co. 299,722; Dec. 20; Serial No. 317,917; published Oct. 11, 1932.

LIST OF LABELS

Burgess Sound Projection Battery. For Batteries. Burgess Battery Company. 41,547; Dec. 20.
Club. For Crackers. Keebler Weyl Baking Company. 41,552; Dec. 20.
Club Kingabeer Special. For Lager Beer. National Breweries, Limited. 41,555; Dec. 20.
Desert Gold Dates. For Dates. California Date Growers Association. 41,549; Dec. 20.
Design No. 306. For Ice Cream. Bloomer Bros. Company. 41,545; Dec. 20.
Design No. 508. For Ice Cream. Bloomer Bros. Company. 41,546; Dec. 20.
Dickinson's Witch Hazel. For Witch Hazel. E. E. Dickinson Co. 41,550; Dec. 20.
Fleischmann's. For Refined Invertase. Standard Brands Incorporated. 41,559; Dec. 20.
Golden Packet. For Tea. Araban Coffee Co. 41,542; Dec. 20.
Kramer. For Oranges, Grapefruit, and Tangerines. L. H. Kramer. 41,553; Dec. 20.
Kumfo Lounging Slippers. For Slippers. Badger Glove & Mitten Company. 41,548; Dec. 20.
Lucky Fortune Teller Incense. For Incense. M. G. Neumann. 41,556; Dec. 20.
Nedick's Orange Drink. For Orange Drink. Burnee Corporation. 41,548; Dec. 20.
Prattlow Brand Solid Pack Tomatoes. For Canned Tomatoes. Pratt-Low Preserving Company. 41,558; Dec. 20.
Prattlow Brand Stewed Ready to Serve Prunes. For Canned Prunes. Pratt-Low Preserving Company. 41,557; Dec. 20.
Royal Mountie. For Malt Syrup. P. Ballantine & Sons. 41,544; Dec. 20.
Tang. For Mustard with Horse Radish. M. Lyon. 41,554; Dec. 20.
Tip-A-Topper Cakes. For Cakes. Gold Seal Baking Corporation. 41,551; Dec. 20.

LIST OF PRINTS

Gifts of Beauty that Keep on Giving Beauty. For Powder, Lipstick, Perfume, Etc. Elizabeth Arden of New York, Ltd. 13,981; Dec. 20.
It's Human Mileage that Counts. For Automobile Tires. General Tire & Rubber Company. 13,988; Dec. 20.
Kris Kringle Stollen. For Flour. General Mills, Inc. 13,982; Dec. 20.
Ramona Chili Square. For Food Seasoning. Ramona Food Products Co. 13,984; Dec. 20.

LIST OF PATENTEES

TO WHOM

PATENTS WERE ISSUED ON THE 20TH DAY OF DECEMBER, 1932

NOTE.—Arranged in accordance with the first significant character or word of the name (in accordance with city and telephone directory practice). Includes patents, reissues, and designs.

Abentrod, Joseph, et al. (See Ceablom, Wendell S., assignor.)
Ablard, Fred. (See Johnston, J., and Ablard.)
Acme Steel Company. (See Ketcham, Ernest J., assignor.)
Acme Steel Company. (See Ott, John B., assignor.)
Ahlm, Charles E. F., Cleveland Heights, and G. L. Elmslie, assignors to Continuous Torque Transmission Company, Cleveland, Ohio. Motor vehicle mechanism. 1,891,399; Dec. 20.
Ainsworth Manufacturing Company. (See Potter, Albert T., assignor.)
Air Control Systems Inc. (See Jordan, W. D., and Van Vliet, assignors.)
Air Reduction Company. (See Anderson, James L., assignor.)
Aktiebolaget Ljungstroms Angturbin. (See Lysholm, Alf., assignor.)
Albertson & Company. (See Albertson, F. O., and Madsen, assignors.)
Albertson, Frans O., and A. Madsen, assignors to Albertson & Company, Inc., Sioux City, Iowa. Valve seat gauge. 1,891,364; Dec. 20.
Albertson, Frans O., and A. Madsen, assignors to Albertson & Company, Sioux City, Iowa. Valve seat gauge. 1,891,365; Dec. 20.
Alexanian, Mihran H., Coytesville, N. J. Platen roller. 1,891,366; Dec. 20.
All Fair Incorporated. (See Hewitt, Elmer L., assignor.)
Allen, Joseph W., assignor to Bendix Aviation Corporation, East Orange, N. J. Electrical apparatus. 1,891,702; Dec. 20.
Alma Manufacturing Company (See Frank, Leon, assignor.)
Aluminum Colors Incorporated. (See Bengston, Helmer, assignor.)
Aluminum Company of America. (See Lane, N. B., and Ennor, assignors.)
American Bosch Magneto Corporation. (See Curtis, Leslie F., assignor.)
American Brass Company, The. (See Westerman, George F., assignor.)
American Cable Company. (See Burd, Gorman C., assignor.)
American Hat Co. Inc., The. (See Overton, George S., assignor.)
American Lace Paper Company. (See Huff, Ernest, assignor.)
American Lurgi Corporation. (See von Girsewald, C., Siecke, and Thieler, assignors.)
American Lurgi Corporation. (See v. Girsewald, C. F., and Weidmann, assignors.)
American Lurgi Corporation. (See Wittenberg, Herbert, assignor.)
American Radiator Company. (See Eggleston, Lewis W., assignor.)
American Slicing Machine Company. (See Campbell, William J., assignor.)
American Swiss File & Tool Co. (See Reichheim, Paul F., assignor.)
American Telephone and Telegraph Company. (See Anderson, C. N., Taylor, and Wright, assignors.)
American Telephone and Telegraph Company. (See Wintringham, William T., assignor.)
American Temperature Indicating Company, The. (See Kuhlman, Carl H., assignor.)
American Wilderman Porous Ebonite Company, The. (See Wilderman, Meyer, assignor.)
Ammirandoli, David, and C. Baldi, Prato, Tuscany, Italy. System for reducing shocks. 1,891,340; Dec. 20.
Anaconda Wire & Cable Company. (See Bassett, W. H., jr., and Leach, assignors.)
Anderson, A. A., et al. (See Howes, Raymond T., assignor.)
Anderson, Axel V., Beacon, assignor to New York Rubber Corporation, New York, N. Y. Inflatable boat. 1,891,491; Dec. 20.
Anderson, Axel V., Beacon, assignor to New York Rubber Corporation, New York, N. Y. Inflatable or pneumatic boat. 1,891,492; Dec. 20.
Anderson, Clifford N., E. R. Taylor, New York, N. Y., and S. B. Wright, South Orange, N. J., assignors to American Telephone and Telegraph Company. Radio telephone system. 1,891,299; Dec. 20.
Anderson, James L., Closter, N. J., assignor to Air Reduction Company, Incorporated, New York, N. Y. Gas cutting machine. 1,891,880; Dec. 20.
Anderson, Oscar M. (See Juenger, F. W., and Anderson.)
Anderson, William, Chicago, Ill. Filing machine. 1,891,742; Dec. 20.

Apostoloff, Sergius, New York, N. Y. Oscillating pulsator. 1,891,493; Dec. 20.
Arienta, Joseph S., Paterson, N. J. Loom picker stick. 1,891,464; Dec. 20.
Arnold, Charles N., Chaumont, N. Y. Snowplow. 1,891,464; Dec. 20.
Asiatic Petroleum Company Limited, The. (See Lubbock, L., and Joyce, assignors.)
Associated Electric Laboratories, Inc. (See Kahn, Frederick L., assignor.)
Auerbach, Fred. (See Madigan, Thomas J., assignor.)
Auto Research Corporation. (See Thomas, Thomas R., assignor.)
Autograf Tooth Brush Co. (See Marogg, Richard, assignor.)
Automatic Burner Corporation. (See Perry, Stanley, assignor.)
Bagby, Robert T. (See Ramsay, A. C., and Bagby.)
Baird, Grover C., Lusk, Wyo. Automatically lubricating windmill. 1,891,863; Dec. 20.
Bakelite Gesellschaft mit beschrankter Haftung. (See Seebach, Fritz, assignor.)
Baker, Alfred Z., Newark, N. J. Toy firearm. 1,891,219; Dec. 20.
Baker, Arthur J., assignor to The Willys-Overland Company, Toledo, Ohio. Automobile. Des. 88,728; Dec. 20.
Baker, Eugene L., Taunton, Mass. Elevator. 1,891,300; Dec. 20.
Baldi, Cino. (See Ammirandoli, D., and Baldi.)
Baltzley, Louis E., Glen Ridge, N. J. Binder clip. 1,891,494; Dec. 20.
Banks, Millard S., New York, N. Y. Device for use in blowing smoke rings. 1,891,466; Dec. 20.
Bannister, Albert R. (See Chubb, G. C. P., Colmer, and Bannister.)
Barnes Manufacturing Company, The. (See Gorman, James C., assignor.)
Barocas, Abraham J., Brooklyn, N. Y. Electric light attachment set. 1,891,341; Dec. 20.
Barrett Company, The. (See Hamlin, Marston L., assignor.)
Barrett Company, The. (See Radasch, Arthur H., assignor.)
Barrett, Cornelius P., Pittsburgh, Pa. Tongue brush and scraper. 1,891,864; Dec. 20.
Barrington, Arthur H., et al. (See Foss, Leland L., assignor.)
Bassett, William H., jr., Scarsdale, N. Y., and R. H. Leach, Fairfield, Conn., assignors to Anaconda Wire & Cable Company, New York, N. Y. Alloy. 1,891,495; Dec. 20.
Batdorf, Charles S., Brooklyn, N. Y. Automatic telephone signal transmitting method and device. 1,891,633; Dec. 20.
Bath, John. (See Bath, Stanley W., assignor.)
Bath, Stanley W., Shrewsbury, assignor to John Bath, Worcester, Mass. Head-stock for machine tools. 1,891,220; Dec. 20.
Battle, John R., Ardmore, Pa., assignor to Gun-Fil Corporation. Lubricator. 1,891,632; Dec. 20.
Baylis, Walter S. (See Kelley, William, assignor.)
Bear Manufacturing Company. (See Wochner, Henry, assignor.)
Beck, Gustaf C. F., Minneapolis, Minn., assignor of forty-nine one-hundredths to G. O. Darrow, Mission San Jose, Calif. Pliers. 1,891,865; Dec. 20.
Becker, William, Chicago, Ill. Belt buckle. 1,891,519; Dec. 20.
Bedford, John S., Twickenham, England. Door attachment for vehicles. 1,891,496; Dec. 20.
Behrend, Oswald, Nitro, W. Va., assignor to The Rubber Service Laboratories Co., Akron, Ohio. Manufacturing vulcanized rubber and products obtained thereby. 1,891,743; Dec. 20.
Bell Punch and Printing Company Limited. (See Chubb, G. C. P., Colmer, and Bannister, assignors.)
Bell Telephone Laboratories, Incorporated. (See Pfannenstiehl, Harry, assignor.)
Bendix Aviation Corporation. (See Allen, Joseph W., assignor.)
Bengston, Helmer, assignor to Aluminum Colors Incorporated, Indianapolis, Ind. Coating. 1,891,708; Dec. 20.
Benn, Alonzo N., Chicago, Ill. Apparatus for preparing meat for smoking. 1,891,467; Dec. 20.
Berby, Ola L. (See McGiffert, J. E., and Berby.)
Bilde, Tord E. D., Stockholm, Sweden, assignor, by mesne assignments, to Electrolux Corporation. Vacuum cleaner. 1,891,256; Dec. 20.
Binns, George W., assignor, by mesne assignments, to Cincinnati Grinders Incorporated, Cincinnati, Ohio. Grinding. 1,891,661; Dec. 20.

Birkenmaier, Theodore, assignor to W. N. Matthews Corporation, St. Louis, Mo. Grip. 1,891,497; Dec. 20.
Bjorson, Carl J. (See Siebert, O. W., and Bjorson, assignors.)
Blair, Robert S., Stamford, Conn. Soap making. 1,891,744; Dec. 20.
Blebert, Maurice B., St. Paul, Minn. Garment. 1,891,400; Dec. 20.
Blume, Henry, Tulare, S. Dak. Tractor guiding device. 1,891,704; Dec. 20.
Bobrick, Mayo A., Cleveland Heights, Ohio. Bottle cap. 1,891,794; Dec. 20.
Bodor, Andrew, Newark, N. J., assignor to Reinforced Paper Bottle Corporation, New York, N. Y. Spinner for paper containers. 1,891,866; Dec. 20.
Bonsleur, Le, assignor to The General Industries Company, Elyria, Ohio. Covering a turntable. 1,891,745; Dec. 20.
Booth, Charles F. (See Huntress, E. H., McCullough, and Booth.)
Booth, Clement, and F. S. Haas, assignors to Cincinnati Grinders Incorporated, Cincinnati, Ohio. Machine tool. 1,891,662; Dec. 20.
Booth, Clement, assignor to The Cincinnati Grinders Incorporated, Cincinnati, Ohio. Grinding machinery. 1,891,663; Dec. 20.
Bordeaux, Ephriam P., assignor to Perfection Steel Body Company, Galion, Ohio. Truck body. 1,891,301; Dec. 20.
Borden Company, The. (See Schibsted, Helge, assignor.)
Borden, Fred W., San Francisco, Calif. Illuminating cabinet. 1,891,498; Dec. 20.
Bostic, Ralph R., Long Beach, Calif. Operating rod guide. 1,891,615; Dec. 20.
Bottrell, Elbert C., Milwaukee, Wis. Folding crate. 1,891,342; Dec. 20.
Bowley, Edward J., assignor to Rubber & Celluloid Products Co., Newark, N. J. Coloring cellulosic plastics. 1,891,520; Dec. 20.
Bowlus, Glenn H., Alhambra, Calif. Oil well surveying device. 1,891,401; Dec. 20.
Brackett, Clare L., Detroit, Mich. Apparatus for forming valve or tappet heads. 1,891,521; Dec. 20.
Brenhelts, Roy, Columbus, Ohio. Combination bench and table. 1,891,665; Dec. 20.
Brenizer, Orson W., Philadelphia, Pa. Wire splicing device. 1,891,664; Dec. 20.
Breusch, Adolph, New York, N. Y. Flash light and medical heater. 1,891,746; Dec. 20.
Brewer-Titchener Corporation, The. (See Johannsen, Udo K., assignor.)
Brewer-Titchener Corporation, The. (See Stannard, Bruce M., assignor.)
Bridier, Fernand, Paris, France. Textile fabric or similar article. Des. 88,729; Dec. 20.
Bridier, Fernand, Paris, France. Textile fabric or similar article. Des. 88,730; Dec. 20.
Broderick, George H., Monroe, Mich., assignor to Ottawa River Paper Company, Toledo, Ohio. Paper box making machinery. 1,891,367; Dec. 20.
Brooks, Donald L., Glendale, Calif. Article of manufacture in a combined radio cabinet and sound amplifying device. 1,891,616; Dec. 20.
Brotz, Frank G. (See Kohler, H. V., and Brotz.)
Brown Company. (See Richter, George A., assignor.)
Brown, Donald F., London, England, assignor to The Westinghouse Air Brake Company, Wilmerding, Pa. Feed valve device. 1,891,666; Dec. 20.
Brown, F. E. (See Cox, Allen, assignor.)
Brown Instrument Company. (See Brown, Richard P., assignor.)
Brown, Richard P., assignor to The Brown Instrument Company, Philadelphia, Pa. Control method and apparatus. 1,891,617; Dec. 20.
Bruning, Charles, Company Inc. (See Murck, Knud, assignor.)
Buck, Charles M., Brooklyn, N. Y. Feeding finely comminuted fuel into a combustion chamber. 1,891,886; Dec. 20.
Buckeye Traction Ditcher Company, The. (See George, Charles L., assignor.)
Buettell, Samuel E., assignor to Cross Parking Systems, Inc., Chicago, Ill. Vehicle storage system. 1,891,795; Dec. 20.
Bullock, Earl C., assignor to Metal Office Furniture Company, Grand Rapids, Mich. Index card compressor. 1,891,522; Dec. 20.
Burd, Gorman C., Adrian, Mich., assignor to American Cable Company, Inc., New York, N. Y. Stranding. 1,891,343; Dec. 20.
Burdick, Ralph V., Albany, and L. R. Krug, West Albany, assignors to Burdick & Son, Albany, N. Y. Producing castings with tapped holes therein. 1,891,867; Dec. 20.
Burdick & Son. (See Burdick, R. V., and Krug, assignors.)
Burkhardt, Harry L., Cleveland Heights, Ohio. Transmission gearing. 1,891,499; Dec. 20.
Burrows, Edwin H., Cleveland, assignor of one-half to W. Hoyt, Cleveland Heights, Ohio. Explosive composition. 1,891,500; Dec. 20.
Burt Machine Company. (See Wild, Charles H., assignor.)
Burton, Thomas L., New York, N. Y., assignor to Chicago Railway Equipment Company, Chicago, Ill. Brake beam support. 1,891,523; Dec. 20.
Cahill, Vincent W., et al. (See Siegel, Max J., assignor.)
Calvert, Burnell M., Terre Haute, Ind. Automobile lamp. Des. 88,724; Dec. 20.
Cameo Scale Corporation. (See Gottfried, John, assignor.)
Campbell, Clarence B., Moores, Pa., assignor to Westinghouse Electric & Manufacturing Company. Auxiliary oil pump regulator. 1,891,018; Dec. 20.
Campbell, William J., Indianapolis, Ind., assignor to American Slicing Machine Company, Chicago, Ill. Slicing machine. 1,891,368; Dec. 20.
Candy, Albert T., jr., Oak Park, assignor to Candy & Company, Inc., Chicago, Ill. Method of coating insulated wire or the like and apparatus therefor. 1,891,501; Dec. 20.
Candy & Company. (See Candy, Albert T., jr., assignor.)
Capocefalo, Edward A., Syracuse, assignor to Sterilek Company, Inc., Brooklyn, N. Y. Positive feeding and cutting device. 1,891,524; Dec. 20.
Carder, Albert M., assignor of one-half to M. J. Carder, Newton, Iowa. Reversible control for hot and cold air in furnaces. 1,891,796; Dec. 20.
Carder, Mary J. (See Carder, Albert M., assignor.)
Carey, Philip, Manufacturing Company, The. (See Fischer, Albert C., assignor.)
Carlstedt, Fredrik, Stockholm, Sweden, assignor, by mesne assignments, to Electrolux Corporation. Brush mechanism for dynamo-electric machines. 1,891,634; Dec. 20.
Carney, Arthur T., Blairsville, assignor of one-third to R. E. Miles, jr., Wilkinsburg, Pa. Radiocabinet. Des. 88,704; Dec. 20.
Carr, Richard H., assignor to The Pure Oil Company, Chicago, Ill. Facilitating the flow of wells. 1,891,667; Dec. 20.
Carter, Charles J., Kansas City, Mo. Grain bin. 1,891,275; Dec. 20.
Carter, Clinton W. (See Giffen, W. W., and Carter.)
Carter, Joseph H. (See Hughes, J. M., Carter, and Perkins.)
Caskey, Emmett, Council Bluffs, Iowa. Rotary pump. 1,891,302; Dec. 20.
Cassé, Marcel, Essonnes, France. Hat press. 1,891,344; Dec. 20.
Caterpillar Tractor Co. (See Clove, Jacob, assignor.)
Caterpillar Tractor Co. (See Radford, William H., assignor.)
Cazes, John, and C. Claps, New York, N. Y. Barber's comb. 1,891,303; Dec. 20.
Ceablom, Wendell S., assignor of one-half to C. Roy, E. J. Roy, and J. Abentrod, Detroit, Mich. Engine starting device. 1,891,868; Dec. 20.
Cement Products Research Corporation. (See Henderson, Albert, assignor.)
Chain Store Products Corporation. (See Goldberg, Sol H., assignor.)
Chance, Albert B., Centralia, Mo. Earth anchor. Re18,697; Dec. 20.
Chappell, Marvin L., Los Angeles, assignor to Standard Oil Company of California, San Francisco, Calif. Producing hydrocarbon products by the action of a metallic halide and a partially chlorinated mineral oil of the carbocyclic series. 1,891,619; Dec. 20.
Chase, Charles E., and E. J. Fiegel, assignors to Line-O-Graph Company, Kansas City, Mo. Rotor for display devices. 1,891,797; Dec. 20.
Chemical Works formerly Sandoz. (See Peter, Albin, assignor.)
Cheshire, Howard B., Long Beach, Calif. Packing. 1,891,798; Dec. 20.
Chicago Cinema Equipment Company. (See Goldberg, Joseph H., assignor.)
Chicago Railway Equipment Company. (See Burton, Thomas L., assignor.)
Chicopee Manufacturing Corporation. (See McCormick, Edward A., assignor.)
Chubb, Graham C. P., W. E. Colmer, and A. R. Bannister, London, assignors to The Bell Punch and Printing Company Limited, Uxbridge, England. Ticket issuing machine. 1,891,468; Dec. 20.
Cincinnati Grinders Incorporated. (See Blanz, George W., assignor.)
Cincinnati Grinders Incorporated, The. (See Booth, Clement, assignor.)
Cincinnati Grinders Incorporated. (See Booth, C., and Haas, assignors.)
Cincinnati Grinders Incorporated. (See Plimmer, Alfred G., assignor.)
Cincinnati Grinders Incorporated. (See Theller, Frederick J., assignor.)
Cincinnati Milling Machine Company, The. (See Ernst, Hans, assignor.)
Claps, Carmine. (See Cazes, J., and Claps.)
Clare, William G. (See Oliver, L. W., and Clare.)
Clark, James R. (See Furlong, R. A., and Clark.)
Clark, William A., assignor of one-half to L. Westphalen, Chicago, Ill. Ornamental side ring for wire-spoked wheels. Re18,692; Dec. 20.
Claus, Frank, Plattsmouth, Nebr. Window safety device. 1,891,588; Dec. 20.
Clements, Wellington I., Norfolk, Va. Body support. 1,891,747; Dec. 20.
Cleveland, John M., Kansas City, Mo. Electric switch. 1,891,799; Dec. 20.

Cleveland Rock Drill Company, The. (See Greve, Louis W., assignor.)
Cleveland Trust Company, The, trustee. (See Jardine, Frank, assignor.)
Cleveland Trust Company, The, trustee. (See Norton, Allen B., assignor.)
Cleveland Wheelbarrow & Mfg. Co., The. (See Tompkins, John E., assignor.)
Clickner, Forest H., assignor to Endowment Foundation, New Brunswick, N. J. Preparing egg powder. 1,891,887; Dec. 20.
Clove, Jacob, Stockton, assignor, by mesne assignments, to Caterpillar Tractor Co., San Leandro, Calif. Pick-up. 1,891,748; Dec. 20.
Clyde Iron Works. (See McGiffert, J. R., and Berby, assignors.)
Coezene Company, The. (See Goddard, Lester J., assignor.)
Coleman, Caruthers A., Ashland, Ky. Kiln. 1,891,469; Dec. 20.
Collins, William O., Wellsville, Kans. Attachment for incubator. 1,891,800; Dec. 20.
Colmer, William E. (See Chubb, G. C. P., Colmer, and Bannister.)
Colour Photographs (British and Foreign) Limited. (See Oliver, L. W., and Clare, assignors.)
Columbia Phonograph Company. (See Friebus, Reginald T., assignor.)
Columbus Auto Parts Company, The. (See Flumerfelt, William A., assignor.)
Columbus-McKinnon Chain Corporation. (See Stahl, Frank E., assignor.)
Condor Company, The. (See Fitts, Silas W. C., assignor.)
Consolidated Fruit Jar Company. (See McGinnis, Edward L., assignor.)
Conti, Eugene, Mount Vernon, assignor to A. Herz, New Rochelle, N. Y. Apparatus for trimming drinking straws. 1,891,749; Dec. 20.
Continental Can Company. (See Dodge, Merton L., assignor.)
Continental Can Company. (See Kronquest, Alfred L., assignor.)
Continental Can Company. (See Nicholson, [illegible] C., assignor.)
Continental Can Company. (See Troyer, N., and Pearson, assignors.)
Continental Process Corporation. (See Eisenberg, Abraham D., assignor.)
Continuous Torque Transmission Company. (See Ahlm, C. E. F., and Elmslie, assignors.)
Cook, Earle S., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa. Multiple speed governor device. 1,891,668; Dec. 20.
Cooke, John M., Beachmont, assignor to Nicholas W. Mathey, Lynn, Mass. Trimming machine. 1,891,257; Dec. 20.
Cornell, Franklin M., Brooklyn, assignor to Stimuplant Laboratories, Inc., Long Island City, N. Y. Bacterial product. 1,891,750; Dec. 20.
Cornett, Walter V., Brooklyn, N. Y., assignor to Rapid Pavement Breaker Corporation. Pavement breaking machine. 1,891,221; Dec. 20.
Cornett, Walter V., Brooklyn, N. Y., assignor to Rapid Pavement Breaker Corporation. Tool for demolition machines. 1,891,222; Dec. 20.
Cox, Allen, assignor of one-half to F. E. Brown, Ames, Iowa. Shaft extractor. 1,891,869; Dec. 20.
Cox, William P., assignor to The Timken Roller Bearing Company, Canton, Ohio. Roller bearing. 1,891,753; Dec. 20.
Coyne, David, New York, N. Y. Electric circuit breaker and burglar alarm. 1,891,751; Dec. 20.
Coyne, David, New York, N. Y. Electric circuit controller. 1,891,752; Dec. 20.
Cralse, Fred L., El Segundo, and H. G. Vesper and H. G. Griffith, Inglewood, assignors to Standard Oil Company of California, San Francisco, Calif. Treating oils. 1,891,402; Dec. 20.
Crane Co. (See Flodin, Victor E., assignor.)
Crane Co. (See McCurdy, G. R., and Turek, assignors.)
Crane Packing Company. (See Payne, Frank E., assignor.)
Craske, Harold. (See Tapp, E. T. J., and Craske.)
Crawford, Thomas J., Youngstown, Ohio. Pole structure. 1,891,620; Dec. 20.
Crocker, Ernest C., Belmont, assignor to Arthur D. Little, Incorporated, Cambridge, Mass. Method for flame-proofing combustible materials and product resulting therefrom. 1,891,258; Dec. 20.
Crosley Radio Corporation, The. (See Kilgour, Charles E., assignor.)
Cross Parking Systems, Inc. (See Buettell, Samuel E., assignor.)
Cruger, Harold, Ridgewood, N. J. Textile fabric or the like. Des. 88,731; Dec. 20.
Curtis, Leslie F., assignor to American Bosch Magneto Corporation, Springfield, Mass. Carrier for electromagnetic pickup. 1,891,369; Dec. 20.
Dailey, Charles A., Torrance, Calif. Operating mechanism for pumping outfits and the like. 1,891,403; Dec. 20.
Dalzen, William F., Grosse Pointe, Mich. Rock drill. 1,891,276; Dec. 20.
Daniels, Lloyd C., Crafton, and C. J. Schwindt, Pittsburgh, Pa. Granulated phthalic anhydride. 1,891,754; Dec. 20.
Danner, Edward, Toledo, Ohio. Method and apparatus for manufacturing glassware. 1,891,370; Dec. 20.
Danner, Edward, Newark, Ohio. Method and apparatus for making glassware. 1,891,371; Dec. 20.
Danner, Edward, Newark, Ohio. Method of and apparatus for producing sheet glass. 1,891,372; Dec. 20.
Danner, Edward, Newark, Ohio. Glass forming method and apparatus. 1,891,373; Dec. 20.
Dardelet Threadlock Corporation. (See Mercadante, J., and Thomson, assignors.)
Darrow, George O. (See Beck, Gustaf C. F., assignor.)
David, Sara, Bellevue, Pa. Bobby form. 1,891,589; Dec. 20.
Davidson, John C., Brooklyn, N. Y. Electrical condenser. 1,891,345; Dec. 20.
Davidson, Louis, New York, N. Y. Long span building and arch construction. 1,891,346; Dec. 20.
Davis, Irvin W., South Milwaukee, Wis. Limb rest stand. 1,891,753; Dec. 20.
Dearden, William H. (See Lawton, G., and Dearden.)
Deere & Company. (See White, Charles H., assignor.)
Delas, François X. J. A., Paris, France. Heat exchanger. 1,891,705; Dec. 20.
Delco-Light Company. (See Oswald, Louis C., assignor.)
De Lonch, Bert H., et al. (See Foss, Leland L., assignor.)
De Ram, Georges H. E., Boulogne sur Seine, France. Leakless joint for rotating shafts. 1,891,706; Dec. 20.
Derrley, Lizzie, New York, N. Y. Textile fabric or the like. Des. 88,705; Dec. 20.
Deubel, Erich, Brooklyn, N. Y. Releasing objects to be dropped from aircraft. 1,891,635; Dec. 20.
Deutsche Gold- und Silber-Scheideanstalt vormals Roessler. (See Gorhau, Adolf, assignor.)
Dewar, Duncan G. (See Kreimer, J., and Dewar.)
DeWitt, William J., assignor to Shoe Form Co., Inc., Auburn, N. Y. Box. 1,891,801; Dec. 20.
Didato, James, Middlesex, N. J. Hybrid tea rose. Pl. Pt. 50; Dec. 20.
Dietz, Richard H., jr., Holyoke, Mass. Receptacle. 1,891,525; Dec. 20.
Dodge, Merton L., Seattle, Wash., assignor to Continental Can Company, Inc., New York, N. Y. Can filling machine. 1,891,870; Dec. 20.
D'Ollier, Henry, jr., Bridgeport, Conn. Reversible bridge suspension strap. 1,891,756; Dec. 20.
Domkee, John H., assignor to The Wire Novelty Manufacturing Company, West Haven, Conn. Button loop. 1,891,223; Dec. 20.
Donnet, Marguerite, Bern, Switzerland. Brassière. 1,891,871; Dec. 20.
Douglass Aircraft Company. (See Kindleberger, James H., assignor.)
Douglass, Henry. (See Krueger, F., and Douglass.)
Doushkess, Milton, New York, N. Y. Multiple sole blank. 1,891,757; Dec. 20.
Dow Chemical Company, The. (See Grebe, John J., assignor.)
Dow Chemical Company, The. (See Harlow, I. F., and Ross, assignors.)
Dowd, Bernard J., West Hartford, Conn., assignor to Royal Typewriter Company, Inc., New York, N. Y. Typewriting machine. 1,891,590; Dec. 20.
Down, Sidney G., Edgewood, assignor to The Westinghouse Air Brake Company, Wilmerding, Pa. Fluid pressure brake. 1,891,669; Dec. 20.
Drenning, Percy R. (See Symington, T. H., and Drenning.)
Drew, William F., Los Angeles, Calif. Oven. 1,891,802; Dec. 20.
Dropinski, Jan, San Francisco, Calif. Shade. 1,891,707; Dec. 20.
Drury, Percy R., Boyce, Va. Bank protective system and means. 1,891,872; Dec. 20.
Duncan, Robert D., jr., East Orange, N. J., assignor to Wired Radio, Inc., New York, N. Y. Electron discharge tube adapter. 1,891,621; Dec. 20.
Dunlop Rubber Company Limited. (See Willshaw, Harry, assignor.)
Duplessis, René E., Beverly, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Machine for shaping shoe parts. 1,891,259; Dec. 20.
Du Pont, E. I., de Nemours & Company. (See Lawson, Walter E., assignor.)
Du Pont, E. I., de Nemours & Company. (See Rintelman, William L., assignor.)
Du Pont, E. I., de Nemours & Company. (See Rintelman, W. L., and Goodrich, assignors.)
Du Pont, E. I., de Nemours & Company. (See Seaman, Stewart E., assignor.)
Du Pont E. I., de Nemours & Company. (See Wrightsman, Philip G., assignor.)
Dupuis, David. (See Dupuis, Joseph A. E., assignor.)
Dupuis, Joseph A. E., assignor of one-half to D. Dupuis, St. Jacques, Quebec, Canada. Harvester. 1,891,526. Dec. 20.
Durgin, Charles B. (See Warren, T. E., and Durgin.)
Dyer, Frank L., New York, N. Y. Exercising apparatus. 1,891,347; Dec. 20.
Eastwood Wire Corporation. (See Webb, Nelson W., assignor.)
Eclipse Machine Company. (See Lansing, Raymond P., assignor.)

Edwards, George H., Brooklyn, N. Y. Latching device. 1,891,224; Dec. 20.
Edwards, Herbert C., assignor to Packard Motor Car Company, Detroit, Mich. Internal combustion engine. 1,891,322; Dec. 20.
Eggleston, Lewis W., Clarence Township, assignor to American Radiator Company, New York, N. Y. Control device for heating apparatus. 1,891,758; Dec. 20.
Ehemann, William, Aliquippa, Pa. Valve. 1,891,374; Dec. 20.
Eisenberg, Abraham D., Brooklyn, assignor to Continental Process Corporation, New York, N. Y. Printing on cellophane or the like. 1,891,323; Dec. 20.
Eisler, Henry, New York, N. Y., assignor to Emeth Financial Corporation. Hair device. Re18,695; Dec. 20.
Ekiov, Karl V., Detroit, Mich. Paint striping device. 1,891,527; Dec. 20.
Elbe, Rudolf, Wandsbek, near Hamburg, Germany. Apparatus for treating food stuffs such as meat and fish. 1,891,873; Dec. 20.
Electric Smelting & Aluminum Company, The. (See Scheidt, Alfred W., assignor.)
Electrolux Corporation. (See Blide, Tord E. D., assignor.)
Electrolux Corporation. (See Carlstedt, Fredrik, assignor.)
Elkins, Philip D., Houston, Tex. Coupling. 1,891,874; Dec. 20.
Ellinger, Phillip, and A. Hirt, Heidelberg, assignors to the Firm Carl Zeiss, Jena, Germany. Method and device for microscopically viewing living objects. 1,891,348; Dec. 20.
Ellis, Carleton. (See Nolan, Harold O., assignor.)
Ellsworth, Nellie S., San Francisco, Calif. Container. Des. 88,732; Dec. 20.
Elmslie, George L. (See Ahlm, C. E. F., and Elmslie.)
Emeth Financial Corporation. (See Eisler, Henry, assignor.)
Endowment Foundation. (See Clickner, Forest H., assignor.)
Engholm, Bernard A., Lakewood, Ohio, assignor to The Rola Company, Oakland, Calif. Loud speaker. 1,891,404; Dec. 20.
Ennor, William T. (See Lane, N. B., and Ennor.)
Erbel, Joseph, San Francisco, Calif. Brake mechanism. 1,891,875; Dec. 20.
Erickson, Emil, assignor to Standard Process Corporation, Chicago, Ill. Cylinder mounting for printing presses. 1,891,405; Dec. 20.
Ernst, Hans, assignor to The Cincinnati Milling Machine Company, Cincinnati, Ohio. Multiconnection hydraulic cable. 1,891,670; Dec. 20.
Errington, Allison F., and G. L. Headley, Akron, Ohio. Rotary tooth brush. 1,891,470; Dec. 20.
Everett, Samuel J., Thornton Heath, England. Manufacture of pointed tubular metal articles. 1,891,304; Dec. 20.
Everson, Franklin E., New York, N. Y. Display basket. 1,891,876; Dec. 20.
Falkenwalde, Oscar, and R. H. Lyon, Baltimore, Md. Whirl fire oil burners. 1,891,877; Dec. 20.
Falwell, Wray, Allston, Mass. Valve spring lock tool. 1,891,803; Dec. 20.
Farmer, Clyde C., Pittsburgh, assignor to The Westinghouse Air Brake Company, Wilmerding, Pa. Fluid pressure brake. 1,891,671; Dec. 20.
Farmer, Fred B., Eugene, Oreg., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa. Fluid pressure brake. 1,891,672; Dec. 20.
Fear, Ralph G., Los Angeles, Calif. Motion picture film treating apparatus. 1,891,225; Dec. 20.
Fear, Ralph G., Los Angeles, Calif. Combined photographic camera and sound recording apparatus. 1,891,277; Dec. 20.
Federal Seaboard Terra Cotta Corporation. (See Olsen, Peter C., assignor.)
Felter, John, Haverstraw, N. Y. Coating composition. 1,891,878; Dec. 20.
Ferguson, Ayrault D., Kansas City, Kans. Pocket fountain toothbrush. 1,891,324; Dec. 20.
Fiegel, Edwin J. (See Chase, C. E., and Fiegel.)
Finley, William A., Valdosta, Ga. Heater. 1,891,591; Dec. 20.
First, Charles Z. (See Hazlett, W. W., First, and Goodman.)
Fischer, Albert C., Chicago, Ill., assignor to The Philip Carey Manufacturing Company. Crowning device for expansion joints. 1,891,897; Dec. 20.
Fitch, John, Richmond Hill, N. Y., assignor to W. M. Vogel, Glen Ridge, N. J. Sprayer device. 1,891,325; Dec. 20.
Fitts, Silas W. C., Alameda, assignor to The Condor Company, San Francisco, Calif. Packing for doorcheck plungers. 1,891,528; Dec. 20.
Fitz Gerald, James W., Savannah, Ga. Cleaning and gasfreeing hydrocarbon storage tanks. 1,891,592; Dec. 20.
Fitzsimmons, Thomas J., Topeka, Kans. Telephone wire connecting means for railway trains. 1,891,349; Dec. 20.
Flockhart, James, San Francisco, Calif. Screen printing machine. 1,891,622; Dec. 20.
Flodin, Victor E., Oak Park, assignor to Crane Co., Chicago, Ill. Cock. 1,891,759; Dec. 20.
Florence Stove Company. (See White, F. E., and Ruttman, assignors.)
Flumerfelt, William A., Columbus, Ohio, assignor to The Columbus Auto Parts Company. Joint construction. 1,891,804; Dec. 20.
Folliet, Alexandre, and N. Sainderichin, Paris, France. Heater suitable for gaseous fluids. 1,891,879; Dec. 20.
Formica Insulation Company, The. (See Lytle, Robert W., assignor.)
Fosberry, William A., Gloucester, Mass. Process and apparatus for refrigeration. 1,891,305; Dec. 20.
Foss, Leland L., Statesboro, assignor of part interests to Edward T. Skeffington, Bert H. DeLoach, and Arthur H. Harrington, Savannah, Sam J. Foss, Statesboro, and Lee V. Graham, Chatham County, Ga. Worm water motor. 1,891,306; Dec. 20.
Foss, Sam J., et al. (See Foss, Leland L., assignor.)
Foster, Arthur T., Beverly, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Manufacture of turn shoes. 1,891,260; Dec. 20.
Fotta, Peter, Chicago, Ill. Fountain comb. 1,891,471; Dec. 20.
Foulds, Charles V., Berkeley, assignor to The Pelton Water Wheel Company, San Francisco, Calif. Surge pressure controlling means. 1,891,636; Dec. 20.
Fox, Gordon, assignor to Freyn Engineering Company, Chicago, Ill. Motor control system. 1,891,226; Dec. 20.
Frank, Leon, assignor to Alma Manufacturing Company, Baltimore, Md. Lock fastener. 1,891,637; Dec. 20.
Frantz, Cruthers I., Los Angeles, assignor of one-half to P. A. Frantz, San Francisco, Calif. Brake. 1,891,805; Dec. 20.
Frantz, Paul A. (See Frantz, Cruthers I., assignors.)
Fraser, Gordon. (See Fraser, Gordon, Norman and J.)
Fraser, Gordon, N., and J., Arbroath, Angus, Scotland. Apparatus for receiving balls or rolls of silver discharged from a silver balling machine. 1,891,406; Dec. 20.
Fraser, John. (See Fraser, Gordon, N., and J.)
Frey, Emil, Bienne, Switzerland, assignor, by mesne assignments, to Perpetual Self Winding Watch Corporation, New York, N. Y. Self-winding watch. 1,891,700; Dec. 20.
Freyn Engineering Company. (See Fox, Gordon, assignor.)
Friebus, Reginald T., Montclair, N. J., assignor to Columbia Phonograph Company, Inc., Bridgeport, Conn. Sound reproducing means and method. 1,891,227; Dec. 20.
Friedberger-Aaron Manufacturing Company. (See Tanner, Guy C., assignor.)
Frigidaire Corporation. (See Hull, Harry B., assignor.)
Frigidaire Corporation. (See Killen, James R., assignor.)
Frigidaire Corporation. (See Summers, Otto M., assignor.)
Fritz, Allen J. (See Sarvay, D. W., Grieb, and Fritz.)
Frohder, Raymond E. M., Brooklyn, N. Y. Illuminated fireman's helmet. 1,891,806; Dec. 20.
Frost, Walter, Rochdale, England. Machine for weighing and grading eggs. 1,891,807; Dec. 20.
Frye, Robert G., Hilliards, Ohio. Latch operating device for power shovels. 1,891,529; Dec. 20.
Fulmer, Joseph H., Nazareth, Pa. Feeding device. 1,891,807; Dec. 20.
Furedy, Frank, New York, N. Y., assignor to Inkpak Manufacturing Co. Inc. Self-inking fountain pen. Re18,702; Dec. 20.
Furlong, Roland A., and J. R. Clark, assignors to The Yawman & Erbe Manufacturing Company, Rochester, N. Y. Card index. 1,891,375; Dec. 20.
Furlong, Roland A., assignor to The Yawman & Erbe Manufacturing Company, Rochester, N. Y. Sheet shifter for visible index binders. 1,891,376; Dec. 20.
Furlong, Roland A., assignor to The Yawman & Erbe Manufacturing Company, Rochester, N. Y. Visible index. 1,891,377; Dec. 20.
Furlong, Roland A., assignor to The Yawman & Erbe Manufacturing Company, Rochester, N. Y. Visible index tray. 1,891,378; Dec. 20.
Furlong, Roland A., assignor to The Yawman & Erbe Manufacturing Company, Rochester, N. Y. Sliding support for visible index trays. 1,891,379; Dec. 20.
Furlong, Roland A., assignor to The Yawman & Erbe Manufacturing Company, Rochester, N. Y. Portable visible index. 1,891,380; Dec. 20.
Furlong, Roland A., assignor to The Yawman & Erbe Manufacturing Company, Rochester, N. Y. Visible index cabinet. 1,891,381; Dec. 20.
Furlong, Roland A., assignor to The Yawman & Erbe Manufacturing Company, Rochester, N. Y. Visible index cabinet. 1,891,382; Dec. 20.
Gadoux, André, La Trette, assignor of one-half to Société pour l'Exploitation des Brevets Gadoux, Paris, France, and one-half to Hupp Motor Car Corporation, Detroit, Mich. Cylinder block construction. 1,891,638; Dec. 20.
Galassi, Pasquale, New York, N. Y. Strip for terrazzo and similar floors. 1,891,530; Dec. 20.
Gale, Ernest L., Yonkers, assignor to Gurney Elevator Company, Inc., New York, N. Y. Elevator control system. 1,891,350; Dec. 20.
Gallihar, Norman, Cleveland, Ohio. Window curtain rod guide. 1,891,808; Dec. 20.
Galloway, Howard L., assignor to Locke Insulator Corporation, Baltimore, Md. Insulator cotter and mode of use. 1,891,708; Dec. 20.

Galusha, Albert L., Caldwell, N. J. Self-clearing grate. 1,891,809; Dec. 20.
Garton, Joseph G., New York, N. Y. Refreshment wagon. Des. 88,706; Dec. 20.
Gasifier Company, The. (See Reichheim, George L., assignor.)
Gasoline Products Company. (See Keith, Percy C., jr., assignor.)
Gastrich, Gustav, Wyomissing, and M. Richter, West Reading, assignor to Textile Machine Works, Wyomissing, Pa. Adjustable stop for thread carrier rods. 1,891,472; Dec. 20.
Gavasa, George V., Quincy, Mass. Receptacle filling device. 1,891,639; Dec. 20.
Gaynor, James C. (See Matthews, Floyd C., assignor.)
Gebr. Eickhoff, Maschinenfabrik. (See Stroedter, Karl, assignor.)
General Aniline Works, Inc. (See Laska, L., and Haller, assignors.)
General Aniline Works, Inc. (See Nawiasky, P., Honold, and Wolff, assignors.)
General Cement Products Company. (See Henderson, Albert, assignor.)
General Industries Company, The. (See Bonsleur, Le, assignor.)
General Steel Castings Corporation. (See Gilpin, G. G., and Small, assignors.)
George, Charles L., Findlay, Ohio, assignor to The Buckeye Traction Ditcher Company. Dipper-stick control for excavating machine. 1,891,351; Dec. 20.
George, Charles L., assignor to The Buckeye Traction Ditcher Company, Findlay, Ohio. Shovel type excavator. 1,891,352; Dec. 20.
George, Jerome R., assignor to Morgan Construction Company, Worcester, Mass. Charging apparatus for metal-heating furnaces, and the like. 1,891,531; Dec. 20.
Gianolio, Giuseppe, Turin, Italy. Level gauge indicating at a distance the level of a liquid contained in a tank. 1,891,810; Dec. 20.
Gibson, Allan R., Bristol, England. Extracting metals from ores, minerals, and other materials. 1,891,532; Dec. 20.
Giffen, William W., Pittsburgh, and C. W. Carter, Mt. Lebanon, assignors to The International Liquid Coffee Company, Pittsburgh, Pa. Making liquid coffee extract. 1,891,383; Dec. 20.
Gilleo, Acie J., assignor to The Outrite Fire Extinguisher Corporation, Detroit, Mich. Fire extinguishing compound. 1,891,673; Dec. 20.
Gillette Safety Razor Company. (See Muros, Joseph, assignor.)
Gillis, Joseph R., and F. P. Kaiser, Lansing, Mich. Aircraft propeller. 1,891,384; Dec. 20.
Gilpin, Garth G., Riverside, and A. E. Small, Chicago, assignors, by mesne assignments, to General Steel Castings Corporation, Granite City, Ill. Railway car. 1,891,228; Dec. 20.
Gish, John L., South Bend, Ind. Valve. 1,891,533; Dec. 20.
Glascodine, Richard T., London, England. Rolling stock. 1,891,674; Dec. 20.
Goddard, Lester J., Miami, Fla., assignor, by mesne assignments, to The Coesene Company, Cleveland, Ohio. Vaginal receptacle. 1,891,761; Dec. 20.
Godel, Albert, Paris, assignor to Societe de Recherches & d'Exploitations Petrolifieres, Paris, France. Activation of carbonaceous substances. 1,891,407; Dec. 20.
Goldberg, Joseph H., assignor to Chicago Cinema Equipment Company, Chicago, Ill. Picture projection machine. 1,891,473; Dec. 20.
Goldberg, Sol H., assignor to Chain Store Products Corporation, Chicago, Ill. Display card or similar article. Des. 88,733; Dec. 20.
Goldstein, Louis, Brooklyn, N. Y. Textile fabric. Des. 88,725; Dec. 20.
Goodman Manufacturing Company. (See McCullough, William T., assignor.)
Goodman, Morton R. (See Haslett, W. W., First and Goodman.)
Goodrich, Robert J. (See Rinteiman, W. L., and Goodrich.)
Gordon, Julius G., assignor of one-half to P. Meinardi, Yakima, Wash. Closure means for collapsible tubes. 1,891,623; Dec. 20.
Gordan, Adolf, Liesing, near Vienna, Austria, assignor to Deutsche Gold- und Silber-Scheideanstalt vormals Roessler, Frankfort (Main), Germany. Apparatus for the manufacture of water-free ethyl alcohol. 1,891,593; Dec. 20.
Gorman, James C., assignor to The Barnes Manufacturing Company, Mansfield, Ohio. Diaphragm convertible pump. 1,891,408; Dec. 20.
Gossman, Andrew T. (See Ramsey, W. F., and Gossman.)
Gottesman, Joseph M., Paris, France, assignor to William Willheim Co., Inc., New York, N. Y. Textile fabric or similar article. Des. 88,707; Dec. 20.
Gottfried, John, Brooklyn, assignor to Cameo Scale Corporation, New York, N. Y. Vending machine. 1,891,640; Dec. 20.
Graff, George B., Company. (See Graff, Leland S., assignor.)
Graff, Leland S., Arlington, assignor to George B. Graff Company, Cambridge, Mass. Patch package. 1,891,624; Dec. 20.
Graham, Lee V., et al. (See Foss, Leland L., assignor.)
Graham-Paige Motors Corporation. (See Kishline, Floyd F., assignor.)
Grant, Casper E., Portsmouth, Va. Action for pipe organs. 1,891,409; Dec. 20.
Gray, Andrew T., assignor to Pacific Pipe and Supply Company, Los Angeles, Calif. Heater for liquids. 1,891,534; Dec. 20.
Gray, Ishmael H., Indianapolis, Ind. Price tag. Des. 88,708; Dec. 20.
Grebe, John J., assignor to The Dow Chemical Company, Midland, Mich. Recovering bromine from sea water and the like. 1,891,888; Dec. 20.
Greene, Otto W., Elyria, Ohio. Rheostat. 1,891,410; Dec. 20.
Greve, Louis W., assignor to The Cleveland Rock Drill Company. Percussive drills. 1,891,411; Dec. 20.
Grieb, John J. (See Sarvay, D. W., Grieb and Fritz.)
Grierson Ronald, London, England. Electric wall heater. 1,891,595; Dec. 20.
Griffith, Dickinson E., assignor to Smith-Lewis Fibre Can Corporation, Lowville, N. Y. Paper or fiber can. 1,891,535; Dec. 20.
Griffith, Hurley G. (See Craise, F. L., Vesper, and Griffith.)
Grillo, Nicholas, Millsdale, Conn. Hybrid tea rose. Pl. Pt. 49; Dec. 20.
Grimes, Curtis C., Yale, Okla. Brooder. 1,891,811; Dec. 20.
Grimm, Henry W., Moline, Ill. Timing toll telephone circuits. 1,891,594; Dec. 20.
Griswold, Donald. (See Harwood, S. G., and Griswold.)
Grove, Sydney H. (See Sandeman, E. K., Thomas, and Grove.)
Grubbs, Lyle D., Hinsdale, Ill. Bird figure. Des. 88,734; Dec. 20.
Gruman, Horace F., assignor to Lewis Invisible Stitch Machine Company, St. Louis, Mo. Combined seaming and pinking machine. 1,891,308; Dec. 20.
Grune, Max, Pirmasens, Germany. Binding together two or more layers of leather, more particularly for the manufacture of boots and shoes. 1,891,412; Dec. 20.
Guimont, Joseph W., Lachine, assignor to Heating Systems Limited, Montreal, Quebec, Canada. Water heater. 1,891,278; Dec. 20.
Gullett Gin Company. (See Wallace, Jeffrey J., assignor.)
Gun-Fil Corporation. (See Battle, John R., assignor.)
Gunn, Charles H., Burlingame, Calif. Safety wing for airplanes. 1,891,261; Dec. 20.
Gurney Elevator Company. (See Gale, Ernest L., assignor.)
Guthier Airplane Company. (See Guthier, Roy E., assignor.)
Guthier, Roy E., Chicago, Ill., assignor to Guthier Airplane Company. Airplane. 1,891,812; Dec. 20.
Hans, Frederick B. (See Booth, C., and Haas.)
Habel, Wenzel, Rochester, N. Y. Artificial horizon for sextants. 1,891,641; Dec. 20.
Hahn, Hugo, Charlottenburg, near Berlin, Germany, assignor to Printator G. m. b. H., Berlin, Germany. Writing and drawing pad. 1,891,414; Dec. 20.
Haigh, Leslie B. (See Wright, E. P. G., and Haigh.)
Haller, Oskar. (See Laska, L., and Haller.)
Hamlin, Marston L., Lynbrook, assignor to The Barrett Company, New York, N. Y. Interlocking shingle. 1,891,229; Dec. 20.
Handley, George F. (See Myers, L. C., and Handley.)
Handley, George F., Glendale, and L. C. Myers Freeport, assignors to Royal Typewriter Company, Inc., New York, N. Y. Typewriting machine. 1,891,813; Dec. 20.
Harbord, Frank W. and V., London, England. Manufacture of metal billets, bars, and the like. 1,891,813; Dec. 20.
Harbord, Vernon. (See Harbord, Frank W. and V.)
Harland Engineering Company of Canada Limited, The. (See Johnstone, R. G., and Phillips, assignors.)
Harlow, Ivan F., and O. C. Ross, assignors to The Dow Chemical Company, Midland, Mich. Preparation of brominated hydrocarbons. 1,891,415; Dec. 20.
Harnden, Millard G., Seattle, Wash. Stamping ice cream shapes. 1,891,230; Dec. 20.
Harris, Irving C., Los Angeles, Calif. Well drilling machine. 1,891,416; Dec. 20.
Harrison, Arthur W., assignor of one-half to Kay-Brunner Steel Products, Inc., Los Angeles, Calif. Six wheel suspension for vehicles. 1,891,642; Dec. 20.
Harrison, Carter A. (See Le Compte, E. J., and Harrison.)
Harshberger, Norman P., Scarsdale, N. Y. Composition shingle. Re18,698; Dec. 20.
Hartford-Empire Company. (See Peller, Karl E., assignor.)
Harwood, Stanley G., and D. Griswold, Rockford, Ill., assignors, by mesne assignments, to The Permutit Company, Wilmington, Del. Water softener. 1,891,675; Dec. 20.
Haskin, Walter E., Flushing, assignor to Pressed & Welded Steel Products Company, Inc., New York, N. Y. Bookrack. 1,891,814; Dec. 20.
Hauk, Paul, assignor to The Piqua Granite and Marble Company, Piqua, Ohio. Marble and granite shaping machine. 1,891,279; Dec. 20.
Hayden, Arthur C., Brockton, Mass. Motion picture camera. 1,891,262; Dec. 20.

Hayes, William, Detroit, Mich. Deck of playing cards. Des. 88,709; Dec. 20.
Hazlett, Wallace W., and C. Z. First, New York, N. Y., and M. R. Goodman, Union City, N. J. Closure for collapsible tubes and the like. 1,891,280; Dec. 20.
Head, Drew, Chicago, Ill. Internal combustion motor. 1,891,326; Dec. 20.
Headley, George L. (See Errington, A. F., and Headley.)
Heating Systems Limited. (See Guimont, Joseph W., assignor.)
Heggem, Alfred G., Tulsa, Okla. Stuffing box. 1,891,417; Dec. 20.
Heidrich, Helene, geboren Noppens, Dresden, Germany. Bodkin for drawing material through hollow hems. 1,891,815; Dec. 20.
Hein, Hermann, Bremen, Germany. Skimming aircraft landing sail. 1,891,309; Dec. 20.
Heinke, Alfred J., Towaco, N. J. Textile fabric or the like. Des. 88,710; Dec. 20.
Heinke, Alfred J., Towaco, N. J. Textile fabric or the like. Des. 88,711; Dec. 20.
Heintz & Kaufman, Ltd. (See Heintz, Ralph M., assignor.)
Heintz & Kaufman, Ltd. (See Scofield, Philip F., assignor.)
Heintz, Ralph M., Palo Alto, assignor to Heintz & Kaufman, Ltd., San Francisco, Calif. Carburetor. 1,891,474; Dec. 20.
Hallwood, Nathan A., Columbus, Ohio. Weighing scale. 1,891,762; Dec. 20.
Henderson, Albert, assignor to General Cement Products Company, Pittsburgh, Pa. Floor structure and slab therefor. 1,891,763; Dec. 20.
Henderson, Albert, assignor, by mesne assignments, to Cement Products Research Corporation, Pittsburgh, Pa. Method and apparatus for making cementitious articles. 1,891,764; Dec. 20.
Henning, Malcolm E., assignor to Penn Electric Switch Co., Des Moines, Iowa. Temporary control device for switch mechanism. 1,891,536; Dec. 20.
Henning, Malcolm E., assignor to Penn Electric Switch Co., Des Moines, Iowa. Automatic control switch. 1,891,537; Dec. 20.
Henrikson, Arthur G., assignor of one-half to Frank B. Perry, Providence, R. I. Tip for furniture legs. 1,891,643; Dec. 20.
Herron, Anna L., et al. (See Herron, Ollie L., assignor.)
Herron, Ollie L., assignor of thirty per cent to A. L. Herron, twenty per cent to J. B. Zimmers, and thirty per cent to W. M. Zimmers, Chicago, Ill. Windshield. 1,891,765; Dec. 20.
Herz, Alexander. (See Conti, Eugene, assignor.)
Hescock, Ethan N., Westfield, assignor to Henry B. Newhall Corporation, Garwood, N. J. Metal cable reel. 1,891,709; Dec. 20.
Hewitt, Ellis E., Edgewood, assignor to The Westinghouse Air Brake Company, Wilmerding, Pa. Reservoir construction. 1,891,644; Dec. 20.
Hewitt, Elmer L., assignor to All Fair Incorporated, Churchville, N. Y. Figure toys. 1,891,816; Dec. 20.
Hicks, Frederick W., assignor to McCord Radiator & Mfg. Co., Detroit, Mich. Evaporator. 1,891,538; Dec. 20.
Hicks, Robert J., Rochester, N. Y. Necktie or other article holder. 1,891,310; Dec. 20.
Hiering, William C., Wyoming, assignor to The J. E. Mergott Company, Newark, N. J. Hand bag frame. Des. 88,735; Dec. 20.
Higbee, Ray P., Germantown, Pa., assignor to Westinghouse Electric & Manufacturing Company. Elevator control system. 1,891,710; Dec. 20.
Highway Trailer Company. (See Williams, LeRoy E., assignor.)
Hildebrand, Axel G., Brooklyn, N. Y. Ejector package. 1,891,817; Dec. 20.
Hills, Alfred J., Abilene, Kans. Steering gear. 1,891,818; Dec. 20.
Himmelberger, William H., assignor to Lansing Company, Lansing, Mich. Trailer coupling. 1,891,711; Dec. 20.
Hirt, August. (See Ellinger, P., and Hirt.)
Hoffman, Edward L., Dayton, Ohio. Aerial safety strap. 1,891,418; Dec. 20.
Hofmeister, Joseph, Pittsburgh, Pa. Face powder dispenser. 1,891,819; Dec. 20.
Holmgren, Eric A., Lynn, assignor to United Shoe Machinery Corporation Paterson, N. J. Machine for operating on lasts. 1,891,263; Dec. 20.
Honeycutt, Alba C. (See Kreimer, J., and Dewar, assignor.)
Honnors, Oscar L., assignor to Whitin Machine Works, Whitinsville, Mass. Drawing roll coupling. 1,891,539; Dec. 20.
Honold, Ernst. (See Nawiasky, P., Honold, and Wolff.)
Hoover Company, The. (See Smellie, Donald G., assignor.)
Hord, Peyton R., Pittsburgh, Pa. Furnace feeding device. 1,891,311; Dec. 20.
Hotchner, Fred, Los Angeles, Calif. Discharge tube electrode. 1,891,475; Dec. 20.
Howard, Clifton P., Worcester, Mass. assignor to Rockwood Sprinkler Company of Massachusetts. Control device for alarm mechanism. 1,891,540; Dec. 20.
Howard, Clifton P., Worcester, Mass., assignor to Rockwood Sprinkler Company of Massachusetts. Control device for alarm mechanism. 1,891,541; Dec. 20.
Howes, Raymond T., Los Angeles, assignor of one-third to A. A. Anderson, and one-third to L. A. Snyder, Wilmington, Calif. Method of insulating high voltages in electrical precipitators. 1,891,645; Dec. 20.
Hoyt, Worthington. (See Burrows, Edwin H., assignor.)
Huff, Ernest, assignor to American Lace Paper Company, Milwaukee, Wis. Drinking cup dispenser. 1,891,542; Dec. 20.
Hughes, John M., and J. H. Carter, Youngstown, Ohio, and Lewis B. Perkins, Sharon, assignors to Sharon Steel Hoop Company, Sharon, Pa. Substitute for natural feed ore. 1,891,889; Dec. 20.
Hull, Foster J., assignor to Pangborn Corporation, Hagerstown, Md. Sand blast air washing. 1,891,625; Dec. 20.
Hull, Harry B., assignor to Frigidaire Corporation, Dayton, Ohio. Refrigerating apparatus. 1,891,231; Dec. 20.
Huntress, Ernest H., Cambridge, Mass., and C. R. McCullough and C. F. Booth, Anniston, Ala., assignors to Swann Research, Inc. Producing mononitrodiphenyls. 1,891,543; Dec. 20.
Hupp Motor Car Corporation et al. (See Gadoux, André, assignor.)
Ilford Limited. (See Shepherd, F. J., and Renwick, assignors.)
Imperial Chemical Industries Ltd. (See Johnston, J., and Ablard, assignors.)
Imperial Chemical Industries Limited. (See Shaw, C., and Thomas, assignors.)
Imperial Chemical Industries, Limited. (See Winter, Ramsay M., assignor.)
Ingham, Leo R., Cedar Grove, W. Va. Collapsible tube closure. 1,891,596; Dec. 20.
Inkpak Manufacturing Co. Inc. (See Furedy, Frank, assignor.)
International Liquid Coffee Company, The. (See Giffen, W. W., and Carter, assignors.)
International Standard Electric Corporation. (See Lawton, G., and Dearden, assignors.)
International Standard Electric Corporation. (See Sandeman, E. K., Thomas, and Grove, assignors.)
International Standard Electric Corporation. (See Wright, E. P. G., and Haigh, assignors.)
Jagdmann, Karl E. W., Cambridge Springs, Pa. Building block and the construction of floors and the like. 1,891,597; Dec. 20.
Jahn, August, Hamburg, Germany. Meat chopper. 1,891,712; Dec. 20.
Jaquith, Eugene H., Clinton, Mass., assignor to Wickwire Spencer Steel Company, New York, N. Y. Bookrack. 1,891,420; Dec. 20.
Jardine, Frank, assignor to The Cleveland Trust Company, Cleveland, Ohio, trustee. Piston. 1,891,419; Dec. 20.
Jeffrey Manufacturing Company. (See Kienzle, Charles J., assignor.)
Jeffrey Manufacturing Company, The. (See Levin, Nils D., assignor.)
Johannsen, Udo K., assignor to The Brewer-Titchener Corporation, Cortland, N. Y. Trim frame for panels. 1,891,421; Dec. 20.
Johannsen, Udo K., assignor to The Brewer-Titchener Corporation, Cortland, N. Y. Making trim frames. 1,891,422; Dec. 20.
Johnson, William D., Miller, S. Dak. Clock. 1,891,281; Dec. 20.
Johnston, John, and F. Ablard, Norton-on-Tees, England, assignors to Imperial Chemical Industries Ltd. Descaling of tubes. 1,891,820; Dec. 20.
Johnstone, Ralph G., and R. J. S. Phillips, assignors to The Harland Engineering Company of Canada Limited, Montreal, Quebec, Canada. Tension regulating means for winding machines. 1,891,766; Dec. 20.
Jones, Clifford C., Washington, D. C. Airplane. Des. 88,726; Dec. 20.
Jones, Robert F. (See McKean, J. G., and Jones.)
Jordan, Wayne D., and P. D. Van Vliet, assignors to Air Control Systems Inc., Chicago, Ill. Air conditioning system. 1,891,713; Dec. 20.
Jordan, Wayne D., and P. D. Van Vliet, assignors to Air Control Systems Inc., Chicago, Ill. Refrigerating system. 1,891,714; Dec. 20.
Joyce, John R. (See Lubbock, I., and Joyce.)
Juengling, Karl F., Lakewood, Ohio. Charging means for blast furnaces. 1,891,821; Dec. 20.
Juengst, Fred W., and O. M. Anderson, assignors to Landers, Frary & Clark, New Britain, Conn. Electric fruit juice extractor. Des. 88,712; Dec. 20.
Julien, Antone W., et al. (See Sager, Lee R., assignor.)
Juillard, Maurice E., Paris, France. Razor. Des. 88,736; Dec. 20.
Junghans, Helmut, Schramberg, Wurtemberg, Germany. Electrically wound clock. 1,891,282; Dec. 20.
Kahn, Frederick L., assignor, by mesne assignments, to Associated Electric Laboratories, Inc., Chicago, Ill. Telephone system. 1,891,423; Dec. 20.
Kahn, Theodor, Berlin-Charlottenburg, Germany. Apparatus for making sound records. 1,891,822; Dec. 20.
Kaiser, Frank P. (See Gillis, J. R., and Kaiser.)
Karr, Allen P. (See Sommers, N., and Karr.)
Kaufman, Paul R., assignor to McCleary Hydraulic Brake Company, Seattle, Wash. Hydraulic brake. 1,891,793; Dec. 20.

Kay-Brunner Steel Products, Inc. (See Harrison, Arthur W., assignor.)
Kearney & Trecker Corporation. (See Parsons, Fred A., assignor.)
Keith, Percy C., jr., Bernardsville, assignor, by mesne assignments, to Gasoline Products Company, Inc., Newark, N. J. Making asphalt. 1,891,890; Dec. 20.
Keller, Charles L., Cincinnati, assignor to The Richardson Company, Lockland, Ohio. Molding process. 1,891,476; Dec. 20.
Kelley, William, assignor of one-half to W. S. Baylis, Los Angeles, Calif. Recovering retained oil and fats from filter-press cake and reactivation of the spent cake. 1,891,715; Dec. 20.
Kelvinator Corporation. (See Replogle, John R., assignor.)
Kenney, George M. (See Kenney, William C. and G. M.)
Kenney Manufacturing Company. (See Kenney, William C. and G. M., assignors.)
Kenney, William C., and G. M. Kenney, Cranston, assignors to Kenney Manufacturing Company, Auburn, R. I. Curtain fixture. 1,891,881; Dec. 20.
Kerns, Leonard R., Chicago, Ill., assignor to Lubrication Devices Incorporated, Battle Creek, Mich. Lubricating device. 1,891,544; Dec. 20.
Ketcham, Ernest J., Seattle, Wash., assignor to Acme Steel Company, Chicago, Ill. Strapping jack and punch. 1,891,767; Dec. 20.
Kienzle, Charles J., assignor to The Jeffrey Manufacturing Company, Columbus, Ohio. Rope winding device. 1,891,598; Dec. 20.
Kilgour, Charles E., assignor to The Crosley Radio Corporation, Cincinnati, Ohio. Radio condenser turning control. 1,891,283; Dec. 20.
Killen, James R., assignor to Frigidaire Corporation, Dayton, Ohio. Refrigerating apparatus. 1,891,232; Dec. 20.
Kindervater, Julius, Great Neck, N. Y. Reverse gear mechanism. 1,891,545; Dec. 20.
Kindleberger, James H., West Los Angeles, assignor to Douglas Aircraft Company, Inc., Santa Monica, Calif. Gull wing plane. 1,891,385; Dec. 20.
Kinney, Fay D., Wenham, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Machine for operating on soles. 1,891,264; Dec. 20.
Kirkpatrick, Lige H., assignor of one-half to A. G. Sechrist, Lawton, Okla. Gasket. 1,891,424; Dec. 20.
Kishline, Floyd F., Detroit, Mich., assignor to Graham-Paige Motors Corporation. Manifold heat control. 1,891,768; Dec. 20.
Kitchen, Francis A. (See Kitchen, John H. and F. A.)
Kitchen, John H., Kansas City, Mo., and F. A. Kitchen, Cleveland, Ohio, assignors to M. L. Kitchen, Kansas City, Mo., and F. A. Kitchen, Cleveland, Ohio. Air conditioning device. 1,891,327; Dec. 20.
Kitchen, Mabel L., et al. (See Kitchen, John H. and F. A., assignors.)
Knecht, Arthur E., assignor to The Perfection Steel Body Co., Gallon, Ohio. Hydraulic hoist for dumping trucks. 1,891,312; Dec. 20.
Koehrman, Mathias G., assignor to Roberts Printing Company, Toledo, Ohio. Advertising folder. 1,891,353; Dec. 20.
Kohler, Herbert V., Sheboygan, and F. G. Brotz, Kohler, Wis. Pedestal lavatory. Des. 88,713; Dec. 20.
Koppers Company, The. (See Myers, Albert J., assignor.)
Kreimer, Joseph and D. G. Dewar; said Dewar assignor of one-half to Alba C. Honeycutt, Kansas City, Mo. Sash cord support. 1,891,265; Dec. 20.
Krembs, Ottmar M., Glencoe, Ill. Brazing rod. 1,891,546; Dec. 20.
Krichbaum, William F., Millburn, N. J. Auxiliary operated governing valve. 1,891,547; Dec. 20.
Kroesen, Jay C., Belleville, N. J., assignor, by mesne assignments, to Radio Corporation of America, New York, N. Y. Sound reproducing apparatus. 1,891,386; Dec. 20.
Kronquest, Alfred L., Syracuse, N. Y., assignor to Continental Can Company, Inc., New York, N. Y. Freezing apparatus. 1,891,425; Dec. 20.
Krueger, Frank, and H. Douglass, assignors to Pacific Can Co., San Francisco, Calif. Apparatus for drying can ends containing a sealing compound. 1,891,646; Dec. 20.
Krug, Louis R. (See Burdick, R. V., and Krug.)
Kuhlman, Carl H., assignor to The American Temperature Indicating Company, Toledo, Ohio. Switch means for telethermometers. 1,891,548; Dec. 20.
Kukowits, Louis J. (See Padelford, L. E., and Kukowits.)
Kushner, Andrew S., Beccaria, Pa. Invalid bed. 1,891,599; Dec. 20.
Lachter, Saul L., Irvington, N. J. Eyeglass case. 1,891,283; Dec. 20.
Laffoon, Carthrae M., Irwin, Pa., assignor to Westinghouse Electric & Manufacturing Company. Winding for dynamo electric machines. 1,891,716; Dec. 20.
Lancaster, Llewellyn C., Conrad, Mont. Damper. 1,891,600; Dec. 20.
Landers, Frary & Clark. (See Juengst, F. W., and Anderson, assignors.)
Lane, Norman B., Niagara Falls, and W. T. Ennor, Massena, N. Y., assignors to Aluminum Company of America, Pittsburgh, Pa. Treatment of aluminum alloys. 1,891,549; Dec. 20.
Langenberg, Frederick C., Edgewater Park, assignor to United States Pipe & Foundry Company, Burlington, N. J. Method of modifying internal strains in metal objects. 1,891,234; Dec. 20.
Lansing Company. (See Himmelberger, William H., assignor.)
Lansing, Raymond P., Montclair, N. J., assignor to Eclipse Machine Company, Elmira Heights, N. Y. Electrical apparatus. 1,891,676; Dec. 20.
Larka, Leopold, and O. Hailer, Offenbach-on-the-Main, Germany, assignors to General Aniline Works, Inc., New York, N. Y. New substituted phenol-carboxylic acids and making same. 1,891,677; Dec. 20.
Latham, Robert V., Coral Gables, Fla. Pressure control for fluid dispensing devices. 1,891,882; Dec. 20.
Lawarree, Henri, Brussels, Belgium. Manufacturing alkali metal nitrates. 1,891,426; Dec. 20.
Lawrence, George I., Melrose, assignor to Tyler Rubber Company, Andover, Mass. Making golf club grips. 1,891,550; Dec. 20.
Lawrence, Theophilus R., Oakland, Calif. Piston ring contractor. 1,891,560; Dec. 20.
Lawson, Paul C., and C. B. Schafer, assignors to Libbey-Owens-Ford Glass Company, Toledo, Ohio. Undercutting machine. 1,891,284; Dec. 20.
Lawson, Walter E., assignor to E. I. du Pont de Nemours & Company, Wilmington, Del. Unsymmetrical diaryl ethanes as plasticizers. 1,891,601; Dec. 20.
Lawton, George, and W. H. Dearden, Aldwych, London, England, assignors to International Standard Electric Corporation, New York, N. Y. Manufacture of magnetic material. 1,891,235; Dec. 20.
Leach, Robert H. (See Bassett, W. H., jr., and Leach.)
Le Bleu, Charles, Los Angeles, Calif. Scraper and apron. 1,891,427; Dec. 20.
Le Bleu, Charles, Los Angeles, Calif. Scraper for digging or leveling. 1,891,428; Dec. 20.
Le Compte, Edward J., and C. A. Harrisson, assignors to National Oil Drill Corporation, St. Louis, Mo. Rotary oil well drilling apparatus. 1,891,328; Dec. 20.
Le Compte, Edward J., and C. A. Harrisson, assignors to National Oil Drill Corporation, St. Louis, Mo. Braking mechanism for rotary oil well drilling apparatus. 1,891,329; Dec. 20.
Le Compte, Edward J., and C. A. Harrisson, assignors to National Oil Drill Corporation, St. Louis, Mo. Signaling means for rotary oil well drilling. 1,891,330; Dec. 20.
Leray, Joseph J., West Warwick, R. I. Airplane. 1,891,354; Dec. 20.
Lester, Nathan, Cleveland, Ohio, assignor to Precision Castings Company, Inc., Syracuse, N. Y. Die-casting machine. 1,891,894; Dec. 20.
Le Tourneau, Robert G., Stockton, Calif. Scraper. 1,891,266; Dec. 20.
Levin, Nils D., assignor to The Jeffrey Manufacturing Company, Columbus, Ohio. Coal cutting machine. 1,891,561; Dec. 20.
Levin, Nils D., assignor to The Jeffrey Manufacturing Company, Columbus, Ohio. Coal cutting machine. 1,891,562; Dec. 20.
Levy, Stanley I., London, England, assignor to Sulphide Corporation, New York, N. Y. Treatment of iron pyrites. 1,891,717; Dec. 20.
Lewis Invisible Stitch Machine Company. (See Gruman, Horace F., assignor.)
Libbey-Owens-Ford Glass Company. (See Lawson, P. C., and Schafer, assignors.)
Liebig, Heinrich, Nordhausen/Harz, Germany. Ventilator for motor-cars. 1,891,390; Dec. 20.
Lillig, Nicholas R., assignor to Tice Lock-Washer Manufacturing Co., Portland, Oreg. Bolt and nut lock. 1,891,563; Dec. 20.
Line-O-Graph Company. (See Chase, C. E., and Fiegel, assignor.)
Lippert, Henry E., Norfolk, Va. Control system for motor vehicles. Re18,699; Dec. 20.
Little, Arthur D., Incorporated. (See Crocker, Ernest C., assignor.)
Ljunggren, Gustaf, Lund, Sweden. Detecting the presence of carbon monoxide. 1,891,429; Dec. 20.
Locke Insulator Corporation. (See Calloway, Howard L., assignor.)
Loetscher, Emil C., Dubuque, Iowa. Gluing wood with phenol condensation products. 1,891,430; Dec. 20.
Loewus, Julian S., Baltimore, Md. Shaft coupling. 1,891,285; Dec. 20.
Lord, Hugh C., Erie, Pa. Apparatus for cleaning or polishing rods. 1,891,331; Dec. 20.
Lovik, Ole J. (See Sample, Walter C., assignor.)
Lubbock, Isaac, and J. R. Joyce, assignors to The Asiatic Petroleum Company Limited, London, England. Providing a leak for liquids. 1,891,813; Dec. 20.
Lubrication Devices Incorporated. (See Kerns, Leonard R., assignor.)
Luft, Oscar v. d., Mount Lebanon, and C. J. Schwindt, Pittsburgh, Pa. Granular organic material. 1,891,891; Dec. 20.
Lyon, Robert H. (See Falkenwalde, O., and Lyon.)

Lysholm, Alf., assignor to Aktiebolaget Ljungstroms Angturbin, Stockholm, Sweden. Shaft for overhung elastic fluid turbines. 1,891,718; Dec. 20.
Lytle, Robert W., assignor to The Formica Insulation Company, Cincinnati, Ohio. Silent gear. 1,891,823; Dec. 20.
Madigan, Thomas J., assignor of one-half to F. Auerbach, New York, N. Y. Condiment holder or container. 1,891,824; Dec. 20.
Madsen, Axel. (See Albertson, F. O., and Madsen.)
Mannl, Rudolf, Karlsbad, Czechoslovakia. Röentgen diaphragm. 1,891,332; Dec. 20.
Manzel, Charles W., Buffalo, N. Y. Lubricating system. 1,891,647; Dec. 20.
Markart, Joseph J., Merrick, N. Y. Cigarette holder. 1,891,431; Dec. 20.
Marogg, Richard, assignor to Autograf Tooth Brush Co., Inc., Troy, N. Y. Bristling machine. 1,891,236; Dec. 20.
Martell, Philip J., and W. B. McMurray, Maryville, Tenn. Gas speed toaster. 1,891,825; Dec. 20.
Martin, Fay H., Woonsocket, R. I., assignor, by mesne assignments, to Whitin Machine Works, Whitinsville, Mass. Creel. 1,891,432; Dec. 20.
Martin, Fay H., Woonsocket, R. I., assignor, by mesne assignments, to Whitin Machine Works, Whitinsville, Mass. Creel. 1,891,433; Dec. 20.
Mason, Harold L., Hampstead, London, England. Stop valve for steam or other fluids and liquids. 1,891,551; Dec. 20.
Mathey, Nicholas W. (See Cooke, John M., assignor.)
Matson, Carl A., Lynnfield, Mass., assignor to The Matson Company, Concord, N. H. Reverse brake. Re18,693; Dec. 20.
Matson Company, The. (See Matson, Carl A., assignor.)
Matthews, Floyd C., assignor of one-half to J. C. Gaynor, Paterson, N. J. Shuttle motion. 1,891,648; Dec. 20.
Matthews, W. N., Corporation. (See Birkenmaier, Theodore, assignor.)
Maurer, John A., jr., New York, N. Y., assignor to Radio Corporation of America. Film phonograph. 1,891,387; Dec. 20.
Maurer, John A., jr., New York, N. Y., assignor to Radio Corporation of America. Recording and reproduction of sound. 1,891,388; Dec. 20.
Maurer, John A., jr., New York, N. Y., assignor to Radio Corporation of America. Reproduction of sound. 1,891,389; Dec. 20.
May, Christopher C., and V. H. Whitten, Bodcaw, Ark. Fertilizer distributor. 1,891,565; Dec. 20.
Maybach, Karl, assignor to Maybach-Motorenbau G. m. b. H., Friedrichshafen, Germany. Change speed gear. 1,891,678; Dec. 20.
Maybach-Motorenbau G. m. b. H. (See Maybach, Karl, assignor.)
Mazza, Leandro, Florence, and R. Regnoni, Rome, Italy. Circuit arrangement for telegraphic apparatus. 1,891,564; Dec. 20.
McCleary Hydraulic Brake Company. (See Kauffman, Paul R., assignor.)
McCord Radiator & Mfg. Co. (See Hicks, Frederick W., assignor.)
McCormick & Co. (See McCormick, Willoughby M., assignor.)
McCormick, Edward A., assignor to Chicopee Manufacturing Corporation, New Brunswick, N. J. Package of facials. 1,891,679; Dec. 20.
McCormick, Willoughby M., assignor to McCormick & Co., Incorporated, Baltimore, Md. Bottle. Des. 88,737; Dec. 20.
McCrosky, Fred B., Walnut Park, Calif. Quick return straight line pump jack. 1,891,552; Dec. 20.
McCullough, Campbell R. (See Huntress, E. H., McCullough, and Booth.)
McCullough, William T., assignor to Goodman Manufacturing Company, Chicago, Ill. Mining machine. 1,891,719; Dec. 20.
McCurdy, George R., Wilmette, and J. R. Turek, Berwyn, assignors to Crane Co., Chicago, Ill. Shower head. 1,891,720; Dec. 20.
McCurrach, Mabel C., Brooklyn, N. Y. Longitudinally folding washable necktie. 1,891,477; Dec. 20.
McFadden, George H., assignor to The Ohio Foundry & Manufacturing Company, Steubenville, Ohio. Gas heater. Des. 88,714; Dec. 20.
McGiffert, John R., and O. L. Berby, assignors to Clyde Iron Works, Duluth, Minn. Hoisting mechanism. 1,891,769; Dec. 20.
McGinnis, Edward L., Highland Park, assignor to Consolidated Fruit Jar Company, New Brunswick, N. J. Spout and closure. 1,891,826; Dec. 20.
McKean, John G., Mount Vernon, and R. F. Jones, Glasgow, Scotland. Heat exchange apparatus for heating or cooling fluids. 1,891,434; Dec. 20.
McKellip, Spencer W., assignor to Philadelphia Storage Battery Company, Philadelphia, Pa. Flexible hinge ring. 1,891,566; Dec. 20.
McMurray, Wallace B. (See Martell, P. J., and McMurray.)
Meatheringham, Russell W., San Marino, Calif. Automobile window structure. 1,891,478; Dec. 20.
Meerwein, Hans, and H. Morschel, Konigsberg, assignors to the Firm Schering-Kahlbaum, A. G., Berlin, Germany. Production of acetone. 1,891,333; Dec. 20.
Megroz, Georges, Bronxville, N. Y. Textile fabric or the like. Des. 88,715; Dec. 20.
Meinardi, Peter. (See Gordon, Julius G., assignor.)
Meissner, Bernhard, Woodside, N. Y. Internal combustion motor. 1,891,770; Dec. 20.
Meldahl, Horace S., Charleston, W. Va. Vanity dresser. 1,891,680; Dec. 20.
Mendenhall, Earl, and J. B. Van Horn, Los Angeles, Calif. Double-acting reciprocating pump. 1,891,771; Dec. 20.
Mercadante, Joseph, Larchmont, N. Y., and A. M. Thomson, Newark, N. J., assignors to Dardelet Threadlock Corporation, New York, N. Y. Machine for finishing and tapping nut blanks. 1,891,721; Dec. 20.
Mergott, J. E., Company, The. (See Hiering, William C., assignor.)
Messier, George L. R. J., Montrouge, France. Pneumatic suspension for airplanes. Re18,696; Dec. 20.
Messier, George L. R. J., Montrouge, France. Framework for the wings of aeroplanes and for other objects. 1,891,681; Dec. 20.
Metal Office Furniture Company. (See Bullock, Earle C.)
Metro-Goldwyn-Mayer Corporation. (See Wise, Anthony G., assignor.)
Metzner, Bruno C., New York, N. Y. Astronomical star-dome. Des. 88,727; Dec. 20.
Meurer, Nicholaus, Cleveland, Ohio. Dental impression device. 1,891,649; Dec. 20.
Meyer, Aubrey E., Paris, France, assignor to Aubrey Meyer, Inc., Jersey City, N. J. Yarn detwisting and yarn treating system. 1,891,435; Dec. 20.
Meyer, Aubrey, Inc. (See Meyer, Aubrey E., assignor.)
Meyer, Henry A., St. Paul, Minn. Aircraft control. 1,891,237; Dec. 20.
Meyer, Nicholas, Tonawanda, N. Y. Pencil. 1,891,682; Dec. 20.
Michell, Anthony G. M., Melbourne, Australia. Packing. 1,891,436; Dec. 20.
Michelsen, William O., Woodhaven, assignor to Royal Typewriter Company, Inc., New York, N. Y. Manifolding attachment. 1,891,567; Dec. 20.
Miersch, Heinrich, assignor to Messrs. G. E. Reinhardt, Leipzig, Germany. Sheet delivering and piling apparatus for printing, ruling, cutting machines and the like. 1,891,286; Dec. 20.
Mikimoto, Kokichi, Ginsa, Kyobashi-Ku, Tokyo-Shi, Japan. Production of perfectly spherical culture pearls. Re18,700; Dec. 20.
Miles, R. E., jr. (See Carney, Arthur T., assignor.)
Milkowski, Victor J., Baldwinsville, N. Y. Centrifugal pump. 1,891,267; Dec. 20.
Miller, Dorothy, Kansas City, Mo. Pianette. 1,891,268; Dec. 20.
Miller, Samuel W., Hollis, N. Y., assignor to Oxweld Acetylene Company. Producing a heating or welding flame. 1,891,314; Dec. 20.
Milmore, Thomas A., Brooklyn, N. Y. Rapid revolver loader. 1,891,437; Dec. 20.
Mines, Henry M., Liverpool, England. Phosphorescent or luminous masses or compounds. 1,891,827; Dec. 20.
Moore, Joseph G. (See Sherwood, H. K. T., and Moore.)
Morgan Construction Company. (See George, Jerome R., assignor.)
Morris, Gertrude, New York, N. Y. Textile fabric or the like. Des. 88,738; Dec. 20.
Morris, John N., London, and M. D. Scott, Enfield, England. Magnetically operated apparatus. 1,891,568; Dec. 20.
Morsbach, Kurt, Berlin-Lichterfelde, assignor, by mesne assignments, to Projector G. m. b. H., Berlin, Germany. Moving picture projection apparatus. 1,891,683; Dec. 20.
Morschel, Heinrich. (See Meerwein, H., and Morschel.)
Mortimer, Charles G., Glen Ridge, assignor to Structural Gypsum Corporation, Linden, N. J. Machine for making slabs. 1,891,626; Dec. 20.
Mosher, Elery E. (See Nicks, J. H., and Mosher.)
Motte, Charles M., Paris, France. Hydraulically propelled lifeboat. 1,891,828; Dec. 20.
Murck, Knud, Forest Hills, N. Y., assignor to Charles Bruning Company Inc. Sensitized paper developing apparatus. 1,891,722; Dec. 20.
Muros, Joseph, New York, N. Y., assignor to Gillette Safety Razor Company, Boston, Mass. Safety Razor. 1,891,627; Dec. 20.
Mutscheller, Arthur, New York, N. Y., assignor to Wappler Electric Co., Inc., Long Island City, N. Y. Vacuum tube discharge device. Re18,694; Dec. 20.
Myers, Albert J., assignor to The Koppers Company, Pittsburgh, Pa. Rotary grizzly. 1,891,772; Dec. 20.
Myers, Lewis C. (See Handley, G. F., and Myers.)
Myers, Lewis C., Freeport, and G. F. Handley, Glendale, assignors to Royal Typewriter Company, Inc., New York, N. Y. Manifolding attachment. 1,891,569; Dec. 20.
Nachtsheim, Peter, New York, N. Y. Aeroplane. 1,891,650; Dec. 20.
Nagel, Charles E., New York, N. Y., assignor to Shake Proof Lock Washer Co., Chicago, Ill. Drive screw. 1,891,895; Dec. 20.
Narbo, Lauritz M., Madison, Wis. Dispensing device. 1,891,315; Dec. 20.
Nasmith, John L., Erith, England, assignor to Vickers-Armstrongs Limited, Westminster, England. Cutting and creasing presses for paper, cardboard or the like. 1,891,391; Dec. 20.

Nathansohn, Alexander, Berlin-Wilmersdorf, Germany. Highly polymerising cellulose acetate and the product thereof. 1,891,829; Dec. 20.
National Oil Drill Corporation. (See Le Compte, E. J., and Harrison, assignors.)
National Pneumatic Company. (See Rowntree, Harold, assignor.)
Nawiasky, Paul, Ludwigshafen-on-the-Rhine, E. Honold, Frankfort-on-the-Main-Fechenheim, and H. Wolff, Mannheim, Germany, assignors to General Aniline Works Inc., New York, N. Y. Vat dyestuffs of the diphthaloylcarbazole series. 1,891,684; Dec. 20.
Needham, Charles E., assignor to The Raymond Brothers Impact Pulverizer Co., Chicago, Ill. Journal for pulverizing mill rollers. 1,891,355; Dec. 20.
Nefzger, Adolf, Vienna, Austria. Hair curling process. 1,891,438; Dec. 20.
Neill, Charles W., Syracuse, N. Y. Sectional cruiser. 1,891,602; Dec. 20.
Neilson, Mary D., Minneapolis, Minn. Undergarments for women such as slips, pajamas, blouses, and the like. 1,891,773; Dec. 20.
Neilson, Mary D., Minneapolis, Minn. Bloomers for women. 1,891,774; Dec. 20.
Neilson, Mary D., Minneapolis, Minn. Women's vest. 1,891,775; Dec. 20.
Nelson Brothers Company. (See Nelson, Harry B., assignor.)
Nelson, Harry B., assignor to Nelson Brothers Company, Saginaw, Mich. Pump assembly for internal combustion engines. 1,891,392; Dec. 20.
Nelson, Orval E., Crosby, Tex. Twin pressure valve. 1,891,570; Dec. 20.
Newhall, Henry B., Corporation. (See Hescock, Ethan N., assignor.)
Newman, David F., Freeport, assignor to Trans-Lux Daylight Picture Screen Corporation, New York, N. Y. Projection system. 1,891,439; Dec. 20.
New York Rubber Corporation. (See Anderson, Axel V., assignor.)
Nichols, Charles R., Dallas, Tex., assignor to Sperry-Sun Well Surveying Company, Philadelphia, Pa. Determining angle and direction of dip of geological formations. 1,891,628; Dec. 20.
Nicholson, Niels C., Seattle, Wash., assignor, by mesne assignments, to Continental Can Company, Inc., New York, N. Y. Can filling machine. 1,891,830; Dec. 20.
Nickerson George W., Cotuit, Mass. Puller. Re18,701; Dec. 20.
Nicks, Joe H., and E. E. Mosher, Refugio, Tex. Blow-out preventer attachment. 1,891,685; Dec. 20.
Nicks, Joe H., and E. E. Mosher, Corpus Christi, Tex. Blow-out preventer attachment. 1,891,686; Dec. 20.
Niles, Harold F. (See Niles, Louis W., and H. F.)
Niles, Louis W., Oak Park, and H. F. Niles, River Forest, Ill. Oil draining valve. 1,891,287; Dec. 20.
No-Drip Company. (See Pipkin, James A., assignor.)
Nolan, Harold O., New York, N. Y., assignor of one-half to C. Ellis, Montclair, N. J. Tawing, dehydrating, and astringent products. 1,891,440; Dec. 20.
Norman, Seawell C., Goldsboro, N. C. Automatic veneer table. 1,891,687; Dec. 20.
Norris, David W., Pasadena, Calif. Furnace. Des. 88,716; Dec. 20.
North, Harold D., Cleveland, Ohio. Motion picture screen. 1,891,603; Dec. 20.
Norton, Allen B., assignor, by mesne assignments, to Cleveland Trust Company, Cleveland, Ohio, as trustee. Piston. 1,891,441; Dec. 20.
Norton, Charles L., Boston, Mass. Concrete. 1,891,269; Dec. 20.
Norton, Charles L., Boston, Mass. Coloration of concrete articles. 1,891,479; Dec. 20.
Novak, Izador J., assignor to Raybestos-Manhattan, Inc., Bridgeport, Conn. Composite friction block. 1,891,723; Dec. 20.
Nyberg, Olaf J., Youngstown, Ohio, assignor to Youngstown Steel Car Corporation. Producing pressed steel hatch frames. 1,891,316; Dec. 20.
Ohio Foundry & Manufacturing Company, The. (See McFadden, George H., assignor.)
Okochi, Masatosi, Tokyo, and M. Okoshi, Tokyo Prefecture, assignors to Zaidan Hojin Rikagaku Kenkyujo, Tokyo, Japan. Machine for manufacturing twist drills. 1,891,831; Dec. 20.
Okoshi, Makoto. (See Okochi, M., and Okoshi.)
Oldham, Samuel R., and L. W. Young, Chicago, Ill., assignors to The Oxweld Railroad Service Company. Welding torch. 1,891,442; Dec. 20.
Oliver, Leslie W., and W. G. Clare, assignors to Colour Photographs (British and Foreign) Limited, London, England. Printing process employed in color photography. 1,891,571; Dec. 20.
Olsen, Peter C., Perth Amboy, N. J., assignor to Federal Seaboard Terra Cotta Corporation, New York, N. Y. Masonry joint. 1,891,724; Dec. 20.
O'Malley, Louis J., Boston, Mass. Selective separation of ores. 1,891,776; Dec. 20.
Oppenländer, Karl, Waiblingen, Germany. Collapsible dinner or tea wagon. 1,891,393; Dec. 20.
Osann, Frederick, Company. (See Plumley, Raymond L., assignor.)
Oswald, Louis C., assignor to Delco-Light Company, Dayton, Ohio. Carburetor. 1,891,288; Dec. 20.
Ott, Alexander, Scranton, Pa. Electric filling feeler for looms. 1,891,572; Dec. 20.
Ott, John E., assignor to Acme Steel Company, Chicago, Ill. Strap seal and forming the same. 1,891,239; Dec. 20.
Ottawa River Paper Company. (See Broderick, George H., assignor.)
Otte, Otho M., Tarentum, Pa. Compartment. 1,891,894; Dec. 20.
Outrite Fire Extinguisher Corporation, The. (See Gilleo, Acie J., assignor.)
Overmeyer, John, assignor to William Willheim Co., Inc., New York, N. Y. Textile fabric or similar article. Des. 88,717; Dec. 20.
Overton, George S., East Norwalk, assignor to The American Hat Co. Inc., Norwalk, Conn. Shipping device for hats. 1,891,334; Dec. 20.
Oxweld Acetylene Company. (See Miller, Samuel W., assignor.)
Oxweld Railroad Service Company, The. (See Oldham, S. R., and Young, assignors.)
Pacific Can Co. (See Krueger, F., and Douglass, assignors.)
Pacific Pipe and Supply Company. (See Gray, Andrew T., assignor.)
Packard Motor Car Company. (See Edwards, Herbert C., assignor.)
Packard Motor Car Company. (See Woolson, Lionel M., assignor.)
Padelford, Lester E., and L. J. Kukowits, assignors to The Republic Metalware Company, Buffalo, N. Y. Waste receptacle. 1,891,651; Dec. 20.
Page, Albert E., Brooklyn, assignor to Scott & Williams, Incorporated, New York, N. Y. Pattern mechanism for knitting machines. 1,891,270; Dec. 20.
Pangborn Corporation. (See Hull, Foster J., assignor.)
Park, Alfred E., et al. (See Wenner, Ira R., assignor.)
Parker, Benjamin F. (See Parker, Cecil T. and B. F.)
Parker, Cecil T. and B. F., Yakima, Wash. Fruit picking knife. 1,891,688; Dec. 20.
Parks, Robert F., Compton, Calif. Elevating and rotating device. 1,891,832; Dec. 20.
Parsons, Fred A., Milwaukee, assignor to Kearney & Trecker Corporation, West Allis, Wis. Milling machine. 1,891,356; Dec. 20.
Pauly Jail Building Company. (See Tracy, Michael J., assignor.)
Pawlicek, Leo, Modling, near Vienna, Austria, assignor to Rabl & Grun, Vienna, Austria. Frame for hand bags and like containers. 1,891,833; Dec. 20.
Payne, Frank B., Glencoe, assignor to Crane Packing Company, Chicago, Ill. Bushing packing. 1,891,725; Dec. 20.
Pearce, James W., Philadelphia, Pa. Ribbed lath. 1,891,240; Dec. 20.
Pearson, Paul E. (See Troyer, N., and Pearson.)
Peiler, Karl E., West Hartford, assignor to Hartford-Empire Company, Hartford, Conn. Heat insulated refractory for molten glass containers. 1,891,604; Dec. 20
Peiler, Karl E., West Hartford, assignor to Hartford-Empire Company, Hartford, Conn. Suction gathering forming machine. 1,891,896; Dec. 20.
Peirce, Thomas J. H., Providence, R. I., assignor to Lewis R. Smith, receiver of The Apco Mossberg Corporation. Attachment for headlights. 1,891,553; Dec. 20
Peltier, Frank D., Evansville, Ind., assignor to Servel Inc., New York, N. Y. Refrigeration. 1,891,357; Dec. 20.
Pelton Water Wheel Company, The. (See Foulds, Charles V., assignor.)
Pendleton, Eldridge M., Vicksburg, Miss. Automobile lunch taole. 1,891,834; Dec. 20.
Penn Electric Switch Co. (See Henning, Malcolm E., assignor.)
Perfection Burial Vault Company. (See Wegner, Clarence J., assignor.)
Perfection Steel Body Company. (See Bordeaux, Ephriam P., assignor.)
Perfection Steel Body Co., The. (See Knecht, Arthur E., assignor.)
Perkins, Lewis B. (See Hughes, J. M., Carter, and Perkins.)
Permutit Company, The. (See Harwood, S. G., and Griswold, assignors.)
Perpetual Self Winding Watch Corporation. (See Frey, Emil, assignor.)
Perry, Frank B. (See Henrikson, Arthur G., assignor.)
Perry, Stanley, assignor to Automatic Burner Corporation, Chicago, Ill. Oil burner. 1,891,835; Dec. 20.
Peter, Albin, assignor to the Firm of Chemical Works formerly Sandoz Basel, Switzerland. Preparation of new condensation products of the anthraquinone series. 1,891,317; Dec. 20.
Pfannenstiehl, Harry, Mountain Lakes, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Sound picture system. 1,891,241; Dec. 20.
Phelps, Clyde H., Mount Vernon, N. Y., assignor to Riess Manufacturing Company, Kokomo, Ind. Caster gauge target. 1,891,578; Dec. 20.
Philadelphia Storage Battery Company. (See McKellip, Spencer W., assignor.)

Phillips, Reginald J. S. (See Johnstone, R. G., and Phillips.)
Pickop, George B., New Haven, Conn. Lock nut. 1,891,358; Dec. 20.
Piette, Olivier, assignor to Union Chimique Belge, Societe Anonyme, Brussels, Belgium. Apparatus for dry cooling coke. 1,891,836; Dec. 20.
Pilot Radio and Tube Corporation. (See Shapiro, Sam A., assignor.)
Pioneer Instrument Company. (See Urfer, Adolf, assignor.)
Pipkin, James A., assignor to No-Drip Company, Dallas, Tex. Drip-catching attachment for bottles. 1,891,892; Dec. 20.
Piqua Granite and Marble Company, The. (See Hauk, Paul, assignor.)
Piriot, Frédéric, Ixelles, Belgium. Vibrating sifting screen. 1,891,574; Dec. 20.
Pittman, Vincent V., Glendale, Calif. Concrete unit for wall construction. 1,891,837; Dec. 20.
Pittsburgh Equitable Meter Company. (See Weymouth, Harry G., assignor.)
Pittson, Nikolais D., Hanna, Alberta, Canada. Calf feeder. 1,891,575; Dec. 20.
Plimmer, Alfred G., assignor to Cincinnati Grinders Incorporated, Cincinnati, Ohio. Grinding machine. 1,891,777; Dec. 20.
Plumley, Raymond L., Brooklyn, assignor to Frederick Osann Company, New York, N. Y. Overseaming sewing machine. 1,891,605; Dec. 20.
Pocock, Merton A., et al. (See Sager, Lee R., assignor.)
Poirier, Georges, St. Symphorien, France. Reverse gear for cycles. 1,891,576; Dec. 20.
Poncet, Albert, Champier, France. Automatic shuttle changing mechanism for a loom weaving with one or several shuttles. 1,891,318; Dec. 20.
Portela, Gus, Afton, Wyo. Brooder. 1,891,838; Dec. 20.
Potter, Albert T., Detroit, Mich., assignor to Ainsworth Manufacturing Company. Corner construction for frames. 1,891,778; Dec. 20.
Precision Castings Company, Inc. (See Lester, Nathan, assignor.)
Pressed & Welded Steel Products Company. (See Haskin, Walter E., assignor.)
Prima Manufacturing Company. (See Waterworth, Robert J., assignor.)
Printator G. m. b. H. (See Hahn, Hugo, assignor.)
Probert, Geoffrey O. C., Woolwich, London, England. Gun sight. 1,891,395; Dec. 20.
Proctor, Alexander, Blairgowrie, Scotland. Collapsible tripod for use in harvesting crops. 1,891,577; Dec. 20.
Projector, G. m. b. H. (See Morsbach, Kurt, assignor.)
Prutzman, Paul W., Los Angeles, Calif. Filter press. 1,891,396; Dec. 20.
Pure Oil Company, The. (See Carr, Richard H., assignor.)
Quinn, Francis J., Chicago, Ill. Trinity sacramental chest. Des. 88,739; Dec. 20.
Rabl & Grun. (See Pawlicek, Leo, assignor.)
Radasch, Arthur H., South Orange, N. J., assignor to The Barrett Company, New York, N. Y. Coking pitch. 1,891,606; Dec. 20.
Radford, William H., assignor to Caterpillar Tractor Co., San Leandro, Calif. Oiling system. 1,891,726; Dec. 20.
Radio Corporation of America. (See Kroesen, Jay C., assignor.)
Radio Corporation of America. (See Maurer, John A., jr., assignor.)
Rainey, Clement A., Riverside, Ill. Condensing apparatus. 1,891,607; Dec. 20.
Ramsay, Andrew C., and R. T. Bagby, Birmingham, Ala. Metallic tire cover. 1,891,727; Dec. 20.
Ramsey, William F., Okanogan, and A. T. Gossman, Wenatchee, Wash.; said Ramsey assignor to said Gossman. Peach. Pl. Pt. 51; Dec. 20.
Rand, Charles F., North Tonawanda, N. Y. Pyroxylin plastic tab or facing and securing the same to an article. 1,891,443; Dec. 20.
Randolph, King M., assignor of forty one-hundredths to Cary F. Spence, Knoxville, Tenn. Garment bag. 1,891,689; Dec. 20.
Rapid Pavement Breaker Corporation. (See Cornett, Walter V., assignor.)
Raybestos-Manhattan, Inc. (See Novak, Izador J., assignor.)
Raymond Brothers Impact Pulverizer Co. (See Needham, Charles E., assignor.)
Reed, Morris V., Evansville, Ind. Four wheel steering gear for automobiles. 1,891,578; Dec. 20.
Regnoni, Romualdo. (See Mazza, L., and Regnoni.)
Reichhelm, George L., New York, N. Y., assignor to The Gasifier Company, Elizabeth, N. J. Gasifying liquid fuels. 1,891,444; Dec. 20.
Reichhelm, George L., assignor to The Gasifier Company, Elizabeth, N. J. Oil gasifier. 1,891,445; Dec. 20.
Reichhelm, George L., Short Beach, Conn., assignor to The Gasifier Company, Elizabeth, N. J. Gasifying liquid fuels. 1,891,446; Dec. 20.
Reichhelm, Paul F., Montclair, assignor to American Swiss File & Tool Co., Elizabeth, N. J. Tool. 1,891,482; Dec. 20.
Reinforced Paper Bottle Corporation. (See Bodor, Andrew, assignor.)
Reinhardt, R. E., Messrs. (See Miersch, Heinrich, assignor.)
Reisinger, Frank X., jr., Schenectady, N. Y. Automatic lubrication annunciator for motor vehicles. 1,891,335; Dec. 20.
Renwick, Frank F. (See Shepherd, F. J., and Renwick.)
Reo Motor Car Company. (See Thomas, Horace T., assignor.)
Replogle, John R., assignor, by mesne assignments, to Kelvinator Corporation, Detroit, Mich. Refrigerating unit. 1,891,728; Dec. 20.
Republic Metalware Company, The. (See Padelford, L. E., and Kukowitz, assignors.)
Richardson Company, The. (See Keller, Charles L., assignor.)
Richter, George A., assignor to Brown Company, Berlin, N. H. Composition for and method of paper making. 1,891,730; Dec. 20.
Richter, Max. (See Gastrich, G., and Richter.)
Rickey, Nathan E., Massillon, Ohio. Combined hose supporter and hose. 1,891,690; Dec. 20.
Ricks, Fred, Leicester, England, assignor to United Shoe Machinery Corporation, Paterson, N. J. Channeling machine. 1,891,271; Dec. 20.
Ride-O-Graph Corporation. (See Widney, Stanley W., assignor.)
Riess Manufacturing Company. (See Phelps, Clyde H., assignor.)
Rintelman, William L., Milwaukee, Wis., assignor, by mesne assignments, to E. I. du Pont de Nemours & Company. Purifying diphenyl-1, 2, 5, 6-anthraquinone-dithiazole bodies. 1,891,448; Dec. 20.
Rintelman, William L., Milwaukee, and R. J. Goodrich, South Milwaukee, Wis., assignors, by mesne assignments, to E. I. du Pont de Nemours & Company. Preparing diaryl-1, 2, 5, 6-anthraquinone-dithiazole bodies. 1,891,447; Dec. 20.
Rintelman, William L., Milwaukee, and R. J. Goodrich, South Milwaukee, Wis., assignor, by mesne assignments, to E. I. du Pont de Nemours & Company. Preparation of diaryl-1, 2, 5, 6-anthraquinone-dithiazole bodies. 1,891,449; Dec. 20.
Rischer, Marguerite E., Brooklyn, N. Y. Garment attachment. 1,891,729; Dec. 20.
Robbins, Henry G., Forest Home, Calif. Apparatus for transporting live fish. 1,891,779; Dec. 20.
Roberson, Willard D., assignor to William Willheim Co., Inc., New York, N. Y. Textile fabric or similar article. Des. 88,718; Dec. 20.
Roberts Printing Company. (See Koehrman, Mathias G., assignor.)
Robinson, E. S., and A., Limited. (See Robinson, Foster G., assignor.)
Robinson, Foster G., assignor to E. S. and A. Robinson, Limited, Bristol, England. Cardboard or like box and carton. 1,891,839; Dec. 20.
Robinson, Thomas F., Rye, N. Y. Holdup protection device. 1,891,554; Dec. 20.
Rockwood, George I., Worcester, Mass. Mechanism for angular adjustment of the bowsprit of a sailboat. 1,891,555; Dec. 20.
Rockwood Sprinkler Company of Massachusetts. (See Howard, Clifton P., assignor.)
Röhm, Otto, Darmstadt, Germany. Egg yolk substitute for tanning. 1,891,363; Dec. 20.
Rola Company, The. (See Engholm, Bernard A., assignor.)
Ronk, George T., Cedar Rapids, Iowa. Tractor tread. 1,891,556; Dec. 20.
Ross, Henry W., Cincinnati, Ohio. Apparatus for laying Concrete floors. 1,891,557; Dec. 20.
Rosenwald, Isidor, Parksville, N. Y. Coal briquette. 1,891,450; Dec. 20.
Ross, Oscar A., New York, N. Y. Liquid circulating cooling system for internal combustion motors. 1,891,480; Dec. 20.
Ross, Otto C. (See Harlow, I. F., and Ross.)
Rothman, Estelle T. See Rothman, Morris and E. T.)
Rothman, Morris, and E. T. Rothman, Bayonne, N. J. Fire alarm signal and photographic apparatus. 1,891,242; Dec. 20.
Roura, Octave G., Paris, France. Container for shaving soap. 1,891,243; Dec. 20.
Rowntree, Harold, Scarsdale, assignor to National Pneumatic Company, New York, N. Y. Door operating mechanism. 1,891,359; Dec. 20.
Roy, Camille, et al. (See Ceablom, Wendell S., assignor.)
Roy, Edmond J., et al. (See Ceablom, Wendell S., assignor.)
Royal Typewriter Company. (See Dowl, Bernard J., assignor.)
Royal Typewriter Company. (See Handley, G. F., and Myers, assignors.)
Royal Typewriter Company. (See Michelsen, William O., assignor.)
Royal Typewriter Company. (See Myers, L. C., and Handley, assignors.)
Rubber & Celluloid Products Co. (See Bowley, Edward J., assignor.)
Rubber Service Laboratories Co., The. See Behrend, Oswald, assignor.)
Ruehl, George Frank, Detroit, Mich. Window. 1,891,840; Dec. 20.
Runkles, Elsie M., Detroit, Mich. Combination chair and writing desk. 1,891,691; Dec. 20.

Rupf, Frank E., Kansas City, Mo., assignor to Wilson-Jones Company, Chicago, Ill. File folder. 1,891,558; Dec. 20.
Rutherford, Robert E., Philadelphia, Pa. Method of and apparatus for recording and reproducing electrical impulses. 1,891,780; Dec. 20.
Ruttiman, Alfred. (See White, F. E., and Ruttiman.)
Ryan, Margaret, Portland, Oreg. Salad table. 1,891,559; Dec. 20.
Ryder, Ely M. T., Yonkers, N. Y. Wheel. 1,891,336; Dec. 20.
Ryther and Pringle Company. (See Sarvay, D. W., Grieb, and Fritz, assignors.)
Sadjian, Harry, Philadelphia, Pa. Toothpick dispensing device. 1,891,781; Dec. 20.
Sager, Lee R., assignor of one-third to A. W. Julien, and one-third to Merton A. Pocock, Minneapolis, Minn. Laundry flat piece spreader. 1,891,782; Dec. 20.
Sainderichin, Nicolas. (See Folliet, A., and Sainderichin.)
St. Dennis, Harold C., Syracuse, N. Y. Grinding head for lens surfacing machines. 1,891,320; Dec. 20.
Sak, Søren, Charlottenlund, Denmark. Yeast propagation controlling method. 1,891,841; Dec. 20.
Sample, Walter C., assignor of one-fourth to O. J. Lovik, Alhambra, Calif. Paint. 1,891,451; Dec. 20.
Sandeman, Edward K., P. R. Thomas, and S. H. Grove, Aldwych, London, England, assignors to International Standard Electric Corporation, New York, N. Y. Submarine cable. 1,891,244; Dec. 20.
Sargent & Company. (See Wiepert, George D., assignor.)
Sarvay, Dell W., J. J. Grieb, and A. J. Fritz, assignors to Ryther and Pringle Company, Carthage, N. Y. Shredding machine. 1,891,245; Dec. 20.
Savage, Ralph V., Los Angeles, Calif. Micrometer. 1,891,783; Dec. 20.
Sayre, Frank N., San Francisco, Calif. Plotting instrument. 1,891,502; Dec. 20.
Schafer, Conrad B. (See Lawson, P. C., and Schafer.)
Scheidt, Alfred W., Sewaren, N. J., assignor to The Electric Smelting & Aluminum Company, Cleveland, Ohio. Producing alumina. 1,891,608; Dec. 20.
Scheidt, Alfred W., Sewaren, N. J., assignor to The Electric Smelting and Aluminum Company, Cleveland, Ohio. Producing aluminum from waste coal products. 1,891,609; Dec. 20.
Schering-Kahlbaum A. G. (See Meerwein, H., and Morschel, assignors.)
Schey, Robert, New York, N. Y. Textile fabric or the like. Des. 88,740; Dec. 20.
Schiaparelli, Elsa, Paris, France. Wearing apparel. 1,891,610; Dec. 20.
Schibsted, Helge, Syracuse, assignor, by mesne assignments, to The Borden Company, New York, N. Y. Can and sealing same. 1,891,452; Dec. 20.
Schindler, Robert B., assignor to Schuylkill Valley Mills, Inc., Spring City, Pa. Stocking. Des. 88,728; Dec. 20.
Schlacht, Herman, Woodhaven, N. Y. Tubular watchcase. 1,891,611; Dec. 20.
Schlenker, Charles E., Lakewood, Ohio, assignor to Western Reserve Air Motors Corporation. Internal combustion engine. 1,891,453; Dec. 20.
Schlumpf, Walter, Fanwood, assignor to Shur-Chek Company, Inc., Fanwood Township, N. J. Identifying mechanism. 1,891,454; Dec. 20.
Schmid-Domann, Josef, Lucerne, Switzerland. Washing machine. 1,891,842; Dec. 20.
Schmidt, Henry F., Lansdowne, Pa., assignor to Westinghouse Electric & Manufacturing Company. Manufacturing propellers. 1,891,612; Dec. 20.
Schreck, Hans L., assignor to Treadwell Engineering Company, Easton, Pa. Rolling mill. 1,891,579; Dec. 20.
Schultz, Alfred W., Waterloo, Iowa, assignor to Zeidler Concrete Products Machinery Company, St. Joseph, Mo. Machine for constructing concrete pipe. 1,891,731; Dec. 20.
Schuylkill Valley Mills, Inc. (See Schindler, Robert B., assignor.)
Schwendt, Bernard J. (See Wiegand, F. B., and Schwendt.)
Schwindt, Christian J. (See Daniels, L. C., and Schwindt.)
Schwindt, Christian J. (See Luft, O. v. d., and Schwindt.)
Scofield, Philip F., Palo Alto, assignor to Heintz & Kaufman, Ltd., San Francisco, Calif. Inductance coil. 1,891,461; Dec. 20.
Scott & Williams, Incorporated. (See Page, Albert E., assignor.)
Scott and Williams, Incorporated. (See Williams, Louis N. D., assignor.)
Scott, David C., Providence, R. I., assignor to Henry L. Scott Company. Brake testing apparatus. 1,891,652; Dec. 20.
Scott, Henry L., Company. (See Scott, David C., assignor.)
Scott, Murray D. (See Morris, J. N., and Scott.)
Scudder, Charles J., Scranton, Pa. Locomotive axle and crank pin and constructing the same. 1,891,505; Dec. 20.
Seaman, Stewart E., Buffalo, N. Y., assignor to E. I. du Pont de Nemours & Company, Wilmington, Del. Producing cellulose. 1,891,337; Dec. 20.
Searles, Wayne S., Providence, R. I., assignor to Universal Optical Corporation. Ophthalmic mounting. 1,891,653; Dec. 20.
Sechrist, A. G. (See Kirkpatrick, Lige H., assignor.)
Seebach, Fritz, Erkner, near Berlin, assignor to Bakelite Gesellschaft mit beschrankter Haftung, Berlin-Charlottenberg, Germany. Purifying phenol-aldehyde condensation products. 1,891,455; Dec. 20.
Senzer, Mathias, Highland Park, N. J. Coat making. 1,891,692; Dec. 20.
Servel Inc. (See Peltier, Frank D., assignor.)
Shake Proof Lock Washer Co. (See Nagel, Charles E., assignor.)
Shanklin, James L., Houston, Tex. Nail. 1,891,246; Dec. 20.
Shanor, William W., Saginaw, Mich. Scraper. 1,891,288; Dec. 20.
Shapiro, Sam A., assignor to Pilot Radio and Tube Corporation, Lawrence, Mass. Switch. 1,891,247; Dec. 20.
Sharon Steel Hoop Company. (See Hughes, J. M., Carter, and Perkins, assignors.)
Shaw, Cecil, Grangemouth, and J. Thomas, Polmont, Scotland, assignors to Imperial Chemical Industries Limited. Production of halogenated pathalic anhydride. 1,891,843; Dec. 20.
Sheinman, Frederick, New York, N. Y. Window cleaning apparatus. 1,891,360; Dec. 20.
Shepard, Edward S., deceased, Vincennes, Ind., by Lela E. Shepherd, administratrix, Vincennes, assignor to A. D. Stewart, St. Joseph, Mo. Building board. 1,891,732; Dec. 20.
Shepard, Lela, administratrix. (See Shepard, Edward S.)
Shepherd, Francis J., and F. F. Renwick, London, England, assignors to Ilford Limited, Ilford, England. Photographic printing process. 1,891,784; Dec. 20.
Sherwood, Horace K. T., and J. G. Moore, Albany, N. Y. Display cabinet. 1,891,580; Dec. 20.
Sherwood, Horace K. T., and J. G. Moore, Albany, N. Y. Display cabinet. 1,891,581; Dec. 20.
Shoe Form Co. (See DeWitt, William J., assignor.)
Shur-Chek Company. (See Schlumpf, Walter, assignor.)
Siebert O. W. Company. (See Siebert, O. W., and Bjorson, assignors.)
Siebert, Otto W., and C. J. Bjorson, assignors to O. W. Siebert Company, Gardner, Mass. Method and apparatus for shaping tubing. 1,891,785; Dec. 20.
Siecke, Wolfhart. (See von Girsewald, C., Siecke, and Thieler.)
Siegel, Max J., assignor to Vincent W. Cahill and B. Robert Swartburg, New York, N. Y. Revolving window sash. 1,891,733; Dec. 20.
Simon, Mortimer R., Passaic, N. J. Accident display board. 1,891,654; Dec. 20.
Skemington, Edward T., et al. (See Foss, Leland L., assignor.)
Slee, Arthur L., San Francisco, Calif. Folding table. 1,891,734; Dec. 20.
Slominsky, Samuel E., Chelsea, Mass. Airplane propeller. 1,891,272; Dec. 20.
Small, Arthur R. (See Gilpin, G. G., and Small.)
Smellie, Donald G., Canton, assignor to The Hoover Company, North Canton, Ohio. Suction cleaner. 1,891,503; Dec. 20.
Smellie, Donald G., Canton, assignor to The Hoover Company, North Canton, Ohio. Suction cleaner. 1,891,504; Dec. 20.
Smith, Armand M. (See Smith, George N., assignor.)
Smith, David C., and W. P. Walden, Shreveport, Iowa. Spark plug. 1,891,693; Dec. 20.
Smith, Franklin S., New Haven, Conn. Transformer construction. 1,891,456; Dec. 20.
Smith, George N., Hamilton, Ontario, assignor of one-half to Armand M. Smith, Union, Ontario, Canada. Milking machine. 1,891,582; Dec. 20.
Smith-Lewis Fibre Can Corporation. (See Griffith, Dickinson E., assignor.)
Smith, Lewis R. (Receiver of Apco Mossberg Corporation.) (See Peirce, Thomas J. H., assignor.)
Smith, Robert M., Sioux Falls, S. Dak. Chalk line device. 1,891,786; Dec. 20.
Snell, Lester W., Alton, Ill. Bending tubes. 1,891,338; Dec. 20.
Snyder, L. A., et al. (See Howes, Raymond T., assignor.)
Societe de Recherches & d'Exploitations Petroliferes. (See Godel, Albert, assignor.)
Societe pour l'Exploitation des Brevets Gadoux et al. (See Gadoux, André, assignor.)
Sommers, Norman and A. P. Karr, Philadelphia, Pa. Repair leak compound. 1,891,506; Dec. 20.
Sparkes, Harry P., West Orange, N. J., assignor to Westinghouse Electric & Manufacturing Company. Method of and apparatus for calibrating electric instruments. 1,891,735; Dec. 20.
Spence, Cary F. (See Randolph, King M., assignor.)
Spengler, Johann P. (See Spengler, Peter J. and J. P.)
Spengler, Peter J. and J. P., Ostwine, Germany. Briquetting coal. 1,891,893; Dec. 20.
Sperry-Sun Well Surveying Company. (See Nichols, Charles R., assignor.)
Spikings, Albert R., Lake Placid Club, N. Y. Swingable garment hanger support. 1,891,844; Dec. 20.
Spitz, Max, and J. Srovnal, Liverce, Czechoslovakia; said Srovnal assignor to said Spitz. Folding kaiser roll. 1,891,845; Dec. 20.
Sporn, Philip, New York, N. Y. Metal pole for electric power systems. 1,891,736; Dec. 20.
Sprovnal, Josef. (See Spitz, M., and Sprovnal, assignor.)

Stacey, Ernest W., Beverly, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Reeling system. 1,891,273; Dec. 20.
Stahl, Frank E., assignor to The Columbus-McKinnon Chain Corporation, Tonawanda, N. Y. Hoisting apparatus. 1,891,883; Dec. 20.
Stamer, Morris, Newark, N. J. Cameo. 1,891,248; Dec. 20.
Stanbon, Charles P., Lynn, Mass. Signal alarm system. 1,891,507; Dec. 20.
Standard Oil Company of California. (See Chappell, Marvin L., assignor.)
Standard Oil Company of California. (See Craise, F. L., Vesper, and Griffith.)
Standard Process Corporation. (See Ericksson, Emil, assignor.)
Stanley, Nathan M., Dayton, Ohio. Liquid dispenser. 1,891,361; Dec. 20.
Stannard, Bruce M., Binghamton, assignor to The Brewer-Titchener Corporation, Cortland, N. Y. Vehicle seat adjuster. 1,891,457; Dec. 20.
Stark, Alexis, San Francisco, Calif. Dump-body. 1,891,458; Dec. 20.
Stauber, Anton, jr., Chicago, Ill. Diffused light lamp. 1,891,846; Dec. 20.
Stayton, John O., Chattanooga, Tenn. Stoker control. 1,891,319; Dec. 20.
Stephens, Oscar K., San Gabriel, Calif. Casing hanger for suspending and packing strings of casing. 1,891,508; Dec. 20.
Sterilek Company. (See Capocefalo, Edward A., assignor.)
Stewart, Albert D. (See Sheperd, Edward S., assignor.)
Stewart, Carlton D., Berkeley, Calif., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa. Electropneumatic signal system. 1,891,655; Dec. 20.
Stiegler, George, Cincinnati, Ohio. Marking machine. 1,891,656; Dec. 20.
Still, Carl, Firm. (See Wessel, Carl, assignor.)
Stilson, Herbert A., Chicago, Ill. Animal trap. 1,891,737; Dec. 20.
Stimuplant Laboratories, Inc. (See Cornell, Franklin M., assignor.)
Stroedter, Karl, assignor to the Firm: Gebr. Eickhoff, Maschinenfabrik, Bochum, Germany. Electrically actuating machinery. 1,891,847; Dec. 20.
Structural Gypsum Corporation. (See Mortimer, Charles G., assignor.)
Styslowsky, Andrew, Astoria, N. Y. Musical instrument. 1,891,848; Dec. 20.
Sulphide Corporation. (See Levy, Stanley I., assignor.)
Summers, Otto M., assignor to Frigidaire Corporation, Dayton, Ohio. Refrigerating apparatus. 1,891,249; Dec. 20.
Suzuki, Tsuneo, assignor to Zaidan Hojin Rikagaku Kenkyujo, Tokyo, Japan. Making projecting screens. 1,891,849; Dec. 20.
Svendsgaard, Sverre R., Marshfield, Oreg. Grass shears. 1,891,694; Dec. 20.
Svorstol, Ragnar I., Kent, Wash. Ski binder. 1,891,509; Dec. 20.
Swann Research, Inc. (See Huntress, E. H., McCullough, and Booth, assignors.)
Swann Research, Inc. (See Warren, T. E., and Durgin, assignors.)
Swartburg, B. Robert, et al. (See Siegel, Max, assignor.)
Swartz, Richey L., Canton, Ohio. Dispenser. 1,891,787; Dec. 20.
Symington, T. H. & Son, Inc. (See Symington, Thomas H., assignor.)
Symington, T. H., and Son, Inc. (See Symington, T. H., and Drenning, assignors.)
Symington, Thomas H., assignor to T. H. Symington & Son, Inc., Baltimore, Md. Truck bolster. 1,891,584; Dec. 20.
Symington, Thomas H., and P. R. Drenning, assignors, by mesne assignments, to T. H. Symington and Son, Inc., Baltimore, Md. Truck bolster. 1,891,583; Dec. 20.
Tanner, Guy C., Melrose Park, assignor to Friedberger-Aaron Manufacturing Company, Philadelphia, Pa. Undergarment. 1,891,884; Dec. 20.
Tapp, Ernest T. J., and H. Craske, London, England. Refuse vehicle. 1,891,885; Dec. 20.
Tatroe, Raymond F., Coffeyville, Kans. Calendar. 1,891,695; Dec. 20.
Täts, Paul, assignor to Telefunken Gesellschaft fur Drahtlose Telegraphie m. b. H., Berlin, Germany. Apparatus adapted to duplex telephony over a single carrier frequency. 1,891,362; Dec. 20.
Taylor, Edmund R. (See Anderson, C. N., Taylor, and Wright.)
Telefunken Gesellschaft fur Drahtlose Telegraphie m. b. H. (See Täts, Paul, assignor.)
Tessky, Karl, Esslingen-on-the-Neckar, Germany. Work piece guide for machine tools. 1,891,290; Dec. 20.
Textile Machine Works. (See Gastrich, G., and Richter, assignors.)
Theler, Frederick J., assignor to Cincinnati Grinders Incorporated, Cincinnati, Ohio. Grinding machine. 1,891,657; Dec. 20.
Thieler, Erich. (See von Girsewald, C., Siecke, and Thieler.)
Thomas, Adolph A., New York, N. Y. Talking movie. 1,891,738; Dec. 20.
Thomas, Frank B., Forest Hills Borough, assignor to Westinghouse Air Brake Company, Wilmerding, Pa. Locking means for rotatable elements. 1,891,658; Dec. 20.
Thomas, Horace T., Lansing, Mich., assignor to Reo Motor Car Company. Door dovetail. 1,891,289; Dec. 20.
Thomas, John. (See Shaw, Cecil.)
Thomas, Philip R. (See Sandeman, E. K., Thomas, and Grove.)
Thomas, Thomas R., Newark, N. J., assignor to Auto Research Corporation. Steering knuckle lubrication. 1,891,459; Dec. 20.
Thompson, Irving A., Milwaukee, Wis. Garment hanger. 1,891,250; Dec. 20.
Thomson, Alfred M. (See Mercadante, J., and Thomson.)
Tice Lock-Washer Manufacturing Co. (See Lillig, Nicholas R., assignor.)
Tidd, Edwin B., Chicago, Ill. Automatic evacuator for steam heating systems. 1,891,483; Dec. 20.
Tietz, Herman J., San Pedro, Calif. Portable electric cooker. Des. 88,719; Dec. 20.
Timken Roller Bearing Company, The. (See Cox, William P., assignor.)
Tomlinson, Charles H., assignor to The Tomlinson Coupler Company, Mansfield, Ohio. Coupling mechanism. 1,891,659; Dec. 20.
Tomlinson, Charles H., assignor to The Tomlinson Coupler Company, Mansfield, Ohio. Car coupling mechanism. 1,891,660; Dec. 20.
Tomlinson Coupler Company, The. (See Tomlinson, Charles H., assignor.)
Tompkins, John E., assignor to The Cleveland Wheelbarrow & Mfg. Co., Cleveland, Ohio. Column clamp. 1,891,484; Dec. 20.
Tracy, Michael J., St. Louis County, assignor to Pauly Jail Building Company, St. Louis, Mo. Window. 1,891,485; Dec. 20.
Trans-Lux Daylight Picture Screen Corporation. (See Newman, David F., assignor.)
Treadwell Engineering Company. (See Schreck, Hans L., assignor.)
Trent Process Corporation. (See Trent, Walter E., assignor.)
Trent, Walter E., assignor to Trent Process Corporation, New York, N. Y. Direct iron ore reduction. 1,891,850; Dec. 20.
Tribune Company, The. (See Wolf, Otto R., assignor.)
Trimble, Fred J., Maywood, Calif. Grinding wheel guard. 1,891,696; Dec. 20.
Troyer, Nelson, and P. E. Pearson, Seattle, Wash., assignors, by mesne assignments, to Continental Can Company, Inc., New York, N. Y. Can vacuumising and sealing machine. 1,891,851; Dec. 20.
Tucker Diesel Motor Co. (See Tucker, E. M., assignor.)
Tucker, Emmitt M., Sacramento, Calif., assignor to Tucker Diesel Motor Co., Ltd. Two-cycle gas engine. 1,891,510; Dec. 20.
Turek, James R. (See McCurdy, G. R., and Turek.)
Turner, George K., Elizabethtown, N. Mex. Chute. 1,891,852; Dec. 20.
Turner, William, Sheffield, England. Fluid pressure indicator for pneumatic tires and other inflated bodies. 1,891,853; Dec. 20.
Tuvin, Louis A., New York, N. Y. Food accessory compound. 1,891,697; Dec. 20.
Tuvin, Louis A., Great Neck, N. Y. Producing a food accessory compound. 1,891,698; Dec. 20.
Tyler Rubber Company. (See Lawrence, George L., assignor.)
Union Chimique Belge, Societe Anonyme. (See Piette, Ollvier, assignor.)
United Shoe Machinery Corporation. (See Duplessis, René E., assignor.)
United Shoe Machinery Corporation. (See Foster, Arthur T., assignor.)
United Shoe Machinery Corporation. (See Holmgren, Eric A., assignor.)
United Shoe Machinery Corporation. (See Kinney, Fay D., assignor.)
United Shoe Machinery Corporation. (See Ricks, Fred, assignor.)
United Shoe Machinery Corporation. (See Stacey, Ernest W., assignor.)
United Shoe Machinery Corporation. (See Winkley, Erastus E., assignor.)
United States Pipe & Foundry Company. (See Langenburg, Frederick C., assignor.)
Universal Optical Corporation. (See Searles, Wayne S., assignor.)
Urfer, Adolf, assignor to Pioneer Instrument Company, Incorporated, Brooklyn, N. Y. Fuse. 1,891,291; Dec. 20.
V. Girsewald, Conway, F., and H. Weidmann, Frankfort-on-the-Main, Germany, assignors to American Lurgi Corporation, New York, N. Y. Production of alkali phosphates from metal-phosphorus alloys. 1,891,293; Dec. 20.
Van Buren, Alfred D., New York, N. Y. Dispenser. 1,891,292; Dec. 20.
Van Horn, Junius B. (See Mendenhall, E., and Van Horn.)
Van Vliet, Paul D. (See Jordan, W. D., and Van Vliet.)
Van Wagner, Lester, Richmond Hill, N. Y. Sanitary paper roll. 1,891,629; Dec. 20.

Venzie, Frederick M., Philadelphia, Pa. Building construction. 1,891,511; Dec. 20.
Venzie, Frederick M., Philadelphia, Pa. Building structure. 1,891,512; Dec. 20.
Venzie, Frederick M., Philadelphia, Pa. Floor structure. 1,891,513; Dec. 20.
Ve Relle, William H., Philadelphia, Pa. Necktie. 1,891,660; Dec. 20.
Vesper, Howard G. (See Craise, F. L., Vesper, and Griffith.)
Vickers-Armstrongs Limited. (See Nasmith, John I., assignor.)
Vickers-Armstrongs Limited. (See Watson, John P., assignor.)
Vinten, William, London, England. Cinematographic film feed mechanism. 1,891,585; Dec. 20.
Viry, Pierre, Cuatellerault, France. Automatic machine heating by induction. 1,891,699; Dec. 20.
Vlahek, Charles D., East St. Louis, Ill. Method of and means for renewing valve seats. 1,891,400; Dec. 20.
Vogel, William M. (See Fitch, John, assignor.)
Voiney, Svatopluk C., New York, N. Y. Machine for punching films. 1,891,251; Dec. 20.
Von Girsewald, Conway, Baron, W. Siecke, Frankfort-on-the-Main, and E. Thieler, Bad Homborg Vor Der Hohe, Germany, assignors to American Lurgi Corporation, New York, N. Y. Facilitating the separation of the precipitate of arsenic sulpnide. 1,891,294; Dec. 20.
Wade, Francis W., Canon City, Colo. Combined lawn-mower and sprinkler. 1,891,854; Dec. 20.
Wahl Clipper Corporation. (See Wahl, Leo J., assignor.)
Wahl, Leo J., assignor to Wahl Clipper Corporation, Sterling, Ill. Electromagnetic clipper regulation. 1,891,486; Dec. 20.
Walden, Walter P. (See Smith, D. C., and Walden.)
Waldron, John, Corporation. (See Waldron, William H., assignor.)
Waldron, William H., assignor to John Waldron Corporation, New Brunswick, N. J. Printing macaine. 1,891,252; Dec. 20.
Wallace, Jeffrey J., assignor to Gullett Gin Company, Amite, La. Cotton tramper. 1,891,295; Dec. 20.
Wallis, William L., College Park, Ga. Smoker's stand or similar article. Des. 88,741; Dec. 20.
Wappler Electric Co. (See Mutscheller, Arthur, assignor.)
Warren, Thomas E., Ottawa, Ontario, Canada, and C. B. Durgin, Anniston, Ala., assignors to Swann Research, Inc. Making diphenyl. 1,891,514; Dec. 20.
Waterworth, Robert J., assignor to Prima Manufacturing Company, Inc., Sidney, Ohio. Washing machine. 1,891,339; Dec. 20.
Watrous, Willis H., Oakland, Calif. Apparatus for testing brakes. 1,891,631; Dec. 20.
Watson, John P., Westminster, assignor to Vickers-Armstrongs Limited, London, England. Apparatus for use in the fire control of antiaircraft guns. 1,891,397; Dec. 20.
Webb, Nelson W., assignor to Eastwood Wire Corporation, Belleville, N. J. Woven wire belt for paper-making machines. 1,891,788; Dec. 20.
Wegner, Clarence J., assignor to Perfection Burial Vault Company, Galion, Ohio. Vault lock. 1,891,296; Dec. 20.
Weidmann, Hans. (See v. Girsewald, Conway, F., and Weidmann.)
Weinstein, Loen, St. Louis, Mo. Wear-plate for shoe-heels and the like. 1,891,515; Dec. 20.
Wenger, Samuel, New York, N. Y. Automatic railroad crossing signal. 1,891,739; Dec. 20.
Wenner, Charles W., et al. (See Wenner, Ira R., assignor.)
Wenner, Ira R., Sycamore, assignor to A. E. Park, Bucyrus, and C. W. Wenner, Sycamore, Ohio. Mail box. 1,891,487; Dec. 20.
Wessel, Carl, Essen-Borbeck, assignor to the Firm Carl Still, Recklinghausen, Germany. Heating coke ovens. 1,891,700; Dec. 20.
Westerman, George F., Ansonia, assignor to The American Brass Company, Waterbury, Conn. Extruded shapes with interlocked joints and method of making. 1,891,740; Dec. 20.
Western Reserve Air Motors Corporation. (See Schlenker, Charles E., assignor.)
Westinghouse Air Brake Company. (See Brown, Donald F., assignor.)
Westinghouse Air Brake Company, The. (See Cook, Earle S., assignor.)
Westinghouse Air Brake Company, The. (See Down, Sidney G., assignor.)
Westinghouse Air Brake Company, The. (See Farmer, Clyde C., assignor.)
Westinghouse Air Brake Company. (See Hewitt, Ellis E., assignor.)
Westinghouse Air Brake Company, The. (See Stewart, Carlton D., assignor.)
Westinghouse Air Brake Company, The. (See Thomas, Frank B., assignor.)
Westinghouse Electric & Manufacturing Company. (See Campbell, Clarence B., assignor.)
Westinghouse Electric & Manufacturing Company. (See Higbee, Ray P., assignor.)
Westinghouse Electric & Manufacturing Company. (See Laffoon, Carthrae M., assignor.)
Westinghouse Electric & Manufacturing Company. (See Schmidt, Henry F., assignor.)
Westinghouse Electric & Manufacturing Company. (See Sparkes, Harry P., assignor.)
Westphalen, Leonard. (See Clark, William A., assignor.)
Weymouth, Harry C., assignor to Pittsburgh Equitable Meter Company, Pittsburgh, Pa. Piston type meter. 1,891,461; Dec. 20.
Wheeler, Omar A., Portland, Oreg. Tire reclaiming machine. 1,891,789; Dec. 20.
White, Charles H., assignor to Deere & Company, Moline, Ill. Multiple row planter. 1,891,488; Dec. 20.
White, Fred E., and A. Ruttiman, Gardner, assignors to Florence Stove Company, Boston, Mass. Automatic heater for water and other purposes. 1,891,855; Dec. 20.
Whitin Machine Works. (See Honnors, Oscar L., assignor.)
Whitin Machine Works. (See Martin, Fay H., assignor.)
Whitten, Vernon H. (See May, C. C., and Whitten.)
Wickwire Spencer Steel Company. (See Jaquith, Eugene H., assignor.)
Widney, Stanley W., Philadelphia, Pa., assignor to Ride-O-Graph Corporation. Method of and apparatus for testing the riding qualities of vehicles. 1,891,613; Dec. 20.
Wiegand, Frederick B., Cleveland, and B. J. Schwendt, Lakewood, Ohio. Cable outlet. 1,891,253; Dec. 20.
Wiepert, George D., assignor to Sargent & Company, New Haven, Conn. Shelf or the like. Des. 88,720; Dec. 20.
Wild, Charles H., Baltimore, Md., assignor to Burt Machine Company, Inc. Case filling machine. 1,891,516; Dec. 20.
Wilderman, Meyer, Monte Carlo, Monaco, France, assignor to The American Wilderman Porous Ebonite Company, Philadelphia, Pa. Spreading apparatus. 1,891,790; Dec. 20.
Willheim, William, New York, N. Y. Textile fabric or similar article. Des. 88,721; Dec. 20.
Willheim, William, New York, N. Y. Textile fabric or similar article. Des. 88,722; Dec. 20.
Willheim, William, Co. (See Gottesman, Joseph M., assignor.)
Willheim, William, Co. (See Overmeyer, John, assignor.)
Willheim, William, Co. (See Roberson, Willard D., assignor.)
Williams, Estelle P. (See Williams, Villor P., assignor.)
Williams, Eugene B., Fort Pierce, Fla. Gyroscopic instrument. 1,891,856; Dec. 20.
Williams, Leroy E., assignor to Highway Trailer Company, Edgerton, Wis. Temporary load support for semitrailers. 1,891,517; Dec. 20.
Williams, Louis N. D., Ogontz, Pa., assignor to Scott and Williams, Incorporated, New York, N. Y. Transfer mechanism for circular knitting machines. 1,891,857; Dec. 20.
Williams, Villor P., assignor, by mesne assignments, to Estelle P. Williams, Baltimore, Md. Universal joint with shroud. 1,891,858; Dec. 20.
Willshaw, Harry, assignor to Dunlop Rubber Company Limited, Birmingham, England. Manufacture of pneumatic tire casings and apparatus therefor. 1,891,489; Dec. 20.
Willys-Overland Company, The. (See Baker, Arthur J., assignor.)
Wilson-Jones Company. (See Rupf, Frank E., assignor.)
Winkler, Kaspar, Zurich, Switzerland. Manufacturing concrete. 1,891,701; Dec. 20.
Winkley, Erastus E., Lynn, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Method of and system for tempering materials. 1,891,274; Dec. 20.
Winship, Ralph B., Montreal, Quebec, Canada. Car roof. 1,891,741; Dec. 20.
Winter, Ramsay M., Norton-on-Tees, assignor to Imperial Chemical Industries, Limited, London, England. Production of carbon and hydrogen chloride. 1,891,859; Dec. 20.
Wintringham, William T., Brooklyn, N. Y., assignor to American Telephone and Telegraph Company. Variable gain circuit device. 1,891,297; Dec. 20.
Wire Novelty Manufacturing Company, The. (See Domkee, John H., assignor.)
Wired Radio, Inc. (See Duncan, Robert D., jr., assignor.)
Wise, Anthony G., Beverly Hills, assignor to Metro-Goldwyn-Mayer Corporation, Culver City, Calif. Apparatus for printing continuous films. 1,891,398; Dec. 20.
Wiseman, Harry A., Hamanskraal, Transvaal, Union of South Africa. Steering or turning lamp arrangement for motor vehicles. 1,891,791; Dec. 20.
Wittenberg, Herbert, Schonberg, near Kronberg-in-Taunus, Germany, assignor to American Lurgi Corporation, New York, N. Y. Sintering apparatus. 1,891,298; Dec. 20.
Wochner, Henry, assignor to Bear Manufacturing Company, Rock Island, Ill. Automobile frame straightening machine. 1,891,490; Dec. 20.
Woerner, Eugen, Feuerbach, Germany. Pressure-operated valve. 1,891,586; Dec. 20.
Wolf, Otto R., River Forest, assignor to The Tribune Company, Chicago, Ill. Printing press. 1,891,614; Dec. 20.
Wolff, Hugo. (See Nawiasky, P., Honold, and Wolff.)
Wood, Cyrus B., Washington, D. C. Germicide. 1,891,462; Dec. 20.
Wood, William H., South Euclid, Ohio. Glass working apparatus. 1,891,792; Dec. 20.

Woolf, Isaac, Providence, R. I. Chimney vent. 1,891,860; Dec. 20.
Woolson, Lionel M., assignor to Packard Motor Car Company, Detroit, Mich. Internal combustion engine. 1,891,321; Dec. 20.
Wright, Ernest C., Belvedere, England. Device for bending tubes, pipes, and the like. 1,891,861; Dec. 20.
Wright, Esmond P. G., Aldwych, London, England, and L. B. Haigh, Paris, France, assignor to International Standard Electric Corporation, New York, N. Y. Automatic telephone system. 1,891,254; Dec. 20.
Wright, Kirk K., Kenmore, N. Y., assignor to R. G. Wright & Company, Buffalo, N. Y. Reenforcement for heat interchangers. 1,891,518; Dec. 20.
Wright, R. G., & Company. (See Wright, Kirk K., assignor.)
Wright, Sumner B. (See Anderson, C. N., Taylor, and Wright.)
Wright, Wilson, Russell Springs, Kans. Automatic compression regulator. 1,891,587; Dec. 20.
Wrightsman, Philip G., Chester, Pa., assignor to E. I. du Pont de Nemours & Company, Wilmington, Del. Nitrated carbohydrate explosives and producing the same. 1,891,255; Dec. 20.
Yarrow, Harold E., Glasgow, Scotland. Water tube boiler. 1,891,862; Dec. 20.
Yawman & Erbe Manufacturing Company, The. (See Furlong, Roland A., assignor.)
Yawman & Erbe Manufacturing Company, The. (See Furlong, R. A., and Clark, assignors.)
Yock, Francis C., Portland, Oreg. Drying rack for washing and ironing. 1,891,463; Dec. 20.
Young, Lloyd W. (See Oldham, S. R., and Young.)
Youngstown Steel Car Corporation. (See Nyberg, Olaf J., assignor.)
Zaidan Hojin Rikagaku Kenkyujo. (See Okochi, M., and Okoshi, assignors.)
Zaidan Hojin Rikagaku Kenkyujo. (See Suzuki, Tsuneo, assignor.)
Zeidler Concrete Products Machinery Company. (See Schultz, Alfred W., assignor.)
Zeiss, Firm, Carl. (See Ellinger, P., and Hirt, assignors.)
Zimmers, Joseph B., et al. (See Herron, Ollie L., assignor.)
Zimmers, Wilma M. (See Herron, Ollie L., assignor.)

LIST OF INVENTIONS

FOR WHICH

PATENTS WERE ISSUED ON THE 20TH DAY OF DECEMBER, 1932

NOTE.—Arranged in accordance with the first significant character or word of the name (in accordance with city and telephone directory practice). Includes patents, reissues, and designs.

Acetone, Production of. H. Meerwein and H. Morschel. 1,891,333; Dec. 20.
Acids and making same, New substituted phenol-carboxylic. L. Laska and O. Haller. 1,891,677; Dec. 20.
Aeroplane. P. Nachtsheim. 1,891,650; Dec. 20.
Air conditioning device. J. H. and F. A. Kitchen. 1,891,327; Dec. 20.
Air conditioning system. W. D. Jordan and P. D. Van Vliet. 1,891,713; Dec. 20.
Aircraft control. H. A. Meyer. 1,891,237; Dec. 20.
Aircraft landing sail, Skimming. H. Hein. 1,891,309; Dec. 20.
Aircraft propeller. J. R. Gillis and F. P. Kaiser. 1,891,384; Dec. 20.
Airplane. R. E. Guthier. 1,891,812; Dec. 20.
Airplane. C. C. Jones. Des. 88,726; Dec. 20.
Airplane. J. J. Leray. 1,891,354; Dec. 20.
Airplane propeller. S. E. Slonimsky. 1,891,272; Dec. 20.
Airplanes, Pneumatic suspension for. G. L. R. J. Messier. Re18,696; Dec. 20.
Airplanes, Safety wing for. C. H. Gunn. 1,891,261; Dec. 20.
Air washing, Sand blast. F. J. Hull. 1,891,625; Dec. 20.
Alarm signal and photographic apparatus. M. and E. T. Rothman. 1,891,242; Dec. 20.
Alarm system, Signal. C. P. Stanbon. 1,891,507; Dec. 20.
Alcohol, Apparatus for the manufacture of water-free ethyl. A. Gorhan. 1,891,593; Dec. 20.
Alkali phosphates from metal-phosphorus alloys, Production of. C., F. v. Girsewald and H. Weidmann. 1,891,293; Dec. 20.
Alloy. W. H. Bassett, jr., and R. H. Leach. 1,891,495; Dec. 20.
Alloys, Treatment of aluminum. N. B. Lane and W. T. Ennor. 1,891,549; Dec. 20.
Alumina, Producing. A. W. Scheidt. 1,891,608; Dec. 20.
Aluminum from waste coal products, Producing. A. W. Scheidt. 1,891,609; Dec. 20.
Anchor, Earth. A. B. Chance. Re18,697; Dec. 20.
Animal trap. H. A. Stilson. 1,891,737; Dec. 20.
Apparel, Wearing. E. Schiaparelli. 1,891,610; Dec. 20.
Arsenic sulphide, Facilitating the separation of the precipitate of. C., Baron von Girsewald, W. Siecke, and E. Thieler. 1,891,294; Dec. 20.
Article of manufacture in a combined radio cabinet and sound amplifying device. D. L. Brooks. 1,891,616; Dec. 20
Asphalt, Making. P. C. Keith, jr. 1,891 890; Dec. 20.
Astronomical star-dome. B. C. Metzner. Des. 88,727; Dec. 20.
Automatic control switch. M. E. Henning. 1,891,537; Dec. 20.
Automatic veneer table. S. C. Norman. 1,891,687; Dec. 20.
Automobile. A. J. Baker. Des. 88,723; Dec. 20.
Automobile frame straightening machine. H. Wochner. 1,891,490; Dec. 20.
Automobile lunch table. E. M. Pendleton. 1,891,834; Dec. 20.
Axle and crank pin and constructing the same, Locomotive. C. J. Scudder. 1,891,505; Dec. 20.
Bacterial product. F. M. Cornell. 1,891,750; Dec. 20.
Bag: *See*—
Garment bag.
Bank protective system and means. P. R. Drury. 1,891,872; Dec. 20.
Barber's comb. J. Cases and C. Claps. 1,891,303; Dec. 20.
Basket, Display. F. E. Everson. 1,891,876; Dec. 20.
Bearing, Roller. W. P. Cox. 1,891,753; Dec. 20.
Bed, Invalid. A. S. Kushner. 1,891,599; Dec. 20.
Belt for paper-making machines, Woven wire. N. W. Webb. 1,891,788; Dec. 20.
Bench and table, Combination. R. Brenholts. 1,891,665; Dec. 20.
Bin: *See*—
Grain bin.
Binder clip. L. E. Baltzley. 1,891,494; Dec. 20.
Binder, Ski. R. I. Svorstol. 1,891,509; Dec. 20.
Bird figure. L. D. Grubbs. Des. 88,734; Dec. 20.
Block: *See*—
Composite friction block.
Block and the construction of floors and the like, Building. K. E. W. Jadgmann. 1,891,597; Dec. 20.
Bloomers for women. M. D. Neilson. 1,891,774; Dec. 20.
Blow-out preventer attachment. J. H. Nicks and E. E. Mosher. 1,891,685–6; Dec. 20.
Board: *See*—
Building board. Display board.
Boat, Hydraulically propelled life. C. M. Motte. 1,891,828; Dec. 20.
Boat, Inflatable. A. V. Anderson. 1,891,491; Dec. 20.
Boat, Inflatable pneumatic. A. V. Anderson. 1,891,492; Dec. 20.
Bodkin for drawing material through hollow hems. H. Heidrich. 1,891,815; Dec. 20.
Boiler: *See*—
Water tube boiler.
Bolster, Truck. T. H. Symington and P. R. Drenning. 1,891,583; Dec. 20.
Bolster, Truck. T. H. Symington. 1,891,584; Dec. 20.
Bolt and nut lock. N. R. Lillig. 1,891,563; Dec. 20.
Bookrack. W. E. Haskin. 1,891,814; Dec. 20.
Bookrack. E. H. Jaquith. 1,891,420; Dec. 20.
Bottle. W. M. McCormick. Des. 88,737; Dec. 20.
Bowsprit of a sailboat, Mechanism for angular adjustment of the. G. I. Rockwood. 1,891,555; Dec. 20.
Box: *See*—
Mail box. Stuffing box.
Box. W. J. DeWitt. 1,891,801; Dec. 20.
Box and carton, Cardboard or like. F. G. Robinson. 1,891,839; Dec. 20.
Box making machinery, Paper. G. H. Broderick. 1,891,367; Dec. 20.
Brake: *See*—
Fluid pressure brake. Pressure brake.
Hydraulic brake. Reverse brake.
Brake. C. I. Frantz. 1,891,805; Dec. 20.
Brake beam support. T. L. Burton. 1,891,523; Dec. 20.
Brake testing apparatus. D. C. Scott. 1,891,652; Dec. 20.
Brake mechanism. J. Erbel. 1,891,875; Dec. 20.
Braking mechanism for rotary oil well drilling apparatus. E. J. Le Compte and C. A. Harrisson. 1,891,329; Dec. 20.
Brakes, Apparatus for testing. W. H. Watrous. 1,891,631; Dec. 20.
Brassière. M. Donnet. 1,891,871; Dec. 20.
Brazing rod. O. M. Krembs. 1,891,546; Dec. 20.
Bridge suspension strap, Reversible. H. D'Oller, jr. 1,891,756; Dec. 20.
Bristling macaline. R. Marogg. 1,891,236; Dec. 20.
Bromine from sea water and the like, Recovering. J. J. Grebe. 1,891,888; Dec. 20.
Brooder. C. C. Grimes. 1,891,811; Dec. 20.
Brooder. G. Portela. 1,891,838; Dec. 20.
Brush and scraper, Tongue. C. P. Barrett. 1,891,864; Dec. 20.
Brush mechanism for dynamo-electric machines. F. Carlstedt. 1,891,634; Dec. 20.
Brush, Rotary tooth. A. F. Errington and G. L. Headley. 1,891,470; Dec. 20.
Buckle, Belt. W. Becker. 1,891,519; Dec. 20.
Building and arch construction, Long span. L. Davidson. 1,891,346; Dec. 20.
Building board. E. S. Sheperd. 1,891,732; Dec. 20.
Building construction. F. M. Venzie. 1,891,511; Dec. 20.
Building structure. F. M. Venzie. 1,891,512; Dec. 20.
Burner: *See*—
Oil burner.
Bushing packing. F. E. Payne. 1,891,725; Dec. 20.
Button loop. J. H. Domkee. 1,891,223; Dec. 20.
Cabinet, Display. H. K. T. Sherwood and J. G. Moore. 1,891,580; Dec. 20.
Cabinet, Display. H. K. T. Sherwood and J. G. Moore. 1,891,581; Dec. 20.
Cabinet, Illuminating. F. W. Borden. 1,891,498; Dec. 20.
Cabinet, Visible index. R. A. Furlong. 1,891,381–2; Dec. 20.
Cable, Multiconnection hydraulic. H. Ernst. 1,891,670; Dec. 20.
Cable outlet. F. B. Wiegand and B. J. Schwendt. 1,891,253; Dec. 20.
Cable reel, Metal. E. N. Hescock. 1,891,709; Dec. 20.
Cable, Submarine. E. K. Sandeman, P. T. Thomas, and S. H. Grove. 1,891,244; Dec. 20.
Calendar. R. F. Tatroe. 1,891,695; Dec. 20.
Cameo. M. Stamer. 1,891,248; Dec. 20.
Camera and sound recording apparatus, Combined photographic. R. G. Fear. 1,891,277; Dec. 20.
Camera, Motion picture. A. C. Hayden. 1,891,262; Dec. 20.
Can: *See*—
Paper or fiber can.
Can and sealing same. H. Schibsted. 1,891,452; Dec. 20.
Can ends containing a sealing compound, Apparatus for drying. F. Krueger and H. Douglass. 1,891,646; Dec. 20.
Can filling machine. M. L. Dodge. 1,891,870; Dec. 20.

Can filling machine. N. C. Nicholson. 1,891,830; Dec. 20.
Can vacuumizing and sealing machine. N. Troyer and P. E. Pearson. 1,891,851; Dec. 20.
Cap, Bottle. M. A. Bobrick. 1,891,794; Dec. 20.
Car coupling mechanism. C. H. Tomlinson. 1,891,660; Dec. 20.
Car, Railway. G. G. Gilpin and A. E. Small. 1,891,228; Dec. 20.
Carbon and hydrogen chloride, Production of. R. M. Winter. 1,891,859; Dec. 20.
Carbon monoxide, Detecting the presence of. G. Ljunggren. 1,891,429; Dec. 20.
Carbonaceous substances, Activation of. A. Godel. 1,891,407; Dec. 20.
Carburetor. R. M. Heintz. 1,891,474; Dec. 20.
Carburetor. L. C. Oswald. 1,891,238; Dec. 20.
Cards, Deck of playing. W. Hayes. Des. 88,709; Dec. 20.
Carrier for electromagnetic pick-up. L. F. Curtis. 1,891,369; Dec. 20.
Case: *See*—
Eyeglass case.
Case filling machine. C. H. Wild. 1,891,516; Dec. 20.
Casing hanger for suspending and packing strings of casing. O. K. Stephens. 1,891,508; Dec. 20.
Castings with tapped holes therein, Producing. R. V. Burdick and L. R. Krug. 1,891,867; Dec. 20.
Cellulose acetate and the product thereof, Highly polymerizing. A. Nathansohn. 1,891,829; Dec. 20.
Cellulose, Producing. S. E. Seaman. 1,891,337; Dec. 20.
Cellulosic plastics, Coloring. E. J. Bowley. 1,891,520; Dec. 20.
Cementitious articles, Method and apparatus for making. A. Henderson. 1,891,764; Dec. 20.
Chair and writing desk, Combination. E. M. Runkles. 1,891,691; Dec. 20.
Chalk line device. R. M. Smith. 1,891,786; Dec. 20.
Channeling machine. F. Ricks. 1,891,271; Dec. 20.
Charging apparatus for metal-heating furnaces and the like. J. R. George. 1,891,531; Dec. 20.
Charging means for blast furnaces. K. F. Juengling. 1,891,821; Dec. 20.
Chimney vent. I. Woolf. 1,891,860; Dec. 20.
Chopper: *See*—
Meat chopper.
Chute. G. K. Turner. 1,891,852; Dec. 20.
Circuit arrangement for telegraphic apparatus. L. Mazza and R. Regnoni. 1,891,564; Dec. 20.
Circuit breaker and burglar alarm, Electric. D. Coyne. 1,891,751; Dec. 20.
Circuit controller, Electric. D. Coyne. 1,891,752; Dec. 20.
Circuit device, Variable gain. W. T. Wintringham. 1,891,297; Dec. 20.
Circuits, Timing toll telephone. H. W. Grimm. 1,891,594; Dec. 20.
Clamp: *See*—
Column clamp.
Cleaner: *See*—
Suction cleaner. Vacuum cleaner.
Cleaning and gas-freezing hydrocarbon storage tanks. J. W. Fitz Gerald. 1,891,592; Dec. 20.
Clip: *See*—
Binder clip.
Clipper regulation, Electromagnetic. L. J. Wahl. 1,891,486; Dec. 20.
Clock. W. D. Johnson. 1,891,281; Dec. 20.
Clock, Electrically wound. H. Junghans. 1,891,282; Dec. 20.
Closure, Collapsible tube. L. R. Ingram. 1,891,596; Dec. 20.
Closure for collapsible tubes and the like. W. W. Haslett, C. Z. First, and M. R. Goodman. 1,891,280; Dec. 20.
Closure means for collapsible tubes. J. G. Gordon. 1,891,623; Dec. 20.
Coal briquette. I. Rosenwald. 1,891,450; Dec. 20.
Coal, Briquetting. P. J. and J. P. Spengler. 1,891,893; Dec. 20.
Coal cutting machine. N. D. Levin. 1,891,561; Dec. 20.
Coal cutting machine. N. D. Levin. 1,891,562; Dec. 20.
Coat making. M. Senzer. 1,891,692; Dec. 20.
Coating. H. Bengston. 1,891,703; Dec. 20.
Coating composition. J. Felter. 1,891,878; Dec. 20.
Cock. V. E. Flodin. 1,891,759; Dec. 20.
Coffee extracts, Making liquid. W. W. Giffen and C. W. Carter. 1,891,383; Dec. 20.
Coil, Inductance. P. F. Scofield. 1,891,481; Dec. 20.
Coke, Apparatus for dry cooling. O. Piette. 1,891,886; Dec. 20.
Column clamp. J. E. Tompkins. 1,891,484; Dec. 20.
Comb: *See*—
Barber's comb. Fountain Comb.
Compartment. O. M. Otte. 1,891,894; Dec. 20.
Composite friction block. I. J. Novak. 1,891,723; Dec. 20.
Compression regulator, Automatic. W. Wright. 1,891,587; Dec. 20.
Compressor, Index card. E. C. Bullock. 1,891,522; Dec. 20.
Concrete. C. L. Norton. 1,891,269; Dec. 20.
Concrete articles, Coloration of. C. L. Norton. 1,891,479; Dec. 20.
Concrete floors, Apparatus for laying. H. W. Roos. 1,891,557; Dec. 20.
Concrete, Manufacturing. K. Winkler. 1,891,701; Dec. 20.
Concrete unit for wall construction. V. V. Pittman. 1,891,837; Dec. 20.
Condenser, Electrical. J. C. Davidson. 1,891,345; Dec. 20.
Condensing apparatus. C. A. Rainey. 1,891,607; Dec. 20.
Container. N. S. Ellsworth. Des. 88,732; Dec. 20.
Container for shaving soap. O. G. Roura. 1,891,243; Dec. 20.
Control device for alarm mechanism. C. P. Howard. 1,891,540–1; Dec. 20.
Control device for heating apparatus. L. W. Eggleston. 1,891,758; Dec. 20.
Control device for switch mechanism, Temporary. M. B. Henning. 1,891,536; Dec. 20.
Control for hot and cold air in furnaces, Reversible. A. M. Carder. 1,891,796; Dec. 20.
Control method and apparatus. R. P. Brown. 1,891,617; Dec. 20.
Control system for motor vehicles. H. E. Lippert. Re18,699; Dec. 20.
Cooker, Portable electric. H. J. Tietz. Des. 88,719; Dec. 20.
Cooling system for internal combustion motors, Liquid circulating. O. A. Ross. 1,891,480; Dec. 20.
Corner construction for frames. A. T. Potter. 1,891,778; Dec. 20.
Cotton tramper. J. J. Wallace. 1,891,295; Dec. 20.
Coupling: *See*—
Rail coupling. Trailer coupling.
Shaft coupling.
Coupling. P. D. Elkins. 1,891,874; Dec. 20.
Coupling mechanism. C. H. Tomlinson. 1,891,659; Dec. 20.
Cover, Metallic tire. A. C. Ramsay and R. T. Bagby. 1,891,727; Dec. 20.
Crate, Folding. E. C. Bottrell. 1,891,342; Dec. 20.
Creel. F. H. Martin. 1,891,432–3; Dec. 20.
Crossing signal, Automatic railroad. S. Wenger. 1,891,739; Dec. 20.
Crowning device for expansion joints. A. C. Fischer. 1,891,897; Dec. 20.
Cruiser, Sectional. C. W. Neill. 1,891,602; Dec. 20.
Culture pearls, Production of perfectly spherical. K. Mikimoto. Re18,700; Dec. 20.
Curtain fixtures. W. C. and G. M. Kenney. 1,891,881; Dec. 20.
Cutting and creasing presses for paper, cardboard, or the like. J. I. Nasmith. 1,891,391; Dec. 20.
Cylinder block construction. A. Gadoux. 1,891,638; Dec. 20.
Cylinder mounting for printing presses. E. Ericksson. 1,891,405; Dec. 20.
Damper. L. C. Lancaster. 1,891,600; Dec. 20.
Dental impression device. N. Meurer. 1,891,649; Dec. 20.
Device for use in blowing smoke rings. M. S. Banks. 1,891,466; Dec. 20.
Diaryl-1, 2, 5, 6-anthraquinone-dithiazole bodies. W. L. Rintelman and R. J. Goodrich. 1,891,449; Dec. 20.
Diaryl-1, 2, 5, 6-anthraquinone-dithiazole bodies, Preparing. W. L. Rintelman and R. J. Goodrich. 1,891,447; Dec. 20.
Die-casting machine. N. Lester. 1,891,894; Dec. 20.
Diphenyl, Making. T. E. Warren and C. B. Durgin. 1,891,514; Dec. 20.
Diphenyl-1, 2, 5, 6-anthraquinon-dithiazole bodies, Purifying. W. L. Rintelman. 1,891,448; Dec. 20.
Dipper-stick control for excavating machines. C. L. George. 1,891,351; Dec. 20.
Dispenser. R. L. Swarts. 1,891,787; Dec. 20.
Dispenser. A. D. Van Buren. 1,891,292; Dec. 20.
Dispenser, Drinking cup. E. Huff. 1,891,542; Dec. 20.
Dispenser, Face powder. J. Hofmeister. 1,891,819; Dec. 20.
Dispensing device. L. M. Narbo. 1,891,315; Dec. 20.
Display board, Accident. M. R. Simon. 1,891,654; Dec. 20.
Display card or similar article. S. H. Goldberg. Des. 88,733; Dec. 20.
Door attachment for vehicles. J. S. Bedford. 1,891,496; Dec. 20.
Door dovetail. H. T. Thomas. 1,891,289; Dec. 20.
Door operating mechanism. H. Rowntree. 1,891,359; Dec. 20.
Dresser, Vanity. H. S. Meldahl. 1,891,680; Dec. 20.
Drill: *See*—
Percussive drill. Rock drill.
Drip-catching attachment for bottles. J. A. Pipkin. 1,891,892; Dec. 20.
Drying rack for washing and ironing. F. C. Yock. 1,891,463; Dec. 20.
Dump-body. A. Stark. 1,891,458; Dec. 20.
Dyestuffs of the diphthaloylcarbazole series, Vat. P. Mawiasky, E. Honold, and H. Wolff. 1,891,684; Dec. 20.
Egg powder, Preparing. F. H. Clickner. 1,891,887; Dec. 20.
Egg yolk substitute for tanning. O. Röhm. 1,891,363; Dec. 20.
Ejector package. A. G. Hildebrand. 1,891,817; Dec. 20.
Electric instruments, Method of and apparatus for calibrating. H. P. Sparkes. 1,891,735; Dec. 20.
Electric light attachment set. A. J. Barocas. 1,891,841; Dec. 20.
Electric switch. J. M. Cleveland. 1,891,799; Dec. 20.
Electric wall heater. R. Grierson. 1,891,595; Dec. 20.

Electrical apparatus. J. W. Allen. 1,891,702; Dec. 20.
Electrical apparatus. R. P. Lansing. 1,891,676; Dec. 20.
Electrical impulses, Method of and apparatus for recording and reproducing. R. E. Rutherford. 1,891,780; Dec. 20.
Electrically actuating machinery. K. Stroedter. 1,891,847; Dec. 20.
Electrode, Discharge tube. F. Hotchner. 1,891,475; Dec. 20.
Elevating and rotating device. R. F. Parks. 1,891,832; Dec. 20.
Elevator. E. L. Baker. 1,891,300; Dec. 20.
Elevator control system. E. L. Gale. 1,891,350; Dec. 20.
Elevator control system. R. P. Higbee. 1,891,710; Dec. 20.
Engine: *See*—
Gas engine. Internal combustion engine.
Engine starting device. W. S. Ceablom. 1,891,868; Dec. 20.
Ethanes as plasticizers, Unsymmetrical diaryl. W. E. Lawson. 1,891,601; Dec. 20.
Evacuator for steam heating systems, Automatic. E. B. Tidd. 1,891,483; Dec. 20.
Evaporator. F. W. Hicks. 1,891,538; Dec. 20.
Excavator, Shovel type. C. L. George. 1,891,352; Dec. 20.
Exercising apparatus. F. L. Dyer. 1,891,347; Dec. 20.
Explosive composition. E. H. Burrows. 1,891,500; Dec. 20.
Explosives and producing the same, Nitrate carbohydrate. P. G. Wrightsman. 1,891,255; Dec. 20.
Extractor: *See*—
Shaft extractor.
Extruded shapes with interlocked joints and method of making. G. F. Westerman. 1,891,740; Dec. 20.
Eyeglass case. S. L. Lachter. 1,891,238; Dec. 20.
Fastener, Lock. L. Frank. 1,891,637; Dec. 20.
Feeder, Calf. N. D. Pittson. 1,891,575; Dec. 20.
Feeding and cutting device, Positive. E. A. Capocefalo. 1,891,524; Dec. 20.
Feeding device. J. H. Fulmer. 1,891,307; Dec. 20.
Fertilizer distributor. C. C. May and V. H. Whitten. 1,891,565; Dec. 20.
Filing machine. W. Anderson. 1,891,742; Dec. 20.
Film feed mechanism, Cinematographic. W. Vinten. 1,891,585; Dec. 20.
Film phonograph. J. A. Maurer. 1,891,387; Dec. 20.
Films, Apparatus for printing continuous. A. G. Wise. 1,891,398; Dec. 20.
Filter press. P. W. Prutzman. 1,891,396; Dec. 20.
Fire extinguishing compound. A. J. Gilleo. 1,891,673; Dec. 20.
Flame, Producing a heating or welding. S. W. Miller. 1,891,814; Dec. 20.
Fish, Apparatus for transporting live. H. G. Robbins. 1,891,779; Dec. 20.
Flash light and medical heater. A. Breusch. 1,891,746; Dec. 20.
Floor structure. F. M. Venzie. 1,891,513; Dec. 20.
Floor structure and slabs therefor. A. Henderson. 1,891,763; Dec. 20.
Fluid pressure brake. C. C. Farmer. 1,891,671; Dec. 20.
Fluid pressure brake. F. B. Farmer. 1,891,672; Dec. 20.
Fluid pressure indicator for pneumatic tires and other inflated bodies. W. Turner. 1,891,853; Dec. 20.
Folder, Advertising. M. G. Koehrman. 1,891,353; Dec. 20.
Folder, File. F. E. Rupf. 1,891,558; Dec. 20.
Folding table. A. L. Slee. 1,891,734; Dec. 20.
Food accessory compound. L. A. Tuvin. 1,891,697; Dec. 20.
Food accessory compound, Producing a. L. A. Tuvin. 1,891,698; Dec. 20.
Food stuffs such as meat and fish, Apparatus for treating. R. Eibe. 1,891,873; Dec. 20.
Form, Bobby. S. David. 1,891,589; Dec. 20.
Fountain comb. P. Fotsa. 1,891,471; Dec. 20.
Frame for handbags and like containers. L. Pawlicek. 1,891,833; Dec. 20.
Frame for panels, Trim. U. K. Johannsen. 1,891,421; Dec. 20.
Frames, Making trim. U. K. Johannsen. 1,891,422; Dec. 20.
Framework for the wings of aeroplanes and for other objects. G. L. R. J. Messier. 1,891,681; Dec. 20.
Freezing apparatus. A. L. Kronquest. 1,891,425; Dec. 20.
Fuel into a combustion chamber, Feeding finely comminuted. C. M. Buck. 1,891,886; Dec. 20.
Fuels, Gasifying liquid. G. L. Reichhelm. 1,891,444; Dec. 20.
Fuels, Gasifying liquid. G. L. Reichhelm. 1,891,446; Dec. 20.
Furnace. D. W. Norris. Des. 88,716; Dec. 20.
Furnace feeding device. P. R. Hord. 1,891,311; Dec. 20.
Fuse. A. Urfer. 1,891,291; Dec. 20.
Garment. M. B. Blehert. 1,891,400; Dec. 20.
Garment attachment. M. E. Risacher. 1,891,729; Dec. 20.
Garment bag. K. M. Randolph. 1,891,689; Dec. 20.
Garment hanger. I. A. Thompson. 1,891,250; Dec. 20.
Gas cutting machine. J. L. Anderson. 1,891,880; Dec. 20.
Gas engine, Two-cycle. E. M. Tucker. 1,891,510; Dec. 20.
Gas heater. G. H. McFadden. Des. 88,714; Dec. 20.
Gasket. L. H. Kirkpatrick. 1,891,424; Dec. 20.
Gauge: *See*—
Valve seat gauge.
Gear, Change speed. K. Maybach. 1,891,678; Dec. 20.
Gear for cycles, Reverse. G. Poirier. 1,891,576; Dec. 20.
Gear mechanism, Reverse. J. Kindervater. 1,891,545; Dec. 20.
Gear, Silent. R. W. Lytle. 1,891,823; Dec. 20.
Gear, Steering. A. J. Hills. 1,891,818; Dec. 20.
Gearing, Transmission. H. L. Burkhardt. 1,891,499; Dec. 20.
Geological formations, Determining angle and direction of dip. C. R. Nichols. 1,891,628; Dec. 20.
Germicide. C. B. Wood. 1,891,462; Dec. 20.
Glass forming method and apparatus. E. Danner. 1,891,378; Dec. 20.
Glass, Method and apparatus for producing sheet. E. Danner. 1,891,372; Dec. 20.
Glass working apparatus. W. H. Wood. 1,891,792; Dec. 20.
Glassware, Method and apparatus for making. E. Danner. 1,891,371; Dec. 20.
Glassware, Method and apparatus for manufacturing. E. Danner. 1,891,370; Dec. 20.
Golf club grips, Making. G. L. Lawrence. 1,891,550; Dec. 20.
Grain bin. C. J. Carter. 1,891,275; Dec. 20.
Grass shears. S. R. Svendsgaard. 1,891,694; Dec. 20.
Grate, Self-clearing. A. L. Galusha. 1,891,809; Dec. 20.
Grinding. G. W. Binns. 1,891,661; Dec. 20.
Grinding head for lens surfacing machines. H. C. St. Dennis. 1,891,320; Dec. 20.
Grinding machine. A. G. Plimmer. 1,891,777; Dec. 20.
Grinding machine. F. J. Theler. 1,891,657; Dec. 20.
Grinding machinery. C. Booth. 1,891,663; Dec. 20.
Grip. T. Birkenmaier. 1,891,497; Dec. 20.
Grizzly, Rotary. A. J. Myers. 1,891,772; Dec. 20.
Guard, Grinding wheel. F. J. Trimble. 1,891,696; Dec. 20.
Guide for machine tools, Workpiece. K. Tesaky. 1,891,290; Dec. 20.
Guide rod, Operating. R. R. Bostic. 1,891,615; Dec. 20.
Guide, Window curtain rod. N. Galliher. 1,891,808; Dec. 20.
Gun sight. G. O. C. Probert. 1,891,895; Dec. 20.
Guns, Apparatus for use in the fire control of antiaircraft. J. P. Watson. 1,891,897; Dec. 20.
Gyroscopic instrument. E. B. Williams. 1,891,856; Dec. 20.
Hair curling process. A. Nefzger. 1,891,438; Dec. 20.
Hair device. H. Eisler. Re18,695; Dec. 20.
Hand bag frame. W. C. Hiering. Des. 88,735; Dec. 20.
Hanger: *See*—
Garment hanger.
Harvester. J. A. E. Dupuis. 1,891,526; Dec. 20.
Hat press. M. Cassé. 1,891,344; Dec. 20.
Hatch frames, Producing pressed steel. O. J. Nyberg. 1,891,316; Dec. 20.
Headlights, Attachment for. T. J. H. Peirce. 1,891,553; Dec. 20.
Head-stock for machine tool. S. W. Bath. 1,891,220; Dec. 20.
Heat control, Manifold. F. F. Kishline. 1,891,768; Dec. 20.
Heat exchange apparatus for heating or cooling fluids. J. G. McKean and R. F. Jones. 1,891,434; Dec. 20.
Heat exchanger. F. X. J. A. Delas. 1,891,705; Dec. 20.
Heat insulated refractory for molten glass containers. K. E. Peller. 1,891,604; Dec. 20.
Heater: *See*—
Electric wall heater. Water heater.
Heater. W. A. Finley. 1,891,591; Dec. 20.
Heater for liquids. A. T. Gray. 1,891,534; Dec. 20.
Heater for water and other purposes, Automatic. F. E. White and A. Ruttiman. 1,891,855; Dec. 20.
Heater suitable for gaseous fluids. A. Folliet and N. Sainderichin. 1,891,879; Dec. 20.
Helmet, Illuminated fireman's. R. E. M. Frohder. 1,891,806; Dec. 20.
Hinge ring, Flexible. S. W. McKellip. 1,891,566; Dec. 20.
Hoist for dumping trucks, Hydraulic. A. E. Knecht. 1,891,312; Dec. 20.
Hoisting apparatus. F. E. Stahl. 1,891,883; Dec. 20.
Hoisting mechanism. J. R. McGiffert and O. L. Berby. 1,891,769; Dec. 20.
Holder, Cigarette. J. J. Markart. 1,891,431; Dec. 20.
Holder, Necktie or other article. R. J. Hicks. 1,891,310; Dec. 20.
Holder or container, Condiment. T. J. Madigan. 1,891,824; Dec. 20.
Holdup protection device. T. F. Robinson. 1,891,554; Dec. 20.
Horizon for Sextants, Artificial. W. Habel. 1,891,641; Dec. 20.
Hydraulic brake. P. R. Kauffman. 1,891,798; Dec. 20.
Hydrocarbon products by the action of a metallic halide and a partially chlorinated mineral oil of the carbo-cyclic series, Producing. M. L. Chappell. 1,891,619; Dec. 20.
Hydrocarbons, Preparation of brominated. I. F. Harlow and O. C. Ross. 1,891,415; Dec. 20.
Ice cream shapes, Stamping. M. G. Harnden. 1,891,230; Dec. 20.

Identifying mechanism. W. Schlumpf. 1,891,454; Dec. 20.
Incubator, Attachment for. W. O. Collins. 1,891,800; Dec. 20.
Index, Card. R. A. Furlong and J. R. Clark. 1,891,375; Dec. 20.
Index, Portable visible. R. A. Furlong. 1,891,380; Dec. 20.
Index, Visible. R. A. Furlong. 1,891,377; Dec. 20.
Insulator cotter and mode of use. H. L. Galloway. 1,891,708; Dec. 20.
Internal combustion engine. H. C. Edwards. 1,891,322; Dec. 20.
Internal combustion engine. C. E. Schlenker. 1,891,453; Dec. 20.
Internal combustion engine. L. M. Woolson. 1,891,321; Dec. 20.
Internal combustion motor. D. Head. 1,891,326; Dec. 20.
Internal combustion motor. B. Meissner. 1,891,770; Dec. 20.
Iron pyrites, Treatment of. S. I. Levy. 1,891,717; Dec. 20.
Jack: *See*—
Pump jack.
Jack and punch, Strapping. E. J. Ketcham. 1,891,767; Dec. 20.
Joint: *See*—
Masonry joint.
Joint construction. W. A. Flumerfelt. 1,891,804; Dec. 20.
Joint for rotating shafts, Leakless. G. H. E. de Ram. 1,891,706; Dec. 20.
Joint with shroud, Universal. V. P. Williams. 1,891,858; Dec. 20.
Journal for pulverizing mill rollers. C. E. Needham. 1,891,355; Dec. 20.
Juice extractor, Electric fruit. F. W. Juengst and O. M. Anderson. Des. 88,712; Dec. 20.
Kiln. C. A. Coleman. 1,891,469; Dec. 20.
Knife, Fruit picking. C. T. and B. F. Parker. 1,891,688; Dec. 20.
Lamp arrangement for motor vehicles, Steering or turning. H. A. Wiseman. 1,891,791; Dec. 20.
Lamp, Automobile. B. M. Calvert. Des. 88,724; Dec. 20.
Lamp, Diffused light. A. Stauber, jr. 1,891,846; Dec. 20.
Latch operating device for power shovels. R. G. Frye. 1,891,529; Dec. 20.
Latching device. G. H. Edwards. 1,891,224; Dec. 20.
Lath, Ribbed. J. W. Pearce. 1,891,240; Dec. 20.
Laundry flat piece spreader. L. R. Sager. 1,891,782; Dec. 20.
Lavatory, Pedestal. H. V. Kohler and F. G. Brotz. Des. 88,713; Dec. 20.
Leak compound, Repair. N. Sommers and A. P. Karr. 1,891,506; Dec. 20.
Leak for liquids, Providing a. I. Lubbock and J. R. Joyce. 1,891,313; Dec. 20.
Leather, more particularly for the manufacture of boots and shoes, Binding together two or more layers of. M. Grune. 1,891,412; Dec. 20.
Level gauge indicating at a distance the level of a liquid contained in a tank. G. Gianolio. 1,891,810; Dec. 20.
Limb rest stand. I. W. Davis. 1,891,755; Dec. 20.
Liquid dispenser. N. M. Stanley. 1,891,361; Dec. 20.
Living objects, Method and device for microscopically viewing. P. Ellinger and A. Hirt. 1,891,348; Dec. 20.
Lock: *See*—
Bolt and nut lock. Vault lock.
Locking means for rotatable elements. F. B. Thomas. 1,891,658; Dec. 20.
Loom picker stick. J. S. Arienta. 1,891,464; Dec. 20.
Looms, Electric filling feeler for. A. Ott. 1,891,572; Dec. 20.
Loud speaker. B. A. Engholm. 1,891,404; Dec. 20.
Lubricating device. L. R. Kerns. 1,891,544; Dec. 20.
Lubricating system. C. W. Manzel. 1,891,647; Dec. 20.
Lubrication annunciator for motor vehicles, Automatic. F. X. Reisinger, jr. 1,891,335; Dec. 20.
Lubricator. J. R. Battle. 1,891,632; Dec. 20.
Machine for constructing concrete pipe. A. W. Schultz. 1,891,731; Dec. 20.
Machine for finishing and tapping nut blanks. J. Mercadante and A. M. Thomson. 1,891,721; Dec. 20.
Machine for making slabs. C. G. Mortimer. 1,891,626; Dec. 20.
Machine for manufacturing twist drills. M. Okochi and M. Okochi. 1,891,881; Dec. 20.
Machine for operating on lasts. E. A. Holmgren. 1,891,263; Dec. 20.
Machine for operating on soles. F. D. Kinney. 1,891,264; Dec. 20.
Machine for punching films. S. C. Volney. 1,891,251; Dec. 20.
Machine for shaping shoe parts. R. E. Duplessis. 1,891,259; Dec. 20.
Machine for weighing and grading eggs. W. Frost. 1,891,807; Dec. 20.
Machine heating by induction, Automatic. P. Viry. 1,891,699; Dec. 20.
Magnetic material, Manufacture of. G. Lawton and W. H. Dearden. 1,891,235; Dec. 20.
Magnetically operated apparatus. J. N. Morris and M. D. Scott. 1,891,568; Dec. 20.
Mail box. I. R. Wenner. 1,891,487; Dec. 20.
Manifolding attachment. W. O. Michelsen. 1,891,567; Dec. 20.
Manifolding attachment. L. C. Myers and G. F. Handley. 1,891,569; Dec. 20.
Marble and granite shaping machine. P. Hauk. 1,891,279; Dec. 20.
Marking machine. G. Stiegler. 1,891,656; Dec. 20.
Masonry joint. P. C. Olsen. 1,891,724; Dec. 20.
Materials and products resulting therefrom, Flame-proofing combustible. E. C. Crocker. 1,891,258; Dec. 20.
Materials, Method of and system for tempering. E. E. Winkley. 1,891,274; Dec. 20.
Meat chopper. A. Jahn. 1,891,712; Dec. 20.
Meat for smoking, Apparatus for preparing. A. N. Benn. 1,891,467; Dec. 20.
Metal articles, Manufacture of pointed tubular. S. J. Everett. 1,891,804; Dec. 20.
Metal billets, bars, and the like, Manufacture of. F. W. and V. Harbord. 1,891,813; Dec. 20.
Metal from ores, minerals, and other materials, Extracting. A. R. Gibson. 1,891,532; Dec. 20.
Metal pole for electric power systems. P. Sporu. 1,891,736; Dec. 20.
Meter: *See*—
Piston type meter.
Micrometer. R. V. Savage. 1,891,783; Dec. 20.
Milking machine. G. N. Smith. 1,891,582; Dec. 20.
Mill: *See*—
Rolling mill.
Milling machine. F. A. Parsons. 1,891,356; Dec. 20.
Mining machine. W. T. McCullough. 1,891,719; Dec. 20.
Molding process. C. L. Keller. 1,891,476; Dec. 20.
Mononitrodiphenyls, Producing. E. H. Huntress, C. R. McCullough, and C. F. Booth. 1,891,543; Dec. 20.
Motor: *See*—
Internal combustion motor Worm water motor.
Motor control system. G. Fox. 1,891,226; Dec. 20.
Mounting, Ophthalmic. W. S. Searles. 1,891,653; Dec. 20.
Mower and sprinkler, Combined lawn. F. W. Wade. 1,891,854; Dec. 20.
Musical instrument. A. Styslowsky. 1,891,848; Dec. 20.
Nail. J. L. Shanklin. 1,891,246; Dec. 20.
Necktie. W. H. Ve Relle. 1,891,630; Dec. 20.
Necktie, Longitudinally folding washable. M. C. McCurrach. 1,891,477; Dec. 20.
Nitrates, Manufacturing alkali metal. H. Lawarree. 1,891,426; Dec. 20.
Nut, Lock. G. B. Pickop. 1,891,358; Dec. 20.
Oil and fats from filter-press cake and reactivation of the spent cake, Recovering retained. W. Kelley. 1,891,715; Dec. 20.
Oil burner. S. Perry. 1,891,835; Dec. 20.
Oil burner, Whirl fire. O. Falkenwalde and R. H. Lyon. 1,891,877; Dec. 20.
Oil gasifier. G. L. Reichheim. 1,891,445; Dec. 20.
Oil well drilling apparatus, Rotary. E. J. Le Compte and C. A. Harrisson. 1,891,328; Dec. 20.
Oil well surveying device. G. H. Bowlus. 1,891,401; Dec. 20.
Oiling system. W. H. Radford. 1,891,726; Dec. 20.
Oils, Treating. F. L. Craise, H. G. Vesper, and H. G. Grimith. 1,891,402; Dec. 20.
Ore reduction, Direct iron. W. E. Trent. 1,891,850; Dec. 20.
Ores, Selective separation of. L. J. O'Malley. 1,891,776; Dec. 20.
Organic material, Granular. O. v. d. Luft and C. J. Schwindt. 1,891,891; Dec. 20.
Organs, Action for pipe. C. E. Grant. 1,891,409; Dec. 20.
Oven. W. F. Drew. 1,891,802; Dec. 20.
Ovens, Heating coke. C. Wessel. 1,891,700; Dec. 20.
Package of facials. E. A. McCormick. 1,891,679; Dec. 20.
Packing. H. B. Cheshire. 1,891,798; Dec. 20.
Packing. A. G. M. Michell. 1,891,436; Dec. 20.
Packing for doorcheck plungers. S. W. C. Fitts. 1,891,528; Dec. 20.
Pad: *See*—
Writing and drawing pad.
Paint. W. C. Sample. 1,891,451; Dec. 20.
Paint striping device. K. V. Eklov. 1,891,527; Dec. 20.
Paper developing apparatus, Sensitized. K. Murck. 1,891,722; Dec. 20.
Papermaking, Composition for and method of. G. A. Richter. 1,891,730; Dec. 20.
Paper or fiber can. D. E. Griffith. 1,891,535; Dec. 20.
Paper roll, Sanitary. L. Van Wagner. 1,891,629; Dec. 20.
Patch package. L. S. Graff. 1,891,624; Dec. 20.
Pattern mechanism for knitting machines. A. E. Page. 1,891,270; Dec. 20.
Pavement breaking machine. W. V. Cornett. 1,891,221; Dec. 20.
Peach. W. F. Ramsey and A. T. Grossman. Pl. Pt. 51; Dec. 20.
Pen, Self inking fountain. F. Furedy. Re18,702; Dec. 20.
Pencil. N. Meyer. 1,891,682; Dec. 20.
Percussive drill. L. W. Greve. 1,891,411; Dec. 20.
Phenol-aldehyde condensation products, Purifying. F. Seebach. 1,891,455; Dec. 20.
Phosphorescent or luminous masses or compounds. H. M. Mines. 1,891,827; Dec. 20.
Photographic printing process. F. J. Shepherd and F. F. Renwick. 1,891,784; Dec. 20.

Phthalic anhydride, Granulated. L. C. Daniels and C. J. Schwindt. 1,891,754; Dec. 20.
Phthalic anhydride, Production of halogenated. C. Shaw and J. Taomas. 1,891,843; Dec. 20.
Pianette. D. Miller. 1,891,268; Dec. 20.
Pick-up. J. Clove. 1,891,748; Dec. 20.
Picture film treating apparatus, Motion. R. G. Fear. 1,891,225; Dec. 20.
Picture projection apparatus, Moving. K. Morsbach. 1,891,683; Dec. 20.
Picture projection machine. J. H. Goldberg. 1,891,473; Dec. 20.
Picture screen, Motion. H. D. North. 1,891,603; Dec. 20.
Piston. F. Jardine. 1,891,419; Dec. 20.
Piston. A. B. Norton. 1,891,441; Dec. 20.
Piston ring contractor. T. R. Lawrence. 1,891,560; Dec. 20.
Piston type meter. H. G. Weymouth. 1,891,461; Dec. 20.
Pitch, Coking. A. H. Radasch. 1,891,606; Dec. 20.
Plane, Gull wing. J. H. Kindleberger. 1,891,385; Dec. 20.
Planter, Multiple row. C. H. White. 1,891,488; Dec. 20.
Platen roller. M. H. Alexanian. 1,891,366; Dec. 20.
Pliers. G. C. F. Beck. 1,891,865; Dec. 20.
Plotting instrument. F. N. Sayre. 1,891,502; Dec. 20.
Plug, Spark. D. C. Smith and W. P. Walden. 1,891,693; Dec. 20.
Pole structure. T. J. Crawford. 1,891,620; Dec. 20.
Press: *See*—
Filter press. Printing press.
Hat press.
Pressure brake, Fluid. S. G. Down. 1,891,609; Dec. 20.
Pressure control for fluid dispensing devices. R. V. Latham. 1,891,882; Dec. 20.
Pressure controlling means, Surge. C. V. Foulds. 1,891,636; Dec. 20.
Printing machine. W. H. Waldron. 1,891,252; Dec. 20.
Printing on cellophane or the like. A. D. Eisenberg. 1,891,323; Dec. 20.
Printing press. O. R. Wolf. 1,891,614; Dec. 20.
Printing process employed in color photography. L. W. Oliver and W. G. Clare. 1,891,571; Dec. 20.
Products of the anthraquinone series, Preparation of new condensation. A. Peter. 1,891,317; Dec. 20.
Projection system. D. F. Newman. 1,891,439; Dec. 20.
Propellers, Manufacturing. H. F. Schmidt. 1,891,612; Dec. 20.
Puller. G. W. Nickerson. Re18,701; Dec. 20.
Pulsator, Oscillating. S. Apostoloff. 1,891,493; Dec. 20.
Pump assembly for internal combustion engines. H. B. Nelson. 1,891,892; Dec. 20.
Pump, Centrifugal. V. J. Milkowski. 1,891,267; Dec. 20.
Pump, Diaphragm convertible. J. C. Gorman. 1,891,408; Dec. 20.
Pump, Double-acting reciprocating. E. Mendenhall and J. B. Van Horn. 1,891,771; Dec. 20.
Pump jack, Quick return straight line. F. B. McCrosky. 1,891,552; Dec. 20.
Pump regulator, Auxiliary oil. C. B. Campbell. 1,891,618; Dec. 20.
Pump, Rotary. E. Caskey. 1,891,302; Dec. 20.
Pumping outfits and the like, Operating mechanism for. C. A. Dalley. 1,891,403; Dec. 20.
Radiocabinet. A. T. Carney. Des. 88,704; Dec. 20.
Radio condenser tuning control. C. E. Kilgour. 1,891,288; Dec. 20.
Radio telephone system. C. N. Anderson, E. R. Taylor, and S. B. Wright. 1,891,299; Dec. 20.
Razor. M. E. Juillard. Des. 88,786; Dec. 20.
Razor, Safety. J. Muros. 1,891,627; Dec. 20.
Receptacle. R. H. Dietz, jr. 1,891,525; Dec. 20.
Receptacle filling device. G. V. Gavaza. 1,891,639; Dec. 20.
Receptacle, Vaginal. L. J. Goddard. 1,891,761; Dec. 20.
Receptacles, Waste. L. E. Padelford and L. J. Kukowitz 1,891,651; Dec. 20.
Reel: *See*—
Cable reel.
Reeling system. E. W. Stacey. 1,891,273; Dec. 20.
Reenforcement for heat interchangers. K. K. Wright. 1,891,518; Dec. 20.
Refrigerating apparatus. H. B. Hull. 1,891,231; Dec. 20.
Refrigerating apparatus. J. R. Killen. 1,891,232; Dec. 20.
Refrigerating apparatus. O. M. Summers. 1,891,249; Dec. 20.
Refrigerating system. W. D. Jordan and P. D. Van Vliet 1,891,714; Dec. 20.
Refrigeration. F. D. Peltier. 1,891,357; Dec. 20.
Refrigeration, Process and apparatus for. W. A. Fosberry. 1,891,305; Dec. 20.
Refrigerator unit. J. R. Replogle. 1,891,728; Dec. 20.
Regulator: *See*—
Compression regulator. Pump regulator.
Releasing objects to be dropped from aircraft. E. Deubel. 1,891,635; Dec. 20.
Reservoir construction. E. E. Hewitt. 1,891,644; Dec. 20.
Reverse brake. C. A. Matson. Des. 18,693; Dec. 20.
Revolver loader, Rapid. T. A. Milmore. 1,891,437; Dec. 20.
Rheostat. O. W. Greene. 1,891,410; Dec. 20.
Ring: *See*—
Hinge ring.
Ring for wire-spoked wheels, Ornamental side. W. A. Clark. Re18,692; Dec. 20.
Rock drill. W. F. Dalzen. 1,891,276; Dec. 20.
Rod: *See*—
Brazing rod. Guide rod.
Rods, Apparatus for cleaning or polishing. H. C. Lord. 1,891,381; Dec. 20.
Röentgen diaphragm. R. Manni. 1,891,332; Dec. 20.
Roll coupling, Drawing. O. L. Honnors. 1,891,539; Dec. 20.
Roll, Folding kaiser. M. Spitz and J. Srovnal. 1,891,845; Dec. 20.
Roller: *See*—
Platen roller.
Rolling mill. H. L. Schreck. 1,891,579; Dec. 20.
Rolling stock. R. T. Glascodine. 1,891,674; Dec. 20.
Roof, Car. R. B. Winship. 1,891,741; Dec. 20.
Rope winding device. C. J. Kienzle. 1,891,598; Dec. 20.
Rose, Hybrid tea. J. Didato. Pl. Pt. 50; Dec. 20.
Rose, Hybrid tea. N. Grillo. Pl. Pt. 49; Dec. 20.
Rotor for display devices. C. E. Chase and E. J. Fiegel. 1,891,797; Dec. 20.
Rubber and products obtained thereby, Manufacturing vulcanized. O. Behrend. 1,891,743; Dec. 20.
Sacramental chest, Trinity. F. J. Quinn. Des. 88,739; Dec. 20.
Safety strap, Aerial. E. L. Hoffman. 1,891,418; Dec. 20.
Salad table. M. Ryan. 1,891,559; Dec. 20.
Sash, Revolving window. M. J. Siegel. 1,891,733; Dec. 20.
Scale, Weighing. N. A. Hallwood. 1,891,762; Dec. 20.
Scraper. R. G. Le Tourneau. 1,891,266; Dec. 20.
Scraper. W. W. Shanor. 1,891,288; Dec. 20.
Scraper and apron. C. Le Bleu. 1,891,427; Dec. 20.
Scraper for digging or leveling. C. Le Bleu. 1,891,428; Dec. 20.
Screen: *See*—
Picture screen. Sifting screen.
Screen printing machine. J. Flockhart. 1,891,622; Dec. 20.
Screens, Making projecting. T. Suzuki. 1,891,849; Dec. 20.
Screw, Drive. C. E. Nagel. 1,891,895; Dec. 20.
Seal and forming the same, Strap. J. E. Ott. 1,891,239; Dec. 20.
Seaming and pinking machine, Combined. H. F. Gruman. 1,891,308; Dec. 20.
Seat adjuster, Vehicle. B. M. Stannard. 1,891,457; Dec. 20.
Sewing machine, Overseaming. R. L. Plumley. 1,891,605; Dec. 20.
Shade. J. Dropinski. 1,891,707; Dec. 20.
Shaft coupling. J. S. Loewus. 1,891,285; Dec. 20.
Shaft extractor. A. Cox. 1,891,869; Dec. 20.
Shaft for overhung elastic fluid turbines. A. Lysholm. 1,891,718; Dec. 20.
Shears: *See*—
Grass shears.
Sheet delivering and piling apparatus for printing, ruling, cutting machines and the like. H. Miersch. 1,891,286; Dec. 20.
Sheet shifter for visible index binders. R. A. Furlong. 1,891,376; Dec. 20.
Shelf or the like. G. D. Wiepert. Des. 88,720; Dec. 20.
Shingle, Composition. N. P. Harshberger. Re18,698; Dec. 20.
Shingle, Interlocking. M. L. Hamlin. 1,891,229; Dec. 20.
Shipping device for hats. G. S. Overton. 1,891,334; Dec. 20.
Shocks, System for reducing. D. Ammirandoli and C. Baldi. 1,891,340; Dec. 20.
Shoes, Manufacture of turn. A. T. Foster. 1,891,260; Dec. 20.
Shower head. G. R. McCurdy and J. R. Turek. 1,891,720; Dec. 20.
Shredding machine. D. W. Sarvay, J. J. Grieb, and A. J. Fritz. 1,891,245; Dec. 20.
Shuttle changing mechanism for a loom weaving with one or several shuttles, Automatic. A. Poncet. 1,891,318; Dec. 20.
Shuttle motion. F. C. Matthews. 1,891,648; Dec. 20.
Sifting screen, Vibrating. F. Pirlot. 1,891,574; Dec. 20.
Signal: *See*—
Crossing signal.
Signal system, Electropneumatic. C. D. Stewart. 1,891,655; Dec. 20.
Signaling means for rotary oil well drilling apparatus. E. J. LeCompte and C. A. Harrisson. 1,891,330; Dec. 20.
Sintering apparatus. H. Wittenberg. 1,891,298; Dec. 20.
Slicing machine. W. J. Campbell. 1,891,368; Dec. 20.
Sliding support for visible index trays. R. A. Furlong. 1,891,379; Dec. 20.
Silver discharged from a silver balling machine, Apparatus for receiving balls or rolls of. G., N. and J. Fraser. 1,891,406; Dec. 20.
Snowplow. C. N. Arnold. 1,891,465; Dec. 20.
Soap making. R. S. Blair. 1,891,744; Dec. 20.
Sole blank, Multiple. M. Doushkess. 1,891,757; Dec. 20.
Sound picture system. H. Pfannenstiehl. 1,891,241; Dec. 20.

Sound, Recording and reproduction of. J. A. Maurer, jr. 1,891,388; Dec. 20.
Sound records, Apparatus for making. T. Kahn. 1,891,822; Dec. 20.
Sound reproducing apparatus. J. C. Kroesen. 1,891,386; Dec. 20.
Sound reproducing means and method. R. T. Friebus. 1,891,227; Dec. 20.
Sound reproduction. J. A. Maurer, jr. 1,891,389; Dec. 20.
Speed governor device, Multiple. E. S. Cook. 1,891,668; Dec. 20.
Spinner for paper containers. A. Bodor. 1,891,866; Dec. 20.
Spout and closure. E. L. McGinnis. 1,891,826; Dec. 20.
Sprayer device. J. Fitch. 1,891,325; Dec. 20.
Spreading apparatus. M. Wildermau. 1,891,790; Dec. 20.
Stand: *See*—
Limb rest stand.
Stand or similar article, Smoker's. W. L. Wallis. Des. 88,741; Dec. 20.
Steering gear for automobiles, Four wheel. M. V. Reed. 1,891,578; Dec. 20.
Steering knuckle lubrication. T. R. Thomas. 1,891,459; Dec. 20.
Stocking. R. B. Schindler. Des. 88,728; Dec. 20.
Stoker control. J. O. Stayton. 1,891,319; Dec. 20.
Stop for thread carrier rods, Adjustable. G. Gastrich and M. Richter. 1,891,472; Dec. 20.
Strains in metal objects, Modifying internal. F. C. Langenberg. 1,891,234; Dec. 20.
Stranding. G. C. Burd. 1,891,343; Dec. 20.
Strap: *See*—
Bridge suspension strap. Safety strap.
Straws, Apparatus for trimming drinking. E. Conti. 1,891,749; Dec. 20.
Strip for terrazzo and similar floors. P. Galassi. 1,891,530; Dec. 20.
Stuffing box. A. G. Heggem. 1,891,417; Dec. 20.
Substitute for natural feed ore. J. M. Hughes, J. H. Carter, and L. B. Perkins. 1,891,889; Dec. 20.
Suction cleaner. D. G. Smellie. 1,891,503–4; Dec. 20.
Suction gathering forming machine. K. E. Peller. 1,891,896; Dec. 20.
Support, Body. W. I. Clements. 1,891,747; Dec. 20.
Support for semitrailers, Temporary load. L. E. Williams. 1,891,517; Dec. 20.
Support, Sash cord. J. Kreimer and D. G. Dewar. 1,891,265; Dec. 20.
Support, Swingable garment hanger. A. R. Spikings. 1,891,844; Dec. 20.
Supporter and hose, Combined hose. N. E. Rickey. 1,891,690; Dec. 20.
Switch: *See*—
Automatic control switch. Electric switch.
Switch. S. A. Shapiro. 1,891,247; Dec. 20.
Switch for telethermometers. C. H. Kuhlman. 1,891,548; Dec. 20.
Tab or facing and securing the same to an article, Pyroxylin plastic. C. F. Rand. 1,891,443; Dec. 20.
Table: *See*—
Automatic veneer table. Folding table.
Automobile lunch table. Salad table.
Tag, Price. I. H. Gray. Des. 88,708; Dec. 20.
Talking movie. A. A. Thomas. 1,891,738; Dec. 20.
Target, Caster gauge. C. H. Phelps. 1,891,573; Dec. 20.
Tawing, dehydrating, and astringent products. H. O. Nolan. 1,891,440; Dec. 20.
Telephone signal-transmitting method and device, Automatic. C. S. Batdorf. 1,891,633; Dec. 20.
Telephone system. F. L. Kahn. 1,891,423; Dec. 20.
Telephone system, Automatic. E. P. G. Wright and L. B. Haigh. 1,891,254; Dec. 20.
Telephone wire connecting means for railway trains. T. J. Fitzsimmons. 1,891,349; Dec. 20.
Telephony over a single carrier frequency, Apparatus adapted to duplex. P. Tätz. 1,891,362; Dec. 20.
Textile fabric. L. Goldstein. Des. 88,725; Dec. 20
Textile fabric or similar article. F. Bridler. Des. 88,729–30; Dec. 20.
Textile fabric or similar article. J. M. Gottesman. Des. 88,707; Dec. 20.
Textile fabric or similar article. J. Overmeyer. Des. 88,717; Dec. 20
Textile fabric or similar article. W. D. Roberson. Des. 88,718; Dec. 20.
Textile fabric or similar article. W. Willhelm. Des. 88,721–2; Dec. 20.
Textile fabric or the like. H. Cruger. Des. 88,731; Dec. 20.
Textile fabric or the like. L. Derriey. Des. 88,705; Dec. 20.
Textile fabric or the like. A. J. Heinke. Des. 88,710–11; Dec. 20.
Textile fabric or the like. G. Megroz. Des. 88,715; Dec. 20.
Textile fabric or the like. G. Morris. Des. 88,738; Dec. 20.
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Tip for furniture legs. A. G. Henrikson. 1,891,643; Dec. 20.
Tire casings and apparatus therefor, Manufacture of pneumatic. H. Willshaw. 1,891,489; Dec. 20.
Tire reclaiming machine. O. A. Wheeler. 1,891,789; Dec. 20.
Toaster, Gas speed. P. J. Martell and W. B. McMurray. 1,891,825; Dec. 20.
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Tool, Valve spring lock. W. Falwell. 1,891,803; Dec. 20.
Toothbrush, Pocket fountain. A. D. Ferguson. 1,891,324; Dec. 20.
Tooth pick dispensing device. H. Sadjian. 1,891,781; Dec. 20.
Torch, Welding. S. R. Oldham and L. W. Young. 1,891,442; Dec. 20.
Toy, Figure. E. L. Hewitt. 1,891,816; Dec. 20.
Toy firearm. A. Z. Baker. 1,891,219; Dec. 20.
Tractor guiding device. H. Blume. 1,891,704; Dec. 20.
Tractor tread. G. T. Ronk. 1,891,556; Dec. 20.
Trailer coupling. W. H. Himmelberger. 1,891,711; Dec. 20.
Transfer mechanism for circular knitting machines. L. N. D. Williams. 1,891,857; Dec. 20.
Transformer construction. F. S. Smith. 1,891,456; Dec. 20.
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Animal trap.
Tray, Visible index. R. A. Furlong. 1,891,378; Dec. 20.
Trimming machine. J. M. Cooke. 1,891,257; Dec. 20.
Tripod for use in harvesting crops, Collapsible. A. Proctor. 1,891,577; Dec. 20.
Truck body. E. P. Bordeaux. 1,891,301; Dec. 20.
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Turntable, Covering a. L. Bonsieur. 1,891,745; Dec. 20.
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Undergarment. G. C. Tanner. 1,891,884; Dec. 20.
Undergarments for women such as slips, pajamas, blouses, and the like. M. D. Neilson. 1,891,773; Dec. 20.
Vacuum cleaner. T. E. D. Bilde. 1,891,256; Dec. 20.
Vacuum tube discharge device. A. Mutscheller. Re18,694; Dec. 20.
Valve. W. Ehemann. 1,891,374; Dec. 20.
Valve. J. L. Gish. 1,891,533; Dec. 20.
Valve, Auxiliary operated governing. W. F. Krichbaum. 1,891,547; Dec. 20.
Valve device, Feed. D. F. Brown. 1,891,666; Dec. 20.
Valve for steam or other fluids and liquids, Stop. H. L. Mason. 1,891,551; Dec. 20.
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Valve or tappet heads, Apparatus for forming. C. L. Brackett. 1,891,521; Dec. 20.
Valve, Pressure-operated. E. Woerner. 1 891,586; Dec. 20.
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Valve, Twin pressure. O. E. Nelson. 1,891,570; Dec. 20.
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Vehicle mechanism, Motor. C. E. F. Ahlm and G. L. Elmslie. 1,891,399; Dec. 20.
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Vehicle storage system. S. E. Ruettell. 1,891,795; Dec. 20.
Vehicles, Method of and apparatus for testing the riding qualities of. S. W. Widney. 1,891,613; Dec. 20.
Vending machine. J. Gottfried. 1,891,640; Dec. 20.
Ventilator for motor-cars. H. Liebig. 1,891,390; Dec. 20.
Vest, Women's. M. D. Neilson. 1,891,775; Dec. 20.
Voltages in electrical precipitators, Insulating high. R. T. Howes. 1,891,645; Dec. 20.
Wagon, Collapsible dinner or tea. K. Oppenländer. 1,891,393; Dec. 20.
Wagon, Refreshment. J. G. Garton. Des. 88,706; Dec. 20.
Washer: *See*—
Air washer.
Washing machine. J. Schmid-Domann. 1,891,842; Dec. 20.
Washing machine. R. J. Waterworth. 1,891,339; Dec. 20.
Watch, Self-winding. E. Frey. 1,891,760; Dec. 20.
Watchcase, Tubular. H. Schlacht. 1,891,611; Dec. 20.
Water heater. J. W. Guimont. 1,891,278; Dec. 20.
Water softener. S. G. Harwood and D. Griswold. 1,891,675; Dec. 20.
Water tube boiler. H. E. Yarrow. 1,891,862; Dec. 20.

Wear-plate for shoe-heels and the like. L. Weinstein. 1,891,515; Dec. 20.
Well drilling machine. I. C. Harris. 1,891,416; Dec. 20.
Wells, Facilitating the flow of. R. H. Carr. 1,891,667; Dec. 20.
Wheel. E. M. T. Ryder. 1,891,336; Dec. 20.
Wheel suspension for vehicles, Six. A. W. Harrison. 1,891,642; Dec. 20.
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Winding machines, Tension regulating means for. R. G. Johnstone and R. J. S. Phillips. 1,891,766; Dec. 20.
Windmill, Automatically lubricating. G. C. Baird. 1,891,863; Dec. 20.
Window. G. F. Ruehl. 1,891,840; Dec. 20.
Window. M. J. Tracy. 1,891,485; Dec. 20.
Window cleaning apparatus. F. Sheinman. 1,891,860; Dec. 20.
Window safety device. F. Claus. 1,891,588; Dec. 20.
Window structure, Automobile. R. W. Meatheringham. 1,891,478; Dec. 20.
Windshield. O. L. Herron. 1,891,765; Dec. 20.
Wire or the like and apparatus therefor, Coating insulated. A. T. Candy, jr. 1,891,501; Dec. 20.
Wire splicing device. O. W. Brenizer. 1,891,664; Dec. 20.
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CLASSIFICATION OF PATENTS

ISSUED DECEMBER 20, 1932

NOTE.—First number—class, second number—subclass, third number—patent number

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1,891,628
4: 1,891,416
19: 1,891,329
28: 1,891,328
35: 1,891,832
73: 1,891,276
257— 23: 1,891,425
43: 1,891,607
79: 1,891,705
236: 1,891,278
245: 1,891,434
248: 1,891,538
258— 1: 1,891,635
259— 101: 1,891,339
260— 4: 1,891,455
36: 1,891,084

260— 39: 1,891,317
44: 1,891,447
1,891,448
1,891,449
102: 1,891,520
111: 1,891,677
123: 1,891,754
1,891,843
1,891,891
134: 1,891,333
142: 1,891,543
162: 1,891,415
166: 1,891,514
261— 39: 1,891,288
52: 1,891,474
262— 15: 1,891,221
28: 1,891,719
30: 1,891,561
1,891,562
33: 1,891,222
265— 1: 1,891,631
2: 1,891,613
30: 1,891,762
266— 21: 1,891,298
23: 1,891,880
267— 34: 1,891,340
64: R. 18,696
74: 1,891,519
268— 19: 1,891,359
270— 30: 1,891,687

271— 2.3: 1,891,225
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274— 2: 1,891,616
5: 1,891,386
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11: 1,891,522
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275— 2: 1,891,565
277— 21: 1,891,862
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280— 33.1: 1,891,517
33.16: 1,891,711
36: 1,891,303
91: 1,891,578
124: 1,891,309
285— 98: 1,891,874
184: 1,891,670
286— 11: 1,891,708
16: 1,891,417
22: 1,891,436
1,891,798
35: 1,891,526
287— 90: 1,891,804
288— 1: 1,891,424
1,891,725
289— 1: 1,891,497
290— 47: 1,891,868

292— 224: 1,891,206
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296— 10: 1,891,301
44: 1,891,478
84: 1,891,778
89: 1,891,765
298— 1: 1,891,885
299— 88: 1,891,325
141: 1,891,730
300— 5: 1,891,236
303— 1: 1,891,644
21: 1,891,668
47: 1,891,672
72: 1,891,669
74: 1,891,671
304— 24: 1,891,586
306— 4: 1,891,615
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206: 1,891,763
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226: 1,891,583
312— 22: 1,891,347
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43: 1,891,542
79: 1,891,781
186: 1,891,262
189: 1,891,261

U. S. GOVERNMENT PRINTING OFFICE: 1932

LIST OF TRADE-MARK APPLICANTS

PUBLISHED FOR OPPOSITION

[Act of Feb. 20, 1905, Sec. 6, as amended Mar. 2, 1907]

Aktiebolaget Astra Apotekarnas Kemiska Fabriker, Sodertalje, Sweden. Preparation in powder form containing iodoacetic acid. Serial No. 320,147; Dec. 27. Class 6.

Alco Seal Co. (See Livergood, Albert C.)

American Rubber Products Co. (See Colle, Claude C.)

Anaconda Wire & Cable Company, New York, N. Y. Electrical coils. Serial Nos. 332,019–20; Dec. 27. Class 21.

Arleesè, Inc., Miami, Fla. Corsets, corselettes, girdles, etc. Serial No. 331,136; Dec. 27. Class 39.

Atlantic Refining Company, The, Philadelphia, Pa. Lubricating oils. Serial No. 330,843; Dec. 27. Class 15.

Atlas Supply Company, Newark, N. J. Vacuum tubes for use in radio apparatus. Serial No. 331,241; Dec. 27. Class 21.

B-Z-B Knitting Co., Rockford, Ill. Hosiery. Serial No. 332,108; Dec. 27. Class 39.

Baker, Frank, doing business as Baker Manufacture, San Francisco, Calif. Soap. Serial No. 331,277; Dec. 27. Class 4.

Barawik Company. (See Braun, Walter C.)

Bauer's, August, Sons, Inc., New York, N. Y. Prepared mustard. Serial No. 330,806; Dec. 27. Class 46.

Beaudoin, Joseph A., San Francisco, Calif. Table board game. Serial No. 331,914; Dec. 27. Class 22.

Beck, Koller & Company, Inc., Detroit, Mich. Paints, varnishes, lacquers, etc. Serial No. 329,920; Dec. 27. Class 16.

Beck, Koller & Company, Inc., Detroit, Mich. Paints, varnishes, lacquers, etc. Serial No. 329,924; Dec. 27. Class 16.

Beck, Koller & Company, Inc., Detroit, Mich. Soluble plastic resins. Serial No. 329,927; Dec. 27. Class 16.

Beck, Koller & Company, Inc., Detroit, Mich. Soluble ester gums and plastic resins. Serial No. 329,930; Dec. 27. Class 16.

Bell, David M., doing business as Pineglow Products, New York, N. Y. Soap and shaving cream. Serial No. 331,847; Dec. 27. Class 4.

Bianchini, Ferier, Lyon, France. Piece goods. Serial No. 317,450; Dec. 27. Class 42.

Bianchini, Ferier, Lyon, France. Piece goods. Serial No. 320,119; Dec. 27. Class 42.

Binney & Smith Co., New York, N. Y. Plasticiser. Serial No. 330,775; Dec. 27. Class 6.

Blumenthal, Sidney, & Co. Inc., New York, N. Y. Pile fabrics. Serial Nos. 331,571–2; Dec. 27. Class 42.

Borden's Milk Products Company, Inc., New York, N. Y. Malted milk. Serial No. 318,619; Dec. 27. Class 46.

Braun, Walter C., doing business as Barawik Company, Chicago, Ill. Radio receiving sets. Serial No. 329,766; Dec. 27. Class 21.

Breitstein Manufacturing Co., Los Angeles, Calif. Coats and suits. Serial No. 331,815; Dec. 27. Class 39.

Bristol Aeroplane Company Limited, The, Bristol, England. Aircraft engines. Serial No. 330,777; Dec. 27. Class 23.

Bromo-Pep, Incorporated, St. Louis, Mo. Medicine. Serial No. 331,848; Dec. 27. Class 6.

Brooklyn Hotel Supply Co., Brooklyn, N. Y. Butter, eggs, beef, veal, mutton, lamb, etc. Serial No. 317,594; Dec. 27. Class 46.

Brown Company, Portland, Me., and Berlin, N. H. Twines. Serial No. 332,174; Dec. 27. Class 7.

Browne, Herbert J., doing business as Permagloss Manufacturing Company, Atlanta, Ga. Cleaning and polishing preparation. Serial No. 331,424; Dec. 27. Class 16.

Callaghan, George H., New York, N. Y. Cleaners and polishers for motor cars, furniture, etc. Serial No. 331,850; Dec. 27. Class 16.

Cardinal Milk Sales Co. (See Oatman Condensed Milk Company, The.)

Central United National Bank of Cleveland, Cleveland, Ohio. Publications. Serial Nos. 330,593–4; Dec. 27. Class 38.

Chad Valley Co. Ltd., The, Birmingham, England. Dolls, puzzles, games, etc. Serial No. 283,550; Dec. 27. Class 22.

Christie & Hoover, Houston, Tex. Malt extracts and syrups. Serial No. 332,176; Dec. 27. Class 46.

City Mills Company, Columbia, Ga. Flour. Serial No. 322,356; Dec. 27. Class 46.

Coal Carburetor Company, The. (See Price, Thornton W.)

Cohn Hall Marx Co., New York, N. Y. Silk piece goods. Serial No. 330,538; Dec. 27. Class 42.

Colle, Claude C., doing business as American Rubber Products Co., Bloomington, Ill. Liquid and dry powder. Serial No. 329,079; Dec. 27. Class 6.

Colorado Fuel and Iron Company, The, Denver, Colo. Staples, lath nails, brads, etc. Serial No. 328,550; Dec. 27. Class 13.

Columbia Petroleum Products Company. (See Radbill, Samuel.)

Columbian Rope Company, Auburn, N. Y. Tire chains. Serial No. 331,635; Dec. 27. Class 13.

Compagnie Internationale des Pieux Armés Frankignoul, S. A., Liege, Belgium. Machines for manufacturing concrete and hydraulic apparatus, etc. Serial No. 320,230; Dec. 27. Class 23.

Conran, James F., St. Louis, Mo. Lubricating oil. Serial No. 331,041; Dec. 27. Class 15.

Continental Steel Corporation, Kokomo and Indianapolis, Ind., and Canton, Ohio. Barbed wire and wire fence. Serial No. 331,724; Dec. 27. Class 13.

Cowles Detergent Company, The, Cleveland, Ohio. Soluble chemical compounds. Serial No. 330,651; Dec. 27. Class 4.

Crawford, McGregor and Canby Company, The, Dayton, Ohio. Golf clubs. Serial No. 330,506; Dec. 27. Class 22.

Cropley, S. J., Aurora, Ill. Scientific testing instruments. Serial No. 331,177; Dec. 27. Class 26.

D-N Facial Bandage Co. (See Welsh, Katherine.)

Deerfoot Farms Company, Southboro, Mass. Sausages, sausage meat, bacon, and lard. Serial No. 331,890; Dec. 27. Class 46.

Delatone Company, The, Chicago, Ill. Perspiration preventatives or deodorant. Serial No. 328,001; Dec. 27. Class 6.

Delta Manufacturing Company, doing business as Delta Specialty Company, Milwaukee, Wis. Lathes and drill presses. Serial No. 331,949; Dec. 27. Class 23.

Dennison Manufacturing Company, Framingham, Mass. Crepe paper. Serial No. 332,033; Dec. 27. Class 37.

Dermitone Manufacturing Co., Inc., New York, N. Y. Tonic and an ointment for skin and scalp. Serial No. 331,672; Dec. 27. Class 6.

Dewar, John, & Sons Limited, Perth, Scotland, and London, England. Scotch whisky. Serial No. 330,541; Dec. 27. Class 49.

Distillers Agency Limited, The, Edinburg, Scotland. Whisky. Serial No. 330,455; Dec. 27. Class 49.

Dixie Laboratories. (See Hinkle, Mrs. Z. B.)

Dralle, Georg, Hamburg, Germany. Perfumery. Serial Nos. 326,132–5; Dec. 27. Class 6.

Eastman Kodak Company, Rochester, N. Y. Photographic film. Serial No. 332,034; Dec. 27. Class 26.

Eastman Kodak Company, Rochester, N. Y. Photographic cameras. Serial No. 332,035; Dec. 27. Class 26.

Eastman Kodak Company, Rochester, N. Y. Photographic film. Serial No. 332,036; Dec. 27. Class 26.

Eastman Kodak Company, Rochester, N. Y. Photographic cameras. Serial No. 332,037; Dec. 27. Class 26.

Economic Blade Co. (See Stein, Max.)

Edison Brothers Stores, Inc., St. Louis, Mo. Shoes. Serial No. 331,729; Dec. 27. Class 39.

Ehlenbeck & Platte, Wuppertal-Vohwinkel, Germany. Beds, mattresses, pillows, etc. Serial No. 329,770; Dec. 27. Class 32.

80th (Blue Ridge) Division Veterans' Association, The, Pittsburgh, Pa. Periodical. Serial No. 320,023; Dec. 27. Class 38.

Electric Auto-Lite Company, The, Toledo, Ohio. Clocks, watches, chronometers, etc. Serial No. 326,582; Dec. 27. Class 27.

Eskimo Pie Corporation, Brooklyn, N. Y. Ice cream, ices, sherbets, etc. Serial No. 329,045; Dec. 27. Class 46.

Excello Products Co. (See Gaunder, Edward J.)

Faber, A. W., Inc., Newark, N. J. Rulers, squares, triangles, etc. Serial Nos. 332,142–3; Dec. 27. Class 26.

Factor, Max, & Co. Inc., Los Angeles, Calif. Powder foundation-cream, grease paints, dry rouge, etc. Serial No. 320,404; Dec. 27. Class 6.

Fear, Ernest D., Kansas City, Mo. Frozen confections. Serial No. 329,744; Dec. 27. Class 46.

Federal Malleable Company, West Allis, Wis. Finished castings. Serial No. 330,785; Dec. 27. Class 19.

Firestone Tire & Rubber Company, The, Akron, Ohio. Rubber solvent. Serial No. 331,674; Dec. 27. Class 6.

Fitchburg Paper Company, Fitchburg, Mass. Papers. Serial No. 332,115; Dec. 27. Class 37.

Fletcher, Hal B., San Francisco, Calif. Rust preventive and metal protective paints. Serial No. 332,185; Dec. 27. Class 16.

Florida Ice and Coal Company, Jacksonville, Fla. Coal. Serial No. 331,923; Dec. 27. Class 1.

Ford, J. B., Company, The, Wyandotte, Mich. Cleaning compound. Serial No. 331,637; Dec. 27. Class 4.

Forestek, Samuel, doing business as The Forestek Plating & Manufacturing Company, Cleveland, Ohio. Electric grilles and toasters. Serial No. 330,401; Dec. 27. Class 21.

Forging and Casting Corporation, The, Ferndale, Mich. Alloy steel castings, forgings, and welded composite. Serial Nos. 330,892–4; Dec. 27. Class 14.

PUBLISHED FOR OPPOSITION

[Act of Feb. 20, 1905, Sec. 6, as amended Mar. 2, 1907]

CARNEGIE LIBRARY OF ATLANTA

Fort Howard Paper Company, Green Bay, Wis. Toilet paper, paper towels and napkins, and crepe paper. Serial No. 331,677; Dec. 27. Class 37.

Franklin, H. H., Manufacturing Company, Syracuse, N. Y. Automobiles and structural parts thereof. Serial No. 332,228; Dec. 27. Class 19.

Freydberg Brothers, Incorporated, New York, N. Y. Ribbon for tying packages and other uses. Serial No. 332,186; Dec. 27. Class 7.

Frigar, Ellis D., Philadelphia, Pa. Cooked banana chips. Serial No. 331,822; Dec. 27. Class 46.

Frsh Frut Products Co. (See Miller, Willard D.)

Gaunder, Edward J., doing business as Excello Products Co., Buffalo, N. Y. Deodorant, germicide, and antiseptic preparation with cleaning properties. Serial No. 331,639; Dec. 27. Class 6.

Gay-Day Corporation, Chicago, Ill. Enamel-like product or substance for finishing walls, etc. Serial No. 331,953; Dec. 27. Class 16.

General Dyestuff Corporation, New York, N. Y. Coal-tar dyes. Serial No. 331,577; Dec. 27. Class 6.

Gibson, Guy T., Inc., New York, N. Y. Perfumes and sachets. Serial No. 331,578; Dec. 27. Class 6.

Gibson, Wm. D., Company, The, Chicago, Ill. Coil springs. Serial Nos. 331,987–8; Dec. 27. Class 13.

Gilbert, A. C., Company, The, New Haven, Conn. Electric fans, beverage mixers, switches, etc. Serial No. 330,367; Dec. 27. Class 21.

Gilman Brothers, Inc., Boston, Mass. Drug preparations. Serial No. 323,452; Dec. 27. Class 6.

Goldblatt Bros., Inc., Chicago, Ill. Razor blades. Serial No. 331,927; Dec. 27. Class 23.

Goodall Worsted Co., Sanford, Me. Fabric made from combinations of mohair, cotton, wool, etc. Serial No. 331,737; Dec. 27. Class 42.

Goodall Worsted Co., Sanford, Me. Fabric made from combinations of mohair, cotton, wool, etc. Serial No. 331,740; Dec. 27. Class 42.

Ground Gripper Shoe Company, Inc., Harrisburg, Pa. Shoes. Serial No. 327,752; Dec. 27. Class 39.

Guardite Corporation, The, Chicago, Ill. Gaseous fumigating material. Serial No. 331,614; Dec. 27. Class 6.

Halliwell-Shelton Electric Corporation, New York, N. Y. Electrical hair dryers and permanent wave machines. Serial No. 331,499; Dec. 27. Class 44.

Health Developing Apparatus Co., Inc., New York, N. Y. Rowing machines and tableboard games. Serial No. 331,681; Dec. 27. Class 22.

Hemp Jute & Textilite Mfg. Co., A. G., Vienna, Austria. Burlap. Serial Nos. 326,184–5; Dec. 27. Class 42.

Herz Laboratories, Incorporated, New York, N. Y. Depilatory. Serial No. 331,641; Dec. 27. Class 6.

Hingle, C. Martin, Chicago, Ill. Top cylinder lubrication oil. Serial No. 330,172; Dec. 27. Class 15.

Hinkle, Mrs. Z. B., doing business as Dixie Laboratories, Atlanta, Ga. Toilet water, hair tonic, vanishing cream, etc. Serial No. 326,101; Dec. 27. Class 6.

Hollywood-Marvel Products Company, Hollywood, Calif. Perfumes. Serial No. 331,404; Dec. 27. Class 6.

Howard-Scott Publishing Co., New York, N. Y. Magazine. Serial No. 330,703; Dec. 27. Class 38.

Hy-Tex Rubber Company. (See Lee, Ralph A.)

Illinois Canning Company, The, Hoopeston, Ill. Canned corn. Serial No. 331,825; Dec. 27. Class 46.

Illinois Farm Supply Company, Chicago, Ill. Lubricating oils. Serial No. 331,485; Dec. 27. Class 15.

Imperial Metal Manufacturing Corporation, Long Island City, N. Y. Pepper and salt cellars. Serial No. 331,990; Dec. 27. Class 2.

Indian Motocycle Company, Springfield, Mass. Motor vehicles. Serial No. 331,742; Dec. 27. Class 19.

Jensen, Georg, & Wendel A/S, Copenhagen, Denmark. Bracelets, brooches, and other jewelry. Serial No. 330,787; Dec. 27. Class 28.

Johnston, R. F., Paint Company, The, Cincinnati, Ohio. Varnishes, paints, stains, etc. Serial No. 330,629; Dec. 27. Class 16.

Jones, Mary K., Salisbury, N. C. Candy. Serial No. 331,087; Dec. 27. Class 46.

Jordan Marsh Company, Boston, Mass. Cloaks, coats, capes, etc. Serial No. 331,467; Dec. 27. Class 39.

Kaplan, Joseph A., Inc., New York, N. Y. Bath shower curtains. Serial No. 331,744; Dec. 27. Class 13.

Kasper, Alfred, doing business as Quieta-Werke, Leipsig, Germany. Coffee. Serial No. 331,663; Dec. 27. Class 46.

Kaufmann Bros. & Bondy, Inc., West New York, N. J. Pipes. Serial No. 331,257; Dec. 27. Class 8.

Kennerly, Pies B., doing business as Sweetheart Ice Cream Company, Houston Heights, Houston, Tex. Novelty confection. Serial No. 325,582; Dec. 27. Class 46.

Keratese, Inc., East Orange, N. J. Foot medications. Serial No. 331,468; Dec. 27. Class 6.

Kohler Co., Kohler, Wis. Bath tub hangers. Serial No. 332,154; Dec. 27. Class 13.

Kresge Department Store Corp., Newark, N. J. Soap, liquid dry cleaner, shaving soap, shoe polish, etc. Serial No. 330,791; Dec. 27. Class 4.

Kress, S. H., & Co., New York, N. Y. Dry cell batteries. Serial No. 331,587; Dec. 27. Class 21.

Laird & Company, Incorporated, Eatontown, N. J. Cider. Serial No. 332,155; Dec. 27. Class 45.

Lawrence, A. C., Leather Company, Peabody, Mass. Leather. Serial No. 332,192; Dec. 27. Class 1.

Lee, Ralph A., doing business as Hy-Tex Rubber Company, Baltimore, Md. Prophylactic rubbers. Serial No. 331,336; Dec. 27. Class 44.

Leeman, Stephen, Products Corporation, New York, N. Y. Pottery bowls, jars, vases. Serial No. 329,020; Dec. 27. Class 30.

Legrand, Oriza L., Inc., Wilmington, Del., and New York, N. Y. Perfumes and toilet water. Serial No. 331,560; Dec. 27. Class 6.

Libby, McNeill & Libby, Chicago, Ill. Corned beef. Serial No. 331,378; Dec. 27. Class 46.

Life Savers, Inc., Port Chester, N. Y. Candy. Serial No. 330,165; Dec. 27. Class 46.

Lincoln Fruit Growers Association, Lincoln, Calif. Fresh peaches, apricots, and plums. Serial No. 315,913; Dec. 27. Class 46.

Lindsay Farm Bureau Fruit Assn., Lindsay, Calif. Fresh citrus fruits. Serial No. 321,113; Dec. 27. Class 46.

Livergood, Albert C., doing business as Alco Seal Co., Philadelphia, Pa. Cleaner for automobiles, furniture woodwork, etc. Serial No. 330,174; Dec. 27. Class 4.

Lobl Manufacturing Company, The, Middleboro, Mass. Menthol pencils and inhalers. Serial No. 330,823; Dec. 27. Class 44.

Longworth, Dewey, Oakland, Calif. Golf clubs. Serial No. 332,305; Dec. 27. Class 22.

Manhattan Kreole Products, Inc., Brooklyn, N. Y. Polishes, dressings and cleaning preparations. Serial No. 331,379; Dec. 27. Class 4.

Marros, Arthur, New York, N. Y. Bird seeds. Serial No. 318,547; Dec. 27. Class 46.

Marvin-Neitzel Corporation, Troy, N. Y. Hospital supplies. Serial No. 331,508; Dec. 27. Class 44.

Mayers, Mollie. (See Zwiebelson, Abraham.)

McCartney, Charles J., New York, N. Y. Dry cleaning fluid. Serial No. 328,843; Dec. 27. Class 4.

McClelland's Ointment Co., Butler, N. J. Ointment. Serial No. 331,311; Dec. 27. Class 6.

McCrory Stores Corporation, New York, N. Y. Razor blades. Serial No. 331,868; Dec. 27. Class 23.

Meadow Brook Farms. (See Miller, John A.)

Memphis Press-Scimitar Company, Memphis, Tenn. Section or column appearing in newspaper or periodical. Serial No. 331,263; Dec. 27. Class 38.

Michigan Lithographing Co., Grand Rapids, Mich. Catalogs, broadsides, posters, etc. Serial No. 331,115; Dec. 27. Class 38.

Miller, John A., doing business as Meadow Brook Farms, Palmer Township and Nazareth, Pa. Ground dehydrated manure. Serial No. 331,991; Dec. 27. Class 10.

Miller, Willard D., doing business as Fresh Fruit Products Co., El Paso, Tex. Maltless beverages and fruit juices, beverage syrups, flavors, and extracts. Serial No. 331,959; Dec. 27. Class 45.

Minot, Hooper & Co., New York, N. Y. Sheets. Serial No. 330,858; Dec. 27. Class 42.

Minot, Hooper & Co., New York, N. Y. Pillow cases. Serial No. 330,859; Dec. 27. Class 42.

Minot, Hooper & Co., New York, N. Y. Sheets and pillow cases. Serial No. 330,860; Dec. 27. Class 42.

Montaqua Mineral Well Co., Joliet, Ill. Mineral water. Serial No. 332,379; Dec. 27. Class 45.

Moore, Olive A., Oakland, Calif. Sauces. Serial No. 328,922; Dec. 27. Class 46.

Movie Stamps, Inc., New York, N. Y. Trading stamps. Serial No. 325,991; Dec. 27. Class 38.

Mulhern, John, Company, San Francisco, Calif. Syrups and fruit juices. Serial No. 299,587; Dec. 27. Class 46.

Napp, H. R., Limited, London, England. Pharmaceutical preparation. Serial No. 328,670; Dec. 27. Class 6.

Nedrox Manufacturing Co., The. (See Senay, Henry J.)

Neisler Mills Inc., Kings Mountain, N. C. Decorative woven fabrics. Serial No. 332,098; Dec. 27. Class 42

Neon, Claude, Electrical Products Corporation, Ltd., Los Angeles, Calif. Gaseous discharge tubular lamps. Serial No. 331,749; Dec. 27. Class 21.

Oatman Condensed Milk Company, The, doing business as Cardinal Milk Sales Co., Dundee, Ill. Milk. Serial No. 325,109; Dec. 27. Class 46.

Olen, John E., Minneapolis, Minn. Expansion rings. Serial No. 331,750; Dec. 27. Class 23.

Ormond Hosiery Shops, Inc., New York, N. Y. Hosiery and stockings. Serial No. 331,694; Dec. 27. Class 39.

Otis Elevator Company, Jersey City, N. J., and New York, N. Y. Dumb waiters and guide rail lubricators. Serial No. 331,696; Dec. 27. Class 23.

Otis Elevator Company, Jersey City, N. J., and New York, N. Y. Dumb waiters and guide rail lubricators. Serial No. 331,699; Dec. 27. Class 23.

Outserts, Incorporated, New York, N. Y. Labels. Serial No. 330,180; Dec. 27. Class 37.

Pacific Coast Macaroni Mfg. Co., Seattle, Wash. Macaroni products. Serial No. 330,805; Dec. 27. Class 46.

Palmer, Forest R., doing business as Palmer Electric Mfg. Co., Toledo, Ohio. Inductance devices. Serial No. 331,192; Dec. 27. Class 21.

Pangborn Corporation, Hagerstown, Md. Sand-blast abrasive. Serial No. 329,901; Dec. 27. Class 4.

Part, A. F., Inc., New York, N. Y. Bath essence, bath oils, dusting powder, etc. Serial No. 328,846; Dec. 27. Class 6.

Pattberg, Phillip W., New York, N. Y. Portable marble shooting prize game apparatus. Serial No. 331,870; Dec. 27. Class 22.

Pease, C. F., Company, The, Chicago, Ill. Machines for making blue prints and attachments for such machines. Serial No. 320,736; Dec. 27. Class 26.

Pennant Sport Togs Company, New York, N. Y. Blouses, rompers, and gym apparel. Serial No. 331,023; Dec. 27. Class 39.

Permagloss Manufacturing Company. (See Browne, Herbert J.)

Perth Shoe Company Limited, Perth, Ontario, Canada. Boots, shoes, slippers, and sandals. Serial No. 331,317; Dec. 27. Class 39.

Perth Shoe Company Limited, Perth, Ontario, Canada. Boots, shoes, slippers, and sandals. Serial No. 331,608; Dec. 27. Class 39.

Pierce, F. O., Company, Brooklyn, N. Y. Paints, waterproof varnish, and painters' wall size. Serial No. 331,658; Dec. 27. Class 16.

Pine Bros., Inc., Philadelphia, Pa. Antiseptic mouth tablets. Serial No. 330,635; Dec. 27. Class 6.

Pineglow Products. (See Bell, David M.)

Polak, Henry, Inc., New York, N. Y. Women's hats. Serial No. 331,195; Dec. 27. Class 39.

Porus-Lastic Corp., Holbrook, Mass. First aid or surgical bandages. Serial No. 331,473; Dec. 27. Class 44.

Pratt & Lambert-Inc., Buffalo, N. Y. Varnishes, paint enamels, lacquers, etc. Serial No. 331,320; Dec. 27. Class 16.

Price, Thornton W., doing business as The Coal Carburetor Company, New Brunswick, N. J. Draft control for furnaces. Serial No. 305,826; Dec. 27. Class 34.

Quieta-Werke. (See Kasper, Alfred.)

R C A Victor Company, Inc., Camden, N. J. Talking machines and parts thereof, records, etc. Serial No. 331,474; Dec. 27. Class 36.

Radbill, Samuel, doing business as Columbia Petroleum Products Company, Philadelphia, Pa. Lubricating oils. Serial No. 331,008; Dec. 27. Class 15.

Ralston Purina Company, St. Louis, Mo. Baked rye flour product. Serial No. 313,509; Dec. 27. Class 46.

Reed & Carnrick, Jersey City, N. J. Alkaline tablets. Serial No. 331,441; Dec. 27. Class 6.

Ridge Tool Company, The, Elyria, Ohio. Thread cutting oil. Serial No. 332,310; Dec. 27. Class 15.

Rosdex Health Products. (See Ross, Irene.)

Rosenkrantz, Eva, Los Angeles, Calif. Hair grower. Serial No. 330,712; Dec. 27. Class 6.

Ross, Irene, doing business as Rosdex Health Products, Philadelphia, Pa. Laxatives. Serial No. 331,476; Dec. 27. Class 6.

Roth Creations, Incorporated, New York, N. Y. Corsets, girdles, underwear, etc. Serial No. 331,413; Dec. 27. Class 39.

Schmidt, Michael, Inc., New York, N. Y. Face powders, nail polish, hair tonic, etc. Serial No. 328,849; Dec. 27. Class 6.

Schutter Johnson Candy Company Inc., Chicago, Ill. Candy. Serial No. 315,284; Dec. 27. Class 46.

Schwalb, Max, Jackson Heights, N. Y. Powder preparation. Serial No. 331,884; Dec. 27. Class 6.

Sears, Roebuck and Co., Chicago, Ill. Watches. Serial No. 329,563; Dec. 27. Class 27.

Senay, Henry J., doing business as The Nedrox Manufacturing Co., West Palm Beach, Fla. Ointments or salves. Serial No. 330,358; Dec. 27. Class 6.

Servel, Inc., New York, N. Y. Refrigerators and refrigerating apparatus. Serial Nos. 331,931–7; Dec. 27. Class 31.

Shell Oil Company, San Francisco, Calif. Gasoline and lubricating oils. Serial No. 331,995; Dec. 27. Class 15.

Shep-Reid Corporation, St. Paul, Minn. Containers. Serial No. 332,048; Dec. 27. Class 2.

Shorewood Mills, Milwaukee, Wis. Athletic union suits, shirts, and shorts. Serial No. 331,293; Dec. 27. Class 39.

Siemens-Planiawerke A. G. fur Kohlefabrikate, Berlin-Lichtenberg, Germany. Asbestos, clay, silica, etc. Serial No. 286,341; Dec. 27. Class 1.

Siemens-Schuckertwerke Aktiengesellschaft, Berlin-Siemensstadt, Germany. Electrical machines, electrotechnical instruments and appliances, etc. Serial No. 329,876; Dec. 27. Class 21.

Silica Products Corporation, New York, N. Y. Soap. Serial No. 331,626; Dec. 27. Class 4.

Silica Products Corporation, New York, N. Y. Fertilizer. Serial No. 331,628; Dec. 27. Class 10.

Silica Products Corporation, New York, N. Y. Varnishes and paints. Serial No. 331,630; Dec. 27. Class 16.

Sloane-Blabon Corporation, Trenton, N. J., and Nicetown, Philadelphia, Pa. Linoleum paste and cement. Serial No. 332,056; Dec. 27. Class 5.

Small's Sales Service, Inc., Warren, R. I. Non-illuminated reflecting devices. Serial No. 329,156; Dec. 27. Class 50.

Societe Worth, Paris, France. Perfumes. Serial No. 320,608; Dec. 27. Class 6.

Sponge-Aire Seat Company, Inc., Buffalo, N. Y. Seat cushions. Serial No. 331,128; Dec. 27. Class 19.

Spring City Knitting Co., Spring City, Pa. Underwear. Serial No. 328,510; Dec. 27. Class 39.

Standard Pressed Steel Co., Jenkintown, Pa. Screws, stripper bolts, and pipe plugs. Serial No. 332,013; Dec. 27. Class 13.

Stein, Max, doing business as Economic Blade Co., New York, N. Y. Razor blades. Serial No. 332,164; Dec. 27. Class 23.

Sterile Products Company, Inc., San Diego, Calif. Tablets. Serial No. 330,730; Dec. 27. Class 6.

Stuebe, William J., New York, N. Y. Cotton piece goods. Serial No. 328,803; Dec. 27. Class 42.

Sturtevant, B. F., Company, Boston, Mass. Air conditioning apparatus. Serial No. 331,807; Dec. 27. Class 34.

Sweetheart Ice Cream Company. (See Kennerly, Pies B.)

Syndicate Publishing Co. Inc., New York, N. Y. Magazine or printed periodical. Serial No. 326,400; Dec. 27. Class 38.

Talens & Son, Inc., Irvington, N. J. Retouching and picture varnish, and printing medium. Serial No. 331,761; Dec. 27. Class 16.

Taylor, Taylor & Hobson, Limited, Leicester, England. Cinematographic projection lenses. Serial Nos. 332,165–6; Dec. 27. Class 26.

Technical Equipment Corporation, New York, N. Y. Lubricants. Serial No. 326,401; Dec. 27. Class 15.

Tetlow, Henry, Company, Philadelphia, Pa. Face powder, skin lotions, astringents. Serial No. 318,469; Dec. 27. Class 6.

Todd, E. M., Co., Richmond, Va. Packing house products. Serial No. 331,479; Dec. 27. Class 46.

Union Metal Manufacturing Company, The, Canton, Ohio. Metal pipes, tubes, and poles. Serial No. 327,074; Dec. 27. Class 13.

United Scientific Laboratories, Inc., New York, N. Y. Radio receiving sets. Serial No. 331,712; Dec. 27. Class 21.

Universal Button Fastening & Button Company, Detroit, Mich. Buttons. Serial No. 331,286; Dec. 27. Class 40.

Vanity Fair Silk Mills, Reading, Pa. Underwear and hosiery. Serial No. 327,205; Dec. 27. Class 39.

Vicbridge Lamp Company, The, Chicago, Ill. Electric lighting units and wiring fixtures therefor. Serial No. 330,215; Dec. 27. Class 21.

Waffled Steak Machines, Inc., Buffalo, N. Y. Steaks. Serial No. 331,016; Dec. 27. Class 46.

Walker, Joe E., Grand Rapids, Mich. Dressed poultry. Serial No. 328,569; Dec. 27. Class 46.

Wells & Richardson Company, Inc., Burlington, Vt. Preparation for coloring butter. Serial No. 331,352; Dec. 27. Class 6.

Wells-Lamont-Smith Corporation, Minneapolis, Minn. Work gloves. Serial No. 331,632; Dec. 27. Class 39.

Welsh, Katherine, doing business as D-N Facial Bandage Co., Brooklyn, N. Y. Face lifting bandage. Serial No. 331,601; Dec. 27. Class 44.

Western Corset Company Inc., Los Angeles, Calif. Brassières, girdles, garter belts, etc. Serial No. 331,521; Dec. 27. Class 39.

Whitall Tatum Company, Millville, N. J. Glass bottles, jars, pots, etc. Serial No. 329,877; Dec. 27. Class 33.

Wilcox, Crittenden and Company, Incorporated, Middletown, Conn. Combination oil and electric marine lamps. Serial No. 326,406; Dec. 27. Class 34.

Williams, J. B., Company, The, Glastonbury, Conn. Shaving cream. Serial No. 331,131; Dec. 27. Class 4.

Zwiebelson, Abraham, doing business as Mollie Mayers, New York, N. Y. Brassières. Serial No. 331,525; Dec. 27. Class 39.

LIST OF REGISTRANTS OF TRADE-MARKS

Allgemeine Thermit-Gesellschaft m. b. H., Essen-on-the-Ruhr, Germany, assignor to Goldschmidt Thermit Company, New York, N. Y. Metal compounds. 39,543; renewed Dec. 23, 1932.

American Stove Company, St. Louis, Mo. Automatic water-heaters. 90,863; renewed Apr. 1, 1933.

Anchor Packing Company, The, Camden, N. J., and Philadelphia, Pa., to The Anchor Packing Company, Philadelphia, Pa. Packing for machinery and machinery parts. 91,305; renewed Apr. 29, 1933.

Asheville Bottling Co., Asheville, N. C. Soft drinks and syrups and extracts for making the same. 299,879; Dec. 27; Serial No. 330,329; published Oct. 18, 1932. Class 45.

Asphalt Laboratories Company. (See Miller, Joseph.)

Atlantic Packing Co. Inc., New York, N. Y. Yeast. 299,845; Dec. 27; Serial No. 325,898; published Oct. 11, 1932. Class 46.

Atwater Paint Co., Los Angeles, Calif. Paints, colors, white lead, lacquers, etc. 299,880; Dec. 27; Serial No. 329,976; published Oct. 11, 1932. Class 16.

Ballard Knitting Company, Norristown, Pa. Underwear. 299,852; Dec. 27; Serial No. 327,997; published Oct. 18, 1932. Class 39.

Barnes, Sylvina O., Salem, Mass. Maltless birch beer. 299,902; Dec. 27; Serial No. 329,218; published Oct. 25, 1932. Class 45.

Bob, H. D., Company, Inc., New York, N. Y. Shirts, blouses, undershirts, etc. 299,861; Dec. 27; Serial No. 329,592; published Oct. 4, 1932. Class 39.

Boonton Full Fashioned Hosiery Mills, Boonton, N. J. Hosiery. 299,859; Dec. 27; Serial No. 329,440; published Oct. 18, 1932. Class 39.

Bulova Watch Company, Inc., New York, N. Y. Bracelet watches and their attached bracelets. 299,818–19; Dec. 27; Serial Nos. 329,523–4; published Oct. 11, 1932. Class 27.

Bump, Roswell J., Binghamton, N. Y. Oil. 299,821; Dec. 27; Serial No. 329,219; published Oct. 11, 1932. Class 15.

Cammeyer, assignor to Cammeyer, Inc., New York, N. Y. Cleaning compound. 89,986; renewed Jan. 28, 1933.

Campbell's Lu-Bri-Cant Co., Newark, N. J. Lubricant. 299,816; Dec. 27; Serial No. 329,783; published Oct. 11, 1932. Class 15.

Canepa, John B., Company, The, Chicago, Ill. Macaroni, spaghetti, noodles, etc. 299,839; Dec. 27; Serial No. 328,683; published Oct. 11, 1932. Class 46.

Capital Paper Company, Indianapolis, Ind. Paper bags. 299,901; Dec. 27; Serial No. 330,222; published Oct. 25, 1932. Class 2.

Chic Manufacturing Co., Peoria, Ill. Dresses and pajamas. 299,922; Dec. 27; Serial No. 316,877; published Oct. 25, 1932. Class 39.

Cluett, Peabody & Co., Inc., Troy, N. Y. Shirts. 299,864; Dec. 27; Serial No. 329,703; published Oct. 11, 1932. Class 39.

Congost, Juan M., Arenys de Mar, Barcelona, Spain. Ethyl alcohol, whiskeys, liqueurs, etc. 299,899; Dec. 27; Serial No. 329,352; published Oct. 25, 1932. Class 39.

Congost, Juan M., doing business as Hijo de Magin Mollfulleda, Arenys de Mar, Barcelona, Spain. Ethyl alcohol, rum, etc. 299,900; Dec. 27; Serial No. 329,348; published Oct. 25, 1932. Class 49.

Copeland, Mark A., et al., executors. (See Crane, Clarence A.)

Cornelius Publications, Inc., Indianapolis, Ind. Publications. 299,884; Dec. 27; Serial No. 329,423; published Oct. 11, 1932. Class 38.

Couch, W. W., Company. (See N & W Overall Co., Inc.)

Crane, Clarence A., to B. M. Crane, N. B. Madden and Mark A. Copeland, executors of the last will of Clarence A. Crane, deceased, Cleveland, Ohio. Candy. 88,243; renewed Sept. 10, 1932.

Crane, Clarence A., to B. M. Crane, N. B. Madden and Mark A. Copeland, executors of the last will of Clarence A. Crane, deceased, Cleveland, Ohio. Candy. 89,339; renewed Dec. 10, 1932.

Daniels & Co., Messrs., Coscob, Conn. Sauce for meats, fish, game, etc. 299,896; Dec. 27; Serial No. 329,626; published Oct. 11, 1932. Class 46.

Daroff, H., & Sons, Inc., Philadelphia, Pa. Clothing. 299,868; Dec. 27; Serial No. 329,785; published Oct. 18, 1932. Class 39.

Dauntless Shipyard, Inc., Essex, Conn. Sail boats and row boats. 299,826; Dec. 27; Serial No. 327,271; published Oct. 11, 1932. Class 19.

Dennis, Martin, Company, Newark, N. J. Portable receptacles. 299,913; Dec. 27; Serial No. 329,801; published Oct. 18, 1932. Class 2.

De Oliveira, José Leite, Lisbon, Portugal. Canned, pickled, salted, smoked, and preserved fish; canned shellfish, etc. 299,841; Dec. 27; Serial No. 328,239; published Oct. 11, 1932. Class 46.

De Vries, William A., Spokane, Wash. Compound for cleaning and polishing automobiles, etc. 299,882; Dec. 27; Serial No. 329,516; published Oct. 11, 1932. Class 16.

Dorr, Clarence, doing business as Soldax Company, Hoosick Falls, N. Y. Liquid adhesive cements. 299,890; Dec. 27; Serial No. 328,267; published Oct. 11, 1932. Class 5.

Earnshaw Knitting Company, Newton, Mass. Underwear. 299,858; Dec. 27; Serial No. 329,330; published Oct. 25, 1932. Class 39.

Economy Macaroni Co. (See Scotland, Bayard S.)

Electric Vacuum Cleaner Company, Inc., Cleveland, Ohio. Electric vacuum cleaners and parts thereof. 299,813; Dec. 27; Serial No. 329,891; published Oct. 11, 1932. Class 21.

Enterprise Manufacturing Company, The, Akron, Ohio. Fishing reels. 299,877; Dec. 27; Serial No. 330,366; published Oct. 25, 1932. Class 22.

Enterprise Manufacturing Company, The, Akron, Ohio. Fishhooks. 299,920; Dec. 27; Serial No. 328,597; published Oct. 18, 1932. Class 22.

Exeter Emperor Association. (See Fremont Fruit Association.)

Feinberg, Maurice M., to Jennie Feinberg, New York, N. Y., successor. Pharmaceutical preparation. 87,059; renewed June 25, 1932.

Firestone Battery Company, Akron, Ohio. Battery clamps, terminals, and connectors, etc. 299,825; Dec. 27; Serial No. 328,118; published Oct. 11, 1932. Class 21.

First National Bank of Arizona at Phoenix, Ariz. Folders. 299,892; Dec. 27; Serial No. 327,652; published Oct. 11, 1932. Class 38.

Flamm, Samuel A., doing business as Uncle Sam Motor Company, Philadelphia, Pa. Motor-cycles and automobiles. 90,423; renewed Feb. 25, 1933.

Fremont Fruit Association, doing business as Exeter Emperor Association, Exeter, Calif. Fresh grapes. 299,828; Dec. 27; Serial No. 325,519; published Oct. 11, 1932. Class 46.

Fruit Industries, Ltd., San Francisco, Calif. Compound containing pure California brandy and cane sugar. 299,842; Dec. 27; Serial No. 327,974; published Oct. 11, 1932. Class 46.

Fuller, W. P., & Co., San Francisco, Calif. Enamels. 299,891; Dec. 27; Serial No. 328,120; published Oct. 11, 1932. Class 16.

Gardiner-Warring Co., Inc., Florence, Ala. Sweaters, bathing suits, and underwear. 299,923–4; Dec. 27; Serial Nos. 314,796–7; published Oct. 11, 1932. Class 39.

Giles & Hirsch, Inc., New York, N. Y. Play suits and overalls. 299,867; Dec. 27; Serial No. 329,855; published Oct. 11, 1932. Class 39.

Gluek Brewing Company, Minneapolis, Minn. Maltless beverages. 299,875; Dec. 27; Serial No. 326,211; published Oct. 18, 1932. Class 45.

Goldschmidt Thermit Company. (See Allgemeine Thermit-Gesellschaft m. b. H., assignor.)

Guptill, Hervey E., Haverhill, Mass., assignor to Hervey E. Guptill Company, Seabrook, N. H. Ladies' boots and shoes. 40,303; renewed May 12, 1933.

Hanes, P. H., Knitting Company, Winston-Salem, N. C. Wearing apparel. 299,872; Dec. 27; Serial No. 330,200; published Oct. 25, 1932. Class 39.

Hartmann, Theodore H., doing business as Vitro Shine Mfg. Co., St. Louis, Mo. Polish. 299,883; Dec. 27; Serial No. 329,469; published Oct. 11, 1932. Class 16.

Health Developing Apparatus Co., Inc., New York, N. Y. Rowing machines. 299,905–6; Dec. 27; Serial Nos. 330,126–7; published Oct. 18, 1932. Class 22.

Health Developing Apparatus Co., Inc., New York, N. Y. Rowing machines. 299,909–10; Dec. 27; Serial Nos. 330,088–9; published Oct. 18, 1932. Class 22.

Hexin, Inc., Chicago, Ill. Tablets for relief of headache, neuralgia, head colds, etc. 299,898; Dec. 27; Serial No. 330,258; published Oct. 18, 1932. Class 6.

Hijo de Magin Mollfulleda. (See Congost, Juan M.)

Hill, Alfred C., doing business as Hill Baking Co., Vernon, Tex. Bread. 299,838; Dec. 27; Serial No. 328,730; published Oct. 11, 1932. Class 46.

Holbrook Raw Hide Company, Providence, R. I. Loompickers. 90,832; renewed Feb. 18, 1933.

Holdeman, Joseph L., Elkhart, Ind. Fluid refinish for masonry. 299,893; Dec. 27; Serial No. 327,014; published Oct. 11, 1932. Class 16.

Hubbard, J. W., Co., Chicago, Ill. Packing house equipment. 299,822; Dec. 27; Serial No. 328,955; published Oct. 11, 1932. Class 19.

Hubinger Company, The, Keokuk, Iowa. Dessert powder. 299,837; Dec. 27; Serial No. 329,144; published Oct. 11, 1932. Class 46.

International Trade, Finance & Export Co., Ltd., Glasgow, Scotland. Whiskey. 299,903; Dec. 27; Serial No. 330,201; published Oct. 25, 1932. Class 49.

Isaacs, I. C., & Company, Baltimore, Md. Riding breeches, jodhpurs, and riding coats, etc. 299,851; Dec. 27; Serial No. 327,154; published Oct. 4, 1932. Class 39.

Janov-Abeles, I., Shirt Co., New York, N. Y. Shirts, collars. 299,869; Dec. 27; Serial No. 329,857; published Oct. 11, 1932. Class 39.

Katz, David, doing business as Peekskill Products Co., Peekskill, N. Y. Malt syrup. 299,849; Dec. 27; Serial No. 318,034; published Oct. 11, 1932. Class 46.

Kearns Brothers, Inc., Pinckneyville, Ill. Dresses. 299,865; Dec. 27; Serial No. 329,799; published Oct. 11, 1932. Class 39.

Keasbey & Mattison Company, Ambler, Pa. Brake linings. 299,911; Dec. 27; Serial No. 329,952; published Oct. 25, 1932. Class 35.

Kendall Refining Company, Bradford, Pa. Oils and greases. 299,823; Dec. 27; Serial No. 327,761; published Oct. 11, 1932. Class 15.

Knott, Wm. T., Company, Inc., New York, N. Y. Hosiery. 299,863; Dec. 27; Serial No. 329,683; published Oct. 4, 1932. Class 39.

Kohn, Samuel S., doing business as Thrift Rubber Company, Newark, N. J. Prophylactic rubber and membraneous articles. 299,852; Dec. 27; Serial No. 314,205; published Aug. 4, 1931. Class 44.

Levy, S. J., & Co. Inc., New York, N. Y. Suits and overcoats. 299,857; Dec. 27; Serial No. 329,262; published Oct. 4, 1932. Class 39.

Ludlow Manufacturing Associates, Boston, Mass. Jute bagging. 91,295; renewed Apr. 22, 1933.

Madden, N. B., et al., executors. (See Crane, Clarence A.)

Mantle Lamp Company of America, The, Chicago, Ill. Lamp bowls, shades, and chimneys, and vases made of glass. 299,889; Dec. 27; Serial No. 328,559; published Oct. 11, 1932. Class 33.

Martha Washington Candies Company, assignor to Elie Sheetz Candies Company, Chicago, Ill. Chocolate. 299,831; Dec. 27; Serial No. 316,603; published Oct. 11, 1932. Class 46.

McDonald, Herman M., Chicago, Ill. Underwear. 299,871; Dec. 27; Serial No. 330,067; published Oct. 18, 1932. Class 39.

Mearick-Ames, Inc., Dayton, Ohio. Hosiery. 299,873; Dec. 27; Serial No. 330,203; published Oct. 25, 1932. Class 39.

Meteor Electric Corporation, New York and Brooklyn, N. Y. Electric plugs, electric receptacles, electric cut-outs, etc. 299,830; Dec. 27; Serial No. 323,347; published Oct. 11, 1932. Class 21.

Metro Hosiery Co., Inc., New York, N. Y. Hosiery. 299,925; Dec. 27; Serial No. 306,195; published Oct. 4, 1932. Class 39.

Meyers Pants Co. Inc., New York, N. Y. Lumberjackets, pants, coats, etc. 299,870; Dec. 27; Serial No. 330,018; published Oct. 18, 1932. Class 39.

Michigan Casket Co., Detroit, Mich. Caskets. 299,878; Dec. 27; Serial No. 330,485; published Oct. 25, 1932. Class 2.

Miller, Joseph, doing business as Asphalt Laboratories Company, Milwaukee, Wis. Lumber, flooring, paving blocks, etc. 299,834; Dec. 27; Serial No. 310,023; published Oct. 11, 1932. Class 12.

Milson Company, The, Cincinnati, Ohio. Allspice, cake icings, celery salt, chewing gum, etc. 299,835; Dec. 27; Serial No. 283,412; published Oct. 11, 1932. Class 46.

Monark Battery Company, Inc., Chicago, Ill. Storage batteries. 299,829; Dec. 27; Serial No. 322,799; published May 31, 1932. Class 21.

Montgomerie & Co., Ltd., Glasgow, Scotland. Malt beverages and extracts for making same. 299,894; Dec. 27; Serial No. 326,833; published July 26, 1932. Class 48.

Morey Mercantile Company, The, Denver, Colo. Foods. 91,364; renewed Apr. 29, 1933.

Munsingwear Corporation, The, Minneapolis, Minn. Girdles and foundation garments with garters. 299,856; Dec. 27; Serial No. 328,365; published Oct. 4, 1932. Class 39.

N & W Overall Co., Inc., doing business as W. W. Couch Company, Lynchburg, Va. Overalls, work shirts and pants. 299,853; Dec. 27; Serial No. 328,032; published Oct. 25, 1932. Class 39.

National Fruit Product Company, Inc., Washington, D. C. Apple products. 299,846; Dec. 27; Serial No. 325,720; published June 11, 1932. Class 46.

National Games Corporation, Buffalo, N. Y. Shuttlecocks. 299,914; Dec. 27; Serial No. 329,750; published Oct. 25, 1932. Class 22.

National Palladium Company, Chicago, Ill. Spark plugs. 299,811; Dec. 27; Serial No. 329,959; published Oct. 11, 1932. Class 21.

National Paper Napkin Mfg. Co., Chicago, Ill. Paper towels and paper napkins. 299,847; Dec. 27; Serial No. 324,690; published Oct. 11, 1932. Class 37.

National Paper Napkin Mfg. Co., Chicago, Ill. Paper towels, paper napkins. 299,848; Dec. 27; Serial No. 322,966; published Oct. 11, 1932. Class 37.

National Pectin Products Company, Chicago, Ill. Ice cream confection. 299,843; Dec. 27; Serial No. 327,561; published Oct. 11, 1932. Class 46.

Natural Products Company, Eugene, Oreg. Mineral water. 299,912; Dec. 27; Serial No. 328,903; published Oct. 18, 1932. Class 45.

Nessly, Frederick C., doing business as Rah-Na Co., Seattle, Wash. Maltless beverages. 299,827; Dec. 27; Serial No. 326,828; published Sept. 20, 1932. Class 45.

Osgood & Sons, Inc., Decatur, Ill. Dresses, pajamas, smocks, beach suits, etc. 299,860; Dec. 27; Serial No. 329,506; published Oct. 11, 1932. Class 39.

Ottawa River Paper Company, The, Toledo, Ohio. Containers, shipping cases, display cases, etc. 299,918; Dec. 27; Serial No. 329,198; published Oct. 18, 1932. Class 2.

Ottinger, Carew and McLaughlin, New York, N. Y. Dolls. 299,916–17; Dec. 27; Serial Nos. 329,426–7; published Oct. 18, 1932. Class 22.

Pacific Commercial Company, San Francisco, Calif., renewed to Pacific Commercial Company, New York, N. Y. Spices, flavoring extracts, canned fruits, etc. 91,128; renewed Apr. 15, 1933.

Pacific Commercial Company, San Francisco, Calif., to Pacific Commercial Company, New York, N. Y. Baking-powder. 91,425; renewed Apr. 29, 1933.

Paparossi, D. Nicola, Newark, N. J. Maltless beverages. 299,874; Dec. 27; Serial No. 329,865; published Oct. 18, 1932. Class 45.

Patterson-Sargent Company, The, Cleveland, Ohio. Paints, paint enamels, stains, etc. 299,887; Dec. 27; Serial No. 329,292; published Oct. 11, 1932. Class 16.

Peekskill Products Co. (See Katz, David.)

Petroleum Marketers Co. Inc., Long Island City, N. Y. Gasoline, oils, and greases. 299,824; Dec. 27; Serial No. 328,711; published Oct. 11, 1932. Class 15.

Pond, Edmund M., to Arthur H. Smith and Esme A. C. Smith, doing business as Pond Manufacturing Company, Rutland, Vt. Surgical bandages. 89,200; renewed Nov. 19, 1932.

Radbill Oil Co., Inc., Philadelphia, Pa. Lubricating oil. 299,817; Dec. 27; Serial No. 329,686; published Oct. 11, 1932. Class 15.

Rah-Na Co. (See Nessly, Frederick G.)

Randolph Marketing Company, San Bernardino, Calif. Fresh fruits, vegetables, and cantaloupes. 299,833; Dec. 27; Serial No. 311,340; published Oct. 11, 1932. Class 46.

Raybestos-Manhattan, Inc., Passaic, N. J. Transmission belts. 299,919; Dec. 27; Serial No. 328,801; published Oct. 18, 1932. Class 35.

Ritz Cosmetic & Perfume Shoppe, Elizabeth, N. J. Facial tissues. 299,885; Dec. 27; Serial No. 329,356; published Oct. 11, 1932. Class 37.

Roggen Bros. & Co., assignor to Roggen Bros. & Co. Inc., New York, N. Y. Shirts. 91,127; renewed Apr. 15, 1933.

Ruch, Max, Berlin, Germany. Collars and cuffs. 299,862; Dec. 27; Serial No. 328,647; published Oct. 11, 1932. Class 39.

"Sanitas" Co. (U. S. A.), Jersey City, N. J., as assignee of The "Sanitas" Company, Limited, Limehouse, London, England, assignor, by mesne assignments, to The "Sanitas" Company, Limited, London, England. Appliances and apparatus for the use of fumigating, deodorizing, etc.; antiseptic gauze and absorbent wool. 90,660; renewed Mar. 11, 1933.

Schmitt, Peter, Columbus, Nebr. Whole wheat flour. 89,153; renewed Nov. 12, 1932.

Scotland, Bayard S., doing business as Economy Macaroni Co., Joliet, Ill. Macaroni, spaghetti, and noodles. 299,844; Dec. 27; Serial No. 326,832; published Oct. 11, 1932. Class 46.

Seiler, Karl, & Sons, Philadelphia, Pa. Liverwurst. 299,895; Dec. 27; Serial No. 329,538; published Oct. 11, 1932. Class 46.

Shawmut Woolen Mills, Stoughton, Mass. Jersey garments. 299,855; Dec. 27; Serial No. 328,311; published Oct. 11, 1932. Class 39.

Sheetz, Elie, Candies Company. (See Martha Washington Candies Company, assignor.)

Siegel Bros. Kiki Maid Coats Inc., New York, N. Y. Coats. 299,921; Dec. 27; Serial No. 320,280; published Dec. 8, 1931. Class 39.

Smith, Arthur H. and Esme A. C. (See Pond, Edmund M.)

Smooth-On Manufacturing Company, Jersey City, N. J. Iron compound. 299,886; Dec. 27; Serial No. 329,317; published Oct. 11, 1932. Class 12.

Soldax Company. (See Dorr, Clarence.)

Steinberger Bros. Glove Corp., New York, N. Y. Fabric gloves. 299,850; Dec. 27; Serial No. 325,960; published Oct. 4, 1932. Class 39.

Stephen Oil Co., Morris, Ill. Lubricating oil. 299,812; Dec. 27; Serial No. 329,909; published Oct. 11, 1932. Class 15.

Sterne-Jay Corporation, New York, N. Y. Lubricating oil. 299,814–15; Dec. 27; Serial Nos. 329,872–3; published Oct. 11, 1932. Class 15.

Sunical Packing Company, San Francisco, Calif. Canned fruits. 299,840; Dec. 27; Serial No. 328,628; published Oct. 11, 1932. Class 46.

Talking Golf Ball Company, Chicago, Ill. Golf balls. 299,876; Dec. 27; Serial No. 330,435; published Oct. 25, 1932. Class 22.

Tartar, Max, Chicago, Ill. Playing cards. 299,908; Dec. 27; Serial No. 330,109; published Oct. 25, 1932. Class 22.

Thrift Rubber Company. (See Kohn, Samuel S.)

Uncle Sam Motor Company. (See Flamm, Samuel A.)

United States Envelope Company, Springfield, Mass. Containers or bags of transparent paper or cellulose. 299,904; Dec. 27; Serial No. 330,132; published Oct. 25, 1932. Class 2.

Uvalde Rock Asphalt Company, San Antonio, Tex. Asphalt plank, floor and industrial tile, and expansion joints. 299,881; Dec. 27; Serial No. 329,963; published Oct. 11, 1932. Class 12.

Vitaphone Co., The, Plainfield, N. J., assignor, by mesne assignments, to The Vitaphone Corporation, New York, N. Y. Graphophones, gramophones, and parts and records therefor. 90,851; renewed Mar. 25, 1933.

Vitro Shine Mfg. Co. (See Hartmann, Theodore H.)

Wapler, Nicholas, Company, New York, N. Y. Feed for fish. 299,836; Dec. 27; Serial No. 329,391; published Oct. 11, 1932. Class 46.

Waterbury Clock Company, Waterbury, Conn. Clockwork operated electric switches. 299,820; Dec. 27; Serial No. 329,320; published Oct. 11, 1932. Class 21.

Western Auto Supply Company, Kansas City, Mo. Tires. 299,907; Dec. 27; Serial No. 330,111; published Oct. 25, 1932. Class 35.

Whitman, Stephan F., & Son, Inc., Philadelphia, Pa. Candy. 299,897; Dec. 27; Serial No. 329,435; published Oct. 11, 1932. Class 46.

Williams Gold Refining Co., Inc., The, Buffalo, N. Y. Artificial fishing baits. 299,915; Dec. 27; Serial No. 329,567; published Oct. 25, 1932. Class 22.

Worcester Knitting Company, Worcester, Mass. Sweaters and bathing suits. 299,866; Dec. 27; Serial No. 329,815; published Oct. 11, 1932. Class 39.

Wrigley, Norman J., Atlanta, Ga. Children's play suits. 299,854; Dec. 27; Serial No. 328,045; published Aug. 9, 1932. Class 39.

Wyodak Chemical Company, The, Cuyahoga Heights Village, Cleveland, Ohio. Plaster and thermal insulating materials. 299,888; Dec. 27; Serial No. 329,211; published Oct. 11, 1932. Class 12.

LIST OF REGISTRANTS OF LABELS

Addo Corporation, The, Swampscott, Mass. Addo. For Muffin Mixture. 41,560; Dec. 27.

Batterton Coffee Co. Inc., Birmingham, Ala. Fresh In Glass Royal Cup Coffee. For Coffee. 41,561; Dec. 27.

Bianchi, Matteucci & Pepe, Stockton, Calif. Baby Bear. For Fresh Grapes. 41,562; Dec. 27.

Bielfeldt, Raymond W., doing business as Moderne Chemical Co., Aurora, Ill. Moderne Cleaner. For Combined Water Softener and Cleaner. 41,563; Dec. 27.

Bishop, Henry Inc., Baltimore, Md. Bishop's Parrakeet and Finch Mixture, For Parrakeet and Finch Seed Mixture. 41,564; Dec. 27.

Buettner, T., & Co. Inc., Chicago, Ill. Nun's Nomotta. For Knitting Worsted. 41,565; Dec. 27.

D'Arrigo Bros. Co., San Jose, Calif. Andy Boy. For Fresh Broccoli. 41,566; Dec. 27.

Daughenbaugh, Carrie A., to Carrie A. Daughenbaugh, doing business as H. L. D. Ointment Co., Allegheny, Pa. Ointment. 11,774, renewed Jan. 3, 1933.

Duff, P., & Sons, Inc., Pittsburgh, Pa. Duff's Fruit Cake Mix. For Fruit Cake Mixture. 41,567; Dec. 27.

H. L. D. Ointment Co. (See Daughenbaugh, Carrie A.)

Hill, H. C., Mfg. Co., Los Angeles, Calif. Chain-Way Lingerie Guards. For Lingerie Guards. 41,568; Dec. 27.

Hoague-Sprague Corporation, Lynn, Mass. Foot Form Shoes. For Boxes. 41,569; Dec. 27.

Hoague-Sprague Corporation, Lynn, Mass. Service Shoes. For Boxes. 41,570; Dec. 27.

Jeffrey, Daniel, & Sons, Incorporated, Jeanerette, La. Jeffrey's. For Pure Cane Syrup. 41,571; Dec. 27.

King, Harry R., Boston, Mass. Som Toy. For Chop Suey. 41,572; Dec. 27.

Krank, A. J., Company, St. Paul. Minn. Tour-Ne-Sol. For Cleansing Cream. 41,573; Dec. 27.

Loud, Carl, Birmingham, Mich. Dairy Fresh Coffee. For Bottled Coffee. 41,574; Dec. 27.

Mason, Au & Magenheimer Confectionery Manufacturing Company, Brooklyn, N. Y. Mason's Black Crows. For Candy Drops. 41,575; Dec. 27.

Mi-Mo Products Co., Rochester, N. Y. Mi-Mo Bath Kushun. For Bath Cushions. 41,576; Dec. 27.

Moderne Chemical Co. (See Bielfeldt, Raymond W.)

Morgan, H. S., Inc., Brooklyn, N. Y. Morgans Whole Wheat Dessert. For Prepared Whole-Wheat Desserts. 41,577; Dec. 27.

National Sulphur Co., Inc., New York, N. Y. Magnetic. For Dusting Sulphur. 41,578; Dec. 27.

Neff Potteries, Pasadena, Calif. "Red Dot" Household Cleaner. For Household Cleaner. 41,579; Dec. 27.

Negwer, Max, Potsdam, Germany. Antiphones, the Sound Absorbers. For Antiseptically Prepared Plastic Balls to be Inserted in the Ear to Protect the Ear from Nerve-Wearing Noise. 41,580; Dec. 27.

New York Toy & Game Co. (See Rubin, Herbert.)

Palmer Advertising Service Inc., New York, N. Y. Indeckskit. For Menus and Recipes. 41,581; Dec. 27.

Patchogue Plymouth Mills Corporation, New York, N. Y. Rugget. For Rugs. 41,582; Dec. 27.

Phillips Milling Company Incorporated, San Francisco, Calif. Phillips Flour. For Flour. 41,583; Dec. 27.

Phillips Milling Company Incorporated, San Francisco, Calif. Phillips Long Grain Rice. For Rice. 41,584; Dec. 27.

Placentia Co-Operative Orange Assn., Placentia, Calif. Placentia Queen. For Fresh Oranges. 41,585; Dec. 27.

Quandt Chemical Co., San Francisco, Calif. Quandt Core Oil. For Core Oil (an Oil Used in Foundry Work). 41,586; Dec. 27.

Rathbun, John, Cincinnati, Ohio. Election. For Game. 41,587; Dec. 27.

Redlands Foothill Groves, Redlands, Calif. Sunny Cove. For Fresh Oranges. 41,588; Dec. 27.

Renstrom, Carl W., doing business as Tip-Top Products Co., Omaha, Nebr. Tip-Top Heatless Liquid Solder. For Liquid Solder. 41,589; Dec. 27.

Rosen, E., Company, Providence, R. I. Puzzle Pop. For Lollypops. 41,590; Dec. 27.

Royal Lace Paper Works, Inc., The, Brooklyn, N. Y. Shelf and Lining Paper. For Shelf and Lining Paper. 41,591; Dec. 27.

Rubin, Herbert, doing business as New York Toy & Game Co., New York, N. Y. Fingerprinter. For Fingerprint Game Toy Sets. 41,592; Dec. 27.

Stuhmer, Geo. F., & Company, Brooklyn, N. Y. Stuhmer's. For Pumpernickel. 41,593; Dec. 27.

Stuhmer, Geo. F., & Company, Brooklyn, N. Y. Stuhmer's. For Rye Bread. 41,594; Dec. 27.

Tip-Top Products Co. (See Renstrom, Carl W.)

Trautwein, Clarence B., Chattanooga, Tenn. Rat-E-K-Tor, Quickly Eradicates Rats and Mice. For Powder Preparation Eradicating Rats and Mice. 41,595; Dec. 27.

Valencia Heights Orchards, Inc., Covina, Calif. Val-Hi. For Oranges. 41,596; Dec. 27.

Van Dyk & Reeves, Inc., Brooklyn, N. Y. Vandyk's Dates. For Dates. 41,597; Dec. 27.

Van Dyk & Reeves, Inc., Brooklyn, N. Y. Minaret Dates. For Dates. 41,598; Dec. 27.

Winstead, Marguerite, Washington, D. C. Marguerite Winstead Face Lotion. For Face Lotion. 41,599; Dec. 27.

LIST OF REGISTRANTS OF PRINTS

Birnbach Radio Co., Inc., New York, N. Y. Birnbach Complete Aerial Kit. For Radio Aerial Kits. 13,985; Dec. 27.

Carroccio, T. A., & Sons, New York, N. Y. Carroccio's Ready to Serve Sauce. For Prepared Sauce. 13,986; Dec. 27.

General Mills, Inc., Minneapolis, Minn. Stop Forcing Your Child to Eat Hot Cereals! For Cereal Food. 13,987; Dec. 27.

Laird & Company, Incorporated, Eatontown, N. J. Laird's Cider. For Cider. 13,988; Dec. 27.

Twenty Grand Blade Company, Inc., Spencer, Ind. Single Edge Blades. For Razor Blades. 13,989; Dec. 27.

CLASSIFIED LIST OF TRADE-MARKS REGISTERED

CLASS 2

Bags, Paper. Capital Paper Company. 299,901; Dec. 27; Serial No. 330,222; published Oct. 25, 1932.

Caskets. Michigan Casket Co. 299,878; Dec. 27; Serial No. 330,485; published Oct. 25, 1932.

Containers or bags of transparent paper or cellulose. United States Envelope Company. 299,904; Dec. 27; Serial No. 330,132; published Oct. 25, 1932.

Containers, shipping and display cases, etc. Ottawa River Paper Company. 299,918; Dec. 27; Serial No. 329,198; published Oct. 18, 1932.

Receptacles, Portable. Martin Dennis Company. 299,913; Dec. 27; Serial No. 329,801; published Oct. 18, 1932.

CLASS 4

Cleaning compound. Cammeyer. 89,986; renewed Jan. 28, 1933.

CLASS 5

Cements, Liquid adhesive. C. Dorr. 299,890; Dec. 27; Serial No. 328,267; published Oct. 11, 1932.

CLASS 6

Pharmaceutical preparation. M. M. Feinberg. 87,059; renewed June 25, 1932.

Tablets for relief of headache, neuralgia, head colds, etc. Hexin, Inc. 299,898; Dec. 27; Serial No. 330,258; published Oct. 18, 1932.

CLASS 12

Asphalt plank, floor and industrial tile, and expansion joints. Uvalde Rock Asphalt Company. 299,881; Dec. 27; Serial No. 329,963; published Oct. 11, 1932.

Iron compound. Smooth-On Manufacturing Company. 299,886; Dec. 27; Serial No. 329,317; published Oct. 11, 1932.

Lumber, flooring, paving blocks, etc. J. Miller. 299,834; Dec. 27; Serial No. 310,023; published Oct. 11, 1932.

Plaster and thermal insulating materials. Wyodak Chemical Company. 299,888; Dec. 27; Serial No. 329,211; published Oct. 11, 1932.

CLASS 14

Metal compounds. Allgemeine Thermit-Gesellschaft m. b. H. 39,543; renewed Dec. 23, 1932.

CLASS 15

Gasoline, oils, and greases. Petroleum Marketers Co. Inc. 299,824; Dec. 27; Serial No. 328,711; published Oct. 11, 1932.

Lubricant. Campbell's Lu-Bri-Cant Co. 299,816; Dec. 27; Serial No. 329,783; published Oct. 11, 1932.

Oil. R. J. Bump. 299,821; Dec. 27; Serial No. 329,219; published Oct. 11, 1932.

Oil, Lubricating. Radbill Oil Co. 299,817; Dec. 27; Serial No. 328,686; published Oct. 11, 1932.

Oil, Lubricating. Stephen Oil Co. 299,812; Dec. 27; Serial No. 329,909; published Oct. 11, 1932.

Oil, Lubricating. Sterne-Jay Corporation. 299,814–15; Dec. 27; Serial Nos. 329,872–3; published Oct. 11, 1932.

Oils and greases. Kendall Refining Company. 299,823; Dec. 27; Serial Nos. 329,872–3; published Oct. 11, 1932.

CLASS 16

Compound for cleaning and polishing automobiles, etc. W. A. De Vries. 299,882; Dec. 27; Serial No. 329,516; published Oct. 11, 1932.

Enamels. W. P. Fuller & Co. 299,891; Dec. 27; Serial No. 328,120; published Oct. 11, 1932.

Fluid refinish for masonry. J. L. Holdeman. 299,893; Dec. 27; Serial No. 327,014; published Oct. 11, 1932.

Paints, colors, white lead, lacquers, etc. Atwater Paint Co. 299,880; Dec. 27; Serial No. 329,976; published Oct. 11, 1932.

Paints, paint enamels, stains, etc. Patterson-Sargent Company. 299,887; Dec. 27; Serial No. 329,292; published Oct. 11, 1932.

Polish. T. H. Hartmann. 299,883; Dec. 27; Serial No. 329,469; published Oct. 11, 1932.

CLASS 19

Boats, Sail and row. Dauntless Shipyard, Inc. 299,826; Dec. 27; Serial No. 327,271; published Oct. 11, 1932.

Motor-cycles and automobiles. S. A. Flamm. 90,423; renewed Feb. 25, 1933.

Packing house equipment in the nature of trucks. J. W. Hubbard Co. 299,822; Dec. 27; Serial No. 328,955; published Oct. 11, 1932.

CLASS 21

Batteries, Storage. Monark Battery Company. 299,829; Dec. 29; Serial No. 322,799; published May 31, 1932.

Clamps, terminals, and connectors, etc., Battery. Firestone Battery Company. 299,825; Dec. 27; Serial No. 328,118; published Oct. 11, 1932.

Electric switches, Clockwork operated. Waterbury Clock Company. 299,820; Dec. 27; Serial No. 329,320; published Oct. 11, 1932.

Electric vacuum cleaners and parts thereof. Electric Vacuum Cleaner Company. 299,813; Dec. 27; Serial No. 329,891; published Oct. 11, 1932.

Plugs, receptacles, cutouts, etc., Electric. Meteor Electric Corporation. 299,830; Dec. 27; Serial No. 323,347; published Oct. 11, 1932.

Spark plugs. National Palladium Company. 299,811; Dec. 27; Serial No. 329,959; published Oct. 11, 1932.

CLASS 22

Baits, Artificial fishing. Williams Gold Refining Co. 299,915; Dec. 27; Serial No. 329,567; published Oct. 25, 1932.

Cards, Playing. M. Tartar. 299,908; Dec. 27; Serial No. 330,109; published Oct. 25, 1932.

Dolls. Ottinger, Carew and McLaughlin. 299,916–17; Dec. 27; Serial Nos. 329,426–7; published Oct. 18, 1932.

Fishhooks. Enterprise Manufacturing Company. 299,920; Dec. 27; Serial No. 328,597; published Oct. 18, 1932.

Golf balls. Talking Golf Ball Company. 299,876; Dec. 27; Serial No. 330,435; published Oct. 25, 1932.

Reels, Fishing. Enterprise Manufacturing Company. 299,877; Dec. 27; Serial No. 330,366; published Oct. 25, 1932.

Rowing machines. Health Developing Apparatus Co. 299,905–6; Dec. 27; Serial Nos. 330,126–7; published Oct. 18, 1932.

Rowing machines. Health Developing Apparatus Co. 299,909–10; Dec. 27; Serial Nos. 330,088–9; published Oct. 18, 1932.

Shuttlecocks. National Games Corporation.. 299,914; Dec. 27; Serial No. 329,750; published Oct. 25, 1932.

CLASS 23

Loom-pickers. Holbrook Raw Hide Company. 90,332; renewed Feb. 18, 1933.

CLASS 27

Watches, Bracelet. Bulova Watch Company. 299,818–19; Dec. 27; Serial Nos. 329,523–4; published Oct. 11, 1932.

CLASS 33

Bowls, shades, and chimneys, and vases made of glass, Lamp. Mantle Lamp Company of America. 299,889; Dec. 27; Serial No. 328,559; published Oct. 11, 1932.

CLASS 34

Heaters, Automatic water. American Stove Company. 90,863; renewed Apr. 1, 1933.

CLASS 35

Belts, transmission. Raybestos-Manhattan, Inc. 299,919; Dec. 27; Serial No. 328,801; published Oct. 18, 1932.

Linings, Brake. Keasbey & Mattison Company. 299,911; Dec. 27; Serial No. 329,952; published Oct. 25, 1932.

Packing. Anchor Packing Company. 91,305; renewed Apr. 29, 1933.

Tires. Western Auto Supply Company. 299,907; Dec. 27; Serial No. 330,111; published Oct. 25, 1932.

CLASS 36

Graphophones, gramophones, and parts and records therefor. Vitaphone Co. 90,851; renewed Mar. 25, 1933.

CLASS 37

Paper towels and napkins. National Paper Napkin Mfg. Co. 299,847; Dec. 27; Serial No. 324,690; published Oct. 11, 1932.

Paper towels and napkins. National Paper Napkin Mfg. Co. 299,848; Dec. 27; Serial No. 322,966; published Oct. 11, 1932.

Tissues, Facial. Ritz Cosmetic & Perfume Shoppe. 299,885; Dec. 27; Serial No. 329,356; published Oct. 11, 1932.

CLASS 38

Folders. First National Bank of Arizona at Phoenix. 299,892; Dec. 27; Serial No. 327,652; published Oct. 11, 1932.

Publications. Cornelius Publications, Inc. 299,884; Dec. 27; Serial No. 329,423; published Oct. 11, 1932.

CLASS 39

Apparel, Wearing. P. H. Hanes Knitting Company. 299,872; Dec. 27; Serial No. 330,200; published Oct. 25, 1932.

Boots and shoes, Ladies'. H. E. Guptill. 40,303; renewed May 12, 1933.

Breeches, jodhpurs, and riding coats, etc., Riding. I. C. Isaacs & Company. 299,851; Dec. 27; Serial No. 327,154; published Oct. 4, 1932.

Clothing. H. Daroff & Sons, Inc. 299,868; Dec. 27; Serial No. 329,785; published Oct. 18, 1932.

Coats. Siegel Bros. Kiki Maid Koats Inc. 299,921; Dec. 27; Serial No. 320,280; published Dec. 8, 1931.

Collars and cuffs. M. Ruch. 299,862; Dec. 27; Serial No. 328,647; published Oct. 11, 1932.

Dresses. Kearns Brothers, Inc. 299,865; Dec. 27; Serial No. 329,799; published Oct. 11, 1932.

Dresses and pajamas. Chic Manufacturing Co. 299,922; Dec. 27; Serial No. 316,877; published Oct. 25, 1932.

Dresses, pajamas, aprons, smocks, etc. Osgood & Sons, Inc. 299,860; Dec. 27; Serial No. 329,506; published Oct. 11, 1932.

Garments, Jersey. Shawmut Woolen Mills. 299,855; Dec. 27; Serial No. 328,311; published Oct. 11, 1932.

Girdles and foundation garments with garters. Munsingwear Corporation. 299,856; Dec. 27; Serial No. 328,365; published Oct. 4, 1932.

Gloves. Steinberger Bros. Glove Corp. 299,850; Dec. 27; Serial No. 325,960; published Oct. 4, 1932.

Hosiery. Boonton Full Fashioned Hosiery Mills. 299,859; Dec. 27; Serial No. 329,440; published Oct. 18, 1932.

Hosiery. Wm. T. Knott Company. 299,863; Dec. 27; Serial No. 329,685; published Oct. 4, 1932.

Hosiery. Mearick-Ames, Inc. 299,873; Dec. 27; Serial No. 330,203; published Oct. 25, 1932.

Hosiery. Metro Hosiery Co. 299,925; Dec. 27; Serial No. 306,195; published Oct. 4, 1932.

Lumberjackets, pants, coats, etc. Meyers Pants Co. Inc. 299,870; Dec. 27; Serial No. 330,018; published Oct. 18, 1932.

Overalls, work shirts and pants. N & W Overall Co. 299,853; Dec. 27; Serial No. 328,032; published Oct. 25, 1932.

Shirts. Cluett, Peabody & Co. 299,864; Dec. 27; Serial No. 329,703; published Oct. 11, 1932.
Shirts. Roggen Bros. & Co. 91,127; renewed Apr. 15, 1933.
Shirts, blouses, undershirts, etc. H. D. Bob Company. 299,861; Dec. 27; Serial No. 329,592; published Oct. 4, 1932.
Shirts, collars. I. Janov-Abeles Shirt Co. 299,869; Dec. 27; Serial No. 329,857; published Oct. 11, 1932.
Suits and overalls, Play. Giles & Hirsch, Inc. 299,867; Dec. 27; Serial No. 329,855; published Oct. 11, 1932.
Suits and overcoats. S. J. Levy & Co. Inc. 299,857; Dec. 27; Serial No. 329,262; published Oct. 4, 1932.
Suits, Children's play. N. J. Wrigley. 299,854; Dec. 27; Serial No. 328,045; published Aug. 9, 1932.
Sweaters and bathing suits. Worcester Knitting Company. 299,866; Dec. 27; Serial No. 329,815; published Oct. 11, 1932.
Sweaters, bathing suits, and underwear. Gardiner-Warring Co. 299,923–4; Dec. 27; Serial Nos. 314,796–7; published Oct. 11, 1932.
Underwear. Ballard Knitting Company. 299,852; Dec 27; Serial No. 327,997; published Oct. 18, 1932.
Underwear. Earnshaw Knitting Company. 299,858; Dec. 27; Serial No. 329,330; published Oct. 25, 1932.
Underwear. H. M. McDonald. 299,871; Dec. 27; Serial No. 330,067; published Oct. 18, 1932.

CLASS 42

Bagging, Jute. Ludlow Manufacturing Associates. 91,295; renewed Apr. 22, 1933.

CLASS 44

Appliances and apparatus used for fumigating and deodorizing, etc.; antiseptic gauze, and absorbent wool. "Sanitas" Co. (U. S. A.) 90,660; renewed Mar. 11, 1933.
Rubber and membranous articles, Prophylactic. S. S. Kohn. 299,832; Dec. 27; Serial No. 314,205; published Aug. 4, 1931.
Surgical bandages. E. M. Pond. 89,200; renewed Nov. 19, 1932.

CLASS 45

Beer, Maltless birch. S. O. Barnes. 299,902; Dec. 27; Serial No. 329,218; published Oct. 25, 1932.
Beverages, Maltless. Gluek Brewing Company. 299,875; Dec. 27; Serial No. 326,211; published Oct. 18, 1932.
Beverages, Maltless. F. C. Nessly. 299,827; Dec. 27; Serial No. 326,828; published Sept. 20, 1932.
Beverages, Maltless. D. N. Paparozzi. 299,874; Dec. 27; Serial No. 329,865; published Oct. 18, 1932.
Drinks and syrups and extracts for making the same, Soft. Asheville Bottling Co. 299,879; Dec. 27; Serial No. 330,329; published Oct. 18, 1932.
Water, Mineral. Natural Products Company. 299,912; Dec. 27; Serial No. 328,903; published Oct. 18, 1932.

CLASS 46

Allspice, cake icings, celery salt, etc. Milson Company. 299,835; Dec. 27; Serial No. 283,412; published Oct. 11, 1932.
Apple products. National Fruit Product Company. 299,846; Dec. 27; Serial No. 325,720; published June 21, 1932.
Baking-powder. Pacific Commercial Company. 91,423; renewed Apr. 29, 1933.
Bread. A. C. Hill. 299,838; Dec. 27; Serial No. 328,730; published Oct. 11, 1932.
Candy. C. A. Crane. 88,243; renewed Sept. 10, 1932.
Candy. C. A. Crane. 89,339; renewed Dec. 10, 1932.
Candy. Stephan F. Whitman & Son, Inc. 299,897; Dec. 27; Serial No. 329,435; published Oct. 11, 1932.
Canned fruits. Sunical Packing Company. 299,840; Dec. 27; Serial No. 328,628; published Oct. 11, 1932.
Canned, pickled, salted, smoked, and preserved fish; canned shellfish, etc. J. L. de Oliveira. 299,841; Dec. 27; Serial No. 328,239; published Oct. 11, 1932.
Chocolate. Martha Washington Candies Company. 299,831; Dec. 27; Serial No. 316,603; published Oct. 11, 1932.
Compound containing pure California brandy and cane sugar. Fruit Industries, Ltd. 299,842; Dec. 27; Serial No. 327,974; published Oct. 11, 1932.
Dessert powder. Hubinger Company. 299,837; Dec. 27; Serial No. 329,144; published Oct. 11, 1932.
Feed for fish. Nicholas Wapler Company. 299,836; Dec. 27; Serial No. 329,391; published Oct. 11, 1932.
Flour, Whole wheat. P. Schmitt. 89,153; renewed Nov. 12, 1932.
Foods. Morey Mercantile Company. 91,364; renewed Apr. 29, 1933.
Fruits, vegetables, and cantaloupes, Fresh. Randolph Marketing Company. 299,833; Dec. 27; Serial No. 311,340; published Oct. 11, 1932.
Grapes, Fresh. Fremont Fruit Association. 299,828; Dec. 27; Serial No. 325,519; published Oct. 11, 1932.
Ice cream confection. National Pectin Products Company. 299,843; Dec. 27; Serial No. 327,561; published Oct. 11, 1932.
Liverwurst. Karl Seiler & Sons. 299,895; Dec. 27; Serial No. 329,538; published Oct. 11, 1932.
Macaroni, spaghetti, and noodles. B. S. Scotland. 299,844; Dec. 27; Serial No. 326,832; published Oct. 11, 1932.
Macaroni, spaghetti, noodles, etc. John B. Canepa Company. 299,839; Dec. 27; Serial No. 328,683; published Oct. 11, 1932.
Sauce. Messrs. Daniels & Co. 299,896; Dec. 27; Serial No. 329,620; published Oct. 11, 1932.
Spices, flavoring extracts, canned fruits, etc. Pacific Commercial Company. 91,123; renewed Apr. 15, 1933.
Syrup for food purposes, Malt. D. Katz. 299,849; Dec. 27; Serial No. 318,034; published Oct. 11, 1932.
Yeast. Atlantic Packing Co. Inc. 299,845; Dec. 27; Serial No. 325,898; published Oct. 11, 1932.

CLASS 48

Malt beverages and extracts. Montgomerie & Co. 299,894; Dec. 27; Serial No. 326,333; published July 26, 1932.

CLASS 49

Ethyl alcohol, whiskeys, liqueurs, etc. J. M. Congost. 299,899; Dec. 27; Serial No. 329,352; published Oct. 25, 1932.
Ethyl alcohol, whiskeys, liqueurs, etc. J. M. Congost. 299,900; Dec. 27; Serial No. 329,348; published Oct. 25, 1932.
Whiskey. International Trade, Finance, & Export Co. 299,903; Dec. 27; Serial No. 330,201; published Oct. 25, 1932.

LIST OF LABELS

Addo. For Muffing Mixture. Addo Corporation. 41,560; Dec. 27.
Andy Boy. For Fresh Broccoli. D'Arrigo Bros. Co. 41,566; Dec. 27.
Antiphones, the Sound Absorbers. For Antiseptically Prepared Plastic Balls to be Inserted in the Ear to Protect the Ear from Nerve-Wearing Noise. M. Negwer. 41,580; Dec. 27.
Baby Bear. For Fresh Grapes. Bianchi, Matteucci & Pepe. 41,562; Dec. 27.
Bishop's Parrakeet and Finch Mixture. For Parrakeet and Finch Seed Mixture. Henry Bishop Inc. 41,564; Dec. 27.
Chain-Way Lingerie Guards. For Lingerie Guards. H. C. Hill Mfg. Co., 41,568; Dec. 27.
Dairy Fresh Coffee. For Bottled Coffee. C. Loud. 41,574; Dec. 27.
Duff's Fruit Cake Mix. For Fruit Cake Mixture. P. Duff & Sons, Inc. 41,567; Dec. 27.
Election. For Game. J. Rathbun. 41,587; Dec. 27.
Fingerprinter. For Fingerprint Game Toy Sets. H. Rubin. 41,592; Dec. 27.
Foot Form Shoes. For Boxes. Hoague-Sprague Corporation. 41,569; Dec. 27.
Fresh In Glass Royal Cup Coffee. For Coffee. Batterton Coffee Co. Inc. 41,561; Dec. 27.
Indeckskit. For Menus and Recipes. Palmer Advertising Service Inc. 41,581; Dec. 27.
Jeffrey's. For Pure Cane Syrup. Daniel Jeffrey & Sons, Incorporated. 41,571; Dec. 27.
Magnetic. For Dusting Sulphur. National Sulphur Co. 41,578; Dec. 27.
Margurette Winstead Face Lotion. For Face Lotion. M. Winstead. 41,599; Dec. 27.
Mason's Black Crows. For Candy Drops. Mason, Au & Magenheimer Confectionery Manufacturing Company. 41,575; Dec. 27.
Mi-Mo Bath Kushun. For Bath Cushions. Mi-Mo Products Co. 41,576; Dec. 27.
Minaret Dates. For Dates. Van Dyk & Reeves, Inc. 41,598; Dec. 27.
Moderne Cleaner. For Combined Water Softener and Cleaner. R. W. Bielfeldt. 41,563; Dec. 27.
Morgans Whole Wheat Dessert. For Prepared Whole-Wheat Desserts. H. S. Morgan, Inc. 41,577; Dec. 27.
Nun's Nometta. For Knitting Worsted. T. Buettner & Co. Inc. 41,565; Dec. 27.
Ointment. C. A. Daughenbaugh. 11,774; renewed Jan. 3, 1933.
Phillips Flour. For Flour. Phillips Milling Company Incorporated. 41,583; Dec. 27.
Phillips Long Grain Rice. For Rice. Phillips Milling Company Incorporated. 41,584; Dec. 27.
Plancentia Queen. For Fresh Oranges. Plancentia Co-Operative Orange Assn. 41,585; Dec. 27.

Puzzle Pop. For Lollypops. E. Rosen Company. 41,590; Dec. 27.
Quandt Core Oil. For Core Oil (An Oil Used in Foundry Work). Quandt Chemical Co. 41,586; Dec. 27.
Rat-E-K-Tor, Quickly Eradicates Rats & Mice. For Powder Preparation for Eradicating Rats and Mice. C. B. Trautwein. 41,595; Dec. 27.
"Red Dot" Household Cleaner. For Household Cleaner. Neff Potteries. 41,579; Dec. 27.
Rugget. For Rugs. Patchogue Plymouth Mills Corporation. 41,582; Dec. 27.
Service Shoes. For Boxes. Hoague-Sprague Corporation. 41,570; Dec. 27.
Shelf and Lining Paper. For Shelf and Lining Paper. Royal Lace Paper Works, Inc. 41,591; Dec. 27.
Som Toy. For Chop Suey. H. R. King. 41,572; Dec. 27.
Stuhmer's. For Pumpernickel. Geo. F. Stuhmer & Company. 41,593; Dec. 27.
Stuhmer's. For Rye Bread. Geo. F. Stuhmer & Company. 41,594; Dec. 27.
Sunny Cove. For Fresh Oranges. Redlands Foothill Groves. 41,588; Dec. 27.
Tip-Top Heatless Liquid Solder. For Liquid Solder. C. W. Renstrom. 41,589; Dec. 27.
Tour-Ne-Sol. For Cleansing Cream. A. J. Krank Company. 41,573; Dec. 27.
Val-Hi. For Oranges. Valencia Heights Orchards, Inc. 41,596; Dec. 27.
Vandyk's Dates. For Dates. Van Dyke & Reeves, Inc 41,597; Dec. 27.

LIST OF PRINTS

Birnbach Complete Aerial Kit. For Radio Aerial Kits. Birnbach Radio Co. 13,985; Dec. 27.
Carroccio's Ready to Serve Sauce. For Sauce. T. A. Carroccio & Sons. 13,986; Dec. 27.
Laird's Cider. For Cider. Laird & Company. 13,988; Dec. 27.
Single Edge Blades. For Razor Blades. Twenty Grand Blade Company. 13,989; Dec. 27.
Stop Forcing Your Child to Eat Hot Cereals! For Cereal Food. General Mills, Inc. 13,987; Dec. 27.

LIST OF PATENTEES

TO WHOM

PATENTS WERE ISSUED ON THE 27TH DAY OF DECEMBER, 1932

NOTE.—Arranged in accordance with the first significant character or word of the name (in accordance with city and telephone directory practice). Includes patents, reissues, and designs.

A. C. Spark Plug Company. (See Babitch, Abraham M., assignor.)
Abell, Frank, Inglewood, Calif. Supercharging internal combustion engine. 1,892,124; Dec. 27.
Actiengesellschaft Joh. Jacob Rieter & Cie. (See Hess, Heinrich O., assignor.)
Adams Mfg. Co., The. (See Rose, Harry F., assignor.)
Adams, William H., Norwalk, Conn. Building construction. 1,892,498; Dec. 27.
Adlake Company, The. (See Whitmore, Edward E., assignor.)
Aero Pickup Service Corp. (See Bushmeyer, H. G., and Card, assignor.)
Agnini, Oreste J. (See Singer, R., and Agnini.)
Air Control Systems, Inc. (See Van Vliet, Paul D., assignor.)
Aircraft Products Corporation of America. (See Gould, John H., assignor.)
Air Development Company. (See Shadle, Clinton F., assignor.)
Albright, John G., Cleveland, Ohio. Circuit interrupter. 1,892,454; Dec. 27.
Alderfer, Sterling W., Akron, Ohio. Method and apparatus for cooling mill rolls. 1,892,028; Dec. 27.
Alderman, Michael, jr., Brewster, Fla. Corn sheller. 1,892,598; Dec. 27.
Alexander, Thomas R., Kaikoura, New Zealand. Tilting dump truck. 1,892,029; Dec. 27.
Allegheny Steel Company. (See Shover, Barton R., assignor.)
All-Steel-Equip Company. (See Carr John E., assignor.)
All-Steel-Equip Company. (See Carr, J. E., and Knell, assignors.)
Altgelt, Rudolph J., and C. H. Gemberling, South Bend, Ind., assignors to Oliver Farm Equipment Company. One-way plow. 1,892,199; Dec. 27.
Alther, Joseph G. (See Morrell, J. C., and Alther.)
Aluminum Company of America. (See Wheeler, Roy L., assignor.)
Alvey Manufacturing Company. (See Dietz, Frank J., assignor.)
Amend, Joseph A. (See Joy, W. P., Amend, and Frauenfelder.)
American Cable Company. (See Burd, G. C., and Bratz, assignors.)
American Engineering Company. (See Harrison, Clifford E., assignor.)
American Fabrics Company, The. (See Juestrich, Max U., assignor.)
American Fibre Corporation. (See Nordstrom, Gustaf E., assignor.)
American Hardware Corporation, The. (See Stone, Elmer B., assignor.)
American Machine & Foundry Company. (See Bronander, Wilhelm B., assignor.)
American Machine & Foundry Company. (See Hawkins, Wilford J., assignor.)
American Machine & Foundry Company. (See Jensen, Thormod, assignor.)
American Machine & Foundry Company. (See Rundell, Rupert E., assignor.)
American Machine & Foundry Company. (See Smith, Elberon D., assignor.)
American Radiator Company. (See Mertsanoff, André M., assignor.)
American Sheet and Tin Plate Company. (See Buccicone, D., and Peterson, assignors.)
American Sheet and Tin Plate Company. (See McElhaney, James E., assignor.)
American Sheet and Tin Plate Company. (See McIlvried, H. G., and West, assignors.)
American Sheet and Tin Plate Company. (See Whetzel, Joshua C., assignor.)
American Smelting and Refining Company. (See Gross, W. F., and Sappington, assignors.)
American Smelting and Refining Company. (See Teats, E., and Hughes, assignors.)
Amsler, Walter O., Toledo, Ohio, assignor to Simplex Engineering Company, Washington, Pa. Apparatus for grinding and polishing glass. 1,892,326; Dec. 27.
Anaconda Wire and Cable Company. (See Kennedy, Joseph A., assignor.)
Anderson, Harold N., Lakewood, Ohio. Apparatus for making forged articles. 1,892,080; Dec. 27.
Anderson, William, Seattle, Wash. Doorcheck and closer. 1,892,200; Dec. 27.
Andrake, Andrew A., assignor to The Glenn L. Martin Company, Cleveland, Ohio. Lubrication system. 1,892,081; Dec. 27.
Andrea, Louis E. (See Hackspill, L., Claude, Andreas, and Rollet.)
Andrew, Lucy B., Forest Hills, N. Y. Hair-wave setting device. 1,892,262; Dec. 27.
Andrews, Jerome E., Andover, Mass. Shoe. Des. 88,742; Dec. 27.
Andrews, Jerome E., Andover, Mass. Shoe. Des. 88,743; Dec. 27.
Angel Novelty Company. (See Mastrangelo, Frank and A., assignors.)
Arato, Achille, Turin, Italy. Mounting for steering wheels of vehicles. 1,892,479; Dec. 27.
Armstrong, Edward R., Hollyoak, Del. Seadrome. 1,892,125; Dec. 27.
Armstrong, Hugh C., assignor of one-fourth to W. M. Ginder, Columbus, Ohio. Rolling door with glass-covered opening. 1,892,562; Dec. 27.
Arnold, Tunis C., Boise, Idaho. Scale. 1,892,032; Dec. 27.
Art Metal Construction Company. (See Ulrich, Charles B., assignor.)
Arvedson, George C. (See Barkelj, Jean A. H., assignor.)
Ashby, Harry V., Erie, Pa. Stop switch for collating machines. 1,892,033; Dec. 27.
Associated Telephone & Telegraph Company. (See Jackson, Herbert, assignor.)
Atherton, Edward, Warwick, England. Manufacture of gelatin. 1,892,599; Dec. 27.
Auto Research Corporation. (See Bijur, Joseph, assignor.)
Autogiro Company of America. (See Pecker, Joseph S., assignor.)
Autoyre Company, Inc., The. (See Mosgrove, Charles A., assignor.)
Aviation Patent and Research Corporation, The. (See Markey, Roscoe I., assignor.)
Aviation Patent and Research Corporation, The. (See Miller, Roy G., assignor.)
Ayers, Bernard H., Nobe, W. Va. Automatic producing valve. 1,892,455; Dec. 27.
Babcock & Wilcox Company, The. (See Hubbard, Norman, assignor.)
Babin, Telesphore, Houma, La. Safety heater. 1,892,568; Dec. 27.
Babitch, Abraham M., assignor to A C Spark Plug Company, Flint, Mich. Fuel pump operating part. 1,891,902; Dec. 27.
Babelka, Joseph, Linden, N. J., assignor to Stanco, Incorporated. Label press. 1,892,647; Dec. 27.
Bailey, James, assignor to Corning Glass Works, Corning, N. Y. Working glass. 1,892,126; Dec. 27.
Bailey Meter Company. (See Gorrie, Harvard H., assignor.)
Bailey Meter Company. (See Woolley, Rew E., assignor.)
Bailey, William M., Lynn, Mass., assignor, by mesne assignments, to General Electric Company. Electrical device and forming insulating dielectrics therein. 1,892,375; Dec. 27.
Baker, Frederick W., Oldswinford, Stourbridge, England, assignor to Trinity Wheel Corporation, New York, N. Y. Demountable wheel rim. 1,892,127; Dec. 27.
Baker, George L. (See Myers, P. B., and Baker.)
Balkwill, Wesley J. (See Benham, L. L., Ferree, and Balkwill.)
Ballard, Arthur H., Incorporated. (See Goodridge, George E., assignor.)
Bang, Harold E., New York, N. Y. Refrigerated bed and couch. 1,891,903; Dec. 27.
Barad, Alexander, assignor to Hunter Candy Corporation, New York, N. Y. Box. 1,892,092; Dec. 27.
Barber-Colman Company. (See Edgar, John, assignor.)
Barber, Thomas S., Shelbyville, Tenn. Watch-hand gauge. 1,892,564; Dec. 27.
Barbier, Henri, Geneva, Switzerland. Nitroderivative of butylcymene and preparing the same. 1,892,128; Dec. 27.
Barkelj, Jean A. H., Los Angeles, Calif., assignor to G. C. Arvedson, New York, N. Y. Internal combustion engine. 1,892,129; Dec. 27.
Barnes, Noah E., Smallett, Mo. Plow. 1,892,230; Dec. 27.
Barnes, Richard P., Spindale, N. C. Knife hook adjusting sleeve. 1,892,231; Dec. 27.
Barnhart, George E., Pasadena, Calif. Tube drawing machine. 1,891,904; Dec. 27.
Barnum, Howard N., Cleveland, Ohio, assignor to Wolverine Supply and Manufacturing Company, Pittsburgh, Pa. Drummer toy. 1,892,646; Dec. 27.
Barrett Company, The. (See Miller, Stuart P., assignor.)
Bartikoski, Wesley, Duluth, Minn. Clock. 1,891,967; Dec. 27.
Bartlett-Collins Company. (See Evans, Charles M., assignor.)
Baskill, Inc. (See Morgan, Robert E., assignor.)
Basquin, Olin H. (See Meyercord, G. E., and Basquin.)

Basseches, Jacob T. (See Ruiz, Vincent, assignor.)
Battistella, Francis C., Baldwin, assignor to Sanitation Holding Corporation, New York, N. Y. Removing rust, scale, and sediment from the interior of metal surfaces. 1,892,093; Dec. 27.
Bausch, Carl L., assignor to Bausch & Lomb Optical Company, Rochester, N. Y. Telescopic goggles. 1,892,444; Dec. 27.
Bausch & Lomb Optical Company. (See Bausch, Carl L., assignor.)
Beatty, Mack A., Garden Grove, Calif. Spark control. 1,892,600; Dec. 27.
Beck, John, Ashland, Wis. Refrigerator. 1,891,905; Dec. 27.
Beehler, William, Baltimore, Md. Automobile umbrella holder. 1,892,601; Dec. 27.
Beehler, William, Baltimore, Md. Automobile umbrella holder. 1,892,602; Dec. 27.
Beehler, William, Baltimore, Md. Automobile umbrella holder. 1,892,603; Dec. 27.
Beehler, William, Baltimore, Md. Umbrella holder for vehicles. 1,892,604; Dec. 27.
Begtrup, Edward F., Jersey City, N. J. Mold for welding rails. 1,892,376; Dec. 27.
Bell Telephone Laboratories, Incorporated. (See Kemp, Archie R., assignor.)
Bell Telephone Laboratories, Incorporated. (See Lum, George R., assignor.)
Bell Telephone Laboratories, Incorporated. (See Mathes, Robert C., assignor.)
Bell Telephone Laboratories, Incorporated. (See Schelleng, John C., assignor.)
Ben-Burk, Incorporated. (See Berkowitz, Hyman C., assignor.)
Beneduce, Pasquale, Hoboken, N. J., assignor to A. Paladini & Company, New York, N. Y. Plaque. Des. 88,744; Dec. 27.
Benham, Leon L., Irondequoit, H. L. Ferree, and W. J. Balkwill, assignors to Richardson Corporation, Rochester, N. Y. Beverage dispenser. 1,892,547; Dec. 27.
Benn, Alonzo N., Chicago, Ill. Apparatus for smoking meat. 1,891,906; Dec. 27.
Benn, Alonzo N., Chicago, Ill. Apparatus for smoking meat. 1,891,907; Dec. 27.
Bennett, David D., et al. (See Galvin, Michael J., assignor.)
Bennhold, Walter, Furstenwalde, Germany. Apparatus for producing water gas. 1,892,456; Dec. 27.
Benson, Melvin B., assignor, by mesne assignments, to W. N. Seligsberg, New York, N. Y. Constant tension winch, variable load motor control system, and the like. 1,892,130; Dec. 27.
Berger, Max, assignor to the Firm Carl Zeiss, Jena, Germany. Microscope stand. 1,892,131; Dec. 27.
Bergskaug, Karl, Brooklyn, N. Y. Stuffing box. 1,892,377; Dec. 27.
Berke, Peter L. (See Heckroth, Frederic C., assignor.)
Berkowitz, Hyman C., assignor to Ben-Burk, Incorporated, Boston, Mass. Bottle or similar article. Des. 88,745; Dec. 27.
Berman, Rita, New York, N. Y. Bed desk. Des. 88,746; Dec. 27.
Berney, John L., assignor to E. R. Hawke, Modesto, Calif. Atomizing attachment for airplane engine exhausts. 1,892,132; Dec. 27.
Bernotow, Dominick M., assignor to Bunte Brothers, Chicago, Ill. Handling candy goods. 1,891,908; Dec. 27.
Bernstein, Sarah E., Washington, D. C. Tent construction. 1,892,378; Dec. 27.
Berthold, Erich. (See Kunz, M. A., Koeberle, and Berthold.)
Berwick, Frederick W. (See Quick, W., Thomas, and Berwick.)
Besler, William J., Plainfield, N. J. Brake mechanism for motor vehicles. 1,892,034; Dec. 27.
Best, Frank E., assignor to Frank E. Best, Inc., Seattle, Wash. Sectional key plug for locks. 1,892,419; Dec. 27.
Best, Frank E., Inc. (See Best, Frank E., assignor.)
Betsler, Paul, Jackson Heights, N. Y. Wall construction. 1,892,605; Dec. 27.
Bibby, James, London, England, assignor to The Falk Corporation, Milwaukee, Wis. Power transmission coupling. 1,891,969; Dec. 27.
Bidwell, William C., and A. L. Cutler, Portland, Oreg. Loud-speaker apparatus. 1,891,968; Dec. 27.
Bigelow-Sanford Carpet Co., Inc. (See Frohlich, Charles, assignor.)
Bijur, Joseph, New York, N. Y., assignor to Auto Research Corporation. Supply installation for central chassis lubrication. 1,892,133; Dec. 27.
Bills, Claud H., La Habra, and G. G. Griswold, Pico, Calif. Automatic spray head. 1,891,909; Dec. 27.
Binks Manufacturing Co. (See Sanders, Carl, assignor.)
Birdsboro Steel Foundry and Machine Company. (See Martin, Mark H., assignor.)
Birmingham, Thomas F., Hammond, Ind., assignor to The Superheater Company, New York, N. Y. Making return bends. 1,891,898; Dec. 27.
Bishop, Joseph W., Muskegon Heights, Mich., assignor, by mesne assignments, to United Research Corporation, Long Island City, N. Y. Press. 1,892,134; Dec. 27.
Bizzell, Carey K., Elizabeth, N. J., and J. E. Bizzell, Brooklyn, N. Y. Treating edible nuts. Re18,703; Dec. 27.
Bizzell, James E. (See Bizzell, Carey K., and J. E.)
Björkman, George E., Djursholm, Sweden. Control for hair waving apparatus. Des. 88,747; Dec. 27.
Blackman, Horace L., Janesville, Wis., assignor, by mesne assignments, to Pen Desk Set Company. Securing means for receiving receptacles for pens. 1,892,499; Dec. 27.
Blackmer, Albert L., Peterson, Iowa. Automobile heater. 1,892,201; Dec. 27.
Bleckley, Frederick W., East Orange, N. J. Supporting device for kitchen utensils and the like. 1,892,500; Dec. 27.
Bohn, Harry. (See Wales, N. B., and Roberts, assignors.)
Bol, Cornelis, Eindhoven, Netherlands, assignor to Radio Corporation of America. Inductance coil. 1,892,204; Dec. 27.
Bolin, Charles D., St. Louis, Mo. Indicating device. 1,892,379; Dec. 27.
Bonhôte, Géraid, assignor to Firm Society of Chemical Industry in Basle, Basel, Switzerland. Azo-dyestuffs. 1,892,490; Dec. 27.
Bonney-Floyd Company, The. (See Mitchell, H. A., Gregg, and Frank, assignors.)
Bonslett, William, McHenry, Ill. Heat reclaimer. 1,892,232; Dec. 27.
Bourdon, Pierre M., Paris, assignor to Michelin et Cie., Clermont-Ferrand, France. Vehicle wheel. 1,892,606; Dec. 27.
Bousman, Samuel I., Denver, Colo., assignor to The Dorr Company, Inc., New York, N. Y. Sedimentation device. 1,892,648; Dec. 27.
Bradley, Linn, Montclair, N. J., and E. P. McKeefe, Plattsburgh, assignors to Bradley-McKeefe Corporation, New York, N. Y. Treatment of a sodium carbonate-sodium sulphid residual liquor. 1,892,100; Dec. 27.
Bradley-McKeefe Corporation. (See Bradley, L., and McKeefe, assignors.)
Brady, Thomas, East Orange, N. J., assignor to Otis Elevator Company, New York, N. Y. Closure operating mechanism. 1,892,420; Dec. 27.
Brain, George, Tiffin, Ohio, assignor to Standard Sanitary Manufacturing Company, Pittsburgh, Pa. Shelf back lavatory. Des. 88,748; Dec. 27.
Bramming, Carl. (See De Foe, E. G., and Bramming.)
Bratz, Otto. (See Burd, G. C., and Bratz.)
Bray, Geo., & Company Limited. (See Bray, George, assignor.)
Bray, George, assignor to Geo. Bray & Company Limited, Leeds, England. Electrical heating element. 1,892,298; Dec. 27.
Breslin, Walter, New York, N. Y. Garter pad form and hook. 1,891,910; Dec. 27.
Brevick, Albert, Thunder Hawk, S. Dak. Support for seats. 1,892,380; Dec. 27.
Bridier, Fernand, Paris, France, assignor to William Willheim Co., Inc., New York, N. Y. Textile fabric or similar article. Des. 88,749; Dec. 27.
Bristol Company, The. (See Faust, Fred A., assignor.)
Bristol, Edward S., assignor to Leeds & Northrup Company, Philadelphia, Pa. Control system. 1,892,135; Dec. 27.
Brode, Johannes, and G. Käb, Ludwigshafen-on-the-Rhine, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Decomposing titanium ores. 1,891,911; Dec. 27.
Broderick Company, The. (See Wolf, Howard M., assignor.)
Brodsky, Michel, Paris, France, assignor to William Willheim Co., Inc., New York, N. Y. Textile fabric or similar article. Des. 88,750; Dec. 27.
Brodsky, Michel, Paris, France, assignor to William Willheim Co., Inc., New York, N. Y. Textile fabric or similar article. Des. 88,751; Dec. 27.
Brodsky, Michel, Paris, France, assignor to William Willheim Co., Inc., New York, N. Y. Textile fabric or similar article. Des. 88,752; Dec. 27.
Bronander, Wilhelm B., Montclair, N. J., assignor to American Machine & Foundry Company. Cigarette machine tobacco feed. 1,892,263; Dec. 27.
Brostrom, Ernest O., Kansas City, Mo. Building construction. 1,892,421; Dec. 27.
Brown, Glendon C. (See Stansbury, Carroll, assignor.)
Brown, Lloyd M. (See Dengler, Franz P., assignor.)
Browne, Lyle W., assignor to The Fisher Governor Company, Marshalltown, Iowa. High-pressure relief valve. 1,892,565; Dec. 27.
Bruns, George H. (See Tichy, Joseph F., assignor.)
Bruson, Herman A., Germantown, assignor to The Resinous Products & Chemical Company, Philadelphia, Pa. Treating polymerizable unsaturated compounds. 1,892,101; Dec. 27.
Buccicone, Dario, Gary, and E. E. Peterson, Aetna, Ind., assignors to American Sheet and Tin Plate Company. Shears. 1,892,327; Dec. 27.
Buckeye Traction Ditcher Company, The. (See George, Charles L., assignor.)
Buckeye Traction Ditcher Company, The. (See George, C. L., and Van Voorhis, assignors.)
Buckeye Traction Ditcher Company, The. (See Vaughn, G. A., and George, assignors.)

Budd Wheel Company. (See Crews, Maurice A., assignor.)
Buehrig, Gordon M., Indianapolis, Ind., assignor to Manning & Co., Chicago, Ill. Combined automobile radiator and front. Des. 88,753; Dec. 27.
Buenger, Clarence O., assignor to Hills-McCanna Company, Chicago, Ill. Check valve. 1,892,649; Dec. 27.
Buffalo Brabe Beam Company. (See Busch, Charles R., assignor.)
Bullinger, Frederic H., Bronxville, assignor to Ward Leonard Electric Company. Resistance unit. 1,892,202; Dec. 27.
Buma, Yukio, assignor to Morimura Bros. Inc., New York, N. Y. Plate or similar article. Des. 88,754; Dec. 27.
Bundy, Harry W., assignor to Bundy Tubing Company, Detroit, Mich. Making a tube. 1,892,607; Dec. 27.
Bundy Tubing Company. (See Bundy, Harry W., assignor.)
Bunnell, Earl C., Stratford, Conn. Producing fabric. 1,891,912; Dec. 27.
Bunte Brothers. (See Bernotow, Dominick M., assignor.)
Burbank, Louis S., Worcester, Mass., assignor, by mesne assignments, to The Waterbury Farrel Foundry and Machine Company, Waterbury, Conn. Machine for producing bolts, screws, and the like. 1,892,445; Dec. 27.
Burckhardt, Ernst. (See Stoll, A., and Burckhardt.)
Burd, Gorman C., and O. Bratz, Adrian, Mich., assignors to American Cable Company, Inc. Machine for producing coil wire structures. 1,892,501; Dec. 27.
Burd, Gorman C., and O. Brantz, Adrian, Mich., assignors to American Cable Company. Wire coil forming means. 1,892,502; Dec. 27.
Burns, Fred J., assignor to Columbia Mills, Incorporated, Saginaw, Mich. Mechanical roller lifts. 1,891,913; Dec. 27.
Burson, Thomas, and C. W. Jenkins, Negley, Ohio. Adjustable propeller. 1,892,035; Dec. 27.
Burton-Dixie Corporation. (See Burton, O. M., and Zimmerman, assignors.)
Burton, Oliver M., and F. R. Zimmerman, assignors, by mesne assignments, to Burton-Dixie Corporation, Chicago, Ill. Mattress and its manufacture. 1,892,203; Dec. 27.
Busch, Charles R., Orange, N. J., assignor to Buffalo Brake Beam Company, New York, N. Y. Draft gear carrier. 1,892,328; Dec. 27.
Bushmeyer, Henry G., and A. W. Card, Mineola, N. Y., assignors to Aero Pickup Service Corp. Airplane pickup device. 1,892,381; Dec. 27.
Bushnell, James E., North Plainfield, assignor to Ransome Concrete Machinery Company, Plainfield, N. J. Mast distributing apparatus. 1,891,890; Dec. 27.
Butler, Charles R., Indianapolis, Ind. Alloy piston. 1,891,914; Dec. 27.
"Cabin Crafts". (See Westcott, George L., assignor.)
Campens, Denis R., Berchem-Antwerp, Belgium. Helicopter. 1,892,036; Dec. 27.
Canfield Rubber Company. (See Goebel, George, assignor.)
Card, Archie W. (See Bushmeyer, H. G., and Card.)
Carey-McFall Co. (See Stuber, Walter J., assignor.)
Carlson, Charles M., Canton, assignor to The Republic Stamping and Enameling Company, Canton, Ohio. Sink strainer. 1,892,481; Dec. 27.
Carlson, Frederick E., assignor to Landers, Frary & Clark, New Britain, Conn. Scales. 1,892,264; Dec. 27.
Carlstedt, Fredrik, Stockholm, Sweden, assignor to Electrolux Corporation, Dover, Del. Vacuum cleaner. 1,892,882; Dec. 27.
Carpenter, Ivan S. (See Pearson, G. C., Croft, and Carpenter.)
Carr, John E., Aurora, Ill., assignor to All-Steel-Equip Company. Latch mechanism. 1,892,446; Dec. 27.
Carr, John E., and J. Knell, Aurora, Ill., assignors to All-Steel-Equip Company. Lock mechanism. 1,892,447; Dec. 27.
Cartoning Machinery Corporation. (See Hohl, George I., assignor.)
Cash, Robert J., Jr., Los Angeles, Calif. Golf club. 1,892,482; Dec. 27.
Caton, Leo J., New York, N. Y. Rolling steel columns. 1,892,608; Dec. 27.
Chaffee, Court B. (See England, W. D., and Chaffee.)
Challenge Machinery Company. (See Lee, James B., assignor.)
Chapman, William C., Chicago, Ill. Curtain and drape structure. 1,892,448; Dec. 27.
Chappell, Frank L., Hobart, N. Y. Method of and apparatus for drying casein. 1,892,233; Dec. 27.
Charlesworth, Stanton I., A. W. Harris, and C. P. Linder, Cleveland, Ohio. Test lamp. 1,892,329; Dec. 27.
Charlesworth, Stanton I., Cleveland Heights, and A. W. Harris, Cleveland, Ohio. Laboratory distillation apparatus. 1,892,609; Dec. 27.
Chase Companies, The. (See von Nessen, Walter, assignor.)
Chemical Works formerly Sandoz. (See Stoll, A., and Burckhardt, assignors.)
Chemische Fabrik von Heyden, Aktiengesellschaft. (See von Hoessle, Carl H., assignor.)
Cheney Brothers. (See George, Robert, assignor.)
Chicago Bridge & Iron Company. (See Griffin, Alvah M., assignor.)
Chilton, Roland, Keyport, N. J., assignor, by mesne assignments, to Eclipse Machine Company, Elmira Heights, N. Y. Engine starting apparatus. 1,892,094; Dec. 27.
Chilton, Roland, Keyport, N. J., assignor, by mesne assignments, to Eclipse Machine Company, Elmira Heights, N. Y. Engine starting apparatus. 1,892,095; Dec. 27.
Chilton, Roland, Keyport, N. J., assignor to Eclipse Machine Company, Elmira Heights, N. Y. Engine starting apparatus. 1,892,096; Dec. 27.
Chireix, Henri, assignor to Société Française Radio-Electrique, Paris, France. High frequency signaling. 1,892,383; Dec. 27.
Christiansen, Walter G. (See Nitardy, F. W., Christiansen, and Harris.)
Cincinnati Car Corporation, The. (See Wernsten, John A., assignor.)
Cincinnati Time Recorder Company, The. (See Streckfuss, Elmer G., assignor.)
Clark, Charles H., New York, N. Y. Flexible coupling. 1,891,915; Dec. 27.
Clark, J. L., Manufacturing Company. (See Mills, Wallace C., assignor.)
Clark, Loyal, et al. (See Maier, Michael, assignor.)
Clark, Paul J., Longport, N. J. Platen for printing machines. 1,892,136; Dec. 27.
Clark Tructractor Company. (See Williams, Alfred O., assignor.)
Classroom Teacher, Inc., The. (See Reardon, Harvey J., assignor.)
Claude, Dominique. (See Hackspill, L., Claude, Andres, and Rollet.)
Clayton and Lambert Manufacturing Company. (See Lambert, Charles F., assignor.)
Clayton, Ralph R., Yorkville, Ill. Milk cooling apparatus. 1,892,097; Dec. 27.
Clearwater, Edgar B., Chicago, Ill. Sanitary headrest for chairs. 1,891,970; Dec. 27.
Clements, Frank O., assignor to General Motors Research Corporation, Detroit, Mich. Crankcase with false bottom. 1,892,185; Dec. 27.
Cleveland Graphite Bronze Company, The. (See Stockfleth, Berger, assignor.)
Clipsham, Kenneth M. (See Jackson, M. B., and Clipsham.)
Clocker, Archie, and G. F. MacFarlane, Wilkes-Barre, Pa. Spinning machine equipment. 1,892,098; Dec. 27.
Cole, Arthur M., assignor to General Findings & Supply Co., Attleboro, Mass. Clasp. 1,892,422; Dec. 27.
Coleman, John A. (See Coleman, Stewart P. and J. A.)
Coleman, Stewart P. and J. A., Houston, Tex., assignors to Standard Oil Development Company. Water-soluble sludge acid and preparing the same. 1,892,650; Dec. 27.
Colf, Gerald M., Los Angeles, Calif. Pelt or fur stretcher, 1,892,137; Dec. 27.
Colonial Steel Company. (See Nimick, Francis B., assignor.)
Colt's Patent Fire Arms Manufacturing Co. (See Conner, Benjamin F., assignor.)
Columbia Mills, Incorporated. (See Burns, Fred J., assignor.)
Combier & Co. Inc. (See Kaufmann, Werner R., assignor.)
Combier & Co. Inc. (See Lukas, Julia, assignor.)
Combier & Co. Inc. (See Schey, Robert, assignor.)
Conley, Arthur W., Cleveland Heights, Ohio, assignor, by mesne assignments, to The Corozone Company, Wilmington, Del. Ozonizer. 1,891,916; Dec. 27.
Conner, Benjamin F., Wethersfield, assignor to Colt's Patent Fire Arms Manufacturing Co., Hartford, Conn. Bottle cap. Des. 88,755; Dec. 27.
Construction Materials Patents, Inc. (See Meadows, William R., assignor.)
Continental Can Company. (See Pearson, Paul E., assignor.)
Continuous Gramophones Limited. (See Oyston, William R., assignor.)
Cook, William, New York, N. Y., assignor to Warman & Cook, Inc. Lighting fixture. Des. 88,756; Dec. 27.
Coppock, Fred D., Greenville, Ohio. Mobile spreader. 1,892,506; Dec. 27.
Cornell, Arthur W., assignor to Forbes Lithograph Manufacturing Company, Boston, Mass. Modifying photographic images. 1,892,099; Dec. 27.
Corning Glass Works. (See Bailey, James, assignor.)
Corning Glass Works. (See Gray, David E., assignor.)
Corning Glass Works. (See Weber, Walter C., assignor.)
Cornyn, William A., New York, N. Y. Alarm switch. 1,892,380; Dec. 27.
Corozone Company, The. (See Conley, Arthur W., assignor.)
Cotton, Robert, Haslingden, England. Loom for weaving. 1,892,299; Dec. 27.
Courtbope, Thomas F., Geneseo, and W. H. McGuire, Retsof, N. Y., assignors to Retsof Mining Company, Scranton, Pa. Method and apparatus for dissolving salts. 1,892,351; Dec. 27.
Cowles, William A. (See Willshaw, H., Cowles, and Smith.)
Cox, John L., Springfield Township, Montgomery County and F. B. Foley, Philadelphia, Pa. Metal alloy. 1,892,384; Dec. 27.
Cozzolino, Donato, assignor to Giulia Cozzolino, San Jacinto, Calif. Stabilizing cereal beverages. 1,892,457; Dec. 27.
Cozzolino, Giulia. (See Cozzolino, Donato, assignor.)

Craddock, Douglas L., Leaksville, N. C. Lightning arrester. 1,892,567; Dec. 27.
Crane, Louis, Bronx, N. Y. Convertible bed and table lamp. 1,891,971; Dec. 27.
Crews, Maurice A., assignor to Budd Wheel Company, Philadelphia, Pa. Universal joint. 1,892,037; Dec. 27.
Croft, Lorenzo E. (See Pearson, G. C., Croft, and Carpenter.)
Cross, Roy, Kansas City, Mo., assignor, by mesne assignments, to Gasoline Products Company, Inc., Wilmington, Del. Process and apparatus for conversion of hydrocarbon oils. 1,892,038; Dec. 27.
Cruger, Harold, Ridgewood, N. J. Textile fabric or the like. Des. 88,757; Dec. 27.
Cruger, Harold, Ridgewood, N. J. Textile fabric or the like. Des. 88,758; Dec. 27.
Cruger, Harold, Ridgewood, N. J. Textile fabric or the like. Des. 88,759; Dec. 27.
Cummins, Walter E., Santa Maria, Calif. Headlight. 1,892,265; Dec. 27.
Curtis, Elam C., Niagara Falls, assignor to The Mathieson Alkali Works, New York, N. Y. Production of argon and neon. 1,892,186; Dec. 27.
Cutler, Albert L. (See Bidwell, W. C., and Cutler.)
Cutler-Hammer, Inc. (See Hodgson, Howard E., assignor.)
Cutler-Hammer, Inc. (See Standbury, C., and Brown, assignors.)
D'Amato, Rocco, New York, N. Y. Trap. 1,892,423; Dec. 27.
Dan, Ellis A., Danbury, Conn. Automatic fire alarm. 1,892,503; Dec. 27.
Darling, Elton R., Danville, Ill., assignor to The Pacific Lumber Company, San Francisco, Calif. Heat and sound insulating material. 1,892,138; Dec. 27.
Davis, De Lancey W., Sayre, and J. P. Laux, Bethlehem, Pa. Lubricating system. 1,891,972; Dec. 27.
Davis, Frank L., jr., Kenilworth, N. J., assignor to The Watson-Stillman Co., New York, N. Y. Variable throw eccentric mechanism. 1,892,504; Dec. 27.
Dawes, Robert T., Hudson, Mass. Garment fastener. 1,892,610; Dec. 27.
Dawes, Robert T., Hudson, Mass. Guy rope. 1,892,611; Dec. 27.
Deere & Company. (See Johnson, Ellsworth, T., assignor.)
De Foe, Edward G., Oak Park, and C. Bramming, assignors to Red Boy, Inc., Chicago, Ill. Merchandise holder attachable to service trays. 1,892,234; Dec. 27.
De Frehn, Charles H. (See Killius, J., and De Frehn.)
De Geronimi, Baldano, Genoa, Italy. Moving picture screen. 1,892,424; Dec. 27.
De Groote, Melvin, St. Louis, assignor, by mesne assignments, to Tretolite Company, Webster Groves, Mo. Preventing accumulation of solid matter in oil wells, pipe lines, and flow lines. 1,82,205; Dec. 27.
Deitch, Alonzo. (See Steele, J. W., and Deitch.)
De la Borbolla, Ignacio, Mexico, Mexico. Attachment for automobiles for locking the hood of the motor and the spare wheels. 1,892,483; Dec. 27.
Delarosa, Herman, Pittsburgh, Pa. Ash container. 1,892,385; Dec. 27.
De Malvin de Montaset, Marie J. A., and I. Johanson, Argenteuil, France. Internal combustion engine. 1,892,040; Dec. 27.
Demaree, Clarence B., Eminence, assignor of one-half to J. H. Rucker, Lawrenceburg, Ky. Cistern filter. 1,892,039; Dec. 27.
De Markns, Louis, and F. A. Fouser, assignors to McKenna Brass & Manufacturing Company, Inc., Pittsburgh, Pa. Container handling apparatus. 1,892,042; Dec. 27.
Dengler, Franz P., assignor to L. M. Brown, Chicago, Ill. Treating chocolate liquor containing proteins, starches, and fats. 1,892,449; Dec. 27.
Denslow, Albert C., New York, assignor to Staten Island Shipbuilding Co., Staten Island, N. Y. Cooling device for photographic apparatus. 1,891,917; Dec. 27.
Derrley, Lizzie, New York, N. Y. Textile fabric or the like. Des. 88,760; Dec. 27.
Desmet, John P., assignor to E. R. Hawke, Modesto, Calif. Airplane spray device. 1,892,139; Dec. 27.
Des Roches, Philip W., Detroit, Mich. Oil seal joint for compressor units. 1,892,332; Dec. 27.
Detroit Lubricator Company. (See Russel, Philip S., assignor.)
De Witt, William J., assignor to Shoe Form Co., Inc., Auburn, N. Y. Shoe form. 1,891,900; Dec. 27.
De Witt, William J., assignor to Shoe Form Co., Inc., Auburn, N. Y. Pediform article. 1,892,300; Dec. 27.
Dial Engineering Corporation. (See Siegel, Charles S., assignor.)
Dictaphone Corporation. (See Frykman, Victor L., assignor.)
Dietz, Frank J., Baltimore, Md., assignor to Alvey Manufacturing Company, St. Louis, Md. Conveyer. 1,892,206; Dec. 27.
Dietz, R. E., Company. (See Throne, Robert P., assignor.)
Dillehay, Edward R., Glen Ellyn, Ill., assignor to The Richardson Company, Lochland, Ohio. Molding composition and process. 1,891,918; Dec. 27.
Dilworth, Richard M., Lakewood, assignor to The Electro-Motive Company, Cleveland, Ohio. Carburetor. 1,892,301; Dec. 27.
Dixon, Thomas H. L., Letchworth, England. Machine for coating paper, fabric, or the like. 1,892,484; Dec. 27.
Dognin, Jean, Paris, France, assignor to The Lace Net Importing Co. Inc., New York, N. Y. Lace. Des. 88,761; Dec. 27.
Do-Huu Chan, André, Cirey-sur-Vezouse, assignor to Société Anonyme des Manufactures des Glaces & Produits Chemiques de Saint Gobain, Chauny & Cirey, Paris, France. Process and apparatus for the manufacture of glass. 1,892,458; Dec. 27.
Dominus, Samuel, Brooklyn, N. Y. Cigarette lighter and case combined. 1,892,450; Dec. 27.
Dooty, John R., Liberal, Kans., assignor to Clarence P. Williams, Miami, Okla. Latch lubricator. 1,892,043; Dec. 27.
Dorough, George L., assignor to E. I. du Pont de Nemours & Company, Wilmington, Del. Preparation of styrene. 1,892,386; Dec. 27.
Dorr Company, The. (See Bousman, Samuel I., assignor.)
Douglas, Fredric E., assignor to Draper Corporation, Hopedale, Mass. Shuttle. 1,892,387; Dec. 27.
Dow Chemical Company, The. (See Heath, Sheldon B., assignor.)
Dow Chemical Company, The. (See Schwegler, Clarence C., assignor.)
Draper Corporation. (See Douglas, Fredric E., assignor.)
Draper Corporation. (See Lindajo, Verner, assignor.)
Drennon, William M., assignor of one-tenth to W. L. Everett, Anaheim, Calif. Variable and reversible pitch propeller. 1,892,187; Dec. 27.
Dubbs, Carbon P., Wilmette, assignor to Universal Oil Products Company, Chicago, Ill. Process and apparatus for cracking petroleum oils. 1,892,451; Dec. 27.
Dubbs, Carbon P., Wilmette, assignor to Universal Oil Products Company, Chicago, Ill. Cracking hydrocarbon oil. 1,892,452; Dec. 27.
Dufour, Léon, Versoix, near Geneva, Switerland. Reversible rotary plow. 1,892,485; Dec. 27.
Dugdale, Charles R., Fairhaven, Mass. Egg carton. 1,892,612; Dec. 27.
Dunham, Henry V., Bainbridge, N. Y. Glue and making plywood. 1,892,486; Dec. 27.
Dunkel, Manfred. (See Hopff, H., and Dunkel.)
Dunlop Rubber Company, Limited, et al. (See Willshaw, H., Cowles, and Smith, assignors.)
Du Pont, E. I., de Nemours & Company. (See Dorough, George L., assignor.)
Durafer (Inc.) (See von Frankenberg, Albrecht, assignor.)
Durham Duplex Razor Company. (See Sheehan, Thomas C., assignor.)
Dutton, Chauncey A., Shaker Heights Village, assignor to Ferro Enamel Corporation, Cleveland, Ohio. Enameling furnace. 1,891,919; Dec. 27.
Eagle Pencil Company. (See Gonzáles, Narciso, assignor.)
Eastern Cabinet Company. (See Hutton, Sam B., assignor.)
Eaton, Reginald O., Wesleyville, Pa., assignor to General Electric Company. Electrical connecting device. 1,891,920; Dec. 27.
Eccleston, Robert C., and I. S. Nippes, Ridgway, assignors to Elliott Company, Pittsburgh, Pa. Automatic rotary converter and starting the same. 1,892,041; Dec. 27.
Eckstein, Irving W., Jamestown, N. Y. Cabinet for filing flat sheets. 1,891,921; Dec. 27.
Eclipse Machine Company. (See Chilton, Roland, assignor.)
Economy Fuse and Manufacturing Co. (See Herbst, Clarence A., assignor.)
Edgar, John, assignor to Barber-Colman Company, Rockford, Ill. Wheel dressing mechanism. 1,892,388; Dec. 27.
Edgin, Isac W. (See Edgin, James E., assignor.)
Edgin, James E., assignor to I. W. Edgin, Charlotte, Tenn. Gate and door latch. 1,892,613; Dec. 27.
Edison General Electric Appliance Company. (See McCormick, Francis H., assignor.)
Edwards, William H. (See Johnson, C. E., and Edwards.)
Egli, Ernst, assignor to Maschinenfabrik Rüti vormals Caspar Honegger, Ruti, Switzerland. Warp stop motions for looms. 1,892,333; Dec. 27.
Egli, Ernst, assignor to Maschinenfabrik Rüti vormals Caspar Honegger, Ruti, Switzerland. Weft feeler for automatic looms. 1,892,334; Dec. 27.
Egr, Joseph. (See Machacek, John J., assignor.)
Eilfaender, Ludwig. (See Kesseler, H., and Eilfaender.)
Eisenberg, Charles G., jr., Wauwatosa, assignor to The Meil Co., Milwaukee, Wis. Dumping mechanism. 1,891,922; Dec. 27.
Elderkin, Paul N., Los Angeles, Calif. Testing motors. 1,892,487; Dec. 27.
Eldred, Byron E., New York, N. Y., and H. C. Snook, Summit, N. J.; said Eldred assignor to said Snook. Casting ingots. 1,892,044; Dec. 27.
Electrolux Corporation. (See Carlstedt, Fredrik, assignor.)
Electro Metallurgical Company. (See Marshall, James G., assignor.)
Electro-Motive Company, The. (See Dilworth, Richard M., assignor.)
Elliott Company. (See Eccleston, R. C., and Nippes, assignors.)
Ellis, Carleton, Montclair, N. J., assignor to Ellis-Foster Company. Rapid drying synthetic resins. 1,892,425; Dec. 27.

Ellis, Daniel S., Hackensack, N. J. Locomotive crosshead and guide construction. 1,891,978; Dec. 27.
Ellis-Foster Company. (See Ellis, Carleton, assignor.)
Ellis, George, St. Catharines, Ontario, Canada, assignor to Niagara Falls Smelting & Refining Corporation, Buffalo, N. Y. Contact finger for electrical controllers and switches. 1,892,045; Dec. 27.
Enderis, Hugo, Belleville, assignor to Monroe Calculating Machine Company, Orange, N. J. Automatic multiplication mechanism for calculators. 1,892,614; Dec. 27.
Engel, Ernst, assignor to Alfred Teves Maschinen- und Armaturen-Fabrik Gesellschaft mit beschrankter Haftung, Frankfort-on-the-Main, Germany. Hydraulic brake. 1,892,335; Dec. 27.
Engels, Bernhard, Waldenburg-Altwasser, Germany. Drawing a glass band from the surface of the molten glass metal. 1,892,459; Dec. 27.
England, Welborn D., and C. B. Chaffee, Luray, Tenn. Combination window sash lock and burglar alarm. 1,892,336; Dec. 27.
Entwisle & Kenyon Limited. (See Kenyon, William H., assignor.)
Erickson, Erick W., Enumclaw, Wash. Time control for radios. 1,891,901; Dec. 27.
Ernst, Walter, assignor to The Hydraulic Press Manufacturing Company, Mount Gilead, Ohio. Surge valve for hydraulic presses or the like. 1,892,568; Dec. 27.
Esch, William T., Kalama, Wash. Hen's nest. 1,892,235; Dec. 27.
Estes, George P. (See Jennings, J. B., and Estes.)
Euken, John J., Cumberland, Iowa. Rim and lug for traction wheels. 1,892,207; Dec. 27.
Evans Auto Loading Co. Inc. (See Snyder, Clifford L., assignor.)
Evans, Charles M., assignor to Bartlett-Collins Company, Sapulpa, Okla. Pitcher. Des. 88,762; Dec. 27.
Evans, Edwin R., Detroit, Mich. Making a shock insulating device. 1,892,505; Dec. 27.
Evans Products Company. (See Snyder, Clifford L., assignor.)
Evans, Ralph L., assignor to Zotos Corporation, New York, N. Y. Permanently waving hair. 1,892,389; Dec. 27
Evans, Ralph L., assignor to Zotos Corporation, New York, N. Y. Permanently waving hair. 1,892,390; Dec. 27.
Evans, Ralph L., assignor to Zotos Corporation, New York, N. Y. Permanently waving hair. 1,892,391; Dec. 27.
Evans, Ralph L., assignor to Zotos Corporation, New York, N. Y. Permanently waving hair. 1,892,426; Dec. 27.
Everett, W. L. (See Drennon, William M., assignor.)
Fagin, Charles R., Cincinnati, Ohio, assignor, by mesne assignments, to The Yale & Towne Manufacturing Company, Stamford, Conn. Lifting truck. 1,892,266; Dec. 27.
Fairbairn Lawson Combe Barbour Limited. (See Parker, Albert F., assignor.)
Fairlie, Thomas W., Cathcart, Glasgow, Scotland. Smoker's ash tray. 1,892,046; Dec. 27.
Falk Corporation, The. (See Bibby, James, assignor.)
Faust, Fred A., Naugatuck, assignor to The Bristol Company, Waterbury, Conn. Temperature regulating system. 1,892,047; Dec. 27.
Featherman, Irving A., Brooklyn, N. Y. Bedstead. 1,892,427; Dec. 27.
Felbelmann, Richard, Radebeul, Germany. Compound and process for treating vegetable and animal fibers and fabrics. 1,892,548; Dec. 27.
Fenton, Paul E., Thomaston, assignor to Scovill Manufacturing Company, Waterbury, Conn. Hinged pin fastener. 1,892,286; Dec. 27.
Fenton, Paul E., Thomaston, assignor to Scovill Manufacturing Company, Waterbury, Conn. Slide buckle. 1,892,641; Dec. 27.
Ferguson, Robert O., Bristol, Tenn. Alarm clock. 1,892,337; Dec. 27.
Ferree, Harry L. (See Benham, L. L., Ferree, and Balkwill.)
Ferrier, Alexander I., Flint, Mich., assignor, by mesne assignments, to Pen Desk Set Company, Chicago, Ill. Desk set for fountain pens. 1,892,523; Dec. 27.
Ferrier, Alexander I., Detroit, Mich., assignor to Pen Desk Set Company, Chicago, Ill. Fountain pen desk set. 1,892,524; Dec. 27.
Ferris, John P. (See Ferris, Walter and J. P., and Macomber.)
Ferris, Walter, Milwaukee, J. P. Ferris, Whitefish Bay, and G. Macomber, Waukesha, assignors to The Oilgear Company, Milwaukee, Wis. Welding machine. 1,892,208; Dec. 27.
Ferro Enamel Corporation. (See Dutton, Chauncey A., assignor.)
Fetterhoff, John H., et al. (See Zerwer, Adam G. P., assignor.)
Fiat Societa Anonima. (See Zerbi, Tranquille, assignor.)
Fink, Henry W., assignor to Tropic-Aire, Incorporated, Minneapolis, Minn. Deflector for automobile heaters. 1,892,506; Dec. 27.
First Investment Corporation, The. (See Johnson, Cornelius B., assignor.)
Fischacher, Henry L., Boston, Mass. Ironing-board structure. 1,892,615; Dec. 27.
Fischer, Franz, Mulheim-on-the-Ruhr, Germany. Purifying gases. 1,891,974; Dec. 27.
Fischer, Herbert. (See Röhm, O., Fischer, and Hess.)
Fisher Governor Company, The. (See Browne, Lyle W., assignor.)
Fisher, Joseph B., Strathmore, Calif. Toy gun. 1,892,209; Dec. 27.
Flather, Herbert L., Nashua, N. H. Work rotating structure for machine tools. 1,891,923; Dec. 27.
Flockhart, James, San Francisco, Calif. Stencil brush. 1,892,267; Dec. 27.
Flockhart, James, San Francisco, Calif. Screen stencil frame. 1,892,268; Dec. 27.
Fogler, Arthur S., Terre Haute, Ind. Collapsible container. 1,892,140; Dec. 27.
Foley, Francis B. (See Cox, J. L., and Foley.)
Fonda, Bayard P., assignor to The Silicia Gel Corporation, Baltimore, Md. Cycle control system. 1,892,428; Dec. 27.
Forbes Lithagraph Manufacturing Company. (See Cornell, Arthur W., assignor.)
Forman, Henri et Maurice. (See Waselge, Charles R., assignor.)
Fouser, Fred A. (See De Markus, L., and Fouser.)
Fowler, Fred D., Newton, Mass., assignor, to The B. F. Goodrich Company, New York, N. Y. Shoe sole. Des. 88,763; Dec. 27.
Frambach, Ralph W., Maplewood, N. J. Textile fabric or the like. Des. 88,764; Dec. 27.
Frambach, Ralph W., Maplewood, N. J. Textile fabric or the like. Des. 88,765; Dec. 27.
Francis Shaw and Company, et al. (See Willshaw, H., Cowles, and Smith, assignors.)
Franco, Cesare. (See Sansone, L., and Franco.)
Frank, Raymond H. (See Mitchell, H. A., Gregg, and Frank.)
Frankel, Benjamin, New York, N. Y. Cigar accessory. 1,892,429; Dec. 27.
Frauenfelder, Edward. (See Joy, W. P., Amend, and Frauenfelder.)
Fried. Krupp Aktiengesellschaft. (See Gross, Siegfried, assignor.)
Friedman, Marcus, Brooklyn, N. Y. Collar. 1,892,430; Dec. 27.
Frigidaire Corporation. (See Hull, Harry B., assignor.)
Frink, Frederick W., Schenectady, N. Y., assignor to General Electric Company. Electric power converting apparatus. 1,891,924; Dec. 27.
Frohlich, Charles, Amsterdam, assignor to Bigelow-Sanford Carpet Co. Inc., New York, N. Y. Setting frame. 1,892,507; Dec. 27.
Fruehauf Trailer Company. (See Reid, Frederick N., assignor.)
Frykman, Victor L., assignor to Dictaphone Corporation, Bridgeport, Conn. Phonograph clutch. 1,892,269; Dec. 27.
Fuller Company. (See Sprague, Edward W., assignor.)
Fuller Lehigh Company. (See Hulsart, Charles A., assignor.)
Fuller Lehigh Company. (See Kerr, Howard J., assignor.)
Fuller, Rufus W., Deerfield, assignor to Production Machine Company, Greenfield, Mass. Apparatus for centerless grinding or polishing. 1,892,453; Dec. 27.
Gainelli, Frank J. (See Wick, Louis D., assignor.)
Galvin, Michael J., assignor of forty-nine per cent to A. P. Reid and D. D. Bennett, Toronto, Ontario, Canada. Puncture sealing device for pneumatic tires and other gas filled containers. 1,891,975; Dec. 27.
Garand, John C., Springfield, Mass. Semiautomatic rifle. 1,892,141; Dec. 27.
Gardner, Delamere B., Los Angeles, Calif. Apparatus for controlling and directing light. 1,892,142; Dec. 27.
Gardner-Denver Company. (See Pearson, G. C., Croft, and Carpenter, assignors.)
Garrett, Margaret, Detroit, Mich. Knife. Des. 88,766; Dec. 27.
Gartin, Elmer G., Claremont, N. H., assignor to Sullivan Machinery Company. Rock drill. 1,892,549; Dec. 27.
Gaskell, Joseph, St. Helens, assignor to Pilkington Brothers Limited, Liverpool, England. Manufacture of wire net glass and apparatus therefor. 1,892,488; Dec. 27.
Gasoline Products Company. (See Cross, Roy, assignor.)
Gaspari, J., & Company, Inc. (See Gaspari, Joseph, assignor.)
Gaspari, Joseph, assignor to J. Gaspari & Company, Inc., New York, N. Y. Collapsible eye glass frame. 1,892,642; Dec. 27.
Gathmann, Emil, Baltimore, Md. Ingot. 1,892,569; Dec. 27.
Gayman, Oliver P., Canal, Winchester, Ohio. Landing and launching device for air vehicles. 1,892,460; Dec. 27.
Gebruder Buhler, the Firm. (See Roth, Ernst, assignor.)
Gehrig, Robert C., jr., Schuylkill Haven, Pa. Concrete burial vault. 1,892,461; Dec. 27.
Gemberling, Cameron H. (See Altgelt, R. J., and Gemberling.)
General Aniline Works, Inc. (See Holzach, K., Krzikalla, and Mueller, assignors.)
General Aniline Works, Inc. (See Kalischer, Georg, assignor.)
General Aniline Works, Inc. (See Kesseler, H., and Eilfaender, assignors.)
General Aniline Works, Inc. (See Kraenzlein, G., and Welde, assignors.)
General Aniline Works, Inc. (See Kränslein, G., Greune, and Vollman, assignors.)
General Aniline Works, Inc. (See Kunz, M. A., Koeberle, and Berthold, assignors.)

General Aniline Works, Inc. (See Zahn, C., and Schimmelschmidt, assignors.)
General Devices and Fittings Company. (See Lapsley, Howard G., assignor.)
General Electric Company. (See Bailey, William M., assignor.)
General Electric Company. (See Eaton, Reginald O., assignor.)
General Electric Company. (See Frink, Frederick W., assignor.)
General Electric Company. (See Haley, Kenneth R., assignor.)
General Electric Company. (See Hall, Chester I., assignor.)
General Electric Company. (See Hayman, W. C., and Piercy, assignors.)
General Electric Company. (See Hinkley, Ray A., assignor.)
General Electric Company. (See Kellogg, Edward W., assignor.)
General Electric Company. (See Langmuir, I., and Kingdon, assignors.)
General Electric Company. (See Mansur, Clarence W., assignor.)
General Electric Company. (See Marcellus, Frederick S., assignor.)
General Electric Company. (See Mauger, Samuel W., assignor.)
General Electric Company. (See Pickard, Greenleaf W., assignor.)
General Electric Company. (See Porter, Willard E., assignor.)
General Electric Company. (See Prager, Hans, assignor.)
General Electric Company. (See Prince, David C., assignor.)
General Electric Company. (See Rice, Chester W., assignor.)
General Electric Company. (See Seeley, Harold T., assignor.)
General Electric Company. (See Sprong, Severn D., assignor.)
General Electric Company. (See Tröger, Richard, assignor.)
General Findings & Supply Co. (See Cole, Arthur M., assignor.)
General Motors Research Corporation. (See Clements, Frank O., assignor.)
General Steel Castings Corporation. (See Sheehan, William M., assignor.)
Gentil, Eugene, Paris, France. Control of heat conditions in glass furnaces. 1,892,462; Dec. 27.
Gentslinger, George, Wapakoneta, Ohio. Broom holder. 1,892,338; Dec. 27.
Genung, Harrington S., Eveleth, Minn. Adjustable auto armrest. 1,892,048; Dec. 27.
George, Charles L. (See Vaughn, G. A., and George.)
George, Charles L., assignor to The Buckeye Traction Ditcher Company, Findlay, Ohio. Trenching machine. 1,892,526; Dec. 27.
George, Charles L., and W. G. Van Voorhis, assignors to The Buckeye Traction Ditcher Company, Findlay, Ohio. Trenching machine. 1,892,525; Dec. 27.
George, Robert, Paris, France, assignor to Cheney Brothers, New York, N. Y. Textile fabric. Des. 88,767; Dec. 27.
George, Robert, Paris, France, assignor to Cheney Brothers, New York, N. Y. Textile fabric. Des. 88,844; Dec. 27.
Gerent, Paul, New Britain, Conn. Combined bird figure and pedestal. Des. 88,768; Dec. 27.
Gibson, William E., Henderson, Tenn. Garment hanger. 1,892,049; Dec. 27.
Ginder, William M. (See Armstrong, Hugh C., assignor.)
Ginder, William M., Columbus, Ohio. Rolling door. 1,892,570; Dec. 27.
Globe Machine & Stamping Company, The. (See Green, Lee B., assignor.)
Goebel, George, assignor to Canfield Rubber Company, Bridgeport, Conn. Mold opening apparatus. 1,891,976; Dec. 27.
Goldkamp, Otto, San Diego, Calif., assignor to The Sprague Meter Company, Bridgeport, Conn. Gas meter. 1,892,513; Dec. 27.
González, Narciso, assignor to Eagle Pencil Company, New York, N. Y. Lead pencil and making the same. 1,892,508; Dec. 27.
Goodrich, B. F., Company, The. (See Fowler, Fred D., assignor.)
Goodrich, B. F., Company, The. (See Semon, Waldo L., assignor.)
Goodrich, B. F., Company, The. (See Zimmerli, W. F., and Havenhill, assignors.)
Goodridge, George E., Reading, assignor to Arthur H. Ballard, Incorporated, Boston, Mass. Combustion control device. 1,892,188; Dec. 27.
Goodwin, Robert B., Memphis, Tenn. Device for heating automobile motors. 1,892,571; Dec. 27.
Goodyear Tire & Rubber Company, The. (See Gunsaulus, Alfred C., assignor.)
Gordon, John A., Kansas City, Mo. Filter. 1,892,210; Dec. 27.
Gordon, Walter F., Dallas, Tex. Cigarette making machine. 1,892,143; Dec. 27.
Gorrie, Harvard H., Cleveland, Ohio, assignor to Bailey Meter Company. Integrating mechanism. 1,892,183; Dec. 27.
Goss, Byron C., Cleveland, Ohio. Expansion chamber type gas gun. 1,892,050; Dec. 27.
Gottesman, Joseph M., Paris, France, assignor to William Willheim Co., Inc., New York, N. Y. Textile fabric or similar article. Des. 88,769; Dec. 27.
Gottesman, Joseph M., Paris, France, assignor to William Willheim Co., Inc., New York, N. Y. Textile fabric or similar article. Des. 88,770; Dec. 27.
Gottesman, Joseph M., Paris, France, assignor to William Willheim Co., Inc., New York, N. Y. Textile fabric or similar article. Des. 88,771; Dec. 27.
Gottesman, Joseph M., Paris, France, assignor to William Willheim Co., Inc., New York, N. Y. Textile fabric or similar article. Des. 88,772; Dec. 27.
Gottesman, Joseph M., Paris, France, assignor to William Willheim Co., Inc., New York, N. Y. Textile fabric or similar article. Des. 88,773; Dec. 27.
Gottesman, Joseph M., Paris, France, assignor to William Willheim Co., Inc., New York, N. Y. Textile fabric or similar article. Des. 88,774; Dec. 27.
Gottesman, Joseph M., Paris, France, assignor to William Willheim Co., Inc., New York, N. Y. Textile fabric or similar article. Des. 88,775; Dec. 27.
Gould, John H., assignor to Aircraft Products Corporation of America, Detroit, Mich. Airplane strut construction. 1,891,977; Dec. 27.
Grammes, L. F., & Sons. (See Weindel, Fred, jr., assignor.)
Grand Rapids Loose Leaf Binder Company. (See Johnson, C. E., and Edwards, assignors.)
Granier, Léon F., Aix, France. Variable speed gearing. 1,892,270; Dec. 27.
Gravatt, Charles M., Asheville, N. C. Game apparatus. Des. 88,776; Dec. 27.
Graves, William H., Culver City, Calif. Sandal. Des. 88,777; Dec. 27.
Gray, Daniel, Oneida, and B. K. Northrop, Hamilton, assignors to Oneida Comunity, Limited, Oneida, N. Y. Electroplated chromium article. 1,892,051; Dec. 27.
Gray, David E., assignor to Corning Glass Works, Corning, N. Y. Glass working machine. 1,892,463; Dec. 27.
Gray, Fred D., Herkimer, N. Y., assignor to The Holed-Tite Packing Corporation. Packing material. 1,892,527; Dec. 27.
Gray, M. Louis. (See Koch, Theodor, sr., assignor.)
Green, Lee B., Lakewood, assignor to The Globe Machine & Stamping Company, Cleveland, Ohio. Automobile radiator shell with louver type grille. Des. 88,778; Dec. 27.
Greene, Harry, Brooklyn, N. Y. Textile fabric or the like. Des. 88,779; Dec. 27.
Gregg, Alfred W. (See Mitchell, H. A., Gregg, and Frank.)
Greune, Heinrich. (See Kranzlein, G., Greune, and Vollmann.)
Griffin, Alvah M., Los Angeles, Calif., assignor, by mesne assignments, to Chicago Bridge & Iron Company, Chicago, Ill. Seal for floating decks. 1,892,144; Dec. 27.
Griswold, Glenn G. (See Ellis, C. H., and Griswold.)
Groggins, Philip H., Washington, D. C. Preparation of organic compounds of the anthraquinone series. 1,892,302; Dec. 27.
Gross, Siegfried, Essen, assignor to Fried. Krupp Aktiengesellschaft, Essen-on-the-Ruhr, Germany. Conical spiral spring. 1,892,339; Dec. 27.
Gross, Walter F., Elizabeth, and C. N. Sapplington, Perth Amboy, N. J., assignors to American Smelting and Refining Company, New York, N. Y. Refining lead. 1,891,978; Dec. 27.
Grupe, William F., Lyndhurst, N. J. Applying indicia to cellophane and the like. 1,892,292; Dec. 27.
Gulliford, Archibald T., administrator. (See Gulliford, Nicholas L.)
Gulliford, Nicholas L., deceased, Peabody; A. T. Gulliford, administrator, assignor to Gulliford Wood Heel Company, Lynn, Mass. Woodworking machine. 1,892,651; Dec. 27.
Gulliford Wood Heel Company. (See Gulliford, Nicholas L., assignor.)
Gunsaulus, Alfred C., assignor to The Goodyear Tire & Rubber Company, Akron, Ohio. Tire. Des. 88,780; Dec. 27.
Gunsaulus, Alfred C., assignor to The Goodyear Tire & Rubber Company, Akron, Ohio. Tire. Des. 88,781; Dec. 27.
Guth, Frederick A., Columbus, Ohio. Foldable door structure. 1,892,340; Dec. 27
Guyot, Walter E., assignor to The Parker Pen Company, Janesville, Wis. Mechanical pencil. 1,892,145; Dec. 27.
Guyot, Walter, Janesville, Wis., assignor, by mesne assignments, to Pen Desk Set Company. Desk set. 1,892,509; Dec. 27.
Hackett, William F., New York, N. Y. Kitchen appliance. 1,891,925; Dec. 27.
Hackspill, Louis, Strasbourg, D. Claude, Le Raincy, L. E. Andres, Wissembourg, and P. A. A. Rollet, Strasbourg, France. Manufacture of potassium salts from potassium chloride. 1,892,341; Dec. 27.
Haehl, William G., near Manilla, Ind. Fence guard wire brace. 1,892,572; Dec. 27.
Hagen, Harold F., Dedham, assignor to B. F. Sturtevant Company, Hyde Park, Mass. Method and apparatus for propelling fluids. 1,892,303; Dec. 27.
Haley, Kenneth R., Beaver Falls, Pa., assignor to General Electric Company. Electric lamp. Des. 88,782; Dec. 27.

Hall, Chester I., Philadelphia, Pa., assignor, by mesne assignments, to General Electric Company. Mixing valve. 1,891,926; Dec. 27.
Hall, Edwin S., New Haven, Conn., assignor to Mitchell-Crankless Engines Corporation, New York, N. Y. Power transmission mechanism. 1,891,927; Dec. 27.
Haller, Robert, Riehen, near Basel, and A. Heckendorn, assignors to Society of Chemical Industry in Basle, Basel, Switzerland. Cellulose derivatives containing nitrogen and making same. 1,892,489; Dec. 27.
Halm, William, Long Island City, N. Y. Flower holder. 1,892,393; Dec. 27.
Hammond, John H., jr., Gloucester, Mass. Echo torpedo. 1,892,431; Dec. 27.
Hanauer, Albert M., assignor to Lava Crucible Company of Pittsburgh, Pittsburgh, Pa. Molding graphite refractory compositions. 1,891,979; Dec. 27.
Handley, George F. (See Myers, L. C., and Handley.)
Hanna, Luther R., Indianapolis, Ind. Autographic manifolding machine. 1,892,550; Dec. 27.
Hanseatische Muhlenwerke Aktiengesellschaft. (See Schwieger, Albert, assignor.)
Harris, Arch W. (See Charlesworth, S. I., and Harris.)
Harris, Arch W. (See Charlesworth, S. I., Harris, and Linder.)
Harris, Sidney E. (See Nitardy, F. W., Christiansen, and Harris.)
Harrison, Clifford E., assignor to American Engineering Company, Philadelphia, Pa. Air regulator for tuyères. 1,892,052; Dec. 27.
Harshberger, Norman P., Pasadena, Calif. Electrical wiring system. 1,892,146; Dec. 27.
Hart, Charles, Media, assignor to Wrought Iron Company of America, Philadelphia, Pa. Method and apparatus for puddling. 1,892,271; Dec. 27.
Hart, Ethel E., executrix. (See Hart, Percy E.)
Hart, Percy E., deceased, Toronto, Ontario, Canada, by E. E. Hart, executrix, Toronto, Canada. Large capacity oil fuse. 1,892,102; Dec. 27.
Hartmann, Max, and H. Isler, Riehen, near Basel, assignors to the Firm: Society of Chemical Industry in Basle, Basel, Switzerland. Basic ethers of halogenated quinoline. 1,891,980; Dec. 27.
Harvey, Tom, Middletown, Ohio. Drive for press rolls or the like. 1,892,573; Dec. 27.
Haselbach, Albrecht, Namslau, Germany. Preparation of beers weak in alcohol. 1,892,342; Dec. 27.
Haskelite Manufacturing Corporation. (See Meyercord, C. R., and Basquin, assignors.)
Haubrook, Edward H., Seattle, Wash. Tie form. 1,892,272; Dec. 27.
Havenhill, Robert S. (See Zimmerli, W. F., and Havenhill.)
Hawke, E. R. (See Berney, John L., assignor.)
Hawke, E. R. (See Desmet, John P., assignor.)
Hawkins, Wilford J., Brooklyn, N. Y., assignor to American Machine & Foundry Company. Fusible alloy and making the same. 1,892,273; Dec. 27.
Hawley, George W., Bridgeport, Conn., assignor to Knysheerer Corporation, New York, N. Y. Fracture operating table. 1,892,304; Dec. 27.
Haws, William H., assignor of one-half to W. W. Hoffman, Johnstown, Pa. Hot top for ingot molds. 1,892,464; Dec. 27.
Hayes-Donahue Manufacturing Co. Inc., The. (See Jacobs, Joseph, assignor.)
Hayes, Harvey C., Washington, D. C. Vibration detector. 1,892,147; Dec. 27.
Hayman, William C., Schenectady, and C. A. Piercy, Ballston Lake, N. Y., assignors to General Electric Company. End cap or head for electric cables. 1,892,561; Dec. 27.
Hazeltine Corporation. (See MacDonald, William A., assignor.)
Health, Sheldon B., assignor to The Dow Chemical Company, Midland, Mich. Preparation of strong hydrogen halide gas. 1,892,652; Dec. 27.
Heany, John A., New Haven, Conn., assignor to Sirian Lamp Company, Newark, N. J. Cathode coating composition and making the same. 1,892,528; Dec. 27.
Heaton, Herman C., Chicago, Ill. Powdered fuel burner. 1,892,053; Dec. 27.
Heckendorn, Alphonse. (See Haller, R., and Heckendorn.)
Heckroth, Frederic C., assignor of one-half to P. L. Berke, Duluth, Minn. Piston packing. 1,892,189; Dec. 27.
Heenan & Froude Limited. (See Walker, George H., assignor.)
Heil Co., The. (See Eisenberg, Charles G., jr., assignor.)
Heinke, Alfred J., Towaco, N. J. Textile fabric or similar article of manufacture. Des. 88,783; Dec. 27.
Heinke, Alfred J., Towaco, N. J. Textile fabric or the like. Des. 88,784; Dec. 27.
Heinke, Alfred J., Towaco, N. J. Textile fabric or the like. Des. 88,785; Dec. 27.
Heinke, Alfred J., Towaco, N. J. Textile fabric or the like. Des. 88,786; Dec. 27.
Heinke, Alfred J., Towaco, N. J. Textile fabric or the like. Des. 88,787; Dec. 27.
Heinke, Alfred J., Towaco, N. J. Textile fabric or the like. Des. 88,788; Dec. 27.
Heinke, Alfred J., Towaco, N. J. Textile fabric or the like. Des. 88,789; Dec. 27.
Heinke, Alfred J., Towaco, N. J. Textile fabric or the like. Des. 88,790; Dec. 27.
Hejcmann, Rudolf, Budapest, Hungary. Dental crown, coated on the front with enamel, made of noble metal or noble metal material and its production. 1,892,490; Dec. 27.
Heilman, Carl R., assignor to William Willheim Co., Inc., New York, N. Y. Textile fabric or similar article. Des. 88,791; Dec. 27.
Henriod, Charles E., Areuse, Switzerland. Power transmission mechanism. 1,892,616; Dec. 27.
Henschen, Minnie, West New York, N. J. Means for bathing patients. 1,892,274; Dec. 27.
Herbst, Clarence A., assignor to Economy Fuse and Manufacturing Co., Chicago, Ill. Heat treating oven. 1,891,981; Dec. 27.
Herm. Bertram, Hallersche Dampfbackofen-Fabrik Hallesche Misch-u Knetmaschinen-Faorik m. b. H. (See Regel, Bruno, assignor.)
Hess, Heinrich. (See Röhm, O., Fischer, and Hess.)
Hess, Heinrich O., assignor to Firm Actiengesellschaft Joh. Jacob Rieter & Cie., Winterthur, Switzerland. Ring spinning and ring doubling machine having a movable spindle rail. 1,892,343; Dec. 27.
Hess, Joseph J., Indianapolis, Ind., assignor to International Printing Company. Open bottom ventilated paper tray. 1,891,928; Dec. 27.
Hickman, Albert F., assignor to Hickman Pneumatic Seat Co., Inc., Eden, N. Y. Vehicle spring and shock absorber suspension. 1,892,305; Dec. 27.
Hickman Pneumatic Seat Co. (See Hickman, Albert F., assignor.)
Higgins, Mark F. (See Nyborg, Tage G., assignor.)
Hillhouse, Charles B., New York, N. Y. Dissociating natural gas. 1,892,559; Dec. 27.
Hillier, Gerald O., Berkeley, assignor to Oliver United Filters Inc., San Francisco, Calif. Filter. 1,892,306; Dec. 27.
Hills-McCanna Company. (See Buenger, Clarence O., assignor.)
Hincman, Alva K., Gloucester, N. J. Centrifugal variable resistance governor. 1,892,054; Dec. 27.
Hinkley, Ray A., Erie, Pa., assignor to General Electric Company. Flexible coupling. 1,891,929; Dec. 27.
Hitchcock, Guy F., Houston, assignor of one-half to T. H. Meeks, Harris County, Tex. Lantern. Re18,704; Dec. 27.
Hodgson, Howard E., Wauwatosa, assignor to Cutler-Hammer, Inc., Milwaukee, Wis. Electromagnetic clutch. 1,891,982; Dec. 27.
Hodsdon, Floyd G., La Grange, Ill., assignor to International Harvester Company. Pulsator for milking machines. 1,891,983; Dec. 27.
Hoffman, Norman W., assignor to The Magee Carpet Co., Bloomsburg, Pa. Mandrel for carpet rolling machines. 1,891,984; Dec. 27.
Hoffman, William W. (See Haws, William H., assignor.)
Hohl, George L., assignor to Cartoning Machinery Corporation, Newport, R. I. Mechanism for opening and filling bags. 1,892,148; Dec. 27.
Holed-Tite Packing Corporation. (See Gray, Fred D., assignor.)
Holly Motors Corporation. (See Schwarz, Alfred, assignor.)
Holts, Frederick C., assignor to Sangamo Electric Company, Springfield, Ill. Alternating current motor and controlling the speed thereof. 1,892,552; Dec. 27.
Holts, Frederick C., Springfield, Ill., assignor to Sangamo Electric Company. Induction reaction motor. 1,892,553; Dec. 27.
Holzach, Karl Ludwigshafen-on-the-Rhine, H. Krzikalla, Mannheim, and W. Mueller, Ludwigshafen-on-the-Rhine, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Azo dyestuffs. 1,892,055; Dec. 27.
Honey, Alfred E., Ilford, assignor to J. Stone & Company, Limited, Deptford, England. Automatic regulating, controlling, and switching means for electrical train lighting and like installations. 1,892,617; Dec. 27.
Hoover, George S., Wellsburg, W. Va. Manufacture of valves in paper sacks. 1,892,287; Dec. 27.
Hope, Ernest, Leicester, England, assignor to United Shoe Machinery Corporation, Paterson, N. J. Finishing tool. 1,891,985; Dec. 27.
Hopff, Heinrich, Ludwigshafen-on-the-Rhine, and M. Dunkel, Mannheim, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Production of organic compounds containing oxygen from carbon monoxide and halogenated nonaromatic hydrocarbons. 1,891,930; Dec. 27.
Hopkins, Leslie A., Detroit, Mich. Electric heater. 1,892,211; Dec. 27.
Hornig, August W., Chicago, Ill. Manufacture of laminated glass. 1,891,931; Dec. 27.
Hougen, Leslie H., Miami, Fla. Starter gearing. 1,892,103; Dec. 27.
Howard, William R., Washington, D. C., assignor to Universal Oil Products Company, Chicago, Ill. Conversion of hydrocarbon oils. 1,892,432; Dec. 27.
Hubbard, Norman, Elizabeth, assignor to The Babcock & Wilcox Company, Bayonne, N. J. Packing for joints. 1,892,618; Dec. 27.
Huber, Peter, Zurich, Switzerland. Apparatus for dispensing oils and fats. 1,892,344; Dec. 27.
Hudgins, Patrick L., Decatur, assignor of sixty per cent to S. A. Love, De Kalb, Ga. Emergency coupling for railroad cars. 1,892,619; Dec. 27.

Huff, Lyman C., assignor to Universal Oil Products Company, Chicago, Ill. Protective lining for vessels. 1,892,433; Dec. 27.

Hughes, Cecil, Downend, near Bristol, England. Pump, compressor, engine, and the like. 1,892,345; Dec. 27.

Hughes, James R., South Bend, Ind., assignor to The Pierce-Arrow Motor Car Company, Buffalo, N. Y. Combined radiator and fender for vehicles. Des. 88,792; Dec. 27.

Hughes, Stanley. (See Teats, R., and Hughes.)

Huhn, Gustav, Berlin, Germany. Plug cock. 1,892,574; Dec. 27.

Hull, Harry B., assignor to Frigidaire Corporation, Dayton, Ohio. Refrigerating apparatus. 1,892,346; Dec. 27.

Hulley, Albert and W. J., City Island, N. Y. Sliding door clamp. 1,892,149; Dec. 27.

Hulley, William J. (See Hulley, Albert and W. J.)

Huisart, Charles A., Westfield, N. J., assignor, by mesne assignments, to Fuller Lehigh Company. Boiler furnace. 1,892,661; Dec. 27.

Hunt, Andrew M., New York, N. Y., assignor to The Standard Stoker Company, Incorporated. Outside feed stoker. 1,892,394; Dec. 27.

Hunt, Andrew M., San Francisco, Calif., assignor to The Standard Stoker Company, Incorporated. Stoker fuel distributor. 1,892,395; Dec. 27.

Hunter Candy Corporation. (See Barad, Alexander, assignor.)

Hunter, Lytle G., Flushing, N. Y. Mounting for a panel. 1,891,932; Dec. 27.

Hunter, Lytle C., Flushing, N. Y. Mounting for panels. 1,892,104; Dec. 27.

Huskey, Oliver B., Los Angeles, Calif. Ignition insulation composition. 1,892,105; Dec. 27.

Hutchins, Ferm E., Lakewood, and C. F. Losey, Cleveland, Ohio. Display rack. 1,892,150; Dec. 27.

Hutt, James W., Toronto, Ontario, Canada. Safety price tag. 1,891,933; Dec. 27.

Hutton, Sam B., assignor to Eastern Cabinet Company, Trenton, N. J. Cabinet and extensible top therefor. 1,891,986; Dec. 27.

Hydraulic Brake Company. (See Tseng, Andrew T. K., assignor.)

Hydraulic Press Manufacturing Company, The. (See Ernst, Walter, assignor.)

Hyland, Lawrence A., Washington, D. C., assignor to Wired Radio, Inc., New York, N. Y. Direction finding system. 1,892,151; Dec. 27.

I. G. Farbenindustrie Aktiengesellschaft. (See Brode, J., and Käb, assignors.)

I. G. Farbenindustrie Aktiengesellschaft. (See Hopff, H., and Dunkel, assignors.)

I. G. Farbenindustrie Aktiengesellschaft. (See Ufer, Hanns, assignor.)

I. G. Farbenindustrie Aktiengesellschaft. (See Voss, Arthur, assignor.)

Industrial Patents Corporation. (See McKee, Harry H., assignor.)

Industrial Patents Corporation. (See Regensburger, Richard W., assignor.)

Ingersoll-Rand Company. (See Lemp, Hermann, assignor.)

Ingersoll-Rand Company. (See Sellars, Oliver H., assignor.)

International Cigar Machinery Company. (See Neumair, Joseph A., assignor.)

International Cigar Machinery Company. (See Schmitt, Frank R., assignor.)

International Cigar Machinery Company. (See Schussler, Walter H., assignor.)

International Harvester Company. (See Hodsdon, Floyd G., assignor.)

International Harvester Company. (See Johnston, Edward A., assignor.)

International Harvester Company. (See Richmond, Albert C., assignor.)

International Harvester Company. (See Robinson, Charles W., assignor.)

International Printing Company. (See Hess, Joseph J., assignor.)

Isler, Hans. (See Hartmann, M., and Isler.)

Ito, Chiyomatsu. (See Sato, M., and Ito.)

Jack, William, assignor of nine-tenths to D. & J. Tullis, Limited, Clydebank, Scotland. Laundry press. 1,892,510; Dec. 27.

Jackson, Herbert, St. Helens, England, assignor to Associated Telephone & Telegraph Company, Chicago, Ill. Automatic switch. 1,892,511; Dec. 27.

Jackson, Maunsell B., and Kenneth M. Clipsham, Toronto, Ontario, assignor to Leaside Engineering Company, Limited, Leaside, Ontario, Canada. Engine starter. 1,892,056; Dec. 27.

Jacobs, Joseph, Bridgeport, assignor to The Hayes-Donahue Manufacturing Co., Inc., Milford, Conn. Hair curler. 1,892,575; Dec. 27.

Jacquard Knitting Machine Company, Inc. (See Sirmay, Julius, assignor.)

Jaeger, Alphons O. Crafton, assignor to The Selden Company, Pittsburgh, Pa. Purification of nonvolatile organic acids. 1,892,396; Dec. 27.

Jancke, Benno F., assignor to Shelton-Jancke Corporation, New York, N. Y. Apparatus for use in waving hair. 1,892,106; Dec. 27.

Jancke, Benno F., New York, and F. Korf, and W. F. Zentler, Crestwood, assignors to Shelton-Jancke Corporation, New York, N. Y. Hair waver. 1,892,107; Dec. 27.

Janssen, Henry, assignor to Textile Machine Works, Wyomissing, Pa. Rotary container for centrifugal machine. 1,892,057; Dec. 27.

Jenkins, Charles W. (See Burson, T., and Jenkins.)

Jenkins, Russell L., Anniston, Ala., assignor to Swann Research, Inc. Production of chlorinated diaryls. 1,892,397; Dec. 27.

Jenkins, Russell L., Anniston, Ala., assignor to Swann Research, Inc. Noncrystalline highly chlorinated diaryl resin. 1,892,398; Dec. 27.

Jenkins, Russell L., and J. A. Sikarski, Anniston, Ala., assignors to Swann Research, Inc. Producing clear transparent chlorinated diaryl resins. 1,892,399; Dec. 27.

Jenkins, Russell L., and J. A. Sikarski, Anniston, Ala., assignors to Swann Research, Incorporated. Diphenyl resin and producing the same. 1,892,400; Dec. 27.

Jennings, James B., and G. P. Estes, McPherson, Kans. Treating crude oil. 1,891,987; Dec. 27.

Jensen, Thormod, Brooklyn, N. Y., assignor to American Machine & Foundry Company. Paper feed control for wrapping machines. 1,892,275; Dec. 27.

Jerome, Walter C., Worcester, Mass. Floor washing machine. 1,892,347; Dec. 27.

Johanson, Ivar. (See de Malvin de Montazet, M. J. A., and Johanson.)

Johnsen, Charles A., Wheatland, Calif. Spice can holder. 1,892,349; Dec. 27.

Johnson, Arthur, Hardin, Mont. Individual watch hanger. Des. 88,793; Dec. 27.

Johnson Bronze Company. (See Leis, Carl H., assignor.)

Johnson Bronze Company. (See Ward, John J., assignor.)

Johnson, Bror G., Chicago, Ill. Engine cranking mechanism. 1,892,348; Dec. 27.

Johnson, Cornelius B., Des Moines, Iowa, assignor to The First Investment Corporation. Clothesline reel. 1,892,276; Dec. 27.

Johnson, Cornelius E., and W. H. Edwards, assignors to Grand Rapids Loose Leaf Binder Company, Grand Rapids, Mich. Loose leaf binder. 1,891,988; Dec. 27.

Johnson, Cyrus C., Salina, Kans. Burner. 1,892,238; Dec. 27.

Johnson, Ellsworth T., assignor to Deere & Company, Moline, Ill. Motion transmitting mechanism. 1,892,108; Dec. 27.

Johnson, Gustav, West Roxbury, assignor to United-Carr Fastener Corporation, Cambridge, Mass. Forming and attaching separable fastener elements. 1,891,989; Dec. 27.

Johnston, Edward A., Chicago, Ill., assignor to International Harvester Company. Mower guard. 1,891,990; Dec. 27.

Johnston, Edward F., Wilmington, Del. Coating material. 1,892,576; Dec. 27.

Jones, Francis J. S., Porthcawl, Wales. Liquid fuel pumping apparatus. 1,892,529; Dec. 27.

Jones, Ralph E., Fort G. G. Meade, Md. Projectile. 1,892,152; Dec. 27.

Jordan, Wayne D., Evanston, Ill. Air conditioning mechanism. 1,892,307; Dec 27.

Joy, Wilford P., Webster Groves, J. A. Amend, University City, and E. Frauenfelder, Webster Groves, Mo., assignors to St. Louis Duntile Company. Building foundation. 1,891,934; Dec. 27.

Judelshon, Oscar L., Park Ridge, N. J. Cloth cutting machine. 1,892,058; Dec. 27.

Juestrich, Max U., Ridgefield, N. J., assignor to The American Fabrics Company, Bridgeport, Conn. Textile fabric. Des. 88,794; Dec. 27.

Juestrich, Max U., Ridgefield, N. J., assignor to The American Fabrics Company, Bridgeport, Conn. Textile fabric. Des. 88,795; Dec. 27.

Juestrich, Max U., Ridgefield, N. J., assignor to The American Fabrics Company, Bridgeport, Conn. Textile fabric. Des. 88,796; Dec. 27.

Junkers, Hugo, Dessau, Germany. Cylinder for internal combustion engines. 1,892,277; Dec. 27.

Käb, Georg. (See Brode, J., and Käb.)

Kalina, Loeser, Brooklyn, N. Y. Garment hanger. 1,892,580; Dec. 27.

Kalischer, Georg, Frankfort-on-the-Main, Germany, assignor to General Aniline Works, Inc., New York, N. Y. Derivatives of amino-naphthol sulphonic acids. 1,892,577; Dec. 27.

Kalle & Co. Aktiengesellschaft. (See Neugebauer, Wilhelm, assignor.)

Kallus, Joseph L., Brooklyn, N. Y. Limb for toy figures. 1,892,278; Dec. 27.

Kaufmann, Werner R., East Elmhurst, Long Island, assignor to Combier & Co. Inc., New York, N. Y. Textile fabric or the like. Des. 88,797; Dec. 27.

Kaufmann, Werner R., East Elmhurst, Long Island, assignor to William Wilhelm Co., Inc., New York, N. Y. Textile fabric or similar article. Des. 88,798; Dec. 27.

Kegresse, Adolphe, Courbevoie, France. Protecting device for ball bearings. 1,892,465; Dec. 27.

Keinath, Georg, Berlin-Charlottenburg, assignor to Siemens & Halske, Aktiengesellschaft, Siemensstadt, near Berlin, Germany. Frequency measurer. 1,892,401; Dec. 27.

Kelley, Elmer E., Windsor, Vt. Machine tool. 1,892,239; Dec. 27.

Kellogg, Edward W., Schenectady, N. Y., assignor to General Electric Company. Film supporting and driving apparatus. 1,892,554; Dec. 27.

Kemp, Archie B., Westwood, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Communication cable. 1,892,279; Dec. 27.

Kemp, Charles, assignor to Kemp Lock Co., New York, N. Y. Lock. 1,892,512; Dec. 27.

Kemp Lock Inc. (See Kemp, Charles, assignor.)

Kennedy, Joseph A., Pawtucket, R. I., assignor to Anaconda Wire and Cable Company, New York, N. Y. Treating paper wrapping strip. 1,892,059; Dec. 27.

Kenyon, William H., assignor to Entwisle & Kenyon Limited, Accrington, England. Carpet sweeper. 1,892,308; Dec. 27.

Kernodle, Robert J., Durham, N. C. Collapsible hogshead. 1,892,153; Dec. 27.

Kerr, Howard J., Westfield, N. J., assignor, by mesne assignments, to Fuller Lehigh Company. Powdered fuel furnace. 1,892,662; Dec. 27.

Kerr, William K., Tulsa, Okla. Feed for fountain pens. 1,892,578; Dec. 27.

Kesseler, Hans, Mannheim, and L. Elfflaender, Ludwigshafen-on-the-Rhine, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Production of colored compositions. 1,892,280; Dec. 27.

Kestenman Bros. Mfg. Co. (See Kestenman, Charles H., assignor.)

Kestenman, Charles H. (See Kestenman Bros. Mfg. Co., assignor.)

Kestenman, Charles H., assignor to Kestenman Bros. Mfg. Co., Providence, R. I. Extendible clasp or connecting device for straps, bands, and bracelets. 1,892,060; Dec. 27.

Kestenman, Charles H., assignor to Kestenman Bros. Mfg. Co., Providence, R. I. Clasp for bracelets, straps, linkages, or the like. 1,892,281; Dec. 27.

Kestenman, Charles H., assignor to Kestenman Bros. Mfg. Co., Providence, R. I. Clasping device for bracelets. 1,892,350; Dec. 27.

Ketchpel, Paul A., Pittsburgh, Pa., assignor, by mesne assignments, to The Standard Stoker Company, Incorporated. Locomotive stoker. 1,892,351; Dec. 27.

Keyel, William. (See Nye, Alvin E., assignor.)

Killius, James, and C. H. De Frehn, Johnstown, Pa. Cupboard desk. 1,892,061; Dec. 27.

Kilner, Arthur H., St. John's Wood, England. Apparatus for the production and manufacture of material impregnated with cellulose regenerated from viscose or other cellulosic solutions. 1,892,579; Dec. 27.

Kingdon, Kenneth H. (See Langmuir, I., and Kingdon.)

Kirkpatrick, Alton, Lansdowne, Pa. Gauge. 1,892,212; Dec. 27.

Kittel, John J., St. Albans, assignor to Royal Typewriter Company, Inc., New York, N. Y. Typewriting machine. 1,891,991; Dec. 27.

Kleess, Edward J., Springfield, N. Y. Paper bottle. 1,892,466; Dec. 27.

Kleinschmidt, Edward E., Highland Park, assignor to Teletype Corporation, Chicago, Ill. Printing telegraph apparatus. 1,892,352; Dec. 27.

Kling, Fred E., Youngstown, Ohio. Auxiliary drive for hot metal mixers. 1,892,309; Dec. 27.

Klös, Heinrich. (See Mietzsch, F., and Klös.)

Knapp, Edelbert J., Norton, Kans. Lubricated rocker arm. 1,892,240; Dec. 27.

Knell, John. (See Carr, J. E., and Knell.)

Kny-Scheerer Corporation. (See Hawley, George W., assignor.)

Kny-Scheerer Corporation. (See Talas, Louis, assignor.)

Koch, Theodor, sr., Buren, Switzerland, assignor to M. Louis Gray, New York, N. Y. Timepiece. 1,892,514; Dec. 27.

Koeberle, Karl. (See Kuns, M. A., Koeberle, and Berthold.)

Korf, Frederick. (See Jancke, B. F., Korf, and Zentler.)

Kraenslein, Georg, and R. Welde, Frankfort-on-the-Main-Hochst, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Derivatives of naphtasarine and preparing them. 1,892,310; Dec. 27.

Kränslein, Georg, H. Greune, and H. Vollmann, Hochst-on-the-Main, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Benzanthrone derivatives and preparing them. 1,892,241; Dec. 27.

Krueger, Richard G., Mount Vernon, N. Y. Doll. Des. 88,799; Dec. 27.

Krsikalla, Hans. (See Holzbach, K., Krsikalla, and Mueller.)

Kuns, Max A., Mannheim, and K. Koeberle, and E. Berthold, Ludwigshafen-on-the-Rhine, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Substitution products of dibenzopyrenequinones. 1,892,242; Dec. 27.

Lace Net Importing Co. Inc., The. (See Dognin, Jean, assignor.)

Lambert, Charles F., Grosse Pointe Farms, assignor to Clayton and Lambert Manufacturing Company, Detroit, Mich. Tire cover for spare tires. Des. 88,800; Dec. 27.

Lambert, Charles F., Grosse Pointe Farms, assignor to Clayton and Lambert Manufacturing Company, Detroit, Mich. Tire cover for spare tires. Des. 88,801; Dec. 27.

Lambert, George, Norwich, Conn. Loading attachment for trucks. 1,892,243; Dec. 27.

Lancaster, Noah T., Gastonia, N. C. Hedge and lawn mower. 1,892,620; Dec. 27.

Land, Arthur A. G., Chicago, Ill. Wire mesh fabric. 1,891,992; Dec. 27.

Landers, Frary & Clark. (See Carlson, Frederick E., assignor.)

Lane, George S., San Anselmo, assignor to Wallace Sheehan, San Francisco, Calif., trustee. Friction disk for clutches, brakes, and the like. 1,892,282; Dec. 27.

Langmuir, Irving, and K. H. Kingdon, Schenectady, N. Y., assignors to General Electric Company. Electrical discharge device. 1,892,244; Dec. 27.

Langston, Samuel M., Wenonah, N. J. Cut-off mechanism. 1,892,213; Dec. 27.

Lankering, Frederick, Paterson, N. J. Cigar. 1,892,402; Dec. 27.

Lapanja, Mathod, Canton, Ohio. Carburetor, blow torch, and solder melter. 1,892,467; Dec. 27.

Lapeley, Howard G., New York, N. Y., assignor to General Devices and Fittings Company. Electrical connecter. 1,891,935; Dec. 27.

Larson, Bernard, Hammond, Ind. Circuit closing device. 1,891,998; Dec. 27.

Larsson, Thure, assignor to Norton Company, Worcester, Mass. Segmental grinding wheel. 1,892,434; Dec. 27.

Lässer, Emil, assignor to Maag Gear-Wheel and Machine Company Ltd., Zurich, Switzerland. Gear cutting machine. 1,892,621; Dec. 27.

Laux, John P. (See Davis, D. W., and Laux.)

Lava Crucible Company of Pittsburgh. (See Hanauer, Albert M., assignor.)

Lawson, Joel S., St. James, N. Y. Combination air-brake switch. 1,892,403; Dec. 27.

Leaside Engineering Co., Limited. (See Jackson, M. B., and Clipsham, assignors.)

Ledoux, John W., Swarthmore, Pa. Meter. 1,892,468; Dec. 27.

Lee, Frank H., assignor to The Frank H. Lee Company, Danbury, Conn. Hat construction and making the same. 1,892,515; Dec. 27.

Lee, Frank H., Company, The. (See Lee, Frank H., assignor.)

Lee, James E., assignor to Challenge Machinery Company, Grand Haven, Mich. Printing press. 1,892,154; Dec. 27.

Leeds & Northrup Company. (See Bristol, Edward S., assignor.)

Leis, Carl H., assignor to Johnson Bronze Company, New Castle, Pa. Fabricating sheet metal bearings. 1,892,555; Dec. 27.

Lemoigne, Pierre, St. Denis, France, assignor, by mesne assignments, to Milton Tibbetts, trustee. Spring suspension for motor vehicles. 1,892,660; Dec. 27.

Lemon, Cecil B. (See Thompson, James C., assignor.)

Lemp, Hermann, Glen Rock, assignor to Ingersoll-Rand Company, Jersey City, N. J. Controlling device for locomotives. 1,891,936; Dec. 27.

Lenawee Textiles, Inc. (See Murphey, Floyd M., assignor.)

Leslie Company. (See Soderberg, Sten E. B., assignor.)

Lester, James U., Brooklyn, N. Y. Shell tag. 1,892,580; Dec. 27.

Levin, Isaac H., Pittsburgh, Pa. Process and apparatus for liquefying and rectifying air or other gaseous mixtures. 1,892,155; Dec. 27.

Levine, Harry, Brighton Beach, N. Y. Extra washer applying machine. 1,892,581; Dec. 27.

Lido Luggage Co. (See Lipschitz, Harry, assignor.)

Linder, Carl P. (See Charlesworth, S. I., Harris, and Linder.)

Lindsjo, Verner, assignor to Draper Corporation, Hopedale, Mass. Loom stopping mechanism. 1,892,062; Dec. 27.

Lipschitz, Harry, Brooklyn, assignor to Lido Luggage Co., Inc., New York, N. Y. Lock plate. Des. 88,802; Dec. 27.

Lodding, Frederick W., Worcester, Mass. Doctor mechanism for rolls and cylinders. 1,892,214; Dec. 27.

Losey, Clyde F. (See Hutchins, F. E., and Losey.)

Love, S. A. (See Hudgins, Patrick L., assignor.)

Lower, Nathan M., Bellevue, Pa., assignor to The Standard Stoker Company, Incorporated. Stoker. 1,892,353; Dec. 27.

Lukas, Julia, assignor to Combier & Co. Inc., New York, N. Y. Textile fabric or the like. Des. 88,803; Dec. 27.

Lum, George R., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Desk stand for a hand telephone. Des. 88,804; Dec. 27.

Lux Clock Manufacturing Company, The. (See Lux, Paul, assignor.)

Lux, Paul, assignor to The Lux Clock Manufacturing Company, Waterbury, Conn. Combined clock-case and dial. Des. 88,845; Dec. 27.

Lyles, Thomas B., Terre Haute, Ind. Safety appliance for airplanes. 1,892,556; Dec. 27.

Maag Gear-Wheel and Machine Company. (See Lässer, Emil, assignor.)

MacDonald, Alexander S., Sydney, New South Wales, Australia. Hollow core or block for use in concrete structures. 1,892,311; Dec. 27.

MacDonald, William A., Little Neck, N. Y., assignor to Hazeltine Corporation, Jersey City, N. J. High-frequency transformer. 1,892,354; Dec. 27.

MacFarlane, George F. (See Clocker, A., and MacFarlane.)

Machacek, John J., Weston, assignor of one-half to Joseph Egr, Valparaiso, Nebr. Alarm for incubators or brooders. 1,891,994; Dec. 27.

MacInnis, Clara O., New York, N. Y. Brush or similar toilet article. Des. 88,805; Dec. 27.
Macomber, Glen. (See Ferris, Walter J. P., and Macomber.)
Macomic, Chester A., Chicago, Ill. Type casting machine and matrix therefor. 1,892,156; Dec. 27.
Magee Carpet Co., The. (See Hoffman, Norman W., assignor.)
Maibach, John J., assignor to Montgomery Ward & Company, New York, N. Y. Textile fabric or similar article. Des. 88,806; Dec. 27.
Maier, Franz X., Munich, Germany. Permanent hair waving apparatus. 1,892,063; Dec. 27.
Maier, Michael, Portland, Oreg., assignor of one-third to L. Clark and one-third to A. C. F. Wilkins, Seattle, Wash. Flowerpot. 1,892,157; Dec. 27.
Maisch, Jacques, New York, N. Y. Textile fabric or the like. Des. 88,807; Dec. 27.
Maisch, Jacques, New York, N. Y. Textile fabric or the like. Des. 88,808; Dec. 27.
Maisch, Jacques, New York, N. Y. Textile fabric or the like. Des. 88,809; Dec. 27.
Manley, Robert E., Port Arthur, Tex., assignor to The Texas Company, New York, N. Y. Treating hydrocarbon oil. 1,892,283; Dec. 27.
Manning & Co. (See Buehrig, Gordon M., assignor.)
Mansur, Clarence W., Malden, Mass., assignor to General Electric Company. Non-metallic gear wheel. 1,891,937; Dec. 27.
Marcellus, Fredrick S., Scotia, N. Y., assignor to General Electric Company. Humidity indicator. Des. 88,810; Dec. 27.
Marchus, Amos S., Oakland, Calif. Combined tire gauge and filling valve. 1,892,485; Dec. 27.
Marcy, John P., Kansas City, Mo. Pipe dolly. 1,891,995; Dec. 27.
Markey, Roscoe I., Buffalo, assignor to The Aviation Patent and Research Corporation, New York, N. Y. Aeroplane landing ski. 1,892,064; Dec. 27.
Markey, Roscoe I., Farmingdale, assignor to The Aviation Patent and Research Corporation, New York, N. Y. Aeroplane engine mount. 1,892,065; Dec. 27.
Markowski, Joseph, Chicago, Ill. Spark plug. 1,892,355; Dec. 27.
Marshall, James G., Niagara Falls, assignor to Electro Metallurgical Company. Apparatus for feeding electric furnace electrodes. 1,892,109; Dec. 27.
Martin, Glenn L., Company, The. (See Andrake, Andrew A., assignor.)
Martin, Mark H., Reading, assignor to Birdsboro Steel Foundry and Machine Company, Birdsboro, Pa. Side frame. 1,891,938; Dec. 27.
Maschinenfabrik Rüti vormals Caspar Honegger. (See Egli, Ernst, assignor.)
Mastrangelo, Alphonso. (See Mastrangelo, Frank and A.)
Mastrangelo, Frank and A., assignors to Angel Novelty Company, Fitchburg, Mass. Wall cabinet. 1,892,491; Dec. 27.
Mathes, Robert C., Wyoming, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Voice operated circuit. 1,892,284; Dec. 27.
Mathieson Alkali Works, The. (See Curtis, Elam C., assignor.)
Mathieu, Gaston A., London, England, assignor to Radio Corporation of America. Automatic current regulating device. 1,892,215; Dec. 27.
Matthews, John, Philadelphia, Pa. Short range bullet. 1,892,158; Dec. 27.
Matthiessen & Hegeler Zinc Co. (See McCrindle, D., and Medill, assignors.)
Mauger, Samuel W., Schenectady, N. Y., assignor to General Electric Company. Safety switch. 1,891,939; Dec. 27.
Mauro, Anthony J., New York, N. Y. Smoking pipe device. 1,892,436; Dec. 27.
Mayes Bros. Tool Manufacturing Company. (See Mayes, John, assignor.)
Mayes, John, assignor to Mayes Bros. Tool Manufacturing Company, Port Austin, Mich. Plumb and level. 1,892,622; Dec. 27.
McAllister, Harry E., Mariners Harbor, N. Y. Automatic window-sash lock. 1,891,940; Dec. 27.
McCollom, Elza L., Villa Grove, Ill. Electric can opener. 1,892,562; Dec. 27.
McCormick, Francis H., Glen Ellyn, assignor to Edison General Electric Appliance Company, Chicago, Ill. Liquid heater. 1,892,557; Dec. 27.
McCrindle, David, and J. B. Medill, assignors to Matthiessen & Hegeler Zinc Co., La Salle, Ill. Mining. 1,892,159. Dec. 27.
McCullough, Frederick S., Edgewood, Pa. Thermionic tube. 1,892,066; Dec. 27.
McDonald, James O., Dallas, Tex. Carbon card index. 1,892,160; Dec. 27.
McElhaney, James R., Vandergrift, Pa., assignor to American Sheet and Tin Plate Company. (Pickling ferrous metals. 1,892,312; Dec. 27.
McElroy, Thomas L., Flatbush, N. Y. Securing a blanket to a printing press cylinder. 1,892,623; Dec. 27.
McFeaters, George H., Johnstown, Pa. Engine stop. 1,892,318; Dec. 27.
McGuire William H. (See Courthope, T. F., and McGuire.)
McIlvried, Howard G., and K. B. West, Gary, Ind., assignors to American Sheet and Tin Plate Company. Furnace door and conveyer control. 1,892,648; Dec. 27.
McKee, Garnet W., Rockford, Ill. Combustion system. 1,892,115; Dec. 27.
McKee, Harry H., assignor, by mesne assignments, to Industrial Patents Corporation, Chicago, Ill. Ice and brine tank for refrigerator cars. 1,892,531; Dec. 27.
McKeefe, Edward P. (See Bradley, L., and McKeefe.)
McKenna Brass & Manufacturing Company. (See DeMarkus, L., and Fouser, assignors.)
McKenna, Phillip M., Unity Township, Westmoreland County, assignor to Vanadium Alloys Steel Company, Latrobe, Pa. Manufacturing a composition of matter. 1,892,653; Dec. 27.
McMillan, Kingsley D., Glasgow, Scotland, assignor to Hans Renold Limited, Manchester, England. Chain transmission gearing. 1,892,067; Dec. 27.
Meadows, William R., Elgin, Ill., assignor to Construction Materials Patents, Inc., Lockland, Ohio. Expansion joint for pavements. 1,892,659; Dec. 27.
Medill, James B. (See McCrindle, D., and Medill.)
Meeks, Thomas H. (See Hitchcock, Guy F., assignor.)
Megroz, Georges, Bronxville, assignor to Wullschleger & Co., New York, N. Y. Textile fabric or the like. Des. 88,811; Dec. 27.
Megroz, Georges, Bronxville, assignor to Wullschleger & Co., New York, N. Y. Textile fabric or the like. Des. 88,812; Dec. 27.
Megroz, Georges, Bronxville, assignor to Wullschleger & Co., New York, N. Y. Textile fabric or the like. Des. 88,813; Dec. 27.
Megroz, Georges, Bronxville, assignor to Wullschleger & Co., New York, N. Y. Textile fabric or the like. Des. 88,814; Dec. 27.
Melzer, Otto. (See Wahl, J., and Melzer.)
Meredith, Wynn, Oakland, Calif. Level variation indicating apparatus. 1,892,110; Dec. 27.
Mertzanoff, André M., assignor to American Radiator Company, New York, N. Y. Radiator. 1,892,216; Dec. 27.
Messerschmitt, Willy, Augsburg, Germany. Flying machine. 1,891,941; Dec. 27.
Messing, Hjalmar S., Milwaukee, Wis., assignor to S. Morgan Smith Company, York, Pa. Hydraulic turbine. 1,892,404; Dec. 27.
Metzger, Joseph A., Buffalo, N. Y. Toy gun. 1,892,405; Dec. 27.
Metzler, Robert J., Newark, N. J. Massage device. 1,892,068; Dec. 27.
Meyercord, George R., and O. H. Basquin, Chicago, Ill., assignor to Haskelite Manufacturing Corporation. Shipping container. 1,892,406; Dec. 27.
Michelin et Cie. (See Bourdon, Pierre M., assignor.)
Michell-Crankless Engines Corporation. (See Hall, Edwin S., assignor.)
Mietzsch, Fritz, and H. Klös, Elberfeld, Germany, assignors to Winthrop Chemical Company, Inc., New York, N. Y. Substituted amino-phenyl-arsonic acids. 1,892,245; Dec. 27.
Millu, Raymond M. (See Nord, S. W., and Millu.)
Mill Engineering and Supply Company. (See Windquist, Victor H., assignor.)
Miller, Arthur A., Selinsgrove, Pa. Cigar and cigarette extinguisher. 1,892,314; Dec. 27.
Miller, Ernest B., assignor to The Silica Gel Corporation, Baltimore, Md. Refrigeration system. 1,892,407; Dec. 27.
Miller, Frank J., East Orange, N. J. Bowling alley. 1,892,315; Dec. 27.
Miller, George W., Amery, Wis. Hot air furnace. 1,891,996; Dec. 27.
Miller, Junius G., Oshkosh, Wis. Pitman. 1,892,069; Dec. 27.
Miller, Nicholas, River Forest, Ill. Optic projection. 1,891,942; Dec. 27.
Miller, Roy G., Farmingdale, assignor to The Aviation Patent and Research Corporation, New York, N. Y. Sound absorbing monocoque fuselage. 1,892,070; Dec. 27.
Miller, Stuart P., Englewood, N. J., assignor to The Barrett Company, New York, N. Y. Method and apparatus for distilling tar and simultaneously producing high and low melting point pitches. 1,892,469; Dec. 27.
Miller, Stuart P., Englewood, N. J. Method and apparatus for distilling tar. 1,892,654; Dec. 27.
Mills, Wallace C., assignor to J. L. Clark Manufacturing Co., Rockford, Ill. Spool. 1,892,356; Dec. 27.
Minami Manshu Tetsudo Kabushiki Kaisha. (See Sato, M., and Ito, assignors.)
Mitchell, H. Alton, A. W. Gregg, and R. H. Frank, assignors to The Bonney-Floyd Company, Columbus, Ohio. Noncorrosive steel alloy. 1,892,316; Dec. 27.
Moe, Edward E., Omaha, Nebr. Airplane catapult. 1,892,357; Dec. 27.
Mohns, Alfred R., Newark, N. J. Woodworking tool. 1,892,246; Dec. 27.
Moineau, René J. L., Paris, France. Gear mechanism. 1,892,217; Dec. 27.
Mole, Peter. (See Richardson, E. C., and Mole.)
Mole, Richardson, Inc. (See Richardson, E. C., and Mole, assignors.)
Molins, Desmond W., Deptford, London, assignor to The Molins Machine Company, Ltd., London, England. Carton and container for cigarettes and like articles. 1,892,111; Dec. 27.

Molins Machine Company, The. (See Molins, Desmond W., assignor.)
Molner, Herman, Chicago, Ill. Frame. 1,892,492; Dec. 27.
Monroe Calculating Machine Company. (See Enders, Hugo, assignor.)
Montgomery Ward & Company. (See Maibach, John J., assignor.)
Moore, Harry W., Dayton, Ohio. Vegetable slicer. 1,891,997; Dec. 27.
Moore, William E., Pittsburgh, and G. L. Simpson, Coraopolis, assignors to Pittsburgh Research Corporation, Pittsburgh, Pa. Annealing furnace. 1,892,112; Dec. 27.
Morgan, Robert E., assignor to Baskill, Inc., New York, N. Y. Sales stimulator game. 1,892,113; Dec. 27.
Morganstern, Oscar, assignor to Teletype Corporation, Chicago, Ill. Electromagnetic device. 1,892,358; Dec. 27.
Morimura Bros. Inc. (See Buma, Yukio, assignor.)
Morrell, Jacque C., and J. G. Alther, assignors to Universal Oil Products Company, Chicago, Ill. Process and apparatus for treating hydrocarbon oil. 1,892,437; Dec. 27.
Mosgrove, Charles A., Waterbury, assignor to The Autoyre Company, Inc., Oakville, Conn. Slide buckle. 1,892,516; Dec. 27.
Mueller, Werner. (See Holzach, K., Krzikalla, and Mueller.)
Murphey, Floyd M., assignor, by mesne assignments, of one-half to Lenawee Textiles, Inc., Adrian, Mich. Tufting machine. 1,892,161; Dec. 27.
Mustad, O., & Son. (See Topp, Mathias, assignor.)
Myers, Lewis C., Freeport, and G. F. Handley, Glendale, assignors to Royal Typewriter Company, Inc., New York, N. Y. Typewriting machine. 1,892,071; Dec. 27.
Myers, Philip B., and G. L. Baker, Newark, Del., dedicated, by mesne assignments, to the People of the United States of America. Extracting pectin from pectin materials. 1,892,536; Dec. 27.
Nabors, William C., Mansfield, La. Vehicle coupling. 1,892,072; Dec. 27.
Nafziger Corporation, The. (See Nafziger, Ralph L., assignor.)
Nafziger, Ralph L., assignor to The Nafziger Corporation, Kansas City, Mo. Electric switch device. 1,891,998; Dec. 27.
Nagel, Rudolph, Miami, Okla. Adjustable barber chair seat. 1,891,999; Dec. 27.
Nasmith, John W., Heaton Mersey, Manchester, England. Combing machine for textile fibers. 1,892,317; Dec. 27.
National Brass Manufacturing Company. (See Wray, Charles F., assignor.)
Nebel, Ernst O., Philadelphia, Pa. Full fashion knitting machine. 1,892,359; Dec. 27.
Nelson, Oscar L., Prentice, Wis. Fur stretcher. 1,892,624; Dec. 27.
Nerger, Hans J., New York, N. Y. Textile fabric or the like. Des. 88,815; Dec. 27.
Nerger, Hans J., New York, N. Y. Textile fabric or the like. Des. 88,816; Dec. 27.
Nerger, Hans J., New York, N. Y. Textile fabric or the like. Des. 88,817; Dec. 27.
Neugebauer, Wilhelm, assignor to Kalle & Co. Aktiengesellschaft, Wiesbaden-Biebrich, Germany. Preparing proteinases free from peptidases. 1,892,247; Dec. 27.
Neumair, Joseph A., Hollis, N. Y., assignor to International Cigar Machinery Company. Cigar package. 1,892,285; Dec. 27.
Niagara Falls Smelting and Refining Corporation. (See Ellis, George, assignor.)
Niagara Lithograph Company. (See Taylor, John A., assignor.)
Nicholas, Charles E., Los Angeles, Calif. Electric switch. 1,892,073; Dec. 27.
Nielsen, Niels, Copenhagen, Denmark, assignor to F. L. Smidth & Co., New York, N. Y. Conversion of pulverous material into a nodulform state. 1,892,074; Dec. 27.
Nimick, Francis B., Coraopolis, assignor to Colonial Steel Company, Pittsburgh, Pa. Making ground rods. 1,891,943; Dec. 27.
Nippes, Ira S. (See Eccleston, R. C., and Nippes.)
Nitardy, Ferdinand W., Brooklyn, N. Y., W. G. Christiansen, Glen Ridge, N. J., and S. E. Harris, Brooklyn, assignors to E. R. Squibb & Sons, New York, N. Y. Halogenated dihydroxy diphenyl. 1,892,000; Dec. 27.
Noffs, Fred W., Bellwood, Ill. Electric lantern. 1,892,075; Dec. 27.
Nord, Swan E., and R. M. Millu, Seattle, Wash., assignors to Standard Oil Company of California, San Francisco, Calif. Liquid dispenser. Des. 88,818; Dec. 27.
Nordstrom, Gustaf E., assignor to American Fibre Corporation, Gardner, Mass. Reed loom. 1,891,944; Dec. 27.
Northrop, Burdette K. (See Gray, D., and Northrop.)
Norton Company. (See Larsson, Thure, assignor.)
Nyberg, Filmore J., Julesburg, Colo. Switch box hanger. 1,892,296; Dec. 27.
Nyborg, Tage G., Worcester, assignor of one-half to M. F. Higgins, Worcester, Worchestershire, England. Shaker conveyer engine. 1,891,945; Dec. 27.
Nye, Alvin F., Rochester, assignor of one-half to William Keyel, Penfield, N. Y. Window screen reenforcement. 1,892,001; Dec. 27.
Oakes Products Corporation. (See Smith, Frederick A., assignor.)
Oberlin, Max, Darmstadt, Germany. Production of 1-(para amino-phenyl)-2-methylamino-propanol-1. 1,892,532; Dec. 27.
Ogg, William A., Newton, Mass. Smelting zinc and the like. 1,892,114; Dec. 27.
Ogren, Carl F., assignor to Thermoid Rubber Company, Trenton, N. J. Brake lining. 1,892,625; Dec. 27.
Ohio Boxboard Company, The. (See Yochheim, Edward G., assignor.)
Oilgear Company, The. (See Ferris, W. and J. P., and Macomber, assignors.)
Oliver Farm Equipment Company. (See Altgelt, R. J., and Gemberling, assignors.)
Oliver United Filters Inc. (See Hillier, Gerald O., assignor.)
Olson, Harry F., New York, N. Y., assignor to Radio Corporation of America. System responsive to the energy flow of sound waves. 1,892,644; Dec. 27.
Olson, Harry F., Collingswood, and J. Weinberger, Haddonfield, N. J., assignors to Radio Corporation of America. Sound pick-up device. 1,892,645; Dec. 27.
Olson, John O., Seattle, Wash. Spring hinge. 1,892,584; Dec. 27.
Oneida Community, Limited. (See Gray, D., and Northrop, assignors.)
Otis Elevator Company. (See Brady, Thomas, assignor.)
Owen, Raymond V., St. Louis, Mo. Lighting fixture. Des. 88,819; Dec. 27.
Oyston, William R., Parkville, Victoria, Australia, assignor to Continuous Gramophones Limited, London, England. Talking machines of the magazine player type. 1,892,626; Dec. 27.
Paalman Furniture Company. (See Paalman, John H., assignor.)
Paalman, John H., assignor to Paalman Furniture Company, Grand Rapids, Mich. Combined book table and rack. 1,892,408; Dec. 27.
Pacific Lumber Company. (See Darling, Elton R., assignor.)
Paganello, Nunzio, Brooklyn, N. Y. Doll structure. 1,892,360; Dec. 27.
Page, Milton H., Cohoes, N. Y., assignor to Radio Corporation of America. Film pass. 1,892,218; Dec. 27.
Paladini, A., & Company. (See Beneduce, Pasquale, assignor.)
Paper Patents Company. (See Smith, Bernard F., assignor.)
Parker, Albert F., Halton, near Leeds, assignor to Fairbairn Lawson Combe Barbour Limited, Leeds, England. Stop motion mechanism for drawing frames used in the treatment of fibrous substances. 1,892,116; Dec. 27.
Parker, Hubbard G., Burlingame, assignor to Standard Stations, Inc., San Francisco, Calif. Pedestal desk. Des. 88,820; Dec. 27.
Parker Pen Company, The. (See Guyot, Walter E., assignor.)
Parker Pen Company, The. (See Platt, J. B., and Tefft, assignors.)
Parker Pen Company, The. (See Tefft, Ivan D., assignor.)
Peacock, Charles T., Arriba, Colo. Combined lister and dam forming device. 1,892,002; Dec. 27.
Pearson, Gustav C., L. E. Croft, and I. S. Carpenter, assignors to Garder-Denver Company, Denver, Colo. Drill sharpener. 1,892,287; Dec. 27.
Pearson, Paul E., Seattle, Wash., assignor to Continental Can Company, Inc. Salter. 1,892,627; Dec. 27.
Pecker, Joseph S., assignor to Autogiro Company of America, Philadelphia, Pa. Aircraft having sustaining rotors. 1,892,003; Dec. 27.
Pen Desk Set Company. (See Blackman, Horace L., assignor.)
Pen Desk Set Company. (See Ferrier, Alexander I., assignor.)
Pen Desk Set Company. (See Guyot, Walter, assignor.)
Pennington, Harry, San Antonio, Tex. Well drilling apparatus. 1,892,517; Dec. 27.
People of the United States of America. (See Myers, P. B., and Baker, assignors.)
Perkins Cementing, Inc. (See Wickersham, Newton W., assignor.)
Perkins, George B., Pasadena, Calif. Cooking device. 1,892,117; Dec. 27.
Perry, Leslie L., and A. M. Rossman, Wilmette, assignors to Sargent & Lundry, Incorporated, Chicago, Ill. Generating and distributing current flow. 1,892,533; Dec. 27.
Peterson, Gust C., Jamestown, N. Y. Mirror supporting and adjusting device. 1,892,219; Dec. 27.
Peterson, Rolland E. (See Buccicone, D., and Peterson.)
Peyinghaus, Walter, Hagge, Germany. Journal bearing. 1,892,628; Dec. 27.
Pfeiffer, Fred B., Akron, Ohio, assignor to Seiberling Rubber Company. Method of and apparatus for making tubing. 1,892,629; Dec. 27.
Pickard, Frank C., Erie, Pa., assignor to The Standard Stoker Company, Incorporated. Stoker mechanism. 1,892,361; Dec. 27.
Pickard, Greenleaf W., Newton Centre, Mass., assignor, by mesne assignments, to General Electric Company. Electrical condenser and making the same. 1,892,362; Dec. 27.
Pierce-Arrow Motor Car Company, The. (See Hughes, James R., assignor.)

Piercy, Carl A. (See Hayman, W. C., and Piercy.)
Pilkington Brothers Limited. (See Gaskell, Joseph, assignor.)
Pine, William B., Okmulgee, Okla. Feeder for argillaceous materials. 1,892,583; Dec. 27.
Pittsburgh Research Corporation. (See Moore, W. E., and Simpson, assignors.)
Platt, Joseph B., New York, N. Y., and I. D. Tefft, assignors to The Parker Pen Company, Janesville, Wis. Fountain pen and pencil clip. Des. 88,821; Dec. 27.
Plowick, Frank G., Detroit, Mich. Battery tag holder. 1,892,248; Dec. 27.
Poole, Edwin J., Cleveland, Ohio. Safety starter switch. 1,892,249; Dec. 27.
Porter, Willard E., Swampscott, Mass., assignor to General Electric Company. Time switch. 1,891,946; Dec. 27.
Potlatch Forests, Inc. (See Prentiss, Spencer W., assignor.)
Powell, Edward V., Arlington, Mass. Support for saxaphones and similar musical instruments. 1,891,947; Dec. 27.
Prager, Hens, Annaberg, Germany, assignor to General Electric Company. Electric snap switch. 1,892,537; Dec. 27.
Pragerstorfer, Anton S., Vienna, Austria. Band saw blade guide. 1,892,470; Dec. 27.
Prentiss, Spencer W., Wellesley, Mass., assignor to Potlatch Forests, Inc., Lewiston, Idaho. Digesting wood. 1,892,409; Dec. 27.
Pressey, Sydney L., Columbus, Ohio. Examination device. 1,892,318; Dec. 27.
Prest-O-Lite Corporation. (See Shipp, Raymond D., assignor.)
Prince, David C., Schenectady, N. Y., assignor to General Electric Company. Vacuum switch. 1,892,538; Dec. 27.
Production Machine Company. (See Fuller, Rufus W., assignor.)
Public, Free use of the. (See Randolph, John W., assignor.)
Puc, Vojtěch, Prague, Czechoslovakia. Press fastener. 1,892,630; Dec. 27.
Pühl, Alfred G. (See Schilling, Hugo O. G., assignor.)
Putterman, Benjamin, Brooklyn, N. Y., assignor to Yankee Metal Products Corp. Combination ash tray and stand. Des. 88,822; Dec. 27.
Quick, William, London, S. E. Thomas, Hounslow, and F. W. Berwick, London, England. Window latch. 1,892,493; Dec. 27.
Quigg, James S., Dewey, Okla. Device for regulating the pumping period of wells. 1,892,631; Dec. 27.
Rabinowitsch, Efraim, assignor of one-half to E. Rivoche, Paris, France. Process relating to baking and dough-making. 1,892,076; Dec. 27.
Radio Corporation of America. (See Bol, Cornelis, assignor.)
Radio Corporation of America. (See Mathieu, Gaston A., assignor.)
Radio Corporation of America. (See Olson, Harry F., assignor.)
Radio Corporation of America. (See Olson, H. F., and Weinberger, assignors.)
Radio Corporation of America. (See Page, Milton H., assignor.)
Radio Corporation of America. (See Wolff, Irving, assignor.)
Raffold Process Corporation. (See Rafton, Harold R., assignor.)
Rafton, Harold R., Andover, Mass., assignor to Raffold Process Corporation. Manufacture of paper. 1,892,471; Dec. 27.
Rafton, Harold R., Andover, Mass., assignor to Raffold Process Corporation. Manufacture of paper. 1,892,472; Dec. 27.
Rail Joint Company. (See Wolhaupter, David P., assignor.)
Rairden, Albert S., Hamden, Conn. Manufacture of dead lay wire rope. 1,892,632; Dec. 27.
Randolph, John W., Auburn, Ala., dedicated to the free use of the Public. Apparatus for seed planters. 1,892,250; Dec. 27.
Ransome Concrete Machinery Company. (See Bushnell, James E., assignor.)
Raule, Clifford T., Brookline, Pa. Multiple external grinder. 1,892,363; Dec. 27.
Raule, Clifford T., Brookline, Pa. External grinder. 1,892,364; Dec. 27.
Rausch, Gottfried, Amendorf, near Halle-on-the-Saale, Germany. Automatic dough dividing and rolling machine. 1,892,251; Dec. 27.
Reardon, Harvey J., assignor to The Classroom Teacher, Inc., Chicago, Ill. Hectograph. 1,892,077; Dec. 27.
Red Boy, Inc. (See De Foe, E. G., and Bramming, assignors.)
Regel, Bruno, assignor to Herm. Bertram, Hallesche Dampfbackofen-Fabrik Hallesche Misch-u. Knetmaschinen-Fabrik m. b. H., Halle-on-the-Saale, Germany. Machine for dividing and working dough. 1,892,633; Dec. 27.
Regensburger, Richard W., assignor, by mesne assignments, to Industrial Patents Corporation, Chicago, Ill. Separating egg whites. 1,892,539; Dec. 27.
Reid, Arthur P., et al. (See Galvin, Michael J., assignor.)
Reid, Frederick M., assignor to Fruehauf Trailer Company, Detroit, Mich. Tractor-trailer combination. 1,892,004; Dec. 27.
Reid, James S., Shaker Heights, assignor to The Reid Products Company, Cleveland, Ohio. Glass run channel. 1,892,518; Dec. 27.
Reid Products Company, The. (See Reid, James S., assignor.)
Reiman, Paul, assignor to William Willheim Co., Inc., New York, N. Y. Textile fabric or similar article. Des. 88,823; Dec. 27.
Reiman, Paul, assignor to William Willheim Co., Inc., New York, N. Y. Textile fabric or similar article. Des. 88,824; Dec. 27.
Reinagel, George F., Buffalo, N. Y. Rack for holding newspapers or the like. Des. 88,825; Dec. 27.
Rembert, Ernest W., assignor of three-fourths to Tide Water Oil Company, Bayonne, N. J. Distillation and conversion of mineral oils. 1,892,534; Dec. 27.
Renold, Hans, Limited. (See McMillan, Kingsley D., assignor.)
Republic Stamping and Enameling Company, The. (See Carlson, Charles M., assignor.)
Republic Steel Corporation. (See Risher, William D., assignor.)
Resinous Products & Chemical Company, The. (See Bruson, Herman A., assignor.)
Retsof Mining Company. (See Courthope, T. F., and McGuire, assignors.)
Reynolds, Harry F., Seattle, Wash. Mop cleaning device. 1,892,494; Dec. 27.
Rheinische Kampfer-Fabrik Gesellschaft mit beschrankter Haftung. (See Sanduhl, Herrmann, assignor.)
Rice, Chester W., Schenectady, N. Y., assignor to General Electric Company. Elastic fluid turbine. 1,891,948; Dec. 27.
Richardson Company, The. (See Dillehay, Edward R., assignor.)
Richardson Corporation. (See Benham, L. L., Ferree, and Balkwill, assignors.)
Richardson, Elmer C., and P. Mole, assignors to Mole-Richardson, Inc., Los Angeles, Calif. Mirror support for projectors. 1,892,488; Dec. 27.
Richmond, Albert C., La Grange, Ill., assignor to International Harvester Company. Gauge. 1,892,005; Dec. 27.
Richter, Robert, assignor to the Firm Carl Zeiss, Jena, Germany. Photographic three-lens objective. 1,892,162; Dec. 27.
Risher, William D., Massillon, assignor, by mesne assignments, to Republic Steel Corporation, Youngstown, Ohio. Interlock for electrical circuits. 1,891,949; Dec. 27.
Ritz Woller, Oliver C., Chicago, Ill. Antirattler device for doors. 1,892,374; Dec. 27.
Rivoche, Eugen. (See Rabinowitsch, Efraim, assignor.)
Robbins, Philip H., New York, N. Y. Undergarment for women. 1,892,585; Dec. 27.
Roberson, Willard D., New York, N. Y. Textile fabric or the like. Des. 88,826; Dec. 27.
Roberts, Bernard, Auckland, New Zealand. Controlling aeroplanes in flight. 1,892,006; Dec. 27.
Roberts, Charles. (See Wales, N. B., and Roberts.)
Robinson, Charles W., Hamilton, Ontario, Canada, assignor, by mesne assignments, to International Harvester Company, Chicago, Ill. Yieldable draft device for ground working implements. 1,892,007; Dec. 27.
Rodde, Armand, Paris, France. Device for the periodic distribution of a liquid subetance on a plane surface, cinematographic films, or others. 1,892,473; Dec. 27.
Rodomich, Otto W., and D. C. Smith, assignors to Toledo Patents, Inc., Toledo, Ohio. Automobile. 1,892,078; Dec. 27.
Röhm, Otto, H. Fischer, and H. Hees, Darmstadt, Germany. Tanning process. 1,892,410; Dec. 27.
Rollet, Pierre A. A. (See Hackspill, L., Claude, Andres, and Rollet.)
Rose, Harry F., assignor to The Adams Mfg. Co., Inc., New York, N. Y. Apparatus for softening box toe stiffeners. 1,892,079; Dec. 27.
Rose, Harry F., assignor to The Adams Mfg. Co., Inc., New York, N. Y. Mulling apparatus. 1,892,080; Dec. 27.
Rose, Manuel F., Alameda, Calif. Order indicator. 1,892,163; Dec. 27.
Rossman, Leo, Newark, N. J. Sewing machine for stitching over fastener means. 1,892,164; Dec. 27.
Ross, Oscar A., New York, N. Y. Circuit breaker. 1,892,008; Dec. 27.
Rossman, Allen M. (See Perry, L. L., and Rossman.)
Rotary Printing Company, The. (See Willard, Louis J., assignor.)
Roth, Ernst, Niederuswil, assignor to the firm Gebruder Buhler, Uzwil, Switzerland. Device for the conditioning and drying of cereals. 1,892,319; Dec. 27.
Rowan, John, New York, N. Y. Eyeglass mirror. 1,892,365; Dec. 27.
Royal Typewriter Company. (See Kittel, John J., assignor.)
Royal Typewriter Company. (See Myers, L. C., and Handley, assignors.)
Rubinsky, Ivan, Beirut, Syria. Calculating device. 1,892,634; Dec. 27.
Rucker, Joseph H. (See Demaree, Clarence B., assignor.)

Rudolph, Corrie F., Washington, D. C. Temperature control system. 1,892,165; Dec. 27.
Ruiz, Vincent, assignor to J. T. Basseches, New York, N. Y. Folding chair. 1,892,166; Dec. 27.
Rummler, Joseph M., Chicago, Ill. Fuse plug. 1,891,951; Dec. 27.
Rundell, Rupert E., Rockville Center, N. Y., assignor to American Machine & Foundry Company. Expansion pulley. 1,892,252; Dec. 27.
Runge, Wilhelm, assignor to Telefunken Gesellschaft für Drahtlose Telegraphie m. b. H., Berlin, Germany. Thermionic tube for directional reception. 1,892,220; Dec. 27.
Runge, Wilhelm, assignor to Telefunken Gesellschaft für Drahtlose Telegraphie, m. b. H., Berlin, Germany. Polarization diversity reception. 1,892,221; Dec. 27.
Rush, Leo E., Indianapolis, assignor to Rush Pump Company, Lafayette, Ind. Combination manual and coin automatic pump. 1,891,950; Dec. 27.
Rush Pump Company. (See Rush, Leo E., assignor.)
Russell, Philip S., assignor to Detroit Lubricator Company, Detroit, Mich. Strainer. 1,892,190; Dec. 27.
Russell, Wallace W., Kansas City, Mo. Highway guard. 1,892,222; Dec. 27.
Ryan, John B., New York, N. Y. Automobile. Des. 88,827; Dec. 27.
Sacerdoti, Camillo, Milan, Italy. Boat apparatus for lowering lifeboats to the water from ships. 1,892,586; Dec. 27.
Sagui, Edward A., Lyndhurst, N. J. Muffler. 1,892,009; Dec. 27.
Sailer, Rudolph J., Townley, assignor to The Singer Manufacturing Company, Elizabeth, N. J. Sewing machine attachment. 1,892,019; Dec. 27.
St. Louis Duntile Company. (See Joy, W. P., Amend, and Frauenfelder, assignors.)
Saint Martin, Georges, Paris, France. Device playing record with a constant linear speed. 1,892,322; Dec. 27.
Sanders, Carl, Detroit, Mich., assignor to Binks Manufacturing Co., Chicago, Ill. Reserve pressure tank system. 1,892,535; Dec. 27.
Sandkuhl, Herrmann, Buderich, assignor to Firm Rheinische Kampfer-Fabrik Gesellschaft mit beschrankter Haftung at Dusseldorf-Oberkassel, Germany. Production of ketones from secondary alcohols. 1,892,011; Dec. 27.
Sangamo Electric Company. (See Holtz, Frederick C., assignor.)
Sanitation Holding Corporation. (See Battistella, Francis C., assignor.)
Sansone, Lorenso, and C. Franco, New York, N. Y. Percussion instrument. 1,892,223; Dec. 27.
Sappington, Charles N. (See Gross, W. F., and Sappington.)
Sargent & Lundy, Incorporated. (See Perry, L. L., and Rossman, assignors.)
Sato, Masanori, and Chiyomatsu Ito, assignors to Minami Manshu Tetsudo Kabushiki Kaisha, Dairen, Manchuria, China. Extracting fatty oil. 1,892,366; Dec. 27.
Satram, Gilbert G., Canton, S. Dak. Rotary gas engine. 1,892,474; Dec. 27.
Scheib, Harry. (See Snyder, H. W., and Scheib.)
Scheiberg, John C., Millburn, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Directive antenna system. 1,892,258; Dec. 27.
Schey, Robert, assignor to Combier & Co. Inc., New York, N. Y. Textile fabric or the like. Des. 88,828; Dec. 27.
Schilling, Hugo O. G., assignor of one-half to Alfred G. Pühl, Hamburg, Germany. Tube-closing machine. 1,892,475; Dec. 27.
Schimmelschmidt, Kurt. (See Zahn, K., and Schimmelschmidt.)
Schloss, Edwin G., and M. J. Schloss, New York, N. Y. Combined folding bar and radio cabinet. Des. 88,829; Dec. 27.
Schloss, Myron J. (See Schloss, Edwin G. and M. J.)
Schmieg, Harry, East St. Louis, Ill. Tube coupling. 1,892,587; Dec. 27.
Schmitt, Frank R., Queens Village, N. Y., assignor to International Cigar Machinery Company. Cigar enveloping. 1,892,254; Dec. 27.
Schottgen, Louis, Port Murray, N. J. Transporting means for liquids. 1,892,519; Dec. 27.
Schrader's Sons, Inc. (See Wahl, J. and Melzer, assignors.)
Schussler, Walter H., Philadelphia, Pa., assignor to International Cigar Machinery Company. Reroller for cigar machines. 1,892,255; Dec. 27.
Schwarz, Alfred, Upper Montclair, N. J., assignor, by mesne assignments, to Holly Motors Corporation, New York, N. Y. Internal combustion engine. 1,892,635; Dec. 27.
Schwegler, Clarence C., assignor to The Dow Chemical Company, Midland, Mich. Apparatus for the manufacture of carbon bisulphide. 1,892,101; Dec. 27.
Schweiser, Jack, assignor to William Willheim Co., Inc., New York, N. Y. Textile fabric or similar article. Des. 88,830; Dec. 27.
Schweiser, Jack, Rye, N. Y. Textile fabric or the like. Des. 88,831; Dec. 27.
Schwieger, Albert, assignor to Hanseatische Muhlenwerke Aktiengesellschaft, Hamburg, Germany. Treatment of vegetable lecithin. 1,892,588; Dec. 27.
Scovill Manufacturing Company. (See Fenton, Paul E., assignor.)
Seehase, Hans, Berlin-Treptow, Germany. Flexible slide rule. 1,892,012; Dec. 27.
Seeley, Harold T., Yeadon, Pa., assignor to General Electric Company. Automatic control equipment. 1,891,952; Dec. 27.
Seeley, Harold T., Yeadon, Pa., assignor to General Electric Company. Control system. 1,892,540; Dec. 27.
Seguión, José, Barcelona, Spain. Chain and knot binder. 1,892,411; Dec. 27.
Seiberling Rubber Company. (See Pfeiffer, Fred B., assignor.)
Selden Company, The. (See Jaeger, Alphons O., assignor.)
Seligsberg, Walter N. (See Benson, Melvin B., assignor.)
Sellars, Oliver H., Glen Ridge, assignor to Ingersoll-Rand Company, Jersey City, N. J. Guide for drill steels. 1,891,953; Dec. 27.
Semon, Waldo L., Cuyahoga Falls, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y. Plastic composition and making same. 1,892,167; Dec. 27.
Shadle, Clinton F., Indianapolis, Ind., assignor to Air Development Company, Inc. Apparatus for conditioning air. 1,892,081; Dec. 27.
Shaw, Thomas R., Minneapolis, Minn. Computing device. 1,892,367; Dec. 27.
Sheehan, Thomas C., Upper Montclair, N. J., assignor to Durham Duplex Razor Company. Safety razor. 1,892,256; Dec. 27.
Sheehan, Wallace, trustee. (See Lane, George S., assignor.)
Sheehan, William M., St. Louis, Mo., assignor, by mesne assignments, to General Steel Castings Corporation, Granite City, Ill. Cab underframe. 1,891,954; Dec. 27.
Shekerjian, Newton J., New York, N. Y. Pliers. 1,892,082; Dec. 27.
Shelton-Jancke Corporation. (See Jancke, Benno F., assignor.)
Shelton-Jancke Corporation. (See Jancke, B. F., Korf, and Zentler, assignors.)
Shoe Form Co. (See De Witt, William J., assignor.)
Shover, Barton R., Pittsburgh, Pa., assignor to Allegheny Steel Company, Rolling mill. 1,891,955; Dec. 27.
Shipp, Raymond D., Indianapolis, Ind., assignor, by mesne assignments, to Prest-O-Lite Storage Battery Corporation. Storage battery. 1,892,288; Dec. 27.
Sidebotham, Melvin H., West Newton, assignor to Specialty Automatic Machine Company, Chelsea, Mass. Waxing blanks. 1,892,083; Dec. 27.
Siebel, Erich, Dusseldorf, Germany, assignor to Steel City Testing Laboratory, Detroit, Mich. Testing sheet metal. 1,892,013; Dec. 27.
Siegel, Charles S., New York, N. Y., assignor to Dial Engineering Corporation. Dial die machine. 1,892,168; Dec. 27.
Siemens & Halske, Aktiengesellschaft. (See Keinath, Georg, assignor.)
Siemens & Halske, Aktiengesellschaft. (See Steiner, Otto, assignor.)
Siemens & Halske, Aktiengesellschaft. (See Tuczek, Franz, assignor.)
Sikarski, Joseph A. (See Jenkins, R. L., and Sikarski.)
Silica Gel Corporation, The. (See Fonda, Bryard P., assignor.)
Silica Gel Corporation, The. (See Miller, Ernest B., assignor.)
Siltz, George W., Port Chester, N. Y. Bottom supply and spray tube for domestic boilers. 1,892,320; Dec. 27.
Simonds, Edmond M., Wilmette, Ill. Apparatus for cooking food. 1,892,169; Dec. 27.
Simplex Engineering Company. (See Amsler, Walter O., assignor.)
Simpson, George L. (See Moore, W. E., and Simpson.)
Singer, Abraham, New York, N. Y. Napkin holder. 1,892,193; Dec. 27.
Singer Manufacturing Company, The. (See Sailer, Rudolph J., assignor.)
Singer, Ralph, Niles Center, and O. J. Agnini, Maywood, Ill. Picture frame. 1,892,014; Dec. 27.
Sirian Lamp Company. (See Heany, John A., assignor.)
Sirmay, Julius, assignor to Jacquard Knitting Machine Company, Inc., Philadelphia, Pa. Circular knitting machine. 1,891,956; Dec. 27.
Sivon, Charles A., Pasadena, Calif. Fastening ironing boards. 1,892,118; Dec. 27.
Slater, Guy P., Sand Springs, Okla. Fluid lift for use in wells. 1,892,636; Dec. 27.
Smelser, Chester E., Shelbyville, Ind. Automatic brake control. 1,892,541; Dec. 27.
Smidth, F. L., & Co. (See Nielsen, Niels, assignor.)
Smith, Arthur L., Seattle, Wash. Warm air heating system. 1,892,015; Dec. 27.
Smith, Bernard F., Appleton, assignor to Paper Patents Company, Neenah, Wis. Device for distributing wood chips in pulp digesters. 1,891,957; Dec. 27.
Smith, David C. (See Rodomich, O. W., and Smith.)
Smith, Elberon D., Brooklyn, N. Y., assignor to American Machine & Foundry Company. Cigarette feed tobacco compressor. 1,892,257; Dec. 27.
Smith, Frederick A., assignor to Oshua Products Corporation, North Chicago, Ill. Underwell lock for spare wheels or tires. 1,892,192; Dec. 27.
Smith, Harold. (See Willshaw, H., Cowles, and Smith.)
Smith, Harry. (See Smith, John F., and H.)

Smith, James U., Berkeley, Calif. Semifloating electric contact. 1,892,439; Dec. 27.

Smith, John F. and H., San Francisco, Calif. Dispensing tube support. 1,892,368; Dec. 27.

Smith, La Verne G., West Hollywood, Calif. Roof construction. 1,892,637; Dec. 27.

Smith, S. Morgan, Company. (See Messing, Hjalmar S., assignor.)

Smith, William A., Wanstead, London, England. Brace end. 1,892,321; Dec. 27.

Sneed, William F., jr., Lakeland, Fla. Crate. 1,892,170; Dec. 27.

Snook, Homer C. (See Eldred, B. E., assignor, and Snook.)

Snyder, Clifford L., assignor to Evans Products Company, Detroit, Mich. Decking structure. 1,892,569; Dec. 27.

Snyder, Clifford L., assignor to The Evans Auto Loading Co. Inc., Detroit, Mich. Making reenforcing corner straps for export boxes and the like. 1,892,638; Dec. 27.

Snyder, Herbert W., and H. Schelb, Lima, Ohio. Steam dome shut-off valve. 1,891,958; Dec. 27.

Société Anonyme des Manufactures des Glaces & Produits Chimiques de Saint Gobain, Chauny & Cirey. (See Do-Huu Chan, André, assignor.)

Société Francaise Radio-Electrique. (See Chireix, Henri, assignor.)

Society of Chemical Industry in Basle. (See Bonhôte, Gérald, assignor.)

Society of Chemical Industry in Basle. (See Haller, R., and Heckendorn, assignors.)

Society of Chemical Industry in Basle. (See Hartmann, M., and Isler, assignors.)

Soderberg, Sten E. B., Passaic, assignor to Leslie Company, Lyndhurst, N. J. Signal. 1,892,016; Dec. 27.

Sommer, William H., Peoria, Ill. Take-up frame for wire operating units. 1,892,171; Dec. 27.

Sorber, Daniel G., El Monte, Calif. Apparatus for freezing canned goods. 1,892,224; Dec. 27.

Specialty Automatic Machine Company. (See Sidebotham, Melvin H., assignor.)

Sprague, Edward W., Allentown, assignor to Fuller Company, Catasauqua, Pa. Circuit closer. 1,892,084; Dec. 27.

Sprague, Henry H., assignor to The Sprague Meter Company, Bridgeport, Conn. Gas meter. 1,892,520; Dec. 27.

Sprague Meter Company, The. (See Goldkamp, Otto, assignor.)

Sprague Meter Company, The. (See Sprague, Henry H., assignor.)

Sprong, Severn D., Brooklyn, N. Y., assignor to General Electric Company. Transformer. 1,891,959; Dec. 27.

Squibb, E. R. & Sons. (See Nitardy, F. W., Christiansen, and Harris.)

Stanco, Incorporated. (See Bahelka, Joseph, assignor.)

Standard Oil Company of California. (See Nord, S. W., and Millu, assignors.)

Standard Oil Development Company. (See Coleman, Stewart P. and J. A., assignors.)

Standard Oil Development Company. (See Stratford, Reginald K., assignor.)

Standard Oil Development Company. (See Wiesevich, Peter J., assignor.)

Standard Sanitary Manufacturing Company. (See Brain, George, assignor.)

Standard Stations, Inc. (See Parker, Hubbard G., assignor.)

Standard Stoker Company, Incorporated, The. (See Hunt, Andrew M., assignor.)

Standard Stoker Company, Incorporated. (See Ketchpel, Paul A., assignor.)

Standard Stoker Company. (See Lower, Nathan M., assignor.)

Standard Stoker Company, Incorporated, The. (See Pickard, Frank C., assignor.)

Standard Stoker Company, Incorporated, The. (See Turner, Edwin A., assignor.)

Stanley, William H., Charles City, Iowa. Animal ringer. 1,892,689; Dec. 27.

Stansbury, Carroll, Wauwatosa, and G. C. Brown, Milwaukee, assignors to Cutler-Hammer, Inc., Milwaukee, Wis. Timing device. 1,892,017; Dec. 27.

Stanton, Ephraim H., San Pablo, Calif. Clothespin. 1,892,018; Dec. 27.

Staten Island Shipbuilding Co. (See Denslow, Albert C., assignor.)

Stäubli, Gebr. & Co. (See Stäubli, Hugo, assignor.)

Stäubli, Hugo, Zurich, assignor to Messrs. Gebr. Stäubli & Co., Horgen, Switzerland. Dobby. 1,892,323; Dec. 27.

Stearns, Jason C., Worcester, Mass. Electric switch. 1,892,542; Dec. 27.

Steel City Testing Laboratory. (See Siebel, Erich, assignor.)

Steele, James W., Elm Grove, W. Va., and A. Deitch, assignors of one-third to H. C. Thomas, Martins Ferry, Ohio. Metal sheet stacking machine. 1,892,590; Dec. 27.

Steele, James W., and A. Deitch, assignors of one-third to H. C. Thomas, Martins Ferry, Ohio. Sheet jogging and registering machine. 1,892,591; Dec. 27.

Stein, Jacob, Brooklyn, N. Y. Decorated molded rubber and producing same. 1,892,085; Dec. 27.

Steiner, Otto, Berlin-Spandaw, assignor to Siemens & Halske Aktiengesellschaft, Siemensstadt near Berlin, Germany. Motion film camera with spring motor drive. 1,892,412; Dec. 27.

Stiles, Frank I., Miami, Fla. Golf game board. 1,892,593; Dec. 27.

Stockfleth, Berger, Niles, Mich., assignor, by mesne assignments, to The Cleveland Graphite Bronze Company, Cleveland, Ohio. Making bearing sleeves. 1,892,172; Dec. 27.

Stockfleth, Berger, Niles, Mich., assignor, by mesne assignments, to The Cleveland Graphite Bronze Company, Cleveland, Ohio. Making thin walled metal articles. 1,892,173; Dec. 27.

Stockfleth, Berger, Niles, Mich., assignor, by mesne assignments, to The Cleveland Graphite Bronze Company, Cleveland, Ohio. Making bearing sleeves. 1,892,174; Dec. 27.

Stockfleth, Berger, Niles, Mich., assignor, by mesne assignments, to The Cleveland Graphite Bronze Company, Cleveland, Ohio. Making bearing sleeves. 1,892,175; Dec. 27.

Stockfleth, Berger, Niles, Mich., assignor, by mesne assignments, to The Cleveland, Graphite Bronze Company, Cleveland, Ohio. Making a bimetal bearing sleeve. 1,892,176; Dec. 27.

Stockfleth, Berger, Niles, Mich., assignor, by mesne assignments, to The Cleveland Graphite Bronze Company, Cleveland, Ohio. Making bearing sleeves. 1,892,177; Dec. 27.

Stockfleth, Berger, Niles, Mich., assignor, by mesne assignments, to The Cleveland Graphite Bronze Company, Cleveland, Ohio. Making bearing sleeves. 1,892,178; Dec. 27.

Stockfleth, Berger, Niles, Mich., assignor, by mesne assignments, to The Cleveland Graphite Bronze Company, Cleveland, Ohio. Making bearing sleeves. 1,892,179; Dec. 27.

Stockfleth, Berger, Niles, Mich., assignor, by mesne assignments, to The Cleveland Graphite Bronze Company, Cleveland, Ohio. Making bearing sleeves. 1,892,180; Dec. 27.

Stoll, Arthur, and E. Burckhardt, assignors to Firm of Chemical Works formely Sandoz, Basel, Switzerland. Manufacture of easily soluble benzylmorphine salts. 1,892,019; Dec. 27.

Stone, Abraham, Brooklyn, N. Y. Container. 1,892,594; Dec. 27.

Stone, Elmer B., assignor to The American Hardware Corporation, New Britain, Conn. Hasp lock. 1,892,289; Dec. 27.

Stone, Elmer B., assignor to The American Hardware Corporation, New Britain, Conn. Permutation lock. 1,892,290; Dec. 27.

Stone, J., & Company Limited. (See Honey, Alfred E., assignor.)

Stratford, Reginald K., Sarnia, Ontario, Canada, assignor to Standard Oil Development Company. Treating mineral oils. 1,892,655; Dec. 27.

Straubel, C. W., et al. (See Straubel, Frederick L. G., assignor.)

Straubel, Frederick L. G., Green Bay, Wis. Filing cabinet or file box. 1,892,476; Dec. 27.

Straubel, Frederick L. G., assignor of one-eighth to O. C. Straubel, Green Bay, Wis., and two-eighths to C. W. Straubel, Youngstown, Ohio. Vertical filing drawer. 1,892,020; Dec. 27.

Straubel, O. C., et al. (See Straubel, Frederick L. G., assignor.)

Streckfuss, Elmer G., assignor to The Cincinnati Time Recorder Company, Cincinnati, Ohio. Time recorder. 1,891,960; Dec. 27.

Street, Joshua H., Chattanooga, Tenn. Slackline excavator. 1,892,086; Dec. 27.

Strigl, Karl J., New York, N. Y. Transmission mechanism. 1,892,021; Dec. 27.

Stuber, Walter J., assignor to Carey-McFall Co., Philadelphia, Pa. Curtain pull. 1,892,087; Dec. 27.

Sturtevant, B. F., Company. (See Hagen, Harold F., assignor.)

Sullivan Machinery Company. (See Gartin, Elmer G., assignor.)

Superheater Company, The. (See Birmingham, Thomas F., assignor.)

Swann Research, Inc. (See Jenkins, Russell L., assignor.)

Swann Research, Inc. (See Jenkins, R. L., and Sikarskl, assignors.)

Symons, Olive. (See Thompson, Lynn, assignor.)

Talas, Louis, assignor to Kny-Scheerer Corporation, New York, N. Y. Bedpan washer. 1,892,291; Dec. 27.

Taylor Foundry Company Inc. (See Taylor, Lloyd J., assignor.)

Taylor, John A., Elmhurst, assignor to Niagara Lithograph Company, New York, N. Y. Advertising device. 1,892,194; Dec. 27.

Taylor, Lloyd J., assignor to Taylor Foundry Company Inc., Wichita Falls, Tex. Lock for meter box covers. 1,891,961; Dec. 27.

Teats, Roscoe, and S. Hughes, Denver, Colo., assignors to American Smelting and Refining Company, New York, N. Y. Hanger. 1,892,418; Dec. 27.

Teepe-Whitney Corporation. (See Viehmann, Louis J., assignor.)

Tefft, Ivan D. (See Platt, J. B., and Tefft.)

Tefft, Ivan D., assignor to The Parker Pen Company, Janesville, Wis. Desk set structure. 1,892,181; Dec. 27.

Telefunken Gesellschaft für Drahtlose Telegraphie, m. b. H. (See Runge, Wilhelm, assignor.)

Teletype Corporation. (See Kleinschmidt, Edward E., assignor.)

Teletype Corporation. (See Morgenstern, Oscar, assignor.)

Teves, Alfred, Maschinen- und Armaturen-Fabrik Gesellschaft mit beschrankter Haftung. (See Engel, Ernst, assignor.)

Texas Company, The. (See Manley, Robert E., assignor.)

Textile Machine Works. (See Janssen, Henry, assignor.)

Thayer, Edward A. L., Chicago, Ill. Screw propeller. 1,892,152; Dec. 27.

Thermoid Rubber Company. (See Ogren, Carl F., assignor.)

Thomas, Harry C. (See Steele, J. W., and Deitch, assignors.)

Thomas, Sydney E. (See Quick, W., Thomas, and Berwick.)

Thompson, James C., Cleveland, assignor of one-half to C. B. Lemon, Lakewood, Ohio. Nut lock. 1,892,119; Dec. 27.

Thompson, Lynn, assignor, by mesne assignments, to Olive Symons, Minneapolis, Minn. Liquid dispensing device. 1,892,196; Dec. 27.

Throne, Robert P., Syracuse, assignor to R. E. Dietz Company, New York, N. Y. Attaching the tubes and shells of lanterns. 1,892,202; Dec. 27.

Tibaldi, Giuseppe, Florence, Italy. Self-filling fountain pen. 1,892,369; Dec. 27.

Tibbetts, Milton, trustee. (See Lemaigre, Pierre, assignor.)

Tichy, Joseph F., Flushing, assignor of one-half to G. H. Bruns, Jamaica, N. Y. Pouring device. 1,892,595; Dec. 27.

Tide Water Oil Company. (See Rembert, Ernest W., assignor.)

Toledo Patents, Inc. (See Rodemich, O. W., and Smith, assignors.)

Topp, Mathias, Gjovik, assignor to O. Mustad & Son, Oslo, Norway. Automatic machinery for making fish hooks. 1,892,120; Dec. 27.

Torres, Rose. (See Torres, Victor and R.)

Torres, Victor and R., San Gabriel, Calif. Device for making edible confections. 1,892,370; Dec. 27.

Travis, John M., St. Louis, Mo. Beverage dispensing container. Des. 88,846; Dec. 27.

Tretolite Company. (See De Groote, Melvin, assignor.)

Trinity Wheel Corporation. (See Baker, Frederick W., assignor.)

Tröger, Richard, Berlin-Zehlendorf-Mitte, Germany, assignor to General Electric Company. Electric valve converting system. 1,892,543; Dec. 27.

Tropic-Aire, Incorporated. (See Fink, Henry W., assignor.)

Troyer, Milo C., Shipshewanna, Ind. Container. 1,892,195; Dec. 27.

Tseng, Andrew T. K., Detroit, Mich., assignor to Hydraulic Brake Company, Los Angeles, Calif. Fluid composition. 1,891,962; Dec. 27.

Tuczek, Frans, Berlin, assignor to Siemens & Halske, Aktiengesellschaft, Siemensstadt, near Berlin, Germany. Picture transmission. 1,892,371; Dec. 27.

Tullis, D. & J., Limited. (See Jack, William, assignor.)

Turner, Edwin A., New York, N. Y., assignor to The Standard Stoker Company, Incorporated. Locomotive. 1,892,372; Dec. 27.

Tyler, Clark L., Torrance, Calif. Piston for slush pumps and the like. 1,892,022; Dec. 27.

Tyson, Leonard E., Manitowoc, Wis. Table. 1,892,373; Dec. 27.

Ufer, Hanns, Ludwigshafen-on-the-Rhine, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Production of modified castor oil. 1,892,258; Dec. 27.

Ulrich, Charles B., assignor to Art Metal Construction Company, Jamestown, N. Y. Typewriter desk. 1,892,414; Dec. 27.

Ulrich, Charles B., assignor to Art Metal Construction Company, Jamestown, N. Y. Desk. 1,892,415; Dec. 27.

United-Carr Fastener Corporation. (See Johnson, Gustav, assignor.)

United Research Corporation. (See Bishop, Joseph W., assignor.)

United Shoe Machinery Corporation. (See Hope, Ernest, assignor.)

Universal Oil Products Company. (See Dubbs, Carbon P., assignor.)

Universal Oil Products Company. (See Howard William R., assignor.)

Universal Oil Products Company. (See Huff, Lyman C., assignor.)

Universal Oil Products Company. (See Morrell, J. C., and Alther, assignors.)

Utley, Clarence V., Columbus, Ohio. Cord control for vacuum cleaners. 1,892,640; Dec. 27.

Vanadium Alloys Steel Company. (See McKenna, Philip M., assignor.)

Van Vliet, Paul D., River Forest, assignor to Air Control Systems, Inc., Chicago, Ill. Atomizing liquids and absorbing the same by gases. 1,892,293; Dec. 27.

Van Vliet, Paul D., River Forest, assignor to Air Control Systems, Inc., Chicago, Ill. Atomizing liquids and impregnating gases therewith. 1,892,294; Dec. 27.

Van Voorhis, William G. (See George, C. L., and Van Voorhis.)

Vaughn, George A., and C. L. George, assignors to The Buckeye Traction Ditcher Company, Findlay, Ohio. Trenching machine. 1,892,521; Dec. 27.

Venzie, Frederick M., Philadelphia, Pa. Building construction. 1,892,225; Dec. 27.

Vernon, Francis W., Vancouver, British Columbia, Canada. Valve gear. 1,892,226; Dec. 27.

Viehmann, Louis J., Douglaston Manor, assignor to Teepe-Whitney Corporation, Long Island City, N. Y. Table. 1,892,656; Dec. 27.

Vitto, Ben, Chicago, Ill. Tympani stick. 1,892,416; Dec. 27.

Vollmann, Heinrich. (See Kranzlein, G., Greune, and Vollman.)

Von Frankenberg, Albrecht, Gelsenkirchen, Germany, assignor, by mesne assignments, to Durafer (Inc.), Dover, Del. Centrifugal casting machine. 1,892,440; Dec. 27.

Von Frommer, Rudolf, Budapest, Hungary. Hand-guard for automatic firearms. 1,892,259; Dec. 27.

Von Hoessle, Carl H., Radebeul, Dresden, assignor to Chemische Fabrik von Heyden, Aktiengesellschaft, Radebeul, near Dresden, Germany. Casting cellulose sheets from solutions of cellulose. 1,892,657; Dec. 27.

Von Nessen, Walter, New York, N. Y., assignor to The Chase Companies, Incorporated, Waterbury, Conn. Book end or similar article. Des. 88,832; Dec. 27.

Von Nessen, Walter, New York, N. Y., assignor to The Chase Companies, Incorporated, Waterbury, Conn. Book end or similar article. Des. 88,833; Dec. 27.

Von Nessen, Walter, New York, N. Y., assignor to The Chase Companies, Incorporated, Waterbury, Conn. Book end or similar article. Des. 88,834; Dec. 27.

Vorthmann, Herbert A., Council Bluffs, Iowa. Combination tractor and elevator unit. 1,892,495; Dec. 27.

Voss, Arthur, Frankfort-on-the-Main-Hochst, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Hardened artificial materials and preparing them. 1,892,227; Dec. 27.

Wahl, John, Rosedale, and O. Meizer, Hollis, assignors to A. Schrader's Son, Inc., New York, N. Y. Pressure gauge. 1,892,088; Dec. 27.

Wales, Nathaniel B., and C. Roberts, New York, N. Y., assignors to Harry Bohn, Dayton, Ohio, trustee. Washing machine. 1,892,441; Dec. 27.

Walker, Benjamin F., Stockton, Calif. Sunshade for automobiles. 1,892,558; Dec. 27.

Walker, George H., assignor to Heenan & Froude Limited, Worcester, England. Apparatus for absorbing and measuring the power developed by prime movers. 1,892,295; Dec. 27.

Wanders, Hans H., Hingham, Mass. Dispenser for tapes. 1,892,544; Dec. 27.

Ward, John J., assignor to Johnson Bronze Company, New Castle, Pa. Marking machine for sleeve bearings. 1,892,545; Dec. 27.

Ward Leonard Electric Company. (See Bullinger, Frederic H., assignor.)

Warman & Cook, Inc. (See Cook, William, assignor.)

Warnke, Fred L., Hartford, Conn. Smoking pipe. 1,892,324; Dec. 27.

Waseige, Charles R., Rueil, assignor to Henri et Maurice Farman, Billancourt, Seine, France. Lubricating device for internal combustion engines. 1,892,089; Dec. 27.

Waterbury Farrel Foundry and Machine Company, The. (See Burbank, Louis S., assignor.)

Watkins, Karl N., Los Angeles, Calif. Awning. Des. 88,835; Dec. 27.

Watson-Stillman Co., The. (See Davis, Frank L., jr., assignor.)

Weber, Jacob A. (See Weber, Louis A. and J. A.)

Weber, Louis A., Shaker Heights, and J. A. Weber, Cleveland Heights, Ohio. Casket bier. 1,891,963; Dec. 27.

Weber, Walter C., assignor to Corning Glass Works, Corning, N. Y. Tube drawing. 1,892,477; Dec. 27.

Weinberger, Julius. (See Olson, H. F., and Weinberger.)

Weindel, Fred, jr., assignor to L. F. Grammes & Sons, Inc., Allentown, Pa. Fabricating metallic labels. 1,892,478; Dec. 27.

Weiser, Frank J. W., Elmhurst, Ill. Piano. 1,892,296; Dec. 27.

Welde, Robert. (See Kraenslein, G., and Welde.)

Welker-Hoops Manufacturing Company, The. (See Welker, Oscar B., assignor.)

Welker, Oscar B., assignor to The Welker-Hoops Manufacturing Company, Middletown, Conn. Closure for tanks. 1,892,297; Dec. 27.

Wernsten, John A., assignor to The Cincinnati Car Corporation, Cincinnati, Ohio. Frame support. 1,892,028; Dec. 27.

West, Kline B. (See McIlvried, H. G., and West.)

Westcott, George L., assignor to "Cabin Crafts", Dalton, Ga. Tufting machine. 1,892,592; Dec. 27.

Wheeler, Roy L., Mount Oliver, assignor to Aluminum Company of America, Pittsburgh, Pa. Tread plate. Des. 88,836; Dec. 27.

Whetsel, Joshua C., Pittsburgh, Pa., assignor to American Sheet and Tin Plate Company. Treating ferrous sheets and plates. 1,892,560; Dec. 27.

White, Ezekiel F., West Hartford, Conn. Adjustable gun choke and constructing the same. 1,892,522; Dec. 27.

Whitmore, Edward E., assignor to The Adlake Company, Chicago, Ill. Vestibule diaphragm. 1,891,964; Dec. 27.
Wick, Louis D., assignor to Frank J. Gainelli, Spokane, Wash. Pneumatic dash gun. 1,892,260; Dec. 27.
Wickersham, Newton W., assignor to Perkins Cementing, Inc., Los Angeles, Calif. Slip mechanism. 1,892,442; Dec. 27.
Wielgus, Sam, Phoenix, Ariz. Hat-shaping device. 1,892,090; Dec. 27.
Wiezevich, Peter J., Elizabeth, N. J., assignor to Standard Oil Development Company. Treating wood. 1,892,658; Dec. 27.
Wildhaber, Ernest, Brooklyn, N. Y. Cutting tool for generating noninvolute gears and gear shaped articles. 1,892,091; Dec. 27.
Wilkins, Arthur C. F., et al. (See Maier, Michael, assignor.)
Willard, Louis J., assignor to The Rotary Printing Company, Norwalk, Ohio. Apparatus for making manifold forms. 1,892,496; Dec. 27.
Willheim, William, New York, N. Y. Textile fabric or similar article. Des. 88,837; Dec. 27.
Willheim, William, New York, N. Y. Textile fabric or similar article. Des. 88,838; Dec. 27.
Willheim, William, New York, N. Y. Textile fabric or similar article. Des. 88,839; Dec. 27.
Willheim, William, New York, N. Y. Textile fabric or similar article. Des. 88,840; Dec. 27.
Willheim, William, New York, N. Y. Textile fabric or similar article. Des. 88,841; Dec. 27.
Willheim, William, New York, N. Y. Textile fabric or similar article. Des. 88,842; Dec. 27.
Willheim, William, New York, N. Y. Textile fabric or similar article. Des. 88,843; Dec. 27.
Willheim, William, Co. (See Bridier, Fernand, assignor.)
Willheim, William, Co. (See Brodsky, Michel, assignor.)
Willheim, William, Co. (See Gottesman, Joseph M., assignor.)
Willheim, William, Co. (See Hellman, Carl R., assignor.)
Willheim, William, Co., Inc. (See Kaufmann, Werner R., assignor.)
Willheim, William, Co., Inc. (See Reiman, Paul, assignor.)
Willheim, William, Co., Inc. (See Schweizer, Jack, assignor.)
Williams, Alfred O., Battle Creek, assignor to Clark Tructractor Company, Buchanan, Mich. Trailer. 1,892,121; Dec. 27.
Williams, Clarence P. (See Dooty, John R., assignor.)
Willshaw, Harry, Wylde Green, and W. A. Cowles, and H. Smith, Birmingham, assignors, by direct and mesne assignments, of one-half to Dunlop Rubber Company Limited, and one-half to Francis Shaw and Company, Limited, Manchester, England. Apparatus for making the foundation of pneumatic tires. 1,892,024; Dec. 27.
Wilson, Peter F., Clearlake, Wash. Pressure retaining valve. 1,892,261; Dec. 27.
Winquist, Victor H., assignor to Mill Engineering and Supply Company, Seattle, Wash. Outfeed carriage. 1,892,497; Dec. 27.
Winslow, Charles A., Vallejo, Calif. Lubricating system for hydrocarbon engines and the like. 1,892,443; Dec. 27.
Winthrop Chemical Company. (See Mietzsch, F., and Klös, assignors.)
Wired Radio, Inc. (See Hyland, Lawrence A., assignor.)
Wist, Engelbert, Vienna, Austria. Converting the electric arc into an elongated flame. 1,892,325; Dec. 27.
Withrow, Floyd G., Grand Rapids, Mich. Rear view mirror bracket. 1,891,966; Dec. 27.
Wolf, Howard M., Muncie, Ind., assignor to The Broderick Company. Stack for producing forced draft. 1,892,417; Dec. 27.
Wolff, Irving, New York, N. Y., assignor to Radio Corporation of America. System responsive to the energy density of sound waves. 1,892,646; Dec. 27.
Wolhaupter, David P., Washington, D. C., assignor to The Rail Joint Company, New York, N. Y. Splice bar for rail joints. 1,892,025; Dec. 27.
Wolverine Supply and Manufacturing Company. (See Barnum, Howard N., assignor.)
Wood, Frederick A., London, England. Footwear. 1,892,596; Dec. 27.
Wood, Henry A. W., assignor to Wood Newspaper Machinery Corporation, New York, N. Y. Quick change web splicing device. 1,891,965; Dec. 27.
Wood Newspaper Machinery Corporation. (See Wood, Henry A. W., assignor.)
Woolley, Rew E., Shaker Heights, Ohio, assignor to Bailey Meter Company. Integrating mechanism. 1,892,184; Dec. 27.
Wray, Charles F., assignor to National Brass Manufacturing Company, Rochester, N. Y. Liquid gauge. 1,892,418; Dec. 27.
Wrought Iron Company of America. (See Hart, Charles, assignor.)
Wullschleger & Co. (See Megros, Georges, assignor.)
Yale & Towne Manufacturing Company, The. (See Fagin, Charles R., assignor.)
Yancey, William O., San Francisco, Calif. Toy. 1,892,561; Dec. 27.
Yankey Metal Products Corp. (See Putterman, Benjamin, assignor.)
Yevseyeff, George F., Detroit, Mich. Chassis support. 1,892,198; Dec. 27.
Yochheim, Edward G., assignor to The Ohio Boxboard Company, Rittman, Ohio. Grave vault cover. 1,892,228; Dec. 27.
York Ice Machinery Corporation. (See Zieber, William E., assignor.)
Yost, Howard M., Washington, D. C. Hose protector. 1,892,122; Dec. 27.
Zahn, Carl, and K. Schimmelschmidt, Frankfort-on-the-Main-Hochst, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Dyestuffs of the dibenzanthrone series. 1,892,229; Dec. 27.
Zeiss, Firm Carl. (See Berger, Max, assignor.)
Zeiss, Firm Carl. (See Richter, Robert, assignor.)
Zentler, William F. (See Jancke, B. F., Korf, and Zentler.)
Zerbi, Tranquillo, assignor to Fiat Societa Anonima, Turin, Italy. Automatic device for limiting the speed of internal combustion engines, more particularly of tractor engines or the like. 1,892,597; Dec. 27.
Zerwer, Adam G. P., assignor of one-fifth to J. H. Fetterhoff and one-fifth to G. J. Zerwer, Whiting, Ind. Heater for oil tanks. 1,892,197; Dec. 27.
Zerwer, George J., et al. (See Zerwer, Adam G. P., assignor.)
Zieber, William E., assignor to York Ice Machinery Corporation, York, Pa. Air agitation for can ice plants. 1,892,026; Dec. 27.
Zieber, William E., assignor to York Ice Machinery Corporation, York, Pa. Air agitation for can ice plants. 1,892,027; Dec. 27.
Zimmerli, William F., Fairlawn, and R. S. Havenhill, Akron, Ohio, assignors to The B. F. Goodrich Company, New York, N. Y. Adhesive composition and making same. 1,892,123; Dec. 27.
Zimmerman, Fred R. (See Burton, O. M., and Zimmerman.)
Zotos Corporation. (See Evans, Ralph L., assignor.)

LIST OF INVENTIONS

FOR WHICH

PATENTS WERE ISSUED ON THE 27TH DAY OF DECEMBER, 1932

NOTE.—Arranged in accordance with the first significant character or word of the name (in accordance with city and telephone directory practice). Includes patents, reissues, and designs.

Acid and preparing the same, Water-soluble sludge. S. P. and J. A. Coleman. 1,892,650; Dec. 27.
Acids, Purification of nonvolatile organic. A. O. Jaeger. 1,892,396; Dec. 27.
Acids, Substituted amino-phenyl-arsonic. F. Mietzsch and H. Klöa. 1,892,245; Dec. 27.
Adhesive composition and making same. W. F. Zimmerli and R. S. Havenhill. 1,892,123; Dec. 27.
Advertising device. J. A. Taylor. 1,892,194; Dec. 27.
Aeroplanes in flight, Controlling. B. Roberts. 1,892,006; Dec. 27.
Air agitation for can ice plants. W. E. Zieber. 1,892,026–7; Dec. 27.
Air, Apparatus for conditioning. C. F. Shadle. 1,892,081; Dec. 27.
Air-break switch, Combination. J. S. Lawson. 1,892,403; Dec. 27.
Air conditioning mechanism. W. D. Jordan. 1,892,807; Dec. 27.
Aircraft having sustaining rotors. J. S. Pecker. 1,892,003; Dec. 27.
Air heating system, Warm. A. L. Smith. 1,892,015; Dec. 27.
Air or other gaseous materials, Process and apparatus for liquefying and rectifying. I. H. Levin. 1,892,155; Dec. 27.
Airplane catapult. E. E. Moe. 1,892,357; Dec. 27.
Airplane pick-up device. H. G. Bushmeyer and A. W. Card. 1,892,381; Dec. 27.
Airplane spray device. J. P. Deamet. 1,892,139; Dec. 27.
Airplane strut construction. J. H. Gould. 1,891,977; Dec. 27.
Air regulator for tuyères. C. E. Harrison. 1,892,052; Dec. 27.
Alarm: *See*—
Fire alarm.
Alarm for incubators or brooders. J. J. Machacek. 1,891,994; Dec. 27.
Alarm switch. W. A. Cornyn. 1,892,330; Dec. 27.
Alloy and making the same, Fusible. W. J. Hawkins. 1,892,273; Dec. 27.
Alloy, Metal. J. L. Cox and F. B. Foley. 1,892,384; Dec. 27.
Alloy, Noncorrosive steel. H. A. Mitchell, A. W. Gregg, and R. H. Frank. 1,892,316; Dec. 27.
Animal ringer. W. H. Stanley. 1,892,639; Dec. 27.
Annealing furnace. W. E. Moore and G. L. Simpson. 1,892,112; Dec. 27.
Antenna system, Directive. J. C. Echelleng. 1,892,253; Dec. 27.
Antirattler device for doors. O. C. Ritz-Woller. 1,892,374; Dec. 27.
Apparatus for absorbing and measuring the power developed by prime movers. G. H. Walker. 1,892,295; Dec. 27.
Argon and neon, Production of. E. C. Curtis. 1,892,186; Dec. 27.
Armrest, Adjustable auto. H. S. Genung. 1,892,048; Dec. 27.
Artificial materials and preparing them, Hardened. A. Voss. 1,892,227; Dec. 27.
Atomizing attachment for airplane engine exhausts. J. L. Berney. 1,892,132; Dec. 27.
Automatic switch. H. Jackson. 1,892,511; Dec. 27.
Automobile. O. W. Rodemich and D. C. Smith. 1,892,078; Dec. 27.
Automobile. J. B. Ryan. Des. 88,827; Dec. 27.
Automobile heater. A. L. Blackmer. 1,892,201; Dec. 27.
Automobile radiator and front, Combined. G. M. Buehrig. Des. 88,753; Dec. 27.
Automobile radiator shell with louver type grille. L. B. Green. Des. 88,778; Dec. 27.
Awning. K. N. Watkins. Des. 88,835; Dec. 27.
Azo-dyestuffs. G. Bonhôte. 1,892,480; Dec. 27.
Bags, Mechanism for opening and filling. G. I. Hohl. 1,892,148; Dec. 27.
Baking and dough-making, Process relating to. B. Rabinowitsch. 1,892,076; Dec. 27.
Bar and radio cabinet, Combined folding. E. G. and M. J. Schloss. Des. 88,829; Dec. 27.
Bar for rail joints, Splice. D. P. Wolhaupter. 1,892,025; Dec. 27.
Bathing patients, Means for. M. Henschen. 1,892,274; Dec. 27.
Battery: *See*—
Storage battery.
Bearing, Journal. W. Peyinghaus. 1,892,628; Dec. 27.
Bearing sleeves, Making. B. Stockfleth. 1,892,172; Dec. 27.
Bearing sleeves, Making. B. Stockfleth. 1,892,174–5; Dec. 27.
Bearing sleeves, Making. B. Stockfleth. 1,892,177–80; Dec. 27.
Bearing sleeve, Making a bimetal. B. Stockfleth. 1,892,176; Dec. 27.
Bearings, Fabricating sheet metal. C. H. Leis. 1,892,555; Dec. 27.
Bed and couch, Refrigerated. H. E. Bang. 1,891,903; Dec. 27.
Bed desk. R. Berman. Des. 88,746; Dec. 27.
Bedpan washer. L. Talas. 1,892,291; Dec. 27.
Bedstead. I. A. Featherman. 1,892,427; Dec. 27.
Beers weak in alcohol, Preparation of. A. Haselbach. 1,892,342; Dec. 27.
Bends, Making return. T. F. Birmingham. 1,891,898; Dec. 27.
Benzanthrone derivatives and preparing them. G. Krünglein, H. Greune, and H. Vollmann. 1,892,241; Dec. 27.
Benzylmorphine salts, Manufacture of easily soluble. A. Stoll and E. Burckhardt. 1,892,019; Dec. 27.
Beverage dispenser. L. L. Benham, H. L. Ferree, and W. J. Balkwill. 1,892,547; Dec. 27.
Beverages, Stabilising cereal. D. Cozzolino. 1,892,457; Dec. 27.
Bier, Casket. L. A. and J. A. Weber. 1,891,963; Dec. 27.
Binder, Chain and knot. J. Segimón. 1,892,411; Dec. 27.
Binder, Loose leaf. C. E. Johnson and W. H. Edwards. 1,891,988; Dec. 27.
Bird figure and pedestal, Combined. P. Gerent. Des. 88,768; Dec. 27.
Blanket to a printing press cylinder, Securing a. T. L. McElroy. 1,892,623; Dec. 27.
Blanks, Waxing. M. H. Sidebotham. 1,892,083; Dec. 27.
Board: *See*—
Golf game board.
Boat apparatus for lowering lifeboats to the water from ships. C. Sacerdoti. 1,892,586; Dec. 27.
Boiler furnace. C. A. Hulsart. 1,892,661; Dec. 27.
Book end or similar article. W. von Nessen. Des. 88,832–4; Dec. 27.
Bottle cap. B. E. Conner. Des. 88,755; Dec. 27.
Bottle or similar article. H. C. Berkowitz. Des. 88,745; Dec. 27.
Bottle, Paper. E. J. Kleess. 1,892,466; Dec. 27.
Bowling alley. F. J. Miller. 1,892,315; Dec. 27.
Box: *See*—
Stuffing box.
Box. A. Barad. 1,892,092; Dec. 27.
Brace: *See*—
Wire brace.
Brace end. W. A. Smith. 1,892,321; Dec. 27.
Bracket: *See*—
Mirror bracket.
Brake: *See*—
Hydraulic brake.
Brake control, Automatic. C. E. Smelser. 1,892,541; Dec. 27.
Brake mechanism for motor vehicles. W. J. Besler. 1,892,034; Dec. 27.
Brush or similar toilet article. C. O. MacInnis. Des. 88,805; Dec. 27.
Brush, Stencil. J. Flockhart. 1,892,267; Dec. 27.
Buckle, Slide. P. E. Fenton. 1,892,641; Dec. 27.
Buckle, Slide. C. A. Mosgrove. 1,892,516; Dec. 27.
Building construction. W. H. Adams. 1,892,498; Dec. 27.
Building construction. E. O. Brostrom. 1,892,421; Dec. 27.
Building construction. F. M. Vensie. 1,892,225; Dec. 27.
Bullet, Short range. J. Matthews. 1,892,158; Dec. 27.
Burner: *See*—
Fuel burner.
Burner. C. C. Johnson. 1,892,238; Dec. 27.
Cab underframe. W. M. Sheehan. 1,891,954; Dec. 27.
Cabinet and extensible top therefor. S. B. Hutton. 1,891,986; Dec. 27.
Cabinet for filing flat sheets. I. W. Eckstein. 1,891,921; Dec. 27.
Cabinet or file box, Filing. F. L. G. Straubel. 1,892,476; Dec. 27.
Cabinet, Wall. F. and A. Mastrangelo. 1,892,491; Dec. 27.
Cable, Communication. A. R. Kemp. 1,892,279; Dec. 27.
Calculating device. I. Rubinsky. 1,892,634; Dec. 27.
Camera with spring motor drive, Motion film. O. Steiner. 1,892,412; Dec. 27.
Candy goods, Handling. D. M. Bernotow. 1,891,908; Dec. 27.
Canned goods, Apparatus for freezing. D. G. Sorber. 1,892,224; Dec. 27.

Cap or head for electric cables, End. W. C. Hayman and C. A. Piercy. 1,892,551; Dec. 27.
Carbon bisulphide, Apparatus for the manufacture of. C. C. Schwegler. 1,892,191; Dec. 27.
Carburetor. R. M. Dilworth. 1,892,301; Dec. 27.
Carburetor, blow torch, and solder melter. M. Lapanja. 1,892,467; Dec. 27.
Carrier: *See*—
Gear carrier.
Carriage, Outfeed. V. H. Winquist. 1,892,497; Dec. 27.
Carton and container for cigarettes and like articles. D. W. Molins. 1,892,111; Dec. 27.
Carton, Egg. C. R. Dugdale. 1,892,612; Dec. 27.
Casein, Method of and apparatus for drying. F. L. Chappell. 1,892,233; Dec. 27.
Casting machine, Centrifugal. A. von Frankenberg. 1,892,440; Dec. 27.
Castor oil, Production of modified. H. Ufer. 1,892,258; Dec. 27.
Cathode coating composition and making the same. J. A. Heany. 1,892,528; Dec. 27.
Cellulose derivatives containing nitrogen and making same. R. Haller and A. Heckendorn. 1,892,489; Dec. 27.
Cellulose sheets from solutions of cellulose, Casting. C. H. von Hoessle. 1,892,657; Dec. 27.
Cereals, Device for the conditioning and drying of. E. Roth. 1,892,319; Dec. 27.
Chair: *See*—
Folding chair.
Chair seat, Adjustable barber. R. Nagel. 1,891,999; Dec. 27.
Chromium article, Electroplated. D. Gray and B. K. Northrop. 1,892,051; Dec. 27.
Cigar. F. Lankering. 1,892,402; Dec. 27.
Cigar accessory. B. Frankel. 1,892,429; Dec. 27.
Cigar and cigarette extinguisher, A. A. Miller. 1,892,314; Dec. 27.
Cigar enveloping. F. R. Schmitt. 1,892,254; Dec. 27.
Cigar package. J. A. Neumair. 1,892,285; Dec. 27.
Cigarette feed tobacco compressor. E. D. Smith. 1,892,257; Dec. 27.
Cigarette machine tobacco feed. W. B. Bronander. 1,892,263; Dec. 27.
Cigarette making machine. W. F. Gordon. 1,892,143; Dec. 27.
Circuit breaker. O. A. Ross. 1,892,008; Dec. 27.
Circuit closer. E. W. Sprague. 1,892,084; Dec. 27.
Circuit closing device. B. Larson. 1,891,993; Dec. 27.
Circuit interrupter. J. G. Albright. 1,892,454; Dec. 27.
Circuit, Voice operated. R. C. Mathes. 1,892,284; Dec. 27.
Circular knitting machine. J. Sirmay. 1,891,956; Dec. 27.
Clamp: *See*—
Door clamp.
Clasp. A. M. Cole. 1,892,422; Dec. 27.
Clasp for bracelets, straps, linkages or the like. C. H. Kestenman. 1,892,281; Dec. 27.
Clasp or connecting device for straps, bands, and bracelets, Extendible. C. H. Kestenman. 1,892,060; Dec. 27.
Clasping device for bracelets. C. H. Kestenman. 1,892,350; Dec. 27.
Cleaner: *See*—
Vacuum cleaner.
Clock. W. Bartikoski. 1,891,967; Dec. 27.
Clock, Alarm. R. O. Ferguson. 1,892,337; Dec. 27.
Clock-case and dial, Combined. P. Lux. Des. 88,845; Dec. 27.
Closure for tanks. O. B. Welker. 1,892,297; Dec. 27.
Closure operating mechanism. T. Brady. 1,892,420; Dec. 27.
Cloth cutting machine. O. I. Judelshon. 1,892,058; Dec. 27.
Clothesline reel. C. B. Johnson. 1,892,276; Dec. 27.
Clothespin. E. H. Stanton. 1,892,018; Dec. 27.
Clutch, Electromagnetic. H. E. Hodgson. 1,891,982; Dec. 27.
Coating material. E. F. Johnston. 1,892,576; Dec. 27.
Cock, Plug. G. Huhn. 1,892,574; Dec. 27.
Coil, Inductance. C. Bol. 1,892,204; Dec. 27.
Collar. M. Friedman. 1,892,430; Dec. 27.
Combing machine for textile fibres. J. W. Nasmith. 1,892,317; Dec. 27.
Combustion control device. G. E. Goodridge. 1,892,188; Dec. 27.
Combustion system. G. W. McKee. 1,892,115; Dec. 27.
Composition of matter, Manufacturing a. P. M. McKenna. 1,892,653; Dec. 27.
Compositions, Production of colored. H. Kesseler and L. Eitlaender. 1,892,280; Dec. 27.
Compound and process for treating vegetable and animal fibers and fabrics. R. Feibelmann. 1,892,548; Dec. 27.
Compounds, Treating polymerisable unsaturated. H. A. Bruson. 1,892,101; Dec. 27.
Computing device. T. R. Shaw. 1,892,367; Dec. 27.
Confections, Device for making edible. V. and R. Torres. 1,892,370; Dec. 27.
Contact finger for electrical controllers and switches. G. Ellis. 1,892,045; Dec. 27.
Container. A. Stone. 1,892,594; Dec. 27.
Container. M. C. Troyer. 1,892,195; Dec. 27.
Container, Ash. H. Delarosa. 1,892,385; Dec. 27.
Container, Beverage dispensing. J. M. Travis. Des. 88,846; Dec. 27.
Container, Collapsible. A. S. Fogler. 1,892,140; Dec. 27.
Container for centrifugal machines, Rotary. H. Janssen. 1,892,057; Dec. 27.
Container handling apparatus. L. De Markus and F. A. Fouser. 1,892,042; Dec. 27.
Container, Shipping. G. R. Meyercord and O. H. Basquin. 1,892,406; Dec. 27.
Control equipment, Automatic. H. T. Seeley. 1,891,952; Dec. 27.
Control for hair waving apparatus. G. E. Björkman. Des. 88,747; Dec. 27.
Control system. E. S. Bristol. 1,892,135; Dec. 27.
Control system. H. T. Seeley. 1,892,540; Dec. 27.
Controlling device for locomotives. H. Lemp. 1,891,936; Dec. 27.
Conversion of pueverous material into a noduliform state. N. Nielsen. 1,892,074; Dec. 27.
Converter and starting the same, Automatic rotary. R. C. Eccleston and I. S. Nippes. 1,892,041; Dec. 27.
Conveyer. F. J. Dietz. 1,892,206; Dec. 27.
Cooking device. G. B. Perkins. 1,892,117; Dec. 27.
Cooling device for photographic apparatus. A. C. Denslow. 1,891,917; Dec. 27.
Cord control for vacuum cleaners. C. V. Utley. 1,892,640; Dec. 27.
Core or block for use in concrete structures, Hollow. A. S. MacDonald. 1,892,311; Dec. 27.
Corn sheller. M. Alderman, jr. 1,892,598; Dec. 27.
Corner straps for export boxes and the like, Making reenforcing. C. L. Snyder. 1,892,638; Dec. 27.
Coupling: *See*—
Flexible coupling.
Power transmission coupling.
Tube coupling.
Vehicle coupling.
Coupling for railroad cars, Emergency. P. L. Hudgins. 1,892,619; Dec. 27.
Cover for spare tires, Tire. C. F. Lambers. Des. 88,800–1; Dec. 27.
Cover, Grave vault. E. G. Yochheim. 1,892,228; Dec. 27.
Crankcase with false bottom. F. O. Clements. 1,892,185; Dec. 27.
Crate. W. F. Sneed, jr. 1,892,170; Dec. 27.
Cupboard-desk. J. Killius and C. H. De Frehn. 1,892,061; Dec. 27.
Current flow, Generating and distributing. L. L. Perry and A. M. Rossman. 1,892,533; Dec. 27.
Current regulating device, Automatic. G. A. Mathieu. 1,892,215; Dec. 27.
Curtain and drape structure. W. C. Chapman. 1,892,448; Dec. 27.
Curtain pull. W. J. Stuber. 1,892,087; Dec. 27.
Cut-off mechanism. S. M. Langston. 1,892,213; Dec. 27.
Cycle control system. B. P. Fonda. 1,892,428; Dec. 27.
Cylinder for internal combustion engines. H. Junkers. 1,892,277; Dec. 27.
Decking structure. C. L. Snyder. 1,892,589; Dec. 27.
Deflector for automobile heaters. H. W. Fink. 1,892,506; Dec. 27.
Dental crown coated on the front with enamel, made of noble metal or noble metal material, and its production. R. Hejcmann. 1,892,490; Dec. 27.
Derivatives of amino-naphthol sulphonic acids. G. Kalischer. 1,892,577; Dec. 27.
Derivatives of naphthazarine and preparing them. G. Kraenzlein, and R. Welde. 1,892,310; Dec. 27.
Desk. C. B. Ulrich. 1,892,415; Dec. 27.
Desk set. W. Guyot. 1,892,509; Dec. 27.
Desk set for fountain pens. A. I. Ferrier. 1,892,523; Dec. 27.
Desk set, Fountain pen. A. I. Ferrier. 1,892,524; Dec. 27.
Desk set structure. I. D. Tefft. 1,892,181; Dec. 27.
Desk stand for a hand telephone. G. R. Lum. Des. 88,804; Dec. 27.
Desk, Typewriter. C. B. Ulrich. 1,892,414; Dec. 27.
Detector: *See*—
Vibration detector.
Device for regulating the pumping period of wells. J. S. Quigg. 1,892,631; Dec. 27.
Device for the periodic distribution of a liquid substance on a plane surface cinematographic films, or others. A. Rodde. 1,892,473; Dec. 27.
Dial die machine. C. S. Siegel. 1,892,168; Dec. 27.
Diaryls, Production of chlorinated. R. L. Jenkins. 1,892,397; Dec. 27.
Diphenyls, Halogenated dihydroxy. F. W. Nitardy, W. G. Christiansen, and S. E. Harris. 1,892,000; Dec. 27.
Direction finding system. L. A. Hyland. 1,892,151; Dec. 27.
Disk for clutches, brakes, and the like, Friction. G. S. Lane. 1,892,282; Dec. 27.
Dispenser for tape. H. H. Wanders. 1,892,544; Dec. 27.
Display rack. F. E. Hutchins and C. F. Losey. 1,892,150; Dec. 27.
Dobby. H. Stäubli. 1,892,323; Dec. 27.
Doctor mechanism for rolls and cylinders. F. W. Lodding. 1,892,214; Dec. 27.
Doll. R. G. Krueger. Des. 88,799; Dec. 27.
Doll structure. N. Paganello. 1,892,360; Dec. 27.
Dolly, Pipe. J. P. Marcy. 1,891,995; Dec. 27.
Door and conveyer control, Furnace. H. G. McIlvried and K. B. West. 1,892,643; Dec. 27.
Doorcheck and closer. W. Anderson. 1,892,200; Dec. 27.

Door clamp, Sliding. A. and W. J. Hulley. 1,892,149; Dec. 27.
Door, Rolling. W. M. Ginder. 1,892,570; Dec. 27.
Door structure, Foldable. F. A. Guth. 1,892,340; Dec. 27.
Door with glass-covered opening, Rolling. H. C. Armstrong. 1,892,562; Dec. 27.
Dough dividing and rolling machine, Automatic. G. Rausch. 1,892,251; Dec. 27.
Draft device for ground working implements, Yieldable. C. W. Robinson. 1,892,007; Dec. 27.
Drawer, Vertical filing. F. L. G. Straubel. 1,892,020; Dec. 27.
Drill: *See*—
Rock drill.
Drive for hot metal mixers, Auxiliary. F. E. Kling. 1,892,309; Dec. 27.
Drive for press rolls or the like. T. Harvey. 1,892,573; Dec. 27.
Dumping mechanism. C. G. Eisenberg, jr. 1,891,922; Dec. 27.
Dyestuffs, Azo. K. Holzach, H. Krzikalla, and W. Mueller. 1,892,055; Dec. 27.
Dyestuffs of the dibenzanthrone series. C. Zahn and K. Schimmelschmidt. 1,892,229; Dec. 27.
Egg whites, Separating. R. W. Regensburger. 1,892,539; Dec. 27.
Electric arc into an elongated flame, Converting the. E. Wist. 1,892,825; Dec. 27.
Electric contact, Semifloating. J. U. Smith. 1,892,489; Dec. 27.
Electric heater. L. A. Hopkins. 1,892,211; Dec. 27.
Electric power converting apparatus. F. W. Frink. 1,891,924; Dec. 27.
Electric snap switch. H. Prager. 1,892,537; Dec. 27.
Electric switch. C. E. Nicholas. 1,892,073; Dec. 27.
Electric switch. J. C. Stearns. 1,892,542; Dec. 27.
Electrical condenser and making the same. G. W. Pickard. 1,892,362; Dec. 27.
Electrical connecter. H. G. Lapsley. 1,891,935; Dec. 27.
Electrical connecting device. R. O. Eaton. 1,891,920; Dec. 27.
Electrical device and forming insulating dielectrics therein. W. M. Bailey. 1,892,375; Dec. 27.
Electrical discharge device. I. Langmuir and K. H. Kingdon. 1,892,244; Dec. 27.
Electrical heating element. G. Bray. 1,892,298; Dec. 27.
Electrical wiring system. N. P. Harshberger. 1,892,146; Dec. 27.
Electrodes, Apparatus for feeding electric furnace. J. G. Marshall. 1,892,109; Dec. 27.
Electromagnetic device. O. Morganstern. 1,892,358; Dec. 27.
Enameling furnace. C. A. Dutton. 1,891,919; Dec. 27.
Engine: *See*—
Gas engine.
Internal combustion engine.
Shaker conveyer engine.
Engine cranking mechanism. B. G. Johnson. 1,892,348; Dec. 27.
Engine mount, Aeroplane. R. I. Markey. 1,892,065; Dec. 27.
Engine starting apparatus. R. Chilton. 1,892,094–6; Dec. 27.
Engine stop. G. H. McFeaters. 1,892,313; Dec. 27.
Ethers of halogenated quinoline, Basic. M. Hartmann and H. Isler. 1,891,980; Dec. 27.
Examination device. S. L. Pressey. 1,892,318; Dec. 27.
Eyeglass frame, Collapsible. J. Gaspari. 1,892,642; Dec. 27.
Eyeglass mirror. J. Rowan. 1,892,365; Dec. 27.
Fabric: *See*—
Wire mesh fabric.
Fabric, Producing. E. C. Bunnell. 1,891,912; Dec. 27.
Fastener, Garment. R. T. Dawes. 1,892,610; Dec. 27.
Fastener, Hinged pin. P. E. Fenton. 1,892,236; Dec. 27.
Fastener, Press. V. Puc. 1,892,630; Dec. 27.
Feed for fountain pens. W. K. Kerr. 1,892,578; Dec. 27.
Feeder for argillaceous materials. W. B. Pine. 1,892,583; Dec. 27.
Film pass. M. H. Page. 1,892,218; Dec. 27.
Film supporting and driving apparatus. E. W. Kellogg. 1,892,554; Dec. 27.
Filter. J. A. Gordon. 1,892,210; Dec. 27.
Filter. G. O. Hillier. 1,892,306; Dec. 27.
Filter, Cistern. C. B. Demaree. 1,892,039; Dec. 27.
Fire alarm, Automatic. E. A. Dan. 1,892,503; Dec. 27.
Flexible coupling. C. H. Clark. 1,891,915; Dec. 27.
Flexible coupling. R. A. Hinkley. 1,891,929; Dec. 27.
Floor washing machine. W. C. Jerome. 1,892,347; Dec. 27.
Flowerpot. M. Maier. 1,892,157; Dec. 27.
Fluid composition. A. T. K. Tseng. 1,891,962; Dec. 27.
Fluid lift for use in wells. G. P. Slater. 1,892,626; Dec. 27.
Fluids, Method and apparatus for propelling. H. F. Hagen. 1,892,303; Dec. 27.
Flying machine. W. Messerschmitt. 1,891,941; Dec. 27.
Folding chair. V. Ruis. 1,892,166; Dec. 27.
Food, Apparatus for cooking. E. M. Simonds. 1,892,169; Dec. 27.
Footwear. F. A. Wood. 1,892,596; Dec. 27.
Forged articles, Apparatus for making. H. N. Anderson. 1,892,030; Dec. 27.
Form, Shoe. W. J. De Witt. 1,891,900; Dec. 27.
Form, Tie. E. H. Haubrook. 1,892,272; Dec. 27.
Forming and attaching separable fastener elements. G. Johnson. 1,891,989; Dec. 27.
Forms, Apparatus for making manifold. L. J. Willard. 1,892,496; Dec. 27.
Foundation, Building. W. P. Joy, J. A. Amend, and E. Frauenfelder. 1,891,924; Dec. 27.
Foundation of pneumatic tires, Apparatus for making the. H. Willshaw, W. A. Cowles, and H. Smith. 1,892,024; Dec. 27.
Fracture operating table. G. W. Hawley. 1,892,304; Dec. 27.
Frame: *See*—
Eyeglass frame.
Picture frame.
Screen stencil frame.
Setting frame.
Side frame.
Frame. H. Molner. 1,892,492; Dec. 27.
Frame for wire operating units, Take-up. W. H. Sommer. 1,892,171; Dec. 27.
Frequency measurer. G. Keinath. 1,892,401; Dec. 27.
Fuel burner, Powdered. H. C. Heaton. 1,892,053; Dec. 27.
Fuel distributor, Stoker. A. M. Hunt. 1,892,395; Dec. 27.
Fuel pumping apparatus, Liquid. F. J. S. Jones. 1,892,529; Dec. 27.
Furnace: *See*—
Annealing furnace.
Boiler furnace.
Enameling furnace.
Hot air furnace.
Powdered fuel furnace.
Fuse, Large capacity oil. P. E. Hart. 1,892,102; Dec. 27.
Fuselage, Sound absorbing monocoque. R. G. Miller. 1,892,070; Dec. 27.
Game apparatus. C. M. Gravatt. Des. 88,776; Dec. 27.
Game, Sales stimulator. R. E. Morgan. 1,892,118; Dec. 27.
Garment hanger. W. E. Gibson. 1,892,049; Dec. 27.
Garment hanger. L. Kalina. 1,892,530; Dec. 27.
Garter pad form and hook. W. Breslin. 1,891,910; Dec. 27.
Gas, Apparatus for producing water. W. Bennhold. 1,892,456; Dec. 27.
Gas, Dissociating natural. C. B. Hillhouse. 1,892,559; Dec. 27.
Gas engine, Rotary. G. G. Satrum. 1,892,474; Dec. 27.
Gas meter. O. Goldkamp. 1,892,513; Dec. 27.
Gas meter. H. H. Sprague. 1,892,520; Dec. 27.
Gases, Purifying. F. Fischer. 1,891,974; Dec. 27.
Gauge: *See*—
Liquid gauge.
Pressure gauge.
Watch-hand gauge.
Gauge. A. Kirkpatrick. 1,892,212; Dec. 27.
Gauge. A. C. Richmond. 1,892,005; Dec. 27.
Gauge and filling valve, Combined tire. A. S. Marchus. 1,892,435; Dec. 27.
Gear carrier, Draft. C. R. Busch. 1,892,328; Dec. 27.
Gear cutting machine. E. Lasser. 1,892,621; Dec. 27.
Gear mechanism. R. J. L. Moineau. 1,892,217; Dec. 27.
Gear, Valve. F. W. Vernon. 1,892,226; Dec. 27.
Gear wheel, Non-metallic. C. W. Mansur. 1,891,937; Dec. 27.
Gearing, Chain transmission. K. D. McMillan. 1,892,067; Dec. 27.
Gearing, Starter. L. H. Hougen. 1,892,103; Dec. 27.
Gearing, Variable speed. L. F. Granier. 1,892,270; Dec. 27.
Gelatine, Manufacture of. E. Atherton. 1,892,509; Dec. 27.
Glass and apparatus therefor, Manufacture of wire net. J. Gaskell. 1,892,488; Dec. 27.
Glass, Apparatus for grinding and polishing. W. O. Amsler. 1,892,326; Dec. 27.
Glass band from the surface of the molten glass metal, Drawing a. B. Engels. 1,892,459; Dec. 27.
Glass, Manufacture of laminated. A. W. Hornig. 1,891,931; Dec. 27.
Glass, Process and apparatus for the manufacture of. A. Do-Huu Chan. 1,892,458; Dec. 27.
Glass run channel. J. S. Reid. 1,892,518; Dec. 27.
Glass, Working. J. Bailey. 1,892,126; Dec. 27.
Glass working machine. D. E. Gray. 1,892,463; Dec. 27.
Glue and making plywood. H. V. Dunham. 1,892,486; Dec. 27.
Goggles, Telescopic. C. L. Bausch. 1,892,444; Dec. 27.
Golf club. R. J. Cash. 1,892,482; Dec. 27.
Golf game board. F. I. Stiles. 1,892,593; Dec. 27.
Governor, Centrifugal variable resistance. A. E. Hinchman. 1,892,054; Dec. 27.
Graphite refractory compositions, Molding. A. M. Hanauer. 1,891,979; Dec. 27.
Grinder, External. C. T. Raule. 1,892,364; Dec. 27.
Grinder, Multiple external. C. T. Raule. 1,892,363; Dec. 27.
Grinding or polishing, Apparatus for centerless. R. W. Fuller. 1,892,453; Dec. 27.
Grinding wheel, Segmental. T. Larsson. 1,892,434; Dec. 27.
Guard for automatic firearms, Hand. R. von Frommer. 1,892,259; Dec. 27.
Guard, Highway. W. W. Russell. 1,892,222; Dec. 27.
Guard, Mower. E. A. Johnston. 1,891,990; Dec. 27.
Guide, Band saw blade. A. S. Pragerstorfer. 1,892,470; Dec. 27.

Guide for drill steels. O. H. Sellars. 1,891,953; Dec. 27.
Gun choke and constructing the same, Adjustable. E. F. White. 1,892,522; Dec. 27.
Gun, Expansion chamber type gas. B. C. Goss. 1,892,050; Dec. 27.
Gun, Pneumatic dash. L. D. Wick. 1,892,260; Dec. 27.
Hair, Apparatus for use in waving. B. F. Jancke. 1,892,106; Dec. 27.
Hair curler. J. Jacobs. 1,892,575; Dec. 27.
Hair, Permanently waving. R. L. Evans. 1,892,389–91; Dec. 27.
Hair, Permanently waving. R. L. Evans. 1,892,426; Dec. 27.
Hair-wave setting device. L. B. Andrew. 1,892,262; Dec. 27.
Hair waver. B. F. Jancke, F. Korf, and W. F. Zentler. 1,892,107; Dec. 27.
Hair waving apparatus, Permanent. F. X. Maier. 1,892,063; Dec. 27.
Hanger: *See*—
Garment hanger. Switch box hanger.
Hanger. R. Teats and S. Hughes. 1,892,413; Dec. 27.
Hasp lock. E. B. Stone. 1,892,289; Dec. 27.
Hat construction and making the same. F. H. Lee. 1,892,515; Dec. 27.
Hat-shaping device. S. Wielgus. 1,892,090; Dec. 27.
Headlight. W. E. Cummins. 1,892,265; Dec. 27.
Headrest for chairs, Sanitary. E. B. Clearwater. 1,891,970; Dec. 27.
Heat conditions in glass furnaces, Control of. E. Gentil. 1,892,462; Dec. 27.
Heat reclaimer. W. Bonslett. 1,892,232; Dec. 27.
Heater: *See*—
Automobile heater. Liquid heater.
Electric heater. Safety heater.
Heater for oil tanks. A. G. P. Zerwer. 1,892,197; Dec. 27.
Heating automobile motors, Device for. R. B. Goodwin. 1,892,571; Dec. 27.
Hectograph. H. J. Reardon. 1,892,077; Dec. 27.
Helicopter. D. R. Campens. 1,892,036; Dec. 27.
Hinge, Spring. J. O. Olson. 1,892,584; Dec. 27.
Hogshead, Collapsible. R. J. Kernodle. 1,892,153; Dec. 27.
Holder attachable to service trays, Merchandise. E. G. De Foe and C. Bramming. 1,892,234; Dec. 27.
Holder, Automobile umbrella. W. Beehler. 1,892,601–3; Dec. 27.
Holder. Battery tag. F. G. Plowick. 1,892,248; Dec. 27.
Holder, Broom. G. Gentslinger. 1,892,338; Dec. 27.
Holder, Flower. W. Halm. 1,892,393; Dec. 27.
Holder for vehicles, Umbrella. W. Beehler. 1,892,604; Dec. 27.
Holder, Napkin. A. Singer. 1,892,193; Dec. 27.
Holder, Spice can. C. A. Johnsen. 1,892,349; Dec. 27.
Hot air furnace. G. W. Miller. 1,891,996; Dec. 27.
Hot top for ingot molds. W. H. Haws. 1,892,464; Dec. 27.
Humidity indicator. F. S. Marcellus. Des. 88,810; Dec. 27.
Hydraulic brake. E. Engel. 1,892,335; Dec. 27.
Hydrogen halide gas, Preparation of strong. S. B. Heath. 1,892,652; Dec. 27.
Ignition insulation composition. O. B. Huskey. 1,892,105; Dec. 27.
Index, Carbon card. J. O. McDonald. 1,892,160; Dec. 27.
Indicating device. C. D. Bolin. 1,892,379; Dec. 27.
Indicator: *See*—
Order indicator.
Indicia to cellophane and the like, Applying. W. F. Grupe. 1,892,392; Dec. 27.
Individual watch hanger. A. Johnson. Des. 88,793; Dec. 27.
Induction reaction motor. F. C. Holtz. 1,892,553; Dec. 27.
Ingot. E. Gathmann. 1,892,569; Dec. 27.
Ingots, Casting. B. E. Eldred and H. C. Snook. 1,892,044; Dec. 27.
Insulating material, Heat and sound. E. R. Darling. 1,892,138; Dec. 27.
Integrating mechanism. H. H. Gorrie. 1,892,183; Dec. 27.
Integrating mechanism. R. E. Woolley. 1,892,184; Dec. 27.
Interlock for electrical circuits. W. D. Risher. 1,891,949; Dec. 27.
Internal combustion engine. J. A. H. Barkeij. 1,892,129; Dec. 27.
Internal combustion engine. M. J. A. de Malvin de Montaset and I. Johanson. 1,892,040; Dec. 27.
Internal combustion engine. A. Schwarz. 1,892,635; Dec. 27.
Internal combustion engine, Supercharging. F. Abell. 1,892,124; Dec. 27.
Ironing-board structure. H. L. Fischacher. 1,892,615; Dec. 27.
Ironing boards, Fastening. C. A. Sivon. 1,892,118; Dec. 27.
Joint: *See*—
Universal joint.
Joint for pavements, Expansion. W. R. Meadows. 1,892,659; Dec. 27.
Ketones from secondary alcohols, Production. H. Sandkuhl. 1,892,011; Dec. 27.
Kitchen appliance. W. F. Hackett. 1,891,925; Dec. 27.
Knife. M. Garrett. Des. 88,766; Dec. 27.
Knife hook adjusting sleeve. R. P. Barnes. 1,892,231; Dec. 27.
Knitting machine, Full fashioned. E. O. Nebel. 1,892,359; Dec. 27.
Label press. J. Bahelka. 1,892,647; Dec. 27.
Labels, Fabricating metallic. F. Weindel, jr. 1,892,478; Dec. 27.
Laboratory distillation apparatus. S. I. Charlesworth and A. W. Harris. 1,892,609; Dec. 27.
Lace. J. Dognin. Des. 88,761; Dec. 27.
Lamp, Convertible bed and table. L. Crane. 1,891,971; Dec. 27.
Lamp, Electric. K. R. Haley. Des. 88,782; Dec. 27.
Lamp, Test. S. I. Charlesworth, A. W. Harris, and C. P. Linder. 1,892,329; Dec. 27.
Landing and launching device for air vehicles. O. P. Gayman. 1,892,460; Dec. 27.
Lantern. G. F. Hitchcock. Re18,704; Dec. 27.
Lantern, Electric. F. W. Noffs. 1,892,075; Dec. 27.
Latch, Gate and door. J. E. Edgin. 1,892,613; Dec. 27.
Latch lubricator. J. R. Dooty. 1,892,043; Dec. 27.
Latch mechanism. J. E. Carr. 1,892,446; Dec. 27.
Latch, Window. W. Quick, S. E. Thomas, and F. W. Berwick. 1,892,498; Dec. 27.
Laundry press. W. Jack. 1,892,510; Dec. 27.
Lavatory, Shelf Back. G. Brain. Des. 88,748; Dec. 27.
Lead, Refining. W. F. Gross and C. N. Sappington. 1,891,978; Dec. 27.
Lecithin, Treatment of vegetable. A. Schwieger. 1,892,588; Dec. 27.
Level variation indicating apparatus. W. Meredith. 1,892,110; Dec. 27.
Light, Apparatus for controlling and directing. D. B. Gardner. 1,892,142; Dec. 27.
Lighter and case combined, Cigarette. S. Dominus. 1,892,450; Dec. 27.
Lighting fixture. W. Cook. Des. 88,756; Dec. 27.
Lighting fixture. R. V. Owen. Des. 88,819; Dec. 27.
Lightning arrester. D. L. Craddock. 1,892,567; Dec. 27.
Limb for toy figures. J. L. Kallus. 1,892,278; Dec. 27.
Lining, Brake. C. F. Ogren. 1,892,625; Dec. 27.
Lining for vessels, Protective. L. C. Huff. 1,892,433; Dec. 27.
Liquid dispenser. S. E. Nord and R. M. Millu. Des. 88,818; Dec. 27.
Liquid dispensing device. L. Thompson. 1,892,196; Dec. 27.
Liquid gauge. C. F. Wray. 1,892,418; Dec. 27.
Liquid heater. F. H. McCormick. 1,892,557; Dec. 27.
Liquids and absorbing the same by gases, Atomizing. P. D. Van Vliet. 1,892,293; Dec. 27.
Liquids and impregnating gases therewith, Atomizing. P. D. Van Vliet. 1,892,294; Dec. 27.
Liquor containing proteins, starches and fats, Treating chocolate. F. P. Dengler. 1,892,449; Dec. 27.
Liquor, Treatment of a sodium carbonate-sodium sulphid residual. L. Bradley and E. P. McKeefe. 1,892,100; Dec. 27.
Lister and dam forming device, Combined. C. T. Peacock. 1,892,002; Dec. 27.
Loading attachment for trucks. G. Lambert. 1,892,243; Dec. 27.
Lock: *See*—
Hasp lock. Permutation lock.
Nut lock. Sash lock.
Lock. C. Kemp. 1,892,512; Dec. 27.
Lock and burglar alarm, Combination window sash. W. D. England and C. B. Chaffee. 1,892,336; Dec. 27.
Lock for meter box covers. L. J. Taylor. 1,891,961; Dec. 27.
Lock for spare wheels or tires, Fenderwell. F. A. Smith. 1,892,192; Dec. 27.
Lock mechanism. J. E. Carr and J. Knell. 1,892,447; Dec. 27.
Lock plate. H. Lipschitz. Des. 88,802; Dec. 27.
Locking the hood of the motor and the spare wheel. Attachment for automobiles for. I. de la Borbolla. 1,892,483; Dec. 27.
Locomotive. E. A. Turner. 1,892,372; Dec. 27.
Locomotive crosshead and guide construction. D. S. Ellis. 1,891,973; Dec. 27.
Loom for weaving. R. Cotton. 1,892,299; Dec. 27.
Loom, Reed. G. E. Nordstrom. 1,891,944; Dec. 27.
Loom stopping mechanism. V. Lindsjo. 1,892,062; Dec. 27.
Looms, Warp stop motion for. E. Egli. 1,892,333; Dec. 27.
Looms, Weft feeler for automatic. E. Egli. 1,892,334; Dec. 27.
Loud-speaker apparatus. W. C. Bidwell and A. L. Cutler. 1,891,968; Dec. 27.
Lubricating device for internal combustion engines. C. R. Waselge. 1,892,089; Dec. 27.
Lubricating system. D. W. Davis and J. P. Laux. 1,891,972; Dec. 27.
Lubricating system for hydrocarbon engines and the like. C. A. Winslow. 1,892,443; Dec. 27.
Lubrication system. A. A. Andrake. 1,892,031; Dec. 27.
Lubricator: *See*—
Latch lubricator.
Machine for coating paper, fabric, or the like. T. H. L. Dixon. 1,892,484; Dec. 27.

Machine for dividing and working dough. B. Regel. 1,892,633; Dec. 27.
Machine for producing bolts, screws, and the like. L. S. Burbank. 1,892,445; Dec. 27.
Machine for producing coil wire structures. G. C. Burd and O. Bratz. 1,892,501; Dec. 27.
Machinery for making fishhooks, Automatic. M. Topp. 1,892,120; Dec. 27.
Mandrel for carpet rolling machines. N. W. Hoffman. 1,891,984; Dec. 27.
Manifolding machine, Autographic. L. R. Hanna. 1,892,550; Dec. 27.
Marking machine for sleeve bearings. J. J. Ward. 1,892,545; Dec. 27.
Massage device. R. J. Metzler. 1,892,068; Dec. 27.
Mast distributing apparatus. J. E. Bushnell. 1,891,899; Dec. 27.
Material impregnated with cellulose regenerated from viscose or other cellulosic solutions, Apparatus for the production and manufacture of. A. H. Kilner. 1,892,579; Dec. 27.
Matter in oil wells, pipe lines and flow lines, Preventing accumulation of solid. M. De Groote. 1,892,205; Dec. 27.
Mattress and its manufacture. O. M. Burton and F. R. Zimmerman. 1,892,203; Dec. 27.
Meat, Apparatus for smoking. A. N. Benn. 1,891,906–7; Dec. 27.
Metal articles, Making thin walled. B. Stockfleth. 1,892,173; Dec. 27.
Metal sheet stacking machine. J. W. Steele and A. Deitch. 1,892,590; Dec. 27.
Metal, Testing sheet. E. Siebel. 1,892,013; Dec. 27.
Metals, Pickling ferrous. J. R. McElhaney. 1,892,312; Dec. 27.
Meter: *See*—
Gas meter.
Meter. J. W. Ledoux. 1,892,468; Dec. 27.
Microscope stand. M. Berger. 1,892,131; Dec. 27.
Milk cooling apparatus. R. R. Clayton. 1,892,097; Dec. 27.
Mill: *See*—
Rolling mill.
Mill rolls, Method and apparatus for cooling. S. W. Alderfer. 1,892,028; Dec. 27.
Mining. D. McCrindle and J. B. Medill. 1,892,159; Dec. 27.
Mirror bracket, Rear view. F. G. Withrow. 1,891,966; Dec. 27.
Mirror supporting and adjusting device. G. C. Peterson. 1,892,219; Dec. 27.
Mold for welding rails. E. F. Begtrup. 1,892,376; Dec. 27.
Mold opening apparatus. G. Goebel. 1,891,976; Dec. 27.
Molding composition and process. E. R. Dillehay. 1,891,918; Dec. 27.
Mop cleaning device. H. F. Reynolds. 1,892,494; Dec. 27.
Motion transmitting mechanism. E. T. Johnson. 1,892,108; Dec. 27.
Motor and controlling the speed thereof, Alternating current. F. C. Holtz. 1,892,552; Dec. 27.
Motors, Testing. P. N. Elderkin. 1,892,487; Dec. 27.
Mounting for a panel. L. G. Hunter. 1,891,932; Dec. 27.
Mounting for panels. L. G. Hunter. 1,892,104; Dec. 27.
Mounting for steering wheels of vehicles. A. Arato. 1,892,479; Dec. 27.
Mower, Hedge and lawn. N. T. Lancaster. 1,892,620; Dec. 27.
Muffler. E. A. Sagui. 1,892,009; Dec. 27.
Mulling apparatus. H. F. Rose. 1,892,080; Dec. 27.
Multiplication mechanism for calculators, Automatic. H. Enders. 1,892,614; Dec. 27.
Nest, Hen's. W. T. Esch. 1,892,235; Dec. 27.
Nitro derivative of butylcymene and preparing the same. H. Barbier. 1,892,128; Dec. 27.
Nut lock. J. C. Thompson. 1,892,119; Dec. 27.
Nuts, Treating edible. C. K. and J. E. Bissell. Re18,703; Dec. 27.
Oil, Cracking hydrocarbon. C. P. Dubbs. 1,892,452; Dec. 27.
Oil, Extracting fatty. M. Sato and C. Ito. 1,892,366; Dec. 27.
Oil, Process and apparatus for treating hydrocarbon. J. C. Morrell and J. G. Alther. 1,892,437; Dec. 27.
Oil seal joint for compressor units. P. W. Des Roches. 1,892,332; Dec. 27.
Oil, Treating crude. J. B. Jennings and G. P. Estes. 1,891,987; Dec. 27.
Oil, Treating hydrocarbon. R. E. Manley. 1,892,283; Dec. 27.
Oils and fats, Apparatus for dispensing. P. Huber. 1,892,344; Dec. 27.
Oils, Conversion of hydrocarbon. W. R. Howard. 1,892,432; Dec. 27.
Oils, Distillation and conversion of mineral. E. W. Rembert. 1,892,534; Dec. 27.
Oils, Process and apparatus for conversion of hydrocarbon. R. Cross. 1,892,088; Dec. 27.
Oils, Treating mineral. R. K. Stratford. 1,892,655; Dec. 27.
1-(para amino-phenyl)-2-methylamino-propanol-1, Production of. M. Oberlin. 1,892,532; Dec. 27.
Opener, Electric can. E. L. McCollom. 1,892,582; Dec. 27.
Optic projection. N. Miller. 1,891,942; Dec. 27.
Order indicator. M. F. Rose. 1,892,163; Dec. 27.
Ores, Decomposing titanium. J. Brode and G. Kalb. 1,891,911; Dec. 27.
Organic compounds containing oxygen from carbon monoxide and halogenated nonaromatic hydrocarbons, Production of. H. Hopff and M. Dunkel. 1,891,930; Dec. 27.
Organic compounds of the antaraquinone series, Preparation of. P. H. Groggins. 1,892,302; Dec. 27.
Oven, Heat treating. C. A. Herbst. 1,891,981; Dec. 27.
Ozonizer. A. W. Conley. 1,891,916; Dec. 27.
Packing for joints. N. Hubbard. 1,892,618; Dec. 27.
Packing material. F. D. Gray. 1,892,527; Dec. 27.
Packing, Piston. F. C. Heckroth. 1,892,189; Dec. 27.
Paper, Manufacture of. H. R. Rafton. 1,892,471–2; Dec. 27.
Paper wrapping strip, Treating. J. A. Kennedy. 1,892,059; Dec. 27.
Pectin from pectin materials, Extracting. P. B. Myers and G. L. Baker. 1,892,536; Dec. 27.
Pedestal desk. H. G. Parker. Des. 88,820; Dec. 27.
Pediform article. W. J. De Witt. 1,892,300; Dec. 27.
Pelt or fur stretcher. G. M. Colf. 1,892,137; Dec. 27.
Pen and pencil clip, Fountain. J. B. Platt and I. D. Tefft. Des. 88,821; Dec. 27.
Pen, Self-filling fountain. G. Tibaldi. 1,892,369; Dec. 27.
Pencil and making the same, Lead. N. Gonsales. 1,892,508; Dec. 27.
Pencil, Mechanical. W. E. Guyot. 1,892,145; Dec. 27.
Percussion instrument. L. Sansone and C. Franco. 1,892,223; Dec. 27.
Permutation lock. E. B. Stone. 1,892,290; Dec. 27.
Petroleum oils, Process and apparatus for cracking. C. P. Dubbs. 1,892,451; Dec. 27.
Phonograph clutch. V. L. Frykman. 1,892,269; Dec. 27.
Photographic images, Modifying. A. W. Cornell. 1,892,099; Dec. 27.
Photographic three-lens objective. R. Richter. 1,892,162; Dec. 27.
Piano. F. J. W. Weiser. 1,892,296; Dec. 27.
Picture frame. R. Singer and O. J. Agnini. 1,892,014; Dec. 27.
Picture screen, Moving. B. DeGeronimi. 1,892,424; Dec. 27.
Picture transmission. F. Tuczek. 1,892,371; Dec. 27.
Pipe: *See*—
Smoking pipe.
Pipe device, Smoking. A. J. Mauro. 1,892,436; Dec. 27.
Piston, Alloy. C. R. Butler. 1,891,914; Dec. 27.
Piston for slush pumps and the like. C. L. Tyler. 1,892,022; Dec. 27.
Pitcher. C. M. Evans. Des. 88,762; Dec. 27.
Pitman. J. G. Miller. 1,892,069; Dec. 27.
Planters, Apparatus for seed. J. W. Randolph. 1,892,250; Dec. 27.
Plaque. P. Beneduce. Des. 88,744; Dec. 27.
Plastic composition and making same. W. L. Semon. 1,892,167; Dec. 27.
Plate or similar article. Y. Bums. Des. 88,754; Dec. 27.
Platen for printing machines. P. J. Clark. 1,892,186; Dec. 27.
Pliers. N. J. Shekerjian. 1,892,082; Dec. 27.
Plow. N. E. Barnes. 1,892,230; Dec. 27.
Plow, One-way. R. J. Altgelt and C. H. Gemberling. 1,892,199; Dec. 27.
Plow, Reversible rotary. L. Dufour. 1,892,485; Dec. 27.
Plug for locks, Sectional key. F. H. Best. 1,892,419; Dec. 27.
Plug, Fuse. J. M. Rummler. 1,891,951; Dec. 27.
Plug, Spark. J. Markowski. 1,892,355; Dec. 27.
Plumb and level. J. Mayes. 1,892,622; Dec. 27.
Polarization diversity reception. W. Runge. 1,892,221; Dec. 27.
Pouring device. J. F. Tichy. 1,892,595; Dec. 27.
Powdered fuel furnace. H. J. Kerr. 1,892,662; Dec. 27.
Power transmission coupling. J. Bibby. 1,891,969; Dec. 27.
Power transmission mechanism. E. S. Hall. 1,891,927; Dec. 27.
Power transmission mechanism. C. E. Henriod. 1,892,616; Dec. 27.
Press: *See*—
Label press. Printing press.
Laundry press.
Press. J. W. Bishop. 1,892,134; Dec. 27.
Pressure gauge. J. Wahl and O. Meiser. 1,892,088; Dec. 27.
Printing press. J. E. Lee. 1,892,154; Dec. 27.
Projectile. R. E. Jones. 1,892,152; Dec. 27.
Propeller, Adjustable. T. Burson and C. W. Jenkins. 1,892,035; Dec. 27.
Propeller, Variable and reversible pitch. W. M. Drennon. 1,892,167; Dec. 27.
Protecting device for ball bearings. A. Kegresse. 1,892,465; Dec. 27.
Protector, Hose. H. M. Yost. 1,892,122; Dec. 27.
Proteinases free from peptidases, Preparing. W. Neugebauer. 1,892,247; Dec. 27.
Puddling, Method and apparatus for. C. Hart. 1,892,271; Dec. 27.
Pulley, Expansion. R. E. Rundell. 1,892,252; Dec. 27.
Pulsator for milking machines. F. G. Hodsdon. 1,891,983; Dec. 27.

Pump, Combination manual and coin automatic. L. E. Rush. 1,891,950; Dec. 27.
Pump, compressor, engine and the like. C. Hughes. 1,892,345; Dec. 27.
Pump operating part, Fuel. A. M. Babitch. 1,891,902; Dec. 27.
Rack: *See*—
Display rack.
Rack for holding newspapers or the like. G. F. Reinagel. Des. 88,825; Dec. 27.
Radiator. A. M. Mertsanoff. 1,892,216; Dec. 27.
Radiator and fender for vehicles, Combined. J. R. Hughes. Des. 88,792; Dec. 27.
Razor, Safety. T. C. Sheehan. 1,892,256; Dec. 27.
Record with a constant linear speed, Device playing. G. Saint Martin. 1,892,322; Dec. 27.
Recorder: *See*—
Time recorder.
Reel: *See*—
Clothesline reel.
Refrigerating apparatus. H. B. Hull. 1,892,346; Dec. 27.
Refrigeration system. E. B. Miller. 1,892,407; Dec. 27.
Refrigerator. J. Beck. 1,891,905; Dec. 27.
Regulating, controlling, and switching means for electrical train lighting and like installations, Automatic. A. E. Honey. 1,892,617; Dec. 27.
Reroller for cigar machines. W. H. Schussler. 1,892,255; Dec. 27.
Resin and producing the same, Diphenyl. R. L. Jenkins and J. A. Sikarski. 1,892,400; Dec. 27.
Resin, Noncrystalline highly chlorinated. R. L. Jenkins. 1,892,398; Dec. 27.
Resins, Producing clear transparent chlorinated diaryl. R. L. Jenkins and J. A. Sikarski. 1,892,399; Dec. 27.
Resins, Rapid drying synthetic. C. Ellis. 1,892,425; Dec. 27.
Resistance unit. F. H. Bullinger. 1,892,202; Dec. 27.
Rifle, Semiautomatic. J. C. Garand. 1,892,141; Dec. 27.
Rim and lug for traction wheels. J. J. Euken. 1,892,207; Dec. 27.
Rim, Demountable wheel. F. W. Baker. 1,892,127; Dec. 27.
Ring spinning and ring doubling machine having a movable spindle rail. H. O. Hess. 1,892,343; Dec. 27.
Rock drill. E. G. Gartin. 1,892,549; Dec. 27.
Rocker arm, Lubricated. E. J. Knapp. 1,892,240; Dec. 27.
Rods, Making ground. F. B. Nimick. 1,891,943; Dec. 27.
Roller lift, Mechanical. F. J. Burns. 1,891,913; Dec. 27.
Rolling mill. B. R. Shover. 1,891,955; Dec. 27.
Roof construction. L. G. Smith. 1,892,637; Dec. 27.
Rope, Guy. R. T. Dawes. 1,892,611; Dec. 27.
Rope, Manufacture of dead lay wire. A. S. Rairden. 1,892,632; Dec. 27.
Rubber and producing the same, Decorated molded. J. Stein. 1,892,085; Dec. 27.
Rule, Flexible slide. H. Seebase. 1,892,012; Dec. 27.
Rust, scale, and sediment from the interior of metal surfaces, Removing. F. C. Battistella. 1,892,093; Dec. 27.
Safety appliance for airplanes. T. B. Lyles. 1,892,556; Dec. 27.
Safety heater. T. Babin. 1,892,563; Dec. 27.
Safety starter switch. E. J. Poole. 1,892,249; Dec. 27.
Safety switch. S. W. Manger. 1,891,939; Dec. 27.
Salter. P. E. Pearson. 1,892,627; Dec. 27.
Salts from potassium chloride, Manufacture of postassium. L. Hackspill, D. Claude, L. E. Andres, and P. A. A. Rollet. 1,892,341; Dec. 27.
Salts, Method and apparatus for dissolving. T. F. Courthope and W. H. McGuire. 1,892,331; Dec. 27.
Sandal. W. H. Graves. Des. 88,777; Dec. 27.
Sash-lock, Automatic window. H. E. McAllister. 1,891,940; Dec. 27.
Scale. T. C. Arnold. 1,892,032; Dec. 27.
Scale. F. E. Carlson. 1,892,264; Dec. 27.
Screen: *See*—
Picture screen.
Screen reenforcement, Window. A. F. Nye. 1,892,001; Dec. 27.
Screen stencil frame. J. Flockhart. 1,892,268; Dec. 27.
Screw propeller. E. A. L. Thayer. 1,892,182; Dec. 27.
Seadrome. E. R. Armstrong. 1,892,125; Dec. 27.
Seal for floating decks. A. M. Griffin. 1,892,144; Dec. 27.
Sealing device for pneumatic tires and other gas filled containers, Puncture. M. J. Galvin. 1,891,975; Dec. 27.
Seat: *See*—
Chair seat.
Securing means for receiving receptacle for pens. H. L. Blackman. 1,892,499; Dec. 27.
Sedimentation device. S. I. Bousman. 1,892,648; Dec. 27.
Setting frame. C. Frohlich. 1,892,507; Dec. 27.
Sewing machine attachment. R. J. Sailer. 1,892,010; Dec. 27.
Sewing machine for stitching over fastener means. L. Roseman. 1,892,164; Dec. 27.
Shaker conveyer engine. T. G. Nyborg. 1,891,945; Dec. 27.
Sharpener, Drill. G. C. Pearson, L. E. Croft, and I. S. Carpenter. 1,882,287; Dec. 27.
Shears. D. Buccicone and R. E. Peterson. 1,892,327; Dec. 27.
Sheet jogging and registering machine. J. W. Steele and A. Deitch. 1,892,591; Dec. 27.
Sheets and plates, Treating ferrous. J. C. Whetzel. 1,892,560; Dec. 27.
Sheller: *See*—
Corn sheller.
Shock insulating device, Making a. E. R. Evans. 1,892,505; Dec. 27.
Shoe. J. E. Andrews. Des. 88,742–3; Dec. 27.
Shoe sole. F. D. Fowler. Des. 88,763; Dec. 27.
Shuttle. F. E. Douglas. 1,892,387; Dec. 27.
Side frame. M. H. Martin. 1,891,938; Dec. 27.
Signal. S. E. B. Soderberg. 1,892,016; Dec. 27.
Signaling, High frequency. H. Chireix. 1,892,383; Dec. 27.
Sled, Aeroplane landing. R. I. Markey. 1,892,064; Dec. 27.
Slackline excavator. J. H. Street. 1,892,086; Dec. 27.
Slicer, Vegetable. H. W. Moore. 1,891,997; Dec. 27.
Slip mechanism. N. W. Wickersham. 1,892,442; Dec. 27.
Smoking pipe. F. L. Warnke. 1,892,324; Dec. 27.
Softening box toe stiffeners, Apparatus for. H. F. Rose. 1,892,079; Dec. 27.
Sound pick-up device. H. F. Olson and J. Weinberger. 1,892,645; Dec. 27.
Sound waves, System responsive to the energy density of. I. Wolff. 1,892,646; Dec. 27.
Sound waves, System responsive to the energy flow of. H. F. Olson. 1,892,644; Dec. 27.
Spark control. M. A. Beatty. 1,892,600; Dec. 27.
Speed of internal combustion engines, more particularly of tractor engines or the like, Automatic device for limiting the. T. Zerbi. 1,892,597; Dec. 27.
Spinning machine equipment. A. Clocker and G. F. MacFarlane. 1,892,098; Dec. 27.
Spiral spring, Conical. S. Gross. 1,892,339; Dec. 27.
Spool. W. C. Mills. 1,892,356; Dec. 27.
Spray head, Automatic. C. H. Bills and G. G. Griswold. 1,891,909; Dec. 27.
Spreader, Mobile. F. D. Coppock. 1,892,566; Dec. 27.
Spring: *See*—
Spiral spring.
Spring and shock absorber suspension, Vehicle. A. F. Hickman. 1,892,305; Dec. 27.
Spring suspension for motor vehicles. P. Lemaigre. 1,892,660; Dec. 27.
Stack for producing forced draft. H. M. Wolf. 1,892,417; Dec. 27.
Stand: *See*—
Microscope stand.
Starter, Engine. M. B. Jackson and K. M. Clipsham. 1,892,056; Dec. 27.
Steel columns, Rolling. L. J. Caton. 1,892,608; Dec. 27.
Stick, Tympani. B. Vitto. 1,892,416; Dec. 27.
Stoker. N. M. Lower. 1,892,353; Dec. 27.
Stoker, Locomotive. P. A. Ketchpel. 1,892,351; Dec. 27.
Stoker mechanism. F. C. Pickard. 1,892,361; Dec. 27.
Stoker, Outside feed. A. M. Hunt. 1,892,394; Dec. 27.
Stop motion mechanism for drawing frames used in the treatment of fibrous substances. A. F. Parker. 1,892,116; Dec. 27.
Storage battery. R. D. Shipp. 1,892,288; Dec. 27.
Strainer. P. S. Russel. 1,892,190; Dec. 27.
Strainer, Sink. C. M. Carlson. 1,892,481; Dec. 27.
Stretcher, Fur. O. L. Nelson. 1,892,624; Dec. 27.
Stuffing box. K. Bergskaug. 1,892,377; Dec. 27.
Styrene, Preparation of. G. L. Dorough. 1,892,386; Dec. 27.
Substitution products of dibensopyrenequinones. M. A. Kunz, K. Koeberle, and E. Berthold. 1,892,242; Dec. 27.
Sunshade for automobiles. B. F. Walker. 1,892,558; Dec. 27.
Supply installation for central chassis lubrication. J. Bijur. 1,892,133; Dec. 27.
Support, Chassis. G. F. Yevseyeff. 1,892,198; Dec. 27.
Support, Dispensing tube. J. F. and H. Smith. 1,892,368; Dec. 27.
Support for projectors, Mirror. E. C. Richardson and P. Mole. 1,892,438; Dec. 27.
Support for saxophones and similar musical instruments. E. V. Powell. 1,891,947; Dec. 27.
Support for seats. A. Brevick. 1,892,380; Dec. 27.
Support, Frame. J. A. Wernsten. 1,892,023; Dec. 27.
Supporting device for kitchen utensils and the like. F. W. Bleckley. 1,892,500; Dec. 27.
Sweeper, Carpet. W. H. Kenyon. 1,892,308; Dec. 27.
Switch: *See*—

Air-brake switch.	Safety starter switch.
Alarm switch.	Safety switch.
Automatic switch.	Time switch.
Electric snap switch.	Vacuum switch.
Electric switch.	

Switch box hanger. F. J. Nyberg. 1,892,286; Dec. 27.
Switch device, Electric. R. L. Nafziger. 1,891,998; Dec. 27.
Switch for collating machines, Stop. H. V. Ashby. 1,892,033; Dec. 27.
Table: *See*—
Fracture operating table.
Table. L. E. Tyson. 1,892,373; Dec. 27.
Table. L. J. Viehmann. 1,892,656; Dec. 27.
Table and rack, Combined book. J. H. Paalman. 1,892,408; Dec. 27.
Tag, Safety price. J. W. Hutt. 1,891,933; Dec. 27.
Tag, Shell. J. U. Lester. 1,892,580; Dec. 27.

Talking machine of the magazine player type. W. R. Oyston. 1,892,626; Dec. 27.
Tank for refrigerator cars, Ice and brine. H. H. McKee. 1,892,531; Dec. 27.
Tank system, Reserve pressure. C. Sanders. 1,892,535; Dec. 27.
Tanning process. O. Röhm, H. Fischer and H. Hess. 1,892,410; Dec. 27.
Tar and simultaneously producing high and low melting point pitches, Method and apparatus for distilling. S. P. Miller. 1,892,469; Dec. 27.
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Throw eccentric mechanism, Variable. F. L. Davis, jr. 1,892,504; Dec. 27.
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Time switch. W. E. Porter. 1,891,946; Dec. 27.
Timing device. C. Stansbury and G. C. Brown. 1,892,017; Dec. 27.
Tire. A. C. Gunsaulus. Des. 88,780–1; Dec. 27.
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Tube coupling. H. Schmieg. 1,892,587; Dec. 27.
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Tubes and sheets of lanterns, Attaching the. R. P. Throne. 1,892,292; Dec. 27.
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Wall construction. P. Betsler. 1,892,605; Dec. 27.
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Wheel dressing mechanism. J. Edgar. 1,892,388; Dec. 27.
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U. S. GOVERNMENT PRINTING OFFICE: 1932

Patents Nos. 1,889,739 to 1,890,441

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THE OFFICIAL GAZETTE OF THE United States Patent Office

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Total	1,068	

Adjudicated Patents

(D. C. N. Y.) Krueger patent, No. 1,194,752, for moistening device for gummed stickers and labels, claim 12 *Held* invalid and claims 14 and 15 *Held* valid and infringed. *Better Packages* v. *L. Link & Co.*, 1 F. Supp. 132.

(D. C. N. Y.) Finucane patent, No. 1,676,485, for leader-pipe strap, *Held* valid and infringed. *Finucane* v. *Apex Gutter Hanger Corporation*, 1 F. Supp. 228.

(D. C. N. Y.) Krueger patent, No. 1,782,123, for package sealer, claims 2, 3, 8, 9, 10, 12, 17, 25, 28, and 30 *Held* invalid. *Better Packages* v. *L. Link & Co.*, 1 F. Supp. 132.

(D. C. N. Y.) Christman and Johnson reissue patent, No. 18,272, for piston-valve, claims 1 and 5 *Held* not infringed. *Christman* v. *New York Air Brake Co.*, 1 F. Supp. 211.

(D. C. N. Y.) Krueger reissue patent, No. 18,822, for tape serving device, claims 1–8 and 28 *Held* valid and infringed. *Better Packages* v. *L. Link & Co.*, 1 F. Supp. 132.

Interference Notices

U. S. Patent Office, *Washington, Nov. 9, 1932.*

Aenne Harteneck, her assigns or legal representatives, take notice:

An interference having been declared by this Office between the patent granted October 6, 1931, No. 1,826,467, to Aenne Harteneck, I. G. Farbenindustrie Aktiengesellschaft, Ludwigshafen-on-the-Rhine, Germany, and an application for patent filed by Leo Wallerstein, care of Wallerstein Company, Inc., 171 Madison Ave., New York, N. Y., and a notice of such declaration sent by registered mail to said Harteneck at the said address having been returned by the post office undeliverable, notice is hereby given that unless said Harteneck, her assigns or legal representatives, shall enter an appearance therein within 20 days from the first publication of this order the interference will be proceeded with as in case of default. This notice will be published in the Official Gazette for three consecutive weeks.

WM. A. KINNAN,
First Assistant Commissioner.

U. S. Patent Office, *Washington, Nov. 11, 1932.*

George G. Brown, his assigns or legal representatives, take notice:

An interference having been declared by this Office between an application for patent filed by George C. Brown, formerly of 1221 N St. N. W., and more recently of 1230 11th St. N. W., Washington, D. C., and an application for patent filed by Arthur Hungerford, 15 Dun Building, Buffalo, N. Y., and the Office having failed to secure service on said Brown, notice is hereby given that unless said Brown, his assigns or legal representatives, shall enter an appearance therein within 20 days from the first publication of this order the interference will be proceeded with as in case of default. This notice will be published in the Official Gazette for three consecutive weeks.

WM. A. KINNAN,
First Assistant Commissioner.

Interference Defined

Rule 98. An interference is a proceeding instituted for the purpose of determining the question of priority of invention between two or more parties claiming substantially the same patentable invention. In order to ascertain whether any question of priority arises the Commissioner may call upon any junior applicant to state in writing the date when he conceived the invention under consideration. All statements filed in compliance with this rule will be returned to the parties filing them. In case the applicant makes no reply within the time specified, not less than ten days, the Commissioner will proceed upon the assumption that the said date is the date of the oath attached to the application. The fact that one of the parties has already obtained a patent will not prevent an interference, for, although the Commissioner has no power to cancel a patent, he may grant another patent for the same invention to a person who proves to be the prior inventor.

Condition of Applications Under Examination at Close of Business November 19, 1932

Room No.	(Total number of applications awaiting action, excluding Trade-Mark Division, 62,575; Trade-Mark Division, 1,049. Oldest new case, May 28, 1932; oldest amended, May 21, 1932.) DIVISIONS, EXAMINERS, AND SUBJECTS OF INVENTIONS	Oldest new application and oldest action by applicant awaiting office action: New	Amended	No. of applications awaiting action
6234	1. LOEFFLER, F. A., Closure Operators; Fences; Gates; Tillage; Handling Implements	Sept. 8	Oct. 6	256
6708	2. HERRMANN, D. (Act.), Fishing and Trapping; Dairy; Animal Husbandry; Presses; Tobacco; Velocipedes.	July 22	July 23	861
4086	3. LINDSEY, A., Heating; Metal Founding; Metallurgy; Metal Treatment; Electric Furnaces	Aug. 20	Aug. 23	617
7023	4. MERRITT, A. D., Conveyers; Hoists; Handling Apparatus; Excavating	Aug. 27	Sept. 20	298
3030	5. MACNAB, J. F., Harvesters; Music; Acoustics; Sound Recording; Knotters	July 27	Aug. 13	388
4088C	6. LEWERS, A. M., Carbon Chemistry	June 1	June 4	1,846
5725	7. JARBOE, C. G., Optics; Photography	July 10	July 10	1,290
7514	8. ADAMS, F. L., Beds; Chairs; Kitchen and Table Articles; Racks and Cabinets	July 20	July 20	709
4034	9. ADAMS, R. E., Pumps; Fluid and Fluid-Current Motors	Aug. 20	Sept. 12	557
6013	10. HUNTER, O. F., Land Vehicles—Animal Draft Appliances, Bodies and Tops	June 29	July 6	697
3987B	11. BENHAM, E. V., Boots, Shoes, and Leggins; Button, Eyelet, and Rivet Setting; Harness; Leather Manufactures; Nailing and Stapling; Whip Apparatus.	July 27	July 28	896
7701	12. HENRY, C. C., Machine Elements	Aug. 9	Aug. 16	396
5896	13. BORLIK, F. J., Gear Cutting, Milling, and Planing; Metal Drawing; Metal Forging and Welding; Metal Rolling; Metal Working; Needle and Pin Making; Turning; Boring and Drilling.	July 22	July 26	950
5907	14. BRUMBAUGH, N. J., Farriery; Metal Bending; Metal Tools and Implements, Making; Sheet Metal Ware, Making; Wire Fabrics; Wire Working; Metal Working, Blanks and Processes.	Aug. 4	Aug. 11	646
4907	15. WORRELL, L. W., Glass; Plastic Block and Earthenware Apparatus; Plastics	June 30	June 30	1,462
5612	16. SPENCER, C. J., Telegraphy; Telephony	Aug. 9	Aug. 9	723
5701	17. ARMSTRONG, H. (Act.), Label Pasting and Paper Hanging; Ornamentation; Paper Manufactures; Printing; Type Casting; Sheet-Material Associating or Folding; Sheet or Web Feeding; Type Setting.	May 26	May 26	1,383
4612	18. PORTER, M. E., Motors, Expansible-Chamber Type; Power Plants; Speed-Responsive Devices	Aug. 12	Aug. 13	509
4096	19. KENNEDY, A. R., Furnaces and Stoves; Heating Systems; Fuel Burners	May 24	May 24	1,737
6613	20. GROVE, S. D., Miscellaneous Hardware; Closure Fasteners; Locks and Latches; Safes; Undertaking	Aug. 23	Aug. 23	440
7733	21. THOMPSON, T. J., Textiles; Cloth Finishing	July 18	July 21	835
5734	22. RINGLE, D. (Act.), Aeronautics; Firearms, Ordnance, and Explosive Devices; Air Guns, Catapults, and Targets; Boats and Buoys; Ships; Marine Propulsion.	Aug. 23	Sept. 9	384
7902	23. GROESBECK, W. D., Coin Handling; Recorders; Registers	June 8	May 27	807
5923	24. DURAS, C. O., Apparel; Apparel Apparatus; Garment Supporters; Sewing Machines	Sept. 13	Sept. 10	515
5709	25. BLAKELY, C. F., Agitating; Buttebring; Classifying Solids; Centrifugal-Bowl Separators; Mills; Threshing; Vegetable and Meat Cutters and Comminutors.	June 20	June 20	1,301
5903	26. ADAMS, W. M. (Act.), Electricity, Generation; Motive Power	June 20	June 21	777
5705	27. CLARK, W. N. (Act.), Brushing, Scrubbing, and Cleaning; Washing Apparatus	Aug. 4	Aug. 4	708
4928	28. BENSON, A. R., Internal-Combustion Engines	June 4	May 21	1,235
5052	29. MORRIS, B. N., Woodworking; Tools; Compound Tools; Furniture; Metal Working, Assembling	May 31	June 7	670
4074	30. SHIPMAN, J. L., Automatic Temperature and Humidity Regulation; Illuminating Burners; Illumination; Thermostats and Humidostats.	July 22	July 25	737
4716	31. HOLMES, W. N., Gas, Heating and Illuminating; Mineral Oils	June 20	June 20	1,399
4086	32. BARTHOLOMEW, J. A., Gas and Liquid Contact Apparatus; Heat Exchange; Gas Separation	Aug. 4	Aug. 10	697
6006	33. WYMAN, W. L., Bridges; Masonry and Concrete Structures; Metallic Building Structures; Roads and Pavements; Roofs; Wooden Buildings.	May 23	May 24	2,047
6625	34. SAPERSTEIN, S. (Act.), Electricity, Transmission to Vehicles; Pneumatic Dispatch; Railways, Rolling Stock, Switches, and Signals; Store Service; Vehicle Fenders; Track Sanders.	June 20	June 22	797
3600	35. REYNOLDS, E. C., Buckles, Buttons, Clasps, Etc.; Card and Sign Exhibiting; Signals; Toilet	Sept. 27	Oct. 4	307
7024	36. McFAYDEN, A. D. (Act.), Automatic Weighers; Geometrical and Measuring Instruments; Force Measuring.	May 28	June 2	1,485
5889	37. WEAVER, M. E., Electricity, Circuit Makers and Breakers	July 5	July 13	864
7510	38. KRAFFT, C. F., Earth Boring; Hydraulic and Earth Engineering; Mining, Quarrying, and Ice Harvesting; Stoneworking; Wells.	Sept. 24	Sept. 7	105
4374	39. WHITNEY, F. J. (Act.), Fluid-Pressure Regulators; Multiple Valves; Valves; Water Distribution	May 28	May 28	1,265
7860	40. OBERLIN, J. J., Receptacles	July 2	July 2	2,033
6062	41. WHITNEY, M. L., Land Vehicles, Wheels, and Axles: Resilient Tires and Wheels; Wheel Substitutes; Railway Draft Appliances; Spring Devices.	Sept. 1	Sept. 21	443
5882	42. CUTTING, H. O., Electric Signaling	June 6	May 28	1,228
4896B	43. KLINGE, E. F., Baths, Closets, Sinks, and Spittoons; Sewerage; Electricity, Medical and Surgical; Medicines; Surgery; Dentistry; Artificial Body Members.	June 22	June 22	1,506
4087B	44. SHAFFER, C. H., Dispensing; Filling and Closing Portable Receptacles; Refrigeration	May 26	May 23	1,653
7097	45. HILL, H. D., Pulleys and Shafting; Lubrication; Bearings and Guides	Aug. 15	Aug. 15	777
4613	46. TAYLOR, M., Evaporators; Fluid Sprinkling; Fire Extinguishers; Boilers	Aug. 4	Aug. 5	476
7800	47. BARKER, H., Clutches and Power Stops; Brakes; Motors	June 21	June 20	1,816
5731	48. ROEPKE, O. B., Electricity, General Applications	July 19	July 16	607
7726	49. SHEFFIELD, E. L., Check-Controlled Apparatus; Domestic Cooking Vessels; Ventilation; Driers; Liquid Separation or Purification.	June 2	June 2	1,389
4701	50. BLAKE, C. L., Plastic and Liquid Coating Compositions; Coating	May 23	May 24	2,009
5628	51. BACKUS, C. D., Radiant Energy	July 13	July 13	1,044
7709	52. KNOTTS, M. E., Supports; Chucks; Joint Packing; Pipe and Rod Joints or Couplings; Tool-Handle Fastenings.	Aug. 27	Sept. 9	595
6907	53. PECK, M. E., Books; Manifolding; Printed Matter; Stationery, Educational Appliances; Paper Files and Binders; Tents, Canopies, Umbrellas, and Canes; Curtains, Shades, and Screens.	Sept. 7	Sept. 2	415
5874	54. WAITE, W. E., Electric Lamps; Vapor Electric Devices; Space Discharge Tubes; Light Sensitive Circuits.	June 20	June 20	1,031
6887	55. BOWEN, S. T.—{Bread, Pastry, and Confection Making; Cutlery Designs	Aug. 29 Oct. 26	Aug. 31 Nov. 3	316 208
4726	56. PORTER, F. J., Electrochemistry; Laminated Fabrics; Paper Making; Substance Preparation	June 14	May 21	1,231
3623	57. NICOLSON, G. D. G., Cutting and Punching; Bolt, Nut, Rivet, Nail, Screw, Chain, and Horse-Shoe Making; Driven and Screw Fastenings; Jewelry; Nut and Bolt Locks.	July 20	July 20	643
5905	58. DOWELL, E. F., Abrading; Typewriting	June 7	June 7	1,194
4709	59. RICHARD, V. I., Chemistry; Alcohol; Fertilizers; Cement and Lime; Hides, Skins, and Leather; Fuel.	May 23	May 23	1,891
5906	60. GLASS, R. L., Electricity, Heating, and Welding; Batteries; Resistances and Rheostats; Prime Mover Dynamo Plants.	June 10	June 10	1,333
6724	61. PARKS, G. E., Elevators; Winding and Reeling; Pushing and Pulling; Fire Escapes; Ladders; Scaffolds; Horology; Time-Controlling Apparatus.	June 22	June 24	1,165
7826	62. COCHRAN, W. W., Toys; Amusement Devices; Baggage; Package and Article Carriers; Bottles and Jars; Deposit and Collection Receptacles.	July 8	July 7	1,319
4926	63. WINKELSTEIN, A. H., Bleaching and Dyeing; Explosive, Pyrotechnic, and Match Compositions; Preserving; Sugar, Starch, and Carbohydrates.	June 9	June 9	1,330
4708	64. NASH, P. N., Acetylene; Distillation; Gas Mixers; Oils, Fats, and Glue	Aug. 20	Sept. 1	374
5634	65. McDERMOTT, F. P., Electricity, Conductors; Conduits and Housings; Repeaters; Relays; Wave Transmission.	June 4	June 6	1,488
2999B	TRADE-MARKS, LABELS, AND PRINTS: F. A. RICHMOND—{Trade-Marks Labels and Prints	Oct. 21 Oct. 19	Nov. 4 Nov. 5	910 133

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DECISIONS IN PATENT AND TRADE-MARK CASES

Commissioner's Decision

CANADA DRY GINGER ALE, INCORPORATED, *v.* INTERNATIONAL PRODUCTS COMPANY, CANADA'S PRIDE PRODUCTS COMPANY, INC., ASSIGNEE, SUB.

Decided August 22, 1932

1. TRADE-MARKS—GOODS OF THE SAME DESCRIPTIVE PROPERTIES—ROOT-BEER EXTRACT AND GINGER ALE.

Root-beer extract and fruit juices sold for soft drink purposes *Held* goods of the same descriptive properties as ginger ale.

2. SAME—SIMILARITY—"CANADA'S PRIDE" AND A MAP OF CANADA AND "CANADA DRY" AND A SIMILAR MAP.

The trade-mark consisting of the words "Canada's Pride" appearing upon an outline map of Canada *Held* confusingly similar to a mark consisting of the words "Canada Dry" appearing in some instances upon a similar background.

3. SAME—DISCLAIMER.

Where, in obtaining registration of a mark consisting of the words "Canada Dry" appearing upon an outline map of Canada, a disclaimer was entered to the printed words "apart from the mark shown in the drawing" *Held* that this disclaimer does not justify permitting registration by another of a mark consisting of the words "Canada's Pride" appearing upon the same kind of a background.

ON APPEAL.

Messrs. Edward S. Rogers, Allen M. Reed, William T. Woodson, Francis L. Browne, Dudley Browne, and *Thos. L. Mead, Jr.*, for Canada Dry Ginger Ale, Inc.

Mr. John B. Hosty for International Products Company, Canada's Pride Products Company, Inc., assignee, sub.

KINNAN, *First Assistant Commissioner:*

This case comes on for review, on appeal of the applicant, International Products Company, Canada's Pride Products Company, Inc., assignee, substituted, of the decision of the Examiner of Trade-Mark Interferences sustaining the opposition of Canada Dry Ginger Ale, Inc., and adjudging the applicant not entitled to the registration for which it has made application.

The applicant seeks registration of the notation "Canada's Pride" appearing upon a background which is readily recognized as an outline map of Canada, the mark being used upon root-beer extract and nonalcoholic carbonated and noncarbonated fruit juices sold for soft drink purposes. Continuous use of its mark is alleged since September 10, 1929.

The opposer sets up adoption and use for many years prior to applicant's entrance into the filed of the mark "Canada Dry" appearing in some instances upon a background, as shown by opposer's labels Exhibit No. 1, and in other instances associated with a map of Canada, the opposer's mark being used upon packages and bottles containing ginger ale. There is also an allegation that within the last year, presumably 1930, the opposer has applied its mark to orangeade and lime. Ownership of trade-mark registration No. 155,002 issued May 16, 1922 is claimed by opposer.

Both parties have filed testimony. It satisfactorily appears that the opposer is the prior user of its mark by a considerable number of years, has sold its goods substantially all over the United States, has expended very large sums in advertising, and its total sales have been nearly nine million dollars annually. Under these conditions the opposer is presumably in possession of a valuable good will as an asset of its business; and if there is reasonable doubt of confusion in trade, such doubt must be resolved against the newcomer.

It is not deemed necessary to enter into any considerable discussion as to the various adjudicated cases defining the meaning of goods belonging to the same class or possessing the same characteristics. It will be sufficient to here state that it is deemed clear enough the goods of the respective parties belong to the same general class of beverages and soft drinks, and that it is proper to hold they possess the same descriptive properties within the meaning of the trade-mark law as interpreted by the decided cases. *National Biscuit Co.* v. *Sheridan*, 402 O. G. 4, 44 F.(2d) 987, 18 C. C. P. A. (Patents) 720; *Cluett, Peabody & Co., Inc.*, v. *Hartogensis* (Arrow Emblem Co., Inc., sub.), 396 O. G. 707, 41 F.(2d) 94, 17 C. C. P. A. (Patents) 1166; *Malone* v. *Horowitz*, 399 O. G. 416, 41 F.(2d) 414, 17 C. C. P. A. (Patents) 1252; *California Packing Corporation* v. *Tillman & Bendel, Inc.*, 394 O. G. 789, 40 F.(2d) 108, 17 C. C. P. A. 1048; *Check-Neal Coffee Co.* (Maxwell House Products Co., Inc. sub.) v. *Hal Dick Manufacturing Company*, 395 O. G. 10, 40 F.(2d) 108, 17 C. C. P. A. (Patents) 1108.

The applicant presses the view that a disclaimer appearing in the registration of opposer's mark narrows its rights so far as they should be considered in the instant proceeding. It is not seen that there is merit in this contention. The disclaimer relates to the printed words "apart from the mark shown in the drawing." The mark shown in the drawing includes the words across the background of the map of Canada. In the applicant's mark the words used by it appear across the background of a map of Canada. The applicant therefore is not availing itself of the opposer's disclaimer since to the extent the applicant is using any of the words disclaimed by the opposer, such use is not apart from the mark as shown but is in connection with the other features of opposer's mark. Without going into this matter further it will be sufficient to state that the question here for review is that of probable damage to opposer by registration of the applicant's mark, this damage being based upon probable confusion in trade. It seems clear enough the two marks when viewed in their entirety are confusingly similar.

The decision of the Examiner sustaining the opposition and adjudging the applicant not entitled to the registration for which it has applied is affirmed.

Decisions of the Board of Appeals

EX PARTE BRASELTON AND MACLAREN

Decided May 7, 1931

1. PATENTABILITY—COPENDING APPLICATIONS—BROAD AND NARROW CLAIMS.

Where two copending applications disclose two distinct species of a generic invention, "if the prior art warrants, claims may be obtained in one application limited to the species shown therein together with claims generic to both applications. The claims in the other application, however, must be limited to cover only the species shown therein."

2. SAME—SAME—SAME.

Where two copending applications disclose two distinct species of a generic invention, the issuance of a patent on one of them with claims limited to the disclosure thereof is not a bar to the allowance of generic claims in the other application where such generic claims were presented prior to the issuance of the patent.

[This application has resulted in Patent No. 1,870,707, issued August 9, 1932.]

Mr. Chester H. Braselton for the applicants.

Before MOORE, Assistant Commissioner, and REDROW and EDINBURG, Examiners in Chief

EDINBURG, *Examiner in Chief:*

This is an appeal from the decision of the Primary Examiner finally rejecting claims 1-8, inclusive, 10, 11, 14, 16, 31, 33, and 34.

Claim 1 is illustrative and is:

1. In an automotive vehicle having a power plant including a charge forming device, the combination, with a fuel supply tank, of a mechanism for pumping liquid fuel from said tank for the charge forming device operated by a variable vibration of relatively movable elements due to inertia; and means for modifying the action of said pumping mechanism to control the pressure at which the liquid fuel is fed to the charge forming device, including a chamber cooperating with said pumping mechanism and having a restricted outlet and into which a portion of the liquid fuel passes.

The reference relied upon is: Braselton et al., 1,715,638, June 4, 1929.

The invention relates to an inertia pumping apparatus and comprises a tank in which a pump cylinder is mounted, and a piston provided with a weight is resiliently mounted to reciprocate in the cylinder. Inlet and outlet valves are provided so that as the piston reciprocates liquid will be drawn into the cylinder and forced into the tank. The inertia of the weighted piston is sufficient to cause movement of the piston with respect to the cylinder when the tank attached to an automobile is moved up and down as the automobile passes over undulations in the road.

In order to stop reciprocation when the liquid in the tank reaches a predetermined level the weight is formed as a hollow cylinder adapted to fit over the pump cylinder and provided with openings in its top wall. The top of the pump cylinder is also closed by a cap provided with a restricted outlet opening. The side wall of the cylinder and the upper end of the piston are provided with apertures to admit liquid to the space above the piston. As the liquid rises in the tank it flows into the space between the piston and the cap and then into the hollow weight and restricts the movement of the piston.

The Examiner has rejected the appealed claims in view of applicants' prior Patent No. 1,715,638. The instant application was filed January 30, 1922, and the application upon which the prior patent was granted was filed June 6, 1922, so the applications have necessarily been copending. They disclosed distinct species of the same generic invention. In such a case, if the prior art warrants, claims may be obtained in one application limited to the species shown therein together with claims generic to both applications. The claims in the other application, however, must be limited to cover only the species shown therein. It is the Examiner's position that the claims in the patent are not limited to the species shown therein but read on the present application. If that be true the appealed claims which read on the patent cannot be granted as generic claims cannot be obtained in two patents.

The Examiner has applied claim 2 of the patent to the instant application and indicated by reference characters how it reads thereon. There is no question about all the elements clearly reading thereon except the last one which is "means positioned in said pump cylinder in the end opposite the inlet aperture for dampening the movement of the plunger when the liquid has reached a predetermined level in the tank." The Examiner states that the upper part of the plunger 38 having passages 52 corresponds to this element. The Examiner's interpretation appears to correspond to the wording of claim 31 wherein the same part is referred to by "means for dampening the movement of the piston including a cylinder and a piston operatively connected with the pump piston etc." Here a separate piston from the pump piston is referred to which piston is merely the upper end of part 38. Furthermore the openings 52 have no other function except to admit liquid at a predetermined level to dampen the movement of the pump piston.

Applicants urge that the last element in claim 2 of the patent refers to the plug 30 as this is positioned within the pump chamber. The wording used, however, is so general that the element will also read on the present application. Of course the cap 34 must also be used to obtain the dampening effect in the present case but it is also true that other parts are necessary in the patent such as opening 54 which must also be used in the patented device to make it function. It cannot be said that the opening 54 is positioned in the cylinder as specified in the claim. The patented claim is somewhat indefinite and very general and when given its broadest interpretation is believed to read on the present application.

It is admitted by applicants that all of the appealed claims except claim 5 read on the prior patent. As no proper line of division has been drawn between these claims and the patent claims they cannot be allowed as this would amount to double patenting.

Claim 5 is believed to read only on the present application for reasons pointed out in the brief and this claim is regarded patentable.

The Examiner appears to hold that even though the patent claims were limited so as to not read on the instant application and defined patentably over it, generic claims could not be allowed in the present application because the specific claims were first patented. It is noted that the instant application was filed prior to the application upon which the patent was granted. Generic claims were introduced in the instant application before the patent issued and have been continuously asserted since they were introduced. It is clear under such circumstances that the issuance of a patent with specific claims would not be a bar to the granting of generic claims. (*Wirebounds Patent Co. et al.* v. *Serenac Automatic Machine Co.* 37 F(2d) 830; *Electric Storage Battery Co.* v. *Buffalo Electric Carriage Co.* 117 Fed. 814; *Century Electric Co.* v. *Westinghouse Electric Co.* 191 Fed. 350; *Higgin Mfg. Co.* v. *Watson*, 268, Fed. 378; *Folberth Auto Specialty Co.* v. *Mayo-Skinner Mfg. Co.* 292 Fed. 888.) However, we have held that the patent claims are not limited to the species shown in the patent but will read on the instant application, and for that reason all the appealed claims except claim 5 must be refused.

The decision of the Examiner is affirmed as to claims 1, 2, 3, 4, 6, 7, 8, 10, 11, 14, 16, 31, 33, and 34 and reversed as to claim 5.

U. S. Circuit Court of Appeals—Tenth Circuit

SKINNER BROS. BELTING CO. *v.* OIL WELL IMPROVEMENTS CO.

No. 400. Decided December 24, 1931

1. PATENTABILITY—COMBINATION.

"It is not necessary to a valid combination that one element shall affect the quality of the work done by another. The test is whether the combination discloses a co-operation or a co-ordination of the elements which, working together as a unit, although mayhap not simultaneously, produces a new or better result."

2. SAME—UNNECESSARY LIMITATION OF CLAIMS.

That the patentee might have claimed more than he did is not fatal to that which is claimed.

3. SAME—INCLUSION OF LIMITATIONS.

Each claim of a patent need not set out every detail of every other claim and the specification.

Appeal from the District Court of the United States for the Northern District of Oklahoma. Before F. E. Kennamer, judge.

Mr. Joe T. Dewberry and *Mr. G. W. Earnshaw* for Skinner Bros. Belting Co.

Mr. Gilbert P. Ritter, Mr. John A. Haver, Messrs. Ritter, Mechlin & O'Neill and *Messrs. Randolph, Haver, Shirk & Bridges* for Oil Well Improvements Co.

Before COTTERAL and MCDERMOTT, Circuit Judges, and POLLOCK, District Judge.

MCDERMOTT, *Cir. J.:*

The defendant appeals from a decree adjudging claims 1 and 2 of patent to Heggem, 1,175,261, and claims 1, 2, 3, 4, and 12, of Heggem Patent 1,256,899 valid and infringed. Both patents involve a device for sealing a drilling oil well so that the drilling cable may operate through the device and at the same time prevent oil from escaping at the mouth of the well.

The validity of the patents, and the range of equivalency accorded them, depends in part upon the prior art. The prior art is sketchy, and, at the time the inventor entered the field, it was not crowded. The merit of these devices was almost immediately recognized by the industry, and very shortly their use became general. These patents were issued in 1916 and 1918, respectively, and it is a fair deduction from the record that considerable capital has been invested on the faith of the grants. Under such circumstances, the defendant must show some clear reason why these grants from the Government should be set aside, and the defendant permitted to appropriate the ideas of the inventor. We are of the opinion that the defendant has not met the burden, and that the decree of the trial court was right.

When oil wells are being drilled or swabbed, it is necessary to prevent the escape of oil out of the top of the casing, both to save the oil and to prevent fires. In both operations the wire drilling cable must be free to operate. The earliest device was crude; a sleeve attached to the drilling cable which operated through packing in a stuffing box. But this was not satisfactory, for the reason that when the tools had to be pulled out of the well, the sleeve had to be taken off the cable, or so loosened that it would not prevent the escape of the oil. In 1902, Rigby invented and patented an oil saver (696,747) which in some respects was more satisfactory. To avoid the necessity of a sleeve on the cable, he proposed a device which was clamped to and closed the casing head, save for a slot through which the cable was free to operate. His device was constructed in two equal parts, each semicircular in form, so that it could be taken off the cable, and thus avoid the necessity of threading the cable through it. The cable operated through a stuffing box in which were rubber rings; these rings were compressed vertically by means of a large screw, operated by handles, which was at the top of the device and which likewise was split to encircle the cable. This device avoided some of the troubles of the old "barrel oil saver," but ran into others. The drilling cable was operated by a walking beam; consequently, as the cable worked up and down, it swayed sideways; the result was a constant wear against the sides of the compressing screw; this caused the screw to work loose which required almost continuous adjustment. Again, the vertical compression of the packing reduced the bearing surface against the cable and lessened its efficiency. Rigby was better for swabbing, and more convenient when tools must be lowered or lifted; but the old barrel saver was better for day by day drilling.

Although some such device was necessary in the oil business, a satisfactory oil saver had not been devised when Heggem entered the field. There were at least three angles to the problem: (*a*) Side sway must be controlled; (*b*) The device must be capable of assembly without cutting or threading the cable; (*c*) means of keeping the packing snug against the cable must be provided for.

Heggem's first patent, claim 1 of which is in the margin,[1] accomplished these ends. He did away

[1] The combination with a stuffing box comprising longitudinally separable sections having alined openings for the passage of a reciprocating element, of a plurality of rotatable guide spools arranged on opposite sections of the box and on opposite sides of the axis of the alined openings of the stuffing box and adapted to contact with a reciprocating element passing through the stuffing box.

with the top compression screw of Rigby, and provided for semilateral means of adjusting the packing. He then took from other arts rotatable guide spools and placed them on top of the device, where Rigby's compression screw was. These guide spools fed the cable into the stuffing box evenly, and avoided the wear incident to side sway. He availed himself of the separable sections of Rigby.

Is this a patentable combination? It is said that all of the elements are old; this is true, but immaterial. *Leeds & Catlin Co.* v. *Victor Talking Mach. Co.*, 213 U. S. 301, 29 S. Ct. 495, 53 L. Ed. 805; *Bates* v. *Coe*, 98 U. S. 31, 25 L. Ed 68. In that text-book of patent law, *National Hollow Brake-Beam Co.* v. *Interchangeable Brake-Beam Co.* (C. C. A. 8) 106 F. 693, 706, Judge Sanborn lays down the rule:

> A new combination of old elements, whereby a new and useful result is produced, or an old result is attained in a more facile, economical, and efficient way, may be protected by patent as securely as a new machine or composition of matter. *Seymour* v. *Osborne*, 11 Wall. 516, 542, 548, 20 L. Ed. 33; *Gould* v. *Rees*, 15 Wall. 187, 189, 21 L. Ed. 39.

The patent in suit meets this test. It is said that no inventive genius, but only mechanical ingenuity, was needed to think of this device. No formula has been prescribed which affords a solution of the vexed question, Has inventive genius been exercised? We know that the simplicity of the device does not belie inventive genius. *Hughes Tool Co.* v. *International Supply Co.* (C. C. A. 10) 47 F.(2d) 490, 492, and cases there cited. We know that we should try to eliminate "hind-sight"; we know that the fact that the problem existed, that financial reward awaited a solution, and that no one did think of it, is strong evidence of invention. We know a presumption of invention arises from the issuance of the patent, and that commercial success strengthens that presumption. Considering these things, we are not prepared to say that this device, simple though it is, does not disclose inventive genius.

[1] It is said that it is an aggregation and not a combination; that the guide spools operate in the same way that they have always operated; and so of the other elements. This is true, but not fatal, for it is not necessary to a valid combination that one element shall affect the quality of the work done by another. It is said that the elements are but hitched together, and therefore are not patentable. Nor is this the test. The test is whether the combination discloses a co-operation or a co-ordination of the elements which, working together as a unit, although mayhap not simultaneously, produces a new or better result. The distinction between combination and aggregation is one difficult to put in words that really define; it has been the subject of much legal literature which we find it unnecessary to review. Walker (6th Ed.) secs. 70, 71, deals with it at length. Justice Matthews drew an analogy from real estate law; joint tenants the combination, tenants in common the aggregation. *Pickering* v. *McCullough*, 104 U. S. 310, 26 L. Ed. 749. Judge Hook compared an aggregation to—

> successive changes of horses in a coach journey from London to Bath. Those out of London, their task done, dropped their burden at Maidenhead; others picked it up there, and carried it to Newbury; and so on to destination." *Moore* v. *Saunders* (C. C. A. 8) 247 F. 314, 317.

Following his analogy, four horses hitched to a coach would be a combination. Where definitions are abstract, there is a natural disposition to resort to analogy. A rough analogy, that cannot be pressed too far, has repeatedly occurred to me in considering this question. I think of a football team as a combination; one passes, one receives, another blocks, another runs, and still others hold the line. Eleven men are doing different things, each in his own way, and not always simultaneously; yet they are working to a common end, to advance the ball; and they coact as a unit. I think of a track team as an aggregation; one runs, another hurdles, another jumps, another throws. They all work for a common general end, to amass points for their alma mater; but there is lacking the vital spark of co-operation or co-ordination. They work, not as one unit, but as several. In the case at bar, we have no doubt that the device is a combination and not an aggregation. A single object is to be accomplished; to prevent escape of the oil from the well. All the elements coordinate in working to that end. It is not a relay of horses from London to Bath; it is a three-horse hitch to the same coach. We conclude that the first patent is valid.

The second patent concerns itself with a particular sort of packing to be used in the stuffing box, and packing followers, and means for the adjustment thereof. Nothing was claimed in the first patent as to the packing to be used in the device; the specifications referring to—

> any suitable packing material; but rubber, fibre, hard oil, * * * may be here mentioned as well adapted for the purpose.

The second patent describes the combination of the first, but in claim 3 adds—

> a plurality of packing followers also arranged in opposite sections and on opposite sides of the alined openings of the stuffing box, and means for adjustably advancing said followers toward the axis of the alined openings;

and in claim 4 adds to the followers "a flexible packing comprised of longitudinally separate sections" and a means of "independently" adjusting the followers described in claim 3; claims 1 and 2 describe the packing as "having transverse grooves."

It is claimed the second patent is void because of the rule that prevents an extension of the monopoly by a second patent on the same device. But the first patent claims nothing as to packing or packing followers or means of adjustment; the second patent covers only these features, although their setting, the stuffing box, is claimed. When the first patent expires, the world can use the device there claimed, except in combination with the improvements claimed in the second patent. The second patent is the usual improvement patent. The packing element is an important feature of oil savers. Wire cables have interstices between the strands; the packing material must close the interstices without checking the movement of the cable; rubber is elastic, but not readily compressible; the grooves in the rubber packer make it so compressible that the rubber will insinuate itself between the strands; the rubbers wear out rapidly, and means for ready and independent adjustment saves time and money. It makes no difference that the inventor holds a prior patent on the device so improved. We think the claims of the second patent disclose patentable improvements, and are valid.

[2, 3] Counsel for defendant contends that both patents are—

> void because indefinite and vague and because of the omission from each of the various claims of essential elements of the claimed combination.

This contention is not entirely clear. If he means that the device lacks utility, the record is to the contrary. If he means that the patentee might have claimed more than he did, it is the misfortune of the patentee, but not fatal to that which is claimed. If he means that each claim must set out every detail of every other claim and the specifications, he is in error. If he means that reference must be had to the specifications and drawings to get a clear understanding of the claims, he is right; that is what specifications and drawings are for. If he means that, so read, they are vague, uncertain, and not understandable, we disagree.

This brings us to the question of infringement. The defendant made and sold the "Economy" oil saver prior to 1927, but desisted upon notice of infringement. Thereafter it made and sold the "Pierce" oil saver. The "Pierce" saver is not as close a copy as the "Economy," but both are designed to and do the same work as the plaintiff's and in the same way. There are differences in detail of construction, but defendant has combined the rotatable guide spools, the longitudinally separable stuffing box, the alined openings for the cable, and the adjustable, flexible, and compressible packer. The plaintiff severs his stuffing box in equal parts, the defendant in unequal parts; but the severance in each case is to permit the device to be assembled on the wire cable. The plaintiff constructs its flexible packer with grooves to allow for compression; the defendant honeycombs its flexible packer to allow for compression. The contention of defendant is that plaintiff's patents should be narrowly construed; even so, defendant infringes, for every valid patent is entitled to some range of equivalents, and the differences between plaintiff's patents and defendant's devices are colorable and not substantial. But we see no reason to hold plaintiff to a particularly narrow range of equivalents. The range of equivalents to be accorded a patent depends upon whether the patent is a pioneer or an improvement; if for an improvement, it depends upon whether the improvement marks a long step forward or but a short one; whether the patent discloses much or little inventive genius. *Bobel Process Co.* v. *Paper Co.*, 261 U. S. 45, 48 S. Ct. 322, 67 L. Ed. 523. Heggem's device, as improved, marked a long step forward in the art of sealing oil wells, and we think his patents are entitled to a reasonably literal range of equivalents. We hold that both of defendant's devices, the Economy and the Pierce, infringe.

Complaint is made because the trial court permitted, at the trial, an amendment to the bill including claims 1 and 2 of the second patent. These claims cover the "transverse grooves" in the packer. Prior to the trial, plaintiff had examined defendant's packer; it appeared to be solid rubber, and not to infringe these claims. At the trial, it was discovered that the apparently solid rubber was in fact honeycombed and did infringe. Thereupon, and at the outset of the trial, plaintiff asked to amend; the trial court reserved a ruling, but admitted evidence on both sides on the point. At the close of the trial, the amendment was allowed, the trial court offering the defendant additional time in which to present testimony as to these claims. The defendant had already introduced its evidence on the point, and declined the offer of additional time. The trial court was entirely right in permitting the amendment; it is amply justified by equity rule 19 (28 U.S.C.A. sec. 723); it saved another suit, and injured no one.

The decree is in all respects affirmed.

Patent Suits

[Notices under Sec. 4921, R. S., as amended Feb. 18, 1922]

1,048,575, E. W. Oldham, Cleaning powder; 1,124,664, C. H. Schlabach; same, D. C., S. D. Calif. (Los Angeles), Doc. R–30–C, *The Hygienic Products Co.* v. *Kleen-Flush Products Co. et al.* Patents held valid and infringed June 30, 1932.

1,118,813, C. E. Schmidt, Manufacture of leather, D. C., S. D. N. Y., Doc. E 51/393, *Leather Makers Process Co.* v. *Fred Rueping Leather Co.* Dismissed without prejudice (notice Oct. 7, 1932).

1,124,664. (See 1,048,575.)

1,171,759, S. P. Thompson, Auto vehicle and method of maintaining same in good working condition, filed Sept. 29, 1932, D. C., S. D. Calif. (Los Angeles), Doc. E X–112–H, *S. P. Thompson* v. *O. Gerber et al.*

1,189,887. (See Re. 14,816.)

1,871,015, C. Amiquet, Lighting fixture, filed Oct. 10, 1932, D. C., S. D. N. Y., Doc. E 71/295, *The Miller Co. et al.* v. *O. Plant & Co., Inc.*

1,877,609, E. F. Townsend, Draft rigging for motor vehicles, D. C., S. D. Calif. (Los Angeles), Doc. E S–73–M, *L. A. Townsend* v. *Vaughan Motor Works, Inc., et al.* Dismissed pursuant to stipulation Aug. 23, 1932.

1,888,426, E. J. Greive, Surface decorating, D. C., S. D. Calif. (Los Angeles), Doc. R–24–C, *E. J. Greive* v. *Dumbeck Bros.* Patent held infringed Oct. 8, 1932.

1,402,589, H. A. Farrand, Rule; 1,799,044, 1,799,094, same, Means for controlling resilient rules; 1,828,401, same, Resilient rule, filed Oct. 10, 1932, D. C., S. D. N. Y., Doc. E 71/298, *H. A. Farrand, Inc.*, v. *Greenberg & Josephberg.* Same, filed Oct. 11, 1932, D. C., E. D. N. Y., Doc. E 6594, *H. A. Farrand, Inc.*, v. *Irving Trust Co. et al.* Doc. E 6602, *H. A. Farrand, Inc.*, v. *McOrory Stores Corp. et al.*

1,448,240. (See Re. 17,107.)

1,481,021. (See Re. 17,107.)

1,526,982, E. W. Hill, Stencil sheet, filed Oct. 11, 1932, D. C., S. D. N. Y., Doc. E 71/306, *A. B. Dick Co.* v. *E. Metcalf.*

1,561,437. (See Re. 17,107.)

1,602,510. (See Re. 17,107.)

1,621,360, R. N. Falge, Incandescent lamp, filed Oct. 14, 1932, D. C., E. D. N. Y., Doc. E 6605, *General Electric Co.* v. *P. Sorensen Mfg. Co., Inc.*

1,639,708. (See Re. 17,107.)

1,654,738, J. A. Krantz, Lock joint for metal pipes, D. C., N. D. W. Va. (Parkersburg), Doc. E 951, *The Reeves Mfg. Co.* v. *The Parkersburg Iron & Steel Co.* Dismissed July 16, 1932.

1,666,516. (See Re. 14,816.)

1,679,359, B. O. Jessen, Orchard heater, D. C., S. D. Calif. (Los Angeles), Doc. E T–9–C, *B. O. Jessen* v. *W. R. Williams*. Dismissed for want of prosecution Sept. 13, 1932.

1,683,531. (See Re. 17,393.)

1,694,928. (See Re. 17,107.)

1,697,886. (See Re. 17,107.)

1,710,073, 1,714,191, S. Ruben, Electrical condenser, filed Oct. 7, 1932, D. C., S. D. N. Y., Doc E 71/289, *Ruben Condenser Co.* v. *John Wanamaker*. Doc. E 71/290, *Ruben Condenser Co.* v. *Davega, Inc.*

1,711,430. (See Re. 17,107.)

1,714,191. (See 1,710,073.)

1,718,025. (See Re. 17,393.)

1,718,716. (See Re. 17,107.)

1,799,044. (See 1,402,589.) 1,799,094. (See 1,402,589.)

1,813,776. (See Re 17,107.)

1,815,745, R. E. Thompson, Safety razor; 1,858,816, Thompson & Smith, same, filed Oct. 7, 1932, D. C., S. D. N. Y., Doc. E 71/287, *Gillette Safety Razor Co.* v. *Triangle Mechanical Laboratories Corp.*

1,824,012, Des. 83,672, Des. 86,767, H. Esterow, Fountain pen clip, filed Oct. 6, 1932, D. C., S. D. N. Y., Doc. E 71/271, *H. Esterow* v. *C. E. Marshall* (*Marshall & Meier*).

1,828,401. (See 1,402,589.) 1,845,997. (See Re. 17,107.)

1,845,998. (See Re. 17,107.)

1,850,800, 1,850,802, S. M. Langston, Printer and slotter, filed Oct. 13, 1932, D. C. Md., Doc. E 2106, *S. M. Langston Co.* v. *F. X. Hooper Co.*

1,850,802. (See 1,850,800.)

1,855,168, C. L. Farrand, Loud speaker, filed Oct. 10, 1932, D. C., S. D. N. Y., Doc. E 71/301, *Utah Radio Products Co. et al* v. *Gimbel Bros., Inc.* Doc. E 71/302, *Utah Radio Products Co. et al.* v. *John Wanamaker*. Doc. E 71/303, *Utah Radio Products Co. et al.* v. *Ludwig Baumann & Co., Inc.* Doc. E 71/304, *Utah Radio Products Co. et al.* v. *R. H. Macy & Co., Inc.* Doc. E 71/305, *Utah Radio Products Co. et al.* v. *Bloomingdale Bros.* Same, filed Oct. 11, 1932, D. C., S. D. N. Y., Doc. E 71/321, *Utah Radio Products Co. et al.* v. *W. H. Mussbaum, Inc.* Same, filed Oct. 13, 1932, D. C., E. D. N. Y., Doc. E 6595, *Utah Radio Products Co.* v. *C. L. Baumann & Co., Inc.* Doc. E 6596, *Utah Radio Products Co.* v. *J. Michaels et al.* Doc. E 6597, *Utah Radio Products Co.* v. *Davega City Radio, Inc.* Doc. E 6598, *Utah Radio Products Co.* v. *J. Michaels, Inc.* Doc. E 6599, *Utah Radio Products Co.* v. *Abraham & Straus, Inc.* Doc. E 6600, *Utah Radio Products Co.* v. *F. Loeser & Co., Inc.* Doc. E 6601, *Utah Radio Products Co.* v. *Vim Electric Co., Inc.* Doc. E 6603, *Utah Radio Products Co. et al.* v. *A. I. Namm & Son, Inc.* Doc. E 6604, *Utah Radio Products Co. et al.* v. *Brooklyn Radio Stores Corp.*

1,858,816. (See 1,815,745.)

1,872,389, A. Benowitz, Process for manufacturing a trimming material or cloth, filed Oct. 13, 1932, D. C., S. D. N. Y., Doc. E 71/322, *Synthetic Fur Mills Corp.* v. *Concord Chenille Co., Inc., et al.*

1,879,799, M. Glaesel, Ornament, filed Oct. 10, 1932, D. C., S. D. N. Y., Doc. E 71/294, *M. Glaesel, Inc.*, v. *D. D. Schnelevois.*

Re. 14,816 (of 1,189,887), W. Tschudy, Method of controlling the efficiency of mercury rectifiers; 1,666,516, same, Vapor rectifier, D. C., S. D. Calif. (Los Angeles), Doc. 5499–C, *W. Tschudy* v. *Westinghouse Electric & Mfg. Co.* Dismissed Sept. 10, 1932.

Re. 17,107, J. A. Spencer, Sadiron; 1,448,240, 1,639,708, 1,813,776, same, Thermostat; 1,561,437, same, Electric heater; 1,602,510, same, Thermostatic control; 1,697,886, 1,845,997, same, Temperature controlling apparatus; 1,711,430, same, Pilot cut-off for gas burners; 1,718,716, same, Circuit interrupting device; 1,481,021, L. K. Marshall, Temperature controlling apparatus; 1,845,998, E. E. Gregory, Thermostat; 1,694,928, H. E. Rider, same, filed Oct. 14, 1932, D. C. Conn. (New Haven), Doc. E 2257, *Spencer Thermostat Co. et al.* v. *Edison General Electric Appliance Co., Inc.*

Re. 17,393, J. Mayer, Hair waving appliance and method; Re. 17,585, same, Permanent hair waving appliance; 1,683,531, G. Decker, Hair waving outfit; 1,718,025, E. Bishinger, Hair curling appliance, C. C. A., 6th Cir., Doc. 5945, *Nuvette, Inc.*, v. *E. Bishinger et al.* Doc. 5946, *The Herold Bros. Co.* v. *The Philad Co. et al.* Claims 9 and 10 of Re. 17,393 held valid and infringed, claims 5, 6, and 11 held invalid; claims in suit of Re. 17,585 held invalid, and patents 1,683,531 and 1,718,025 held invalid Oct. 12, 1932.

Re. 17,585. (See Re. 17,393.)

Des. 83,672. (See 1,824,012.)

Des. 86,217, G. W. Bungay, Juice extractor, filed Oct. 8, 1932, D. C., E. D. Mo. (St. Louis), Doc. 10135, *Bungay-Wolf Corp.* v. *Tiffany Castings Co.* Same, filed Oct. 10, 1932, D. C. Mo. (Kansas City), Doc. 2061, *Bungay-Wolf Corp.* v. *Standard Brass Mfg. Co. et al.*

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Des. 87,434, W. F. Haas, Clasp, filed Oct. 8, 1932, D. C., S. D. N. Y., Doc. E 71/292, *B. Blumenthal & Co., Inc.*, v. *S. Gorden & Sons.*

Disclaimers

1,706,842.—*George E. Cooper*, West Allis, Wis. WELDING MACHINE. Patent dated March 26, 1929. Disclaimer filed November 5, 1932, by the assignee, *Allis-Chalmers Manufacturing Company.*

Hereby enters this disclaimer to that part of the claim in said specification which is in the following words, to wit:

"3. In an automatic welding machine having a movable electrode cooperable with work forming the other electrode, means for controlling the arc between said electrodes comprising means including a motor for feeding said movable electrode, said motor having an armature circuit connected across said electrodes, and means for controlling said motor responsive to the potential across said electrodes."

"25. In an automatic welding machine having a movable electrode, a head for carrying said electrode, means in said head for engaging said electrode and causing it to move, a tubular extension for said head, a rotatable shaft extending through said tubular extension and cooperable with said electrode engaging means, a support for said tubular extension, means whereby said tubular extension may be adjusted concentrically about said shaft relatively to said support, a means on said support for driving said shaft."

1,716,738.—*John Reid*, Oil City, Pa. CLUTCH-PULLEY CONTROL. Patent dated June 11, 1929. Disclaimer filed November 7, 1932, by the assignee, *Joseph Reid Gas Engine Company.*

Hereby enters this disclaimer to that part of the claim in said specification which is in the following words, to wit:

"3. In a device of the class described a constantly rotating shaft, a pulley rotatably mounted on said shaft, a clutch for coupling said pulley to said shaft, reversing gearing for said pulley, a brake for holding said pulley stationary, a common control for said reversing gearing and said clutch having a reversing position, a clutch operating position, and an intermediate neutral position, and means actuable by said common control in its neutral position for actuating said brake."

1,870,050.—*Francis H. Hunt*, Leonia, N. J. EXCAVATING BUCKET. Patent dated August 2, 1932. Disclaimer filed November 11, 1932, by the patentee, said *Hunt*, the assignee, *Raymond Concrete Pile Company*, acquiescing.

Therefore, disclaims from the scope of said Letters Patent the subject matter covered by claim 4, said claim reading as follows:

"4. In a machine of the class described, in combination, a rotating digging bucket, digging elements carried by said bucket, means permanently connected to the bucket for raising and lowering said bucket, and means for operating said bucket to dig into the earth while said raising and lowering means is operative, said operating means being independent of said raising and lowering means."

TRADE-MARKS

OFFICIAL GAZETTE, DECEMBER 6, 1932

[VOL. 425. No. 1]

The following trade-marks are published in compliance with section 6 of the act of February 20, 1905, as amended March 2, 1907. Notice of opposition must be filed within thirty days of this publication.

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As provided by section 1 of said act, a fee of ten dollars must accompany each notice of opposition.

CLASS 1

Raw or Partly-Prepared Materials

Ser. No. 331,117. THE PURE OIL COMPANY, Chicago, Ill. Filed Oct. 10, 1932.

POCO-KOKE

No claim is made to the word "Koke" apart from its use in the mark as shown.

For Petroleum Coke Produced from the Distillation or Heat Treatment of Hydrocarbon Oils.

Claims use since July, 1932.

CLASS 2

Receptacles

Ser. No. 325,117. WALTER H. ROLL, Kansas City, Mo. Filed Mar. 14, 1932.

SANTA CLAUS
TRADE MARK
TOY SHOP

The words "Trade-Mark" are disclaimed apart from the mark shown.

For Empty Receptacles—Namely, Boxes, Cases, Cartons, Bags, and Tubes Made of Wood, Non-Precious Metals, Minerals, or Fibers, or Combinations Thereof, Not Glass or Earthenware.

Claims use since Mar. 5, 1932.

CLASS 3

Baggage, Animal Equipments, Portfolios, and Pocketbooks

Ser. No. 331,309. KORET, INC., New York, N. Y. Filed Oct. 17, 1932.



For Ladies' Purses, Pocketbooks, and Hand Bags.
Claims use since Sept. 1, 1932.

CLASS 4

Abrasive, Detergent, and Polishing Materials

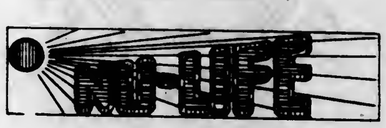
Ser. No. 325,706. BOWL-LO CHEMICAL COMPANY, Canton, Ohio. Filed Apr. 1, 1932.

BOWL-LO



For Preparation for Cleaning Toilet Bowls.
Claims use since Jan. 15, 1932.

Ser. No. 326,907. NU-DI COMPANY, Cleveland, Ohio. Filed May 9, 1932.



For Cleaning Fluid and Dry Cleaner.
Claims use since June 1. 1931.

1,679,359, B. O. Jessen, Orchard heater, D. C., S. D. Calif. (Los Angeles), Doc. E T-9-C, *B. O. Jessen* v. *W. E. Williams*. Dismissed for want of prosecution Sept. 13, 1932.

1,683,531. (See Re. 17,393.)

1,694,928. (See Re. 17,107.)

1,697,886. (See Re. 17,107.)

1,710,073, 1,714,191, S. Ruben, Electrical condenser, filed Oct. 7, 1932, D. C., S. D. N. Y., Doc E 71/289, *Ruben Condenser Co.* v. *John Wanamaker*. Doc. E 71/290, *Ruben Condenser Co.* v. *Davega, Inc.*

1,711,430. (See Re. 17,107.)

1,714,191. (See 1,710,073.)

1,718,025. (See Re. 17,393.)

1,718,716. (See Re. 17,107.)

1,799,044. (See 1,402,589.) 1,799,094. (See 1,402,589.)

1,813,776. (See Re 17,107.)

1,815,745, R. E. Thompson, Safety razor; 1,858,316, Thompson & Smith, same, filed Oct. 7, 1932, D. C., S. D. N. Y., Doc. E 71/287, *Gillette Safety Razor Co.* v. *Triangle Mechanical Laboratories Corp.*

1,824,012, Des. 83,672, Des. 86,767, H. Esterow, Fountain pen clip, filed Oct. 6, 1932, D. C., S. D. N. Y., Doc. E 71/271, *H. Esterow* v. *C. E. Marshall* (*Marshall & Meier*).

1,828,401. (See 1,402,589.) 1,845,997. (See Re. 17,107.)

1,845,998. (See Re. 17,107.)

1,850,800, 1,850,802, S. M. Langston, Printer and slotter, filed Oct. 13, 1932, D. C. Md., Doc. E 2106, *S. M. Langston Co.* v. *F. X. Hooper Co.*

1,850,802. (See 1,850,800.)

1,855,168, C. L. Farrand, Loud speaker, filed Oct. 10, 1932, D. C., S. D. N. Y., Doc. E 71/301, *Utah Radio Products Co. et al* v. *Gimbel Bros., Inc.* Doc. E 71/302, *Utah Radio Products Co. et al.* v. *John Wanamaker*. Doc. E 71/303, *Utah Radio Products Co. et al.* v. *Ludwig Baumann & Co., Inc.* Doc. E 71/304, *Utah Radio Products Co. et al.* v. *R. H. Macy & Co., Inc.* Doc. E 71/305, *Utah Radio Products Co. et al.* v. *Bloomingdale Bros.* Same, filed Oct. 11, 1932, D. C., S. D. N. Y., Doc. E 71/321, *Utah Radio Products Co. et al.* v. *W. H. Mussbaum, Inc.* Same, filed Oct. 13, 1932, D. C., E. D. N. Y., Doc. E 6595, *Utah Radio Products Co.* v. *C. L. Baumann & Co., Inc.* Doc. E 6596, *Utah Radio Products Co.* v. *J. Michaels et al.* Doc. E 6597, *Utah Radio Products Co.* v. *Davega City Radio, Inc.* Doc. E 6598, *Utah Radio Products Co.* v. *J. Michaels, Inc.* Doc. E 6599, *Utah Radio Products Co.* v. *Abraham & Straus, Inc.* Doc. E 6600, *Utah Radio Products Co.* v. *F. Loeser & Co., Inc.* Doc. E 6601, *Utah Radio Products Co.* v. *Vim Electric Co., Inc.* Doc. E 6603, *Utah Radio Products Co. et al.* v. *A. I. Namm & Son, Inc.* Doc. E 6604, *Utah Radio Products Co. et al.* v. *Brooklyn Radio Stores Corp.*

1,858,316. (See 1,815,745.)

1,872,389, A. Benowitz, Process for manufacturing a trimming material or cloth, filed Oct. 13, 1932, D. C., S. D. N. Y., Doc. E 71/322, *Synthetic Fur Mills Corp.* v. *Concord Chenille Co., Inc., et al.*

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Des. 83,672. (See 1,824,012.)

Des. 86,217, G. W. Bungay, Juice extractor, filed Oct. 8, 1932, D. C., E. D. Mo. (St. Louis), Doc. 10185, *Bungay-Wolf Corp.* v. *Tiffany Castings Co.* Same, filed Oct. 10, 1932, D. C. Mo. (Kansas City), Doc. 2061, *Bungay-Wolf Corp.* v. *Standard Brass Mfg. Co. et al.*

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Des. 87,434, W. F. Haas, Clasp, filed Oct. 8, 1932, D. C., S. D. N. Y., Doc. E 71/292, *B. Blumenthal & Co., Inc.*, v. *S. Gordon & Sons.*

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Therefore, disclaims from the scope of said Letters Patent the subject matter covered by claim 4, said claim reading as follows:

"4. In a machine of the class described, in combination, a rotating digging bucket, digging elements carried by said bucket, means permanently connected to the bucket for raising and lowering said bucket, and means for operating said bucket to dig into the earth while said raising and lowering means is operative, said operating means being independent of said raising and lowering means."

TRADE-MARKS

OFFICIAL GAZETTE, DECEMBER 6, 1932

[VOL. 425. No. 1]

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As provided by section 1 of said act, a fee of ten dollars must accompany each notice of opposition.

CLASS 1

Raw or Partly-Prepared Materials

Ser. No. 331,117. THE PURE OIL COMPANY, Chicago, Ill. Filed Oct. 10, 1932.

POCO-KOKE

No claim is made to the word "Koke" apart from its use in the mark as shown.

For Petroleum Coke Produced from the Distillation or Heat Treatment of Hydrocarbon Oils.

Claims use since July, 1932.

CLASS 2

Receptacles

Ser. No. 325,117. WALTER H. ROLL, Kansas City, Mo. Filed Mar. 14, 1932.

SANTA CLAUS
TRADE MARK.
TOY SHOP

The words "Trade-Mark" are disclaimed apart from the mark shown.

For Empty Receptacles—Namely, Boxes, Cases, Cartons, Bags, and Tubes Made of Wood, Non-Precious Metals, Minerals, or Fibers, or Combinations Thereof, Not Glass or Earthenware.

Claims use since Mar. 5, 1932.

CLASS 3

Baggage, Animal Equipments, Portfolios, and Pocketbooks

Ser. No. 331,309. KORET, INC., New York, N. Y. Filed Oct. 17, 1932.



For Ladies' Purses, Pocketbooks, and Hand Bags.
Claims use since Sept. 1, 1932.

CLASS 4

Abrasive, Detergent, and Polishing Materials

Ser. No. 325,706. BOWL-LO CHEMICAL COMPANY, Canton, Ohio. Filed Apr. 1, 1932.

BOWL-LO



For Preparation for Cleaning Toilet Bowls.
Claims use since Jan. 15, 1932.

Ser. No. 326,907. NU-DI COMPANY, Cleveland, Ohio. Filed May 9, 1932.



For Cleaning Fluid and Dry Cleaner.
Claims use since June 1, 1931.

Ser. No. 330,745. VINCENZO GUADAGNO, doing business as Reliable Manufacturing Co., Cleveland, Ohio. Filed Sept. 28, 1932.

WASH WE EASY EASY

The descriptive words "Wash Easy" are hereby disclaimed apart from the other features of the mark as shown on the drawing.

For Washing Fluid for Laundry Use.

Claims use since Apr. 1, 1920.

Ser. No. 331,429. THE GALLAHER DRUG COMPANY, Dayton, Ohio. Filed Oct. 21, 1932.

BALLYHOO

For Shaving Cream.

Claims use since June 22, 1932.

CLASS 5

Adhesives

Ser. No. 329,867. PIONEER LABORATORY & MFG. CORP., Chicago, Ill. Filed Aug. 26, 1932.

METALLIC X THE UNIVERSAL FIXER

No claim is made herein to the exclusive right to the words "Metallic" and "The Universal Fixer" apart from the mark shown in the drawing.

For Adhesive Cement Compound.

Claims use since July 1, 1931.

CLASS 6

Chemicals, Medicines, and Pharmaceutical Preparations

Ser. No. 297,597. HANCE BROTHERS & WHITE, INC., Philadelphia, Pa. Filed Mar. 20, 1930.

HANCE HANCE

The color of the mark is not material and the lining shown on the drawing is used for shading purposes only.

For Medicinal Preparation Used as a System Purifier, Norwegian Cod Liver Oil, Ephedrine Hydrochloride, Solution 3% Ephedrine Hydrochloride, Ephedrine Inhalant 1%, Russian Mineral Oil for Medicinal Purposes, a Non-Irritating Deodorizer and Antiseptic, Mustardised Goose Grease in the Form of a Liniment, a Preparation for Rubbing for External Use, an Antiseptic and Mouth Wash, and a Tasteless Mineral Oil Combined with Agar Agar.

Claims use since June, 1929.

Ser. No. 303,654. PARIS LABORATORIES, INC., New York, N. Y. Filed July 19, 1930.

LaTesh

Applicant is the owner of registered trade-mark #205,522. The silhouette forming a feature of the mark is fanciful.

For Astringents, Astringent Cerates, Bleach Creams, Beauty Creams, Cold Creams, Cleansing Creams, Obesity Creams, Refreshing Creams, Obesity Astringents, Dry Rouges, Face Bleaches, Face Packs, Eyebrow and Eyelash Grower, Eye Drops, Hand Lotions, Skin Lotions, After Shaving Lotions, Pomades, Face Powders, Talcum Powders, Sachets, Hair Salves, Hair Elixirs, Dandruff Preparations, Hair Tonics, Hair Oils, Shampoos, Hair Dyes, Bath Salts, Smelling Salts, Lip Sticks, Incense, Tooth Powders, Mouth Washes, Dentifrices, Tooth Pastes, Nail Powders, Nail Creams, Nail Bleaches, Witch Hazel, Peroxide, Petroleum Jellies, Witch Hazel Salves, Camphor Creams, Foot Powders, Corn Salves, Deodorants, Disinfectants, Bay Rum, Perfumes, and Toilet Waters.

Claims use since March, 1930.

Ser. No. 325,488. TERMINAL BARBER SHOPS, INC., New York, N. Y. Filed Mar. 25, 1932.

LA NIMPHET

The drawing is lined to indicate green.

For Cold Creams and Facial Creams—Namely, Lotus Cream, Circulation Cream, Cleansing Cream, and Powder Base.

Claims use since Oct. 31, 1931.

Ser. No. 326,058. MASTER LABORATORIES, INC., Omaha, Nebr. Filed Apr. 13, 1932.

Mex

The representation of the female head forming a feature of the mark is fanciful.

For Dentrifice Used in the Treatment of Trench Mouth and Pyorrhea.

Claims use since Sept. 1, 1931.

Ser. No. 326,312. PALMERS LIMITED, Montreal, Quebec, Canada. Filed Apr. 20, 1932.

For Toilet Preparations—Namely, Perfumes, Toilet Waters, Toilet Creams, Skin Lotions, Skin Salves and Ointments, Face Powders, Liquid Face Powders, Face Powder Compacts, Combination Powder and Rouge Compacts, Rouge Compacts, Liquid and Paste Rouges, Lip Rouge, Lipstick, Talcum Powders, Bath Powders, Bath Salts, Deodorants and Depilatories, Eye Shadow, Eyebrow Pencil, Eyebrow and Eyelash Tinting and Growth Promoting Preparations, Eye Drops, Tooth Pastes and Tooth Powders, Chemical Preparations for Softening the Cuticle, Nail Polishes, Nail Polish Removers, Nail Bleaches, Hair Tonics, Hair Salves, Shampoos, Hair Curling Preparations, Pomade, and Brilliantine.

Claims use since Oct. 31, 1931.

Ser. No. 327,587. WILLIAM B. FREEMAN, doing business as Haltiwanger-Taylor Drug Company, Atlanta, Ga. Filed May 31, 1932. Under 10-year proviso.

TAYLOR'S ORIGINAL SWEET GUM AND MULLEIN

For Medicinal Compound Used for the Relief of Coughs Due to Common Colds and Minor Bronchial Irritations.

Claims use since Aug. 14, 1883.

Ser. No. 328,301. JENNIE S. EICHENBERG, doing business as Mme. Jenné, New York, N. Y. Filed June 25, 1932.

JENNE D'OR

For Cosmetic Preparations—Namely, Cleansing Cream, Astringent Lotion, Liquid Balm Cream, a Soothing and Softening Application for the Skin.

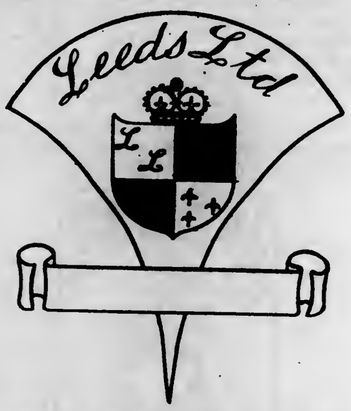
Claims use since June 18, 1932.

Ser. No. 329,226. JOHN H. FAXON, Jr., New York, N. Y. Filed July 30, 1932.

For Ink Solvent.

Claims use since Apr. 12, 1932.

Ser. No. 329,377. SAM HAGLER, doing business as Leeds Ltd., New York, N. Y. Filed Aug. 6, 1932.



For Cosmetics and Toilet Preparations—Namely, Cold Cream, Lemon Cream, Astringent, Face Powder, Rouge, Lipstick, Toilet Water, and Hair Tonic.
Claims use since January, 1930.

Ser. No. 329,598. KATHRYN ELLSWORTH, New York, N. Y. Filed Aug. 17, 1932.

Rx TOXOPHAN

The symbol "Rx" is disclaimed apart from the mark shown on the drawing.
For Medicines—Namely, a Gargle or Antiseptic Composed of Tincture of Iodine, Tincture of Benzoin Compound, Alcohol, Glycerine, and Peppermint.
Claims use since June, 1932.

Ser. No. 329,617. ANTOINE DE PARIS, INC., New York, N. Y. Filed Aug. 18, 1932.



ANTOINE

For Cleansing Cream, Massage Cream, Bleach Cream, Acne Cream, Eye Cream, Pore Cream, Foundation Cream, Skin Tonic, Astringent, Lotion for Removing Make-Up, Acne Lotion, Eye Lotion, Skin Whitener, Liquid Powder, Hand Lotion, Face and Body Powders, Rouge, Lipstick, Eye Brow Pencil, and Perfume.
Claims use since December, 1926.

Ser. No. 329,736. CAPSULOIDS (1909) LIMITED, doing business as The Cicfa Co., London, England. Filed Aug. 22, 1932.

CICFA

For Preparation for the Treatment of Indigestion.
Claims use since 1909.

Ser. No. 329,752. NOVA-BONSHEEN, INC., doing business as (Manufacturers), Chicago, Ill. Filed Aug. 22, 1932.

Nova

For Creme Lotion, a Liquid Preparation for Keeping the Hands Soft and White; Nail Polish, a Liquid Preparation for Polishing the Finger Nails; Nail Polish Remover, a Liquid Preparation for Removing Polish from the Finger Nails; Cuticle Remover, a Liquid Preparation for Removing the Dead Cuticle from Around the Finger Nails; Cuticle Oil, and Nail White.
Claims use since January, 1927.

Ser. No. 330,000. MATHILDA PIKE, New York, N. Y. Filed Aug. 30, 1932.



For Facial Preparation for Use as a Mask, Cleanser and Astringent and Face Powder.
Claims use since Jan. 13, 1932.

Ser. No. 330,406. CARL A. LEHMANN, East Orange, N. J. Filed Sept. 16, 1932.



The trade-mark consists of the letters "A R U" inclosed within a circle.
For Medicinal Preparation for the Treatment of Arthritis and Rheumatism.
Claims use since Sept. 8, 1932.

Ser. No. 330,540. JOHN DARAIO, New York, N. Y. Filed Sept. 21, 1932.



The portrait being that of applicant. No claim being made to the exclusive use of the word "Bitter," apart from the mark as shown in the drawing.
For General Tonic.
Claims use since Apr. 18, 1932.

Ser. No. 330,581. NICHOLAS WAPLER COMPANY, New York, N. Y. Filed Sept. 22, 1932.

"Antidiscrassicum"

For Fish Parasiticidal Preparation and Water Plants Nutritive Salt.
Claims use since September, 1918.

Ser. No. 330,584. SUPERIOR PRODUCTS COMPANY, Dallas, Tex. Filed Sept. 22, 1932.



S-P LABORATORIES

For Petrolatum, White (Petroleum Jelly); Petrolatum, Amber (Petroleum Jelly); Rubbing Alcohol Compound, and Bay Rum.
Claims use since Sept. 2, 1927.

Ser. No. 330,804. WINTHROP CHEMICAL COMPANY, INC., New York, N. Y. Filed Sept. 29, 1932.

NEOSKIODAN

For Water-Soluble Organic Iodine Compound Used as a Radiopaque Medium for X-Ray Examinations.
Claims use since Sept. 19, 1932.

Ser. No. 330,870. SOCIETE DES MARQUES ROBIN, SOCIETE A RESPONSABILITE LIMITEE, Paris, France. Filed Oct. 1, 1932.

PYRELOPHAGE

For Internal Medicines for Malaria Fever, Malaria and Conditions Caused by Malarial Fevers.
Claims use since May 19, 1931.

Ser. No. 330,919. JOSEPH CHIARELLO, doing business as Lido Chemical Co., Los Angeles, Calif. Filed Oct. 4, 1932.

LIDO

For Medicated Ointment for Treatment of Sore or Itching Feet, Ringworm, Golf Itch, and Athlete's Foot.
Claims use since Feb. 15, 1932.

Ser. No. 330,922. DAVIS & LAWRENCE CO., New York, N. Y. Filed Oct. 4, 1932.

URISEPTIC

For Pills Used as a Diuretic Antiseptic.
Claims use since 1908.

Ser. No. 330,929. ELIZABETH MOTLEY, doing business as Motley's Beauty Parlor, Washington, D. C. Filed Oct. 4, 1932.



For Preparation for the Hair.
Claims use since Sept. 1, 1932.

Ser. No. 330,937. SOCIETY OF CHEMICAL INDUSTRY IN BASLE, Basel, Switzerland. Filed Oct. 4, 1932.

BINACA

For Tooth Paste.
Claims use since Oct. 20, 1931.

Ser. No. 330,959. MAXINE PRODUCTS COMPANY, INC., Detroit, Mich. Filed Oct. 5, 1932.

BABY'S BREATH

For Perfume.
Claims use since December, 1927.

Ser. No. 330,960. MAXINE PRODUCTS COMPANY, INC., Detroit, Mich. Filed Oct. 5, 1932.

CHRISTMAS DREAM

For Perfume.
Claims use since December, 1927.

Ser. No. 330,961. MAXINE PRODUCTS COMPANY, INC., Detroit, Mich. Filed Oct. 5, 1932.

CHALYS

For Perfume.
Claims use since December, 1927.

Ser. No. 330,962. MAXINE PRODUCTS COMPANY, INC., Detroit, Mich. Filed Oct. 5, 1932.

BRISE DU MATIN

For Perfume.
Claims use since December, 1927.

Ser. No. 330,968. MAXINE PRODUCTS COMPANY, INC., Detroit, Mich. Filed Oct. 5, 1932.

ALOHSIA

For Perfume.
Claims use since December, 1927.

Ser. No. 331,011. MANDEL SHAPIRO, New York, N. Y. Filed Oct. 6, 1932.

RUN-RIVAL

For Preparation to Prevent Runs in Hosiery and Lingerie and to Strengthen Silk and Rayon Fabrics.
Claims use since September, 1932.

Ser. No. 331,029. WILLIAM GRAHAM THOMAS, doing business as W. G. Thomas, Pharmacist, Varina, N. C. Filed Oct. 6, 1932.

ATHETE

For Medicinal Preparation for the Treatment of Athlete's Foot.
Claims use since Aug. 15, 1930.

Ser. No. 331,067. SOUTHWEST LABORATORIES, INC., St. Louis, Mo. Filed Oct. 7, 1932.

Junos

For Hygienic Powder and a Special Liquid Germicide for Advanced Personal Hygiene of Women.
Claims use since June 9, 1931.

Ser. No. 331,182. A. C. HORN COMPANY, Long Island City, N. Y. Filed Oct. 12, 1932.

DY-SUDS

For Liquid Dye-Soap for Dyeing and Washing Fabrics.
Claims use since Mar. 1, 1932.

CLASS 12

Construction Materials

Ser. No. 319,816. FRANKLIN POTTERY, INCORPORATED, Lansdale, Pa. Filed Oct. 7, 1931.

HEVIDUTI GLAZEDVITRES

The word "Heviduti" being disclaimed apart from the mark shown.
For Wall and Floor Tiles.
Claims use since Sept. 1, 1931.

Ser. No. 330,185. UNITED CORK COMPANIES OF DELAWARE, Lyndhurst, N. J. Filed Sept. 8, 1932.

UNITED'S CORK INSULATION

The exclusive use of the words "Cork" and "Insulation" is hereby disclaimed apart from the mark as shown in the drawing.
For Corkboard, Cork Insulation for Cold Storage Work, Cork Pipe Covering, Cork Tile Floors, Cork Bricks, Cork Isolation, Cork Seam Fillers; Cork Insulations for Sound, Heat, and Moisture, as Well as Vibrations.
Claims use since August, 1929.

CLASS 13

Hardware and Plumbing and Steam-Fitting Supplies

Ser. No. 322,282. THE DURST MANUFACTURING COMPANY, INC., New York, N. Y. Filed Dec. 19, 1931.

LITTLE WONDER

For Radiator Siphon Valves.
Claims use since September, 1929.

Ser. No. 330,592. EDWARD C. BOWERS and CHARLES L. FELDMAN, receivers for Wickwire Spencer Steel Company, New York, N. Y. Filed Sept. 28, 1932.

FRIENDLY

For Steel and Wire Fences.
Claims use since Apr. 1, 1927.

Ser. No. 330,879. THE AMERICAN BRASS COMPANY, Waterbury, Conn. Filed Oct. 3, 1932.

G = ANACONDA = O

For Seamless Copper and Brass Tubes.
Claims use since Aug. 18, 1932.

CLASS 14

Metals and Metal Castings and Forgings

Ser. No. 325,789. GUNITE FOUNDRIES CORPORATION, Rockford, Ill. Filed Apr. 4, 1932.

Z-RON

For Ferrous Metal Castings.
Claims use since Mar. 7, 1932.

Ser. No. 330,543. FONDERIES DE BRONZE DE NANTERRE, SOCIETE ANONYME, Nanterre, France. Filed Sept. 21, 1932.

RICARD-F.B.N.

For Bronze Articles, Wrought or Partly Wrought, and Bronze Alloys in Ingot Form.
Claims use since June, 1932.

Ser. No. 331,498. HALCOMB STEEL COMPANY, Geddes, Syracuse, N. Y. Filed Oct. 24, 1932.

"HALVAN"

For Steel in the Form of Bars, Rods, Billets, Blooms, Sheets, Plates, Slabs, Strips, Blocks, and Forgings.
Claims use since Aug. 3, 1932.

CLASS 15

Oils and Greases

Ser. No. 331,126. L. SONNEBORN SONS, INC., New York, N. Y. Filed Oct. 10, 1932.

DEO-BASE

The word "Base" is disclaimed apart from the mark shown in the drawing.
For Deodorised Kerosene.
Claims use since Sept. 20, 1932.

Ser. No. 331,184. E. F. HOUGHTON & CO., Philadelphia, Pa. Filed Oct. 12, 1932.

EFHCO

For Lubricating Greases.
Claims use since May 25, 1932.

Ser. No. 331,223. CHARLES E. FLAGER, Lima, Ohio. Filed Oct. 13, 1932.

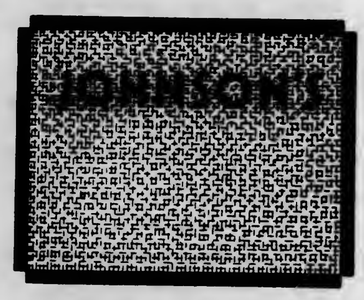
Lubri-Cushion

For Lubricating Oil.
Claims use since Jan. 18, 1932.

CLASS 16

Paints and Painters' Materials

Ser. No. 325,330. S. C. JOHNSON & SON, Racine, Wis. Filed Mar. 21, 1932.



The drawing is lined to indicate the color yellow.
For Wax for Coating and Polishing Wood, Metal, and Other Surfaces and Lacquer.
Claims use since Jan. 21, 1931, on wax; since Sept. 29, 1931, on lacquer.

CLASS 19

Vehicles, Not Including Engines

Ser. No. 330,017. METAL SPECIALTIES MANUFACTURING COMPANY, Chicago, Ill. Filed Aug. 31, 1932.



Applicant hereby disclaims the words "Speed" and "Ryke" apart from the mark shown in the drawing.
For Bicycles.
Claims use since June 21, 1932.

CLASS 21

Electrical Apparatus, Machines, and Supplies

Ser. No. 285,973. THE HOLYOKE COMPANY, INC., Holyoke, Mass. Filed June 22, 1929.

Electron Wire

No claim is made to the word "Wire" apart from its use with the mark as shown.
For Aerial and Lead-In Wires for Radio Receivers.
Claims use since Mar. 4, 1929.

Ser. No. 329,778. THE RADOLEK COMPANY, Chicago, Ill. Filed Aug. 23, 1932.

RADOLEK

For Radio Receiving Sets, Radio Transmitting Sets, and Parts Thereof.
Claims use since September, 1930.

Ser. No. 330,025. STANTEST LAMP CORPORATION, New York, N. Y. Filed Aug. 31, 1932.



For Incandescent Lamps.
Claims use since Apr. 1, 1932.

Ser. No. 330,798. THE OKONITE COMPANY, Passaic, N. J. Filed Sept. 29, 1932.



No claim being made to the representation of a section of cable.
For Electric Cords and Cables.
Claims use since Apr. 30, 1932.

CLASS 22

Games, Toys, and Sporting Goods

Ser. No. 329,621. BID-RITE PLAYING CARD CORPORATION, New York, N. Y. Filed Aug. 18, 1932.

SELF SORTING

For Playing Cards.
Claims use since July 15, 1932.

CARNEGIE LIBRARY OF ATLANTA

Ser. No. 330,535. THE BURNET COMPANY, New York, N. Y. Filed Sept. 21, 1932.



The drawing is lined for yellow. No claim is made to the representation of a billiard ball except in the association shown on the drawing.
For Billiard Accessories—Namely, Billiard Balls, Cue Balls, Bowling Alley Balls, Bridgeheads, Cue Tips, Cue Racks, Triangles, and Tally Balls.
Claims use since Aug. 1, 1932.

Ser. No. 331,680. HEALTH DEVELOPING APPARATUS CO., INC., New York, N. Y. Filed Oct. 29, 1932.

CHIEF

For Rowing Machines.
Claims use since Sept. 26, 1932.

Ser. No. 331,682. HEALTH DEVELOPING APPARATUS CO., INC., New York, N. Y. Filed Oct. 29, 1932.

HI-RO

For Rowing Machines.
Claims use since Sept. 26, 1932.

Ser. No. 331,684. HEALTH DEVELOPING APPARATUS CO., INC., New York, N. Y. Filed Oct. 29, 1932.

PAR-ROW

For Rowing Machines.
Claims use since Sept. 26, 1932.

Ser. No. 331,685. HEALTH DEVELOPING APPARATUS CO., INC., New York, N. Y. Filed Oct. 29, 1932.

SKIPPER

For Rowing Machines.
Claims use since Sept. 26, 1932.

CLASS 23

Cutlery, Machinery, and Tools, and Parts Thereof

Ser. No. 314,326. EMEROL MANUFACTURING CO., New York, N. Y. Filed May 8, 1931.



The central portion of the mark between the letters being printed in red as indicated by the lining shown in the drawing. No claim is made for the word "Oil" apart from the mark as shown.
For Lubricator for Internal Combustion Engines of the Accessory Type.
Claims use since May 1, 1930.

Ser. No. 316,396. THE WHITCOMB LOCOMOTIVE CO., Rochelle, Ill. Filed June 27, 1931.



No claim is made to the words "Gasoline, Electric Locomotives, Rochelle, Illinois, U. S. A." or the representation of the name plate per se.
For Gasoline, Oil, Diesel, and Mechanical Locomotives or Combinations of These, and Parts or Assemblies Entering Into the Manufacture of These Locomotives—Namely, Clutches, Bearings, and Bearing Boxes, Radiators, Bumper-Castings, Side Frames; Haulage Equipment and Apparatus and Accessories for the Same—Namely, Bearings; Road Building Machinery—Namely, Road Shouldering Machines, Machines for Removing or Filling in the Earth During the Building of a Road, Machinery for Conveying and Loading Earth, Machinery for Handling Material in Combination with Devices for Digging Ditches, Together with All Manner of Parts for Such Machinery.
Claims use since January, 1929.

Ser. No. 316,397. THE WHITCOMB LOCOMOTIVE CO., Rochelle, Ill. Filed June 27, 1931.



No claim is made to the words "Gasoline, Electric, Locomotives, Rochelle, Illinois, U. S. A." or the representation of the name plate per se. The cross-hatching used in the drawing is for the purpose of indicating red, and polished brass or yellow.

For Gasoline, Oil, Diesel, and Mechanical Locomotives or Combinations of These, and Parts or Assemblies Entering Into the Manufacture of These Locomotives—Namely, Clutches, Bearings, and Bearing Boxes, Radiators, Bumper-Castings, Side Frames; Haulage Equipment and Apparatus and Accessories for the Same—Namely, Bearings; Road Building Machinery—Namely, Road Shouldering Machines, Machines for Removing or Filling in the Earth During the Building of a Road, Machinery for Conveying and Loading Earth, Machinery for Handling Material in Combination with Devices for Digging Ditches, Together with All Manner of Parts for Such Machinery.

Claims use since January, 1929.

Ser. No. 330,664. NASHUA PACKAGE SEALING CO. INC., Nashua, N. H. Filed Sept. 26, 1932.

THE SHIPPER

For Machines and Tools for Moistening, Serving, or Applying Adhesive or Gummed Tape, Wrappers, Labels, and the Like Sheet or Strip Material; and Package and Container Sealing, Securing, Wrapping, or Labelling and Like Machines, and Devices Utilizing Such Material.

Claims use since October, 1926.

Ser. No. 330,665. NASHUA PACKAGE SEALING CO. INC., Nashua, N. H. Filed Sept. 26, 1932.

TAY-PER

For Machines and Tools for Moistening, Serving, or Applying Adhesive or Gummed Tape, Wrappers, Labels, and the Like Sheet or Strip Material; and Package and Container Sealing, Securing, Wrapping, or Labelling and Like Machines, and Devices Utilizing Such Material.

Claims use since February, 1932.

Ser. No. 331,015. TWIN COACH COMPANY, Kent, Ohio, assignor to Automatic Drive & Transmission Company, New York, N. Y. Filed Oct. 6, 1932.

POWERFLO

For Automatic Clutches for Power Transmission Purposes.

Claims use since Oct. 13, 1931.

CLASS 28

Jewelry and Precious-Metal Ware

Ser. No. 314,586. STATE YOUNG MEN'S CHRISTIAN ASSOCIATION OF PENNSYLVANIA, Harrisburg, Pa. Filed May 14, 1931.

Hi-Y

For Emblems and Badges Made of or Plated With Precious Metal.

Claims use since Jan. 1, 1918.

CLASS 30

Crockery, Earthenware, and Porcelain

Ser. No. 330,888. BOHEMIA KERAMISCHE WERKE, AKTIENGESELLSCHAFT, Neurohlau near Carlsbad, Czechoslovakia. Filed Oct. 3, 1932.



No claim is made to the words "Bohemia" and "China" apart from the mark shown on the drawing.

For Hotel China Ware.

Claims use since July, 1931.

CLASS 31

Filters and Refrigerators

Ser. No. 330,725. GIBSON ELECTRIC REFRIGERATOR CORPORATION, Greenville, Mich. Filed Sept. 26, 1932.

GIBSON
KEROUNIT

For Refrigerators and Refrigerating Units.

Claims use since Aug. 1, 1932.

CLASS 32

Furniture and Upholstery

Ser. No. 327,956. PETER WEISSWASSER, doing business as Sanitary Mop Cabinet Co., Detroit, Mich. Filed June 10, 1932.

PW

For Mop Cabinet.

Claims use since Apr. 15, 1932.

Ser. No. 329,913. ENGLANDER SPRING BED CO., Brooklyn, N. Y. Filed Aug. 26, 1932.

VICEROY

For Springs, Mattresses, Beds, Couch Beds, Studio Beds, Gliders, Tables, and Chairs Used for Household, Office, and Outdoor Purposes.

Claims use since July 5, 1932.

CLASS 33

Glassware

Ser. No. 331,562. PITTSBURGH PLATE GLASS COMPANY, Pittsburgh, Pa. Filed Oct. 25, 1932.



For Flat Glass.

Claims use since Mar. 21, 1930.

CLASS 34

Heating, Lighting, and Ventilating Apparatus, Not Including Electrical Apparatus

Ser. No. 330,503. WOOD HYDRAULIC HOIST AND BODY COMPANY, Detroit, Mich. Filed Sept. 19, 1932.

GARWOOD

The lining shown on the drawing is used to indicate the colors red and yellow.

For Heating Boilers and Oil Burners.

Claims use since May 22, 1930.

CLASS 35

Belting, Hose, Machinery Packing, and Nonmetallic Tires

Ser. No. 320,514. S. SCHWABE & SÖHNE LEDER-U. TREIBRIEMENFABRIKEN A.-G., Varel/Oldenburg, Germany. Filed Oct. 27, 1931.

VIRO

No claim is made to the representation of the goods shown on the drawing, except in the connection illustrated.

For Driving Belts and Driving Belt Fasteners Made of Leather.

Claims use since Dec. 6, 1928.

CLASS 37

Paper and Stationery

Ser. No. 331,120. RIEGEL PAPER CORPORATION, Riegelsville, N. J., and New York, N. Y. Filed Oct. 10, 1932.

RIEGELINE

For Glassine Paper.

Claims use since September, 1931.

Ser. No. 331,597. STRATHMORE PAPER COMPANY, Mittineague, Mass. Filed Oct. 26, 1932.

REEDMARK

For Writing and Printing Paper.
Claims use since Oct. 17, 1932.

Ser. No. 331,598. STRATHMORE PAPER COMPANY, Mittineague, Mass. Filed Oct. 26, 1932.

SCOTSMAN

For Writing and Printing Paper.
Claims use since Oct. 21, 1932.

Ser. No. 331,678. FORT HOWARD PAPER COMPANY, Green Bay, Wis. Filed Oct. 29, 1932.

TRUMP

For Toilet Paper, Paper Towels, Paper Napkins, and Crepe Paper.
Claims use since Oct. 18, 1932.

Ser. No. 331,716. THE SWEET MFG. & SALES CO., Phoenix, N. Y. Filed Oct. 28, 1932.

Sweetall

For Toilet Tissues, Paper Napkins, Wax Paper, Wax Tissue Paper, Cleansing Tissues, and Shelf and Wrapping Paper.
Claims use since Oct. 10, 1932.

CLASS 38

Prints and Publications

Ser. No. 331,640. WILLIAM M. GOLDSMITH, Wichita, Kans. Filed Oct. 28, 1932.

The Omnibus College
"America's College on Wheels"

For Books.
Claims use since June 15, 1925.

CLASS 39

Clothing

Ser. No. 320,003. THE MAY DEPARTMENT STORES COMPANY, St. Louis, Mo. Filed Oct. 12, 1931.

ROCHAMBEAU

For Men's Ties.
Claims use since Aug. 29, 1931.

Ser. No. 320,096. MARATHON RUBBER PRODUCTS, INC., Wausau, Wis. Filed Oct. 15, 1931.



No claim is made to exclusive use of the words "Sport Garments" descriptively or apart from the mark shown.
The face represented and other parts similarly shaded are colored golden yellow, while the parts vertically shaded are in red.
For Sport Goods, Consisting of Raincoats of Calendered Rubber.
Claims use since Mar. 18, 1931.

Ser. No. 326,955. HARRY W. SCHWEIZER, doing business as De Silhouette Hosiery, Philadelphia, Pa. Filed May 10, 1932.

Ninon de Silhouette

No claim is made to the word "Ninon" except in the association shown.
For Hosiery.
Claims use since Apr. 19, 1932.

Ser. No. 328,579. GREENHILL & DANIEL, INC., Brooklyn, N. Y. Filed July 6, 1932.

GOLD DART

For Knitted Bathing Suits.
Claims use since Jan. 4, 1932.

Ser. No. 329,637. WILLIAM HOLLINS AND COMPANY, LIMITED, Nottingham, England. Filed Aug. 18, 1932.

ROYALIST

For Articles of Clothing—Namely, Frocks, Dresses, Underwear, and Nightwear, All Being for Ladies; and Pyjamas and Shirts for Men.
Claims use since 1904.

Ser. No. 329,918. GRETZ & SCHWARTZ, Philadelphia, Pa. Filed Aug. 27, 1932.

GYM-ZIP

For Boys' and Girls' Rompers, Dresses, Play Suits, and Gymnasium Suits.
Claims use since July 5, 1932.

Ser. No. 330,365. THE CROWN OVERALL MFG. CO., Cincinnati, Ohio. Filed Sept. 15, 1932.

BREEZKOTE

For Men's Coats, Vest Coats, Sleeveless Vest Coats, Sport Coats, and Norfolk Coats.
Claims use since June 30, 1932.

Ser. No. 330,481. GEORGE LAGANAS, Boston, Mass. Filed Sept. 19, 1932.



No claim is made to the exclusive use of the words "Steel Shank Adhesive" apart from the mark shown.
For Shoes Made of Leather, Rubber or Fabric and/or a Combination of Those Materials.
Claims use since June 1, 1932.

Ser. No. 330,497. WELLS-LAMONT-SMITH CORPORATION, Minneapolis, Minn. Filed Sept. 19, 1932.



Applicant disclaims the exclusive use of the word "Line" except in the combination shown.
For Work Gloves of Fabric and Combined Fabric and Leather.
Claims use since Aug. 15, 1932.

Ser. No. 330,579. THE MOYER MANUFACTURING COMPANY, Youngstown, Ohio. Filed Sept. 22, 1932.

EZY-ZIP

For Coats, Vests, and Trousers for Men and Boys; Infants' Outer Wear, and Sport Coats and Sport Dresses for Women and Girls.
Claims use since June 1, 1932.

Ser. No. 331,127. LOUIS SOPKIN COMPANY, Chicago, Ill. Filed Oct. 10, 1932.

Lady Belle

For Frocks and Aprons for Women and Misses.
Claims use since Sept. 1, 1932.

Ser. No. 331,544. CLUETT, PEABODY & CO., INC., Troy, N. Y. Filed Oct. 25, 1932.

FLIGHT

For Underwear of Knitted and Textile Fabrics for Men, Women, and Children.
Claims use since May, 1931.

CLASS 40

Fancy Goods, Furnishings, and Notions

Ser. No. 330,585. UNIVERSAL BUTTON FASTENING & BUTTON COMPANY, Detroit, Mich. Filed Sept. 22, 1932.

UNITRO

For Buttons of Non-Precious Material.
Claims use since Aug. 23, 1932.

CLASS 42

Knitted, Netted, and Textile Fabrics

Ser. No. 328,897. THOMAS WILSON & CO., INC., New York, N. Y. Filed July 19, 1932.



The lining on the drawing is for the purpose of shading. The exclusive use of the words "A Wilson Origination" and "Trade-Mark" and the word "Chalk" is hereby disclaimed apart from the mark shown on the drawing.
For Laces in the Piece.
Claims use since July 15, 1932.

Ser. No. 328,999. SUTTON'S MILLS, INCORPORATED, North Andover and Boston, Mass. Filed July 22, 1932.



For Woolen Piece Goods.
Claims use since May 9, 1932.

Ser. No. 329,111. THE ESMOND MILLS, Esmond, Smithfield, R. I. Filed July 27, 1932.



No claim being made in this application to the exclusive right to the use of the term "Warmth Certificate" apart from the mark shown.
For Textile Blankets Made Wholly or Partly of Wool.
Claims use since June 10, 1932.

Ser. No. 330,814. GLADDING'S INC., Providence, R. I. Filed Sept. 30, 1932.

Renuvator

For Gauze Curtains and Curtaining.
Claims use since Sept. 21, 1932.

Ser. No. 330,861. MINOT, HOOPER & CO., New York, N. Y. Filed Oct. 1, 1932.



For Finished Sheets and Pillow Cases.
Claims use since 1896.

Ser. No. 331,463. HOLDEN-LEONARD COMPANY INC., New York, N. Y. Filed Oct. 22, 1932.

SILVAPACA

For Worsted and Woolens in the Piece.
Claims use since Jan. 15, 1932.

CLASS 44

Dental, Medical, and Surgical Appliances

Ser. No. 329,749. MAC-DELL'S, Superior, Wis. Filed Aug. 22, 1932.

For Tooth Picks.
Claims use since Nov. 2, 1931.

Ser. No. 331,132. THE BAND-TEX COMPANY, Chicago, Ill. Filed Oct. 10, 1932.

BAND-TEX

For Surgical Bandages.
Claims use since Sept. 1, 1932.

CLASS 45

Beverages, Nonalcoholic

Ser. No. 311,830. FRENCH LICK SPRINGS HOTEL CO., French Lick, Ind. Filed Mar. 6, 1931.

When Nature Won't—Pluto Will

For Laxative Natural Mineral Water.
Claims use since 1895.

Ser. No. 331,357. DOUGLAS SENTELL, Keyport, N. J. Filed Oct. 15, 1932.

TONSIL TEASER

For Nonalcoholic, Maltless, Ginger Cordial Sold as a Soft Drink.
Claims use since Oct. 8, 1932.

CLASS 46

Foods and Ingredients of Foods

Ser. No. 307,259. CALIFORNIA PACKING CORPORATION, San Francisco, Calif. Filed Oct. 28, 1930.

SUN-KIST

For Canned Fruit, Dried Fruit, Raisins, Canned and Dried Prunes, Canned Vegetables, Tomato Puree, Salted Nuts, Evaporated Milk, Jams, Jellies, Fruit Preserves, Canned Fish, Catsup, Olives, Vegetable Oil, Pickles, Coffee, Tea, Dried Vegetables, Cocoa, Sugar and Maple Syrup, Sugar, Spices, Dry Rice, Tapioca, Fruit Juices for Food Purposes, Canned Beans with and without Pork and Tomato Sauce, Sauerkraut, Honey, Vinegar, Macaroni, Noodles, Spaghetti, Gelatine, Mincemeat, Cornstarch, Farina, Flavoring Extracts for Food Purposes, Fresh Vegetables, Maraschino Type Cherries, Tomato Sauce, Cranberry Sauce, Canned Hominy, Fruit Butter, Apple Sauce, Pickle Relishes, Chili Sauce, Mustard, Chowchow, Tomato Juice, Sauerkraut Juice, Marmalades, Meat Sauces, Mayonnaise, Tamales, Ravioli, Soup, Peanut Butter, Vegetable Shortening, Canned Meat—Namely, Canned Chicken; and Candies.

Claims use since Sept. 23, 1907, on canned fruit, dried fruit, raisins and canned and dried prunes; since Apr. 1, 1911, on canned vegetables and tomato puree; since June 28, 1911, on salted nuts and evaporated milk; since Sept. 2 1911, on jams, jellies, fruit preserves, canned fish, catsup, olives, vegetable oil, pickles, coffee, tea, and dried vegetables; since Apr. 9, 1912, on cocoa, sugar and maple syrup, sugar, spices, dry rice, tapioca, fruit juices for food purposes, canned beans with and without pork and tomato sauce, and sauerkraut; since Nov. 16, 1914, on honey, vinegar, macaroni, noodles, spaghetti, gelatine, mincemeat, cornstarch, farina and flavoring extracts for food purposes; since May 17, 1916, on fresh vegetables; since Mar. 13, 1920, on maraschino type cherries; since Apr. 23, 1920, on tomato sauce; since Oct. 16, 1920, on cranberry sauce, canned hominy, fruit butter and apple sauce; since Sept. 1, 1921, on pickle relishes, chili sauce, mustard and chowchow; since Oct. 24, 1929, on tomato juice; since Dec. 7, 1929, on sauerkraut juice; since Mar. 18, 1930, on marmalades, meat sauces, mayonnaise, tamales, ravioli, soup and peanut butter; since Mar. 18, 1930, on vegetable shortening; since Apr. 9, 1930, on canned meat—namely, canned chicken; since Apr. 25, 1930, on candies.

Ser. No. 307,264. CALIFORNIA PACKING CORPORATION, San Francisco, Calif. Filed Oct. 28, 1930.



The lining on the drawing indicates the color red upon the letters and background, the border being lined for shading only.

For Canned Fruit, Dried Fruit, Raisins, Canned and Dried Prunes, Canned Vegetables, Tomato Puree, Salted Nuts, Evaporated Milk, Jams, Jellies, Fruit Preserves, Canned Fish, Catsup, Olives, Vegetable Oil, Pickles, Coffee, Tea, Dried Vegetables, Cocoa, Sugar and Maple Syrup, Sugar, Spices, Dry Rice, Tapioca, Fruit Juices for Food Purposes, Canned Beans with and without Pork and Tomato Sauce, Sauerkraut, Honey, Vinegar, Macaroni, Noodles, Spaghetti, Gelatine, Mincemeat, Cornstarch, Farina, Flavoring Extracts for Food Purposes, Fresh Vegetables, Maraschino Type Cherries, Tomato Sauce, Cranberry Sauce, Canned Hominy, Fruit Butter, Apple Sauce, Pickle Relishes, Chili Sauce, Mustard, Chowchow, Tomato Juice, Sauerkraut Juice, Marmalades, Meat Sauces, Mayonnaise, Tamales, Ravioli, Soup, Peanut Butter, Vegetable Shortening, Canned Meat—Namely, Canned Chicken; and Candies.

Claims use since April, 1911, on canned fruit, dried fruit, raisins, canned and dried prunes, canned vegetables and tomato puree; since June 28, 1911, on salted nuts and evaporated milk; since Sept. 2, 1911, on jams, jellies, fruit preserves, canned fish, catsup, olives, vegetable oil, pickles, coffee, tea, and dried vegetables; since Apr. 9, 1912, on cocoa, sugar and maple syrup, sugar, spices, dry rice, tapioca, fruit juices for food purposes, canned beans with and without pork and tomato sauce, and sauerkraut; since Nov. 16, 1914, on honey, vinegar, macaroni, noodles, spaghetti, gelatine, mincemeat, cornstarch, farina and flavoring extracts for food purposes; since May 17, 1916, on fresh vegetables; since Mar. 13, 1920, on maraschino type cherries; since Apr. 23, 1920, on tomato sauce; since Oct. 16, 1920, on cranberry sauce, canned hominy, fruit butter and apple sauce; since Sept. 1, 1921, on pickle relishes, chili sauce, mustard and chowchow; since Oct. 24, 1929, on tomato juice; since Dec. 7, 1929, on sauerkraut juice; since Mar. 18, 1930, on marmalades, meat sauces, mayonnaise, tamales, ravioli, soup and peanut butter; since Mar. 18, 1930, on vegetable shortening; since Apr. 9, 1920, on canned meat—namely, canned chicken; since Apr. 25, 1930, on candies.

Ser. No. 311,003. PHILADELPHIA MALT EXTRACT CO., Philadelphia, Pa. Filed Feb. 12, 1931.

GILT-EDGE
MALT SYRUP

Philadelphia Malt Extract Co.

The words "Malt Syrup" are disclaimed apart from the mark shown in the drawing. In the drawing, the edges of the words "Gilt Edge" have been lined to indicate yellow or gold which is particularly claimed. The words "Philadelphia Malt Extract Co." are disclaimed except in the association shown in the drawing.

For Malt Syrup.

Claims use since October, 1927.

Ser. No. 316,693. BORDEN'S MILK PRODUCTS COMPANY, INC., New York, N. Y., assignor to Borden's Quality Inc., New York, N. Y., a Corporation of Delaware. Filed July 7, 1931.

SILVER COW



For Creamery Products—Namely, Evaporated Milk.

Claims use since Jan. 2, 1901.

Ser. No. 320,129. MISSOURI STATE CHICKERIES, Jefferson City, Mo. Filed Oct. 16, 1931.

BOTZ
Poulette



No claim is made to the words "Botz Poulette," the pictorial representation of the goods or the slogan "The Best You Can Wish For," apart from the mark as shown.

For Dressed Chickens.

Claims use since Oct. 7, 1930.

Ser. No. 320,744. CUPID'S INN, Springfield, Mass. Filed Nov. 2, 1931.



For Sandwiches.

Claims use since Oct. 26, 1931.

Ser. No. 321,210. JOHN MANTIA & SONS, Boston, Mass. Filed Nov. 17, 1931.

GEORGES BANK



No registration rights are claimed for the words "Georges Bank" apart from the mark shown on the drawing.

For Fresh Fish Fillets.

Claims use since Mar. 16, 1931.

Ser. No. 325,788. THE GRIST MILL, Los Angeles, Calif. Filed Apr. 4, 1932.

VITA-VEGE

For Seasoning and Flavoring Vegetable Compound in the Form of a Salt.

Claims use since Aug. 21, 1928.

Ser. No. 326,236. FRED J. SILK, doing business as Silk Packing Company, Los Angeles, Calif. Filed Apr. 18, 1932.

Silk's
TRADE-MARK
PREPARED
SPANISH
STYLE
RICE
simply heat and eat!

All the words except "Silk's Supreme" are disclaimed apart from the mark shown.

For Spanish Style Rice.

Claims use since Mar. 28, 1932.

Ser. No. 327,261. S. & S. CONE CORPORATION, New York, N. Y. Filed May 19, 1932.

MILK-E-

The Pastree Cone

No claim is made to the words "The Pastree Cone" and "Milk" apart from the mark as shown.

For Ice Cream Cones.

Claims use since Jan. 13, 1932.

Ser. No. 328,154. BIRDSALL & WILCOX, New Haven, Conn. Filed June 21, 1932.

DIATE

For Salad Dressing.

Claims use since Mar. 15, 1932.

Ser. No. 329,346. THE CROSSE & BLACKWELL COMPANY, Baltimore, Md. Filed Aug. 5, 1932.

CROSSE & BLACKWELL

For Marmalades, Jellies, Fruit Preserves, Catsups, Food Sauces, Vinegars, Pickles, Salad Relish, Sandwich Relish, Canned Stews—Namely, Irish Stew, Lamb Stew, Beef Stew, and Curried Beef with Vegetables and Rice; Tomato Juice. Cheese, Mincemeat, Puddings, Soups, Canned Fish, Chutney Sauces, Coffee Essence, Fruit Juices for Food Purposes, Tomato Juice Cocktail.

Claims use since 1890.

Ser. No. 330,069. NATIONAL DAIRY PRODUCTS COMPANY, INC., Baltimore Md. Filed Sept. 2, 1932.

"NATIONAL DAIRY"

For Malted Milk Powder.

Claims use since Jan. 2, 1932.

Ser. No. 330,070. NATIONAL DAIRY PRODUCTS COMPANY, INC., Baltimore, Md. Filed Sept. 2, 1932.



The cross-hatching in the drawing is intended to denote the color orange.

For Malted Milk Powder.

Claims use since Mar. 15, 1932.

Ser. No. 330,100. THE QUAKER OATS COMPANY, Chicago, Ill. Filed Sept. 3, 1932.

Fluffy-Light

For Pancake Flour.

Claims use since July 30, 1932.

Ser. No. 330,218. QUAKER CITY CHOCOLATE & CONFECTIONERY CO., INC., Philadelphia, Pa. Filed Sept. 9, 1932.

REPEAL

For Candy.

Claims use since July 28, 1932.

Ser. No. 330,326. JACK KATZ, Los Angeles, Calif. Filed Sept. 13, 1932.



No claim is made to the word "Fruit", apart from the mark as shown in the drawing.
For Frozen Chocolate-Covered Fruits.
Claims use since Jan. 5, 1932.

Ser. No. 330,339. CARLTON CRAWFORD, doing business as Anglo-American Importing Company, Galveston, Tex. Filed Sept. 14, 1932.

Dutch Master

Malt
BLEND

No claim is made to the words "Malt Blend" apart from the mark as shown.
For Malt Syrups.
Claims use since May 1, 1932.

Ser. No. 330,615. ABABL FARR & SONS COMPANY, Ogden, Utah. Filed Sept. 24, 1932.

Creamsicle

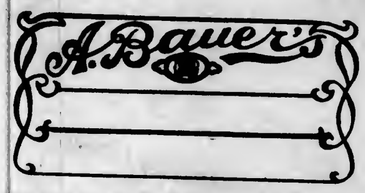
For Ice Cream, Ices, and Frozen Confections.
Claims use since July 1, 1932.

Ser. No. 330,773. WM. M. BELL COMPANY, Chicago, Ill. Filed Sept. 29, 1932.



No claim is made to the words "Frozen" and "The Nutty Sundae" apart from the mark as shown.
For Ice Cream Confection.
Claims use since Oct. 1, 1931.

Ser. No. 330,807. AUGUST BAUER'S SONS, INC., New York, N. Y. Filed Sept. 30, 1932.



For Prepared Mustard and Prepared Horseradish Mustard.
Claims use since February, 1917.

Ser. No. 331,096. WILLIAMSON CANDY COMPANY, Chicago, Ill. Filed Oct. 8, 1932.

ROSIO

The lining shown on the drawing is used for shading purposes only.
For Candy.
Claims use since Sept. 14, 1932.

Ser. No. 331,124. JOSEPH E. SAUNDERS, doing business as Saunders Company, Kansas City, Mo. Filed Oct. 10, 1932.

DELUXE
Chicken Chili

The words "Chicken Chili" are disclaimed apart from the mark as shown by the drawing.
For Prepared Chili in Compressed Form.
Claims use since Sept. 1, 1932.

Ser. No. 331,154. JOHN JACOBS COMPANY, Canon City, Colo. Filed Oct. 11, 1932.

New Golden
MELODEW

For Fresh Melons.
Claims use since May 1, 1931.

Ser. No. 331,197. G. B. RAFFETTO INC., New York, N. Y. Filed Oct. 12, 1932.



Applicant hereby disclaims the representation of the label "per se", as any part of the applicant's mark.
For Diced Pineapples.
Claims use since July 2, 1931.

Ser. No. 331,380. MAXWELL HOME SUPPLY CORP., New York, N. Y. Filed Oct. 19, 1932.



The portrait shown in the drawing is merely fanciful. The lining in the word "Kraft" represents red color. No claim is made to the word "Kraft" apart from the mark shown on the drawing.
For Malt Syrup.
Claims use since November, 1926.

Ser. No. 331,423. THE BACHRACH-FELD COMPANY, INC., doing business as Wortex Concentrated Malt Co., Cincinnati, Ohio. Filed Oct. 21, 1932.

WORTEX

For Concentrated Liquid Malt Syrup Used for Food Purposes.
Claims use since Aug. 22, 1932.

CLASS 47
Wines

Ser. No. 331,704. GEO. G. SANDEMAN SONS & CO. LIMITED, London, England. Filed Oct. 29, 1932.

CORREGIDOR

For Wines.
Claims use since July 16, 1931.

Ser. No. 331,706. GEO. G. SANDEMAN SONS & CO. LIMITED, London, England. Filed Oct. 29, 1932.

THE PARTNERS

For Wines.
Claims use since Jan. 6, 1913.

Ser. No. 331,799. ROBERTSON & COMPANY, Glasgow, Scotland. Filed Nov. 1, 1932.

CRADLE



For Port.
Claims use since Dec. 2, 1925.

CLASS 48
Malt Beverages and Liquors

Ser. No. 331,376. INDEPENDENT MILWAUKEE BREWERY, Milwaukee, Wis. Filed Oct. 19, 1932.



The picture is merely fanciful and all words and numerals except the word "Braumeister" are disclaimed apart from the mark as shown.
For Malt Beverage, with Not More Than the Legal Alcoholic Content.
Claims use since June 15, 1914.

CLASS 49
Distilled Alcoholic Liquors

Ser. No. 330,818. GOODERHAM & WORTS, LTD., Toronto, Ontario, Canada. Filed Sept. 30, 1932. Under 10-year proviso.

GOODERHAM & WORTS Special

For Whisky.
Claims use since March, 1890.

Ser. No. 331,728. DISTILLERS CORPORATION LIMITED, Montreal, Quebec, Canada. Filed Oct. 31, 1932.

INDIAN HILL

For Potable Spirits, Whiskey, and Liquors.
Claims use since Feb. 22, 1928.

TRADE-MARK REGISTRATIONS GRANTED

[ACT OF FEBRUARY 20, 1905]

DECEMBER 6, 1932

299,390. ARTICLES MADE OF SILVER—NAMELY, KNIVES, FORKS, AND SPOONS, NUT AND CANDY DISHES, ASH TRAYS, BASKETS, BEVERAGE MIXERS, CUPS, SAUCERS, BOWLS, TABLE DISHES, PITCHERS, BREAD TRAYS, PLATES, CANDLESTICKS, CENTRE PIECES, TEA AND COFFEE SETS, AND WAITERS, COMPOTIERS, GOBLETS, LOVING CUPS, PLATTERS, SALT AND PEPPER SHAKERS, SUGAR BOWLS, AND VASES. CONCORD SILVERSMITHS, INC., Concord, N. H.
Filed November 24, 1931. Serial No. 321,459. PUBLISHED SEPTEMBER 13, 1932. Class 28.

299,391. PETROLEUM PRODUCTS—NAMELY, LUBRICATING OILS, GASOLINE. RICHFIELD OIL CORPORATION OF NEW YORK, New York, N. Y.
Filed December 5, 1931. Serial No. 321,821. PUBLISHED SEPTEMBER 20, 1932. Class 15.

299,392. CLOTHING. SOCIETE ANONYME DES ETABLISSEMENTS ANDRÉ GILLIER, Troyes, France.
Filed January 28, 1932. Serial No. 323,548. PUBLISHED AUGUST 16, 1932. Class 39.

299,393. SANDALS OF LEATHER, FABRIC, AND RUBBER, AND COMBINATIONS OF THE SAME FOR MEN, WOMEN, AND CHILDREN. GOLO SLIPPER COMPANY, INC., New York, N. Y.
Filed February 2, 1932. Serial No. 323,745. PUBLISHED MAY 31, 1932. Class 39.

299,394. LADIES' HATS. SAMUEL GOLDBAUM, doing business as Lily Hat Company, New York, N. Y.
Filed February 9, 1932. Serial No. 323,993. PUBLISHED MARCH 29, 1932. Class 39.

299,395. VACUUM OR GAS-FILLED TUBES AND PARTICULARLY FOR X-RAY TUBES. WESTINGHOUSE LAMP COMPANY, Bloomfield, N. J.
Filed February 19, 1932. Serial No. 324,416. PUBLISHED SEPTEMBER 20, 1932. Class 21.

299,396. SHOES OF LEATHER, RUBBER, OR FABRIC AND OF COMBINATIONS OF THOSE MATERIALS. M. N. ARNOLD SHOE COMPANY, North Abington, Mass.
Filed March 2, 1932. Serial No. 324,691. PUBLISHED SEPTEMBER 20, 1932. Class 39.

299,397. WOMEN'S AND MISSES' DRESSES, COATS, AND SUITS. SAMUEL ALTMAN, New York, N. Y.
Filed December 19, 1931. Serial No. 322,280. PUBLISHED FEBRUARY 23, 1932. Class 39.

299,398. OLIVE OIL. MAGNUS, MABEE & REYNARD, INC., New York, N. Y.
Filed December 12, 1931. Serial No. 322,053. PUBLISHED MARCH 1, 1932. Class 46.

299,399. HOSIERY. HOLEPROOF HOSIERY CO., Milwaukee, Wis.
Filed July 15, 1932. Serial No. 328,812. PUBLISHED SEPTEMBER 20, 1932. Class 39.

299,400. CHILDREN'S CLOTHING—NAMELY, CREEPERS, ROMPERS, WASH SUITS, PAJAMAS, BATH ROBES, SLEEPERS, PLAY SUITS, SUN SUITS, AND GYM SUITS. PENNWAY MANUFACTURING COMPANY, Harrisburg, Pa.
Filed July 22, 1932. Serial No. 328,996. PUBLISHED SEPTEMBER 20, 1932. Class 39.

299,401. GENERATORS FOR VAPORIZING SOLID CARBON DIOXIDE FOR USE IN SODA FOUNTAINS AND THE LIKE. Co_2 APPLIANCE COMPANY, Tulsa, Okla.
Filed June 3, 1932. Serial No. 327,680. PUBLISHED SEPTEMBER 27, 1932. Class 23.

299,402. LEATHER PATCHES FOR KNEES AND ELBOWS OF GARMENTS. SILVERITE-GUTTERMAN CO., Boston, Mass.
Filed July 8, 1932. Serial No. 328,648. PUBLISHED SEPTEMBER 20, 1932. Class 39.

299,403. CARPET AND RUG CUSHIONS. DEMSTER FELT & HAIR COMPANY, INC., Philadelphia, Pa.
Filed June 17, 1932. Serial No. 328,057. PUBLISHED SEPTEMBER 27, 1932. Class 50.

299,404. LADIES' AND CHILDREN'S WEARING APPAREL—NAMELY, COATS, DRESSES, SLIPPERS, PUMPS, SANDALS MADE OF LEATHER AND/OR FABRIC, HOSIERY, FABRIC AND KID GLOVES, BLOUSES, SWEATERS, SKIRTS, BATHING SUITS, BRASSIÈRES, CORSETS, FUR COATS, FUR NECKPIECES, KIMONOS, SUITS, AND HATS. W. H. ROLAND, Bloomington, Ill.
Filed May 25, 1932. Serial No. 327,452. PUBLISHED SEPTEMBER 27, 1932. Class 39.

299,405. SMOKED HERRING. THOMAS S. GORTON, JR., doing business as Slade Gorton Co., Chicago, Ill.
Filed February 23, 1932. Serial No. 324,377. PUBLISHED SEPTEMBER 27, 1932. Class 46.

299,406. HOSIERY. MORGAN HOSIERY MILLS, Indianapolis, Ind.
Filed February 6, 1932. Serial No. 323,902. PUBLISHED MARCH 15, 1932. Class 39.

299,407. MACARONI. THE PFAFFMAN EGG NOODLE COMPANY, Cleveland, Ohio.
Filed January 22, 1932. Serial No. 323,306. PUBLISHED SEPTEMBER 27, 1932. Class 46.

299,408. SCARFS. GLENSDER TEXTILE CO., New York, N. Y.
Filed January 13, 1932. Serial No. 322,957. PUBLISHED APRIL 5, 1932. Class 39.

299,409. CARBON PAPER. F. S. WEBSTER COMPANY, Cambridge, Mass.
Filed December 22, 1931. Serial No. 322,411. PUBLISHED SEPTEMBER 27, 1932. Class 11.

299,410. FLAT-WARE AND HOLLOW-WARE MADE OF OR PLATED WITH PRECIOUS METALS. INTERNATIONAL SILVER COMPANY, Meriden, Conn.
Filed July 30, 1932. Serial No. 329,235. PUBLISHED SEPTEMBER 20, 1932. Class 28.

299,411. LUBRICATING OILS, LUBRICATING GREASES, AND GASOLINE. BALLARD OIL COMPANY OF WORCESTER, INC., Worcester, Mass.
Filed August 1, 1932. Serial No. 329,251. PUBLISHED SEPTEMBER 20, 1932. Class 15.

299,412. GASOLINE, MOTOR LUBRICATING OILS, FUEL OILS, AND MACHINE LUBRICATING OILS. NAGY BROS. MOTOR COMPANY, Bethlehem, Pa.
Filed August 1, 1932. Serial No. 329,263. PUBLISHED SEPTEMBER 20, 1932. Class 15.

299,413. STORAGE BATTERIES. WITHERBEE STORAGE BATTERY CO., INC., Belleville, N. J.
Filed August 5, 1932. Serial No. 329,393. PUBLISHED SEPTEMBER 20, 1932. Class 21.

299,414. FOOTWEAR—NAMELY, BOOTS AND SHOES MADE WHOLLY OR PARTLY OF RUBBER. THE B. F. GOODRICH COMPANY, New York, N. Y.
Filed April 14, 1932. Serial No. 326,100. PUBLISHED SEPTEMBER 13, 1932. Class 39.

299,415. FOOTWEAR—NAMELY BOOTS AND SHOES MADE WHOLLY OR PARTLY OF RUBBER. HOOD RUBBER COMPANY, INC., Wilmington, Del., and Watertown, Mass.
Filed April 14, 1932. Serial No. 326,103. PUBLISHED SEPTEMBER 13, 1932. Class 39.

299,416. BOOTS AND SHOES OF LEATHER, FABRIC, OR COMBINATIONS THEREOF. FREEMAN SHOE CORPORATION, Beloit, Wis.
Filed April 20, 1932. Serial No. 326,285. PUBLISHED SEPTEMBER 13, 1932. Class 39.

299,417. BUCKLES MADE OF NON-PRECIOUS METAL. PIONEER SUSPENDER COMPANY, Philadelphia, Pa.
Filed June 15, 1932. Serial No. 328,015. PUBLISHED SEPTEMBER 6, 1932. Class 40.

299,418. MEN'S AND WOMEN'S HATS OF KNITTED AND WOVEN MATERIAL. SOFTKNIT HAT CO., New York, N. Y.
Filed June 22, 1932. Serial No. 328,229. PUBLISHED SEPTEMBER 13, 1932. Class 39.

299,419. CERTAIN NAMED WEARING APPAREL. FASHION PARK ASSOCIATES, INC., Rochester, N. Y.
Filed June 29, 1932. Serial No. 328,394. PUBLISHED AUGUST 23, 1932. Class 39.

299,420. PILE FABRICS IN THE PIECE. SIDNEY BLUMENTHAL & CO. INC., New York, N. Y.
Filed July 2, 1932. Serial No. 328,519. PUBLISHED AUGUST 23, 1932. Class 42.

299,421. HEADGEAR IN THE NATURE OF A CAP-VEIL. KATHRYN S. JORDAN, assignor to Van Raalte Co. Inc., New York, N. Y., a Corporation of New York.
Filed July 9, 1932. Serial No. 328,669. PUBLISHED SEPTEMBER 20, 1932. Class 39.

299,422. CAPS AND FUR FELT HATS FOR MEN. MALROY HAT AND CAP CO., Minneapolis, Minn.
Filed July 14, 1932. Serial No. 328,796. PUBLISHED SEPTEMBER 20, 1932. Class 39.

299,423. FOOTWEAR—NAMELY, BOOTS AND SHOES OF RUBBER OR CANVAS AND RUBBER AND INNER AND OUTER SOLES THEREFOR. FIRESTONE FOOTWEAR COMPANY, Hudson, Mass.
Filed July 14, 1932. Serial No. 328,784. PUBLISHED SEPTEMBER 13, 1932. Class 39.

299,424. MEN'S, WOMEN'S, AND CHILDREN'S SHOES, MADE OF LEATHER, RUBBER, OR FABRIC AND COMBINATIONS OF THESE MATERIALS. MAURICE J. MARKELL, Brooklyn, N. Y.
Filed July 14, 1932. Serial No. 328,797. PUBLISHED SEPTEMBER 13, 1932. Class 39.

299,425. WOMEN'S, MISSES', AND CHILDREN'S HATS. BRIGHTON LADIES HAT CO. INC., New York, N. Y.
Filed July 20, 1932. Serial No. 328,011. PUBLISHED SEPTEMBER 13, 1932. Class 39.

299,426. EMBROIDERED EMBLEMS FOR SPECIAL WEARING APPAREL SUCH AS BATHING SUITS, GYM SHORTS, ATHLETIC SUITS, UNIFORMS, SWEAT SHIRTS, WORK CLOTHING SUCH AS UNIFORMS FOR OIL COMPANIES AND AUTOMOBILE MANUFACTURERS. GEMSCO, INC., New York, N. Y.
Filed July 21, 1932. Serial No. 328,954. PUBLISHED SEPTEMBER 6, 1932. Class 40.

299,427. WOMEN'S HATS. R. H. MACY & CO., INC., New York, N. Y.
Filed July 22, 1932. Serial No. 328,991. PUBLISHED SEPTEMBER 6, 1932. Class 39.

299,428. LEATHER SHOES. WALTER A. FANKHAUSER, doing business as Walters Shoe Company, New York, N. Y.
Filed July 22, 1932. Serial No. 328,982. PUBLISHED SEPTEMBER 20, 1932. Class 39.

299,429. BANDETTES, BANDEAUX, BRASSIÈRES, GIRDLES, CORSELETTES, AND GARTER BELTS. DOROTHY BICKUM, New York, N. Y.
Filed July 22, 1932. Serial No. 328,974. PUBLISHED SEPTEMBER 6, 1932. Class 39.

299,430. TONIC FOR THE TREATMENT OF HEMATOZOSIS OF PALUDISM. SOCIÉTÉ DES USINES CHIMIQUES RHONE-POULENC, Paris, France.
Filed April 22, 1932. Serial No. 326,397. PUBLISHED SEPTEMBER 27, 1932. Class 6.

299,431. PROPHYLACTIC RUBBER ARTICLES. LATEX LABORATORIES, New York, N. Y.
Filed March 16, 1932. Serial No. 325,175. PUBLISHED SEPTEMBER 27, 1932. Class 44.

299,432. CHILDREN'S PLAYSUITS AND SNOW SUITS. NORTHBILT MANUFACTURING CO., Minneapolis, Minn.
Filed August 15, 1932. Serial No. 329,561. PUBLISHED SEPTEMBER 27, 1932. Class 39.

299,433. OPHTHALMIC LENSES. BAUSCH & LOMB OPTICAL COMPANY, Rochester, N. Y.
Filed August 13, 1932. Serial No. 329,518. PUBLISHED SEPTEMBER 27, 1932. Class 26.

299,434. SWEATERS AND SWEATER COATS. JOS. B. HAGES, INC., Philadelphia, Pa.
Filed August 12, 1932. Serial No. 329,505. PUBLISHED SEPTEMBER 20, 1932. Class 39.

299,435. FERTILIZERS. CHASE & CO., Sanford, Fla.
Filed July 28, 1932. Serial No. 329,133. PUBLISHED SEPTEMBER 27, 1932. Class 10.

299,436. CIGARS. G. FREDERIC RIEGEL, New York, N. Y.
Filed August 16, 1932. Serial No. 329,586. PUBLISHED SEPTEMBER 27, 1932. Class 17.

299,437. CANVAS DIVIDING AND DOORWAY CURTAINS FOR REFRIGERATOR CARS, REFRIGERATED AUTOMOBILE TRUCKS, AND COLD STORAGE WAREHOUSES. HENRY B. MEINHARDT, Chicago, Ill.
Filed August 15, 1932. Serial No. 329,558. PUBLISHED SEPTEMBER 27, 1932. Class 50.

299,438. ICE CHIPPING MACHINES. CLAWSON MACHINE CO., Flagtown, N. J.
Filed August 11, 1932. Serial No. 329,466. PUBLISHED SEPTEMBER 27, 1932. Class 23.

299,439. HECTOGRAPH INK, RUBBER STAMP INK, AND INKING PADS. THE CLASSROOM TEACHER, INC., Chicago, Ill.
Filed August 10, 1932. Serial No. 329,442. PUBLISHED SEPTEMBER 27, 1932. Class 11.

299,440. SMOKING AND CHEWING TOBACCO. BARLOW-MOORE TOBACCO COMPANY, INC., Bowling Green, Ky.
Filed August 10, 1932. Serial No. 329,439. PUBLISHED SEPTEMBER 27, 1932. Class 17.

299,441. SWEATERS. SIMON ASCHER & CO., INC., New York, N. Y.
Filed August 10, 1932. Serial No. 329,438. PUBLISHED SEPTEMBER 27, 1932. Class 39.

299,442. CARBON PAPER. H. M. STORMS COMPANY, Brooklyn, N. Y.
Filed June 29, 1932. Serial No. 328,406. PUBLISHED SEPTEMBER 27, 1932. Class 11.

299,443. SOLID FUEL CONSISTING OF A MIXTURE OF PETROLEUM COKE AND ANTHRACITE COAL. BURNS BROS., New York, N. Y.
Filed August 3, 1932. Serial No. 329,301. PUBLISHED SEPTEMBER 27, 1932. Class 1.

299,444. FEED FOR FISH. NICHOLAS WAPLER COMPANY, New York, N. Y.
Filed August 1, 1932. Serial No. 329,268. PUBLISHED SEPTEMBER 27, 1932. Class 46.

299,445. SEWING THREAD. LILY MILL AND POWER COMPANY, Shelby, N. C.
Filed July 23, 1932. Serial No. 329,021. PUBLISHED SEPTEMBER 20, 1932. Class 48.

299,446. CATAMENIAL BELTS OR SANITARY NAPKIN HOLDERS. MAXON H. DUEMMER, Kansas City, Mo.
Filed August 15, 1932. Serial No. 329,552. PUBLISHED SEPTEMBER 27, 1932. Class 44.

299,447. SHAMPOO. AMERICAN ADVERTISED PRODUCTS, INCORPORATED, Chicago, Ill.
Filed July 28, 1932. Serial No. 329,127. PUBLISHED SEPTEMBER 13, 1932. Class 6.

299,448. NASAL OIL. A. ARLIN SINAIKO, doing business as Narol Co., Stevens Point, Wis.
Filed July 25, 1932. Serial No. 329,035. PUBLISHED SEPTEMBER 13, 1932. Class 6.

299,449. MEDICINAL PRODUCT FOR TREATMENT OF ANEMIA. PITMAN-MOORE COMPANY, Indianapolis, Ind.
Filed July 23, 1932. Serial No. 329,026. PUBLISHED SEPTEMBER 13, 1932. Class 6.

299,450. MEDICINAL PREPARATION FOR COUGHS AND COLDS, ETC. JACOB J. GREENWALD, doing business as Elkton Pharmaceutical Co., Elkton, Md.
Filed July 19, 1932. Serial No. 328,889. PUBLISHED SEPTEMBER 13, 1932. Class 6.

299,451. PHARMACEUTICAL PREPARATION. ANGELO GIORDANO, Westerly, R. I.
Filed July 18, 1932. Serial No. 328,868. PUBLISHED SEPTEMBER 13, 1932. Class 6.

299,452. GENERAL TONIC. LUIGI PAGLIARO, doing business as California Products Company, Pittsburgh, Pa.
Filed July 15, 1932. Serial No. 328,819. PUBLISHED SEPTEMBER 20, 1932. Class 6.

299,453. MANICURE PREPARATIONS. CASTERLINE BROS., Milwaukee, Wis.
Filed July 13, 1932. Serial No. 328,767. PUBLISHED SEPTEMBER 13, 1932. Class 6.

299,454. LIQUID LAXATIVE. SAMUEL SILVERBERG, doing business as Citrasol Laboratories, New York, N. Y.
Filed July 2, 1932. Serial No. 328,589. PUBLISHED SEPTEMBER 20, 1932. Class 6.

299,455. COSMETICS. ARTHUR GOLD, Jersey City, N. J.
Filed June 30, 1932. Serial No. 328,422. PUBLISHED SEPTEMBER 20, 1932. Class 6.

299,456. LAXATIVES. JACOB M. WIENNER, doing business as J. M. Wienner & Co., Baltimore, Md.
Filed June 27, 1932. Serial No. 328,342. PUBLISHED SEPTEMBER 27, 1932. Class 6.

299,457. DYEING PREPARATION. LONJI COMPANY, Des Moines, Iowa.
Filed June 27, 1932. Serial No. 328,334. PUBLISHED SEPTEMBER 20, 1932. Class 6.

299,458. A BLEACH FOR SHOES. DAVIS & SCANLAN CO., Boston, Mass.
Filed June 27, 1932. Serial No. 328,326. PUBLISHED SEPTEMBER 13, 1932. Class 6.

299,459. SKIN LOTION. BLANCHE CERVELLI, San Francisco, Calif.
Filed August 2, 1932. Serial No. 329,278. PUBLISHED SEPTEMBER 20, 1932. Class 6.

299,460. PROPHYLACTIC RUBBER ARTICLES. CERTEX CORPORATION, Kansas City, Mo.
Filed August 1, 1932. Serial No. 329,250. PUBLISHED SEPTEMBER 27, 1932. Class 44.

299,461. PHARMACEUTICAL PREPARATIONS. PETER MAER, doing business as Mayrose Laboratories, New York, N. Y.
Filed June 23, 1932. Serial No. 328,246. PUBLISHED SEPTEMBER 13, 1932. Class 6.

299,462. OINTMENT FOR TREATMENT OF TINEA TRICHOPHYTINA. THE SAN DER COMPANY, Evansville, Ind.
Filed June 17, 1932. Serial No. 328,076. PUBLISHED SEPTEMBER 20, 1932. Class 6.

299,463. SKIN OINTMENT FOR ATHLETE'S FOOT, ETC. THE THYLARD COMPANY, Fort Wayne, Ind.
Filed June 11, 1932. Serial No. 327,924. PUBLISHED SEPTEMBER 13, 1932. Class 6.

299,464. COSMETICS. NORTH AMERICAN DYE CORPORATION, New York, N. Y.
Filed June 11, 1932. Serial No. 327,917. PUBLISHED SEPTEMBER 13, 1932. Class 6.

299,465. SKIN LOTION, COLD CREAM, RUBBER LATEX STABILIZER, ETC. PREMIER MILL CORPORATION, Geneva, N. Y.
Filed June 7, 1932. Serial No. 327,805. PUBLISHED SEPTEMBER 13, 1932. Class 6.

299,466. PHARMACEUTICAL PREPARATIONS, COSMETICS, ETC. KRESGE DEPARTMENT STORE CORP., Newark, N. J.
Filed May 27, 1932. Serial No. 327,514. PUBLISHED SEPTEMBER 13, 1932. Class 6.

299,467. ANTACID, DIURETIC, AND ALKALINE LAXATIVE. MARTHA ELIZABETH ROBINS, doing business as A. H. Robins Co., Richmond, Va.
Filed May 18, 1932. Serial No. 327,284. PUBLISHED SEPTEMBER 13, 1932. Class 6.

299,468. HAIR TONICS. MARGARET M. SULKIS, doing business as Gray-Storative, Niagara Falls, N. Y.
Filed May 11, 1932. Serial No. 326,992. PUBLISHED SEPTEMBER 13, 1932. Class 6.

299,469. ELECTRIC LIGHTING, PARTICULARLY USED WITH SELF-PROPELLING VEHICLES, AND VISUAL INDICATING SYSTEMS USING LIGHT PRODUCING MEANS, PARTICULARLY HEADLIGHTS AND REAR-END SIGNAL LIGHTS AND PARTS THEREOF. LITE-WATCHMAN CORPORATION, New York, N. Y.
Filed March 28, 1931. Serial No. 312,729. PUBLISHED SEPTEMBER 13, 1932. Class 21.

299,470. COSMETIC PREPARATIONS. MARK W. ALLEN & Co., Detroit, Mich.
Filed March 30, 1931. Serial No. 312,684. PUBLISHED SEPTEMBER 13, 1932. Class 6.

299,471. LUBRICATING OIL. CONTINENTAL OIL COMPANY, Ponca City, Okla.
Filed January 19, 1931. Serial No. 310,119. PUBLISHED MARCH 10, 1931. Class 15.

299,472. PRESERVED PICKLES, CHOW CHOW, PICKLED RELISHES, OLIVES, OLIVE OILS, AND MAYONNAISE. SAMUEL MARENUS, doing business as Union County Pickle Works, Elizabeth, N. J.
Filed November 3, 1930. Serial No. 307,501. PUBLISHED SEPTEMBER 27, 1932. Class 46.

299,473. COFFEE. VAN ROOY COFFEE CO., INC., Cleveland, Ohio.
Filed October 29, 1930. Serial No. 307,341. PUBLISHED SEPTEMBER 27, 1932. Class 46.

299,474. POWDERED SOAP. LOCKWOOD BRACKETT CO., Waltham and Boston, Mass.
Filed September 15, 1930. Serial No. 305,714. PUBLISHED SEPTEMBER 27, 1932. Class 4.

299,475. AIRPLANES AND AIRPLANE STRUCTURAL PARTS. BELLANCA AIRCRAFT CORPORATION, New Castle, Del.
Filed June 7, 1930. Serial No. 302,230. PUBLISHED MARCH 24, 1931. Class 19.

299,476. COSMETIC PREPARATIONS. CAROL RUTH, INC., New York, N. Y.
Filed June 6, 1930. Serial No. 302,223. PUBLISHED SEPTEMBER 13, 1932. Class 6.

299,477. LUBRICATING GREASES. ALLIED GREASE & OIL CO., Chicago, Ill.
Filed July 30, 1931. Serial No. 317,447. PUBLISHED SEPTEMBER 13, 1932. Class 15.

299,478. PERIODICAL. THE CLAYTON MAGAZINES, INC., New York, N. Y.
Filed July 21, 1931. Serial No. 317,161. PUBLISHED AUGUST 9, 1932. Class 38.

299,479. FROZEN CONFECTIONS. FROZEN CONFECTIONS, INC., New York, N. Y.
Filed July 28, 1932. Serial No. 329,016. PUBLISHED SEPTEMBER 27, 1932. Class 46.

299,480. WHOLE WHEAT WAFERS. THOS. C. COSGROVE, doing business as The Cosgrove Bakers, Vineyard Haven, Mass.
Filed August 1, 1932. Serial No. 329,257. PUBLISHED SEPTEMBER 27, 1932. Class 46.

299,481. FOOD OILS. CALAVO GROWERS OF CALIFORNIA, Los Angeles, Calif.
Filed August 1, 1932. Serial No. 329,253. PUBLISHED SEPTEMBER 27, 1932. Class 46.

299,482. PRESERVED FISH. ROSALINO GONZÁLEZ, San Juan de la Arena, Spain.
Filed July 30, 1932. Serial No. 329,288. PUBLISHED SEPTEMBER 27, 1932. Class 46.

299,483. ICE CREAM. SWIFT AND COMPANY, Chicago, Ill.
Filed July 29, 1932. Serial No. 329,204. PUBLISHED SEPTEMBER 27, 1932. Class 46.

299,484. CANDY. THE BRADLEY, SMITH CO., New Haven, Conn.
Filed July 20, 1932. Serial No. 328,909. PUBLISHED SEPTEMBER 27, 1932. Class 46.

299,485. ROLLED OATS AND MACARONI. HOLMSTROM-PILCHER CO., Lockport, Ill.
Filed July 25, 1932. Serial No. 329,048. PUBLISHED SEPTEMBER 27, 1932. Class 46.

299,486. COFFEE. KING, DOBBS & COMPANY, Chattanooga, Tenn.
Filed July 21, 1932. Serial No. 328,957. PUBLISHED SEPTEMBER 27, 1932. Class 46.

299,487. BREAD. SAFEWAY STORES, INCORPORATED, Oakland, Calif.
Filed July 19, 1932. Serial No. 328,894. PUBLISHED SEPTEMBER 27, 1932. Class 46.

299,488. GRANULATED SUGAR. ISABELLA SUGAR COMPANY, Mount Pleasant, Mich.
Filed July 11, 1932. Serial No. 328,716. PUBLISHED SEPTEMBER 27, 1932. Class 46.

299,489. VEGETABLE PICKLES. MRS. E. G. KIDD, INCORPORATED, Richmond, Va.
Filed June 29, 1932. Serial No. 328,400. PUBLISHED SEPTEMBER 27, 1932. Class 46.

299,490. CANNED VEGETABLES, CANNED FRUITS, CANNED BERRIES, ETC. SNIDER PACKING CORPORATION, Rochester, N. Y., now by change of name Snider Liquidating Company, Inc., assignor to Snider Packing Corporation, a Corporation of New York.
Filed April 21, 1932. Serial No. 326,344. PUBLISHED SEPTEMBER 27, 1932. Class 46.

299,491. COFFEE. JOHN MORRELL & CO., Ottumwa, Iowa.
Filed June 24, 1932. Serial No. 328,276. PUBLISHED SEPTEMBER 27, 1932. Class 46.

299,492. WHEEL SPOKE SHROUDS. BUDD WHEEL COMPANY, Philadelphia, Pa.
Filed November 4, 1931. Serial No. 320,777. PUBLISHED SEPTEMBER 13, 1932. Class 19.

299,493. COIN CONTROLLED TABLE BOARD GAME PLAYED WITH PIECES. DAVID GOTTLIEB, doing business as D. Gottlieb & Co., Chicago, Ill.
Filed November 5, 1931. Serial No. 320,824. PUBLISHED FEBRUARY 23, 1932. Class 22.

299,494. CERTAIN NAMED WEARING APPAREL. J. N. ADAM & CO., Buffalo, N. Y.
Filed October 1, 1931. Serial No. 319,601. PUBLISHED MARCH 1, 1932. Class 39.

299,495. CANNED TOMATO JUICE. CAMPBELL SOUP COMPANY, Camden, N. J.
Filed August 26, 1931. Serial No. 318,437. PUBLISHED SEPTEMBER 27, 1932. Class 46.

299,496. GIRDLES, BRASSIÈRES, AND COMBINATIONS OF GIRDLES AND BRASSIÈRES. KOPS BROTHERS, INC., New York, N. Y.
Filed August 8, 1931. Serial No. 317,810. PUBLISHED SEPTEMBER 13, 1932. Class 39.

299,497. SPRAY OR INHALANT FOR THROAT AND NOSE. STEPHENSON MFG. CO., INC., Springfield, Mass.
Filed July 28, 1932. Serial No. 329,159. PUBLISHED SEPTEMBER 13, 1932. Class 6.

299,498. ANTISEPTIC, OR GERMICIDE, FOR COLDS, HAY FEVER, ETC. STEPHENSON MFG. CO., INC., Springfield, Mass.
Filed July 28, 1932. Serial No. 329,160. PUBLISHED SEPTEMBER 27, 1932. Class 6.

299,499. MEDICINAL PREPARATION FOR THE TREATMENT OF SKIN DISEASES. F. A. SCANNELL & COMPANY, Boston, Mass.
Filed August 10, 1932. Serial No. 329,459. PUBLISHED SEPTEMBER 27, 1932. Class 6.

299,500. PROPHYLACTIC RUBBER ARTICLES. THE KILLIAN MANUFACTURING CO., Akron, Ohio.
Filed August 13, 1932. Serial No. 329,531. PUBLISHED SEPTEMBER 27, 1932. Class 44.

299,501. PROPHYLACTIC RUBBER ARTICLES. THE KILLIAN MANUFACTURING CO., Akron, Ohio.
Filed August 13, 1932. Serial No. 329,582. PUBLISHED SEPTEMBER 27, 1932. Class 44.

299,502. INSULATED WIRES AND CABLES. THE OKONITE COMPANY, Passaic, N. J.
Filed April 1, 1932. Serial No. 325,721. PUBLISHED SEPTEMBER 20, 1932. Class 21.

299,503. LUBRICATING OILS AND GREASES. AMERICAN STATIONERY MFG. CO., New York, N. Y., and Habana, Cuba.
Filed April 7, 1932. Serial No. 325,864. PUBLISHED AUGUST 23, 1932. Class 15.

299,504. SOUND-ORIGINATING, SOUND-RECORDING, AND SOUND-REPRODUCING APPARATUS. RCA VICTOR COMPANY, INC., Camden, N. J.
Filed April 29, 1932. Serial No. 326,617. PUBLISHED SEPTEMBER 13, 1932. Class 36.

299,505. REFINED, SEMI-REFINED, AND UNREFINED OILS AND GREASES MADE FROM PETROLEUM, BOTH WITH AND WITHOUT ADMIXTURE OF ANIMAL, VEGETABLE, OR MINERAL SUBSTANCES, FOR ILLUMINATING, BURNING, POWER, FUEL, AND LUBRICATING PURPOSES. PHILLIPS PETROLEUM COMPANY, Bartlesville, Okla.
Filed July 1, 1932. Serial No. 328,505. PUBLISHED SEPTEMBER 20, 1932. Class 15.

299,506. REFINED, SEMI-REFINED, AND UNREFINED OILS AND GREASES MADE FROM PETROLEUM, BOTH WITH AND WITHOUT ADMIXTURE OF ANIMAL, VEGETABLE, OR MINERAL SUBSTANCES, FOR ILLUMINATING, BURNING, POWER, FUEL, AND LUBRICATING PURPOSES. PHILLIPS PETROLEUM COMPANY, Bartlesville, Okla.
Filed July 1, 1932. Serial No. 328,506. PUBLISHED SEPTEMBER 20, 1932. Class 15.

299,507. ELECTRICAL SPACE DISCHARGE TUBES. RAYTHEON PRODUCTION CORPORATION, Newton, Mass.
Filed July 7, 1932. Serial No. 328,618. PUBLISHED SEPTEMBER 13, 1932. Class 21.

299,508. COAL DUST CONTROLLING MINERAL OIL. STANDARD OIL COMPANY OF NEW JERSEY, Wilmington, Del.
Filed July 9, 1932. Serial No. 328,673. PUBLISHED SEPTEMBER 20, 1932. Class 15.

299,509. GASOLINE, FURNACE OILS, AND FUEL OILS. COL-TEX REFINING COMPANY, Wilmington, Del., and Oklahoma City, Okla.
Filed July 12, 1932. Serial No. 328,721. PUBLISHED SEPTEMBER 13, 1932. Class 15.

299,510. LUBRICATING OILS FOR USE IN THE HOME, OFFICE, OR GARAGE. JOHNSON OIL REFINING COMPANY, Chicago, Ill.
Filed July 13, 1932. Serial No. 328,769. PUBLISHED SEPTEMBER 20, 1932. Class 15.

299,511. LUBRICATING OIL. SUN OIL COMPANY, Philadelphia, Pa.
Filed July 18, 1932. Serial No. 328,880. PUBLISHED SEPTEMBER 13, 1932. Class 15.

299,512. GASOLINE PASSENGER AUTOMOBILES. HUDSON MOTOR CAR COMPANY, Detroit, Mich.
Filed July 29, 1932. Serial No. 329,190. PUBLISHED SEPTEMBER 13, 1932. Class 19.

299,513. GASOLINE. THE EL DORADO REFINING COMPANY, El Dorado, Kans.
Filed July 30, 1932. Serial No. 329,225. PUBLISHED SEPTEMBER 20, 1932. Class 15.

299,514. MEDICATED OIL FOR SCALP TREATMENTS. HECKEL BROS., Kansas City, Mo.
Filed November 27, 1931. Serial No. 321,536. PUBLISHED SEPTEMBER 20, 1932. Class 6.

299,515. CLEANING COMPOUND HAVING VARIOUS USES. EDWARD L. BATES, doing business as Novo Mfg. Co., Modesto, Calif.
Filed February 9, 1932. Serial No. 323,982. PUBLISHED SEPTEMBER 27, 1932. Class 4.

299,516. COSMETIC PREPARATIONS. HARZFELD'S, INC., Kansas City, Mo.
Filed February 26, 1932. Serial No. 324,511. PUBLISHED SEPTEMBER 27, 1932. Class 6.

299,517. COSMETIC PREPARATIONS. A. BRENLAUER, INC., New York, N. Y.
Filed March 4, 1932. Serial No. 324,773. PUBLISHED SEPTEMBER 13, 1932. Class 6.

299,518. FOOD PRODUCTS. JOE LOWE CORPORATION, Brooklyn, N. Y.
Filed December 12, 1929. Serial No. 293,587. PUBLISHED JUNE 14, 1932. Class 46.

299,519. CANDIED AND SALTED NUTS, PEANUT BUTTER, PREPARED MUSTARD, CANE SYRUP, VINEGAR, CANDY, MARSHMALLOW CREAM, MAYONNAISE, AND FOOD FLAVORING EXTRACTS. THE NEWTON PRODUCTS COMPANY, Cincinnati, Ohio.
Filed May 22, 1930. Serial No. 301,054. PUBLISHED JULY 28, 1931. Class 46.

299,520. MOTHPROOF STORAGE BAGS. LINCOLN BAG COMPANY, Chicago, Ill.
Filed May 31, 1932. Serial No. 327,615. PUBLISHED SEPTEMBER 27, 1932. Class 2.

299,521. MOTHPROOF STORAGE BAGS. LINCOLN BAG COMPANY, Chicago, Ill.
Filed May 31, 1932. Serial No. 327,616. PUBLISHED SEPTEMBER 27, 1932. Class 2.

299,522. FISHING LINES. JOHN H. DAVIS COMPANY, doing business as Sunset Line & Twine Company, San Francisco, Calif.
Filed June 13, 1932. Serial No. 327,935. PUBLISHED SEPTEMBER 27, 1932. Class 22.

299,523. MINERAL AND CARBONATED WATER, AND FOR CARBONATED, NONALCOHOLIC, NONCEREAL, MALTLESS BEVERAGES SOLD AS SOFT DRINKS, AND SYRUPS AND EXTRACTS USED IN MAKING THE SAME. N. H. DARSKY, doing business as Golden Age Ginger Ale Co. of America, Youngstown, Ohio.
Filed June 24, 1932. Serial No. 328,263. PUBLISHED SEPTEMBER 27, 1932. Class 45.

299,524. FLAX PACKING FOR GLANDS, STUFFING BOXES, VALVE STEMS, PISTONS, PISTON RODS, AND PLUNGERS. JOHNS-MANVILLE CORPORATION, New York, N. Y.
Filed July 8, 1932. Serial No. 328,641. PUBLISHED SEPTEMBER 27, 1932. Class 35.

299,525. NON-METALLIC TIRES AND INNER-TUBES FOR USE IN NON-METALLIC TIRES. THE GENERAL TIRE & RUBBER COMPANY, Akron, Ohio.
Filed May 6, 1932. Serial No. 326,818. PUBLISHED SEPTEMBER 20, 1932. Class 35.

299,526. FILTERING MEDIA, COMPOSED OF FRESHLY MINED AND/OR RECLAIMED ANTHRACITE IN ANY SIZE. ANTHRACITE EQUIPMENT CORPORATION, New York, N. Y.
Filed July 21, 1932. Serial No. 328,931. PUBLISHED SEPTEMBER 27, 1932. Class 31.

299,527. PICTURE PUZZLES. VICTOR MORAN, Bradford, Pa.
Filed August 18, 1932. Serial No. 329,044. PUBLISHED SEPTEMBER 27, 1932. Class 22.

299,528. GINGER ALE. BLOOMINGDALE BROS., INC., New York, N. Y.
Filed August 23, 1932. Serial No. 329,762. PUBLISHED SEPTEMBER 27, 1932. Class 45.

299,529. MANILA, SISAL, HEMP, AND OTHER VEGETABLE FIBRE ROPE. AMERICAN MANUFACTURING COMPANY, Boston, Mass., and Brooklyn, N. Y.
Filed July 29, 1932. Serial No. 329,171. PUBLISHED SEPTEMBER 27, 1932. Class 7.

299,530. MANILA, HEMP, SISAL, AND OTHER VEGETABLE FIBRE ROPE. AMERICAN MANUFACTURING COMPANY, Boston, Mass., and Brooklyn, N. Y.
Filed July 29, 1932. Serial No. 329,172. PUBLISHED SEPTEMBER 27, 1932. Class 7.

299,531. COIN-CONTROLLED AMUSEMENT DEVICE. JOHN F. MEYER, doing business as The Exhibit Supply Company, Chicago, Ill.
Filed August 6, 1932. Serial No. 329,381. PUBLISHED SEPTEMBER 27, 1932. Class 22.

299,532. SCOTCH WHISKY. JOHN DEWAR & SONS LIMITED, Perth, Scotland, and London, England.
Filed August 18, 1932. Serial No. 329,628. PUBLISHED SEPTEMBER 27, 1932. Class 49.

299,533. CONSTRUCTION MATERIALS—NAMELY, PLASTER BOARD AND PLASTER WALL BOARD. PLASTOID PRODUCTS INC., Los Angeles, Calif.
Filed June 10, 1926. Serial No. 283,024. PUBLISHED JULY 20, 1926. Class 12.

299,534. SCOTCH WHISKY AND GIN. S. CAMPBELL & SON LIMITED, Glasgow, Scotland.
Filed August 18, 1932. Serial No. 329,622. PUBLISHED SEPTEMBER 27, 1932. Class 49.

299,535. MALTLESS BEVERAGES, SYRUPS, AND EXTRACTS AND CONCENTRATES. OXO, LIMITED, London, England.
Filed August 10, 1932. Serial No. 329,455. PUBLISHED SEPTEMBER 27, 1932. Class 45.

299,536. WEARING APPAREL FOR MEN, WOMEN, AND CHILDREN—NAMELY, MEN'S AND BOYS' DRESS AND WORK SHIRTS AND BLOUSES, AND MEN'S, WOMEN'S, YOUTHS', AND CHILDREN'S PAJAMAS, WOMEN'S AND CHILDREN'S NIGHT GOWNS, AND MEN'S AND BOYS' NIGHT SHIRTS. RICE-STIX DRY GOODS CO., St. Louis, Mo.
Filed May 16, 1932. Serial No. 327,169. PUBLISHED SEPTEMBER 20, 1932. Class 39.

299,537. CIGARETTE CASES. DAVIS PRESTO-PAK COMPANY, Los Angeles, Calif.
Filed May 10, 1932. Serial No. 326,935. PUBLISHED SEPTEMBER 27, 1932. Class 8.

299,538. ALIMENTARY PASTE PRODUCTS—NAMELY, MACARONI. VITO COSTA & SONS, Chicago, Ill.
Filed March 21, 1932. Serial No. 325,321. PUBLISHED MAY 17, 1932. Class 46.

299,539. NONALCOHOLIC MALTLESS BEVERAGES SOLD AS SOFT DRINKS AND SYRUPS AND EXTRACTS FOR MAKING THE SAME. VIRGINIA DARE EXTRACT COMPANY, INC., Brooklyn, N. Y.
Filed August 22, 1932. Serial No. 329,758. PUBLISHED SEPTEMBER 27, 1932. Class 45.

299,540. DOLLS. IDEAL NOVELTY & TOY CO., Brooklyn, N. Y.
Filed August 20, 1932. Serial No. 329,715. PUBLISHED SEPTEMBER 27, 1932. Class 22.

[ACT OF MARCH 19, 1920, SEC. 1 (b)]

THESE REGISTRATIONS ARE NOT SUBJECT TO OPPOSITION

299,541. (CLASS 21. ELECTRICAL APPARATUS, MACHINES, AND SUPPLIES.) DEFIANCE SPARK PLUGS, INCORPORATED, Toledo, Ohio. Filed Oct. 18, 1932. Serial No. 331,330.

DE FRANCE

For Spark Plugs.
Claims use since Jan. 4, 1929.

299,542. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) KLEMM AUTOMOTIVE PRODUCTS COMPANY, Chicago, Ill. Filed Sept. 19, 1932. Serial No. 330,480.

Cheat-Proof

For Governors for Internal Combustion Engines.
Claims use since Apr. 16, 1930.

299,543. (CLASS 39. CLOTHING.) FASHION PARK ASSOCIATES, INC., doing business as Weber & Heilbroner, Rochester and New York, N. Y. Filed Sept. 16, 1932. Serial No. 330,400.

PARKINGTON

For Men's and Boys' Sweaters, Hats, Caps, Neckties, Dress and Negligee Shirts and Undershirts of Knitted and Textile Fabric, Pyjamas, Nightshirts, Bath Robes, Smoking Jackets, and House Gowns.
Claims use since Sept. 1, 1931.

299,544. (CLASS 26. MEASURING AND SCIENTIFIC APPLIANCES.) JASON H. TUTTLE, Brooklyn, N. Y. Filed Sept. 7, 1932. Serial No. 330,169.

SERVIS-METR

For an Indicating Device Designed to be Applied to Automobiles and Analogous Motor Vehicles and Constructed to Indicate When the Automobile Has to be Oiled, Greased, Inspected, and the Like.
Claims use since May 1, 1929.

299,545. (CLASS 39. CLOTHING.) RUSSEKS FIFTH AVENUE, INC., New York, N. Y. Filed Sept. 3, 1932. Serial No. 330,103.

aiken

For Women's, Misses' and Children's Articles of Clothing as Follows: Hats and Caps; Gloves of Wool, Leather, Silk and Fabric; Scarfs of Silk, Wool, Rayon, Linen and Cotton; Belts for Outer Wear; Collar and Cuff Sets; Shoes of Leather, Calfskin, Fabric, Satin and Linen; Slippers of Leather, Felt, Silk and Wool; Sandals of Rubber, Leather, Silk and Fabric; Puttees; Leggings, Rubbers; Overshoes of Rubber and Rubberized Silk; Spats; Overgaiters; Riding Boots of Leather; Stockings and Socks; Underwear of Knitted, Netted and Textile Fabrics, Bloomers, Chemises, Brassières, Negligees, Petticoats, Panties, Vests and Shirts for Underwear, Nightgowns, Pajamas; Corsets, Garter Belts and Girdles; Sweaters; Lumberjackets of Leather, Suede and Wool; Coats; Fur Coats and Fur Scarfs; Wraps; Skirts for Under and Outer Wear; Knickers; Riding Habits; Raincoats; Aprons; Wrappers; Children's Sun Suits and Rompers; Bath Robes and Coolie Coats; Bathing Suits, Silk Ties, Bathing Caps, Bathing Shoes, Bathing Robes, Beach Overalls and Beach Pajamas; Blouses; Frocks, Dresses and Suits.
Claims use since May 13, 1931.

299,546. (CLASS 42. KNITTED, NETTED, AND TEXTILE FABRICS.) MATTHEW W. RYAN SONS & CO. INC., New York, N. Y. Filed Sept. 2, 1932. Serial No. 330,072.

LA CHINE MUSLIN

For Cotton Piece Goods.
Claims use since June 25, 1910.

299,547. (CLASS 39. CLOTHING.) HAT CORPORATION OF AMERICA, South Norwalk, Conn. Filed Aug. 20, 1932. Serial No. 329,714.

Knapp-Felt

For Caps and Hats of Felt, Straw, Silk, Cloth, and Fur; Overcoats, Sport Jackets, Trousers, Knickers, Leather Jackets, Mufflers, Scarfs, and Neckties.
Claims use since Feb. 1, 1906.

299,548. (CLASS 39. CLOTHING.) HAT CORPORATION OF AMERICA, South Norwalk, Conn. Filed Aug. 20, 1932. Serial No. 329,713.

Dobbs

For Hats and Caps for Men, Women, and Children; Leather Gloves, Fabric Gloves, and Fur-Lined Gloves; Men's and Women's Suits, Overcoats, Raincoats, Fur Coats, Leather Coats, Sport Suits, and Sport Jackets; Men's Full-Dress Suits, Tuxedos, Knickers, Trousers, Bath Robes, Dressing Gowns, Lounging Suits, and Robes; Dress Vests and Waistcoats; Women's Dresses, Evening Wraps, Evening Gowns, Tea Gowns, Skirts for Outer Wear, Blouses, Shirt Waists, Capes, Riding Habits, Negligees, and Bed Jackets Made of Silk; Neckwear, as Follows: Mufflers, Scarfs, Neckties, Fur Neck Pieces, Fur Collars and Shawls; Fur Cuffs, Fur Caps, and Fur Muffs, Fur Bed Jackets, Sweaters, Sweater Suits, Knitted Dresses, Knitted Coats, Knitted Vests, All for Outer Wear; Bathing Suits, Hosiery, Underwear Made of Knitted and Textile Fabrics, and Pajamas for the Use of Men, Women, and Children; Outer Shirts—Namely, Men's Dress Shirts and Men's Negligee and Women's Negligee and Work Shirts; Collars, Garters, Suspenders, and Belts for Outer Wear; Footwear, as Follows: Sport Shoes, Pullman Slippers, House Slippers of Leather or Leather and Fabric, Boudoir Mules, Bath Slippers, and Wooden Beach Clogs; Berets for Men, Women, and Children; Plush Helmets and Cork Helmets with Linen Covering (Tropical Headwear), Chamois Blouses for Women, Leather Jackets, Vestees of Net and Lace, Beach Pajamas, Beach Coats, Lounging and Sleeping Pajamas; Lingerie, as Follows: Brassières, Costume Slips, Breakfast Coats, Step-Ins, Bloomers, Panties, Combinations.
Claims use since July, 1908.

299,549. (CLASS 39. CLOTHING.) HAT CORPORATION OF AMERICA, South Norwalk, Conn. Filed Aug. 20, 1932. Serial No. 329,712.

Byron

For Hats and Caps for Men, Overcoats for Men, Hats for Women, Women's Dresses, and Women's Coats.
Claims use since Oct. 29, 1929.

299,550. (CLASS 39. CLOTHING.) SOCIÉTÉ À RESPONSABILITÉ LIMITÉE LE MONNIER, Paris, France. Filed June 21, 1932. Serial No. 328,188.

LE MONNIER
23 L RUE ST HONORÉ. PARIS
PLACE VENDÔME

For Ladies' Hats.
Claims use since 1921.

299,551. (CLASS 31. FILTERS AND REFRIGERATORS.) MAXWELL R. KARGE, doing business as Monroe Refrigeration Engineering Co., Brockport, N. Y. Filed Apr. 16, 1932. Serial No. 326,190.



For Refrigerating Units, Portable Self-Contained Emersion Brine and Ice-Water Cooling Machines, Internal Tube Liquid Coolers, Milk Cooling and Holding Units and Parts for These Units, Aluminum Evaporating Sections for the Refrigerating Units and Steel Valves and Fittings for These Units.
Claims use since February, 1929.

299,552. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) SAM JOYIA, Los Angeles, Calif. Filed Dec. 10, 1931. Serial No. 321,996.

Sam Joyia

For a Liquid Preparation Especially Compounded for Exterminating Insects.
Claims use since Sept. 1, 1931.

299,553. (CLASS 44. DENTAL, MEDICAL, AND SURGICAL APPLIANCES.) THE SEAMLESS RUBBER COMPANY, INC., New Haven, Conn. Filed Nov. 19, 1931. Serial No. 321,302.

COMPACTO

For Folding Fountain Syringe.
Claims use since Oct. 31, 1931.

299,554. (CLASS 39. CLOTHING.) JULIUS KAYSER & Co., New York, N. Y. Filed Nov. 14, 1931. Serial No. 321,140.

VENTINIT

For Underwear Made of Cotton, Silk Rayon and Combinations Thereof for Men, Women, and Children.
Claims use since Nov. 2, 1931.

299,555. (CLASS 39. CLOTHING.) SOCIÉTÉ À RESPONSABILITÉ LIMITÉE MAINBOCHER, Paris, France. Filed Nov. 2, 1931. Serial No. 320,738.

MAINBOCHER
12 AVENUE GEORGE V A PARIS

For Ready-Made Garments for Women, Misses, and Children Comprising Gowns, Cloaks, Capes, Hats and Bonnets, Scarfs and Muffs of Fabric and of Fur; Blouses, Pyjamas, Day and Night Chemises and Combination Chemises and Pantaloons; Gloves, Slippers, and Belts of Leather, of Fur, and of Fabric as Well as of Imitation Leather; and Hats for Men.
Claims use since Oct. 13, 1930.

299,556. (CLASS 45. BEVERAGES, NONALCOHOLIC.) GORDON DISTRIBUTING CO. INC., West New York, N. J. Filed June 29, 1931. Serial No. 316,427.

AMERICAN GORDON'S

For Nonalcoholic, Maltless Herb Beverage Sold as a Soft Drink and Extracts and Concentrates Therefor. Claims use since June 11, 1931.

299,557. (CLASS 37. PAPER AND STATIONERY.) SCOTT PAPER COMPANY, Chester, Pa. Filed June 11, 1931. Serial No. 315,703.

Soft as old Linen

For Tissue, Creped, and Absorbent Papers. Claims use since Sept. 23, 1913.

299,558. (CLASS 13. HARDWARE AND PLUMBING AND STEAM-FITTING SUPPLIES.) EMMETT B MOORE, doing business as Emvir Manufacturing Company, Chicago, Ill. Filed May 13, 1931. Serial No 314,534.

AUTOCAP
SAVES TIME AND TIRES

For Air Inflation Valve Caps. Claims use since Apr. 1, 1931.

299,559. (CLASS 44. DENTAL, MEDICAL, AND SURGICAL APPLIANCES.) SAN-NAP-PAK MFG. CO., INC., New York, N. Y. Filed May 7, 1931. Serial No. 314,301.

FORM FIT

For Absorbent Cotton, Absorbent Gauze, and Sanitary Napkins. Claims use since May 1, 1929.

TRADE-MARK REGISTRATIONS RENEWED

40,211. LEAF TOBACCO. Registered April 28, 1903. THOMAS DADE LUCKETT, Clarksville, Tenn. Renewed April 28, 1933, to Luckett-Ware Tobacco Co., Louisville, Ky., a Corporation of Arizona, assignee.

87,342. GARTERS. Registered July 23, 1912. IVORY CLASP & GARTER CO., New Orleans, La. Renewed July 23, 1932, to A. Stein & Company, Chicago, Ill., a Corporation of Illinois, successor.

88,397. WHEAT-FLOUR. Registered September 17, 1912. CENTENNIAL MILL CO., Spokane and Seattle, Wash. Renewed September 17, 1932, to Centennial Flouring Mills Company, Seattle, Wash., a Corporation of Washington, assignee.

88,561. LUBRICATING-GREASE. Registered October 1, 1912. ECONOMY LUBRICATING CO. Renewed October 1, 1932, to Harry H. Atkinson, doing business as Economy Lubricating Company, Boston, Mass.

88,938. CERTAIN NAMED SCIENTIFIC APPLIANCES. Registered October 29, 1912. OPTISCHE ANSTALT C. P. GOERZ AKTIENGESELLSCHAFT, Friedenau, near Berlin, Germany. Renewed October 29, 1932, to Zeiss Ikon Aktiengesellschaft, Dresden, Germany, a Corporation of Germany, successor.

90,185. WHEAT-FLOUR. Registered February 11, 1913. FISHER FLOURING MILLS COMPANY, Seattle, Wash. Renewed February 11, 1933, to Fisher Flouring Mills Co., Harbor Island, Seattle, Wash., a Corporation of Washington.

90,345. PAINT FOR OUTSIDE USE. Registered February 18, 1913. KEYSTONE VARNISH COMPANY, Brooklyn, N. Y., a Corporation of New York. Renewed February 18, 1933.

90,346. ENAMEL PAINT. Registered February 18, 1913. KEYSTONE VARNISH COMPANY, Brooklyn, N. Y., a Corporation of New York. Renewed February 18, 1933.

90,823. BLANKETS. Registered March 25, 1913. THE ESMOND MILLS, Esmond, R. I., a Corporation of Massachusetts. Renewed March 25, 1933.

91,004. SAUCE AND PICKLES. Registered April 8, 1913. THE MIDLAND VINEGAR COMPANY LIMITED. Renewed April 8, 1933, to H. P. Sauce Limited, Birmingham, England, a Corporation of Great Britain, assignee.

91,118. DRY CELLS. Registered April 15, 1913. NATIONAL CARBON COMPANY, Cleveland, Ohio. Renewed April 15, 1933, to National Carbon Company, Inc., New York, N. Y., a Corporation of New York, assignee.

91,171. TEA, BLENDED COFFEE, COCOA, AND FLAVORING EXTRACTS. Registered April 22, 1913. CLARK & HOST COMPANY, Milwaukee, Wis., a Corporation of Wisconsin. Renewed April 22, 1933.

91,354. SAMPLE CASES AND BAGS. Registered April 29, 1913. KNICKERBOCKER CASE COMPANY, Chicago, Ill., a Corporation of Illinois. Renewed April 29, 1933.

LABELS

REGISTERED DECEMBER 6, 1932

41,473.—*Title:* PIPERS—3. For Games. ALL-FAIR, INC., Churchville, N. Y. Published September 16, 1931.

41,474.—*Title:* HIGH HEAT RESISTING ALUMINUM. For High Heat Resisting Aluminum Paint. AMERICAN ASPHALT PAINT CO., Chicago, Ill. Published June 1, 1932.

41,475.—*Title:* VALDURA DECORATIVE UNDERCOAT. For Valdura Decorative Undercoat Paint. AMERICAN ASPHALT PAINT CO., Chicago, Ill. Published June 1, 1932.

41,476.—*Title:* BANQUET SELECTED MILK HI-TEST. For Milk. AMERICAN DAIRY SUPPLY CO., Washington, D. C. Published October 28, 1932.

41,477.—*Title:* CULTURED BUTTERMILK. For Buttermilk. AMERICAN DAIRY SUPPLY CO., Washington, D. C. Published October 28, 1932.

41,478.—*Title:* GRADE A WHIPPING CREAM. For Whipping Cream. AMERICAN DAIRY SUPPLY CO., Washington, D. C. Published October 28, 1932.

41,479.—*Title:* PASTEURIZED MILK. For Milk. AMERICAN DAIRY SUPPLY CO., Washington, D. C. Published October 28, 1932.

41,480.—*Title:* WHOLE MILK PASTEURIZED. For Whole Milk. AMERICAN DAIRY SUPPLY CO., Washington, D. C. Published October 28, 1932.

41,481.—*Title:* MILK PASTEURIZED & FILTERED. For Milk. AMERICAN DAIRY SUPPLY CO., Washington, D. C. Published October 28, 1932.

41,482.—*Title:* PASTEURIZED COFFÉE CREAM. For Cream. AMERICAN DAIRY SUPPLY CO., Washington, D. C. Published October 28, 1932.

41,483.—*Title:* PASTEURIZED MILK GRADE A A. For Milk. AMERICAN DAIRY SUPPLY CO., Washington, D. C. Published October 28, 1932.

41,484.—*Title:* PURE CREAM. For Cream. AMERICAN DAIRY SUPPLY CO., Washington, D. C. Published October 28, 1932.

41,485.—*Title:* RAW MILK FROM TESTED COWS. For Raw Milk. AMERICAN DAIRY SUPPLY CO., Washington, D. C. Published October 28, 1932.

41,486.—*Title:* DESIGN NO. 509. For Ice Cream. BLOOMER BROS. COMPANY, Newark, N. Y. Published December 15, 1931.

41,487.—*Title:* RAGGEDY ANN FINE FOODS. For Peaches. R. M. BUCHANAN, doing business as Raggedy Ann Provisioners, Evanston, Ill. Published July 11, 1932.

41,488.—*Title:* MY BUDDY. For Tomato Juice. CANTEEN SERVICE CO., Portland, Oreg. Published March 15, 1932.

41,489.—*Title:* DUFF'S SPICE CAKE MIX. For Spice Cake Mixture. P. DUFF & SONS, INC., Pittsburgh, Pa. Published October 22, 1932.

41,490.—*Title:* FRONTENAC—SPECIAL. For Lager Beer. FRONTENAC BREWERIES, LIMITED, Montreal, Canada. Published February 2, 1931.

41,491.—*Title:* SCRAM PAINT CLEANER. For Paint Cleaner. GREENWOOD PRODUCTS COMPANY, Albany, Calif. Published July 20, 1932.

41,492.—*Title:* HANNAN'S SLIMS. For Cigars. A. HANNAN & BRO., Pittsburgh, Pa. Published June 1, 1932.

41,493.—*Title:* MODISH SHOES. For Boxes. HOAGUE-SPRAGUE CORPORATION, Lynn, Mass. Published January 14, 1931.

41,494.—*Title:* B & R. For Boxes. HOAGUE-SPRAGUE CORPORATION, Lynn, Mass. Published September 8, 1932.

41,495.—*Title:* GOOD SHOES. For Boxes. HOAGUE-SPRAGUE CORPORATION, Lynn, Mass. Published August 29, 1932.

41,496.—*Title:* SOFT SHOES FOR TENDER FEET. For Boxes. HOAGUE-SPRAGUE CORPORATION, Lynn, Mass. Published October 10, 1932.

41,497.—*Title:* KEWPIE DRESS. For Dresses. KEWPEE DRESS CO. INC., New York, N. Y. Published July 1, 1932.

41,498.—*Title:* GARCIA SUPERIOR. For Cigars. G. A. KOHLER & CO., Yoe, Pa. Published October 29, 1932.

41,499.—*Title:* ZELLA'S NEW THOUGHT PRODUCTS. For Watermelon Rind Preserves. ZELLA LONG, Chicago, Ill. Published September 1, 1932.

41,500.—*Title:* MAC-DELL'S DAINTY FLAVORED PICKS. For Tooth-Picks. MAC-DELL'S, Superior, Wis. Published November 2, 1931.

41,501.—*Title:* EXELA. For Flour. MIDDLETON & CO., LTD., New York, N. Y. Published October 28, 1929.

41,502.—*Title:* MOUNDS. For Chocolate and Cocoanut Confection. PETER PAUL, INC., Naugatuck, Conn. Published May 15, 1932.

41,503.—*Title:* THIN MINTS. For Mint Flavored Confection. PETER PAUL, INC., Naugatuck, Conn. Published July 19, 1932.

41,504.—*Title:* TRUX-O KLENZER. For Washing and Cleaning Compound. JOHN F. RENTSCHLER, doing business as Trux-O-Chemical Co., Kansas City, Mo. Published September 1, 1932.

41,505.—*Title:* CREAMERY BUTTER. For Butter. SUTHERLAND PAPER COMPANY, Kalamazoo, Mich. Published June 1, 1932.

41,506.—*Title:* SACRAMENTO. For Peaches. NORMAN L. WAGGONER, INC., San Francisco, Calif. Published June 17, 1932.

41,507.—*Title:* LITHIATED LEMON SODA. For Lithiated Lemon Soda. K. WIEGAND & SONS, doing business as Albert Lea Bottling Works, Albert Lea, Minn. Published January 1, 1932.

PRINTS

REGISTERED DECEMBER 6, 1932

13,975.—*Title:* CARROCCIO'S SPAGHETTI. For Spaghetti. T. A. CARROCCIO & SONS, New York, N. Y. Published October 11, 1932.

13,976.—*Title:* I COULDN'T CONFESS THAT TO OUR DOCTOR. For Wheat Breakfast Food. THE CREAM OF WHEAT CORPORATION, Minneapolis, Minn. Published November 5, 1932.

13,977.—*Title:* FITLER SEA GOLD MANILA ROPE. For Rope. THE EDWIN H. FITLER CO., Philadelphia, Pa. Published September 15, 1932.

13,978.—*Title:* WOMEN! ACCEPT FREE THIS SET OF BETTY CROCKER'S NEW BONNYWARE BISCUIT CUTTERS. For Biscuit Flour. GENERAL MILLS, INC., Minneapolis, Minn. Published November 1, 1932.

REISSUES

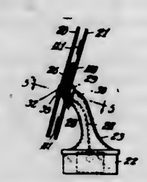
DECEMBER 6, 1932

18,678. FLASH LAMP. JOHANNES OSTERMEIER, Althegnenberg, Germany, assignor, by mesne assignments, to General Electric Company, a Corporation of New York. Original No. 1,776,637, dated Sept. 23, 1930, Serial No. 352,705, filed Apr. 5, 1929, and in Germany Feb. 28, 1929. Application for reissue filed Aug. 9, 1932. Serial No. 628,758. 10 Claims. (Cl. 67—31.)



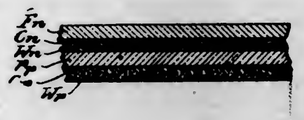
8. A flash lamp particularly for photographic purposes, comprising a closed gas tight transparent bulb containing an oxygen gas, and a loose filling of foil in the bulb adapted to emit light upon combustion thereof with the oxygen and disposed within effective range of an ignition device.

18,679. DISCHARGE TUBE DISPLAY. FRED HOTCHNER, Chicago, Ill. Original No. 1,803,706, dated May 5, 1931, Serial No. 366,069, filed May 25, 1929. Application for reissue filed Oct. 22, 1931. Serial No. 570,471. 15 Claims. (Cl. 40—130.)



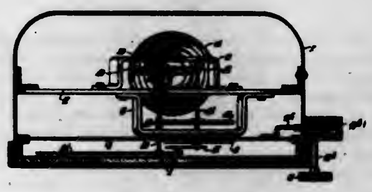
1. In an electric display, a pair of extended spaced sheets of light transmitting material, a tubular light therebetween in the form of a display pattern, and another display pattern disposed between said sheets of light transmitting material and formed of light reflecting material, the second said pattern being so positioned as to be rendered luminous by radiation from said tubular light.

18,680. COLOR PHOTOGRAPHY. LEONARD T. TROLAND, Cambridge, Mass., assignor to Comstock & Wescott, Inc., Boston, Mass., a Corporation of Massachusetts. Original No. 1,808,584, dated June 2, 1931, Serial No. 499,425, filed Sept. 9, 1921. Application for reissue filed Sept. 24, 1931. Serial No. 564,930. 239 Claims. (Cl. 95—2.)



1. A sensitized element for use in color photography comprising an emulsion which is sensitive to complemental colors at different depths respectively.

18,681. SENSITIVE ALTIMETER. GEORGE P. LUCKEY, Lancaster, Pa., assignor to Pioneer Instrument Company, Incorporated, Brooklyn, N. Y., a Corporation of New York. Original No. 1,749,494, dated Mar. 4, 1930, Serial No. 648,057, filed June 27, 1923. Application for reissue filed Mar. 16, 1931. Serial No. 523,093. 9 Claims. (Cl. 73—4.)

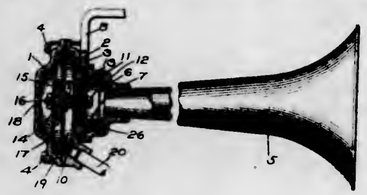


4. In an altimeter having pressure-responsive means, a plurality of pointers adapted to be actuated thereby, said pointers being so arranged relative to each other that each is actuated to a different extent, a pair of dials for indicating the degree of actuation of said pointers, means connecting said pressure-responsive means to said pointers for transforming unequal movements of the former into uniform movements of the latter, said connecting means including adjustable means for changing the ratio of the movements of said pressure-responsive means to the movements of said pointers, and means for causing relative movement between one of the dials and the pointers for setting the altimeter so that a zero indication is obtained at a predetermined altitude.

18,682. VACUUM OPERATED HORN. JOSEPH C. MCCUNE, Edgewood, and STEPHEN JOHNSON, Jr., Pittsburgh, Pa., assignors to The Westinghouse Air Brake Company, Wilmerding, Pa., a Corporation of Pennsylvania. Original No. 1,786,214, dated Dec. 23, 1930, Serial No. 400,781, filed Oct. 19, 1929. Application for reissue filed Oct. 13, 1932. Serial No. 637,662. 5 Claims. (Cl. 116—142.)

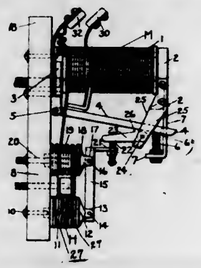
1. A sound producer comprising a flexible diaphragm having a chamber at one side constantly open to the

atmosphere and having a chamber at the opposite side, a partial vacuum source, manually operated means for connecting said source to said chamber at the opposite side, a



horn, and a thin flexible valve operated by said diaphragm for controlling communication from said horn to said vacuum chamber.

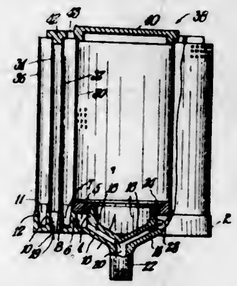
18,683. TIME ELEMENT DEVICE. WILLIAM M. SCOTT, Treddyfrin Township, Chester County, Pa. Original No. 1,848,668, dated Mar. 8, 1932, Serial No. 757,077, filed Dec. 19, 1924. Application for reissue filed May 21, 1932. Serial No. 612,837. 24 Claims. (Cl. 200—88.)



1. The combination with a movable member comprising a magnetizable element, of current-controlled means for exerting a force thereon to move it, means for restraining said member, heat responsive means for transmitting force to free said member from said restraining means, and heat responsive means compensating for the effect of changes of temperature of atmosphere upon said first named heat responsive means.

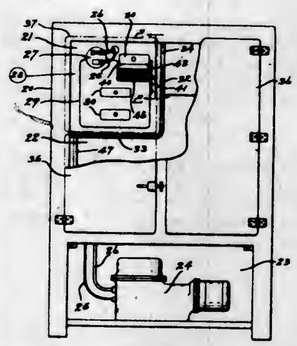
18,684. FUEL BURNING APPARATUS. LOUIS A. MORIN, Westfield, Mass. Original No. 1,843,954, dated Feb. 9, 1932, Serial No. 424,823, filed Jan. 31, 1930. Application for reissue filed Oct. 12, 1932. Serial No. 637,517. 5 Claims. (Cl. 158—87.)

3. A liquid fuel burner having spaced, concentric, combustion tubes forming inner and outer combustion chambers with an intermediate air chamber and an inner air chamber enclosed within the inner tube, a base surmounted by said combustion tubes and comprising an inner, radially broad, annular base portion and an outer, relatively narrow, annular base portion separated from and surrounding said inner base portion and having connections thereto at intervals, said base having openings between said connections for supplying air to said intermediate air chamber and an opening within said inner base portion for supplying air to said inner air chamber, said outer base portion having a pair of concentrically arranged, upwardly extending, spaced, annular walls forming between them an annular, wick-receiving channel beneath and opening into the outer combustion chamber, and said inner, broad base portion having concentrically arranged, upwardly extending, spaced, annular walls, the same comprising an inner, an outer and an intermediate wall forming an outer wick-receiving channel beneath and opening into said inner combustion chamber and an inner channel surrounded by said last-named outer wick-receiving channel, a separate cover plate engaging the innermost wall of said broad base portion extending beneath said inner air chamber, completely covering the innermost channel thereof to provide a confined vaporizing chamber in close proximity to said adjacent wick-receiving channel and separated therefrom by said intermediate wall only, said intermediate



wall being provided with at least one duct connecting the vaporizing chamber with the adjoining wick-receiving channel and said base being further provided with at least one other duct connecting the last-named channel and the outer surrounding channel, and a fuel supply pipe out of the path of the products of combustion and connected to supply liquid fuel to said vaporizing chamber.

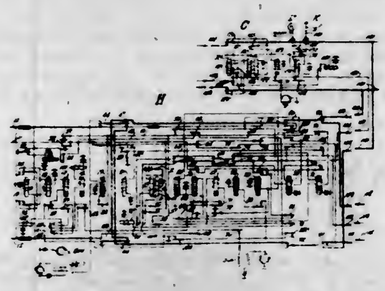
18,685. REFRIGERATING APPARATUS. HARRY B. HULL, Dayton, Ohio, assignor, by mesne assignments, to Frigidaire Corporation, a Corporation of Delaware. Original No. 1,779,542, dated Oct. 28, 1930, Serial No. 694,928, filed Feb. 25, 1924. Application for reissue filed Mar. 28, 1932. Serial No. 601,659. 15 Claims. (Cl. 62—108.5.)



14. A heating apparatus of the class described comprising a support, a heating element associated therewith, and an inverted ice-tray mounted on said support, said support having an opening in the bottom thereof to permit the ice liberated from the tray to fall freely therethrough.

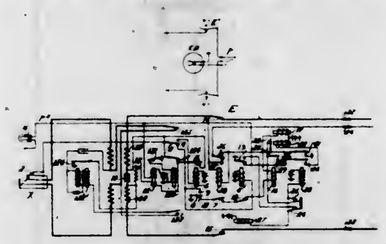
18,686. AUTOMATIC TELEPHONE SYSTEM. JOHN E. GARDNER, Clarendon Hills, Ill., assignor, by mesne assignments, to Associated Electric Laboratories, Inc., Chicago, Ill., a Corporation of Delaware. Original No. 1,727,592, dated Sept. 10, 1929, Serial No. 532,159, filed Jan. 27, 1922. Renewed Dec. 3, 1928. Application for reissue filed Aug. 12, 1931. Serial No. 556,698. 64 Claims. (Cl. 179—27.)

1. In a telephone system, a two way trunk line interconnecting two exchanges, automatic switches in each exchange having access to said trunk line and means operative automatically responsive to said trunk line becom-



ing open for rendering it inaccessible to said automatic switches in both exchanges.

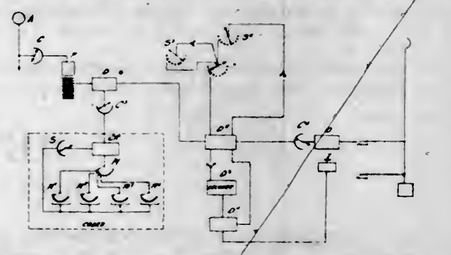
18,687. SEMIAUTOMATIC TELEPHONE SYSTEM. JOHN WICKS, Chicago, Ill., assignor, by mesne assignments, to Associated Electric Laboratories, Inc., Chicago, Ill., a Corporation of Delaware. Original No. 1,404,416, dated Jan. 24, 1922, Serial No. 220,151, filed Mar. 4, 1918. Application for reissue filed Jan. 23, 1924. Serial No. 688,081. 47 Claims. (Cl. 179—27.)



1. In a telephone system, a called line, means for establishing a connection with said called line, a source of signaling current, means for automatically connecting said source of current to the called line, means for interrupting said current to intermittently operate a signal thereat, means for disconnecting said current, means for again applying said ringing current to the called line to operate the signal before said connection is released, a source of alternating current, and means for applying said alternating current to said connection to actuate said last means.

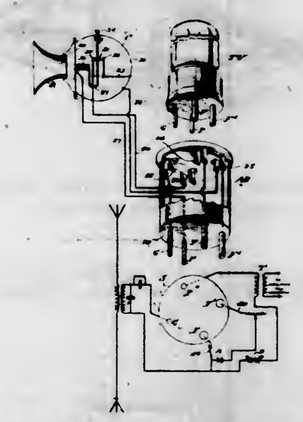
18,688. MULTIOFFICE TELEPHONE SYSTEM. JOHN E. OSTLINE, Berwyn, Ill., assignor, by mesne assignments, to Associated Electric Laboratories, Inc., Chicago, Ill., a Corporation of Delaware. Original No. 1,680,565, dated Aug. 14, 1928, Serial No. 630,726, filed Apr. 9, 1923. Renewed Jan. 5, 1928. Application for reissue filed Dec. 8, 1931. Serial No. 578,837. 74 Claims. (Cl. 197—27.)

1. In a telephone system, trunk lines extending from an automatic exchange to a manual exchange for handling automatic to manual calls, registering equipment controlled by a calling automatic subscriber for registering the number of the wanted manual subscriber when a trunk is taken for use, means for displaying the registered



number to an operator, a plurality of plug ending cords common to said trunks, and automatic switching mechanism responsive to the insertion of any plug in the jack of the wanted subscriber for connecting the associated cord with the trunk in use by the calling subscriber.

18,689. LOCALLY CONTROLLING RADIO RECEIVING APPARATUS. CLARENCE P. HOLLISTER, Cold Spring, N. Y., assignor to The Brooklyn Metal Stamping Corporation, Brooklyn, N. Y., a Corporation of New York. Original No. 1,790,636, dated Jan. 27, 1931, Serial No. 279,116, filed May 11, 1928. Application for reissue filed Nov. 4, 1932. Serial No. 641,324. 8 Claims. (Cl. 179—2.)



1. Apparatus for locally controlling a radio receiving set, comprising an adapter having prongs insertable in a radio detector tube socket to engage the contacts thereof, and provided with apertures to receive the prongs of a radio tube and with contacts engaged by said tube prongs, electric connections between the contacts and prongs of the adapter, a magnetic transmitter having a generating coil included in one of said connections, and means for eliminating the plate and superposing the transmitter currents directly upon the original plate circuit of said tube.

PLANT PATENTS

GRANTED DECEMBER 6, 1932

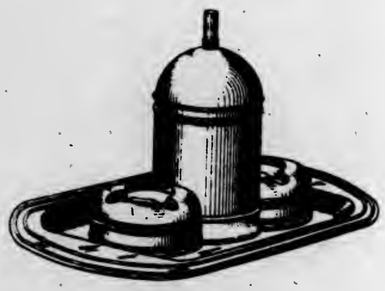
48. PLANT OR ROSEBUSH. GEORGE B. HART, Brighton, N. Y. Filed Jan. 23, 1932. Serial No. 588,470. 1 Claim. (Cl. 47—1.)

A new variety of rose bush herein described characterized by having roses in which the outside base of the petals is of light cadmium yellow in color, blending into alizarine pink, the inside of the outer petals being rose colored veined with Tyrian rose and the inner petals being eosine pink in color suffused with rose Tyrian, as shown.

DESIGNS

DECEMBER 6, 1932

88,493. COMBINED TRAY AND RECEPTACLES FOR SMOKERS. JAY ACKERMAN, New York, N. Y., assignor to The Chase Companies, Incorporated, Waterbury, Conn., a Corporation. Filed Oct. 7, 1932. Serial No. 45,251. Term of patent 3½ years.



The ornamental design for a combined tray and receptacles for smokers as shown and described.

88,494. MAGAZINE RACK. GEORGE ANDERSON, Battle Creek, Mich. Filed Aug. 29, 1932. Serial No. 44,716. Term of patent 7 years.



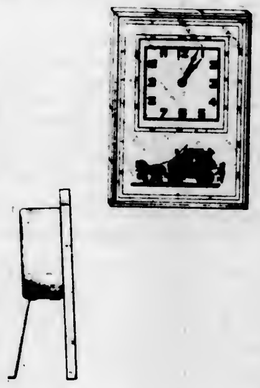
The ornamental design for a magazine rack as shown and described.

88,495. VALVE STAND FOR LIQUID FUEL BURNERS. HAROLD O. BERRY, Gardner, Mass., and WILLIAM T. BRADBURY, Kankakee, Ill., assignors to Florence Stove Company, Gardner, Mass., a Corporation of Massachusetts. Filed Sept. 8, 1932. Serial No. 44,783. Term of patent 7 years.



The ornamental design for a valve stand for liquid fuel burners, substantially as shown.

88,496. CLOCK FRAME. KARL E. BERNO, Detroit, Mich. Filed Apr. 25, 1932. Serial No. 43,594. Term of patent 7 years.



The ornamental design for a clock frame substantially as shown and described.

88,497. COMBINED LIQUID FUEL RESERVOIR AND BOWL. HAROLD O. BERRY and FRED E. WHITE, Gardner, Mass., assignors to Florence Stove Company, Gardner, Mass., a Corporation of Massachusetts. Filed Sept. 8, 1932. Serial No. 44,782. Term of patent 7 years.



The ornamental design for a combined liquid fuel reservoir and bowl, substantially as shown.

88,498. LIGHTING FIXTURE. THEODORE R. BETTENCOURT, New Bedford, Mass., assignor to John I. Paulding, Inc., New Bedford, Mass., a Corporation of Massachusetts. Filed Sept. 30, 1932. Serial No. 45,179. Term of patent 7 years.



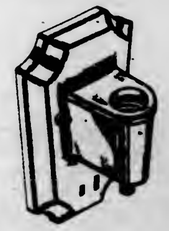
The ornamental design for a lighting fixture as shown.

88,499. LIGHTING FIXTURE. THEODORE R. BETTENCOURT, New Bedford, Mass., assignor to John I. Paulding, Inc., New Bedford, Mass., a Corporation of Massachusetts. Filed Sept. 30, 1932. Serial No. 45,180. Term of patent 7 years.



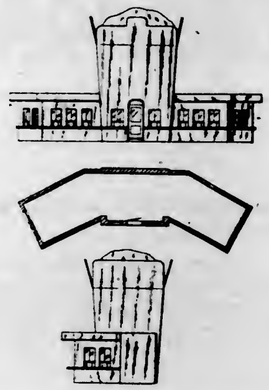
The ornamental design for a lighting fixture, as shown.

88,500. LIGHTING FIXTURE. THEODORE R. BETTENCOURT, New Bedford, Mass., assignor to John I. Paulding, Inc., New Bedford, Mass., a Corporation of Massachusetts. Filed Sept. 30, 1932. Serial No. 45,181. Term of patent 7 years.



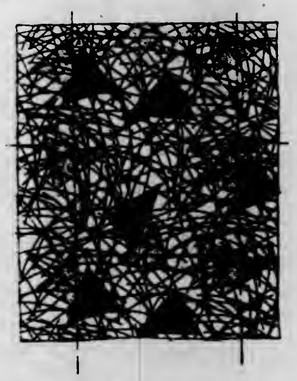
The ornamental design for a lighting fixture as shown.

88,501. REFRESHMENT STAND OR SIMILAR ARTICLE. JAMES R. CONNERY, Springfield, Mass. Filed Aug. 24, 1932. Serial No. 44,681. Term of patent 7 years.



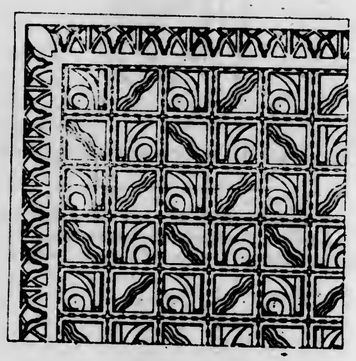
The ornamental design for a refreshment stand or similar article as shown.

88,502. TEXTILE FABRIC OR THE LIKE. SYLVAIN CUSSON, New York, N. Y. Filed Nov. 2, 1932. Serial No. 45,698. Term of patent 3½ years.



The ornamental design for a textile fabric or the like, as shown and described.

88,503. GRILLE PANEL. RUTH ANDREW DEAN, Boston, Mass., assignor to Harrington & King Perforating Company, Chicago, Ill., a Corporation of Illinois. Filed Aug. 31, 1932. Serial No. 44,731. Term of patent 14 years.



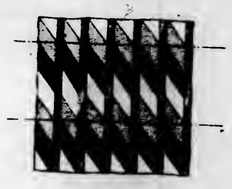
The ornamental design for a grille panel substantially as shown and described.

88,504. BOTTLE. PAUL C. DELAIZE, New York, N. Y., assignor to D'Orsay Perfumeries Corporation, New York, N. Y., a Corporation of New York. Filed Oct. 7, 1932. Serial No. 45,255. Term of patent 7 years.



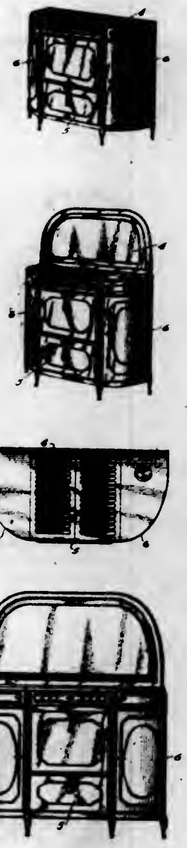
The ornamental design for a bottle as shown.

88,505. TEXTILE FABRIC OR THE LIKE. LIZZIE DERRIEY, New York, N. Y. Filed Nov. 7, 1932. Serial No. 45,782. Term of patent 3½ years.



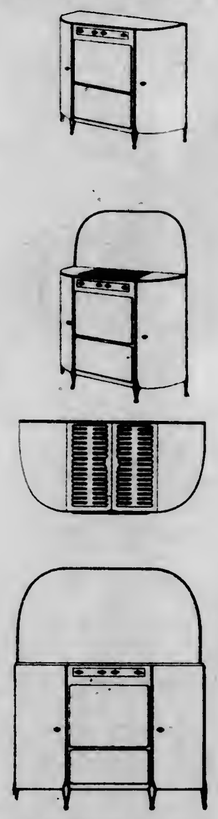
The ornamental design for a textile fabric or the like, as shown and described.

88,506. GAS OR ELECTRIC RANGE OR ANALOGOUS ARTICLE. LEONARD DE WIT, Chicago, Ill., assignor to Moore Bros., Joliet, Ill., a Corporation of Illinois. Filed Apr. 15, 1931. Serial No. 39,494. Term of patent 7 years.



The ornamental design for a gas or electric range or analogous article as shown and described.

88,507. GAS OR ELECTRIC RANGE OR ANALOGOUS ARTICLE. LEONARD DE WIT, Chicago, Ill. Filed May 18, 1932. Serial No. 43,841. Term of patent 7 years.



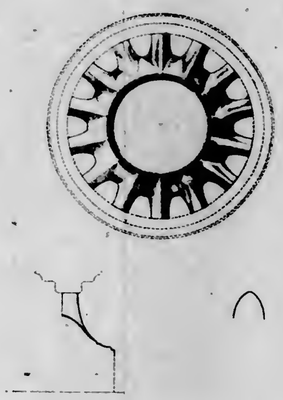
The ornamental design for a gas or electric range or analogous article as shown and described.

88,508. LACE. JEAN DOGNIN, Paris, France, assignor to The Lace Net Importing Co. Inc., New York, N. Y. Filed July 15, 1932. Serial No. 44,352. Term of patent 3½ years.



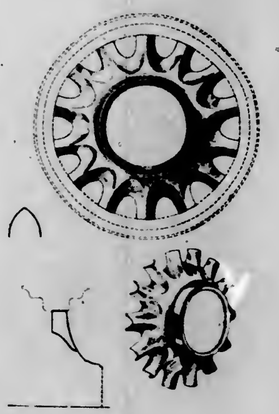
The ornamental design for lace, substantially as shown.

88,509. ARTILLERY WHEEL. CAROLUS L. EKSERGIAN, Detroit, Mich., assignor to Budd Wheel Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Apr. 4, 1932. Serial No. 43,892. Term of patent 14 years.



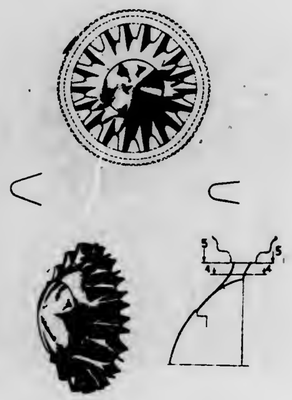
The ornamental design for an artillery wheel as shown.

88,510. ARTILLERY WHEEL. CAROLUS L. EKSERGIAN and TALMON A. DAVENPORT, Detroit, Mich., assignors to Budd Wheel Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Apr. 4, 1932. Serial No. 43,894. Term of patent 14 years.



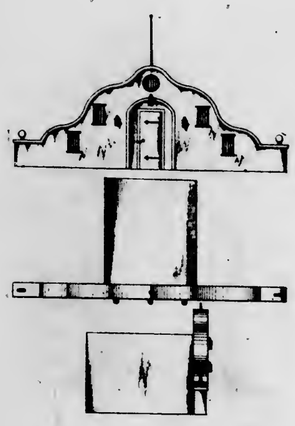
The ornamental design for an artillery wheel as shown.

88,511. WHEEL. CAROLUS L. EKSERGIAN and TALMON A. DAVENPORT, Detroit, Mich., assignors to Budd Wheel Co., Philadelphia, Pa., a Corporation of Pennsylvania. Filed Apr. 18, 1932. Serial No. 43,538. Term of patent 14 years.



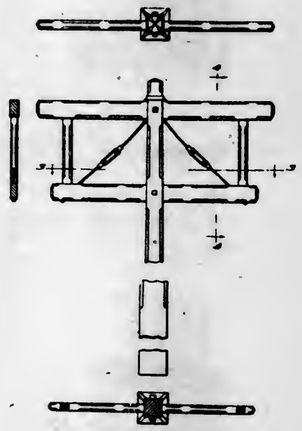
The ornamental design for a wheel as shown.

88,512. SERVICE STATION OR SIMILAR BUILDING STRUCTURE. ALVAN S. FAIR, Socorro, N. Mex. Filed Sept. 17, 1932. Serial No. 44,981. Term of patent 14 years.



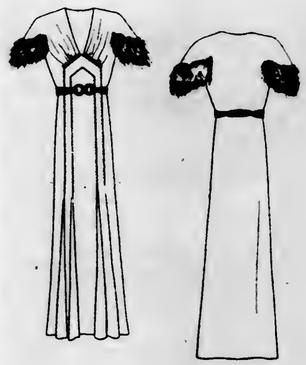
The ornamental design for a service station or similar building structure as shown.

88,513. LIGHT POST. JULIAN P. FARNAM, Minneapolis, Minn., assignor to Page & Hill Co., Minneapolis, Minn., a Corporation of Minnesota. Filed Sept. 8, 1932. Serial No. 44,771. Term of patent 3½ years.



The ornamental design for a light post, as shown.

88,514. DRESS. PAULINE E. FIELDS, New York, N. Y. Filed Oct. 19, 1932. Serial No. 45,421. Term of patent 3½ years.



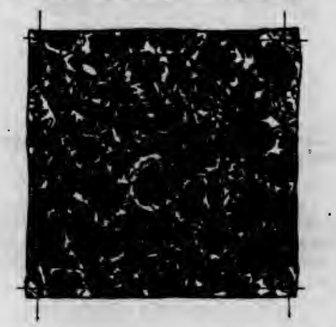
The ornamental design for a dress substantially as shown.

88,515. TEXTILE FABRIC OR THE LIKE. ANDREW FLORY, Grantwood, N. J. Filed Nov. 3, 1932. Serial No. 45,713. Term of patent 3½ years.



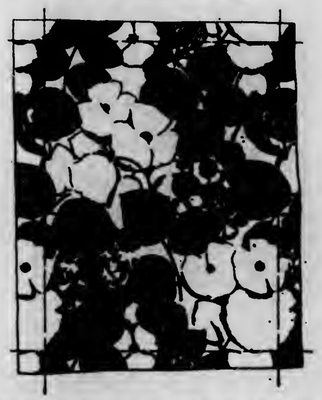
The ornamental design for a textile fabric or the like substantially as shown and described.

88,516. TEXTILE FABRIC OR THE LIKE. RALPH W. FRAMBACH, Maplewood, N. J. Filed Nov. 7, 1932. Serial No. 45,786. Term of patent 3½ years.



The ornamental design for a textile fabric or the like, as shown and described.

88,517. TEXTILE FABRIC OR THE LIKE. RALPH W. FRAMBACH, Maplewood, N. J. Filed Nov. 7, 1932. Serial No. 45,783. Term of patent 3½ years.



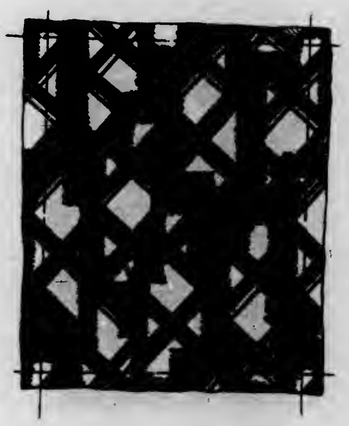
The ornamental design for a textile fabric or the like, as shown and described.

88,518. TEXTILE FABRIC OR THE LIKE. RALPH W. FRAMBACH, Maplewood, N. J. Filed Nov. 7, 1932. Serial No. 45,784. Term of patent 3½ years.



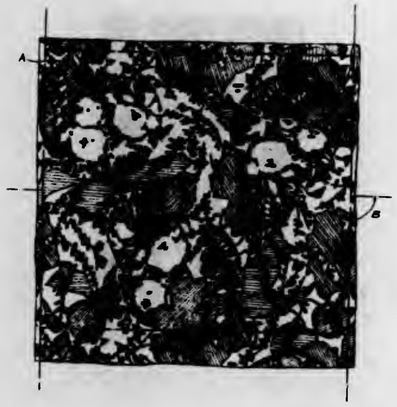
The ornamental design for a textile fabric or the like, as shown and described.

88,519. TEXTILE FABRIC OR THE LIKE. RALPH W. FRAMBACH, Maplewood, N. J. Filed Nov. 7, 1932. Serial No. 45,785. Term of patent 3½ years.



The ornamental design for a textile fabric or the like, as shown and described.

88,520. TEXTILE FABRIC OR THE LIKE. RALPH W. FRAMBACH, Maplewood, N. J. Filed Nov. 7, 1932. Serial No. 45,788. Term of patent 3½ years.



The ornamental design for a textile fabric or the like, as shown and described.

88,521. NURSERY FURNITURE PANEL. LEONARD FULLER, Grand Rapids, and KARL F. SCHMIDT, Ada, Mich. Filed Apr. 8, 1932. Serial No. 43,429. Term of patent 7 years.



The ornamental design for a nursery furniture panel, substantially as shown and described.

88,522. NURSERY FURNITURE PANEL. LEONARD FULLER, Grand Rapids, and KARL F. SCHMIDT, Ada, Mich. Filed Apr. 8, 1932. Serial No. 43,430. Term of patent 7 years.



The ornamental design for a nursery furniture panel, substantially as shown and described.

88,523. NURSERY FURNITURE PANEL. LEONARD FULLER, Grand Rapids, and KARL F. SCHMIDT, Ada, Mich. Filed Apr. 8, 1932. Serial No. 43,431. Term of patent 7 years.



The ornamental design for a nursery furniture panel, substantially as shown and described.

88,524. NURSERY FURNITURE PANEL. LEONARD FULLER, Grand Rapids, and KARL F. SCHMIDT, Ada, Mich. Filed Apr. 8, 1932. Serial No. 43,432. Term of patent 7 years.



The ornamental design for a nursery furniture panel, substantially as shown and described.

88,525. NURSERY FURNITURE PANEL. LEONARD FULLER, Grand Rapids, and KARL F. SCHMIDT, Ada, Mich. Filed Apr. 8, 1932. Serial No. 43,433. Term of patent 7 years.



The ornamental design for a nursery furniture panel substantially as shown and described.

88,526. NURSERY FURNITURE PANEL. LEONARD FULLER, Grand Rapids, and KARL F. SCHMIDT, Ada, Mich. Filed Apr. 8, 1932. Serial No. 43,434. Term of patent 7 years.



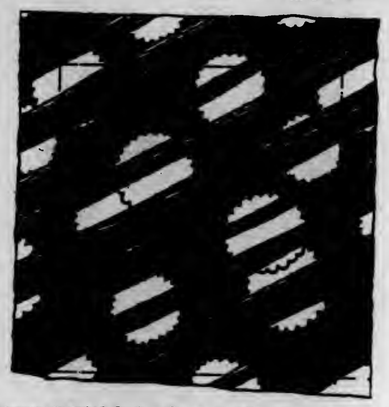
The ornamental design for a nursery furniture panel, substantially as shown and described.

88,527. TEXTILE FABRIC. ROBERT GROSCH, Paris, France, assignor to Cheney Brothers, New York, N. Y., a Corporation of Connecticut. Filed Sept. 28, 1932. Serial No. 45,116. Term of patent 3½ years.



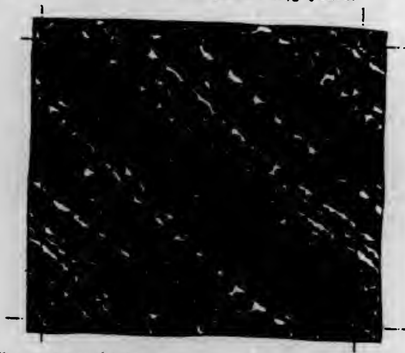
The ornamental design for a textile fabric, substantially as shown and described.

88,528. TEXTILE FABRIC. ROBERT GEORGE, Paris, France, assignor to Cheney Brothers, New York, N. Y., a Corporation of Connecticut. Filed Sept. 28, 1932. Serial No. 45,121. Term of patent 3½ years.



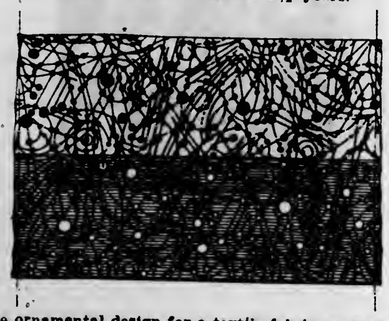
The ornamental design for a textile fabric, substantially as shown and described.

88,529. TEXTILE FABRIC. ROBERT GEORGE, Paris, France, assignor to Cheney Brothers, New York, N. Y., a Corporation of Connecticut. Filed Oct. 24, 1932. Serial No. 45,522. Term of patent 3½ years.



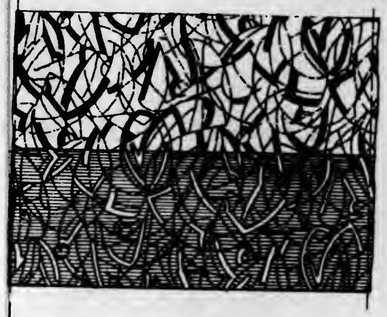
The ornamental design for a textile fabric, substantially as shown and described.

88,530. TEXTILE FABRIC. ROBERT GEORGE, Paris, France, assignor to Cheney Brothers, New York, N. Y., a Corporation of Connecticut. Filed Oct. 24, 1932. Serial No. 45,523. Term of patent 3½ years.



The ornamental design for a textile fabric, substantially as shown and described.

88,531. TEXTILE FABRIC. ROBERT GEORGE, Paris, France, assignor to Cheney Brothers, New York, N. Y., a Corporation of Connecticut. Filed Oct. 24, 1932. Serial No. 45,524. Term of patent 3½ years.



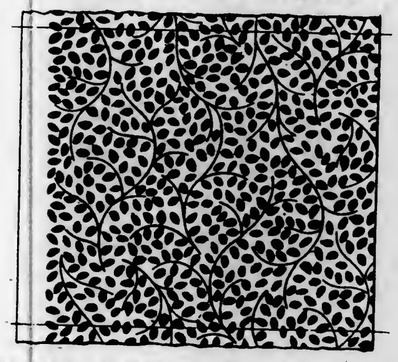
The ornamental design for a textile fabric, substantially as shown and described.

88,532. TEXTILE FABRIC. ROBERT GEORGE, Paris, France, assignor to Cheney Brothers, New York, N. Y., a Corporation of Connecticut. Filed Sept. 28, 1932. Serial No. 45,117. Term of patent 3½ years.



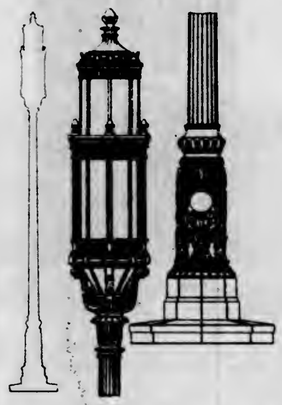
The ornamental design for a textile fabric, substantially as shown and described.

88,533. TEXTILE FABRIC. ROBERT GEORGE, Paris, France, assignor to Cheney Brothers, New York, N. Y., a Corporation of Connecticut. Filed Sept. 28, 1932. Serial No. 45,120. Term of patent 3½ years.



The ornamental design for a textile fabric, substantially as shown and described.

88,534. LIGHTING STANDARD. JOSEPH W. GOSLING, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Sept. 28, 1932. Serial No. 45,106. Term of patent 14 years.



The ornamental design for a lighting standard, as shown and described.

88,535. CURTAIN TIE-BACK OR SIMILAR ARTICLE. RAYMOND GRIESER, Detroit, Mich., assignor of one-half to Lloyd C. Felts, Detroit, Mich. Filed Nov. 24, 1931. Serial No. 41,848. Term of patent 7 years.



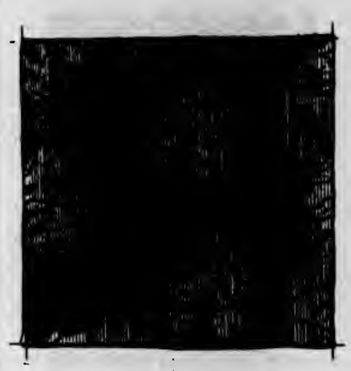
The ornamental design for a curtain tie back or similar article, as shown.

88,536. TEXTILE FABRIC. MACLYN GUHL, New York, N. Y., assignor to Moss-Still, Inc., New York, N. Y., a Corporation of New York. Filed Nov. 3, 1932. Serial No. 45,716. Term of patent 3½ years.



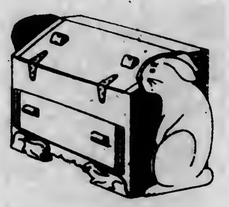
The ornamental design for a textile fabric, substantially as shown and described.

88,537. TEXTILE FABRIC. MACLYN GUHL, New York, N. Y., assignor to Moss-Still, Inc., New York, N. Y., a Corporation of New York. Filed Nov. 3, 1932. Serial No. 45,717. Term of patent 3½ years.



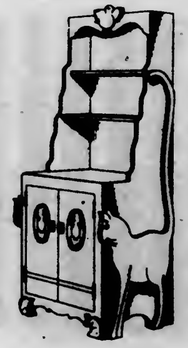
The ornamental design for a textile fabric, substantially as shown and described.

88,538. CHILD'S TOY CHEST. MICHAEL HALLWARD, Pasadena, Calif. Filed Oct. 10, 1932. Serial No. 45,266. Term of patent 7 years.



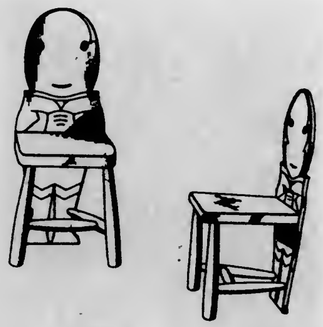
The ornamental design for a child's toy chest, as shown.

88,539. CHILD'S TOY CHEST. MICHAEL HALLWARD, Pasadena, Calif. Filed Oct. 10, 1932. Serial No. 45,267. Term of patent 7 years.



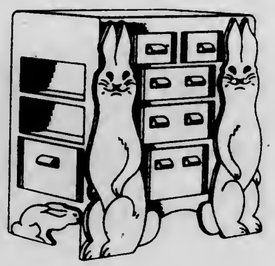
The ornamental design for a child's toy chest, as shown.

88,540. CHILD'S CHAIR. MICHAEL HALLWARD, Pasadena, Calif. Filed Oct. 10, 1932. Serial No. 45,268. Term of patent 7 years.



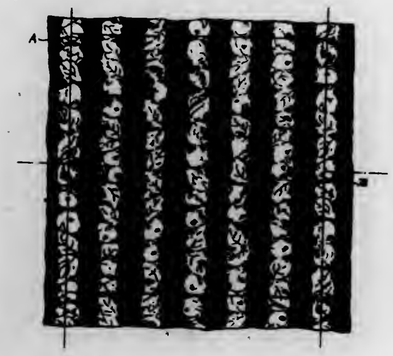
The ornamental design for a child's chair, as shown.

88,541. CHILD'S CHEST OF DRAWERS. MICHAEL HALLWARD, Pasadena, Calif. Filed Oct. 10, 1932. Serial No. 45,269. Term of patent 7 years.



The ornamental design for a child's chest of drawers, as shown.

88,542. TEXTILE FABRIC OR THE LIKE. ALFRED J. HEINKE, Towaco, N. J. Filed Nov. 7, 1932. Serial No. 45,792. Term of patent 3½ years.



The ornamental design for a textile fabric or the like, as shown and described.

88,543. TEXTILE FABRIC OR THE LIKE. ALFRED J. HEINKE, Towaco, N. J. Filed Nov. 7, 1932. Serial No. 45,789. Term of patent 3½ years.



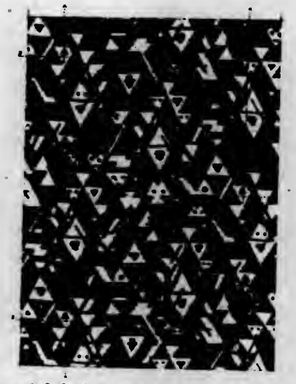
The ornamental design for a textile fabric or the like, as shown and described.

88,544. TEXTILE FABRIC OR THE LIKE. ALFRED J. HEINKE, Towaco, N. J. Filed Nov. 7, 1932. Serial No. 45,790. Term of patent 3½ years.



The ornamental design for a textile fabric or the like, as shown and described.

88,545. TEXTILE FABRIC OR SIMILAR ARTICLE OF MANUFACTURE. ALFRED J. HEINKE, Towaco, N. J. Filed Oct. 19, 1932. Serial No. 45,409. Term of patent 3½ years.



The ornamental design for a textile fabric or similar article of manufacture substantially as shown and described.

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88,546. TEXTILE FABRIC OR SIMILAR ARTICLE OF MANUFACTURE. ALFRED J. HEINKE, Towaco, N. J. Filed Oct. 19, 1932. Serial No. 45,408. Term of patent 3½ years.



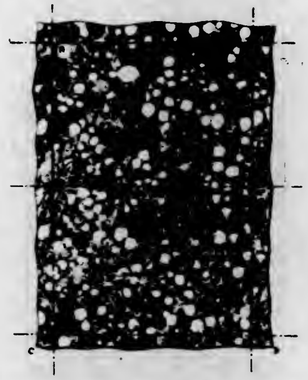
The ornamental design for a textile fabric or similar article of manufacture substantially as shown and described.

88,547. TEXTILE FABRIC OR SIMILAR ARTICLE OF MANUFACTURE. ALFRED J. HEINKE, Towaco, N. J. Filed Oct. 8, 1932. Serial No. 45,260. Term of patent 3½ years.



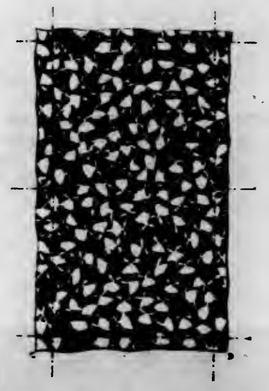
The ornamental design for a textile fabric or similar article of manufacture substantially as shown and described.

88,548. TEXTILE FABRIC OR SIMILAR ARTICLE. CARL R. HELLMAN, New York, N. Y., assignor to William Willheim Co., Inc., New York, N. Y. Filed Nov. 4, 1932. Serial No. 45,743. Term of patent 3½ years.



The ornamental design for a textile fabric or similar article as shown and described.

88,549. TEXTILE FABRIC OR SIMILAR ARTICLE. CARL R. HELLMAN, New York, N. Y., assignor to William Willheim Co., Inc., New York, N. Y. Filed Nov. 4, 1932. Serial No. 45,745. Term of patent 3½ years.



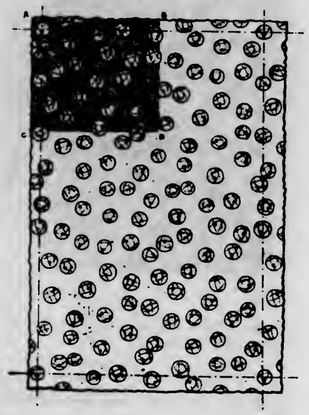
The ornamental design for a textile fabric or similar article as shown and described.

88,550. TEXTILE FABRIC OR SIMILAR ARTICLE. CARL R. HELLMAN, New York, N. Y., assignor to William Willheim Co., Inc., New York, N. Y. Filed Nov. 4, 1932. Serial No. 45,741. Term of patent 3½ years.



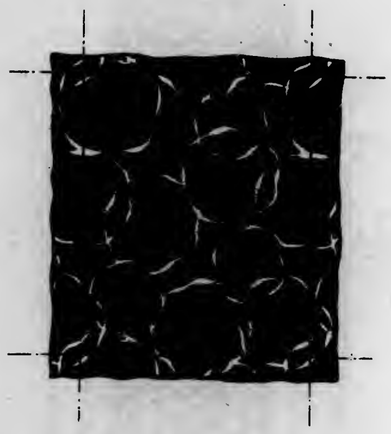
The ornamental design for a textile fabric or similar article as shown and described.

88,551. TEXTILE FABRIC OR SIMILAR ARTICLE. CARL R. HELLMAN, New York, N. Y., assignor to William Willheim Co., Inc., New York, N. Y. Filed Oct. 22, 1932. Serial No. 45,469. Term of patent 3½ years.



The ornamental design for a textile fabric or similar article as shown and described.

88,552. TEXTILE FABRIC OR SIMILAR ARTICLE. CARL R. HELLMAN, New York, N. Y., assignor to William Willheim Co., Inc., New York, N. Y. Filed Nov. 4, 1932. Serial No. 45,740. Term of patent 3½ years.



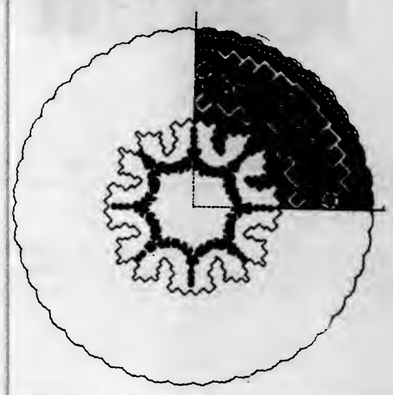
The ornamental design for a textile fabric or similar article as shown and described.

88,553. SPOON OR SIMILAR ARTICLE. CLIFFORD C. HUNT, Jackson, Mich., assignor to Reynolds Spring Company, Jackson, Mich., a Corporation of Delaware. Filed Oct. 12, 1932. Serial No. 45,321. Term of patent 7 years.



The ornamental design for a spoon or a similar article substantially as shown and described.

88,554. DOILY. ROBERT J. HUTT and GEORGE A. HUTT, Brooklyn, N. Y. Filed Aug. 31, 1932. Serial No. 44,732. Term of patent 3½ years.



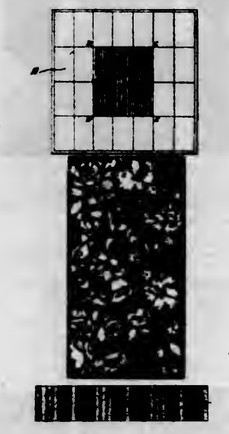
The ornamental design for a doily, as shown and described.

88,555. TEXTILE FABRIC OR SIMILAR ARTICLE OF MANUFACTURE. FRANCES JOHNSON, Brooklyn, N. Y. Filed Oct. 12, 1932. Serial No. 45,319. Term of patent 3½ years.



The ornamental design for a textile fabric or similar article of manufacture substantially as shown and described.

88,556. TEXTILE FABRIC OR SIMILAR ARTICLE. HERBERT KATZMAN, New York, N. Y., assignor to William Willheim Co., Inc., New York, N. Y. Filed Oct. 22, 1932. Serial No. 45,452. Term of patent 3½ years.



The ornamental design for a textile fabric or similar article as shown and described.

88,557. TEXTILE FABRIC OR THE LIKE. WERNER R. KAUFMANN, East Elmhurst, Long Island, N. Y., assignor to Combier & Co. Inc., New York, N. Y., a Corporation of Delaware. Filed Oct. 4, 1932. Serial No. 45,208. Term of patent 3½ years.



The ornamental design for a textile fabric or the like substantially as shown and described.

88,558. SIGN. BARTLEY H. KOLLMAN, Indianapolis, Ind. Filed June 6, 1932. Serial No. 43,991. Term of patent 14 years.



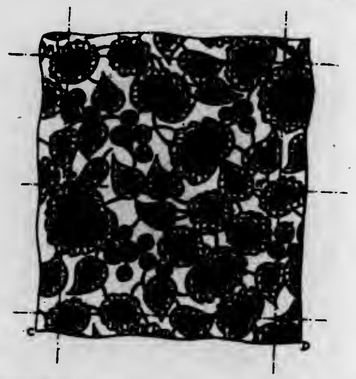
The ornamental design for a sign, as shown and described.

88,559. TEXTILE FABRIC OR SIMILAR ARTICLE. ALEXANDER KOHUT, New York, N. Y., assignor to William Willheim Co., Inc., New York, N. Y. Filed Nov. 4, 1932. Serial No. 45,732. Term of patent 3½ years.



The ornamental design for a textile fabric or similar article as shown and described.

88,560. TEXTILE FABRIC OR SIMILAR ARTICLE. ALEXANDER KONUT, New York, N. Y., assignor to William Willheim Co., Inc., New York, N. Y. Filed Nov. 4, 1932. Serial No. 45,735. Term of patent 3½ years.



The ornamental design for a textile fabric or similar article as shown and described.

88,561. FINGER RING. JOSEPH H. LEVI, Washington, D. C. Filed Oct. 5, 1932. Serial No. 45,229. Term of patent 14 years.



The ornamental design for a finger ring, as shown and described.

88,562. TEXTILE FABRIC OR THE LIKE. EVELYN LITTMAN, New York, N. Y. Filed Oct. 29, 1932. Serial No. 45,621. Term of patent 3½ years.



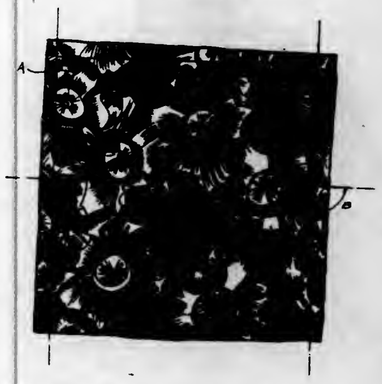
The ornamental design for a textile fabric or the like substantially as shown and described.

88,563. TEXTILE FABRIC OR SIMILAR ARTICLE. JULIA LUKAS, New York, N. Y., assignor to William Willheim Co., Inc., New York, N. Y. Filed Nov. 4, 1932. Serial No. 45,761. Term of patent 3½ years.



The ornamental design for a textile fabric or similar article as shown and described.

88,564. TEXTILE FABRIC OR THE LIKE. JULIA LUKAS, New York, N. Y. Filed Nov. 2, 1932. Serial No. 45,701. Term of patent 3½ years.



The ornamental design for a textile fabric or the like, as shown and described.

88,565. TEXTILE FABRIC OR THE LIKE. JULIA LUKAS, New York, N. Y., assignor to Combier & Co. Inc., New York, N. Y., a Corporation of Delaware. Filed Nov. 2, 1932. Serial No. 45,702. Term of patent 3½ years.



The ornamental design for a textile fabric or the like, as shown and described.

88,566. BELT BUCKLE CONNECTER OR THE LIKE. BEN B. MANASTER, Chicago, Ill. Filed Sept. 24, 1932. Serial No. 45,054. Term of patent 7 years.



The ornamental design for a belt buckle connecter or the like substantially as shown.

88,567. DRESS. SALLY MILGRIM, Woodmere, N. Y., assignor to Associated Merchandising Corporation, New York, N. Y., a Corporation of New Jersey. Filed Oct. 19, 1932. Serial No. 45,420. Term of patent 3½ years.



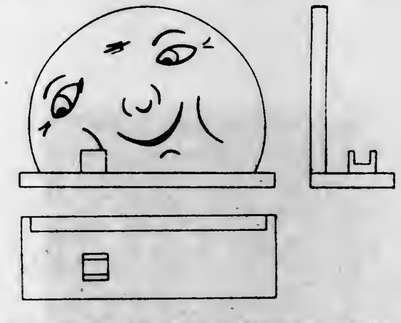
The ornamental design for a dress substantially as shown.

88,568. COMBINED CARD TABLE LAMP AND TRAY. VICTOR S. PEARLMAN, Chicago, Ill., assignor to The Vicbridge Lamp Company, Chicago, Ill., a Corporation of Illinois. Filed Aug. 15, 1932. Serial No. 44,613. Term of patent 14 years.



The ornamental design for a combined card table lamp and tray, substantially as shown.

88,569. HOLDER FOR A BABY SPOON OR SIMILAR ARTICLE. BENJAMIN H. PROUT, Meriden, Conn., assignor to International Silver Company, Meriden, Conn., a Corporation of New Jersey. Filed Sept. 8, 1932. Serial No. 44,755. Term of patent 3½ years.



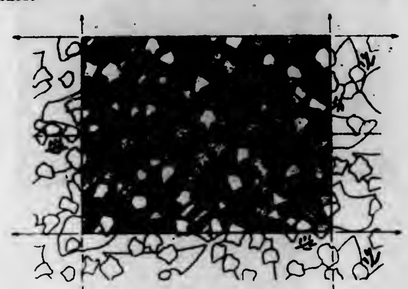
The ornamental design for a holder for a baby spoon or similar article, substantially as shown.

88,570. TEXTILE FABRIC. GUSTAV M. PULITZER, New York, N. Y., assignor to Moss-Still, Inc., New York, N. Y., a Corporation of New York. Filed Nov. 7, 1932. Serial No. 45,794. Term of patent 3½ years.



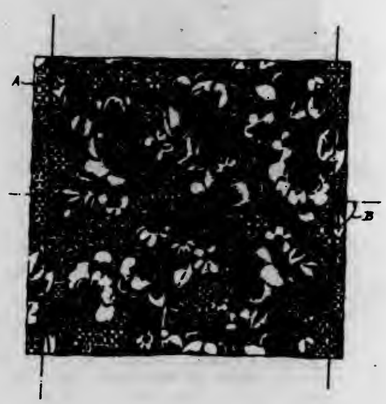
The ornamental design for a textile fabric, substantially as shown and described.

88,571. TEXTILE FABRIC. WILLARD D. ROBERSON, New York, N. Y., assignor to Hess, Goldsmith & Co., Inc., New York, N. Y., a Corporation of Delaware. Filed Nov. 2, 1932. Serial No. 45,700. Term of patent 3½ years.



The ornamental design for a textile fabric, as shown and described.

88,572. TEXTILE FABRIC. WILLARD D. ROBERSON, New York, N. Y., assignor to Moss-Still, Inc., New York, N. Y., a Corporation of New York. Filed Nov. 3, 1932. Serial No. 45,715. Term of patent 3½ years.



The ornamental design for a textile fabric, substantially as shown and described.

88,573. TEXTILE FABRIC OR THE LIKE. LOUIS RUBINGER, New York. N. Y. Filed Nov. 1, 1932. Serial No. 45,674. Term of patent 3½ years.



The ornamental design for a textile fabric or the like, as shown and described.

88,574. TEXTILE FABRIC OR THE LIKE. FRANÇOIS J. SCHANTZEL, Staten Island, N. Y. Filed Nov. 1, 1932. Serial No. 45,684. Term of patent 3½ years.



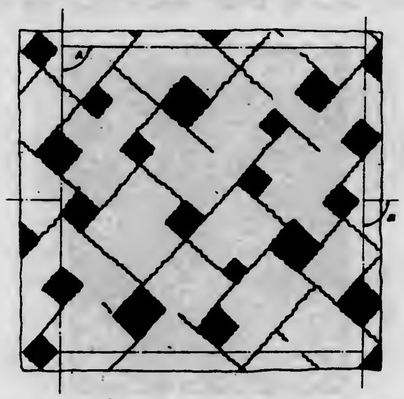
The ornamental design for a textile fabric or the like, as shown and described.

88,575. TEXTILE FABRIC OR SIMILAR ARTICLE. JACK SCHWEIZER, New York, N. Y., assignor to William Willheim Co., Inc., New York, N. Y. Filed Nov. 4, 1932. Serial No. 45,737. Term of patent 3½ years.



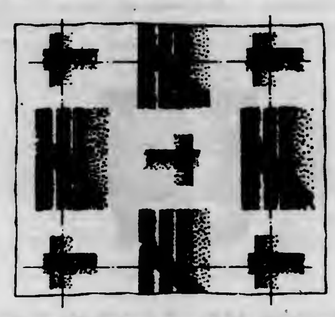
The ornamental design for a textile fabric or similar article as shown and described.

88,576. TEXTILE FABRIC OR THE LIKE. JACK SCHWEIZER, Rye, N. Y. Filed Nov. 7, 1932. Serial No. 45,779. Term of patent 3½ years.



The ornamental design for a textile fabric or the like, as shown and described.

88,577. TEXTILE FABRIC OR THE LIKE. JACK SCHWEIZER, Rye, N. Y. Filed Nov. 7, 1932. Serial No. 45,780. Term of patent 3½ years.



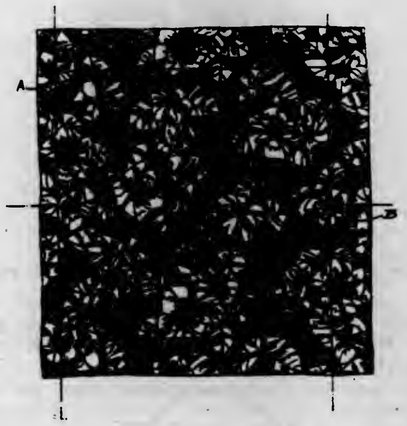
The ornamental design for a textile fabric or the like, as shown and described.

88,578. TEXTILE FABRIC OR SIMILAR ARTICLE. JACK SCHWEIZER, New York, N. Y., assignor to William Willheim Co., Inc., New York, N. Y. Filed Nov. 4, 1932. Serial No. 45,738. Term of patent 3½ years.



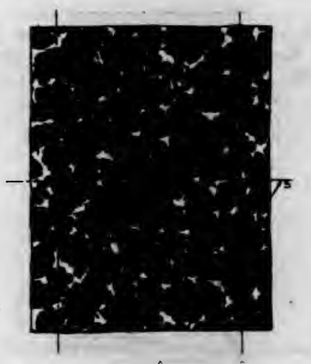
The ornamental design for a textile fabric or similar article as shown and described.

88,579. TEXTILE FABRIC. JACK SCHWEIZER, New York, N. Y., assignor to Moss-Still, Inc., New York, N. Y., a Corporation of New York. Filed Nov. 3, 1932. Serial No. 45,714. Term of patent 3½ years.



The ornamental design for a textile fabric, substantially as shown and described.

88,580. TEXTILE FABRIC. JACK SCHWEIZER, New York, N. Y., assignor to Moss-Still, Inc., New York, N. Y., a Corporation of New York. Filed Nov. 7, 1932. Serial No. 45,781. Term of patent 3½ years.



The ornamental design for a textile fabric, substantially as shown and described.

88,581. FLOWER STAND. IRVING G. SCOTT and MAUD C. FOX, New York, N. Y. Filed Oct. 7, 1932. Serial No. 45,254. Term of patent 3½ years.



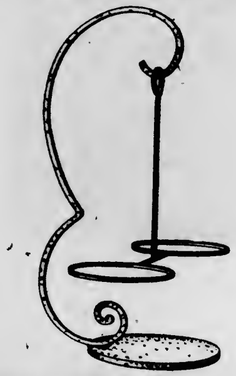
The ornamental design for a flower stand, as shown.

88,582. FLOWER STAND. IRVING G. SCOTT and MAUD C. FOX, New York, N. Y. Filed Oct. 10, 1932. Serial No. 45,286. Term of patent 7 years.



The ornamental design for a flower stand, as shown.

88,583. FLOWER STAND. IRVING G. SCOTT and MAUD C. FOX, New York, N. Y. Filed Oct. 11, 1932. Serial No. 45,310. Term of patent 3½ years.



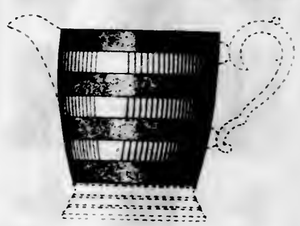
The ornamental design for a flower stand as shown.

88,584. TEXTILE FABRIC OR SIMILAR ARTICLE. FRANK SHARA, Brooklyn, N. Y., assignor to William Willheim Co., Inc., New York, N. Y. Filed Nov. 4, 1932. Serial No. 45,760. Term of patent 3½ years.



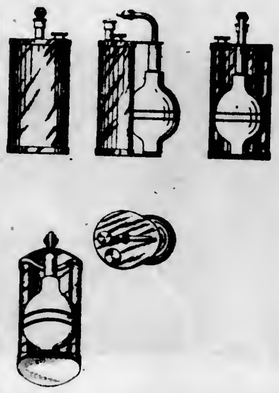
The ornamental design for a textile fabric or similar article as shown and described.

88,585. CONTAINER. MORRIS SPERLING, Port Jervis, N. Y., assignor to Knickerbocker Silver Co. Inc., Port Jervis, N. Y., a Corporation of New York. Filed Aug. 2, 1932. Serial No. 44,509. Term of patent 3½ years.



The ornamental design for a container, as shown and described.

88,586. BLOWTORCH. JACOB F. STEFFAN and KARL G. ROHRER, San Francisco, Calif. Filed May 2, 1932. Serial No. 43,698. Term of patent 14 years.



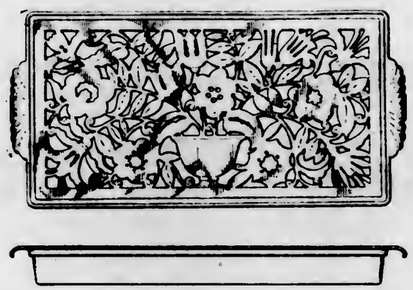
The ornamental design for a blowtorch, as shown.

88,587. HUMIDIFIER. EDNA FLORENCE STEFFENS, Cleveland Heights, Ohio. Filed Sept. 14, 1932. Serial No. 44,828. Term of patent 7 years.



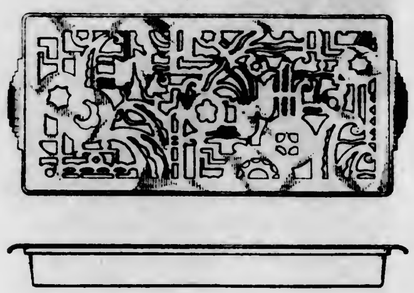
The ornamental design for a humidifier as shown.

88,588. HUMIDIFIER. EDNA FLORENCE STEFFENS, Cleveland Heights, Ohio. Filed Sept. 14, 1932. Serial No. 44,829. Term of patent 7 years.



The ornamental design for a humidifier as shown.

88,589. HUMIDIFIER. EDNA FLORENCE STEFFENS, Cleveland Heights, Ohio. Filed Sept. 14, 1932. Serial No. 44,830. Term of patent 14 years.



The ornamental design for a humidifier as shown.

88,590. CLOCK CASE. PAUL C. TIETS, Chicago, Ill. Filed Apr. 30, 1932. Serial No. 43,678. Term of patent 3½ years.



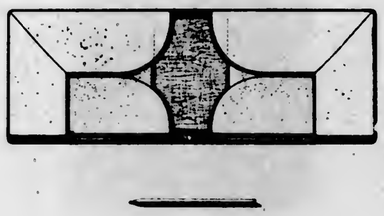
The ornamental design for a clock case as shown.

88,591. LIGHTING FIXTURE. HENRY K. WACK, New Bedford, Mass., assignor to John I. Paulding, Inc., New Bedford, Mass., a Corporation of Massachusetts. Filed Sept. 30, 1932. Serial No. 45,178. Term of patent 7 years.



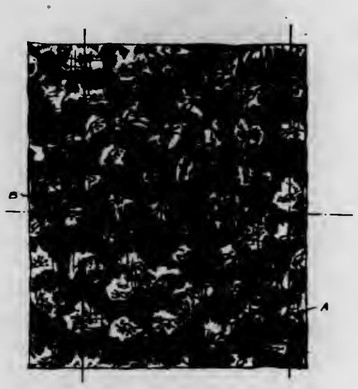
The ornamental design for a lighting fixture as shown.

88,592. BILL FOLD. JOHN PHILIP WEGE, West Bend, Wis., assignor to Amity Leather Products Co., West Bend, Wis., a Corporation of Wisconsin. Filed Sept. 26, 1932. Serial No. 45,068. Term of patent 14 years.



The ornamental design for a billfold as shown.

88,593. TEXTILE FABRIC OR THE LIKE. IRENE A. WEITZ, Brooklyn, N. Y., assignor to Combier & Co. Inc., New York, N. Y., a Corporation of Delaware. Filed Oct. 11, 1932. Serial No. 45,291. Term of patent 3½ years.



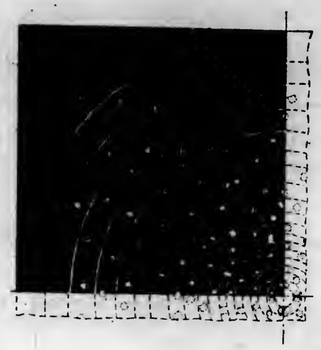
The ornamental design for a textile fabric or the like substantially as shown and described.

88,594. COMBINATION LIQUID FUEL RESERVOIR, BOWL, AND SUPPORT THEREFOR. FRED E. WHITE and HAROLD O. BERRY, Gardner, Mass., and WILLIAM T. BRADBURY, Kankakee, Ill., assignors to Florence Stove Company, Gardner, Mass., a Corporation of Massachusetts. Filed Sept. 8, 1932. Serial No. 44,784. Term of patent 7 years.



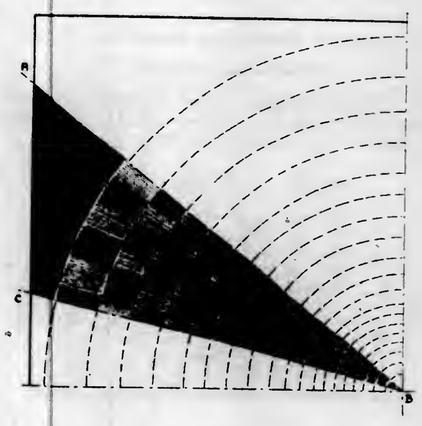
The ornamental design for a combination liquid fuel reservoir, bowl, and support therefor, substantially as shown.

88,595. TEXTILE FABRIC OR SIMILAR ARTICLE. WILLIAM WILLHEIM, New York, N. Y. Filed Oct. 31, 1932. Serial No. 45,651. Term of patent 3½ years.



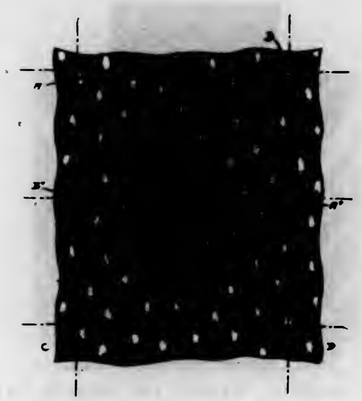
The ornamental design for a textile fabric or similar article as shown and described.

88,596. TEXTILE FABRIC OR SIMILAR ARTICLE. WILLIAM WILLHEIM, New York, N. Y. Filed Oct. 31, 1932. Serial No. 45,652. Term of patent 3½ years.



The ornamental design for a textile fabric or similar article as shown and described.

88,597. TEXTILE FABRIC OR SIMILAR ARTICLE. WILLIAM WILLHEIM, New York, N. Y. Filed Oct. 31, 1932. Serial No. 45,654. Term of patent 3½ years.



The ornamental design for a textile fabric or similar article as shown and described.

88,598. TEXTILE FABRIC OR SIMILAR ARTICLE. WILLIAM WILLHEIM, New York, N. Y. Filed Oct. 31, 1932. Serial No. 45,658. Term of patent 3½ years.



The ornamental design for a textile fabric or similar article as shown.

88,599. TEXTILE FABRIC OR SIMILAR ARTICLE. WILLIAM WILLHEIM, New York, N. Y. Filed Oct. 31, 1932. Serial No. 45,659. Term of patent 3½ years.



The ornamental design for a textile fabric or similar article as shown and described.

88,600. TEXTILE FABRIC OR SIMILAR ARTICLE. WILLIAM WILLHEIM, New York, N. Y. Filed Nov. 4, 1932. Serial No. 45,746. Term of patent 3½ years.



The ornamental design for a textile fabric or similar article as shown and described.

88,601. TEXTILE FABRIC OR SIMILAR ARTICLE. WILLIAM WILLHEIM, New York, N. Y. Filed Nov. 4, 1932. Serial No. 45,747. Term of patent 3½ years.



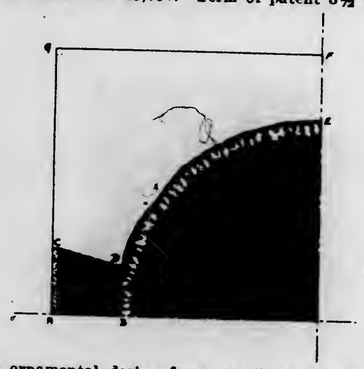
The ornamental design for a textile fabric or similar article as shown and described.

88,602. TEXTILE FABRIC OR SIMILAR ARTICLE. WILLIAM WILLHEIM, New York, N. Y. Filed Nov. 4, 1932. Serial No. 45,748. Term of patent 3½ years.



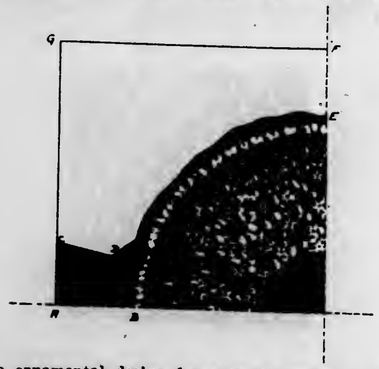
The ornamental design for a textile fabric or similar article as shown and described.

88,603. TEXTILE FABRIC OR SIMILAR ARTICLE. WILLIAM WILLHEIM, New York, N. Y. Filed Nov. 4, 1932. Serial No. 45,750. Term of patent 3½ years.



The ornamental design for a textile fabric or similar article as shown and described.

88,604. TEXTILE FABRIC OR SIMILAR ARTICLE. WILLIAM WILLHEIM, New York, N. Y. Filed Nov. 4, 1932. Serial No. 45,751. Term of patent 3½ years.



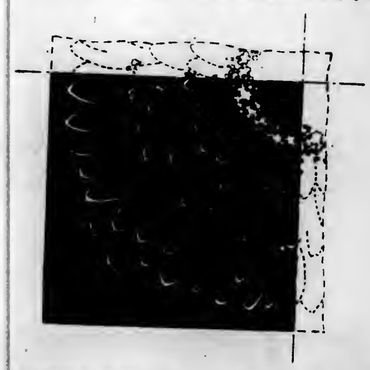
The ornamental design for a textile fabric or similar article as shown and described.

88,605. TEXTILE FABRIC OR SIMILAR ARTICLE. WILLIAM WILLHEIM, New York, N. Y. Filed Nov. 4, 1932. Serial No. 45,752. Term of patent 3½ years.



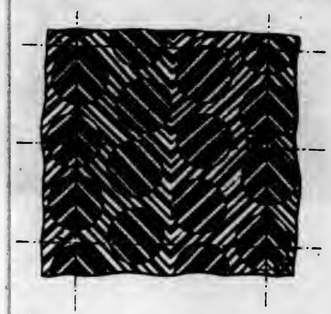
The ornamental design for a textile fabric or similar article as shown and described.

88,606. TEXTILE FABRIC OR SIMILAR ARTICLE. WILLIAM WILLHEIM, New York, N. Y. Filed Nov. 4, 1932. Serial No. 45,754. Term of patent 3½ years.



The ornamental design for a textile fabric or similar article as shown and described.

88,607. TEXTILE FABRIC OR SIMILAR ARTICLE. WILLIAM WILLHEIM, New York, N. Y. Filed Nov. 4, 1932. Serial No. 45,755. Term of patent 3½ years.



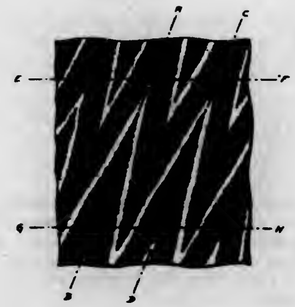
The ornamental design for a textile fabric or similar article as shown and described.

88,608. TEXTILE FABRIC OR SIMILAR ARTICLE. WILLIAM WILLHEIM, New York, N. Y. Filed Nov. 4, 1932. Serial No. 45,756. Term of patent 3½ years.



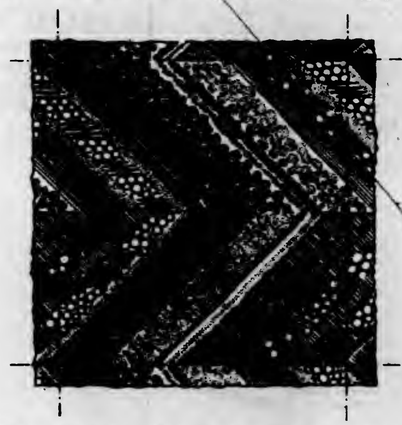
The ornamental design for a textile fabric or similar article as shown and described.

88,609. TEXTILE FABRIC OR SIMILAR ARTICLE. WILLIAM WILLHEIM, New York, N. Y. Filed Nov. 4, 1932. Serial No. 45,757. Term of patent 3½ years.



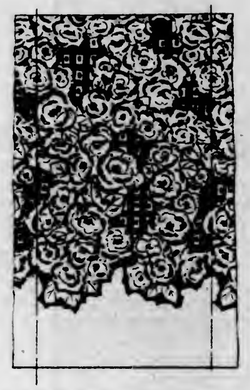
The ornamental design for a textile fabric or similar article as shown and described.

88,610. TEXTILE FABRIC OR SIMILAR ARTICLE. WILLIAM WILLHEIM, New York, N. Y. Filed Nov. 4, 1932. Serial No. 45,758. Term of patent 3½ years.



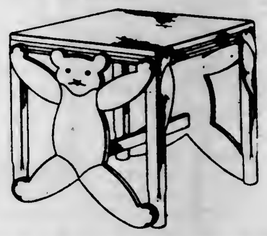
The ornamental design for a textile fabric or similar article as shown and described.

88,611. TEXTILE FABRIC. PHILIP A. VOGELMAN. New York, N. Y. Filed Nov. 7, 1932. Serial No. 45,796. Term of patent 3½ years.



The ornamental design for a textile fabric, substantially as shown and described.

88,612. CHILD'S PLAY TABLE. MICHAEL HALLWARD, Pasadena, Calif. Filed Oct. 10, 1932. Serial No. 45,870. Term of patent 7 years.

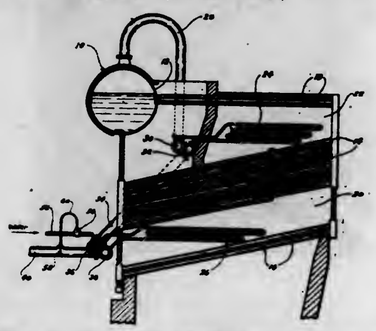


The ornamental design for a child's play table, as shown.

PATENTS

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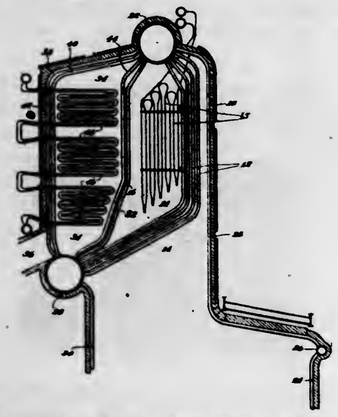
1,889,739. DESUPERHEATER. WILBUR H. ARMACOST, New York, N. Y., assignor to The Superheater Company, New York, N. Y. Filed May 29, 1931. Serial No. 540,884. 5 Claims. (Cl. 122—479.)



1. The method of superheating vapor comprising superheating a confined current of vapor, spraying liquid into said current after said superheating step, superheating said current a second time, regulating the rate of liquid supply to said spraying step in accordance with the temperature of the vapor current after said second superheating step, and preheating the liquid to be sprayed into the vapor sufficiently so that substantially all the sprayed liquid is vaporized prior to said second superheating step.

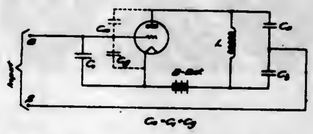
5. An apparatus including series connected sets of primary and secondary superheater elements, a preheating coil in the connection between said two sets of superheating elements and having means adapted to create a spray, and means for introducing water into said coil at a rate increasing with increasing temperature at the outlet of said secondary superheating means said preheating coil being adapted to normally heat the water so that it substantially all vaporizes before reaching the inlets of the secondary set of superheater elements.

1,889,740. HIGH-CAPACITY BOILER. WILBUR H. ARMACOST and DAGOBERT W. RUDORFF, New York, N. Y., assignors to The Superheater Company, New York, N. Y. Filed Nov. 18, 1930. Serial No. 496,375. 5 Claims. (Cl. 122—235.)



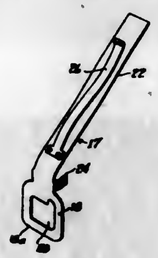
1. The combination with a boiler having a furnace chamber with steam generating tubes on its walls, an up-pass receiving gases from said chamber, a group of generating tubes in said pass over and between which the gases flow, a down-pass connected to said up-pass, a baffle separating said passes, downcomer tubes in said down-pass in juxtaposition to said baffle, connections whereby said generating tubes and said downcomer tubes form a circulating system of a heater in said down-pass having a working temperature less than that of the boiler.

1,889,741. METHOD OF AND MEANS FOR REDUCING RETROACTIVE CURRENTS IN AUDION AMPLIFIERS. STUART BALLANTINE, White Haven, Pa., assignor, by mesne assignments, to Radio Corporation of America, New York, N. Y., a Corporation of Delaware. Filed July 14, 1925. Serial No. 43,635. 15 Claims. (Cl. 179—171.)



9. A radio receiving apparatus comprising a repeating coil having a secondary and a vacuum tube having a filament, a grid and a plate, elements forming in effect a Wheatstone bridge arrangement, substantially pure capacity only forming each arm of said bridge, the secondary of said repeating coil being connected between opposite junctions of said bridge, one such capacity being formed by the grid to plate capacity of said tube, to thereby suppress oscillation of the tube.

1,889,742. MESSAGE HOLDER FOR TELEPHONES. ROBERT H. BARCLAY, New York, N. Y. Filed Aug. 8, 1931. Serial No. 555,958. 8 Claims. (Cl. 40—11.)



1. A device of the character described comprising a member having an apertured lower portion adapted to engage about a telephone prong at the base thereof and extend along the inner side thereof, said lower portion including a transverse part below the aperture adapted to extend under the prongs means on the member for retaining the device in engagement with the inner side of the prong, and means on the upper portion of the member for holding messages.

1,889,743. GOLF CLUB. ALFRED E. BUHRKE and ALLEN F. HEETER, Chicago, Ill., assignors to R. H. Buhrke Company, a Corporation of Illinois. Filed Sept. 26, 1930. Serial No. 484 535. 5 Claims. (Cl. 273—80.)

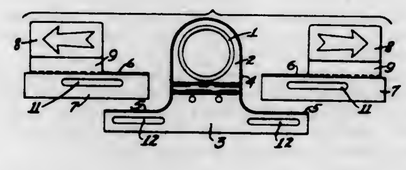
1. In a golf club, a head portion provided with an elongated neck or shank having a central bore, there being an undercut peripheral groove on the interior of said bore or

hosel opening, a tubular metallic handle shaft seated within the hosel opening, and means on the interior of the said tubular handle shaft for expanding the walls of said shaft



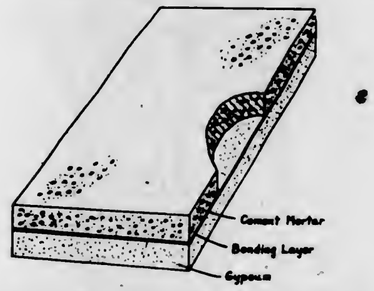
into said peripheral undercut groove therein for locking said tubular shaft into permanent engagement with the said head of the club.

1,889,744. AUTOMOBILE SIGNALING DEVICE. CARL C. CARSTENS, Michigan City, Ind. Filed Feb. 23, 1928. Serial No. 256,381. 3 Claims. (Cl. 177—329.)



1. The combination with a tail light having a license plate bracket, a license plate and means securing said license plate to said bracket at opposite ends thereof, of vehicle direction signal light boxes at opposite sides of the tail light, a depending supporting plate carried by each light box and provided with an aperture to receive one of said license plate securing means and also having an off-set means adapted to engage an edge of the license plate to cooperate with the holding means to prevent relative rotary movement of the light box with respect to the plate when the latter are secured together.

1,889,745. STRUCTURAL UNIT AND PROCESS FOR MAKING SAME. CLOYD M. CHAPMAN, Douglaston, N. Y. Filed Jan. 14, 1928. Serial No. 246,906. 8 Claims. (Cl. 72—36.)



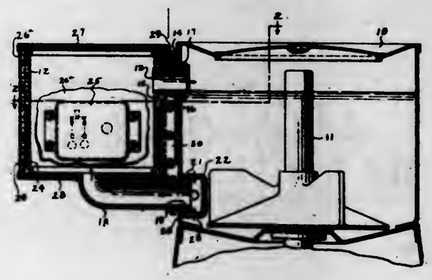
1. A portion of a structure comprising a gypsum member having a smooth surface which has incorporated therein a multiplicity of small particles of a mineral matter and a layer of cement mortar bonded thereto.

1,889,746. METHOD OF AND MEANS FOR PERMANENTLY WAVING HAIR. RALPH L. EVANS, New York, N. Y., assignor to Zotos Corporation, New York, N. Y., a Corporation of New York. Original application filed Jan. 21, 1932, Serial No. 587,890. Divided and this application filed June 3, 1932. Serial No. 615,081. 8 Claims. (Cl. 132—36.2.)



1. The method of waving hair comprising subjecting the hair to the action of a chemical which, when moistened, will generate sufficient heat to impart a permanent wave to the hair, and retaining the heat over a period of time after the development of heat has ceased.

1,889,747. WASHING MACHINE. W. NEAL GALLAGHER, Newton, Iowa. Filed Apr. 4, 1931. Serial No. 527,653. 2 Claims. (Cl. 219—38.)

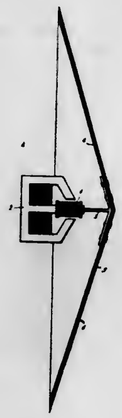


1. In combination, a washing machine tub, a water container disposed adjacent said tub, upper and lower pipe connections between the tub and container, said pipe members operating as a supporting means for the container, an electrical heating element surrounding said container, insulation means for said electrical heating element and means for housing and supporting the insulating and heating element in such manner that the water in said container will be heated to such a degree as to create a continuous circulation of water from the tub to the container, thereby operating to maintain said water at a temperature suitable for the washing operation.

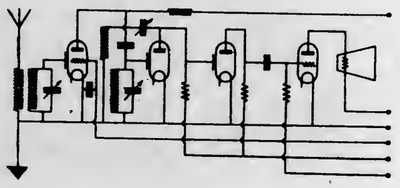
1,889,748. LOUD SPEAKER WITH ACTUATING SYSTEMS OF DIFFERENT TYPES. GEORG GRUSCHKE, Berlin-Wilmersdorf, Germany, assignor to Siemens & Halske, Aktiengesellschaft, Siemensstadt, near Berlin, Germany, a Corporation of Germany. Filed Sept. 4, 1929, Serial No. 390,289, and in Germany Sept. 7, 1928. 3 Claims. (Cl. 179—106.)

1. An acoustic device comprising a vibratile member having a conducting surface, means including a winding

adapted to be traversed by a modulated electric current for vibrating said member, and a second conducting surface electrostatically cooperating with the first mentioned conducting surface for causing additional vibration of said member.



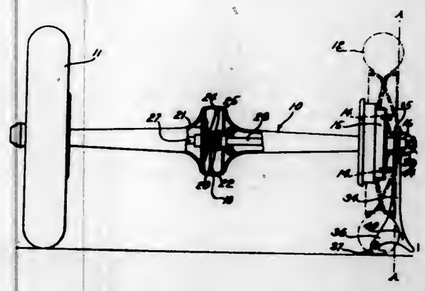
1,889,749. GAS TUBE AMPLIFIER. GÜNTHER JOBST, JOHANNES RICHTER, and WALDEMAR WEHNERT, Berlin, Germany, assignors to Telefunken Gesellschaft fur Drahtlose Telegraphie m. b. H., Berlin, Germany, a Corporation of Germany. Filed Jan. 24, 1931, Serial No. 511,039½, and in Germany Jan. 7, 1930. 3 Claims. (Cl. 250—20.)



1. In combination, in a radio receiver, a tunable radio frequency amplifier stage including a tube having its electrodes arranged for energization from a source of alternating current, a source of radio frequency energy to be amplified, said tube being provided with an external control electrode coupled to said source, an atmosphere of gas within the tube, the relation between the geometry of the tube and the gas pressure being such that radio frequencies are amplified more efficiently than audible frequencies, a detector stage including a tunable input circuit coupled to the amplifier output, said detector including a tube of the same construction as said first tube whereby hum frequencies due to said alternating current are poorly amplified.

1,889,750. METHOD OF AND APPARATUS FOR REMOVING HUBS. REUBEN A. KAPLAN, Owatonna, Minn., assignor to Owatonna Tool Company, Owatonna, Minn., a Corporation of Minnesota. Filed Dec. 26, 1929. Serial No. 416,351. 15 Claims. (Cl. 29—85.)

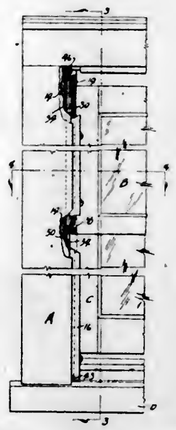
1. The method of removing a hub from an axle shaft of an automotive vehicle, which consists in causing the weight of the vehicle to exert an outward force against the hub to take up play in the gears and bearings associated with the shaft, and simultaneously exerting a sudden inward force upon the shaft to displace it relative to the hub.



1,889,751. PROCESSES FOR MAKING PHENOL-ALDEHYDE CONDENSATION PRODUCTS. JOHN J. KESSLER, St. Louis, Mo., assignor to Apple Electrical Manufacturing Company, Dayton, Ohio, a Corporation of Delaware. Filed Sept. 24, 1928. Serial No. 308,127. 7 Claims. (Cl. 8—55.)

1. The process of making a moulding compound which consists in incorporating an inert filler with a potentially reactive resinous binder which has been prepared by the partial reaction between an aldehyde and a mixture of monohydric phenols and polyhydric phenols.

1,889,752. SPRING HUNG SASH CONSTRUCTION. SEEN MADSEN, Clinton, Iowa, assignor to Curtis Companies, Incorporated, Clinton, Iowa, a Corporation of Iowa. Original application filed Mar. 24, 1930, Serial No. 438,451. Divided and this application filed Apr. 14, 1930. Serial No. 444,189. 10 Claims. (Cl. 20—52.)



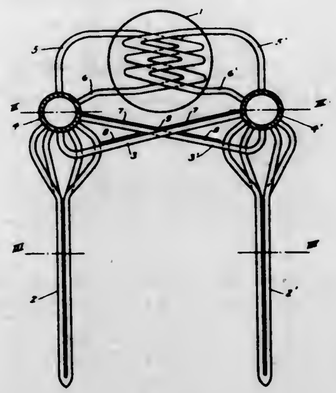
1. The combination of a window frame having jambs and stops with a sash arranged to slide in the frame, said sash, jambs and stops each having a groove therein whereby to conjointly house springs, springs housed in said grooves and respectively connected to the sash and the frame, whereby removal of the stops from the window frame will permit the springs to be disconnected and removed laterally without disturbing the sash, large grooves may be provided without undue weakening of the sash, ample stock may be left for installation of a weatherstrip in the most desirable location therefor and whereby to permit insertion or removal of the sash relative to the window frame with said springs in operative connection with said sash and said frame.

1,889,753. CLOSURE FASTENER. SEEN MADSEN, Clinton, Iowa, assignor to Curtis Companies Incorporated, Clinton, Iowa, a Corporation of Iowa. Filed Oct. 14, 1931. Serial No. 568,657. 4 Claims. (Cl. 292—342.)



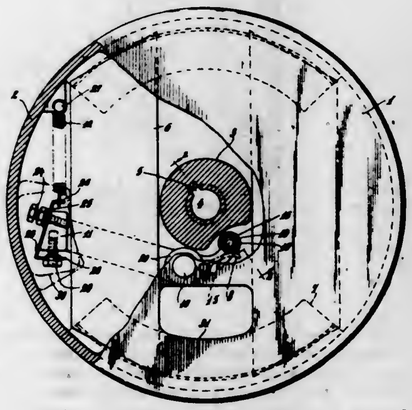
1. For use with a frame member and a closure member coacting therewith, a fastener for holding said members fixed relative to each other, said fastener having a pair of legs at right angles relative to each other, one of said members having a slit cut into the face thereof and a permanently mounted pin across said slit, one leg of said fastener having a formed hook detachably engaging with said pin of said member and the other leg thereof in direct engagement with a surface of the other member with a force opposed to the pull of said hook and against said surface.

1,889,754. FIRE BOX FOR LOCOMOTIVES OR OTHER STEAM VEHICLES. AUGUSTE MAGIS and ANDRÉ HUET. Paris, France, assignors to The Superheater Company, New York, N. Y. Filed Jan. 2, 1932, Serial No. 584,508, and in France Jan. 22, 1931. 5 Claims. (Cl. 122—33.)



1. In apparatus of the class described, the combination of a main steam generating drum, a steam collecting header, a U-shaped tubular steam generating element with one of its legs adjacent to a furnace and the other shielded from the furnace by the first, both legs opening into said header, a tubular condenser element in the drum both ends of which open into the header.

1,889,755. IGNITION GOVERNOR. JOHN F. MARTIN, Springfield, Mass., assignor to United American Bosch Corporation, Springfield, Mass., a Corporation of New York. Filed May 12, 1932. Serial No. 610,823. 4 Claims. (Cl. 123—118.)



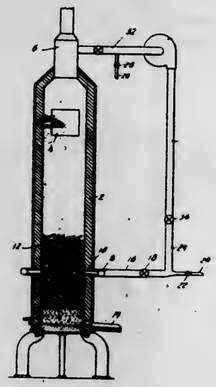
1. A speed regulator for a magneto on the flywheel of an engine comprising an arm journalled on the flywheel in position to engage an interrupter lever of the magneto at one end, said arm having a weight at the opposite end, a spring connecting said end to the flywheel and an adjustable member between said spring and said arm.

1,889,756. SECURING MEANS FOR ARTIFICIAL TEETH. FRANK J. MCNAMARA, Seattle, Wash. Filed Jan. 24, 1931. Serial No. 510,903. 1 Claim. (Cl. 32—9.)



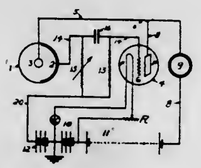
A securing means for artificial teeth in dental bridgework having in combination a tooth with a longitudinal groove in its concave base with flat side walls and whose depth is greater than its width, a bar of rectangular cross section fitting snugly into the groove, said tooth having a well in its base concentric with the groove and extending into the side walls thereof, said well and groove having a small concentric hole extending into and terminating within the teeth, a pin comprising a base portion with upstanding spaced apart prongs and a depending spindle, said base seated on the bottom of the well and the prongs bearing against the sides thereof and the space between the prongs aligned with the groove, the spindle fitting snugly into the small hole, the bar fitting snugly between the prongs and soldered thereto and to the base of the pin, and cementing means for the concave base of the tooth covering the pin and bar.

1,889,757. PROCESS OF OPERATING CUPOLA FURNACES. STUART PARMELEE MILLER, Englewood, N. J., assignor to The Barrett Company, New York, N. Y., a Corporation of New Jersey. Filed Nov. 18, 1930. Serial No. 496,369. 8 Claims. (Cl. 75—17.)



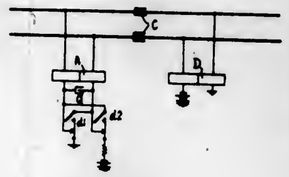
1. The process of treating metals which comprises introducing fuel and the metal to be treated into a cupola furnace, withdrawing stack gases from the furnace, mixing oxygen with the stack gases and burning the fuel by passing the mixed oxygenated gases into contact with the fuel.

1,889,758. MEANS FOR TRANSFORMING LIGHT IMPULSES INTO CURRENT IMPULSES. THEODORUS HENDRIK NAKKEN, Brooklyn, N. Y., assignor to Nakken Patents Corporation, a Corporation of Delaware. Filed Oct. 27, 1928. Serial No. 315,562. 16 Claims. (Cl. 250—27.)



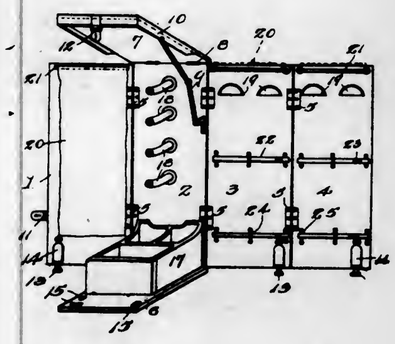
1. Means in combination for transforming light impulses into electric current impulses comprising a cathode, a grid and a plate, a plate circuit including a source of current for the traverse of said electric current impulses; a photo-electric body adapted to be subjected to light impulses constituting the cathode-electrode of a photoelectric couple; an envelope for maintaining said body in a cooperative atmosphere; an anode within said envelope and within said envelope electrically disconnected and separated from said body and constituting the second electrode of said photoelectric couple; provisions tending to produce and maintain a negative normal potential for said body but themselves incapable of maintaining said potential when said body is being subjected to light; and a link-means including a condenser electrically connecting said body and said grid and adapted to impart potential variations to said grid corresponding to those which take place on said body.

1,889,759. TELEPHONE SYSTEM. WILLIAM GEORGE PATTERSON, London, England, assignor to Siemens Brothers & Company Limited, London, England. Filed Oct. 10, 1929, Serial No. 398,607, and in Great Britain Oct. 17, 1928. 9 Claims. (Cl. 179—16.)



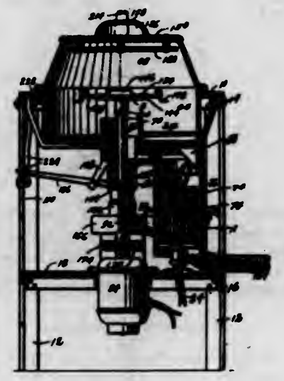
1. At a feeding bridge in a telephone system at which a reversal of current in the line wires on one side of the bridge is effected for the transmission of a signal, an impedance connected between the said line wires and the point at which the current reversal is effected.

1,889,760. CONVERTIBLE SHIPPING AND STORAGE CHEST. EDWARD F. PETERS, Cincinnati, Ohio; Frank E. O'Gallagher, administrator of said Edward F. Peters, deceased, assignor to The National Marking Machine Co., Cincinnati, Ohio, a Corporation of Ohio. Filed Nov. 13, 1930. Serial No. 495,497. 1 Claim. (Cl. 190—1.)



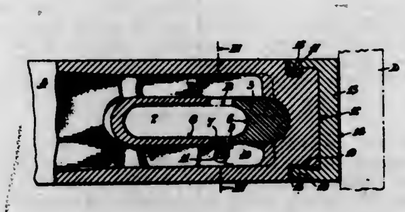
The combination with a rigidly joined main panel, an angular base and a rectangular tray, of a panel hinged at one side of the main panel and a pair of hinged panels hinged at the other side of the main panel, said hinged panels adapted to fold against the rectangular tray, spring pressed fastening bolts mounted adjacent the lower ends of the hinged panels and adapted, alternately, to engage the base, and a floor, a head hinged on the main panel, a valance on the head adapted to engage the upper ends of the folded hinged panels, means for locking said head to one of the folded panels, and means for locking the two outer hinged panels in folded position.

1,889,761. HAT CLEANING AND DRYING MACHINE. HARRY SCHLESINGER, Des Moines, Iowa, assignor of seventy-four one-hundred-and-eighty-thirds to Alfred F. Yoerg and thirty-five one-hundred-and-eighty-thirds to Jack Goldberg, Des Moines, Iowa. Filed July 29, 1929. Serial No. 381,972. 13 Claims. (Cl. 223—26.)



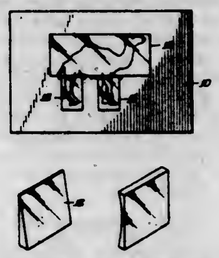
5. Hat drying mechanism comprising a drying chamber, a shaft extending thereinto, an expansible hat chuck on said shaft and in said chamber, means for supplying heated air to said chamber, a sleeve on said shaft and operatively connected with said chuck to control the expansion thereof and means, outside of said chamber, to actuate said sleeve.

1,889,762. DRAFT ATTACHMENT FOR RAILWAY VEHICLES. ERNEST H. SCHMIDT, Cleveland Heights, Ohio, assignor to National Malleable and Steel Castings Company, Cleveland, Ohio, a Corporation of Ohio. Filed Mar. 5, 1927. Serial No. 173,024. 9 Claims. (Cl. 213—69.)



7. In a coupler attachment, a coupler shank adapted for connection to a yoke, a pair of equalizing members supported by and movable with the shank, draft stresses being transmitted through one of said members and the buffing stresses through the other, and retaining means limiting the movement of each of said members longitudinally relative to the shank and securing said members to the shank even when the latter is disconnected from said yoke.

1,889,763. DISPLAY DEVICE. WILLIAM H. STAYTON, Sr., Smyrna, Del. Filed May 2, 1929. Serial No. 359,799. 8 Claims. (Cl. 40—139.)



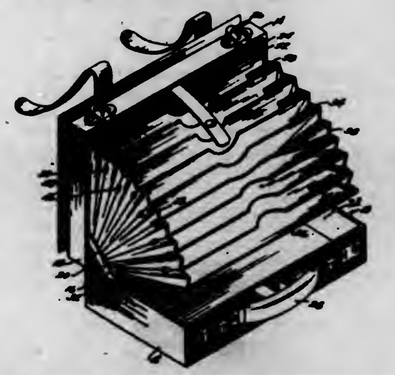
1. An indicia bearing display having in combination therewith, a plurality of prisms superimposed upon different parts of the display together with means for imparting motion to the various prisms to cause a semblance of motion to be imparted to the several parts of the indicia.

1,889,764. INSTRUMENT POINTER STRUCTURE. FERNALD S. STICKNEY, West Orange, N. J., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Mar. 18, 1932. Serial No. 599,696. 3 Claims. (Cl. 116—129.)



1. An instrument pointer including an arm, a balance member for cooperation with said arm, said member being in the form of a segment of a double helix.

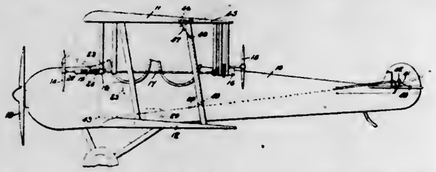
1,889,765. COMBINATION TRAVELING CASE AND PORTFOLIO. LEON SWITKES, Brooklyn, N. Y., assignor to Travelers Efficiency Case Co., Inc., New York, N. Y., a Corporation of New York. Filed May 15, 1928. Serial No. 277,914. 6 Claims. (Cl. 190—51.)



1. A device of the character described comprising a pair of upper and lower recessed members hinged together and forming a casing, a member movably connected to the rear

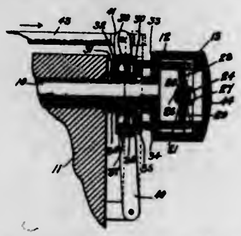
of said upper member intermediate said upper and lower members and providing a transverse partition therebetween, and flexible side portions connecting the lateral portions of said partition with the inner side of said upper member, and serving to retain said partition suspended from the upper member in position above said lower member when the casing is open, said partition and flexible side portions being foldable substantially into the confines of the recess of the upper member and being adapted, when expanded, and the casing is closed, to project into the recess of the lower member, and transverse plates disposed between said upper member and said partition and attached to said side portions to form a plurality of document receiving pockets.

1,889,766. SAFETY DEVICE FOR AIRPLANES. ALEXANDER ALTIERI, Philadelphia, Pa. Filed Aug. 25, 1931. Serial No. 559,159. 7 Claims. (Cl. 244—29.)



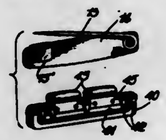
1. The combination with an airplane comprising a body, a propeller having a fixed orbit, a gravity controlled switch mounted upon said body, a wind actuated propeller mounted upon said body and adapted to be tilted from normal, a motor adapted to tilt said propeller, and a circuit including said gravity controlled switch for energizing the motor.

1,889,767. PROPELLER. ALEXANDER ALTIERI, Philadelphia, Pa. Filed Sept. 15, 1931. Serial No. 562,853. 5 Claims. (Cl. 170—163.)



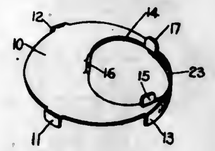
1. A propeller comprising a hub, shafts extending diametrically from the hub, propeller blades carried by the shafts, arms lying in a plane perpendicular to and extending radially from the shafts within and diametrically of the hub, links connected with and lying in the plane of the arms, and a slidable collar connected with the links and adapted to vary the pitch of the blades.

1,889,768. GARMENT SUPPORTER. CORA BRAITHWAITE BATTIN, New York, N. Y., assignor to G. Forest Braithwaite, Wood-Ridge, N. J. Filed Dec. 30, 1930. Serial No. 505,476. 5 Claims. (Cl. 24—76.)



5. A pin attaching device comprising a main body portion, a plurality of spaced pin receiving loops projecting from one edge of said main body portion, said pin receiving loops being also spaced from the ends of the body portion, and attaching prongs formed integral with said body portion and arranged between the pin receiving loops, and between the pin receiving loops and the ends of the main body portion.

1,889,769. APPARATUS FOR FUSING MULTIFOCAL LENSES. WILLIAM BAUSCH and JOHN R. POWELL, Rochester, N. Y., assignors to Bausch & Lomb Optical Company, Rochester, N. Y., a Corporation of New York. Filed Aug. 9, 1929. Serial No. 384,711. 7 Claims. (Cl. 49—14.)

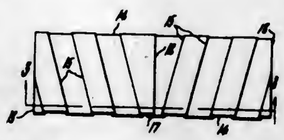


1. For fusing multifocal lenses, a device formed to rest on the major lens blank, means on said device for holding a lens segment in tilted position on the major lens blank, and means on said device for holding the segment against substantial lateral movement on the major lens blank.

1,889,770. FASTENING DEVICE OR CLIP. GEORGE E. BLACK, Sewickley, Pa., assignor to H. H. Robertson Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Apr. 13, 1929. Serial No. 354,942. 1 Claim. (Cl. 189—35.)

A clip of the character described, comprising a flat metal bar having a tough outer skin and bendable with difficulty, said bar being provided at one end with a hook and between its ends with a rivet blank extended from its surface opposite to said hook and having in it between said rivet blank and the rear end of said bar an opening located between the sides of the bar to align with the edge of the support upon which the flat portion of the bar which carries the rivet blank is to rest, whereby the rear portion of the flat bar bendable with difficulty and projecting beyond the edge of said support may be hammered into a position substantially at right angles to the flat portion of the bar resting on the said support without breaking the tough skin of said bar at the bend therein and without disturbing the contact of the flat portion of the bar with the upper surface of said support.

1,889,771. METAL FLASHING. PEARL M. BURGESS, Reading, Mass., assignor to Burgess & Blacher Co., Boston, Mass., a Corporation of Massachusetts. Filed Aug. 12, 1931. Serial No. 556,548. 4 Claims. (Cl. 72—127.)



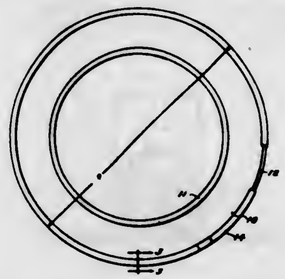
1. An oblong flashing having a plurality of transverse zones, each zone being provided with dovetail-shaped corrugations having narrow side walls projecting from opposite sides of the zone and extending obliquely crosswise of the flashing, said walls in each zone being parallel with each other and having an inclination opposite that of the walls in the next zone.

1,889,772. FORMATION TESTING AND WELL FLOWING DEVICE. EDWARD HUGH CAMPBELL, Edmonton, Alberta, Canada. Filed June 22, 1932. Serial No. 618,719. 2 Claims. (Cl. 166—1.)



1. A tool of the class described comprising a hollow cylinder for attachment to a drill stem, a plunger reciprocably disposed therein, said plunger having an obstructed passage therethrough, lateral ports disposed at each side of the obstruction, a strainer communicating with the passage, a packer borne by a projecting part of the plunger, a spring normally retaining the plunger in an advanced position, and a by-pass in the cylinder having ports adapted to register with the ports of said plunger by the receding of the latter.

1,889,773. METHOD OF MAKING ANNULAR OBJECTS. CLARENCE P. CHAMBERLIN, Detroit, Mich. Filed June 8, 1932. Serial No. 616,137. 2 Claims. (Cl. 153—1.)



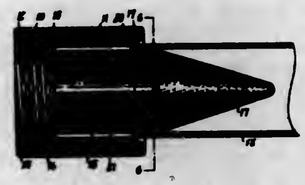
1. The method of applying a molding of C cross section to an annular seam or bead in an object of pliable material which comprises providing a length of the molding substantially equal to the circumferential length of the seamed or beaded annulus, and having an inherent tendency to expand to a diameter greater than the diameter of the seamed or beaded annulus, and applying the molding onto the seam or bead and contracting it to the diameter of the seamed or beaded annulus, in opposition to the inherent tendency of the molding to expand to its original diameter.

1,889,774. CONSTRUCTION OF ANNULAR OBJECTS, SUCH AS TIRE COVERS. CLARENCE P. CHAMBERLIN, Detroit, Mich. Original application filed June 8, 1932, Serial No. 616,137. Divided and this application filed Aug. 8, 1932. Serial No. 627,829. 4 Claims. (Cl. 150—54.)



1. In an annular corner construction for annular objects of pliable material, the combination of a planar side wall, a cylindrical top wall, an annular bead adjacent the annular corner of said walls and firmly anchored with respect to said walls, and an annular C cross section molding externally encompassing and supported on said bead by having its edges turned in over said bead, the molding being loose enough with respect to the bead, as not to bind thereon and thereby cause puckering of pliable wall parts to which said bead is anchored, the molding also being loose enough thereon so as to permit relative circumferential movement between the molding and the bead.

1,889,775. TUBE-STRAIGHTENING-AND-SIZING-TOOL. EDWARD S. CORNELL, Jr., Watertown, Conn., assignor to The Chase Companies, Incorporated, Waterbury, Conn., a Corporation. Filed Feb. 10, 1931. Serial No. 514,779. 8 Claims. (Cl. 153—79.)



1. As a new article of manufacture, a tube-straightening-and-sizing tool having an outer sleeve-portion for engagement with the exterior surface of the terminal end of a tube; and a coaxial mandrel-portion having a tapered terminal for engagement with the interior surface of the terminal end of a tube; the said coaxial sleeve- and mandrel-portions being adapted for operation as a unit in fixed relation to each other, and the mandrel-portion being of less external diameter throughout than the internal diameter of the sleeve-portion, to provide an annular tube-receiving space therebetween.

1,889,776. TIRE COVER. ROBERT RUSSELL CROCKER, Dearborn, Mich., assignor to Thomas J. McCormick, Detroit, Mich. Filed Mar. 7, 1932. Serial No. 597,267. 7 Claims. (Cl. 150—54.)

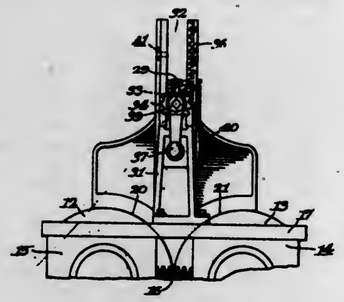
7. A tire cover including an annular, substantially planar, pliable face portion, circumferentially spaced

means biasing an annular zone thereof, located adjacent the annular edge of the tire rim, towards said rim, and



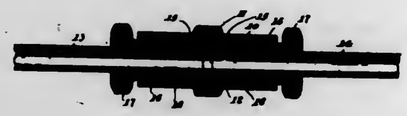
annular stiffening means in said zone for stiffening said zone, and for preventing radial puckering of said zone, due to the force exerted thereon by the biasing means.

1,889,777. ROLLER MILL. PAUL O. DIEDERICHS, Chicago, Ill., assignor, by mesne assignments, to American Machine & Foundry Company, New York, N. Y., a Corporation of New Jersey. Filed Apr. 26, 1928. Serial No. 272,968. 1 Claim. (Cl. 83—12.)



In a roller mill, the combination of a main frame, a pair of cooperating rolls mounted on said main frame, a pair of brackets extending upwardly from said main frame respectively adjacent the opposite ends of said pair of rolls, a shaft vertically adjustably mounted in said brackets, a pair of guide plates pivotally mounted on said shaft, depending therefrom and serving with the adjacent upper surface portions of said rolls to form a hopper for holding material to be ground, and means for effecting vertical adjustment of said shaft to an elevated position permitting said plates to be swung about said shaft to a position facilitating cleaning of the guide plates, said means comprising a pair of racks respectively mounted on said brackets, a pair of gears secured to said shaft and respectively meshing with said racks, and a crank for effecting rotation of said shaft and gears.

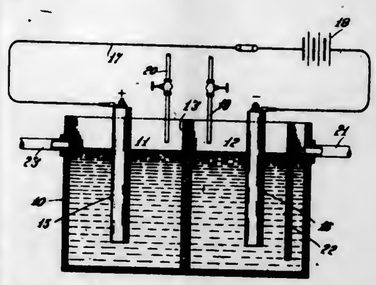
1,889,778. COMPRESSION COUPLING. AUGUST C. DOBRICK, Chicago, Ill. Filed Nov. 5, 1928. Serial No. 317,368. 8 Claims. (Cl. 29—148.2.)



5. As a new and useful article of manufacture, a male pipe-coupling member having three portions, one to which a wrench can be applied; another a threaded portion; and finally an acutely tapered portion adapted to be deformed when applied to a pipe and connected to the threaded portion by a thinned web portion adapted to be broken during said application, substantially as and for the purpose described.

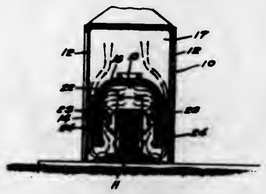
7. The method of coupling two cylindrical members which consists in forming one member with a threaded recess having a tapered inner end to receive the other member, then applying a thinly connected double sleeve unit to the cylindrical member, the rear part of said unit being threaded and its front part being compressible, then forcing said unit into the recess until the connection between its front and rear parts is broken, and then forcing the compressible part of the unit as a separate piece into the tapering end of the recess, by screwing the threaded part of the unit further into the recess, for the purpose specified.

1,889,779. METHOD OF PURIFYING SUGAR SOLUTIONS. CHARLES EBERT, Leonia, N. J., WILLIAM B. NEWKIRK, Riverside, Ill., and MEYER MOSKOWITZ, Spring Valley, N. Y., assignors to International Patents Development Company, Wilmington, Del., a Corporation of Delaware. Filed June 15, 1927. Serial No. 199,009. 1 Claim. (Cl. 204—1.)



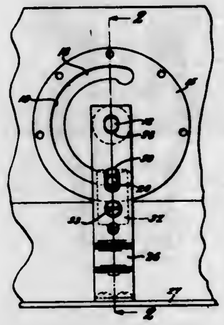
Method of purifying a starch converted dextrose solution which consists in introducing the solution into and withdrawing it from the cathode side of an electrolytic cell having a permeable barrier between its electrodes and introducing water into and withdrawing it from the cell on the other side of the barrier and filtering the dextrose solution withdrawn from the cathode side to remove coagulated and precipitated impurities.

1,889,780. WELDING PROCESS. ROYAL E. FAICKEY, San Francisco, Calif., assignor to Welding Service, Inc., San Francisco, Calif., a Corporation of California. Filed June 2, 1930. Serial No. 459,005. 2 Claims. (Cl. 113—112.)



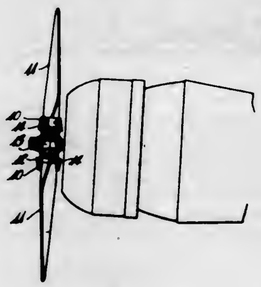
1. In a method of welding rails, to form a welded portion having an upper layer of weld metal and a zone of hardened metal of substantial extended depth below the weld metal, the steps of preheating a localized rail portion to be welded, applying a layer of fused weld metal to the upper surface of the same, and then permitting the rear portion to cool, whereby there is formed a zone of hardened metal of substantial extended depth below the weld metal.

1,889,781. VARIABLE CONDENSER DRIVE FOR RADIO APPARATUS. JOHN Q. GAUBERT, Dayton, Ohio, assignor to General Motors Radio Corporation, Dayton, Ohio, a Corporation of Ohio. Filed Feb. 15, 1932. Serial No. 593,180. 6 Claims. (Cl. 74—7.)



1. In combination, a variable condenser having a rotatable shaft, two spaced driving disks fixed to said shaft, said disks having aligned arcuate slots therein concentric with said shaft, a driving shaft extending through said aligned slots and having two spaced peripheral grooves frictionally engaging edges of said slots.

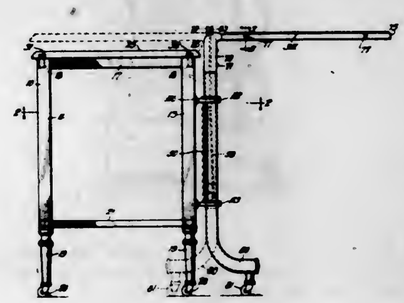
1,889,782. DEVICE FOR PREVENTING ACCUMULATION OF ICE ON AEROPLANE PROPELLERS. WILLIAM C. GEER, Ithaca, N. Y. Filed May 12, 1932. Serial No. 610,839. 8 Claims. (Cl. 244—31.)



8. In combination with a part of an aeroplane to be protected from accumulation of ice thereon, a rubber shield associated therewith and adapted to be stretched by centrifugal force, and means for rotating said rubber member.

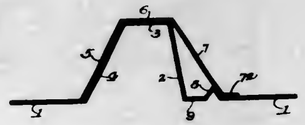
1,889,783. HOSPITAL TABLE. FRANK B. HARMAN, Kenosha, Wis., assignor to Simmons Company, New York, N. Y., a Corporation of Delaware. Filed Apr. 5, 1928. Serial No. 267,557. 10 Claims. (Cl. 45—111.)

1. In a hospital table, the combination of a main supporting frame, a main table top mounted on said frame, a vertically disposed post rotatably mounted on said frame adjacent one side thereof, an auxiliary table top mounted, adjacent one edge thereof, on said post and adapted to turn therewith so as to be movable from normal position overlying said main table top to offset position adjacent one side of the latter, and a foot member secured to the lower end of said post and projecting laterally therefrom so as to be positioned beneath said auxiliary top, said



foot member being also adapted to turn with said post so as to effectively support said shiftable top in any position of adjustment of the latter, thereby to prevent tipping of the table when said shiftable top is in offset position.

1,889,784. ROOFING SHEET. WILLIAM G. HARTER, Kokomo, Ind., assignor to Continental Steel Corporation, Kokomo, Ind., a Corporation of Indiana. Filed Mar. 11, 1931. Serial No. 521,625. 1 Claim. (Cl. 108—18.)

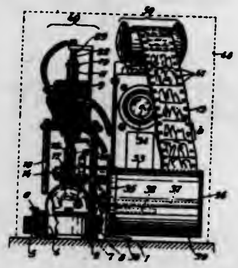


A roofing sheet composed of a body having one end portion provided with similar converging parts connected by a horizontal part and having the terminal of said end portion horizontal, the other end of the body being extended upwardly and horizontally to underlie and conformably engage one of the converging parts and the horizontal part of an adjacent sheet and having its horizontal part extended downwardly at an obtuse angle of approximately 105° and then extended horizontally and provided with an inverted V-part the outer side of which underlies and engages the other converging part of the first named end of the body, said terminal of the horizontal part of the first named end of the body being free and resting upon the horizontal part of the other end of the body.

1,889,785. INTERMITTENTLY ACTING FEEDING DEVICE. GOTTHOLD HOPPE, Copenick-Wendenschloss, Germany. Filed Oct. 7, 1930, Serial No. 487,003, and in Germany Oct. 10, 1929. 3 Claims. (Cl. 88—26.)

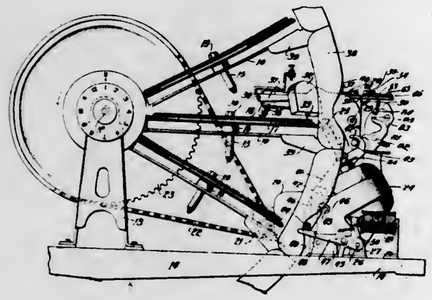
1. An intermittently acting feeding device for any purposes especially for the picture carrier of advertising picture projectors, comprising in combination a feed mechanism, means for driving said feed mechanism consisting of an intermittently excited electric magnet with an armature, a pump mechanism casing, a resilient wall closing said casing at the top connected to said armature

consisting of a rubber cap in the shape of a hollow ball cut through in the middle and open towards the interior of said casing adapted to automatically return said arma-



ture into the circuit when it has become currentless, and an inlet valve in said casing for regulating the intervals at which said cap operates.

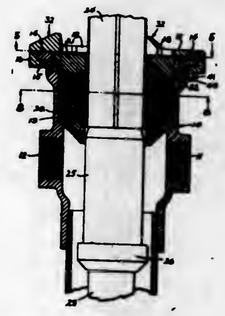
1,889,786. AUTOMATIC CUT-OFF SWITCH. BERT E. MILLS, Oak Park, Ill., assignor to Mills Novelty Company, Chicago, Ill., a Corporation of Illinois. Filed Feb. 10, 1930. Serial No. 427,360. 5 Claims. (Cl. 274—1.)



1. In an automatic phonograph, the combination with a tone arm and electrically operated means for effecting a record change, of mechanism for starting operation of said record change means upon termination of the playing of a record, said mechanism comprising a pair of spaced switch arms, a switch lever fulcrumed between said arms and having contact elements for engaging said arms to close a circuit for energizing said record change means, and means affording operative connection between said lever and the tone arm whereby upon uniform movement of the tone arm to the end of a record said lever is pivoted in direction to contact with one of said arms, said connecting means being further operative to pivot said lever in direction to contact with the other arm upon reverse movement of the tone arm at the end of a record.

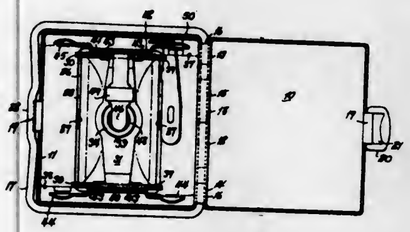
1,889,787. DEVICE FOR CONTROLLING PRESSURES IN OIL WELLS. BURT S. MINOR, San Pedro, Calif. Filed June 9, 1926. Serial No. 114,605. 4 Claims. (Cl. 166—14.)

1. In combination with a well drilling mechanism provided with an abutment, of a vented casing head having a plurality of seats formed around the upper end thereof, said head adapted to be detachably secured to the upper end of a string of well casing, a packing mechanism including a pair of apertured metal disk members and an expansible apertured disk member interposed between said members, the upper disk member being provided with a plurality of offset lugs adapted to engage the seats formed on the casing head at the upper end thereof, a locking ring provided with means for locking the ring to the casing head and the packing disks within said head, and



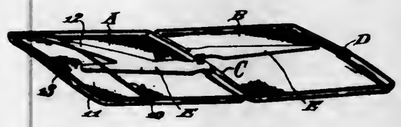
means formed on said ring for guiding the offset lugs on the upper disk member into the seats formed on the casing head when the drilling mechanism is lowered into the well.

1,889,788. PORTABLE BATTERY LAMP. AUGUST MITCHELL, New York, N. Y., assignor to The Chase Companies, Incorporated, Waterbury, Conn., a Corporation. Filed June 13, 1932. Serial No. 616,811. 6 Claims. (Cl. 240—10.65.)



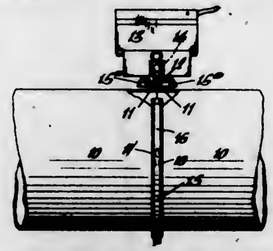
1. In a portable battery lamp, the combination with a two-part hinged shell, of a removable reflector-battery-and-lamp unit, comprising a reflector, a lamp located therein, a pair of cells located on opposite sides of the reflector, insulating frame-plates attached to the reflector, and spring contact-plates carried by the said frame-plates and having spring contact-arms between which the cells are interposed.

1,889,789. CIGARETTE AND MATCH CONTAINER. LOUIS P. PEREZ, Philadelphia, Pa. Filed May 10, 1932. Serial No. 610,361. 4 Claims. (Cl. 206—38.)



3. A cigarette and match container comprising hinged sections, a compartment formed in one of said sections remote from the hinge, spring fingers hinged to the hinge of the sections, and a cover carried by one of the spring fingers closing the compartment.

1,889,790. TRACK FOR PIPE JOINT SEALING TOOLS. ALBERT G. PERKINS, Buffalo, N. Y. Filed Mar. 10, 1930. Serial No. 434,681. 7 Claims. (Cl. 113—37.)



1. In a jointing device of the character described, an annular sectional track adapted for detachable application to the joint in overlying relation thereto and adapted to guide a sealing tool thereover, means for coupling the track-sections at one of their opposing ends, and means for detachably connecting said sections at the other of their opposing ends, said last-named means being constructed to interfit in a circumferential direction and including devices for receiving a tool to effect the final contraction of the sections about the joint.

1,889,791. PRODUCTION OF ARTIFICIAL RESINS. WILHELM PUNGS, KARL EISENMANN, and JOHANN KUCHENBUCH, Ludwigshafen-on-the-Rhine, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Filed Jan. 3, 1930, Serial No. 418,426, and in Germany Jan. 15, 1929. 11 Claims. (Cl. 260—3.)

1. In the condensation of a urea and formaldehyde in the presence of an organic, hydroxyl-bearing solvent, the step which comprises treating the dispersion of the condensation product obtained, with steam.

5. In the condensation of a urea and formaldehyde in the presence of an organic, hydroxyl-bearing solvent, the step which comprises treating the dispersion of the condensation products obtained with steam, drying the resulting product and subjecting it to fractional extraction with an organic solvent which is free from hydroxyl groups and is a low boiling member of its class.

1,889,792. CAPILLARY FLUID TRANSMISSION SYSTEM. DURWOOD D. ROSENBUSCH, Rochester, N. Y., assignor to Taylor Instrument Companies, Rochester, N. Y., a Corporation of New York. Filed Oct. 19, 1926. Serial No. 142,632. 9 Claims. (Cl. 73—52.)



1. In apparatus of the character described, a capillary tube having a uniformly smooth bore of substantially circular cross-section and containing a filler core of uniformly smooth surface, the difference in diameter between the bore and the core being less than .003".

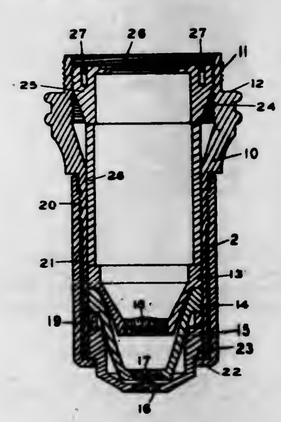
1,889,793. GRIP STRAP. HERMAN H. RUBIN, New York, N. Y. Filed July 3, 1931. Serial No. 548,496. 6 Claims. (Cl. 105—354.)



1. In a grip strap, the combination of a resilient member having its ends bent toward each other to form a double stem with a loop at one end and means at the other end for holding together said ends of the resilient member, an attaching device engaging the looped end of the stem, and a gripping device secured at the opposite end of the stem.

2. In a grip strap, the combination of a fabric covered resilient member having its ends bent toward each other to form a double stem with a loop at one end, a pompon secured at the opposite end of said stem, and an attaching device engaging said loop.

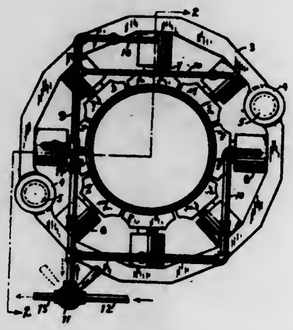
1,889,794. MICROSCOPE OBJECTIVE. JOHN C. SABEL, Rochester, N. Y., assignor to Bausch & Lomb Optical Company, Rochester, N. Y., a Corporation of New York. Filed Jan. 3, 1931. Serial No. 506,887. 5 Claims. (Cl. 88—57.)



1. An objective comprising a tubular member having a smooth inner bore, two spaced retaining members threadedly secured to said tubular member, lens cells carrying lenses, said cells being concentrically and snugly fitted

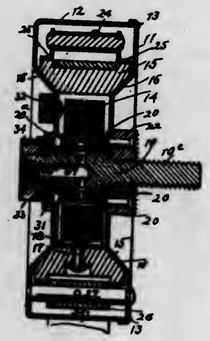
within said bore and slidable on the walls thereof, said cells being held between said retaining members whereby said lenses may be secured in adjusted position within the bore of the tubular member.

1,889,795. METHOD OF JOINING PIPES. FRANK H. SMITH, Philadelphia, Pa., and HENRY A. STRINGFELLOW, Akron, Ohio. Filed Dec. 4, 1928. Serial No. 323,750. 2 Claims. (Cl. 113—36.)



1. The herein described method of joining conduit pipes which consists in forming successive joints of the conduit by inserting the spigot of one pipe into the bell of another, and shrinking the bell onto the spigot by external pressure applied simultaneously throughout the circumference and substantially throughout the length of the bell.

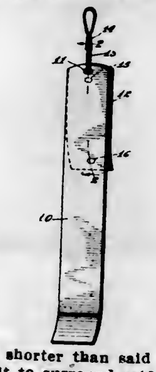
1,889,796. SHOCK ABSORBER. JACOB R. SNYDER, Cleveland, Ohio. Filed Aug. 9, 1924, Serial No. 731,016. Renewed Apr. 21, 1932. 33 Claims. (Cl. 267—10.)



1. In a shock absorber, a rotary member, a strap connected thereto and adapted to be wound onto and unwound therefrom, and a floating friction member between the rotary member and the strap and engaging the rotary member.

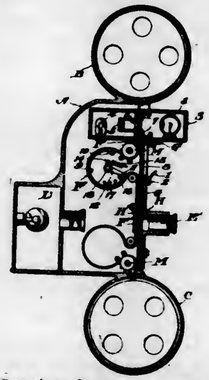
1,889,797. RAZOR STROP. WILLIAM G. WALLENBECK, Chicago, Ill. Filed Feb. 15, 1930. Serial No. 428,550. 1 Claim. (Cl. 51—198.)

In a strop construction, the combination of a strop comprising a first strip of flexible material for stropping purposes, a protective member comprising a second strip of flexible material to surround said first strip in rolled condition, means securing said strips together, and separable fastening devices carried by said second strip for holding it around said first strip in rolled condition, said



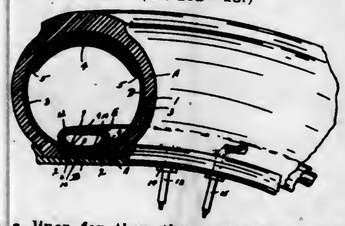
second strip being shorter than said first strip and of a length permitting it to surround said first strip in rolled condition.

1,889,798. APPARATUS FOR REPRODUCING SOUND AND PICTURES. HENRY C. BULLIS, Franklin, Pa., assignor, by mesne assignments, to Sound Picture Patent Company, Chicago, Ill., a Corporation of Illinois. Filed May 29, 1929. Serial No. 367,012. 16 Claims. (Cl. 88—16.2.)



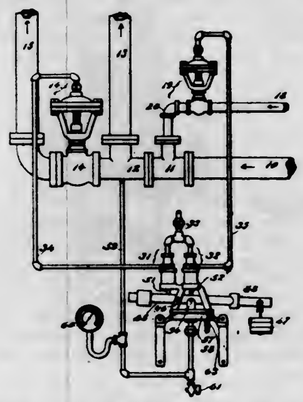
15. In an apparatus for reproducing sound and pictures from the same film, the combination of means for initially framing the sound and picture records, and means for automatically maintaining through film adjustment, the proper relationship of the picture and sound records during the operation of the apparatus.

1,889,799. AUTOMOBILE TIRE. JOHN T. CLARK, Salt Lake City, Utah. Filed Sept. 13, 1930. Serial No. 481,619. 4 Claims. (Cl. 152—13.)



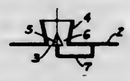
1. In a liner for tires the combination of side walls formed to a thickened tread-like portion; inwardly extending flanges formed on the edges of the side walls, annular ridges formed on the surface of the flanges and wire beadings carried in the walls adjacent said ridges.

1,889,800. STEAM FLOW REGULATION. VERNER F. DAVIS, West Orange, N. J., assignor to Atlas Valve Company, Newark, N. J., a Corporation of New Jersey. Filed Dec. 5, 1930. Serial No. 500,206. 5 Claims. (Cl. 137—78.)



1. In steam flow regulation apparatus for delivering at substantially constant low pressure, the combination of a low pressure supply passage, a low pressure delivery passage connected therewith, a high pressure passage with control make-up valve adapted to discharge into one of said low pressure passages, a relief passage with control relief valve adapted to discharge from one of said low pressure passages, and automatic regulating means for said control valves, comprising a first device for opening and closing the relief valve and locking it closed, a second device for closing and opening the make-up valve, a pressure responsive actuator operated by variations of delivered pressure between a neutral position and to positions at opposite sides thereof, and connections from said actuator to both of said devices whereby in neutral position it adjusts both devices to close and lock both control valves, but in one side position corresponding to deficient delivered pressure it adjusts said devices to open the make-up valve and close the relief valve, while in the other side position corresponding to excess delivered pressure it adjusts said devices to close the make-up valve and open the relief valve.

1,889,801. EXTINGUISHER FOR CIGARETTES AND THE LIKE. WILLIAM A. BESSMER, Erie, Pa. Filed Jan. 20, 1930. Serial No. 421,985. 6 Claims. (Cl. 131—51.)



1. In an extinguisher for cigarettes and the like, the combination of a body having a tapered opening; a tapered pin in the opening having its small end toward the larger end of the opening and related to the taper of the body to compress an inserted cigarette end between the tapered surfaces, said pin being spaced from the wall of the opening permitting an ash discharge from the opening through the space; and a mounting for the pin holding it in place in the opening.

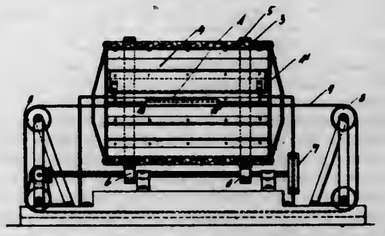
1,889,802. RETARD DEVICE. ERVIE A. FERRIS, Westwood, Calif. Filed May 9, 1930. Serial No. 451,158. 1 Claim. (Cl. 137—153.)

A fluid control device comprising a body having a passage for fluid, a plunger extending at right angles to the passage and designed to be moved into the passage for cutting down the flow of fluid therethrough, a piston connected to the plunger and actuated by fluid for moving the plunger, and a manually adjustable passageway-



restricting member movable into the passage for cutting down the size of the passage and adapted to serve as a stop for the movement of the plunger in one direction.

1,889,803. DEVICE FOR THE MANUFACTURE OF SEPARABLE FASTENERS. HUGO HENKELS, Wuppertal-Elberfeld, Germany. Filed Apr. 21, 1931, Serial No. 531,737, and in Germany Aug. 18, 1930. 23 Claims. (Cl. 153—1.)



1. A device for arranging separable fasteners upon a band comprising a rack-like bar, its teeth and notches corresponding in width to the thickness of a separable fastener link, each tooth being provided at one side with a recess corresponding in form and size to an elevation on one side of the fastener link, all of the recesses facing in a direction along the longitudinal axis of said bar.

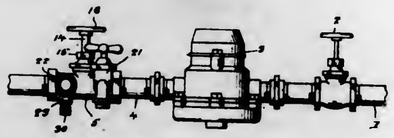
1,889,804. LOCK SOCKET. WILLIAM F. HILD, East Rutherford, N. J. Filed Apr. 27, 1929. Serial No. 358,723. 1 Claim. (Cl. 173—356.)



In an electric socket, a threaded shell having a peripheral flange at one end acting as means for mounting the shell in place, and a toothed formation at the opposite

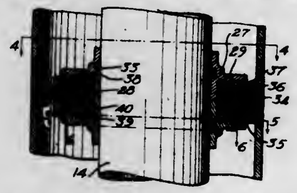
end acting as means for receiving an instrument for preventing rotation of the shell while a lamp is being applied or removed, an apertured stationary plate having an inturned flange overlapping said peripheral flange for holding said shell in place while permitting the same to rotate, and a resilient contact extending through said aperture plate for engaging the central contact of the lamp carried by said shell, said socket having an aperture for receiving an object which may be pressed against said shell for holding the same against rotation.

1,889,805. METER PROTECTOR. SAMUEL S. JOHNSON, Harrisburg, Pa. Filed Oct. 27, 1930. Serial No. 491,545. 1 Claim. (Cl. 277—46.)



A protector for water meters, comprising a body casting divided by a valve seat into an inner and an outer compartment, the inner compartment being connected to the meter and the outer compartment being connected to the house water supply pipe, a gravity-influenced check valve normally occupying the seat, a handle-operated head screwed in the body and having a hollow portion to receive the stem of the check valve therein, said body having its compartments provided with opposite openings surrounded by bosses, plugs covering two of said openings, a faucet screwed in the remaining opening of the inner compartment, a globular valve casing screwed in the remaining opening of the outer compartment, said casing having a water outlet branch, a spring-urged valve for closing said branch, the outer compartment being provided with a depending hollow boss which is exteriorly threaded and provided with a transverse aperture and a cap screwed on the stem and having a transverse aperture normally out of alignment with the aperture in the boss.

1,889,806. WEAR PREVENTER FOR DRILL PIPE. CHARLES LAMB, DOUGLAS R. RADFORD, and CLARENCE H. RILEY, Los Angeles, Calif. Filed Sept. 26, 1927. Serial No. 222,173. 12 Claims. (Cl. 308—4.)



1. A wear preventer for drill pipe, comprising: a supporting member formed of plates adapted to be secured to a drill pipe; annular projections formed on said plates; an engagement member rotatably mounted on said plates and adapted to engage the casing of a well; bearing elements carried by said engagement member and being formed with annular grooves, and said projections adapted to extend into said annular grooves of said bearing elements.

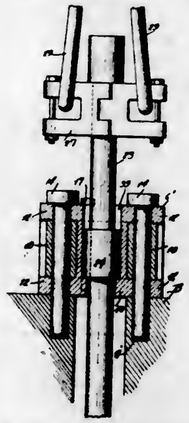
1,889,807. FASTENING DEVICE. LEFFMAN H. LEE, Bellevue, Pa., assignor of one-sixth to William B. Wharton and one-sixth to James M. Guthrie, Pittsburgh, Pa. Filed Apr. 22, 1930. Serial No. 446,419. 3 Claims. (Cl. 20—92.)

2. A fastening device adapted to be secured in an orificed plate of hard, unyielding material, such as structural steel, the combination of a thimble member adapted for insertion in an orifice in said plate, said thimble member having a wall of sheet metal adapted to fit snugly said orifice, said thimble member being in length several times greater than the thickness of said plate, means at one end of said thimble member for limiting the insertion of said thimble in said orifice, and a plug of compressible, nailable material for insertion in said thimble, means adjacent the other end of said thimble for limiting the insertion of said plug, said plug being initially of larger



cross-section than the interior of said thimble, whereby, said plug, while it is being forced into said thimble, effects a lateral expansion of the thimble wall into locking engagement with the orifice in said plate of unyielding material, and said plate, in preventing further expansion of so much of said thimble wall as lies within said orifice, being adapted to compress a portion of said plug, whereby the thimble member and plug are secured against removal from said orifice.

1,889,808. SYSTEM AND APPARATUS FOR ELEVATING AND LOWERING OIL WELL PIPING. MARTIN J. MCNULTY, Jr., Tulsa, Okla. Filed Aug. 14, 1930. Serial No. 475,290. 3 Claims. (Cl. 24—248.)

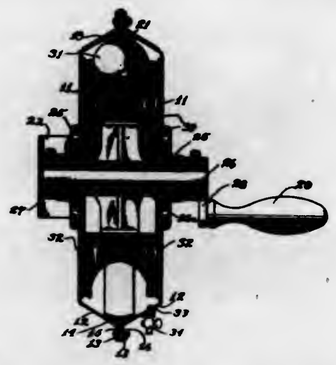


1. A well tubing or casing mechanism of the character described, comprising a two part separable clamping and supporting member adapted to be carried by a rotary well drilling table, anchoring pins passing through the two part clamping and supporting member for holding the sections of the two part clamp in place as well as holding the same against rotation upon the rotary well drilling table, a central opening through the two part clamping member for receiving a well tubing or casing, said well tubing or casing having a series of spaced supporting collars adapted to be seated upon the two part clamping member and a pivoted pawl carried by each section of the two part clamp adapted to move in a plane at right angles to the longitudinal axis of the well tubing or casing for engaging and holding the same against rotation.

1,889,809. GOLF BALL WASHER. OTTO H. NIELSEN, Chicago, Ill. Filed Sept. 19, 1930. Serial No. 482,963. 1 Claim. (Cl. 15—21.)

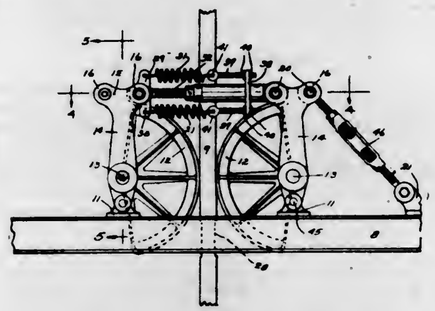
A golf ball washer comprising a casing formed of a pair of dished circular side members each having a periph-

eral flange, a T-shaped annular gasket having a portion thereof disposed between the opposed flanges of the sides when assembled and having a portion extending within



the casing to provide a relatively wide and concave raceway, a shaft journaled in said casing, and a circular brush on said shaft and within the casing.

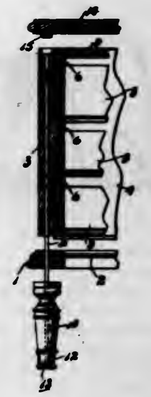
1,889,810. EXCESS PRESSURE RELIEVING DEVICE. AUGUSTUS J. PENOTE, Shaker Heights, Ohio. Filed May 12, 1930. Serial No. 451,874. 4 Claims. (Cl. 74—14.)



1. A tamper mechanism, comprising a vertical reciprocable tamper bar, parallel horizontal supporting beams, spaced vertical posts pivoted on said beams in pairs and in planes longitudinal of the beams, said pairs carrying parallel cross shafts each having a segmental gripping member mounted thereon for engaging a face of said bar, adjustable means for rigidly securing one pair of posts and their gripper immovable on their pivots, the other pair carrying another cross shaft with its gripping member movable toward and from the rigid posts, gear means on said cross shafts for driving said gripping members to alternately lift said bar, means for connecting the upper ends of said posts of the two pairs and including telescoping parts to limit the minimum distance between the two gripping members, and coil spring means to relieve the pressure between the said gripping members and the tamper bar, and actuating means for driving said gear means from a power source.

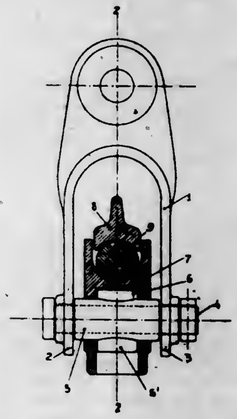
1,889,811. WOOD DESK CONSTRUCTION. BAYARD E. RICHARDSON, Grand Rapids, Mich. Filed Mar. 17, 1930. Serial No. 436,877. 4 Claims. (Cl. 45—6.)

1. A construction of the class described comprising, a flat base unit having a rectangular outline, a drawer unit adapted to be located above said base unit comprising four corner posts each having a single longitudinal opening therethrough, a vertical back between the back corner posts and vertical sides between the front and rear posts, a top adapted to be located over the drawer unit, supporting members one under each corner of the base unit



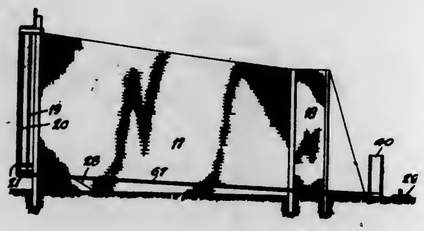
having longitudinal openings therethrough, rods extending through said supporting members, the corner portions of the base unit and through the openings in said corner posts, and means rigidly mounted on the under side of said top with which the upper ends of the rods have detachable connection.

1,889,812. ANTIVIBRATING SELF-BALANCED SUSPENSION CLAMP. ALESSANDRO SALVI, Milan, Italy. Filed Feb. 27, 1931, Serial No. 518,847, and in Italy July 21, 1930. 1 Claim. (Cl. 248—31.)



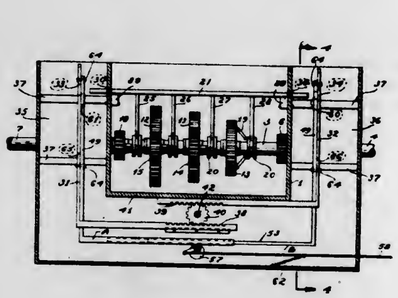
An anti-vibrating self-balanced suspension clamp for electric transmission lines, comprising a suspension strap having two branches, a horizontal bearing pin mounted between said branches, a sleeve rotatably mounted on said pin, vertically disposed aligned trunnions on said sleeve, and a saddle member rotatably mounted on said trunnions.

1,889,813. GOLF DRIVING DEVICE. BLANCHARD D. SMITH, New Orleans, La., assignor to B. D. Smith, Inc., New Orleans, La., a Corporation. Filed Aug. 23, 1930. Serial No. 477,372. 17 Claims. (Cl. 161—18.)



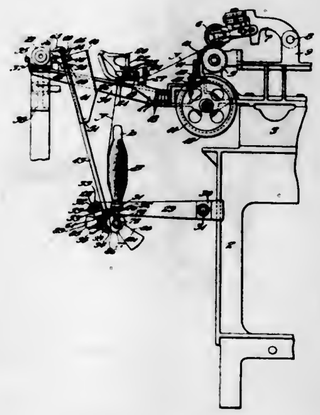
1. In a golf ball driving device, a driving tee from which a ball is to be driven, a target spaced from said tee, an indicator, means operated by a ball being driven from said tee to start the operation of the indicator, and means operated by the ball striking the target to stop the operation of said indicator.

1,889,814. AUTOMATIC GEAR SHIFT. RICHARD B. SPIKES, San Francisco, Calif. Filed Mar. 31, 1931. Serial No. 526,725. 1 Claim. (Cl. 74—58.)



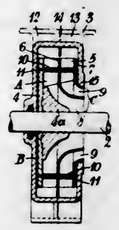
In combination, a plurality of clutch actuating members, a rod for each member, a rod shifting device having an opening for receiving the rods, a gate for each rod, selective means for moving any one of the gates to cover a portion of the opening, and means for moving the rod shifting device for moving the desired clutch actuating member; a second rod shifting device having an opening for the passage of rods therethrough, a second gate for each rod and normally closing the opening in the second rod shifting device, the gates in the first and second sets disposed opposite the same rod being operatively connected together, whereby the closing of the opening in the first rod shifting device by one of the first named gates will cause its associate gate to uncover a portion of the opening in the second rod shifting device, said second rod shifting device being moved by the same means actuating the first rod shifting device and returning all clutch actuating members not actuated by the first device, to normal position.

1,889,815. SUPPLY-HOLDER. GEORGE N. TAYLOR, East Providence, R. I., assignor to Universal Winding Company, Boston, Mass., a Corporation of Massachusetts. Filed Jan. 30, 1930. Serial No. 424,682. 19 Claims. (Cl. 242—130.)



1. A device of the type specified comprising means for holding a bobbin, manually-controlled means for tilting the holding-means into inverted position to cause a spent bobbin to slide off therefrom, and means for automatically returning the holding-means into position to receive a fresh bobbin.

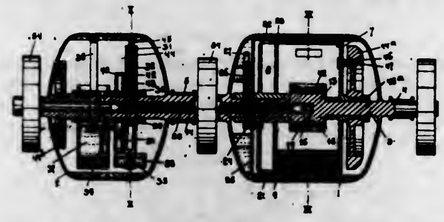
1,889,816. DISTRIBUTOR. WILLIAM ALBERT WHITE, Hebburn-on-Tyne, England, assignor to White's Marine Engineering Company, Limited, Hebburn-on-Tyne, England. Filed Oct. 21, 1931, Serial No. 570,233, and in Great Britain Oct. 30, 1930. 9 Claims. (Cl. 302—28.)



1. A distributor of the kind indicated, comprising in combination a casing having a common central inlet and a plurality of peripheral deliveries therefrom, a rotatable blower element mounted within said casing and partition means also within said casing and defining a plurality of paths through said blower, all said paths issuing from said common central inlet and leading to said plurality of peripheral deliveries.

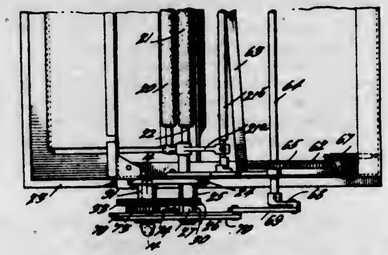
1,889,817. ROTARY REFRIGERATING MACHINE. MARCEL AUDIFFREN, Cannes, and ALBERT SINGRÜN, Epinal, France. Filed Oct. 23, 1928, Serial No. 314,508, and in France Oct. 28, 1927. 9 Claims. (Cl. 62—115.)

1. In a rotary refrigerating machine of the type described, a condenser, an evaporator, a hollow shaft common to both said condenser and evaporator, a pendulous weighted crankcase mounted upon the hollow shaft in the condenser, a compressor carried by the crankcase, an eccentric upon the hollow shaft for directly driving the



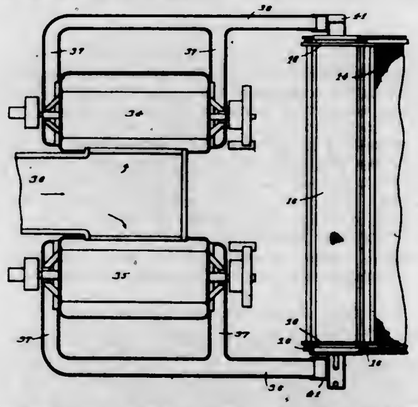
compressor, said eccentric having a passage in cooperative relation with the evaporator through the interior of the hollow shaft and periodically presenting its discharge opening to the intake ports of the compressor.

1,889,818. PHOTOGRAPHIC DEVELOPING APPARATUS. GEORGE C. BEIDLER, Rochester, N. Y. Filed Oct. 26, 1931. Serial No. 571,282. 18 Claims. (Cl. 95—90.5.)



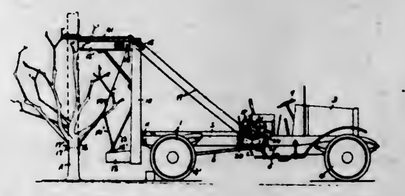
1. In a photographic developing apparatus, a holder of coil form for developing film, means for feeding film to the holder, suitably operated means in volutions of the coil for engaging film and advancing it in the holder, and means for operating the said engaging means to release said film when said film is located in the holder.

1,889,819. METHOD AND MEANS FOR DELIVERING STOCK FOR WEB FORMING. EARL E. BERRY, Beloit, Wis., assignor to Beloit Iron Works, Beloit, Wis., a Corporation of Wisconsin. Filed June 2, 1930. Serial No. 458,952. 21 Claims. (Cl. 92—88.)



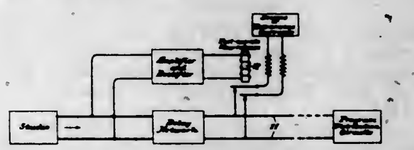
1. In a paper making machine, a rotating stock delivery cylinder, and means for feeding stock into the cylinder through one or both of its ends and for distributing the stock lengthwise within the cylinder, the cylinder having small nozzle-like orifices serving to even the flow of stock to the web forming element and to mix the fibers.

1,889,820. TRANSPLANTING DEVICE. JEAN G. BUTTS, Cato, N. Y. Filed Jan. 28, 1931. Serial No. 511,784. 8 Claims. (Cl. 214—8.)



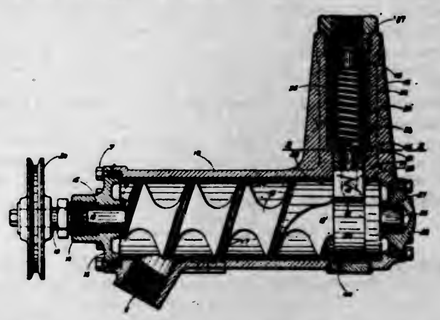
1. The herein described method of transplanting trees consisting in boring an approximately diametrical hole through the trunk of the tree, securing a bolt in said hole, and lifting the tree from the ground by means attached to the bolt.

1,889,821. PREVENTION OF OVERHEARING IN PROGRAM CIRCUITS. ARTHUR G. CHAPMAN, Butler, and RALPH G. MCCURDY, Englewood, N. J., assignors to American Telephone and Telegraph Company, a Corporation of New York. Filed Aug. 27, 1930. Serial No. 478,240. 8 Claims. (Cl. 179—78.)



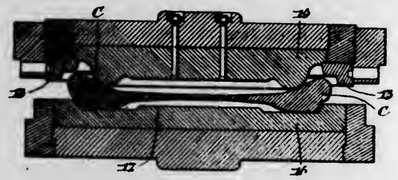
1. In a circuit for the transmission of programs, said circuit being continuously operative, the method of preventing intelligible cross-talk in the program circuit from neighboring message circuits which consists in producing independently of energy in the program circuit currents extraneous to the program currents and supplying the extraneous currents to the circuit only when no program currents are being transmitted.

1,889,822. PUMP. KENNETH S. CLAPP and THEODORE H. EICKHOFF, Cleveland, Ohio. Filed May 10, 1930. Serial No. 451,298. 18 Claims. (Cl. 103—5.)



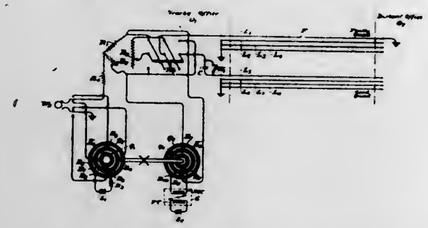
1. In a mechanism for handling viscous material, a tubular housing, a screw conveyor enclosed in said housing means to rotate the conveyor and means operable by the conveyor to subject the material to increased pressure.

1,889,823. TIRE MOLD MANUFACTURE. AMOS G. COLE, Burnham, Pa., assignor to Standard Steel Works Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed June 21, 1928. Serial No. 287,106. 5 Claims. (Cl. 29—148.2.)



1. An improvement in die-pressing an ingot, as distinguished from rolling or hammering, into a tire mold side piece of usual annular concave shape, by initially piercing and squeezing out the ingot into an annular blank with central web, and subsequently pressing the die cavity in the blank; which improvement comprises initially die-pressing the ingot into an oblate inward tapering webbed torus of pear-shaped cross-section, and then squeezing the same into a saucer form characterized by a concavely dished, centrally flat topside and a flat, centrally concave-recessed bottom side, and having a thick rim externally bevelled downward and internally flared upward, and intermediately rounded off, by pressure initially applied to the taper of the pear section inside its greatest thickness, and thereafter die-pressing the mold cavity in the inside flare of the rim and the piece to its final forged shape.

1,889,824. TESTING SYSTEM. PAUL G. EDWARDS, Millburn, N. J., assignor to American Telephone and Telegraph Company, a Corporation of New York. Filed Dec. 30, 1931. Serial No. 583,989. 5 Claims. (Cl. 179—175.3.)

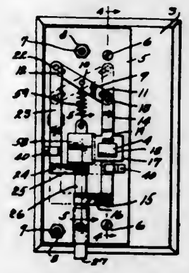


1. Apparatus for determining the location of a fault in a conductor and avoiding the effect of interfering potentials on the apparatus, comprising a Wheatstone bridge arrangement including the faulty conductor as one of its arms, a good conductor connected as another of its arms, a rheostat, means for connecting said rheostat in series with either of said arms, a source of alternating potential connected to one of the diagonals of the Wheatstone bridge arrangement, means for changing the phase of said alternating potential by 90 degrees, and means responsive to the alternating potential derived from the other diagonal of the bridge arrangement to determine whether the bridge arrangement is balanced.

1,889,825. MANUFACTURE OF RUBBER GOODS. GUMAL FESSEL, Halle-on-the-Saale, Germany, assignor to Technische Chemikalien-Compagnie G. m. b. H., Halle-on-the-Saale, Germany. Filed Nov. 9, 1927, Serial No. 232,187, and in Germany Sept. 18, 1926. 10 Claims. (Cl. 106—23.)

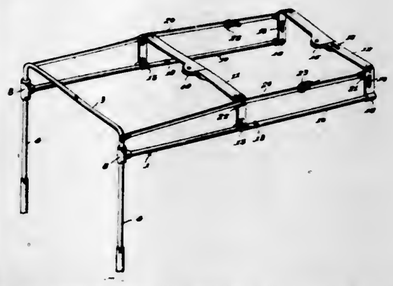
1. The process of conditioning rubber for the manufacture of vulcanised rubber goods which comprises mixing the rubber under treatment with an extract, obtained by extracting tars, originating in the distillation of bituminous minerals, by means of water-soluble, oxygenic, organic solvents of the aliphatic series and by removing the solvent from the extract.

1,889,826. OPERATING ATTACHMENT FOR TOGGLE SWITCHES. WILLIAM FISHER, Dearborn, Mich. Filed Apr. 9, 1931. Serial No. 528,890. 7 Claims. (Cl. 74—14.)



1. A device of the character described comprising a bar engaging an operating handle, a second bar, means connecting the two bars whereby movement of either bar in one direction will impart reverse movement to the opposite bar, a pull member, means thereon for successively engaging first one bar and then the second bar upon successive operations of the pull member whereby the operating handle will be moved first in one direction and then in the opposite direction.

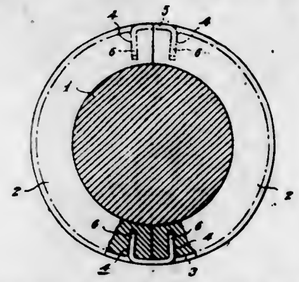
1,889,827. SELF-FOLDING TOP FOR RUMBLE SEATS. PATRICK COLUMBUS GARRISON, Wheeling, W. Va. Filed July 8, 1931. Serial No. 549,549. 1 Claim. (Cl 296—99.)



A top for rumble seats of vehicles comprising brackets secured to the rear end of a vehicle, adjustable vertically disposed supporting members detachably secured to the vehicle by the brackets, horizontal members connected to the supporting members and extending over the rumble seat of the vehicle to the top thereof and each including pivotally connected sections, transversely arranged substantially U-shaped elements secured to the horizontal members and one of the members engaging the top of the vehicle, said elements each including hinged sections, adjustable straps secured to the bow elements, and a cover supported by the bow elements and the straps.

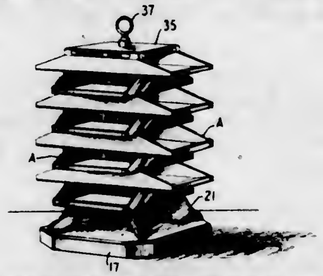
1,889,828. SPLIT JOINT RING. OTTO C. GEHRMAN, Omaha, Nebr., assignor to Paxton-Mitchell Company, Omaha, Nebr., a Corporation of Nebraska. Filed Mar. 6, 1930. Serial No. 433,693. 1 Claim. (Cl. 288—3.)

In metallic piston packing construction, the combination of metal ring segments each having a socket adjacent each end disposed substantially radially but slightly inclined toward the respective adjacent end so that when two ring segments are brought into end contact the adjacent sockets converge slightly inward, and substantially U-shaped spring clips engaging said sockets for detachably connecting the segments, the legs of each clip con-



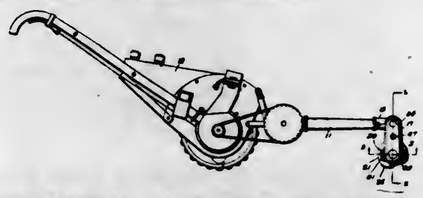
verging corresponding to the direction of the sockets and the cross bar of each clip connecting the legs being relatively thick and dimensioned to be equal in length only to the distance between outer ends of adjacent sockets for enabling the clips to retain the ring segments in contact under direct resistance to separation thereof by the bars of the respective clips.

1,889,829. PRINTER'S COLLATING STAND. CHARLES W. GOVIER, Brooklyn, and JOHN W. REID, Queens Village, N. Y., assignors to Mergenthaler Linotype Company, a Corporation of New York. Filed Oct. 1, 1931. Serial No. 566 206. 14 Claims. (Cl. 276—44.)



1. A printer's collating stand comprising a plurality of superposed type cases supported by and attached to an upright shaft rotatably mounted in a suitable base, said cases being connected together for rotation as a unit.

1,889,830. LAWNMOWER DEVICE. BENJAMIN F. GRAVELY, Dunbar, W. Va. Filed Feb. 6, 1932. Serial No. 591,418. 7 Claims. (Cl. 56—26.)

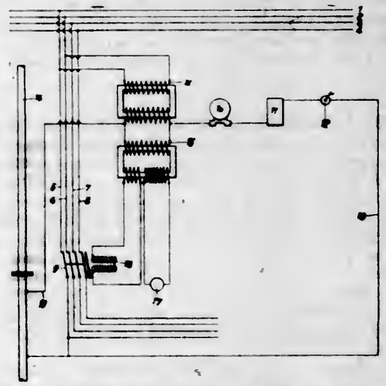


1. A lawnmower device comprising supporting end frames, a rotatable cutting reel, a stationary knife, means for supporting said reel, and means for supporting said supporting means in said frames, said first-named supporting means being adjustable within the second supporting means for moving the reel toward and away from the stationary knife.

1,889,831. MANUFACTURE OF ANTHRAQUINONE DERIVATIVES. ERNST GUTZWILLER, Basel, Switzerland, assignor to the Firm of Chemical Works formerly Sandoz, Basel, Switzerland. Filed Mar. 14, 1929, Serial No. 347,178, and in Germany Mar. 27, 1928. 3 Claims. (Cl. 260—59.)

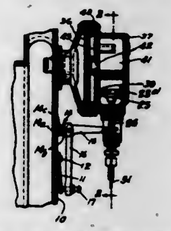
1. A process for the manufacture of methylated dihydroxydiaminoanthraquinone-monosulphonic acids, consisting in heating dihydroxydiaminoanthraquinone-monosulphonic acids in form of their alkalimetal salts to 50–100° C. for 10–20 hours in presence of small quantities of a mineral acid with formaldehyde and agents yielding formaldehyde.

1,889,832. SAFETY DEVICE FOR USE WITH EARTHING CIRCUITS IN ALTERNATING CURRENT SYSTEMS. EUGÈNE HAMM, Strasbourg, France. Filed Apr. 13, 1932. Serial No. 604,944. 1 Claim. (Cl. 175—294.)



In a safety device for protective earthing circuits in alternating current installations comprising a transformer energized by the supply means a second transformer the primary of which is connected to the secondary of the first transformer and an earthing circuit passing through the appliances to be protected and short circuiting the secondary of the first transformer, two separate secondary windings for the second transformer, a signaling device, in the one and a device for breaking of the current supply in the other winding.

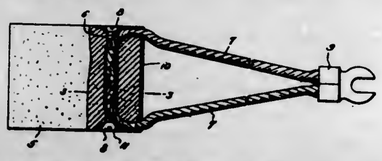
1,889,833. ADJUSTABLE THERMOSTAT FOR RADIATORS. AUGUST J. HARTFIELD, Huntington Park, Calif., assignor to Pacific Gas Radiator Company, Huntington Park, Calif. Filed May 26, 1931. Serial No. 540 061. 2 Claims. (Cl. 236—36.)



2. In a device of the kind described, the combination with a fuel valve and dual thermostatic means for actuating said valve; of a stem forming a part of said valve and projecting outwardly therefrom, said stem having a relatively deep longitudinally extending socket in its outer end, and an operating rod projecting loosely into the socket of said stem, said oper-

ating rod being connected with one of the thermostatic controls and the other thermostatic control and the other thermostatic control having an operating relation to said valve stem independently of said rod.

1,889,834. CARBON BRUSH. GEORGE KLEIN, Centralia, Ill. Filed May 17, 1932. Serial No. 611,903. 4 Claims. (Cl. 171—325.)



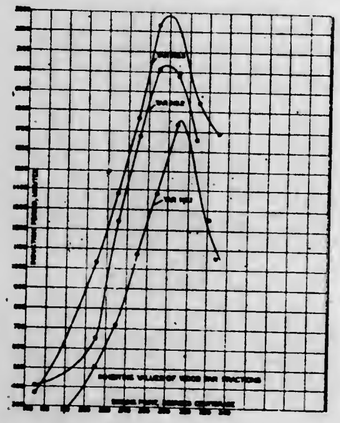
1. A brush of the character described comprising a carbon block having a transversely extending bore therein, a conductor disposed through the bore, said bore being provided with threads in the wall thereof, and a screw feedable into the bore longitudinally of the conductor for clamping the conductor against the wall of the bore.

1,889,835. TREATMENT OF MOTOR FUEL. CHARLES D. LOWRY, Jr., and CHARLES G. DRYER, Chicago, Ill., assignors to Universal Oil Products Company, Chicago, Ill., a Corporation of South Dakota. Filed Dec. 18, 1931. Serial No. 581,986. 8 Claims. (Cl. 44—9.)

1. A process for preventing or substantially reducing deterioration of hydrocarbon distillates consisting essentially of gasoline and containing cracked unsaturated hydrocarbons, said process comprising adding to the distillate a small amount of the tar fraction obtained in the destructive distillation of wood, said fraction having the property of substantially inhibiting gum formation in the distillate.

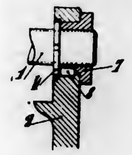
3. A process for prevening or substantially reducing deterioration of hydrocarbon distillates consisting essentially of gasoline and containing cracked unsaturated hydrocarbons, said process comprising adding to the distillate a small amount of the tar fraction obtained in the destructive distillation of hardwood.

1,889,836. TREATMENT OF MOTOR FUEL. CHARLES D. LOWRY, Jr., and CHARLES G. DRYER, Chicago, Ill., assignors to Universal Oil Products Company, Chicago, Ill., a Corporation of South Dakota. Filed Mar. 11, 1932. Serial No. 598,114. 6 Claims. (Cl. 44—9.)



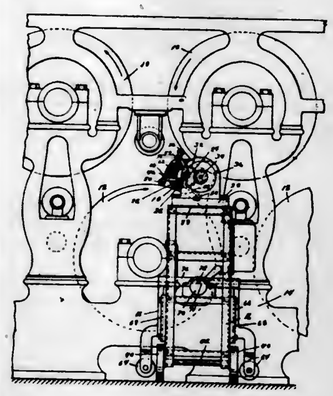
1. A process for preventing or substantially reducing deterioration of hydrocarbon distillates consisting essentially of gasoline and containing cracked unsaturated hydrocarbons, said process comprising adding to the distillate a small amount of an oily distillate of hardwood tar, boiling between 240° C. and 300° C.

1,889,837. MEANS FOR SECURING REMOVABLE WHEELS TO A HUB. ANDRÉ JULES MICHELIN, Paris, France, assignor to Michelin & Cie., Clermont-Ferrand, France, a Corporation of France. Filed Dec. 26, 1930, Serial No. 504,981, and in France Jan. 10, 1930. 8 Claims. (Cl. 301—9.)



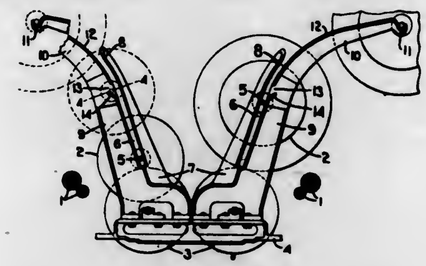
1. In a vehicle wheel, the combination of a hub flange provided with at least one hole close to its periphery, an inwardly threaded sleeve securely fitted in said hole, said sleeve projecting from the inner face of said hub flange and extending in said hole at most as far as the outer face of said hub flange, said hub flange and said sleeve being respectively provided in their contacting faces with complementary rectilinear grooves forming together a rectilinear blind hole parallel to the axis of said sleeve, and opening into the outer faces of said hub flange and sleeve, a rectilinear key adapted to fit in said hole for preventing angular displacement of said sleeve with respect to said flange, a spindle adapted to be screwed in said sleeve for fixing the wheel proper to said hub flange, and means carried by said spindle for locking said key in said hole.

1,889,838. CLEANING APPARATUS FOR THE ROLLS OF PAPER-MAKING MACHINES. HARRY T. NORMAN, East Millinocket, Me., assignor to Great Northern Paper Company, Millinocket, Me., a Corporation of Maine. Filed Aug. 29, 1930. Serial No. 478,652. 12 Claims. (Cl. 15—21.)



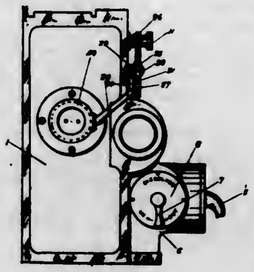
1. Cleaning apparatus for the rolls of a paper making machine comprising a wheeled truck, a driving motor thereon, a horizontal shaft supported at one end by the truck and having a driving connection with the motor, said shaft being at least as long as the axial length of the rolls to be cleaned, a rotary cleaning brush on the free end of said shaft, and supporting means for said free end of said shaft located adjacent said brush and having supporting elements that bear upon the rolls to be cleaned.

1,889,839. SPOOL STAND. HENRY A. OWEN, Lawrence, Mass., assignor to Davis & Furber Machine Company, North Andover, Mass., a Corporation of Massachusetts. Filed May 16, 1932. Serial No. 611,547. 5 Claims. (Cl. 242—130.)



1. In a spinning machine having horizontal jack spools, spool holding means comprising a plurality of supporting brackets mounted on the upper portion of the machine frame and having substantially vertical slots therein open at their upper ends acting as bearings for the spool gudgeons, outwardly-extending arms at the tops of said brackets, a notch in the outer end of each of said arms to receive temporarily the gudgeons of the full spools, a guiding surface on each of said arms acting to guide the gudgeons of a full spool from its temporary position into running position and a gate in at least one slot of each pair co-operating with the gudgeons of a spool to permit at least one of the gudgeons of the spool to be removed laterally from its slot when the spool is lifted for removal from the machine and means at each gate to retain the gudgeons in the slots when the spools are moved downward from temporary position into running position.

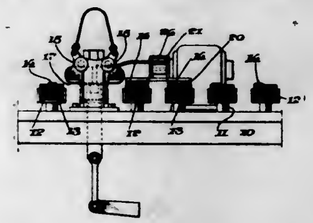
1,889,840. COMBINED MOTION PICTURE AND SOUND CAMERA. FREEMAN H. OWENS, New York, N. Y. Filed July 13, 1927. Serial No. 205,444. 14 Claims. (Cl. 88—16.2.)



10. The combination with means for recording sound and scene, of means for fading the scene record, and means cooperating with said first-mentioned means for simultaneously fading the sound record.

1,889,841. MACHINE FOR PACKING MATCHES. MICHAEL PARIDON, Barberton, Ohio, assignor to The Diamond Match Company, Baltimore, Md., a Corporation of Maryland. Filed May 12, 1931. Serial No. 536,777. 4 Claims. (Cl. 226—7.)

1. In a match packing machine having means for intermittently feeding box trays filled with matches and provided with protection strips, means having a relatively wide bearing surface movable upon the protection strips of each succeeding tray during a step or movement of the tray before it comes to rest, and operative to hold the protection strip of the tray in opposition to such step

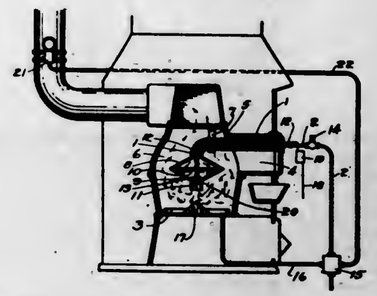


or movement, whereby the trailing side of the tray, where the match heads are located, is positioned in close relation to the strip.

1,889,842. COMPOSITION OF MATTER. THOMAS C. PARR, Shaker Heights, Ohio. Filed Dec. 8, 1930. Serial No. 500,879. 4 Claims. (Cl. 106—8.)

1. A composition of matter comprising about thirty per cent of a pigment, about five per cent asbestos fibre, about nine per cent aluminum, about thirty per cent oil and the balance a volatile diluent vehicle.

1,889,843. BURNER. FRED M. POORE, Seattle, Wash. Filed Nov. 25, 1929, Serial No. 409,735. Renewed Aug. 15, 1932. 7 Claims. (Cl. 158—91.)

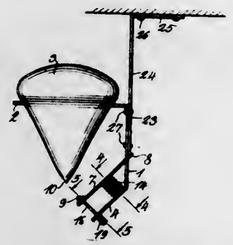


1. In a device of the class described, a furnace, a vertical tubular member positioned in the center of the fire box of the furnace, an enlarged chamber in the said vertical member adjacent the lower end thereof, a fuel supply pipe extending downward through the vertical member and chamber to a point a short distance from the lower end, and a conical member with the vertex toward and in axial alignment with the said vertical chamber and spaced a short distance from the lower end thereof, the said tubular member with the supply pipe in the same relation thereto extending to the outer wall of the furnace.

1,889,844. FIRE EXTINGUISHER. WILLIAM L. ROESSNER, Denver, Colo. Filed Sept. 8, 1931. Serial No. 561,666. 2 Claims. (Cl. 169—26.)

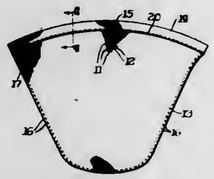
1. In a fire extinguisher of the type employing a hermetically sealed glass grenade containing a fire extinguishing liquid, such as carbon tetrachloride, a bracket having a vertically disposed body member, the upper end of the body member having a grenade supporting means adapted to hold a grenade with its tip projecting downwardly, the lower end of the body member being bent so as to project outwardly therefrom, a hammer having its inner end pivotally attached to the body member above the bend, a compression coil spring located between the hammer and the

outwardly projecting portion of the body member, a tubular member located inside of the spring for preventing buckling thereof, and a fusible link extending between the hammer and the outwardly bent portion for holding the



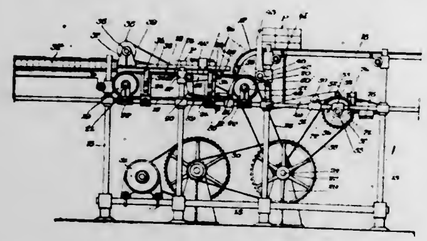
hammer in such a position that the spring will be under compression whereby when the temperature rises sufficiently to make the link fail the hammer will move in response to the action of the spring and break the grenade.

1,889,845. COFFEE URN BAG. CARL A. RUNDQUIST, Chicago, Ill. Filed Apr. 4, 1932. Serial No. 603,012. 5 Claims. (Cl. 53—3.)



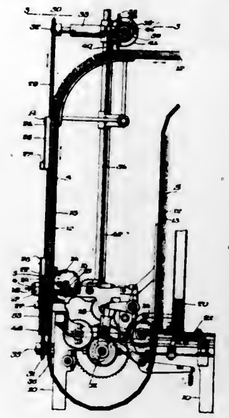
1. A filter bag for urns comprising a body portion of generally conical shape and having a substantially circular open mouth, and a supporting band extending circumferentially of the mouth and stitched to the fabric of the bag, said band adapted to be engaged by a clamping ring for supporting the bag in the urn, the threads in the band extending longitudinally and transversely of the band and the threads of the bag extending in some portions parallel to the threads of the band with a gradual divergence therefrom in other portions towards a bias relationship.

1,889,846. MECHANISM FOR STACKING PACKAGES. CHARLES F. WRIGHT, Akron, Ohio, assignor to The Diamond Match Company, Baltimore, Md., a Corporation of Maryland. Filed Aug. 25, 1931. Serial No. 559,164. 11 Claims. (Cl. 198—21.)



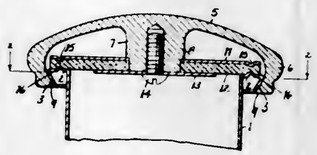
1. In combination with a package support, means on a lower level for advancing a succession of packages toward said support, lifter arms which normally underlie the path of a leading series of packages, means including a cam for actuating said lifter arms to raise the opposing packages and position them in stacked relation on the support, an intermittently-acting stop device for said cam, an electric circuit in which are included an electro-magnet for controlling the stop device and a switch for making and breaking the circuit, and means extending into the path of the leading advancing package for controlling the operation of the switch.

1,889,847. TRANSFER-TRAY FILLING MECHANISM FOR MATCH MACHINES. CHARLES F. WRIGHT, Akron, Ohio, assignor to The Diamond Match Company, Baltimore, Md., a Corporation of Maryland. Filed Aug. 25, 1931. Serial No. 559,202. 10 Claims. (Cl. 144—62.)



1. In a match machine having a travelling carrier from which rows of matches project, and means for discharging such rows successively from the carrier, a match transfer-tray open at the top and having a bottom member insertable between two adjacent rows of projecting matches above the path of the match discharging means, by which rows the tray can be supported in close parallel relation to the outer face of the carrier and moved correspondingly with the carrier to the discharge means, and means for engaging said tray and feeding it progressively downward when the row of tray supporting splints has been discharged from the carrier.

1,889,848. CLOSURE FOR RADIATOR NECKS AND THE LIKE. MICHAEL B. ANDRIE, Grand Rapids, Mich., assignor to W. B. Jarvis Company, Grand Rapids, Mich. Filed Apr. 15 1929. Serial No. 355,105. 10 Claims. (Cl. 220—40.)



9. In a closure, the combination of a sheet metal neck provided with segmental downwardly tapered male joint members, a cap provided with coacting tapered socket joint members engageable and disengageable with said male joint members by a relative rotative movement, and a spring closure member carried by said cap and acting to apply spring tension to the joint members when they are in engagement.

1,889,849. CIGAR LIGHTER. LOUIS V. ARONSON, Newark, N. J., assignor to Art Metal Works, Inc., a Corporation of New Jersey. Filed Mar. 17, 1927, Serial No. 176,159. Renewed Sept. 26, 1931. 5 Claims. (Cl. 67—7.1.)



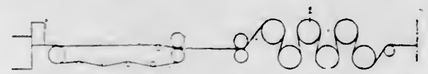
1. A cigar lighter comprising in combination, a fuel receptacle having a top wall and side walls projecting therebeyond in spaced relation, a wick tube carried by said top wall and housing a wick projecting into said receptacle, an abradant wheel journalled between said projecting walls, a hub upon said wheel bearing ratchet teeth, a pyrophoric element mounted for pressure against said wheel, a lever journalled upon the axis of said wheel, pinion teeth carried upon said lever to cause motion thereof about its axis, a snuffer carried by said lever normally housing the projection of said wick, means reciprocably mounted upon said top wall, a pawl pivoted upon said means and spring pressed into contact with said ratchet teeth, rack teeth carried by said means and meshing with said pinion teeth, means to cause reciprocation of said means to simultaneously raise said snuffer and cause rotation of said wheel, and spring means to return said reciprocable means to normal position whereby to return said snuffer to normal position and said pawl to position for subsequent action.

1,889,850. LACING TAB. RUDOLPH F. BARTEL, New York, N. Y. Filed Oct. 30, 1929. Serial No. 403,442. 1 Claim. (Cl. 24—265.)



A lacing tab of pliable material having slots with their longitudinal axes inclined to each other, said tab adapted to frictionally and detachably support an end of a sanitary napkin by having its end extending through the slots of the tab, the pliability of the tab material being such as to cause the walls of its slots to give when the end of the napkin is extended through said slots, thereby producing frictional engagement between the walls of the slots and the end of the sanitary napkin.

1,889,851. METHOD OF MAKING AND TREATING PAPER. FRANK G. CRANE, Montague, Mich. Filed Jan. 10, 1931. Serial No. 507,802. 14 Claims. (Cl. 92—40.)



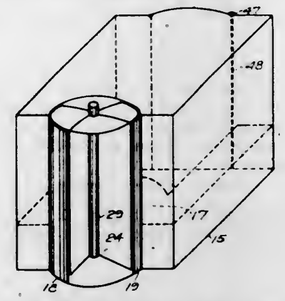
14. The method of treating paper consisting of impregnating paper with a solution containing a substantial proportion of silicate of soda, thereafter treating the impregnated paper to convert a substantial portion of the silicate of soda, and drying.

1,889,852. TELEVISION SYSTEM. CHESTER L. DAVIS, Keokuk, Iowa, assignor to Wired Radio, Inc., New York, N. Y., a Corporation of Delaware. Filed July 25, 1930. Serial No. 470,720. 7 Claims. (Cl. 178—6.)



1. In a television system an optical path extending through a multiplicity of gaseous discharge chambers in succession, sets of discharge plates in each of said chambers and means for applying television signals to said sets of discharge plates for establishing a condition of ionization in one or more of said chambers along the length of said optical path.

1,889,853. COMPARTMENT GUARD. VICTOR JOHN ENGLISH, Verdun, Quebec, Canada. Filed Oct. 25, 1930. Serial No. 491,188. 1 Claim. (Cl. 20—1.01.)



A revolving door and arcuate wall enclosures extending outwardly from a counter, said door having diametrically opposite open compartments in one position and diametrically opposite close compartments in all positions, said open compartments forming close compartments with said arcuate walls during the operations of the door and means for operating said door from a distance and locking it.

1,889,854. HAIR WAVER. ANNA E. FARRELL, Seattle, Wash. Filed Nov. 9, 1931. Serial No. 573,733. 13 Claims. (Cl. 132—41.)

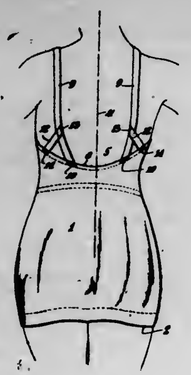


1. A hair waver comprising, in combination, three pivotally connected elements, namely: spaced means to positively retain the hairs in normal side-by-side relationship, a pair of ridge-forming elements adapted to pass between said retaining means and to lie in a level different from the level of the retaining means, and a strap adapted to pass between the ridge-forming elements in a direction opposite to the movement of the latter between the retaining means, and means to maintain the several parts in substantially the specified relationship.

1,889,855. SWIM SUIT. EDWIN H. FOREMAN, New York, N. Y. Filed Dec. 23, 1931. Serial No. 582,727. 2 Claims. (Cl. 2—67.)

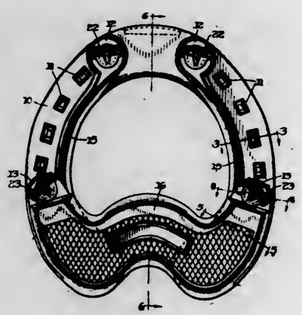
1. In a swim suit, a portion adapted to cover the lower part of the body of the wearer, a portion for covering the upper part of the body comprising a bib extending

from the lower portion to points in front of each shoulder and bounded by a continuous arcuate edge from the shoulder points to the middle of the back at about the waistline whereby the shoulders, arms, under arms, neck and back are exposed, shoulder straps between the front



shoulder points and the waistline edge at opposite sides of the median line of the back and an auxiliary strap from each shoulder strap to the continuous arcuate edge at a point more removed from the median line than the shoulder strap.

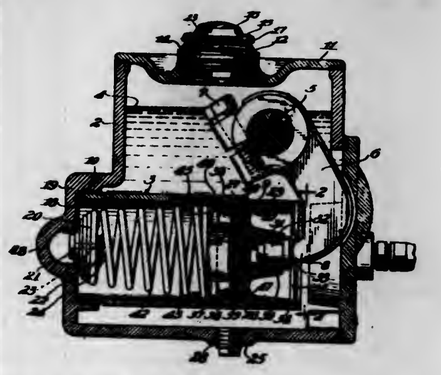
1,889,856. HORSESHOE. ROBERT E. FRUIN, Chicago, Ill. Filed Dec. 29, 1930. Serial No. 505,228. 7 Claims. (Cl. 168—14.)



1. In a horseshoe of the type described, the combination of a one-piece full length metal shoe frame formed with rows of nail-holes in its sides, a heel pad mounted on the under side of the rear end portion of said frame, a toe calk located on the front of the frame, and a pair of side calks respectively located on the sides of the frame between the rearmost nail-holes and the ends of said pad, the shoe having an open center for ventilating the frog of the hoof.

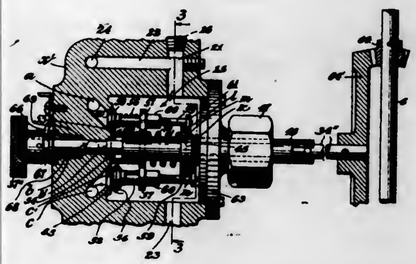
1,889,857. MASTER CYLINDER PISTON. CLARENCE V. GARDNER, Detroit, Mich., assignor to Hydraulic Brake Company, Detroit, Mich., a Corporation of California. Filed May 6, 1931. Serial No. 535,816. 14 Claims. (Cl. 60—54.6.)

1. In a hydraulic brake mechanism including a master cylinder, a piston reciprocable therein, a packing cup engaging the forward face of said piston, an annular groove in the forward face of said piston, passages extending through said piston and merging with said groove, and a



movable member seated in said groove to provide a continuous flat contacting surface for said cup during the pressure stroke of said piston.

1,889,858. APPARATUS FOR DISHWASHING. EDGEWORTH GREENE and WAITSTILL H. SWENARTON, Montclair, N. J. Original application filed Nov. 21, 1927, Serial No. 234 888, now Patent No. 1,794,169, dated Feb. 24, 1931. Divided and this application filed July 5, 1929. Serial No. 375,947. 3 Claims. (Cl. 141—9.)

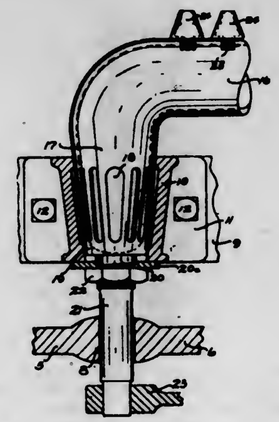


1. In a dishwasher in which a small volume of water is distributed in orderly succession through a plurality of groups of spraying means, the combination of a distributor chamber provided with a plurality of outlet ports, a plurality of groups of spraying means, each of said groups being in communication with a different one of said outlet ports, means for connecting said distributor chamber with a source of water under high pressure, a plurality of spring-pressed tappet valves, each valve controlling a different one of said outlet ports, a cam-engaging shoe mounted on the stem of each tappet valve and a common cam having a face which is disposed so as to be in continuous contact with a shoe when its respective valve is open, and which face is of such a configuration and length as to continually maintain a discharge of water from the distributor chamber which is substantially equal to the full discharge area of at least one of said ports.

1,889,859. BOILER TUBE CLEANER. DAVID W. GROVES, Coeur D'Alene, Idaho. Filed Mar. 8, 1930. Serial No. 434,264. 1 Claim. (Cl. 285—9.)

In a bearing head for a boiler cleaner, the combination with an open-end, tapered head and a steam supply pipe

connected thereto, of a ported, tapered, hollow journal supported in said head and provided with a rear closed end, a threaded boss on said end, a washer on the boss



closing the rear end of the hollow head, a lock nut on the boss, and means united with the threaded boss for turning the hollow journal.

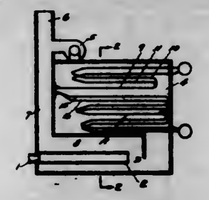
1,889,860. MONEY BAG. ABRAHAM HALPIN, New York, N. Y. Filed Sept. 28, 1931. Serial No. 565,518. 10 Claims. (Cl. 70—2.)



1. In a flexible bag having a mouth and a slide fastener for closing said mouth, including a slide for the interlocking thereof, the combination of a padlock having a shackle and a short connecting means disposed along an edge of the bag for controlling the slide, said connecting means being laterally inflexible and having laterally swingable connection at one end with the slide and sliding permanent connection at the other end with a leg of the shackle, the bag having a hole through which a leg of the shackle is movable for interlocking.

1,889,861. BAFFLE ARRANGEMENT. ANDRÉ HUET, Paris, France, assignor to The Superheater Company, New York, N. Y. Filed Sept. 20, 1930, Serial No. 483,232, and in France May 5, 1930. 8 Claims. (Cl. 122—485.)

1. A group of U-tubes arranged close together in parallel planes and having alternately greater and less widths and each having one of its legs in a given plane at a considerable angle to said parallel planes and each having its



other leg on the same side of said given plane, said legs in the given plane arranged to form a baffle and the other legs arranged to permit the passage of gases therebetween.

1,889,862. INTERCHANGEABLE JEWEL MOUNTING. FRANK KESSLER, Brooklyn, N. Y., assignor to the Leo Baum estate, A. Russell Bond, executor, New York, N. Y. Filed May 31, 1929. Serial No. 367,370. 10 Claims. (Cl. 63—15.)



1. A locket comprising a body portion, a lid therefor, means on the lid for engaging a jewel at opposite edges thereof, and means integral with the body portion for overlapping intermediate edges of the jewel when the body portion is closed by the lid.

1,889,863. PREPARATION OF DOUBLE SALTS OF CALCIUM NITRATE. EMIL LÖSCHER, Basel, Switzerland, assignor to Lonza Elektrizitatswerke und Chemische Fabriken Aktiengesellschaft, Basel, Switzerland, a Corporation of Switzerland. Filed Mar. 1, 1932, Serial No. 596,155, and in Switzerland Mar. 4, 1931. 7 Claims. (Cl. 23—102.)

1. The process of making double salts of the formula

$$5Ca(NO_3)_2MeNO_3 10H_2O$$

which comprises adding a nitrate of a monovalent cation to a hot strong solution of calcium nitrate the said added nitrate being in considerable excess over the amount required for the double salt formation, crystallizing by slow cooling, separating the crystals from the hot mother liquor.

4. The process of preparing a double salt of the composition

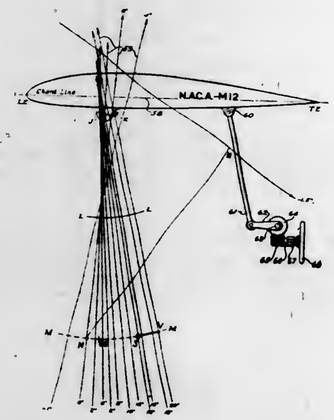
$$5Ca(NO_3)_2NH_4NO_3 10H_2O$$

which consists in adding 1.5–2.5 moles of ammonium nitrate per 5 moles of calcium nitrate, to a hot solution of 70–82% of calcium nitrate, allowing to crystallise by slow cooling, and separating the double salt formed from the still hot mother liquor.

1,889,864. AIRPLANE. ALBERT A. MERRILL, Jamaica, N. Y., assignor, by mesne assignments, to Merrill Aircraft Company, Long Island City, N. Y., a Corporation of Delaware. Filed Sept. 6, 1929. Serial No. 390,767. 18 Claims. (Cl. 244—120.)

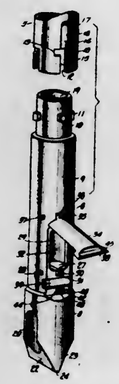
1. In an airplane, the combination of a fuselage, a unitary wing structure of the class wherein there is a zone in which the lines of action of the resultant aerodynamic forces progress consecutively from front to rear and con-

verge approximately to a point and means for rotatably and adjustably moving the wing structure upon the fuselage substantially about said point of convergence; the center of gravity of the airplane being located below said point of convergence and within the zone, whereby rota-



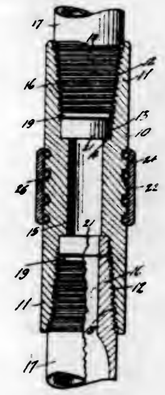
tion of the wing structure will change the angle of attack and bring the corresponding line of action through the center of gravity to maintain the flying attitude of the fuselage substantially constant with respect to the path of the airplane.

1,889,865. CLEAN-OUT BIT FOR SAND PUMPS. GEORGE W. MILLER, Sapulpa, Okla. Filed Apr. 2, 1930. Serial No. 441,047. 5 Claims. (Cl. 166—19.)



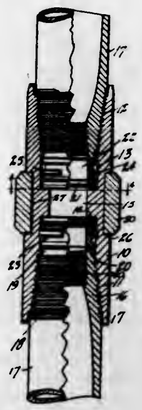
2. In combination with a barrel having a side opening and a groove at one end of the opening, a valve for closing the barrel channel below the side opening, a door pivotally mounted on the barrel adapted for closing the side opening and having a rib adapted to seat in said groove, and latching means cooperative with the door and barrel to retain the door in closed position.

1,889,866. TUBULAR COUPLING. GUSTAVUS A. MONTGOMERY, Dallas, Tex. Filed June 24, 1929. Serial No. 373,355. 6 Claims. (Cl. 308—4.)



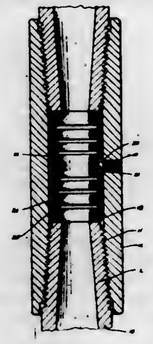
1. In a tubular coupling, a coupling sleeve having boxes at each end and a plurality of circumferential grooves, a flexible mobile protector sleeve having internal ribs fitting in said grooves, and resilient means on said ribs engaging within said grooves.

1,889,867. TUBULAR COUPLING. GUSTAVUS A. MONTGOMERY, Dallas, Tex. Filed June 24, 1929. Serial No. 373,356. 13 Claims. (Cl. 285—146.)



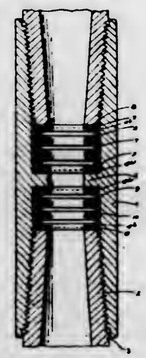
1. In a tubular coupling, tubular members free from external stop shoulders and having threaded pins at their ends, a coupling sleeve having internally threaded boxes receiving said pins, means within the sleeve abutted by the ends of the pins for forming liquid-tight joints between the pins and sleeve and for limiting the insertion of the pins in the boxes as well as for taking the end thrust of the members, and resilient means in the boxes for sustaining said last named means and tensioned by the pressure thereon from said pins.

1,889,868. DOUBLE BOX ROTARY TOOL JOINT. GUSTAVUS A. MONTGOMERY, Dallas, Tex. Filed July 21, 1930. Serial No. 469,337. 7 Claims. (Cl. 285—146.)



1. A tubular pipe joint for drill stems including a coupling having threaded sockets at each end to receive the pipe sections, a resilient sleeve in said coupling adapted to abut the adjacent ends of the pipe sections, and means to hold said sleeve from rotation in said coupling, but allowing longitudinal movement between them.

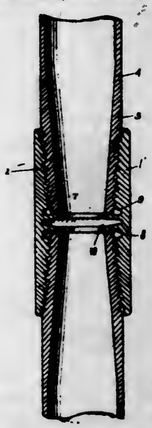
1,889,869. TUBE COUPLING. GUSTAVUS A. MONTGOMERY, Dallas, Tex. Filed Aug. 2, 1930. Serial No. 472,544. 4 Claims. (Cl. 285—156.)



1. A pipe joint for drill stems comprising a sealing member consisting of a bellows and rings at the ends of the bellows, said rings being substantially of the same diameter, a coupling having a threaded socket to receive a pipe section for abutting one of the rings, said socket merging into a cylindrical bore of a diameter greater than that of the rings thereby providing a space around the abutted ring, and a flange in said bore providing a support for the other ring, said bore having a fillet adjacent to the flange in which said other ring has a relatively tight fit.

1,889,870. INTERIOR SHOULDER SINGLE PIECE TOOL JOINT. GUSTAVUS A. MONTGOMERY, Dallas, Tex. Filed Mar. 27, 1931. Serial No. 525,749. 16 Claims. (Cl. 285—146.)

1. A fluid-sealing tool joint for rotary drill stems including a coupling sleeve having taper threaded boxes at each end thereof, in combination with pipe sections having their ends internally upset to provide friction faces of substantial sizes and being tapered to engage said boxes, and means in said sleeve providing confronting friction faces substantially coextensive with the friction



faces of said upsets to frictionally engage the faces of said pipe sections, and form a fluid seal exclusive of the threads and prevent leakage along the threads.

1,889,871. ROTARY DRILL STEM, ITS TUBE AND COLLAR. GUSTAVUS A. MONTGOMERY, Dallas, Tex. Original application filed June 24, 1929, Serial No. 373,355. Divided and this application filed June 25, 1931. Serial No. 546,788. 3 Claims. (Cl. 285—146.)



1. In a hollow shafting subject to a torque and for transmitting a fluid, a tapered threaded pin thereon, a coupling sleeve having a relatively long acutely tapered and threaded box in one end adapted to receive the pin of said shafting, said box inwardly of its outer end having a cylindrical bore, a separate hardened ring in said bore, the outer surface of the ring confronting the surface of the bore, one of said surfaces being knurled to establish a grip to prevent turning of the ring, said ring having its extremity engaged by said pin to form a fluid tight seal between the interior of the sleeve and said shafting.

1,889,872. INSERTED JOINT ROTARY DRILL STEM. GUSTAVUS A. MONTGOMERY, Dallas, Tex. Filed Aug. 25, 1931. Serial No. 559,286. 18 Claims. (Cl. 285—146.)

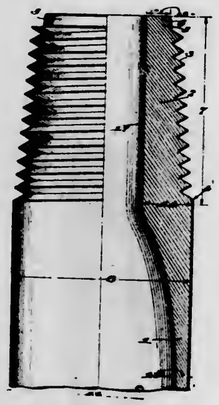
1. In a rotary drill stem coupling, an acutely tapered box member, an acutely tapered pin member, said members

being threaded for engagement to an extent wherein the box is under tension and the pin under compression, and spherically surfaced cooperatively engaging means asso-



ciated with said members to form and maintain a fluid seal independently of the threads throughout the endurance of an elastic stress between said members enabling a permissible reverse torque.

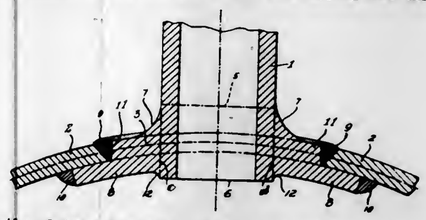
1,889,873. WELL TUBE AND ROTARY DRILL PIPE. GUSTAVUS A. MONTGOMERY, Dallas, Tex. Filed Mar. 26, 1932. Serial No. 601,383. 4 Claims. (Cl. 285—146.)



1. For use in a drill stem or well tube, a pipe having a thickened pin portion adapted to enter the box of a coupling, said pin portion being externally tapered from two to three inches per linear foot and having relatively few continuous screw threads per linear inch, said taper and threads being matched in the box and enabling a quick connection without high heating, the extremity of the pin having a relatively broad annular area to make contact with a corresponding abutment in the box, said area being mechanically faced to be concentric with the axis of the pin at every circumferential point so as to exactly seat against said abutment thereby forming a tight seal to prevent passage of fluid into the threads of the connection.

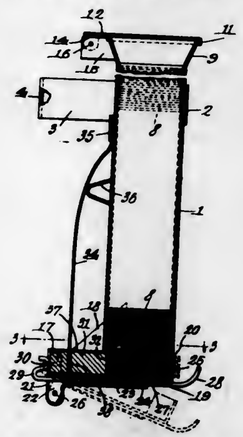
1,889,874. NOZZLE MOUNTING. CASIN W. OBERT, Mount Vernon, N. Y., assignor to The Linde Air Products Company, a Corporation of Ohio. Filed Mar. 27, 1931. Serial No. 525,850. 5 Claims. (Cl. 285—106.)

1. The combination with a container having a curved apertured plate, of an outlet member having a basal portion proportioned to include an annular body of metal capable of substantially equalizing the stresses in the margin of the apertured plate, a flange on the annular portion constituting a tension member when the contents of the container are under pressure, said flange lying on the inside of the container and overlapping the margin



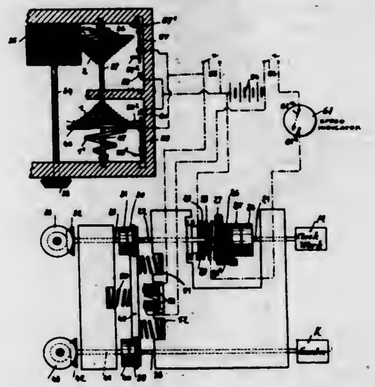
of the plate and making contact with one surface thereof, a shoulder on the basal portion forming with the flange a recess for the plate, means attaching the shoulder to the margin of the plate, and means attaching the margin of the flange to said surface of the plate.

1,889,875. MILK CAP DISPENSER. JAMES R. PARKER, Russellville, Ark. Filed Apr. 21, 1932. Serial No. 606,729. 1 Claim. (Cl. 312—55.)



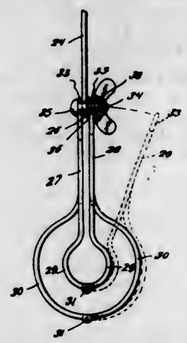
A device for dispensing milk bottle caps, comprising a tubular body, a box-like transverse chute at the lower end of the body and including a top, and a bottom extended across the lower end of the body, the chute having a first opening in its top and a second opening at its outer end, a block-like ejector slidable in the chute, toward and away from the second opening and having a transverse slot, an operating lever including a plate-like member located underneath the bottom of the chute and provided at one end with an upwardly-extended lip forming a closure for the second opening, when the plate-like member is swung upwardly against the bottom of the chute, means for pivoting the plate-like member at one end upon the chute, the lever including a handle secured to the under surface of the plate-like member and reenforcing the same, one end of the handle projecting beyond the lip, to form a finger piece, the opposite end of the handle being fashioned into an upstanding arm engaging one end of the ejector, a socket on the body, near to the upper end thereof, an outstanding spacing bracket on the body, below the socket, and a spring tongue extended longitudinally of the body, the upper end of the spring tongue being received in the socket, the lower end of the spring tongue extending downwardly through the first opening in the top of the chute and into the slot of the ejector, the spring tongue being flexed in its intermediate portion across the bracket.

1,889,876. APPARATUS FOR INDICATING THE MEAN SPEED OF A VEHICLE. ERIC PELLERIN, MARCEL HECTOR, and PASCAL JULES CARPENTIER, Vincennes, France. Filed Jan. 22, 1929, Serial No. 334,296, and in France Jan. 24, 1928. 3 Claims. (Cl. 235—61.)



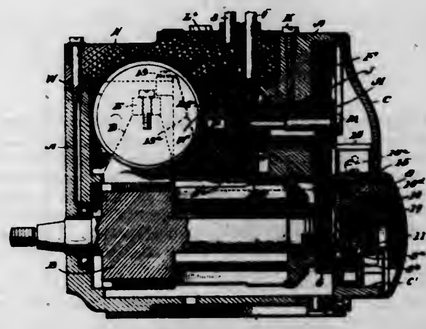
3. An apparatus of the type described comprising in combination, two cams, two followers, one for each of said cams respectively, a differential mechanism for combining the movements of said followers, an odometer, transmission means for driving one of the cams from said odometer, a watch, transmission means for driving the other cam from said watch, a clutch in each of said transmission means, a rigid member connecting the movable elements of said clutches whereby they are simultaneously operated, an electromagnet for actuating said rigid member, contacting means operated by said cams for closing the circuit of said electro-magnet as soon as one of the cams has completed its rotation, resilient means for resetting the cams adapted to operate when the clutches are disengaged, another clutch in the transmission means between the watch and the corresponding cam, an electro-magnet for operating said last mentioned clutch, a speedometer, an electric circuit for energizing said electro-magnet, said circuit including the pointer of said speedometer and a contact stud corresponding to the position of said pointer when the speed of the vehicle is zero, whereby said last mentioned clutch is automatically disengaged when the vehicle is stopped.

1,889,877. BOTTLE HOLDER. REGINA T. REDDINGTON-DRAGER, White Plains, N. Y. Filed Feb. 24, 1932. Serial No. 594,864. 3 Claims. (Cl. 248—65.)



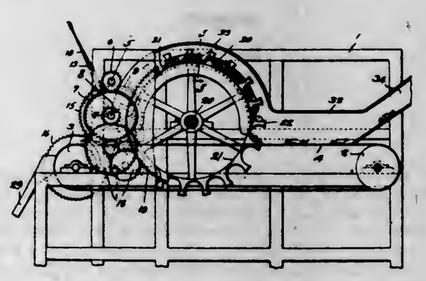
1. In a device of the character described, a clamp including a vertically adjustable rod, a pivot supported by the lower end of the rod, a bottle holder comprising a pair of complementary hingedly connected wire members unitedly defining spaced bottle receiving loops, each member having an intermediate eye receiving said pivot whereby the holder is mounted for pivotal movement, the eye of one wire member being movable off and on said pivot, and means for holding the eye of the last-mentioned member associated with the pivot and for maintaining the holder fixed in any given adjusted position.

1,889,878. IGNITION DYNAMO. CURT FREDERICK REIS, Chicago, Ill., assignor to Excel Magneto Company, Chicago, Ill. Filed Apr. 11, 1929. Serial No. 354,343. 6 Claims. (Cl. 123—149.)



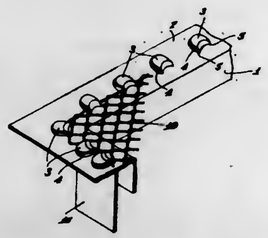
1. In an ignition dynamo, a casing provided with an elongated recess, a rotor journaled in said casing adjacent said recess, an inductor winding mounted in said recess at one end, a distributor mechanism mounted in said recess at the other end, and a detachable member interposed between said winding and said distributor for effecting connections between said elements, said member embracing said winding and forming a top closure for said recess.

1,889,879. FISH CUTTING MACHINE. ARTHUR B. ROGERS, Jonesport, Me. Filed July 22, 1930. Serial No. 469,814. 7 Claims. (Cl. 17—4.)



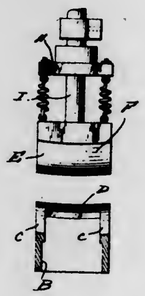
1. In a machine for cutting fish, the combination with cutters and a series of endless conveying elements, of a rotatable cradle working between said elements for successively picking up a plurality of fish from the conveying elements and depositing them on the conveying elements, and stationary means in the path of fish being conveyed by the cradle for directing the fish head first by gravity transversely of the machine while being conveyed in the cradle.

1,889,880. APPARATUS FOR DRYING GELATIN AND THE LIKE. DAVID U. SMITH, Woburn, Mass. Filed Apr. 13, 1931. Serial No. 529,749. 1 Claim. (Cl. 34—17.)



A hygienic apparatus of the kind described for drying food products, gelatin, or the like, comprising an all-metal rectangular frame, a plurality of hooks stamped from the top portion of said frame, having an inclined wedge-shaped surface and a round wire-engaging portion and a removable wire net constructed and arranged to be detachably secured to said frame by predetermined meshes of said wire net engaging and jamming under the wedge hook and bearing on the wire-engaging surface.

1,889,881. METHOD OF BENDING GLASS. RALPH C. THOMPSON, Cleveland, Ohio, assignor to The Simplex Piston Ring Company of America, Incorporated, Cleveland, Ohio, a Corporation of Ohio. Filed Sept. 23, 1929. Serial No. 394,570. 2 Claims. (Cl. 49—67.)



1. An apparatus for bending glass to a predetermined double curvature in transverse planes comprising a supporting member having marginal portions of greater dimensions than the finished article and of the desired concave curvature longitudinally and transversely, and a member of corresponding double curvature for clamping the marginal portions of a plastic blank to the marginal portions of said support.

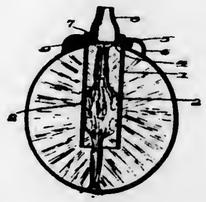
1,889,882. CONTAINER FOR FOOD PRODUCTS. ROBERT M. WOODS, Cleveland, Ohio, assignor to Drake Bakeries Incorporated, Brooklyn, N. Y., a Corporation of New York. Filed Nov. 11, 1931. Serial No. 574,416. 8 Claims. (Cl. 206—46.)

1. A package of the character described formed of a sheet of flexible material arranged to provide a container, and releasable means dividing the container into compartments adapted to hold food products of different nature,



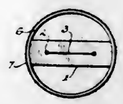
said means upon release being operative to throw said compartments into communication and being arranged about the container and operable from the exterior thereof.

1,889,883. FRUIT JUICE EXTRACTOR. MARIE D. CODY, Frostproof, Fla. Filed Nov. 26, 1928. Serial No. 321,972. 5 Claims. (Cl. 100—49.)



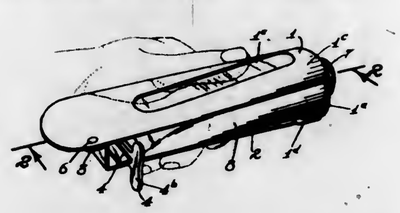
1. A fruit juice extractor including a body portion formed approximately cylindrical in shape and having an open inner end provided with longitudinal indentations in the side walls thereof and terminating at its outer end in a mouth-piece of substantially reduced size and area for the withdrawal of the juice from the fruit by suction action.

1,889,884. HEATER FOR ELECTRON DISCHARGE DEVICES. HENRY L. CROWLEY, East Orange, N. J., assignor to Henry L. Crowley & Company, Inc., West Orange, N. J., a Corporation of New Jersey. Filed Sept. 16, 1930. Serial No. 482,275. 1 Claim. (Cl. 250—27.5.)



A cathode structure comprising a substantially rectangular block of insulating material having its vertical edges of curved form in cross-section, a circular sleeve surrounding said block and contacting with its curved edges leaving a free space on each side of the block bounded by the sleeve, an electron emissive coating on said sleeve, and a heater element passing through said block.

1,889,885. HOLDER FOR COLLAPSIBLE TUBES. ERNEST E. CULLEN, San Diego, Calif. Filed May 25, 1931. Serial No. 539,710. 6 Claims. (Cl. 221—60.)



1. In a holder, a substantially rigid frame comprising a rigid head and a pair of spaced apart relatively long legs extending from one side of the head at the opposite edges thereof, one of said legs being hinged to said head and the other rigid therewith and means for connecting the extended ends of the legs together, the holder being adapted to receive a collapsible tube, having a reduced neck, longitudinally between the legs thereof, said head having a hole for receiving the neck of the tube, one of the legs having a longitudinal slot adapted to receive a finger of the hand to facilitate the extraction of the contents of the tube.

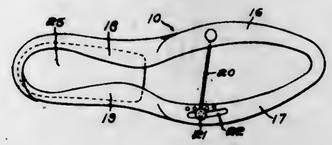
1,889,886. CARBONATING DEVICE. JAMES F. DAWSON, Galveston, Tex., assignor to Triple "XXX" Company, a Corporation of Texas. Filed Apr. 16, 1931. Serial No. 530,706. 7 Claims. (Cl. 261—19.)



5. An improved carbonator of the character described, comprising a chamber having an inlet and an outlet, a plurality of baffle members disposed in said chamber between the inlet and the outlet, alternate ones of said baffles completely partitioning the chamber, said baffles being of circular outline, certain of said baffles having ports therethrough in an annular formation and relatively close to the radial centers of the baffles, the others of said baffles having ports therethrough adjacent their peripheries, means covering each of the ports of each baffle for directing fluid passing through the port in a circular path in the chamber and said means upon certain of the baffles being directed oppositely to those upon the other baffles to effect the continued reversal of flow of liquid passing through the chamber.

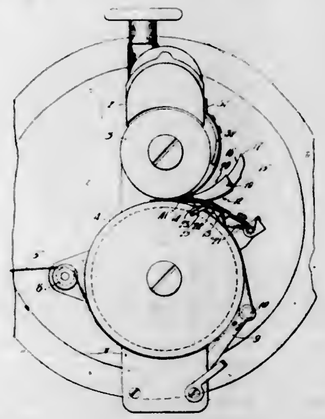
7. A valve structure for a carbonating device, comprising a hollow body having a water inlet and a gas inlet, a movable valve body controlling the water inlet, a needle valve controlling the passage of gas through the gas inlet, said needle valve being normally spring pressed to closed position and having a stem, a pivotally mounted lever having contact with said water inlet valve to be oscillated by the movement of the same in one direction, and connecting means between said lever and said needle valve stem whereby the opening movement of the lever against the said spring means is obtained upon the opening of the water inlet valve.

1,889,887. SHOE FORM. WILLIAM J. DE WITT, Auburn, N. Y., assignor to Shoe Form Co., Inc., Auburn, N. Y., a Corporation of New York. Filed Sept. 21, 1931. Serial No. 564,000. 5 Claims. (Cl. 12—128.5.)



1. A hollow shoe form comprising toe, intermediate and heel portions, the side walls terminating at the sole of the form in flanges, adjustable means for connecting the side wall flanges at the toe portion, and fixed means for connecting the side wall flanges at the intermediate and heel portions.

1,889,888. TAPING MACHINE. HORACE M. EATON, Swampscott, Mass., assignor to Excel Taping Machine Co., Lynn, Mass., a Corporation of Massachusetts. Filed Mar. 7, 1930. Serial No. 434,140. 14 Claims. (Cl. 154—42.)



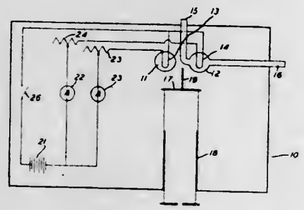
1. In a machine of the class described, a pair of juxtaposed rolls, means for supplying adhesive tape between the rolls, and guide means adjoining the rolls for sheets which are stitched substantially face to face, said guide means including a part yieldably to engage the body portions of the sheets adjoining the seam, and a member providing a surface against which the seam is pressed by said member, whereby the sheets are spread away from the seam and the article is directed between the rolls and into adhesive engagement with the tape.

1,889,889. METHOD OF TESTING OPEN WELLS. GEORGE H. ENNIS, Long Beach, Calif., assignor of one-half to Robert V. Funk, Long Beach, Calif. Filed Feb. 3, 1930. Serial No. 425,521. 9 Claims. (Cl. 175—183.)



1. A method of testing a well to find water leakages, prior to the removal of rotary mud from the well, said method comprising: placing a body of electrolyte in said well between layers of rotary mud; bailing rotary mud from the upper end of the well to allow an ingress of water; and electrochemically testing said electrolyte to determine whether or not it has been diluted.

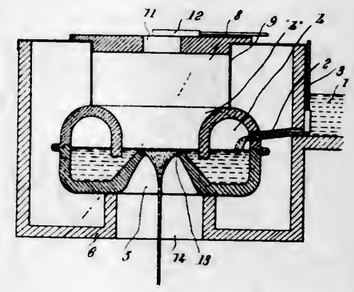
1,889,890. METHOD AND APPARATUS FOR DETECTING THE PRESENCE OF INFLAMMABLE CONSTITUENTS IN GAS MIXTUPES. ALBERT N. ERICKSON, Elmhurst, N. Y., assignor to Union Carbide Company, a Corporation of Virginia. Filed July 8, 1927. Serial No. 204,367. 3 Claims. (Cl. 23—255.)



1. In an apparatus for detecting the presence of combustible gases in an oxygen-containing gas mixture, the combination of a chamber having a transparent portion, means for forcing a sample of the mixture to be tested through said chamber, a filament in said chamber, means for supplying current to said filament, a screen disposed to receive light emitted by said filament, means for projecting light on a screen adjacent that first mentioned and means for varying the intensity of illumination on said last mentioned screen.

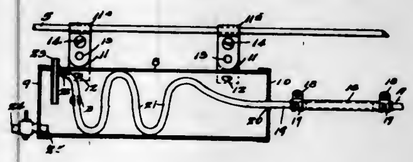
1,889,891. METHOD AND APPARATUS FOR MAKING GLASS TUBING AND RODS. PIERRE ANDRÉ FAVRE, Crosne, France. Filed Mar. 27, 1930, Serial No. 439,446, and in Austria Nov. 6, 1929. 5 Claims. (Cl. 49—17.1.)

1. In a tube making apparatus, a chamber adapted to receive molten glass, said chamber having a peripherally unobstructed orifice formed therein lying in a substantially horizontal plane and above the level of the bottom thereof, a glass furnace adapted to supply glass to said



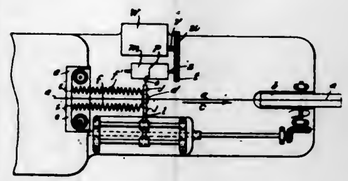
chamber, a conduit extending between said furnace and said chamber, and means for controlling the rate of flow of glass through said conduit.

1,889,892. ALCOHOL CONDENSER FOR USE WITH INTERNAL COMBUSTION ENGINES. LOUIS B. GOETZMAN, East St. Louis, Ill., assignor of one-half to John H. Rightmyer, East St. Louis, Ill. Filed Jan. 18, 1932. Serial No. 587,326. 1 Claim. (Cl. 257—25.)



The combination in a condensing apparatus for use with the overflow pipe of an automobile radiator, of an expansion tank having a vent and clamping means on the tank for attachment to a support, a condensing coil having an open end in the upper portion of the tank and means for rigidly securing the coil to the tank, an exterior integral nipple on the coil, an outlet valve mounted in one end of the tank, a flexible tubular connection and means for clamping said connection on the nipple, and means on the tubular connection for clamping said connection to the overflow pipe.

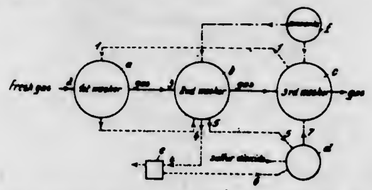
1,889,893. GAUGE-RECORDING DEVICE FOR WIRE-DRAWING MACHINES. JEAN GUERNÉ, Rouen, France. Filed Mar. 13, 1931, Serial No. 522,463, and in France Mar. 20, 1930. 3 Claims. (Cl. 265—2.)



1. In combination with a wire-drawing machine having a movable die holder and a die carried thereby, a device for automatically recording any minute inequality in the gauge, diameter, roundness or hardness of the wire submitted to the drawing operation and comprising stretchable spring means connecting the die holder to a

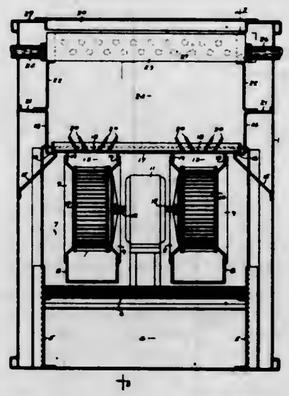
stationary part of the machine, said spring means being so arranged as to undergo elongation by the drawing of the wire and being highly responsive and sensitive to the varying resistance offered by the die to the passing of the wire therethrough, a recording element directly associated with the die holder, and a member having a recording surface associated with the recording element, said member being movable uniformly throughout the drawing operation, and means for effecting such movement.

1,889,894. RECOVERING HYDROGEN SULPHIDE FROM GAS MIXTURES. CHRISTIAN JOHANNES HANSEN, Essen-Ruhr, Germany, assignor, by mesne assignments, to The Koppers Company of Delaware, Pittsburgh, Pa., a Corporation of Delaware. Filed Aug. 2, 1929, Serial No. 383,113, and in Germany Jan. 10, 1929. 12 Claims. (Cl. 23—225.)



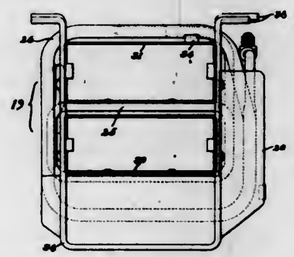
1. The method of recovering sulphur and ammonium compounds from gas mixtures containing hydrogen sulphide and ammonia comprising treating said gas in not less than three consecutive steps with a washing liquor containing a thionate of a metal susceptible of forming sulphides insoluble in water, but soluble in the presence of sulphur dioxide, providing in a medium washing step only for that quantity of ammonia which is required in the conversion of the dissolved metal compounds into sulphides and withdrawing the spent washing liquor from said medium step.

1,889,895. CROSS FLOW RADIATOR. PERCIVAL P. HENSHALL, Columbus, Ohio, assignor to The Buckeye Blower Company, Columbus, Ohio, a Corporation of Ohio. Filed June 1, 1931. Serial No. 541,166. 14 Claims. (Cl. 257—137.)



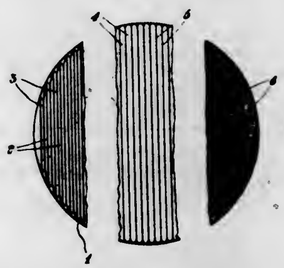
2. In a ventilating apparatus, a casing having an inlet chamber, an expansion chamber, an outlet adjacent the expansion chamber and a partition having a passageway therein between the inlet chamber and the expansion chamber, means to cause a current of air through the casing from the inlet chamber through the expansion chamber and out at the outlet, a plurality of oppositely inclined deflectors across the passageway to disperse the air as it passes through the passageway whereby it more readily and evenly expands in the expansion chamber, and means adjacent the outlet to heat the expanding air, said heating means including a plurality of closely arranged narrow fins arranged across the lines of dispersion of the air.

1,889,896. REFRIGERATING APPARATUS. HARRY B. HULL and DONALD H. REEVES, Dayton, Ohio, assignors to Frigidaire Corporation, Dayton, Ohio, a Corporation of Delaware. Filed Feb. 27, 1928. Serial No. 257,227. 6 Claims. (Cl. 62—126.)



2. A refrigerating element for refrigerating apparatus adapted to be placed in the path of circulating air for cooling the air and for freezing ice, comprising in combination a refrigerant conduit, a pair of freezing sleeves disposed in vertical alignment, the outer side of the bottom of each sleeve being directly secured in intimate thermal contact with said conduit, and an open refrigerant conduit surrounding the first mentioned conduit and both sleeves to chill air circulating over said element to prevent absorption of heat by said air from the sleeves.

1,889,897. SURFACE PLATE. CARL EDVARD JOHANSSON, Detroit, Mich. Filed Dec. 18, 1930, Serial No. 503,284, and in Sweden July 2, 1930. 7 Claims. (Cl. 33—174.)



1. A surface plate having its test surface defined by a plurality of sharp projections disposed in the same plane.

1,889 898. PYROPHORIC LIGHTER. HEINRICH KELLERMANN, Berlin-Lichtenberg, Germany. Filed Aug. 7, 1930, Serial No. 473,625, and in Germany Sept. 2, 1929. 9 Claims. (Cl. 67—7.1.)

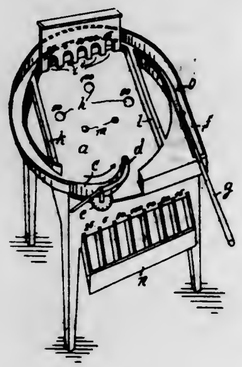
2. A pyrophoric lighter comprising a wick-tube, a wheel file, a snuffing member, a common axis for said wheel file and snuffing member, said snuffing member being coupled with said wheel file, a pressure-lever, a link hingedly connecting said snuffing member to said pressure lever, said link engaging said snuffing member at a point situated between two vertical transverse parallel planes when the snuffing member is in the closed position, one of which planes passes through the pivot axle of said snuffing member and the other of said planes

passing through the wick-tube, a spring acting upon said link, said spring engaging a rearward extension of said link in such an angular position, that said snuffing



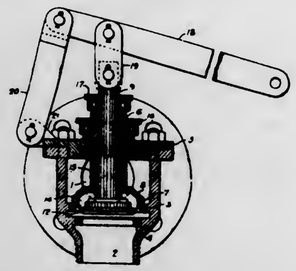
member is thereby forced into the closing position, as long as the pivot point of said link has not reached the dead-point position.

1,889,899. BILLIARD TABLE. MAX LANGENHAUN, Arnstadt in Thuringia, Germany. Filed Oct. 25, 1929, Serial No. 402,386, and in Germany Jan. 14, 1929. 3 Claims. (Cl. 273—124.)



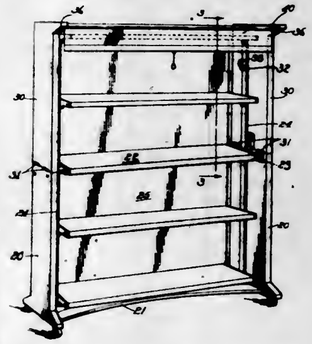
2. In the game of billiards, a billiard table provided with a gutter having the shape of a circle and surrounding the playing field of said table, a circular wall around said gutter, and a spring forming a continuation of said circular wall.

1,889,900. VALVE. JOSEPH ALLAN LENTZ, Baltimore, Md. Filed Jan. 11, 1930. Serial No. 420,244. 8 Claims. (Cl. 277—26.)



1. In a valve, a fluid passage therethrough, a cut-off valve extending across said passage adjacent the inlet thereof adapted to be closed by the flow of fluid therethrough, a sealing valve extending across said passage adjacent the outlet thereof, unitary means to open first said sealing valve, then said cut-off valve.

1,889,901. INTERCONVERTIBLE DINING TABLE AND SHELF CUPBOARD. MABEL MILLARD, Oak Park, Ill. Filed Nov. 6, 1931. Serial No. 573,394. 4 Claims. (Cl. 312—2.)



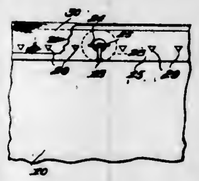
1. In combination with an interconvertible table and shelf structure of the type having a shelf system connected by means of the nature of parallel bars for maintaining the shelf members parallel, and a support having end standards of normal table height between which the shelf system is mounted for swinging from table position to shelf position, means for closing the shelf space at shelf position above the height of the end standards, consisting of substantial duplicates of the end standards hinged at their upper ends to the corresponding ends of said standards respectively at the outer sides of the latter and adapted to be swung upwardly into alignment with the standards respectively, and means for releasably locking them at such upwardly aligned position.

1,889,902. PROCESS OF FINISHING KNITTED PILE FABRICS. DAVID PELTON MOORE, Avon Park, Fla. Filed Feb. 19, 1931. Serial No. 517,042. 6 Claims. (Cl. 26—2.)



1. A process for finishing a knitted pile fabric, which includes the subjecting of the pile fabric non-pile side down while in a stretched condition and in transit, to a moistening only of the non-pile side, drying the fabric from the non-pile side thereof, and forcing an air blast from below through the fabric.

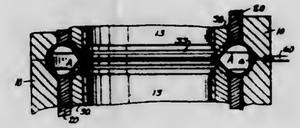
1,889,903. EDGING FOR TRIM PANELS. BION C. PLACE, Detroit, Mich., assignor of one-half to George E. Gagnier, Detroit, Mich. Filed Jan. 23, 1929. Serial No. 334,548. 7 Claims. (Cl. 45—138.)



1. A finish panel comprising a body of fibrous or similar material, a metal binder for the edges of said panel, said binder being provided with a portion overlying the back of said panel and having a plurality of openings designed to receive and hold separable headed fasteners inserted in said portion in assembled relation thereto with the heads of said fasteners disposed against the face of said portion that is immediately adjacent the rear of said panel, and openings in said body and opposite said first named openings to receive the heads of said fasteners so that said face of the binder may contact with the rear of said panel and so that the thickness of the head of fastener occupies the space provided by the opening made in the panel.

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1,889,904. METHOD OF MAKING INNER TUBES AND AIR BAGS. FRED THOMAS ROBERTS, Malone, N. Y. Filed Jan. 18, 1930. Serial No. 421,643. 15 Claims. (Cl. 154—14.)



1. The method of manufacturing articles of plastic material comprising placing a sheet of stock over a cavity and pneumatically forcing a region of such stock into the cavity while causing the cavity to change its shape until opposed regions of the stock are thereby brought into contact with each other under pressure sufficient to form a seam.

1,889,905. CORE OR MOLD BINDER, COATING OR PASTE. CHARLES MARSHALL SAEGER, Jr., Bowmanstown, Pa. Filed Feb. 17, 1930. Serial No. 429,225. 16 Claims. (Cl. 22—188.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)

1. A core binder, coating, or paste containing rubber and a polymerized vinyl derivative and adapted to be applied to a mold and subjected to decomposition by the heat of the metal to be cast in such mold or core.

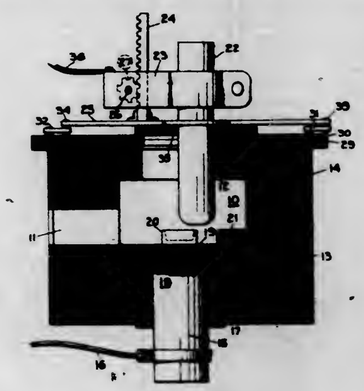
1,889,906. STEERING GEAR FOR TRACTORS. WILLIAM W. SWAN, Frankfort, S. Dak. Filed Nov. 17, 1927. Serial No. 233,849. 5 Claims. (Cl. 97—49.)



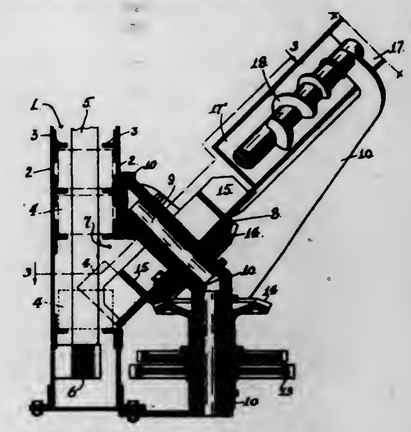
1. The combination with a tractor having the usual steering mechanism including front steering wheels having hubs, a furrow engaging guide bar mounted on one of said hubs, means for yieldably holding said guide bar engaged with the side wall of the furrow, means for limiting the movement of said bar to prevent its dropping below a predetermined point, and a connection between said bar and steering mechanism whereby the tractor wheels may be located either in or to one side of the furrow.

1,889,907. ELECTRIC ARC FURNACE. JOSEPH T. TERRY, Glendale, Calif. Filed June 10, 1931. Serial No. 543,345. 12 Claims. (Cl. 13—9.)

1. An electric furnace comprising means providing an arc chamber, vertically spaced electrodes in the chamber, a work container or crucible in electrical contact with the lower electrode, the upper electrode being horizontally movable, and means for preventing the upper electrode from assuming a position co-axial with the crucible.



1,889,908. CAN FEEDER FOR VERTICAL COOLERS. ALBERT R. THOMPSON, San Jose, Calif., assignor to Anderson-Barngrover Mfg. Co., San Jose, Calif., a Corporation of California. Filed Jan. 15, 1930. Serial No. 420,970. 5 Claims. (Cl. 198—22.)

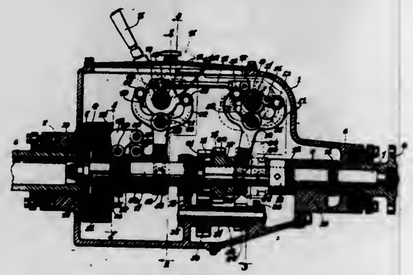


1. In apparatus of the class described, a can-way adapted for the rolling progression of cans; a reel of spaced bars adapted to advance the cans along said can-way; a turret associated therewith adapted for rotation in a plane inclined to the reel bars, and adapted to present the rounding surfaces of the cans to said bars at an angle thereto, said turret being adapted to control and advance the outer end of the can during the positioning of said cans.

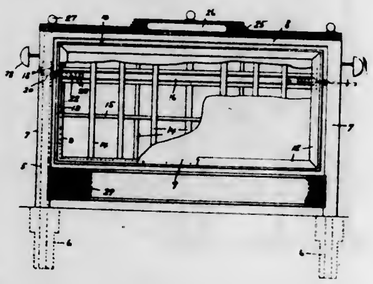
1,889,909. REVERSE GEAR AND CLUTCH OPERATING MECHANISM. ROY M. UPTON, Miami, Fla. Filed Aug. 23, 1930. Serial No. 477,408. 4 Claims. (Cl. 74—39.)

1. In a mechanism for operating a clutch and a reverse gearing, a pivotally mounted shifting element for the clutch and including an upper and a lower yoke disposed at right angles to each other, a pivotally mounted shifting element for the reverse gearing and including an upper and a lower yoke disposed at right angles to each other, a

rotatably mounted cam operating in and coacting with the upper yoke of and for controlling the shifting element for the clutch, a rotatably mounted cam operating in and coacting with the upper yoke of and for controlling the shifting element for the reverse gearing, means for oscillating said cams in unison, a lobe on the cam for controlling the reverse gearing shifting element to shift the latter in one direction when the cams are at their limits of movement in one direction, a lobe on the cam for controlling the reverse gearing shifting element to shift the latter in the opposite direction when the cams are at their limits of movement in the opposite direction, a pair of lobes on the cam for controlling the clutch shifting element to shift the latter in one direction when said cams are at their limits of movement in either direction, and a lobe on the cam for controlling the clutch shifting element to shift the latter in the opposite direction when said cams are intermediate their limits of movement.



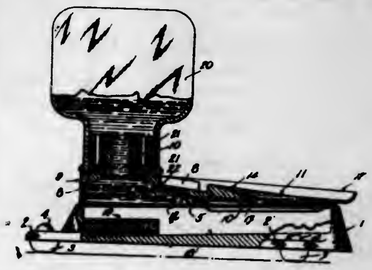
1,889,910. SIGN BOARD. LEO A. WEAMER, Altoona, Pa. Filed Aug. 19, 1931. Serial No. 558,121. 3 Claims. (Cl. 40—125.)



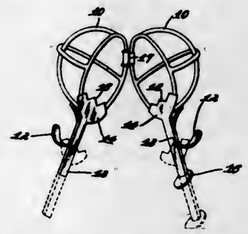
1. In a device of the character described, a pair of vertical casings, a standard arranged in each of said casings, a frame, a pair of spaced plates mounted in the frame, an I-beam extending between said plates and pivot rods secured to said I-beam and journalled in said standards.

1,889,911. MOISTENING DEVICE. FREDERICK W. STOECK, Somerville, Mass., assignor to Standard Mailing Machines Company, Everett, Mass., a Corporation of Massachusetts. Filed Oct. 24, 1929. Serial No. 402,176. 3 Claims. (Cl. 91—43.)

1. In a device of the character specified, the combination of a water container air locked at the top, and a discharge spout attached to said container substantially below the water level thereof, said spout being provided with a narrow elongated discharge slot and a larger passage connecting said slot with said water container, and entering it at a position remote from its extremities, said larger passage comprising a plurality of sections, each section being substantially and abruptly diminished in cross section as compared with the adjacent section located toward the water container end of said passage.

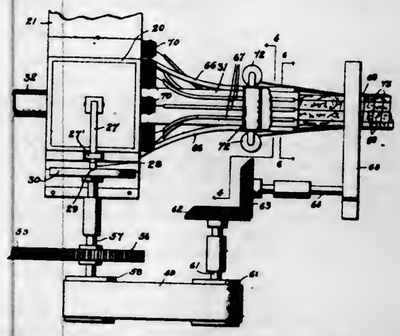


1,889,912. EGG OPENER. ANDRÉS PORTUONDO BARCELO, Santiago, Cuba. Filed Sept. 17, 1930, Serial No. 482,575, and in Cuba May 7, 1930. 2 Claims. (Cl. 146—2.)



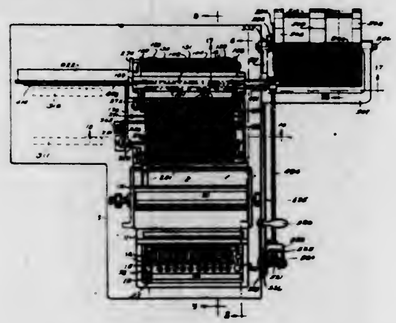
1. In an egg opener, a pair of cup-shaped hingedly connected frames, an arm extending radially from each of said frames, a sleeve slidable longitudinally upon each arm, a shell penetrating element carried by each sleeve and adapted to be projected over the edges of the cup-shaped frames when the sleeves are moved inward, a thumb piece carried by one of the sleeves and engageable with the other sleeve to simultaneously move said sleeves inward, and finger pieces rigid with the frames and arms.

1,889,913. APPARATUS FOR MAKING STUFFED BARS. HERBERT L. BIRUM, Sr., and HERBERT L. BIRUM, Jr., Trenton, N. J. Filed Apr. 9, 1930. Serial No. 442,970. 28 Claims. (Cl. 154—1.)



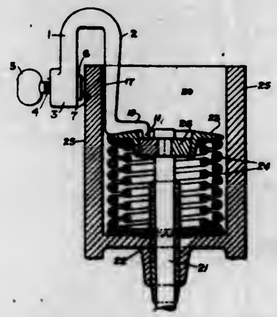
1. An apparatus for producing a stuffed bar comprising a former, means to extrude material from the former, and means to apply a winding to the progressing bar.

1,889,914. TYPESETTING MACHINE. CLIFTON CHISHOLM, Cleveland, Ohio, assignor, by mesne assignments, to Multigraph Company, Wilmington, Del., a Corporation of Delaware. Filed Jan. 22, 1929. Serial No. 334,200. 71 Claims. (Cl. 276—3.)



1. The combination of a typewriter having a keyboard, a character type and a paper support, of a type case adapted to contain type, a line holder adapted to receive type being assembled in a line, of power-driven mechanically released mechanism cooperating with the typewriter, the type case and the line holder for enabling the same keys of the typewriter to print on paper and discharge type from the type case and assemble it into a line.

1,889,915. VALVE SPRING RETAINING DEVICE. CLARENCE H. COLE, U. S. Navy. Filed Jan. 31, 1931. Serial No. 512,643. 1 Claim. (Cl. 29—87.1.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)



In a valve spring retaining tool, a clamp tensioning means on one leg of said clamp, said tensioning means comprising a threaded screw member having a winged operating member on its outer end, and a cushioned head on its inner end; and another leg having an offset work engaging finger at its extreme lower end and extending outwardly, said other leg having a boss on its inner side in alignment with the cushioned head of said one leg.

1,889,916. METHOD OF MAKING COMPOSITE VALVES. ARCHIE T. COLWELL, Cleveland, Ohio, assignor to Thompson Products, Incorporated, Cleveland, Ohio, a Corporation of Ohio. Filed May 20, 1931. Serial No. 538,787. 4 Claims. (Cl. 29—156.7.)

3. The method of making a metal cooled valve which comprises forging a metal blank containing an insert of a metal of relatively high rate of heat conductivity to provide a partially finished valve having a core of said insert metal extending through the head thereof, removing a portion of said core, filling the recess thus formed with molten metal of the same composition as that of the blank and reforging the blank to form a finished valve.

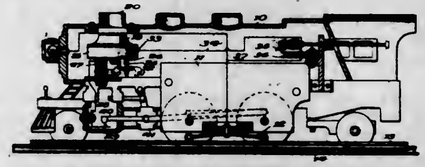


1,889,917. REFRIGERATING SYSTEM. GEORGE HILGER, Chicago, Ill. Filed Nov. 16, 1929. Serial No. 407,583. 13 Claims. (Cl. 62—126.)



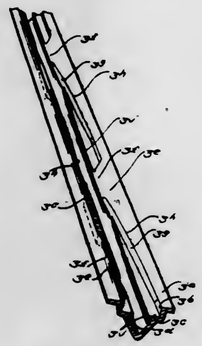
1. A refrigerating system comprising, in combination, a unit having a space adapted to contain separated liquid and vapor phases of the refrigerant, an inlet line for supplying refrigerant under pressure to said space, an oil drain opening from the bottom of said space, and an outlet line having its inlet disposed at the predetermined normal level of the liquid for discharging vapor or vapor and entrained liquid from said space to a pressure lower than the inlet pressure.

1,889,918. SOUND ATTACHMENT FOR TOY LOCOMOTIVES. HARRY R. HOWSER, Jr., Washington, D. C., assignor to The Lionel Corporation, New York, N. Y., a Corporation of New York. Filed May 23, 1932. Serial No. 613,084. 12 Claims. (Cl. 46—47.)



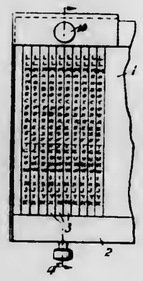
1. The combination with a toy steam type locomotive, of electrically operated sound producing means simulating exhaust of steam from the cylinders of a locomotive in motion, an operating circuit therefor, and means for intermittently closing said circuit in timed relation to the speed of the locomotive.

1,889,919. **FISH DORSAL FIN CENTERING MEANS.** WILLIAM H. HUNT, National City, Calif. Filed Nov. 17, 1930. Serial No. 496,210. 14 Claims. (Cl. 17—2.)



1. The combination with a fish body positioning means and fish conveyor apparatus, of a fish fin centering means, including a trough, and angularly disposed deflectors arranged along the margins of said trough for guiding fish fins riding along said margins into said trough.

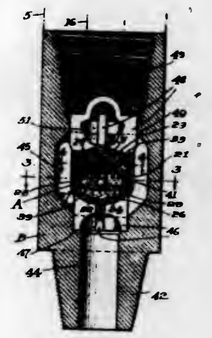
1,889,920. **CARD INTERPRETER.** THOMAS E. HURNS and ARTHUR Y. LESLIE, Detroit, Mich., assignors to Remington Rand Inc., Buffalo, N. Y. Filed Nov. 22, 1930. Serial No. 497,585. 5 Claims. (Cl. 35—9.)



1. In a device of the class described for use with a card having reading perforations and key perforations, a series of longitudinally movable character bars adapted to show characters through the reading perforations of such card and by their position to select the characters so exposed, and means operable through the key perforations of said card for determining the selective movement of said bars.

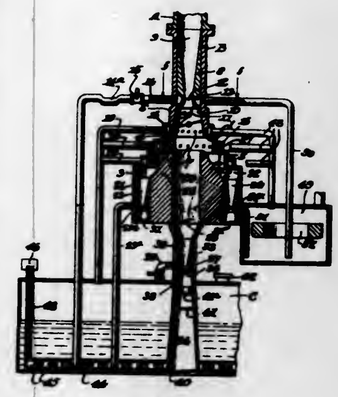
1,889,921. **APPARATUS FOR MEASURING DEVIATION OF ROTARY DRILLS FROM THE VERTICAL.** JOHN J. JAKOSKY, Los Angeles, Calif., assignor to Drill Guide Incorporated, Los Angeles, Calif., a Corporation of Nevada. Filed May 28, 1930. Serial No. 456,438. 9 Claims. (Cl. 234—1.)

1. An apparatus for measuring deviation of rotary drills from the vertical, comprising a record blank, means for mounting said record blank in a rotary drill stem in fixed relative position with respect to said drill stem, a gravity responsive member engaging the surface of said record blank and movable to different positions thereon dependent upon the angular deviation of the axis of the drill stem from the vertical, said gravity responsive member being



adapted to produce a record on the surface of said record blank due to engagement therewith during successive rotative movements of said drill stem.

1,889,922. **FUELING SYSTEM.** CLARENCE I. JUSTHEIM, Salt Lake City, Utah. Filed Aug. 20, 1930. Serial No. 476,619. 13 Claims. (Cl. 261—72.)

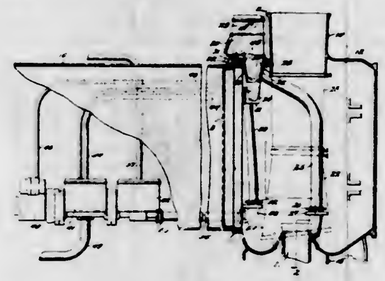


1. In a fueling system for engines the combination of a Venturi tube formed of an inverted frustum of a cone formed integral and tangential to a curved surface and having the extended side walls tapered outwardly from the curve; step cuts formed adjacent the tapered walls; Venturi tubes leading into a chamber below the step cuts; ports from annular chambers into the side walls of the step cuts; ports into the Venturi tube at its tangential juncture; an annular chamber around said Venturi tube in open connection with said ports; a lead line connecting said annular chamber in said Venturi tube with a source of fluid supply; lead lines connecting the annular chambers around the step cuts with a source of fluid supply; a tapered walled member through the fuel supply tank; a Venturi tube on the upper end of said member; a pipe connecting the central opening of the chamber below the step cuts with the Venturi tube at said tank; a lead line connecting said Venturi tube with the upper vapors on top of said tank; and means in said tank to vaporize the fuels therein by aeration.

1,889,923. **RESINOUS CONDENSATION PRODUCT.** ROY H. KIENLE, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed July 27, 1928, Serial No. 295,847. Renewed Nov. 4, 1930. 7 Claims. (Cl. 260—8.)

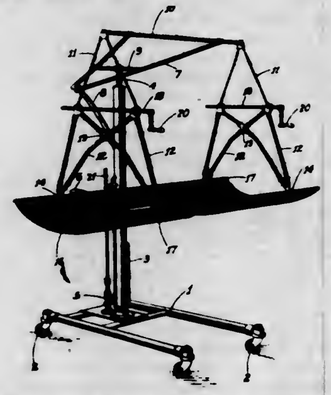
1. The method of producing a varnish composition which consists in first forming a mono-glyceride of an oxidizable, unsaturated, fatty acid, then causing said mono-glyceride to be blended with a drying oil, and thereupon adding polybasic organic acid to combine with free hydroxy groups of the mono-glyceride.

1,889,924. **LOCOMOTIVE EXHAUST PIPING AND FEED WATER HEATER.** WILLIAM F. KIESEL, Jr., Altoona, Pa. Filed Dec. 30, 1927. Serial No. 243,725. 1 Claim. (Cl. 122—425.)



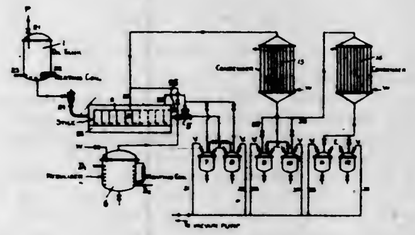
In a locomotive in combination, a boiler, a smoke-box at the front thereof, a stack extending inside and outside of said smoke-box, cylinders and valves adjacent said smoke-box, exhaust steam outlets from said valves, a feed water heater mounted on top of said smoke-box and having a portion projecting above the smoke-box wall and a portion extending through the wall of the smoke-box toward said outlets, all of said feed water heater being behind the stack, conduits connecting said outlets directly to said heater and entirely in said smoke-box, a hot water outlet pipe extending from said heater to the bottom of said smoke-box, a continuation of said pipe extending through the rear wall of said smoke-box and alongside the outside of the boiler, and a cold water feed pipe connected to the portion of the heater which is above the smoke-box wall.

1,889,925. **INVALID CONVEYER.** LILLIE LEININGER, Modesto, Calif. Filed Jan. 8, 1932. Serial No. 585,522. 6 Claims. (Cl. 5—89.)



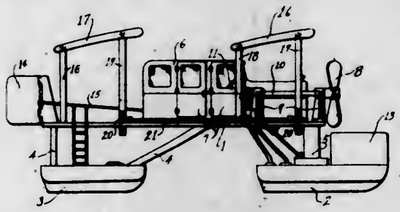
1. An invalid conveyer comprising a flexible patient supporting sheet, means to suspendingly support said sheet from the sides at spaced points in the length thereof, said means including pairs of vertical frames extending transversely of the sheet, the frames of each pair being pivoted together, means on the lower ends of the frames engaging the sheet, and means applied to cooperating frames to alter the distance between the sheet engaging ends of the same.

1,889,926. **RECOVERY OF OILS OF HIGH BOILING POINT.** MARTIN LUTHER, Mannheim, and MARTIN MÜLLER-CUNRADI, Ludwigshafen-on-the-Rhine, Germany, assignors, by mesne assignments, to Standard-I. G. Company, Linden, N. J., a Corporation of Delaware. Filed Mar. 21, 1928, Serial No. 263,592, and in Germany Mar. 25, 1927. 6 Claims. (Cl. 196—77.)



1. A process for the recovery of oils of high boiling point from hydrocarbon residues resulting from the destructive hydrogenation of distillable carbonaceous materials which comprises introducing at a pressure less than atmospheric pressure vapors carrying finely distributed particles of liquids of low boiling point into a residue of the said nature and which is heated to a temperature above 300° C. but below the cracking temperature of the oils contained in the said residue.

1,889,927. **BOAT.** DANIEL W. MACCALLUM, Caseyville, Ill. Filed Jan. 21, 1931. Serial No. 510,151. 3 Claims. (Cl. 114—66.5.)

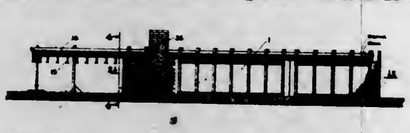


1. A water-craft comprising a base; a plurality of supporting wings mounted thereabove; a motor-vehicle superimposed upon said base and having a power plant therein; an air propeller at the forward end of the base and driven by said power plant for propelling said craft; means for adjustably tilting said wings; boats mounted below said base for supporting the structure thereabove upon the water; means driven by said power plant to adjustably control the simultaneous tilting of said wings; and means for steering said craft from within the motor-vehicle.

1,889,928. **FURNACE.** LEO W. MANION, Canton, Ohio, assignor, by mesne assignments, to Ferro Enamel Corporation, Cleveland, Ohio, a Corporation of Ohio. Filed May 20, 1929. Serial No. 364,477. 7 Claims. (Cl. 25—142.)

1. The combination with a U-type furnace of a continuous conveyor for carrying articles through said furnace comprising a guide rail located outside of the furnace, a plurality of hangers spaced upon said rail, a

chain interconnecting said hangers, supporting members pivotally mounted upon said hangers, said furnace having a roof provided with a continuous U-shaped opening for receiving said supporting members, and means for preventing the escape of heat through said continuous open-

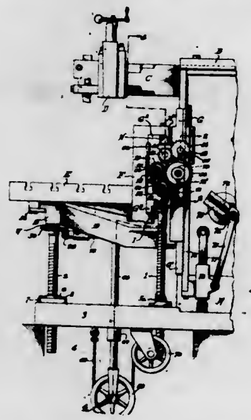


ing, said last named means comprising overlapping plates engaged by said supporting members and slidable along the furnace roof, said plates being solely supported by said roof while over the furnace and by said supporting members when away from the furnace.

1,889,929. PROCESS OF PURIFYING PHOSPHORIC ACID. GEORGE F. MOORE, Tampa, Fla., assignor to U. S. Phosphoric Products Corporation, New York, N. Y., a Corporation of Delaware. Filed Sept. 25, 1930. Serial No. 484,472. 5 Claims. (Cl. 23—165.)

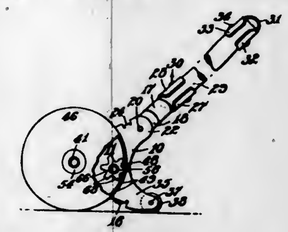
1. A process of refining phosphoric acid, which comprises neutralizing crude phosphoric acid with an alkali thereby forming a solution of di-alkali phosphate, separating the solution of di-alkali phosphate from the insoluble residues and precipitates, treating the solution of di-alkali phosphate with pure gypsum to precipitate pure di-calcium phosphate, separating the said di-calcium phosphate from the remaining solution, subjecting the di-calcium phosphate thus obtained to the action of pure concentrated sulphuric acid to convert the phosphate to pure ortho-phosphoric acid, separating the solution of phosphoric acid so obtained from the precipitated gypsum, and recycling said gypsum to the step of the operation wherein di-alkali phosphate is reacted with gypsum to form di-calcium phosphate.

1,889,930. DRAW-CUT SHAPER TABLE. HENRY E. MORTON, Muskegon Heights, Mich. Filed Jan. 25, 1928. Serial No. 249,282. 2 Claims. (Cl. 90—58.)



1. In a metal working machine having a pedestal provided with vertical guides and a power shaft, the combination of a horizontally disposed rail guided for vertical adjustment by said guides on said pedestal, an apron mounted on said rail for vertical adjustment therewith and for horizontal adjustment relative thereto, a table of extended upper surface area secured along one edge to said apron, a supporting frame rigid at its inner end with the lower end of said rail and extending outwardly beneath said table, said table being operatively connected with said frame at the outer end thereof for horizontal adjustment with said apron relative to said frame and rail, vertically adjustable screw shafts beneath said rail and frame for supporting the load of said rail, apron and table and for adjusting the same vertically, parallel shafts mounted in bearings on said rail and extending longitudinally thereof, one of said shafts being screwthreaded, a nut on said apron engaging said screw shaft on said rail, means for transmitting motion from the other of said shafts on said rail to turn said vertically adjustable screw shafts, means for transmitting motion from said power shaft on said pedestal to said parallel shafts on said rail, and means for connecting said last named motion transmitting means to either of said parallel shafts.

1,889,931. LAWN MOWER. NEWELL H. MOTSINGER, Marion, Ind. Filed Feb. 24, 1931. Serial No. 517,684. 8 Claims. (Cl. 56—249.)



1. In a lawn mower, a frame, a rod mounted transversely in said frame, a pair of cup-shaped stamped-metal wheels mounted at opposite ends of said rod for rotation with respect to said frame, the bases of said cup-shaped wheels facing outwardly, and the annular flanges of said wheels being castellated, a shaft mounted in said frame and paralleling said rod, a blade carried by said shaft, and a gear carried on said shaft and meshing with the castellations of one of said wheels.

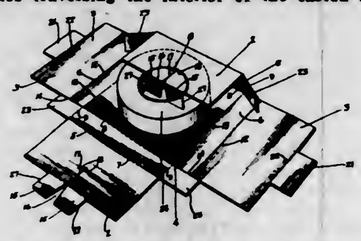
1,889,932. RECOVERY OF OILS FROM INDUSTRIAL RESIDUES. EMMERICH v. PONGRATZ, Oppau, and HERMANN ZORN, Mannheim, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed Feb. 14, 1929, Serial No. 340,010, and in Germany Apr. 23, 1928. 6 Claims. (Cl. 196—79.)

1. A process for the recovery of oils from oil-bearing residues which are substantially free from low boiling hydrocarbons and which are obtained from a previous treatment of hydrocarbons with a metal halide, which comprises subjecting the said residues containing said metal halide to dry distillation with an addition of a substance having a basic action.

1,889,933. CARTON. HENRY T. PRATT, Minneapolis, Minn., assignor to The B. F. Nelson Manufacturing Company, Minneapolis, Minn., a Corporation of Minnesota. Filed May 13, 1929. Serial No. 362,701. 7 Claims. (Cl. 206—52.)

1. A carton blank comprising a portion adapted to form the bottom wall of the carton, side wall portions attached to said bottom wall portion and adapted to be bent upwardly to form the side walls of the carton, a flap on each side wall portion adapted to be folded inwardly over the bottom and cooperating to provide a closure for the carton, tabs centrally located on oppositely disposed flaps adapted to be bent downwardly and traversing the interior of the carton, each of said tabs having a slit therein, extending through the tabs and into their supporting flaps, and tabs on the other flaps adapted to be

inserted through said slits and be retained therein by frictional engagement with the walls of the slits, all of said tabs traversing the interior of the carton and co-



operating to provide a central support for an article within the carton, whereby the article may be spaced from the side walls of the carton.

1,889,934. PURIFICATION OF NITROGEN-HYDROGEN MIXTURES FOR AMMONIA SYNTHESIS. RALPH S. RICHARDSON, Teaneck, N. J. Filed Aug. 16, 1929. Serial No. 386,500. 3 Claims. (Cl. 23—7.)

1. In the purification of nitrogen-hydrogen mixtures for ammonia synthesis, the steps which comprise washing the gas mixture with liquid nitrogen under pressure, converting the oxygen in the washed gases to water vapor with the aid of a catalyst, maintaining substantially the same pressure on the gases during the washing and catalytic conversion steps, removing the water vapor from the gases, passing the gases to an ammonia synthesis such synthesis being conducted at a pressure greater than that of the washing step.

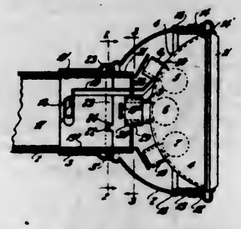
1,889,935. PLASTER BLOCK MACHINE. GEORGE H. A. RUBY, Linden, N. J. Filed Jan. 6, 1930. Serial No. 418,792. 10 Claims. (Cl. 154—1.)



1. In a machine of the class described, a horizontally located endless conveyor mounted for movement to carry its upper run in one direction, means for driving said conveyor, a pair of endless belts located in substantially parallel and spaced apart relation above said conveyor and having inner sides located in vertical planes, the lower edges of the inner sides of said belts contacting with the upper side of said conveyor, and means for adjusting said belts to different distances apart above the conveyor whereby cementitious material may be delivered adjacent the front end of said conveyor between said belts and held by said belts until set, said cementitious material being carried to the rear by the movement of the conveyor for the purposes described.

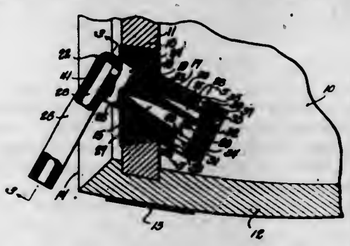
1,889,936. ELECTRIC FLASH LIGHT. JAMES L. SHANNON, Longmeadow, Mass., assignor, by mesne assignments, to French Battery Company, Madison, Wis., a Corporation of Wisconsin. Filed Mar. 11, 1930. Serial No. 434,942. 4 Claims. (Cl. 240—10.66.)

1. In a flashlight construction, in combination with a battery enclosing casing, a cap for the casing, a cage member connected to the casing and having co-operating means between the casing and cage member to prevent rotation of the cage member, after insertion, a reflector, lamp sockets thereon, a square part on the central lamp socket of the reflector engaging a square central opening in the cage member for preventing annular movement of the reflector relative to the cage member, contact strips for the lamps, the construction and arrangement being such that when the reflector is inserted in the cap, it is accurately posi-



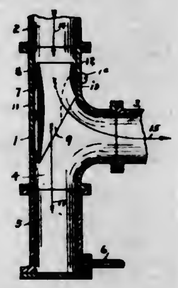
tioned to bring the lamp terminals in contact with the circuit strips, means for attaching the reflector to the cap, and sleeve means for insulating the cap from the reflector.

1,889,937. SPIGOT. BYRON SPENCE, Wauwatosa, Wis., assignor to Chr. Hansen's Laboratory, Inc., Little Falls, N. Y., a Corporation of New York. Filed May 18, 1931. Serial No. 538,225. 4 Claims. (Cl. 225—5.)



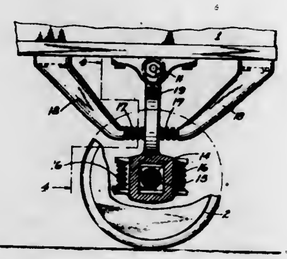
1. In a device of the character described, the combination of a casing for mounting in the head of a container, an angled pouring member having a shank portion mounted to rotate in said ceiling and an enclosed spout portion and having a dispensing passage, an air inlet passage and a vent for said air inlet passage, said pouring member having ports at the inner ends of said dispensing passage and said air inlet passage, said casing having ports adapted to cooperate with said first named ports when said pouring member is in dispensing position, means forming a seal about the ported portion of said pouring member, and means for retaining said shank portion against removal from said casing.

1,889,938. STEAM SEPARATOR. CARL C. THOMAS, Pasadena, Calif. Filed Dec. 1, 1931. Serial No. 578,291. 6 Claims. (Cl. 183—105.)



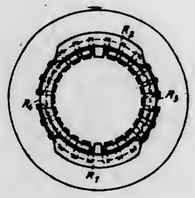
1. A steam separator comprising, a steam conduit, a reducing means within said conduit, said reducing means having an angular opening and a by-pass between said means and the wall of said conduit.

1,889,939. TRAILER. DAVID R. THOMAS, Cleveland, Ohio. Filed June 15, 1929. Serial No. 371,195. 10 Claims. (Cl. 280—80.)



1. A vehicle having a body and a wheel, the combination of an axle carried by the wheel, a depending strut resiliently engaging said axle and pivotally connected to said body and resilient means engaging said strut for limiting its movement relative to said body.

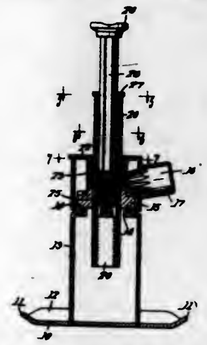
1,889,940. WINDING FOR ELECTRICAL MACHINES. GEORG ZIEGLER, Nuremberg, Germany, assignor to Siemens-Schuckertwerke Aktiengesellschaft, Berlin-Siemensstadt, Germany, a Corporation of Germany. Filed Feb. 20, 1930, Serial No. 431,034, and in Germany Feb. 16, 1929. 5 Claims. (Cl. 171—206.)



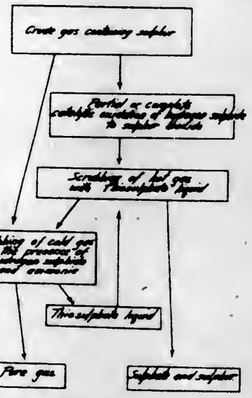
1. In electric machines or the like, an armature member having slots distributed over its face, a multi-layer winding composed of a plurality of coils of suitable pitch carried in said slots, the said coils being divided into groups, each group forming a grate, said grates being disposed closely adjacent to one another, the several coils of each grate being displaced in relation to one another along the armature face and overlapping one another and having both sides located at the same depth in their respective slots.

1,889,941. JACK. JOHN A. ADELL, Orange, Mass. Filed Nov. 24, 1930. Serial No. 497,718. 3 Claims. (Cl. 254—102.)

1. In a jack, the combination with a casing having a horizontal wall therein, a gear resting on said wall, said casing having a cap fixed thereto and provided with an integral nut extending downwardly therefrom and screw-threaded inside, a vertical lifting member formed of a sheet of pressed metal in a non-circular shape with a screw-thread thereon meshing with the threads in said nut, the gear having an opening therethrough of the same shape as said lifting member whereby the lifting member will rotate with the gear, said lifting member having a thread on the interior thereof, a non-circular post within said lifting member having a screw-thread on the bottom fitting the screw-thread in the interior of the lifting member, means carried up and down with the lifting member guided by the cap and fitting the post, to prevent it from turning, and means for rotating the gear.



1,889,942. PURIFICATION OF SULPHUR BEARING GASES AND RECOVERY OF SULPHATES AND SULPHUR. HANS BAEHR, Ludwigshafen-on-the-Rhine, Germany, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed Aug. 1, 1929, Serial No. 382,730, and in Germany Aug. 27, 1928. 6 Claims. (Cl. 23—225.)



1. The process of recovering sulphur and ammonium sulphate from gases containing hydrogen sulphide, which comprises catalytically oxidizing at least part of the hydrogen sulphide contained in said gases, scrubbing the hot gas with a solution comprising ammonium thiosulphate, thereby converting the thiosulphate into sulphur and ammonium sulphate, freeing the resulting gas, while cool, from sulphur dioxide by scrubbing in the presence of hydrogen sulphide and ammonia, and employing the resulting solution again for the first scrubbing operation.

1,889,943. METHOD OF MAKING DITHIOPHOSPHATES. GEORGE BARSKY, New York, N. Y., and RALPH V. HEUSER, Cranford, N. J., assignors to American Cyanamid Company, New York, N. Y., a Corporation of Maine. Filed Aug. 8, 1929. Serial No. 384,440. 18 Claims. (Cl. 260—98.)

1. A method of making dithiophosphates which comprises reacting a compound selected from a group consisting of aliphatic monohydroxy alcohols and phenols, with

phosphorus pentasulphide in the presence of an organic compound which is a solvent for said alcoholic body and the dithiophosphate formed, and recovering the dithiophosphate.

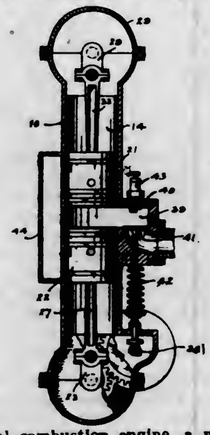
1,889,944. METHOD OF MAKING UREA. GEORGE BARSKY, New York, N. Y., assignor to American Cyanamid Company, New York, N. Y., a Corporation of Maine. Filed May 13, 1930. Serial No. 452,136. 6 Claims. (Cl. 260—125.)

1. A method of making urea which comprises providing a water solution of a compound of an alkali metal with a negative radical capable of forming a water insoluble compound with calcium, adding calcium cyanamid thereto, heating the mixture and maintaining a ratio of cyanamid ions to alkali metal ions in the solution such that all cyanamid is in the form of the ion.

1,889,945. PRODUCTION OF MONOCARBOXYLIC ACIDS. JOHANNES BRODE, Ludwigshafen-on-the-Rhine, and ADOLF JOHANNSEN, Mannheim, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed Apr. 21, 1928, Serial No. 271,972, and in Germany Nov. 27, 1925. 15 Claims. (Cl. 260—108.)

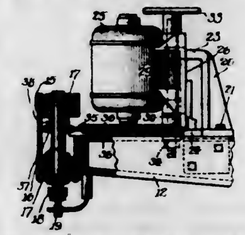
2. In the production of monocarboxylic acids from a member of the group consisting of dicarboxylic acids and their anhydrides, contaminated with sulphur compounds, by treatment with catalysts capable of splitting off carbon dioxid, the step of contacting the initial material, before the catalytic treatment, in the vapor state with an agent absorbing sulfur compounds.

1,889,946. GAS ENGINE. LESLIE E. CADWELL, Indianapolis, Ind., assignor to Headless Multiple Motor Corporation, Indianapolis, Ind., a Corporation. Filed Jan. 15, 1930. Serial No. 421,041. 1 Claim. (Cl. 123—51.)



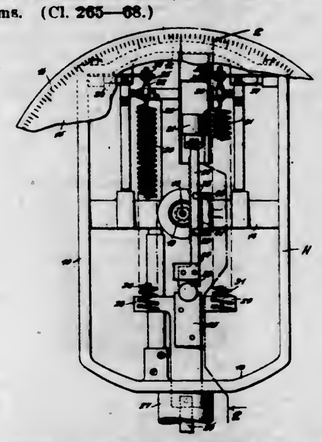
In an internal combustion engine, a motor block having a plurality of vertically disposed cylinders in pairs, each comprising an upper and lower cylinder, a piston in each cylinder, transverse crank shafts common to adjoining cylinders, at the ends of the engine, and operated by said pistons, the length of each cylinder being such that when the two pistons within a pair of cylinders reach their limit of travel toward each other there is a space between the pistons, a housing laterally of each pair of cylinders defining a pocket in communication with said space, intake and exhaust ports in the bottom of the pocket, valves closing and opening the ports, openings through the top of the pocket for the introduction of the valves, plugs screwed into and closing the openings, spark plugs through the last named plugs, crank cases in two parts containing the crank shafts and cranks, one part being integral with the cylinder walls and the other part removably secured to the first part, the lower integral part having an extension under the valve housing, stems from the valves terminating within their respective extensions, springs to normally seat the valves, a cam shaft drivingly connected with the adjacent crank shaft, cams on the cam shaft lifting the valves at each revolution of the cam shaft, a water jacket cooling the cylinders, a stub shaft between the crank shafts, gears drivingly connecting the crank shafts and stub shaft, means for taking power from the stub shaft and means for taking power from each end of the crank shafts.

1,889,947. FRICTIONAL DRIVE FOR A ROUTER OR THE LIKE. GEORGE H. CARLSON, Rockford, Ill., assignor to Ekstrom, Carlson & Co., Rockford, Ill., a Corporation of Illinois. Filed Oct. 10, 1928. Serial No. 311,502. 1 Claim. (Cl. 74—26.)



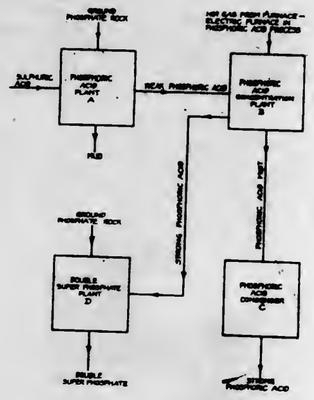
A machine of character described comprising, in combination, a stationary support, a spindle carried thereby for rotation on a vertical axis, a plurality of sheaves of different diameters on said spindle, a driving element capable of engaging any of said sheaves, and means for adjustably supporting said element in position comprising a bracket on said support having spaced vertically alined stationary bearings thereon, a member to which said element is rigidly secured having a pair of vertically spaced bearings thereon, a pivot extending through all of said bearings and having a screw-threaded engagement with one of said stationary bearings, and means connecting said driving-element-supporting member to said pivot for vertical movement therewith.

1,889,948. PROTECTIVE DEVICE FOR SCALES. GEORGE E. CHATILLON, New York, N. Y., assignor to John Chatillon & Sons, New York, N. Y., a Corporation of New York. Filed Feb. 17, 1928. Serial No. 255,119. 15 Claims. (Cl. 265—68.)



1. In a scale, a runner, a vertically movable gravity actuated rack resting thereon at no load, the rack and runner being freely separable on the application of load, and means on the rack controlling said rack movement.

1,889,949. CONCENTRATION OF WEAK PHOSPHORIC ACID. CYRIL B. CLARK, Scarsdale, N. Y., assignor to American Cyanamid Company, New York, N. Y., a Corporation of Maine. Filed Feb. 11, 1930. Serial No. 427,456. 4 Claims. (Cl. 23—165.)

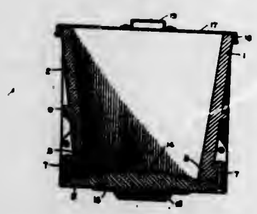


1. In a process for concentrating weak phosphoric acid evolved from treating natural phosphates with sulphuric acid, the step which comprises dehydrating the weak phosphoric acid by scrubbing with a heated gas containing phosphorus pentoxide while removing impurities from the gas during the scrubbing and condensing the phosphoric acid mist formed as a result of the scrubbing action by dry condensation to concentrated phosphoric acid.

1,889,950. FUMIGATION COMPOSITION AND PROCESS. KENNETH F. COOPER, Great Neck, N. Y., assignor to American Cyanamid Company, New York, N. Y., a Corporation of Maine. Filed Apr. 2, 1930. Serial No. 441,185. 6 Claims. (Cl. 167—20.)

1. A method of destroying pests which comprises exposing a mass containing calcium cyanide and sulphur to the air to cause liberation of hydrocyanic acid gas in toxic concentrations, said sulphur remaining behind partly in form of calcium thiocyanate.

1,889,951. METHOD FOR COOLING CALCIUM CARBIDE. GEORGE E. COX, Niagara Falls, N. Y., assignor to American Cyanamid Company, New York, N. Y., a Corporation of Maine. Filed Mar. 21, 1927. Serial No. 177,022. 1 Claim. (Cl. 23—208.)



A method of molding calcium carbide which comprises pouring the molten carbide into a receptacle, the depths of carbide in the receptacle being great relative to the cross section thereof so as to expose only a relatively small area thereof to the air, and allowing the same to solidify.

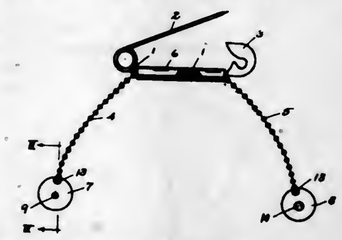
1,889,952. POLYMERIZATION PRODUCTS OF γ BUTYLENES. MARTIN MUELLER-CUNRADI, Ludwigshafen-on-the-Rhine, and FRITZ EGGERT, Mannheim, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed June 14, 1929, Serial No. 371,047, and in Germany Aug. 7, 1928. 4 Claims. (Cl. 260—170.)

1. A process for the production of dimers of γ-butylenes, besides only small quantities of trimers and higher polymerization products, which comprises treating a γ-butylene with a sulphuric acid of between about 50 and 60 per cent strength, thereupon heating the sulphuric acid solution, removing the polymerization products which separate out during the heating, cooling the remaining sulphuric acid and employing it over again for the treatment of a further quantity of a γ-butylene.

1,889,953. COLORED EFFECT PAPER. CARL DANKERT, Ludwigshafen-on-the-Rhine, Germany, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Filed Nov. 24, 1931, Serial No. 577,151, and in Germany Nov. 26, 1930. 3 Claims. (Cl. 92—42.)

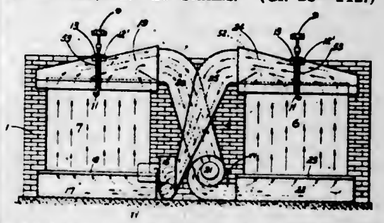
1. A process of producing colored effect papers on the paper machine which comprises supplying to the paper pulp on the sieve near the gate a solution of a water-insoluble cellulose derivative in an organic solvent, at least one of the said components forming the effect paper being colored.

1,889,954. SECURING DEVICE FOR CLOTHING. SARA DAVID, Pittsburgh, Pa. Filed Jan. 23, 1932. Serial No. 588,265. 4 Claims. (Cl. 24—73.)



4. A securing device for clothing including a bar safety-pin, a length of chain of links of light weight, an elongate split sleeve closed over the bar of said safety-pin and said chain intermediate its ends, and a fastener composed of two complementary elements secured one element to each of the otherwise free ends of said chain, the means for securing the fastener elements to said chain comprising an expanded metal eyelet extending through an end link of said chain and an element of said fastener.

1,889,955. FURNACE. CHAUNCEY ARNOLD DUTTON, Shaker Heights Village, Ohio, assignor, by mesne assignments, to Ferro Enamel Corporation, Cleveland, Ohio, a Corporation of Ohio. Filed Feb. 19, 1930. Serial No. 429,482. 20 Claims. (Cl. 25—142.)



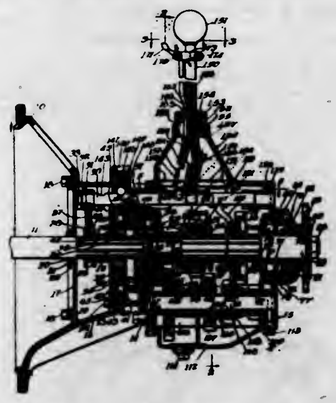
1. Screens for entrance and exit openings of a heat-treating furnace through which work is passed in a continuous stream comprising a single moving body of air passing successively across said openings by continuous movement.

1,889,956. METHOD OF PRODUCING AMMONIA. PHILIP H. FALTER, Orange, N. J., assignor to American Cyanamid Company, New York, N. Y., a Corporation of Maine. Filed Feb. 27, 1929. Serial No. 343,246. 9 Claims. (Cl. 23—194.)

1. A process of making ammonia from cyanamide which consists in adding cyanamide and water to a vessel, raising the temperature thereof to at least 160° C. and maintaining at least that temperature until the reaction is substantially complete, beginning the discharge of ammonia after the charge reaches 160° C. and removing substantially all the ammonia generated while the charge is above that temperature.

9. The process of making ammonia from cyanamide which consists in applying steam to cyanamide in a closed vessel to bring about a reaction and when a temperature of 160° C. is reached, cutting off said steam, withdrawing from the chamber only enough ammonia to enable the exothermic reaction to continue and maintaining the temperature at or above 160° C. until the reaction has been completed, and then exhausting the ammonia from the vessel.

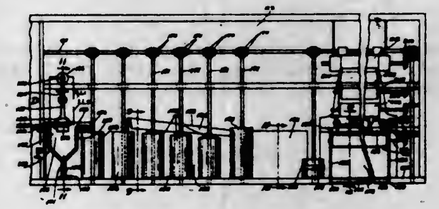
1,889,957. TRANSMISSION. THOMAS L. FAWICK, Racine, Wis., assignor to Brown-Lipe Gear Company, Syracuse, N. Y., a Corporation of New York. Filed Nov. 8, 1926. Serial No. 146,917. 11 Claims. (Cl. 74—58.)



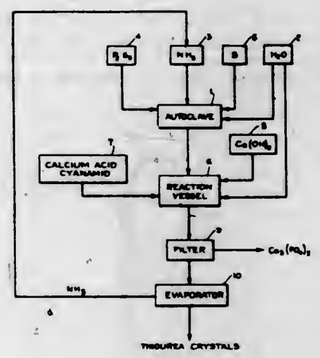
2. In combination, a gear case having a bore in one end, a driving shaft, a driven shaft, one of said shafts being piloted into the other for aligned relative rotation, a sleeve including internal and external gears embracing the outer of said shafts at the point of interengagement, anti-friction means seated in said bore and supporting said sleeve and shafts between said internal and external gears, a second sleeve having internal and external gears eccentrically journaled in said case and having its external gear in constant mesh with the internal gear of the first sleeve, and slidable means on said driving shaft for optional engagement with said second sleeve or first sleeve to drive said first sleeve either through the second sleeve or directly.

1,889,958. MACHINE FOR PREPARING MAILABLE MATTER. JACOB B. FRECH, ELMER J. FRECH, and WESLEY S. COX, Cincinnati, Ohio. Filed Oct. 19, 1928. Serial No. 313,454. 8 Claims. (Cl. 93—2.)

1. In a device of the class described the combination of a conveyor comprising receptacles, a hopper adapted to receive a supply of inserts, controllable means for removing a single insert from the hopper and advancing same, a normally inoperative ejector means for receiving said single insert and for ejecting it into one of the receptacles, electrical means conditioned by contact with said single insert for simultaneously actuating the ejector means and rendering the controllable means inoperative, an envelope blank feeding mechanism for disposing a blank in a position to receive the contents of a receptacle, means for moving the filled envelope blank from said receiving position, and means operable upon the filled blank for shaping and closing the blank in envelope form about the contents thereof.



1,889,959. PROCESS FOR PRODUCING THIOUREA. RALPH V. HEUSER, Cranford, N. J., assignor to American Cyanamid Company, New York, N. Y., a Corporation of Maine. Filed Feb. 9, 1931. Serial No. 514,886. 13 Claims. (Cl. 260—125.)



1. A method of making thiourea which comprises causing a reaction between phosphorous pentasulphide and ammonia, adding a cyanamid thereto and recovering the thiourea formed.

1,889,960. PROCESS FOR INCREASING THE SOLUBILITY OF WATER-SOLUBLE SALTS. KARL HINTZMANN, Leverkusen, Germany, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Filed Sept. 5, 1930, Serial No. 479,920, and in Germany Sept. 25, 1929. 6 Claims. (Cl. 23—1.)

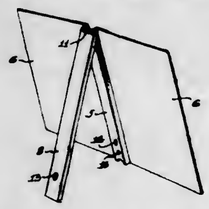
1. Supersaturated aqueous solutions of water-soluble salts comprising a water-soluble salt, a quantity of water insufficient for its dissolution, and a substance selected from the group of urea and its water-soluble derivatives.

1,889,961. PURIFICATION OF PHTHALIDE. ALPHONS O. JAEGER, Mount Lebanon, Pa., assignor, by mesne assignments, to The Selden Research & Engineering Corporation, Pittsburgh, Pa., a Corporation of Delaware. Filed Nov. 10, 1930. Serial No. 494,813. 6 Claims. (Cl. 260—123.)

1. A method of partially purifying an impure phthalide obtained by the reduction of a compound included in the group consisting of impure phthalic anhydride prepared

by the catalytic air-oxidation of naphthalene, phthalimide obtained from impure phthalic anhydride prepared by the catalytic air-oxidation of naphthalene, which comprises subjecting the impure product to distillation with steam at a temperature below that at which substantial amounts of the phthalide sublime over.

1,889,962. LOOSE LEAF BINDER. STANLEY G. JOHNSON, Grosse Pointe Village, Mich. Filed Jan. 7, 1932. Serial No. 585,329. 13 Claims. (Cl. 281—33.)



1. In combination a book cover having lids, and a supporting leg pivoted to the book cover back and arranged to cooperate with the lids in supporting the cover in easel-like fashion, the supporting leg being shaped to conform to the contour of the book back so as to embrace the same when the leg is not in use.

1,889,963. VIAL. FRANK B. COONEY and JUDSON P. SPORE, Sandusky, Ohio, assignors to The American Crayon Company, Sandusky, Ohio, a Corporation of Ohio. Filed Oct. 29, 1930. Serial No. 491,930. 1 Claim. (Cl. 215—41.)



In a pressure operated discharging means for pencil leads, wherein a lead is to be discharged upon each application of pressure, a supply vial for the leads, a discharging device for receiving leads from the vial comprising an elongated cap having a flat head end, said cap and head end being formed of resiliently elastic material, said head end being longer in one direction than in the other and provided with crossed slits, extending one along the longer dimension and the other across the shorter dimension, and dividing the head end into pairs of elongated members adapted, on application of pressure to the cap, to bulge and overlap outwardly whereby to provide an outlet opening for a lead, a guiding surface inside the cap for directing a lead to said opening, and an extension on the cap adjacent said guiding surface for engagement with the vial.

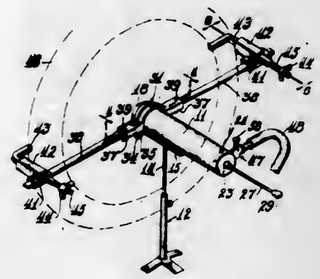
1,889,964. MARINE MOTOR. HARRY L. JOHNSON, Waukegan, Ill., and LOUIS J. JOHNSON, South Bend, Ind., assignors to Johnson Brothers Engineering Corporation, South Bend, Ind., a Corporation of Indiana. Filed Sept. 7, 1929. Serial No. 391,028. 10 Claims. (Cl. 123—59.)

4. A combustion engine having cylinders with a common crank casing and a crankshaft rotatable therein, a circular valve member on the crankshaft dividing the casing into separate chambers and having passages from the periphery thereof to the opposite faces of the circular valve member, the crank case having a fuel admission



opening communicating with the peripheral ends of the valve passages and the opening extending partially about the periphery of the valve member.

1,889,965. WHEEL PULLER. EARL KENDALL, Melrose Park, Ill., assignor of one-half to Ira E. Cole, Melrose Park, Ill. Filed Mar. 26, 1930. Serial No. 439,042. 3 Claims. (Cl. 29—86.)



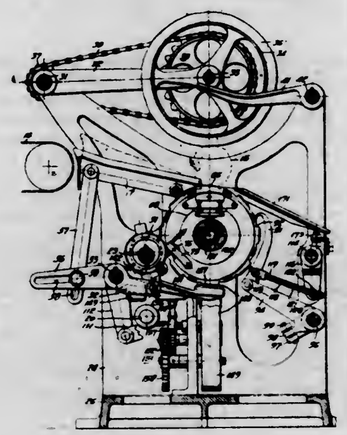
1. A wheel pulling device of the character described comprising, in combination, a vertically adjustable support, a horizontally disposed barrel on said support adapted to be arranged in axial alignment with a wheel mounting, one end of said barrel being open to receive the end of said mounting and a closure on the other end, a fluid pressure operated reciprocable plunger in said barrel having means extending through said closure for moving said plunger toward the closed end of the barrel, a yoke mounted for adjustment longitudinally of said barrel, opposed horizontally disposed sockets in said yoke, an arm adjustable longitudinally in each socket, and a bracket adjustable longitudinally on each arm, a socket in each bracket at right angles to said arms, a wheel engaging member adjustably mounted in each bracket, and means admitting fluid into said barrel to drive said plunger against said wheel mounting to urge the wheel therefrom.

1,889,966. PACKAGING DEVICE. OSCAR N. WHITEHEAD, Wallingford, Conn., assignor to H. L. Judd Company, Inc., Wallingford, Conn., a Corporation of Delaware. Filed Nov. 23, 1931. Serial No. 576,800. 1 Claim. (Cl. 206—46.)



A holder for the packaging of a plurality of irregularly shaped articles, comprising a backing member, perforated adjacent one end edge to form holding shoulders to receive between them the irregular end portions of a plurality of irregularly shaped articles, with means to hold the other portions of said articles against the rear of said backing, with cheek pieces at the side edges of said backing to reinforce the latter and to form a holding pocket for the last mentioned parts of said articles.

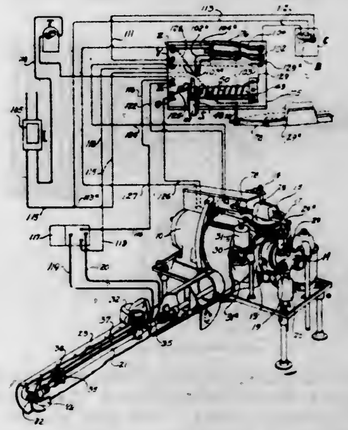
1,889,967. FRUIT MARKER. FRANK AHLBURG, Los Angeles, Calif., assignor to Electric Fruit Marking Co., Los Angeles, Calif., a Corporation of California. Filed May 28, 1930. Serial No. 456,430. 18 Claims. (Cl. 101—40.)



1. In a marking machine, a heated element, a plurality of separate dies, and means for securing said separate dies together to form a rotatable chain about and substantially in thermal contact with said heated element.

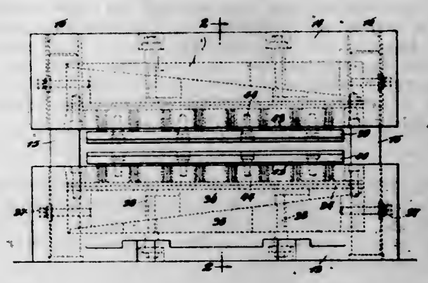
1,889,968. SPARK IGNITION MECHANISM FOR DOMESTIC OIL BURNERS. LOYD I. ALDRICH, Peoria, Ill., assignor to Preferred Oil Burners, Inc., Peoria, Ill., a Corporation of Illinois. Filed May 1, 1925. Serial No. 27,182. 7 Claims. (Cl. 158—28.)

5. In combination with an oil burner, of electrically power driven means for discharging a fuel mixture into a zone of ignition, a combustion chamber, spark ignition mechanism and means comprising pressure operated mech-



anism automatically controlled by the operation of the burner for advancing and withdrawing said spark ignition mechanism from the zone of ignition.

1,889,969. APPARATUS FOR SLITTING AND FORMING METAL SHEETS. HERBERT K. BAKER, Detroit, Mich., assignor to Penn Metal Company, Parkersburg, W. Va., a Corporation of Massachusetts. Original application filed Aug. 29, 1927, Serial No. 216,031. Divided and this application filed Nov. 26, 1929. Serial No. 409,791. 28 Claims. (Cl. 164—6.5.)



1. In apparatus of the character described, a press member, a series of groups of slitting punches mounted therein but spaced apart from each other, punch spacing and securing members between alternate groups, said spacing members being secured to said press member and said securing members comprising wedge elements adapted to secure said punches by reaction therethrough against said spacing members, together with a wedge at one end of said wedge elements for advancing said elements to securing position.

1,889,970. BRUSH LOCK. JOSEPH BONARDI, Rock Falls, Ill. Filed June 24, 1931. Serial No. 546,571. 2 Claims. (Cl. 15—23.)

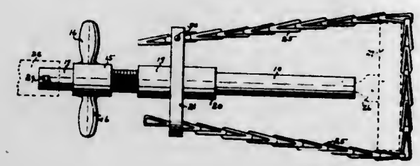
1. A brush lock comprising a cylindrical handle provided with a head at one of its ends, an arbor rotatably

mounted in said handle, a hand-hold connected with said arbor and forming an extension of said head, said head and hand-hold being jointly engageable by the hand of



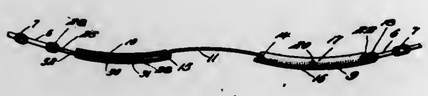
the operator to hold the hand-hold and arbor from rotation, and a brush assembly detachably connected with said arbor to rotate therewith.

1,889,971. ATTACHABLE ADAPTER FOR USE IN CONNECTION WITH GREASE GUNS. EDWARD J. BROUHARD, Des Moines, Iowa. Filed Sept. 14, 1928. Serial No. 306,047. 3 Claims. (Cl. 184—105.)



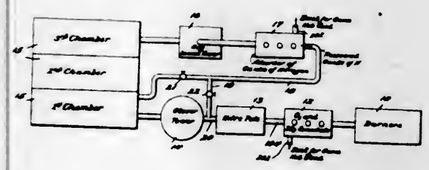
1. A device for lubricating a spring shackle or the like having a contact type lubricant receiving nipple comprising a member, an adapter secured to said member, means for attaching the device to said shackle, said adapter having a nozzle adapted to engage said nipple and an inlet end to which a lubricant dispenser may be attached, and a passageway establishing communication between the inlet end and said nozzle.

1,889,972. BRACELET STRUCTURE. EDWIN G. CARLSON, East Providence, R. I., assignor to Albert E. R. Speidel, Providence, R. I., doing business as Speidel Brothers. Filed Mar. 4, 1932. Serial No. 596,756. 6 Claims. (Cl. 24—71.)



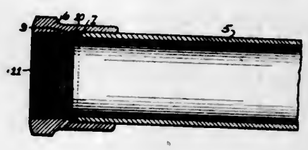
1. In a bracelet structure, a connecting means comprising a plate provided with a curved end portion forming a hook, and having upstanding flanges spaced from said curved end portion, and an eccentrically mounted locking member positioned between and supported by said flanges, said locking member being provided with a cylindrical portion movable into position to retain a connector member within said hook or movable away from said hook to permit removal of the connector member therefrom.

1,889,973. CHAMBER PROCESS OF MANUFACTURING SULPHURIC ACID. ERNEST B. MILLER, Baltimore, Md., assignor to The Silica Gel Corporation, Baltimore, Md., a Corporation of Maryland. Filed June 6, 1924. Serial No. 718,372. 5 Claims. (Cl. 23—168.)



1. In the manufacture of sulphuric acid by the chamber process, the step of adsorbing in a porous material oxides of nitrogen escaping from the system, separating the oxides from the material and returning said oxides in gaseous form and said porous material to the system.

1,889,974. METHOD OF JOINING TELESCOPED TUBULAR MEMBERS. GEORGE L. CHAMBERLAIN, Chicago, Ill. Filed Aug. 14, 1929. Serial No. 385,957. 2 Claims. (Cl. 29—148.2.)



1. The method of joining telescoped tubular members consisting in forming an internal annularly shouldered abutment in the outer receiving member, externally and annularly beveling the end of the insertable inner member, whereby to provide an undercut annular pocket between the cooperating shouldered abutment of the outer receiving member and the beveled end portion of the inserted inner member, inserting a ring of soldering material in said outer receiving member, then inserting the inner member whereby to confine said ring of soldering material between the meeting annularly shouldered abutment and beveled end portions of said tubular members, and applying heat to fuse said ring of soldering material.

1,889,975. DEVICE FOR ELECTRIC SOUND TRANSMISSION. HENRI CHIREIX, Paris, France. Filed Nov. 1, 1929, Serial No. 403,963, and in France Nov. 17, 1928. 1 Claim. (Cl. 179—1.)



A sound collecting unit for collecting sound emitted by a source or group of sources occupying a zone around said unit which is large relative to the dimensions of the unit, comprising a group of microphones facing in different directions toward said large zone and grouped within

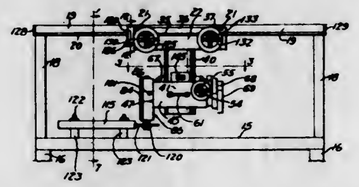
a space which is small relative to the size of said zone, and sound absorbing material positioned adjacent the back of said microphones and additional sound absorbing material positioned adjacent the bottom of said microphones, all of said sound absorbing material being at a distance which is small relative to the dimensions of said large zone.

1,889,976. DESIGNING FRAME. ARTHUR C. COMINS, Worcester, Mass. Filed Dec. 31, 1929. Serial No. 417,779. 4 Claims. (Cl. 35—12.)



1. In a designing frame, the combination with a wire of non-circular cross-section, of a series of discs mounted on said wire, each disc having a non-circular hole therethrough larger than the wire, whereby the discs will be supported by the wire and will have no tendency to turn thereon but can be turned when desired without moving them along the wires, each disc having its edge divided into areas, each area of a different color and as many areas as there are sides to the wire, whereby the disc can be turned on the wire to bring any desired colors to the front and form part of a design.

1,889,977. COMBINATION WOODWORKING MACHINE. CLAUDE R. CRUMP, Los Angeles, Calif. Filed Apr. 25, 1928. Serial No. 272,642. 16 Claims. (Cl. 144—1.)



15. A woodworking device of the character described, including: a horizontal work support; a horizontally movably carriage member spaced above said work support; a superstructure above said work support having parts supporting said carriage member so that said carriage member will have movement in a plurality of directions in a horizontal plane; and tool holding and operating means suspended from said carriage, said means being adjustable to face in a plurality of directions in a horizontal plane.

1,889,978. UNIVERSAL LAMP. JONATHAN A. DICKEY, Memphis, Tenn. Filed June 10, 1931. Serial No. 543,407. 1 Claim. (Cl. 240—81.)

In a lamp, a base, a hollow standard secured to and extending vertically upward therefrom, a hollow post slidably mounted within said standard, said post being vertically slotted, a lamp case universally mounted on said post, a bulb in said case, a lighting circuit entering through said base and extending upward within said post and to said bulb, and means for supporting said post and associated parts, relatively to said standard, comprising a flanged bushing slidably enclosing said post, disposed within and supported by the upper end of said standard, a cap slidably surrounding said post, enclosing the flange of said bushing and the upper end of said standard and secured to said standard, said cap, standard and bushing when assembled having concentric openings therethrough, a pin slidably disposed in the opening in said bushing, a spring disposed against the outer end of said pin and a hollow



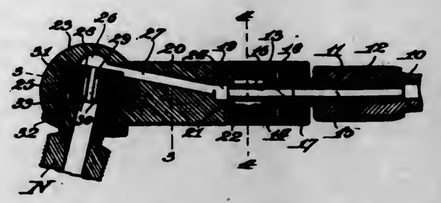
screw having its outer end closed, disposed around said pin and spring and screwed into the hole in said cap, said screw acting through said spring to frictionally engage said pin in the slot in said post to prevent rotation of and frictionally support said post relatively to said standard.

1,889,979. SAND BLAST NOZZLE. VICTOR W. FALARDEAU, Waterbury, Vt., assignor to Cooley-Wright Manufacturing Company, Incorporated, Waterbury, Vt., a Corporation of Vermont. Filed Jan. 20, 1932. Serial No. 587,733. 4 Claims. (Cl. 51—11.)



1. As an article of manufacture, a sand-blast nozzle having a passage therethrough for the discharge of abrasive and air and a convex surface at the entrance end of said passage for receiving the blast of abrasive and sand against it before it enters the passage.

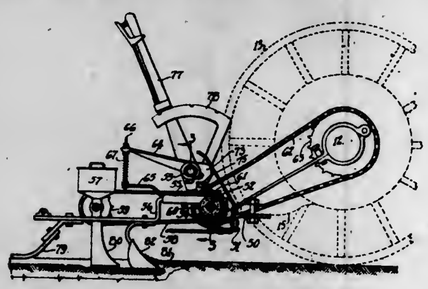
1,889,980. SWIVELED TIRE INFLATING CHUCK. GEORGE E. FARLEY, South Gate, Calif., assignor to Service Equipment Company, South Gate, Calif. Filed Sept. 30, 1929. Serial No. 396,186. 6 Claims. (Cl. 285—150.)



1. In a swiveled chuck for tire inflators, a tubular stem adapted to be seated in the end of an air hose, a two-part chuck body mounted for rotary movement upon said stem,

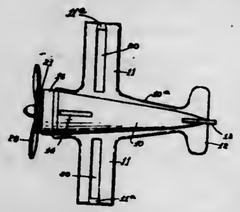
tubular means within said two-part chuck body for producing a fluid pressure tight joint between said stem and two-part body and the outer end of said body being provided with a threaded recess for the reception of the end of an externally threaded filling nipple the threads on said nipple engaging the upper and lower opposite threads of said recess.

1,889,981. SEEDING ATTACHMENT FOR TRACTORS. ANTONIO FAZIO, Portland, Oreg. Filed Oct. 26, 1927. Serial No. 228,773. 2 Claims. (Cl. 111—59.)



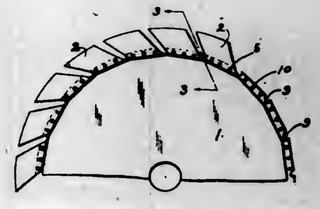
1. The combination of a tractor having a rearwardly extending and laterally projecting frame attached thereto; a pair of rock shafts mounted over said frame transversely with said tractor, the inner ends of said shafts being adjacent, each inner end having an operating lever mounted thereon; a plurality of ground-engaging implements each of which is hinged to said supporting frame at its forward end and having means engaging the ground for supporting each rearward end thereof; means operable from one of said hand levers acting through its rock shaft for raising all of the implements on one side of the longitudinal center line of the tractor in unison; similar means for operating all of the elements in the group on the opposite side of said center line; a planting mechanism on each of said implements having means for driving same at a speed proportionate of the forward travel of the tractor; and means for rendering said driving means operative when all of the planting mechanisms on their respective sides of the tractor are lowered to a planting position.

1,889,982. TOY AEROPLANE BANK. GEORGE D. FULL, Winnetka, Ill., assignor to Dudley Lock Corporation, Chicago, Ill., a Corporation of Illinois. Filed Feb. 10, 1932. Serial No. 592,039. 7 Claims. (Cl. 46—36.)



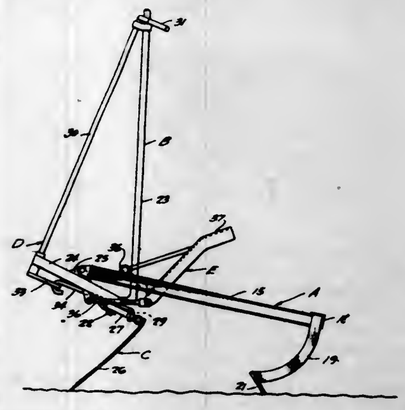
1. A savings bank in the form of a miniature aeroplane, having a hollow fuselage serving as the savings compartment and provided with a slot through which coins may be inserted, the forward end of the fuselage being formed with an opening, a permutation lock mechanism mounted in said opening, said lock mechanism including a dial having outwardly exposed characteristics designating certain positions of adjustment of the tumbler mechanism, and a propeller journaled with respect to said dial and adapted for imparting rotation to the tumbler disks, said propeller having an indicating character associated therewith for registration with the designating characteristics of the dial face for adjusting the tumblers in a predetermined combination to release said lock and permit access through said opening to the savings compartment in the fuselage.

1,889,983. STONE SAW. GEORGE A. GAVARD, Index, Wash., assignor, by direct and mesne assignments, to Gavard Stone Saw Company, a Corporation of Washington. Filed Sept. 20, 1929. Serial No. 394,048. 2 Claims. (Cl. 125—22.)



2. A rotary saw comprising a substantially circular blank, a reduced tongue projecting from the periphery of said blank, a plurality of peripherally spaced notches formed in said tongue, the walls of said notches being bound by two intersecting, non-radial lines, the teeth having inclined side edges, each tooth being formed at its inner end with a groove to fit over the tongue between said notches, and means for securing the teeth to the tongue, the adjacent teeth being so positioned on said blade as to form a shot-receiving channel which is in alignment with a notch in the tongue.

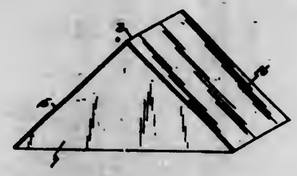
1,889,984. LEVER SPADE. HAROLD H. GLASIER, Los Angeles, Calif. Filed Nov. 1, 1930. Serial No. 492,793. 10 Claims. (Cl. 254—131.5.)



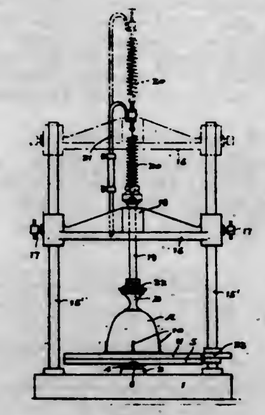
1. A lever spade comprising a brace adapted to range along the ground and having a heel at its rear for anchoring and fulcruming thereabout, a spader having a spade and a handle laterally offset, said spader being pivotally connected laterally forward of and above said spade to said brace at its front end whereby to be rockable forwardly and backwardly about the front of said brace and to be bodily swung with said brace about said heel.

1,889,985. CARTON OR CONTAINER. ROLFE MILLER HAYS, Los Angeles, Calif., assignor of one-half to Charles E. R. Fulcher, Los Angeles, Calif. Filed Feb. 9, 1931. Serial No. 514,532. 1 Claim. (Cl. 229—22.)

A container consisting of a one-piece blank which includes a base at the sides of which are foldable, triangular wall panels the outer sides of each of which has a set of foldable flanges whose several ends near the base will, when the panels are in effective position, lie parallel and close to the ends of the base, and a foldable closure strip extending from an end margin of the base and continuing around the panels and lapping about the inwardly folded flanges of said walls and having a locking-hook tongue inturned over the near base edge and interlocking positively between the base and the near end edges of inturned flanges; the flanges forming struts whose ends at the corner bend of the strip lie close and parallel to the said bend to form an internal support for the same.



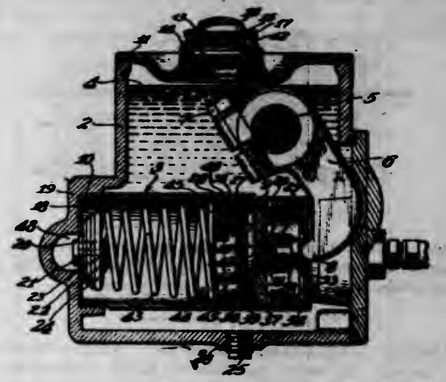
1,889,986. CENTERING DEVICE. PERCY WILLIAM HAYWOOD, Toronto, Ontario, Canada, assignor to International Silver Company of Canada, Limited, Hamilton, Ontario, Canada. Filed Aug. 8, 1930. Serial No. 474,032. 18 Claims. (Cl. 113—99.)



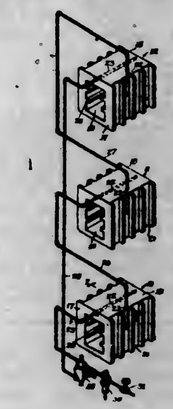
1. In a device for positioning a plurality of parts in assembled relation, the combination with means for supporting one of said parts, of means including a vertically slidable support rod for temporarily supporting the remaining part or parts in positioned relation to the first-mentioned part, and means for effecting a substantial counterbalance of the weight of said rod and temporary supporting means to facilitate operation of the device.

1,889,987. MASTER CYLINDER PISTON FOR HYDRAULIC BRAKE SYSTEMS. JOSEPH R. HEIDLOFF, Detroit, Mich., assignor to Hydraulic Brake Company, Detroit, Mich., a Corporation of California. Filed Aug. 18, 1930. Serial No. 475,972. 12 Claims. (Cl. 60—54.6.)

1. In mechanism of the class described, the combination of a cylinder, a piston reciprocable therein, a packing cup adjacent the forward face of said piston, a fluid supply in communication with the rear of said piston, said piston having a passageway therethrough, and a movable member for preventing said packing cup from being forced into said passageway during the protractile stroke of said piston.



1,889,988. REFRIGERATING SYSTEM. GEORGE HILGUS, Chicago, Ill. Filed Sept. 17, 1928. Serial No. 306,563. 23 Claims. (Cl. 62—115.)

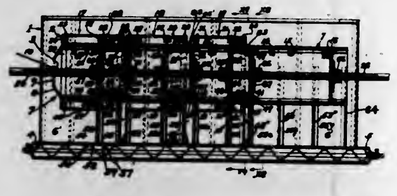


1. A refrigerating system comprising, in combination, a refrigerating unit having a space adapted to contain separated liquid and vapor phases of the refrigerant, inlet means for supplying refrigerant at a predetermined pressure, and outlet means for discharging refrigerant at a pressure lower than said predetermined pressure, said outlet means opening from said space at a substantial distance from the top, the liquid tending to rise to said outlet means, and the vapor entering said outlet means tending to entrain liquid when the level of the latter is at or above the inlet of said outlet means.

1,889,989. METHOD OF SEPARATING BORAX. JOHN RILEY HUGHES, Lynwood, Calif., assignor to Victor C. Emden, Los Angeles, Calif. Filed May 9, 1930. Serial No. 451,100. 1 Claim. (Cl. 209—6.)

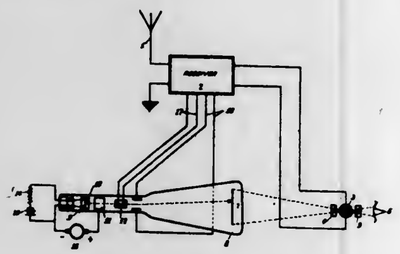
The method of obtaining borax from a comminuted mass of ore containing a mixture of sodium borate and shale; which consists in calcining such mass, thus dehydrating and softening the sodium borate and producing

a more friable borax, and hardening and making less friable, the shale; soft grinding the mixture, thereby reducing the borax in size and shape without like reduc-



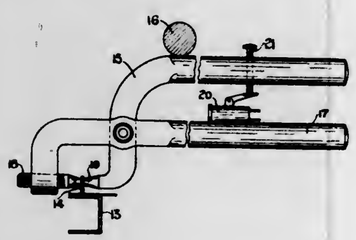
tion of the shale, and causing separation between the borax and shale according to the differences of the two materials with respect to size and shape.

1,889,990. TELEVISION SYSTEM. AUGUST KAROLUS, Leipzig, Germany, assignor to Radio Corporation of America, a Corporation of Delaware. Filed Nov. 30, 1928, Serial No. 322,756, and in Germany Dec. 31, 1927. 14 Claims. (Cl. 178—6.)



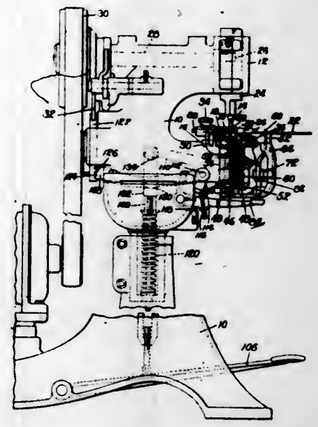
1. A receiving arrangement for television systems including a Braun tube for producing cathode rays, means associated with the said Braun tube for controlling the position of the said generated cathode rays, and an inertialess light valve external to the said Braun tube for regulating the observed intensity of the rays produced.

1,889,991. ELECTRIC WELDING TOOL. JOHN M. LARSEN, Grand Rapids, Mich. Filed Sept. 29, 1930. Serial No. 485,011. 5 Claims. (Cl. 219—4.)



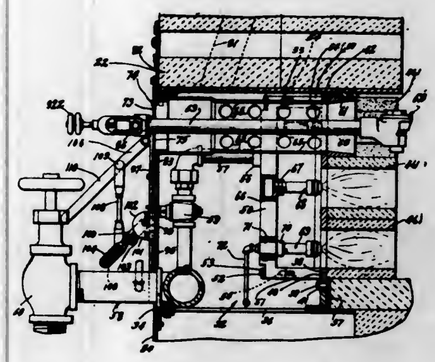
2. A welding tool comprising two members pivotally mounted together intermediate their ends whereby inward movement of corresponding ends causes similar movement of the opposite ends, contacts on one set of ends and electrical switch means mounted upon the other set of ends, said switch means being automatically operated by movement of the said members.

1,889,992. MACHINE FOR OPERATING UPON SHEET MATERIAL. AXEL ARNOLD LAWSON, Beverly, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Dec. 17, 1931. Serial No. 581,679. 10 Claims. (Cl. 164—86.)



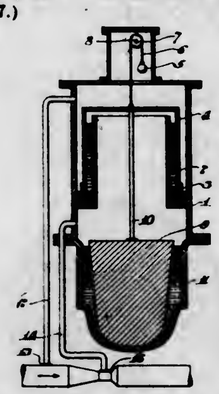
1. A machine for operating upon soles comprising a reciprocating tool, a work-support mounted for angular movement about the axis of the tool, a pair of gages for engaging a sole positioned upon the work-support at points upon opposite sides of the sole near one end thereof, a second pair of gages for engaging opposite sides of the sole, and means associated with the last-mentioned pair of gages for moving the work-support angularly to locate the sole with a median line thereof intersecting the axis of the tool.

1,889,993. FURNACE CONSTRUCTION. HERBERT V. LEAHY, Los Angeles, Calif. Filed Aug. 22, 1927. Serial No. 214,570. 36 Claims. (Cl. 158—1.)



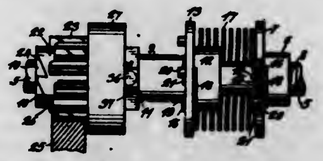
1. A furnace construction comprising a metal case with an opening, a plate section closing said opening, tile holders detachably mounted in the case and removable through the opening, gas distributors detachably connected with the tile holders and removable through the opening burner tiles detachably supported by the holders and removable through the opening, and gas nozzles projecting from the gas distributors in axial alinement with the tiles.

1,889,994. METER. JOHN W. LEDOUX, Swarthmore, Pa. Filed Dec. 22, 1928. Serial No. 327,849. 8 Claims. (Cl. 73—167.)



1. A fluid meter comprising a casing containing a pool of liquid heavier than the fluid to be measured, means forming a channel containing a pool of liquid heavier than the fluid to be measured, the bottom of one of said pools being above the top of the other of said pools, a hood vertically movable in and sealed by one of said pools, a displacing device shaped in accordance with the functional relation between the differential head and a flow of a fluid to be measured and movable vertically in the other of said pools, and a connector positioning in vertical alignment the vertical axes of said hood and displacing device, the movement of said hood being regulated by said displacing device.

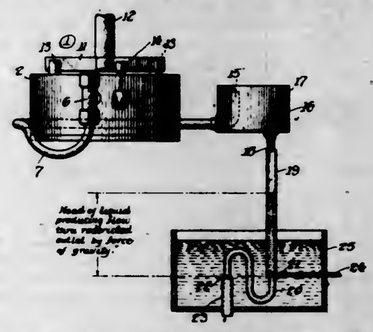
1,889,995. MOTOR STARTER. HERBERT L. MEEDER, Denver, Colo. Filed Dec. 15, 1931. Serial No. 581,142. 7 Claims. (Cl. 74—7.)



1. A power operated motor starter comprising, in combination, a driving member adapted to be rotated from a source of power, a sleeve carried by the driving member, means for interconnecting the sleeve and driving member, said means comprising a pin carried by one of the members and projecting into a helical groove in the other member, a pinion carried on the driving member and rotatably secured to the sleeve, means for securing the pinion to the sleeve for holding the two against relative movement in the direction of the axis of the driving member while permitting relative rotation, the sleeve having a projection whose outer surface is polygonal, means carried by the pinion for yieldingly engaging the sides of the polygonal portion, and interengaging lugs on the pinion and on the driving member for holding them against relative rotation in one direction when the pinion is in one of its extreme positions with respect to the driving member.

1,889,996. METHOD AND MEANS FOR THE MEASUREMENT OF VISCOSITY. CARL D. MILLER, Chicago, Ill. Filed Mar. 19, 1924. Serial No. 700,207. 22 Claims. (Cl. 265—11.)

17. Apparatus for measuring the viscosity of oils and similar liquids comprising means for producing a constant flow of said liquid regardless of viscosity and for offering a resistance to said flow so as to produce a pressure, a closed reservoir, means for connecting said source of pressure to said reservoir whereby pressure is transmitted through the liquid under test to the interior of said reservoir, a tube containing a liquid approximating that under test, said connecting means being connected to said tube in such a manner that the pressure in said connecting means causes a rise of the fluid in said tube against the



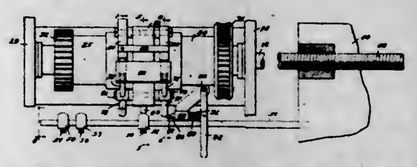
force of gravity, a second gauge tube connected with said reservoir, the lower portion of said reservoir and the lower part of said second tube containing water, the upper portion of said reservoir containing liquid approximately that under test, said connecting means having communication with said oil whereby rise in pressure will drive water from said reservoir up into said second tube against the force of gravity.

1,889,997. METHOD OF PRODUCING AN UPHOLSTERY PAD. GARRETT W. MUDD, Chicago, Ill., assignor, by mesne assignments, to Chicago Curled Hair Company, Chicago, Ill., a Corporation of Illinois. Filed Apr. 17, 1929. Serial No. 355,782. 1 Claim. (Cl. 154—33.)



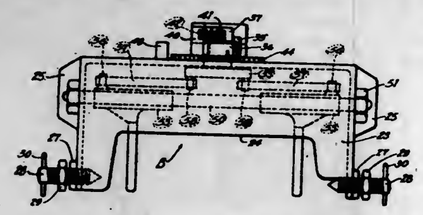
The method of forming pads for upholstering and the like which consists in securing filling material of considerable thickness to a flexible backing and forming isolated portions of the material to produce channels therebetween extending across the pad open at their tops and closed at their bottoms by the said flexible backing, then applying a flexible covering for said portions of filling material, said covering extending across said channels, then drawing portions of the covering material into the channels and securing the same to the said flexible backing at the bottom of the channels.

1,889,998. CLUTCH. JOHN NELSON, Chicago, Ill., assignor of one-half to Bengt Granberg, Rockford, Ill. Filed June 6, 1931. Serial No. 542,473. 27 Claims. (Cl. 74—14.)



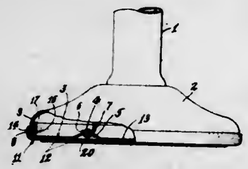
1. A clutch comprising in combination, a driven shaft, at least two driving members, an intermediate member on said shaft having driving engagement therewith, and cam means operable between said intermediate member and either of said driving members for transmitting a continuous driving force to said shaft.

1,889,999. BEARING BABBITTING DEVICE. CLAIR A. NICKLES, Ponca City, Okla. Filed Mar. 2, 1931. Serial No. 519,379. 6 Claims. (Cl. 22—123.)



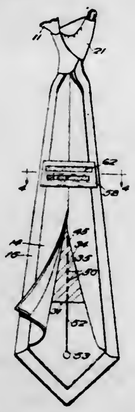
1. A moulding device for bearings, embodying a housing, a cylindrical bore pivotally mounted in said housing, means including a pair of slidable pins for positioning a bearing cap in spaced relation to and in axial alinement with said core, said core having slidable collars thereon for closing the sides of said cap, and means including a single lever for clamping said cap and said collars rigidly in position for the cap to receive a bearing material.

1,890,000. RUBBER BASE FOR TELEPHONES AND THE LIKE. EMILY OAKLEY, Los Angeles, Calif. Filed Jan. 30, 1931. Serial No. 512,273. 3 Claims. (Cl. 248—41.)



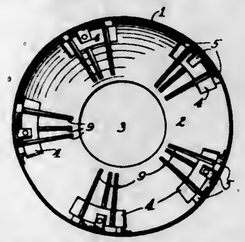
2. An anti-slipping cover for the base of telephones including a rubber pad integral throughout and formed to extend over the bottom of the telephone base when in use, said pad having an upstanding wall provided with an inturned annular lip at the upper edge and a retaining annular ring of rubber integral with the base, said ring of rubber extending parallel with said flange but spaced inwardly from the flange.

1,890,001. NECKTIE. LAWRENCE S. OTTEN, Cincinnati, Ohio. Filed June 8, 1931. Serial No. 542,819. 5 Claims. (Cl. 2—146.)



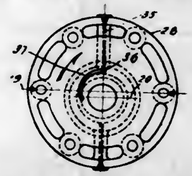
1. A necktie comprising a tube having knot-sections, and a woven fabric lining woven into comparatively narrow resilient sections alternately of different thicknesses, said lining extending lengthwise in said tube, and said sections arranged crosswise in said knot-sections of said tube.

1,890,002. BAFFLE PLATE ARRANGEMENT AND DESIGN FOR CONCRETE MIXERS. HUGH P. PARIS, near Kirkland, King County, Wash., assignor to Paris Transit Mixer Company, Seattle, Wash., a Corporation of Washington. Filed Nov. 1, 1927. Serial No. 230,236. 5 Claims. (Cl. 83—73.)



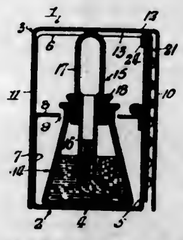
1. The combination with a rotative mixer shell, of baffles therein angularly disposed relative to the direction of rotation of said shell, to intercept and lift the materials therein, and spikes projecting beyond the edges of said baffles.

1,890,003. COMPRESSOR AND VACUUM PUMP. CÉSAR PFEIFFER, Asnieres, France, assignor to Fuller Company, a Corporation of Delaware. Filed Apr. 15, 1930. Serial No. 444,447. 6 Claims. (Cl. 230—207.)



1. A rotary compressor comprising a stator casing having a central bore, an air inlet on one side of the casing and an air outlet on the opposite side, a cylindrical rotor provided with substantially radial slots, vanes movable within the slots, the rotor being arranged eccentrically within the bore between heads at each end of the casing, at least one of the heads being provided with a duct and an oil groove for the flow of lubricant opening into the bore between the base of a vane and the bottom of the corresponding slot and near the inlet side of the casing, said groove extending from said bore in a direction opposite to the direction of rotation of the rotor.

1,890,004. METHOD OF AND MEANS FOR MIXING COLORS. GEORGE A. SCHUBERT, Chicago, Ill. Filed Apr. 20, 1931. Serial No. 531,507. 14 Claims. (Cl. 41—5.)

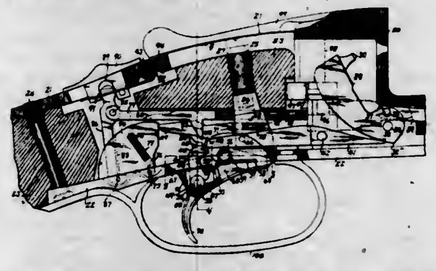


9. The method of mixing colors which consists in providing a support formed in desired portions thereof with

spaced apart cup-like depressions, depositing unit quantities of the colors required to produce the desired mixed color in certain of said depressions and brushing the unit quantities of said required colors together into a larger quantity forming the desired mixed color.

14. A color mixing kit embodying therein a box body having a horizontal partition with openings therein, a plurality of color containers having stoppered ends projecting up through said openings, a color mixing plate having detachable hanging engagement with one of the walls of the box and a cover for said box body adapted to enclose the same from the top and securing said plate in hanging position upon said box body wall.

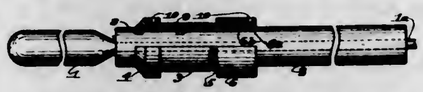
1,890,005. SINGLE-TRIGGER MECHANISM FOR MULTIPLE-BARREL FIREARMS. LOUIS STIENNON, New Haven, Conn., assignor, by mesne assignments, to Winchester Repeating Arms Company, New Haven, Conn., a Corporation of Maryland. Continuation of application Serial No. 470,412, filed July 24, 1930. This application filed Sept. 23, 1931. Serial No. 565,535. 19 Claims. (Cl. 42—42.)



1. In a single-trigger mechanism for multiple-barrel firearms, the combination with a pair of firing-mechanisms; of a trigger; and a manually-shiftable actuator-member carried by the said trigger with capacity for movement both crosswise and longitudinally with respect thereto and engageable with portions of the said firing-mechanisms for releasing the same in a selective sequence when the said trigger is actuated.

12. In a single-trigger mechanism for multiple-barrel firearms, the combination with a pair of firing-mechanisms, including the respective sears thereof; of a trigger; a manually-operable selector-button mounted within the exposed profile of the trigger for transverse reciprocating movement therein; and a manually-shiftable sear-actuator member pivotally mounted for longitudinal rocking movement upon the said selector-button.

1,890,006. SANITARY FITTING FOR INDUSTRIAL THERMOMETERS. LEWIS B. SWIFT, Rochester, N. Y., assignor to Taylor Instrument Companies, Rochester, N. Y., a Corporation of New York. Filed Feb. 23, 1929. Serial No. 341,943. 5 Claims. (Cl. 73—52.)



1. A sanitary fitting for a thermometer stem or the like, an adapter body at one end thereof having an external conical seat to form a part of a sanitary joint, merging into a shoulder, said body having an internal diameter larger than that of the stem to form an interspace between the latter and the interior surface of the body, said interspace narrowing down to approximately the diameter of the stem, substantially at the face of the seat, a compression ring tapering toward one edge and disposed in said interspace with its tapering edge directed toward the narrow end of said interspace, and means engaging the compression ring to force it into the narrow portion of the interspace.

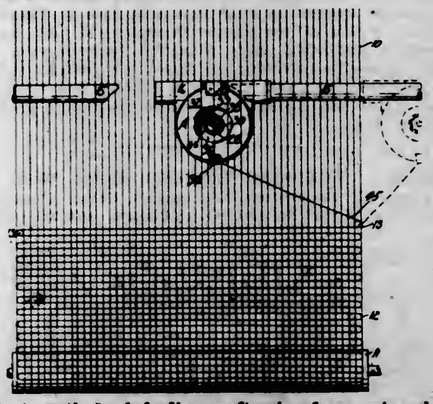
5. A fitting for a thermometer stem or pipe, a tubular element on said stem, said element having an external beveled end and having an internal diameter larger than that of the stem to form an interspace between the tubular element and the stem, said interspace including a cylindrical portion and a conical portion narrowing from the cylindrical portion to substantially the diameter of the stem at said end of the tubular element whereby said tubular element terminates in a relatively sharp edge, a tubular member having a conical portion dimensioned to fill the conical portion of said interspace and terminating in a sharp edge having substantially the diameter of the stem, and means for forcing said tubular member into the conical portion of said interspace to provide a sanitary joint between said stem and the tubular element.

1,890,007. LINING OR COATING OF PIPES AND OTHER TUBULAR BODIES. BENJAMIN TALBOT, Middlesbrough, England, assignor to The Talbot Non-Corrosive Linings Company, Philadelphia, Pa., a Corporation of Delaware. Filed Nov. 29, 1927, Serial No. 236,557, and in Great Britain Feb. 18, 1927. 1 Claim. (Cl. 137—75.)



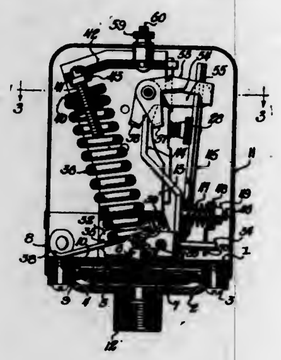
A pipe composed of sections connected by a bell and spigot joint, each of said sections having a concentric annulus projecting from the surface thereof adjacent to but retracted from the joint between said sections, said sections being spaced sufficiently for the introduction of jointing material between said annuli, a coating keyed to said sections by said annuli, and jointing material disposed between said annuli, said coating being held by said annuli against fracturing action of said jointing material.

1,890,008. SHUTTLE STRUCTURE FOR WIRE CLOTH LOOMS AND METHOD OF HANDLING WEFT WIRE. HERBERT L. THOMPSON, Elgin, Ill., assignor to Reynolds Wire Co., Dixon, Ill., a Corporation. Filed May 21, 1930, Serial No. 454,317. Renewed May 2, 1932. 22 Claims. (Cl. 139—197.)



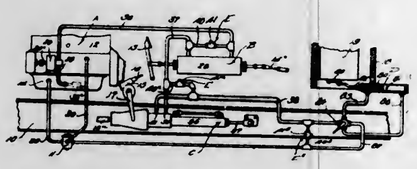
1. A method of feeding weft wire for a wire cloth loom, comprising drawing wire from the inside of a snugly held coil around oppositely disposed barriers arranged within said coil and then around a limited wind-up device.

1,890,009. PRESSURE SWITCH. HERMON L. VAN VALKENBURG, Wauwatosa, Wis., assignor to Square D Company, Detroit, Mich. Filed Aug. 11, 1930. Serial No. 474,449. 5 Claims. (Cl. 200—163.)



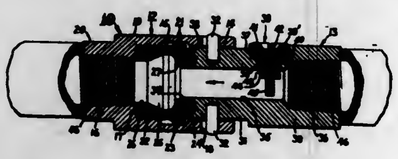
1. A switch comprising an automatically moved operating member, a contact bar yieldingly supported by said member, an insulating block having a recess housing said contact bar in all positions of said contact bar, stationary contacts carried by said insulating block and located within said recess and adapted to be engaged by said contact bar, and means supporting said insulating block.

1,890,010. HYDRAULIC APPARATUS FOR MOTOR VEHICLES. HARRY F. VICKERS, Detroit, Mich. Filed May 19, 1930. Serial No. 453,849. 6 Claims. (Cl. 60—52.)



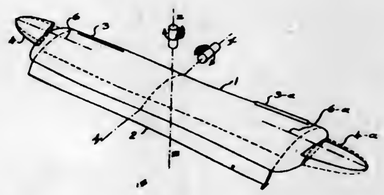
1. In a motor vehicle, an internal combustion engine having a case carrying lubrication fluid and a lubrication system, a fluid pressure actuated unit, a pump operating to deliver lubricating fluid from said case to the lubricating system of the engine through said unit, and a pressure regulating valve connected between said unit and the engine governing the pressure at which the fluid is delivered from said unit to the lubricating system of the engine and operable to by-pass excess fluid pressure to the case.

1,890,011. COUPLING DEVICE. HENRY WIRZ and HARRY G. HOTCHKISS, Los Angeles, Calif. Filed May 5, 1930. Serial No. 449,741. 8 Claims. (Cl. 285—163.)



1. A packing member for use in a hose coupler, said packing member having a cylindrical external surface with an external flange at one end thereof connected to said cylindrical surface by a bevelled portion, said member having a chamber therein, said member having an internal flange at one end thereof, said flange having a rounded end portion and having a tapered aperture communicating at one end with said chamber, said member having a second aperture at the end opposite to said external flange and communicating with said chamber, the wall of said chamber being defined by a tapered portion, a cylindrical portion and a curved portion.

1,890,012. AIRPLANE. HERACLIO ALFARO, East Cleveland, Ohio. Filed Sept. 22, 1928. Serial No. 307,705. 12 Claims. (Cl. 244—29.)



1. In an airplane, a wing having a whole span flap of the sliding type at its trailing edge, wing tip allerons positioned wholly beyond the end of the wing and adjustable lift spoilers adjacent the ends thereof.

1,890,013. LEAD ALLOY. REGINALD SCOTT DEAN, Riverside, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed June 29, 1928. Serial No. 289,145. 23 Claims. (Cl. 148—21.4.)

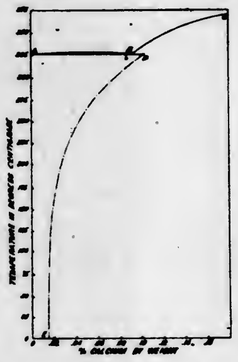


1. A method of producing improved alloys of lead, which consists in alloying calcium therewith, heating the alloy to form a solid solution, cooling the alloy to produce a super-saturated solid solution, and aging the alloy to cause the dispersion of minute particles containing the calcium substantially uniformly throughout the lead.

1,890,014. LEAD ALLOY. REGINALD S. DEAN, Washington, D. C., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Original application filed June 29, 1928, Serial No. 289,145. Divided and this application filed May 24, 1930. Serial No. 455,190. 7 Claims. (Cl. 148—21.4.)

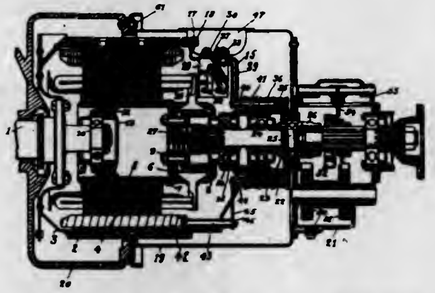
1. A method of producing extruded lead alloy articles, which comprises alloying less than 1% calcium with lead by heating the ingredients, extruding the resulting alloy

in the form of a solid solution into an article, quenching the article to reduce the alloy to a supersaturated solid solution, and immobilizing the solid solution.



3. An electrical cable sheath comprising an age-hardened alloy of lead and calcium containing from 0.02% to 0.1% calcium.

1,890,015. MOTOR VEHICLE POWER AND TRANSMISSION APPARATUS. ALFONS HENRY NEULAND, Irvington, N. J., assignor, by mesne assignments, to Electrogear Corporation, a Corporation of Delaware. Filed Aug. 24, 1928. Serial No. 301,755. 11 Claims. (Cl. 172—239.)

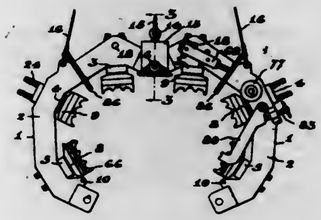


1. In a combined power plant and transmission the combination of an engine, a rotatable clutch dynamo element having one end secured to the engine, a reverse gear box bolted to the engine, a bearing secured to the gear box for rotatively supporting the other end of the dynamo element, a rotor provided with a broached hole and journaled within the dynamo element, a load shaft journaled in the gear box, and a splined shaft extending from the gear box and slidingly engaging with the broached hole in the rotor for transmitting power therebetween.

4. In an electric transmission, a rotatable field element, a brush adapted to rotate with the field element and subject to a centrifugal pressure, a brush holder for said brush, and a plurality of anti-friction compression members interposed between the brush holder and the brush adapted to reduce centrifugal friction between the brush and the brush holder and to permit movement of the brush with respect to the holder substantially at right angles to the centrifugal force acting on the brush.

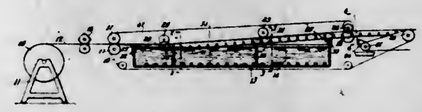
1,890,016. CABLE COMPACTING PRESS. FRANK H. SMITH, Hoboken, N. J., and HENRY A. STRINGFELLOW, Philadelphia, Pa. Filed Mar. 2, 1931. Serial No. 519,514. 13 Claims. (Cl. 153—48.)

1. A cable compacting press comprising an annulus composed of arcuate sections pivotally connected end to end, releasable locking means for securing an end of one section to the abutting end of another section when the annulus is closed, a series of fluid pressure cylinders carried by said annulus, said cylinders having radially



disposed pistons provided with cable engaging heads at their inner ends, means for simultaneously supplying pressure to said cylinders to impart radial inward movement to said pistons, and means carried by said annulus for tightening a band on the cable.

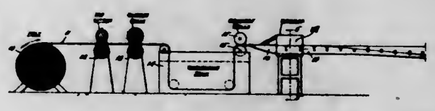
1,890,017. METHOD OF AND MACHINE FOR MAKING THICK BUTT ROOFING. CHESTER R. MACDONALD, Monroe, Mich., assignor, by mesne assignments, to The Patent and Licensing Corporation, Boston, Mass., a Corporation of Massachusetts. Filed Mar. 1, 1926, Serial No. 91,835. Renewed Mar. 3, 1932. 36 Claims. (Cl. 91—68.)



1. In a device of the class described, means for feeding a sheet in a flat condition, means for bending said sheet longitudinally, means for applying coating material to the marginal portions of said sheet, and means for restoring said sheet to a flat condition.

25. An apparatus for the purpose specified, having in combination, means for longitudinally moving a piece of strip stock, means for bending down both edges of said strip stock, while so moving, and means for guiding the said turned down edges through a coating bath for the purpose of forming a ribbon-like coating along the edges of said strip stock.

1,890,018. METHOD OF AND MACHINE FOR VERTICALLY COATING CONTINUOUS STRIPS OF ROOFING MATERIAL. FREDERICK C. OVERBURY, Hillsdale, N. J., assignor, by mesne assignments, to The Patent and Licensing Corporation, Boston, Mass., a Corporation of Massachusetts. Filed Apr. 6, 1926. Serial No. 100,158. 21 Claims. (Cl. 91—68.)



1. Steps in the method of making roofing elements which comprise causing a portion of a continuous strip of coated roofing material to travel lengthwise and in a vertical plane, and applying comminuted material to said vertical portion of the strip.

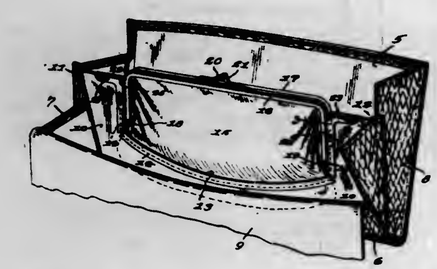
15. Steps in the method of making prepared roofing, which comprise cutting a sheet of roofing material lengthwise into strips each having a notched edge, advancing

each strip with its notched edge in a lower plane than its opposite edge and free, applying liquid weatherproofing composition to a face of the traveling strip so that the composition will flow toward the free lower edge and cover the same.

1,890,019. METHOD OF TREATING AND FILLING CAVITIES IN TREES. WALTER M. RITCHIE, Rahway, N. J. Filed Feb. 20, 1931. Serial No. 517,375. 11 Claims. (Cl. 47—8.)

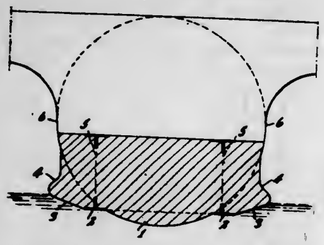
5. A method of treating and filling tree cavities including the steps of introducing into a cavity sulphur which is normally inert and which becomes effective upon activity or entrance of fungoid, bacterial or other tree destroying growth, and substantially excluding air from the tree cavity.

1,890,020. HAND BAG. JOSEPH RUDOLPH, JOSEPH ROSENZWEIG, and DAVID ASCHKENAS, New York, N. Y. Filed Oct. 10, 1931. Serial No. 568,130. 4 Claims. (Cl. 150—30.)



1. The combination with a hand bag having side walls and a purse including pivoted frame members, of a partition secured to the sidewalls of the bag, said partition having its central upper portion cut away to present a recess and a clamping member affixed to the ends of one of said frame members and having a channel portion clamped to the upper edges of the partition adjacent said recess to non-rotatably mount said purse in said recess.

1,890,021. FLYING BOAT. LUDWIG ADRIAN SANDERS, Voorburg, Netherlands, assignor to Johann Anton Sanders, Voorburg, Netherlands, and Frans Lambert Stoot, The Hague, Netherlands. Filed Mar. 30, 1931, Serial No. 526,407, and in the Netherlands Apr. 7, 1930. 4 Claims. (Cl. 244—2.)



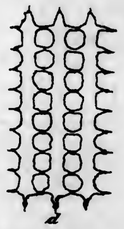
1. A flying boat, wherein the lower portion of the cross section of the hull comprises a surface of revolution, this portion merging into a side portion which is substantially horizontal, thereafter into a substantially straight portion at an acute angle with the horizontal, and thereafter into a side portion which is a continuation of the surface of revolution.

1,890,022. HOLE STRAIGHTENER. JAMES J. SANTIAGO, Los Angeles, Calif., assignor to John Grant, Los Angeles, Calif. Filed Dec. 14, 1929. Serial No. 414,072. 2 Claims. (Cl. 255—28.)



2. In combination with a rotary drill pipe, a guide tube supported on and concentrically surrounding the drill pipe, said guide tube being spaced from the drill pipe to provide a circulating fluid passage and rotational bearings on the drill pipe for the guide tube at its upper and lower ends, there being fluid passages leading through said rotational bearings to the space between said guide tube and the drill pipe.

1,890,023. PROCESS FOR COVERING PLASTER CARRYING WIRE NETTING. CARL SCHRÖDER, Sr., Viersen, Germany. Filed Dec. 5, 1929, Serial No. 411,968, and in Germany Dec. 10, 1928. 1 Claim. (Cl. 72—116.)

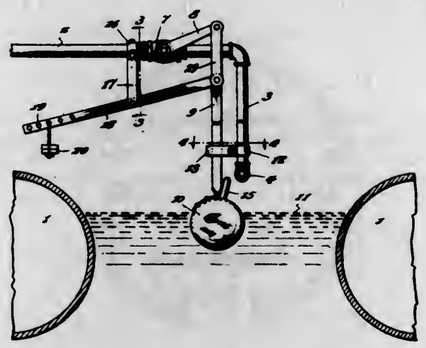


Process of covering wire netting with solidifying concrete or other setting material to serve as plaster carrier, consisting in coating the wire netting with an adhesive material, in strewing sand or volcanic ashes on said coating, and in covering the surface with a setting material so as to provide the wire with a roughened petrified stone-like covering presenting a large adhering surface for the plaster.

1,890,024. SUPPLY-CONTROLLING FLOAT FOR MILK DRYING MACHINES. RAYMOND J. SOULIGNE, Goodland, Ind. Filed Nov. 16, 1931. Serial No. 575,427. 1 Claim. (Cl. 137—104.)

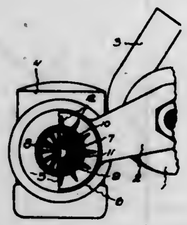
The combination with a liquid supply pipe having a downturned discharge end, and a regulating valve fitted in the pipe to control the flow of liquid therethrough, of a crank connected with the valve for setting the same, a hanger pivoted to the crank, a float carried by the lower end of the hanger and disposed in the body of liquid discharged

from the pipe, a guide bracket mounted on the dowaturned portion of the supply pipe and spanning the hanger, a link suspended on the supply pipe, and a lever fulcrumed



between its ends at the lower end of said link and having one end pivoted to the hanger and its opposite end provided with a counter weight.

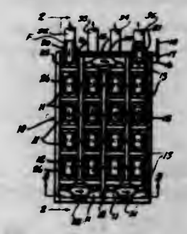
1,890,025. HEATING APPARATUS FOR FLUID CIRCULATION SYSTEMS. OSCAR HERBERT WALLIN, Stockholm-Lidingo, Sweden. Filed Apr. 7, 1930, Serial No. 442,896, and in Sweden Nov. 9, 1928. 3 Claims. (Cl. 123—174.)



1. An aggregate adapted to be connected as a unit in a cooling liquid circulating system for an internal combustion engine to cause the liquid to circulate through the said system and to heat the liquid contained in the said system, comprising in combination a pump having an inlet and an outlet adapted to be connected in a pipe line for the said cooling liquid and a catalytic heating device comprising an evaporator, means for transmitting liquid fuel such as gasoline to the said evaporator, a combustion chamber containing a catalyst; means for transmitting the evaporated fuel from the evaporator to the combustion chamber, and means for admittance of air into and escape of combustion gases from the said combustion chamber, the combustion chamber being housed within the housing of the pump and having a wall bounding a passage for the cooling liquid within the pump.

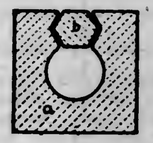
1,890,026. FILM DEVELOPING SYSTEM. JAMES T. BARKELEW, Pasadena, Calif., assignor to Paramount Publix Corporation, New York, N. Y., a Corporation of New York. Filed Mar. 21, 1931. Serial No. 524,361. 12 Claims. (Cl. 95—94.)

1. In film treating apparatus, a convoluted conduit through which a film may be propelled by skin friction of a liquid flowing therethrough, said conduit comprising a succession of vertical compartments communicating each to the next alternately at their lower and upper ends,



means for flowing liquid through said conduit, and means for feeding a film into said conduit in the direction of liquid flow therethrough.

1,890,027. CASTING RUNNER. THEODOR BRINKMANN, Haspe, Germany. Filed June 20, 1929, Serial No. 372,492, and in Germany Mar. 8, 1929. 3 Claims. (Cl. 22—141.)



1. A refractory channel stone having a slot-like opening in its upper surface and connecting with the channel, and a slidable refractory element located in the opening and adapted to act as a valve for the channel.

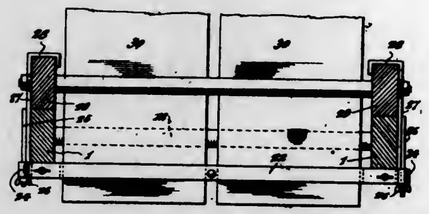
1,890,028. DEMOUNTABLE RIM. EARL E. CAMPBELL, Gillette, Wyo., assignor of one-half to A. J. McClelland, Gillette, Wyo. Filed Jan. 21, 1930. Serial No. 422,404. 1 Claim. (Cl. 301—27.)



In a device of the class described, the combination with the felly of a wheel having a peripheral channel on its outer face between the sides thereof, of a rim removably fitted on the outer face of the felly having a peripheral channel on its inner face between its sides, for registration with the channel in the felly when the rim is fitted thereon, said felly being further provided with a slot communicating with the channel therein and defining a pocket and being spaced from the side edges of said felly, the channel in the felly being of a greater depth than the channel in the rim, and means for removably locking the rim on the felly including a resilient split band adapted to circle the felly and to be received within the channel therein, a toggle connecting the ends of the band together including an operating lever, the toggle and operating lever being received within the pocket when the operating lever is in its closed position and swung bodily outwardly of said slot when said operating lever is in its open position, said band being adapted to be wholly contained within

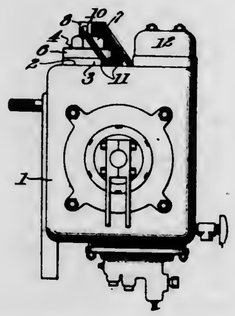
the channel in the felly, when it is desired to remove or replace the rim on the felly and being received in both of said channels when it is desired to lock the rim on the felly.

1,890,029. SCAFFOLD. JOHN DELFS, West Springfield, Mass. Filed Nov. 5, 1930. Serial No. 493,638. 3 Claims. (Cl. 304—10.)



1. A scaffold comprising a series of ladders arranged in spaced relation, the lower ends of upper ladders being disposed against the sides of the upper ends of lower ladders in overlapping relation, clamps fitted about the overlapping ends of the ladders to secure them together, and foot boards carried by the rungs of the several ladders, the uppermost rungs of lower ladders supporting the foot boards and the lowest rungs of upper ladders resting on the foot boards.

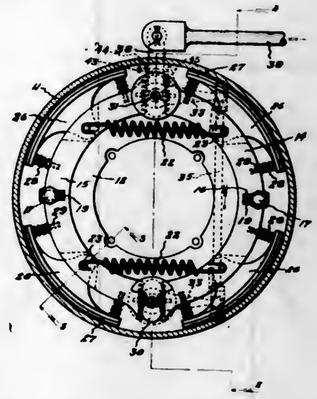
1,890,030. LOCKING DEVICE FOR ROTATABLE MEMBERS. FRANK W. EDWARDS, Chicago, Ill., assignor to The Ohio Injector Company, Chicago, Ill., a Corporation of Illinois. Filed Oct. 6, 1930. Serial No. 486,803. 7 Claims. (Cl. 151—33.)



4. A locking device for rotatable members, comprising, in combination with an offstanding boss on the member, a relatively rigid rod pivotally connected with said boss and having its pivot arranged substantially normal to the axis of rotation of said member, said rod adapted normally to extend laterally of the rotatable member and to foul against some adjacent projection to arrest rotation of the member.

1,890,031. BRAKE. GEORGE MCKINLEY FITTS, Siler City, N. C. Filed Dec. 19, 1928. Serial No. 326,969. 2 Claims. (Cl. 188—78.)

1. A brake comprising a brake drum, a brake support therewithin, a pair of semicircular shoe carriers, guide means on said support engaging a portion intermediate of the ends of the carriers for guiding said carriers in movement toward and away from said brake drum, springs bearing on said guide means and said carriers and urging said carriers away from said brake drum, springs connecting said semicircular shoe carriers urging them toward each other, cams between said carriers, actuating mechanism for moving said cams simultaneously and thereby moving said carriers away from each other and toward



said brake drum, a pair of brake shoes pivotally mounted on each of said shoe carriers and urged against said brake drum by operation of said cam means, and a pair of coiled equalizing springs between each brake shoe and its carrier.

1,890,032. DARNING LAST. ANNA K. FRASIER, Leavenworth, Kans. Filed June 26, 1930. Serial No. 464,026. 1 Claim. (Cl. 223—14.)



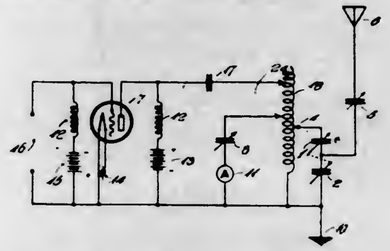
A darning last comprising a body tapered transversely toward its front end and having its rear end rounded, the body being of greater width than thickness and having smooth upper and lower faces merging into transversely arcuate side edge faces and said side edge faces merging into the rounded rear end of the body, said body being arcuate longitudinally to curve upwardly toward its front and having its front end arcuate and merging into the side edge faces and upper and lower faces of the body, and a handle secured to the rounded rear end of the body between the upper and lower faces thereof and extending upwardly therefrom in the same general direction as said upper and lower faces.

1,890,033. MANUFACTURE OF CONDENSATION PRODUCTS FROM FORMALDEHYDE, THIOUREA, AND UREA. ALPHONSE GAMS, GUSTAVE WIDMER, and KARL FREY, Basel, Switzerland, assignors to "Society of Chemical Industry in Basle," Basel, Switerland. Filed May 31, 1929, Serial No. 367,611, and in Switzerland June 15, 1928. 4 Claims. (Cl. 260—3.)

1. In the process for the manufacture of clear condensation products from urea, thiourea and formaldehyde, as obtainer by condensing formaldehyde with a quantity of urea not greater than that corresponding to 1 molecular proportion of urea for each two molecular proportions of formaldehyde at a temperature of about 100° C. up to the

stage at which a sample of the reaction mixture yields a precipitate on dilution with water, neutralising the solution, then adding thiourea in such a proportion that the total quantity of urea and thiourea present in the mixture amounts to not less than 1 molecular proportion for each 1.6 molecular proportions for formaldehyde, the feature of allowing the resulting solution, before its being further worked up, to stand until at least the greater part of the free aldehyde has been bound.

1,890,034. ELECTRICAL COUPLING SYSTEM. LOUIS A. GEBHARD, Washington, D. C., assignor, by mesne assignments, to Wired Radio, Inc., New York, N. Y., a Corporation of Delaware. Filed June 12, 1928. Serial No. 284,754. 5 Claims. (Cl. 178—44.)



1. A coupling system comprising in combination two variable capacities connected in series and the resultant series capacity connected across an output circuit, a load circuit connected to the series connection between said series connected capacities and to one terminal of said output circuit, and means for simultaneously adjusting said series connected capacities in opposite sense for varying the energy transfer between said output circuit and said load circuit without varying the frequency characteristics of said circuits.

1,890,035. AIRPLANE. RANDOLPH F. HALL, Rochester, N. Y. Filed Oct. 24, 1929. Serial No. 402,068. 7 Claims. (Cl. 244—29.)



1. In an airplane, a wing cellule comprising a lower wing providing the major wing area of and supporting surface for the airplane, said lower wing of small chord with respect to the chord of the lower wing and including a forward and a rear wing beam forming a fixed structural element thereof, an upper wing having a single wing beam, and inverted V-type struts between and fixedly connecting said wings, said struts attached at the upper ends thereof to the single beam of said upper wing and at the lower, diverged ends thereof to the forward and rear beams, respectively, of said lower wing, said wings including the wing beams thereof, and struts forming fixed structural elements of the cellule.

1,890,036. GAUGE FOR TIRE INFLATION AIR LINES AND THE LIKE. BERNARD JANUS, Sarnia, Ontario, Canada, assignor to Sarnia Air Equipment Limited, Sarnia, Ontario, Canada, a Corporation of Canada. Filed Sept. 14, 1931. Seril No. 562,803. 3 Claims. (Cl. 284—17.)

1. A tire inflation air line chuck adapted for use in combination with a tire valve of the type incorporating a barrel in which the tire valve stem extends to the vicinity of the open end thereof, comprising a casing, a pair of air conduits communicating with the interior of the casing, a mushroom valve in the casing controlling communication with one of the conduits and having its



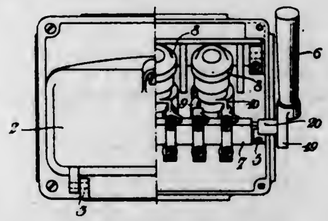
stem extending to a tire valve barrel receiving orifice in the casing and adapted to contact with the valve stem in the tire valve barrel, a slide valve also contained within the casing and controlling communication with the other conduit and adapted to contact with the end of the tire valve barrel.

1,890,037. RUBBER COVERED ARTICLE. HERBERT B. JOHNSON, Larchmont, N. Y. Filed Nov. 21, 1930. Serial No. 497,803. 3 Claims. (Cl. 273—81.)



1. In combination, a golf club shaft having an enlarged handle and a covering of crepe rubber entirely overlying the shaft and handle, that portion of the covering overlying the handle retaining its natural tackiness.

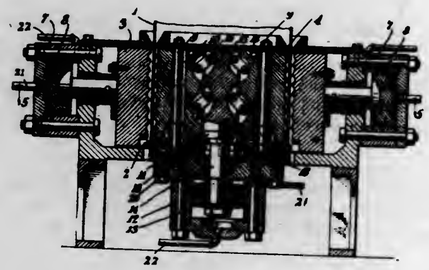
1,890,038. ELECTRICAL SWITCH. KARL JOHAN JUNGHOLM, Stockholm, Sweden. Filed Sept. 18, 1929, Serial No. 393,517, and in Sweden Apr. 19, 1928. 4 Claims. (Cl. 200—50.)



1. An electrical switch, comprising a box having a lid to permit accession to the interior of the box, a shaft rotatably mounted in said box and projecting with one end outside the box, a handle attached to said projecting end, bus-bars in said box extending substantially at right angles to said shaft, primary and secondary rigid contacts secured to said bus-bars and corresponding movable

contacts carried by said shaft, in such a way that both the primary and the secondary contacts will positively be broken simultaneously by rotating the shaft, each pair of movable contacts being arranged to receive a contact screw and a plug for fuses, respectively.

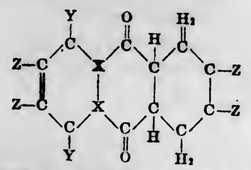
1,890,039. SHAPING AND FLANGING MACHINE. PAUL H. LANGE, Bridgeport, Conn., assignor to The Max Ams Machine Company, Bridgeport, Conn., a Corporation of New York. Filed Dec. 26, 1930. Serial No. 504,984. 8 Claims. (Cl. 153—73.)



1. In a machine of the character set forth, means to support a body of sheet material on its end, contractible outer jaws and expansible inner jaws to shape the body while so supported, and actuating means operating to expand the inner jaws and thereafter to move the supporting means to flange the supported end of the body by bending it over the outer jaws.

1,890,040. PRODUCTION OF ANTHRAQUINONE AND DERIVATIVES THEREOF. ARTHUR LÜTTRINGHAUS, Mannheim, HEINRICH NERESHEIMER, Ludwigshafen-on-the-Rhine, WILLY EICHHOLZ, Mannheim, GEORG BOSHNER, Edingen-on-the-Neckar, and WILHELM SCHNEIDER, Ludwigshafen-on-the-Rhine, Germany, assignors to General Aniline Works Inc., New York, N. Y., a Corporation of Delaware. Filed May 3, 1929, Serial No. 360,324, and in Germany May 7, 1928. 12 Claims. (Cl. 260—57.)

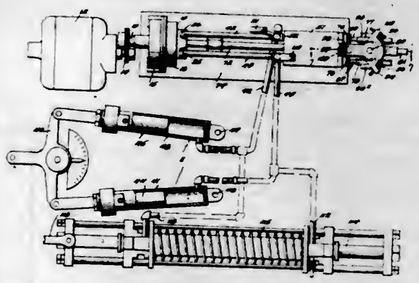
1. A process of producing anthraquinone and derivatives thereof, which comprises causing a product of the formula



in which Y may be H, OH or NH_2 when X must be C, or Y may be H_2 when X must be C—H, and Z is H or CH_3, to react under non-acid conditions with an oxidizing agent other than ozone.

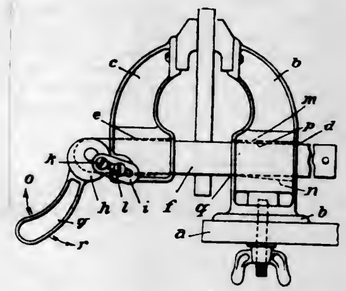
1,890,041. STEERING APPARATUS OR THE LIKE. THOMAS MCLEOD, Elizabeth, N. J. Filed Oct. 28, 1931. Serial No. 571,637. 5 Claims. (Cl. 60—52.)

1. In a device of the class described, in combination, a constantly available source of fluid under pressure, two fluid motors, a member to be operated in two directions, to which member both fluid motors are connected, separate conduits for leading fluid under pressure from said source to said motors, respectively, each such conduit having a leakage aperture formed therein, and mechanism under the control of an operator for regulating the escape of fluid under pressure from each such aperture and whereby the relative pressures of the fluid in said conduits may be adjusted at will to either balance the efforts of said motors or render the effort of either greater or less than that of the other and thereby effect movement of said



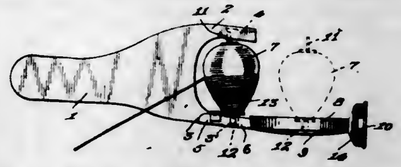
member, said mechanism being pressure responsive and permitting the escape of fluid from either conduit should the fluid pressure therein become unduly high by reason of movement of said member under the influence of an extraneous force.

1,890,042. CLAMPING MEANS. ANTONIO MORANDI, Munich, Germany. Filed Sept. 5, 1930, Serial No. 479,877, and in Germany Sept. 27, 1929. 4 Claims. (Cl. 81—26.)



1. In a clamping vise the combination with two relatively movable, oppositely recessed clamping jaws, an edgewise disposed beam substantially axially guided in said jaws, and cam shaped locking means at one end of said beam, of guiding means in one of said jaws, loosely embracing the beam, so that the jaw and beam may tilt into locking engagement and connecting means for said jaw, being eccentrically pivoted to the locking means and so connected to said jaw that unclamping action of the locking means tilts the jaw to release the same.

1,890,043. TOP SPINNER. JAMES M. MURPHREE, Troy, Ala. Filed July 18, 1931. Serial No. 550,577. 2 Claims. (Cl. 46—32.)



1. A top spinner including a flat handle having one of its ends bifurcated to provide upper and lower arms, arranged at the same angle of inclination, the upper

arm being of a greater length than the lower arm and having its inner face grooved from its outer end and the outer end of the lower arm being notched, a flanged disc having a substantially U-shaped portion extending angularly from one side thereof and communicating therewith, said extension affording a runway which has its outer end fixed to the sides of the lower arm and the inner wall of the runway being parallel with the groove in the upper arm, said groove and runway designed to receive therein a pin and a plug in the opposite ends of a wound top and the plug designed to be received in the notch of the lower arm and whereby the unwinding of the top will cause the same to travel through the groove of the upper arm and through the runway into the flanged disc.

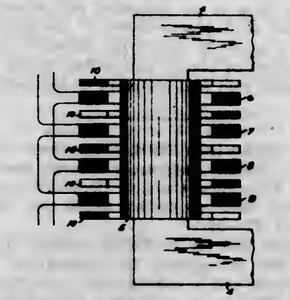
1,890,044. METHOD OF MANUFACTURING PRE-PORTIONED MOLDS OF EDIBLE SUBSTANCES AND THE RESULTING PRODUCTS. CHARLES M. POLICASTRO, Philadelphia, and GEORGE W. MORRISON, Upper Darby, Pa., assignors to Abbotts Dairies, Inc., Philadelphia, Pa., a Corporation of Delaware. Filed May 14, 1930. Serial No. 452,269. 14 Claims. (Cl. 99—16.)



1. The method of making an edible frozen confection mold, which consists in forming individual portions, hardening said portions at a sub-freezing temperature to prevent them from coalescing, and then coating a plurality of such portions with edible material after being assembled, and then hardening said coating to temporarily bind the same together.

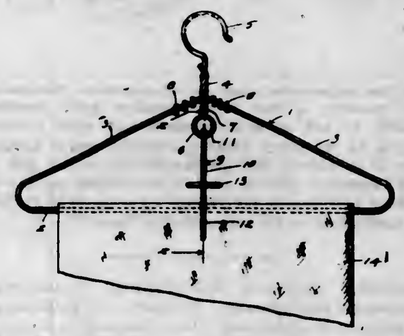
8. An edible mold comprising a core of individual portions of a frozen confection in juxtaposition, and a frozen shell of edible binding material surrounding said portions sufficiently to unite them as a unit, said shell when severed along the general lines of union between said portions permitting the separation of said portions with parts of said binding material adhering to each.

1,890,045. TRANSFORMER STRUCTURE. STEFAN WIDMER and MAX HÜRLIMANN, Baden, Switzerland, assignors to Aktiengesellschaft Brown Boveri et Cie., Baden, Switzerland, a Joint-Stock Company of Switzerland. Filed Oct. 2, 1931, Serial No. 566,434, and in Germany Sept. 17, 1931. 9 Claims. (Cl. 177—356.)



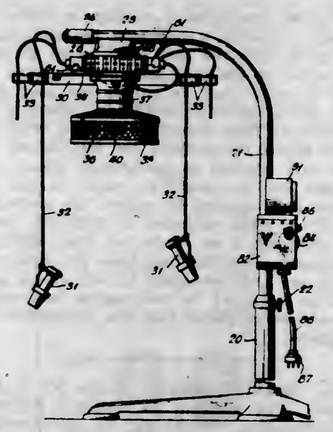
1. In an electric transformer, a core, a primary winding upon said core, a secondary winding divided into a plurality of sections arranged in spaced relation over said primary winding, and means arranged adjacent said secondary winding to increase the voltage drop thereof.

1,890,046. CLOTHES HANGER. GIULIO CICCONI, Smock, Pa., assignor of one-half to George A. Andreakovich, Monessen, Pa. Filed Oct. 9, 1930. Serial No. 487,576. 3 Claims. (Cl. 223—62.)



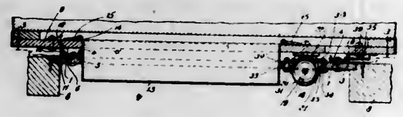
1. The combination with a coat hanger having a horizontal bar portion and side bars disposed in convergent relation and joined above the horizontal bar, of a ring member disposed beneath the points of convergence of the side bars, said ring being formed with end portions each of which is twisted about an adjacent side bar, a resilient clasp suspended from said ring and having a pair of spaced leg members arranged with said horizontal bar disposed therebetween, and means for drawing said leg members together to secure an article suspended on the horizontal bar.

1,890,047. HAIR-WAVING MACHINE. JOHN WILLIAM COX, deceased, Newark, N. J., by George A. S. Cooper, administrator, Newark, N. J., assignor to The Nestle-Lemur Company, New York, N. Y., a Corporation of Ohio. Filed Jan. 6, 1932. Serial No. 584,984. 25 Claims. (Cl. 132—36.)



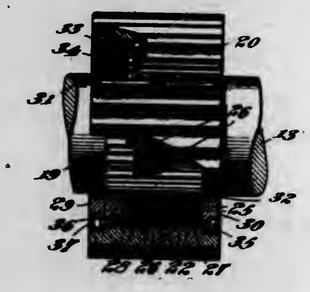
1. A hair-waving machine, comprising a heater-carrying frame, and means supported therewith for directing a cooling current of air through an open atmospheric space on to the exterior of the heaters carried by said frame.

1,890,048. ADJUSTABLE SEAT. GERHARD FLINTERMANN, West Orange, N. J. Filed Sept. 12, 1929. Serial No. 392,112. 3 Claims. (Cl. 155—14.)



3. An adjustable seat for automobiles comprising a base member, a seat frame member, guide mechanism secured to one of said members and slide mechanism secured to the other member, resilient means tending to force a portion of the mechanism on one of said members toward a portion of the mechanism on the other member and means for rigidly securing said portion of the mechanism to its corresponding member.

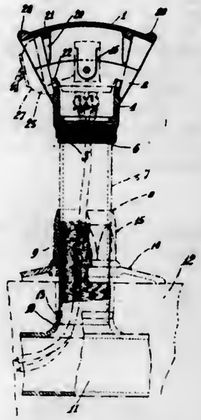
1,890,049. DRIVING MECHANISM. CLARENCE H. FROHLICH and RICHARD J. MCCARTY, Jr., Bethlehem, Pa., assignors to Bethlehem Steel Company, a Corporation of Pennsylvania. Filed June 16, 1930. Serial No. 461,451. 2 Claims. (Cl. 74—29.)



1. In power transmission gearing, a driven shaft, a driven gear rotatably mounted on the said shaft, bearings mounted upon the said shaft, cover plates on the opposite sides of the said gear and engaging the said bearings to center and fix axially the said gear upon the said shaft, fastening means for retaining the said cover plates in fixed assembled relation with the said gear, and means intermediate the said driven gear and the said axle adapted to operatively connect the said driven gear and the said axle under normal operative conditions, and adapted to relieve the parts from excessive stress when subjected to abnormal loads, said means comprising a set of friction discs splined to the axle, a second set of friction discs intercalate the first mentioned set and connected to the driven gear, and coil springs assembled in compression intermediate one of the said cover plates and the intercalated nest of friction plates.

1,890,050. SERVICE HEAD. JAMES M. G. FULLMAN, Sewickley, Pa., assignor to National Electric Products Corporation, Pittsburgh, Pa., a Corporation of Delaware. Filed July 8, 1929. Serial No. 376,599. 8 Claims. (Cl. 247—6.)

1. A head for an extension service connection adapted to receive a substantially cylindrical receptacle and comprising longitudinally and transversely arcuate complementary sections removably secured together; complementary ribs positioned on the inner walls of said sections and in partial peripheral engagement with said receptacle, the ends of said head tapering inwardly toward the bottom thereof to provide overhanging projections at the top ends of said head adapted to protect from the top said receptacle.



1,890,051. VALVE MECHANISM. HEWITT A. GEHRES, Mount Vernon, Ohio, assignor to Cooper-Bessemer Corporation, Mount Vernon, Ohio, a Corporation of Ohio. Filed Mar. 25, 1930. Serial No. 438,674. 6 Claims. (Cl. 277—46.)



1. A compressor plate valve having frame means providing a plurality of valve openings and adjacent seats lying substantially in the same plane, a plurality of relatively thin valve plates engageable with said seats to close said openings, a common valve-holding member overlying and bearing against said plates, said member being in the form of an elongated rod extending transversely of the path of movement of the plates and restricted to a path of movement substantially parallel to the movement of plates, and means urging said member to yieldably hold said plates in closed position.

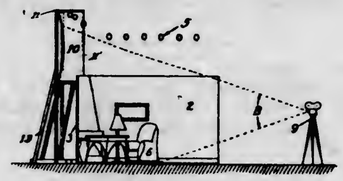
1,890,052. GROOVING TOOL. ABRAHAM J. GERMAN, Waterbury, Conn., assignor to Scovill Manufacturing Company, Waterbury, Conn., a Corporation of Connecticut. Filed June 4, 1930. Serial No. 459,141. 1 Claim. (Cl. 77—58.)

A tube sheet tool for producing parallel grooves in a tube sheet hole comprising, in combination, a tubular body having one end a substantially cylindrical reduced portion and split to be expansible throughout and substantially inwardly of said reduced portion, cutting teeth on the reduced portion, said cutting teeth being at right

angles to the axis of said tubular body portion, the interior of the split end of the body being cone-shaped, a spreader rod threaded within the body portion and having a conical end engaging the cone shaped interior of the split end, the threads advancing the spreader on rotation thereof to force the conical end into the cone-shaped end of the body portion, thereby to expand the latter, and a collar on said spreader for engaging the tubular body to limit advance of the spreader therein, and thereby limit the amount of expansion.

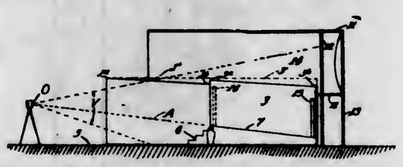


1,890,053. PHOTOGRAPHIC STAGE SETTING. ANTON GROT, Brentwood Heights, Calif. Filed June 29, 1931. Serial No. 547,559. 8 Claims. (Cl. 95—83.)



1. A stage setting for photographic purposes comprising a ceiling illusion drop having a horizontally concave surface disposed toward said camera.

1,890,054. PHOTOGRAPHIC STAGE SETTING. ANTON GROT, Brentwood Heights, Calif. Filed July 18, 1931. Serial No. 551,680. 6 Claims. (Cl. 88—16.)



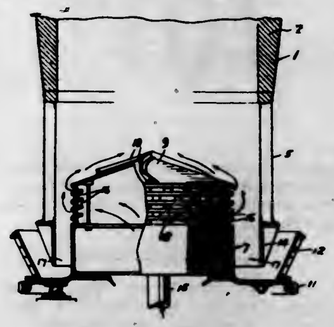
6. A stage setting for use in combination with a photographic camera, comprising a plurality of vertical wall surfaces and a floor surface, said wall surfaces having the rearward portions of the upper edges thereof disposed at a lower level than the forward portions of said upper edges, said upper edges of said wall surfaces being sloped from said forward portions to said rearward portions, and a portion of said floor surface being inclined rearwardly and downwardly substantially along a line of vision of said camera.

1,890,055. BERET. HARRY GRUMBACH, New York, N. Y., assignor to Simon Ascher & Co., Inc., New York, N. Y., a Corporation of New York. Filed July 10, 1931. Serial No. 549,864. 2 Claims. (Cl. 66—172.)

2. In a beret comprising a piece of flat or jersey knit material which has a natural tendency to curl or roll at an edge thereof; a plurality of purl knit stitches along said edge for stiffening the latter and causing the said edge to curl or roll evenly; and a row of purl knit stitches adjacent said edge and spaced from said plurality of rows of stitches.

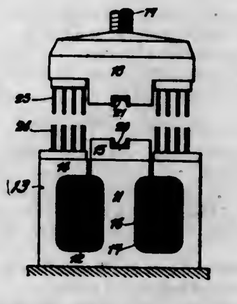


1,890,056. GAS PRODUCER. JOHN S. HAUG, Philadelphia, Pa., assignor to The U. G. I. Contracting Company, Philadelphia, Pa., a Corporation of Delaware. Filed May 21, 1928. Serial No. 279,569. 2 Claims. (Cl. 48—68.)



1. In a gas producer having a stationary cylindrical lower portion including a water jacket having a bare inner metallic wall; a grate structure having a cylindrical portion spaced from the wall of said producer to leave an annular space therebetween forming an ash outlet, said grate structure, including a conical portion supported by the lower cylindrical portion, said conical portion having ports for gas making fluids opposite the water jacket, and a flattened solid top portion having curved cutting ribs thereon, and means for introducing gas making fluids beneath the grate structure and to the ports.

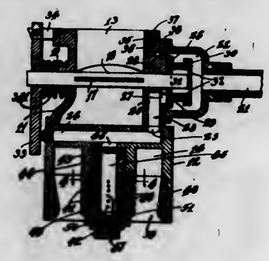
1,890,057. ELECTRIC WELDING MACHINE. HENRY S. HOLMES, Rockville Center, N. Y. Filed July 10, 1930. Serial No. 466,934. 4 Claims. (Cl. 219—4.)



1. A welding machine of the character described having a transformer carrying a lower electrode, an upper electrode, and contact devices between the secondary of

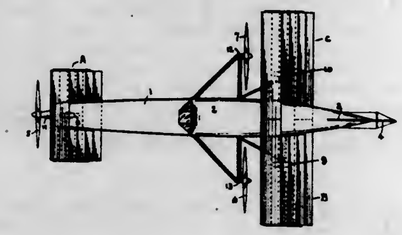
the transformer and the upper electrode, the respective contact devices of each pair having engaging faces which extend lengthwise of the work and in the vertical direction so as to permit relative vertical movement in engagement with each other and to oppose relative lateral movement.

1,890,058. GAS CARBURETOR AND METHOD OF CARBURATION. GEORGE L. HOLZAPFEL, Houston, Tex., assignor to Richfield Oil Company of California, Los Angeles, Calif., a Corporation of Delaware. Filed Aug. 26, 1929. Serial No. 388,397. 10 Claims. (Cl. 48—180.)



1. A gas carburetor comprising a body provided with a vertical bore, a Venturi tube in said bore, and a nozzle in said tube provided with horisontally opening annular orifices at different levels in said tube.

1,890,059. FLYING MACHINE. THOMAS A. EDISON LAKE, Milford, Conn. Filed Mar. 13, 1931. Serial No. 522,472. 15 Claims. (Cl. 244—14.)



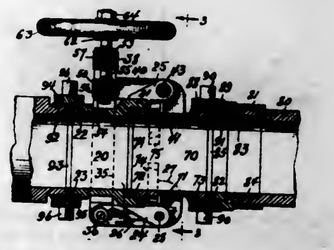
1. A flying machine comprising three groups of wings and propellers arranged to provide three-point support, means for propulsion and means for adjusting the groups of wings and propellers jointly or separately to provide variable lift and stability.

1,890,060. PROCESS OF POLYMERIZING VINYL DERIVATIVES. WALTER E. LAWSON, Wilmington, Del., assignor to E. I. du Pont de Nemours & Company, Wilmington, Del., a Corporation of Delaware. Filed Sept. 22, 1928. Serial No. 307,773. 10 Claims. (Cl. 260—2.)

1. The method of polymerizing vinyl esters which comprises catalyzing them with ozone.

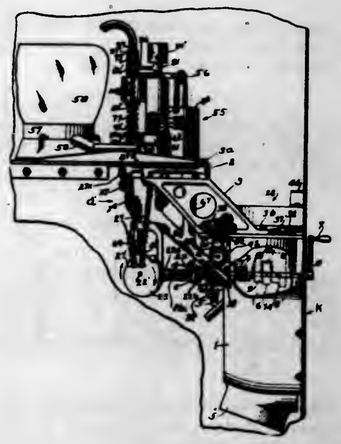
9. The method of polymerizing one of a group of compounds consisting of vinyl esters and styrene which comprises dissolving ozone in a solvent for the compound and dissolving the compound in the ozonized solvent.

1,890,061. HOSE COUPLING. EMANUEL LESKOWITZ, Carteret, N. J. Filed May 31, 1930. Serial No. 458,470. 3 Claims. (Cl. 285—171.)



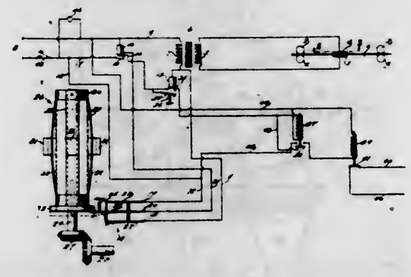
3. In a coupling of the character described the combination of a body portion, pairs of clamping levers pivoted to said body portion, a pair of links, one pair of said levers pivoted to said links, a cross bar pivoted to said links, a second cross bar extending through said links and parallel to the first cross bar and pivoted to the other pair of clamping levers and an operating spindle coacting with both of said cross bars to move said clamping levers.

1,890,062. VENDING MACHINE. FRANK A. MADDEN, Salina, Kans. Original application filed Oct. 26, 1925, Serial No. 64,735. Divided and this application filed Apr. 6, 1931. Serial No. 528,024. 3 Claims. (Cl. 312—44.)



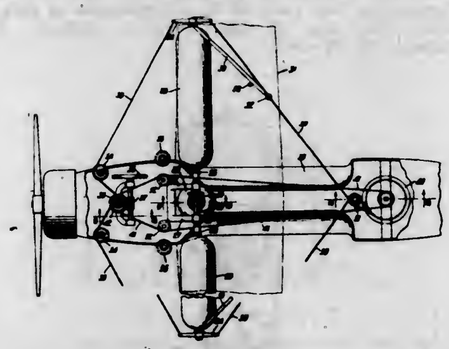
3. In a cup dispensing machine, mechanism adapted to move a cup toward a delivery position and then propel it suddenly forward toward a position for receiving liquid, a driven shaft operatively connected with said mechanism, a driving shaft to rotate said driven shaft, a spring section between said shafts, and a snap action spring comprising two upwardly diverging sections which are each anchored at one end and attached at the other end eccentrically to said driven shaft in order to maintain said driven shaft normally at a definite position of rest and adapted, when said driven shaft is rotated to a point beyond dead center to impart to the aforementioned cup delivery mechanism the recited sudden forward movement.

1,890,063. TESTING APPARATUS AND METHOD. DOUGLAS M. MCBEAN, Canajoharie, N. Y., assignor to Beech-Nut Packing Company, Canajoharie, N. Y., a Corporation of New York. Filed Nov. 7, 1930. Serial No. 494,076. 9 Claims. (Cl. 175—183.)



1. The method of testing dielectric material which comprises maintaining the material for a predetermined length of time between electrodes, and impressing a potential difference across the electrodes of a value sufficient in that length of time to cause breakdown of the material at a point where the dielectric strength drops below a predetermined degree but not sufficient to otherwise cause breakdown of the material in that length of time.

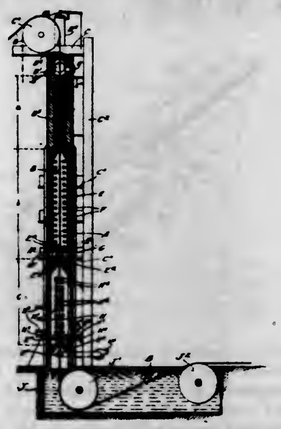
1,890,064. AIRPLANE. NICHOLAS J. MEDVEDEFF, Larchmont, N. Y. Filed July 24, 1930. Serial No. 470,409. 8 Claims. (Cl. 244—14.)



1. In an aircraft, a fuselage, a shaft disposed transversely of said fuselage and extending exteriorly thereof, means for rotating said shaft, wings carried by said fuselage, a revoluble sustaining element, pivotally carried by each end of said shaft, and a pair of struts each carried at one end by each of said wings and connected at the other end to the free end of said elements.

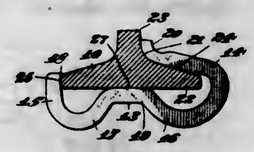
1,890,065. METHOD AND APPARATUS FOR HEAT TREATING SHEET METAL. PAUL A. MEEHAN, Cleveland, Ohio, assignor, by mesne assignments, to Swindell-Dressler Corporation, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed June 28, 1927. Serial No. 202,014. 9 Claims. (Cl. 263—3.)

2. The method of annealing sheet metal of a substantial width which comprises passing a continuous strip of the metal vertically downward through a low temperature preheating zone in which heat is transferred to the metal by convection, a high temperature heating zone in which heat is transferred to the metal partly by convection and partly by radiation and wherein a reducing atmosphere is maintained, and a cooling zone through which a cooling fluid is passed in a direction opposite to the travel of the



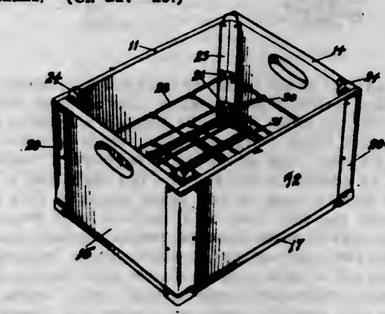
metal strip, and regulating the combustion conditions in said heating zone to prevent the circulation of gases between said heating and cooling zones.

1,890,066. RAIL ANCHOR. GEORGE LOOP MOORE and JAMES ROBERT STEELE, Owego, N. Y. Filed Apr. 23, 1930. Serial No. 446,511. 18 Claims. (Cl. 238—330.)



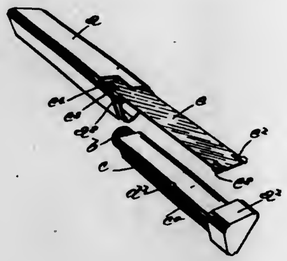
1. A rail anchor comprising a toe portion adapted to engage the flange at one side of a rail, a fillet engaging portion adapted to normally grip the fillet at the other side of a rail, an under rail portion intermediate the aforementioned portions, comprising a tie engaging portion and a portion adapted to lie substantially parallel with the under side of the base of a rail and in close contiguity thereto, and a substantially flat portion adjacent the fillet engaging portion adapted to lie substantially parallel with and in close contiguity to the upper surface of the rail flange but normally out of gripping engagement therewith.

1,890,067. CRATE. WILLIAM W. ROBINSON, Chattanooga, Tenn. Filed July 28, 1931. Serial No. 553,495. 6 Claims. (Cl. 217—19.)



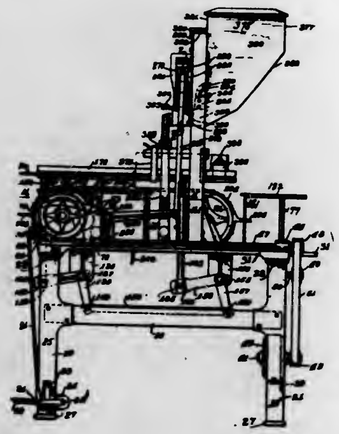
1. A crate containing grid wires, a frame wire connected therewith, and corner braces for said crate provided with supports engaging and positioning said frame wire in said crate.

1,890,068. LIP STICK, EYEBROW PENCIL, AND THE LIKE. JACQUES SCHALL, Paris, France. Filed Oct. 26, 1929, Serial No. 402,712, and in Belgium Nov. 19, 1928. 6 Claims. (Cl. 132—79.)



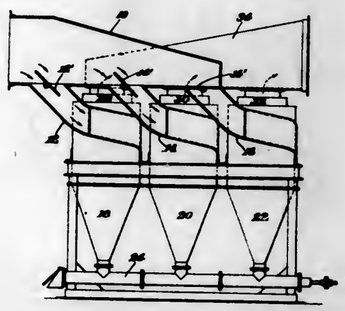
1. In a toilet article, a casing, an assembly including an end closure for said casing and a support for a cosmetic material connected to said end closure, said support being formed so as to be insertable into said casing, and a mirror slidably mounted inside said casing in the space between said casing and said support.

1,890,069. CHARLOTTE RUSSE CUP FILLING MACHINE. LOUIS TRIOLO, Brooklyn, N. Y., assignor to Imperial Paper Box Corporation, Brooklyn, N. Y., a Corporation of New York. Filed Aug. 24, 1929, Serial No. 388,124. Renewed Mar. 30, 1932. 1 Claim. (Cl. 107—28.)



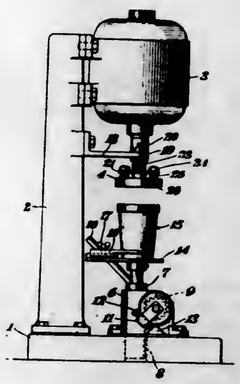
In a machine of the character described the combination of a frame, vertically reciprocating table members extending up from the frame, said table members adapted to slidably support boxes containing cups, means to move the boxes with their cups on the table members, a reservoir adapted to contain cream and the like supported in the machine over the path of said boxes, means to draw said cream and the like from said reservoir and discharge into said cups in equal amounts, flexible conduits extending from the latter means, an outlet nozzle fastened to the outlet end of each conduit, a cross plate having openings located below said nozzles, said outlet nozzles inserted in said openings, means to vibrate said cross plate simultaneously in directions parallel to its longitudinal axis and at right angles thereto, whereby said cream or fondant is deposited into said cups in the form of pyramidal spirals.

1,890,070. DUST SEPARATOR CONTROL. LOUIS C. WHITON, Jr., New York, N. Y., assignor to Prat-Daniel Corporation, New York, N. Y., a Corporation of New York. Filed July 14, 1931. Serial No. 550,694. 4 Claims. (Cl. 183—83.)



1. The combination with a plurality of dust separators all communicating with a common inlet duct, of means for interrupting the communication between one or more of said separators and said duct when the pressure or volume of the dust carrying medium flowing through said duct decreases.

1,890,071. PAPER WORKING MACHINE. FRANK G. WIKSTROM, Brooklyn, N. Y., assignor to Lily-Tulip Cup Corporation, New York, N. Y., a Corporation of Delaware. Filed Nov. 17, 1931. Serial No. 575,557. 5 Claims. (Cl. 93—36.)

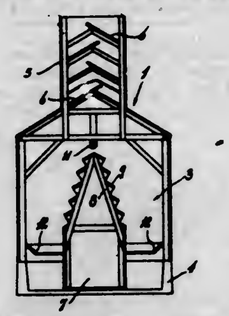


1. In a paper working machine the combination of, a crimping head and friction means for heating said head, said head and said friction means being relatively movable one with respect to the other.

1,890,072. COOLING SYSTEM. CLAUD H. BILLS and GLENN G. GRISWOLD, Los Angeles, Calif. Filed Feb. 17, 1931. Serial No. 516,322. 4 Claims. (Cl. 261—111.)

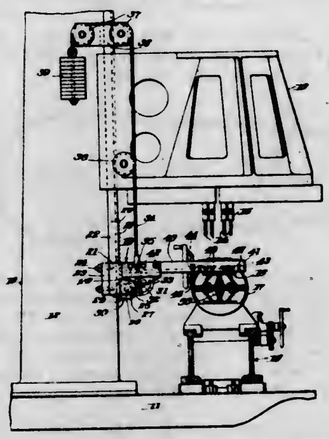
1. A cooling tower comprising a housing, a vent chamber rising from the top of said housing, baffle means in said vent chamber, an air tunnel extending transversely

through the housing, said tunnel being open at the ends thereof whereby air is supplied to the housing, a vent rising from the air tunnel and provided with louvers through



which air is admitted into the housing, and a spray head in the housing above said vent through which the water to be cooled is forced.

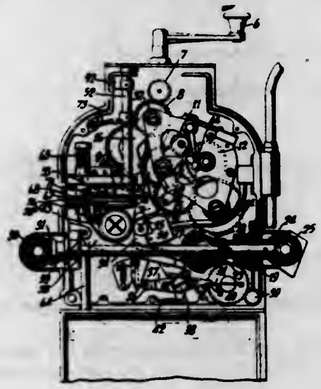
1,890,073. TEMPLATE HOLDING DEVICE. HARRY SHARLES BOONE, Pottstown, Pa., assignor to McClintic-Marshall Company, Pottstown, Pa., a Corporation of Pennsylvania. Filed Apr. 2, 1929. Serial No. 351,848. 2 Claims. (Cl. 77—62.)



1. In combination with a press of the class described having a column provided with vertical flanges and with a multiple spindle tool head movable thereon, a carriage independently of said head having portions overlapping the sides of said flanges, means on said portions overlapping the rear of the flanges, a rack on the column, gearing on the carriage in mesh with the rack and operable to move the carriage independently of and relatively to said head and to the work, counterbalancing means to maintain the carriage at different elevations, said carriage having side flanges, and template-mounting arms having flanges disposed in contact with said side flanges and a template adjustably secured to said arms.

1,890,074. MULTILENS AERIAL CAMERA. AMBROSIUS BERSCHEL, Brooklyn, FREDERICK W. LUTZ, Floral Park, and GEORGE RATTRAY, Mineola, N. Y., assignors to Fairchild Aerial Camera Corporation, New York, N. Y., a Corporation of New York. Filed July 7, 1931. Serial No. 549,156. 14 Claims. (Cl. 95—18.)

1. In an aerial camera, film advancing means and shutter setting means controlled thereby, shutter tripping means, a measuring roll over which said film is drawn, said film advancing means including a winding member and clutch therefor, means actuated by said measuring roll for controlling the operation of said clutch and thereby said film and shutter operating means and comprising devices for



predeterminedly limiting the amount of film which may be advanced between exposures and for rendering ineffective the operation of said winding member toward further film advancement prior to exposure or toward exposure prior to the advancement of a predetermined amount of film.

1,890,075. SEWING MACHINE WORK-SUPPORT. FREDERIC M. CARD, Bridgeport, Conn., assignor to The Singer Manufacturing Company, Elizabeth, N. J., a Corporation of New Jersey. Original application filed May 28, 1930, Serial No. 456,380. Divided and this application filed July 16, 1931. Serial No. 551,113. 2 Claims. (Cl. 112—260.)

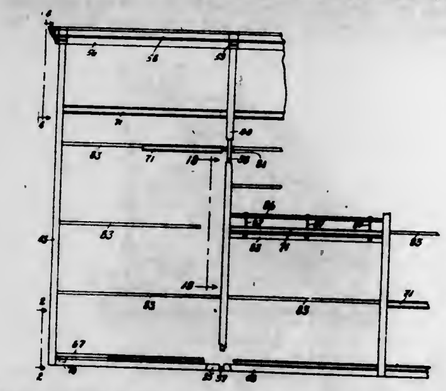


1. In a sewing machine, in combination, stitch-forming mechanism including a reciprocatory needle, feeding mechanism, a throat-plate, presser means opposed to the throat-plate having spaced work-engaging toes between which upturned margins of material are adapted to pass toward the stitching point, a ridged fabric-margin supporting member having a crest which extends lengthwise and substantially centrally of the line of seam within the space between said toes and terminates in a chaining-off finger, and means for detachably securing said fabric-margin supporting member upon the throat-plate with its crest above the upper surface of the throat-plate and its chaining-off finger projecting rearwardly beyond the path of the needle.

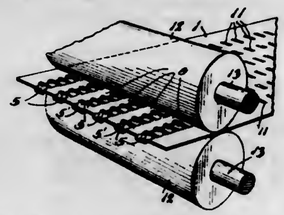
1,890,076. KNOCKDOWN SHELVING. EDWARD C. CORDES, Cincinnati, Ohio, assignor to The Hyde Park Lumber Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Jan. 29, 1931. Serial No. 512,022. 18 Claims. (Cl. 211—148.)

1. Knockdown shelving units each comprising base members, vertical members supportable by the base members top members and means for removable attachment thereof

to the vertical members, shelves and means for removable positioning thereof between the vertical members, and upwardly-opening receiving members and downwardly-projecting tongue members associated with the base and providing for the addition of other units to the erected shelving unit.

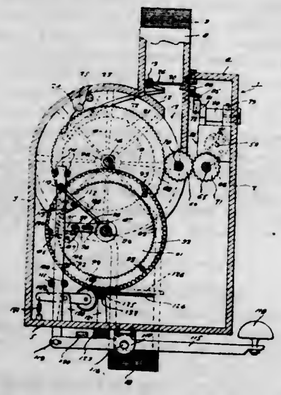


1,890,077. METHOD OF MAKING TUBING. AUGUST O. ELTING, Chicago, Ill. Filed June 27, 1928. Serial No. 288,698. 12 Claims. (Cl. 113—33.)



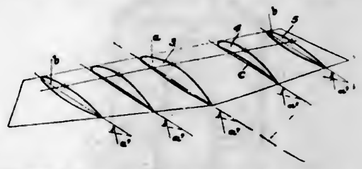
1. The art of constructing sheet metal tubing comprising kneading parts of the material of a sheet to be formed into tubing while preserving the sheet in a straight condition, and then shaping the sheet into tubing.

1,890,078. LIQUID MEASURING AND RECORDING MACHINE. ROBERT E. ENOCHS and HARVY W. LAWRENCE, Natchez, Miss. Filed July 3, 1930. Serial No. 465,674. 5 Claims. (Cl. 234—34.)



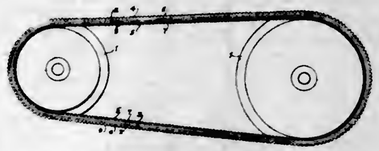
1. In combination, a rotary measuring wheel, a motor for actuating the wheel, material actuated locking means for releasably securing the wheel against rotation, and a printing unit operatively connected with the wheel for operation in unison therewith.

1,890,079. AIRCRAFT WING. HENRICH FOCKE, Bremen, Germany. Filed May 14, 1930, Serial No. 452,405, and in Germany Feb. 27, 1930. 1 Claim. (Cl. 244—12.)



An aircraft wing, the highest profile points of which are situated in a straight horizontal line from end to end, said wing decreasing in vertical thickness from the center towards each end and the transverse curvature thereof first increasing and then decreasing from center to tip, all profile sections being at the same angle of incidence with respect to the horizontal plane of the horizontal axis of the fuselage, the central and outer end cross sectional profile of the plane being convex both on the upper and lower sides, and the intermediate cross sectional profiles of the plane being convex on the upper side and concave on the lower side.

1,890,080. DOUBLE COG BELT. ABRAHAM L. FREEDLANDER, Dayton, Ohio. Filed Aug. 8, 1928. Serial No. 298,217. 4 Claims. (Cl. 74—62.)



1. A driving belt comprising an inner or compression member having as part of its outer surface transverse strengthening means of greater rigidity than the material of the compression member, an inextensible neutral member composed of circumferentially wound cord, and an outer or extension member having as part of its outer surface transverse strengthening means.

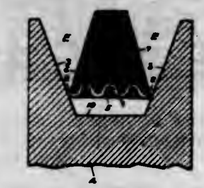
1,890,081. PROCESS OF MAKING A PUNCTUREPROOF INNER TUBE. ABRAHAM L. FREEDLANDER, Dayton, Ohio, assignor to The Dayton Rubber Manufacturing Company, Dayton, Ohio, a Corporation of Ohio. Filed July 29, 1929. Serial No. 382,033. 2 Claims. (Cl. 18—53.)



2. In a process of making a punctureproof inner tube, mixing a compound of sulphur, oxide, rubber, a low temperature accelerator and a high temperature accelerator, making one portion of tube thicker than the other portion of the tube so as to delay the action of the heat applied to the exterior of the tube on the interior of the thickened portion and heating the exterior only of said tube to

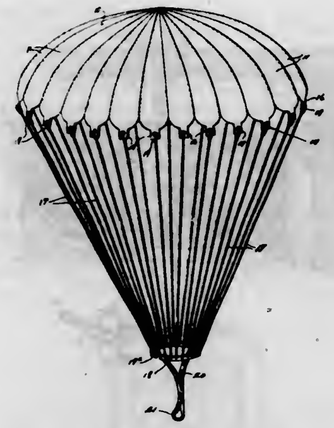
a point where the low temperature accelerator takes effect and withdrawing the tube from the heat before the high temperature accelerator completes its acceleration on the interior of the thickened portion of the tube.

1,890,082. LINE CONTACT BELT. ABRAHAM L. FREEDLANDER, Dayton, Ohio. Filed Aug. 5, 1929. Serial No. 383,757. 11 Claims. (Cl. 74—63.)



1. In combination, a groove pulley and a belt therein having a rigid layer engaging said pulley substantially along a single line on each pulley surface, said belt having raw ends arranged in a line for forming the line contact.

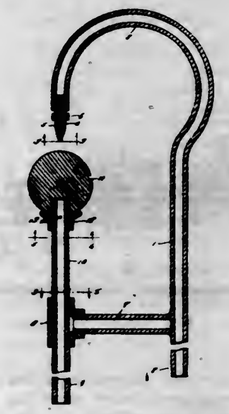
1,890,083. MAIL-BAG PARACHUTE. CHARLES M. GRAEFF, Harrisburg, Pa. Filed Dec. 12, 1929, Serial No. 413,623. Renewed Apr. 23, 1932. 3 Claims. (Cl. 244—21.)



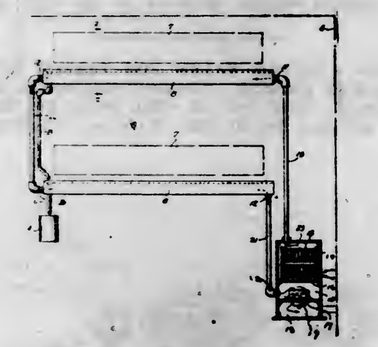
3. A mail parachute comprising a parachute proper, the lower margin of the parachute being provided with a series of spaced grommets, metallic members engaging through said grommets and engaging with a series of depending ropes, a ring, snap hooks at the lower ends of the ropes engagable with said ring, the ring having means whereby a mail bag may be supported therefrom.

1,890,084. FRUIT AND VEGETABLE STAND SPRAY. RAY H. HAMM and JOHN H. W. CHAMPION, Phoenix, Aris., assignors to Arizona Grocery Company, Phoenix, Aris., a Corporation of Arizona. Filed July 29, 1931. Serial No. 553,864. 1 Claim. (Cl. 299—58.)

In a spray device, an upright feed pipe having a depending outlet portion provided with a nozzle, said feed pipe being provided with a lateral arm having a T-coupling, a drain pipe threaded through said T-coupling and adjustable with respect thereto, a spherical deflector threaded onto said drain pipe immediately below said nozzle, and a collector cup threaded on said drain pipe below said spherical deflector, said drain pipe being provided below said spherical deflector and said collector with drain openings, said drain pipe being provided with a single screw thread providing for the attachment of the pipe to the coupling, and for the mounting of the spherical deflector and collector.



1,890,085. DEFROSTING DEVICE FOR REFRIGERATING CASES. CLEMENT V. HILL, Trenton, N. J., assignor to C. V. Hill & Co., Inc., Trenton, N. J., a Corporation of New Jersey. Filed June 9, 1930. Serial No. 459,960. 13 Claims. (Cl. 62—89.)

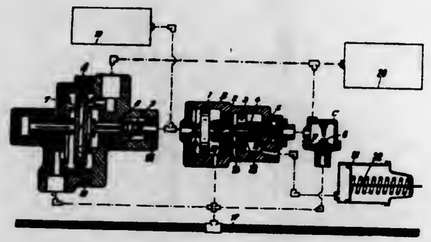


1. The method of defrosting the cooling coils in a refrigerator having drip pans beneath the coils, which consists in shutting down the refrigerating apparatus, passing comparatively warm medium through the drip pans, and expelling the water of condensation together with the warm medium from said pans.

1,890,086. METHOD OF REFINING ROSIN. IRVIN W. HUMPHREY, Wilmington, Del., assignor to Hercules Powder Company, Wilmington, Del., a Corporation of Delaware. Filed Feb. 28, 1930, Serial No. 432,253. Renewed May 26, 1931. 23 Claims. (Cl. 87—2.)

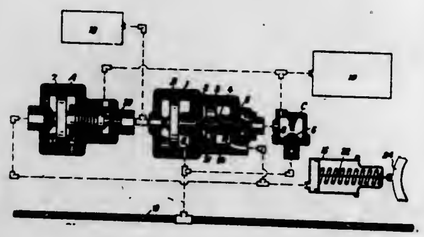
1. The step in the method of refining rosin by the removal of color bodies therefrom which includes subjecting rosin in solution in a suitable solvent to treatment with an organic ester having a capacity for selectively dissolving color bodies in the rosin and capable of immiscibility with the rosin solution.

1,890,087. TRIPLE VALVE FOR AUTOMATIC RAILWAY BRAKES. FLORENTIN KASANTZEFF, Berlin, Germany. Filed Feb. 26, 1929, Serial No. 342,736, and in Russia Oct. 30, 1927. 3 Claims. (Cl. 303—60.)



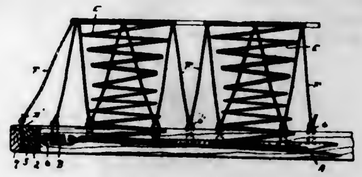
1. A triple valve for automatic railway brakes, comprising in combination a valve governing the air inlet and exhaust of the brake cylinder, an air pressure transmitting member governing said valve, a chamber connected to the train pipe on one side of said air pressure transmitting member, a control chamber adjoined on the other side of said air pressure transmitting member during all graduations of braking and releasing, a check valve for closing said control chamber during braking applications so as to enable said control chamber to retain a constant air pressure acting on the air pressure transmitting member, and means dependent upon the air pressures existing in the auxiliary reservoir and in the train pipe for exhausting air from said control chamber immediately to the usual auxiliary reservoir by each pressure increase produced in the train pipe.

1,890,088. TRIPLE VALVE FOR DIRECT ACTING RAILWAY BRAKES. FLORENTIN KASANTZEFF, Berlin, Germany. Filed Feb. 26, 1929, Serial No. 342,737, and in Russia Oct. 30, 1927. 5 Claims. (Cl. 303—60.)



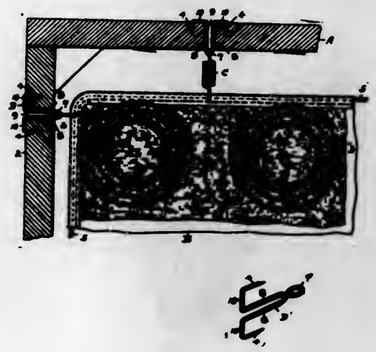
1. A triple valve for direct acting railway brakes, comprising in combination a valve governing the air inlet and exhaust on the brake cylinder, an air pressure transmitting member governing said valve, a chamber connected to the train pipe on one side of said air pressure transmitting member, a control chamber adjoining the other of said air pressure transmitting member, and a valve passage governed by air pressure transmitting means dependent upon the air pressures existing in the auxiliary reservoir and in the brake cylinder for feeding air from the auxiliary reservoir to said control chamber so as to retain therein air at a constant pressure during braking applications.

1,890,089. RESILIENT BOTTOM. JACOB KRONHEIM, Cleveland, Ohio. Filed Feb. 27, 1930. Serial No. 431,781. 3 Claims. (Cl. 155—179.)



3. In a structure as described, an open frame having a rail formed with a series of transverse openings, and a tie member having loop portions extending through said openings and other loop portions projecting at right angles to the plane of said first loops.

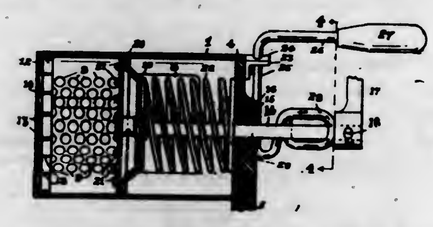
1,890,090. CHAIR AND COUCH. JACOB KRONHEIM, Cleveland, Ohio. Filed June 27, 1930. Serial No. 464,189. 1 Claim. (Cl. 155—179.)



A chair or couch frame, a yielding bottom supported within said frame, a series of openings in the rails of said frame, a series of wire connecting devices each extending freely through and substantially beyond one of said openings, and including a loop end and pointed bent extremities of substantial length adapted to seat against and interlock with the rails of said frame, said connecting devices having their loops close to the ends thereof twisted to have said loops and the bent extremities lie in different planes, and means to connect said bottom with said loop ends of said devices.

1,890,091. CHEESE GRATING MACHINE. GIOVANNI MAESTRO, New Kensington, Pa. Filed Oct. 6, 1931. Serial No. 567,179. 5 Claims. (Cl. 146—177.)

1. In a cheese grater, the combination with a horizontally disposed barrel, a grater at one end of the barrel, a shaft extending into the other end of said barrel, a follower mounted on said shaft and a spring urging said follower toward the grater, of means comprising a bent lever straddling said shaft without said casing and arranged when moved into its operative position to retract said shaft and follower away from the



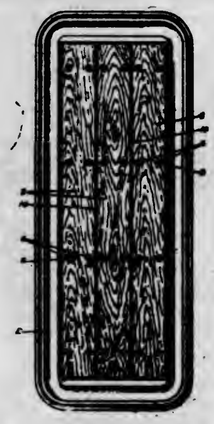
grater and against the force of said spring to permit the cheese to be loaded into the barrel between the grater and the follower.

1,890,092. TRAFFIC ALARM FOR HIGHWAYS. HAROLD STEPHEN MULHOLLEN, Los Angeles, Calif. Filed July 6, 1931. Serial No. 548,811. 5 Claims. (Cl. 116—67.)



1. In combination with a vehicular highway having a pit ranging transversely thereof, a rattle channel frame disposed in said pit and open at the top, a lid plate substantially flush with the highway surface loosely mounted thereon and rockably supported, coacting shoulders on said lid and frame providing percussion surfaces and limiting the rocking of said plate whereby a vehicle wheel passing thereover will rock said plate and produce an audible drumming.

1,890,093. CASKET. HARRY A. NEFF, Bellaire, Ohio, assignor to The Belmont Casket Manufacturing Company, Columbus, Ohio, a Corporation of Ohio. Filed June 4, 1931. Serial No. 541,988. 1 Claim. (Cl. 27—5.)

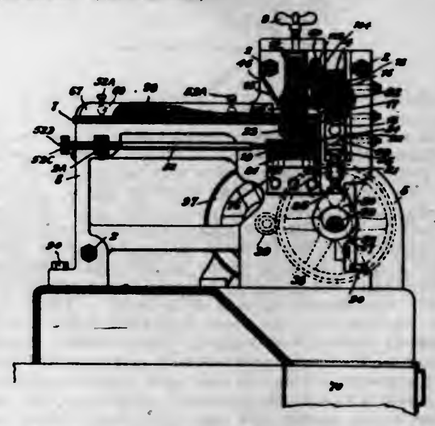


A casket having a metal bottom, said bottom being flat, a plurality of flat wooden strips covering practically the entire bottom, said wooden strips being spaced apart to allow for expansion and contraction, said strips having a plurality of holes arranged in symmetrical relation, and metal cup-shaped members countersunk in said holes and secured to said bottom for permanently attaching said wooden strips to said bottom, said members being so secured to avoid disrupting the continuity of said bottom.

1,890,094. COPPER PLATING. WILLIAM PEACOCK, JR., Philadelphia, Pa., assignor to Peacock Laboratories, Inc., Philadelphia, Pa., a Corporation of Pennsylvania. Filed Nov. 21, 1930. Serial No. 497,337. 4 Claims. (Cl. 91—68.1.)

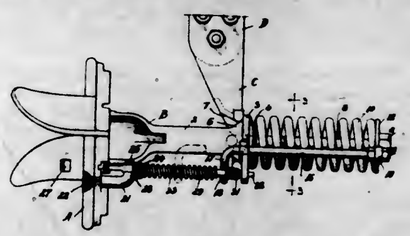
1. A method of protectively coating the metallic reflecting film of a glass mirror or the like to protect the same against spoilage due to exterior influences which consists in applying to the rear surface of said mirror a free flowing mixture of resinous material and comminuted copper particles of substantially leafy form.

1,890,095. YARN OR FIBER CUTTING MACHINE. JAMES F. PULLAN, Pawtucket, R. I., assignor to Lincoln Machine Company, Pawtucket, R. I., a Corporation of Rhode Island. Filed June 1, 1931. Serial No. 541,196. 5 Claims. (Cl. 164—49.)



1. In a machine of the class described, the combination with a pair of cutting knives, means for reciprocating one of said knives, gripping means for holding filament-like yarns during the cutting of the same by the knives, a support for the yarns, rollers for feeding the yarns therefrom to the grippers and knives, one of the grippers acting while in a non-gripping position to prevent the yarns from wrapping about the feed rollers.

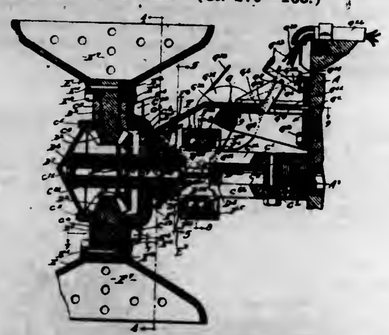
1,890,096. AUTOMATIC TRAIN PIPE CONNECTER LOCK. JOSEPH ROBINSON, New York, N. Y. Filed Sept. 10, 1928. Serial No. 304,907. Renewed Feb. 23, 1932. 7 Claims. (Cl. 285—68.)



1. In an automatic lock for train pipe connecters of the class described, the combination with a connecter head, a bracket arm including an anchoring device, a tie rod and

a buffer spring surrounding the tie rod and connected therewith and abutting a tubular member carrying the connecter head, of a locking member carried by the head, operative connections between the tie rod and the locking member including a connecting rod and a link member, a slip joint between the connecting rod and link member, and means for adjusting said slip joint whereby the time of action of the locking member by operation of the connecting rod may be adjusted as desired.

1,890,097. AIRPLANE PROPELLER. SAMUEL E. SLONIMSKY, Sawtelle, Calif. Filed May 21, 1929. Serial No. 364,805. 3 Claims. (Cl. 170—163.)



1. An airplane propeller comprising, in combination with a driving shaft, a hub fixed on said shaft, a plurality of propeller shafts journaled in said hub, pinions secured on the inner ends of said propeller shafts, propeller blades secured on the outer ends of said propeller shafts, a gear in mesh with said pinions and formed with a hub journaled in said driving shaft, said gear hub being formed with a spiral internal groove, a slide shaft extending through said hub, means to prevent turning of said slide shaft with relation to said drive shaft, a pin in said slide shaft engaging the groove in said gear hub, a lock for normally locking said propeller blades against turning, means for disengaging said lock from said propeller blades, and means for moving said slide shaft longitudinally when said lock is disengaged as aforesaid, for turning said propeller blades through said pin, groove, gear, pinions, and propeller shafts.

1,890,098. PRODUCTION OF FLAVANTHRONE DYESTUFF INTERMEDIATES. WILLIAM SMITH and JOHN THOMAS, Grangemouth, Scotland, assignors to Scottish Dyes, Limited, Grangemouth, Scotland. Filed Mar. 31, 1928, Serial No. 266,452, and in Great Britain May 26, 1926. 6 Claims. (Cl. 260—60.)

2. 1 : 1'-dianthraquinonyl-2 : 2'-diurethanes.

1,890,099. PRODUCTION OF DYESTUFF INTERMEDIATES OF THE ANTHRAQUINONE SERIES. WILLIAM SMITH AND JOHN THOMAS, Grangemouth, Scotland, assignors to Scottish Dyes, Limited, Grangemouth, Scotland. Filed Apr. 10, 1928, Serial No. 269,021, and in Great Britain Apr. 19, 1927. 7 Claims. (Cl. 260—60.)

1. The process which consists in treating halogenated amino-anthraquinones having halogen in the a position in suspension in the presence of an alkali chosen from the group consisting of hydroxides of alkali metals and hydroxides of alkaline earth metals with a reducing sugar.

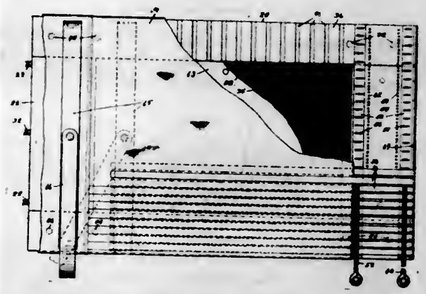
1,890,100. FOUNTAIN PEN. HARRY SPIRO, San Francisco, Calif., assignor to Ada Joel Spiro. Filed Sept. 9, 1931. Serial No. 561,861. 8 Claims. (Cl. 120—42.)

1. In a fountain pen of the character described, a barrel section, a container in the barrel, a pen connected with one end of said container, an opaque cartridge containing concentrated ink connected with the opposite end of the container, means for filling the container with water, means for successively discharging predetermined quanti-



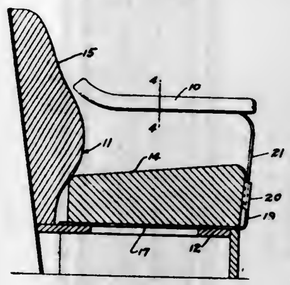
ties of concentrated ink from the cartridge into the container to form a writing fluid, and other means actuated by said discharging means for visibly indicating the quantity of concentrated ink remaining in the cartridge.

1,890,101. PLAITING DEVICE. WILLIAM H. STEWART, Jacksonville, Fla. Filed Oct. 31, 1928. Serial No. 316,122. 23 Claims. (Cl. 223—40.)



1. A plaiting device including a frame having a well therein, having a closure for the bottom thereof, a screen forming a cover for the top of said well, plaiting bars located in the plaits of the material in parallel side by side relation adapted to hold the material on said frame over said screen, means connecting said bars independently removably to said frame above said screen, and means to admit a moistening agent into said well under said screen and to the material on said bars.

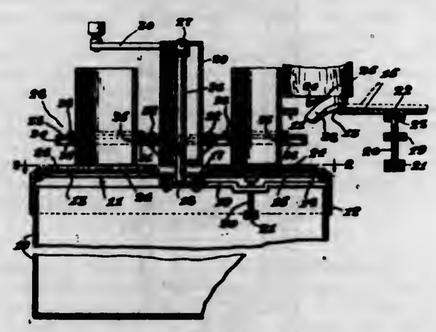
1,890,102. ARMREST ATTACHMENT FOR VEHICLE SEATS. ERNEST C. URQUHART, Oakland, Calif. Filed Aug. 18, 1931. Serial No. 557,787. 1 Claim. (Cl. 155—112.)



The combination with a seat having an erect back, of a substantially U-shaped member of resilient material composed of two separable approximately L-shaped upper and lower sections having horizontal and vertical portions, the vertical portions interfitting at the front of the seat and the horizontal portion of the lower section extending beneath the seat, and an arm rest member provided with an outwardly opening socket receiving the horizontal portion of the upper section, said arm rest

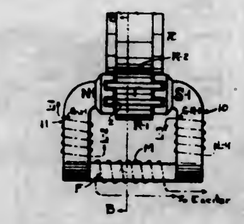
member extending to a point adjacent the back of the seat and sufficiently close to the same so that the back of the seat will limit the downward movement of the arm rest member and at the same time prevent the arm rest member from being accidentally separated from the horizontal portion of the said upper section.

1,890,103. SLICER. HUGH W. WATSON, Seattle, Wash. Filed Feb. 15, 1930. Serial No. 428,552. 2 Claims. (Cl. 146—167.)



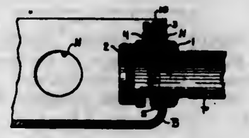
1. A slicer comprising a circular baseplate having a diametral slot formed therein and having concentrically disposed slits extending from the ends of said slot to form diametrically opposed resilient quadrant-shaped portions thereon, an annular flange depending from the perimeter of said baseplate, a diametrically disposed bar rigidly secured at its ends to the inner walls of said flange in perpendicular relation to said diametral slot, relatively narrow slicing knives disposed in medial alignment with said diametral slot having their inner ends detachably secured to said diametrically disposed bar and their outer ends similarly secured to the upper face of said baseplate adjacent its perimeter, a post rigidly secured at its inner end to said diametrically disposed bar and extending outwardly therefrom through the said baseplate in concentric relation to the latter, a head rotatably mounted upon said post, a plurality of open-ended tubular hoppers removably mounted within said head for the materials to be sliced, said hoppers having a circular path of travel over said knives with their lower ends disposed in shearing relation to the latter, means to rotate said head, and means for adjusting the quadrant-shaped portions relative to said knives.

1,890,104. MAGNETIC INDUCTION MACHINE. ELI WHITE, Detroit, Mich. Filed July 28, 1930. Serial No. 471,173. 11 Claims. (Cl. 171—252.)



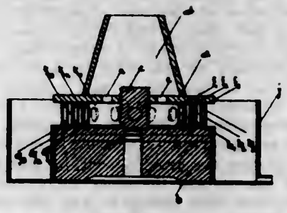
1. In a magnetic induction machine, a magnet having a series of pole arms in pairs, a field coil for energizing the same, a series of generating coils, at least one for each of the pole arms and completely enclosing the same, a rotor including a series of segments of magnetic material alternating with sections of approximately equal size non-magnetic and non-conducting in character positioned between the said pole arms and through rotation of which, as one magnetic segment is opposite one pair of pole arms a non-magnetic section is between a succeeding pair, said segments being so arranged that only one magnetic segment may be opposite a pair of pole arms at any time the arrangement providing a structure in which continued rotation of the rotor causes a surge of magnetic lines of force first through one set of pole arms and then through the other thereby generating current in the generating coils.

1,890,105. GROUNDING CONNECTER. BASIL J. YANCHENKO, New York, N. Y., assignor to The Thomas & Betts Co., Elizabeth, N. J., a Corporation of New Jersey. Filed July 12, 1928. Serial No. 292,206. 6 Claims. (Cl. 247—1.)



1. A grounding connecter for outlet box assemblies comprising a plate bent upon itself forming a pair of adjacent sections hingedly secured together at the bending axis, and means to forcibly spread the plates apart.

1,890,106. APPARATUS FOR EMULSIFICATION OF IMMISCIBLE INGREDIENTS. NIELS BENDIXEN, London, England, assignor to J. C. Vredenburg, London, England. Filed Apr. 16, 1931, Serial No. 530,687, and in England Nov. 24, 1930. 5 Claims. (Cl. 99—2.)

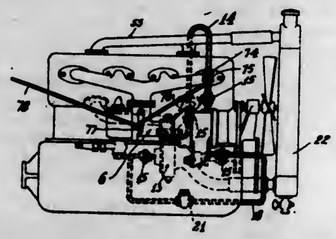


3. An apparatus for emulsification of immiscible ingredients comprising two metal discs adapted to rotate horizontally, a series of perforated circular rings placed between the said discs concentric to each other and to the center of rotation, metal gauses covering the perforations of said rings, means for detachably connecting the discs adapted to hold the rings in position between the discs, means for feeding the liquids to be emulsified inside the smallest ring, and carriers arranged before the first ring and between the following rings adapted to move the mixture to be emulsified through the said perforations.

1,890,107. AIR-CONDITIONER FOR INTERNAL COMBUSTION ENGINES. HYMAN D. BOWMAN, Pittsburgh, Pa. Filed Jan. 11, 1930. Serial No. 420,067. 5 Claims. (Cl. 128—25.)

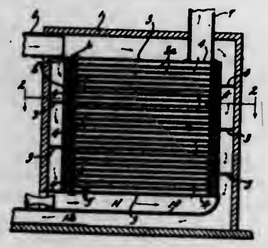
1. In combination with an internal combustion engine having a water circulating pump, an air intake device in communication with the intake manifold of said engine; a plurality of air screens positioned in spaced relation within the air intake device; a water sprayer positioned in said air intake device intermediate said screens; a

well adapted to receive the surplus water delivered by the sprayer; a pipe line connecting said sprayer with the high pressure side of said pump; another pipe line con-



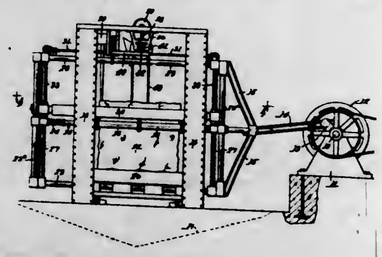
necting said well with the suction side of the pump, and means actuated by the suction pressure of said engine to regulate the flow of water to the sprayer.

1,890,108. HEAT TRANSFER DEVICE. HENRI G. CHATAIN, Erie, Pa., assignor to Northern Laboratories, Inc., Cleveland, Ohio, a Corporation of Ohio. Filed July 13, 1931. Serial No. 550,362. 3 Claims. (Cl. 257—245.)



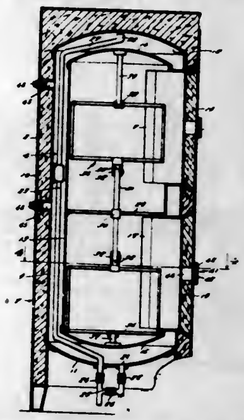
1. In a heat transfer device of the class described, a system of plates and spacers arranged in a stack within a housing, said spacers comprising frames having sides and ends spaced from those of said housing, said plates extending laterally to the sides of said housing, each plate extending on one end to said housing and on the other end terminating with the spacers and having an opening immediately within the spacer end, adjacent of said plates being turned in opposite directions, whereby two paths of flow are provided within said housing, one within said spacers and the other thereabout, each path including reverse flow passes in the directions of said plates and between a pair thereof.

1,890,109. STONE SAWING MACHINE. ALBERT E. COX and JOHN B. HALL, Hardwick, Vt. Filed Nov. 19, 1931. Serial No. 576,148. 5 Claims. (Cl. 125—12.)



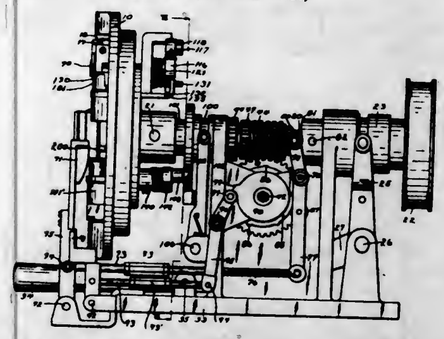
2. In a stone sawing machine, the combination of a reciprocable frame, a saw frame carried thereby, a series of hoppers supported by the stationary frame over the saw frame, a rack on the reciprocating frame, a pinion mounted to mesh with the rack, and means operated by the pinion for introducing an abrasive into the several hoppers as the pinion oscillates.

1,890,110. WATER-COOLED REFRIGERATOR. EDWARD R. DOMPKE, Fairfield, Wash. Filed June 14, 1932. Serial No. 617,208. 2 Claims. (Cl. 257—21.)



1. A water cooled refrigerator of the class described comprising a cabinet including an outer wall, a compartment in said cabinet including a cylindrical wall, and upper and lower closing heads, packing interposed between the compartment and cabinet wall, the frontal portion of the cabinet having entrance openings and insulated closing doors therefor, a hollow shell-like article storage device supported in said compartment and including a cylinder and closing head for the opposite ends thereof, together with waterproofing means between the cylinders and compartments, said device being spaced from the wall of the compartment to provide a water circulating space, a valved water supply pipe connected to the lower closing head of the compartment, a valved water return pipe extending up through the water space and into the upper portion of the compartment and having a lateral branch terminating in a water return neck.

1,890,111. AUTOMATIC ARMATURE WINDING MACHINE. HARRISON H. EATON, Toledo, Ohio, assignor to The Electric Auto Lite Company, Toledo, Ohio, a Corporation of Ohio. Filed Mar. 10, 1925. Serial No. 14,367. 34 Claims. (Cl. 242—13.)



1. In a machine, the combination of a wire holding means, an armature supply holding means, means for causing relative movement between said means to effect a winding of wire from a source thereof on the armature in a plurality of separate coils, and guiding means for variably controlling said wire to lie in layers against the armature shaft at both ends of said armature, said guiding means being dependent upon the increase in the number of coils wound on said armature.

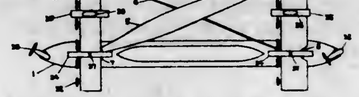
28. An armature winding machine comprising, in combination, a rotatable winding head for supporting an armature core with the core axis transverse to the axis of rotation of the winding head, means for rotating the winding head, mechanism for rotating the core to index the core into successive winding positions, a locating member for normally maintaining the core in a desired location relative to the winding head, and means under the control of the winding head rotating means for automatically stopping the winding head after a certain number of revolutions and for retracting the locating member and for operating the indexing mechanism.

34. In a mechanism; a wire holding means; a combined holder and cutter comprising a slotted rod for receiving wire; a cutting edge adjacent thereto; cam operated means for periodically rotating said rod to bend the wire and sever a portion therefrom whereby the ends of the severed wire have different configurations.

1,890,112. IGNITER CHARGE FOR BLASTING CAPS. LLOYD H. FISHER, Kenvil, N. J., assignor to Hercules Powder Company, Wilmington, Del., a Corporation of Delaware. Filed Dec. 23, 1931. Serial No. 582,871. 9 Claims. (Cl. 52—2.)

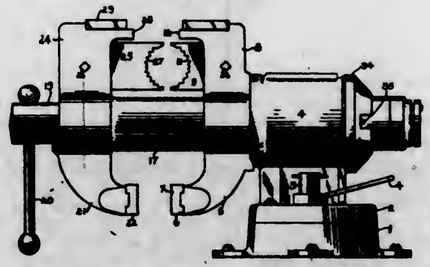
1. An igniter charge for blasting caps including in admixture a ferricyanide, an oxidising agent and a nitrated carbohydrate.

1,890,113. AEROSHIP. SAMUEL E. HITT, Elyria, Ohio. Filed Mar. 14, 1932. Serial No. 598,578. 20 Claims. (Cl. 114—66.5.)



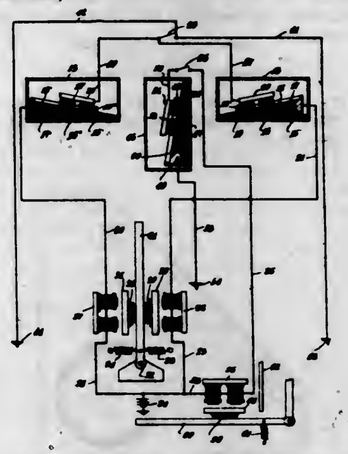
1. In a two hulled aeroship or similar craft, a lifting aerofoil mounted forward on the two said hulls, a lifting aerofoil mounted aft on the two said hulls, air propulsion units carried by the said aerofoils, each of the said hulls consisting of an outer shell capable of water closure, doors in the said shell opening outwardly and means of water closure of the said doors.

1,890,114. VISE. EDWIN W. FULTON, Oswego, N. Y. Filed Aug. 29, 1930. Serial No. 478,573. 1 Claim. (Cl. 81—38.)



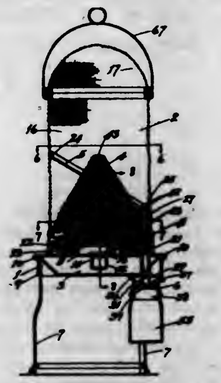
In a vise, a plurality of projections adapted to approach each other, and a plate upon each said projection, each said plate being provided with a V-shaped slot therein, said plates being arranged flat upon said projections and a portion of each projection extending beyond its associated plate, to prevent passage through said V-shaped slots.

1,890,115. AUTOMATIC CONTROL SYSTEM FOR AEROPLANES. YOUNG HO KOUN, New York, N. Y. Filed Apr. 28, 1931. Serial No. 533,497. 4 Claims. (Cl. 244—29.)



1. In a device as described, a tube transversely arranged to the fuselage of an aircraft behind its wings, and comprising duplicate circuit closers one for each wing, each consisting of a carriage normally resting on a rail on an insulated member adapted to slide onto a metal member over which said rail extends, upon the lowering of the respective wing to close a circuit, solenoids energized upon the closing of the circuit, a spring controlled stick controlling the ailerons of the craft, and armatures to be attracted by the energized solenoids, means connecting stick and ailerons to raise the aileron on the raised wing and to lower the aileron on the lowered wing stabilizing the aircraft.

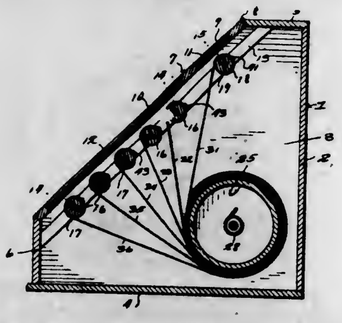
1,890,116. INSECT DESTROYING DEVICE. CHARLES L. JACKSON, Chula Vista, Calif. Filed Nov. 18, 1931. Serial No. 575,805. 6 Claims. (Cl. 43—118.)



1. An insect destroying device consisting of a base member, a reservoir mounted in said base member, a barrel member hinged on said base member provided in its base portion with a plurality of vents spaced apart radially and having mounted in it a plurality of flattened

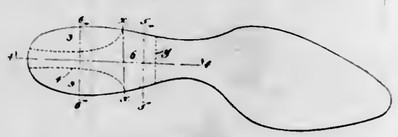
cone members with exit openings spaced apart one above the other, a funnel mounted in said barrel above said flattened cones, an inclined baffle with an outlet opening therein mounted in said barrel around the end of said funnel, a tubular insect passageway having its one end connected with the opening in said baffle and its other end operatively connected with an insect destroying member, mounted in said barrel, an insect destroying member mounted on the bottom of said reservoir and operatively connected with said tubular passageway, a cap member mounted on the upper end of said barrel and a handle means mounted on the upper end of said barrel below said clamp member.

1,890,117. CALENDAR. OLIVER B. JEFFREYS, Outwood, Ky. Filed Oct. 13, 1932. Serial No. 637,684. 4 Claims. (Cl. 40—117.)



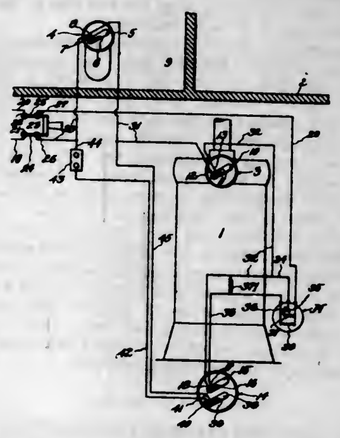
1. A calendar, comprising a plurality of tapes, a cylinder common to and on which said tapes are rolled, a plurality of rollers each having an end of a tape connected thereto to be rolled thereon from the cylinder, and means for simultaneously rotating the rollers to roll the tapes thereon from the cylinder, one of said tapes having the names of the months printed thereon and a year date associated with each name and the other tapes having a plurality of transverse rows of numerals which are coordinated to give with each month the proper day dates therefor.

1,890,118. BOOT OR SHOE SOLE. CHARLES EDWARD JOHNSON, Whitman, Mass., assignor to Augustus E. Guertin, Belmont, Mass. Filed Dec. 10, 1931. Serial No. 580,043. 3 Claims. (Cl. 36—24.5.)



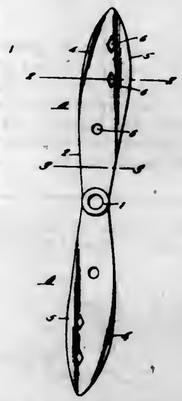
1. As a new article of manufacture, a boot or shoe sole having its rear end portion divided horizontally throughout its width and adjacent to the tread side thereof from the back of the heel part forwardly into the shank part a substantial distance beyond the position occupied by the breast of a heel so as to provide a thin breast-covering flap having upon its inner side a narrow relatively thick longitudinal median rib and formed at each side of said rib with a relatively thin side marginal portion of a length to extend from the top to the bottom of said heel, the inner and outer faces of each side marginal portion being approximately parallel and the shank portion of said flap being of greater thickness than said side marginal portions and having inner and outer surfaces which are approximately parallel.

1,890,119. OIL BURNER CONTROL SYSTEM. KARL KLINCKMULLER, Boston, Mass. Filed June 22, 1931. Serial No. 545,911. 2 Claims. (Cl. 236—9.)



1. In an apparatus of the character described, the combination with a boiler provided with an oil burner, of an electrical control system for said burner including an electrically operated burner-regulating element; a circuit in which said burner-regulating element is arranged; a room thermostat switch for operating said circuit; means for checking the operation of said burner when the pressure within said boiler rises to a predetermined point; a shunt circuit around said room thermostat switch; and a burner-controlled thermostat switch in said shunt circuit that is automatically maintained closed while said burner is in operation and which is automatically opened when the operation of said burner is checked.

1,890,120. PROPELLER. RALPH KLINGER, Riverside, Calif. Filed May 3, 1932. Serial No. 608,982. 1 Claim. (Cl. 170—172.)



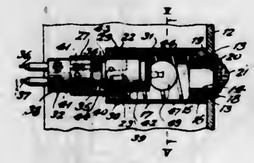
A propeller of the class described comprising a hub and elongated blades having their inner ends attached to the hub, each blade having its forward and rear edges forming elongated arcs merging at the tip of the blade, the forward or cutting edge of the blade having a slightly forwardly curved portion, extending from a point adjacent the tip to a point slightly beyond the transverse center of the blade, the rear edge of the blade being rearwardly curved to a greater extent than the forward edge, the ends

of this rear curved portion extending beyond the ends of the forwardly curved portion and each blade having openings therein permitting air to pass through the blade and being acted on by the curve at the rear edge thereof.

1,890,121. PROCESS OF BLEACHING SOAP STOCK. ANTHONY M. LAGASSE, Arlington, N. J., assignor to Stockton G. Turnbull, Arlington, N. J. Filed May 31, 1930. Serial No. 458,907. 8 Claims. (Cl. 87—12.)

1. The process of bleaching soap stock which comprises treating said soap stock with hydrogen peroxide in non-alkaline condition, and decomposing the excess hydrogen peroxide after the bleaching operation is completed.

1,890,122. RAILWAY SIGNALING TRACK DIAGRAM. WILLIAM H. B. LAVARACK, Pine Bush, N. Y., assignor to Railroad Accessories Corporation, New York, N. Y., a Corporation of New York. Filed Dec. 12, 1930. Serial No. 501,822. 1 Claim. (Cl. 240—1.)



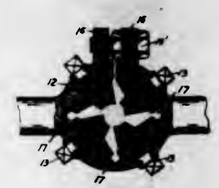
In a lamp holder for an illuminated track diagram, in combination: a barrel formed with an internal screw thread at one end and bayonet joint slots at the other end; a glass holder formed with an external screw thread, and a flange whereby the barrel may be mounted on a plate held between the end of the barrel and the flange by the cooperation of the screw threads; a lamp holder provided with pins adapted to cooperate with the slots in the barrel; and a spring positioned inside of the barrel between the holder and the far end of the barrel.

1,890,123. TIRE COVER. ROBERT E. LINN, Detroit, Mich. Filed June 3, 1932. Serial No. 615,188. 12 Claims. (Cl. 150—54.)



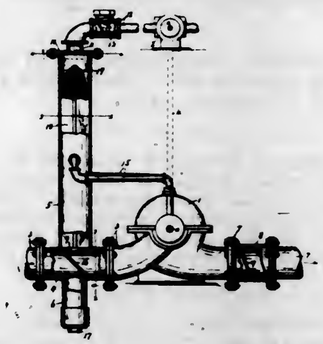
12. A tire cover or the like having a substantially planar face ring or rigid, form sustaining, material, having a complete and substantially circular edge, and a molding receiving, surrounding, binding, protecting and ornamenting said edge comprising a resilient deeply channel split ring of metal or the like having its channel opening in a radial direction with the mouth of the channel radially remote from the web thereof, and with the flanges of the channel substantially planar, and having an inherent tendency to spring radially as it is snapped into place on and receives said edge in order to lock and secure itself on said edge by its own resiliency and the rigidity of the edge.

1,890,124. SCREW CUTTING DIE. JOHN MILLERCHIP, Lane Cove, and THOMAS MORRISON LAMBERT, Artarmon, New South Wales, Australia. Filed May 11, 1932, Serial No. 610,664, and in Australia May 6, 1931. 1 Claim. (Cl. 10—123.)



A screw cutting tool, comprising a circular stock having a radial slot on one side by which it is split, and an adjusting screw passing through and connecting the split portions, said stock being further provided on the inner side with notches, one opposite the slot and the others intermediate said notch and said slot and dividing the stock into sections, and a set of dies each having a convex arcuate base and a concavely curved land or toothed surface eccentric to the base, each die being arranged in the stock with its convex base bearing against one section thereof and in contact with said section throughout its entire length and concentric with the inner cylindrical surface of the stock and a radial screw releasably securing each die in the stock and passing through the stock and engaging a threaded bore in the die.

1,890,125. HYDRAULIC PUMPING APPARATUS. THOMAS F. MOORE, Morris Plains, N. J. Filed Nov. 26, 1928. Serial No. 322,056. 4 Claims. (Cl. 103—118.)

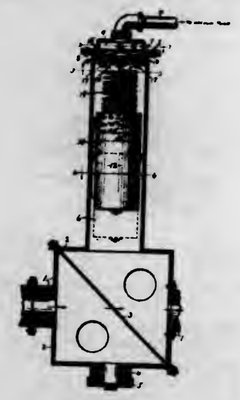


3. In a pumping system a centrifugal hydraulic pump having an intake conduit and a discharge conduit, the intake conduit being provided with a sump, and having alined openings in its upper and lower sides, a baffle screen extending diagonally across the interior of the intake conduit from the outer side of the upper opening to the inner side of the lower opening, the sump being connected to the lower opening, and an air exhaust device connected to the upper opening.

1,890,126. FLOAT-CONTROLLED DIAPHRAGM VALVE FOR HYDRAULIC PUMPING SYSTEMS. THOMAS F. MOORE, Morris, Plains, N. J. Filed Nov. 15, 1930. Serial No. 495,989. 5 Claims. (Cl. 103—118.)

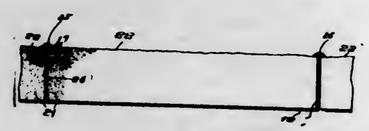
1. The combination with a liquid-receiving chamber and a suction chamber communicating with each other, a valve

controlling said communication, a support for the valve, a float in the first named chamber, and resilient connec-



tions between the float and valve support to prevent violent action of the valve under similar action of the float.

1,890,127. ARTIFICIAL SNOW. JOHN OTTENDAHL, Chicago, Ill. Filed Aug. 16, 1929. Serial No. 386,444. 9 Claims. (Cl. 252—1.)

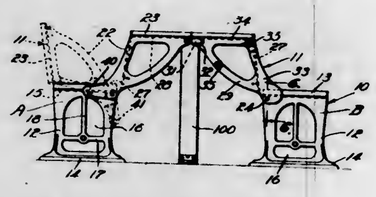


1. As a new article of manufacture, artificial snow comprising a self-supporting slab of soluble silicate having a fragmentary, light-reflecting surface.

1,890,128. FLOOR COVERING. JAMES H. RILE, Newport, Del., assignor to Hercules Powder Company, Wilmington, Del., a Corporation of Delaware. Filed Apr. 3, 1928. Serial No. 267,138. 6 Claims. (Cl. 106—37.)

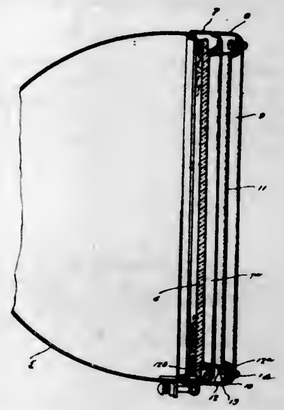
1. A floor covering including soluble nitrocellulose, monohydric alcohol abietate and an absorbent.

1,890,129. CONVERTIBLE SEAT AND TABLE. NANINE ROSS, Santa Ana, Calif. Filed Mar. 9, 1931. Serial No. 521,098. 2 Claims. (Cl. 155—43.)



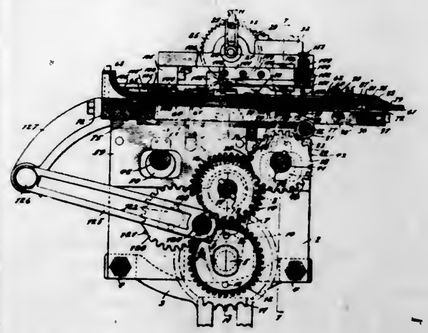
1. A device of the character described including two spaced units, each unit including, a horizontal seat, supports for the seat, a back board, end members carrying the back board and pivotally mounted on the supports so that the back board is operable between a position at the rear edge of the seat and a horizontal position above the seat, the units being related so that the edges of the back boards are in abutment when the back boards are in horizontal positions, one of the said end members of one of the units being sectional and including a section pivotally attached to a support and operable to a position to provide a passage between the seat and the remainder of the said sectional member.

1,890,130. HEADLIGHT LENS PROTECTOR. JACK ANTHONY SCARDINA, Baton Rouge, La. Filed Jan. 18, 1932. Serial No. 587,428. 3 Claims. (Cl. 240—102.)



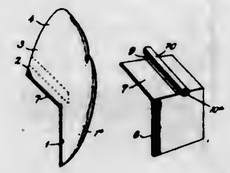
1. As a new article of manufacture, a headlight lens protector comprising an annular frame provided at one end with a circular flange, said flange on the inner side thereof being provided with a circular channel, a sheet of reticulated material mounted within said frame and having the marginal edge thereof anchored within said channel, and a plurality of relatively spaced attaching clips carried by said frame and having one end arranged within said channel.

1,890,131. MACHINE FOR CUTTING OFF PIECES OF MATERIAL FROM A STRIP AND CARRYING THEM FORWARD. JACOB SCHAUB, Westfield, N. J., assignor to Best Foods, Inc., New York, N. Y., a Corporation of New Jersey. Filed Mar. 7, 1928. Serial No. 259,706. 26 Claims. (Cl. 164—48.)



1. In a machine of the character described, means comprising a reciprocating feeding member for moving a strip of material forwardly intermittently and cutting pieces off of it, and a pusher connected to said strip moving means for pushing the pieces forwardly after they have been cut off.

1,890,132. PORCELAIN ROOT TOOTH. ERNEST P. SHAW, San Antonio, Tex., assignor to The Columbus Dental Manufacturing Company, Columbus, Ohio, a Corporation of Ohio. Continuation of application Serial No. 579,381, filed Aug. 3, 1922. This application filed June 7, 1927, Serial No. 197,126. 1 Claim. (Cl. 32—9.)



A plate type backing for an artificial pontic tooth, said tooth having a root extension and having in its occlusally directed end surface an undercut socket comprising a slot terminating away from said surface in a broadened recess, said backing consisting of a top designed to engage the base of the root extension, a depending front intersecting said top in an angle and adapted to engage the lingual face of the tooth, a tenon extending longitudinally of and upward from said top, and at one end extending labially beyond the labial edge of said top, and adapted to engage said socket.

1,890,133. EXPANDING CORE AND MOLD FOR PNEUMATIC TIRES. ALVIN H. SHOEMAKER, Seattle, Wash. Filed Oct. 29, 1930. Serial No. 491,943. 11 Claims. (Cl. 18—45.)



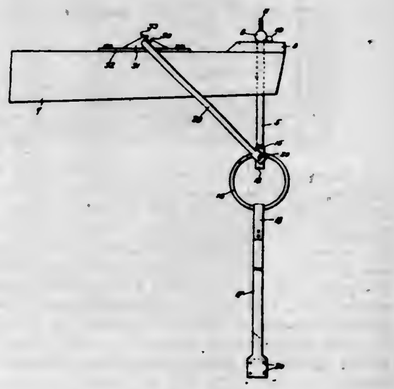
11. An expanding core and mold for use in the manufacture of pneumatic tires, embodying two metal discs disposed side by side, two annular core portions of bowl shaped cross section on the respective margins of said discs, said core portions projecting outwardly beyond the planes of said discs and having annular shoulders at the locations where they connect with said discs and said core portions having external bead forming recesses adjacent said shoulders said core portions having side wall and tread portions whereby a tire which is to be cured may be built up thereon, a mold enclosing said tire and said core said mold being formed of two halves separable in a medial plane, and means for admitting fluid under pressure to said core whereby said core will be expanded and said tire compressed, said core being separable at the location of the tread portion of the tire whereby the fluid pressure will be in direct contact with the inner tread portion of the tire.

1,890,134. PENCIL HOLDER. GOTTFRID A. SKOOG, Chicago, Ill. Filed Oct. 19, 1931. Serial No. 569,618. 1 Claim. (Cl. 24—10.)



A pencil and pen holder, comprising in combination, a plate, a plurality of pen holding loops on the forward face of the plate, each of said loops comprising an annular resilient collar of spring wire fastened to the plate, and supporting means for the plate on the rear face thereof, said supporting means comprising suction cups, and a hook for supporting other objects on the front face of the plate.

1,890,135. BEAM HANGER. RALPH E. STICKEL, Seminole, Okla. Filed May 13, 1932. Serial No. 611,227. 3 Claims. (Cl. 74—5.)

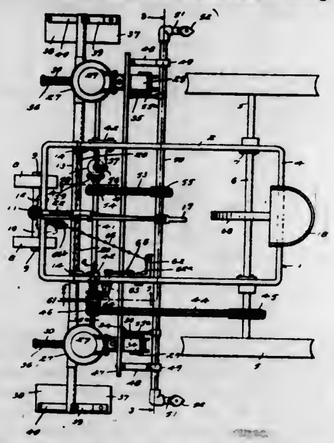


1. A beam hanger comprising a stem provided with means to suspend it from a walking beam, rings loosely engaged with said stem, straps loosely engaged at one end with said rings, and means connecting said straps with a polish rod, said last named means comprising a block connecting said straps and provided with a vertical recess for accommodating the polish rod, and a retaining wedge closing the open side of said recess.

1,890,136. CORN PLANTER. NICHOLAS J. THELEN, St. Cloud, and HENRY KOOPMEINERS and ALOIS KOOPMEINERS, Freeport, Minn. Filed Oct. 14, 1930. Serial No. 488,656. 1 Claim. (Cl. 111—16.)

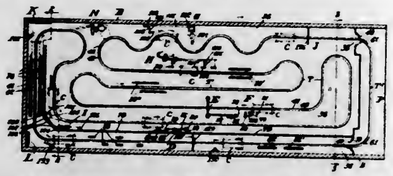
A corn planter including an axle, covering wheels fixed to the axle, furrow openers, hoppers having seed dropping means, boots extending from the hoppers to the furrow openers, a check shaft geared to the seed dropping means, a shaft constantly driven by the check shaft for

manual acceleration to advance the operation of the seed dropping means and for manual retardation to retard the operation of said means, and means establishing a driving



connection between the axle and check shaft and embodying a clutch adapted to slip during the advancing or retarding of the seed dropping means.

1,890,137. AMUSEMENT RAILWAY. HARRY G. TRAVER, Beaver Falls, Pa. Filed Nov. 14, 1930. Serial No. 495,619. 23 Claims. (Cl. 104—63.)



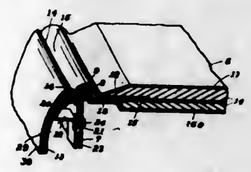
1. In an amusement railway, a floor, a pair of rails extending in parallel spaced relation along the floor, one rail constituting a conductor rail and the other a conductor and guide rail, a car embodying wheels to support the car at one end by said floor in straddling relation to the rails and a traction wheel support at the opposite end upon the guide rail to permit the car to have movement on a vertical axis relative to said support, and guard rails in parallel relation to said rails adapted for the abutment of the floor supported car wheels to permit limited movement of the car on the floor in a direction transversely of the rails.

1,890,138. SOAP DISPENSER AND SUPPORT THEREFOR. HUGH H. YOUNG, Baltimore, Md. Filed July 26, 1930. Serial No. 470,953. 2 Claims. (Cl. 248—20.)



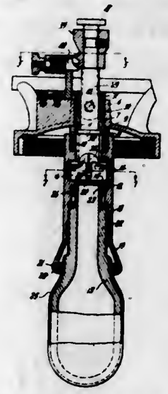
1. In a dispensing device including a journal and a receptacle swingably supported thereon, means on said journal holding said receptacle against relative longitudinal movement with respect to the journal except in a predetermined position of said device, while permitting unlimited relative rotary movement.

1,890,139. BOOK OR BINDER. HUBERT AUBURN, Mount Healthy, Ohio. Filed July 22, 1932. Serial No. 623,924. 6 Claims. (Cl. 281—29.)



3. A book comprising in combination a back member and a panel-like cover member, a hinge arrangement whereby the cover member may be hingedly moved relative to the back member, and a sliding tongue covering the hinge arrangement and adapted to slide thereover when the cover member is moved about its hinge, said sliding tongue being mounted for movement with one of said members and relatively to the other of said members.

1,890,140. FIRE EXTINGUISHER. ARTHUR C. BADGER, Newton, Mass. Filed Nov. 2, 1931. Serial No. 572,453. 7 Claims. (Cl. 169—31.)

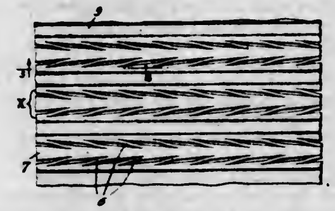


4. A fire extinguisher comprising a shell adapted to be substantially filled with quenching liquid and having a cover portion, a tubular holder depending from said cover portion, a compressed-gas cartridge secured in the lower part of said holder and provided with an upper end wall adapted to be penetrated by a punch, the holder having a lateral opening extending upwardly from approximately the level of said end wall, a punch spindle extending through said cover portion and being movable endwise therein toward and away from the compressed gas cartridge and having on its inner end a punch of less diameter than the spindle normally withdrawn from the cartridge and adapted to be advanced through the end wall thereof, the spindle having a cut away inclined surface in its side tangent to one side of the punch and containing a groove which extends along the adjacent side of the punch far enough to provide a channel for flow of gas from the cartridge when the punch is passed through the end wall of the cartridge; said groove and inclined surface serving in conjunction with the gas flowing from the cartridge to entrain a stream of the liquid in heat-transferring contact with the gas when the extinguisher is put to use in inverted position.

7. A fire extinguisher adapted to hold fire quenching liquid, a tubular holder open at its inner end extending

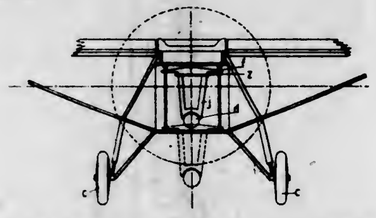
inward from the top of the extinguisher, a compressed gas cartridge having walls entirely enclosing its charge and adapted to be punctured at one end to release the charge, such end of the cartridge being received in the inner end of the holder while the body of the cartridge protrudes therefrom, and the holder having an outlet for gas released from the cartridge, means to prevent entrance of the quenching liquid past the said end of the cartridge into the space between the cartridge and the enveloping walls of the tubular holder, a sheath or skin of material non-corrodible by the quenching liquid applied to the cartridge so as to envelop its protruding body and extend into the holder in liquid sealing contact with a surrounding part thereof, and means for puncturing the end of the cartridge within the holder; said holder having an outlet for the released gas opening to the liquid-holding space of the extinguisher above the normal liquid level.

1,890,141. EXPANDED METAL LATHING. HERBERT K. BAKER, Detroit, Mich., assignor to Penn Metal Company, Parkersburg, W. Va., a Corporation of Massachusetts. Filed Aug. 29, 1927. Serial No. 216,081. 4 Claims. (Cl. 72—117.)



1. A metallic blank prepared for expansion, said blank having a slitted strip therein the slits of which extend in said strip at an angle to the longitudinal axis thereof, the strands of metal formed by the slitting being displaced from the general plane of the blank, and the displacement being greatest at a point intermediate the ends of the strands from which point they extend toward the plane of the blank.

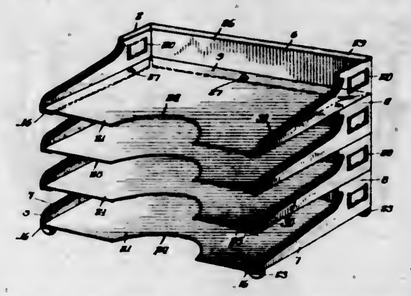
1,890,142. ELEVATOR BOMB RACK FOR AEROPLANES. RICHARD E. BOLLAM, Portland, Oreg. Filed June 13, 1931. Serial No. 544,051. 20 Claims. (Cl. 244—1.)



19. In an aeroplane provided with a longitudinally-extending fuselage, a bomb rack, laterally stable elevator mechanism for such rack adapted to move the latter within limits and the upper or retracted limit positioning the bomb within said fuselage.

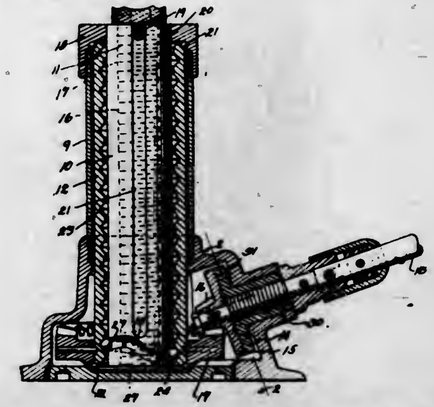
1,890,143. DESK TRAY. JAMES E. BALES, Aurora, Ill., assignor to Lyon Metal Products, Incorporated, Aurora, Ill., a Corporation of Illinois. Filed May 7, 1930. Serial No. 450,357. 6 Claims. (Cl. 220—97.)

1. In combination, a sheet metal tray having a back, sides bent forwardly from said back and made integral therewith, lower inturned integral flanges bent from said back and sides, a bottom supported by said flanges, flanges bent inwardly from the top of said back and sides, a second back arranged above said first back, sides integrally connected to said second back, lower inturned flanges on said second back and said last named sides and supported by the upper inturned flanges on said first



named back and sides, a second bottom arranged on top of the lower flanges of said second back and sides, and fastening means passing through said second bottom, said flanges on said second back and sides, and the upper flanges on said first named back and sides.

1,890,144. JACK. NORMAN A. BEST, Midland, Mich. Filed Feb. 10, 1930. Serial No. 427,091. 4 Claims. (Cl. 254—98.)

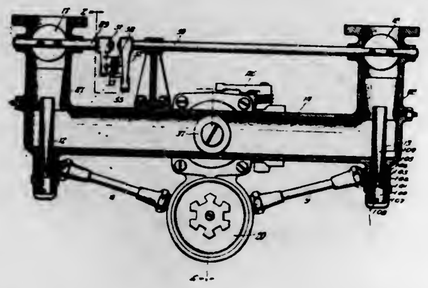


1. An automobile jack comprising a slidable ram, a rotatable sleeve surrounding said ram, means to prevent rotation of the ram, means to prevent reciprocation of said sleeve, and means to cause the rotation of said sleeve, said ram and sleeve having cooperating formations to enable rotation of said sleeve to cause elevation of said ram, said formations including a peripheral endless single turn groove on said ram, an internal helical multiturn groove on said sleeve, and a plurality of balls in the sleeve groove.

1,890,145. CARBURETOR. ROBERT C. BRACKE, Chicago, Ill., assignor to Curtiss B. Camp, trustee, Glencoe, Ill. Filed Sept. 26, 1925. Serial No. 58,696. 11 Claims. (Cl. 123—52.)

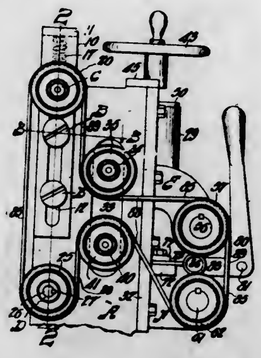
1. In a carburetor, a plurality of nozzles each having a primary air induction passage therethrough, a common secondary air induction passage for said nozzles, an air valve for restricting the flow of air into said common secondary air passage, a chamber from which a plurality of said nozzles receives fuel including independent directly connected conduits from said chamber to each of said nozzles, means to maintain the fuel in said chamber

under depression, said nozzles each having a primary air passage and the outer end adjacent the induction passage being positioned in branches with said secondary air passage and having one end exposed to the at-



mosphere, each branch being restricted about its nozzle whereby the flow of air from the secondary air passage past the nozzle creates a suction on the nozzle for drawing fuel from said fuel chamber.

1,890,146. MACHINING APPARATUS. OTTIS R. BRINEY, Pontiac, Mich. Filed July 19, 1927. Serial No. 206,873. 20 Claims. (Cl. 51—103.)



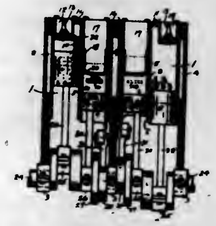
1. An apparatus of the character described including a pair of heads having article contacting members thereon, one of said heads being movable in relation to the other one of said heads, moving means normally tending to automatically move said movable head and the contacting member thereon in an article contacting direction, and a selectively operative lever means adapted to move said movable head in an article releasing direction against the action of said automatically moving means.

1,890,147. HAND APPARATUS FOR ROUGHING CLOTH. ALDO COTTI, Milan, Italy. Filed Oct. 10, 1931, Serial No. 568,194, and in Germany Nov. 18, 1930. 3 Claims. (Cl. 26—31.)



1. A hand apparatus for raising cloth, comprising in combination with a casing open at the bottom and several cylinders mounted transversely between the longitudinal sides of said casing, raising elements on the periphery of said cylinders, and means for varying the intermeshing depth of said raising elements.

1,890,148. INTERNAL COMBUSTION ENGINE. OSCAR H. ERICKSON, Puyallup, Wash. Filed June 22, 1929. Serial No. 372,832. 4 Claims. (Cl. 123—70.)



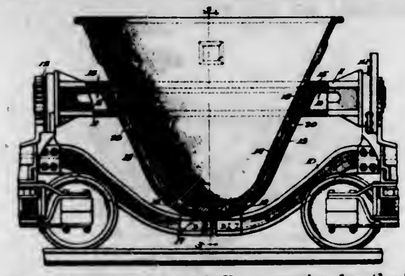
1. In an internal combustion engine, the combination of a working cylinder; a piston in said working cylinder; an exhaust port in said working cylinder, adapted to be uncovered by said piston as it approaches the lower end of its stroke; an auxiliary cylinder; a piston in said auxiliary cylinder; mechanical means positively connecting the two said pistons together whereby the pressure in the auxiliary cylinder is substantially lower than that in the working cylinder at the lower part of the working stroke thereof; a transfer passage joining the working and auxiliary cylinders together, and adapted to be uncovered by said piston in the working cylinder substantially simultaneously with the uncovering of said exhaust port thereby; and a valve in said transfer passage adapted to open said passage to permit a portion of the exhaust gases to pass into said auxiliary cylinder after said passage and the exhaust port have been uncovered by said working piston.

1,890,149. READING MACHINE. BRADLEY A. FISKE, New York, N. Y. Filed Nov. 22, 1930. Serial No. 497,405. 5 Claims. (Cl. 88—39.)



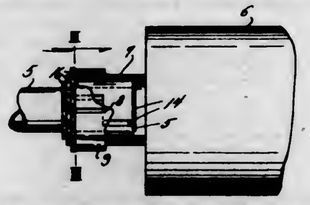
1. An improved reading machine, the combination with a vertical main frame and a lens or glass carried thereby, of a paper carrier adjustable vertically with respect to the lens, a paper strip mounted in said carrier and moving horizontally therein, said paper strip being provided with printed matter arranged in the form of panels extending in horizontal rows one above the other and a vertically adjustable handle frictionally engaging the main frame and telescoping with respect thereto.

1,890,150. SLAG LADLE AND CARRIER. AUGUST F. GIESS, Jr., Gary, Ind. Filed Jan. 7, 1932. Serial No. 585,209. 10 Claims. (Cl. 266—39.)



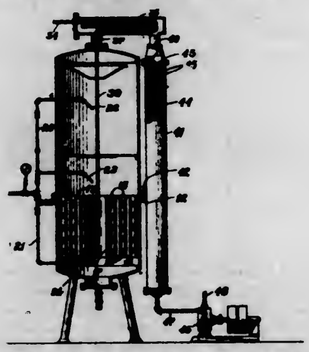
1. In combination, a slag ladle, a carrier for the ladle and from which carrier the ladle is freely removable, means for maintaining the ladle spaced from the carrier, and means for inducing circulation of a cooling medium directly against the bottom of the ladle and between the carrier and the ladle.

1,890,151. MUFFLER MOUNTING. HAROLD F. HADLEY, Toledo, Ohio, assignor to Associated Parts, Inc., Toledo, Ohio, a Corporation of Ohio. Filed May 3, 1930. Serial No. 449,516. 1 Claim. (Cl. 285—198.)



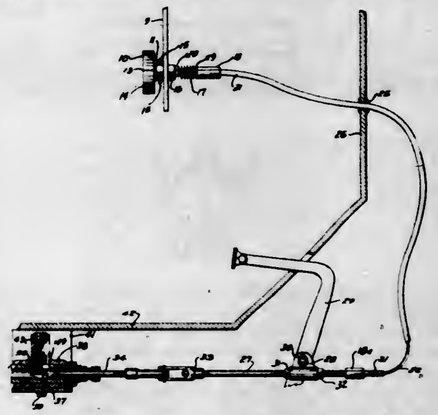
In a nest of bushing sections comprising sheet metal rolls of split ring form, said rolls terminally having a toothed flange forming a rim for each thereof, said rims in nesting assembly of the sections being in abutting relation for imparting arc flexibility to the separate rings, and the teeth of the successive rims providing abutment means adapted to be engaged by a tool for effecting ready relative shifting between the rings.

1,890,152. VACUUM STILL. JOHN H. HILLS, Grand Rapids, Mich., assignor to Bousman Mfg. Co., a Corporation of Michigan. Filed Sept. 20, 1929. Serial No. 893,883. 13 Claims. (Cl. 202—177.)



13. A vacuum vaporiser comprising a closed vessel, a steam calandria therein for heating the same and comprising a series of tubes arranged about a relatively large central passage, said tubes containing spiral deflecting strips, a feed regulator for a raw liquid supply to the vaporizer, a preheater receiving the liquid from said regulator, and a discharge pipe from said preheater extending into the central passage of said calandria.

1,890,153. CLUTCH BRAKE CONTROL DEVICE FOR MOTOR VEHICLES. WARNER G. HULT and HARRY KINGSMILL, Cleveland, Ohio. Filed Dec. 26, 1931. Serial No. 583,310. 11 Claims. (Cl. 192—13.)

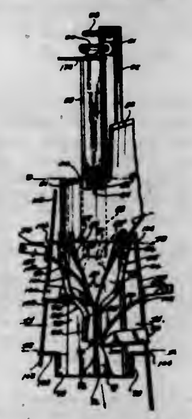


1. A connection between the clutch lever and brake rod of an automobile, comprising a slide, lost motion connections between the slide and the lever and the rod, and means to lock the slide against movement when the lever is depressed and the brakes are applied.

1,890,154. ANTI-OXIDANT FOR VULCANIZED RUBBER PRODUCTS. JOSEPH R. INGRAM, Nitro, W. Va., assignor to The Rubber Service Laboratories Company, Akron, Ohio, a Corporation of Ohio. Filed Nov. 13, 1930. Serial No. 495,421. 16 Claims. (Cl. 18—50.)

1. The process of vulcanizing rubber which comprises heating rubber and sulfur in the presence of anti-oxidant comprising a reaction product of an amino substituted triphenyl-methane and an aromatic hydrocarbon, wherein one or more hydrogen atoms thereof are substituted by hydroxyl groups only.

1,890,155. POTATO PLANTER. PEDER ISRAELSON, Hillman, Minn. Filed Apr. 23, 1930. Serial No. 446,544. 5 Claims. (Cl. 146—59.)



1. In a planter of the class described, a body having cutting edges and ways leading therefrom, a reciprocatory

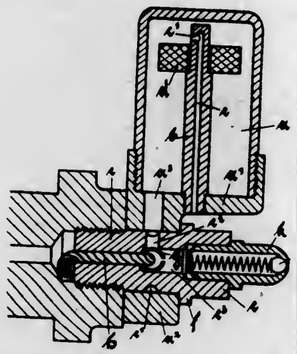
plunger for forcing a potato onto the cutting edges and into the ways, a holder including an individual yieldingly held arm in each way for holding a potato while the same is being cut and the pieces thereof after being cut, ejector mechanism operated in timed relation with the plunger for successively removing the pieces of a potato from the holder and moving the same in the ways, and power-actuated mechanism for reciprocating the plunger and operating the elevator and ejector.

1,890,156. SHOWER ROSE. WENZEL KÖNIG, Leipzig, Germany. Filed June 5, 1930, Serial No. 459,375, and in Germany July 24, 1929. 2 Claims. (Cl. 299—141.)



1. A shower rose for hand showers, air moistening, gardens and the like, comprising in combination a casing having an inner closing wall, and rings with conical outer surfaces arranged in said casing inserted concentrically one in the other and projecting unsupported in step shape and having on their conical outer surfaces axially extending channels the conicity of said rings determining the spraying range of the jets.

1,890,157. WICK LUBRICATOR. HANS KREIDEL, Wiesbedan, Germany. Filed Nov. 12, 1928, Serial No. 318,685, and in Germany May 3, 1928. 3 Claims. (Cl. 184—64.)

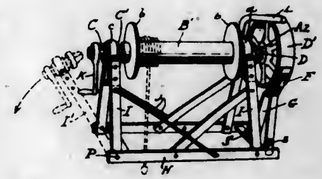


1. In a lubricator, a reservoir, an automatic air valve therefor comprising a tubular member providing a passageway connecting said reservoir with atmosphere, and a float for closing said passageway, an inlet nipple provided with a non-return valve, a passageway connecting said reservoir with a part requiring lubrication, and a wick in said passageway.

1,890,158. SPREADER AND EMULSIFIER FOR SPRAY COMPOSITIONS. FRANK FLOYD LINDSTAEDT, Oakland, Calif., assignor to Hercules Glue Company, San Francisco, Calif., a Corporation of California. Filed Nov. 20, 1928. Serial No. 320,758. 2 Claims. (Cl. 167—42.)

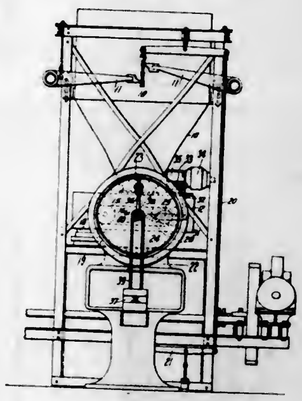
1. A spray composition comprising oil, the reaction product of an amine and a fatty acid for improving the spreading of the oil on the object sprayed, and a free amine for controlling the penetration of the oil.

1,890,159. WELL-DEPTH MEASURING DEVICE. RAY H. MCCONAHAY, Wooster, Ohio, assignor of one-half to B. W. Hammeth. Filed Apr. 9, 1930. Serial No. 442,967. 2 Claims. (Cl. 254—186.)



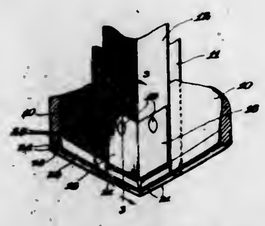
1. In a device of the character described, the combination with a frame, of a drive shaft rotatably mounted thereon, an eccentric mounted on said shaft, a bearing for said eccentric adapted to permit a limited sidewise and tilting movement of said shaft thereon, a pair of tapered drive-blocks mounted on said shaft, one of them being secured thereto adjacent said eccentric axis, a sleeve removably mounted on the opposite end of said shaft, in operative engagement with the other of said pair of tapered blocks, a bearing for said shaft adapted to allow a tilting movement thereof within said bearing, means for withdrawing said sleeve and bearing from said shaft, a spool mounted removably on said shaft, said spool having tapered cavities at each end fitted to engage said tapered drive blocks, respectively for the reversal endwise of said spool, a pulley mounted on said shaft to drive the latter, a brake to stop said pulley, and means for shifting said eccentric laterally to move said shaft and pulley laterally, substantially as set forth.

1,890,160. AUTOMATIC MEASURING MECHANISM. JAMES M. MONTGOMERY, Piqua, Ohio. Filed Oct. 13, 1930. Serial No. 488,317. 18 Claims. (Cl. 249—2.)



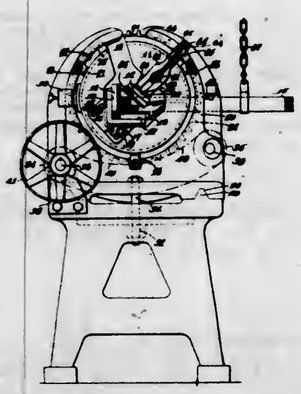
1. In a mechanism of the character described, a material delivering device, operable means for causing the delivery of material by said device, a movable member, means for actuating said movable member in accordance with the quantity of material delivered by said device, a second member movable with relation to the first mentioned movable member, separate means for actuating said second movable member, and means controlled jointably by said members for controlling the operation of the means which controls the delivery of material by said delivery device.

1,890,161. CRATE CORNERS AND RAIL BOTTOM. EDWARD M. PENNOCK, Minneapolis, Minn., assignor to G. H. Tennant Company, Minneapolis, Minn., a Corporation of Minnesota. Filed June 18, 1930. Serial No. 460,908. 8 Claims. (Cl. 217—5.)



8. A wearing edge for the bottom of a milk bottle crate including, an arcuated metal lower outer wearing surface extending over the entire bottom edge of the crate including the corners, and means for securing said arcuated metal surface to the lower edges of a milk bottle crate.

1,890,162. IRONING MACHINE FOR COILS. CLIFFORD T. RAULE, Brookline, Pa. Filed June 22, 1927. Serial No. 200,559. 11 Claims. (Cl. 178—244.)



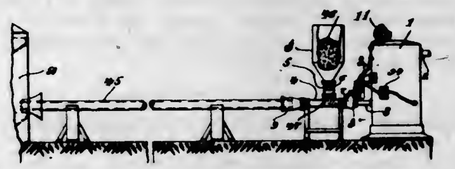
1. The method of ironing a bar or the like which consists in revolving ironing devices about the work while maintaining one angularly fixed and the other angularly movable with respect to the axis of revolution and accommodating the work to the devices by movement within a plane.

1,890,163. ANIMAL BED CONSTRUCTION. CHARLES MANN ROSE, Louisville, Ky. Filed June 26, 1930. Serial No. 463,906. 4 Claims. (Cl. 119—160.)



1. An animal bed construction of the class described comprising a supporting frame having an open top, a bed surface element removably secured to said frame to provide a bed surface extending across said open top, said element including a bed surface in the form of an envelope and an open frame insertible into said envelope.

1,890,164. SAND BLASTING METHOD AND APPARATUS. WILLIAM A. ROSENBERGER, Hagerstown, Md., assignor to Pangborn Corporation, Hagerstown, Md., a Corporation of Maryland. Filed Apr. 21, 1931. Serial No. 531,659. 9 Claims. (Cl. 51—8.)



2. The method of sand lasting particularly adapted to the treatment of the inner surfaces of tubular objects and the like which consists of projecting abrasive through the tubular work against the said surfaces by means of intermittent blasts of air under pressure.

1,890,165. PROCESS FOR VULCANIZING RUBBER. WINFIELD SCOTT, Nitro, W. Va., assignor to The Rubber Service Laboratories Co., Akron, Ohio, a Corporation of Ohio. Filed Mar. 15, 1928. Serial No. 262,028. 9 Claims. (Cl. 18—53.)

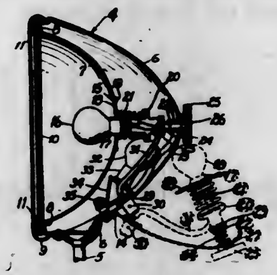
1. The process of vulcanising rubber which comprises heating rubber and sulfur in the presence of a vulcanization accelerator comprising the sulfurized butyaldehyde derivative of butylidene-aniline.

1,890,166. MIRROR CONSTRUCTION. DAVID L. SHAT, TO, Berkeley, and FRANK FLOYD LINDSTAEDT, Oakland, Calif., assignors to Hercules Glue Company, San Francisco, Calif., a Corporation of California. Filed Apr. 5, 1930. Serial No. 441,824. 8 Claims. (Cl. 45—18.)



1. In a mirror construction, a backing plate of greater tensile strength than the mirror, and means integrally uniting said plate to the mirror.

1,890,167. LIGHT. JOSEPH H. SHEELY, St. Louis, Mo. Filed Mar. 26, 1932. Serial No. 601,809. 1 Claim. (Cl. 240—41.)



In combination with a lamp, a shell, a reflector, said reflector operatively positioned in said shell, a glass closure operatively positioned in said shell, said shell having a slot cut therein, a strip hingedly secured to said shell over said slot, an electric socket secured near its free end to

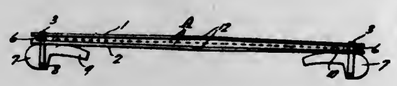
said strip, an electric bulb selectively positioned in said socket, means for securing said strip in position, a portion of said reflector secured to said socket, electric wires secured to said socket and passing through said shell, a bracket secured in said shell in an oscillatory manner, an electric socket secured to said bracket, an electric bulb positioned in said last mentioned socket, said bracket being capable of rotation through the small arc of a circle, until said last mentioned bulb is immediately in front of the slot of said shell.

1,890,168. DUMMY RIFLE. OTTO STOLZ, Berlin, Germany. Filed Mar. 30, 1931, Serial No. 526,427, and in Germany Oct. 10, 1930. 2 Claims. (Cl. 88—24.)



1. A dummy rifle, comprising in combination with the barrel of the rifle, a source of light arranged in the rear end of said barrel, a double-walled frame having a central bore fixed in said barrel in front of said source of light, a carrier on said frame projecting towards the muzzle of said barrel, a ring-shaped pendulum on said carrier adapted to oscillate relative to said carrier and retain its vertical position as said barrel is inclined, an arm on said pendulum extending towards the rear of said barrel, a target film suspended on the rear end of said arm and vertically guided in said double frame but capable of lateral displacement when said barrel is turned to the right or to the left, a condenser lens shiftable in the front end of said barrel adapted in conjunction with said source of light to project a picture of said target film on any flat surface used as aiming screen, said target film adapted through the intermediary of said arm and said pendulum to oscillate in any direction relative to said barrel so that when said barrel is in horizontal position, the centre of said target film coincides with the centre of said barrel.

1,890,169. TROUSER HANGER. LUMIR SVANCARA, Buhl, Idaho. Filed Apr. 8, 1931. Serial No. 528,479. 2 Claims. (Cl. 223—67.)



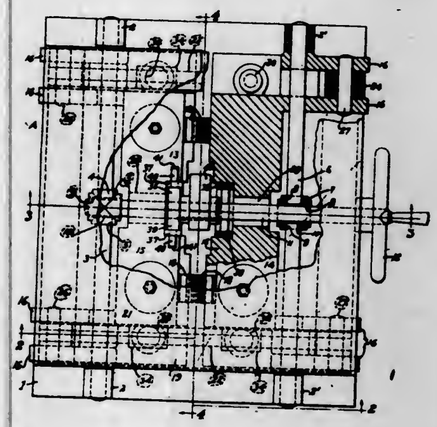
1. In combination with a pair of bars having spaced slots in their ends, U-shaped members having their legs passed loosely through the slots, coil springs coiled around one leg of each U-shaped member and braced between the bars, and cams eccentrically pivoted between the ends of the said legs of the U-shaped members.

1,890,170. FURNACE WALL CONSTRUCTION. JOHN VAN BRUNT, Flushing, N. Y., assignor to International Combustion Engineering Corporation, a Corporation of Delaware. Filed July 25, 1925. Serial No. 45,974. 3 Claims. (Cl. 122—235.)



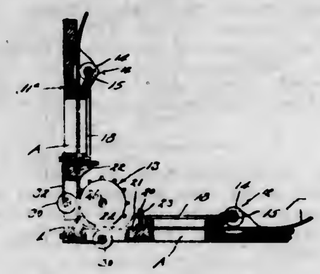
1. In a boiler having overhead water tubes heated by convection from the heating gases and having a furnace with a combustion chamber below said tubes, a side wall of said furnace comprising a set of upright water tubes, said wall being supported from above independently of said overhead tubes, and spring means supporting said wall at the bottom thereof and permitting expansion and contraction thereof.

1,890,171. JOLTER. WALTER H. WANGELIN, St. Louis, Mo. Filed June 16, 1930. Serial No. 461,416. 10 Claims. (Cl. 259—91.)



1. A jolter comprising a flask support, means for elevating said flask support, said means including a pivotally supported member having a portion for subjecting said flask support to a sharp blow, said portion being movable upwardly into sharp contact with the flask support when said flask support is moving downwardly, and means for pivotally connecting said pivotally supported member to said flask support.

1,890,172. FILM HANDLING MECHANISM. WALTER L. WRIGHT, Santa Monica, Calif., assignor to Synchrome Corporation, Los Angeles County, Calif., a Corporation of California. Filed Feb. 29, 1928. Serial No. 258,039. 3 Claims. (Cl. 88—17.)



1. A device for positioning a perforated strip of film including a sprocket having teeth engaging perforations at longitudinally spaced points maintaining a strained loop in the film between said points free of the sprocket, means for holding the film in engagement with the teeth at said points, and a member engaging the strained loop of the film.

3. In combination two aperture plates, means guiding a film at the plates for free longitudinal movement, an intermittently driven member, spaced parts on the member engaging the film to hold it with a loop portion between the plates free of the member, and a member in pressure engagement with the loop.

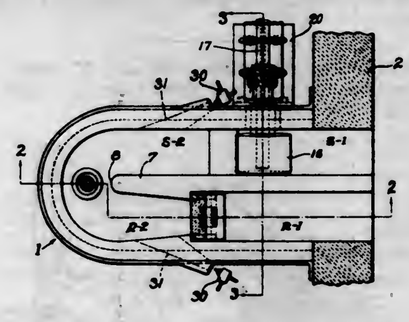
1,890,173. MANUFACTURE OF EXPANDED METAL. HERBERT K. BAKER, Detroit, Mich. Filed Apr. 19, 1929. Serial No. 356,331. 6 Claims. (Cl. 164—6.5.)



6. In a method for manufacturing lathing having strands of a predetermined width from blank sheets, the steps of producing groups of parallel slits in the sheets spaced from each other a distance greater than the predetermined width of the strands to be produced, to provide groups of relatively wide strands, the slits of one group being inclined oppositely with respect to the slits of an adjacent group, subsequently producing additional and similar groups of slits in the sheets, the individual slits of which are parallel to and extend between slits of the first groups, whereby said relatively wide strands are divided into strands of said predetermined width, and then subjecting the slitted sheets to an expanding operation.

1,890,174. FOREHEARTH. JOTHAM F. BLACK, Butler, Pa., assignor to Hartford-Empire Company, Hartford, Conn., a Corporation of Delaware. Filed July 2, 1930. Serial No. 465,265. 18 Claims. (Cl. 49—55.)

14. The combination with a source of supply of molten glass of a delivery chamber adjacent to said source, means for preventing any flow of glass by gravity and head pressure from said source to said delivery chamber, means for



transferring glass from said source to said chamber, and means for returning glass from said delivery chamber to said source of supply.

1,890,175. PROJECTILE HAVING GUIDE TAILS. EDGAR WILLIAM BRANDT, Paris, France. Filed Dec. 4, 1931. Serial No. 579,088, and in France Jan. 8, 1931. 13 Claims. (Cl. 182—29.)

1. Projectile comprising a body, an extension on the rear of said body, a plurality of wings secured to said extension and movable between a folded position surrounding said extension in which they are of lesser diameter than said body and an extended position in which they extend beyond said body, and a removable latching clamp located at the free end of said extension and including a plurality of fingers extending over and engaging the wings and holding them in folded position.

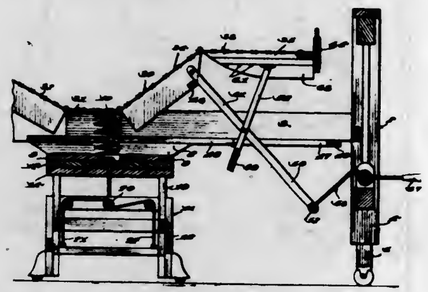
1,890,176. MECHANICAL DELAY FUSE FOR ROTATIVE PROJECTILES. EDGAR WILLIAM BRANDT, Paris, France. Filed Jan. 25, 1932, Serial No. 588,730, and in France Jan. 24, 1931. 28 Claims. (Cl. 102—39.)



1. Mechanical delay fuse for rotative projectiles, comprising a body, a firing pin element and a primer element in said body, at least one of said elements being movable toward the other for detonating said primer element, a bolt for holding said elements apart during transport and handling and adapted to be operated by centrifugal force for retaining the firing elements away from one another during a given part of the flight while the rotative speed of the projectile is greater than a predetermined value and

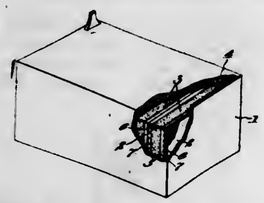
being subsequently moved when the speed falls below said value under the braking effect of the fluid through which the projectile travels for liberating them, and detonating means for bringing said elements together upon said liberation.

1,890,177. INVALID BED. WILLIAM R. DERBY, Augusta, Ga. Filed Dec. 6, 1929. Serial No. 412,179. 1 Claim. (Cl. 5—69.)



A bed spring having a foot section composed of a plurality of hingedly connected members, one of the members having one end pivotally connected to a fixed part of the bed spring, a frame having one end pivotally connected with the other end of the last-mentioned member of the foot section, a lever pivotally mounted on the foot of the bed below the bed spring and having one end connected with the other end of the frame, a second frame pivoted adjacent the lower end thereof on the first-mentioned frame and having the upper free end adapted to engage in supporting relation the other member of the foot section when said members have been moved relative to each other for holding the last-mentioned member of the foot section in a predetermined position.

1,890,178. DRY CELL OF THE FLAT TYPE. GEORGE W. HEISE, Bayside, and ERWIN A. SCHUMACHER, Brooklyn, N. Y., assignors to National Carbon Company, Inc., a Corporation of New York. Filed June 11, 1924. Serial No. 719,415. 2 Claims. (Cl. 136—111.)



1. A dry cell of the flat type having an anode, a body of depolarizing mix, a bibulous spacing element between the anode and the body of mix, and compression-resisting members regularly distributed between the anode and the body of mix to protect portions of said bibulous spacing element from undue pressure.

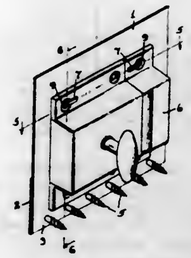
1,890,179. PREPARING REFINED BLEACHED PULP. HORATIO A. HELDEN, Canton, N. C., assignor to The Champion Fibre Company, Canton, N. C., a Corporation of Ohio. Filed June 15, 1928. Serial No. 285,783. 5 Claims. (Cl. 92—7.)

1. Process of preparing a bleached pulp product of a uniform degree of whiteness suitable for use directly in a paper-web-forming operation which comprises digesting raw fibrous material, refining and hydrating the resulting pulp substantially to the condition suitable, except for color, for use directly in a paper web-forming operation, and thereafter bleaching the pulp.

1,890,180. FOOD COMPOUND. FREDERICK H. HOFFMAN, Columbus, Ohio. Filed July 21, 1928. Serial No. 294,591. 2 Claims. (Cl. 99—11.)

2. An edible compound consisting of the following ingredients in approximately these proportions by weight, to wit: ground roasted peanuts, seventy three percent, strained honey, fifteen percent, oil of green peanuts, twelve percent.

1,890,181. HARDWARE DISPLAY CARD. LAURENCE N. HOFFMAN, Shelby, Ohio, assignor to Shelby Metal Products Company, Shelby, Ohio, a Corporation of Ohio. Filed Mar. 12, 1932. Serial No. 598,522. 4 Claims. (Cl. 206—80.)



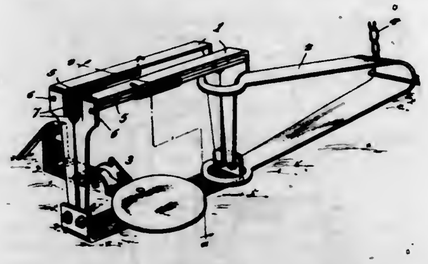
4. A display package comprising a card having a display face, a hardware article which is an adjunct of a door or the like and which requires a definite number of headed fasteners having shanks to secure it in operative position, and the aforesaid headed fasteners; said hardware article being secured to said display face of said card, said shanks being displayed in the same face as said hardware article and the heads of said headed fasteners being on the opposite face thereto, said card having a folded flap portion maintaining said heads in position.

1,890,182. INTEREST CALCULATING DEVICE. ALBERT M. HUNTER, Philadelphia, Pa. Filed Feb. 27, 1930. Serial No. 431,863. 1 Claim. (Cl. 40—102.)



A device of the character described comprising a casing having an upper wall formed with a plurality of transversely extending slots, cards extending through said slots and projecting above the upper wall, each card being bent adjacent its lower end to form an angularly disposed tab, all of the tabs extending in the same direction and bearing against the under face of the upper wall between the slots, rigid strips releasably secured at their ends near the respective ends of the upper wall and extending longitudinally thereof across the slots and engaging under faces of the tabs whereby all of the tabs will be firmly clamped in engagement with the under face of the upper wall and the cards firmly held in place but permitted to be individually removed by loosening the strips.

1,890,183. TRAP. EARL M. JOHNSON, Audubon, Iowa. Filed Nov. 18, 1930. Serial No. 496,469. 4 Claims. (Cl. 43—90.)

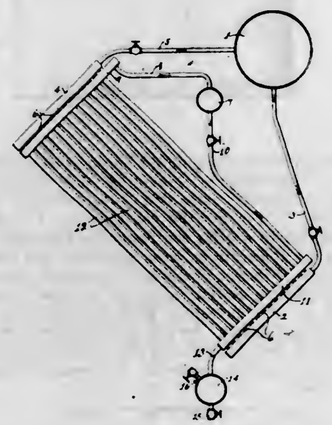


4. The combination with the rocking main jaws of a spring jaw trap, of supplemental jaws pivotally mounted upon the main jaws and converging downwardly in closed position, and springs carried by the main and supplemental jaws urging the supplemental jaws to closed position.

1,890,184. PRODUCING BOARD-LIKE MATERIAL WITH THE AID OF MINERAL WOOL. ISIDOR KITSEE, Philadelphia, Pa., assignor to Mineralite Corporation, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Nov. 21, 1929. Serial No. 408,937. 2 Claims. (Cl. 92—8.)

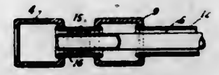
1. The improvement in producing a board-like material consisting therein that the material out of which said board is fashioned, consists of mineral wool, and is provided on both surfaces with a material adapted to produce a smooth surface.

1,890,185. HEAT TRANSFER DEVICE. CHARLES E. LUCKE, New York, N. Y., assignor to The Babcock & Wilcox Company, Bayonne, N. J., a Corporation of New Jersey. Filed July 14, 1928. Serial No. 292,638. 8 Claims. (Cl. 122—32.)



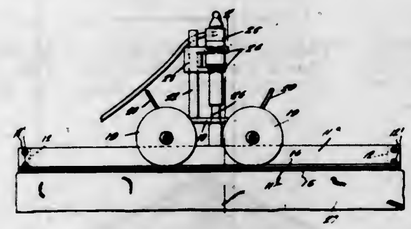
1. In a heat transfer device, a pair of outside headers located at the respective ends of said device, a pair of inside headers located at the opposite ends of said device, the headers at each end of said device being connected by nipples, tubes connecting said outside headers secured to said nipples and tubes surrounding and spaced from said first mentioned tubes and connected to said inside headers.

1,890,186. HEAT TRANSFER DEVICE. CHARLES E. LUCKE, New York, N. Y., assignor to The Babcock & Wilcox Company, Bayonne, N. J., a Corporation of New Jersey. Filed Mar. 17, 1931. Serial No. 523,272. 9 Claims. (Cl. 257—246.)



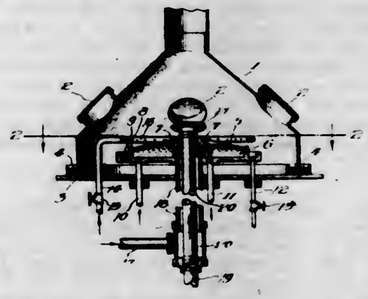
1. In a heat transfer device, a header adapted to receive a fluid at high temperature, a second header adapted to receive a fluid at lower temperature, a tube connected to said first named header, a second tube disposed within said first named tube connected to said second header, and packing means maintaining said tubes in fluid tight relationship with each other while permitting relative movement therebetween.

1,890,187. APPARATUS FOR RIFTING GRANITE OR ANALOGOUS STONE. WILLIAM S. MARTIN, Mount Airy, N. C., assignor to The North Carolina Granite Corporation, Mount Airy, N. C. Filed Aug. 23, 1932. Serial No. 630,133. 3 Claims. (Cl. 262—15.)



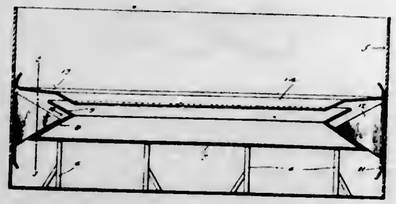
1. In a device of the character described, a guide for rifting purposes comprising a pair of angle irons, means connecting said irons together in spaced parallelism, with the vertical flanges of said irons arranged in slightly spaced relation and forming therebetween a slot extending longitudinally of the guide, compressible strips secured to the undersurfaces of the horizontal flanges of said angle irons, a carriage movable over said angle irons, and a rifting tool mounted on the carriage including a power driven tracing element arranged to operate in said slot.

1,890,188. METHOD AND APPARATUS FOR PRODUCING LAMPBLACK. JACQUE C. MORRELL and VALENTINE A. MEKLER, Chicago, Ill., assignors to Universal Oil Products Company, Chicago, Ill., a Corporation of South Dakota. Filed Apr. 2, 1928. Serial No. 266,856. 5 Claims. (Cl. 134—60.)



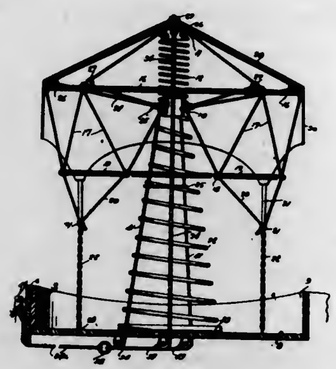
4. A method for producing lampblack which comprises incompletely burning liquid hydrocarbon while continuously flowing the same by gravity in a thin film.

1,890,189. FLOATING DECK FOR OIL STORAGE TANKS. LOUIS J. OSWALD, Chicago, Ill. Filed Aug. 25, 1931. Serial No. 559,320. 2 Claims. (Cl. 220—26.)



1. In combination, a storage tank for gasoline and the like, a floating deck arranged in the tank and including a flange extending upwardly from the deck and having a V-shaped groove therein, wedge members extending into the groove and a runner attached to each wedge member and slidingly engaging the tank.

1,890,190. PARACHUTE ATTACHMENT FOR AEROPLANES. LOUIS R. PAPP, Cleveland, Ohio. Filed Dec. 24, 1931. Serial No. 583,100. 3 Claims. (Cl. 244—21.)

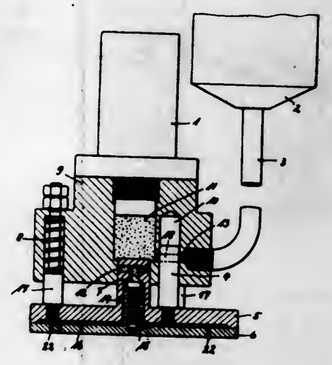


1. In a parachute attachment for aeroplanes, a parachute of umbrella formation including a center ring and cap plate, a coil spring interposed therebetween, radial ribs pivoted to the ring and cap plate and arranged in pairs with the outer ends of each pair pivotally connected, horizontally disposed coil springs connecting the outer ends of the ribs, angularly disposed rods depending from the outer ends of the ribs, horizontal coil springs connecting the lower ends of the rods and means attaching the lower ends of the rods to the aeroplane.

1,890,191. METHOD OF MAKING PLASTIC SUBSTANCES AND PRODUCTS OBTAINED THEREBY. JOSEPH C. PATRICK, Trenton, N. J. Filed May 18, 1931, Serial No. 538,389, and in Canada May 28, 1928. 37 Claims. (Cl. 260—6.)

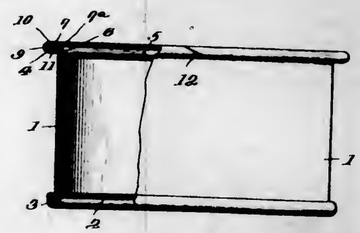
1. The method which comprises causing reaction between alkaline polysulfides and olefinic compounds containing the group C_nH_{2n} combined with the equivalent of two monovalent negative radicals.

1,890,192. APPARATUS FOR APPLYING PAINT. MAX PFEIFFER, Schwenningen-on-the-Neckar, Germany. Filed Nov. 24, 1930, Serial No. 497,807, and in Germany Apr. 28, 1930. 12 Claims. (Cl. 101—114.)



1. An apparatus for applying paint comprising a cylinder and a plunger, means for supplying paint to said cylinder, and a stencil on said plunger, said plunger having a conduit for supplying paint to said stencil from said cylinder, which conduit is adapted to be controlled by the relative movement of said plunger and said cylinder.

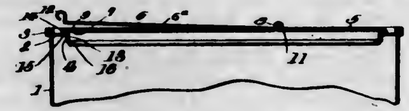
1,890,193. METHOD OF SEALING METAL CONTAINER. WILLIAM F. PUNTE, Syracuse, N. Y., assignor to Continental Can Company, Inc., New York, N. Y., a Corporation of New York. Filed June 29, 1931. Serial No. 547,734. 2 Claims. (Cl. 113—121.)



1. The method of forming an hermetically sealed metal container consisting in providing the container body with an outwardly extending substantially horizontal flange, and a cover for the container with a peripheral flange adapted to overlie the flange on the body and normally curved upwardly between the inner and outer edges of the flange to form a channel on the under face thereof, placing a plastic sealing material in said channel and the cover on the container body, and sealing the container by applying a sealing strip thereto which embraces the flanges and forces the curved flange on the cover into parallelism with the horizontal flange on the container body.

1,890,194. DISPENSING CLOSURE FOR CANS. WILLIAM F. PUNTE, Syracuse, N. Y., assignor to Continental Can Company, Inc., New York, N. Y., a Corporation of New York. Filed Aug. 22, 1931. Serial No. 558,814. 3 Claims. (Cl. 220—32.)

1. A dispensing closure for containers comprising a top portion having an opening therethrough, one side of which is a straight line, a cover hinged to said top portion along the straight side of the opening and overlying said top, a collar adapted to engage the friction seat of a container for securing the dispensing closure to the container, said collar having an outwardly bent flange at



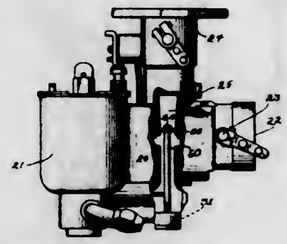
its outer edge, and said top being bent downwardly and inwardly underneath the flange for firmly joining the top to the collar.

1,890,195. WEAVER'S SHUTTLE FOR PIRNS AND REWOUND WEFTS. HENRY RICHMOND, Frenchwood, Preston, England. Filed Mar. 14, 1931, Serial No. 522,722, and in Great Britain Mar. 17, 1930. 8 Claims. (Cl. 139—206.)



1. A weaver's shuttle for pirns and rewound wefts comprising in combination a shuttle body, a shuttle peg fixedly mounted on said shuttle body, a retaining device carried by the shuttle for engaging the pirn to retain it on the peg and locking means for maintaining said retaining device and the pirn in engagement with each other.

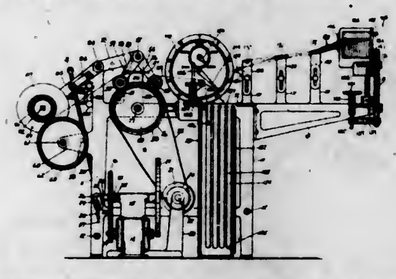
1,890,196.. CARBURETOR. FREDERICK C. SCHRAMM and MAX DACH, Flushing, N. Y. Filed Apr. 22, 1931. Serial No. 532,042. 8 Claims. (Cl. 261—66.)



1. In a carburetor, an air passage extending therethrough, a fuel jet positioned in said passage, said fuel jet having a closed upper end, an enlarged portion formed on the upper end of said fuel jet, said enlarged portion extending into said air passage to retard the flow of air therethrough, discharge passages extending through the side walls of said jet near the upper end thereof, said passages discharging into said air passage, and a plurality of relatively small air passages formed in said jet and discharging tangentially into said jet discharge passages, said air passages having their inlet ends located on the exterior of the jet at the base of the enlarged portion thereof.

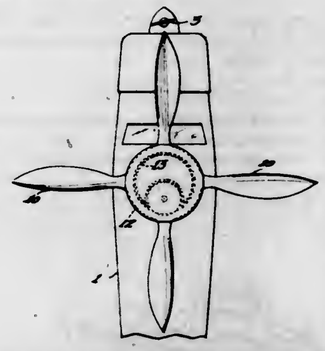
1,890,197. WARPER. JOHN JOSEPH SUSSMUTH, Fort Lee, N. J. Filed Jan. 13, 1930. Serial No. 420,412. 3 Claims. (Cl. 28—22.)

1. In combination with a warper in which a multitude of yarns are passed through said warper by a drawing drum and are taken up by a section drum which is driven by a friction drum engaged in tangential contact thereupon, a drive which normally operates said friction drum at a peripheral speed slightly in excess of the peripheral speed of said drawing drum, means adapted operatively to connect said drawing drum to said friction drum at a peripheral speed of said drawing drum greater than the peripheral speed of said friction drum, and means for shifting the drive to a reverse rotation of said drawing drum and friction drum and simultaneously to shift



the normal connection between said drawing and friction drums to said means adapted operatively to connect said drawing drum to said friction drum at a peripheral speed of said drawing drum greater than the peripheral speed of said friction drum.

1,890,198. AIRCRAFT. FREDERICK C. THOMAS, Cleveland, Ohio. Filed June 7, 1930. Serial No. 459,668. 1 Claim. (Cl. 244—19.)



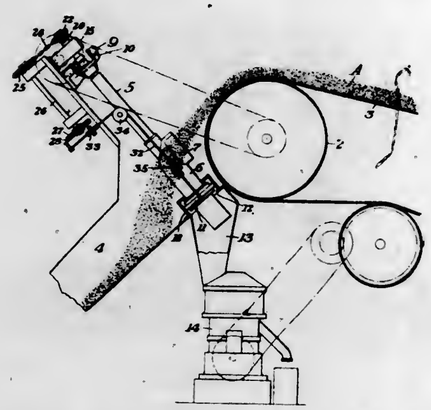
In an aircraft of the class described, a plurality of radial wings gyratable about a common axis, and means for gyratably supporting said wings on the body of said craft, said means including an annular hub rigid with said wings, said hub having an upper and lower flat surface and an annular channel on each of its flat surfaces, each adapted to receive and partially embrace a set of ball bearings, a bearing plate on the body of said craft, a complementary bearing plate rigid with said first mentioned plate and in spaced relation thereto, annular bearing channels on each of said plates complementary to those on said hub respectively whereby said plates may rotatably support said hub.

1,890,199. METHOD AND APPARATUS FOR SAMPLING MATERIAL. THORLEIF THORSTEN, Pittsburgh, Pa. Filed Mar. 1, 1926. Serial No. 91,648. 20 Claims. (Cl. 73—21.)

1. A method of sampling a traveling stream of material which comprises causing the stream of material to fall and removing a section at one point in the width of the stream through the full dimension substantially normal to but less than the width of the falling stream and at regularly recurring intervals.

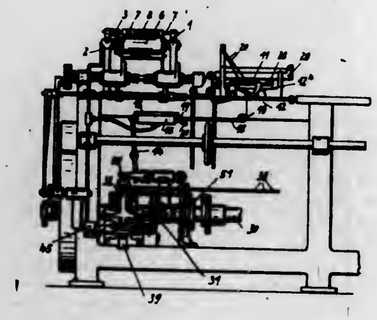
20. A sample selecting device for divided solid material comprising a rotatable substantially tubular exposed sampling body projecting into the material to be sampled

and having an opening through the wall thereof for receiving material and having its longitudinal axis inclined with respect to the horizontal and vertical, said body



having a discharge outlet at its lower end, means supporting the tubular body, and means for rotating it about its longitudinal axis.

1,890,200. FLAT HOSIERY FRAME. GUIDO THIERFELDER, Auerbach, Germany. Filed Apr. 24, 1931, Serial No. 532,624, and in Germany May 6, 1930. 4 Claims. (Cl. 66—82.)



1. In a flat hosiery frame, distance converting means interposed between the electric pattern device and the attachment to be controlled, comprising a displaceable carrier, racks displaceably arranged in slotted members connected with the machine and adapted to be driven by the said carrier, electromagnets corresponding in number to the adjusting range of the attachment and arranged on the said carrier, a coil forming part of each magnet, and armature cores in the said magnets disposed loosely in the said coil and adapted to be drawn by the magnet and to extend into notches of the said racks, the teeth of the said racks being spaced differently to vary the distance over which the racks are driven by the said carrier.

1,890,201. PROCESS FOR THE PREPARATION OF ARYLIDES OF 2,3-HYDROXY-NAPHTHOIC ACID. JOHN M. TINKER and LOUIS SPIEGLER, South Milwaukee, Wis., assignors to E. I. du Pont de Nemours & Company, Wilmington, Del., a Corporation of Delaware. Filed Nov. 16, 1931. Serial No. 575,484. 6 Claims. (Cl. 260—124.)

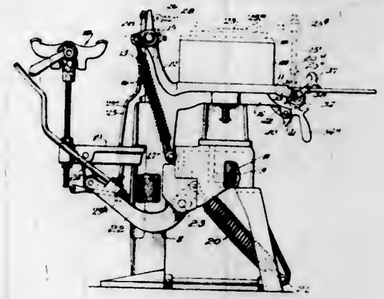
2. In the process of preparing an arylide of 2,3-hydroxy-naphthoic acid by reacting 2,3-hydroxy-naphthoic acid with an arylamine, the step of employing the latter reactant in the form of its hydrochloric acid salt.

1,890,202. PROCESS OF PURIFYING ARYLIDES OF 2,3-HYDROXY-NAPHTHOIC ACID. JOHN M. TINKER and LOUIS SPIEGLER, South Milwaukee, Wis., assignors to E. I. du Pont de Nemours & Company, Wilmington, Del., a Corporation of Delaware. Filed Nov. 16, 1931. Serial No. 575,485. 11 Claims. (Cl. 260—124.)

4. In the process of purifying an arylide of 2,3-hydroxy-naphthoic acid, the step which comprises dry milling the same with a water soluble, mildly alkaline compound.

8. As a composition of matter an intimate, dry mixture of an arylide of 2,3-hydroxy-naphthoic acid and a water-soluble, mildly alkaline compound in finely divided form.

1,890,203. MOLDING MACHINE. HENRY TSCHERNING, deceased, Freeport, Ill., by Hugo K. Tscherning, executor, Freeport, Ill., assignor to Arcade Manufacturing Company, Freeport, Ill., a Corporation of Illinois. Filed July 20, 1931. Serial No. 552,031. 8 Claims. (Cl. 22—33.)

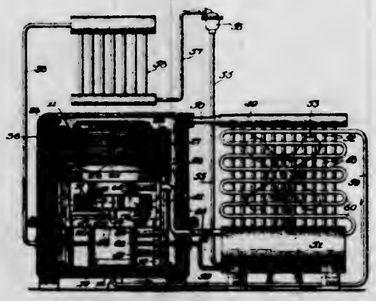


1. A molding machine comprising a revoluble carrier for the flask mounted to be vertically movable bodily, and a clamp for clamping the flask to said carrier pivotally supported on a stationary part of the machine on an axis substantially in alinement with the axis about which said carrier swings.

1,890,204. PROCESS FOR THE PRODUCTION OF PHOSPHATES. CONWAY, BARON VON GIRSEWALD, HANS WEIDMANN, and GERHARD ROESNER, Frankfort-on-the-Main, Germany, assignors to American Lurgi Corporation, New York, N. Y., a Corporation of New York. Filed May 9, 1931, Serial No. 536,312, and in Germany May 19, 1930. 5 Claims. (Cl. 23—106.)

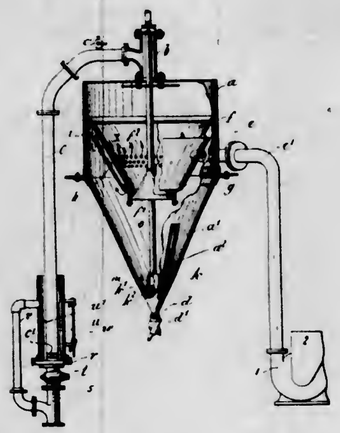
1. A process for the production of phosphates from metal phosphorus compounds having a high content of silicon which comprises removing silicon from the metal phosphorus compound until not more than five per cent of silicon remains and thereafter decomposing the metal phosphorus compound at elevated temperature with a salt containing the metal of the desired phosphate.

1,890,205. REFRIGERATING APPARATUS. GEORGE ANDERSEN, Chicago, Ill., assignor to W. B. Parkyn, Chicago, Ill. Filed Jan. 31, 1931. Serial No. 512,671. 27 Claims. (Cl. 62—115.)



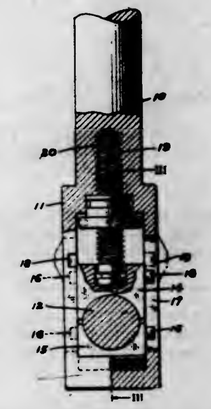
1. In refrigerating apparatus the combination of a compressor, means for actuating said compressor, a receptacle into which said compressor discharges, a condenser in communication with said receptacle, and mechanical means for producing flow of the compressed gaseous refrigerant from said receptacle into said condenser.

1,890,206. CLASSIFICATION OF MATERIALS BY ELUTRIATION. LEONARD ANDREWS, Holborn, London, England. Filed Sept. 8, 1930, Serial No. 480,549, and in Great Britain Sept. 19, 1929. 7 Claims. (Cl. 209—211.)



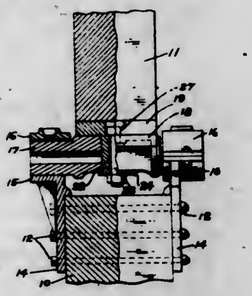
1. For the classification of material by elutriation, a classifier comprising a casing having upper and lower outlets, suction means connected to the upper outlet of said casing and adapted to draw off liquid carrying fine particles of separated material, a discharge pipe connected to the lower outlet of said casing and adapted to admit of the free discharge of separated oversize particles of material and liquid, means adapted to discharge into said casing between its upper and lower outlets and in a tangential direction, a mixture of liquid and material to be classified, and cones arranged within said casing above the inlet for mixed liquid and material and adapted to direct liquid carrying separated particles to the upper outlet of said casing.

1,890,207. PITMAN BEARING. REUBEN C. BAKER, Coalinga, Calif., assignor to Baker Oil Tools, Inc., Huntington Park, Calif., a Corporation of California. Filed Jan. 21, 1930. Serial No. 422,352. 3 Claims. (Cl. 308—67.)



1. In a bearing, the combination of a substantially rectilinear housing having slots in its sides and a threaded hole in one end thereof, a pair of bearing blocks contained by the housing, lugs formed on the blocks and slidably engaging said slots, said housing also having grooves formed between said slots and its outer surface to permit removal of the bearing blocks, a threaded rod in said threaded hole adapted to be screwed against said bearing blocks whereby they may be adjusted, and means for securing said rod in position to maintain the adjustment.

1,890,208. WALKING BEAM SWIVEL. REUBEN C. BAKER, Coalinga, Calif., assignor to Baker Oil Tools, Inc., Huntington Park, Calif., a Corporation of California. Filed Jan. 21, 1930. Serial No. 422,353. 8 Claims. (Cl. 308—21.)

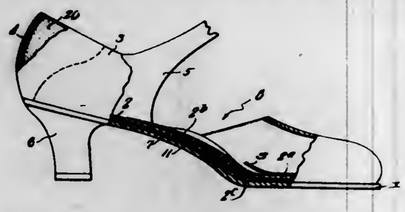


1. In combination with a well pumping rig including a walking beam and a Samson post, a pair of trunnion bearings supported by the Samson post, a trunnion journalled in said bearings and supporting a pivot plate, and a second pivot plate fastened to the walking beam and rotatably mounted on the first pivot plate.

1,890,209. FOOTWEAR. ALBERT F. BANCROFT, West Newton, Mass., assignor to Bancroft-Walker Company, Boston, Mass., a Corporation of Massachusetts. Filed Feb. 11, 1931. Serial No. 514,968. 4 Claims. (Cl. 36—71.)

1. A shoe having a sole member comprising a shank and forepart portions, cushioning means overlying the

inner edge of the shank portion and extending forwardly to the forepart portion, and a piece of flexible sheet material underlying the shank portion of the sole member



and having opposite ends arranged to extend up over the edge of the shank portion of the sole member and to overlie the shank portion of the cushioning means.

1,890,210. FURNACE GRATE. ALFRED WILLIAM BENNIS, Bolton, England. Filed Oct. 8, 1928, Serial No. 311,168, and in Great Britain Nov. 23, 1927. 4 Claims. (Cl. 110—40.)



1. A furnace grate comprising a driving chain, grate bars supported on said chain, a plurality of collecting receptacles supported on said chain and located beneath the bars to receive material which passes through said bars, a plurality of chutes located along the length of the grate for receiving material discharged from said collecting receptacles whereby such materials are segregated according to the portion of such travel at which they pass through said bars, and means to prevent a discharge of said collecting receptacles between said chutes.

1,890,211. FURNACE GRATE. ALFRED WILLIAM BENNIS, Bolton, England. Filed Oct. 8, 1928, Serial No. 311,169, and in Great Britain Nov. 23, 1927. 5 Claims. (Cl. 110—40.)



1. A furnace chain grate comprising a driving chain, grate bars supported on said chain, and a plurality of trough-shaped dampers pivotally supported on said chain for movement therewith, said dampers operating to control the upward flow of air past themselves to the grate bars, and means for moving said dampers to a selected angular position with respect to their pivotal supports while moving with the chain and grate bars whereby to retain material passing through the grate bars and to limit and control the quantity of air moving upward past the dampers to said grate bars.

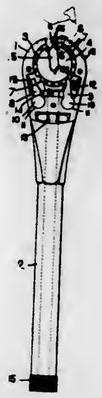
1,890,212. WHISTLE AND THE LIKE. ARTHUR L. BRIDGHAM, Boston, Mass., assignor to Charles H. Sherburne, Boston, Mass. Filed Apr. 19, 1932. Serial No. 606,138. 1 Claim. (Cl. 116—137.)

In an instrument of the type specified, in combination, spaced casing portions, one of said casing portions having an air chamber, the other of said casing portions having an opening to the atmosphere and a compression chamber, said other casing portion having a passage connecting said opening and compression chamber, and a nozzle adapted to direct fluid under pressure into said passage and cause air to be drawn through said opening



into said passage, said other casing portion having means for directing fluid under pressure from said compression chamber toward said air chamber.

1,890,213. OPEN-ENDED REVERSIBLE RATCHET WRENCH. FREDERICK S. CAMERON, Dorchester, and ALLAN B. JONES, Brookline, Mass., assignors to John H. Dodge, Harry R. Sinclair, Worcester, Mass., and Louis C. Smith, Newton, Mass., trustees. Filed Mar. 9, 1931. Serial No. 521,162. 5 Claims. (Cl. 140—119.)



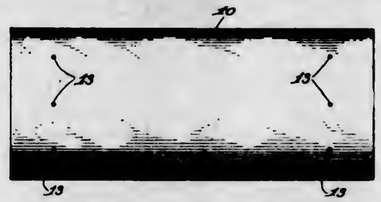
1. An open-ended ratchet wrench comprising a head member having a socket-receiving chamber, a handle extending from the head member and having the portion which is grasped when the wrench is operated of insulating material, a socket member rotatably mounted in said chamber and provided with a socket opening which leads to and is open at the periphery of said socket member, said head member having a radial opening through the wall thereof with which the socket opening may be aligned to permit the article to be turned to be entered into the socket opening in a radial direction, pawl and ratchet connection between the socket member and the head member and a U-shaped liner element resilient in a transverse direction insertable edgewise into said socket opening and which by its presence in said opening reduces the transverse dimension thereof.

1,890,214. CLEANING COMPOSITION. HARRY V. CHURCHILL, Parnassus, Pa., assignor to Aluminum Company of America, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed May 18, 1929. Serial No. 364,333. 7 Claims. (Cl. 87—5.)

1. A water soluble powder for cleaning aluminum consisting of about 99 per cent of tartaric acid and about 1 per cent of an alkali metal fluoride.

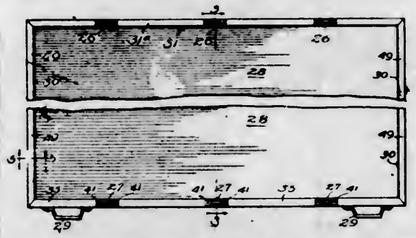
3. A composition for cleaning aluminum consisting of a solid organic fruit acid and a small amount, at least about 1 per cent, of an alkali metal fluoride.

1,890,215. SAUSAGE CASING. HASWELL R. DE CRESSEY, San Francisco, Calif., assignor to The Visking Corporation, Chicago, Ill., a Corporation of Virginia. Filed Nov. 17, 1930. Serial No. 496,315. 6 Claims. (Cl. 99—8.)



1. The method of preparing a sausage casing for stuffing which comprises punching a plurality of apertures therein.

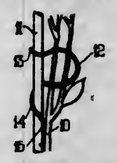
1,890,216. SHALLOW DRAWER CONTAINER FOR SHEETS. HAROLD L. DE LISLE, Chicago, Ill. Original application filed Aug. 1, 1928, Serial No. 296,695. Divided and this application filed Aug. 29, 1929. Serial No. 389,291. 11 Claims. (Cl. 45—2.)



1. In combination, walls forming a cabinet, a pair of open-top drawers having substantially flat bottom walls respectively, said drawers being adjacent to each other and positioned one above the other in the cabinet, guiding-and-supporting means at the sides of the drawers respectively, the lower drawer having a roller at the rear end portion thereof and arranged to contact the bottom wall of the upper drawer when the lower drawer is drawn outwardly relative to the upper drawer.

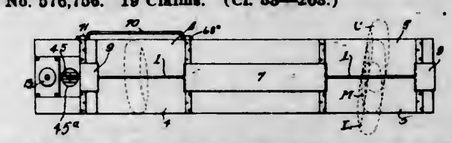
1,890,217. SPRING CLIP PLANT SUPPORT. HARRY DOBBINS, Sankey, near Warrington, England, assignor to Tilling Gray and Company Limited, Warrington, England, a British Company. Filed June 12, 1931, Serial No. 543,990, and in England June 18, 1930. 1 Claim. (Cl. 47—44.)

A support for growing plants comprising a vertical stake and a spring clip formed from a piece of wire consisting of an open loop in the form of a helix the axis of which is parallel to that of the stake, one end of said loop also being of open helical form and passing around said stake to engage therewith at displaced longitudinal parts of said stake and the other end of said loop being in the form of a half convolution helix of opposite curvature to said first



mentioned end and engaging only with the opposite side of said stake to that which is engaged by the inner half convolution of said first mentioned end.

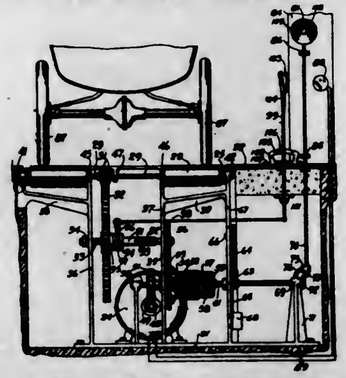
1,890,218. VEHICLE TIRE SCUFF DETECTOR. JOHN FABIEN DUBY, Boston, Mass. Filed Nov. 23, 1931. Serial No. 576,756. 19 Claims. (Cl. 33—203.)



7. The method of detecting undesirable movements between a vehicle tire and the road in a direction lateral to the path of vehicle travel, which consists of moving the vehicle forward while maintaining approximately the normal degree of frictional engagement between the tires and a fixed supporting surface, providing a laterally displaceable element associated with said surface and utilizing any such movement of the tire to actuate said element.

18. Apparatus of the class described comprising means presenting a fixed wheel-supporting surface, means movable laterally to a wheel plane adapted for frictional contact with a tire periphery to detect certain scuffing action between said surface and the tire as the latter traverses said surface while in approximately full frictional contact with the fixed surface, means to indicate lateral movement of said detecting means, and operable connections between said indicating means and said detecting means.

1,890,219. METHOD FOR TESTING AUTOMOBILE BRAKES. LEON L. GRAHAM and OSCAR S. FLOOD, Chicago, Ill., assignors to Bendix-Cowdrey Brake Tester, Inc., South Bend, Ind., a Corporation of Delaware. Original application filed Aug. 18, 1923, Serial No. 658,001, Patent No. 1,789,650. Divided and this application filed Nov. 21, 1930, Serial No. 497,301. Renewed Sept. 22, 1932. 10 Claims. (Cl. 265—25.)

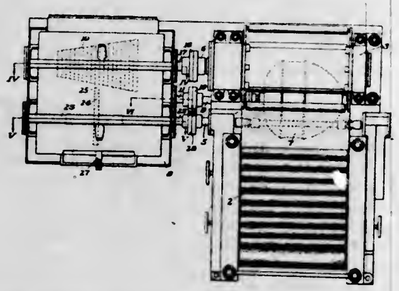


1. A method of testing a brake associated with a wheel of a vehicle comprising securing the vehicle against movement, rotating the wheel by force applied to the periphery thereof, applying the brake to the wheel, and measuring the resistance to the rotation of the wheel.

1,890,220. LIQUID COMPOSITION FOR PRESERVING MATERIALS, PARTICULARLY TIMBER. FREDERICK ARTHUR HILL, Ealing, London, England. Filed May 15, 1930, Serial No. 452,816, and in Great Britain Mar. 14, 1930. 1 Claim. (Cl. 134—78.6.)

A process for the manufacture of a liquid composition for preserving timber which consists in preparing a molten mixture of asphalt and naphthalene in the proportions of about 2 parts asphalt to 1 part of naphthalene, and thoroughly incorporating this mixture with a main body of fuel oil in proportions of about 15 parts asphalt-naphthalene mixture to 85 parts fuel oil.

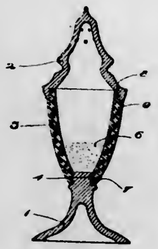
1,890,221. METHOD AND APPARATUS FOR LEVELING AND SHEARING METAL STOCK. LORENZ IVERSEN, Pittsburgh, Pa., assignor to Mesta Machine Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed July 15, 1929. Serial No. 378,205. 21 Claims. (Cl. 153—2.)



1. The method of leveling and shearing metal strips and bars, which comprises the steps of leveling the stock in a leveler, delivering the stock from the leveler to a flying shear, and normally maintaining a loop in the stock between the leveler and the shear.

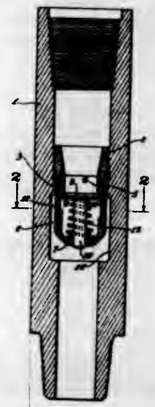
4. Apparatus for leveling and shearing metal stock, comprising a leveling unit, a flying shear unit adjacent the delivery end of the leveling unit, and means for selectively varying the operating speed of one unit with respect to the other to a predetermined extent.

1,890,222. SHAKER FOR SALT, ETC. JAMES W. JENNINGS, Providence, R. I., assignor to Quaker Silver Company, Attleboro, Mass., a Corporation of Massachusetts. Filed Jan. 5, 1929. Serial No. 330,561. 3 Claims. (Cl. 65—45.)



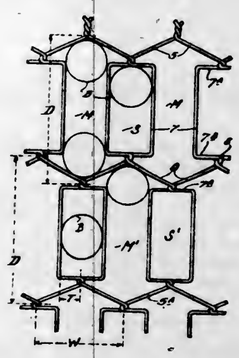
1. A shaker comprising a hollow body formed of smooth, non-corrodible non-metallic moulded material and tapering downwardly from a large opening at the top to a small opening at the bottom, and a perforated metallic dispensing cap and a metallic base member mounted on the body at said openings respectively, the base having a reduced end extending into and completely closing said opening and terminating substantially at the upper end thereof, whereby the area of normal contact between the shaker and its contents is substantially confined to said non-corrodible non-metallic material while the parts subject to impacts are relatively non-frangible.

1,890,223. DRILL PIPE FLOAT COUPLING. JAMES E. KILLEE, St. Louis, Mo., assignor to John J. Larkin, St. Louis, Mo. Filed Feb. 13, 1928. Serial No. 253,873. 6 Claims. (Cl. 137—69.)



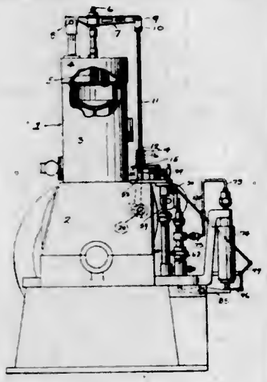
1. A drill pipe float coupling, comprising, a coupling adapted for connecting sections of drill pipe and having a fluid passage longitudinally therethrough, a valve seat member in said coupling, a cage member having depending arms and a stem guide below said seat member, a valve guided by said arms to move upwardly against said seat member and having a stem engaging said stem guide, and a spring adapted to move said valve upwardly against its seat.

1,890,224. CHAIN LINK WIRE FABRIC. ARTHUR A. G. LAND, Chicago, Ill. Filed June 16, 1930. Serial No. 461,276. 8 Claims. (Cl. 245—6.)



1. A chain-link type of wire fabric comprising consecutively intertwined spiral strands of zigzag formation in elevation, each strand presenting a row of alined bights at each longitudinal edge of the zigzagged strand, the said formations presenting portions in which two consecutive bights at one edge of the strand are disposed between two bights at the other edge of the strand, so that two consecutive strands border meshes presenting six interlocked bights.

1,890,225. DIESEL ENGINE SPEED GOVERNOR AND APPARATUS TO RELIEVE FUEL OIL PRESSURE ACCUMULATION. JOHN W. LORIMER, Oakland, Calif. Filed June 28, 1926. Serial No. 119,023. 16 Claims. (Cl. 123—140.)



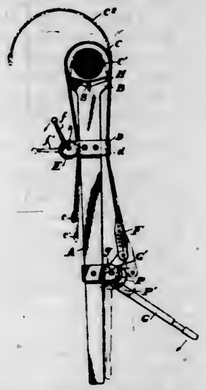
1. An apparatus to regulate the fuel pressure in the fuel line of a Diesel engine, which apparatus is comprised of a plurality of fuel pumps connected to said fuel line; a valve in each pump to regulate the entry of fuel thereto; a pressure regulator, operable by the combined pressures developed in the fuel line by said pumps; a plunger in said regulator to be reciprocated proportionately to the pressure transmitted to said regulator from said fuel line; a shaft; spring pressed fingers on said shaft, each finger normally occupying a restrained position adjacent to, but so that by the energy of its spring when the finger is released it can move one of said valves; an arm on said shaft to be moved by said plunger to release said fingers so that each can impart a limited movement to the valve adjacent thereto when pressure above a predetermined amount is developed in said line.

1,890,226. BLOWER. EUGENE MATHIS, Chicago, Ill., assignor to New York Blower Company, Chicago, Ill., a Corporation of Indiana. Original application filed Dec. 31, 1931, Serial No. 584,102. Divided and this application filed Sept. 3, 1932. Serial No. 631,706. 6 Claims. (Cl. 230—134.)



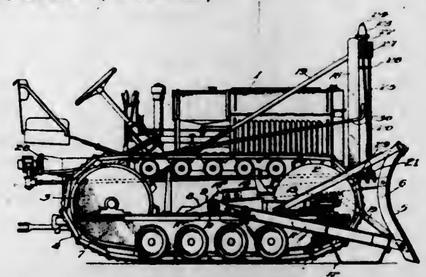
1. A fan comprising generally oppositely spaced blade-carrying members each provided with a plurality of perforations and a plurality of blades, each end of each blade carrying lugs, one of said lugs on each end extending out of the plane of the blade to form a shoulder engaging one side of each of the blade-carrying members, and another of said lugs at each end of the blade extending through one of said perforations and thence at an angle to engage opposite sides of the blade-carrying members.

1,890,227. AUTO CRANK SHAFT WRENCH. WELDON W. MCKEE, Wooster, Ohio. Filed Aug. 28, 1931. Serial No. 559,952. 1 Claim. (Cl. 81—64.)



In a wrench of the character described, the combination with a handle, a pair of angular jaws at its head, a support member attached to the handle below its head, an eccentric rocker pivotally mounted in said support and an opening thru said support opposite said eccentric, a thin flexible strap adapted to be adjustably and detachably secured between said eccentric and said handle at one end, and a clip fastener adapted to engage the other end thereof, means including a pair of wedge-shaped members slidingly operable in said clip to grip said strap between them, and means, including a hand lever pivotally operable on said handle, and engaging said clip, to control the tension of said strap, substantially as set forth.

1,890,228. HYDRAULIC BULLDOZER. ROYAL R. MILLER, Elkhart, Ind., assignor to William Mitchell Blair, Chicago, Ill. Filed May 20, 1929. Serial No. 364,507. 12 Claims. (Cl. 37—144.)



5. In a bulldozer adapted to be mounted upon a caterpillar tractor provided with driving treads, stud shafts mounted on the framework of the driving treads and extending laterally thereto, arms positioned on each side of said treads and mounted on said stud shafts, a blade secured to said arms, and means for raising and lowering said arms and blade.

1,890,229. REFINING OF HYDROCARBON OIL. JACQUES C. MORRELL and JESSE L. ESSEX, Chicago, Ill., assignors to Universal Oil Products Company, Chicago, Ill., a Corporation of South Dakota. Filed Jan. 9, 1928. Serial No. 245,625. 2 Claims. (Cl. 196—44.)

1. A step in a process of refining cracked hydrocarbon distillate which consists in subjecting said distillate to the action of borax at a temperature substantially above atmospheric but below cracking to remove therefrom gummy compounds and oily polymers.

1,890,230. REFINING OF HYDROCARBON OIL. JACQUE C. MORRELL and JESSE L. ESSEX, Chicago, Ill., assignors to Universal Oil Products Company, Chicago, Ill., a Corporation of South Dakota. Filed Nov. 5, 1928. Serial No. 317,476. 8 Claims. (Cl. 196—79.)

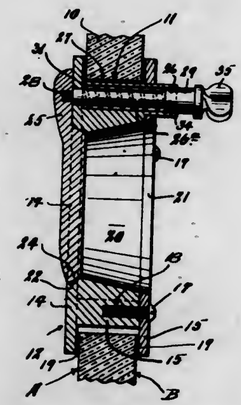
1. A step in a process of refining cracked hydrocarbon distillates to remove gummy compounds, comprising subjecting said distillates to heat in the presence of a mixture of borax and adsorbent of the clay type under temperature conditions adequate to effect such removal.

1,890,231. VULCANIZABLE COMPOUNDS AND VULCANIZED PRODUCTS DERIVED THEREFROM. JOSEPH C. PATRICK and NATHAN M. MNOOKIN, Kansas City, Mo. Filed May 28, 1928, Serial No. 281,351. Renewed Oct. 3, 1932. 18 Claims. (Cl. 106—23.)

1. A vulcanisable composition comprising high sulfur plastic of the type of additive polysulfides of olefines of the general formula C_nH_{2n}, unvulcanized rubber, and sulfur.

18. As an article of manufacture, a vulcanized material strongly resembling soft vulcanized rubber in mechanical properties containing a plastic of the type of additive polysulfides of olefines of the general formula C_nH_{2n}, rubber and sulfur, the total proportion of sulfur uncombined and combined with the rubber and in the olefine polysulfide plastic being not substantially less than 50%.

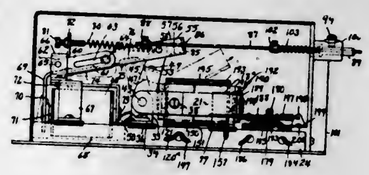
1,890,232. GUN PORT. NARY H. PHILLIPS, St. Louis, Mo., assignor to Julius H. Wise, St. Louis, Mo. Filed Aug. 24, 1931. Serial No. 558,886. 7 Claims. (Cl. 89—36.)



1. A gun port comprising a body portion adapted to be secured within an opening formed in a wall and provided with a centrally disposed aperture establishing communication between the respective sides of said wall, a closure plate disposed adjacent to the outer side of said body portion for closing said aperture, and a bolt slidably and revolubly mounted in said body portion to one side of said aperture and having its outer end secured to said closure plate and having its inner end extending beyond the inner side of said body portion, said bolt being manually operable slidably to seat and unseat said closure plate and revolubly to swing said closure plate relatively to said aperture.

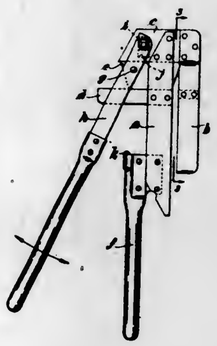
1,890,233. AUTOMATIC CIRCUIT-BREAKING APPARATUS. ROSS M. G. PHILLIPS, West Haven, Conn., assignor to Malcolm P. Nichols, trustee, New Haven, Conn. Filed Feb. 27, 1929, Serial No. 343,018. Renewed Apr. 15, 1932. 5 Claims. (Cl. 180—82.)

1. An automatic circuit-breaking apparatus comprising a switch; yielding-means normally tending to move the said switch into its open-circuit position; electro-magnetic means constructed and arranged to hold the said switch in its circuit-closing position against the counterarge of the said yielding-means; and an inertia-operated collision-switch interposed in the electrical circuit so as to control



the flow of current through the said electro-magnetic means; whereby when a vehicle mounting my improved apparatus is involved in a collision the said inertia-operated collision-switch will move into its open-circuit position and effect the similar movement of the first mentioned switch.

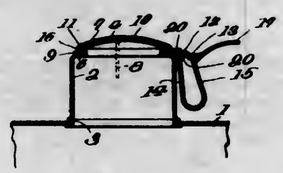
1,890,234. DEVICE FOR CUTTING SHEETS OF TOUGH OR HARD MATERIAL. PERCY PICKERING, Birmingham, England. Filed Feb. 7, 1930, Serial No. 426,646, and in Australia Feb. 9, 1929. 1 Claim. (Cl. 125—23.)



A sheet cutter comprising in combination a top jaw and a bottom jaw having between them a slot to receive the sheet, a cutter reciprocatable in said top jaw, a connecting piece uniting said jaws at one end thereof, close to said cutter and adapted to pass through cuts made by the cutter in the sheet, a handle fixed to said top jaw, and mechanism including a second handle above said top jaw for reciprocating said cutter, said bottom jaw having a recess for entrance of the edge of said cutter of a width leaving substantial clearance on both sides of said cutter, and both said jaws extending at the free ends thereof substantially beyond the cutter, in the direction of the cut made in the sheet, so that obstructions of substantial length are afforded to prevent upward and downward curl of the sheet.

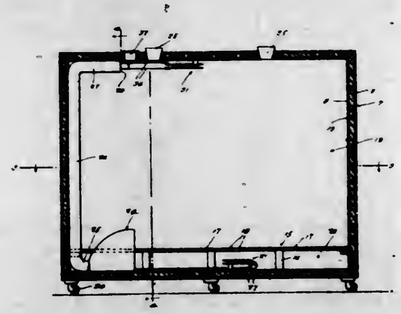
1,890,235. NOZZLE CLOSURE FOR METAL CONTAINERS. WILLIAM F. PUNTS, Syracuse, N. Y., assignor to Continental Can Company, Inc., New York, N. Y., a Corporation of New York. Filed Feb. 19, 1932. Serial No. 594,118. 7 Claims. (Cl. 221—5.)

1. A dispensing nozzle comprising a body portion and a top formed integral therewith, said body having a raised central portion provided with a score line which may be ruptured for opening the nozzle, and a closure for said nozzle including a cover conforming to and engaging



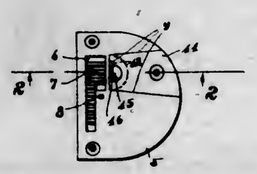
the outer face of said raised portion and a supporting member surrounding said raised portion to which said cover is hinged.

1,890,236. INCUBATOR. OMER V. ROOKSTOOL, McCracken, Kans. Filed Jan. 18, 1932. Serial No. 587,399. 4 Claims. (Cl. 219—39.)



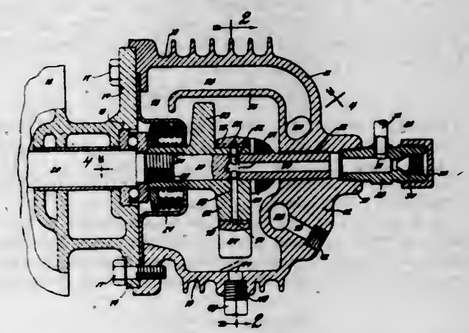
1. An incubator comprising a cabinet, supporting members arranged in the lower portion of the cabinet, an elevated floor comprising a plurality of apertured plates mounted on said supporting member and arranged within the vicinity of the bottom of the cabinet, said floor dividing the cabinet into upper and lower compartments, and an electric fan-type heater supported in the lower part of the cabinet, a housing enclosing said heater and in communication with the upper and lower compartments, a tubular air conducting and distributing pipe connected at its lower end with said housing and having its upper end located within the vicinity of the ceiling of the cabinet, an electric air circulating fan mounted in said housing.

1,890,237. SEWING MACHINE NEEDLE-PLATE. ZACHARIA BOUTTENBERG, Los Angeles, Calif. Filed Jan. 20, 1930. Serial No. 422,047. 1 Claim. (Cl. 112—260.)



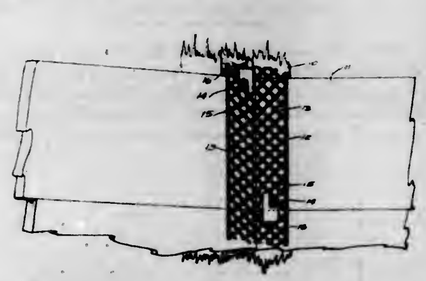
In an attachment of the class described, a needle-plate having a recess with an adjoining aperture besides the apertures for a feed member and for a sewing-needle, and an insert fitting in said recess and having a shouldered portion extending downwardly to engage in said adjoining aperture, the top of the insert being flush with the top of the said plate, and the insert being recessed whereby a cutting edge is formed in the top of the insert along a line in the direction in which material is normally fed over the plate and sidewise of the said aperture for the needle.

1,890,238. COMPRESSOR. RUSSELL T. SMITH and CHARLES H. SMITH, Greenville, Mich., assignors to Gibson Refrigerator Company, Greenville, Mich., a Corporation of Michigan. Filed Apr. 15, 1931. Serial No. 530,252. 7 Claims. (Cl. 230—185.)



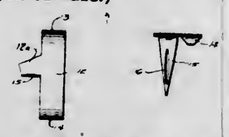
1. In a compressor, a casing having a bored end wall, a rotating shaft journalled in the bore, an inlet opening in the wall and in communication with the bore therein, the adjacent end of the shaft being hollow and open to the bore continuously, and also to the interior of the casing, the openings from the interior of the shaft to the interior of the casing being adjacent moving parts of the compressor, so as to lubricate them in their movement on the shaft.

1,890,239. METAL CLIP FOR HOLDING EXPANDED OR OTHER METAL ANGLE CORNERS IN WALLS. ROY J. TAYLOR, Ashtabula County, Ohio, assignor of one-half to The American Gypsum Co., Port Clinton, Ohio, a Corporation of Ohio. Filed Mar. 28, 1931. Serial No. 525,925. 1 Claim. (Cl. 72—118.)



The combination, in a corner structure for buildings, of studding, plaster board thereon, a reticulated metal corner angle fitting against the board, said metal having diamond shaped openings, and clips fitting against the metal angle, each clip consisting of a flat metal plate having a corner angle and a prong bent down along one edge of the angle between the ends of the plate and extending diagonally through one of said openings in a direction transverse to the length of the metal corner angle.

1,890,240. FASTENING CLIP FOR APPLYING PLASTIC LATH OR THE LIKE TO WOOD STUDDING. ROY J. TAYLOR, Ashtabula, Ohio, assignor of one-half to The American Gypsum Co., Port Clinton, Ohio, a Corporation of Ohio. Filed Mar. 28, 1931. Serial No. 525,926. 2 Claims. (Cl. 72—118.)

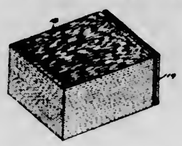


1. A fastener comprising an elongated sheet metal plate having an extension at one side edge spaced from each end thereof, and a pointed prong bent from one side edge of said extension at an angle to the plane of the plate and at a right angle to the length of the plate, and adapted to be driven into a stud or the like.

1,890,241. PROCESS OF MAKING DOUBLE BASE POWDERS. WILLIAM E. WAGNER, Alton, Ill., assignor to Western Cartridge Company, East Alton, Ill., a Corporation of Delaware. Filed Apr. 7, 1930. Serial No. 442,471. 12 Claims. (Cl. 52—22.)

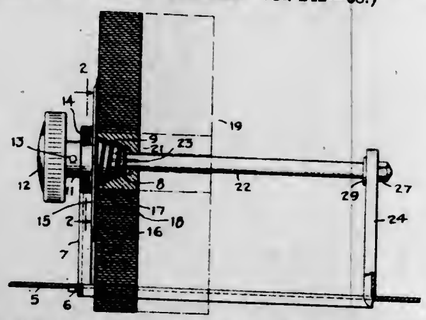
4. A process of making double base powders in which finely divided cellulose is subjected to a nitrating agent, characterized by the feature that nitro-glycerin is mixed with the nitrated cellulose in the presence of the nitrating agent.

1,890,242. ELECTROLYTIC DIAPHRAGM. WILLIAM H. WOOD, South Euclid, Ohio. Filed June 23, 1927. Serial No. 200,866. 2 Claims. (Cl. 136—148.)



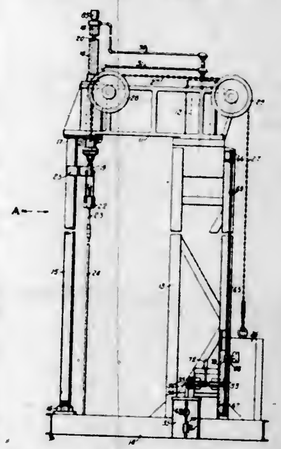
1. The process of making a porous diaphragm for electrolytic use which contains the steps of mixing indiscriminately together a plastic matrix substance and a fibrous pervious substance, rolling such mixture repeatedly in the same direction, superposing the sheets thereby produced to form a pile with the grain of the majority of said sheets parallel, causing said sheets to adhere together, and slicing such pile transversely of the grain.

1,890,243. RIBBON TRANSFER MACHINE. ARTHUR B. ZACHERT, New York, N. Y., assignor to Bedford Armstrong Corporation, Bedford, Va. Filed Apr. 22, 1930. Serial No. 446,422. 3 Claims. (Cl. 242—68.)



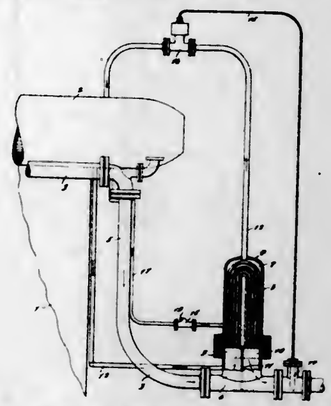
1. A device of the character described having in combination, a core for a roll of ribbon, said core being formed of a yielding material and provided with a frusto-conical shaped bore, a frusto-conical shaped chuck, a cutting thread on said chuck cooperating with said bore, a socket in said chuck, and a shaft having one end cooperating with said socket.

1,890,244. PUMP RIG. LAWRENCE A. BARRETT and JOHN P. FERRIS, Milwaukee, Wis.; said Ferris assignor to The Oilgear Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed Feb. 1, 1926. Serial No. 85,207. 12 Claims. (Cl. 103—46.)



1. A hydraulic drive comprising a hydraulic motor, means for delivering a smooth flow of driving liquid to said motor at a measured rate, means for varying the rate of delivery of driving liquid to said motor, and means for controlling the rate of action of said varying means to control the rate of change in the liquid flow.

1,890,245. STEAM TEMPERATURE REGULATOR. JOHN E. BLACK, Rumson, N. J., assignor to The Babcock & Wilcox Company, Bayonne, N. J., a Corporation of New Jersey. Filed Apr. 22, 1930. Serial No. 446,270. 10 Claims. (Cl. 122—479.)

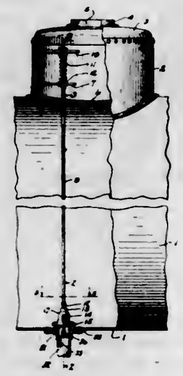


8. In combination, a boiler having a steam space, a superheated steam pipe, a temperature regulator connected to said pipe and having a chamber beneath the normal water level of the boiler, two connections from the chamber to the water space of the boiler for maintaining a supply of water in the chamber, means for passing the steam from the pipe through the chamber while maintaining it out of contact with the water therein, a connection from the upper part of said chamber to said steam space, a valve in said connection, and means to control operation of said valve by the temperature of steam leaving the regulator, said two connections including a part in which water circulation is promoted.

1,890,246. PROCESS FOR SEPARATING N-MONOALKYL AND N-DIALKYL AROMATIC AMINES OF THE BENZENE SERIES. EDGAR C. BRITTON and RAY D. HOLMES, Midland, Mich., assignors to The Dow Chemical Company, Midland, Mich., a Corporation of Michigan. Filed Apr. 18, 1928. Serial No. 269,861. 14 Claims. (Cl. 260—128.)

1. A process for separating N-monoalkyl and N-dialkyl aromatic amines of the benzene series from a mixture thereof, which comprises reacting at a temperature between about 100° and about 200° C. the N-monoalkyl aromatic amine with a dicarboxylic acid and separating the unreacted N-dialkyl aromatic amine from the reaction mixture.

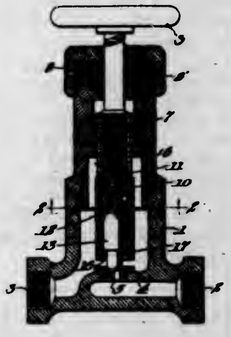
1,890,247. TANK CAR VALVE. FRANCIS L. DIETERICH, Newark, N. J. Filed Dec. 3, 1930. Serial No. 499,694. 8 Claims. (Cl. 137—21.)



1. In a valve mechanism for tank cars, the combination comprising an elongated operating rod provided with means adjacent its upper end for rotating the same, said rod being of sufficient length to project from the dome of said car into proximity to a valve seat located in the bottom of the tank car, a valve member mounted on the lower end of said rod, a collar on the lower end of the rod for effecting the raising or lowering within defined limits of said valve with respect to its seat according to the direction in which said rod is rotated, means, including a spring, for normally holding said collar against rotation during the normal raising or lowering of said valve while permitting of the rotation of the collar when the operating rod is depressed, guide means secured to said tank car for supporting said operating rod adjacent its upper end and means for normally maintaining said rod in operative relation with said guide means.

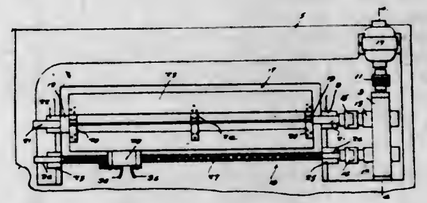
1,890,248. HIGH PRESSURE SELF-GRINDING VALVE. FRANK W. EDWARDS, Chicago, Ill., assignor to The Ohio Injector Company, Chicago, Ill., a Corporation of Illinois. Filed July 2, 1926. Serial No. 120,173. 11 Claims. (Cl. 251—38.)

1. A valve of the character described, having a valve seat, and a plug-like valve having ends of different diameter, one end adapted to seat in said seat, and a thrust bearing acting upon the other end of the plug-like valve



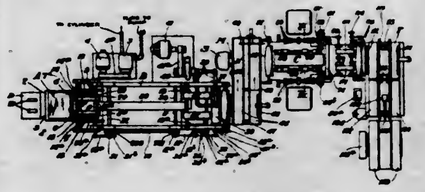
to hold the valve to its seat in a self-adjustable, flexible manner.

1,890,249. SAUSAGE PREPARING APPARATUS. HOMER A. EDWARDS, Nampa, Idaho. Filed May 11, 1929. Serial No. 362,439. 6 Claims. (Cl. 17—34.)



1. A sausage preparing apparatus comprising a base, a removable reel mounted upon the base, a screw mounted for rotation in parallelism to said reel, a sausage guide on said screw, means for rotating said reel and operating guide simultaneously, said guide being threadedly engaged on said screw, means to prevent the rotation thereon on said screw, said means consisting of a block pivotally connected to said guide, a rod, said block being provided with an opening therein to receive the rod.

1,890,250. METHOD OF AND APPARATUS FOR HANDLING TIN PLATE. ARCHIBALD D. EVANS, Warren, Ohio, and JAMES K. LAMOREN, Mount Lebanon, Pa. Filed Mar. 24, 1930. Serial No. 438,485. 7 Claims. (Cl. 271—63.)



1. A tin plate handling mechanism comprising a vertically movable plate supporting platform adapted to support a pile of plates to be inspected, conveying mechanism for receiving and conveying the plates forwardly as they

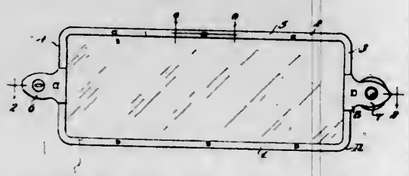
are manually moved from said pile, and a combined turning and conveying mechanism adapted to receive the plates from said conveying mechanism and to simultaneously feed said plates forwardly while turning said plates 180 degrees, said combined turning and conveying mechanism comprising two pair of vertically spaced rollers, said pairs of rollers being spaced in the direction of travel of the plates, and a continuous belt trained over said rollers, said belt extending under the lower rollers of said pair of rollers, over the lower roller of the rear pair of rollers, turned 180 degrees, passed under and over the top one of the forward pair of rollers, passed over and under the top one of the rear pair of rollers, turned 180 degrees, and then passed over the lower one of the forward pair of rollers whereby the two belt portions turned 180 degrees extend parallel with each other and form a twisted path through which the plates are conveyed and turned 180 degrees.

1,890,251. FILTER. GILBERT J. FOWLER, Bangalore, India. Filed Aug. 29, 1927, Serial No. 216,117. Renewed May 21, 1932. 6 Claims. (Cl. 210—198.)



1. A filter comprising a supporting base provided with a multiplicity of projecting bristles located sufficiently close to each other to form a supporting surface for the major portion of the solid material to be separated by said filter, said filter base comprising a flexible belt adapted to be bent about a curved surface to spread said bristles and facilitate cleaning of said filter.

1,890,252. ANTIFROST SHIELD. SAMUEL FRANK, St. Paul, Minn. Filed Dec. 1, 1930. Serial No. 499,181. 8 Claims. (Cl. 20—40.5.)



1. An anti-frost shield, comprising a frame formed of a pair of similar, oppositely disposed strips, having their ends in abutting relation, a plurality of downwardly extending projections stamped from the material of said strips, a transparent sheet of a size to fit within said frame, said projections being bent over to engage said sheet, a pair of brackets connected to said strips at their point of abutment, said brackets having each a downwardly bent portion to overlie the joint between said strips, vacuum cup means secured to each of said brackets, and a flexible sealing strip adhesively secured around the margin of said transparent sheet below said frame.

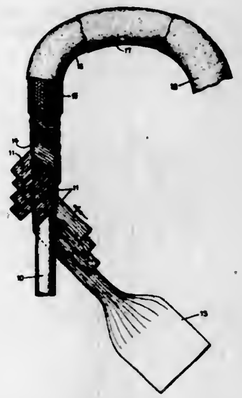
1,890,253. WEATHERPROOF WIRE AND METHOD AND MEANS OF MAKING SAME. OTTO A. FREDERICKSON, Ben Avon, Pa., assignor to National Electric Products Corporation, New York, N. Y., a Corporation of Delaware. Filed Jan. 10, 1929. Serial No. 331,694. 5 Claims. (Cl. 173—264.)

4. A weather proof insulated wire comprising a central conductor with coverings comprising a number of relatively solid but flexible sheaths of compacted crinkled paper disposed over each other, each sheath having the adjacent convolutions in the same layer overlapping each other at the edges of abuting adjacent convolutions in



the same layer, and asphaltic material disposed above and below each sheath to impregnate the same from the interior and exterior of each sheath.

1,890,254. WEATHERPROOF WIRE. OTTO A. FREDERICKSON, Ben Avon, Pa., assignor to National Electric Products Corporation, New York, N. Y., a Corporation of Delaware. Filed Feb. 7, 1930. Serial No. 426,492. 15 Claims. (Cl. 173—264.)



7. A weather proof insulated wire having a multiplicity of layers of wrappings thereon, each of said wrappings comprising compacted crinkled paper substantially free of complete twists, said wrappings being also impregnated with an impregnating compound, and a covering for such layers comprising stearin pitch which has a relatively high melting point.

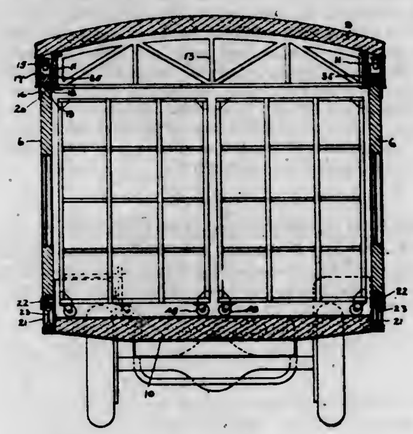
1,890,255. PROCESS OF TREATING SPENT ADSORBENTS. IRA K. FULLER, Olean, N. Y., assignor, by mesne assignments, to Contact Filtration Company, a Corporation of California. Filed Sept. 27, 1929. Serial No. 395,595. 2 Claims. (Cl. 252—2.)

1. A process for reactivating spent adsorbent from an oil contacting operation, which process comprises treating the adsorbent with an oil solvent for removal of oil, drying the adsorbent, mixing the dried adsorbent with a solvent for adsorbed matter, filtering the adsorbent from such mixture, and passing through the filter cake a further quantity of fresh solvent to wash the remaining solution of adsorbed matter therefrom.

1,890,256. PROCESS OF PREPARING AMINO-DIARYL ETHERS. ERNEST F. GRETHER, Midland, Mich., assignor to The Dow Chemical Company, Midland, Mich., a Corporation of Michigan. Filed Mar. 19, 1928. Serial No. 262,994. 17 Claims. (Cl. 260—130.5.)

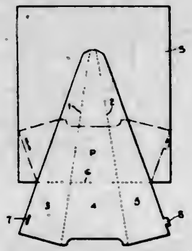
1. In a method for making amino-diaryl ethers, the step which consists in reacting between the corresponding halogenated diaryl ether and ammonia.

1,890,257. TRUCK BODY CONSTRUCTION. LOUIS S. HAFNER and EDWARD H. HAUTE, Lakewood, Ohio. Filed Aug. 15, 1929. Serial No. 386,128. 2 Claims. (Cl. 296—47.)



1. In a delivery truck, the combination which comprises a truck body, a trackway along one side of the body top, a plurality of side doors mounted for sliding movement along said trackway, a groove in said trackway and a tongue on said doors, and means carried by said truck body adapted to raise said doors off said trackway and cause said tongues to fit tightly into said grooves.

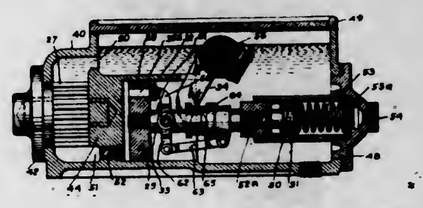
1,890,258. ADVERTISING OR DISPLAY DEVICE. JAY B. HINSON, Little Neck, N. Y., assignor to Leo H. Fuller, Inc., Long Island City, N. Y., a Corporation of New York. Filed Feb. 7, 1930. Serial No. 426,534. 1 Claim. (Cl. 40—150.)



A sign comprising a sign portion and a pedestal portion fixed to said sign portion and arranged to support the sign portion, so that the bottom thereof is above the surface upon which the pedestal portion rests, said pedestal portion comprising a plurality of longitudinally extending segments integral with one another and arranged to fold relative to each other to form a substantially closed three dimensioned body, the portion extending outside the marginal limitations of said sign and adapted to fold back within said limitations.

1,890,259. CONTROL MEANS FOR A BRAKE SYSTEM POWER UNIT. FREDERICK I. LIBBEY, Bronxville, N. Y., assignor to Automatic Brake Corporation, New York, N. Y., a Corporation of New York. Filed Dec. 26, 1930. Serial No. 504,683. 5 Claims. (Cl. 60—52.)

1. In an operator controlled fluid pressure brake system for vehicles, a pump, fluid pressure actuated mechanism including a brake actuating part, receiving fluid under pressure from the pump and having a fluid escape port which moves in correspondence with the brake actuating operation of the mechanism, a valve pivotally mounted upon said brake actuating part and bodily shiftable there-

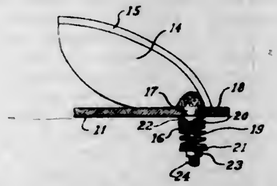


with and tiltably operable by the operator into cooperation with said port in said fluid pressure actuated mechanism, and means for transmitting a reaction force to the operator from said valve to apprise the operator of the relative braking force being applied by said mechanism.

1,890,260. EXPANSION JOINT. JAMES A. MACDONALD, Los Angeles, Calif., assignor to Willard Warne, Los Angeles, Calif., operating under the fictitious name of Willard Warne Company. Filed May 5, 1931. Serial No. 535,805. 1 Claim. (Cl. 94—18.)

A preformed expansion joint comprising a body of consolidated cork composed of granules bonded together by their inherent resin and cover sheets of flexible reinforcing material impermeable to moisture.

1,890,261. ATTACHMENT FOR PLOWS. ANDREW J. MILLER, Massillon, Ohio. Filed July 21, 1930. Serial No. 469,388. 5 Claims. (Cl. 97—117.)

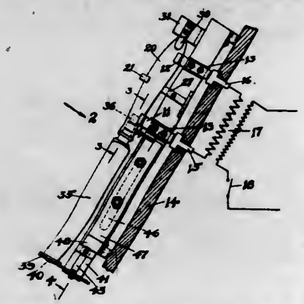


1. In combination with a plow having a moldboard, a blade pivotally mounted upon the moldboard upon an axis perpendicular thereto and free to swing upon its pivot as the plow is pulled through the earth, and compression means for normally holding the blade against movement when the plow is inoperative.

1,890,262. SOLDERING APPARATUS. ARTHUR H. PARDEW, Sherrill, N. Y., assignor to Oneida Community, Limited, Oneida, N. Y., a Corporation of New York. Filed May 18, 1929. Serial No. 364,227. 3 Claims. (Cl. 219—12.)

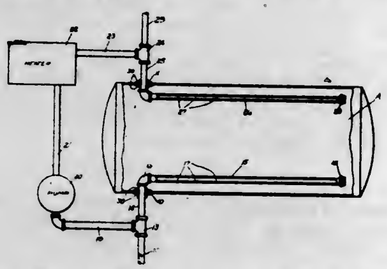
2. An apparatus for soldering a knife blade to a knife handle, comprising a frame, spaced electrodes carried thereby, means for detachably clamping the knife handle against the electrodes, said handle having a socket for solder, an electric circuit including the electrodes for passing current through that part of the handle between the electrodes, means for assembling the knife blade with its tang in the socket of the handle, said means embodying a trans-

verse element for engaging the end of the blade and movable longitudinally, resilient means for urging the transverse element to maintain the tang forced into the socket,



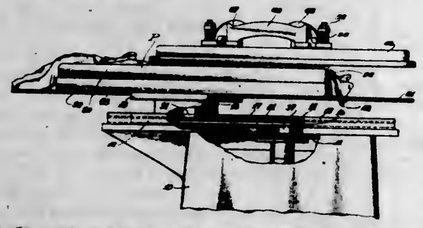
and manual means for moving the transverse element back against the action of the resilient means to permit assembly of the knife blade.

1,890,263. WATER HEATING SYSTEM. EMILE J. PARENT, Hartford, Conn., assignor to The Whitlock Coil Pipe Company, West Hartford, Conn., a Corporation of Connecticut. Filed Jan. 16, 1931. Serial No. 509,135. 3 Claims. (Cl. 122—4.)



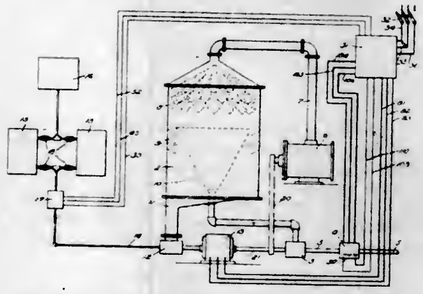
2. In a water heating system of the character described, a reservoir, a cold water diffuser in the lower portion of the reservoir, a hot water diffuser in the upper portion of the reservoir, a supply pipe, an outlet pipe, and a connection including a pump and a heater, one end of said connection and said supply pipe being connected to the same end of said cold water diffuser, and the other end of said connection and said outlet pipe being connected to the same end of said hot water diffuser whereby the water is admitted to and withdrawn from the same end of each diffuser, each of said diffusers having graduated openings increasing in size as they progress away from said mentioned ends thereof.

1,890,264. SLEEVE PRESS. CHARLES O. REEPS, deceased, Waukegan, Ill., by Harriette Estelle Reeps, executrix, Waukegan, Ill., assignor to National Laundry Machinery Company, Inc., Syracuse, N. Y., a Corporation of Delaware. Filed Jan. 2, 1930. Serial No. 418,117. Renewed May 12, 1932. 5 Claims. (Cl. 68—9.)



3. In an ironing machine, the combination of a stationary support, a buck structure on said support having a fluid chamber below its ironing surface, an ironing head mounted on said support for movement into ironing cooperation with said buck structure, means adapting said buck structure for transverse adjustment on said support for positioning only a desired part of an article on said buck structure for engagement by an ironing head, said support having fluid inlet and outlet passageways and said buck structure having fluid inlet and outlet passageways for the fluid chambers therein, there being transmission passageways between and defined by said support and buck structure for retaining communication between said support inlet and outlet passageways and buck structure inlet and outlet passageways during any adjustment of movement of said buck structure.

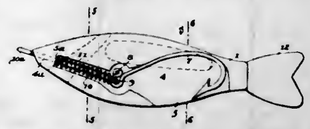
1,890,265. LIQUID TREATING APPARATUS. CLARENCE J. RODMAN and RUSSELL P. DUNMIRE, Alliance, Ohio, assignors to The Buckeye Twist Drill Company, Alliance, Ohio, a Corporation of Ohio. Filed Sept. 28, 1929. Serial No. 395,811. 14 Claims. (Cl. 196—16.)



1. A fluid treating device comprising a heater for the fluid, a filter therefor, means for supplying fluid to said heater and filter and means responsive to the pressure of the fluid supplied to the filter for stopping operation of said supply means and said heater.

14. In a fluid treating system, a fluid heater on the supply side thereof, a pump and a filter on the discharge side, control means for the heater and pump responsive to the pressure in the filter, and thermostatic control means for the heater.

1,890,266. FISH LURE. GEORGE P. SCHADELL, Paterson, and Stuart B. Gleason, Passaic, N. J. Filed May 26, 1931. Serial No. 540,052. 8 Claims. (Cl. 43—35.)

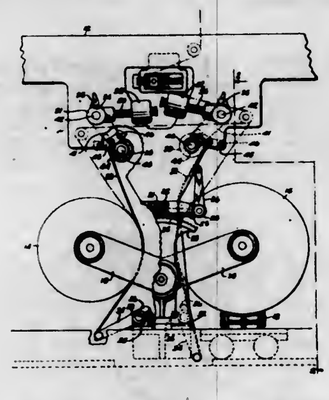


1. A fish lure of the draft type consisting of an elongated body including three laminated longitudinal sections, the middle section and each of the other two sections together forming at one side of the middle section an air-cell substantially closed to the admission of water thereto.

1,890,267. WEB CONTROLLING APPARATUS. ERNEST JAMES SMITH, Fleet Street, London, England, assignor to Goss Printing Press Company, a Corporation of Illinois. Filed Jan. 8, 1930, Serial No. 418,379, and in Great Britain Jan. 11, 1929. 7 Claims. (Cl. 242—75.)

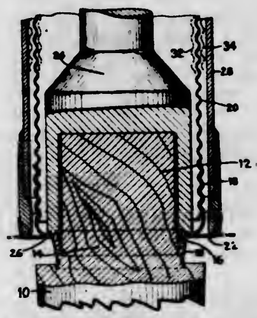
1. Web controlling mechanism for use with printing presses including in combination angularly movable arms for rotatably supporting a web roll and means for tensioning the web as it is drawn from the web roll by the press including a flexible friction belt adjacent to the axis of the

arms to bear against the periphery of the web roll, a roller to which the belt is fastened, a weighted arm and gear connected with the roller for turning the roller for



maintaining the belt in contact with the periphery of the web roll and means for raising and lowering the angularly movable arms.

1,890,268. METHOD AND APPARATUS FOR FORMING COMPOSITE PILES. HERMAN E. SMITH, Douglaston, N. Y., assignor to Raymond Concrete Pile Company, New York, N. Y., a Corporation of New Jersey. Filed June 20, 1931. Serial No. 545,720. 14 Claims. (Cl. 61—53.)



1. Apparatus for sinking into the ground a pre-formed lower pile section having a complete upper pile shell permanently attached thereto in which an upper concrete pile section is to be cast in situ, comprising means for driving said lower section whereby said section and said shell are sunk into the ground, in combination with a temporary casing surrounding said shell and driven simultaneously therewith, said temporary casing serving to protect the shell in driving and adapted to be withdrawn after driving of the shell.

1,890,269. TOY CONSTRUCTION UNIT. CARL E. SWANSON, Chicago, Ill. Filed Apr. 10, 1930. Serial No. 443,088. 16 Claims. (Cl. 46—85.)

1. A toy construction unit comprising a rectangular member of sheet material which is flexible but of self-sustaining stiffness, said member being provided with a plurality of openings respectively located adjacent the corners of the unit, and a plurality of ears projecting from an edge of the member, adapted to be inserted into the openings of a similar unit for connecting the two units, said openings being shaped to provide oppositely disposed niches for snugly receiving the opposite edges of the respective ears received by said openings, the width of each



ear being substantially equal to the distance between the oppositely disposed niches to effect the snug fit of the ears in the openings.

1,890,270. ELECTRIC CAUTERIZER. SHOTARO TAKAOKA, Gardena, Calif. Filed Oct. 29, 1930. Serial No. 491,839. 3 Claims. (Cl. 219—31.)

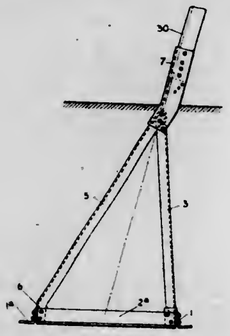


2. In an electric cauterizer, a casing including an applicator projecting angularly from the upper end thereof, an electric grid within the casing, a handle for the casing, and heat-insulating jackets enclosing the casing with the applicator projecting therefrom.

1,890,271. BASKET TYPE ANCHOR. EMIL UMBRICHT, Jackson, Mich., assignor, by mesne assignments, to The Commonwealth & Southern Corporation of Maryland, Baltimore, Md., a Corporation of Maryland. Filed Mar. 16, 1931. Serial No. 522,900. 9 Claims. (Cl. 189—21.)

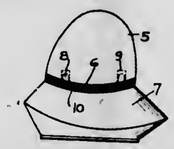
1. An anchor construction comprising four angle iron base members forming a rectangular base, an angle iron riser connecting two base members at one corner and extending upwardly and inwardly, said two base members being angularly disposed and bolted substantially flush with the riser, two risers of angle iron extending upwardly from two other corners of the base and bolted respectively to the same two angle members, clips at the corners of the second mentioned risers for connecting said two base members to two other base members, a fourth angle

iron riser extending from the fourth corner and serving as a connection for the second mentioned base member, all of said risers extending upwardly and angularly inward-



ly and and meeting at an apex within the area of the base but off center thereof, and a shoe for supporting a structural element attached to some of the members at the apex.

1,890,272. HAT BLOCK CONSTRUCTION. HARRY E. GOUGH, Ozone Park, N. Y. Filed Oct. 30, 1930. Serial No. 492,122. 8 Claims. (Cl. 223—21.)



1. The method of making a unit of a hat block assembly which consists in building up a laminated structure and then shaping the same under pressure between shaping members, including the crown and brim portions of a hat block.

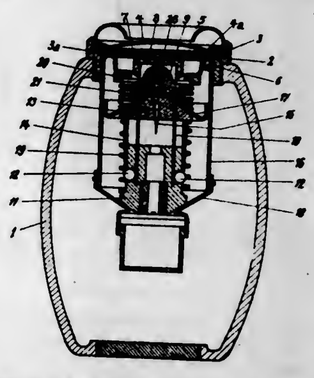
1,890,273. CARPENTER'S TOOL. WILLIAM H. WELLS, Concord, Mass. Filed Sept. 9, 1931. Serial No. 561,879. 1 Claim. (Cl. 254—131.)



As an article of manufacture a carpenter's tool composed of a metal bar including a curved major portion having a continuous curve of long radius providing a salient outer side and a reentrant inner side, an extracting claw at one end of the major portion, and an angular terminal at the opposite end of said portion projecting inwardly from the inner side thereof, said terminal comprising a short arm overhanging a part of the inner side of the major portion and a neck connecting said arm with the major portion, the salient outer side of the major portion providing a point of support adapted to bear on a flat surface at one side of a driven nail engaged by the claw, and said point of support being caused to progress outwardly from the nail when the tool is manipulated to lift the claw, so that the nail may be extracted by a non-bending pull, the terminal, and a part of the major portion constituting a socket formed to engage a structure member and adaped to be forcibly turned by pressure exerted on the major portion to wrench said member loose,

said terminal constituting a hand grip adapted to facilitate a turning movement of the tool on the longitudinal axis of the major portion to cause the claw of said major portion to exert a twisting force on a nail and thereby extract the same.

1,890,274. HAND GRENADE. JOSEF WESZYCKI, Budapest, Hungary, assignor to Firma Magyar Fém-és Lámpa-Aru-Gyár Részvénytársasag Ungarische Metallwaren- und Lampenfabriks Actien-Gesellschaft, Budapest, Hungary. Filed July 27, 1932, Serial No. 624,993, and in Austria Apr. 22, 1931. 10 Claims. (Cl. 102—29.)



1. A hand grenade comprising a casing for the reception of an explosive, said casing having an opening therein co-axial with the longitudinal axis thereof, a fuse adapted to be positioned in said casing and releasable through said opening, a cover plate for said opening forming a safety device for said grenade and operable to permit said fuse to function, said cover plate being normally locked in said opening and capable of manual deformation to permit the same to fall from said opening and allow the fuse to be released and means whereby said cover plate may be returned to the normal to lock the cover plate in position.

1,890,275. ANTIRATTLING DEVICE. CARL WIRTH, Rochester, N. Y. Filed June 29, 1931. Serial No. 547,630. 6 Claims. (Cl. 292—169.)

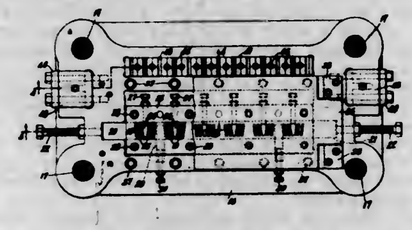


1. An anti-rattling device comprising a housing, a fixed cam formed by the back of said housing, a spring pressed bolt mounted to slide in and out of the front of said housing and operating means adapted to slide over said cam and pivotally connected to said bolt within the housing to move said bolt in one direction.

1,890,276. APPARATUS FOR THE MANUFACTURE OF EXPANDED METAL. HERBERT K. BAKER, Detroit, Mich. Original application filed Apr. 19. 1929, Serial No. 356,331. Divided and this application filed May 21, 1931. Serial No. 538,924. 12 Claims. (Cl. 164—6.5.)

12. In apparatus for slitting metallic blanks to form lathing having strands of a predetermined width, a pair of cooperating press elements; groups of slitting punches

mounted in the press elements, the punches of each group being spaced from each other a distance greater than said predetermined width, each punch being provided with a pair of spaced and parallel cutting edges inclined with respect to the direction of feed through the apparatus,

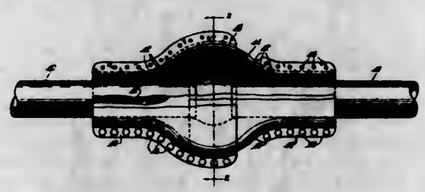


and the punches in the cooperating press elements being so relatively disposed as to interleave upon actuation thereof; and means for feeding blanks through the apparatus in step by step fashion, the length of each feed step being less than the length of any slit produced.

1,890,277. PROCESS OF PRODUCING ACRYLIC ACID ESTERS. WALTER BAUER, Darmstadt, Germany, assignor to Rohm & Haas Aktiengesellschaft, Darmstadt, Germany, a Corporation of Germany. Filed Jan. 15, 1931, Serial No. 509,084, and in Germany Feb. 20, 1930. 3 Claims. (Cl. 260—106.)

1. The process of producing alkyl esters of acrylic acid, comprising treating hydracrylic acid esters with a dehydrating agent as a catalyst at temperatures of about 200° C.

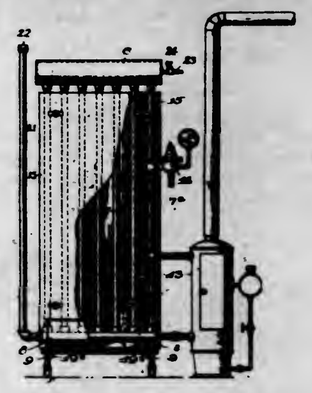
1,890,278. FLEXIBLE COUPLING. GEORGE K. BEDUR, Akron, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y., a Corporation of New York. Filed May 14, 1929. Serial No. 362,965. 3 Claims. (Cl. 285—90.)



1. In a flexible pipe-coupling, the combination of a flexible tubular structure anchored at axially spaced positions and having both its inner and its outer faces normally bowed outwardly intermediate its anchorages, and a strain-resisting structure in such bracing relation to the outer surface of said tubular structure as to resist outward expansion of the latter with substantial uniformity over the entire axial extent of the latter between the anchorages, the material of said bowed portion being resiliently stretchable and compressible in an axial direction.

1,890,279. AIR CIRCULATOR AND HEATER. HARVEY J. DIVEKEY, Aurora, Ill., assignor to Illinois Supply Company, Aurora, Ill., a Co-Partnership composed of Harvey J. Divekey, William M. Willett, sr., and William M. Willett, jr. Filed Apr. 28, 1930. Serial No. 447,986. 2 Claims. (Cl. 257—136.)

1. A heater and air circulator for poultry houses comprising a pair of parallel spaced, horizontally disposed, elongated chambers, the upper of said chambers being of larger capacity than the lower, a series of vertically disposed tubes extending and providing communication between said chambers, plates spaced from and secured upon opposite sides of said lower chamber and communicating tubes, supports associated with said lower chamber for supporting said structure in spaced relation with



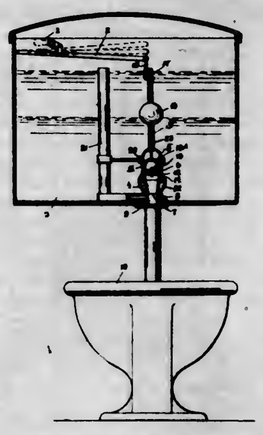
the floor, and an inlet connection for said upper chamber and an outlet connection for said lower chamber aligning with the bottoms of said respective chambers.

1,890,280. IDENTIFYING BAND FOR BIRDS. HARVEY J. DIVEKEY, Aurora, Ill., assignor to Illinois Supply Company, Aurora, Ill., a Corporation of Illinois. Filed Dec. 28, 1931. Serial No. 583,433. 2 Claims. (Cl. 40—3.)



1. An identifying bird band comprising a strip of suitable metal having perforations of angular configuration in its respective ends in combination with a rivet having a circular head and a shank extending therefrom, formed with an angular section corresponding with the perforations in said strip adjacent said head and of cylindric or circular section beyond said angled portion.

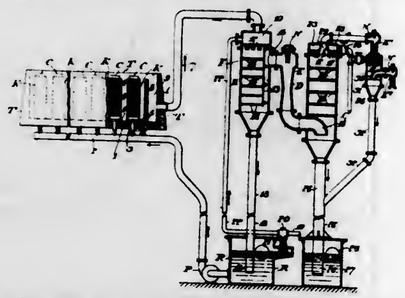
1,890,281. VALVE. LEWIS L. DOLLINGER, Rochester, N. Y. Filed Sept. 28, 1931. Serial No. 565,521. 10 Claims. (Cl. 4—58.)



5. In a drainage valve mechanism for tanks having an outlet the combination of a hollow valve member having an opening in the bottom thereof, said hollow valve being

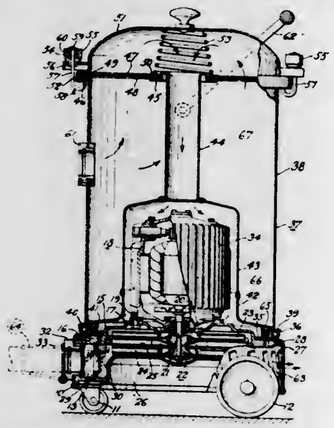
adapted to close said outlet, a valve chamber provided on said hollow valve member having an opening in the side thereof and an air pocket formed above the opening, a second valve for opening and closing the opening in said valve chamber, and a float for controlling the closing of the opening by said second valve at a predetermined level of the liquid in said tank.

1,890,282. REFRIGERATING SYSTEM. LE ROY A. DROESCHER, Willow Grove, Pa., assignor to C. H. Wheeler Manufacturing Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Mar. 10, 1931. Serial No. 521,414. 7 Claims. (Cl. 62—172.)



1. A system for producing ice comprising a tank, a plurality of receptacles therein for holding water to be frozen, an evaporator, a connection from said tank conveying cooling medium therefrom to said evaporator in which it is lowered in temperature, means for maintaining high vacuum in said evaporator, a receptacle for cooling medium from said evaporator, a connection communicating with said evaporator through which make-up water is delivered to be co-mingled with the cooling medium and lowered in temperature therewith, means controlling the delivery of make-up water through said connection in response to variations in the amount of cooling medium from said evaporator, and means for delivering the cooling medium to said tank.

1,890,283. VACUUM CLEANER. ANDERS ERIKSSON-JONS, Stockholm, Sweden, assignor, by mesne assignments, to Electrolux Corporation, a Corporation of Delaware. Filed June 2, 1931, Serial No. 541,575, and in Germany June 14, 1930. 11 Claims. (Cl. 183—37.)

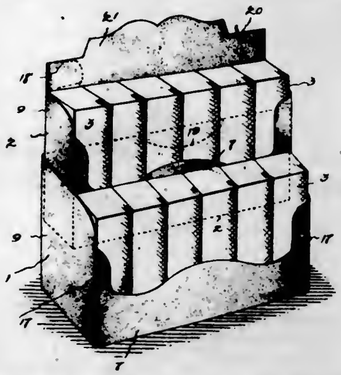


1. In a vacuum cleaner, a base, a fan unit comprising an electric motor and a fan having an air outlet mounted on said base, a dust receiving member having an air inlet supported on said base, said member comprising an annular receptacle formed by an outer impermeable wall and an inner impermeable wall, said walls being joined together to form the bottom of said receptacle, said inner wall forming a central passageway through said receptacle of varying cross-sectional area, being larger at the bottom than at the top, the lower portion of said inner wall forming a motor chamber for housing said motor, a dust separator comprising the top of said receptacle and a cover member forming together with said dust separator a chamber, said passageway being in communication with said chamber so that rotation of said fan induces a current of air through said inlet into said receptacle and through said dust separating member into said chamber and through said passageway in contact with said motor to said fan from whence it is discharged through said outlet.

1,890,284. PROCESS OF TREATING SPENT ADSORBENTS. IRA K. FULLER, Olean, N. Y., assignor, by mesne assignments, to Contact Filtration Company, a Corporation of California. Filed Sept. 27, 1929. Serial No. 395,594. 8 Claims. (Cl. 252—2.)

1. The process of treating spent adsorbent from an oil-contacting operation, which comprises mixing the adsorbent with a relatively large quantity of oil solvent, filtering the adsorbent from the mixture, and then passing, through the filter cake so formed, a relatively small amount of solvent to remove the remaining dilute oil solution.

1,890,285. PACKING AND DISPLAY CONTAINER. JOHN J. GAFFNEY, New Haven, Conn., assignor to National Folding Box Company, New Haven, Conn., a Corporation of New Jersey. Filed Oct. 5, 1929. Serial No. 397,559. 1 Claim. (Cl. 206—44.)



A composite packing and display carton organized as a complete shipping assembly within itself comprising inner and outer container sections telescoping within each other, a bottom, a front, back, and side walls for each container section, the front wall of each container section being provided with a window extending downwardly from the top of the wall and bounded respectively on its sides and bottom by flanges and a base portion forming the front wall, said inner container section being normally positioned within the outer container section so as to form a compartment between the front walls of the two container sections, a cover for the inner and outer container sections hinged to the back of the inner container section, said cover being of a length sufficient to close the top of the outer container section and being provided with a hinged extension flap forming a closure for the window of the outer container, said flap when closing the window of the outer container section being tucked inside the flanges bounding the window.

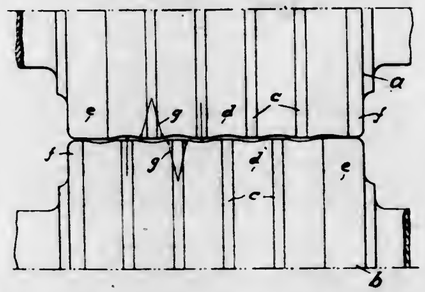
CARNEGIE LIBRARY OF ATLANTA

1,890,286. DE-ICER FOR AEROPLANES AND THE LIKE. WILLIAM C. GEER, Ithaca, N. Y. Filed May 12, 1932. Serial No. 610,840. 8 Claims. (Cl. 244—31.)



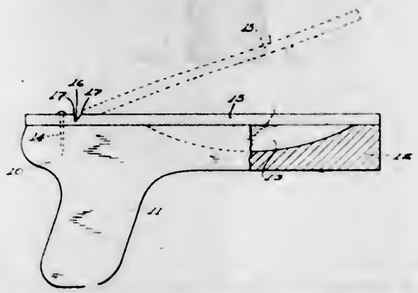
3. In combination with a member exposed to ice-forming conditions in an air-stream, a strip of vulcanized rubber composition extending along the said member and having a portion freely projecting laterally from said member when in an unstrained condition and thus so disposed as to be agitated by the air-stream.

1,890,287. MACHINE FOR STRAIGHTENING METAL BARS. HOWARD M. GIVENS, Abington, Pa. Filed Aug. 25, 1931. Serial No. 559,216. 8 Claims. (Cl. 153—60.)



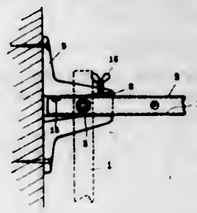
1. A bar straightening machine comprising two rotatable rolls arranged side by side and slightly spaced apart, each roll having a succession of alternating approximately convex and concave circumferential faces, the concave circumferential surfaces of each roll being substantially opposite the convex circumferential faces of the other roll, the axes of the two rolls, when the same are viewed in side elevation, being inclined relatively to each other.

1,890,288. SNAP GUN. ARTHUR J. GRAF, Fond Du Lac, Wis. Filed July 30, 1931. Serial No. 553,986. 4 Claims. (Cl. 46—46.)



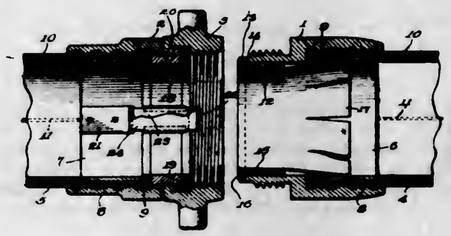
1. A snap gun comprising a body shaped to resemble a pistol and having a barrel with a flat top containing a cavity, and a flexible tongue member secured to the rear end of the flat top and adapted to lie flat thereagainst and having a hinge-like portion on which it may swing away therefrom while the gun is in motion for producing a loud report by swinging down against the flat top to quickly close the cavity thereof when the gun is brought to a quick stop.

1,890,289. DROP-DOWN TABLE OR SEAT. FRANK LEWIS HARRISON, Coogee, New South Wales, Australia. Filed Jan. 7, 1931, Serial No. 507,090, and in Australia Feb. 20, 1930. 4 Claims. (Cl. 45—51.)



1. For the purpose indicated in combination a board, pins upon which the board is pivoted, brackets carrying the pivot pins and each recessed to receive the board when moved laterally, spring means tending to move the board laterally into the recesses and a stop upon one bracket projecting over an enlarged part of the recess therein as specified.

1,890,290. FIRE HOSE COUPLING. GEORGE ARTHUR HARGREAVES, Evanston, Ill., assignor of one-half to William T. Owens, Evanston, Ill. Filed Feb. 26, 1932. Serial No. 595,311. 9 Claims. (Cl. 173—326.)



1. An electric hose coupling comprising male and female parts with an interposed gasket and having coacting contact members, one of said members being positioned adjacent the end of one of said parts and having a radially extending portion arranged to abut a face of said gasket, and the other of said members comprising an axially extending finger positioned within the other of said parts and having its forward portion turned radially and overlapping a face of said gasket, said finger comprising two elements slidable one upon the other to provide for axial compression and expansion of said gasket.

1,890,291. INSULATED ELECTRIC CONDUCTOR AND THE METHOD OF APPLYING COLORED SURFACES THERETO. ANTHONY P. HINSKY, Brooklyn, N. Y., assignor to E. T. Trotter & Co., Brooklyn, N. Y., a Corporation of New York. Filed Mar. 17, 1932. Serial No. 599,431. 13 Claims. (Cl. 91—70.)

1. The process of treating the insulated jacket of an electric conductor which comprises first applying a liquid

compound to the jacket, then applying to the jacket a powdered colored substance having sticky characteristics



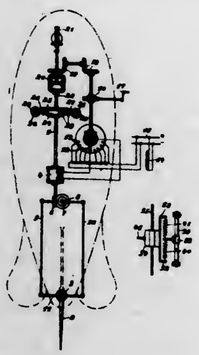
when subjected to heat, and then covering the powdered substance with a film, retaining said substance against displacement from the jacket of the conductor.

1,890,292. METHOD OF APPLYING COATINGS TO INSULATED WIRES AND THE LIKE. ANTHONY P. HINSKY, Brooklyn, N. Y., assignor to E. T. Trotter & Co., Brooklyn, N. Y., a Corporation of New York. Filed May 3, 1932. Serial No. 608,932. 15 Claims. (Cl. 18—13.)



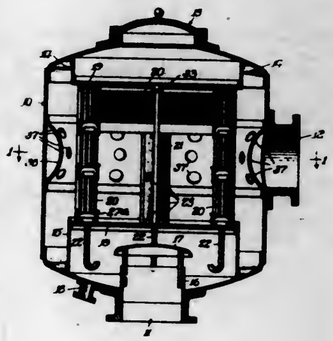
1. The herein described method of applying a coating to a predetermined strand, which consists in first applying a compound coating to the strand, then passing the coated strand through a die forming substantially even deposits of the coating circumferentially of the strand and with recesses between said deposits, and then passing the strand with the coating deposits thereon through an ironing or smoothing die for flushing the deposits into the recesses and to form a smooth outer coating of substantially the same thickness throughout the circumference of the strand.

1,890,293. STEERING GEAR FOR WATER AND AIR VEHICLES. HERMANN HORT, Berlin-Neuwestend, Germany, assignor to Gesellschaft für Elektrische Apparate, m. b. H., Berlin-Marienfelde, Germany, a Corporation of Germany. Filed Jan. 30, 1931, Serial No. 512,233, and in Germany Jan. 10, 1930. 12 Claims. (Cl. 114—144.)



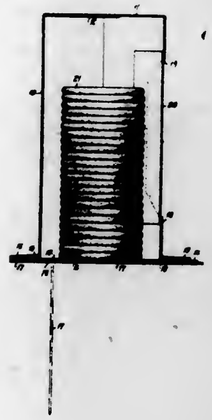
1. Steering gear for aircraft and water craft, comprising a course-indicator, a rudder, an operative connection between said course-indicator and said rudder, such connection including an accumulator of angular motion to secure an out-of-phase relation between the movements of the course-indicator and of the rudder, and independent means for actuating said rudder.

1,890,294. FLUID PURIFYING DEVICE. WALTER J. HUGHES, Chicago, Ill., assignor to General Zeolite Co., Chicago, Ill., a Corporation of Illinois. Filed Apr. 9, 1931. Serial No. 528,746. 13 Claims. (Cl. 183—75.)



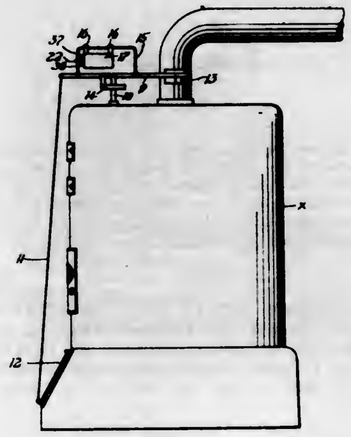
1. In a fluid purifier comprising a vertical cylindrical casing, an inner wall forming an outer annular passage having an outlet and an inner chamber having an inlet, a port in the said wall, a demountable purifying element adjacent to said port and means for equalizing the resistance to flow from the outer annular passage to the said outlet.

1,890,295. DISPENSING-PACKAGE FOR POWDER PUFFS. JOSEPH JACOBS, Bridgeport, Conn., assignor to The A. J. Donahue Corporation, Milford, Conn., a Corporation. Filed Apr. 30, 1932. Serial No. 608,482. 3 Claims. (Cl. 206—56.)



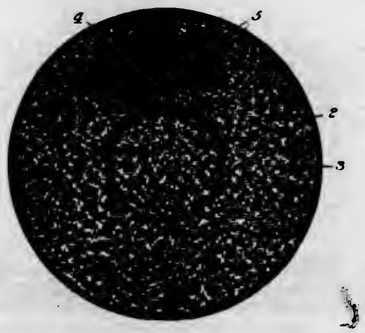
1. A dispensing-package for powder puffs comprising a casing with the lower ends turned outward, a base to which the outwardly-turned ends are secured, a centrally-arranged opening in the base, and a cover adapted to close said opening.

1,890,296. DRAFT REGULATING APPARATUS FOR FURNACES. WINFRED N. LUBCOTT, Elizabeth, N. J. Filed Jan. 23, 1932. Serial No. 588,488. 6 Claims. (Cl. 236—74.)



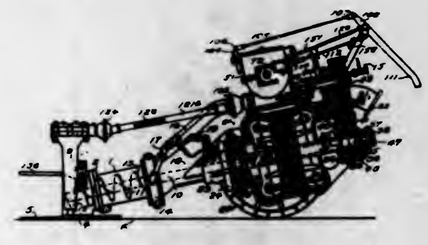
1. In draft regulating apparatus for furnaces, the combination with a pivotally balanced member operatively connected with a furnace draft regulating member, an apparatus for rocking said balanced member comprising an automotive weight member supported by said balanced member, said weight member being adapted to move successively in opposite directions to affect the balance of said balance member by the weight of said weight member.

1,890,297. EARTHENWARE DISHES AND GLAZE THEREFOR. HARRY J. MCMASTER, Sebring, Ohio, assignor of one-fourth to The Sebring Pottery Company, one-fourth to The Limoges China Company, one-fourth to The Crescent China Company, Sebring, Ohio, and one-fourth to The Salem China Company, Salem, Ohio, Corporations of Ohio. Filed Nov. 7, 1927. Serial No. 231,625. 3 Claims. (Cl. 91—70.)



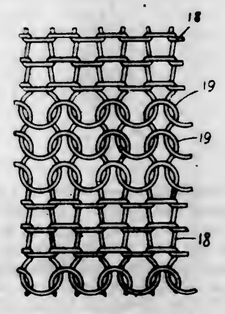
1. In the manufacture of yellow glaze dishes of uniform color intensity, the steps which comprise calcining sodium uranate with china clay and flint, adding the calcined mass to a transparent white glaze composition in such proportion that the quantity of uranium salt in the resulting mixture shall be approximately between 1 to 3 percent of the total mass, dipping an unglazed dish into the mixture and thereafter firing the ware in a non-reducing atmosphere.

1,890,298. PORTABLE PUMP. JOSEPH H. MORROW, Hokendauqua, Pa., assignor to Fuller Company, Catasauqua, Pa., a Corporation of Delaware. Filed Jan. 7, 1932. Serial No. 585,267. 15 Claims. (Cl. 302—17.)



1. Apparatus for conveying pulverized material, comprising a casing having an open end for the admission of material, an offset discharge elbow connected to the other end of the casing, a screw shaft within the casing and extending through a wall of the latter, a feeder secured to the casing near the open end thereof comprising a substantially horizontal perforated disc arranged on a substantially vertical driving shaft, means for rotating the screw at high speed, and means for driving the feeder at a relatively slow speed.

1,890,299. STOCKING AND METHOD OF KNITTING SAME. ARTHUR W. MUTCHLER and ALLEN L. LEOPOLD, Brooklyn, N. Y., assignors to Julius Kayser & Co., New York, N. Y. Filed Nov. 9, 1931. Serial No. 573,940. 8 Claims. (Cl. 66—178.)

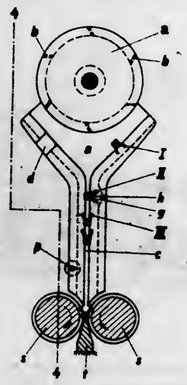


1. A stocking of the character described comprising alternate series of courses of loose and tight loops, each series comprising groups of a plural number of rows, all of the loops of each group being substantially of the same size.

1,890,300. DEVICE FOR AUTOMATICALLY ARRANGING THE ELEMENTS OF SLIDING CLASP FASTENERS. KARL FRIEDRICH NÄGELE, Berlin-Neukolln, Germany. Filed Dec. 10, 1931, Serial No. 580,118, and in Germany May 17, 1930. 7 Claims. (Cl. 153—1.)

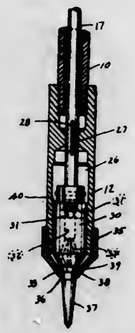
1. A device for automatically arranging the elements of sliding clasp fasteners in correct relative location for assembly on the articles to which they are to be applied, comprising a rotating drum with a circumferential slot of width substantially equal to the thickness of an element.

the said slot having notches on one side only not greatly exceeding in size the projection on the face of an element, an element receiving guide track and receiving and con-



veying means for the elements in the form of two cooperating members rotating in opposite directions and provided with left- and right-handed screw threads.

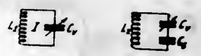
1,890,301. WEED EXTERMINATOR. LUCIAN R. OAKES, Tipton, Ind. Filed Oct. 24, 1931. Serial No. 570,779. 8 Claims. (Cl. 47—49.)



1. A weed exterminator consisting of a tube with a rigid handle on the upper end thereof, a fluid tank on the tube below the handle and communicating with the tube, a rod extending through the tube, a finger lever pivoted to one side of the handle and connected with the upper end of said rod whereby said rod can be reciprocated in said tube, a small cylinder secured to the lower end of the tube, a cap screwed on the lower end of said cylinder with a contracted outlet end, and a plunger in the lower end of said cylinder secured to said rod with a tapering point extending through said outlet opening and large enough to close the outlet opening when the point is in its lower position and to open said outlet opening when the point is withdrawn upward, whereby weed-killing fluid from said tank and tube in said cylinder may move down said tapered point into the weed as the point is being withdrawn therefrom.

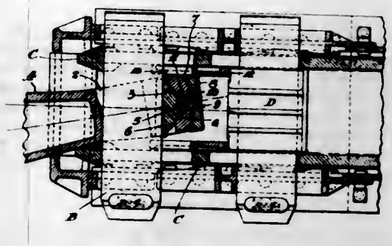
1,890,302. ARRANGEMENT FOR OSCILLATION CIRCUITS. WILHELM RUNGE, Berlin, Germany, assignor to Telefunken Gesellschaft fur Drahtlose Telegraphie mit beschrankter Haftung, Berlin, Germany, a Corporation of Germany. Filed Nov. 6, 1925, Serial No. 67,206. Renewed Nov. 7, 1930. 4 Claims. (Cl. 250—20.)

1. In a heterodyne receiving system, the combination of a receiving circuit and a local oscillation circuit, one of said circuits including an inductance, a fixed condenser and a variable condenser and the other of said circuits including only an inductance and an equal variable condenser, said variable condensers being of substantially similar characteristics throughout the range of variation and



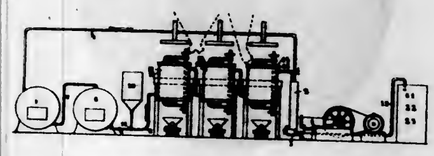
common means for adjusting said variable condensers by equal amounts, the values of said fixed and variable condensers being so related that a beat frequency of substantially constant value is produced by adjustment of said variable condensers, the inductance in one of said circuits being greater than the inductance in the other.

1,890,303. DRAFT ATTACHMENT FOR RAILWAY VEHICLES. ERNEST H. SCHMIDT, Cleveland Heights, Ohio, assignor to National Malleable and Steel Castings Company, Cleveland, Ohio, a Corporation of Ohio. Filed July 27, 1927. Serial No. 208,701. 7 Claims. (Cl. 213—69.)



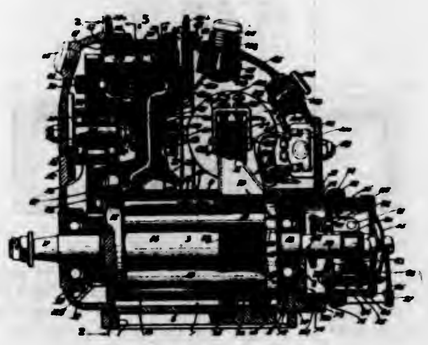
4. In a coupler attachment, the combination of a coupler shank and a yoke having horizontally aligned slots; a connecting key seating in said slots; a draft gear in said yoke; a follower for said gear; an equalizing member movable with said shank active only in buffing; and means between said coupler shank and yoke permitting rotative movement therebetween but limiting the lateral extent thereof.

1,890,304. PROCESS AND DEVICE FOR THE SACCHARIFICATION OF CELLULOSE AND THE LIKE. HEINRICH SCHOLLER, Munich, Germany. Filed Dec. 6, 1927, Serial No. 238,195, and in Germany Sept. 7, 1927. 9 Claims. (Cl. 127—37.)



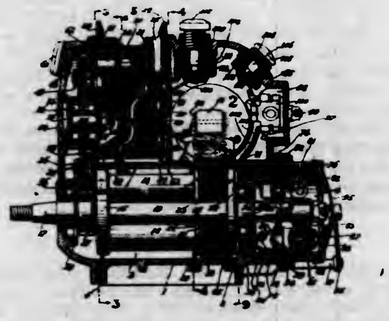
1. The process of saccharification of cellulose material comprising, reducing the interstices in the cellulose material by pressure, percolating diluted acid through the compressed cellulose material while heating the same under pressure, continually and rapidly removing the solution of sugar formed from the system, and reducing the temperature of the emerging sugar solution to prevent decomposition.

1,890,305. MAGNETO. WOLFGANG E. SCHWARZMAN, Longmeadow, Mass., assignor to American Bosch Magneto Corporation, Springfield, Mass., a Corporation of New York. Filed Mar. 22, 1930. Serial No. 438,040. 25 Claims. (Cl. 171—209.)



1. A magneto having a polepiece comprising laminæ of unequal sizes, said laminæ being shaped and arranged to render the pole piece thicker at one end than the other and to provide polar faces adjacent the ends of the pole pieces with the polar faces adjacent the thicker end of greater width than the other polar projection.

1,890,306. MAGNETO. WOLFGANG E. SCHWARZMAN, Longmeadow, Mass., assignor to American Bosch Magneto Corporation, Springfield, Mass., a Corporation of New York. Filed Mar. 22, 1930. Serial No. 438,041. 27 Claims. (Cl. 123—149.)



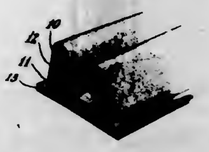
1. A magneto having a housing containing a rotor, a generating coil mounted on the housing, a distributor member on the housing adjacent said coil, and an insulating plate between said mechanism and said rotor.

1,890,307. MIXING DEVICE. PHILIP B. SHAILER and HARRY P. TROENDLY, Chicago, Ill., assignors to The Wm. D. Gibson Company, Chicago, Ill., a Corporation of Illinois. Filed May 11, 1931. Serial No. 536,338. 5 Claims. (Cl. 259—113.)

1. In a device of the class described, a rigid receptacle having an open top, an inverted relatively thin sheet metal cup-shaped cover having substantially straight side walls for providing a desired flexibility in said cover, an agitator shaft extending through said cover, and a dasher movable by said shaft to agitate a solution in said receptacle, the inner wall of said receptacle adjacent said open top receiving in sealed engagement therewith the peripheral wall of said cover to prevent a displacement of said solution outside of said receptacle, the walls of said receptacle converging in one direction and said cover converging in an opposite direction.



1,890,308. CHANNEL STRIP AND METHOD OF MAKING THE SAME. JOSEPH I. TAYLOR, Akron, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y., a Corporation of New York. Filed May 18, 1928, Serial No. 278,887. Renewed Feb. 9, 1931. 4 Claims. (Cl. 296—44.5.)

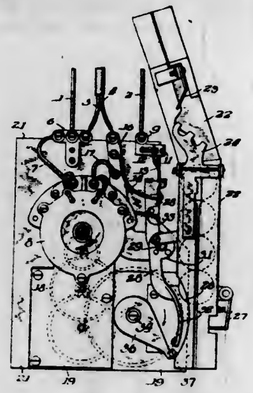


4. An article of manufacture comprising a relatively stiff base strip, a rubber strip vulcanized thereto, and a reinforcing strip of flexible fibrous material vulcanized to the base strip and extending into and vulcanized to the rubber strip.

1,890,309. COIN OPERATED TIME CONTROLLED SWITCH MECHANISM. JOHN L. VAUGHN, Cicero, Ill., assignor to O. D. Jennings & Company, Chicago, Ill., a Corporation of Illinois. Filed Nov. 28, 1930. Serial No. 498,577. 10 Claims. (Cl. 194—9.)

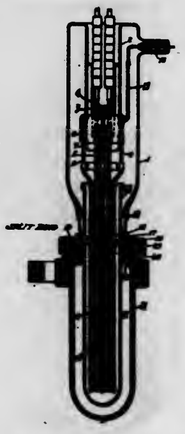
1. In a coin operated time controlled switch mechanism, a coin chute, a switch operable by a coin in said chute,

means for retaining said coin in operative position in said chute, means for ejecting the coin from said chute at the



expiration of a predetermined time period and means for maintaining said switch against movement for a predetermined time period after said coin has been ejected.

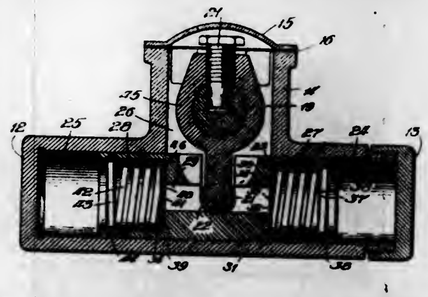
1,890,310. COOLED ELECTRON DISCHARGE DEVICE. LEE HALL BENSON, Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Aug. 13, 1927. Serial No. 212,788. 6 Claims. (Cl. 250—27.5.)



1. An electrical discharge device comprising a vacuum-tight container, a cathode within said container, a portion of said container constituting the anode of said device and having threads consisting of undulations in said portion, a collar having an annular face on one side thereof, and adapted to engage said threaded portion, a split ring rotatably supported on said collar, a water-jacket having an annular face adapted for water-tight engagement with said first annular face, and a screw cap adapted to engage said split ring and said water jacket, to press said two annular faces together.

1,890,311. SHOCK ABSORBER. DENNIS B. D. BLAKE, Danville, Ill., assignor of one-half to Donald E. Willard, Danville, Ill. Filed May 23, 1930. Serial No. 454,895. 18 Claims. (Cl. 188—88.)

1. In a fluid flow shock absorber, the combination of a support having a passage therethrough, and a valve disk associated with said support having a flap cut from said disk within the margin thereof and joined to said disk by a connecting segment, said flap having an opening therethrough and movable out of the plane of said disk by a fluid



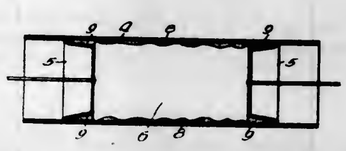
pressure established on one side of said support to permit a flow through said passage and seated against said support by a fluid pressure established on the opposite side thereof to permit a smaller flow through said opening.

1,890,312. CONDENSER. CHARLES H. CAINE, Chicago, Ill., assignor to Tung-Sol Condensers Inc., Chicago, Ill., a Corporation of Illinois. Filed Mar. 30, 1931. Serial No. 526,225. 6 Claims. (Cl. 175—12.)



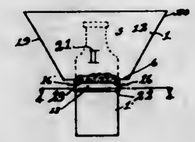
1. A condenser comprising a pair of metallic foils separated by insulation and rolled into a cylinder with the foils projecting from opposite ends thereof, a cylindrical casing for said condenser composed of a rigid insulating material, a pair of metallic cups having flared edges, said cups fitting in the ends of said casing and being held tightly against the ends of said cylinder by their flared edges which bite into the interior surface of the casing, said cups having upturned ears which bite into the overhanging ends of said foils to establish a low resistance electrical connection therewith, a wire attached to each metallic cup and leading out of the open ends of said casing, and a sealing compound disposed in the ends of said casing over said cups and around said wires.

1,890,313. METHOD OF MAKING CONDENSERS. CHARLES H. CAINE, Chicago, Ill., assignor to Tung-Sol Condensers Inc., Chicago, Ill., a Corporation of Illinois. Filed Aug. 14, 1931. Serial No. 556,960. 8 Claims. (Cl. 175—41.)



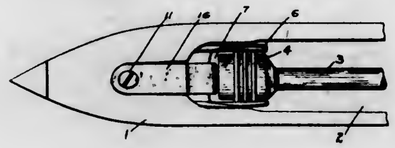
1. The method of impregnating and sealing a condenser unit housed in a fibrous casing which comprises, impregnating the condenser unit prior to its assembly in the casing and impregnating the casing after assembly is completed.

1,890,314. ADVERTISING DISPLAY DEVICE. STANLEY A. CRANE, Norwood, Ohio, assignor to The Hennegan Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Dec. 10, 1931. Serial No. 580,050. 6 Claims. (Cl. 40—4.)



1. A display device formed from sheet material and comprising a band having slots in one end and having a tongue on its other end, an apron integral with the upper edge of said band and extending upwardly, said apron having thereon a representation of merchandise exposed to air, whereby when said band is placed around a container of merchandise and said tongue is received in said slots and said device is secured to said container it appears that said merchandise within said container is exposed to air.

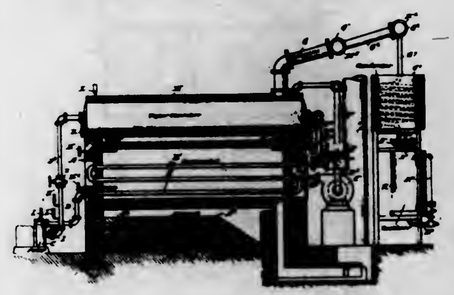
1,890,315. SHUTTLE SPRING. FREDRIC E. DOUGLAS, Hopedale, Mass., assignor to Draper Corporation, Hopedale, Mass., a Corporation of Maine. Filed Feb. 9, 1932. Serial No. 591,849. 3 Claims. (Cl. 139—207.)



1. A shuttle including a body having a bobbin supporting spring located in a cavity in one end thereof, said spring including integrally joined bobbin gripping jaws, a tongue extending outwardly from one edge of the junction of the jaws and overlying the shuttle body, a second tongue extending inwardly toward the center of the shuttle from the other edge of the junction of the jaws, and overlying a portion of the shuttle body, and means for securing said tongues to the shuttle body.

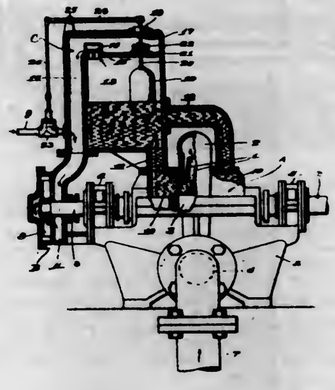
1,890,316. APPARATUS FOR PRODUCING LOWER BOILING POINT HYDROCARBONS. CARBON P. DUBBS, Wilmette, Ill., assignor to Universal Oil Products Company, Chicago, Ill., a Corporation of South Dakota. Continuation of application Serial No. 260,955, filed Nov. 4, 1918. This application filed Jan. 14, 1925, Serial No. 2,448. Renewed May 15, 1929. 5 Claims. (Cl. 196—109.)

1. An apparatus for treating hydrocarbon oils, comprising a plurality of heating coils of restricted cross-sectional area disposed within a furnace, means for passing the oil successively through each of the plurality of coils, means positioned intermediate said coils to relieve the oil of its vaporous constituents prior to its passage through the subsequent coil, means for passing the oil from the last of said coils to an enlarged vapor chamber wherein substantial conversion of the oil occurs, means for dephlegmating the evolved vapors, means for returning the reflux condensate to said enlarged vapor chamber, means for continuously returning the unvaporized reflux condensate and the lighter unvaporized residual oil in



said vapor chamber to the inlet of the first of said coils, and means for maintaining a superatmospheric pressure on the oil undergoing conversion.

1,890,317. PRIMING APPARATUS FOR PUMPS. AUGUSTUS C. DURDIN, Jr., Chicago, Ill., assignor to Chicago Pump Company, Chicago, Ill., a Corporation of Illinois. Filed May 15, 1930. Serial No. 452,550. 11 Claims. (Cl. 103—113.)

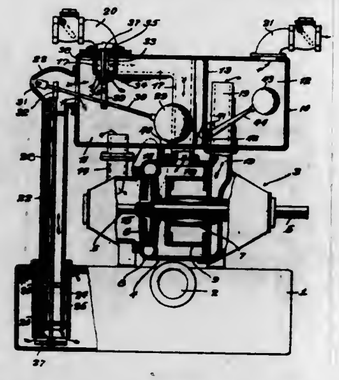


1. Priming apparatus for rotary liquid pumps comprising in combination a gas pump driven with the liquid pump, a conduit connecting the liquid pump with the intake of the gas pump and including a chamber adapted to receive air and liquid from the liquid pump, there being a port between said chamber and that part of the conduit leading therefrom to the gas pump, controlled by a valve opening outward from the chamber, and there being a valve-controlled relief port opening from that part of the conduit which leads from the chamber to the gas pump, having a valve operating independently of said first mentioned valve for admitting outside air to the gas pump through that part of the conduit which leads from the relief port to the gas pump.

1,890,318. VACUUM CONDENSATION PUMP. AUGUSTUS C. DURDIN, Jr., Chicago, Ill. Filed Apr. 29, 1931. Serial No. 533,755. 16 Claims. (Cl. 103—6.)

1. Pumping apparatus comprising in combination a receiver for water, vapor and air, a vacuum chamber, a

combined liquid and gas conduit leading from said receiver to said vacuum chamber and having a water inlet



and a vapor and air inlet within the receiver, a pump for exhausting air from said vacuum chamber, and a pump for discharging water from said vacuum chamber.

1,890,319. FOUNTAIN BRUSH. JACOB E. ECKSTEIN, Pittsburgh, Pa. Filed Mar. 27, 1931. Serial No. 525,645. 5 Claims. (Cl. 15—125.)



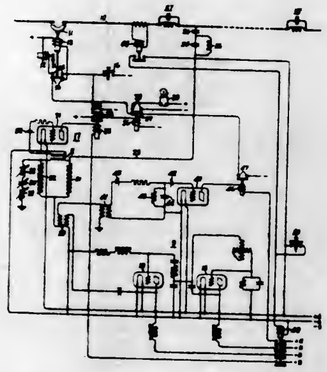
1. A fountain brush comprising in combination a head, bristles mounted in and projecting from one side of said head, a tubular casing connected to the other side of the head surrounding one end of a bore of varying cross-section extending through the head, a tube containing material to be supplied to the bristles disposed in said casing with its lower open end projecting slidably into and slidably snugly fitting said bore within the head for expulsion of said material to the bristles, and means for feeding material in desired amounts from the tube directly to the bristles.

1,890,320. DEVICE FOR DETACHABLY SECURING INTERCHANGEABLE ORNAMENTS TO STRAP ENDS. WALTER E. FIELD, Providence, R. I. Filed June 10, 1932. Serial No. 616,432. 11 Claims. (Cl. 40—20.)



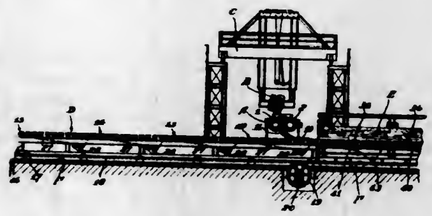
4. In a device for detachably securing interchangeable ornaments to strap ends, permanent strap end means, detachable ornament means, one of said means having tubular rod means secured thereto split at the outer end thereof, the other of said means having rod means secured to the outer end thereof slidable within said split rod means.

1,890,321. CONTROL AND PROTECTION OF ELECTRIC CIRCUITS. ALAN S. FITZ GERALD, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Apr. 30, 1929. Serial No. 359,353. 9 Claims. (Cl. 175—294.)



1. In combination with an electric power line, circuit controlling means therefor including a circuit interrupter, a source of high frequency current, two comparison circuits, one being connected to said line and arranged to be energized by said high frequency current, means for energizing the other circuit, means connected and arranged to be energized responsively to the difference between the currents in said circuits, and means controlled by said current difference responsive means for controlling the closing of said circuit interrupter.

1,890,322. APPARATUS FOR MAKING PLATE GLASS. JOHN H. FOX, Pittsburgh, Pa., assignor to Pittsburgh Plate Glass Company, a Corporation of Pennsylvania. Filed Sept. 20, 1929. Serial No. 394,033. 5 Claims. (Cl. 49—3.)



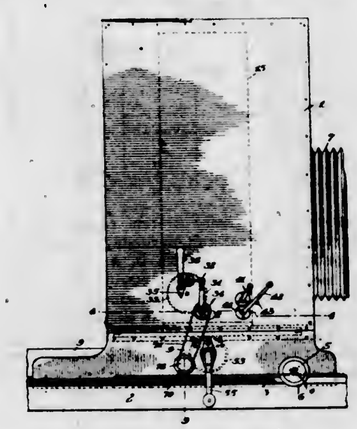
5. In apparatus for making a sheet of glass, a roller leer and a roller runway at the entrance end of the leer mounted for bodily movement in a longitudinal direction, means for driving the runway and leer rolls at the same constant speed, a pair of forming or sizing rolls mounted in fixed position above the runway, means for driving the forming rolls, means for moving the runway and leer forward during the formation of the sheet between the forming rolls and for returning the runway and leer to starting position, a roller receiving table at the outlet end of the leer arranged to receive a sheet of glass from the leer on the forward movement thereof and retain such sheet thereon as the leer moves rearward, a roller transfer table in alignment with the end of the receiving table, means carried by the transfer table for moving the glass sheets received thereon laterally off of the table, a roller inspection table between the receiving and transfer tables, and means for driving the rolls of all of said tables to carry the glass sheets longitudinally of said tables.

1,890,323. BOTTLE PROTECTOR. CARL W. GLAESER, Youngstown, Ohio. Filed Apr. 13, 1931. Serial No. 529,713. 1 Claim. (Cl. 215—11.)



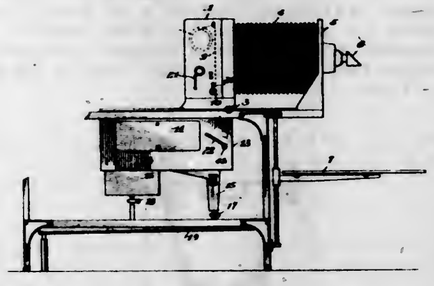
In a device of the class described, a casing made of rubber, a lower depending flange formed on said casing, a plurality of bottom portions consisting of two oppositely disposed bottom portions, two other oppositely disposed bottom portions of relatively smaller size than the first mentioned bottom portions, said bottom portions being relatively thicker than said casing, a plurality of horizontal ribs formed on interior of said casing, a plurality of vertical ribs formed on interior of said casing, thus forming a plurality of air cushioned spaces on the interior of said casing, substantially as described for the purpose set forth.

1,890,324. PHOTOGRAPHIC ROLL HOLDER. JOHN S. GREENE, Rochester, N. Y., assignor to Photostat Corporation, Providence, R. I., a Corporation of Rhode Island. Filed Aug. 20, 1924. Serial No. 733,062. 4 Claims. (Cl. 95—31.)



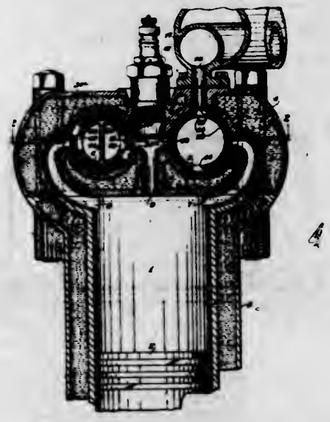
1. The combination with a camera body and a roll holder therein adapted to feed a sheet of double coated sensitive material through the focal plane of the camera, of means including a gear on said roll holder and a gear meshing therewith and operable from the exterior of the camera body for rotating said roll holder to present first one side and then the other side of the sensitive material to exposure.

1,890,325. PHOTOGRAPHIC DEVELOPING METHOD AND APPARATUS. JOHN S. GREENE, Rochester, N. Y., assignor to Photostat Corporation, Providence, R. I., a Corporation of Rhode Island. Filed Dec. 28, 1927. Serial No. 243,181. 84 Claims. (Cl. 95—94.)



1. In a photographic print treating apparatus, the combination with an exposing mechanism and a fluid bath located below the same, of a vertically disposed light tight chute extending downwardly from the exposing mechanism, said chute being substantially straight for the major portion of its length and having a laterally turned end provided with an abutment against which latter the end edge of a print standing vertically in the chute is adapted to rest, means for feeding prints into the chute from the exposing mechanism and a conveyer having a print carrier thereon movable downwardly substantially parallel with the major portion of the chute and provided with impaling pins adapted to engage the said end of the print and to carry the latter from the chute to the bath.

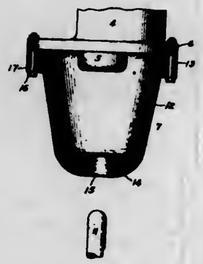
1,890,326. VALVE STRUCTURE FOR GAS ENGINES. SEAN L. HANSEN, Cleveland, Ohio. Filed Feb. 27, 1931. Serial No. 518,850. 7 Claims. (Cl. 123—190.)



1. In an internal combustion engine, the combination of a piston chamber, separate intake and exhaust valves therefor, each of said valves comprising a cylindrical casing having diametrically disposed port openings therethrough and communicating with said chamber, and comprising also a rotatable, hollow, cylindrical valve member within said casing and having diametrically disposed openings therethrough for registry with said port openings, means of communication between the inside of each of said valve members and the outside of said casing for intake and exhaust, and means for rotating said valve members in properly timed sequence, said valves being

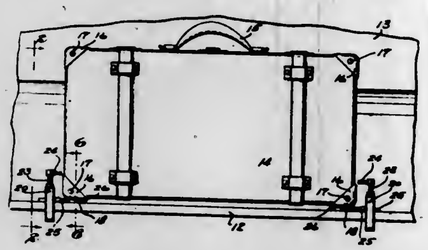
so constructed and operated that the impact of the explosions individually upon the valves will be counterbalanced upon diametrically opposite sides of each of said valves.

1,890,327. EXPLOSION CHAMBER FOR LIQUID BREAK SWITCHES. HERMAN J. H. HUBER, Upper Darby, Pa., and CHARLES R. KELLOGG, Scotia, N. Y., assignors to General Electric Company, a Corporation of New York. Filed Apr. 25, 1929. Serial No. 358,089. 3 Claims. (Cl. 200—150.)



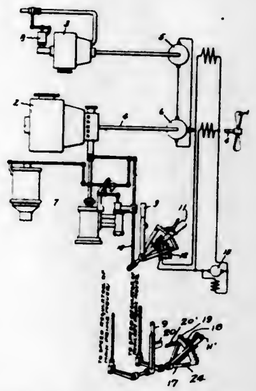
1. In an electric switch having relatively movable contacts arranged to be separated in an insulating liquid, an all-insulation explosion chamber pot surrounding one of said contacts and having a throat opening through which a coacting contact is withdrawn when said contacts are separated, said explosion chamber pot being a one-piece structure composed of built-up laminations of insulating material extending longitudinally of and continuously throughout the wall structure of said pot so as to withstand high bursting pressures.

1,890,328. AUTOMOBILE CASE CLAMP. PAUL J. HUBER, Minneapolis, Minn., assignor of one-third to Frank W. Peterson and one-third to William H. Wallraff, Minneapolis, Minn. Filed May 26, 1930, Serial No. 455,719. Renewed July 28, 1932. 4 Claims. (Cl. 224—29.)



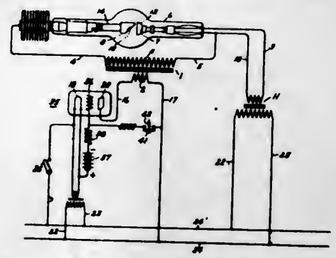
1. In combination with a case provided near its bottom corners with eyes, clamping devices for securing opposite ends of the case to a base of support each comprising a U-shaped clamping bracket the lower arm of which is adapted to be extended beneath the base of support and the upper arm of which is adapted to be extended above the base of support in parallel relation to one end of the case, a base plate carried by the upper arm of each bracket and having swiveled connection thereto, said base plate being adapted to rest upon the base of support at one end of the case and having lugs projected therefrom in spaced relation and insertable through the eyes on that end of the case, and a clamping screw carried by one of said bracket arms whereby the base plate may be clamped to the base support thereby securing the case in place thereon.

1,890,329. POWER SYSTEM. ERIC M. JOHNSON, Westminster, England, assignor to General Electric Company, a Corporation of New York. Filed Jan. 28, 1931, Serial No. 511,897, and in Great Britain Jan. 30, 1930. 10 Claims. (Cl. 172—8.)



1. A power system comprising a main source of power, an auxiliary source of power, a load device common to both of said power sources, means for controlling the output of said main source of power, means for controlling the output of said auxiliary source of power, and means associated with both of said controlling means for setting the maximum power output of said auxiliary source relative to said main source.

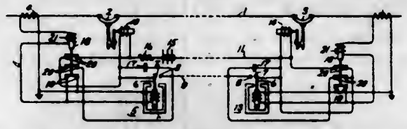
1,890,330. APPARATUS FOR AND METHOD OF OPERATING RECTIFYING LOAD DEVICES. WILLIAM K. KEARSLEY, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Feb. 6, 1930. Serial No. 426,427. 5 Claims. (Cl. 250—34.)



1. An alternating current system comprising a transformer having primary and secondary circuits, a unilaterally conducting load device in a secondary circuit, and valve means in a primary circuit constructed and connected to conduct current continuously in said circuit during the half wave intervals of useful current flow in said load device and preventing flow of a magnetising current in said primary circuit during the half wave intervals when said device is non-conductive.

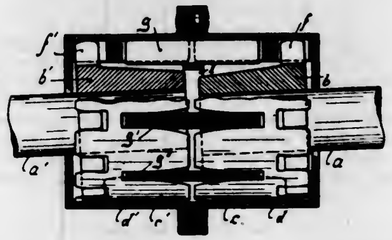
1,890,331. PROTECTIVE ARRANGEMENT. FRANCIS JOHN LANE, London, England, assignor to General Electric Company, a Corporation of New York. Filed June 30, 1931, Serial No. 548,018, and in Great Britain July 29, 1930. 7 Claims. (Cl. 175—294.)

1. In combination, an electric circuit energized by alternating current, a pilot circuit extending between two points of said electric circuit, means for controlling said pilot circuit in accordance with the phase relation between the current in said electric circuit at one of said points and the current at the other point including frequency responsive means adjacent each of said points connected to be energized from the circuit to move in



synchronism with the current thereof at the respective points, and means for normally preventing the synchronous movement of at least one of said frequency responsive means.

1,890,332. FLEXIBLE ELASTIC COUPLING. WILHELM MÜLLER-KEUTH, Hanover, Germany, assignor to Firm Eisenwerk Wülfel, Hanover-Wulfel, Germany. Filed Aug. 25, 1931, Serial No. 559,234, and in Germany Sept. 11, 1930. 5 Claims. (Cl. 64—96.)



1. A flexible elastic shaft coupling, comprising lost-motion devices fastened on the ends of the two shafts to be coupled, elastic members located between the said lost-motion devices, and auxiliary members connecting the said lost-motion devices with the said elastic members and arranged coaxial and rotatable in relation to each other and capable of being swung in all directions in relation to the ends of both shafts.

1,890,333. SAFETY RAZOR. JOSEPH MUROS, New York, N. Y., assignor, by mesne assignments, to Gillette Safety Razor Company, Boston, Mass., a Corporation of Delaware. Filed June 22, 1928, Serial No. 287,545, Renewed Aug. 25, 1932. 14 Claims. (Cl. 30—12.)



12. A blade for a safety razor having one or more openings therein adapted to receive positioning lugs having uniformly corrugated heads, each opening being provided with a series of uniformly spaced projections radially converging and terminating at their inner ends in a circle of less diameter than that of the corrugated head.

1,890,334. SAFETY RAZOR. JOSEPH MUROS, New York, N. Y., assignor to Gillette Safety Razor Company, Boston, Mass., a Corporation of Delaware. Filed May 8, 1931. Serial No. 535,898. 8 Claims. (Cl. 30—12.)

1. A safety razor comprising a guard member having guarding means located along a medial portion of said member, a series of spaced projections on said member for supporting a pair of blades with their cutting edges in shaving relation to said guarding means, and means to detachably retain said blades in shaving position on the guard member, the blade retaining means including



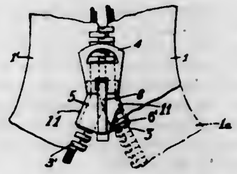
a piece of metal having sides embracing the guard member and having edge portions extending inwardly over the blades to retain them in shaving position.

1,890,335. SEPARABLE FASTENER AND METHOD OF MAKING SAME. FRANK E. NODINE, Meadville, Pa. Filed Apr. 18, 1931. Serial No. 531,115. 26 Claims. (Cl. 153—1.)



1. The method of assembling a plurality of elements on a carrier which includes, grouping a plurality of strips of elements in a transversely aligned relation with respect to each other, and thence associating a carrier with an element of a plurality of strips of the group.

1,890,336. LOCKING MEANS. FRANK E. NODINE, Meadville, Pa. Filed June 2, 1931. Serial No. 541,556. 3 Claims. (Cl. 24—205.)



1. In a slide fastener including a plurality of adjacent interlocking assemblies, the combination of a slider movably mounted on said adjacent assemblies for locking and unlocking said assemblies with respect to each other, said slider having an upper and lower portion whose side edges are flanged inwardly therefrom for forming a guideway for elements of the assemblies, said flanged edges having a planar guideway outline along their entire length, a prong extending inwardly from a front end of each portion adjacent the prong of the other portion of said slider for locking said slider against an unlocking movement produced by an opening strain upon the assemblies that is independent of manual operation of said slider.

1,890,337. IRRIGATION SYSTEM. JOHN W. ORD, Cleveland, Ohio. Filed Nov. 10, 1930. Serial No. 494,680. 1 Claim. (Cl. 299—62.)

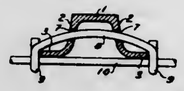
An irrigation system comprising the combination with a plurality of apertured pipe lines adapted to deliver a spray of liquid therefrom, each of said pipe lines having a pulley fixed thereto, the adjacent pulleys being connected by individual cables, springs interposed in said cables to maintain the same taut, and an oscillating means for turning one of said pipe lines through a predetermined

angle, thereby turning all of said pipe lines through said pulley and cable instrumentalities to uniformly distribute the liquid spray therefrom, of a plurality of supporting means for each pipe line, the said supporting means comprising a plurality of brackets having a smooth, straight flat pipe supporting edge along which the pipe is



adapted to roll with a minimum of friction, each of the said brackets being provided with means for readily removably securing the bracket in a holder with the said pipe supporting edge in a horizontal plane, said means including a projection extending from said bracket and frictionally engaging said holder.

1,890,338. WINGED CHANNEL POST AND CLIP. EDWARD J. PAQUE, Cincinnati, Ohio, assignor to The Pollak Steel Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Feb. 23, 1932. Serial No. 594,536. 3 Claims. (Cl. 256—57.)



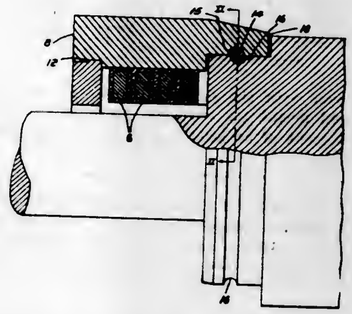
1. In a post structure for supporting strands of wire, a post formed of a strip of metal and having a back part, sides and flanges extending from the sides, said sides having aligned holes therein, and clip means in the holes for supporting the strands of wire against the flanges, said clips engaging the sides of the post by passing through the holes in said side portions and also engaging portions of the flanges of the post, and adapted to hold a wire against portions of said flanges.

1,890,339. CATHODE STRUCTURE. EDGAR RÖMHILD, Berlin-Steglitz, Germany, assignor to General Electric Company, a Corporation of New York. Filed May 3, 1932, Serial No. 608,987, and in Germany May 4, 1931. 6 Claims. (Cl. 250—27.5.)



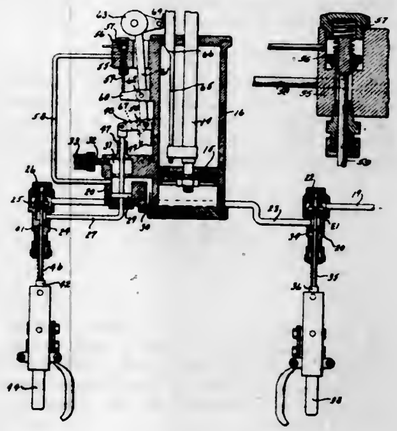
1. A cathode for an electric discharge device comprising a plurality of main metal strips bent into recurrent angular portions, said strips being substantially in abutting relation at the ends of each strip and at intermediate portions, an auxiliary strip of metal secured to the main strips at the places of contact therebetween whereby all of the strips are secured together and the structure as a whole is rendered rigid.

1,890,340. MEANS FOR FASTENING RETAINING RINGS ON TURBOGENERATOR ROTORS. BENNIE A. ROSS, Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Sept. 20, 1930. Serial No. 483,255. 4 Claims. (Cl. 171—252.)



1. A high-speed dynamo-electric machine characterized by a rotor having windings with coil-ends, solid metal retaining rings for retaining said coil-ends against centrifugal forces, said retaining rings fitting telescopically over a portion of the rotor member, the telescoped portions having opposite grooves, the retaining ring having an approximately tangential perforation leading to said grooves, and a wire extending through said perforation and into said grooves.

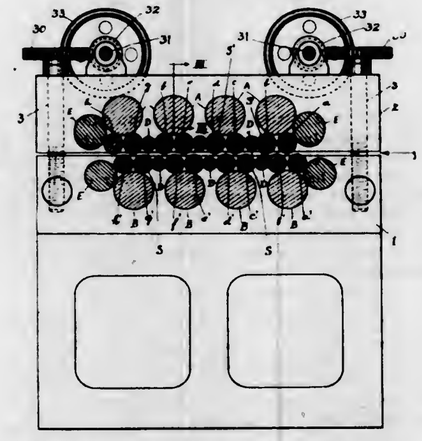
1,890,341. PRESSING MACHINE. JOHN P. SINGISER, Chicago, Ill., assignor to The American Laundry Machinery Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Apr. 18, 1930. Serial No. 445,339. 3 Claims. (Cl. 121—38.)



1. A garment press, comprising relatively movable pressing members, press closing mechanism including a cylinder and piston type operating motor, said cylinder being in communication with a valve chamber and normally with an exhaust port leading therefrom, a normally open valve in said chamber, a fluid supply line leading to said valve chamber and provided with normally closed controlling valves connected in series, said valves being adapted when both are opened to permit flow of

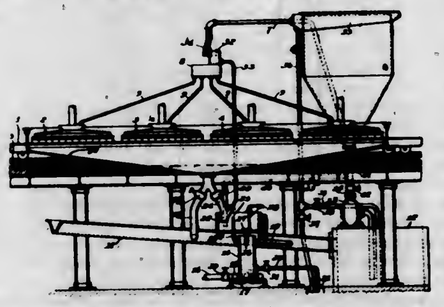
fluid pressure to said valve chamber for actuating the valve therein to close the exhaust port and cause operation of the piston to close the press, and a final pressure fluid supply line leading to said valve chamber, a normally closed valve in said final pressure supply line, and means for opening said last named valve by and in timed relation with movement of the press closing mechanism, to supply fluid pressure to said cylinder when the press has been closed.

1,890,342. SHEET FLATTENER. JOHN BLAIR SUTTON and GEORGE A. WISS, Pittsburgh, Pa., assignors to Sutton Engineering Company, a Corporation of Pennsylvania. Filed Apr. 3, 1931. Serial No. 527,370. 14 Claims. (Cl. 153—54.)



1. A sheet-flattening device including two upper rolls for engagement with the upper surface of the sheet to be flattened, a lateral supporting roll between said upper rolls, the nether surface of which supporting roll projects below the plane of the axes of said upper sheet-engaging rolls, and a plurality of lower rolls for engagement with the nether surface of said sheet to be flattened and cooperating with said upper sheet-engaging rolls to effect a flexing of said sheet when the rolls revolve and the sheet moves between them.

1,890,343. PROCESS AND APPARATUS FOR GRINDING GLASS. THOMAS H. SWARTZLANDER, Aspinwall, Pa., assignor to Pittsburgh Plate Glass Company, a Corporation of Pennsylvania. Filed Feb. 14, 1931. Serial No. 515,757. 7 Claims. (Cl. 51—264.)



7. A process for use in connection with glass grinding apparatus requiring finely divided abrasive and water, which consists in grading the material in a body of water by an upward flow of water therethrough, circulating the mixture to the grinding apparatus, collecting the mixture draining from the apparatus and returning it to said body of liquid in a continuous cycle, and at intervals bypassing the circulating mixture which drains from the grinding apparatus through a separator and removing therefrom any oversize and foreign material unsuitable as abrasive and liable to injure the glass.

1,890,344. DYNAMO ELECTRIC MACHINE. HAMILTON D. TAYLOR, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed May 20, 1929. Serial No. 364,376. 11 Claims. (Cl. 172—120.)



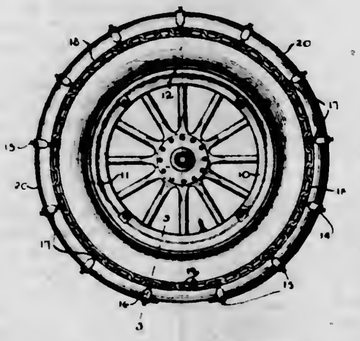
1. A dynamo electric machine including stationary and rotatable members, windings carried by said members, one of said members having slots proportioned and arranged in such relation as to make the radial magnetic pull between the stationary and rotatable members substantially constant in all positions with respect to the stationary member so as to reduce noise produced by the machine during its operation.

1,890,345. METHOD OF ATTACHING RUBBER TO LEATHER. ARTHUR VARNEY THOMAS, Hanover, Mass., assignor to E. H. Clapp Rubber Company, Boston, Mass., a Corporation of Massachusetts. Filed May 12, 1932. Serial No. 610,826. 8 Claims. (Cl. 18—59.)



8. A process of uniting rubber and leather by vulcanization at relatively high temperatures, consisting in drying the leather at moderate temperature, coating one surface of the leather with a vulcanizable cement, applying a layer of rubber composition to the coated surface while the leather is relatively cool, placing a pad of textile fabric against the opposite surface of the leather, and inserting the plied leather, and rubber and the pad in a vulcanizing press.

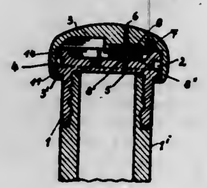
1,890,346. ANTISKIDDING DEVICE. DAVID R. TUDHOPE, North Hero, Vt. Filed Nov. 20, 1929. Serial No. 408,623. 1 Claim. (Cl. 152—14.)



An anti-skidding device for tires, comprising a relatively thick, flat flexible tread strip adapted to extend about the periphery of a tire and lie against the same, a

plurality of relatively narrow tread members each having a flattened portion secured across the outer surface of the tread strip at spaced intervals and having end portions extending at either side of the strip and curved towards the sides of the tire, providing spaces between the end portions and the side of the tire for expansion of the tire into said spaces, and side chains connected to the extremities of the cross members to hold the latter and the strip to the tire.

1,890,347. DROP CLOSURE FOR BOTTLES, RECEPTACLES AND THE LIKE. WALTER VOSS, Berlin-Neukölln, Germany. Filed Mar. 25, 1930, Serial No. 438,833, and in Germany Mar. 28, 1929. 4 Claims. (Cl. 215—76.)



1. A dropper closure for bottles, receptacles or the like, comprising a wall closing off the opening of the bottle or the like, a rotatable cover on said wall, an intermediate elastic cushion the area of which is a small fraction of the area of the surfaces of the wall and cover, said cushion being interposed between said wall and cover, said wall, cover and cushion being provided with openings adapted to be brought into and out of register by rotary movement of the cover, and at least three guides for regulating and limiting the relative movement of said wall and cover.

1,890,348. FASTENING DEVICE. ALBERT J. WEATHERHEAD, Jr., Cleveland, Ohio. Filed Aug. 1, 1929. Serial No. 382,623. 1 Claim. (Cl. 85—5.)

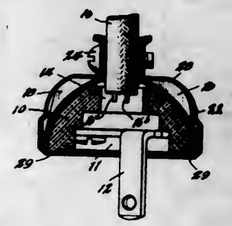


A fastening device including an elongated member having its circular wall flattened at opposite sides, and a shell made of thin spring metal in the form of a truncated straight sided cone, the wall of said cone having at opposite ends sharp edges and being slit and partly cut away at symmetrical areas at the truncated end of said cone to provide oppositely arranged groups of yielding fingers separated by recessed portions in the wall of said cone engaging the circular wall portions of said elongated member and adapted to be released from said circular wall portions by rotation of said shell with respect thereto such that the circular portions of the bolt lie in said recessed portions.

1,890,349. DISPOSAL OF COAL TAR PITCH. JOHN MORRIS WEISS, New York, N. Y., assignor, by mesne assignments, to The Barrett Company, New York, N. Y., a Corporation of New Jersey. Filed Sept. 26, 1927. Serial No. 222,207. 8 Claims. (Cl. 202—3.)

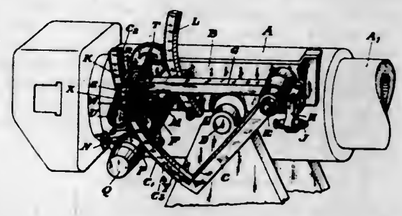
1. The processing of by-product coke oven tar comprising distilling the tar until a residual pitch hard enough to be ground at ordinary atmospheric temperatures is obtained and coking said pitch in admixture with bituminous coking coal in the proportion of not over 15 parts of pitch to 100 parts of coal and producing coke therefrom.

1,890,350. STRAIN RELIEF FITTING. BENJAMIN C. WEBSTER, Southport, Conn., assignor to The Bryant Electric Company, Bridgeport, Conn., a Corporation of Connecticut. Filed Feb. 4, 1931. Serial No. 513,445. 6 Claims. (Cl. 173—322.)



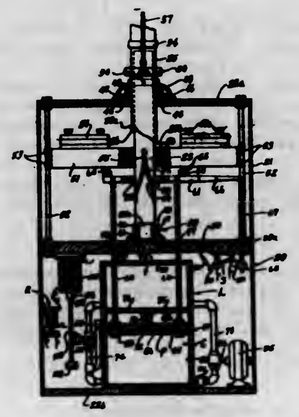
6. An electric fitting comprising an insulating body having recesses in the surface thereof, strain relief members having portions at one end adapted to grip an electric cable and having extensions at their other ends engaging in said recesses and transmitting the stress imposed upon said strain relief members by the cable directly to the insulating body, and a cover encasing said insulating body and holding said strain relief members in said recesses.

1,890,351. SIGHTING DEVICE FOR ORDNANCE. HERMANN WESTPHÄLINGER, Dusseldorf, Germany, assignor to Rheinische Metallwaaren- und Maschinenfabrik, Dusseldorf-Derendorf, Germany, a Corporation of Germany. Filed June 23, 1930, Serial No. 463,333, and in Germany Nov. 15, 1928. 1 Claim. (Cl. 33—48.)



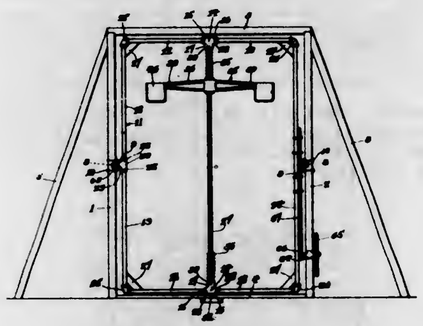
In a gun-aiming device, the combination of a sighting means, a support for said means mounted upon the gun, means for adjusting the said sighting means to the correct angle of elevation corresponding to the standard initial velocity of the projectile, a second means for adjusting said sighting means to a supplemental extent, in accordance with correction values made necessary by deviations of said initial velocity from the assumed standard value, said second adjusting means comprising two setting elements which together constitute an indicating device, and which are adjustable with respect to one another, a common single operating member for so adjusting them, one of said setting elements comprising a means provided with a series of correction curves for combining the said above-named angle of elevation corresponding to the standard velocity with the correction settings, each curve of the said series corresponding to a definite initial velocity of the projectile, whereas the other setting element, which constitutes a pointer cooperating with said curves, is shifted by the second means in correspondence with the necessary value of the correction corresponding to the deviation of the actual initial velocity of the projectile from said standard initial velocity.

1,890,352. CROSSING SIGNAL. MERCER D. WILSON, Phoenix, Ariz., assignor to Standard Crossing Gate Corporation, Phoenix, Ariz., a Corporation of Arizona. Filed Mar. 11, 1931. Serial No. 521,685. 16 Claims. (Cl. 246—128.)



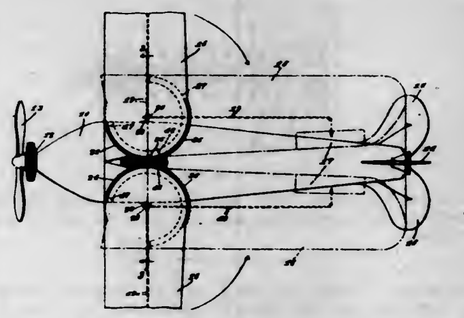
1. A signal system having, in combination: a signal member; a revolvable shaft operatively connected with the signal member; a member mounted axially slidable relative to the shaft; cam means interconnecting said shaft and slidable member whereby movement of said member will cause rotation of the shaft; power means to raise the slidable member against gravity and cause rotation of the shaft in one direction, said slidable member being sufficiently weighted to cause rotation of the shaft in the opposite direction by its gravitational fall; and remote control means controlling the power means.

1,890,353. SWING FOR CHILDREN. WILLIAM E. ANDERSON, Tillamook, Oreg. Filed Aug. 28, 1930. Serial No. 478,505. 3 Claims. (Cl. 212—36.)



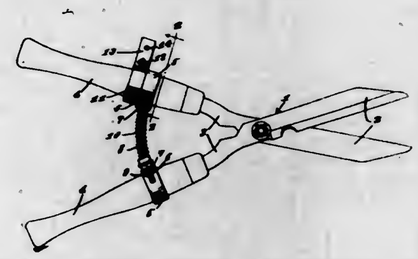
1. In a child's swing, a threaded element, a gravity movable, revoluble carrier having a central opening, a longitudinal opening at each end terminal portion thereof and a shoulder at the inner end of each longitudinal opening, an interiorly threaded flanged sleeve extending through said central opening and threadedly engaging with said element, a seat at each end of the carrier, a U-shaped strap secured to each seat and provided at one end with a head, and means extending through said longitudinal openings, abutting said shoulders and fixed to said heads for swivelly suspending the seats.

1,890,354. AIRPLANE. EARL ARMOUR, Richmond, and JOHN KREMER, St. Louis County, Mo. Filed Dec. 21, 1931. Serial No. 582,412. 4 Claims. (Cl. 244—12.)



1. In an aircraft, a fuselage, bearings mounted externally at opposite sides of the fuselage, turning shafts journaled in said bearings, wing sections carried by said turning shafts and adapted to swing in a horizontal plane, inner rounded ends formed on said wing sections, segmental gears carried at the rounded ends, a worm screw mounted between the rounded ends and meshing with the segmental gears, a hand crank arranged within the fuselage convenient to a pilot, driven connections between the crank and said worm screw for operating the latter, wing bracing struts connected with said turning shafts and the wing sections, stationary substantially I-shaped tracks at the top of the fuselage, and slide clips carried by the rounded ends of the wing sections and embracing said tracks.

1,890,355. HEDGE SHEARS. HENRY O. BAILEY, Baltimore, Md. Filed Mar. 9, 1932. Serial No. 597,787. 2 Claims. (Cl. 30—11.)

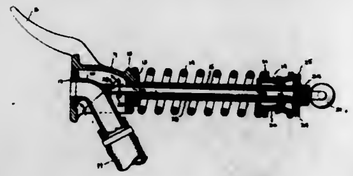


1. In combination with shears having pivoted blades and provided with hand grips, spring means located between and connected to said grips for urging the latter apart and positioning the blades in non-cutting position, and a comparatively long handle detachably and pivotally connected to one of the grips for permitting a person to move the blades into cutting position when said shears are positioned with one blade and grip in engagement with the ground.

1,890,356. AUTOMATIC TRAIN PIPE COUPLING. GEORGE E. BALDWIN, Lima, Ohio, assignor to Joseph Robinson, New York, N. Y. Filed May 29, 1929, Serial No. 366,789. Renewed Jan. 24, 1931. 20 Claims. (Cl. 285—58.)

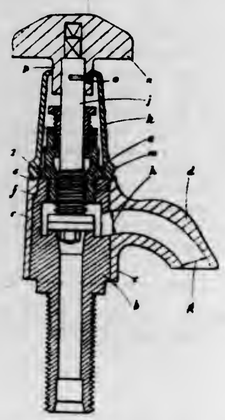
1. In an automatic train pipe coupling, the combination of a coupling head having an opening therein, a sup-

port for said head including a bracket, a tubular conduit extending into the opening in said head, and means to support said conduit in said opening and to permit its



removal therefrom while mated coupling heads remain coupled, said means being operated from the rear of said bracket.

1,890,357. VALVE OR COCK. JAMES GRESHAM BARBER, Mill Hill, London, England. Filed Sept. 30, 1931, Serial No. 566,151, and in Great Britain Feb. 9, 1931. 2 Claims. (Cl. 251—156.)



1. A valve or cock of the screw down lift valve type for domestic or household use, wherein the metal assembly thereof is covered by a previously moulded covering of non-metallic material, said covering consisting of a plurality of parts each of which is attached to the metal valve assembly, the nozzle or outlet being formed in one with the part covering the valve body of the assembly and consisting solely of moulded material.

1,890,358. PILLOW OR CUSHION. EDWARD J. BARCALO, Buffalo, N. Y. Filed Mar. 14, 1932. Serial No. 598,569. 5 Claims. (Cl. 5—337.)

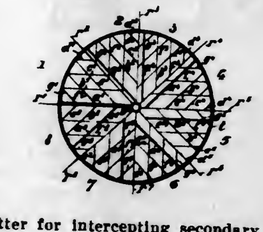


1. A pillow comprising a soft resilient filling and a flexible enclosing case therefor of substantially triangular shape in cross section having opposite end walls each of substantially triangular shape with unequal angles and sides, and three substantially rectangular side walls of unequal widths connecting said end walls and an adjustable stay connecting intermediate portions of said end walls and adapted to be adjusted to variably limit the bulging of said end walls and more or less soften or compress the pillow.

1,890,359. RECOVERY OF TIN. HARRY P. BASSETT, Cynthiana, Ky. Filed Sept. 3, 1930. Serial No. 479,587. 15 Claims. (Cl. 75—55.)

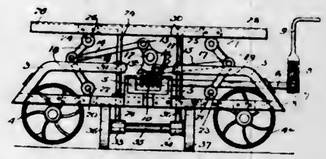
1. The herein described process of recovering tin from tin-containing material such as scruff, dross and the like which contains iron as an impurity which comprises heating the material to be treated at approximately the melting point of tin in contact with a high flash point petroleum oil, an organic reducing agent, and calcium sulfide, separating the molten tin from the mass, and recovering the tin.

1,890,360. ROTARY SHUTTER FOR RÖNTGEN APPARATUS. WILHELM BAUERMEISTER, Brunswick, Germany. Filed Dec. 11, 1928, Serial No. 325,254, and in Germany Mar. 2, 1927. 4 Claims. (Cl. 250—34.)



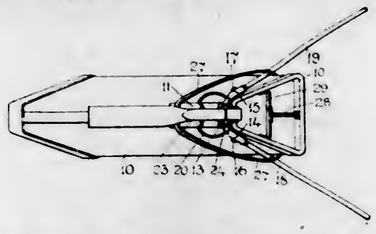
4. A shutter for intercepting secondary Röntgen rays, comprising a member adapted to be rotatably mounted in the path of Röntgen rays and comprising radial arms dividing the member into sectors, and sets of crossing laminations in each of the sectors disposed respectively parallel to the radial arms bounding the sectors and disposed equal normal distances apart, the laminations being disposed with their planes substantially in the direction of the rays and consisting of a material impermeable to Röntgen rays, and the distance between the first lamination of one set and its adjacent radial arm gradually increasing in the successive sectors according to multiples of a fraction of the normal distance between the laminations obtained by dividing the said distance by the number of the arms.

1,890,361. TWO-WAY ELEVATING TRUCK. JAMES BEATTIE, Sydney, New South Wales, Australia. Filed Apr. 30, 1930, Serial No. 448,729, and in Australia May 29, 1929. 6 Claims. (Cl. 280—44.)



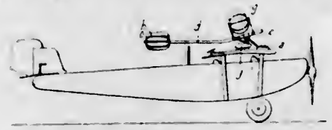
1. In a truck of the type set forth, a wheeled body frame, a platform above said frame carrying wheels in planes at right angles to those of the wheels on the body frame, and toggle connections between the body frame and platform operative in one range of movement to adjustably support the platform above the body frame with the wheels thereof in raised position and operative in another range of movement to suspend the body frame from the platform with the wheels thereof in raised position.

1,890,362. GOLF AND LIKE BAG. EDWARD ARMSTRONG BELLOW, St. Leonards-on-Sea, England. Filed Oct. 29, 1931, Serial No. 571,895, and in Great Britain Feb. 6, 1931. 1 Claim. (Cl. 150—1.5.)



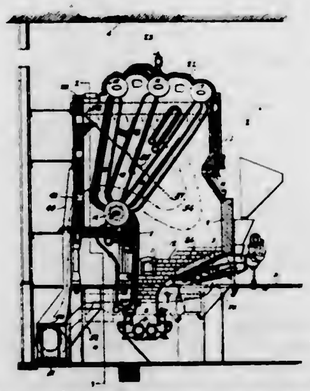
A golf bag of substantially triangular shaped cross section, a plate shaped to one of the apices of the triangle and having its end portions extending a short distance across the two sides of the bag and securable to the mouth of the bag, struts each pivoted near one of its ends to the plate on one side of the bag, a bow spring connecting the two struts adjacent their pivotal points for normally pressing the struts toward the bag and a strap secured to the bag to limit the movement of the struts, the struts when opened out, together with the bag, forming a tripod.

1,890,363. AUTOMATIC AERODYNAMIC STABILIZER FOR AIRPLANES. OTTO EDUARDO BEMBERG, Paris, France. Filed Oct. 5, 1931, Serial No. 567,055, and in France Aug. 26, 1931. 4 Claims. (Cl. 244—29.)



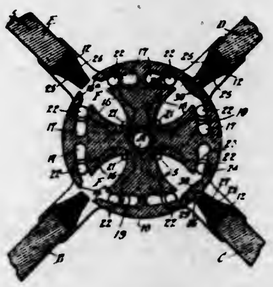
1. An aerodynamic device adapted to automatically ensure the stability of airplanes and other apparatus for aerial navigation, comprising a wind vane formed by a group of intersecting planes freely rotating on a shaft, a rudder integral with the said group of planes, a swivel connection with the airplane, and means for using the movements of above system for acting on the controls.

1,890,364. AIR-COOLED FURNACE WALL. JOSEPH S. BENNETT, Philadelphia, Pa., assignor to American Engineering Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Jan. 24, 1928. Serial No. 249,121. 7 Claims. (Cl. 110—56.)



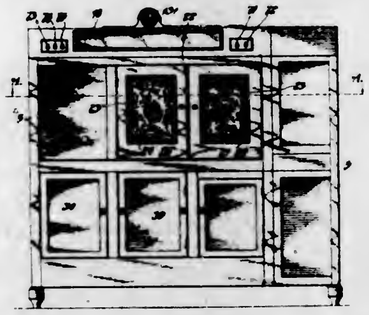
1. A furnace comprising a stoker, a side wall extending upwardly from said stoker, a boiler system having one part thereof positioned in the upper portion of the furnace, a wall spaced from the exposed side of said side wall to form an air passage, one portion of said side wall being heated to a greater extent than the other portions thereof, means whereby air may be drawn through said air passage over said exposed side of the furnace wall, and means positioned in said passage whereby the velocity of the air passing over said first-mentioned portion of said side wall may be increased.

1,890,365. FULL COLLAPSIBLE PANICPROOF REVOLVING DOOR. ROBERT L. BLANCHARD, New York, N. Y., assignor to Van Kannel Revolving Door Company, New York, N. Y., a Corporation of New Jersey. Filed Feb. 26, 1931. Serial No. 518,569. 18 Claims. (Cl. 20—18.)



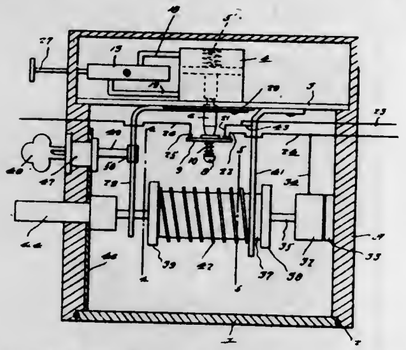
14. In a revolving door structure, a central supporting member, means secured to said member for supporting the door wings and pivotal members carried by each door wing engaging the said supporting means for connecting the wings thereto, each wing being collapsible in one direction by swinging movement on one pivotal member and collapsible in the opposite direction by swinging movement on another pivotal member.

1,890,366. DEVELOPING UNIT FOR X-RAY AND OTHER PHOTOGRAPHIC FILMS. JOHN EARL BOWKER, Ivanhoe, near Melbourne, Victoria, Australia. Filed Apr. 30, 1930, Serial No. 448,687, and in Australia June 26, 1929. 9 Claims. (Cl. 95—91.)



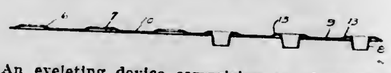
1. Means for developing X-ray and other photographic films, comprising a unitary cabinet of the hand insertion type in which all the operations required in a dark room may be effected, a dark chamber within said cabinet having in combination therewith cassette and hanger magazines, developing, rinsing, fixing and washing tanks and a drying chamber, and light-tight sleeve covers for the reception of the operator's arms to permit a film to be transferred to and from any one of the units within the cabinet.

1,890,367. SELF-LOCKING IGNITION AND SAFETY SWITCH. GEORGE M. BRONISH, Eagle River, Wis., assignor to Frank A. Hall, Eagle River, Wis. Filed Apr. 25, 1932. Serial No. 607,433. 5 Claims. (Cl. 123—146.5.)



1. A locking device for the ignition system of a motor vehicle comprising a casing, a pair of contacts located therein, means connecting one of the contacts to a source of electrical supply, means for connecting the other contact to the ignition circuit, a cylinder in the casing, a piston therein, a piston rod connected with the piston and passing through the cylinder, a switch member carried by, and insulated from the piston rod for bridging the contacts when the piston is in one position, valve controlled means for connecting either end of the cylinder to a pressure part of the motor, whereby the piston is moved to a position, when the motor is in operation, to cause the switch part carried by the rod to engage the contacts, manually operated means for adjusting the valve, manually operated means for initially closing the ignition circuit when the switch member is out of contact with the first-mentioned contacts, and lock means for holding the piston in a position with the switch member out of engagement with the contacts and preventing operation of the initial switch means.

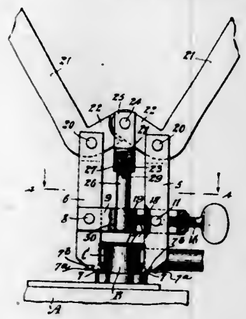
1,890,368. GROMMET-FASTENED METALLIC GRIPPER. CHAIM CHESLER, Cleveland Heights, Ohio, assignor to The Metallic Gripper Company, Cleveland, Ohio, a Corporation of Ohio. Filed Feb. 24, 1930. Serial No. 430,793. 3 Claims. (Cl. 24—141.)



1. An eyeleting device comprising an elongated metal plate which may be bent upon a cross line thereof to form portions for engaging opposite faces of a piece of material, one portion having annular upturned and apertured gripper members struck up from the metal, and another portion having tubular neck members integral with the plate, spaced apart and all extending in parallelism in the same direction but opposite to that of said gripper members, all of said gripper members and neck members being in alinement.

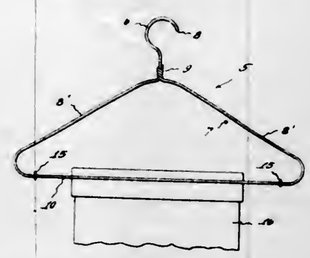
1,890,369. TOOL FOR REMOVING TERMINAL CLAMPS FROM STORAGE BATTERY BINDING POSTS. CHARLES R. COOK, Canton, N. Y. Filed July 16, 1930. Serial No. 468,382. 1 Claim. (Cl. 29—85.)

A puller of the type comprising a pair of handles having offset terminals, a plunger, a pair of jaws, and means by which the jaws are pivoted at one end to the offsets of the handles; in combination, wedges at the other ends of the jaws having bottoms assuming upwardly relieved positions when in the act of gripping, an extension carried by the plunger and being directed toward the wedges, a cross member both linking the jaws together and providing a central guide for the plunger extension, and means to adjust said extension simultaneously both in respect to the plunger and said wedges, enabling



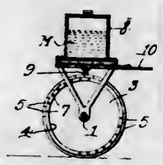
a preliminary unimpeded entering action of said wedges between a fixed abutment and an object to be pried from a post projecting from said abutment before said plunger extension assumes engagement with the post for the lifting off of said object.

1,890,370. HANGER. ACHILLE DE FALCO, North Adams, Mass. Filed Jan. 12, 1932. Serial No. 586,207. 1 Claim. (Cl. 223—64.)



A hanger comprising a hook and a loop, the lower portion of which loop comprises a pair of horizontal members, and a pair of rings embracing and slidable on said members and adapted to press the same together when the hanger is holding one or more articles, said hook and loop being formed from a single piece of material doubled at the free end of the hook.

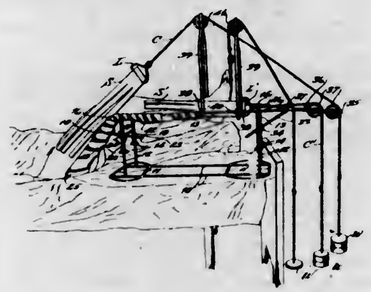
1,890,371. MARKING APPARATUS. ARTHUR W. DENNIS, Jacksonville, Fla. Filed July 14, 1930. Serial No. 467,873. 1 Claim. (Cl. 101—328.)



A road marking apparatus including a trailer structure having supporting wheels, there being an annular channel in one of the wheels, interchangeable type blocks removably seated in the channel having printing faces constituting the ground engaging tread of the wheel, a container extending transversely across and supported by

the trailer, one end thereof overhanging the type carrying wheel and having an outlet, said container constituting a holder for liquid marking material and a weight for the wheels, and a brush depending from the container for transferring marking material to the type faces of the blocks, said brush and wheel being held against movement toward and from each other.

1,890,372. LEG SPLINT. JOE J. ETTINGER, Warsaw, Ind. Filed Dec. 3, 1931. Serial No. 578,832. 5 Claims. (Cl. 128—85.)



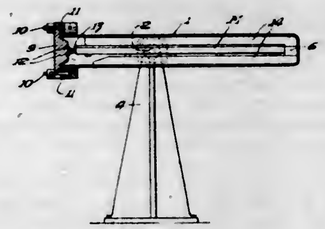
1. In a splint of the kind described, a main frame including vertically extensible posts consisting each of an upper and a lower member movable relatively one to the other and means for holding the posts in extensibly adjusted positions, said frame also including upper longitudinal frame bars each connecting the upper members of a pair of the posts to form one side of the splint, an extension frame hinged to the longitudinal bars at one end of the splint to swing to desired vertical angles, and means connecting the extension frame with the upper member of the adjacent posts to hold the extension frame in angularly adjusted position.

1,890,373. HORMONE AND THE PROCESS OF OBTAINING SAME. SIGMUND FRAENKEL, Vienna, Austria, assignor to Firm of Society of Chemical Industry in Basle, Basel, Switzerland. Filed June 7, 1928, Serial No. 283,741, and in Germany June 27, 1927. 2 Claims. (Cl. 167—74.)

1. Process for obtaining female sex hormone from an extract of female sexual organs, which extract has been preliminarily purified by elimination of phosphatides, cholesterin and cholesterin esters and by precipitation of the bulk of fatty acids in form of metal soaps in known manner, the process consisting in dissolving this preliminarily purified extract in petroleum ether, precipitating the remaining residues of metal soaps of unsaturated fatty acids soluble in petroleum ether with a solution of a neutral electrolyte whose anions and kations form with the kations and anions, respectively, of the metal soap salts which are insoluble in petroleum ether, filtering the precipitate, and finally evaporating the petroleum ether solution.

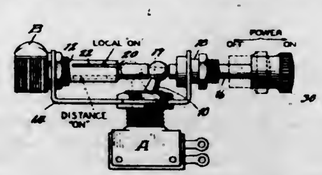
1,890,374. CLEANING MACHINE FOR MAGAZINES AND MATRICES. HERMAN R. FREUND, Brooklyn, N. Y., assignor to Intertype Corporation, New York, N. Y., a Corporation of New York. Original application filed Nov. 22, 1928, Serial No. 321,146, and in Germany May 24, 1929. Divided and this application filed Nov. 30, 1929. Serial No. 410,791. 4 Claims. (Cl. 141—1.)

2. Apparatus for interiorly cleaning the open-ended magazine and therein slidably contained matrices of a line casting machine, comprising a tank to contain a treating fluid, matrix confining members to extend over and engage the open ends of the magazine to support it and its contained matrices fixedly away from the walls of the tank and to engage and prevent the escape of matrices from the magazine, said members providing passages between them and the respective ends of the magazine for the flow of the treating fluid through the magazine, and



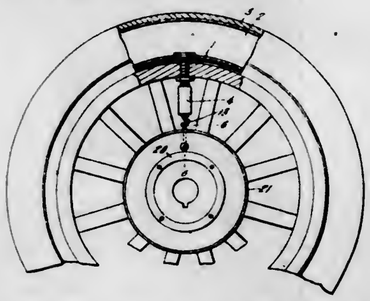
means pivotally supporting the tank and the magazine for successive inversions about an axis transverse to the length of the magazine to cause the matrices in the magazine to slide alternately toward opposite ends of the magazine, while resting alternately on the top and bottom plates of the magazine.

1,890,375. PLURAL SWITCH OPERATING MEANS. JOHN D. GARRETT, Hartford, Conn., assignor to The Arrow-Hart & Hegeman Electric Company, Hartford, Conn., a Corporation of Connecticut. Filed Oct. 30, 1930. Serial No. 492,318. 6 Claims. (Cl. 200—18.)



1. The combination comprising a bracket, a plurality of switches supported thereon, slotted operating members projecting from said switches, and a single control member having means engaging in the slots of said operating members whereby predetermined movements of said control member will cause actuation of said switches.

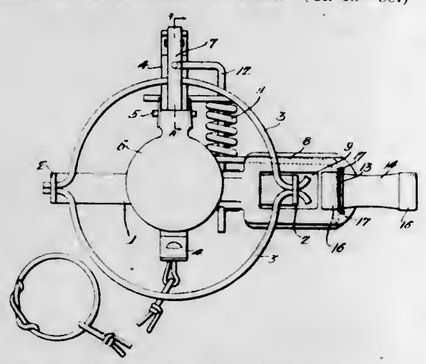
1,890,376. PRESSURE OPERATED SWITCH. JOSEPH G. GEWECKE, MELVIN I. ELLISON, and WILLIAM H. MENKING, Geneva, Nebr. Filed July 13, 1931. Serial No. 550,588. 1 Claim. (Cl. 200—58.)



In a low pressure signal for tires of motor vehicles, a casing having one end provided with a threaded hole, a second casing located in the first casing and having one end open, said end provided with an external flange, a

nut threaded in the first casing and clamping the flange of the second casing against that end of the first casing which is provided with the threaded hole, the opposite end of the second casing being closed, a disk bearing against said closed end of the second casing, a contractable spring surrounding the second casing and placed in the first casing and having one end attached to the disk and the other to the nut, a stem connected to the disk and having a head on the free end, a hollow plug closing the outer end of the first casing and having a partition therein formed of non-conducting material, a contact ring carried by the partition, the stem passing through the partition through the center of the ring, whereby when the inner casing contracts the head of the same will be engaged with the ring for closing a circuit.

1,890,377. ANIMAL TRAP. WALTER A. GIBBS, Holly Oak, Del. Filed Aug. 10, 1926, Serial No. 128,438. Renewed May 24, 1930. 8 Claims. (Cl. 43—88.)



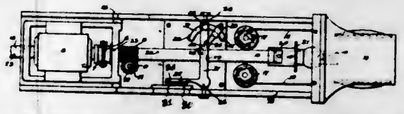
1. An animal trap comprising means for gripping and holding an animal, a rupturable container movable into position to be ruptured by the trapped animal and means for moving said container.

1,890,378. LIGHTING FIXTURE. JOHN G. GODOY, New York, N. Y. Filed Aug. 19, 1931. Serial No. 558,107. 7 Claims. (Cl. 240—13.)



5. In a lighting fixture, a candle with a wick and having a bottom with the wick spaced from the bottom of the candle, and a bracket having a tubular member in which the candle is disposed, the bracket having an inwardly disposed portion for engaging the top of the candle and which will permit the bracket to descend as the candle is burned, the bracket being disposed at the bottom of the candle and below the wick as the candle burns out because of the burning away of the wick.

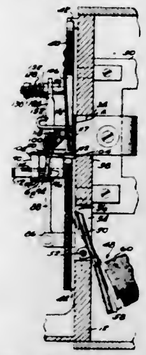
1,890,379. AUTOMOBILE DIRECTION INDICATOR. ABRAHAM F. HADDAD, Cranbrook, British Columbia, Canada. Filed Oct. 22, 1929. Serial No. 401,504. 16 Claims. (Cl. 177—329.)



4. In an automobile direction indicator, a casing having an opening in one end, a member slidably mounted in said casing for projecting through said opening, a motor and power transmitting connections between said motor and said slidable member for causing projection and retraction of said slidable member from and into said casing, a lamp house carried by said slidable member to lie over the open end of said casing when said slidable member is in the retracted position, a roller strip sign having its free end anchored to said lamp house and its roller end located within said casing, a light fixedly located in said casing in a position to project its rays over said strip sign and into said lamp house, and a motor reversing switch, means to throw said switch by the movements of said slidable member, and an electric circuit including a source of energy, a manually operated circuit closer, said motor and said reversing switch, a branch electric circuit including said source of energy and a manually operated parking light switch, and a light controlling switch in both said circuits operated by the movement of said slidable member to connect to said light either with said first mentioned circuit or in said branch circuit accordingly as said slidable member is in one position or another.

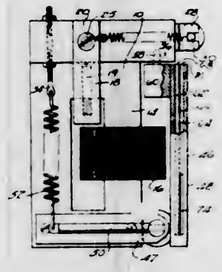
16. In an automobile direction indicator, a casing, a semaphore adapted to be extended from and retracted to said casing, and including a member carrying a lamp house, a strip-sign, means operated by movement of said lamp house for extending and retracting said sign from and into said casing to expose or hide said sign accordingly, as said lamp house is in one position or another, a lamp fixed in said casing with a reflector directed to project light rays outwardly to illuminate said sign and lamp house, and means to energize said lamp.

1,890,380. COIN TESTING APPARATUS. FAIRFIELD W. HOBAN, New York, N. Y., assignor to Fairfield Specialties Corporation, New York, N. Y., a Corporation of New York. Filed Apr. 24, 1929. Serial No. 357,715. 32 Claims. (Cl. 194—101.)



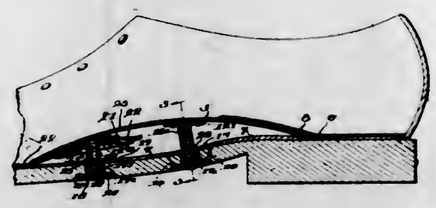
1. An apparatus of the character described comprising a guideway for a coin, token or like device having an opening for the insertion of the device and an outlet for returning the device to the person inserting the same, means associated with said guideway for testing various electrically conducting devices presented thereto, an electrically actuated member movable into said guideway to retain the device in operative relation to said testing means, said member being normally in inoperative position, a circuit therefor having contacts contiguous to the entrance to said guideway and controlled by the devices inserted, a circuit for said testing means, and a member movable into said guideway below said testing means and controlled by said last named circuit to divert the device from said guideway when the reaction thereof on the testing means is that of a genuine or good device.

1,890,381. ART OF TESTING COINS OR OTHER TOKENS FOR GENUINENESS. FAIRFIELD W. HOBAN, New York, N. Y., assignor to Fairfield Specialties Corporation, New York, N. Y., a Corporation of New York. Filed Nov. 14, 1929. Serial No. 407,092. 15 Claims. (Cl. 194—101.)



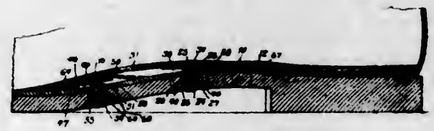
1. The herein described method of distinguishing between genuine and spurious coins, token or like devices which consists in presenting the devices to a circuit having impedance controlling the current therethrough, and utilizing the conductivity of said devices for reducing said impedance and causing a current flow varying in inverse relation to the resistance of the devices, and utilizing the magnetic field of said impedance developed by current of certain of the amperages obtained for making known the character of the device presented.

1,890,382. ADJUSTABLE ARCH SUPPORT. JOSEPH C. HOWELL, Fort Lee, N. J. Filed Oct. 26, 1931. Serial No. 571,235. 4 Claims. (Cl. 36—71.)



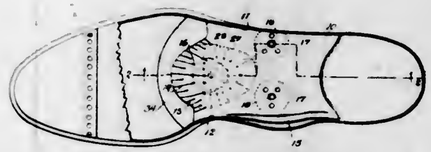
1. The combination with a shoe having an inner sole extending from front to rear thereof, said inner sole having a recess in the heel portion, of an arch support having one end disposed in the recess, a heel pad covering a portion of the arch support and the heel at one end, an adjustable member disposed near the front end of the arch for raising and lowering the latter, and a covering carried by said adjustable member and extending between the front end of the arch support and the inner sole.

1,890,383. ADJUSTABLE ARCH SUPPORT. JOSEPH C. HOWELL, Fort Lee, N. J. Filed Dec. 8, 1931. Serial No. 579,776. 22 Claims. (Cl. 36—71.)



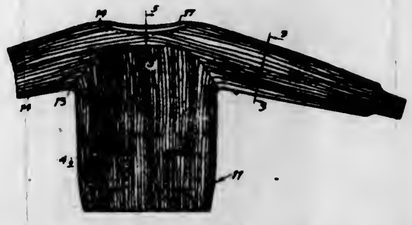
1. The combination of a shoe, and an arch support including a plate arranged on the inside of the shoe, means supporting the said plate arranged adjacent each side edge of the sole of the shoe forwardly of the heel, and a third support arranged in the sole of the shoe for supporting said plate under the ball of the foot.

1,890,384. FLEXIBLE ARCH SUPPORT. JOSEPH C. HOWELL, Fort Lee, N. J. Filed Apr. 20, 1932. Serial No. 606,452. 3 Claims. (Cl. 36—71.)



1. The combination of a shoe and an arch support including a longitudinally-arched plate arranged in the inside of the shoe and extending from the heel of the shoe forwardly to underlie the ball of the foot, the forward end of said plate being provided with a plurality of spaced slots to form a flexible forward end portion, and adjustable means arranged in the sole of the shoe under the forward end of the said plate for regulating the height of the flexible end portion of the said plate above the sole of the shoe.

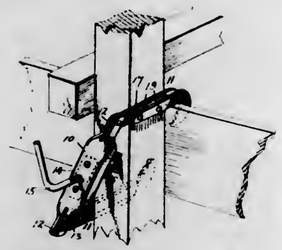
1,890,385. KNITTED SWEATER. KAY KARAHADIAN, Los Angeles, Calif., assignor to Hollywood Knitting Mills, Inc., a Corporation of California. Filed Aug. 30, 1932. Serial No. 631,007. 1 Claim. (Cl. 2—90.)



A knitted sweater comprising a body member, and a one piece neck, shoulders and sleeve member having a neck opening lying entirely within the neck portion thereof, the body member having ribs extending longitudinally thereof, the right and left sides of the body member terminating substantially at the arm pits of the garment, each of the front and back top edges of the body member converging upwardly from the arm pits and terminating short of the neck portion of the garment, the one piece neck, shoulders and sleeve member having the ribs thereof extend-

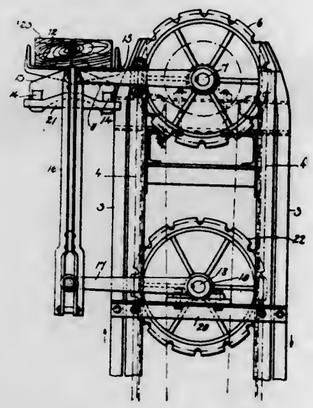
ing longitudinally, the front and back bottom edges of the neck and shoulders portion conformed and connected to the upwardly converging top edges of the front and back of the body member, the ribs of the sleeves portion progressing regularly in length from the arm pits upwardly and extending the full length of the neck, shoulders and sleeve member above the front and back of the body member, and the arm holes of the garment lying entirely within the arms and shoulders portions.

1,890,386. LEDGER CLAMP. THOMAS H. KINGSTON, West Somerville, Mass., assignor to Builders' Patent Scaffolding Company, a Partnership composed of Frank G. Kingston, A. R. Kingston, C. C. Pimm, and Mabel G. Kitchen, doing business at West Somerville, Mass. Filed Dec. 13, 1928. Serial No. 325,778. 3 Claims. (Cl. 304—40.)



3. A ledger board clamp having a vertically extending body and jaw members pivoted to the body, at vertically spaced apart points, at least one of the jaw members being limited to swing between a substantially horizontal position and a vertical position, and coacting parts on said body and the jaw member which is limited to swing between a substantially horizontal position and a vertical position that contact when said jaw member is in a substantially horizontal position, the jaw portions of the jaw members extending vertically when in ledger board clamping position.

1,890,387. LUMBER ELEVATOR. GUSTAF LEONARD KJELLANDER, Sodertalje, Sweden. Filed Aug. 11, 1930, Serial No. 474,581, and in Sweden Aug. 31, 1929. 7 Claims. (Cl. 198—158.)



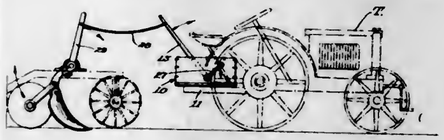
1. In a lumber elevator, in combination, an upright frame, upper and lower chain wheels mounted with their shafts in said frame, endless chains on said chain wheels, arms secured to said chains, carriers pivoted to said arms to carry the lumber up along one side of the elevator and down along the other side thereof, elongated members rigidly connected with said upper chain wheels, similar members carried by shafts parallel to said chain wheel shafts, links connected with said elongated members to form linked parallelograms, and means carried by said parallelograms adapted to engage said carriers to guide them during their movement around the upper half of said upper chain wheels.

1,890,388. GOLF CLUB HANDLE. SEBASTIAN KRAMLIK, Kenilworth, N. J. Filed Dec. 9, 1929. Serial No. 412,879. 4 Claims. (Cl. 312—43.)



1. A holder for golf tees comprising a handle having a socket in its upper end to receive a plurality of golf tees, yieldable means to force the tees outward, a closure for the outer end of the socket, and means to retain the closure in position and to retard the outward movement of the tees when the closure is removed.

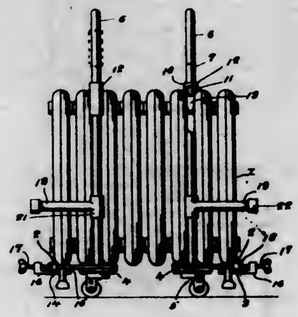
1,890,389. FOOT LIFT FOR TRACTOR PLOWS. ADOLPH KROKENBERGER, Paulsboro, N. J. Filed July 26, 1932. Serial No. 624,882. 8 Claims. (Cl. 97—47.)



1. In a foot-control mechanism for operating the plow lift of a trailer plow on a tractor, an arm pivotally supported from the tractor frame, a pedal lever to rotate said arm in one direction, a spring to move the arm in the opposite direction, means to yieldably check movement of the arm in the last-named direction, and means to positively limit movement of the arm in the last-named direction.

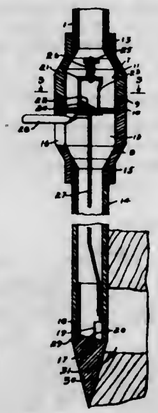
1,890,390. RADIATOR TRUCK. JAMES C. LAMB, Warsaw, Va. Filed Aug. 10, 1931. Serial No. 556,218. 8 Claims. (Cl. 280—49.)

1. A truck for radiators comprising a frame to engage under an end of a radiator, ground engaging elements for the frame and arranged at opposite sides of the radiator and between the ends of the latter and providing a fulcrum on which the frame may swing, means on the frame



to swing the latter on its ground engaging elements to elevate the radiator, and means detachably securing said first means to the radiator.

1,890,391. RODENT FEEDER. CHARLES F. LANE, San Jose, Calif. Filed Dec. 7, 1931. Serial No. 579,862. 2 Claims. (Cl. 221—112.)



1. A device of the character described comprising, a tubular member adapted to penetrate the soil to a rodent's burrow and having a magazine chamber formed therein and a discharge chamber formed therein, means for transferring a measured portion of material from the magazine chamber to the discharge chamber, and separate means cooperating as a unit with the last mentioned means for discharging the measured portion of material from the discharge chamber into the burrow.

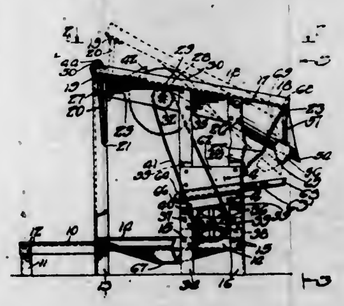
1,890,392. DYED CELLULOSE ETHER PRODUCT AND PROCESS OF MAKING SAME. LEON LILIENFELD, Vienna, Austria. Filed June 10, 1922, Serial No. 567,427, and in Austria June 18, 1921. Renewed May 10, 1924. 30 Claims. (Cl. 8—5.)

16. The process of dyeing cellulose ether which process comprises softening said ether without dissolving the same and dyeing the same while softened.

1,890,393. WATER SOLUBLE COMPOUNDS OF CELLULOSE-XANTHO-FATTY ACIDS AND METHOD OF PRODUCING THEM. LEON LILIENFELD, Vienna, Austria. Filed Jan. 21, 1926, Serial No. 82,855, and in Austria Feb. 6, 1925. 11 Claims. (Cl. 260—100.)

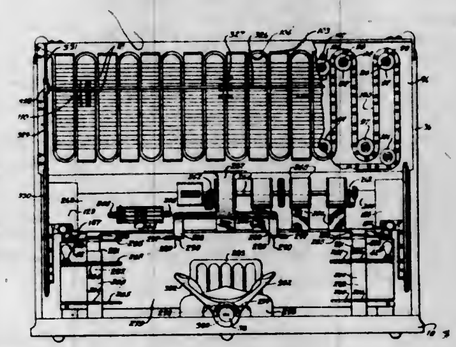
1. The process of forming a water soluble compound from a cellulose-xantho-fatty acid which comprises treating it in the presence of water with an aromatic amine in which a hydrocarbon radical is connected with the nitrogen of the amine.

1,890,394. MACHINE FOR REMOVING HEADS AND FEET OF FOWL. LESLIE E. LONG, Chicago, Ill. Filed Sept. 10, 1930. Serial No. 481,001. 7 Claims. (Cl. 17—12.)



1. In a machine of the class described, a supporting structure, a table pivotally mounted on said supporting structure, means providing pivotal connection between said table and said supporting structure, said table including diverging trough members having outlets formed therein, fluid supplying means including a pipe member mounted on said table, means providing connection between said last-mentioned means and said table, a cutting element rotatably mounted between said trough members adjacent the point of divergence of said trough members, and supporting means for said cutting element.

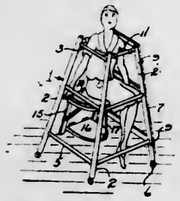
1,890,395. PRICE POSTING MACHINE. FRED W. LA CHANCE, Chicago, Ill. Filed Apr. 25, 1930. Serial No. 447,352. 19 Claims. (Cl. 101—93.)



1. In a device of the class described, a frame having bearings therein, shafts journaled in said bearings and disposed in parallel relation, drums freely mounted on said shafts, power receiving means freely mounted on said shafts and fixedly secured to the ends of said drums, means for yieldingly connecting power receiving means

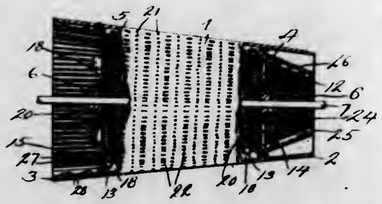
to said shafts, a plurality of type carrying bars, means for connecting said bars into a substantially chainlike structure, means for connecting the respective ends of said structure to said drums whereby said structure may be wound upon said drums so as to be windable from one to the other, and means connected to said power receiving means whereby either of said drums may be selectively driven so as to withdraw said structure from the other of said drums for winding upon said driven drum.

1,890,396. INVALID'S SUPPORT. NANCY E. MAPHET, Wichita, Kans. Filed May 31, 1930. Serial No. 458,123. 1 Claim. (Cl. 155—22.)



An invalid's support comprising converging corner posts, upper, lower and intermediate braces connecting said posts and omitted between a pair of said posts to provide an entranceway, a seat carried by a pair of posts with the entranceway arranged at one side of the seat to permit placing of a person on the seat by way of the entranceway while occupying a substantial sitting position, a solid door for closing the entranceway and providing a shield for the person on the seat and hinged to one of the posts and detachably secured to another post, and spaced traps secured to opposite upper braces and adapted to extend under the arm pits of the person on the seat to support said person in a sitting position, leaving the arms of the person free for use and disposed within the device.

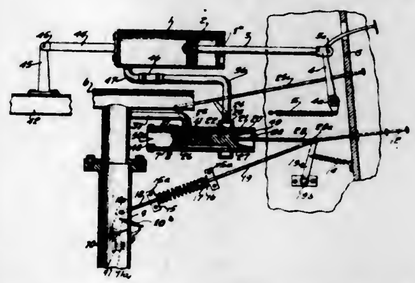
1,890,397. FRUIT DRIER. ERNEST MCCARTHY, Orlando, Fla. Filed Aug. 11, 1931. Serial No. 556,443. 7 Claims. (Cl. 34—5.)



1. A fruit drying machine comprising a rotatable drum, a spiral wiping channel within the drum and through which fruit passes during the rotation of the drum, said channel being formed by strips of material in spaced relation, projections carried by said strips of material in spaced relation and spirally arranged within the drum and means for anchoring said strips of material to the inner periphery of the drum.

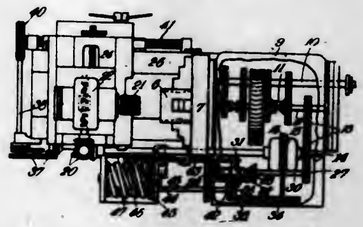
1,890,398. CLUTCH CONTROLLING MECHANISM. HENRY J. DE N. MCCOLLUM and JAMES H. K. MCCOLLUM, Long Branch, N. J. Original application filed Dec. 20, 1930 Serial No. 503,767. Divided and this application filed May 7, 1932. Serial No. 609,802. 4 Claims. (Cl. 192—.01.)

1. In a power producing apparatus for actuating the clutch of a motor car comprising a vacuum operated device connected to the clutch lever and a conduit connecting said device with the intake manifold of the car motor, the combination, with said above described apparatus, of a valve mechanism for controlling the passage of air through said conduit which comprises a tubular casing having a port adapted to communicate with one section of such conduit, a second port adapted to communicate with another section of such conduit and an opening to the atmosphere spaced away from said ports, together with a movable valve member adapted to slide in said casing having a full bodied section filling said casing and a portion provided with an inwardly inclined surface



sloping slightly inwardly from said full bodied section and toward said opening to the atmosphere, said sloping surface portion extending a distance from said full bodied section at least substantially equal to the width of the port with which it is adapted to cooperate; whereby, when said valve member is moved in said casing away from said opening to the atmosphere toward and opposite to said cooperating port, its portion having said inclined surface permits air to flow through said port to or from said opening to the atmosphere in varying quantities per unit of time.

1,890,399. METAL MILLING MACHINE. ROBERT JAMES MCLEOD, West Drayton, Middlesex, England. Filed Nov. 29, 1930, Serial No. 499,074, and in Great Britain Dec. 4, 1929. 2 Claims. (Cl. 10—154.)



1. In a machine for effecting milling operations, such as thread cutting by hobs, in which the tool and the work normally rotate at constant speeds, but at certain stages of the operation the relative velocity of the tool and work is varied by suitable gearing and a corresponding longitudinal traverse is imparted to the tool, means, for the purpose described, for automatically restoring the tool to a predetermined axial and angular position relatively to the work, a saddle on which the tool is mounted, differential mechanism by which the speed or rotation of the tool can be adjusted relatively to that of the work, a sliding clutch and gears connectible to said clutch for operating said differential mechanism and said traversing movements of the saddle, the said clutch having a central neutral position and two end positions for rotating said differential mechanism, respectively, in opposite directions, a cylinder rotated by the gearing operating said differential mechanism, inclined surfaces on said cylinder, a slidable rod, a member secured to said rod and engaging with said inclined surfaces, stops on said rod, a second

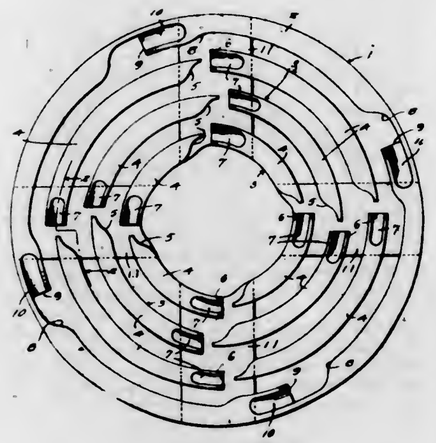
slidable rod connected to said clutch and a lug thereon adapted to engage with said stops in the limiting positions of the tool to move said clutch into the neutral position when the tool is at either of its limiting positions.

1,890,400. FISH LURE. JOSEPH J. MILLER, West Allis, Wis. Filed Jan. 22, 1931. Serial No. 510,520. 1 Claim. (Cl. 43—42.)



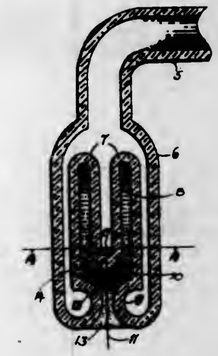
A fish lure of the character described, comprising a spoon of gradually increasing width from a narrow forward end to the opposite end thereof, said opposite or rear end being rounded slightly to define a broad arc and being of greater width than the intermediate portion of the spoon, a hook having the shank portion disposed against the concave face of the spoon and extending over and in close proximity to the broad rear edge, said hook being disposed upon the longitudinal center of the spoon, means for attaching a line to the forward end of the spoon, and a guard secured to the spoon at the forward end and extending longitudinally thereof in the same plane as the point of the hook and terminating adjacent the point of the hook.

1,890,401. EMERY OR ABRADING WHEEL. JAMES ROSS MITCHELL, Montpelier, Vt. Filed Apr. 30, 1931. Serial No. 534,037. 7 Claims. (Cl. 51—209.)



7. A grinding wheel having radially spaced grinding members, with the inner side wall of one grinding member shaped to provide pockets to receive abrasive, the extreme inner edge portion of the side wall forming each pocket being hook-shaped and being projected forwardly.

1,890,402. MERCURY LUMINESCENT TUBE ELECTRODE. MELVIN G. MORRIS, Houston, Tex., assignor, by mesne assignments, to Claude Neon Lights, Inc., New York, N. Y., a Corporation of New York. Filed Aug. 13, 1928. Serial No. 299,308. 11 Claims. (Cl. 176—126.)



11. A luminous gas discharge tube with reentrant ends forming external pockets containing mercury.

1,890,403. TOY GUN. CLIFFORD J. MURDOCK, Mayer, Ariz. Filed Nov. 2, 1931. Serial No. 572,684. 1 Claim. (Cl. 124—14.)

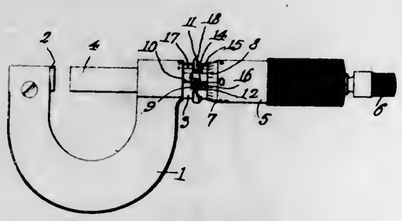


A toy gun for projecting rubber bands comprising a barrel having longitudinally spaced openings therein extending between its upper and lower sides and further having a series of notches in its upper side between the openings, a flexible strand having one end portion inserted through the forward opening and knotted for anchoring said one end to the barrel, the other end portion of the strand extending slidably through the rear opening, said rear opening being inclined rearwardly and downwardly, a ring connected to said other end of the strand, said ring providing means for manually drawing said strand in one direction through the rear opening, and intermediate portions of the strand being insertable in the notches, said notches being adapted to receive one end of the rubber bands in a manner to releasably retain said rubber bands under tension on the barrel, the strand constituting means for disengaging the rubber bands from the notches when drawn in said one direction through the rear opening in a manner to withdraw said intermediate portions of the strand from the notches.

1,890,404. POSITION INDICATOR FOR MICROMETER CALIPERS AND GAUGES. GEORGE J. MURDOCK, Newark, N. J. Filed Nov. 20, 1928. Serial No. 320,615. 9 Claims. (Cl. 33—166.)

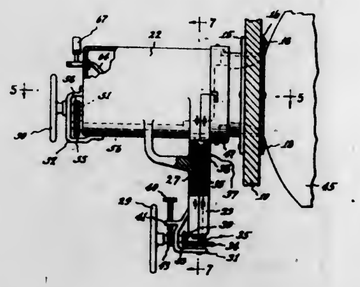
1. The combination with a micrometer caliper or the like having a hub provided with a longitudinal series of graduations, of a split ring embracing and frictionally engaging the hub, a graduated thimble having a screw feed and adapted, when rotated by hand, to move longitudinally along the hub and thrust against the ring to

adjust the ring, and a hand operated ratchet stop for feeding the thimble, said ring gripping the hub with sufficient pressure to constitute a stop for the thimble when actuated by the ratchet stop.



2. The combination with a micrometer caliper or the like having a hub provided with a longitudinal series of graduations, of a split ring embracing and frictionally engaging the hub, cooperating means on the hub and ring for holding the ring against rotation without interfering with the sliding of the ring, a graduated thimble having a screw feed and adapted, when rotated by hand, to move longitudinally along the hub and thrust against the ring to adjust the ring, and a hand operated ratchet stop for feeding the thimble, said ring gripping the hub with sufficient pressure to constitute a stop for the thimble when actuated by the ratchet stop.

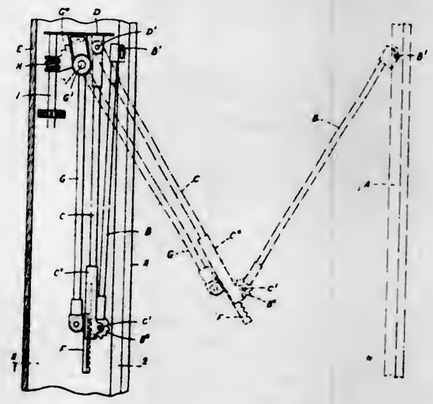
1,890,405. SUBMARINE SALVAGE APPARATUS. JOHN PALMIERI, New York, N. Y. Filed Jan. 20, 1932. Serial No. 587,804. 5 Claims. (Cl. 114—16.80.)



1. A salvage apparatus comprising a casing having a closed end and an opposite open end, a fixture for swingingly connecting the casing to a vessel hull having a porthole whereby the said casing may swing to confronting relation to or away from the porthole, an annular flange projected inwardly from the porthole, means for latching the casing with the flange when confronting the porthole and effecting a sealed joint therebetween, a gate movable into the casing to close said porthole thereto, a normally collapsed inflatable buoyant element within the casing, means for moving said buoyant element from the casing through the porthole, and means for conveying fluid to the element for inflating the same when moved through the porthole.

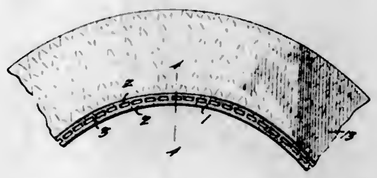
1,890,406. AWNING. HAROLD EDWARD POLLARD, London, England, assignor to E. Pollard & Company Limited, London, England. Filed Dec. 8, 1931, Serial No. 578,826, and in Great Britain Mar. 28, 1931. 8 Claims. (Cl. 156—44.)

1. In supports for awnings and the like in which the rail at the free end of the awning is supported at each of a plurality of points by a pivoted arm comprising a pair of pivotally connected parts, means for effecting the pivotal movement of the outer part of each arm upon the inner part thereof, said means comprising a rack upon the inner part of the arm, a pinion upon the inner end of the outer part of the arm and engaging said rack, means for maintaining said pinion in engagement with said rack during relative movement of said rack with respect



to said pinion, and means for producing relative movement between said pinion and rack, said last-named means comprising a radius rod having its outer end pivotally and slidably connected with that portion of the inner part of the arm on which said rack is formed and having its inner end pivoted on a fixed point, and means for swinging said radius rod about its inner pivot.

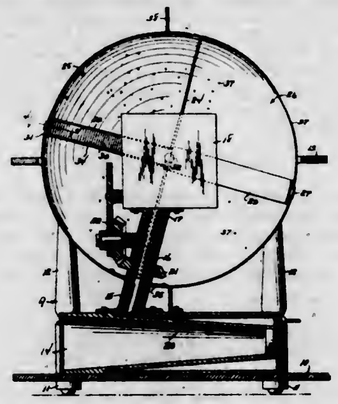
1,890,407. VENTILATING STRIP FOR HATS. MAX POPPER, New York, N. Y. Filed Oct. 4, 1928. Serial No. 310,421. 4 Claims. (Cl. 2—176.)



1. A self conforming ventilating strip having a central section of substantially rectangular outline and formed with openings, a securing flap of less thickness than the similar dimension of the central section and adapted to be turned up into contact with the central section in the use of the strip, a second flap adapted to be turned up into contact with the central section to provide a shoulder substantially in the plane of the top of the section to receive the lower edge of a sweat band.

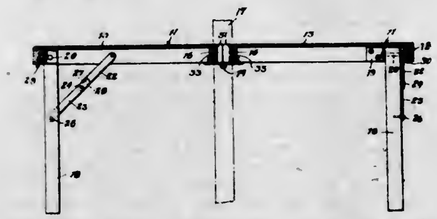
1,890,408. RADIO RECEIVING SET. ALBERT L. C. RINGEL, Altoona, Pa. Filed Jan. 19, 1931. Serial No. 509,762. 4 Claims. (Cl. 250—14.)

1. In a radio receiving set, a stand, a loud speaker on the stand, a revoluble sphere supported upon the stand and having an externally mapped surface, a meter band of translucent material encircling the sphere and carried thereby, means within the sphere for lighting a portion of the band, a radio receiving mechanism within the sphere, means for tuning said mechanism on rotation of



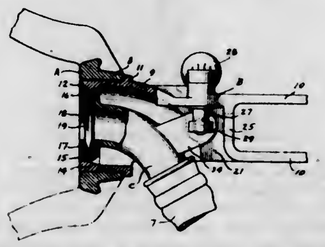
the sphere and means within the sphere to create a dark spot and visible through the meter band in the lighted portion thereof.

1,890,409. TABLE. WALTER J. ROBERTS, Brooklyn, N. Y. Filed Aug. 26, 1931. Serial No. 559,536. 5 Claims. (Cl. 45—116.)



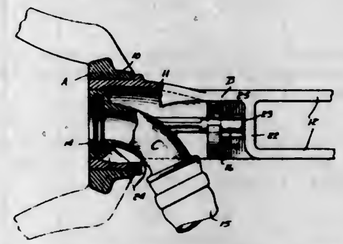
1. A table having two sections with edges hinged together at their undersides, there being cooperating concave bearing surfaces in the adjacent edges of the sections, an umbrella stick disposed between the concave bearing surfaces, and legs spaced from the said edges and secured to the sections for supporting the sections at the legs, while permitting the sections at the said edges to fall to grip the umbrella stick between the concave bearing surfaces.

1,890,410. AUTOMATIC TRAIN PIPE CONNECTER HEAD. JOSEPH ROBINSON, New York, N. Y. Filed June 17, 1829, Serial No. 371,480. Renewed Feb. 17, 1932. 13 Claims. (Cl. 285—58.)



1. In combination, an automatic train pipe connecter head having an opening therein, a carrier on which the head is suitably mounted, said carrier being provided with a seat, a projection rigidly connected to and extending away from said seat, a conduit mounted in the opening in said head and having a portion which rests on said seat and through which said projection extends, said conduit being removably mounted on said seat and in said opening.

1,890,411. AUTOMATIC TRAIN PIPE CONNECTER HEAD. JOSEPH ROBINSON, New York, N. Y. Filed June 19, 1929, Serial No. 372,187. Renewed Feb. 17, 1932. 15 Claims. (Cl. 285—58.)



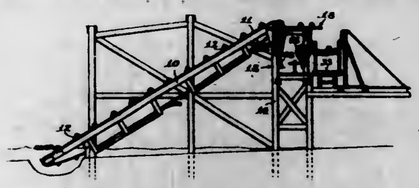
1. In combination, an automatic train pipe connecter head having an opening therein, a member for supporting the head, said member being provided with a seat and a projection, and a conduit removably mounted in the opening in said head and having a portion hooked into said seat.

1,890,412. DEVICE FOR LAYING PLASTIC PAVEMENTS. JOHN P. ROGERS, San Diego, Calif. Filed Oct. 22, 1929. Serial No. 401,454. 1 Claim. (Cl. 25—118.)



A form member for use in laying plastic pavements comprising an elongated substantially wedge shaped strip consisting of a wooden core, a sheet metal covering extending around the sides and lower narrow edge and a rigid metal strip of greater thickness than the covering arranged over the upper wider edge thereof, said latter strip extending beyond the ends of the core and bent downwardly and inwardly to provide handles for facilitating the handling of the form member.

1,890,413. LOG LOADING APPARATUS. WALDO E. ROSEBUSH, Millwood, Wash. Filed Aug. 15, 1931. Serial No. 557,360. 8 Claims. (Cl. 214—41.)

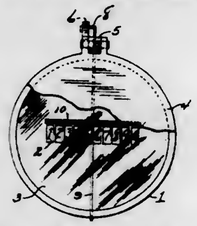


1. The combination of a runway, a traveler on said runway, said traveler consisting of beams connected together on which material may roll, and lowering means arranged in relation to said traveler to lower material delivered thereto from said traveler.

1,890,414. AUTOMATIC METER-LID OPERATED WIPER. JOSEPH RUMPEL, Nampa, Idaho. Filed Jan. 8, 1932. Serial No. 585,584. 3 Claims. (Cl. 285—1.)

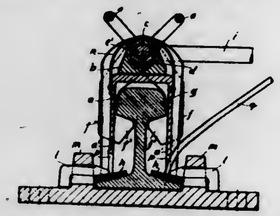
1. A means for wiping the under face of a glass cover of a meter box, and which meter box is normally closed

by a hinged cover, said means comprising a squeegee which is in contact with the under face of the glass case and



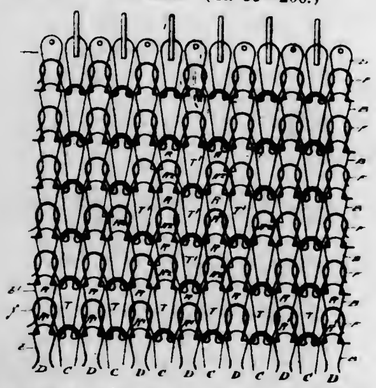
means connected to the squeegee and operated by the opening and closing of the cover for imparting a longitudinal movement to the squeegee.

1,890,415. DEVICE FOR STRESSING SPRINGS. MAX RÜPING, Munich, Germany. Filed Mar. 3, 1932. Serial No. 596,611. 2 Claims. (Cl. 29—87.1.)



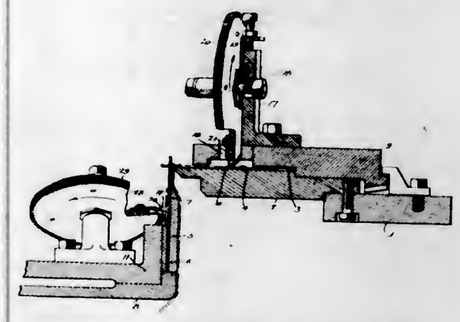
1. A device for stressing springs used for fixing railway rails to their supports, comprising in combination an inverted U-shaped member having its limbs spaced apart by the thickness of the rail head, a cylindrical shaft on the crown of the said inverted U-shaped member capable of being rotated and lying parallel to the rail, a bearing for said shaft, the bearing being disposed on the crown of the said inverted U-shaped member and capable to slide transversely to the rail, eccentrically arranged journals at the ends of the shaft, two pairs of gripper tongs pivoted at the journals, inwardly directed claws at the ends of the arms of said tongs and the length of the said gripper arms being in such proportion to the height of the inverted U-shaped pressure member, that on the said member resting on the two springs lying on the foot of the rail the said claws will be in a position to engage under the head of the rail.

1,890,416. TUBULAR KNIT RIBBED FABRIC. JOSEPH SAFTLAS, Philadelphia, Pa. Filed Sept. 9, 1930. Serial No. 480,766. 4 Claims. (Cl. 66—200.)



2. A tubular knit ribbed fabric composed of a pair of independent threads interknit with each other to form fabric, said fabric having a design formed on one of its faces by tuck stitches composed of one of said threads and a surrounding backgrounnd formed of regular stitches composed of the other of said threads, and a corresponding design formed on its opposite face directly behind the design on the first said face, the design on the second said face being formed of regular stitches composed of the thread forming the background on the first said face and a surrounding background formed of tuck stitches composed of the thread forming the design on the first said face of the fabric.

1,890,417. MEANS FOR PRODUCING TUBULAR KNIT RIBBED FABRIC. JOSEPH SAFTLAS, Philadelphia, Pa. Original application filed Sept. 9, 1930, Serial No. 480,766. Divided and this application filed June 5, 1931. Serial No. 542,375. 9 Claims. (Cl. 66—25.)



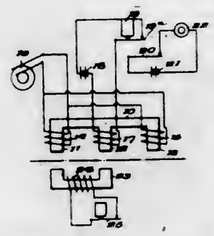
1. In a circular rib knitting machine having a set of cylinder needles and a set of dial needles, the combination of a pattern wheel co-operating with one of said sets of needles to form a design in tuck stitches and a surrounding background in regular stitches on one face of the fabric, and a second pattern wheel coordinately associated with the first said pattern wheel and co-operating with the other of said sets of needles to form a corresponding design in regular stitches and a surrounding background in tuck stitches on the opposite face of the fabric directly behind the design on the first said face thereof.

1,890,418. HEAT INSULATION. ERNST SCHMIDT, Danzig, Free City of Danzig. Filed Sept. 28, 1932, Serial No. 635,263, and in Germany July 4, 1925. 7 Claims. (Cl. 154—45.)



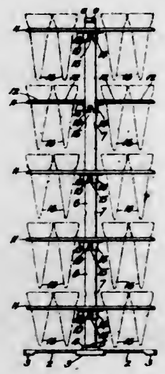
1. An insulating structure comprising a casing, a plurality of substantially confined layers of gas in the casing, such layers being in the order of about a centimeter thick on the average so as to provide a substantial insulation against the transfer of heat by conduction but thin enough to prevent the extensive formation of convection currents, and very thin, readily flexible sheets having metal surfaces exposed on both sides adapted largely to prevent the transfer of heat by radiation separating such layers and held positioned in such casing against substantial movement.

1,890,419. AUTOMATIC TRAIN CONTROL. DANIEL HERBERT SCHWEYER, Easton, Pa. Filed Nov. 10, 1931. Serial No. 574,188. 18 Claims. (Cl. 246—63.)



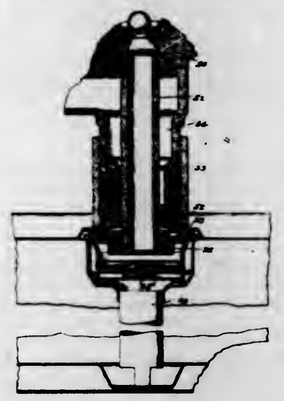
1. In a train control system, a train-carried receiver including a magnetic core, a constant current source, winding on said core energized by said constant current source and setting up a normal flux distribution in said core, an electric-responsive control or indicating device, a second winding on said core, said second winding being so arranged with respect to the normal distribution of flux in said core and so electrically associated with said electro-responsive device that said device remains undisturbed during and only during the existence of said normal flux distribution in said core; and a trackway-mounted armature normally non-influential with respect to said receiver but rendered effective in accordance with adverse trackway conditions to shunt away a large portion of the flux normally existent in one portion of the core and thus effecting a current variation in the second winding which causes appropriate actuation of the electro-responsive control or indicating device.

1,890,420. ICE CREAM CONE SUPPORTING DEVICE FOR USE WITH REFRIGERATING SAFES. FRANK DAVIDSON SMITH, Kew, Melbourne, Victoria, Australia, assignor to Zero Heat Cone Containers Proprietary Limited, Melbourne, Victoria, Australia, a Company of Victoria, Australia. Filed Jan. 23, 1931, Serial No. 510,782, and in Australia Oct. 14, 1930. 1 Claim. (Cl. 211—148.)



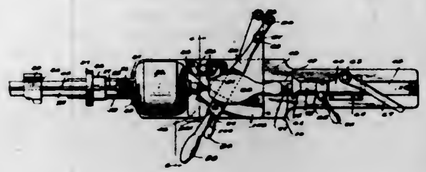
An ice cream cone supporting device including a vertical column formed with a series of diametric apertures arranged in spaced relation vertically of the column and successively at right angles to each other, pins removably fitting said apertures or any of them, a series of plates centrally formed to slidably fit the column and formed beyond the area of the column opening with a series of article-receiving apertures, each plate having a hollow boss depending therefrom to slidably fit the column below the plate, with the lower edge of the boss formed at diametric points with recesses to cooperate with a particular pin, any one plate baing freely movable upwardly on the column but held against downward or turning movement with respect to the column when in position on the pin.

1,890,421. NONREFILLABLE RECEPTACLE. FRANK A TALBOT, Baltimore, Md., assignor of one-half to William B. W. Mann, Baltimore, Md. Filed Sept. 25, 1931. Serial No. 565,155. 7 Claims. (Cl. 220—86.)



1. A component or unit constituting an operative portion of a non-refillable container comprising a drum top, a ring secured to said top and provided with an opening, a down tube below the top in alignment with said opening, means intervening between said top and said tube functioning to maintain said tube in its operative relation with respect to said top without the presence of additional supporting means at the lower end of the down tube, said means being of greater diameter than the opening to prevent withdrawal of said means and down tube through said opening said ring, means and down tube forming a passageway, and a check valve in the passageway adjacent to the upper end of the tube for preventing flow of liquid through the passageway in a direction toward the lower end of the tube.

1,890,422. BOWLING PIN REJUVENATOR. JOHN COOPER TAYLOR, Hermansville, Mich. Filed Feb. 11, 1931. Serial No. 515,064. 3 Claims. (Cl. 144—2.)



1. In a device of the character described, a base, an electric motor mounted thereon, a head spindle carried by the motor shaft, a tail spindle mounted on said base in opposed relation thereto, said spindles co-operating to mount said pin, a carriage mounted on said base for sliding adjustment between said spindles, a cutter mounted on said carriage for movement transversely of the base of said pin, a second cutter mounted on said table for movement in a curved path longitudinally of said pin and in fixed relationship to said first cutter.

1,890,423. RIFLE REST. WILLIAM B. TEAGARDEN, San Antonio, Tex. Filed Feb. 6, 1932. Serial No. 591,422. 2 Claims. (Cl. 42—94.)



1. A device of the class described comprising an elongated member, means carried by one end portion of the member for securing the same for swinging movement, a second member slidably engaged with the first named member, means for constantly urging the second named member outwardly with respect to the first named member, and a rifle rest member carried by the second named member.

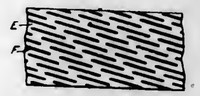
1,890,424. BRAKE LINING AND METHOD OF MAKING. HARRY WHITWORTH, Hartford, Conn., assignor to Colt's Patent Fire Arms Manufacturing Co., Hartford, Conn., a Corporation of Connecticut. Filed Dec. 19, 1930. Serial No. 503,512. 24 Claims. (Cl. 18—47.5.)



24. The hereindescribed method of making sheet brake lining, which consists in preparing and mixing a plastic mass comprising asbestos fibre, synthetic resin, rubber and a readily vaporizable liquid including a solvent for the rubber, forming from the mass while below the curing and vulcanizing temperatures for the resin and the rubber successively superposed layers which firmly adhere to each other to form a homogeneous incompletely dried lining sheet of the required thickness, perforating the lining at least at one surface thereof to provied small closely spaced and substantially uniformly distributed vents, thereafter heating the lining to a temperature below the said curing and vulcanizing temperatures so as to vaporize the solvent liquid and expel it from the surface portions of the lining and from the interior portions thereof through the said vents thus effecting complete drying of the lining, and finally subjecting the lining simultaneously to heat and pressure to effect curing and vulcanizing of the resin and rubber.

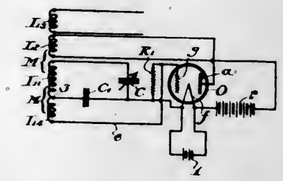
1,890,425. BRAKE LINING AND METHOD OF MAKING. HARRY WHITWORTH, Hartford, Conn., assignor to Colt's Patent Fire Arms Manufacturing Co., Hartford, Conn., a Corporation of Connecticut. Filed Sept. 23, 1931. Serial No. 564,579. 9 Claims. (Cl. 18—47.5.)

9. The hereindescribed method for making a fibrous sheet, which consists in preparing and mixing a plastic mass comprising fibrous material, a binder adapted to be cured when heated to a prescribed curing temperature and a readily vaporizable liquid including a solvent for at least a portion of the binder, forming from the mass while below the said curing temperature successively superposed layers which firmly adhere to each other to form a homogeneous incompletely dried sheet of the required thickness, forming in the sheet at least at one surface thereof a large number of small narrow substantially parallel grooves



which are closely and substantially uniformly spaced, and thereafter drying the sheet at a temperature below the said curing temperature so as to vaporize the solvent liquid and expel it from the surface portions of the sheet and from the interior portions thereof through the said grooves, thus preparing the sheet for subsequent curing without blistering.

1,890,426. RADIO RECEIVING SYSTEM. VERNON C. MACNABB, Philadelphia, Pa., assignor to Atwater Kent Manufacturing Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed July 25, 1930. Serial No. 470,557. 4 Claims. (Cl. 250—20.)



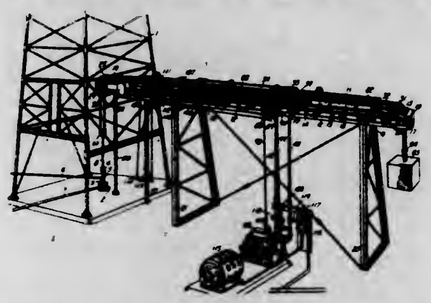
1. A generator of oscillations comprising a vacuum tube, a resonance loop comprising an inductance in series with serially connected capacities, one of said capacities being variable and having a maximum less than another of said capacities, means for coupling the output system of said tube to said inductance, and connections to the input electrodes of said tube from the terminals of said other capacity through an inductance coupled to said first named inductance.

1,890,427. PROCESS FOR SEPARATING CHLORODIPHENYLS. EDGAR C. BRITTON and WESLEY C. STOESSER, Midland, Mich., assignors to The Dow Chemical Company, Midland, Mich., a Corporation of Michigan. Filed Dec. 22, 1930. Serial No. 503,938. 14 Claims. (Cl. 260—161.)

10. The method of separating a mixture consisting of diphenyl, ortho-chlorodiphenyl and para-chlorodiphenyl into the components thereof, which comprises separating said mixture by distillation into a fraction consisting of diphenyl and ortho-chlorodiphenyl in non-eutectic proportions and another fraction consisting of ortho- and para-chlorodiphenyl in non-eutectic proportions, and then separating by cooling each fraction into its components.

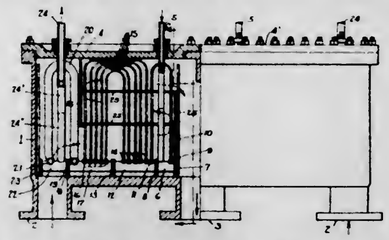
1,890,428. PUMP RIG. WALTER FERRIS and JOHN P. FERRIS, Milwaukee, Wis., and HAROLD L. CRULL, Tulsa, Okla., assignors to The Oilgear Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed May 23, 1928. Serial No. 280,004. 16 Claims. (Cl. 103—45.)

1. In a pump rig for deep wells the combination of pump reciprocating means, a hydraulic motor disposed beside a well, flexible driving connections between said motor and means, said connections including a member normally disposed in active position directly over the well, a movable support for said member permitting withdrawal of



said member into inactive position beside the well, and a pump for driving said motor alternately in opposite directions about said tube assemblies adapted to hold a molten metal.

1,890,429. MERCURY BOILER. THOMAS GRISWOLD, Jr., Midland, Mich., assignor to The Dow Chemical Company, Midland, Mich., a Corporation of Michigan. Filed Sept. 20, 1929. Serial No. 393,884. 2 Claims. (Cl. 122—32.)



1. In apparatus of the character described, the combination of a plurality of metallic tube assemblies, each said assembly comprising a plurality of hair-pin tubes welded at their like ends to two tubular headers constituting inlet and outlet conduits therefor, a cross header welded to the several inlet headers, a cross header welded to the several outlet headers, said cross headers constituting respectively an inlet and outlet conduit therefor, a casing about said tube assemblies adapted to hold a molten metal, conduit means adapted to lead mercury to an inlet cross header, conduit means adapted to lead mercury from an outlet cross header, and openings in said casing adapted to receive and discharge a current of molten metal as heating agent for the mercury.

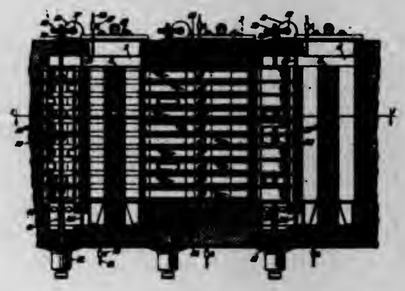
1,890,430. PROCESS FOR THE PRODUCTION OF PRIMARY AROMATIC AMINES OF THE BENZENE SERIES BY HYDROGENATION OF THEIR CORRESPONDING AZO ETHERS. RALPH P. PERKINS and PETER S. PETRIE, Midland, Mich., assignors to The Dow Chemical Company, Midland, Mich., a Corporation of Michigan. Filed Sept. 21, 1929. Serial No. 394,376. 14 Claims. (Cl. 260—130.5.)

1. The method of making an amino ether, comprising reacting hydrogen with an azo ether, having the general formula,

$$\text{Alkyl}-\text{O}-\text{R}-\text{N}=\text{N}-\text{R}'$$

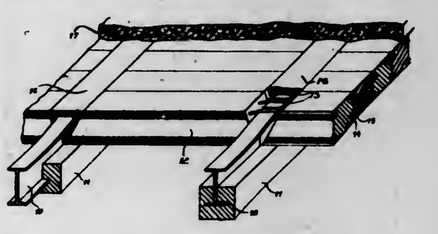
wherein R and R' represent aromatic residues of the benzene series which may be further substituted by substituents selected from the group consisting of alkyl and alkoxy substituents, the reaction being carried out under super-atmospheric pressure, in the presence of a hydrogenation catalyst, in the absence of a solvent, and at a temperature between the melting point of the azo ether and about 200° C.

1,890,431. HEAT TREATING APPARATUS. GUSTAV SCHWAB, Townley-Elizabeth, N. J., assignor of one-third to Albert C. Nolte, New York, N. Y. Filed Sept. 7, 1929. Serial No. 390,944. 29 Claims. (Cl. 263—1.)



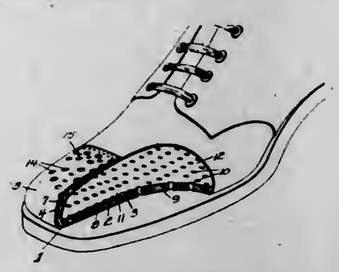
14. The method of heat treating charges of work while maintaining them stationary throughout the treatment, which involves subjecing each charge to a series of preheating steps, a final heating step, and a series of cooling steps, by deriving the heat for first preheating step solely from the charge undergoing the last cooling step, the heat for the second preheating step solely from the charge undergoing the next to the last cooling step, and so on.

1,890,432. BUILDING CONSTRUCTION AND PROCESS FOR MAKING THE SAME. KARL PAULI BILLNER, New York, N. Y. Filed Aug. 13, 1927. Serial No. 212,713. 11 Claims. (Cl. 72—68.)



5. A building element comprising a relatively long piece of porous molten cast blast furnace slag.

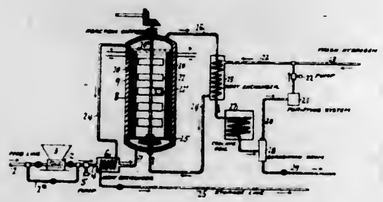
1,890,433. VENTILATED SHOE. DAVID COHEN, Brooklyn, N. Y. Filed May 26, 1931. Serial No. 540,143. 9 Claims. (Cl. 36—3.)



1. A ventilated shoe including a metallic box toe including a bottom perforated wall, a rounded perforated upper wall, the outline shape of the box conforming to that of the toe of the shoe, and a perforated insole for use in the shoe and recessed to receive the bottom of the box toe, said box toe and insole being covered with fabric

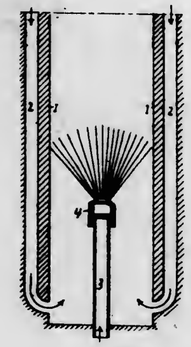
formed with continuations of the perforations in the box toe and insole, and a perforated metallic section conforming to the shape of the toe of the shoe and into which the metallic box toe and insole are fitted.

1,890,434. CONVERSION OF SOLID FUELS AND PRODUCTS DERIVED THEREFROM OR OTHER MATERIALS INTO VALUABLE LIQUIDS. CARL KRAUCH, Ludwigshafen-on-the-Rhine, and MATHIAS PIER, Heidelberg, Germany, assignors, by mesne assignments, to Standard-I. G. Company, Linden, N. J., a Corporation of Delaware. Filed Feb. 6, 1926, Serial No. 86,646, and in Germany Feb. 14, 1925. 60 Claims. (Cl. 196—53.)



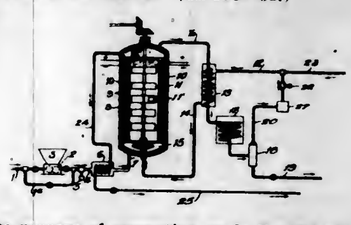
1. The process of destructively hydrogenizing carbonaceous substances, such as solid and liquid fuels, distillation and extraction products thereof, into valuable liquids which comprises treating them with added hydrogen in the presence of an added catalyst immune to sulfur poisoning, and heat at a temperature sufficient to promote the conversion and at a pressure of at least 20 atmospheres.

1,890,435. PRODUCTION OF VALUABLE LIQUID PRODUCTS FROM TARS, MINERAL OILS, AND THE LIKE CARBONACEOUS MATERIALS. CARL KRAUCH, Ludwigshafen-on-the-Rhine, and MATHIAS PIER, Heidelberg, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed Aug. 13, 1926, Serial No. 129,096, and in Germany Aug. 14, 1925. 6 Claims. (Cl. 196—53.)



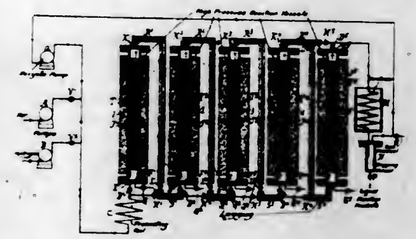
1. The process for producing low boiling hydrocarbons from liquid bituminous materials by destructive hydrogenation with an added hydrogenating gas which comprises subjecting said bituminous materials to the action of said hydrogenating gas while said materials are finely dispersed therein, under a continuously maintained pressure of at least 50 atmospheres, a temperature of the order of those employed in destructive hydrogenation and in the presence of a catalyst immune to sulfur poisoning.

1,890,436. CONVERSION OF SOLID FUELS AND PRODUCTS DERIVED THEREFROM OR OTHER MATERIALS INTO VALUABLE LIQUIDS. CARL KRAUCH, Ludwigshafen-on-the-Rhine, and MATHIAS PIER, Heidelberg, Germany, assignors, by mesne assignments, to Standard-I. G. Company, Linden, N. J., a Corporation of Delaware. Original application filed Feb. 6, 1926, Serial No. 86,646, and in Germany Feb. 16, 1925. Divided and this application filed Apr. 7, 1927. Serial No. 181,883. 24 Claims. (Cl. 196—53.)



1. The process of converting crude liquid hydrocarbons into a liquid rich in hydrocarbons of low boiling point of benzine character which comprises distributing the crude liquid hydrocarbons in a stream of hydrogen in excess of the required quantity and exposing the mixture to heat at a temperature ranging between about 300° and 700° centigrade and a pressure upwards of 100 atmospheres, in the presence of an added catalyst immune to sulfur poisoning.

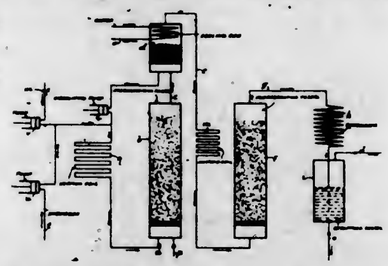
1,890,437. PRODUCTION OF VALUABLE HYDROCARBONS FROM CARBONACEOUS MATERIALS, TARS, MINERAL OILS, AND THE LIKE. MATHIAS PIER, Heidelberg, Germany, assignor, by mesne assignments, to Standard-I. G. Company, Linden, N. J., a Corporation of Delaware. Filed Nov. 20, 1928, Serial No. 320,764, and in Germany Nov. 24, 1927. Renewed May 12, 1932. 3 Claims. (Cl. 196—53.)



1. A process for producing liquid hydrocarbons by destructive hydrogenation of carbonaceous materials in the liquid state which comprises effecting the reaction with hydrogen in at least three reaction vessels arranged in series, at a temperature of between 300° C. and 700° C. and a pressure of at least 20 atmospheres, the speed of flow of the materials and the temperature in at least the first two vessels of the series being such that the reaction is only partially effected therein, all the vapors resulting from the treatment in at least said first two vessels being passed through all the remaining vessels of the series while avoiding appreciable cooling in the flow of materials from one vessel to another.

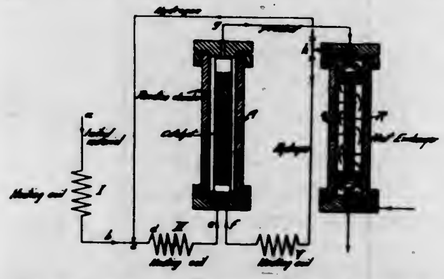
1,890,438. CONVERSION OF CARBONACEOUS MATERIALS INTO FUELS OF RELATIVELY LOW BOILING POINT RANGE. MATHIAS PIER, Heidelberg, Germany, assignor, by mesne assignments, to Standard-I. G. Company, Linden, N. J., a Corporation of Delaware. Filed Nov. 20, 1928, Serial No. 320,765, and in Germany Dec. 17, 1927. 13 Claims. (Cl. 196—53.)

1. In the conversion of carbonaceous materials into liquid fuels of relatively low boiling point range by destructive hydrogenation at a temperature between 300° and 700° C. and under a pressure of more than 20 atmospheres in more than one stage in the presence of catalytic substances, the step of removing substantially all the carbonaceous substances of high molecular weight, which disturb the further conversion, contained in the vaporous



products derived from the first stage of the process, without appreciably depreciating the quantity of substances suitable for further conversion prior to a further destructive hydrogenation of said vaporous products with a catalyst subject to clogging by said substances of high molecular weight.

1,890,439. DESTRUCTIVE HYDROGENATION OF CARBONACEOUS MATERIALS. MATHIAS PIER, Heidelberg, Germany, assignor, by mesne assignments, to Standard-I. G. Company, Linden, N. J., a Corporation of Delaware. Filed May 3, 1929, Serial No. 360,194, and in Germany June 14, 1928. 4 Claims. (Cl. 196—53.)



1. In the destructive hydrogenation of a distillable bituminous material in the presence of a gas comprising free hydrogen under a pressure of at least 20 atmospheres and a temperature within that portion of the range usually employed for destructive hydrogenation which is substantially above 350° C., said bituminous material containing constituents decomposable between 300° C. and the reaction temperature, the step of separately preheating the bituminous material and the hydrogenating gas to a temperature between 300 and 350° C., then mixing the bituminous material with at least part of the hydrogenating gas and supplying at least that amount of heat to the materials which is required to bring them from said temperature to the reaction temperature prior to introducing them into the reaction chamber.

1,890,440. COLLAPSIBLE POCKET UMBRELLA. MATHEY MONZ and HERTA MONZ, Brooklyn, N. Y. Filed Feb. 5, 1930. Serial No. 426,165. 20 Claims. (Cl. 135—25.)



3. In a collapsible umbrella having a collapsible staff, the combination of a plurality of sets of lazy tong links forming the ribs of said umbrella, means for connecting said ribs to said staff in such manner that they lie in the collapsed condition in a plane approximately at right angles to the normal position of such staff, and means for extending and collapsing said links.

1,890,441. CLOSURES FOR COLLAPSIBLE TUBES. CHARLES V. HICKMAN and RAYMOND L. JEFFERY, Seattle, Wash. Filed June 15, 1931. Serial No. 544,626. 18 Claims. (Cl. 221—60.)



1. A closure for collapsible tubes and the like of the type permitting removal of material without removing the cap member, which comprises a neck portion on the collapsible tube, a top portion on said neck having a curved surface, a cap member having an opening in the top portion thereof, a continuous knife edge portion on said cap member adapted to engage said curved surface at such an angle as to provide a knife edge seal, said neck portion having an opening below said knife edge seal through which material is passed from the collapsible tube in the open position of said cap member, and means for effecting forcible engagement of said knife edge portion with said curved surface.

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Patents Nos. 1,890,442 to 1,891,218

THE OFFICIAL GAZETTE

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Designs	91—No.	88,613 to No.	88,703, inclusive.
Patents	777—No.	1,890,442 to No.	1,891,218, inclusive.
Total	1,072		

U. S. COURT OF CUSTOMS AND PATENT APPEALS

INTERPRETATION OF RULE XIII

Printing of Documentary Exhibits

NOVEMBER 28, 1932.

I have been instructed by the court to make the following statement:

"In view of some misunderstanding, it has been thought advisable to explain somewhat the provisions of Rule XIII of the United States Court of Customs and Patent Appeals, relative to the printing of documentary exhibits in the Transcript of Record. This rule was not intended to apply to documentary exhibits impracticable to reproduce in printed form, such as pictures, blue prints, drawings, tabulated forms, and the like. Reproduction of such exhibits in the printed record may be dispensed with by application to the court therefor, or by stipulation of the parties. In addition, the clerk of the court, in the absence of such order or stipulation, will exercise his discretion in selecting from the documentary exhibits such as it may be practicable to print, and is under instructions from the court to administer the rule in a liberal way, to avoid unnecessary expense to litigants."

ARTHUR B. SHELTON,
Clerk.

Interference Notices

U. S. PATENT OFFICE, *Washington, Nov. 9, 1932.*

Aenne Harteneck, her assigns or legal representatives, take notice:

An interference having been declared by this Office between the patent granted October 6, 1931, No. 1,826,467, to Aenne Harteneck, I. G. Farbenindustrie Aktiengesellschaft, Ludwigshafen-on-the-Rhine, Germany, and an application for patent filed by Leo Wallerstein, care of Wallerstein Company, Inc., 171 Madison Ave., New York, N. Y., and a notice of such declaration sent by registered mail to said Harteneck at the said address having been returned by the post office undeliverable, notice is hereby given that unless said Harteneck, her assigns or legal representatives, shall enter an appearance therein within 30 days from the first publication of this order the interference will be proceeded with as in case of default. This notice will be published in the OFFICIAL GAZETTE for three consecutive weeks.

WM. A. KINNAN,
First Assistant Commissioner.

U. S. PATENT OFFICE, *Washington, Nov. 11, 1932.*

George G. Brown, his assigns or legal representatives, take notice:

An interference having been declared by this Office between an application for patent filed by George G. Brown, formerly of 1221 N St. N. W., and more recently of 1290 11th St. N. W., Washington, D. C., and an application for patent filed by Arthur Hungerford, 15 Dun Building, Buffalo, N. Y., and the Office having failed to secure service on said Brown, notice is hereby given that unless said Brown, his assigns or legal representatives, shall enter an appearance therein within 30 days from the first publication of this order the interference will be proceeded with as in case of default. This notice will be published in the OFFICIAL GAZETTE for three consecutive weeks.

WM. A. KINNAN,
First Assistant Commissioner.

U. S. PATENT OFFICE, *Washington, Nov. 21, 1932.*

Goody Nectar Company, its assigns or legal representatives, take notice:

An interference having been declared by this office between the application of Harry E. Grigsby, 111 West California Avenue, Oklahoma City, Okla., for registration of a trade-mark and trade-mark registered October 23, 1928, No. 248,458, to Goody Nectar Company, 129 East Main Street, Oklahoma City, Okla., and a notice of such declaration sent by registered mail to said Goody Nectar Company, at the said address, having been returned by the post office as undeliverable, notice is hereby given that unless said Goody Nectar Company, its assigns or legal representatives, shall enter an appearance therein within 30 days from the first publication of this order the interference will be proceeded with as in case of default. This notice will be published in the OFFICIAL GAZETTE for three consecutive weeks.

WM. A. KINNAN,
First Assistant Commissioner.

Condition of Applications Under Examination at Close of Business November 26, 1932

Room No.	(Total number of applications awaiting action, excluding Trade-Mark Division, 62,859; Trade-Mark Division, 1,061. Oldest new case, May 28, 1932; oldest amended, May 28, 1932.) DIVISIONS, EXAMINERS, AND SUBJECTS OF INVENTIONS	Oldest new application and oldest action by applicant awaiting office action: New	Amended	No. of applications awaiting action
6624	1. LOEFFLER, F. A., Closure Operators; Fences; Gates; Tillage; Handling Implements	Sept. 17	Oct. 15	259
6708	2. HERRMANN, D. (Act.), Fishing and Trapping: Dairy; Animal Husbandry; Presses; Tobacco; Velocipedes	July 26	Aug. 1	863
4003	3. LINDSEY, A., Heating; Metal Founding; Metallurgy; Metal Treatment; Electric Furnaces	Aug. 29	Sept. 1	648
7063	4. MERRITT, A. D., Conveyers; Hoists; Handling Apparatus; Excavating	Sept. 2	Oct. 4	304
3628	5. MACNAB, J. F., Harvesters; Music; Acoustics; Sound Recording; Knotters	July 30	Aug. 16	293
4808C	6. LEWERS, A. M., Carbon Chemistry	June 8	June 9	1,836
5725	7. JARBOE, C. G., Optics; Photography	July 20	July 20	1,286
7514	8. ADAMS, F. L., Beds; Chairs; Kitchen and Table Articles; Racks and Cabinets	July 27	Aug. 5	776
4634	9. ADAMS, R. E., Pumps; Fluid and Fluid-Current Motors	Aug. 26	Sept. 20	583
6612	10. HUNTER, O. F., Land Vehicles—Animal Draft Appliances; Bodies and Tops	July 11	July 11	604
8087B	11. BENHAM, E. V., Boots, Shoes, and Leggins; Button, Eyelet, and Rivet Setting; Harness; Leather Manufactures; Nailing and Stapling; Whip Apparatus	July 29	July 29	576
7701	12. HENRY, C. C., Machine Elements			
5096	13. BORLIK, F. J., Gear Cutting, Milling, and Planing; Metal Drawing; Metal Forging and Welding; Metal Rolling; Metal Working; Needle and Pin Making; Turning; Boring and Drilling	Aug. 16	Aug. 23	348
8097	14. BRUMBAUGH, N. J., Farriery; Metal Bending; Metal Tools and Implements, Making; Sheet Metal Ware, Making; Wire Fabrics; Wire Working; Metal Working, Blanks and Processes	July 29	Aug. 1	952
4897	15. WORRELL, L. W., Glass; Plastic Block and Earthenware Apparatus; Plastics	Aug. 13	Aug. 23	643
5612	16. SPENCER, C. J., Telegraphy; Telephony	July 7	July 7	1,590
5701	17. ARMSTRONG, H. (Act.), Label Pasting and Paper Hanging; Ornamentation; Paper Manufactures; Printing; Type Casting; Sheet-Material Associating or Folding; Sheet or Web Feeding; Type Setting	Aug. 15	Aug. 15	713
4612	18. PORTER, M. E., Motors, Expansible-Chamber Type; Power Plants; Speed-Responsive Devices	June 2	June 2	1,388
4096	19. KENNEDY, A. R., Furnaces and Stoves; Heating Systems; Fuel Burners	Aug. 23	Aug. 23	511
6613	20. GROVE, S. D., Miscellaneous Hardware; Closure Fasteners; Locks and Latches; Safes; Undertaking	June 7	June 7	1,730
7733	21. THOMPSON, T. J., Textiles; Cloth Finishing	Sept. 6	Sept. 6	452
5724	22. RINGLE, D. (Act.), Aeronautics; Firearms, Ordnance, and Explosive Devices; Air Guns, Catapults, and Targets; Boats and Buoys; Ships; Marine Propulsion	July 19	July 30	840
7802	23. GROESBECK, W. D., Coin Handling; Recorders; Registers	Sept. 2	Sept. 14	368
5083	24. DURAS, C. O., Apparel; Apparel Apparatus; Garment Supporters; Sewing Machines	June 14	June 3	806
5709	25. BLAKELY, C. F., Agitating; Butchering; Classifying Solids; Centrifugal-Bowl Separators; Mills; Threshing; Vegetable and Meat Cutters and Comminutors	Sept. 19	Sept. 17	514
5893	26. ADAMS, W. M. (Act.), Electricity, Generation; Motive Power	June 27	June 27	1,368
5708	27. CLARK, W. N. (Act.), Brushing, Scrubbing, and Cleaning; Washing Apparatus	July 1	July 1	761
4628	28. BENSON, A. R., Internal-Combustion Engines	Aug. 11	Aug. 11	716
5062	29. MORRIS, B. N., Woodworking; Tools; Compound Tools; Furniture; Metal Working, Assembling	June 10	June 6	1,223
4074	30. SHIPMAN, J. L., Automatic Temperature and Humidity Regulation, Illuminating Burners; Illumination; Thermostats and Humidostats	June 4	June 11	672
4716	31. HOLMES, W. N., Gas, Heating and Illuminating; Mineral Oils	July 27	July 28	726
4086	32. BARTHOLOMEW, J. A., Gas and Liquid Contact Apparatus; Heat Exchange; Gas Separation	June 29	June 27	1,392
6096	33. WYMAN, W. I., Bridges; Masonry and Concrete Structures; Metallic Building Structures; Roads and Pavements; Roofs; Wooden Buildings	Aug. 11	Aug. 13	711
6625	34. SAPERSTEIN, S. (Act.), Electricity, Transmission to Vehicles; Pneumatic Dispatch; Railways, Rolling Stock, Switches, and Signals; Store Service; Vehicle Fenders; Track Sanders	June 3	June 3	2,071
3600	35. REYNOLDS, E. C., Buckles, Buttons, Clasps, Etc.; Card and Sign Exhibiting; Signals; Toilet Measuring	July 1	July 1	818
7624	36. McFAYDEN, A. D. (Act.), Automatic Weighers; Geometrical and Measuring Instruments; Force	Oct. 4	Oct. 11	288
5889	37. WEAVER, M. E., Electricity, Circuit Makers and Breakers	June 2	June 10	1,466
7510	38. KRAFFT, C. F., Earth Boring; Hydraulic and Earth Engineering; Mining, Quarrying, and Ice Harvesting; Stoneworking; Wells	July 12	July 16	903
4874	39. WHITNEY, F. J. (Act.), Fluid-Pressure Regulators; Multiple Valves; Valves; Water Distribution	Oct. 8	Sept. 7	110
7880	40. OBERLIN, J. J., Receptacles	May 31	June 3	1,266
6062	41. WHITNEY, M. L., Land Vehicles, Wheels, and Axles: Resilient Tires and Wheels; Wheel Substitutes; Railway Draft Appliances; Spring Devices	July 11	July 11	2,123
5882	42. CUTTING, H. O., Electric Signaling	Sept. 17	Sept. 26	475
4586B	43. KLINGE, E. F., Baths, Closets, Sinks, and Spittoons; Sewerage; Electricity, Medical and Surgical; Medicines; Surgery; Dentistry; Artificial Body Members	June 13	June 7	1,251
4087B	44. SHAFFER, C. H., Dispensing; Filling and Closing Portable Receptacles; Refrigeration	June 27	June 27	1,530
7097	45. HILL, H. D., Pulleys and Shafting; Lubrication; Bearings and Guides	May 31	June 2	1,648
4613	46. TAYLOR, M., Evaporators; Fluid Sprinkling; Fire Extinguishers; Boilers	Aug. 23	Aug. 23	789
7600	47. BARKER, H., Clutches and Power Stops; Brakes; Motors	Aug. 16	Aug. 16	483
5731	48. ROEPKE, O. B., Electricity, General Applications	June 27	June 27	1,810
7725	49. SHEFFIELD, E. L., Check-Controlled Apparatus; Domestic Cooking Vessels; Ventilation; Driers: Liquid Separation or Purification	July 26	July 26	626
4701	50. BLAKE, C. L., Plastic and Liquid Coating Compositions; Coating	June 9	June 9	1,379
5628	51. BACKUS, C. D., Radiant Energy	May 31	May 31	2,014
7709	52. KNOTTS, M. K., Supports; Chucks; Joint Packing; Pipe and Rod Joints or Couplings; Tool-Handle Fastenings	July 22	July 22	1,054
6897	53. PECK, M. K., Books; Manifolding; Printed Matter; Stationery, Educational Appliances; Paper Files and Binders; Tents, Canopies, Umbrellas, and Canes; Curtains, Shades, and Screens	Sept. 6	Sept. 16	551
5874	54. WAITE, W. E., Electric Lamps; Vapor Electric Devices; Space Discharge Tubes; Light Sensitive Circuits	Sept. 9	Sept. 2	406
6887	55. BOWEN, S. T., Bread, Pastry, and Confection Making; Cutlery Designs	July 1	July 1	1,031
4725	56. PORTER, F. J., Electrochemistry; Laminated Fabrics; Paper Making; Substance Preparation	Sept. 15	Sept. 13	317
3622	57. NICOLSON, G. D. G., Cutting and Punching: Bolt, Nut, Rivet, Nail, Screw, Chain, and Horse-Shoe Making; Driven and Screw Fastenings; Jewelry; Nut and Bolt Locks	Nov. 2	Nov. 7	213
5605	58. DOWELL, E. F., Abrading; Typewriting	June 14	June 9	1,246
4709	59. RICHARD, V. I., Chemistry; Alcohol; Fertilizers; Cement and Lime; Hides, Skins, and Leather; Fuel	July 21	July 25	649
5896	60. GLASS, R. L., Electricity, Heating, and Welding; Batteries; Resistances and Rheostats; Prime Mover Dynamo Plants	June 15	June 15	1,180
6724	61. PARKS, G. E., Elevators; Winding and Reeling; Pushing and Pulling; Fire Escapes; Ladders; Scaffolds; Horology; Time-Controlling Apparatus	May 28	May 28	1,589
7525	62. COCHRAN, W. W., Toys; Amusement Devices; Baggage; Package and Article Carriers; Bottles and Jars; Deposit and Collection Receptacles	June 18	June 18	1,336
4588	63. WINKELSTEIN, A. H., Bleaching and Dyeing; Explosive, Pyrotechnic, and Match Compositions; Preserving; Sugar, Starch, and Carbohydrates	June 27	July 1	1,182
4706	64. NASH, P. N., Acetylene; Distillation; Gas Mixers; Oils, Fats, and Glue	July 15	July 15	1,281
5624	65. McDERMOTT, F. P., Electricity, Conductors; Conduits and Housings; Repeaters; Relays; Wave Transmission	June 16	June 16	1,324
3099B	TRADE-MARKS, LABELS, AND PRINTS: F. A. RICHMOND	Sept. 7	Sept. 12	364
		June 13	June 13	1,484
		Trade-Marks: Oct. 26	Nov. 11	930
		Labels and Prints: Oct. 26	Nov. 14	131

DECISIONS IN PATENT AND TRADE-MARK CASES

Decision of the Board of Appeals

EX PARTE GUSTAVSON, VAN HOOFSTADT, AND GREENBAUM

Decided April 19, 1933

1. PATENTABILITY—RES ADJUDICATA.

Where the rejection of claims in an application was affirmed by the Board of Appeals on the ground of insufficient disclosure and applicant subsequently filed another application with an adequate disclosure and also filed affidavits to establish the advantages of the construction claimed over the constructions of the prior art *Held* that the question of the patentability of the claims in the later application was not res adjudicata.

2. SAME—APPLICANTS' PRIOR PATENTS.

Claims for a process of making match comb blanks and the apparatus for same *Held* not unpatentable in view of applicants' prior patents where one of those patents does not disclose the invention claimed and the other, issued less then two years prior to the later application, discloses it but claims the product only, since the process of the first patent and the product of the second patent could be produced without the use of the machine covered by the appealed claims; "the monopoly of these patents would not be extended and these applications and patents constitute no estoppel against the allowance of these claims."

[This application has resulted in Patent No. 1,870,955. Issued August 9, 1932.]

Application for patent filed December 15, 1930, Serial No. 502,350. Machines and Methods for Making Book Matches.

Mr. Cornelius Zabriskie for applicants.

Before HOPKINS, Assistant Commissioner, and SKINNER and CLIFT, Examiners in Chief

SKINNER, *Examiner in Chief:*

This is an appeal from the decision of the Primary Examiner finally rejecting claims 1, 2, 3, 9 and 10 of which claim 9 will serve as an example:

9. The method of making match comb blanks which consists in positioning paper stock upon a hard, flat, unyielding surface and then driving a gang of cutting knives simultaneously through the stock and forcibly against said surface to form a comb blank with splints.

The rejected claims are identical with claims 9, 10, 11, 25, and 26 of an application Serial No. 190,684 which were before this Board on a former appeal in which a decision was rendered on November 7, 1930, holding them unpatentable and in view of said decision the Examiner has rejected the claims on the ground of res adjudicata.

We have considered our former decision and are of the opinion that these claims were not held unpatentable on their merits but on the ground that they were not supported by the original disclosure and further that certain affidavits which were relied on by the appellant did not establish comparative facts which would show wherein the construction covered by the rejected claims possessed certain advantages over the art cited as alleged in the arguments for their allowance. Appellant has now filed a new application Serial No. 502,350, December 15, 1930, in which the construction claimed is adequately disclosed and has supported his contentions relative thereto by new affidavits, thus prima facie overcoming the grounds upon which the former decision was based. Under these conditions we are of the opinion that the rejection on the ground of res adjudicata should not be insisted on.

All the rejected claims are limited to the use of a cutting table "having a hard unyielding, plane cutting surface." The references cited disclose cutting tables having a relatively soft surface such as aluminum, copper, etc., or a male and female die. The affidavits allege that by the use of a hard unyielding surface, the knives are not dulled as might be expected and that the production of the machines is greatly increased over the die cutting machines which are stated to be the only ones in practical use and that it is not uncommon for one gang of knives, without resharpening, to produce in the neighborhood of 30 million complete match books. They will dull in time but are readily resharpened and can be reused five or six times. A set of these knives are said to cost about 85 cents as compared with $600 or $700 for the cost of a male and female die such as are used in the Whelan patent.

There is no reference showing the construction claimed and the affidavits appear to establish important advantages of the construction over anything known in the prior art. In our opinion the claims should be allowed.

The Examiner refers to an earlier application by the same parties Serial No. 686,739 filed January 17, 1924, which they attempted to amend to include the subject matter now claimed and also to two other applications filed February 10, 1925, and January 7, 1927, which have been patented as No. 1,628,661 and No. 1,733,258, respectively. Application Serial No. 686,739 has become abandoned. Patent No. 1,628,661 does not disclose the invention covered by the rejected claims. Patent No. 1,733,258 does disclose it but was not granted more than two years prior to this application and the claims are for the product and do not mention such subject matter. The Examiner holds that appellant could have disclosed and claimed this subject matter in these earlier applications and, as the rejected claims cover the best machine known to the applicant for carrying out the process and producing the product of these patents, the grant of a patent would tend to extend the monopoly thereon and for this reason the claims should not be allowed.

In our opinion the process of Patent No. 1,628,661 could be carried out and the product of Patent No. 1,733,258 could be produced without the use of the machine covered by the rejected claims; the monopoly of these patents would not be extended and these applications and patents constitute no estoppel against the allowance of these claims.

The attention of the Examiner is called to the fact that appellant has placed in the record a copy of

an affidavit by one of the joint inventors which was originally filed in application Serial No. 190,684 on November 14, 1928, which affidavit clearly shows that for some time prior to that date the invention in issue had been in extensive commercial use and this would appear to make out at least a prima facie case of public use of the invention more than two years prior to the filing of the present application on December 15, 1930.

The decision of the Examiner is reversed.

U. S. Circuit Court of Appeals—Second Circuit

PETERS CO. INC., *v.* MACDONALD (L. G. BALFOUR CO., INTERVENER)

No. 431. Decided June 13, 1932

1. PATENTABILITY—ANTICIPATION.
"It is not sufficient to constitute an anticipation to say that by modification the function of the patent in suit might be accomplished."
2. SAME.
Peters patent, No. 1,570,776, for a finger ring *Held* valid and infringed.

APPEAL from the District Court of the United States for the District of Connecticut.

Suit by the H. W. Peters Company, Inc., against Douglas S. MacDonald for infringement of Patent No. 1,570,776 for a finger ring, wherein the L. G. Balfour Company intervened as defendant. Decree for defendant, and plaintiff appeals. Reversed.

Mr. Harold E. Cole and *Mr. Vernon W. Marr* for appellant.

Mr. D. Lewis Mattern and *Mr. H. H. Benjamin* for defendant-appellee and intervener-appellee.

Before MANTON, SWAN, and CHASE, Circuit Judges.

MANTON, *Cir. J.:*

This suit is for infringement of Patent No. 1,570,776, issued January 26, 1926. Prior to this suit, the patent was assigned to appellant. It is for a finger ring having a stone and emblem above the stone. It has had a very marked commercial success; its sale being principally to school and college students.

Theretofore drilled stone rings were made, consisting of a piece of gold, which was bent around to the shape of the finger ring, having a flat or base portion. To this base, in the drilled stone ring, a hollow frame or bezel was soldered; the upper portion of this hollow frame is thinned down so it can be peened over later. The onyx stone used has two holes drilled in it; the top emblem, which is separated from the hollow frame or setting, has two pegs soldered on it. The holes in the stone are then engaged by the pegs, and the pegs are peened over at their ends, which fasten the emblem to the stone. The stone is inserted in the hollow frame which is already united to the base, and the stone rests directly on the base. The upper portion of the sides of the frame are peened over onto the stone all the way around. The top emblem is not a part of the frame or connected thereto.

The work of attaching the emblem to the stone is done by skilled workmen. These workmen are not required in constructing a ring under the patent in suit, and the labor costs are greatly reduced. When the ring made under the patent in suit appeared, it captured the market. The novelty consisted in the holding device and its new features when integrally united to the base. This device consists of a top emblem and a plurality of sides or flanges projecting downward; these sides are always in pairs or multiples thereof in the finished ring. The holding device, having a top emblem directly connected with the sides, prevents the passage of the stone through the top, but is open enough to permit a view of the stone below it. It is an open face top emblem with at least one pair of sides integrally connected with and extending downward from the emblem. But the holding device is a distinct member, as the claims provide. There is a second open face through which the stone may be inserted in place. The claims and specifications do not limit where this second open face may be located, whether at the side of or below the holding device, as long as the stone may be inserted and seen through the first open face or emblem. The inclusion of the stone and means to retain the stone in the holding device completes the ring.

Among the advantages is the fact that the holding device may be stamped out in one piece. The crest on the top emblem may be stamped out separately and integrally united to the remainder of the holding device before the holding device is integrally united to the base. The holding device is machine-made by one or more stamping operations. Hard soldering, which integrally unites one part to another, does not require skilled labor. A hole may be cut in the base, as done by appellant, and the stone there inserted in the second open face into the holding device. A plate may then be soldered under the stone. There is a saving in labor costs. The favor of the ring in the market indicates that it looks better than the drilled stone ring; it affords more opportunity for a design, making possible a greater variety. Designs sell the ring. There is less gold used than in the drilled stone ring. Appellee admits it has doubled its sales of the protected stone ring over the drilled stone ring.

The prior art refers to the patent to Closson, No. 203,323, issued May 7, 1878. This has no holding device, but is a one-piece ring without any base, and was cast, and not stamped, as the patent in suit provides for. The ring band or shank runs up to the top of the ring. The Gunther patent, No. 569,100, issued October 6, 1896, was for a coin-holding device, and was not intended for a ring. The second Gunther patent, No. 569,495, issued October 13, 1896, relates to cuff buttons. It has neither a holding device emblem nor a base. The patent to Bleaden, No. 690,095, issued December 31, 1901, shows a drilled stone ring. The emblem has two pegs which fit into two holes drilled in the stone. The patent to Meyer, No. 1,130,197, issued March 9, 1915, shows a ring which has no holding device with the top emblem. It is unnecessary to consider the other patents cited.

It is not sufficient to constitute an anticipation to say that by modification the function of the patent in suit might be accomplished. *Topliff* v. *Topliff*, 145 U. S. 156, 12 S. Ct. 825, 36 L. Ed. 658; *Diamond Rubber Co.* v. *Consolidated Rubber Co.*, 220 U. S. 428, 31 S. Ct. 444, 55 L. Ed. 527.

The prior use of 1922, referred to as an anticipation, was a ring having no base and no holding device. The stone was not firmly held; it rattled. The band of the ring was made in two parts, which were semicircular, extending from the inside finger portion of the ring band right up to the emblem itself, sufficient space being left under the emblem to have inserted a stone inside the ring band and upwardly so it would show through the emblem. After inserting the stone, it is hard soldered together. It is not a prior use which will defeat the patent in suit.

The exhibit marked as an infringing ring has a base; the flat portion of the ring is shown in the drawing. It has a holding device integral therewith, having an open face. The parts are hard soldered together to form the holding device and then integrally united to the base by the hard soldering, the top being open enough to see the stone through it. The stone is inserted through the second open face into the holding device where it is exposed through the first or top opening. It has a—

means for retaining the inserted member against removal through said second open face.

This infringes claim 1 of the patent. Claim 2 is distinguished from claim 1 in having—

means movable to position across said second face for retaining the member against withdrawal.

The infringing ring, as shown in the drawing, has a plate which is movable to position across the second face for retaining the stone against withdrawal. Giving these claims their clearly understood meaning, they are infringed.

The patent is valid and infringed.

Decree reversed.

U. S. Circuit Court of Appeals—Sixth Circuit

NEWCOMB, DAVID CO., INC., *v.* R. C. MAHON CO.

No. 5,984. Decided June 27, 1932

1. PATENTABILITY—COMBINATION.
"It is elementary that invention may reside in a combination of elements all of which were theretofore separately old in the art, but, in order to sustain such a combination, it is equally clear that the inventor must have done more than make a judicious selection from the devices of the prior art, each designed and utilized to accomplish its individual purpose at a time and in a place where such function is necessary for the operation of the whole."
2. SAME.
Mahon patent, No. 1,641,181, for a pneumatic conveyer *Held* invalid for lack of invention.

APPEAL from the District Court of the United States for the Eastern District of Michigan; Charles C. Simons, Judge.

Suit by the R. C. Mahon Company against the Newcomb, David Company, Inc. From a decree in favor of the plaintiff [46 F.(2d) 478], the defendant appeals.

Reversed, and cause remanded with instructions to dismiss the bill.

Mr. R. S. Binns, Messrs. Barthel, Flanders & Barthel, and *Mr. Otto F. Barthel,* for appellant.

Mr. S. C. Barnes, of Detroit, Mich. (*Mr. Arthur Raisch,* and *Messrs. Barnes & Kisselle,* all of Detroit, Mich., on the brief), for appellee.

Before MOORMAN, HICKS, and HICKENLOOPER, Circuit Judges.

HICKENLOOPER, *Cir. J.:*

The district court held claims 11 and 12 of patent to Russell C. Mahon, No. 1,641,181, for a pneumatic conveyer, to be valid and to have been infringed by appellant. It will be sufficient to quote but one of these claims.[1] This appeal followed.

At the time of the application for the patent in suit, pneumatic conveyers for sawdust and shavings, and even heavier materials, were already old in the art. When used in connection with the operation of a number of separate machines in a woodworking plant, it was necessary that the conveyer have a series of branch conduits to receive the sawdust and shavings at the several machines, and to discharge them into the main conveyer conduit through which it was designed they should be carried to a dump or furnace. It would seem that it must then have been obvious to the pneumatic or hydraulic engineer that the suction necessary to convey the material through the branch conduits to the main conduit could be produced only by an exhaust fan (see patent to Allington, No. 898,968), the other alternative being to deliver such material to the main conduit by gravity (see patents to Dodge, Reissue No. 11,549 [1896], and to McKone, No. 713,787 [1902]). It was also then known that, after the material had been deposited in the main conduit, whether by suction or gravity, it could be moved along and within such conduit only by the speed of the air column, as in the patent to Allington, or by providing diagonal openings in the base of the conduit, sloped in the direction of travel, through which inrushing jets of air passed and "kicked" the heavier material progressively from point to point, as in patents to Dodge and McKone. In fact, McKone, depositing his material in the main conduit by gravity, used both of these means, a strong blast of air through the main conduit and also the diagonal base openings, to the end that the lighter particles were carried by the blast of air and the heavier ones were prevented from settling in the conduit by reason of the air jets entering the base.

It was also well known at the time of the application for the patent in suit that speed of the main air column, sufficient to move the heavier particles, could be maintained only if and when the volume of the air admitted by the intake openings, or sum of intake openings, closely approximated the volume of the exhaust. Since speed of motion of a dense air

[1] "11. In a pneumatic conveyor, a conveyor conduit, an exhaust fan housing connected to the discharge end of the conveyor conduit and having a discharge opening, an exhaust fan in the housing adapted to withdraw material from the conveyor conduit and discharge it through the discharge opening, the said conveyor conduit having a series of angular depressions in the bottom, each depression being provided with an opening to atmosphere, each opening being provided in the portion of the depression at the greatest distance from the exhaust fan."

column, and not a partial vacuum, was one means used to move material after it had reached the main conduit, it seems to us to be as obvious in the pneumatic art, as it would be in the hydraulic art, where this means is utilized, that the balance between intake and exhaust must be preserved in order that speed may be maintained. Allington accomplished this result by tapering the main conduit so that, even at points distant from the exhaust fan, the relationship between the diameter of the conduit (viz., volume of exhaust) and the volume of the intake was preserved.

Mahon conceived the idea that there might be installation economy in an avoidance of the tapering conduits of Allington. This necessarily required the utilization of some means, other than speed of motion of the air column, for propelling the material along the main conduit after it had been carried there by the branch conduits, at points so far distant from the exhaust fan that the speed of the air column was insufficient for this purpose. To accomplish this result Mahon resorted to the diagonally arranged air intakes of Dodge and McKone. He also conceived that there might be occasion, nearer the fan, to remove a temporary obstruction or accumulation of material by the use of similar intake openings in the base, and he accordingly provided such openings along the entire base of his main conduit; but, since the inflowing jets of air at the base of the conduit were not ordinarily necessary near the fan, where the speed of the main air column was already high, and because the speed of such air column would be retarded by provision of additional openings after the volume of the sum of the intake had approximated the volume of the exhaust, Mahon provided each of his base openings with a valve, thus permitting any desired number to be cut out of service.

In the defendant's device the base openings are provided only at those portions of the main conduit where the branch conduits are insufficient in number and size to produce the desired speed of motion of the main air column, and where it is therefore necessary to provide the mechanical rolling or "kicking" effect of air jets. To emphasize this feature, the defendant also provides a blast fan and a separate blast conduit beneath the main or exhaust conduit. Thus in defendant's device the intake or branch conduits are operated solely by the exhaust fan, while the force of the jets of air rushing through the base openings may be, though it necessarily need not be, supplemented by the blast fan. Where the volume of the air admitted through the combined base openings and branch conduits sufficiently approaches the volume of the exhaust to maintain both suction in the branch conduits and speed of the main air column, the base openings and the blast trough are discontinued. The main conduit is, however, uniform in diameter throughout its length.

It is elementary that invention may reside in a combination of elements all of which were theretofore separately old in the art, but, in order to sustain such a combination, it is equally clear that the inventor must have done more than make a judicious selection from the devices of the prior art, each designed and utilized to accomplish its individual purpose at a time and in a place where such function is necessary for the operation of the whole. This is but the exercise of the mechanical ability reasonably to be expected in the development of the art, and has repeatedly been held insufficient to evidence invention, whether such decision be placed upon the ground of aggregation or upon the lack of an exercise of the inventive faculty. *Concrete Appliances Co.* v. *Gomery*, 269 U. S. 177, 46 S. Ct. 42, 70 L. Ed. 222; *Reynolds Spring Co.* v. *L. A. Young Industries, Inc.*, 36 F.(2d) 150 (C. C. A. 6); *Adams* v. *Galion Iron Works*, 42 F.(2d) 395 (C. C. A. 6); *Beck-Frost Corp.* v. *Ford Motor Co.*, 44 F.(2d) 519 (C. C. A. 6); *Bettendorf Co.* v. *Ohio Steel Foundry Co.*, 56 F.(2d) 777 (C. C. A. 6). And compare *Sachs* v. *Hartford Electric Supply Co.*, 47 F.(2d) 743, 748 (C. C. A. 2), where Judge Learned Hand criticizes the promiscuous use of the term "aggregation," and says that in every case—

> inventions depend upon whether more was required to fill the need than the routine ingenuity of the ordinary craftsman.

We think that this statement perhaps requires too little, but certain it is that something more is required than even a highly skillful selection of well-known means from the prior art to progressively perform their several functions.

In the present case we can see nothing more in the alleged invention of Mahon than the use of the base openings of Dodge and McKone at those locations where such openings are necessary to accomplish the desired movement of material in the main conveyer conduit, and the abandonment of such means of conveyance where the attained speed of the main air column makes use of this supplemental means unnecessary or even a fault. Doubtless the conveyer design of Mahon, certainly as embodied in the commercial practices of the complainant, has met with favorable reception and has gone into broad use. Doubtless, also, it is a more serviceable conveyer than had theretofore been placed upon the market; but we fail to find in its underlying concept that spark of inventive genius which alone can distinguish it from an exercise of mechanical ability reasonably to be expected from the pneumatic engineer, and which alone would justify a patent.

The decree of the district court is reversed, and the cause is remanded with instructions to dismiss the bill.

Patent Suits

[Notices under sec. 4921, R. S., as amended Feb. 18, 1922.]

1,125,476, G. Claude, System of illuminating by luminescent tubes, D. C., S. D. N. Y., Doc. E 46/301, *Claude Neon Lights, Inc.*, v. *American Neon Light Corp. et al.* Dismissed as to six of the defendants (notice Oct. 14, 1932).

1,158,186, J. W. Dearborn, Package wrapping machine, D. C. Mass., Doc. E 1804, *Johnson Automatic Sealer Co., Ltd.*, v. *P. E. Ginn (National Packaging Machine Co.) et al.* Consent decree May 16, 1932.

1,203,717, J. S. Duncan, Printing machine, D. C., N. D. Ohio, E. Div., Doc. E 3368, *Addressograph Co.* v. *Utilities Service Co.* Dismissed Oct. 17, 1932.

1,268,725, Kadel & Pilcher, Railway car; 1,743,144, 1,737,927, B. W. Kadel, same; 1,434,953, 1,733,736, same, Door mechanism for railway cars; 1,738,057, same, Car door locking device; 1,431,499, Re. 15,792 (of 1,472,540), 1,455,694, W. E. Wine, same; 1,460,009, same, Railway car; 1,699,386, same, Door device; 1,658,585, same, Hopper door lock; 1,433,056, 1,431,506, 1,486,210, same, Door arrangement for railway cars, filed Oct. 10, 1932, D. C. Md., Doc. E 2102, *Wine Rwy. Appliance Co.* v. *The B. & O. Rrd. Co.*

1,314,867, C. B. Gray, Power transmitting mechanism, appeal filed Sept. 9, 1932, C. C. A., 3d Cir., Doc. 4986. *C. B. Gray* v. *Eastman Kodak Co. et al.*

1,365,803, F. W. Storck, Envelope sealing machine, D. C. Mass., Doc. E 2012, *Standard Mailing Machines Co.* v. *The Postage Meter Co.* Decree for plaintiff for injunction Feb. 4, 1931.

1,374,711, J. C. Armor, Arc welding composition, D. C., E. D. Pa., Doc. 5025, *General Electric Co.* v. *Reid Avery Co., Inc.* Dismissed without prejudice Oct. 3, 1932.

1,419,137, J. A. Hewes, Men's neckwear, appeal filed Oct. 5, 1932, C. C. A., 2d Cir., Doc. 12325, *Hewes & Potter, Inc.*, v. *H. M. Meyerson et al.*

1,431,499. (See 1,268,725.) 1,431,506. (See 1,268,725.)

1,433,056. (See 1,268,725.) 1,434,953. (See 1,268,725.)

1,447,001, F. J. Winchell, Shank reinforce, D. C. Mass., Doc. E 2009, *H. G. Josephson, et al.* v. *Parkman-Fernsworth Lamp Co.* Dismissed without prejudice for lack of prosecution Jan. 2, 1931.

1,455,694. (See 1,268,725.) 1,460,009. (See 1,268,725.)

1,466,656, Barr & Jackson, Electric toaster, filed Oct. 15, 1932, D. C., W. D. Mich., S. Div., Doc. E 2589, *H. C. Le Vine* v. *Consumers Power Co. et al.*

1,472,540. (See 1,268,725.)

1,480,137, B. C. Allin, Loading platform and wharf arrangement, filed Oct. 10, 1932, D. C., S. D. Calif. (Los Angeles), Doc. E Y-4-M, *B. C. Allin* v. *Central Mfg. District, Inc., et al.*

1,486,210. (See 1,268,725.)

1,601,455, C. F. Rubsam, Wheel, filed Oct. 18, 1932, D. C. Mich. (Detroit), Doc. 5589, *Rubsam Corp.* v. *General Motors Corp. et al.*

1,602,713, F. Shanley, Manhole, D. C., E. D. Wis. (Milwaukee), Doc. 3757, *Shanley* v. *Neenah Foundry Co.* Consent decree for plaintiff Oct. 19, 1932.

1,638,945, D. London, Hanger for wardrobe bags, filed Oct. 15, 1932, D. C., S. D. N. Y., Doc. E 71/342, *D. London et al.* v. *H. A. Enrich.*

1,648,159, S. Greenberg, Child's overcoat, filed Oct. 19, 1932, D. C., E. D. N. Y., Doc. E 6625, *S. Greenberg & Bro., Inc.*, v. *A. I. Namm & Son.*

1,658,585. (See 1,268,725.)

1,673,639, J. Poole, Bank counter, D. C. Ga. (Atlanta), Doc. E 655, *Clear-Vision Counters, Inc.*, v. *The First National Bank of Atlanta, Ga.* Consent decree sustaining validity of patent (notice Oct. 17, 1932).

1,673,727, L. V. Aronson, Cigar lighter, D. C., S. D. N. Y., Doc. E 56/294, *Art Metal Works, Inc.*, v. *Reirden Bros., Inc.* Consent decree for plaintiff (notice Oct. 18, 1932).

1,699,386. (See 1,268,725.)

1,719,082, H. S. Regar, Method of producing scallops in knitted fabrics, appeal filed Oct. 19, 1932, C. C. A., 3d Cir., Doc. 12358, *H. K. Regar Sons, Inc.*, v. *Scott & Williams, Inc.*

1,725,223, J. E. Sturges, Fruit pitter, D. C., N. D. Calif. (San Francisco), Doc. E 3305-L, *Sun-Maid Raisin Growers of Calif. et al.* v. *Rosenberg Bros. & Co. et al.* Claims 18, 19, and 20 of the patent held invalid therein and priority with respect thereto awarded to T. W. W. Forrest and T. O. L. Smith whose application No. 408,143 was assigned to plaintiff Oct. 6, 1932.

1,733,736. (See 1,268,725.) 1,737,927. (See 1,268,725.)

1,738,057. (See 1,268,725.)

1,740,539, H. E. Dunn, Ice cream dispensing container, filed Oct. 19, 1932, D. C. Nebr. (Omaha), Doc. E 1225, *H. E. Dunn* v. *Baker Ice Machine Co.*

1,743,144. (See 1,268,725.)

1,784,466, O. Rensonnet, Steering sight adapted to be fitted to the mud guards of motor vehicles, D. C., S. D. N. Y., Doc. E 62/3, *Casco Products Corp. et al.* v. *S. Kenny (Chrome Products Co.) et al.* Consent decree for plaintiff (notice Oct. 18, 1932).

1,816,975, D. F. Keith, Refrigeration apparatus, filed Oct. 14, 1932, D. C., N. D. Ohio, E. Div., Doc. E 4470, *Perfection Stove Co.* v. *Montgomery Ward & Co.*

1,821,429, C. E. Ferreira, Chair for motor busses, D. C., N. D. Calif. (San Francisco), Doc. E 2875-K, *D. E. Austin et al.* v. *C. E. Ferreira.* Bill and counterclaim dismissed with prejudice Oct. 11, 1932.

1,855,168, C. L. Farrand, Loud speaker, filed Oct. 13, 1932, D. C., S. D. N. Y., Doc. E 71/323, *Utah Radio Products Co. et al.* v. *The Rudolph Wurlitzer Co.* Doc. E 71/324, *Utah Radio Products Co.* v. *Heins & Electric Supply Corp.* Same, filed Oct. 18, 1932, D. C., S. D. N. Y., Doc. E 71/370, *Utah Radio Products Co. et al.* v. *Stern Bros.* Doc. E 71/371, *Utah Radio Products Co. et al.* v. *Modell's Radio Outlets, Inc.* Doc. E 71/373, *Utah Radio Products Co. et al.* v. *A. Finkenberg's Sons, Inc.* Doc. E 71/374, *Utah Radio Products Co. et al.* v. *Spear & Co., Inc.* Doc. E 71/375, *Utah Radio Products Co. et al.* v. *Roessler-Sterling, Inc.* Doc. E 71/376, *Utah Radio Products Co. et al.* v. *Hearn Department Stores, Inc.* Doc. E 71/377, *Utah Radio Products Co. et al.* v. *Furst Radio Corp.* Doc. E 71/378, *Utah Radio Products Co. et al.* v. *Amco Radio Stores, Inc.* Same, filed Oct. 20, 1932, D. C., E. D. N. Y., Doc. E 6627, *Utah Radio Products Co. et al.* v. *Michaels Bros., Inc.* Same, D. C., S. D. N. Y., Doc. E 72/10, *Utah Radio Products Co. et al.* v. *H. & B. Radio Corp.* Doc. E 72/11, *Utah Radio Products Co. et al.* v. *S. Baum-Ann & Bro., Inc.*

1,881,324, H. E. Metcalf, Signal reproducer, filed Oct. 14, 1932, D. C., S. D. N. Y., Doc. E 71/326, *The Magnavox Co.* v. *Gimbell Bros., Inc.* Doc. E 71/327, *The Magnavox Co.* v. *The Rudolph Wurlitzer Co.* Doc. E 71/328, *The Magnavox Co.* v. *R. H. Macy & Co., Inc.* Same, filed Oct. 15, 1932, D. C., S. D. N. Y., Doc. E 71/340, *The Magnavox Co.* v. *Amco Radio Stores, Inc.* Doc. E 71/341, *The Magnavox Co.* v. *Davega City Radio, Inc.* Same, filed Oct. 13, 1932, D. C., S. D. N. Y., Doc. E 71/325, *The Magnavox Co.* v. *Stearn Bros., Inc.* Same, filed Oct. 17, 1932, D. C., E. D. N. Y., Doc E 6611, *The Magnavox Co.* v. *Abraham & Straus, Inc.* Doc. E 6612, *The Magnavox Co.* v. *Brooklyn Radio Stores Corp.* Doc. E 6613, *The Magnavox Co.* v. *Vim Electric Co., Inc.* Doc. E 6614, *The Magnavox Co.* v. *A. I. Namm & Son, Inc.* Doc. E 6615, *The Magnavox Co.* v. *Frederick Loeser & Co., Inc.* Same, filed Oct. 18, 1932, D. C., E. D. N. Y., Doc. E 6619, *The Magnavox Co.* v. *J. Michaels, Inc.* Same, filed Oct. 17, 1932, D. C., S. D. N. Y., Doc. E 71/355, *The Magnavox Co.* v. *Furst Radio Corp.* Doc. E 71/356, *The Magnavox Co.* v. *John Wanamaker New York, Inc.* Doc. E 71/357, *The Magnavox Co.* v. *Heins & Bolet, Inc.* Same, filed Oct. 19, 1932, D. C., E. D. N. Y., Doc. E 6626, *The Magnavox Co.* v. *Michael Bros., Inc.* Same, filed Oct. 18, 1932, D. C., S. D. N. Y., Doc. E 71/365, *The Magnavox Co.* v. *Ludwig Baumann & Co., Inc.* Doc. E 71/366, *The Magnavox Co.* v. *W. H. Nussbaum, Inc.* Doc. E 71/367, *The Magnavox Co.* v. *Modell's Radio Outlets, Inc.* Doc. E 71/368, *The Magnavox Co.* v. *Spear & Co., Inc.* Doc. E 71/369, *The Magnavox Co.* v. *Park Radio Service, Inc.* Same, filed Oct. 19, 1932, D. C., S. D. N. Y., Doc. E 71/399, *The Magnavox Co.* v. *S. Baumann & Bro., Inc.* Doc. E 71/400, *The Magnavox Co.* v. *Bloomingdale Bros., Inc.* Doc. E 71/401, *The Magnavox Co.* v. *A. Finkenberg's Sons, Inc.* Doc. E 71/402, *The Magnavox Co.* v. *Hearn Dept. Stores, Inc.* Doc. E 71/1, *The Magnavox Co.* v. *Roessler-Sterling, Inc.*.

Re. 15,792. (See 1,268,725.)

Des. 87,020, F. E. Packard, Shoe, filed Oct. 17, 1932, D. C., S. D. N. Y., Doc. E 71/358, *G. B. Keith Co.* v. *K. & O. Shoe Co., Inc.*

Adjudicated Patents

(D. C. Ga.) Bilque patent, No. 1,385,299, for building-brick and wall construction, claim 1 *Held* invalid. *Bilque* v. *Merry Bros. Brick & Tile Co.*, 1 F. Supp. 261.

(D. C. N. Y.) Tansi patent, No. 1,506,869, for macaroni die, claims 1, 2, and 5 *Held* not infringed. *Mario Tansi & Bros.* v. *Tansi*, 1 F. Supp. 227.

Adverse Decisions in Interference

In interferences involving the indicated claims of the following patents final decisions have been rendered that the respective patentees were not the first inventors with respect to the claims listed:

Pat. 1,779,588, Doty and Orcutt, Masking strip, decided September 29, 1932, claim 1.

Pat. 1,793,487, G. A. Johnson, Apparatus for making electric cables, decided November 12, 1932, claim 11.

Pat. 1,820,244, J. P. Pederson, Carriage roll release for hektograph machine, decided October 6, 1932, claim 8.

Pat. 1,824,135, W. D. Hailes, Train dispatching system for railroads, decided November 14, 1932, claims 17, 18, 19 and 20.

Pat. 1,828,904, Morton and Geer, Heat-treatment chamber, decided November 14, 1932, claims 2, 3, 6 and 18.

Disclaimers

1,825,598.—*Hans Vogt*, Berlin-Wilmersdorf, and *Joseph Massolle* and *Josef Engl*, Berlin-Grunewald, Germany. PROCESS FOR PRODUCING COMBINED SOUND AND PICTURE FILMS. Patent dated September 29, 1931. Disclaimer filed November 23, 1932, by the assignee, *American Tri-Ergon Corporation.*

Hereby enters this disclaimer to that part of the claim which it does not choose to claim or hold by virtue of the patent or said assignments, to wit:

(*a*) The process as set forth in claim 6, except wherein the picture and sound negatives are separate films at the time of development.

(*b*) The process as set forth in claim 7, except wherein the sequence of pictures is photographed upon a film separate from that upon which the sequence of sounds is photographed, and the picture and sound negatives are separately developed, in a manner appropriate for each, and are consecutively printed upon the same sensitised film.

1,859,338.—*Walter P. Murphy*, Chicago, Ill. TANK FOR RAILWAY CARS. Patent dated May 24, 1932. Disclaimer filed November 19, 1932, by the assignee, *Union Metal Products Company.*

Hereby enters this disclaimer to that part of the claims in said specification which is in the following words, to wit:

"3. A railway car having a horisontally positioned tank mounted thereon, said tank comprising a rolled steel shell, and a cast metal tank head consisting of an integral casting comprising a central portion and a continuous flange adjacent the perimeter of said portion secured to the shell, a plurality of brackets connecting the central portion to the flange, and a plurality of reinforcing ribs for said portion with their opposite ends merging into said portion between said brackets."

"5. A railway car having a horizontally positioned tank mounted thereon, said tank comprising a rolled steel shell, and a cast metal tank head secured to the shell, said tank head provided with a rib forming a continuous shoulder against which the shell abuts."

"7. As an article of manufacture, a cast metal tank head consisting of an integral casting comprising a central portion, a continuous flange secured to the shell, a plurality of brackets connecting the central portion to the flange, and a plurality of reinforcing ribs for said portion with their opposite ends merging into said portion between said brackets."

Notice of Cancellation

U. S. PATENT OFFICE, *Washington, Nov. 23, 1932.*

Jack Daniel Distilling Company, its assigns or legal representatives, take notice:

A cancellation proceeding having been instituted by this Office upon the application of Lem Motlow, of Lynchburg, Tenn., to effect the cancellation of the trade-mark registration of the Jack Daniel Distilling Company, of 117 South Broadway, St. Louis, Missouri, No. 125,797, dated June 17, 1919, and the notice of such proceeding sent by registered mail to the said Jack Daniel Distilling Company at the said address having been returned by the post-office as undeliverable, notice is hereby given that unless said Jack Daniel Distilling Company, its assigns or legal representatives, shall enter an appearance therein within 30 days from the first publication of this order the cancellation will be proceeded with as in case of default. This notice will be published in the OFFICIAL GAZETTE for three consecutive weeks.

WM. A. KINNAN,
First Assistant Commissioner.

TRADE-MARKS

OFFICIAL GAZETTE, DECEMBER 13, 1932

[VOL. 425. No. 2]

The following trade-marks are published in compliance with section 6 of the act of February 20, 1905, as amended March 2, 1907. Notice of opposition must be filed within thirty days of this publication.

Marks applied for "under the ten-year proviso" are registrable under the provision in clause (b) of section 5 of said act as amended February 18, 1911.

As provided by section 1 of said act, a fee of ten dollars must accompany each notice of opposition.

CLASS 1

Raw or Partly-Prepared Materials

Ser. No. 326,509. SAUL'S SEED STORE, INC., Syracuse, N. Y. Filed Apr. 23, 1932.



No claim is made to the word "Brand" apart from the mark shown.

For Clover Seeds, Timothy Seeds, Lawn Grass Seed, and Field or Farm Seeds.

Claims use since 1880.

Ser. No. 329,165. KAHN'S PICKERY, New Orleans, La. Filed June 18, 1932.



The word "Batting" which appears on the drawing is disclaimed apart from the mark as shown.

For Cotton Batting.

Claims use since Oct. 1, 1930.

Ser. No. 329,166. KAHN'S PICKERY, New Orleans, La. Filed June 18, 1932.



The word "Batting" which appears on the drawing is disclaimed apart from the mark as shown.

For Cotton Batting.

Claims use since Oct. 1, 1928.

Ser. No. 329,464. READING POULTRY FOOD COMPANY, Reading, Pa. Filed Aug. 10, 1932.

Re-Peat-er

For Peat Moss for Poultry Bedding and Mulching for Trees and Plants.

Claims use since Jan. 1, 1931.

Ser. No. 330,596. DAVID GOLDNER, New York, N. Y. Filed Sept. 23, 1932.

DYMKA

For Furs and Pelts, Dressed and/or Dyed.

Claims use since March, 1932.

Ser. No. 330,704. INGRAM-RICHARDSON MANUFACTURING COMPANY, Beaver Falls, Pa., and Frankfort, Ind. Filed Sept. 27, 1932.

PORCELFRIT

For Frit.
Claims use since Jan. 12, 1931.

Ser. No. 330,713. PHILIP A. SINGER & BRO. INC., Newark, N. J. Filed Sept. 27, 1932.

IMPERIAL SEAL

SINGER PRODUCT

No claim is made to the exclusive use of the words "Seal" and "A Singer Product" apart from the mark as shown in the drawing.
For Furs.
Claims use since May 15, 1932.

Ser. No. 330,735. THE ATLANTIC SEED COMPANY, INC., Philadelphia, Pa. Filed Sept. 20, 1932.

BENT-A-LAWN

The words "Bent" and "Lawn" which appear on the drawing are disclaimed apart from the mark shown.
For Field Seeds, Grass Seed Mixtures, and Lawn Seed Mixtures.
Claims use since April, 1930.

Ser. No. 330,954. A. HOLLANDER & SON, INC., Newark, N. J. Filed Oct. 5, 1932.

HOLLANDER A.H.&S. SEAL

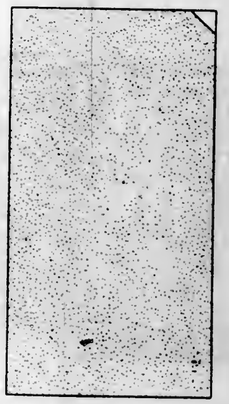
No rights are claimed to registration of the word "Seal" apart from the mark as shown.
For Fur Skins, Particularly Muskrat Skins Dyed in Imitation of Seal.
Claims use since 1913.

Ser. No. 331,079. FEDERAL STAR DYERS CORP., New York, N. Y. Filed Oct. 8, 1932.

TRA JURE

For Dyed Fox Furs, Wolf Furs, and Lynx Furs.
Claims use since Sept. 1, 1932.

Ser. No. 331,105. THE R. T. FRENCH COMPANY, Rochester, N. Y. Filed Oct. 10, 1932.



The mark consists of a white triangular mark at the upper right hand corner of the package or carton in which the product is contained, contrasting with the color of the package or carton. The outline of the label appearing on the drawing is disclaimed. The applicant specifically reserves all its common law rights in and to the use of the design comprising the mark regardless of color.
For Bird Gravel.
Claims use since Jan. 20, 1932.

Ser. No. 331,108. A. HOLLANDER & SON, INC., Newark, N. J. Filed Oct. 10, 1932.

A.H.&S.

For Fur Skins.
Claims use since May, 1932.

Ser. No. 331,172. AMERICAN SPONGE & CHAMOIS CO., INC., New York, N. Y. Filed Oct. 12, 1932.



For Sponges and Chamois.
Claims use since 1905.

Ser. No. 331,675. THE FIRESTONE TIRE & RUBBER COMPANY, Akron, Ohio. Filed Oct. 29, 1932.

Firestone

For Tire Casing Dusting Powders—Namely, Mica, Talc, and Soapstone.
Claims use since June 27, 1922.

Ser. No. 331,676. THE FIRESTONE TIRE & RUBBER COMPANY, Akron, Ohio. Filed Oct. 29, 1932.



For Tire Casing Dusting Powders—Namely, Mica, Talc, and Soapstone.
Claims use since June 27, 1922.

CLASS 2

Receptacles

Ser. No. 326,806. THE DAVIS WELDING & MANUFACTURING COMPANY, Cincinnati, Ohio. Filed May 6, 1932.

DAVISBILT

For Metal Buckets and Bulk Delivery Cans.
Claims use since Aug. 7, 1930.

CLASS 4

Abrasive, Detergent, and Polishing Materials

Ser. No. 328,704. JAMES H. RHODES & COMPANY, Chicago, Ill. Filed July 11, 1932.

KP

For Steel Wool Put Up in Small Cloth Covered Blocks.
Claims use since Sept. 10, 1931

Ser. No. 331,143. CARMAN & CO., INC., New York, N. Y. Filed Oct. 11, 1932.

METRON

For Laundry Cleaning Compounds for General Industrial Purposes.
Claims use since Sept. 8, 1932.

CLASS 6

Chemicals, Medicines, and Pharmaceutical Preparations

Ser. No. 329,831. WILLIAM R. DRAPER, doing business as Ozalts Company, Sulphur Springs, Ark. Filed Aug. 25, 1932.

OZALTS

The word appearing on the drawing is Ozalts.
For Medical Preparation for Making Mineral Water—Namely, Crystals or Salts.
Claims use since May 15, 1932.

Ser. No. 329,853. EMERY INDUSTRIES, INC., Cincinnati, Ohio. Filed Aug. 26, 1932.

SANITONE

For Dry Cleaning Absorbefacient Used for Causing or Promoting Absorption of Moisture by a Dry Cleaning Solvent.
Claims use since Aug. 24, 1932.

Ser. No. 330,479. ROBERT KERN, doing business as American Noxpain Laboratories, Baltimore, Md. Filed Sept. 19, 1932.

NOXPAIN

For Pharmaceutical Preparations for External Application in the Treatment for the Alleviation of Pain in Cases of Rheumatic Inflammation, Lumbago, Neuralgia, Neuritis, Etc., as Well as in the Treatment of Muscular Cramps, Etc.
Claims use since Aug. 26, 1932.

Ser. No. 330,568. BRILLO MANUFACTURING COMPANY, Brooklyn, N. Y. Filed Sept. 22, 1932.

ORBO

For Bluing.
Claims use since Feb. 28, 1932.

Ser. No. 330,964. MICHAEL A. MELLENTHIN, doing business as Mellenthin Laboratories, Los Angeles, Calif. Filed Oct. 5, 1932.

MEL-O-LAX

For Medicinal Compound to be Used in the Treatment of Constipation and as a Liver Stimulant and Intestinal Tonic.
Claims use since Jan. 1, 1918.

Ser. No. 331,043. D'ORSAY PERFUMERIES CORPORATION, New York, N. Y. Filed Oct. 7, 1932.

casino

For Perfumes, Perfume Extracts, Bulk Perfumes, Toilet Waters, Face Powders, Powder Compacts, Rouge, Rouge Compacts, Talcum Powders, Dusting Powders, Lipsticks, Eyebrow Pencils, Skin and Tissue Building Creams, Vanishing Creams, Cleansing Creams, Bath Salts, Brilliantines, Sachet Powders, Shampoo Powders, Eau de Cologne, Body Powder, Hair Tonics, and Body, Face, Foot, Hand, and Head Lotions.
Claims use since July 1, 1932.

CLASS 7

Cordage

Ser. No. 329,599. EMPIRE TWINE AND YARN CO., INC., New York, N. Y. Filed Aug. 17, 1932.

TRITON

For Twine and Cordage Made of Cotton, Hemp, Flax, Jute, Sisal, Manila, Tinsel, Linen, and Combinations Thereof.
Claims use since 1929.

Ser. No. 331,917. BRITISH ROPES LIMITED, London, England. Filed Nov. 5, 1932.

WHITE CIRCLE

For Rope of Jute and Hemp.
Claims use since Apr. 2, 1932.

CLASS 10

Fertilizers

Ser. No. 328,146. UNIÓN ESPAÑOLA DE EXPLOSIVOS SOCIEDAD ANÓNIMA, Bilbao, Spain. Filed June 20, 1932.

UNION ESPAÑOLA DE EXPLOSIVOS · CASTILLO DE CARBONA · BILBAO ·

Exclusive use of the word "Bilbao" is disclaimed apart from the other features of the mark shown on the drawing.
For Fertilizers.
Claims use since May 4, 1932.

Ser. No. 331,530. A. C. ROBERTS, Kimberton, Pa. Filed Oct. 24, 1932.

ACR

For Plant Foods.
Claims use since Sept. 3, 1932.

Ser. No. 331,711. TENNESSEE CORPORATION, New York, N. Y. Filed Oct. 29, 1932.

Soil-Prep

For Fertilizers and Soil Conditioners.
Claims use since Oct. 19, 1932.

CLASS 12

Construction Materials

Ser. No. 302,974. VEREINIGTE STAHLWERKE AKTIENGESELLSCHAFT, Dusseldorf, Germany. Filed June 28, 1930.



The exclusive use of the words "Patina Brand" is disclaimed apart from the mark as shown.
For Fabricated Structural Shapes—Namely, Sheet Piling, Corrugated Metal Plates Used for Construction Purposes, Metal Roofing, Balustrades, and Railings, Mooring Masts, Poles for Telegraph and Telephone and Electric Transmission Lines, Tin Sheet Covering, Roof Stanchions and Supports for Telephone and Power Lines, Metal Covering for Out-of-Door Power Transformation Stations, Water Spouts, Parts for Railroad Station Equipment—Namely, Roofs, Turntables, Roundhouses, Sheds, Platforms, Boat Slips, Lock Doors, Knocked Down Buildings and Structures—Namely, Steel Barns and Steel Houses, Work Sheds and Building Skeletons, Bridges and Bridge Super-Structure, Railroad Crossings Consisting of Foot Bridges or Traffic Bridges, Floating Docks, Wharfs, Garages, All Said Goods Being Made of Iron or Steel and Used for Constructional Purposes.
Claims use since Dec. 16, 1929.

Ser. No. 317,912. DOMINION STUCCO CO. LIMITED, St. Boniface, Canada. Filed Aug. 8, 1931.

ZONOQUILT

For Thermal Insulating Material Made Out of Insulating Minerals and Wood Pulp.
Claims use since April, 1930.

Ser. No. 326,127. DANVILLE BRICK COMPANY, Danville, Ill. Filed Apr. 15, 1932.

WAYLITE

For Building Block, Building Brick, and Other Unit Shapes and Articles Manufactured in Whole or in Part From Slag; for Masonry Cement and Mortar and Aggregate for Concrete of All Types When Made in Whole or in Part of Furnace Slag.
Claims use since Apr. 28, 1931.

Ser. No. 330,335. MARVIN CANTOR, doing business as Continental Asbestos & Refining Co., New York, N. Y. Filed Sept. 14, 1932.

PROTEXALL

For a Protective Coating Other Than Paint for Damp Proofing and Waterproofing Surfaces of Metal and Wood.
Claims use since June, 1931.

Ser. No. 330,537. CONCRETE TREATMENT MATERIALS, INC., Philadelphia, Pa. Filed Sept. 21, 1932.

"CT"

For Material for Dust Proofing, Hardening, Etc., Concrete Floors or Other Concrete Surfaces.
Claims use since Sept. 17, 1929.

Ser. No. 330,538. CONCRETE TREATMENT MATERIALS, INC., Philadelphia, Pa. Filed Sept. 21, 1932.

DUOTEX

For a Material for Dust Proofing, Hardening, Etc., Concrete Floors or Other Concrete Surfaces.
Claims use since Mar. 1, 1930.

Ser. No. 330,539. CONCRETE TREATMENT MATERIALS, INC., Philadelphia, Pa. Filed Sept. 21, 1932.

KLAXONITE

For a Material for Dust Proofing, Hardening, Etc., Concrete Floors or Other Concrete Surfaces.
Claims use since Mar. 1, 1930.

Ser. No. 331,346. THE RUBEROID CO., Bound Brook, N. J., and New York, N. Y. Filed Oct. 18, 1932.

TIMBERTEX

For Asbestos-Cement Shingles.
Claims use since Sept. 6, 1932.

Ser. No. 331,656. THERMAX CORPORATION, Chewelah, Wash. Filed Oct. 28, 1932.

ABSORBEX

For Insulating Building Board.
Claims use since Oct. 13, 1932.

CLASS 13

Hardware and Plumbing and Steam-Fitting Supplies

Ser. No. 320,236. THE LUDLOW VALVE MANUFACTURING COMPANY, Troy, N. Y. Filed Oct. 20, 1931. Under ten-year proviso.

LUDLOW

Applicant claims ownership of trade-mark registration No. 25,955, issued Jan. 29, 1895.
For Gate Valves, Fire Hydrants, Air Valves, Automatic Drip Valves, Sluice Gates, Balanced Float Valves, Float Valves, Check Valves—Horizontal, Check Valves—Vertical, Foot Valves, Cylinder Operated Valves, Motor Operated Valves, Shear Gates, Flap Valves, Angle Gate Valves, Indicator Posts, Relief Valves, Siamese Connections, Water Cranes, Floor Stands for Operating Means in the Remote Control of Valves, Flush Hydrants, Plug Valves, Mud Valves, Gear or Grease Cover Valves, Hose Valves, Remote Control Valves, Tapping Machine Valves, and Yard Hydrants.
Claims use since 1870.

Ser. No. 320,237. THE LUDLOW VALVE MANUFACTURING COMPANY, Troy, N. Y. Filed Oct. 20, 1931. Under ten-year proviso.

LUDLOW

Applicant claims ownership of trade-mark registration No. 25,955 issued Jan. 29, 1895.
For Gate Valves, Fire Hydrants, Air Valves, Automatic Drip Valves, Sluice Gates, Balanced Float Valves, Float Valves, Check Valves—Horizontal, Check Valves—Vertical, Foot Valves, Cylinder Operated Valves, Motor Operated Valves, Shear Gates, Flap Valves, Angle Gate Valves, Indicator Posts, Relief Valves, Siamese Connections, Water Cranes, Floor Stands for Operating Means in the Remote Control of Valves, Flush Hydrants, Plug Valves, Mud Valves, Gear or Grease Cover Valves, Hose Valves, Remote Control Valves, Tapping Machine Valves, and Yard Hydrants.
Claims use since 1870.

Ser. No. 320,507. PAGE STEEL AND WIRE COMPANY, Adrian, Mich., and Bridgeport, Conn. Filed Oct. 27, 1931.

PAGE
TRAFFIC TAPE

Applicant claims ownership of registered Trade-Mark No. 262,417 issued Oct. 8, 1929.
For Wire Fabric for Fencing.
Claims use since Sept. 24, 1931.

CLASS 14

Metals and Metal Castings and Forgings

Ser. No. 302,976. VEREINIGTE STAHLWERKE AKTIENGESELLSCHAFT, Dusseldorf, Germany. Filed June 28, 1930.

PATINA BRAND

The exclusive use of the words "Patina" and "Brand" is disclaimed apart from the mark as shown.
For Anchors; Wire, Including Rolled Wire, Bright Annealed Wire, Black Annealed Wire, and Drawn Wire; Permanent Way Material for Railways—Namely, Rails, Metal Ties, Fish Plates, Sleepers and Sleeper Plates, Metal Braces Used at Switches and Curbs, Tie Plates; Trough Iron to Protect Conduit and Metal Sheets for Draft Flues, All Said Goods Being Made of Iron or Steel.
Claims use since Dec. 16, 1929.

CLASS 15

Oils and Greases

Ser. No. 326,338. THE PENN-JAY CORPORATION, Akron, Ohio, and New York, N. Y. Filed Apr. 21, 1932.

PERMA-FLO

For Lubricating Oils.
Claims use since Mar. 1, 1932.

Ser. No. 329,065. STANDARD OIL COMPANY, Whiting, Ind., and Chicago, Ill. Filed July 25, 1932.

SYNTHOLUBE MOTOR OIL

For the purpose of this registration the words "Motor Oil" are hereby disclaimed.
For Lubricating Oils.
Claims use since July 8, 1932.

CLASS 16

Paints and Painters' Materials

Ser. No. 319,449. S. C. JOHNSON & SON, Racine, Wis. Filed Sept. 26, 1931.

JOHNSON'S

For Polishing Wax for Coating and Polishing Wood, Metal, and Other Surfaces.
Claims use since Jan. 21, 1931.

Ser. No. 331,760. TALENS & SON, INC., Irvington, N. J. Filed Oct. 31, 1932.

Van Eyck

For Picture Varnish and Painting Medium to be Mixed with Paints.
Claims use since July 1, 1930.

CLASS 17

Tobacco Products

Ser. No. 331,558. LARUS & BROTHER COMPANY, INCORPORATED, Richmond, Va. Filed Oct. 25, 1932.

PARROT

For Smoking Tobacco and Cigarettes.
Claims use since 1889.

CLASS 19

Vehicles, Not Including Engines

Ser. No. 330,996. HUDSON MOTOR CAR COMPANY, Detroit, Mich. Filed Oct. 6, 1932.

AUTOPLANO

For Gasoline Passenger Automobiles.
Claims use since Sept. 16, 1932.

Ser. No. 331,367. DEXTER BROTHERS BOAT COMPANY, South Manchester, Conn. Filed Oct. 19, 1932.

SKIBOAT

The lining of the drawing represents the color black. No claim is made to the representation of the outline of a boat apart from the mark as shown in the drawing.

For Sail Boats, Row Boats, Ice Boats, and Canoes.

Claims use since July 28, 1932.

CLASS 21

Electrical Apparatus, Machines, and Supplies

Ser. No. 315,219. VEREINIGTE STAHLWERKE AKTIENGESELLSCHAFT, Dusseldorf, Germany. Filed May 29, 1931.



The lines appearing on the drawing indicate shading only. The exclusive use of the words "Patina Brand" is disclaimed apart from the mark as shown.

For Frames for Electric Switches, Telegraph Wire, Insulator Brackets, Cable Armor for Electric Cables, Lightning Conductors—All Said Goods Being Made of Iron or Steel.

Claims use since Dec. 16, 1929.

Ser. No. 329,054. MALLORY ELECTRIC CORPORATION, Detroit, Mich. Filed July 25, 1932.

Mallory

The name "Mallory" is disclaimed apart from the mark shown in the drawing.

For Ignition Distributors.

Claims use since Feb. 4, 1930.

Ser. No. 329,541. TUNG-SOL LAMP WORKS, INC., Newark, N. J. Filed Aug. 13, 1932.

TUNG SOL

For Incandescent Electric Bulbs.

Claims use since Apr. 27, 1916.

Ser. No. 331,381. VALENTINE J. MOLZBERGER, doing business as Molzberger Battery Company, Antigo, Wis. Filed Oct. 19, 1932.

Val's

For Storage Batteries.

Claims use since June, 1925.

Ser. No. 331,403. HICKOK OIL CORPORATION, doing business as Hi-Speed Tire and Accessory Co., Toledo, Ohio. Filed Oct. 20, 1932.

POWERKING

For Batteries, Electric Light Bulbs, Spark Plugs, Cables for Electric Circuits, and Parts Thereof.

Claims use since Oct. 3, 1932.

CLASS 22

Games, Toys, and Sporting Goods

Ser. No. 326,384. LEO P. MCMANUS, doing business as Sky-Top Company, Philadelphia, Pa. Filed Apr. 22, 1932.

SKY-TOP

No claim being made to the exclusive right to register the word "Top" apart from the mark as shown.

For Tops of the Character Employed in Playing the Game of Diablo.

Claims use since Apr. 19, 1932.

Ser. No. 331,564. GEORGE F. ROHRSEN, Chicago, Ill. Filed Oct. 25, 1932.



For A Card Game.

Claims use since Oct. 18, 1932.

CLASS 23

Cutlery, Machinery, and Tools, and Parts Thereof

Ser. No. 329,933. THE BRADY CONVEYORS CORPORATION, Chicago, Ill. Filed Aug. 29, 1932.

ASHVEYOR

For Steam Jet Ash Conveyors.

Claims use since Jan. 29, 1929.

Ser. No. 329,934. THE BRADY CONVEYORS CORPORATION, Chicago, Ill. Filed Aug. 29, 1932.

JETVEYOR

For Steam Jet Ash Conveyors.

Claims use since Jan. 29, 1929.

Ser. No. 331,002. NEPPERHAN CONCRETE PRODUCTS CORPORATION, Yonkers, N. Y., assignor to Joltcrete Inc., Yonkers, N. Y., a Corporation of New York. Filed Oct. 6, 1932.

JOLTCRETE

For Building Block Machines.

Claims use since January, 1930.

Ser. No. 331,017. WAFFLED STEAK MACHINES, INC., Buffalo, N. Y. Filed Oct. 6, 1932.

WAFFLER

For Meat Tendering Machines.

Claims use since Sept. 30, 1932.

Ser. No. 331,035. BARNSTEAD STILL AND STERILIZER CO. INC., Boston, Mass. Filed Oct. 7, 1932.



For Water Stills.

Claims use since Sept. 8, 1924.

Ser. No. 331,099. BORON ALLOY TOOL CORPORATION, New York, N. Y. Filed Oct. 10, 1932.

BOROLOY

For Machinist's Cutting, Abrading, and Forming Tools, and Wire Dies.

Claims use since December, 1931.

Ser. No. 331,469. F. A. KOCH & CO., INC., New York, N. Y. Filed Oct. 22, 1932.

JUNIOR

For Razors and Barber Shears.

Claims use since Oct. 17, 1930.

Ser. No. 331,523. AUGUST WOLF, EISENWARENFABRIK GES. M. BESCHR. HAFTUNG, Betzdorf (Sieg) Germany. Filed Oct. 24, 1932.



For Garden and Agricultural Tools—Namely, Hoes and Plate Hoes, Planters, Dibbles, Cultivators, Rakes, Plows, Weeding-Claws, Grubbers, and Spades.

Claims use since Jan. 1, 1922.

CLASS 26

Measuring and Scientific Appliances

Ser. No. 331,585. KATAGIRI CORPORATION, New York, N. Y. Filed Oct. 26, 1932.

Kamerette Junior

For Cameras.

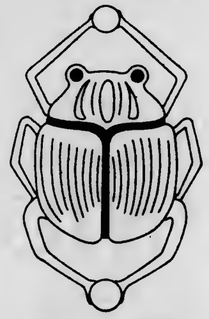
Claims use since Sept. 16, 1932.

CLASS 28

Jewelry and Precious-Metal Ware

Ser. No. 321,176. SUPREME COUNCIL OF SCARAB, Lawrence, Kans. Filed Nov. 16, 1931.

SCARAB



For Pins, Keys, and Medals Made of or Plated with Precious Metal.
Claims use since 1910.

CLASS 34

Heating, Lighting, and Ventilating Apparatus, Not Including Electrical Apparatus

Ser. No. 330,726. FLOYD P. SHULTZ, Des Moines, Iowa. Filed Sept. 26, 1932.

MELL-O-HEAT

No claim is made to the word "Heat" except in connection with the mark shown.
For Oil Burners.
Claims use since Sept. 12, 1932.

Ser. No. 331,514. QUEEN STOVE WORKS INCORPORATED, Albert Lea, Minn. Filed Oct. 24, 1932.

SPIR O FLAME

No claim is made to the exclusive right of the word "Flame" apart from the trade-mark as shown.
For Oil Burners for Domestic and Commercial Heating and Cooking Purposes.
Claims use since Sept. 30, 1931.

Ser. No. 331,579. THE A. C. GILBERT COMPANY, New Haven, Conn. Filed Oct. 26, 1932.

GILBERT

For Portable Electrically Operated Humidifiers for Conditioning the Air in Rooms.
Claims use since July 1, 1913.

CLASS 35

Belting, Hose, Machinery Packing, and Non-metallic Tires

Ser. No. 330,620. HENRY CROSSLEY, Bolton, England. Filed Sept. 24, 1932.



For Fiber Packing for Steam and Hydraulic Purposes.
Claims use since Jan. 2, 1918.

CLASS 37

Paper and Stationery

Ser. No. 329,755. EDWARD G. SOEBBING, Kansas City, Mo. Filed Aug. 22, 1932.

THE WHEEL OF LIFE

For School and Correspondence Writing Tablets, Composition and Note Books, Loose Leaf Note Book Fillers, Loose Leaf Note Book Binders, Papeteries.
Claims use since Dec. 8, 1930.

Ser. No. 330,123. ALBERT W. ENGEL, doing business as Engel Art Corners Mfg. Co., Chicago, Ill. Filed Sept. 6, 1932.

TRANSPARO

For Picture or Sheet Mounting Corners.
Claims use since October, 1931.

Ser. No. 330,809. THE CHAMPION FIBRE COMPANY, Canton, N. C. Filed Sept. 30, 1932.

TUFTEAR

For Paper Which is Especially Suitable for Tag and/or Folder Stock.
Claims use since Jan. 1, 1930.

Ser. No. 331,895. HAMPSHIRE PAPER COMPANY, South Hadley Falls, Mass. Filed Nov. 4, 1932.

Appraisal Ledger

Applicant disclaims the exclusive right to the word "Ledger" apart from the mark shown in the drawing.
For Writing and Printing Paper.
Claims use since Jan. 28, 1932.

Ser. No. 331,896. HAMPSHIRE PAPER COMPANY, South Hadley Falls, Mass. Filed Nov. 4, 1932.

PENDRIFT BOND

Applicant disclaims the exclusive right to the word "Bond" apart from the mark shown in the drawing.
For Writing and Printing Paper.
Claims use since Mar. 2, 1932.

Ser. No. 331,975. JOSEPH & ANDERSCH, Auburn, Calif. Filed Nov. 5, 1932.

LIPTIPS

For Packets of Cleansing Tissue.
Claims use since Sept. 10, 1932.

CLASS 38

Prints and Publications

Ser. No. 320,160. PAUL DIETERLE, doing business as Museums Supplies Company, Binghamton, N. Y. Filed Oct. 17, 1931.

ARPRO

For Framed Prints and Pictures.
Claims use since Sept. 24, 1931.

Ser. No. 331,859. JOHN L. HOFF, Chicago, Ill. Filed Oct. 17, 1932.

HOT CROSS PUNS
With a few cold facts

For Periodical or Newspaper Column.
Claims use since Sept. 24, 1932.

Ser. No. 331,794. M. KOENIGSBERG, New York, N. Y. Filed Nov. 1, 1932.

SHAMERICA

For Periodical.
Claims use since Oct. 15, 1932.

CLASS 39

Clothing

Ser. No. 322,844. V. & F. W. FILOON COMPANY, Brockton, Mass. Filed Jan. 9, 1932.

NOO-LIF

For Leather Innersoles and Leather Counters for Shoes and Other Footwear.
Claims use since Feb. 18, 1931.

Ser. No. 324,716. H. LOEB & CO. INC., New York, N. Y. Filed Mar. 2, 1932. Under 10-year proviso.

STUTTGARTER

For Men's, Women's, and Children's Underwear Made of Knitted, Netted, and/or Textile Fabrics; Bathing Suits, Sport Coats, Sweater Suits and Coats, Vests for Under and Outer Wear, Jackets, Petticoats, Nightshirts, Nightgowns, and Pyjamas.
Claims use since 1889.

Ser. No. 326,728. LILYAN MALMSTEAD, Worcester, Mass. Filed Apr. 30, 1932.



Applicant disclaims the right to the exclusive use of the words "Trade Mark."
For Corsets, Girdles, Brassières, and Underwear for Girls and Women.
Claims use since June, 1931.

Ser. No. 326,766. WILSON BROTHERS, Chicago, Ill. Filed May 4, 1932.

STRAIGHT LINE Value

The word "Value", apart from the mark shown, is hereby disclaimed.
For Dress and Negligee Shirts, Pajamas, Underwear, and Neckties.
Claims use since Feb. 10, 1932.

Ser. No. 329,832. HARRINGTON & WARING, New York, N. Y. Filed Aug. 25, 1932.

Won't Run

No claim is made to the words "Won't Run" apart from the mark shown in the drawing.
For Hosiery.
Claims use since July 7, 1932.

Ser. No. 330,748. INTERNATIONAL SHOE CO., St. Louis, Mo. Filed Sept. 28, 1932.

Pedi-Fit
A
SUNDIAL
SHOE

The word "Fit" is not claimed apart from the trade-mark shown. No claim is made to the word "Shoe" apart from the mark shown.

For Boots and Shoes of Leather, Fabric, and/or Combinations Thereof.

Claims use since Apr. 1, 1932.

Ser. No. 330,784. THE ENRO SHIRT COMPANY, INC., Louisville, Ky. Filed Sept. 29, 1932.

LOUNJAMA

For Pajamas for Men, Women, and Children.
Claims use since Sept. 1, 1932.

Ser. No. 330,796. MIRIAM NEEDLES, Atlantic City, N. J. Filed Sept. 29, 1932.

Swan-Yay

For Ladies' Undergarments—Namely Hose Supporters, Brassières, Corselets, Slips, Athletic Shorts, and Underdrawers.

Claims use since Sept. 8, 1932.

CLASS 39

Clothing

Ser. No. 331,123. THE ROYAL NOVELTY CO., New York, N. Y. Filed Oct. 10, 1932.

WINDGARD

For Men's, Women's and Children's Garments—Namely, Skirts and Pants.

Claims use since June 1, 1932.

Ser. No. 331,265. HENRY POLLAK, INC., New York, N. Y. Filed Oct. 14, 1932.

FAWNTRA

For Women's and Children's Felt Hats, Untrimmed.
Claims use since July 26, 1932.

Ser. No. 331,326. WELLS-LAMONT-SMITH CORPORATION, Minneapolis, Minn. Filed Oct. 17, 1932.

SOUTHERN
LINES
PACIFIC

For Work Gloves of Fabric and Combined Fabric and Leather.

Claims use since Aug. 15, 1932.

Ser. No. 331,327. WELLS-LAMONT-SMITH CORPORATION, Minneapolis, Minn. Filed Oct. 17, 1932.

UNION
PACIFIC

For Work Gloves of Fabric and Combined Fabric and Leather.

Claims use since Aug. 15, 1932.

Ser. No. 331,388. COHEN, GOLDMAN & CO., INC., New York, N. Y. Filed Oct. 14, 1932.

Tropi-tex

For Men's, Boys', and Children's Outer Garments Consisting of Coats, Vests, Pants, Trousers, Top-Coats, Overcoats, and Summer Clothing for Men, Boys, and Children Consisting of Coats, Vests, and Pants Made of Either Woven or Knitted Material.

Claims use since June 1, 1932.

Ser. No. 331,480. WELLS-LAMONT-SMITH CORPORATION, Minneapolis, Minn. Filed Oct. 22, 1932.

MISSOURI
PACIFIC
LINES

For Work Gloves of Fabric and Combined Fabric and Leather.

Claims use since Aug. 15, 1932.

Ser. No. 331,617. HOLEPROOF HOSIERY CO., Milwaukee, Wis. Filed Oct. 27, 1932.



Exclusive use to the word "Hosiery" and to the outline representation of the wrap is disclaimed apart from the other features of the trade-mark as shown in the drawing.

For Hosiery.

Claims use since Oct. 7, 1932.

Ser. No. 331,638. FUNK & KLEIN, INC., New York, N. Y. Filed Oct. 28, 1932.

JO-JO

For Women's, Misses', and Junior Coats.
Claims use since Nov. 30, 1931.

Ser. No. 331,738. GOODALL WORSTED CO., Sanford, Me. Filed Oct. 31, 1932.

Goodall SUMA Suit

No claim is made to the exclusive use of the word "Suit" separate and apart from the mark shown in the drawing.

For Men's and Boys' Outer Wearing Apparel, Consisting of Coats, Pants, Knickerbockers, and Vests.

Claims use since Sept. 1, 1932.

Ser. No. 331,739. GOODALL WORSTED CO., Sanford, Me. Filed Oct. 31, 1932.

SUMA

For Men's and Boys' Outer Wearing Apparel, Consisting of Coats, Pants, Knickerbockers, and Vests.

Claims use since Sept. 1, 1932.

Ser. No. 331,899. LAKEWOOD SILK HOSIERY MILLS, INC., Charlotte, N. C. Filed Nov. 4, 1932.

Multi-Pul-Length

Applicant disclaims the exclusive right to the use of the word "Length" except in association with the other features of the mark.

For Hosiery.

Claims use since Oct. 19, 1932.

CLASS 42

Knitted, Netted, and Textile Fabrics

Ser. No. 326,550. S. H. KRESS & Co., New York, N. Y. Filed Apr. 27, 1932.

Swanee

For Linen Towels, Sheets, Tablecloths, Textile Blankets, Textile Bath Towels, Mattress Ticking, Counterpanes, Handkerchiefs, Cretonne in the Piece, Turkish Towels, Pillow Cases, Napkins, Seamless Textile Rugs, Face Cloths, and Bedspreads.
Claims use since Apr. 18, 1932.

Ser. No. 330,967. RIEGEL TEXTILE CORPORATION, New York, N. Y. Filed Oct. 5, 1932.



No claim being made to the exclusive use of the word "Products" apart from the mark as shown in the drawing.
For Cotton Piece Goods.
Claims use since Sept. 1, 1932.

CLASS 43

Thread and Yarn

Ser. No. 331,584. I. G. FARBENINDUSTRIE AKTIENGESELLSCHAFT, Frankfort-on-the-Main, Germany. Filed Oct. 26, 1932.

Woolstra

For Threads and Yarns.
Claims use since June 7, 1932.

CLASS 44

Dental, Medical, and Surgical Appliances

Ser. No. 329,830. THE COLUMBUS DENTAL MANUFACTURING CO., Columbus, Ohio. Filed Aug. 25, 1932.



No claim being made to the representation of the slot. The trade-mark consists of a circular design ground in the lingual face of the tooth at or near the bottom of the slot in the lingual face of the tooth.
For Artificial Teeth.
Claims use since July 25, 1932.

CLASS 45

Beverages, Nonalcoholic

Ser. No. 326,669. CALIFORNIA VINEYARDS COMPANY, INC., Chicago, Ill. Filed May 2, 1932.

FORBIDDEN JUICE

No claim is made to the word "Juice" except in the association shown on the drawing.
For Grape Juice and Grape Concentrate Used for Making Soft Drinks.
Claims use since February, 1931.

Ser. No. 330,934. ERWIN SIBLEY, Milledgeville, Ga. Filed Oct. 4, 1932.

Repeal

For Non-Alcoholic, Maltless Beverages Sold for Soft Drinks and Syrups Therefor.
Claims use since Oct. 3, 1932.

Ser. No. 331,419. HIRAM RICKER & SONS, Poland Springs, South Poland, Me. Filed Oct. 20, 1932. Under 10-year proviso.



The drawing is lined for shading only.
For Mineral Spring Water.
Claims use since 1860.

CLASS 46

Foods and Ingredients of Foods

Ser. No. 300,714. FOREMOST DAIRY PRODUCTS INCORPORATED, Jacksonville, Fla. Filed May 17, 1930.

FOREMOST

For Fresh Milk, Buttermilk, Chocolate Milk, Cream, Ice Cream, and Butter.
Claims use since Mar. 8, 1929.

Ser. No. 319,176. HAWAIIAN PINEAPPLE COMPANY, LTD., San Francisco, Calif., and Honolulu, Hawaii. Filed Sept. 18, 1931.



The drawing is lined to show contrasting colors, no claim being made to color as an essential feature. The notation "1" shown on the drawing is disclaimed.
For Canned Pineapple.
Claims use since 1902.

Ser. No. 319,713. AMERICAN KITCHENS, INC., Chicago, Ill. Filed Oct. 5, 1931.



The picture is fanciful. "Ting Hou" means "The Very Best." Applicant makes no claim to the exclusive use of the words "Ting Hou" or the Chinese characters which mean "Ting Hou" apart from the mark shown in the drawing.
For Chop Suey.
Claims use since Aug. 29, 1931.

Ser. No. 323,964. SOLO PRODUCTS CO., Chicago, Ill. Filed Feb. 8, 1932.

SOLO

For Malt Syrup.
Claims use since December, 1906.

Ser. No. 326,334. MONTGOMERIE & CO. LTD., Glasgow, Scotland. Filed Apr. 21, 1932.

"U-JEN"

Registration of this trade-mark shall give no rights to the exclusive use of the letter "U."
For Bread, Cakes, Biscuits, Rusks, Wheat Flour, Malted Wheat Flour, Malted Barley Flour, Infants' and Invalids' Foods, and Flavouring Materials for Use as Ingredients in Food.
Claims use since June 10, 1930.

Ser. No. 327,163. MID-WEST CONFECTION EQUIPMENT COMPANY, Kearney, Nebr. Filed May 16, 1932.

LOLLY ROLL

No claim is made to the word "Roll" apart from the mark as shown on the drawing.
For Candy Coated Ice Cream Confections.
Claims use since Apr. 1, 1931.

Ser. No. 327,622. ALBERS BROS. MILLING CO., Portland, Oreg. Filed June 1, 1932.

pearls of wheat

The word "Wheat" is disclaimed apart from the mark shown on the drawing.
For Breakfast Food Made of Wheat.
Claims use since Dec. 16, 1910.

Ser. No. 327,735. NELSON ASSOCIATES, LTD., Los Angeles, Calif. Filed June 4, 1932.

AMRITA

For Canned Fruit Juices with Pulp for Food Purposes.
Claims use since Apr. 5, 1932.

Ser. No. 328,287. MRS. WILLIAM F. BEIER, Kenmore, N. Y. Filed June 15, 1932.

SARAH HEDDEN'S

For Candy.
Claims use since Sept. 18, 1930.

Ser. No. 328,565. ALLEN V. SMITH, INC., Marcellus Falls, N. Y. Filed July 5, 1932.

For Pearl Barley, Whole and Split Dried Peas, Dried Beans, and Dried Lentils.
Claims use since Nov. 1, 1931.

Ser. No. 328,887. EZL. DUNWOODY CO., Philadelphia, Pa. Filed July 19, 1932.

SUPER X

For Poultry and Dairy Feeds, Mixed Grains, Horse and Hog Feeds, Meat Scrap for Poultry and Animal Foods, a By-Product Made from the Manufacture of Grease, Tallow, and Oils; Fish Meal, Linseed Oil Meal, Gluten Meal, and Feed; Cotton Seed Meal, All Whole Ground and Crushed; Grains, Alfalfa Hay, and Ground Alfalfa; Grain By-Products, Consisting of Bran, Middlings, Oat Feed, and Hominy Feed; Dried Skim Milk and Dried Butter Milk for Poultry and Animal Feeding, Soya Bean Meal.
Claims use since September, 1924.

Ser. No. 329,384. PLEE-ZING, INC., Chicago, Ill. Filed Aug. 6, 1932.

VIM VIGOR VITALITY DOG FOOD

No claim is made under the statute to the words "Dog Food" apart from the mark as shown.
For Dog Food.
Claims use since November, 1928.

Ser. No. 330,095. THE LEADWAY STORES CORPORATION, Wilmington, Del. Filed Sept. 3, 1932.

LEADWAY

For Canned Fruits.
Claims use since Aug. 25, 1932.

Ser. No. 330,307. NAAMLOOZE VENNOOTSCHAP DROSTE'S CACAO- EN CHOCOLADEFABRIEKEN, Haarlem, Netherlands. Filed Sept. 13, 1932.

DROSTE'S NEO COCOA

Exclusive use of the word "Cocoa" is disclaimed apart from the mark as shown in the drawing.
For Cocoa.
Claims use since May 15, 1932.

Ser. No. 330,525. STANDARD NUT MARGARINE CO., Indianapolis, Ind. Filed Sept. 20, 1932.

GOLMAR

For Oleomargarine.
Claims use since Aug. 11, 1920.

Ser. No. 330,527. STANDARD NUT MARGARINE CO., Indianapolis, Ind. Filed Sept. 20, 1932.

BREDNUT

For Oleomargarine.
Claims use since Sept. 29, 1920.

Ser. No. 330,692. BRAUN BAKING COMPANY, Pittsburgh, Pa. Filed Sept. 27, 1932.

CRESTO'GOLD

For Cakes.
Claims use since Aug. 11, 1932.

Ser. No. 330,736. AKTIEBOLAGET SKÅNSKA SPISEBRÖDSFABRIKEN, Kristianstad, Sweden. Filed Sept. 28, 1932.

Ryking

For Hard Bread, Especially Hard Rye Bread in Flat Cakes.
Claims use since July 1, 1932.

Ser. No. 331,044. EUROPA SALES CORPORATION, New York, N. Y. Filed Oct. 7, 1932.

EUROPA

The word "Europa," in Greek mythology, refers to a sister of Cadmus, carried off to Delphi by Zeus in the form of a white bull.
For Candies, Chocolates, and Cocoa.
Claims use since Oct. 8, 1932.

Ser. No. 331,101. CONSERVERIES EMILE CHEMIN, SOCIETE A RESPONSABILITE LIMITEE, Paris, France. Filed Oct. 10, 1932.

LP 76

No claim being made to the words "Paris" or "Bretagne" apart from the mark shown.
For Canned Fish and Canned Fish Roe.
Claims use since June, 1931.

Ser. No. 331,215. HYMAN J. AROESTY, doing business as Aroesty Products, Rochester, N. Y. Filed Oct. 13, 1932.

R.S.T.

For Mayonnaise, Sandwich Spread, Russian Dressing and Table Vegetable Oil for Use in Substitution for Olive Oil.
Claims use since Dec. 31, 1929.

Ser. No. 331,310. THE LIGHT GRAIN & MILLING CO., Liberal, Kans. Filed Oct. 17, 1932.

GRIDDLE KING

For Self-Rising Pancake Flour.
Claims use since Oct. 1, 1932.

Ser. No. 331,436. MILLERS PRODUCTS CORP., New York, N. Y. Filed Oct. 21, 1932.

CIRCLE 8 EIGHT

For Wheat Flour.
Claims use since Jan. 15, 1931.

Ser. No. 331,497. JOHN P. GOMMELS, doing business as The GoMel Korn Shop, Quincy, Ill. Filed Oct. 24, 1932.

GOMEL KORN

The exclusive right to the use of the word "Korn" apart from the mark shown on the drawing is hereby disclaimed.
For Pop Corn Confections.
Claims use since Apr. 2, 1932.

Ser. No. 331,642. JOHN F. JELKE COMPANY, Chicago, Ill. Filed Oct. 28, 1932.

CHOCOLATINE

For Chocolate Spread and Flavoring Compound.
Claims use since Sept. 14, 1932.

Ser. No. 331,643. SAMUEL B. KIRK, Philadelphia, Pa. Filed Oct. 28, 1932.

JULLICUM

For Preparation for Coagulating or Congealing Milk.
Claims use since Nov. 21, 1931.

Ser. No. 331,688. JOHN F. JELKE COMPANY, Chicago, Ill. Filed Oct. 29, 1932.

GOOD LUCK

For Chocolate Flavored Evaporated Milk.
Claims use since Sept. 17, 1932.

Ser. No. 331,877. STANDARD BRANDS INCORPORATED, New York, N. Y. Filed Nov. 3, 1932. Under section 5b of the act of 1905, as amended in 1920.

FLEISCHMANN'S

Applicant is the owner of registration No. 151,760, of February 14, 1922, effected on the ground of actual and exclusive use by the applicant's predecessors in business of the mark shown therein on the goods recited in said registration as a trade-mark for ten years next preceding February 20, 1905, and the mark has been used by the applicant on an invertase preparation suitable for use in the conversion of sucrose in the preparation of foods and ingredients of foods in interstate commerce for at least one year.
For Invertase Preparation Suitable for Use in the Conversion of Sucrose in the Preparation of Foods and Ingredients of Foods.
Claims use since Oct. 29, 1931.

Ser. No. 331,903. PILLSBURY FLOUR MILLS COMPANY, Minneapolis, Minn. Filed Nov. 4, 1932.

DELITEX

For Wheat Flour.
Claims use since Oct. 24, 1932.

CLASS 47

Wines

Ser. No. 332,024. BLOCH BROS., Glasgow, Scotland. Filed Nov. 10, 1932.

GOVERNOR

For Port Wine.
Claims use since 1924.

CLASS 48

Malt Beverages and Liquors

Ser. No. 331,478. ERWIN SIBLEY, Milledgeville, Ga. Filed Oct. 22, 1932.

Repeal

For Malt Beverage with Not More Than the Legal Alcoholic Content and Syrups Therefor.
Claims use since Oct. 3, 1932.

CLASS 49

Distilled Alcoholic Liquors

Ser. No. 329,658. TANQUERAY, GORDON & CO., LIMITED, London, England. Filed Aug. 18, 1932.

Estd 1769 GORDON'S COCKTAIL TANQUERAY GORDON & CO. LIMITED THE DISTILLERY LONDON

No claim is made to the words "Cocktail," "The Distillery," and "London" apart from the trade-mark as shown in the drawing.
For Alcoholic Cocktails.
Claims use since Oct. 15, 1924.

Ser. No. 330,493. JOSEPH E. SEAGRAM & SONS LIMITED, Waterloo, Ontario, Canada. Filed Sept. 19, 1932.

"OLD TIMES"

For Whiskey and Potable Spirits.
Claims use since 1886.

Ser. No. 332,023. BLOCH BROS., Glasgow, Scotland. Filed Nov. 10, 1932.

OLD COURT

For Whiskey.
Claims use since 1929.

Ser. No. 332,026. BLOCH BROS., Glasgow, Scotland. Filed Nov. 10, 1932.

LOCHMILLER

For Whiskey.
Claims use since 1925.

Ser. No. 332,027. BLOCH BROS., Glasgow, Scotland. Filed Nov. 10, 1932.

LOCHVANNA

For Whiskey.
Claims use since 1925.

Ser. No. 332,029. BLOCH BROS., Glasgow, Scotland. Filed Nov. 10, 1932.

STATESMAN

For Whiskey.
Claims use since 1919.

CLASS 50

Merchandise Not Otherwise Classified

Ser. No. 330,830. PIONEER PAPER STOCK COMPANY, Chicago, Ill. Filed Sept. 30, 1932.

Seelpad

For Excelsior Packing Pads.
Claims use since June 1, 1932.

TRADE-MARK REGISTRATIONS GRANTED

[ACT OF FEBRUARY 20, 1905]

DECEMBER 13, 1932

299,560. PAINTS (READY-MIXED, PASTE FORM, AND DRY), PAINT ENAMELS, LACQUERS, JAPANS, VARNISHES, STAINS, FILLERS, AND PAINTS, VARNISHES, LACQUERS, AND ENAMELS OF A SYNTHETIC NATURE, OR CONTAINING SYNTHETIC RESINS. THE SHERWIN-WILLIAMS COMPANY, Cleveland, Ohio.

Filed July 23, 1932. Serial No. 329,027. PUBLISHED SEPTEMBER 27, 1932. Class 16.

299,561. SHOWCARD PAINTS IN THE NATURE OF WATER COLOR PAINTS FOR USE ON SIGNS, SHOWCARDS, WINDOW BACKGROUNDS, AND THE LIKE. WALTER MORGAN COMPANY INC., Washington, D. C.

Filed July 21, 1932. Serial No. 328,962. PUBLISHED SEPTEMBER 27, 1932. Class 16.

299,562. SOUND-DEADENING AND INSULATING FELT. HYDREX ASPHALT PRODUCTS CORPORATION, New York, N. Y.

Filed June 22, 1932. Serial No. 328,293. PUBLISHED SEPTEMBER 13, 1932. Class 12.

299,563. STOCK FEED AND POULTRY FEED, AND PANCAKE AND WAFFLE FLOUR. CENTENNIAL FLOURING MILLS COMPANY, Seattle, Wash.

Filed June 21, 1932. Serial No. 328,159. PUBLISHED OCTOBER 4, 1932. Class 46.

299,564. LACQUER, VARNISH, STAIN, AND PAINT IN READY MIXED OR PASTE FORM. VELSICOL CORPORATION, Chicago, Ill.

Filed March 30, 1932. Serial No. 325,669. PUBLISHED SEPTEMBER 27, 1932. Class 16.

299,565. PAPER USED FOR PRINTING, BINDING, AND WRAPPING. G. A. ACKERMANN PAPER MILLS, INC., Chicago, Ill.

Filed January 29, 1931. Serial No. 310,507. PUBLISHED SEPTEMBER 27, 1932. Class 37.

299,566. WHEAT FLOUR AND CORN MEAL. THE BARNSTABLE FEED & SUPPLY Co's INC., doing business as The Barnstable-Schaper-Ware Feed & Supply Companies, Inc., Nokomis, Ill.

Filed March 1, 1932. Serial No. 324,648. PUBLISHED OCTOBER 4, 1932. Class 46.

299,567. PAINT OILS, BAKING VARNISHES, TIN PLATE LACQUERS, PIPE COATINGS, AND PAPER AND CLOTH COATINGS; SUCH COATINGS BEING IN THE NATURE OF VARNISH-TYPE PAINT. BALL CHEMICAL COMPANY, Pittsburgh, Pa.

Filed March 9, 1932. Serial No. 324,950. PUBLISHED MAY 31, 1932. Class 16.

299,568. PAPER AND ENVELOPES, PARTICULARLY BOOK PAPERS AND ANNOUNCEMENT PAPERS AND ENVELOPES. UNITED STATES ENVELOPE COMPANY, Springfield, Mass.

Filed February 29, 1932. Serial No. 324,634. PUBLISHED OCTOBER 4, 1932. Class 37.

299,569. LIME. THE WESTERN LIME & CEMENT Co., Milwaukee, Wis.

Filed July 23, 1932. Serial No. 329,033. PUBLISHED SEPTEMBER 20, 1932. Class 12.

299,570. FINISHING HYDRATED LIME. THE KELLEY ISLAND LIME AND TRANSPORT COMPANY, Cleveland, Ohio.

Filed July 25, 1932. Serial No. 329,051. PUBLISHED SEPTEMBER 27, 1932. Class 12.

299,571. COMPOSITION OF MATTER FOR WATERPROOFING CONCRETE AND CEMENT MORTAR, AND FOR A COMPOSITION OF MATTER FOR COLORING CONCRETE AND CEMENT MORTAR, AND FOR A COMPOSITION OF MATTER FOR WATERPROOFING AND COLORING CONCRETE AND CEMENT MORTAR. THE MASTER BUILDERS COMPANY, Cleveland, Ohio.

Filed July 28, 1932. Serial No. 329,148. PUBLISHED SEPTEMBER 13, 1932. Class 12.

299,572. TILE, BRICKS, BUILDING BLOCKS, COLUMNS, STEPS, WALL BOARDS, WALL PANELS, MOLDED CEMENTITIOUS BLOCKS OR PANELS FOR USE AS FLOORING OR WALLING, MOLDED CEMENTITIOUS BLOCKS OR PANELS SIMULATING MARBLE, TRAVERTIN, GRANITE AND THE LIKE, CEMENTITIOUS COMPOSITIONS FOR USE IN MAKING ANY OR ALL OF THE ABOVE MENTIONED ARTICLES, AND PLASTIC AND CEMENTITIOUS COATINGS FOR PROTECTING AND PRESERVING WOOD, STEEL, IRON, AND OTHER CONSTRUCTION MATERIALS. TAJMAL LIMITED, Hamilton, Ontario, Canada.

Filed June 21, 1932. Serial No. 328,192. PUBLISHED SEPTEMBER 13, 1932. Class 12.

299,573. CARBON BLACK. GODFREY L. CABOT, INC., Boston, Mass.

Filed August 11, 1932. Serial No. 329,465. PUBLISHED SEPTEMBER 27, 1932. Class 16.

299,574. MINERAL WATER AND CARBONATED WATER, INCLUDING CARBONATED WATER IN SIPHONS. ORANGE-CRUSH COMPANY, Chicago. Ill.

Filed July 11, 1932. Serial No. 328,697. PUBLISHED OCTOBER 4, 1932. Class 45.

299,575. LUMBER. CALIFORNIA REDWOOD ASSOCIATION, San Francisco, Calif.

Filed August 1, 1932. Serial No. 329,255. PUBLISHED SEPTEMBER 13, 1932. Class 12.

299,576. NON-ALCOHOLIC NON-CEREAL MALTLESS BEVERAGES SOLD AS SOFT DRINKS, AND SIRUPS AND EXTRACTS FOR MAKING THE SAME. HOMER NEER AND WILLIAM DUANE MORGAN, Springfield, Ohio.

Filed August 2, 1932. Serial No. 329,291. PUBLISHED OCTOBER 4, 1932. Class 45.

299,577. SAUSAGE. F. G. VOGT & SONS, INCORPORATED, Philadelphia, Pa.

Filed August 5, 1932. Serial No. 329,362. PUBLISHED OCTOBER 4, 1932. Class 46.

299,578. ROLLER COASTERS AND SEE-SAW MERRY-GO-ROUNDS. S. L. ALLEN & Co., INC., Philadelphia, Pa.

Filed August 11, 1932. Serial No. 329,491. PUBLISHED OCTOBER 4, 1932. Class 22.

299,579. PACKAGED READY-CUT STRIPS, BLOCKS, AND ROUND WOOD FOR CHILDREN'S USE IN MAKING TOYS. BERTRAM F. KEHERR, doing business as Kiddipak Mfg. Co., Seattle, Wash.

Filed August 16, 1932. Serial No. 329,557. PUBLISHED OCTOBER 4, 1932. Class 22.

299,580. WHISKEY. BLOCH BROS., Glasgow, Scotland.

Filed August 16, 1932. Serial No. 329,572. PUBLISHED OCTOBER 4, 1932. Class 49.

299,581. THERMAL AND SOUND INSULATING WALL BOARD. PLASTERGON WALL BOARD COMPANY, Buffalo, N. Y.

Filed August 18, 1932. Serial No. 329,651. PUBLISHED OCTOBER 4, 1932. Class 12.

299,582. THERMAL AND SOUND INSULATING WALL BOARD. PLASTERGON WALL BOARD COMPANY, Buffalo, N. Y.

Filed August 18, 1932. Serial No. 329,652. PUBLISHED OCTOBER 4, 1932. Class 12.

299,583. GOLF TEE HOLDING WRISTLETS. CHARLES ANTON GLOCK, Chatham, Ontario, Canada.

Filed August 24, 1932. Serial No. 329,795. PUBLISHED OCTOBER 4, 1932. Class 22.

299,584. BREAD. SEVAIN A. HARAM, doing business as S. A. Haram, New York, N. Y.

Filed August 26, 1932. Serial No. 329,856. PUBLISHED OCTOBER 4, 1932. Class 46.

299,585. LUMBER PRODUCTS—I. E., DRESSED AND UNDRESSED LUMBER, FLOORING, SIDING, SHIP-LAP, JOISTS, CEILING, SHELVING, AND FINISHED LUMBER. LONG-BELL LUMBER SALES CORPORATION, Kansas City, Mo., and Longview, Wash.

Filed August 22, 1932. Serial No. 329,748. PUBLISHED OCTOBER 4, 1932. Class 12.

299,586. NON-ALCOHOLIC, NON-CEREAL MALTLESS BEVERAGES SOLD AS SOFT DRINKS, AND SIRUPS AND EXTRACTS FOR MAKING THE SAME. JOSEPH SCHLACHTER, doing business as The Poughkeepsie Mineral Water Works, Poughkeepsie, N. Y.

Filed August 27, 1932. Serial No. 329,903. PUBLISHED OCTOBER 4, 1932. Class 45.

299,587. BASEBALL BATS. HILLERICH & BRADSBY CO., Louisville, Ky.

Filed August 29, 1932. Serial No. 329,949. PUBLISHED OCTOBER 4, 1932. Class 22.

299,588. STOCK FEED AND POULTRY FEED. CENTENNIAL FLOURING MILLS COMPANY, Seattle, Wash.

Filed June 30, 1932. Serial No. 328,417. PUBLISHED OCTOBER 4, 1932. Class 46.

299,589. PLATE VALVES, ORIFICE FITTINGS, AND PARTS THEREFOR USED FOR MEASURING THE FLOW OF FLUIDS THRU PIPE LINES BY THE DIFFERENTIAL PRESSURE METHOD THRU AN ORIFICE PLATE. BYRON JACKSON CO., Los Angeles, Calif.

Filed July 6, 1932. Serial No. 328,576. PUBLISHED OCTOBER 4, 1932. Class 26.

299,590. RANGE OIL BURNERS ADAPTED FOR INSTALLATION IN DOMESTIC RANGES AND STOVES ORIGINALLY DESIGNED TO USE WOOD OR COAL FOR FUEL. HANSON-GATES CO., INC., Wakefield, Mass.

Filed June 6, 1932. Serial No. 327,753. PUBLISHED OCTOBER 4, 1932. Class 34.

299,591. GAUGES FOR GAUGING BORE LIMITS. AKTIEBOLAGET SVENSKA KULLAGERFABRIKEN, Gottenborg, Sweden.

Filed April 14, 1932. Serial No. 326,074. PUBLISHED OCTOBER 4, 1932. Class 26.

299,592. CORRESPONDENCE PAPERS AND ENVELOPES, PARTICULARLY THOSE USED FOR ANNOUNCEMENTS. UNITED STATES ENVELOPE COMPANY, Springfield, Mass.

Filed February 29, 1932. Serial No. 324,633. PUBLISHED OCTOBER 4, 1932. Class 37.

299,593. CORRESPONDENCE PAPERS AND ENVELOPES. UNITED STATES ENVELOPE COMPANY, Springfield, Mass.

Filed February 29, 1932. Serial No. 324,632. PUBLISHED OCTOBER 4, 1932. Class 37.

299,594. PAPER AND ENVELOPES, PARTICULARLY BOOK PAPERS AND ANNOUNCEMENT PAPERS AND ENVELOPES. UNITED STATES ENVELOPE COMPANY, Springfield, Mass.

Filed February 29, 1932. Serial No. 324,631. PUBLISHED OCTOBER 4, 1932. Class 37.

299,595. DOUGHNUTS AND DOUGHNUT FLOUR. JOE LOWE CORPORATION, Brooklyn, N. Y.

Filed February 8, 1932. Serial No. 323,786. PUBLISHED OCTOBER 4, 1932. Class 46.

299,596. NICKEL, NICKEL INGOTS AND ALLOYS, ETC. THE INTERNATIONAL NICKEL COMPANY, INC., New York, N. Y.

Filed September 30, 1931. Serial No. 319,579. PUBLISHED OCTOBER 4, 1932. Class 14.

299,597. CLEANERS FOR SCHOOL SLATES, PEN WIPERS, AND STAMP MOISTENERS MADE IN FANCIFUL FORMS OF INDIA RUBBER OF ALL KINDS, PARTICULARLY MADE OF INDIA RUBBER HAVING SPONGE-LIKE OR MOSS-LIKE APPEARANCE. "SEMPERIT" OESTERREICHISCH-AMERIKANISCHE GUMMIWERKE AKTIENGESELLSCHAFT, Vienna, Austria.

Filed September 3, 1931. Serial No. 318,723. PUBLISHED SEPTEMBER 27, 1932. Class 37.

299,598. WALL BOARD, PLASTER BOARD AND PLASTER. UNITED STATES GYPSUM COMPANY, Chicago, Ill.

Filed August 31, 1931. Serial No. 318,607. PUBLISHED SEPTEMBER 20, 1932. Class 12.

299,599. FLEXIBLE MACHINERY COUPLINGS. THOMAS FLEXIBLE COUPLING COMPANY, Warren, Pa.

Filed August 24, 1931. Serial No. 318,381. PUBLISHED OCTOBER 4, 1932. Class 23.

299,600. LIQUID PUMPS. MILFORD W. HARTMANN, doing business as M. W. Hartmann Manufacturing Company, Hutchinson, Kans.

Filed August 20, 1932. Serial No. 329,726. PUBLISHED OCTOBER 4, 1932. Class 23.

299,601. PHOTOGRAPHIC FILM. DU PONT FILM MANUFACTURING CORPORATION, New York, N. Y.

Filed August 20, 1932. Serial No. 329,724. PUBLISHED OCTOBER 4, 1932. Class 26.

299,602. DRILL PRESSES, SCROLL SAWS, BAND SAWS, WORK BENCHES, SAW TABLES, PULLEYS, HANGERS, JOINTERS, LATHES, AND MORTISERS. DELTA MANUFACTURING COMPANY, doing business as Delta Specialty Company, Milwaukee, Wis.

Filed August 19, 1932. Serial No. 329,675. PUBLISHED OCTOBER 4, 1932. Class 23.

299,603. MEAT AND BONE CUTTING MACHINES. WILLIAM LASAR, Los Angeles, Calif.

Filed August 11, 1932. Serial No. 329,477. PUBLISHED OCTOBER 4, 1932. Class 23.

299,604. RAZOR BLADES. STERILIZED RAZOR BLADE CO., INC., New York, N. Y.

Filed August 4, 1932. Serial No. 329,339. PUBLISHED OCTOBER 4, 1932. Class 28.

299,605. BATHROOM FIXTURES—NAMELY, SHOWER FIXTURES, TUB FIXTURES, DIVERTER FIXTURES, DRAINS AND OVERFLOWS, SHOWER RAIL FLANGES, SHOWER HEADS AND FLANGES, LAVATORY FIXTURES AND TRIMS, TANK LEVERS, TANK TRIMS, SUPPLY PIPES AND FLANGES, AND TRAPS AND FLANGES. CHASE BRASS & COPPER CO. INCORPORATED, Waterbury, Conn.

Filed August 3, 1932. Serial No. 329,302. PUBLISHED OCTOBER 4, 1932. Class 13.

299,606. CAMERAS. E. LEITZ, INC., New York, N. Y.

Filed July 14, 1932. Serial No. 328,794. PUBLISHED OCTOBER 4, 1932. Class 26.

299,607. CAMERAS. E. LEITZ, INC., New York, N. Y.

Filed July 14, 1932. Serial No. 328,793. PUBLISHED OCTOBER 4, 1932. Class 26.

299,608. MICROSCOPES, MAGNIFYING GLASSES, TELESCOPES AND THEIR ACCESSORIES. ERNST LEITZ, OPTISCHE WERKE, G. M. B. H., Wetzlar, Germany.

Filed July 12, 1932. Serial No. 328,784. PUBLISHED OCTOBER 4, 1932. Class 26.

299,609. HAIR DYE. INECTO, INC., New York, N. Y.

Filed June 30, 1932. Serial No. 328,427. PUBLISHED SEPTEMBER 27, 1932. Class 6.

299,610. HAIR DYE. INECTO, INC., New York, N. Y.

Filed June 30, 1932. Serial No. 328,426. PUBLISHED SEPTEMBER 27, 1932. Class 6.

299,611. HAIR DYE. INECTO, INC., New York, N. Y.
Filed June 30, 1932. Serial No. 328,425. PUBLISHED SEPTEMBER 27, 1932. Class 6.

299,612. BRIDAL VEILS. MARIE DORROS, INC., New York, N. Y.
Filed June 25, 1932. Serial No. 328,410. PUBLISHED SEPTEMBER 20, 1932. Class 42.

299,613. VAGINAL OINTMENT, NOSE AND THROAT OINTMENT, PERSPIRATION POWDER, DENTAL CREAM, ANTISEPTIC OINTMENT, RECTAL AND COLON OINTMENT, PROPHYLACTIC PASTE, AND SKIN OINTMENT. WILLIAM E. PENTZ, doing business as Wep Chemical Co., St. Joseph, Mo.
Filed June 29, 1932. Serial No. 328,404. PUBLISHED SEPTEMBER 27, 1932. Class 6.

299,614. PREPARATION FOR THE RELIEF OF HEADACHES, NEURALGIA, MUSCULAR ACHES, AND COLDS. JOSEPH W. JONES, doing business as The E. P. Remedy Co., Inc., Bristol, Tenn.
Filed June 28, 1932. Serial No. 328,387. PUBLISHED SEPTEMBER 27, 1932. Class 6.

299,615. PREPARATION FOR USE IN THE TREATMENT OF STOMACH COMPLAINTS. ALEJANDRO GUMMÁ CASTELLÓ, Barcelona, Spain.
Filed May 16, 1932. Serial No. 327,179. PUBLISHED SEPTEMBER 27, 1932. Class 6.

299,616. INHALANT FOR ASTHMA AND BRONCHIAL CATARRH. DR. ERNST SILTEN, Berlin, Germany.
Filed May 4, 1932. Serial No. 326,763. PUBLISHED SEPTEMBER 27, 1932. Class 6.

299,617. MEDICINE INDICATED IN THE TREATMENT OF EPILEPSY. VALERIA ING. PODHORSKY, Bucharest, Rumania.
Filed April 7, 1932. Serial No. 325,897. PUBLISHED SEPTEMBER 27, 1932. Class 6.

299,618. ASTRINGENTS, ASTRINGENT CERATES, BLEACH CREAMS, BEAUTY CREAMS, ETC. FRANK C. REILLY, New York, N. Y.
Filed April 1, 1932. Serial No. 325,725. PUBLISHED SEPTEMBER 27, 1932. Class 6.

299,619. HAIR BLEACH. EDWARD D. MINTZER, doing business as The Standard Peroxide Co., Chicago, Ill.
Filed June 22, 1932. Serial No. 328,221. PUBLISHED SEPTEMBER 27, 1932. Class 6.

299,620. EYEBROW AND EYELASH COLORING PENCILS, EYE SHADOW PENCILS AND MAKE-UP PENCILS. J. S. STAEDTLER, INC., New York, N. Y.
Filed June 11, 1932. Serial No. 327,923. PUBLISHED SEPTEMBER 27, 1932. Class 6.

299,621. BAKING POWDER. ROYAL BAKING POWDER COMPANY, New York, N. Y.
Filed June 10, 1932. Serial No. 327,890. PUBLISHED SEPTEMBER 27, 1932. Class 6.

299,622. MEDICINES—NAMELY, EMBROCATIONS FOR MUSCULAR SORENESS DUE TO EXPOSURE AND FATIGUE. KYFFHÄUSER-LABORATORIUM, FABRIKATION CHEM.-PHARM. PRÄPARATE HERMANN QUINCKE, Bad Frankenhausen A. K., Frankenhausen, Germany.
Filed May 25, 1932. Serial No. 327,443. PUBLISHED SEPTEMBER 27, 1932. Class 6.

299,623. CHEMICAL SUBSTANCES USED FOR VETERINARY PURPOSES. ASSOCIATED LONDON FLOUR MILLERS LIMITED, London, England.
Filed March 31, 1932. Serial No. 325,674. PUBLISHED SEPTEMBER 27, 1932. Class 6.

299,624. COMPOUND IN THE FORM OF POWDER USED IN THE FILTRATION OF LIQUIDS AND BEVERAGES. CRYSTAL HOME FILTER CO. INC., Brooklyn, N. Y.
Filed July 15, 1932. Serial No. 328,809. PUBLISHED OCTOBER 4, 1932. Class 6.

299,625. THERAPEUTIC PREPARATION FOR THE CONTROL OF FERMENTATION IN THE HUMAN SYSTEM AND ADAPTED FOR BOTH INTERNAL AND EXTERNAL USE; FOR A NON-TOXIC THERAPEUTIC PREPARATION FOR EXTERNAL USE ONLY, TO BE USED FOR CUTS, SORES, BRUISES, INSECT BITES, BURNS, SUNBURN, AND POISON IVY; AND FOR A LAXATIVE PREPARATION. THOMAS J. ILES, New York, N. Y.
Filed July 5, 1932. Serial No. 328,555. PUBLISHED OCTOBER 4, 1932. Class 6.

299,626. PREPARATION FOR TREATMENT OF PSORIASIS, ECZEMA, AND OTHER SKIN DISEASES; AN ALTERATIVE AND DISCUTIENT FOR USE IN THE TREATMENT OF SOME FORMS OF SKIN DISEASES; ISOPRENE, TOLUENE, BENZOL, AND XYLOL. HAYMAN OIL CO., Los Angeles, Calif.
Filed June 28, 1932. Serial No. 328,354. PUBLISHED OCTOBER 4, 1932. Class 6.

299,627. FABRICS MADE WHOLLY OR PARTIALLY OF ARTIFICIAL SILK. AMERICAN BEMBERG CORPORATION, New York, N. Y.
Filed June 22, 1932. Serial No. 328,204. PUBLISHED SEPTEMBER 20, 1932. Class 42.

299,628. PREPARATIONS OF CAMPHOR USED AS A CARDIO TONIC. KABUSHIKI-KAISHA TAKEDA-CHOBEI SHOTEN, Osaka, Japan.
Filed June 15, 1932. Serial No. 328,005. PUBLISHED OCTOBER 4, 1932. Class 6.

299,629. HAIR NETS. THE GLEMBY COMPANY, INC., New York, N. Y.
Filed July 29, 1932. Serial No. 329,183. PUBLISHED SEPTEMBER 20, 1932. Class 42.

299,630. UNBLEACHED, BLEACHED, DYED, AND COLORED COTTON DUCKS AND DRILLS, AWNING STRIPE AND TICKING MADE OF COTTON, LINEN, COTTON DAMASK, AND COMBINATION OF COTTON AND LINEN IN THE PIECE. JOHN BOYLE & COMPANY, INCORPORATED, New York, N. Y.
Filed July 29, 1932. Serial No. 329,174. PUBLISHED OCTOBER 4, 1932. Class 42.

299,631. SILK FABRICS IN THE PIECE. ONONDAGA SILK COMPANY, INC., Syracuse and New York, N. Y.
Filed July 28, 1932. Serial No. 329,152. PUBLISHED SEPTEMBER 20, 1932. Class 42.

299,632. BASE EXCHANGE SILICATES USED AS PURIFYING AND TREATING MATERIALS FOR WATER. THE PERMUTIT COMPANY, New York, N. Y.
Filed July 27, 1932. Serial No. 329,121. PUBLISHED SEPTEMBER 27, 1932. Class 6.

299,633. FACE POWDER, LIPSTICK, ROUGE, EYE SHADOW, ETC. SAMUEL BONAT & BRO., New York, N. Y.
Filed July 27, 1932. Serial No. 329,109. PUBLISHED SEPTEMBER 27, 1932. Class 6.

299,634. HYPNOTIC. I. G. FARBENINDUSTRIE AKTIENGESELLSCHAFT, Frankfort-on-the-Main, Germany.
Filed July 26, 1932. Serial No. 329,085. PUBLISHED SEPTEMBER 27, 1932. Class 6.

299,635. HANDKERCHIEFS. VICTOR W. KNIGHT, Chicago, Ill.
Filed July 25, 1932. Serial No. 329,052. PUBLISHED SEPTEMBER 27, 1932. Class 42.

299,636. CONCENTRATED MOTH PROOFING SOLUTION. S. B. PENICK & COMPANY, INC., New York, N. Y.
Filed July 23, 1932. Serial No. 329,025. PUBLISHED SEPTEMBER 27, 1932. Class 6.

299,637. EXTRACT OF CUBE ROOT OR DERRIS ROOT. S. B. PENICK & COMPANY, INC., New York, N. Y.
Filed July 28, 1932. Serial No. 329,024. PUBLISHED SEPTEMBER 27, 1932. Class 6.

299,638. SULPHUR FOR DUSTING PURPOSES (CONTROL OF INSECT PESTS AND FUNGUS ON VEGETATION AND FRUIT TREES). NATIONAL SULPHUR CO., INC., New York, N. Y.
Filed July 23, 1932. Serial No. 329,023. PUBLISHED SEPTEMBER 27, 1932. Class 6.

299,639. INSECTICIDES. BAIRD & MCGUIRE, INC., Holbrook, Mass.
Filed July 21, 1932. Serial No. 329,009. PUBLISHED SEPTEMBER 27, 1932. Class 6.

299,640. PERFUME. CHANEL, INC., New York, N. Y.
Filed July 18, 1932. Serial No. 328,865. PUBLISHED SEPTEMBER 27, 1932. Class 6.

299,641. CATHARTIC MEDICINE. WLADYSLAW WOJTASINSKI, doing business as W. Wojtasinski Drug Co., Dorchester, Mass.
Filed July 16, 1932. Serial No. 328,857. PUBLISHED SEPTEMBER 27, 1932. Class 6.

299,642. CANDY LAXATIVE. CLARON PRODUCTS INCORPORATED, Philadelphia, Pa.
Filed July 15, 1932. Serial No. 328,808. PUBLISHED SEPTEMBER 27, 1932. Class 6.

299,643. LAXATIVE. GEORGE H. SCHAEFER, doing business as Baked Products Company, Newark, N. J.
Filed July 12, 1932. Serial No. 328,743. PUBLISHED SEPTEMBER 27, 1932. Class 6.

299,644. LINIMENTS FOR EXTERNAL USE TO RELIEVE PAINS, ACHES, STRAINS, RHEUMATISM, NEURALGIA, BACKACHE, SPRAINED ANKLES, COLDS, AND CHILLS. J. H. MILLER, Chicago, Ill.
Filed July 11, 1932. Serial No. 328,717. PUBLISHED SEPTEMBER 27, 1932. Class 6.

299,645. HAIR TONIC. CONSTANCE A. HALL, doing business as The Keratin Company, Forest Hills, N. Y.
Filed July 7, 1932. Serial No. 328,608. PUBLISHED SEPTEMBER 27, 1932. Class 6.

299,646. HAIR DYE. INECTO, INC., New York, N. Y.
Filed June 30, 1932. Serial No. 328,428. PUBLISHED SEPTEMBER 27, 1932. Class 6.

299,647. TOOTH PASTE. DRUGKRAFT, INC., doing business as Sabrol Laboratories, New York, N. Y.
Filed July 1, 1932. Serial No. 328,481. PUBLISHED SEPTEMBER 27, 1932. Class 6.

299,648. COMPOUND FOR THE TREATMENT OF BURNS, SORES, WOUNDS, PIMPLES, SKIN DISEASES, SUCH AS ECZEMA, OR GRAIN PIMPLES OF INFANTS, SUNBURN, AND FOR THE ALLEVIATION OF COUGHS. KONSTANTIN CHRISTODOULOU, Bronx, N. Y.
Filed November 26, 1930. Serial No. 308,325. PUBLISHED OCTOBER 4, 1932. Class 6.

299,649. COMPOUND FOR STOPPING BOILER LEAKS, COMPOUND FOR CLEANING WASTE MATTER FROM PIPES, ETC. FRANK J. BENTZ, doing business as Fixit System, Miami, Fla.
Filed March 30, 1931. Serial No. 312,736. PUBLISHED OCTOBER 4, 1932. Class 6.

299,650. HANDKERCHIEFS. HARRY S. COHEN, Hartford, Conn.
Filed October 22, 1931. Serial No. 320,338. PUBLISHED OCTOBER 4, 1932. Class 42.

299,651. AQUEOUS AND TABLET PREPARATION OF A PHYSICIAN'S SUCCESSFUL PRESCRIPTION FOR SIMPLE COUGHS FROM HEAD COLDS, AND FOR ALLAYING ORDINARY IRRITATIONS OF THE THROAT, AND AS A MILD LAXATIVE. JOSEPH KERN, doing business as Oriole Drug Company, Baltimore, Md.
Filed November 6, 1931. Serial No. 321,062. PUBLISHED OCTOBER 4, 1932. Class 6.

299,652. COLD CREAM. WIEBOLDT STORES, INC., Chicago, Ill.
Filed January 2, 1932. Serial No. 322,664. PUBLISHED SEPTEMBER 27, 1932. Class 6.

299,653. HAIR TONICS; WAVESETS, (BEING POWDERS OR LIQUIDS TO BE USED FOR SETTING WAVES IN THE HAIR), SHAMPOOS, FACIAL AND SKIN CREAMS, SKIN LOTIONS, AND PREPARATIONS FOR WAVING, CLEANSING, OR BEAUTIFYING THE HAIR. THE WILDROOT COMPANY, INC., Buffalo, N. Y.
Filed January 16, 1932. Serial No. 323,107. PUBLISHED OCTOBER 4, 1932. Class 6.

299,654. WOOLEN PIECE GOODS. FORSTMANN & HUFFMANN COMPANY, Passaic, N. J.
Filed August 13, 1931. Serial No. 317,925. PUBLISHED SEPTEMBER 27, 1932. Class 42.

299,655. HAIR REMOVER—NAMELY, A DEPILATORY CREAM. GOTTFRIED SCHREITMÜLLER, doing business as Shavol Corp. of America, New York, N. Y.
Filed August 7, 1931. Serial No. 317,780. PUBLISHED SEPTEMBER 27, 1932. Class 6.

299,656. CHEMICAL AND PHARMACEUTICAL PRODUCTS—NAMELY, SALVES FOR USE IN THE TREATMENT OF ABCESSES, FOR MASSAGING, FOR COUGHS, INSECT STINGS, BITES, HEADACHES, AND STOMACH DISORDERS. ILON AKTIENGESELLSCHAFT, Basel, Switzerland.
Filed August 5, 1931. Serial No. 317,669. PUBLISHED SEPTEMBER 27, 1932. Class 6.

299,657. FABRICS MADE WHOLLY OR PARTIALLY OF CELLULOSE DERIVATIVES. CELANESE CORPORATION OF AMERICA, New York, N. Y.
Filed July 21, 1931. Serial No. 317,160. PUBLISHED OCTOBER 27, 1931. Class 42.

299,658. STOMACHIC HOME TREATMENT FOR STOMACH DISORDERS, BOWEL DISORDERS, LIVER DISORDERS, ARTHRITIS, NEURITIS, RHEUMATISM, AND PARTIAL PARALYSIS. HORTON M. DOUGLASS, Seattle, Wash.
Filed July 29, 1931. Serial No. 317,427. PUBLISHED SEPTEMBER 27, 1932. Class 6.

299,659. FABRICS MADE OF SILK AND CELLULOSE DERIVATIVES. CELANESE CORPORATION OF AMERICA, New York, N. Y.
Filed July 21, 1931. Serial No. 317,159. PUBLISHED OCTOBER 27, 1931. Class 42.

299,660. SILK PIECE GOODS. COUDURIER, FRUCTUS & DESCHER, Lyon, France.
Filed August 24, 1932. Serial No. 329,784. PUBLISHED OCTOBER 4, 1932. Class 42.

299,661. HANDKERCHIEFS. GRAEMIGER BROS. INC., New York, N. Y.
Filed August 6, 1932. Serial No. 329,376. PUBLISHED OCTOBER 4, 1932. Class 42.

299,662. VELVETS IN THE PIECE. ROSSIE VELVET COMPANY, Mystic, Conn.
Filed August 5, 1932. Serial No. 329,360. PUBLISHED OCTOBER 4, 1932. Class 42.

299,663. PILE FABRICS IN THE PIECE. ROSSIE VELVET COMPANY, Mystic, Conn.
Filed August 5, 1932. Serial No. 329,359. PUBLISHED OCTOBER 4, 1932. Class 42.

299,664. PILE FABRICS IN THE PIECE. ROSSIE VELVET COMPANY, Mystic, Conn.
Filed August 5, 1932. Serial No. 329,358. PUBLISHED OCTOBER 4, 1932. Class 42.

299,665. PILE FABRICS IN THE PIECE. ROSSIE VELVET COMPANY, Mystic, Conn.
Filed August 5, 1932. Serial No. 329,357. PUBLISHED OCTOBER 4, 1932. Class 42.

299,666. WOOLEN PIECE GOODS. FORSTMANN WOOLEN CO., Passaic, N. J.
Filed August 4, 1932. Serial No. 329,332. PUBLISHED OCTOBER 4, 1932. Class 42.

299,667. COTTON PIECE GOODS AND FILLED AND FINISHED COTTON PIECE GOODS. THE HOLLISTON MILLS, INC., Norwood, Mass.
Filed August 3, 1932. Serial No. 329,322. PUBLISHED OCTOBER 4, 1932. Class 42.

299,668. PIECE GOODS AND BLANKETS OF COTTON, WOOL, OR COMBINATIONS THEREOF. TROY BLANKET MILLS, Troy, N. H.
Filed July 30, 1932. Serial No. 329,246. PUBLISHED SEPTEMBER 20, 1932. Class 42.

299,669. KITCHEN AND HOUSEHOLD TOOLS OR UTENSILS. R. WALLACE & SONS MANUFACTURING COMPANY, Wallingford, Conn.
Filed October 21, 1931. Serial No. 320,287. PUBLISHED JANUARY 12, 1932. Class 23.

299,670. LACQUER, VARNISH, STAIN, AND PAINT IN READY MIXED OR PASTE FORM. VELSICOL CORPORATION, Chicago, Ill.
Filed March 30, 1932. Serial No. 325,668. PUBLISHED SEPTEMBER 27, 1932. Class 16.

299,671. FILING ENVELOPES, MAILING ENVELOPES, FILING FOLDERS, AND FILING POCKETS. WILSON-JONES COMPANY, Chicago, Ill.
Filed August 22, 1932. Serial No. 329,759. PUBLISHED SEPTEMBER 27, 1932. Class 37.

299,672. PAPER SEALING TAPE. THE HERRLINGER PAPER COMPANY, Cincinnati, Ohio.
Filed August 16, 1932. Serial No. 329,581. PUBLISHED SEPTEMBER 27, 1932. Class 37.

299,673. NEWSPAPER ARTICLE PUBLISHED FROM TIME TO TIME. EVENING HERALD PUBLISHING COMPANY, Los Angeles, Calif.
Filed August 15, 1932. Serial No. 329,554. PUBLISHED SEPTEMBER 27, 1932. Class 38.

299,674. NEWSPAPER ARTICLE PUBLISHED FROM TIME TO TIME. EVENING HERALD PUBLISHING COMPANY, Los Angeles, Calif.
Filed August 15, 1932. Serial No. 329,553. PUBLISHED SEPTEMBER 27, 1932. Class 38.

299,675. LEAD PENCILS AND COLORED PENCILS. SCHWAN-BLEISTIFT-FABRIK A. G., Nuremberg, Germany.
Filed August 13, 1932. Serial No. 329,539. PUBLISHED OCTOBER 4, 1932. Class 37.

299,676. HANDKERCHIEFS, CLEANSING AND POLISHING TISSUES, NAPKINS, FACIAL TISSUES IN FOLDED SHEETS OR IN ROLLS, AND SMALL TOWELS, ALL MADE OF SOFT CELLULOSE TISSUE. CELLULOSE PRODUCTS CORPORATION, Shamokin, Pa., and New York, N. Y.
Filed August 13, 1932. Serial No. 329,527. PUBLISHED SEPTEMBER 27, 1932. Class 37.

299,677. HAT BOXES, OVER-NIGHT CASES, WEEK-END CASES, WARDROBE CASES, AND HAND TRUNKS. JOHN WANAMAKER PHILADELPHIA, Philadelphia, Pa.
Filed August 5, 1932. Serial No. 329,364. PUBLISHED SEPTEMBER 27, 1932. Class 3.

299,678. TYPEWRITER RIBBON REVIVIFYING LIQUID. STONE-MUELLER COMPANY, Chicago, Ill.
Filed August 12, 1932. Serial No. 329,508. PUBLISHED OCTOBER 4, 1932. Class 11.

299,679. PRINTED CHART. KELLOGG COMPANY, Battle Creek, Mich.
Filed August 3, 1932. Serial No. 329,311. PUBLISHED SEPTEMBER 27, 1932, Class 38.

299,680. SECTION OR COLUMN APPEARING IN A NEWSPAPER. THE POST PRINTING AND PUBLISHING COMPANY, Denver, Colo.
Filed July 30, 1932. Serial No. 329,240. PUBLISHED SEPTEMBER 27, 1932. Class 38.

299,681. CARBON BLACK SOLD AS A PIGMENT FOR MANUFACTURING INKS ONLY. GODFREY L. CABOT, INC., Boston, Mass.
Filed July 11, 1932. Serial No. 328,681. PUBLISHED OCTOBER 4, 1932. Class 11.

299,682. METALLIC LIQUID CEMENT. HARRY E. ADAMS, doing business as Northlake Products Company, Peoria, Ill.
Filed July 2, 1932. Serial No. 328,515. PUBLISHED SEPTEMBER 27, 1932. Class 5.

299,683. WEEKLY PUBLICATION. SCOTT B. MCCAFFERTY, Washington, D. C., assignor to B. E. F. News Company, Washington, D. C., a Corporation of District of Columbia.
Filed June 30, 1932. Serial No. 328,444. PUBLISHED SEPTEMBER 27, 1932. Class 38.

299,684. FINISHED PRINTING PLATES READY FOR THE PRESS. VAIL-BALLOU PRESS INC., Binghamton, N. Y.
Filed June 29, 1932. Serial No. 328,408. PUBLISHED OCTOBER 4, 1932. Class 50.

299,685. ROCK ISLAND SHEEP WOOL SPONGES. CHRIS RUSSELL, doing business as Deep Sea Sponge Company, Tarpon Springs, Fla.
Filed June 23, 1932. Serial No. 328,252. PUBLISHED OCTOBER 4, 1932. Class 1.

299,686. TABLOID NEWSPAPER. AL PAUL LEFTON COMPANY, INC., Philadelphia, Pa.
Filed June 20, 1932. Serial No. 328,130. PUBLISHED OCTOBER 4, 1932. Class 38.

299,687. PORTABLE FITTED OR UNFITTED TOILET CASES. CHARLOTTE RICHMOND, Tudor City, New York, N. Y.
Filed June 10, 1932. Serial No. 327,888. PUBLISHED OCTOBER 4, 1932. Class 3.

299,688. LOOSE-LEAF PUBLICATION ISSUED AT INTERVALS. NATIONAL SOCIETY OF PURITAN DESCENDANTS, Boston, Mass.
Filed June 8, 1932. Serial No. 327,828. PUBLISHED SEPTEMBER 27, 1932. Class 38.

299,689. PACKAGES OF WAX PAPER. MINERVA WAX PAPER COMPANY, Minerva, Ohio.
Filed May 28, 1932. Serial No. 327,560. PUBLISHED SEPTEMBER 27, 1932. Class 37.

[ACT OF MARCH 19, 1920, SEC. 1 (b)]

THESE REGISTRATIONS ARE NOT SUBJECT TO OPPOSITION

299,690. (CLASS 49. DISTILLED ALCOHOLIC LIQUORS.) DISTILLERS CORPORATION LIMITED, Montreal Quebec, Canada. Filed Sept. 19, 1932. Serial No. 330,464.

Old Dougherty

For Potable Spirits, Whiskey, and Liquors.
Claims use since February, 1930.

299,691. (CLASS 49. DISTILLED ALCOHOLIC LIQUORS.) DISTILLERS CORPORATION LIMITED, Montreal, Quebec, Canada. Filed Sept. 19, 1932. Serial No. 330,459.

HAYNER

For Potable Spirits, Whiskey, and Liquors.
Claims use since February, 1930.

299,692. (CLASS 15. OILS AND GREASES.) L. L. CORYELL & SON, Lincoln, Nebr. Filed Aug. 22, 1932. Serial No. 329,738.

CORYELL -70-

For Gasoline, Lubricating and Fuel Oils, and Grease Primarily Used for Greasing Motor Vehicle Parts.
Claims use since Sept. 1, 1931.

299,693. (CLASS 34. HEATING, LIGHTING, AND VENTILATING APPARATUS, NOT INCLUDING ELECTRICAL APPARATUS.) INTERNATIONAL OIL HEATING CO., St. Louis, Mo. Filed Aug. 3, 1932. Serial No. 329,310.

BLUE FLAME

For Oil and Gas Burners.
Claims use since Nov. 1, 1928.

299,694. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) ROBERTS AND OAKS, INC., Chicago, Ill. Filed Mar. 30, 1932. Serial No. 325,664.

Roberts

For Meat Products—Namely, Summer Sausage, Fresh Salami Style; Summer Sausage, Fresh Thuringer Style; Pork Sausage, Lard, Ham, Bacon, Suls, Lunch Ham, Fresh Pork Ham, Liver Style Sausage, Meat Roll, Sandwich Meat, Pork Loaf.
Claims use since Feb. 1, 1928.

299,695. (CLASS 15. OILS AND GREASES.) DURFEE & CANNING, INC., Fall River, Mass. Filed Jan. 22, 1932. Serial No. 328,281.

Kwik Lite

For Fuel Oils for Heating, Burning, and Power, and All Other Usages for Which Fuel Oils are Adapted.
Claims use since Nov. 2, 1931.

299,696. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) COMSTOCK CANNERIES, INC., Newark, N. J. Filed Dec. 5, 1931. Serial No. 321,800.

COMSTOCK'S DELICIOUS

For Canned Foods—Namely, Canned Fruits and Canned Vegetables; and Packaged Powdered Soups.
Claims use since Nov. 6, 1931.

299,697. (CLASS 21. ELECTRICAL APPARATUS, MACHINES, AND SUPPLIES.) EDWIN L. WIEGAND COMPANY, Pittsburgh, Pa. Filed Nov. 17, 1931. Serial No. 321,228.

FINROD

For Electric Heating Units, Electric Heating Elements and Parts Therefor Suitable for Use in Space Heaters, Cooking and Heating Plates, Immersion Heaters, Drying Rolls, and Otherwise.
Claims use since Oct. 26, 1931.

299,698. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) BATTLE CREEK BISCUIT COMPANY, Battle Creek, Mich. Filed Oct. 27, 1931. Serial No. 320,487.

CHEESE LOGS

For Cakes and Biscuits of Various Forms Filled with Cheese.
Claims use since Feb. 1, 1931.

299,699. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) BEVERLY DAIRIES, LTD., Los Angeles, Calif. Filed Oct. 5, 1931. Serial No. 319,716.

INSTANT FROZEN

For Ice Cream.
Claims use since Aug. 26, 1931.

299,700. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) JOSEPH SMITH, New York, N. Y. Filed Aug. 5, 1931. Serial No. 317,680.

Smith

BLADE

For Razor Blades, Razors, Mechanical Razor Blade Stroppers.

Claims use since July 11, 1931.

299,701. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS AND PARTS THEREOF.) K-D MANUFACTURING COMPANY, Lancaster, Pa. Filed July 22, 1931. Serial No. 317,211.

BECKY PORTER

For Kitchen or Frying Forks and Food Choppers and Attachments—Including Fruit Juice Extracting Attachments.

Claims use since Aug. 15, 1928.

299,702. (CLASS 42. KNITTED, NETTED, AND TEXTILE FABRICS.) AJAX QUILTING & MANUFACTURING CO., Chicago, Ill. Filed May 22, 1931. Serial No. 314,886.

NEEDLE-LOOM

For Textile Mattress Protectors or Pads, Textile Quilted Padding for Use as Table Pads, for Pads in Clothing, Uniforms, Etc., Textile Quilted Patchwork Quilts, and Textile Quilted Comforters.

Claims use since May 6, 1931.

299,703. (CLASS 14. METALS AND METAL CASTINGS AND FORGINGS.) THE LINCOLN ELECTRIC COMPANY, Cleveland, Ohio. Filed Sept. 8, 1930. Serial No. 305,440.

ANODE

For Welding Wire for Metals.

Claims use since Dec. 1, 1928.

TRADE-MARK REGISTRATIONS RENEWED

39,856. CERTAIN NAMED ELECTRICAL APPLIANCES. Registered February 24, 1903. THE HART MANUFACTURING CO. Renewed February 24, 1933, to The Hart Manufacturing Company, Hartford, Conn., a Corporation of Connecticut, assignee.

39,921. CARPET SWEEPERS. Registered March 10, 1903. BISSELL CARPET SWEEPER COMPANY, Grand Rapids, Mich., a Corporation of Michigan. Renewed March 10, 1933.

40,159. CHEESE. Registered April 21, 1903. SOCIÉTÉ DES CAVES ET DES PRODUCTEURS RÉUNIS DE ROQUEFORT, (Aveyron,) Roquefort, France, a Corporation of France. Renewed April 21, 1933.

89,043. BISCUITS, CAKES, AND COOKIES. Registered November 5, 1912. LOOSE-WILES BISCUIT COMPANY, Boston, Mass., a Corporation of Maine. Renewed November 5, 1932.

89,169. A LINIMENT AND A REMEDY FOR CERTAIN NAMED DISEASES. Registered November 12, 1912. C. D. WARNER CO. Renewed November 12, 1932, to Fred L. Drury, administrator of the Estate of Hiram E. Warner, Coldwater, Mich., successor.

89,524. A COMPOUND OF COFFEE, CHICORY, AND CEREALS. Registered December 24, 1912, to ABEL & ASHER CO. Renewed December 24, 1932, to Frank Grocery Co., Inc., Shreveport, La., a Corporation of Louisiana, assignee.

89,698. DOORS. Registered December 31, 1912. PAINE LUMBER COMPANY, LIMITED, Oshkosh, Wis. Renewed December 31, to Nathan Paine, Washington, D. C., assignee.

89,699. BACON, HAMS, SKINNED HAMS, AND SUGAR-CURED HAMS. Registered December 31, 1912. THE RATH PACKING COMPANY, Waterloo, Iowa, a Corporation of Iowa. Renewed December 31, 1932.

89,813. CERTAIN NAMED PARTS OF CERTAIN NAMED VEHICLES. Registered January 14, 1913. BRAMPTON BROTHERS LIMITED, Birmingham, England, a Corporation of Great Britain. Renewed January 14, 1933.

89,908. CARPET-SWEEPERS. Registered January 21, 1913. BISSELL CARPET SWEEPER COMPANY, Grand Rapids, Mich., a Corporation of Michigan. Renewed January 21, 1933.

89,917. AN INTERNAL ANTISEPTIC FOR THE UROPOIETICAL SYSTEM. Registered January 21, 1913. FARBWERKE VORM. MEISTER LUCIUS & BRÜNING, Höchst-on-the-Main, Germany. Renewed January 21, 1933, to The Chemical Foundation, Incorporated, Wilmington, Del., and New York, N. Y., a Corporation of Delaware, assignee by mesne assignments.

89,957. AN ANTISEPTIC SOLUTION OF ROSIN FOR DRESSING AND BANDAGING WOUNDS. Registered January 21, 1913. GEBRÜDER SCHUBERT, Berlin, Germany. Renewed January 21, 1933, to The Chemical Foundation, Incorporated, Wilmington, Del., and New York, N. Y., a Corporation of Delaware, assignee by mesne assignments.

90,017. SILK BOLTING-CLOTH. Registered January 28, 1913. HAMMOND-HOMBERGER CO., Silver Creek, N. Y. Renewed January 28, 1933, to Swiss Silk Bolting Cloth Manufacturing Company, Limited, Thal, Switzerland, a Corporation of Switzerland, assignee by mesne assignments.

90,090. PORTABLE CARPET-CLEANING MACHINES. Registered February 4, 1913. BISSELL CARPET SWEEPER COMPANY, Grand Rapids, Mich., a Corporation of Michigan. Renewed February 4, 1933.

90,151. CERTAIN NAMED PAINTERS' MATERIALS. Registered February 4, 1913. YARNALL PAINT COMPANY, Philadelphia, Pa., a Corporation of Pennsylvania. Renewed February 4, 1933.

90,244. FINISHED LEATHER FOR BOOKBINDING, UPHOLSTERING, AND LIKE PURPOSES. Registered February 11, 1913. EDW. & JAS. RICHARDSON. Renewed February 11, 1933, to Edward & James Richardson Limited, Newcastle-upon-Tyne, England, a Corporation of Great Britain, assignee.

90,390. MINERAL WAX. Registered February 18, 1913. STROHMEYER & ARPE COMPANY, New York, N. Y., a Corporation of New York. Renewed February 18, 1933.

90,758. PERFORATING AND PUNCHING MACHINERY. Registered March 18, 1913. THE SAMUEL C. TATUM COMPANY, Cincinnati, Ohio. Renewed March 18, 1933, to Wilson-Jones Company, Chicago, Ill., a Corporation of Massachusetts, assignee.

90,799. LADIES', GENTLEMEN'S, AND CHILDREN'S WATER OR RAIN PROOF WEARING-APPAREL. Registered March 25, 1913. THE EXPRESS RUBBER CO. LIMITED. Renewed March 25, 1933, to Nobility Limited, London, England, a Corporation of Great Britain, assignee.

90,828. PIPES, TUBES, AND CASINGS. Registered March 25, 1913. NATIONAL TUBE COMPANY, Pittsburgh, Pa., a Corporation of New Jersey. Renewed March 25, 1933.

91,372. CERTAIN INGREDIENTS USED IN FOOD PRODUCTS. Registered April 29, 1913. THE PRESERVALINE MANUFACTURING CO., Brooklyn, N. Y., a Corporation of New York. Renewed April 29, 1933.

91,430. MINERAL WAX. Registered April 29, 1913. STROHMEYER & ARPE COMPANY, New York, N. Y., a Corporation of New York. Renewed April 29, 1933.

LABELS

REGISTERED DECEMBER 13, 1932

41,508.—*Title:* grAde PASTEURIZED MILK. For Milk. AMERICAN DAIRY SUPPLY CO., Washington, D. C. Published October 28, 1932.

41,509.—*Title:* MILK PASTEURIZED T. B. TESTED. For Milk. AMERICAN DAIRY SUPPLY CO., Washington, D. C. Published October 28, 1932.

41,510.—*Title:* GOLDEN PACKET. For Tea. ARABAN COFFEE CO., INC., Boston, Mass. Published September 6, 1932.

41,511.—*Title:* GOODY CHOCOLATE FLAVORED MALTED MILK. For Malted Milk. CIRCLE FOODS, INC., New York, N. Y. Published February 17, 1932.

41,512.—*Title:* BABY RUTH. For Orange Drops. CURTISS CANDY COMPANY, Chicago, Ill. Published June 1, 1931.

41,513.—*Title:* ORIENTAL GARDEN INCENSE. For Incense. EASTERN TRADING COMPANY, Chicago, Ill. Published July 13, 1932.

41,514.—*Title:* ARTITLE LABELS. For Decorative Gummed Labels. ENGEL ART CORNERS MFG. CO., Chicago, Ill. Published November 10, 1932.

41,515.—*Title:* VELV SHAVING CREAM. For Shaving Cream. THE LA-MO LABORATORIES CO., Cleveland, Ohio. Published October 15, 1932.

41,516.—*Title:* LIPTON'S TEA (YELLOW LABEL). For Tea. THOMAS J. LIPTON, INC., Hoboken, N. J., Chicago, Ill., and San Francisco, Calif. Published May 1, 1932.

41,517.—*Title:* LIPTON'S TEA (GREEN LABEL). For Tea. THOMAS J. LIPTON, INC., Hoboken, N. J., Chicago, Ill., and San Francisco, Calif. Published May 1, 1932.

41,518.—*Title:* LIPTON'S TEA (GREEN LABEL). For Tea. THOMAS J. LIPTON, INC., Hoboken, N. J., Chicago, Ill., and San Francisco, Calif. Published May 1, 1932.

41,519.—*Title:* LIPTON'S TEA (RED LABEL). For Tea. THOMAS J. LIPTON, INC., Hoboken, N. J., Chicago, Ill., and San Francisco, Calif. Published May 1, 1932.

41,520.—*Title:* LIPTON'S TEA (YELLOW LABEL). For Tea. THOMAS J. LIPTON, INC., Hoboken, N. J., Chicago, Ill., and San Francisco, Calif. Published May 1, 1932.

41,521.—*Title:* LIPTON'S TEA (GREEN LABEL). For Tea. THOMAS J. LIPTON, INC., Hoboken, N. J., Chicago, Ill., and San Francisco, Calif. Published May 1, 1932.

41,522.—*Title:* LIPTON'S TEA (YELLOW LABEL). For Tea. THOMAS J. LIPTON, INC., Hoboken, N. J., Chicago, Ill., and San Francisco, Calif. Published May 1, 1932.

41,523.—*Title:* LIPTON'S TEA (GREEN LABEL)—PURE IMPERIAL GUNPOWDER TEA. For Tea. THOMAS J. LIPTON, INC., Hoboken, N. J., Chicago, Ill., and San Francisco, Calif. Published May 1, 1932.

41,524.—*Title:* LIPTON'S TEA (GREEN LABEL)—BLACK AND GREEN TEA. For Tea. THOMAS J. LIPTON, INC., Hoboken, N. J., Chicago, Ill., and San Francisco, Calif. Published May 1, 1932.

41,525.—*Title:* WHOLE WHEAT MATZOS. For Matzos. THE B. MANISCHEWITZ COMPANY, Cincinnati, Ohio. Published August 23, 1932.

41,526.—*Title:* MENIHAN ARCH-AID SHOES. For Shoe Boxes. THE MENIHAN COMPANY, Rochester, N. Y. Published August 16, 1932.

41,527.—*Title:* MILLAR'S DRIP COFFEE. For Coffee. THE E. B. MILLAR COFFEE COMPANY, Denver, Colo. Published September 7, 1932.

41,528.—*Title:* MEDALIST. For Flour. MILLERS PRODUCTS CORP., New York, N. Y. Published October 1, 1930.

41,529.—*Title:* SNO-FLUF. For Flake Hominy. MOUNT VERNON MILLING COMPANY, Mount Vernon, Ind. Published September 25, 1932.

41,530.—*Title:* WM. PENN SHIRT. For Shirts. ONYX BLOUSE CO. INC. Published October 19, 1932.

41,531.—*Title:* CHICKEN CHILI. For Chicken Chili. JOSEPH E. SAUNDERS, doing business as Saunders Company, Kansas City, Mo. Published October 7, 1932.

41,532.—*Title:* SAVARESE. For Tomato Sauce. JAMES SAVARESE, New York, N. Y. Published January 1, 1932.

41,533.—*Title:* CHASE & SANBORN'S SEAL BRAND. For Tea. STANDARD BRANDS INCORPORATED, New York, N. Y. Published June 10, 1932.

41,534.—*Title:* OUR SPECIAL. For Coffee. STANDARD BRANDS INCORPORATED, New York, N. Y. Published September 21, 1932.

41,535.—*Title:* CULMBACHER. For Malt Extract. STERLING PRODUCTS COMPANY, Evansville, Ind. Published November 7, 1932.

41,536.—*Title:* REFLECTOGRAPH. For an Instructive Toy. STROMBECK-BECKER MFG. CO., Moline, Ill. Published September 24, 1932.

41,537.—*Title:* FINEST QUALITY. For Butter. SUTHERLAND PAPER CO., Kalamazoo, Mich. Published June 28, 1932.

41,538.—*Title:* JERSEY MAID ICE CREAM. For Ice Cream. SUTHERLAND PAPER CO., Kalamazoo, Mich. Published July 29, 1932.

41,539.—*Title:* UNIVERSAL PATCHING PLASTER. For Patching Plaster. UNIVERSAL GYPSUM & LIME CO., Chicago, Ill. Published September 30, 1932.

41,540.—*Title:* WATERPROOF 100% PURE ASPHALT-ASBESTOS ROOF COATING. For Roof Coating. WATERPROOF PAINT & VARNISH CO., Watertown, Mass. Published October 1, 1932.

41,541.—*Title:* ENDURA BOND FILLER. For Fillers for Loose Leaf Books. WHITE & WYCKOFF MFG. CO., Holyoke, Mass. Published July 18, 1932.

PRINTS

REGISTERED DECEMBER 13, 1932

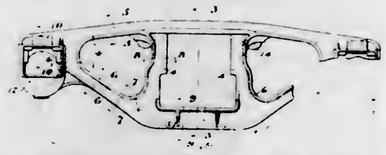
13,979.—*Title:* A TURN IN HIS LIFE . . . TAKE CARE! For Wheat Breakfast Food. THE CREAM OF WHEAT CORPORATION, Minneapolis, Minn. Published November 10, 1932.

13,980.—*Title:* ANOTHER ECLIPSE OF THE SUN!—ADFORM 127. For Coffee. HILLS BROS., San Francisco, Calif. Published June 15, 1932.

REISSUES

DECEMBER 13, 1932

18,690. RAILWAY SIDE FRAME. CLAUS J. WERNER CLASEN, Davenport, Iowa, assignor to The Bettendorf Company, Bettendorf, Iowa, a Corporation of Iowa. Original No. 1,351,326, dated Aug. 31, 1920, Serial No. 333,903, filed Oct. 28, 1919. Application for reissue filed Apr. 27, 1932. Serial No. 607,878. 2 Claims. (Cl. 105—205.)



1. An integral metallic car truck side frame of truss form comprising top and bottom chords of U section, spaced columns defining a central bolster receiving opening, and journal boxes having their top, bottom and side walls integrally formed, said top chord having spaced side flanges extending downwardly from its web, said journal boxes being disposed beneath the ends of the top chord and having their top walls beneath the web and integral with the overlying spaced depending flanges of the top chord to form, with the side flanges and web of the top chord, a rigid boxlike structure extending substantially the full width of each journal box, said bottom chord having end portions inclined upwardly toward the top chord and integrally joined to the side flanges of the top chord adjacent the top inner corners of the journal boxes, the side flanges and web of the bottom chord merging into the inner side walls of the journal boxes at and below the upper inner corner thereof, whereby the integrally formed journal boxes are positioned in the angles between the ends of the top and bottom chords and the entire structure of each journal box lends a resistance to the tensional forces acting upon the bottom chord.

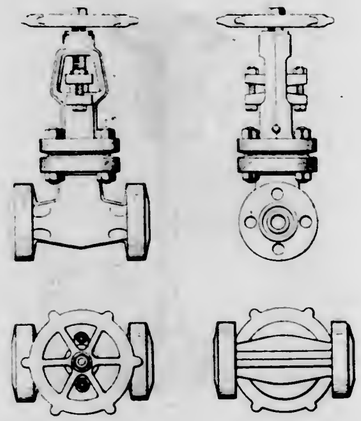
18,691. PROCESS FOR MODIFYING VULCANIZABLE MATERIAL AND PRODUCT. WILLIS A. GIBBONS, Montclair, N. J., assignor to The Naugatuck Chemical Company, Naugatuck, Conn., a Corporation of Connecticut. Original No. 1,807,031, dated May 26, 1931, Serial No. 174,716, filed Mar. 11, 1927. Application for reissue filed Mar. 30, 1932. Serial No. 602,104. 25 Claims. (Cl. 18—50.)

1. The process of modifying the properties of vulcanisable material by preliminary treatment of latex with normal water content which process comprises heating the latex above 212° F. without evaporation of its water content for a length of time in excess of that required to sterilise latex against the action of bacteria.

DESIGNS

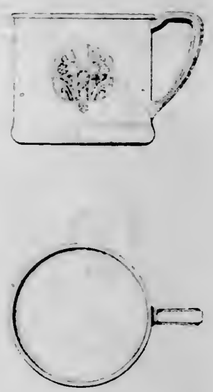
DECEMBER 13, 1932

88,613. VALVE. CHAUNCEY D. ALLEN, Philadelphia, Pa., assignor to Consolidated Ashcroft Hancock Company, New York, N. Y., a Corporation of Delaware. Filed Dec. 20, 1930. Serial No. 38,037. Term of patent 7 years.



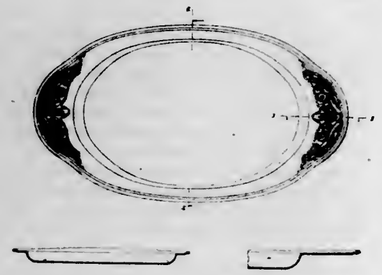
The ornamental design for a valve substantially as shown.

88,614. CUP OR SIMILAR ARTICLE. GROSVENOR N. ALLEN and ELMER H. KEEPS, Oneida, N. Y., assignors to Oneida Community, Limited, Oneida, N. Y., a Corporation of New York. Filed Oct. 6, 1932. Serial No. 45,249. Term of patent 14 years.



The ornamental design for a cup or similar article as shown and described.

88,615. DISH OR SIMILAR ARTICLE. GROSVENOR N. ALLEN and ELMER H. KREPS, Oneida, N. Y., assignors to Oneida Community, Limited, Oneida, N. Y., a Corporation of New York. Filed Oct. 6, 1932. Serial No. 45,250. Term of patent 14 years.



The ornamental design for a dish or similar article as shown and described.

88,616. OPHTHALMIC MOUNTING. NELSON M. BAKER, Southbridge, Mass., assignor to American Optical Company, Southbridge, Mass., a Voluntary Association of Massachusetts. Filed Oct. 10, 1932. Serial No. 45,276. Term of patent 14 years.



The ornamental design for an ophthalmic mounting substantially as shown.

88,617. BRIDGE FOR AN OPHTHALMIC MOUNTING. NELSON M. BAKER, Southbridge, Mass., assignor to American Optical Company, Southbridge, Mass., a Voluntary Association of Massachusetts. Filed Jan. 25, 1932. Serial No. 42,626. Term of patent 14 years.



The ornamental design for a bridge for an ophthalmic mounting substantially as shown.

88,618. OPHTHALMIC MOUNTING. NELSON M. BAKER, Southbridge, Mass., assignor to American Optical Company, Southbridge, Mass., a Voluntary Association of Massachusetts. Filed Mar. 18, 1932. Serial No. 43,226. Term of patent 14 years.



The ornamental design for an ophthalmic mounting substantially as shown and described.

88,619. SMOKER'S STAND. ROBERT N. BAYLIS, Caldwell, N. J., assignor to Smokador Manufacturing Co., Inc., Bloomfield, N. J., a Corporation of Delaware. Filed Sept. 30, 1932. Serial No. 45,174. Term of patent 7 years.



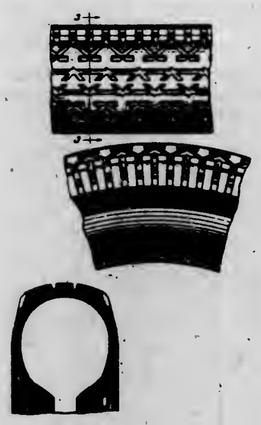
The ornamental design for a smoker's stand, substantially as shown.

88,620. TIRE. JOSEPH J. BLACK, Akron, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y., a Corporation of New York. Filed Oct. 11, 1932. Serial No. 45,307. Term of patent 14 years.



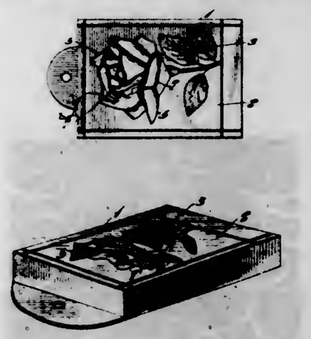
The ornamental design for a tire as shown and described.

88,621. TIRE. JOSEPH J. BLACK and CHASE F. OPENSEND, Akron, Ohio, assignors to The B. F. Goodrich Company, New York, N. Y., a Corporation of New York. Filed Oct. 11, 1932. Serial No. 45,308. Term of patent 14 years.



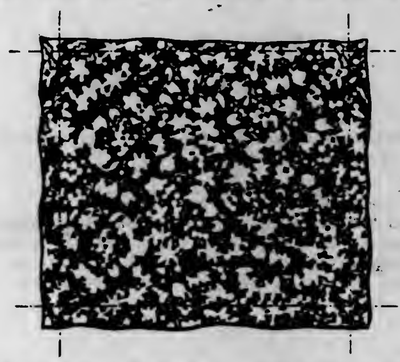
The ornamental design for a tire as shown and described.

88,622. PACKAGED ANTIMOTH CAKE AND DEODORANT. MORRIS BORDMAN, Philadelphia, Pa. Filed May 26, 1932. Serial No. 43,907. Term of patent 14 years.



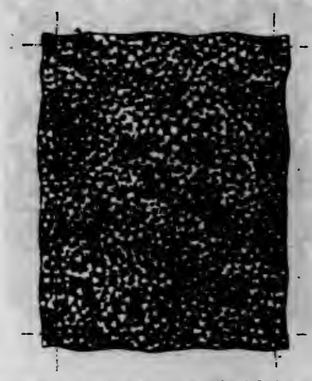
The ornamental design for a packaged anti-moth cake and deodorant, as shown and described.

88,623. TEXTILE FABRIC OR SIMILAR ARTICLE. FERNAND BRIDIER, Paris, France, assignor to William Willheim Co., Inc., New York, N. Y. Filed Nov. 12, 1932. Serial No. 45,895. Term of patent 3½ years.



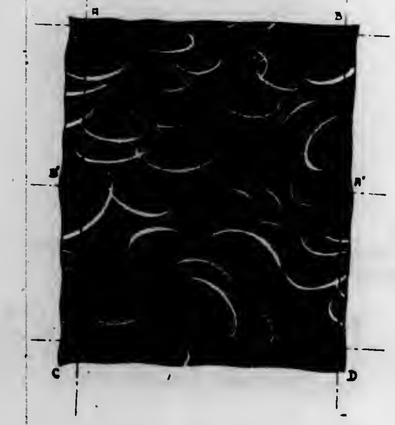
The ornamental design for a textile fabric or similar article as shown and described.

88,624. TEXTILE FABRIC OR SIMILAR ARTICLE. FERNAND BRIDIER, Paris, France, assignor to William Willheim Co., Inc., New York, N. Y. Filed Nov. 12, 1932. Serial No. 45,896. Term of patent 3½ years.



The ornamental design for a textile fabric or similar article as shown and described.

88,625. TEXTILE FABRIC OR SIMILAR ARTICLE. FERNAND BRIDIER, Paris, France. Filed Nov. 12, 1932. Serial No. 45,906. Term of patent 3½ years.



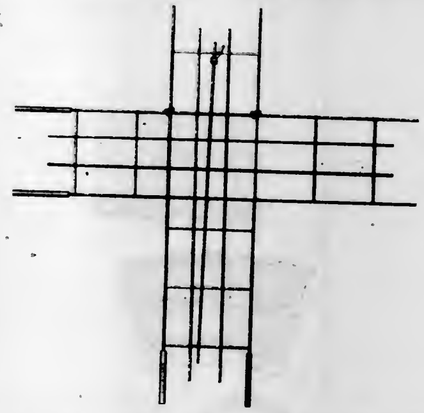
The ornamental design for a textile fabric or similar article as shown and described.

88,626. TEXTILE FABRIC OR SIMILAR ARTICLE. FERNAND BRIDIER, Paris, France, assignor to William Willheim Co., Inc., New York, N. Y. Filed Nov. 12, 1932. Serial No. 45,894. Term of patent 3½ years.



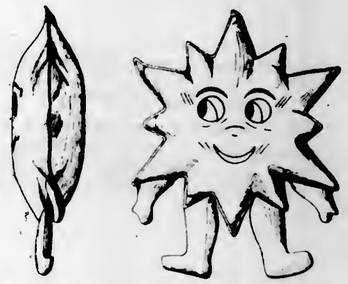
The ornamental design for a textile fabric or similar article as shown and described.

88,627. FLORAL RACK OR SIMILAR ARTICLE. CLARENCE A. BRUNING, Colfax, Wash. Filed Feb. 28, 1931. Serial No. 88,863. Term of patent 3½ years.



The ornamental design for a floral rack or similar article, substantially as shown.

88,628. DOLL. MARTHA OTIS CABELL, San Diego, Calif. Filed Oct. 8, 1932. Serial No. 45,262. Term of patent 3½ years.



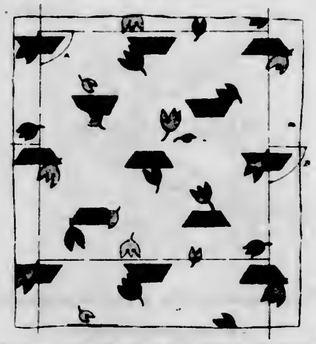
The ornamental design for a doll substantially as shown.

88,629. TEXTILE FABRIC OR THE LIKE. DELIA CARMICHAEL, Woodside, N. Y. Filed Nov. 8, 1932. Serial No. 45,822. Term of patent 3½ years.



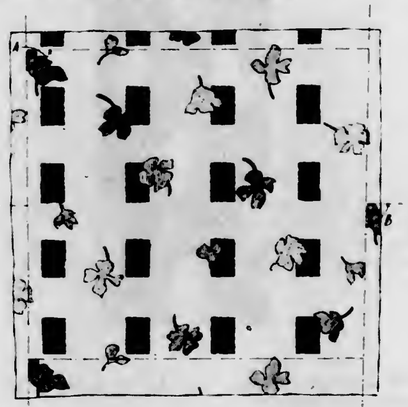
The ornamental design for a textile fabric or the like, as shown and described.

88,630. TEXTILE FABRIC OR THE LIKE. HAROLD CRUGER, Ridgewood, N. J. Filed Nov. 8, 1932. Serial No. 45,812. Term of patent 3½ years.



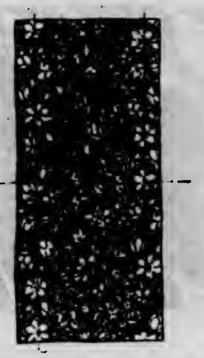
The ornamental design for a textile fabric or the like, as shown and described.

88,681. TEXTILE FABRIC OR THE LIKE. HAROLD CRUGER, Ridgewood, N. J. Filed Nov. 8, 1932. Serial No. 45,813. Term of patent 3½ years.



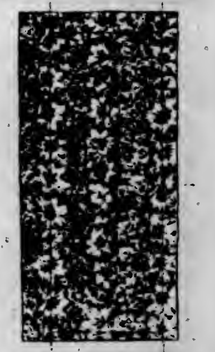
The ornamental design for a textile fabric or the like, as shown and described.

88,632. TEXTILE FABRIC OR THE LIKE. HAROLD CRUGER, Ridgewood, N. J. Filed Nov. 8, 1932. Serial No. 45,814. Term of patent 3½ years.



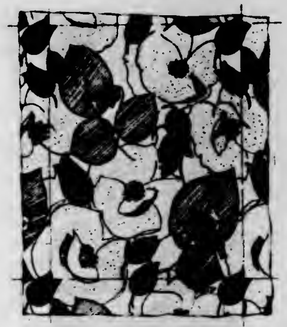
The ornamental design for a textile fabric or the like, as shown and described.

88,633. TEXTILE FABRIC OR THE LIKE. HAROLD CRUGER, Ridgewood, N. J. Filed Nov. 8, 1932. Serial No. 45,817. Term of patent 3½ years.



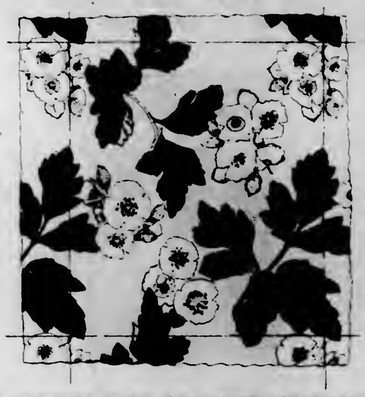
The ornamental design for a textile fabric or the like, as shown and described.

88,634. TEXTILE FABRIC OR THE LIKE. HAROLD CRUGER, Ridgewood, N. J. Filed Nov. 8, 1932. Serial No. 45,815. Term of patent 3½ years.



The ornamental design for a textile fabric or the like, as shown and described.

88,635. TEXTILE FABRIC OR THE LIKE. HAROLD CRUGER, Ridgewood, N. J. Filed Nov. 8, 1932. Serial No. 45,816. Term of patent 3½ years.



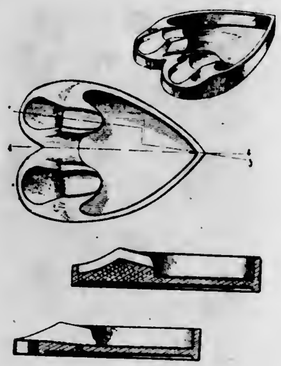
The ornamental design for a textile fabric or the like, as shown and described.

88,636. SHOE. WALTER E. EBLING, New York, N. Y., assignor to E. P. Reed & Company, Rochester, N. Y., a Corporation of New York. Filed Nov. 7, 1932. Serial No. 45,799. Term of patent 3½ years.



The ornamental design for a shoe substantially as shown and described.

88,637. ASH TRAY. CLARENCE D. EHRMAN, Petersburg, Va. Filed July 22, 1932. Serial No. 44,411. Term of patent 7 years.



The ornamental design for an ash tray, as shown.

88,638. CLOCK FACE. AARON ELKONIN, San Pedro, Calif. Filed Sept. 19, 1932. Serial No. 44,991. Term of patent 14 years.



The ornamental design for a clock face as shown and described.

88,639. VEHICLE ORNAMENT. STEPHEN FAITH, Chicago, Ill. Filed Sept. 15, 1932. Serial No. 44,840. Term of patent 14 years.



The ornamental design for a vehicle ornament as shown.

88,640. TEXTILE FABRIC OR THE LIKE. RALPH W. FRAMBACH, Maplewood, N. J. Filed Nov. 8, 1932. Serial No. 45,818. Term of patent 3½ years.



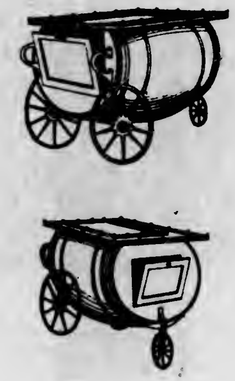
The ornamental design for a textile fabric or the like, as shown and described.

88,641. TEXTILE FABRIC OR THE LIKE. RALPH W. FRAMBACH, Maplewood, N. J. Filed Nov. 14, 1932. Serial No. 45,951. Term of patent 3½ years.



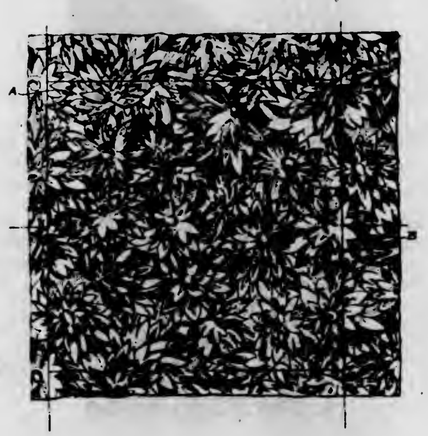
The ornamental design for a textile fabric or the like, as shown and described.

88,642. REFRESHMENT WAGON. JOSEPH GILLOW GARTON, New York, N. Y. Filed Sept. 17, 1932. Serial No. 44,986. Term of patent 7 years.



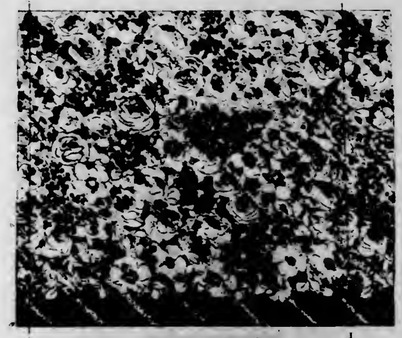
The ornamental design for a refreshment wagon as shown.

88,643. TEXTILE FABRIC. ROBERT GENTILE, New York, N. Y., assignor to Bloomsburg Silk Mill, New York, N. Y., a Corporation of Pennsylvania. Filed Nov. 2, 1932. Serial No. 45,699. Term of patent 3½ years.



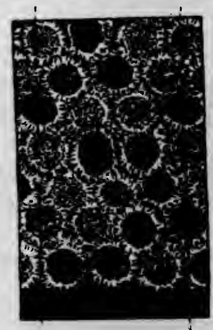
The ornamental design for a textile fabric, substantially as shown and described.

88,644. TEXTILE FABRIC. ROBERT GEORGE, Paris, France, assignor to Cheney Brothers, New York, N. Y., a Corporation of Connecticut. Filed Oct. 24, 1932. Serial No. 45,520. Term of patent 3½ years.



The ornamental design for a textile fabric, substantially as shown and described.

88,645. TEXTILE FABRIC. ROBERT GEORGE, Paris, France, assignor to Cheney Brothers, New York, N. Y., a Corporation of Connecticut. Filed Oct. 24, 1932. Serial No. 45,521. Term of patent 3½ years.



The ornamental design for a textile fabric, substantially as shown and described.

88,646. TEXTILE FABRIC OR SIMILAR ARTICLE. ANTON GRULICH, Glen Ridge, N. J., assignor to William Willheim Co., Inc., New York, N. Y. Filed Nov. 12, 1932. Serial No. 45,926. Term of patent 3½ years.



The ornamental design for a textile fabric or similar article as shown and described.

88,647. TEXTILE FABRIC OR SIMILAR ARTICLE. ANTON GRULICH, Glen Ridge, N. J., assignor to William Willheim Co., Inc., New York, N. Y. Filed Nov. 12, 1932. Serial No. 45,925. Term of patent 3½ years.



The ornamental design for a textile fabric or similar article as shown and described.

88,648. TEXTILE FABRIC OR THE LIKE. ALFRED J. HEINKE, Towaco, N. J. Filed Nov. 14, 1932. Serial No. 45,955. Term of patent 3½ years.



The ornamental design for a textile fabric or the like, as shown and described.

88,649. TEXTILE FABRIC OR THE LIKE. ALFRED J. HEINKE, Towaco, N. J. Filed Nov. 8, 1932. Serial No. 45,836. Term of patent 3½ years.



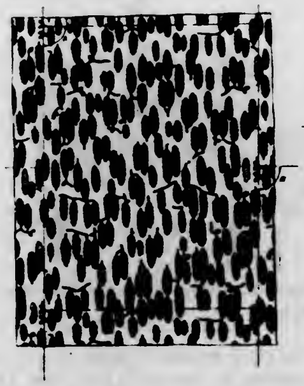
The ornamental design for a textile fabric or the like, as shown and described.

88,650. TEXTILE FABRIC OR THE LIKE. ALFRED J. HEINKE, Towaco, N. J. Filed Nov. 10, 1932. Serial No. 45,861. Term of patent 3½ years.



The ornamental design for a textile fabric or the like, as shown and described.

88,651. TEXTILE FABRIC OR THE LIKE. ALFRED J. HEINKE, Towaco, N. J. Filed Nov. 10, 1932. Serial No. 45,862. Term of patent 3½ years.



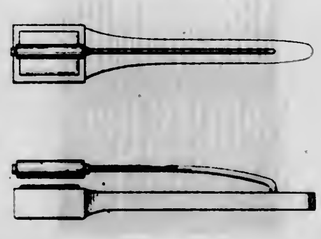
The ornamental design for a textile fabric or the like, as shown and described.

88,652. TEXTILE FABRIC OR SIMILAR ARTICLE. CARL R. HELLMAN, New York, N. Y., assignor to William Willheim Co., Inc., New York, N. Y. Filed Oct. 22, 1932. Serial No. 45,486. Term of patent 3½ years.



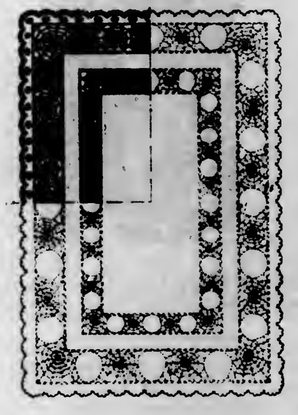
The ornamental design for a textile fabric or similar article as shown and described.

88,653. TYPEWRITER-RIBBON CLEANER. WILBUR G. HUDSON, Newark, N. J. Filed Sept. 24, 1932. Serial No. 45,184. Term of patent 3½ years.



The ornamental design for a typewriter-ribbon cleaner, as shown.

88,654. DOILY. EDWARD KARFIOL, New York, N. Y. Filed Oct. 21, 1932. Serial No. 45,441. Term of patent 14 years.



The ornamental design for a doily as shown and described.

88,655. TEXTILE FABRIC OR SIMILAR ARTICLE. ALEXANDER KOHUT, New York, N. Y., assignor to William Willheim Co., Inc., New York, N. Y. Filed Nov. 12, 1932. Serial No. 45,930. Term of patent 3½ years.



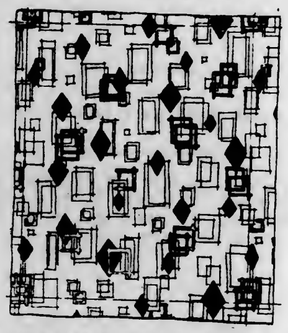
The ornamental design for a textile fabric or similar article as shown and described.

88,656. TEXTILE FABRIC OR SIMILAR ARTICLE. ALEXANDER KOHUT, New York, N. Y., assignor to William Willheim Co., Inc., New York, N. Y. Filed Nov. 12, 1932. Serial No. 45,931. Term of patent 3½ years.



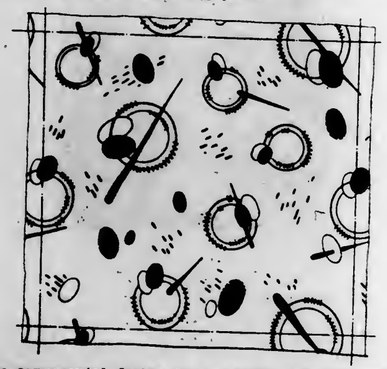
The ornamental design for a textile fabric or similar article as shown and described.

88,657. TEXTILE FABRIC OR THE LIKE. PAUL LESSER, Brooklyn, N. Y. Filed Nov. 14, 1932. Serial No. No. 45,949. Term of patent 3½ years.



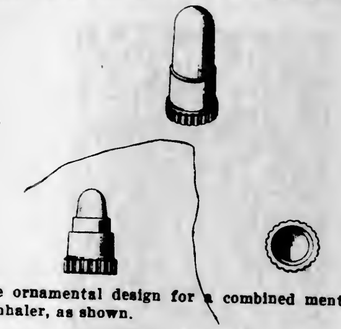
The ornamental design for a textile fabric or the like, as shown and described.

88,658. TEXTILE FABRIC OR THE LIKE. PAUL LESSER, Brooklyn, N. Y. Filed Nov. 14, 1932. Serial No. 45,950. Term of patent 3½ years.



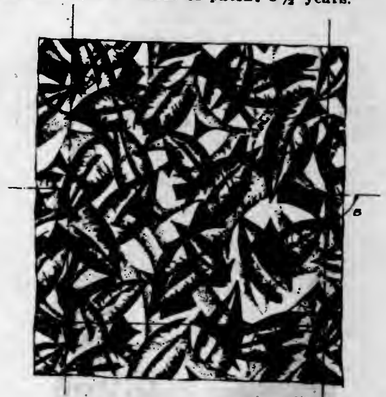
The ornamental design for a textile fabric or the like, as shown and described.

88,659. COMBINED MENTHOL PENCIL AND INHALER. FREDERICK LOBL, Middleboro, Mass. Filed Oct. 5, 1932. Serial No. 45,219. Term of patent 14 years.



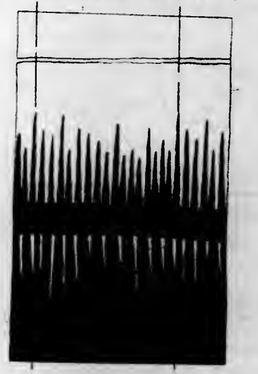
The ornamental design for a combined menthol pencil and inhaler, as shown.

88,660. TEXTILE FABRIC. JULIA LUKAS, New York, N. Y., assignor to Moss-Still, Inc., New York, N. Y., a Corporation of New York. Filed Nov. 7, 1932. Serial No. 45,795. Term of patent 3½ years.



The ornamental design for a textile fabric, substantially as shown and described.

88,661. TEXTILE FABRIC OR THE LIKE. JAQUES MAISCH, New York, N. Y. Filed Nov. 10, 1932. Serial No. 45,863. Term of patent 3½ years.



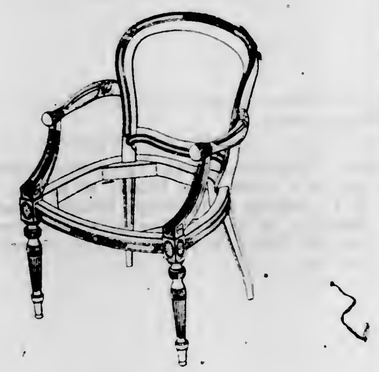
The ornamental design for textile fabric or the like, as shown and described.

88,662. GLIDER SEAT. WILLIAM R. MCGOWEN, Pittsburgh, Pa., assignor to The McKay Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Apr. 4, 1932. Serial No. 43,388. Term of patent 3½ years.



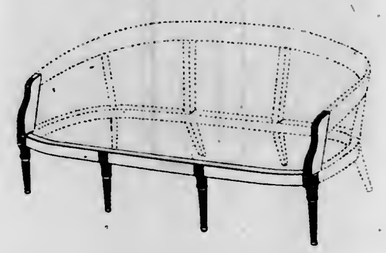
The ornamental design for a glider seat, as shown.

88,663. CHAIR FRAME OR SIMILAR ARTICLE. ARTHUR MCLAURIN, Boston, Mass. Filed Oct. 27, 1932. Serial No. 45,598. Term of patent 3½ years.



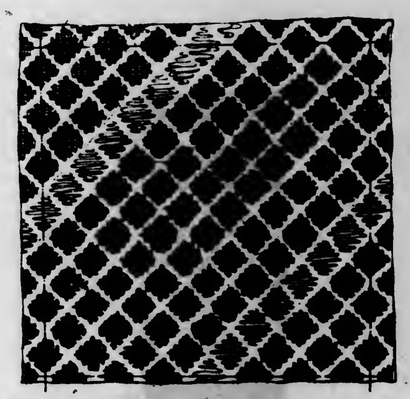
The ornamental design for a chair frame or similar article, as shown.

88,664. SOFA FRAME OR SIMILAR ARTICLE. ARTHUR MCLAURIN, Boston, Mass. Filed Oct. 27, 1932. Serial No. 45,597. Term of patent 3½ years.



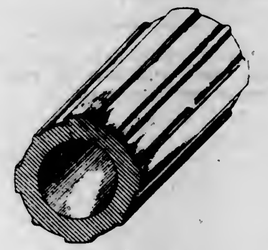
The ornamental design for a sofa frame or similar article, as shown.

88,665. TEXTILE FABRIC OR THE LIKE. GEORGES MENOZ, Bronxville, N. Y., assignor to Combier & Co. Inc., New York, N. Y., a Corporation of Delaware. Filed Oct. 4, 1932. Serial No. 45,205. Term of patent 3½ years.



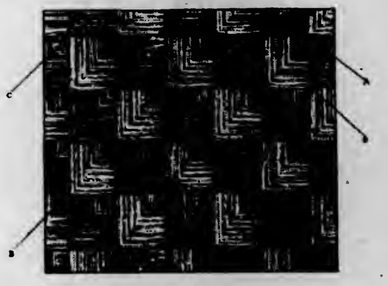
The ornamental design for a textile fabric or the like substantially as shown and described.

88,666. HOSE. HERMAN E. MORSE, Akron, Ohio, assignor to The Goodyear Tire & Rubber Company, Akron, Ohio, a Corporation of Ohio. Filed June 29, 1931. Serial No. 40,858. Term of patent 14 years.



The ornamental design for a hose, as shown.

88,667. CARPET. FRANCIS MURPHY, New York, N. Y., assignor to Bigelow Sanford Carpet Co., Inc., a Corporation of Massachusetts. Filed Oct. 21, 1932. Serial No. 45,435. Term of patent 7 years.



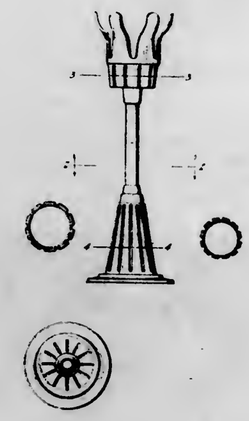
The ornamental design for a carpet substantially as shown and described.

88,668. TEXTILE FABRIC OR SIMILAR ARTICLE. HERMAN S. MURRAY, Woodmere, N. Y., assignor to William Willheim Co., Inc., New York, N. Y. Filed Nov. 12, 1932. Serial No. 45,021. Term of patent 3½ years.



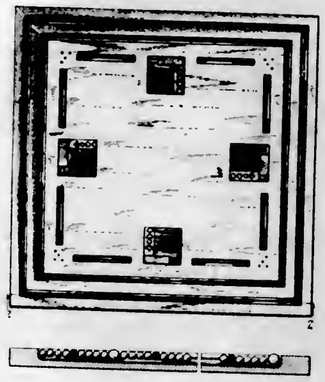
The ornamental design for a textile fabric or similar article as shown and described.

88,669. OIL TANK PEDESTAL. ANTONI MUSZYNSKI, Easthampton, Mass. Filed Sept. 26, 1932. Serial No. 45,069. Term of patent 14 years.



The ornamental design for an oil tank pedestal, as shown.

88,670. BRIDGE TABLE TOP. WILLIAM ANDREW O'BRIEN, San Francisco, Calif. Filed Sept. 19, 1932. Serial No. 44,999. Term of patent 3½ years.



The ornamental design for a bridge table top, substantially as shown.

88,671. DECALCOMANIA TRANSFER SHEET. CORNELIUS R. POWERS and LILLIAN M. KOUBEK, Elizabeth, N. J., assignors to The Singer Manufacturing Company, Elizabeth, N. J., a Corporation of New Jersey. Filed Oct. 21, 1932. Serial No. 45,448. Term of patent 14 years.



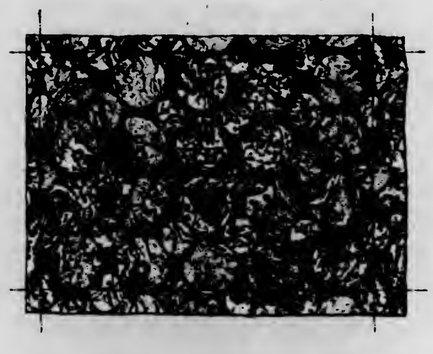
The ornamental design for a decalcomania transfer sheet, as shown.

88,672. TEXTILE FABRIC OR THE LIKE. WILLARD D. ROBERSON, New York, N. Y. Filed Nov. 1, 1932. Serial No. 45,682. Term of patent 3½ years.



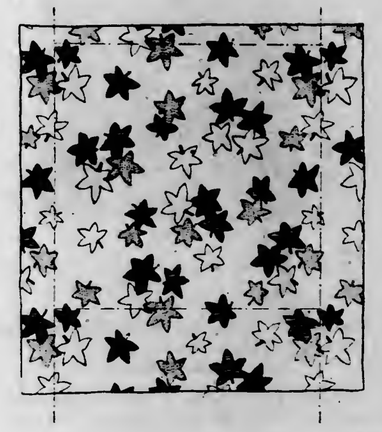
The ornamental design for textile fabric or the like, as shown and described.

88,673. TEXTILE FABRIC. WILLARD D. ROBERSON, New York, N. Y., assignor to Hess Goldsmith & Company, Inc., New York, N. Y., a Corporation of Delaware. Filed Nov. 5, 1932. Serial No. 45,776. Term of patent 3½ years.



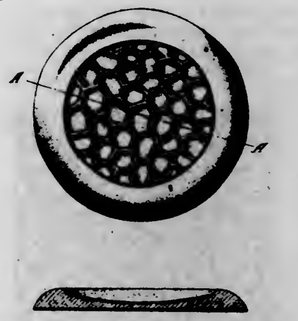
The ornamental design for a textile fabric, substantially as shown and described.

88,674. TEXTILE FABRIC OR THE LIKE. CARL SANDELIN, New York, N. Y. Filed Nov. 8, 1932. Serial No. 45,880. Term of patent 3½ years.



The ornamental design for a textile fabric or the like, as shown and described.

88,675. CANDY CONFECTION. GRETCHEN B. SCHOENLEBER, Milwaukee, Wis., assignor to Ambrosia Chocolate Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed May 25, 1932. Serial No. 43,903. Term of patent 7 years.



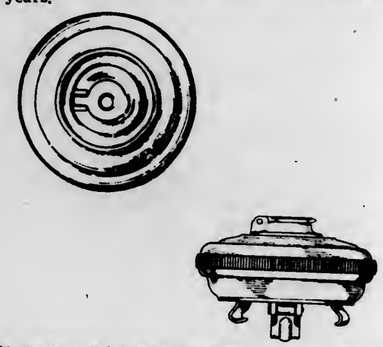
The ornamental design for a candy confection, as shown.

88,676. RADIATOR ORNAMENT. LOWELL J. SMITH, Connersville, Ind., assignor to Stant Manufacturing Co., Connersville, Ind., a Corporation of Indiana. Filed Oct. 21, 1932. Serial No. 45,436. Term of patent 7 years.



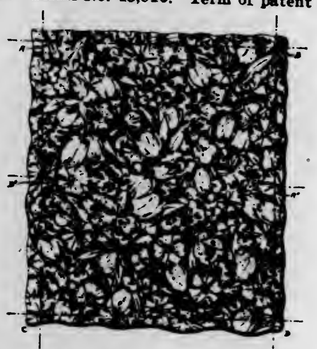
The ornamental design for a radiator ornament, as shown.

88,677. FILLER CAP. KYLE E. STANT, Connersville, Ind. Filed Apr. 11, 1932. Serial No. 43,454. Term of patent 7 years.



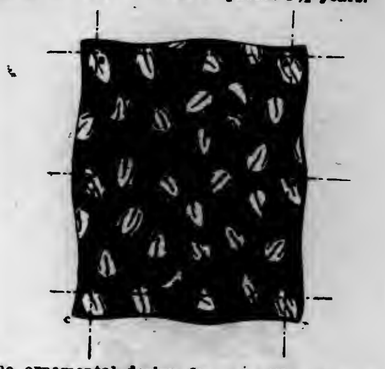
The ornamental design for a filler cap, substantially as shown.

88,678. TEXTILE FABRIC OR SIMILAR ARTICLE. JACK SCHWEIZER, New York, N. Y., assignor to William Willheim Co., Inc., New York, N, Y. Filed Nov. 12, 1932. Serial No. 45,910. Term of patent 3½ years.



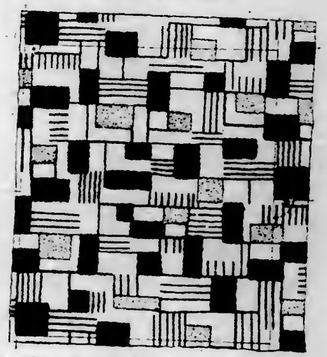
The ornamental design for a textile fabric or similar article as shown and described.

88,679. TEXTILE FABRIC OR SIMILAR ARTICLE. JACK SCHWEIZER, New York, N. Y., assignor to William Willheim Co., Inc., New York, N. Y. Filed Nov. 12, 1932. Serial No. 45,913. Term of patent 3½ years.



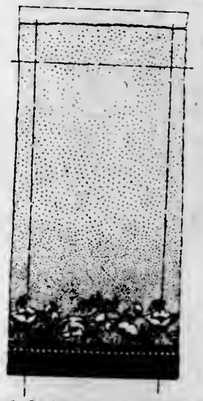
The ornamental design for a textile fabric or similar article as shown and described.

88,680. TEXTILE FABRIC OR THE LIKE. JACK SCHWEIZER, Rye, N. Y. Filed Nov. 8, 1932. Serial No. 45,808. Term of patent 3½ years.



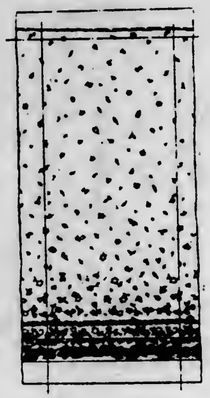
The ornamental design for a textile fabric or the like, as shown and described.

88,681. TEXTILE FABRIC OR THE LIKE. JACK SCHWEIZER, Rye, N. Y. Filed Nov. 11, 1932. Serial No. 45,877. Term of patent 3½ years.



The ornamental design for a textile fabric or the like, as shown and described.

88,682. TEXTILE FABRIC OR THE LIKE. JACK SCHWEIZER, Rye, N. Y. Filed Nov. 11, 1932. Serial No. 45,878. Term of patent 3½ years.



The ornamental design for a textile fabric or the like, as shown and described.

88,683. ELBOW FITTING FOR RESPIRATORS. HARRY F. SHINDEL, Reading, Pa., assignor to Willson Products, Inc., Reading, Pa., a Corporation of Pennsylvania. Filed Sept. 3, 1932. Serial No. 44,752. Term of patent 14 years.



The ornamental design for an elbow fitting for respirators as shown.

88,684. CARPET. ANTHONY E. SMIDLEIN, New York, N. Y., assignor to Bigelow Sanford Carpet Co., Inc., a Corporation of Massachusetts. Filed Oct. 25, 1932. Serial No. 45,573. Term of patent 7 years.



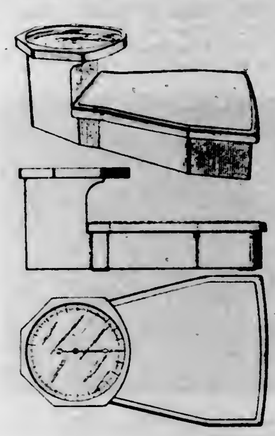
The ornamental design for a carpet substantially as shown and described.

88,685. CARPET. ANTHONY E. SMIDLEIN, New York, N. Y., assignor to Bigelow Sanford Carpet Co., Inc., a Corporation of Massachusetts. Filed Oct. 26, 1932. Serial No. 45,581. Term of patent 7 years.



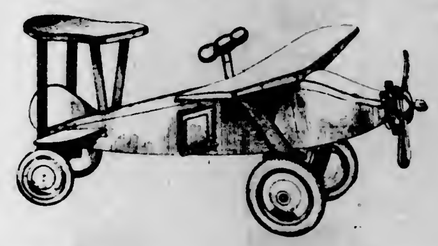
The ornamental design for a carpet substantially as shown and described.

88,686. SCALE. WILLIAM V. SUTTON, Rockford, Ill., assignor to Walter E. Brearley, Rockford, Ill. Filed Oct. 17, 1932. Serial No. 45 376. Term of patent 7 years.



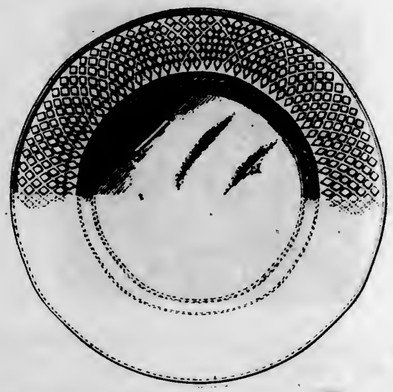
The ornamental design for a scale, as shown.

88,687. TOY VEHICLE. EDWARD M. SWARTS, Boston, Mass., assignor to Keystone Mfg. Co., Boston, Mass., a Corporation of Massachusetts. Filed Feb. 1, 1932. Serial No. 42,686. Term of patent 14 years.



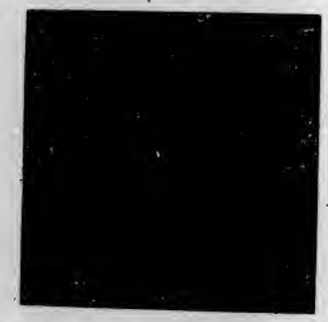
The ornamental design for a toy vehicle substantially as shown and described.

88,688. PLATE OR SIMILAR ARTICLE OF POTTERY. SIDNEY E. THOMPSON, West Englewood, N. J., assignor to Copeland & Thompson, Incorporated, New York, N. Y., a Corporation of New York. Filed Oct. 14, 1932. Serial No. 45,364. Term of patent 14 years.



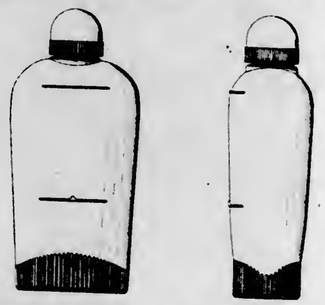
The ornamental design for a plate or similar article of pottery as shown and described.

88,689. CARPET. JOHN S. TRAVIS, Long Island City, N. Y., assignor to Bigelow Sanford Carpet Co., Inc., a Corporation of Massachusetts. Filed Oct. 26, 1932. Serial No. 45,582. Term of patent 7 years.



The ornamental design for a carpet substantially as shown and described.

88,690. BOTTLE. SIMON DE VAULCHIER, New York, N. Y., assignor to Chamberlain Laboratories, Inc., Des Moines, Iowa, a Corporation of Iowa. Filed Mar. 24, 1932. Serial No. 43,281. Term of patent 14 years.



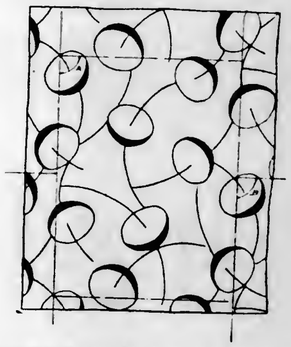
The ornamental design for a bottle as shown.

88,691. BRIDGE MEMBER FOR AN OPHTHALMIC MOUNTING. ALFRED VEILLETTE, Attleboro, Mass. Filed Apr. 2, 1932. Serial No. 43,378. Term of patent 3½ years.



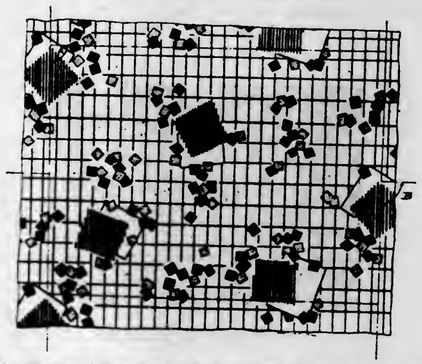
The ornamental design for a bridge member for an ophthalmic mounting as shown.

88,692. TEXTILE FABRIC OR THE LIKE. JAMES VILLANI, Ridgewood, N. J. Filed Nov. 8, 1932. Serial No. 45,824. Term of patent 3½ years.



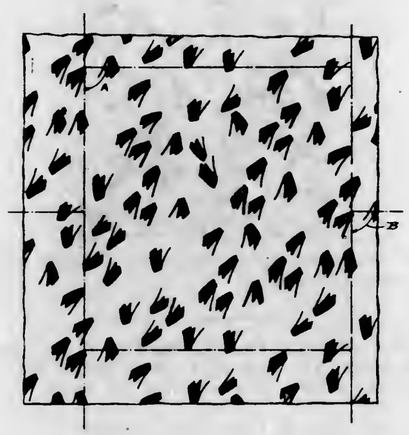
The ornamental design for a textile fabric or the like, as shown and described.

88,693. TEXTILE FABRIC OR THE LIKE. JAMES VILLANI, Ridgewood, N. J. Filed Nov. 8, 1932. Serial No. 45,823. Term of patent 3½ years.



The ornamental design for a textile fabric or the like, as shown and described.

88,694. TEXTILE FABRIC OR THE LIKE. GABRIEL VIRGILE, Long Beach, N. Y. Filed Oct. 29, 1932. Serial No. 45,628. Term of patent 3½ years.



The ornamental design for a textile fabric or the like substantially as shown and described.

88,695. TEXTILE FABRIC OR SIMILAR ARTICLE. PHILIP A. VOGELMAN, New York, N. Y., assignor to William Willheim Co., Inc., New York, N. Y. Filed Nov. 12, 1932. Serial No. 45,933. Term of patent 3½ years.



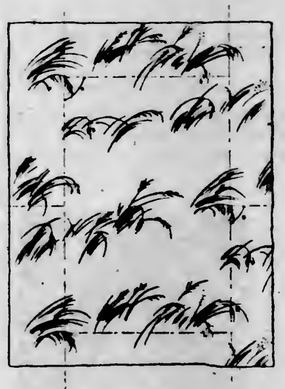
The ornamental design for a textile fabric or similar article as shown and described.

88,696. TEXTILE FABRIC. PHILIP A. VOGELMAN, New York, N. Y. Filed Nov. 11, 1932. Serial No. 45,871. Term of patent 3½ years.



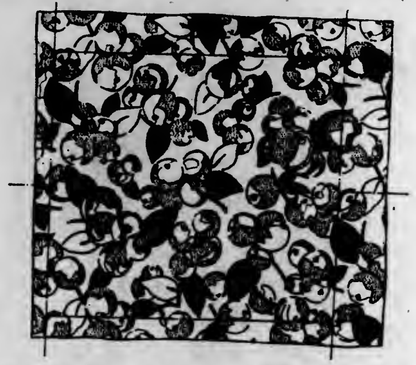
The ornamental design for a textile fabric, substantially as shown and described.

88,697. TEXTILE FABRIC. PHILIP A. VOGELMAN, New York, N. Y. Filed Nov. 11, 1932. Serial No. 45,872. Term of patent 3½ years.



The ornamental design for a textile fabric, substantially as shown and described.

88,698. TEXTILE FABRIC OR THE LIKE. IRENE A. WEITZ, Brooklyn, N. Y. Filed Nov. 11, 1932. Serial No. 45,876. Term of patent 3½ years.



The ornamental design for a textile fabric or the like, as shown and described.

88,699. TEXTILE FABRIC OR SIMILAR ARTICLE. WILLIAM WILLHEIM, New York, N. Y. Filed Nov. 4, 1932. Serial No. 45,749. Term of patent 3½ years.



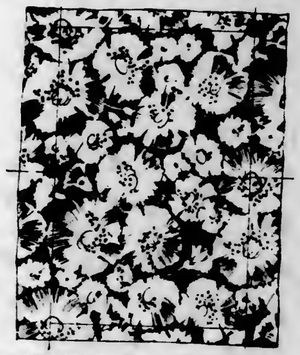
The ornamental design for a textile fabric or similar article as shown and described.

88,700. TEXTILE FABRIC OR SIMILAR ARTICLE. WILLIAM WILLHEIM, New York, N. Y. Filed Nov. 12, 1932. Serial No. 45,917. Term of patent 3½ years.



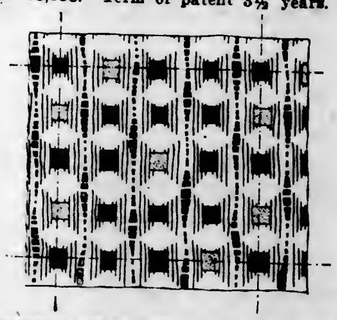
The ornamental design for a textile fabric or similar article as shown and described.

88,701. TEXTILE FABRIC OR THE LIKE. EVELYN WINTRICH, New York, N. Y. Filed Nov. 14, 1932. Serial No. 45,952. Term of patent 3½ years.



The ornamental design for a textile fabric or the like, as shown and described.

88,702. TEXTILE FABRIC OR THE LIKE. EVELYN WINTRICH, New York, N. Y. Filed Nov. 8, 1932. Serial No. 45,838. Term of patent 3½ years.



The ornamental design for a textile fabric or the like, as shown and described.

88,703. TEXTILE FABRIC OR THE LIKE. EVELYN WINTRICH, New York, N. Y. Filed Nov. 8, 1932. Serial No. 45,839. Term of patent 3½ years.

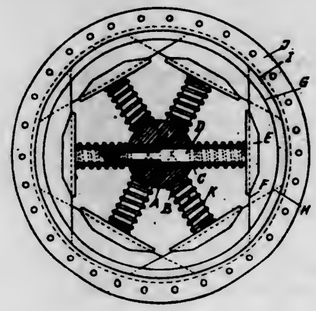


The ornamental design for a textile fabric or the like, as shown and described.

PATENTS

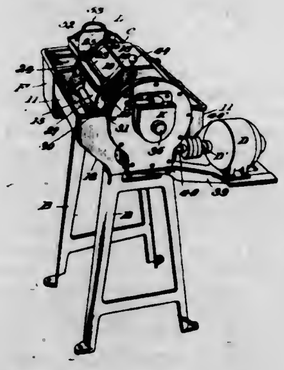
GRANTED DECEMBER 13, 1932

1,890,442. SHOCK-ABSORBING APPARATUS FOR MASSIVE WHEELS. PEDRO ALTUNA, San Sebastian, Spain. Filed Feb. 17, 1932, Serial No. 593,617, and in Spain Jan. 22, 1932. 5 Claims. (Cl. 152—28.)



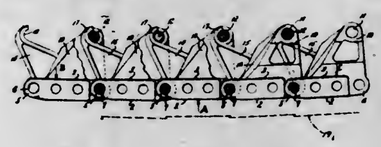
1. In a wheel center, an inner hub having a series of diametrically disposed openings therein, spokes slidable through said openings independently of each other and projecting at both ends from the hub, an outer annular hub normally concentric to the inner hub, sliding connections between the extremities of each stroke and the outer hub, and compression springs surrounding the projecting ends of the spokes and normally holding the hub centrally on the spokes.

1,890,443. BURNISHING MACHINE. MORTIMER R. ANSTICE and CLELAND C. ROSS, Rochester, N. Y., assignors to Josiah Anstice & Co. Inc., Rochester, N. Y. Filed Jan. 21, 1931. Serial No. 510,809. 13 Claims. (Cl. 51—164.)



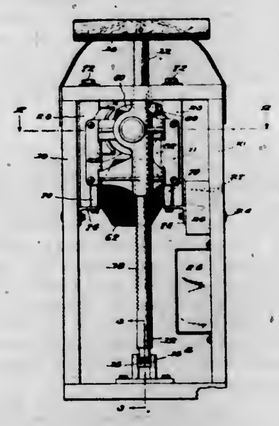
12. A burnishing machine comprising a rotatably mounted tumbling barrel having therein oppositely disposed sides closed by covers adapted to open in opposite directions, a foraminous basket capable of being inserted in one opening and withdrawn from the other opening, and means for rotating said tumbling barrel.

1,890,444. TREAD LINK. ARTHUR P. ARMINGTON, Willoughby, Ohio. Filed July 21, 1932. Serial No. 623,708. 2 Claims. (Cl. 305—10.)



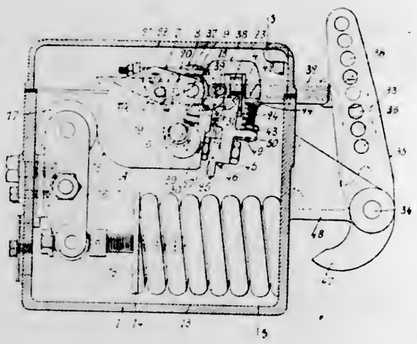
2. A tread linkage composed of articulate links, each adjacent pair of links having rail-carrying ground-engaging shoe parts with hinge means connecting their adjacent ends, truss members upwardly extending from said shoe parts and having oppositely directed bearing faces for transmitting truss-forming stresses between said links, and roller means arranged to be effective between said faces to provide antifriction characteristics for their relative translatory motion, permitted by looseness at said hinge connection, at least one of said faces being concavely curved whereby upon relative translatory motion of said links permitted by looseness at said hinge connection when said links are operating in a truss-forming stretch of linkage, said links will be caused relative angular motion about said connection in a direction to oppose the loading on said stretch.

1,890,445. ELECTRIC BLASTING MACHINE. HORACE W. ASIRE and WALLACE W. PERKINS, Detroit, and EDWARD J. MARTIN, Ferndale, Mich., assignors to E. I. du Pont de Nemours & Company, Wilmington, Del., a Corporation of Delaware. Filed Oct. 8, 1929. Serial No. 398,132. 7 Claims. (Cl. 171—76.)



1. In a blasting machine the combination of a closed igniting circuit, including a charge igniting device, a generator in the igniting circuit, means for normally short circuiting the generator including a normally closed multipoint switch, means for operating the generator, and means for thereafter opening the switch to produce discharge of generated current through the igniting circuit, said switch, when opened, providing a series of gaps in series to minimise arcing.

1,890,446. SERVO-BRAKE. FRANCIS ATHIMON, Paris, France. Filed Apr. 11, 1930, Serial No. 443,580, and in France Apr. 23, 1929. 5 Claims. (Cl. 188—140.)



1. In a braking device, an operating rod adapted to be moved by an operator, a stationary axle, a main lever adapted to be rotated on said axle, a tensioned spring, means adapted to transmit the tension of said spring to said main lever along variable directions differently distant from said stationary axle, a pivoting connection between said main lever and said operating rod located on a perpendicular drawn from the centre line of said axle on said operating rod, said perpendicular sloping in a direction opposite the direction of the movement of said operating rod during the operator's action, and a controlling rod pivoted to said lever and adapted to be connected with the brakes.

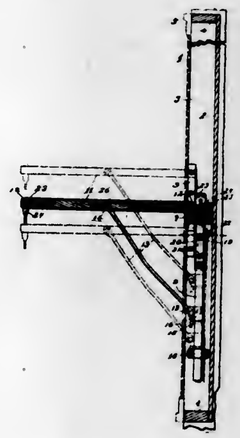
1,890,447. SINGLE NEEDLE JOINING FOLDER. HARVEY W. BECK and ROBERT M. BELL, Danville, Pa. Filed Apr. 3, 1931. Serial No. 527,592. 1 Claim. (Cl. 112—147.)



A folder of the character described comprising a plate formed with an upwardly and laterally curved portion inclined transversely of said plate, a vertical portion rising from the outer edge of said first named portion and having a flange extending inwardly spaced below the upwardly and laterally curved portion, the flange being gradually increased in width from end to end, a plate having a loop joined with the uppermost of said second named portion, and a loop extended from the second named portion and following the loop of the plate and spaced an equidistance therefrom, said flange, loops and plate being inclined correspondingly to the incline of the upwardly and laterally curved portion.

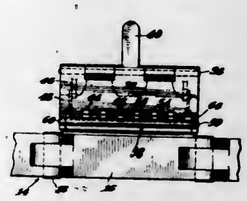
1,890,448. FOLDING IRONING BOARD. JOHN T. BERG, Pequannock, N. J. Filed May 27, 1931. Serial No. 540,303. 3 Claims. (Cl. 68—10.)

1. In combination with a sustaining frame, an ironing board having a detachable horizontal pivotal connection at one end with said frame to fold to an upright inoperative position, supporting links pivoted at their upper ends to the opposite edges of the board and having sliding connection at their opposite ends with the frame, means for limiting the downward movement of the links to support the board in extended operative position, whereby by disconnecting the end of the board from the frame, the board may be turned end for end on the pivots of the



links, and means for connecting the other end of the board in its reversed position pivotally and detachably with the frame.

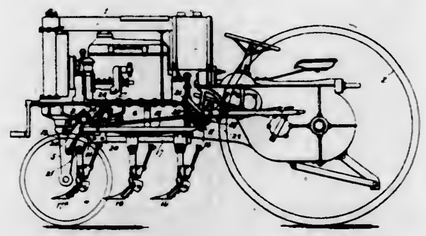
1,890,449. CLIP FOR TENTERING MACHINES AND THE LIKE. WILLIAM BEARY, Passaic, N. J. Filed July 22, 1931. Serial No. 552,461. 17 Claims. (Cl. 26—62.)



1. A clip for allowing predetermined shrinkage in fabric, comprising a base member, a movable nipper plate with a corrugated edge, the ridges of which are adapted to bear against said base member when the clip is closed and a movable member provided with a series of projections conforming in shape with, and adapted to fit into, the indentations of said corrugated edge so that when the clip is open, fabric introduced therein may be pressed into the corrugations of the nipper plate, and means for lowering said projections when the clip is closed so that the fabric surplus within the indentations is available for shrinkage.

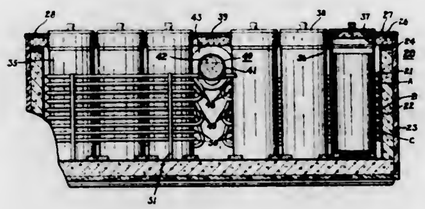
1,890,450. TRACTOR IMPLEMENT. HERMAN E. ALTGELT, South Bend, Ind., assignor, by mesne assignments, to Oliver Farm Equipment Company, a Corporation of Delaware. Filed Mar. 19, 1928. Serial No. 262,929. 12 Claims. (Cl. 97—47.)

1. The combination with a tractor and a beam secured thereto and projecting laterally from its forward portion, of a hanger secured to said beam and having a depending arm, an earth-working structure including a beam and a bracket secured to the forward portion of said last-mentioned beam, said bracket including an upwardly projecting post, a link connection between the upper portion of said post and said hanger, a link con-



nection between said bracket and the depending arm of the hanger, and means for raising and lowering said earth-working structure.

1,890,451. REFRIGERATING APPARATUS. FRANK W. ANDREWS, Dayton, Ohio, assignor, by mesne assignments, to Frigidaire Corporation, a Corporation of Delaware. Filed Apr. 13, 1927. Serial No. 183,469. 6 Claims. (Cl. 62—126.)



5. A cooling unit for a refrigerating apparatus comprising a header adapted to contain liquid refrigerating medium, means for maintaining a substantially constant quantity of liquid in the header and a vertically extending coil connected to the header and disposed laterally thereof, said coil including a plurality of substantially horizontal loops forming an enclosure for a vertically arranged compartment, and being connected at both ends to the header.

1,890,452. BORING BAR FOR USE UPON PIPE COUPLING BLANKS OR THE LIKE. WILLIAM G. BENNINGHOFF, Cleveland Heights, Ohio. Filed Nov. 8, 1930. Serial No. 494,359. 5 Claims. (Cl. 77—58.)

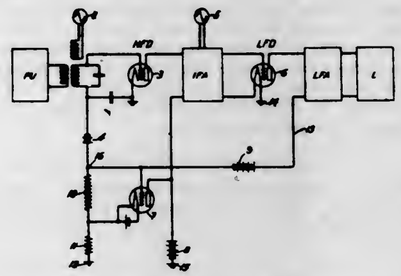


1. A boring bar comprising, a body member, an adjusting ring having threaded engagement with said body member, the latter being formed with grooves adapted to accommodate cutting tools, adjusting bars extended through the body member and at one end abutting said adjusting ring and at the other end adapted to extend into said grooves, said body member being also formed with surface recesses adapted to accommodate other cutting tools, and means positioned in transverse alignment with said surface recesses for securing tools in said recesses.

1,890,453. TRISODIUM PHOSPHATE-SODIUM NITRATE. FREDERIC CHARLES BOWMAN, Los Angeles, Calif., assignor to A. R. Maas Chemical Co., Los Angeles, Calif., a Corporation of California. Filed Aug. 24, 1931. Serial No. 559,138. 16 Claims. (Cl. 23—250.)

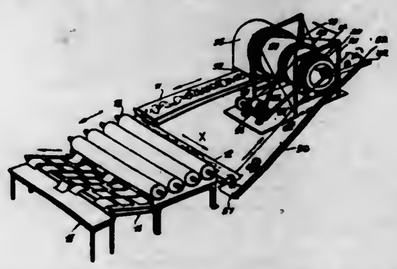
11. The herein described composition of matter of crystalline form consisting of sodium phosphate, a plurality of salts of monobasic acids, sodium hydroxide and water of crystallization.

1,890,454. AUTOMATIC GAIN CONTROL. EDMOND BRUCE, Red Bank, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Dec. 21, 1928. Serial No. 327,564. 7 Claims. (Cl. 250—20.)



1. In combination, a space discharge device, an auxiliary space discharge device, means for causing the space current of the auxiliary device to vary inversely with the space current of the first device, means for producing a potential in proportion to the difference in the space currents of said devices, and means for causing the space current of the first device to vary inversely with said potential.

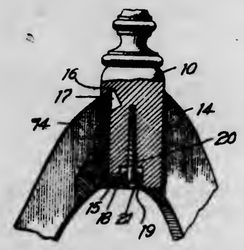
1,890,455. LAUNDRY APPARATUS. JOHN CONSORTI, Brooklyn, N. Y., assignor of sixty one-hundredths to Louis Gordon, Brooklyn, N. Y. Filed Apr. 16, 1931. Serial No. 530,674. 3 Claims. (Cl. 68—11.)



3. In a laundry apparatus, a tumbling barrel for removing major folds from articles to be ironed, said barrel being open at both ends for continuously receiving and discharging individual articles, belt means for conveying said articles from the outlet to the inlet of said barrel, said belt means together with said tumbling barrel form-

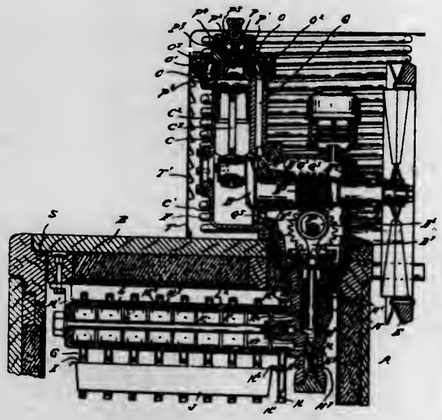
ing a closed path for the articles and enclosing an area within which an operator may be positioned to remove selected articles from the belt means for the ironing treatment.

1,890,456. ARTICLE OF FURNITURE. WILLIAM C. H. CUSHMAN, North Bennington, Vt., assignor to H. T. Cushman Mfg. Co., North Bennington, Vt. Filed July 31, 1931. Serial No. 554,194. 3 Claims. (Cl. 45—117.)



1. A device as characterized comprising a standard and legs therefor, said standard having elongated slots, the upper portions forming a half dove-tail at an acute angle to receive marginal portions of the legs, and said slots adjacent their lower ends and extending inward towards the center of the standard being cut away to form notches to more firmly secure the lower marginal portions of the legs to the standard.

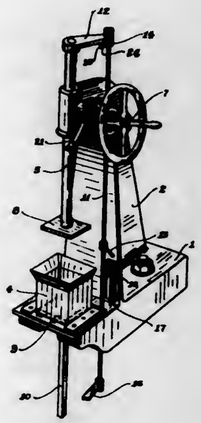
1,890,457. REFRIGERATING MACHINE. MERRILL DAVIS, Detroit, Mich. Filed Oct. 25, 1926. Serial No. 144,079. 15 Claims. (Cl. 62—115.)



1. In a refrigerating apparatus the combination with a compressor and expansion and compression chambers adjacent thereto, of means for positively ejecting condensate from the pressure side of the system into the expansion side thereof.

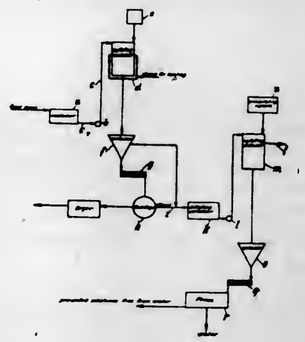
1,890,458. FOOD PRESS. NICKOLAS J. DZIEDZIC, Chicago, Ill., assignor to Swift and Company, Chicago, Ill., a Corporation of Illinois. Filed Sept. 28, 1931. Serial No. 565,496. 3 Claims. (Cl. 17—32.)

1. In a press including compression box, a plunger, an ejector and lifter, a rod having the lifter connected thereto and having a swivel connection with the plunger to move therewith and turn independently thereof, and trip means for automatically turning the rod to position



the lifter in the path of the ejector, said trip means including an arm rigidly connected to the said rod, and a cam mounted upon the supporting frame.

1,890,459. PROCESS OF MAKING FERTILIZERS FROM FECES OR THE LIKE. RICHARD FLUCK, Berlin, and ALFRED THEIL, Berlin-Schmargendorf, Germany, assignors to Wilhelm von Radowitz, Berlin, Germany. Filed June 4, 1927, Serial No. 196,628, and in Germany June 23, 1926. 2 Claims. (Cl. 71—8.)



1. The process of simultaneously producing an organic and a mineral fertilizer from fecal matter contained in sewage which process consists in mixing said fecal matter with three to five per cent, in weight, of an adsorbent material selected from the group consisting of peat and lignite, raising the temperature of the mixture in said container to about 60° C. while agitating said mixture, thus causing said material to eagerly absorb and adsorb solid organic fertilizing matter and also fertilizing gases out of the fecal matter forming part of said mixture; allowing the solid matter so obtained to settle; and removing the liquid from the separated solid matter; removing further amounts of liquid present in the solid matter by centrifuging; collecting all removed amount of liquid; and precipitating therefrom inorganic fertiliser constituents.

1,890,460. TEMPORARY CAP FOR CUPS, ETC. CARL GEBHARD, Los Angeles, Calif. Filed Mar. 7, 1931. Serial No. 520,889. 6 Claims. (Cl. 215—38.)



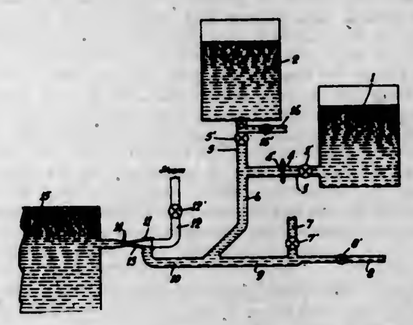
1. In combination with a cup, a paper cap fitting in flat contact therewith so as to cover the same snugly to prevent spilling of the contents thereof, and resilient clips carried dependingly by said cap engaging frictionally the side of the cup as a means of retention thereon.

1,890,461. REFRIGERATOR EQUIPMENT. ELMER A. HAMBURG, Pittsburgh, Pa., assignor to the Firm of Hamburg Brothers, Pittsburgh, Pa., composed of Elmer A. Hamburg, Louis Hamburg, and Joseph Hamburg. Filed Aug. 7, 1931. Serial No. 555,650. 1 Claim. (Cl. 62—89.)



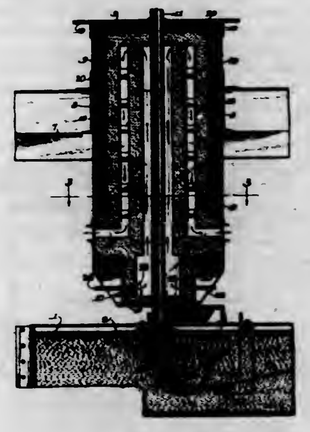
A liquid container for installation in a refrigerator including a shelf and refrigerating equipment extending upward from the shelf, which container comprises an independent unit tank structure adapted to seat freely on said shelf, the tank being of relatively narrow, tall and elongate dimensions, one of the narrow and elongate faces therefor comprising the bottom of said structure, and the face of the tank opposite said bottom including a removable cover, one of the narrow and tall faces of said container constituting its front face, the container being adapted to seat on said shelf with its front face adjacent the edge of the shelf and with one of its elongate and tall faces adjacent said refrigerating equipment, said front face being provided with a valved outlet which includes a hollow, swingable handle which is adapted to be swung to a position overhanging the edge of said shelf, and in such position to effect an opening of said valved outlet, whereby liquid is discharged from the container by way of said hollow handle, and said handle being further adapted to be swung upward to a position against said face, whereby said valved outlet is closed.

1,890,462. ROSIN SIZE. WILLIAM H. HARDING, Flushing, N. Y., and SIDNEY V. BURROWS, Boston, Mass., assignors to The Kalbfleisch Corporation, New York, N. Y., a Corporation of Delaware. Filed Mar. 17, 1931. Serial No. 523,274. 6 Claims. (Cl. 134—21.)



1. A method for making a low free rosin size comprising substantially simultaneously subjecting a rosin size having a free rosin content of greater than 22%, as determined by titration, to great agitation with the addition of heat and substantially simultaneously adding a strong alkaline solution.

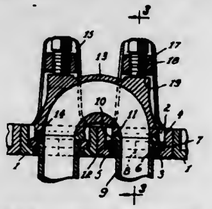
1,890,463. METAL COATED IRON OR STEEL ARTICLE AND METHOD AND APPARATUS FOR PRODUCING SAME. JOSEPH L. HERMAN, Peoria, Ill., assignor to Keystone Steel & Wire Company, Peoria, Ill., a Corporation of Illinois. Filed Apr. 3, 1931. Serial No. 527,496. 6 Claims. (Cl. 91—12.6.)



6. In an apparatus of the character described, in combination, a galvanising pan for use with a bath of molten zinc, means for diverting material subjected to the bath into a vertical path of travel as such material leaves the bath, a structure supported in a vertical position above the pan at the point where the material emerges from said pan, such structure characterised by having a central vertical heating flue and spaced vertical exhaust flues on opposite sides thereof in communication with said central flue at their upper ends and with exhaust outlets at their lower ends, an imperforate hot tube disposed in vertical position in said central flue through which the

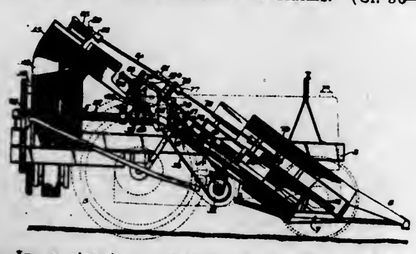
coated material is carried and having its lower end projecting through the structure and being submerged in the bath of molten zinc, said tube consisting of joined aligned vertical sections, certain of which are of heat resisting material and certain others being of the consistency of soft steel, means to guide the material from the pan and through the tube as to prevent the material and coating from coming into contact with any object during emergence of the material from the bath and through the tube and until the coating becomes substantially solidified, means for heating the tube through heat inlets at the lower end of said central flue and in turn through radiation of the heat from the tube heat-treating the material and coating as it is carried through the tube, and a deoxidizing material on the surface of the bath within the tube, where the tube is submerged in the bath, to reduce the amount of surface oxidation of both the zinc bath and the coating where the coated material emerges into the atmosphere of the tube from such bath.

1,890,464. RETURN BEND OR HEADER CONSTRUCTION FOR TUBULAR STILLS OR BOILERS OR PIPE CONNECTIONS. RAYMOND THAYER HOWES, Long Beach, Calif., assignor of one-half to James W. Weir, Los Angeles, Calif. Filed Jan. 5, 1931. Serial No. 506,630. 4 Claims. (Cl. 285—20.)



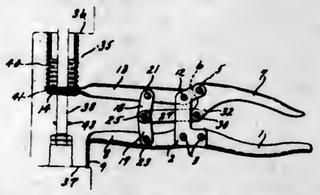
1. In a tube sheet construction, the combination of a plurality of substantially rectangular blocks arranged in rows with the edges of the blocks substantially touching each other, each of said blocks having an opening therein with a bushing, a tube of considerably smaller diameter than the opening, received in each bushing so that each tube is capable of lateral movement within its bushing, each tube having a shoulder seating on the bushing, and having an integral seat on its end, return bends connecting the tubes in pairs with the ends of the return bends seating against the said integral seats on the ends of the tubes and forming a joint therewith, and means for clamping the return bends against the ends of the tubes, the openings in said bushings permitting lateral shifting of the tubes so that the tubes center themselves respectively on the ends of the return bends, and the position of the tubes is determined by the ends of the bends.

1,890,465. DRIVE MEANS FOR CORN HARVESTERS. ALFRED KRIEG, Racine, Wis., assignor, by mesne assignments, to Oliver Farm Equipment Company, Wilmington, Del., a Corporation of Delaware. Filed July 11, 1928. Serial No. 291,714. 3 Claims. (Cl. 56—18.)



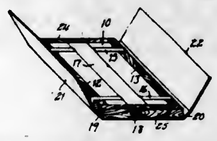
1. In a tractor operated harvesting mechanism, a frame therefor and comprising a pair of spaced frame members, a saddle rigidly connected to said frame members, a housing rigid with said saddle, roller bearings carried by said housing, a centralized group of power transmitting elements operatively supported in said bearings, a power take-off extending laterally from the tractor and operative connections extending from said group to operative devices on said harvesting mechanism and to said power take-off means.

1,890,466. VALVE SPRING LIFTER. HOWARD E. LEMMERMAN, Cleveland, Ohio, assignor to The Simmons Manufacturing Company, Cleveland, Ohio, a Corporation of Ohio. Filed June 6, 1931. Serial No. 542,492. 1 Claim. (Cl. 29—86.3.)



A valve spring lifter, comprising a rigid member having bearing and handle portions at its opposite ends and between them a pair of laterally extending plate-like supports each provided with an ear, said supports lying side by side in spaced parallel planes, a lifting jaw pivoted between said supports and extending opposite said bearing portion, toggle members connecting said bearing portion and jaw, an operating handle pivoted between said ears and having an extension toward the first named handle portion, and a link connecting said extension to the toggle members and passing between said supports, the supports and extension being so formed and arranged and the link being of such length that on closing the handles the toggle members move beyond dead center and the extension abuts said supports to limit such movement to a self-locking position.

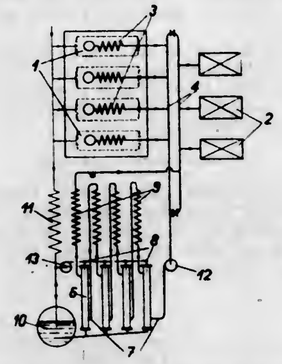
1,890,467. SHIPPING-CONTAINER FOR PRINTING PLATES, ELECTROTYPERS' MATS, ETC. WALKER W. MCCARROLL, New Haven, Conn. Filed Nov. 20, 1930. Serial No. 496,880. 5 Claims. (Cl. 206—60.)



1. A shipping-container of the type referred to consisting of a pair of marginal-guard bars respectively located against the opposite edges of the goods to be shipped and organized therewith into a unitary inner package; an outer casing; and a pair of complementary marginal-guard bars secured to the said casing and extending at a right angle to the marginal-bars first mentioned to complement the same in protecting the edges of the contained goods.

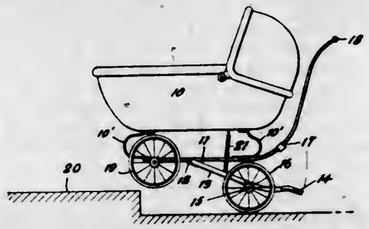
1,890,468. STEAM GENERATOR. WALTER GUSTAV NOACK, Baden, Switzerland. Filed Feb. 28, 1929, Serial No. 343,413, and in Germany Mar. 1, 1928. 10 Claims. (Cl. 122—459.)

1. The method of obtaining excess steam for supplying overloads of short or long duration from an existing boiler aggregate of a capacity insufficient to supply the overloads, which comprises supplying the steam from said boiler aggregate to the load during absence of overload, and, in case of overload demand, diverting all or a part of the steam generated by said boiler aggregate from the load and passing it as exciting steam into a multi-stage injection steam vaporizer producing therein additional steam, and delivering the steam so produced in the vaporizer to the load to supply the overload demand.



6. In a steam plant, a slowly responsive sluggishly acting boiler aggregate, a steam consuming load, a steam distributing pipe system, a quickly responsive instantaneously acting injection steam vaporizer, and means for diverting all or a part of the steam generated by said aggregate from said load and passing it as exciting steam into said injection vaporizer to produce additional steam and deliver it to the load.

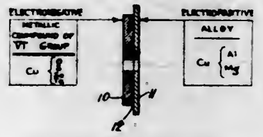
1,890,469. PERAMBULATOR. JOSEPH J. POWERS, Roosevelt, N. Y., assignor of one-twentieth to William J. Steele, Baldwin, N. Y. Filed May 18, 1931. Serial No. 538,207. 5 Claims. (Cl. 280—29.)



1. In a perambulator, a body, a primary chassis supporting said body, front wheels mounted on an axle fastened to said primary chassis, an auxiliary chassis comprising longitudinally extending frame members within which correspondingly extending portions of the primary chassis are adapted to normally nest, means yieldingly holding said parts in nested relation, a connection between said auxiliary and said primary chassis, and rear wheels mounted on an axle fastened to said auxiliary chassis, said axle providing an axis about which said auxiliary chassis is adapted to fulcrum to de-nest said parts and elevate the front wheels and hence the primary chassis relatively to the rear wheels.

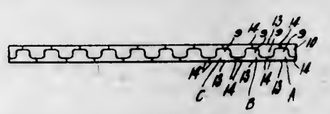
1,890,470. ELECTRIC CURRENT RECTIFIER. SAMUEL RUBEN, New York, N. Y., assignor to Ruben Rectifier Corporation, Englewood, N. J., a Corporation of Delaware. Filed July 28, 1928. Serial No. 295,971. 10 Claims. (Cl. 175—366.)

10. In electric current rectifiers and the like, of the dry surface contact variety, an asymmetric couple arranged to have substantially uniform unilateral conductivity, which comprises electropositive and electronegative electrode elements adjacently disposed to have a rectifying junction therebetween, said electropositive electrode element being an alloy of copper with a relatively



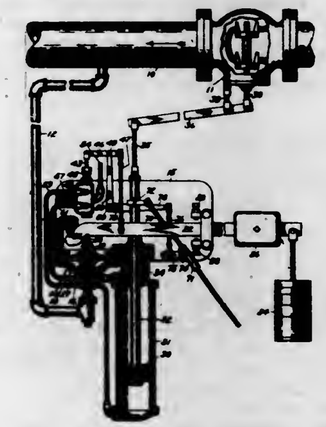
light highly electropositive metal, the electronegative electrode element comprising a compound of copper with sulphur.

1,890,471. METHOD OF MAKING FASTENER ELEMENTS. EUGENE W. RUTHERFORD, New Haven, Conn., assignor to The Shoe Hardware Company, Waterbury, Conn., a Corporation of Connecticut. Filed Nov. 17, 1930. Serial No. 496,126. 11 Claims. (Cl. 29—148.)



1. The improved method of making fastener elements having gripping members formed integrally therewith which consists in taking a strip of material of a width greater than the length of the body of an element, dividing the same into blanks of equal size having arms formed integrally therewith and extending laterally outward therefrom at one end thereof for forming the gripping members of the finished elements, swaging said arms to conform with the shape of the finished arm and bending the same into final position with respect to the body, and finally forming a depression and a projection on opposite faces of the element.

1,890,472. REGULATING APPARATUS. PAUL C. TEMPLE, Decatur, Ill., assignor to A. W. Cash Company, Decatur, Ill., a Corporation of Delaware. Filed Dec. 9, 1929. Serial No. 412,848. 5 Claims. (Cl. 50—10.)



1. A regulating apparatus comprising a fluid pressure responsive device, a reversible hydraulic motor having a piston and a piston rod movable between limiting positions, a pilot valve moved by said fluid pressure responsive device and connected to control the movements of

the piston, a member which is pivoted to a stationary portion of the apparatus, a rod pivoted to the piston rod at an angle thereto and arranged to slide relative to said member and control its angular position, and connections between said member and the pilot valve, said parts being so constructed and arranged that as the piston moves in response to an increase in the controlling fluid pressure, the rod will make a greater angle with the piston rod and equal increments of increase of controlling fluid pressure will produce decreasing increments of piston movement.

1,890,473. SHOE FILLING METHOD. ANDREW THOMA, Cambridge, Mass., assignor to North American Chemical Company, Boston, Mass., a Corporation of Massachusetts. Filed Aug. 30, 1928. Serial No. 302,996. 13 Claims. (Cl. 12—142.)



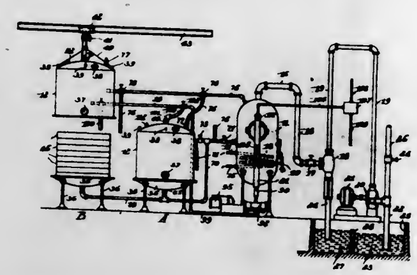
1. The method of filling shoes, which comprises applying plastic filler to the shoe-bottom cavity, and substantially contemporaneously with the application of the plastic filler introducting into said plastic filler a separate chemical stiffener.

9. The method of filling shoes which comprises applying plastic, spreadable filler material to a shoe bottom cavity, and substantially contemporaneously therewith and at the time of laying and spreading the plastic filler material combining therewith a space occupying layer in the form of an integral piece of flexible, fibrous, sheet material.

1,890,474. PROCESS FOR THE ACTIVATION OF CLAY AND MANUFACTURE OF HYDROCHLORIC ACID. CHESTER TIETIG, Los Angeles, Calif. Filed June 1, 1931. Serial No. 541,359½. 9 Claims. (Cl. 252—2.)

5. The process of activating clay and making hydrochloric acid simultaneously, which comprises burning a mixture of hydrogen and chlorine together in the presence of aqueous vapor and of finely divided activatable clay.

1,890,475. METHOD OF TREATING PRODUCTS. ULYSSES G. TODD, Rochester, N. Y., assignor to The Pfaudler Co., Rochester, N. Y., a Corporation of New York. Filed June 8, 1928. Serial No. 283,879. 1 Claim. (Cl. 99—11.)

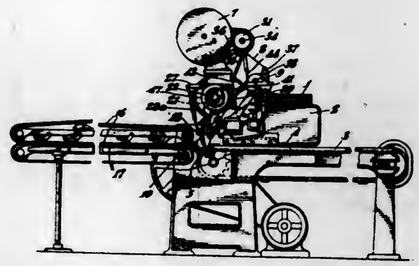


The method of treating fruit, vegetables, and like organic products which comprises bringing products and a treating liquid into contact with each other in a partial vacuum and repeatedly varying the degree of said vacuum while said products are in contact with said treating liquid so that said treating liquid may permeate said products thoroughly.

1,890,476. PROCESS FOR THE PRODUCTION OF FLEXIBLE FLOOR-, WALL- AND LIKE COVERS. PAUL CHRISTIAAN VAN DER WILLIGEN, Krommenie, Netherlands, assignor of one-half to N. V. Nederlandsche Linoleumfabriek, Krommenie, Netherlands, a Dutch Limited Company. Filed Nov. 23, 1928, Serial No. 321,518, and in the Netherlands Dec. 8, 1927. 3 Claims. (Cl. 106—7.)

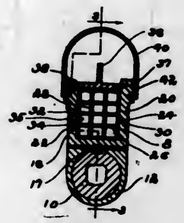
1. A method of manufacturing a composition covering material which comprises, mixing colloidal emulsions of latex, asphalt and linoxyne with coloring and filling matter in substantially colloidal suspended form, and then coagulating the mixture.

1,890,477. TAPING MACHINE. JOSHUA WAGNER, Brooklyn, N. Y., assignor to Progressive Corrugated Paper Machinery Co. Inc., Brooklyn, N. Y., a Corporation of New York. Filed Apr. 29, 1929. Serial No. 359,032. 5 Claims. (Cl. 91—51.)



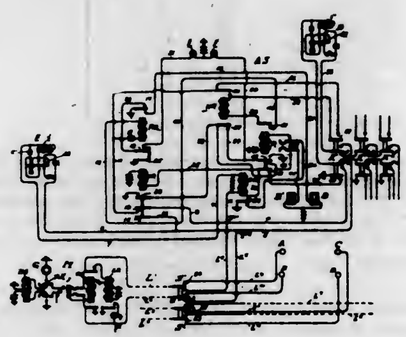
1. In a machine of the class described, a periodically operated tape feeding device adapted to feed a length of tape to a blank to be taped, a tape supply device, a tape moistening device interposed between said first mentioned devices, and periodically operated means interposed between said tape supply device and said tape moistening device for relieving said tape feeding device from strains incident to the operation of drawing tape from said supply device, said last mentioned means being timed to begin operation somewhat before said tape feeding device operates.

1,890,478. GUN SIGHT. HERBERT E. WALE, Bremerton, Wash. Filed Nov. 12, 1931. Serial No. 574,625. 5 Claims. (Cl. 33—51.)



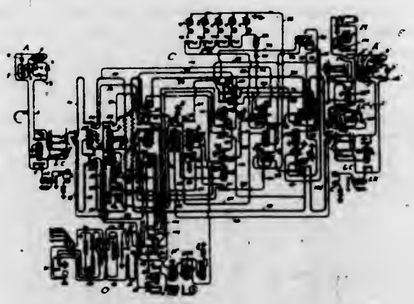
4. In a front sight, the combination with side walls one of which has a hole therein, of a rectangular sight frame and crossed wires therein, a spring-blade on the sight-frame, and a retaining stud on said blade engaging said hole.

1,890,479. TELEPHONE SYSTEM. BERT A. WALLACE, Chicago, Ill., assignor to Kellogg Switchboard and Supply Company, Chicago, Ill., a Corporation of Illinois. Filed Feb. 21, 1930. Serial No. 430,348. 14 Claims. (Cl. 179—42.)



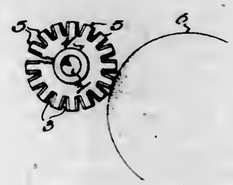
1. A telephone system including an attendant station circuit, an extension phone and an attendant phone, means whereby an incoming call may be answered directly at the extension phone and supervisory signalling means including means for indicating the answering of the call at the extension phone and the termination of the call automatically controlled by said extension phone.

1,890,480. TELEPHONE SYSTEM. BERT A. WALLACE, Chicago, Ill., assignor to Kellogg Switchboard and Supply Company, Chicago, Ill., a Corporation of Illinois. Filed Feb. 24, 1930. Serial No. 430,607. 10 Claims. (Cl. 179—51.)



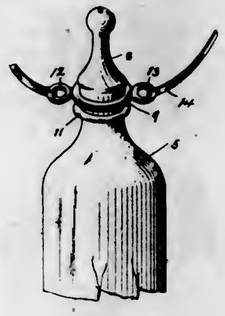
1. A telephone system of the character described including a plurality of subscribers' lines, some of said lines having common battery substations and the remainder having magneto type substations, a cord circuit provided with means for interconnecting any two of said lines, all of said means operating in combination to provide communication between two common battery substations, and some of said means operating in combination to provide communication between a common battery and a magneto type substation.

1,890,481. DRESSING TOOL. MATTHEW J. WALSH, Milwaukee, Wis. Filed Apr. 26, 1931. Serial No. 532,780. 1 Claim. (Cl. 125—37.)



A tool for refacing abrading wheels comprising a hub, a flat strip wound spirally upon the periphery of said hub, and radially projecting teeth on the outer edge of the strip, said teeth having its edges bevelled in opposite directions and provided with flat outer faces of substantially diamond shape.

1,890,482. COMBINED NURSING BOTTLE AND NIPPLE HOLDER. HYMAN D. WEISSBERG, New York, N. Y. Filed May 7, 1929. Serial No. 361,207. 2 Claims. (Cl. 215—100.)



1. In combination, a bottle having a neck and a nursing nipple therefor, a resilient ring of a diameter less than the outside diameter of the bottle neck adapted to be positioned over said nipple, and opposed rings integral with said first mentioned ring for attaching a band or ribbon thereto.

1,890,483. SIGN. AUSTIN A. WOOD and EDWARD BOSS, Columbus, Ohio. Filed Dec. 12, 1931. Serial No. 580,585. 1 Claim. (Cl. 40—145.)

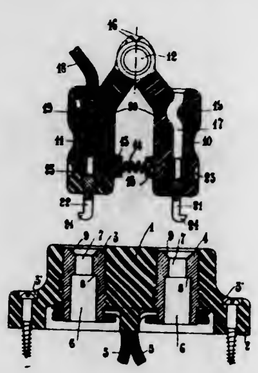
A metallic sign structure having the general outline of a banner comprising a single supporting standard formed of suitable length and cross sectional formation having its lower end anchored in connection with a supporting surface, a pair of opposed advertising panels carried by the upper portion of said standard and arranged one on each side thereof, fastening elements having threaded extremities projecting from said standard for detachable connection with said panel, said fastening elements permitting the removal of one of the panels without disturbing the connection for the other, additional fasten-

ing elements uniting the outer side edges of the panels for drawing the panels into a slightly oblong formation when viewed in plan, the upper end of said standard extending a distance above said panels and provided with



an ornamental top piece, and angularly arranged rods extending from the upper corner edges of the panels and having a connection with said top piece, said rods serving to unite said top piece with the upper end of said standard.

1,890,484. ELECTRIC PLUG. PAUL ALLENIC, Paris, France. Filed Oct. 25, 1929, Serial No. 402,459, and in France Nov. 3, 1928. 1 Claim. (Cl. 173—338.)



Electric coupling means comprising a male part consisting of two insulating members pivotally secured to each other, spring means urging said two members away from each other, an electrical contact pin projecting from the free end of each of said members, each of said pins being formed at its free end with a lug, means in said members to secure electrical leads to said pins, a base provided with electrical sockets to which leads may be secured, said sockets being formed with a recess in which said lugs may engage and being spaced apart a distance smaller than the maximum expansion between said pins whereby when said male member is mounted on said base, traction on said leads will not separate the former from the latter.

1,890,485. METHOD OF TREATING METAL. WALTER O. AMALER, Toledo, Ohio, assignor to Paul R. Caruthers, trustee, Glenshaw, Pa. Filed Nov. 6, 1929. Serial No. 405,286. 2 Claims. (Cl. 75—46.)

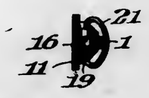
1. The method of removing nitrogeneous impurities from steel, which comprises adding to approximately each 100 lbs. of the metal batch, a refining mixture comprising bauxite, ¾ lb.; feldspar 1 lb., and lime 1 lb.

1,890,486. BUILDING CONSTRUCTION. EDWARD H. ANGIER, Framingham, Mass. Original application filed Apr. 27, 1931, Serial No. 538,156. Divided and this application filed Feb. 19, 1932. Serial No. 594,031. 2 Claims. (Cl. 72—17.)



2. A building structure comprising a frame, a resiliently expansible paper base sheet secured over the frame, relatively frangible means restraining the expansion thereof, a lathing over the sheet and autosolidified plastic on the lathing back-supported by said relatively frangible means.

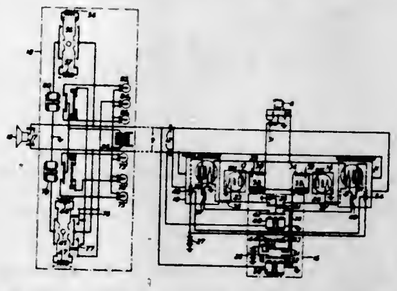
1,890,487. ORTHODONTIC APPLIANCE. EDWARD H. ANGLE, Pasadena, Calif. Filed June 5, 1930. Serial No. 459,322. 3 Claims. (Cl. 32—19.)



2. An orthodontic appliance comprising a tooth-band bracket having an arch-bar receiving slot extending horizontally in its outer face and having retaining means, and a spring hasp extended across said slot and having its free ends bent inwardly to engage in said means and thereby retain said arch-bar in said slot.

3. An orthodontic appliance comprising a tooth-band bracket having retaining means and having its outer face provided with relatively inclined surfaces diverging toward said retaining means and serving as guides disposed upon opposite sides of an arch-bar receiving slot in said face, and an arch-bar retainer having its free ends bent inwardly toward each other to engage said retaining means and cooperative with said inclined surfaces when forced to slide thereon to spread them apart and guide them into snapped engagement with said retaining means, and in position to embrace an arch-bar and to retain it in said slot.

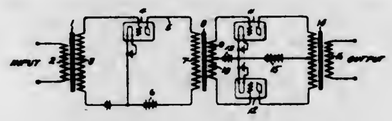
1,890,488. REMOTE CONTROL SYSTEM. HENRY B. ARNOLD, New York, N. Y., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Dec. 28, 1931. Serial No. 582,700. 5 Claims. (Cl. 250—2.)



1. In combination in a radio system, a receiving antenna, a signal transmission line, a pair of normally deenergized radio receivers having their inputs connected

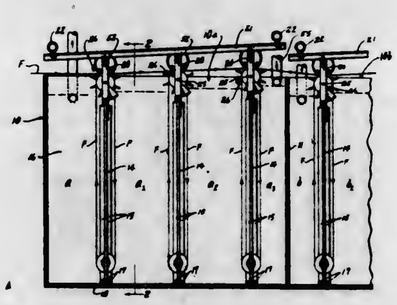
to said antenna and their outputs connected in parallel to said line, relay means responsive to current of one polarity for energizing one of said radio receivers and responsive to current of the opposite polarity for energizing the other of said radio receivers, an audio frequency oscillator connected to supply waves to each of said radio receivers for modulating the received wave, other relay means responsive to current of one polarity for causing that one of said radio receivers energized at a particular time to operate at a predetermined gain and responsive to currents of the opposite polarity for causing said one of said radio receivers to operate at a different predetermined gain, connections whereby when said other relay means is in the unoperated position that one of the audio frequency oscillators associated with that one of said radio receivers in an operative condition at the time will be energized, and means for supplying current of the desired polarity for operating each of said relay means over said signal transmission line.

1,890,489. AMPLIFYING SYSTEM. JUDD O. BAKER, Hastings-on-Hudson, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Oct. 20, 1931. Serial No. 570,000. 6 Claims. (Cl. 179—171.)



1. A coupling device adapted to connect a driver and a driven stage of an amplifier, said driven stage comprising a discharge device having a grid, said coupling device being provided with primary and secondary windings, said secondary winding having an impedance lower than the input impedance of the driven stage when the grid of the said driven stage becomes positive during operation.

1,890,490. FILM DEVELOPING SYSTEM. JAMES T. BARKELEW, Pasadena, Calif., assignor to Paramount Publix Corporation, New York, N. Y., a Corporation of New York. Filed Mar. 30, 1931. Serial No. 526,150. 39 Claims. (Cl. 95—94.)



1. In film treating apparatus, the combination of means providing a conduit for the flow of liquid, impeller wheels mounted to be driven by the flow of liquid through said conduit, and film driving means operated by said impeller wheels.

1,890,491. CONSOLIDATED LIGNIN AND METHOD OF PRODUCING THE SAME. FRIEDRICH BERGIUS, FRIEDRICH KOCH, and EDUARD FAERBER, Heidelberg, Germany, assignors to the Firm Holzhydrolyse Aktiengesellschaft, Heidelberg, Germany. Filed Jan. 25, 1930, Serial No. 428,566, and in Germany Jan. 23, 1929. 7 Claims. (Cl. 44—15.)

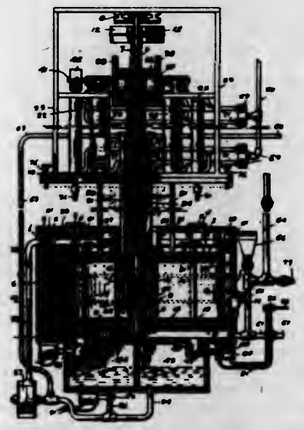
1. The process which comprises pressing in a mold particles of dry, granular, porous brittle deacidified substantially pure lignin residue of hydrolysing vegetable material with hydrochloric acid of high concentration, said particles being in a condition where they exhibit no capability of clinging together, until such interaction occurs between the particles in the mold that upon release of the pressure and removal from the mold the lignin material will retain the molded shape by self-sustainment, not requiring the presence of any added binding agent.

1,890,492. PROCESS OF IMPROVING THE EFFICIENCY OF REFINING BATHS OF THE TEXTILE ART, THE REFINING BATH, AND THE PROCESS OF REFINING TEXTILE MATERIAL. HEINRICH BERTSCH, Chemnitz, Germany, assignor to H. Th. Böhme A.-G., Chemnitz, Germany, a Joint Stock Company of Germany. Filed May 9, 1928, Serial No. 276,514, and in Germany May 11, 1927. 4 Claims. (Cl. 8—20.)

1. A process for treating textiles with liquids containing substances which cause decomposition in solutions of ordinary Turkey-red oil and Monopole soap, consisting in adding to said liquids a sulphonate, prepared by sulphonating a fat in the presence of a water-binding acid substance selected from the group consisting of organic and inorganic acid anhydrides and chlorides besides the sulphonating means.

4. A composition of matter consisting of (1) a watery solution of a substance commonly used for treating textiles and which causes decomposition of solutions of ordinary Turkey-red oil and Monopole soap and (2) a sulphonate prepared by sulphonating a fatty substance in the presence of a water binding acid substance selected from the group consisting of organic and inorganic acid anhydrides and chlorides besides the sulphonating means.

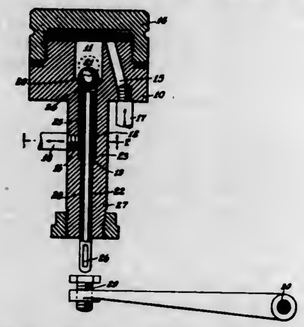
1,890,493. WASHING MACHINE. MICHAEL N. BONSIAKOS, San Francisco, Calif. Filed June 14, 1932. Serial No. 617,084. 9 Claims. (Cl. 68—18.)



1. A washing machine comprising a housing; a perforated bowl suspended therein; a perforated plate resting upon the bottom of said bowl; a perforated top mounted upon said bowl; means for reciprocating said

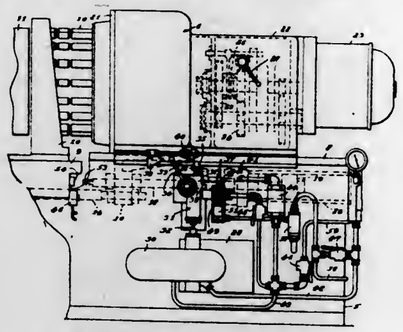
plate within the bowl to agitate washing solution thru clothing to be washed between said plate and top; means for introducing a washing solution into said housing and bowl; means for rotating said bowl at high speed to remove liquid from said clothing and bowl by centrifugal force; and means for draining said housing and bowl.

1,890,494. VALVE DEVICE. PERRY A. BORDEN, Waterbury, Conn., assignor to The Bristol Company, Waterbury, Conn., a Corporation of Connecticut. Filed Sept. 25, 1931. Serial No. 565,033. 4 Claims. (Cl. 277—9.)



2. A fluid controlling valve, comprising a casing provided with a longitudinal passageway having a valve seat at its inner portion and the casing having an inlet at the entrance side of the seat and an outlet beyond the seat, a ball adapted to rest upon the valve seat to shut off communication between the inlet and outlet, and a tubular stem movable in the casing, its inner end being adapted for engagement with the ball to unseat the same and simultaneously therewith to be sealed by said ball, the outer end of the stem being open to the external atmosphere and the inner end when not sealed in communication with the outlet.

1,890,495. HYDRAULICALLY OPERATED MACHINE TOOL. RAYMOND A. CARLSON, Rockford, Ill., assignor to Rockford Drilling Machine Company, Rockford, Ill., a Corporation of Illinois. Filed July 31, 1930. Serial No. 471,987. 13 Claims. (Cl. 10—130.)



1. In a machine tool adapted for tapping, the combination of a base, a carriage reciprocable thereon having one or more spindles carried thereby and arranged to be fitted with taps, a reversible electric motor for driving said spindles, means for controlling said motor to stop and reverse the same at the end of forward movement of said carriage, a working cylinder associated with the carriage, a source of pressure fluid supply so constructed and operated for delivering fluid to said cylinder to give the carriage lineal movement proportionate to the speed of said motor, whereby the taps will cut accurate threads and will effect proper withdrawal from the work, and means controlling admission of fluid from said source to either end of said cylinder, adapted to cause stopping reversal of the carriage simultaneously with stopping and reversal of said motor.

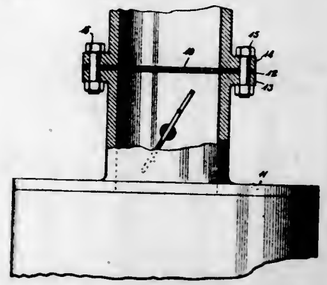
1,890,496. APPLIANCE FOR AUTOMOBILES. JOHN L. CREVELING, Oracle, Ariz. Filed Apr. 22, 1924. Serial No. 708,192. 14 Claims. (Cl. 177—337.)



1. In an automobile having foot operated engine controlling means, a signal system and an inclined floor board, controlling means entirely separate and independent of the engine controlling means for affecting the signal system, arranged to engage the foot of the driver when operating the engine controlling means to simultaneously and independently operate the signal controlling means, said signal controlling means comprehending movable means mounted upon the inclined floor board and provided with foot engaging means in juxtaposition to the engine controlling means and movable in a plane parallel to said floor board, and means whereby motion thereof affects the signal system.

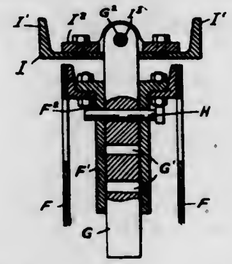
12. In an automobile having throttle controlling means operated by the foot of a driver by rotation of the foot in a vertical plane, independent and separately supported means for simultaneously and voluntarily controlling an additional useful operating function by said foot without interfering with the operation of the throttle controlling means comprehending independently operable means engaged by the foot while operating the throttle controlling means and movable by rotation of the foot in a plane substantially normal to the first-named plane.

1,890,497. APPARATUS FOR AFFECTING THE PHYSICAL CONDITION OF GASES. HERBERT V. DALGLIESH, Atlanta, Ga.; S. A. Love, administrator of said H. V. Dalgliesh, deceased, assignor of one-half to Francis L. Browne and Nelson J. Jewett, Washington, D. C. Filed Sept. 23, 1930. Serial No. 483,941. 1 Claim. (Cl. 48—180.)



Apparatus for affecting the physical condition of gases comprising a perforated plate to be placed in a stream of gas in such relation that the gas flows through the perforations, the perforations being each substantially three thirty-seconds of an inch in diameter, the number of perforations being such that their combined area constitutes substantially sixty-two and one-half per cent of the exposed area of the plate and the thickness of the plate being substantially one-sixteenth of an inch.

1,890,498. RUNWAY FOR PIPES. ROBERT EARL DANIEL and RICHARD K. HAUGHTON, Birmingham, Ala., and STUART B. CLARK, Riverton, N. J., assignors to United States Pipe and Foundry Company, Burlington, N. J., a Corporation of New Jersey. Filed June 2, 1931. Serial No. 541,650. 7 Claims. (Cl. 22—65.)



1. A runway for pipes comprising one or more pivoted frames having runway tracks extending upward from the frames on opposite sides of their pivotal lines of support.

1,890,499. FILTER. CHARLES DAVIES, New York, N. Y. Filed Nov. 25, 1931. Serial No. 577,177. 3 Claims. (Cl. 183—71.)



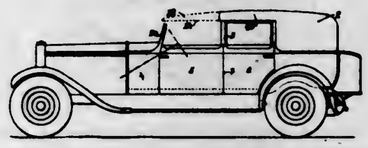
1. A filter having a series of folds, each of the said folds being spread at its ends, and means to hold the spread ends in overlapping relation to form a flat rim for the filter.

1,890,500. EQUALIZING TENSION DEVICE FOR VARIABLE SPEED DRIVES. WALTER F. DEHUFF, Glen Rock, Pa. Filed Aug. 6, 1930. Serial No. 473,493. 10 Claims. (Cl. 64—8.)



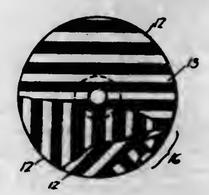
1. In a variable speed drive including driving and driven pulleys each comprising mutually approachable parts and connected by belt gearing, means for bringing said parts adjustably together to increase the radius of the circumferential portion of the path of travel of said belt gearing for tensioning the latter comprising actuating members adapted to be extraneously rotated for making the tensioning adjustment, operatively connected to said pulley parts for moving them into tensioning relation to said belt gearing said members being connected to rotate together but relatively reciprocable, means forming part of the operative connection between said members and pulley parts and imparting reciprocable movement in opposite directions to said members when the applied force continues beyond the point where the last named means becomes stationary relative to said actuating means, and spring means resisting the reciprocatory movement of said members for transmitting yielding pressure to said pulley parts.

1,890,501. CONVERTIBLE VEHICLE BODY. CARLO CITO FILOMARINO DI BITETTO, Paris, France. Filed Jan. 25, 1929, Serial No. 335,072, and in France Mar. 30, 1928. 1 Claim. (Cl. 296—107.)



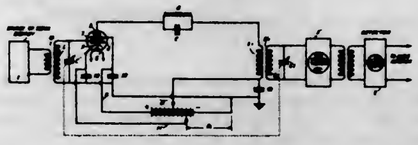
Convertible vehicle body comprising the combination of a body having on either side two doors with vertically sliding glass plates, and a post between these doors, movable columns capable of being arranged above the said posts of the body, and adapted to guide the glass plates of the front and rear doors, a hood movable forwardly and rearwardly and having a rear part, sides adapted to fit on the upper edge of the body and a top extending forwardly beyond the said sides on a length substantially equal to the width of each of the said doors, each of the said sides having its front edge adapted to guide the glass plate of the rear or front door according to the position of the said movable hood and means for closing the rear part of the body when the hood is at the front part of the latter.

1,890,502. BUFFING WHEEL. BRADFORD H. DIVINE, Utica, N. Y. Filed Oct. 26, 1929. Serial No. 402,765. 6 Claims. (Cl. 51—198.)



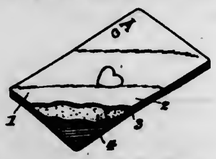
1. A buffing wheel composed of a plurality of disk-shaped layers of fabric certain layers of which have portions composed of a plurality of integrally-formed, separate thicknesses forming pockets in such layers, the sides of which are positively connected by seamless joints.

1,890,503. TUNABLE DYNATRON AMPLIFIER. PAUL O. FARNHAM, Boonton, N. J., assignor to Radio Corporation of America, a Corporation of Delaware. Filed Oct. 17, 1931. Serial No. 569,421. 9 Claims. (Cl. 179—171.)



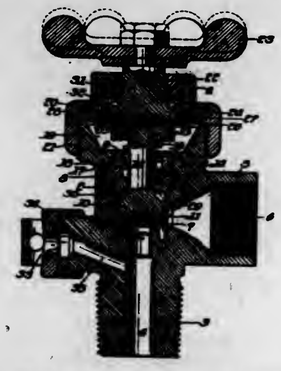
1. In a dynatron amplifier, the combination with an electron tube and means energizing said tube for dynatron operation of a tuned output circuit, including a tunable resonant network, whose impedance at resonance varies with the frequency to which said network is tuned, and means in series between the tube anode and the network in said output circuit for maintaining the total impedance of said output circuit substantially constant during tuning.

1,890,504. PLAYING CARD. HARLEY B. FERGUSON, Jr., Norfolk, Va. Filed July 22, 1930. Serial No. 469,857. 9 Claims. (Cl. 273—152.)



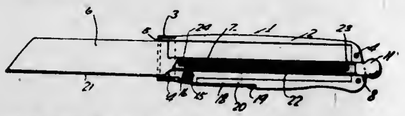
3. A playing card or the like comprising a lamination and a weighted metallic layer applied thereto.

1,890,505. VALVE. JOHN S. FORBES, Pittsburgh, Pa., assignor to Kerotest Manufacturing Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Oct. 25, 1930. Serial No. 491,230. 2 Claims. (Cl. 251—31.)



1. In a valve body having a valve chamber therein, a supplemental chamber spaced from the valve chamber, a valve in the valve chamber having a stem extending between the said chambers, an operating stem in alinement with the valve stem, an imperforate diaphragm closing the supplemental chamber and in contact with the valve and operating stems, and back-seating means on the valve for sealing off the valve chamber from the supplemental chamber when the said valve is in open position, whereby the diaphragm may be removed while the valve is in operation.

1,890,506. SELF-SHARPENING KNIFE. EARL L. FRANK and JOHN D. KIBBEY, International Falls, Minn. Filed May 14, 1932. Serial No. 611,264. 6 Claims. (Cl. 30—9.)



1. In a device of the kind described, an elongated, hollow handle having an elongated slot formed through one side near one end, a leaf spring mounted over the slot and having one end fastened to the handle at the inner end of the slot, the forward end of the spring being free, a sharpening element mounted at the inner side of the free end of the spring, a knife blade and connected blade rod reciprocatingly mounted through the handle, the blade being at the same end with the sharpening element and the edge of the blade being turned towards said element, the said blade being beveled at its juncture with the said blade rod so as to enable the sharpening element to clamp and ride upon the edge of the blade as the same is drawn backward.

1,890,507. BUST SUPPORTER. JANE C. GIFFORD, New York, N. Y. Filed Jan. 30, 1930. Serial No. 424,585. 3 Claims. (Cl. 2—42.)

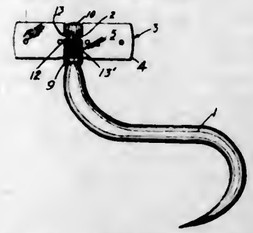


1. In combination with a woman's garment of the type that is cut low in the back so as to expose the central part of the back of the wearer, a bust supporter comprising a transverse piece of material extending across the inside of the front portion of the garment above the lower extremity of the cut low portion of the back and terminating at the sides of the garment, thereby leaving the central portion of the back of the wearer entirely exposed and avoiding a circumferential restriction around the bust of the wearer, said transverse piece of material being stitched to the front portion of the garment along one edge and having portions of the opposite edge free to fit under the breasts of the wearer, and strap connections attached to the transverse strip adjacent its free edge portions, extending upwardly and attached to the upper part of the garment.

1,890,508. MATERIALS FOR TREATMENT OF NEUROSYPHILIS AND PROCESS OF MANUFACTURE. PAUL J. HANZLIK, San Mateo, Calif., assignor to The Board of Trustees of The Leland Stanford Junior University. Filed Sept. 29, 1930. Serial No. 485,305. 4 Claims. (Cl. 23—51.)

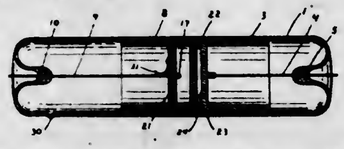
1. In a process of procuring a compound of bismuth in anionic form suitable for pharmacological and therapeutic use and free of impurities detrimental to such use, the steps of reacting a halogen salt with a bismuth salt in solution to form a salt of bismuthous acid and a substantially insoluble residue, filtering off the residue, evaporating the filtrate to form crystals of the salt of bismuthous acid, and washing the salt with ether to remove impurities.

1,890,509. CARGO HOOK. WILLIAM EDWARD HOPKINS, Oakland, Calif. Filed Jan. 17, 1931. Serial No. 509,364. 8 Claims. (Cl. 294—26.)



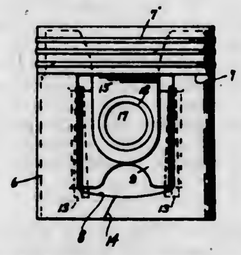
1. In a cargo hook, a hook portion, a shank therefor, a handle rotatable on and extending transversely of the shank, and means for yieldingly and frictionally holding the handle against turning arranged to release the handle when the latter is forcibly turned and when a heavy object falls on the hook, said means comprising cooperating inclined surfaces provided on said shank and handle.

1,890,510. SWITCH. FRED HOTCHNER, Los Angeles, Calif. Filed Nov. 21, 1930. Serial No. 497,165. 6 Claims. (Cl. 200—144.)



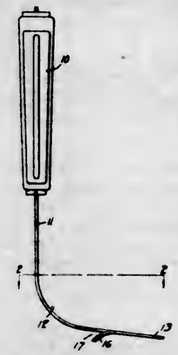
1. In a switch, a tube of insulating material hermetically sealed and provided with an atmosphere of gaseous ionization conductor, cylindrical electrodes in said tube, at least one of which is slidable through said tube but fitting the inside wall of said tube so close as to prevent the discharge passing therebetween, and means to limit the movement of said electrode in two directions whereby said electrode may approach the other electrode so closely that no conduction may take place therebetween upon the application of voltage to said electrodes by virtue of the insulating effect of a thin layer of the ionization conductor.

1,890,511. EXPANSIBLE PISTON. CLARENCE S. JOHNSTON, Amarillo, Tex. Filed Nov. 28, 1930, Serial No. 498,800. Renewed Apr. 21, 1932. 5 Claims. (Cl. 74—108.)



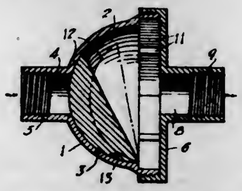
1. An expansible piston including in combination a skirt provided on diametrically opposite sides with an opening, a boss integral with the skirt at opposite sides of each opening, each of said bosses provided with slots opening inwardly from one face thereof and means for expanding the slots for effecting expansion of the piston.

1,890,512. HAIR WAVING TOOL. RALPH M. KEELE, San Francisco, Calif., assignor to United States Appliance Corporation, San Francisco, Calif., a Corporation of California. Filed Aug. 8, 1932. Serial No. 627,826. 5 Claims. (Cl. 132—38.)



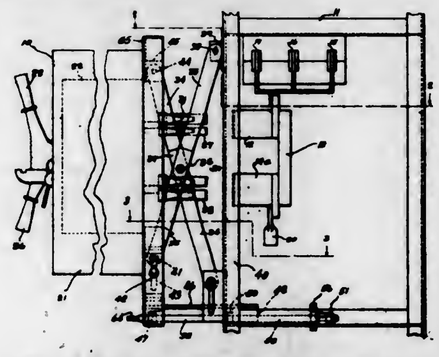
1. A tool for use in wrapping a strand of hair about a curler or waving form, comprising a blade shaped to facilitate thrusting the same laterally thru a part in the strand and formed to provide a recess adapted to engage the entire strand beyond said part whereby the entire strand can be drawn thru the part and around the form, when the blade is retracted from the part.

1,890,513. CHECK VALVE. GEORGE M. KESSLER, Madison, N. J. Filed Mar. 4, 1931. Serial No. 519,916. 2 Claims. (Cl. 251—127.)



2. A check valve comprising a casing having a cup-shaped body part having a portion of its inner wall segmentally spherically concave and an inlet opening through said portion of said wall, a cap closing the open end of said body part having an outlet opening, a valve disk loosely mounted in said chamber and having a segmentally spherical surface of the same radius as said concave portion to overlie said inlet opening with its spherical surface to contact with said concave portion, and a grid clamped between said body part and said cap to limit sliding and bodily movement of said disk relative to said concave portion and prevent said disk from closing said outlet opening.

1,890,514. SWITCH APPARATUS. JAMES A. C. KEIPS, Haddonfield, N. J., assignor to I-T-E Circuit Breaker Company, Philadelphia, Pa., a Corporation of New Jersey. Filed Mar. 17, 1930. Serial No. 436,830. 19 Claims. (Cl. 175—298.)

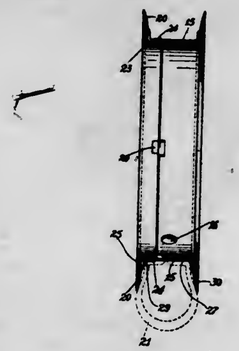


1. The combination with a fixed unit comprising contacts, of a movable unit comprising switch mechanism and contacts connected therewith, link structure disposed in a vertical plane capable of wholly supporting said movable unit upon said fixed unit for horizontal straight-line movement of said movable unit to effect separation of the contacts thereof from those of said fixed unit, and means coacting with said units for preventing torsional deflection of said link structure about a vertical axis during said movement of said movable unit.

1,890,515. AUTO RIM. HARRY KUNARD, Chicago, Ill. Filed May 27, 1932. Serial No. 613,920. 2 Claims. (Cl. 301—35.)

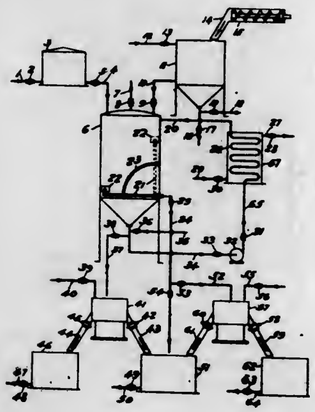
1. In a device of the class described, a body of a wheel rim having a radially outwardly extending circular flange and adapted to receive a rubber tire, the flange being

adapted to engage the side of said tire, the body being provided with a plurality of circumferentially extending holes, a locking ring rotatably mounted on said body, a plurality of radially outwardly extending lugs on the locking ring adapted to enter the holes on the body, and



a holding ring having a plurality of hooks thereon adapted to enter the holes in the body, the lugs on the locking ring being adapted to engage upon rotation to engage said hooks while remaining in engagement with the holes in the rim.

1,890,516. PROCESS FOR TREATING GASOLINE STOCK. ARTHUR LACHMAN, Berkeley, Calif., assignor to Richfield Oil Company of California, Los Angeles, Calif., a Corporation of Delaware. Filed Oct. 6, 1930. Serial No. 486,815. 8 Claims. (Cl. 196—132.)



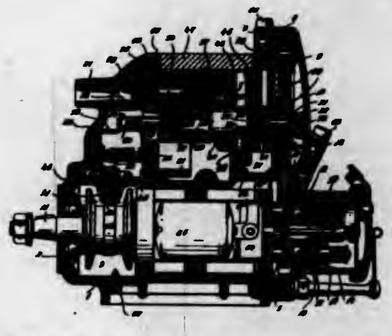
1. A process for treating gasoline stock which is positive to the "doctor test" to render the gasoline stock negative to the "doctor test", comprising, commingling gasoline stock which is positive to the "doctor test" with a water solution of an alkali salt having a pH value greater than 7.4 containing comminuted activated charcoal and air, to convert corrosive sulphur hydrocarbons into non-corrosive sulphur hydrocarbons and render the gasoline negative to the "doctor test", and then separating purified gasoline stock from the excess alkali salt solution, products of reaction, activated charcoal and aeriform products.

1,890,517. FIRE EXTINGUISHER. HENRI CHARLES LAENGEL, Paris, France, assignor to Societe Anonyme Assuro, Paris, France. Filed Mar. 17, 1930, Serial No. 436,576, and in France Mar. 23, 1929. 1 Claim. (Cl 169—31.)



A fire extinguisher comprising a substantially cylindrical water tank, an inner integral sleeve at one end thereof, a compressed gas receptacle adapted to be retained in said sleeve, a striker carried adjacent the receptacle, means for normally holding the receptacle from the striker, means for bringing the receptacle into forceful engagement with the striker, a tube leading from the sleeve to the opposite end of the tank, the end of said tube being split and bent to engage the side of the tank and thereby centrally dispose the tube, and discharging means.

1,890,518. MAGNETO. GUSTAVE J. LANG, Longmeadow, and JOHN F. MARTIN, Springfield, Mass., assignors to American Bosch Magneto Corporation, Springfield, Mass., a Corporation of New York. Filed Aug. 16, 1930. Serial No. 475,652. 10 Claims. (Cl. 123—149.)



1. A magneto comprising a framework formed to provide an armature chamber and a gear casing, a single end plate to cover the gear casing and one end of the armature chamber, said casing being part of said framework, said end plate having an exterior supporting projection, and timer mechanism comprising a casing on said projection.

1,890,519. HELICOPLANE. JOSEPH J. LERAY, West Warwick, R. I. Filed Apr. 13, 1932. Serial No. 604,968. 4 Claims. (Cl. 244—19.)

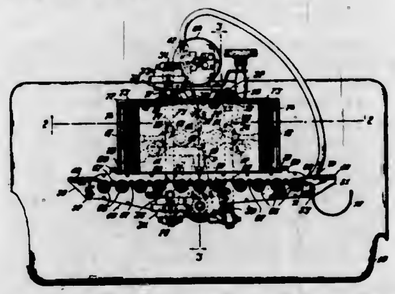
1. In helicoplanes, a combination of helicopter and airplane, having wings horizontally fixed with open bays at

their root, a rotatable vertical shaft on suitable bearings carrying an airscrew having hollow blades arranged and assembled together by and into a large hollow hub with inside communication with said blades; said hub open underneath, covering the top opening and communicating with an air chamber formed by a portion of the fuselage; said air chamber having an exhaust fan pumping the air out of the air chamber through an opening at the rear, which opening encloses the exhaust fan which produces a slip stream directed at the tail surfaces for means of control, said fan developing an inside vacuum extending to air



chamber, hub and blades of the airscrew; said blades having series of slots or holes in the wall of their upper surface, admitting the outside air by suction into the blades, said suction producing vacuum on the upper surface of the blades, said vacuum being increased by the relative wind, generated by the rotation, blowing across the path of the entering current; and having suitable motor and gears to turn the vertical shaft and rotate the air screw connected to said vertical shaft and simultaneously rotate the exhaust fan directing its blast into the tail surfaces to assist the stability and maneuverability of the aircraft.

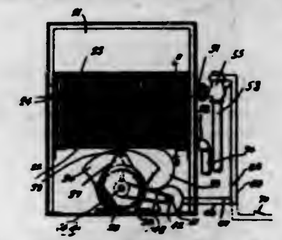
1,890,520. DISHWASHING MACHINE. WALDEMAR L. LINDGREN, Waukegan, Ill., assignor of one-half to John E. Ericsson, Chicago, Ill. Filed May 31, 1930. Serial No. 458,346. 3 Claims. (Cl. 141—9.)



2. In a dish-washing machine, the combination with a framework adapted to be placed in a sink, of a series of rollers journaled therein and extending transversely thereof, spray pipes connected with the sink faucets and adapted to extend transversely of said framework parallel to the rollers, and driving means to rotate said rollers in the same direction to carry the dishes from one end of the frame to the other and between the spray pipes, said rollers being spaced apart more widely directly above the spray pipes beneath them and coarse-mesh wire screens being placed between the spaced-apart rollers directly over the spray pipes.

1,890,521. APPARATUS FOR HEATING ROOMS. WALTER L. MACK, Toledo, Ohio, assignor, by mesne assignments, to Air-Way Electric Appliance Corporation, Toledo, Ohio, a Corporation of Delaware. Filed Oct. 16, 1929, Serial No. 400,018. Renewed Oct. 28, 1931. 5 Claims. (Cl. 257—137.)

3. A heat exchange device adapted for installation within the wall of an ordinary room comprising a circulation box of less width than the space between the adjacent wall studs, a discharge orifice for discharging heated air into the room to be heated, an inlet orifice one of said orifices being positioned in the upper, and the other in the lower region of the box, a fluid chamber positioned between said orifices and having an inlet pipe and an outlet pipe, a plurality of fins extending from said chamber substantially vertically and at right angles to the plane of the



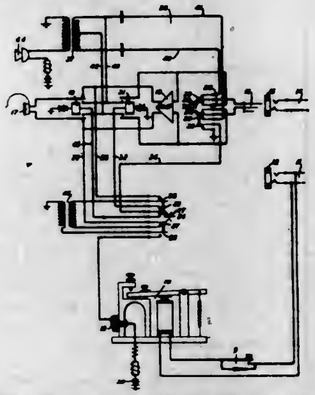
wall, an electrically controlled valve in said inlet pipe, a motor driven air circulating device for drawing air into the inlet orifice, over the surface of the chamber and fins and out of the discharge orifice, and means for simultaneously supplying said motor and said valve with electrical energy for operation.

1,890,522. CONTAINER FOR PULVERULENT OR GRANULATED SUBSTANCES. JOSEPH EUGENE BAPTISTE MAILLARD, Nogent-Le-Roy, France. Filed June 6, 1930, Serial No. 459,505, and in France June 6, 1929. 5 Claims. (Cl. 221—61.)



1. A longitudinally wedge-shaped container for pulverulent material having oppositely disposed, distortable compression plates which are transversely bent to cause the longitudinal medial portions thereof to be farther from the central plane of the container than the edge portions thereof, distortable means of sheet material connecting the adjacent longitudinal edge portions of said plates, and means within said container operated by the relative movement of said plates for agitating the contents of said container.

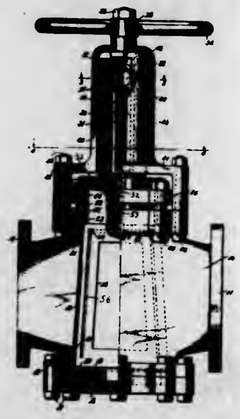
1,890,523. TELEPHONE SYSTEM. TOLA A. MARSHALL, Floral Park, N. Y., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Feb. 27, 1932. Serial No. 595,546. 8 Claims. (Cl. 179—175.3.)



6. In combination, a telephone line, an operator's telephone, a link circuit connecting said line and said operator's telephone, a unidirectional current conducting device,

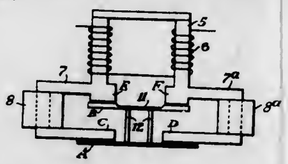
a telegraph sounder, a transmitter acoustically coupled with said telegraph sounder, and switching means for connecting said transmitter to said link circuit between said operator's telephone and said device whereby the signals emanating from said sounder may be heard in said operator's telephone and are prevented from being transmitted over said telephone line.

1,890,524. PLUG COCK AND MEANS FOR TURNING SAME. JESSE C. MARTIN, Jr., San Francisco, Calif., assignor to Walworth Patents Inc., Boston, Mass., a Corporation of Massachusetts. Filed Apr. 19, 1924, Serial No. 707,668. Renewed Apr. 11, 1927. 3 Claims. (Cl. 251—93.)



3. A plug cock comprising, in combination, a plug seat, a revoluble plug fitting said seat and having a port therethrough, a spindle extending from one end of said plug, cam means acting upon said spindle to cause rotation of the plug, said plug having surface lubricant grooves therein so located as to be at all times opposite a portion of the valve seat, means carried by said plug to introduce lubricant under pressure into said grooves.

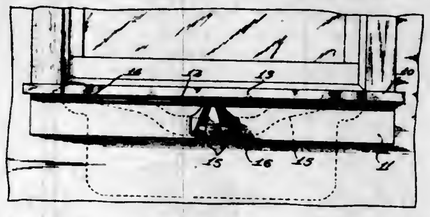
1,890,525. ELECTRICAL RELAY. PAUL N. MARTIN, Swissvale, Pa., assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed Jan. 7, 1932. Serial No. 585,326. 2 Claims. (Cl. 175—337.)



1. A relay comprising a core provided with the usual main pole pieces and operating winding, a main armature member co-acting in the usual way with said main pole pieces, two auxiliary core members attached to said two pole pieces respectively and terminating in auxiliary pole pieces, means for delaying the change of flux through each of said auxiliary core members, and an auxiliary armature member mechanically attached to said main armature member and co-acting with said auxiliary pole pieces.

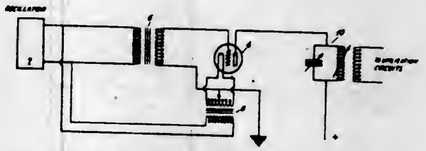
1,890,526. FOLDING SHELF. LUTHER B. MCEWING, New York, N. Y. Filed June 17, 1931. Serial No. 545,012. 2 Claims. (Cl. 211—93.)

2. A folding shelf for cooperation with a window frame including a stool and an apron therebeneath, said shelf comprising a leaf hinged to the edge of the stool for movement to horizontal and vertical positions, means for rigidly supporting said leaf in the horizontal position, comprising a plurality of foldable brackets hinged to the apron for horizontal swinging movement beneath said leaf into abutment with each other at the free ends, for supporting



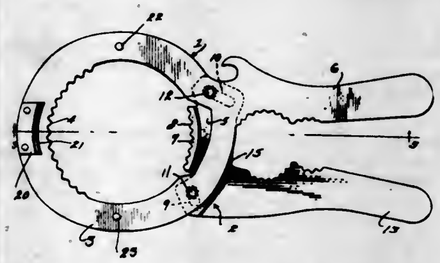
said leaf, the hinged ends of said brackets being enlarged to form a large abutment surface adapted to bear against the apron and prevent displacement toward each other when in abutting relation forming in effect a single rigid bracket adapted to resist horizontal pressure from either side.

1,890,527. FREQUENCY MULTIPLICATION. MENDEL OSNOS, Berlin, Germany, assignor to Telefunken Gesellschaft fur Drahtlose Telegraphie m. b. H., Berlin, Germany, a Corporation of Germany. Filed Dec. 2, 1930, Serial No. 499,450, and in Germany Dec. 2, 1929. 4 Claims. (Cl. 250—36.)



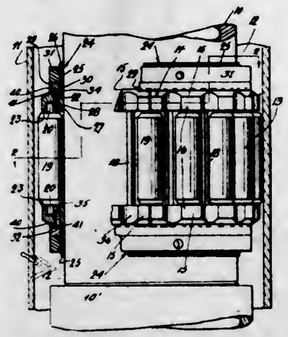
1. A high frequency producing means comprising a source of oscillations and means for multiplying the frequency of said oscillations including, a thermionic discharge device having input and output electrodes including a heated cathode, a transformer having its primary winding connected to said oscillator and its secondary winding connected in series with the heated cathode of said tube, an input circuit including an inductance connected between the control electrode of said tube and the electrical midpoint of said secondary winding of said transformer, a second inductance connected with said oscillator and coupled to said first named inductance, a circuit connected between the output electrodes of said tube, and means in said output circuit for tuning the same to a multiple of the frequency of said source.

1,890,528. JAR COVER WRENCH. RUDOLPH RATZLAFF, Dearborn, Mich. Filed Apr. 6, 1931. Serial No. 528,040. 6 Claims. (Cl. 81—3.1.)



1. A jar cover wrench comprising a closed ring like member provided on one face with a pivot, the inner periphery of the same provided with a gripping edge, a handle extending from the ring like portion, a second member provided with a gripping edge lying in the same plane with the gripping edge on the ring like member, the second member pivotally connected to the pivot on the first member and provided with a handle extending in the same general direction as the first mentioned handle and spaced therefrom so that movement of the handles toward each other will cause the gripping edge on the second member to move toward the gripping edge on the inner periphery of the ring like member.

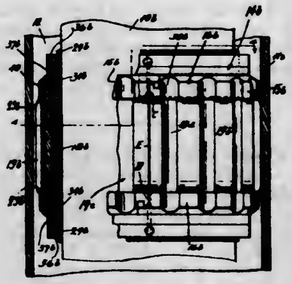
1,890,529. DRILL STEM BEARING. JAMES J. SANTIAGO, Los Angeles, Calif., assignor to John Grant, Los Angeles, Calif. Filed Feb. 24, 1930. Serial No. 430,609. 29 Claims. (Cl. 308—6.)



1. In a bearing for drill stems or the like, a carrier adapted to encircle the stem and embodying a plurality of segments, a bearing element carried by each segment, said segments being movable transversely of the stem into and out of encircling association therewith, and a member on and adjustable longitudinally along the stem into and out of engagement with said segments near their adjacent ends and adapted, when in such engagement, to hold said ends against transverse separative displacements.

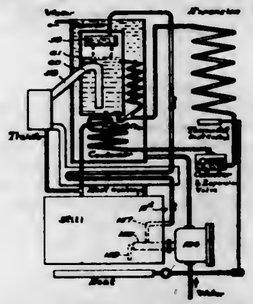
29. A bearing element for drill stems embodying a rubber sleeve, and rigid internal reinforcement in the sleeve, said reinforcement comprising angularly spaced bars extending through the sleeve in substantial parallelism with the sleeve axis, and means rigidly connecting said bars and holding them in said spaced relation, said connecting means extending longitudinally of the sleeve beyond an end thereof.

1,890,530. DRILL STEM BEARING. JAMES J. SANTIAGO, Los Angeles, Calif., assignor to John Grant, Los Angeles, Calif. Filed Feb. 24, 1930. Serial No. 430,610. 4 Claims. (Cl. 308—6.)



1. In a bearing for drill stems or the like, a carrier adapted to encircle the stem and embodying a plurality of segments, a bearing element carried by each segment, said segments being movable transversely of the stem into and out of encircling association therewith, and interengaging parts on said segments to hold them releasably against transverse separative displacement, said parts being engageable and disengageable by virtue of relative longitudinal movement of said segments.

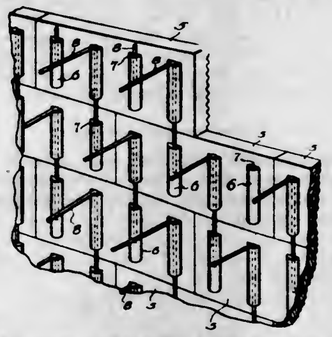
1,890,531. AUTOMATIC WEAK LIQUOR CONTROL. RALPH E. SCHUETZ, Kansas City, Mo., assignor, by mesne assignments, of one-half to R. W. Bailey and C. T. Jobes, Kansas City, Mo. Filed Feb. 4, 1928. Serial No. 251,978. 12 Claims. (Cl. 62—5.)



1. In a refrigerating system of the character described, the combination with a means responsive to heat within the system for controlling distillation, of a means responsive to heat exteriorly of the system operatively associated with the said first named means in counteracting relation.

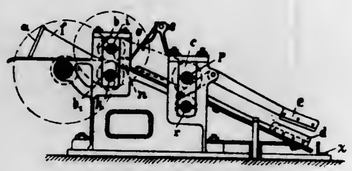
12. In a liquor control for a refrigerating system of the character described including a still and an absorber a liquid refrigerant absorbent therein, a conduit from the still to the absorber for strong liquid refrigerant, a valve in the conduit, a float in the absorbent operatively connected with the valve, and heat responsive means to vary the effective buoyancy of the float.

1,890,532. BUILDING BLOCK AND WALL FORM. MAX SKOLNIK, Chicago, Ill., assignor to Insolo Holding Company, a Corporation of Minnesota. Filed June 8, 1931. Serial No. 542,816. 10 Claims. (Cl. 72—44.)



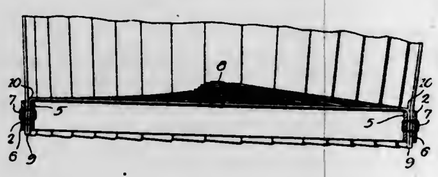
1. A wall form, comprising a plurality of building blocks arranged to form sides of said wall form, a plurality of spaced bosses on each of said blocks each having a hole therethrough parallel to the face of the block, the ends of said bosses being spaced from respective edges of the block, means engaging certain holes to hold certain blocks of one side of said wall form in spaced relationship with certain blocks of the other side of said wall form, and other means engaging other holes to tie together adjacent blocks of a respective side of said wall form, said blocks being arranged as facings for a wall.

1,890,533. PROCESS AND APPARATUS FOR MANUFACTURING SUGAR SWEETMEATS AND THE LIKE. ROBERT SOLLICH, Rostock, Germany. Filed Mar. 5, 1930, Serial No. 433,432, and in Germany Mar. 7, 1929. 9 Claims. (Cl. 107—4.)



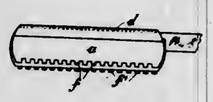
1. A process for manufacturing sugar sweetmeats that consists in forming a ribbon of medium thickness of viscous, plastic condition of a material of melted sugar prepared with the required ingredients, undulating and spinning out said ribbon in its breadth and longitudinal direction to a thin film, thereupon dividing the so prepared sugar film, and then forming the cut off portions into sweetmeat pieces of folded configuration.

1,890,534. BASKET AND METHOD OF CONSTRUCTION THEREOF. ARTHUR F. DURAND, Ravinia, Ill., assignor to Saranac Machine Company, Benton Harbor, Mich., a Corporation of Michigan. Filed Apr. 9, 1931. Serial No 528,755. 4 Claims. (Cl. 217—122.)



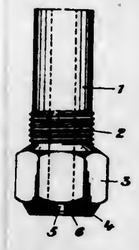
1. A basket having downwardly tapered side walls, a substantially flat raised bottom, and outside and inside bottom hoops, said bottom resting upon the upper edge of the inside bottom hoop, and the side walls having upturned integral portions connecting the lower edges of the side walls with the outer edges of said bottom, together with fasteners inserted through the side walls and upturned portions and both hoops to fasten the parts in place.

1,890,535. SAFETY DEVICE FOR RAZOR BLADES. CARL FRIEDRICH ERN, Solingen-Wald, Germany. Filed Dec. 3, 1931, Serial No. 578,759, and in Germany Aug. 26, 1930. 2 Claims. (Cl. 30—12.)



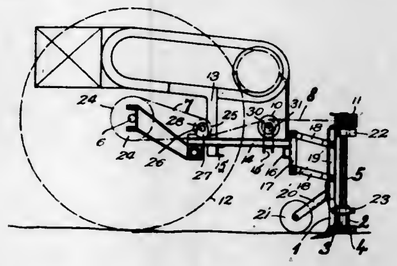
1. A safety device for a razor blade, comprising a strip-like guard to cover one side of the blade nearly to the edge of the blade, said guard having a sheath-like portion adapted to grip the back of the blade, another strip-like guard to cover the other side of the blade projecting beyond the edge of the blade, said other guard being adapted to grip the back of the first-mentioned guard, both strip-like guards being of such a length as to lie substantially with the edge of the blade in one plane; both strip-like guards having projections to form a support against the blade, and to space them therefrom.

1,890,536. FLOW BEAN. GEORGE SPENCER FLANDERS and MERVYN ALECK AP RHYS PRYCE, Maracaibo, Venezuela, assignors to Naamlooze Vennootschap de Bataafsche Petroleum Maatschappij, The Hague, Netherlands. Filed Jan. 10, 1930, Serial No. 419,919½, and in the Netherlands Jan. 16, 1929. 2 Claims. (Cl. 137—75.)



1. Flow bean for regulating oil wells comprising a short length of pipe with a cylindrical axial passage and provided with external thread, and a thin perforated substantially flat plate fastened to the face of the pipe at the entry side thereof with its perforation coaxial with the passage of the pipe, the diameter of said perforation being substantially smaller than the diameter of said passage, so as to form a restricted throat.

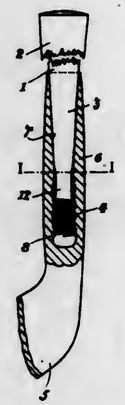
1,890,537. HOE. ARMIN FRANK, Ilberstedt, Germany. Filed Dec. 19, 1928, Serial No. 327,122, and in Germany June 25, 1928. 4 Claims. (Cl. 97—43.)



1. A cultivator comprising a sulky frame and a transverse row of spaced apart cultivators associated with said frame, in combination with vertically movable frames, each of said vertically movable frames maintaining a horisontally rotary blade, and a surface engaging roll in advance of said rotary blade.

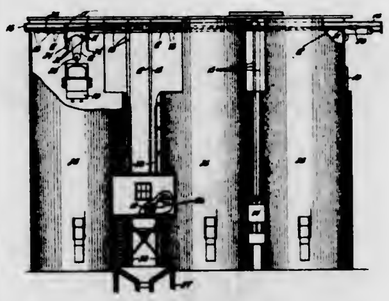
1,890,538. SHAFT FOR GOLF CLUBS. WILLIAM JAMES HADDEN, Glasgow, Scotland, assignor to Donaldson Manufacturing Company Limited, Glasgow, Scotland. Filed Nov. 30, 1928, Serial No. 322,846, and in Great Britain Oct. 23, 1928. 5 Claims. (Cl. 273—80.)

1. A tapering shaft of relatively thin highly tempered steel, for golf clubs, said shaft having a slight taper towards its lower end and a portion of the metal thereof at its lower end being itself bent into helical screw formation of uniform diameter substantially the same as the smallest diameter of the tapering part of the shaft, a plain cylindrical clearance portion on the shaft separating the screw threaded and tapering parts and of diameter not greater than the smallest diameter of the



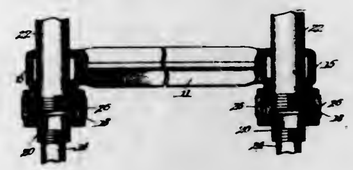
tapering part, the metal of the shaft being of uniform thickness throughout the length of the tapering, screw threaded and cylindrical clearance parts.

1,890,539. ELECTRICAL CONTROL MEANS FOR TROLLEY BUCKETS. HAROLD E. HALLENBECK, Hudson, N. Y., assignor to Gifford-Wood Company, Hudson, N. Y., a Corporation of New York. Filed Oct. 9, 1930. Serial No. 487,628. 15 Claims. (Cl. 212—86.)



1. A control device for motor-driven trolley buckets comprising, in combination, a sheave; a pair of cheek plates forming a frame in which the sheave rotates; a coil spring in the frame abutting one end thereof; a spring follower abutting the other end of said spring; a rod connected to the spring follower and passing through the coil spring; a cross bar centrally connected to the rod; a pair of bolts passing through the ends of the cross bar; springs on the bolts interposed between said cross bar and the heads of the bolts; another cross bar connected to the opposite ends of the bolts; means secured to the second cross bar for attaching the device to a fixed support; a pair of switches on said frame so arranged as to be closed alternately as the frame reciprocates relative to the follower; an overload switch on said second-named cross bar; and means carried by the first-named cross bar to contact with said overload switch to open it when the two springs on said bolts are sufficiently compressed by movement of said second cross bar responsive to movement of the sheave and its frame.

1,890,540. COMBINED METER HANGER AND TEMPLATE. ORVILLE J. HAWKINS, Decatur, Ill., assignor to Mueller Co., Decatur, Ill., a Corporation of Illinois. Filed June 24, 1932. Serial No. 619,161. 10 Claims. (Cl. 285—3.)



1. Means for spacing the service pipes of meters, comprising a bar having at one end thereof means for establishing communication with the meter and at the other end thereof means for receiving a pipe, means for connecting said pipe with a second pipe for establishing communication with the meter, said connecting means disposed in abutting relation to the bar, and means for securing the connecting means in such abutting relation.

1,890,541. FIRE EXTINGUISHER. LUTHER W. HAWLEY, New Rochelle, N. Y., assignor to International Fire Equipment Corporation, West New Brighton, N. Y., a Corporation of Delaware. Filed Feb. 17, 1931. Serial No. 516,309. 5 Claims. (Cl. 169—26.)

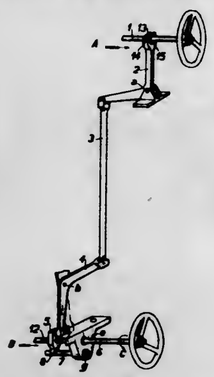


1. A fire extinguisher comprising a socket, non-positive, resilient clamping means carried by the socket, and a closed frangible fire extinguisher container of fire extinguishing liquid having a portion adapted to fit into said socket and having offset portions engageable by said clamping means, said clamping means and offset portions of the container being constructed and arranged to release the container from the clamping means by a direct pull on the container.

1,890,542. CONTROLLING COAL-DUST FURNACES. GEORG HAYN, Essen, Germany, assignor to Richard Roosen, Kassel, Prussia, Germany. Filed Aug. 5, 1929, Serial No. 383,528, and in Germany Aug. 14, 1928. 2 Claims. (Cl. 110—104.)

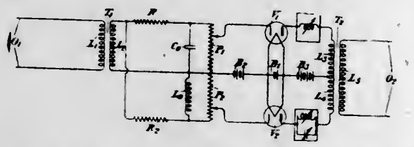
1. In a coal dust furnace for locomotives, a device for starting and stopping the supply of combustion air and a device for starting and stopping the supply of coal dust, a member adapted to take part in the operating mo-

tions of said first-named device, another member adapted to take part in the operating motions of said last-named device, said first-named member projecting into the path



of said last-named member when said first-named device is in stop position but leaving said path when the latter is moved to starting position.

1,890,543. CURRENT-SUPPRESSOR. WILLIAM H. T. HOLDEN, Brooklyn, N. Y., assignor to American Telephone and Telegraph Company, a Corporation of New York. Filed Apr. 17, 1930. Serial No. 445,143. 3 Claims. (Cl. 178—44.)



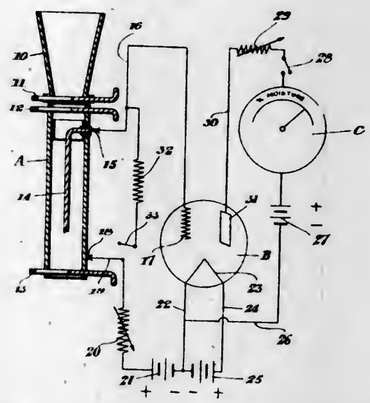
1. A current suppressing system comprising, in combination, a first potentiometer, a condenser bridging said first potentiometer, a second potentiometer, a winding bridging said second potentiometer, and two amplifiers connected, respectively, to said potentiometers, said amplifiers being connected in opposition, said potentiometers controlling the frequency of the current to be suppressed.

1,890,544. MOTOR VEHICLE CONTROL. HARRY E. HULL, Washington, D. C. Filed Oct. 17, 1931. Serial No. 569,517. 4 Claims. (Cl. 74—81.)



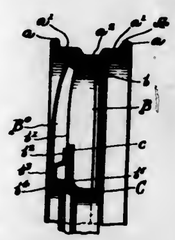
1. A control mechanism for automobiles comprising brake and accelerator pedals, the foot-engaging portion of the brake pedal being forward of the foot-engaging portion of the accelerator pedal in position for the shifting of the foot by forward movement from accelerator pedal to the brake pedal, said brake pedal having an arm with which the accelerator pedal is movably connected to permit independent movement of the accelerator pedal for throttle operation, said brake pedal arm extending rearward below the foot-engaging portion of the brake pedal and the accelerator pedal being pivoted thereto to rock for throttle operation.

1,890,545. MOISTURE MEASURING DEVICE. CHARLES BERNARD LIMBRICK, Fort William, Ontario, Canada. Filed Aug. 23, 1930, Serial No. 477,352, and in Canada Sept. 9, 1929. 1 Claim. (Cl. 175—183.)



A device for measuring the moisture content of materials through their electrical conductivity, comprising in combination a three-electrode vacuum tube having plate, grid and filament electrodes, a receptacle for the material to be tested, including a hopper having controlling slides at the top and bottom thereof, an electrode extending into the receptacle and suitably insulated from the walls thereof, the said electrode and the receptacle being included in the grid circuit, a battery in the plate circuit, a battery in the grid circuit connected to place a positive bias on the grid, a filament battery, an indicating instrument in the plate circuit and variable resistances in the plate and grid circuit.

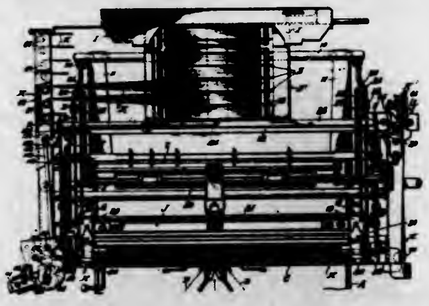
1,890,546. VEHICLE WHEEL. ANDRÉ JULES MICHELIN, Paris, France, assignor to Michelin et Cie., Clermont-Ferrand, France, a Corporation of France. Filed Apr. 7, 1930. Serial No. 442,309. 2 Claims. (Cl. 301—64.)



2. In a wheel the combination of a rim, a hub having a radial flange, and an intermediate sheet metal spoke portion engaging the rim and constructed with a hub portion, said hub portion having a plurality of radially disposed flanges located intermediate the spoke portions and lying in contact with one side of the wheel hub flange, and bolts passing through the hub flange and said hub portion, substantially as set forth.

1,890,547. MANIFOLDING DEVICE. LEWIS C. MYERS, Freeport, and GEORGE F. HANDLEY, Glendale, N. Y., assignors to Royal Typewriter Company, Inc., New York, N. Y., a Corporation of New York. Filed June 25, 1931. Serial No. 546,858. 82 Claims. (Cl. 197—158.)

1. In a typewriting machine, the combination with a non-rotatable shaft, of a ribbon spool rotatably mounted thereon, means mounted on the shaft for applying a constant tension to the spool, means for feeding the



ribbon against the drag of said tension means, and means extending longitudinally within the shaft for releasing said tensioning means.

1,890,548. PREALLOYS. JOSEF NOVÁK and ROMAN KESSELRING, Oderberg, Csechoslovakia. Original application filed Apr. 17, 1930, Serial No. 445,198, and in Germany Mar. 30, 1929. Divided and this application filed July 28, 1931. Serial No. 553,681. 2 Claims. (Cl. 75—1.)

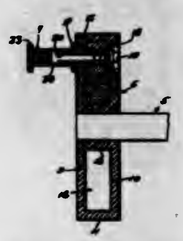
1. A pre-alloy for producing rust-proof, non-corrodible alloys, which consists of the elements iron, chromium, tungsten, nickel and copper having a ledeburitic structure and which contains only traces of phosphorus, sulphur, silicon and manganese and wherein iron is the base, the content of chromium being between 20 and 30 per cent, tungsten between 5 and 6 per cent, nickel between 6 and 10 per cent, copper between 10 and 15 per cent and the content of carbon of carbidic character between 2½ and 3 per cent.

1,890,549. WASHBOARD. DOMINICK J. SIGNORELLI, New Orleans, La. Filed June 1, 1931. Serial No. 541,482. 1 Claim. (Cl. 68—29.)



A wash board comprising leg members, spaced cross members connected with the leg members, a board panel having an edge disposed between two of the cross members and in close contact therewith and an upper portion disposed across the upper edge of a third cross member, the upper portion of the panel being located behind the rear edges of the leg members and that portion of the panel disposed between the upper and lower cross members being corrugated transversely, rod members having angularly disposed ends inserted in the leg members, said rod members bearing against the corrugated portion of the panel and backing members spaced from each other at their inner edges and interposed between the corrugated portion of the panel and two of said cross members.

1,890,550. LUBRICATED STRUCTURE. GEORGE STENGLEMEIR, Woodward, Okla. Filed Apr. 20, 1932. Serial No. 606,448. 5 Claims. (Cl. 74—38.)



3. A lubricator structure comprising a hollow rotatable body, an interior radial partition in the body having an opening extending to each side of the partition for receiving lubricant contained in the body, a wrist pin placed through a wrist pin opening extending through both sides of the body and through the partition, a flange on the wrist pin for engaging one side of the body, a nut threaded on the wrist pin for engaging the other side of the body, said wrist pin having a longitudinal chamber therein having communication means registrable with one side of the lubricant receiving opening and surface lubricating means fed by the chamber.

1,890,551. APPARATUS FOR MAGNETIC SEPARATION OF MATERIALS. GEORG ULLRICH, Magdeburg, Germany, assignor to the Firm Fried. Krupp-Grusonwerk Aktiengesellschaft, Magdeburg-Buckau, Germany. Filed Jan. 2, 1929, Serial No. 329,814, and in Germany Jan. 5, 1928. 8 Claims. (Cl. 209—219.)

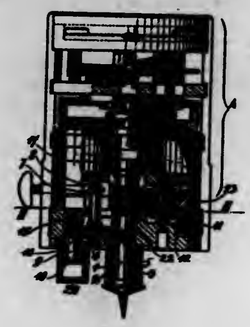


1. An apparatus for the magnetic separation of materials comprising two magnet poles, an armature drum arranged between said poles, means for feeding material onto said drum adjacent one side of one of said poles, means adjacent the other side of said pole for separating the material discharged from said drum from the material retained on said drum, said retained material being subsequently discharged from said drum, and means for causing said last-mentioned discharged material to pass through the magnetic field formed between said drum and said second pole to effect a secondary separation.

1,890,552. TIME FUSE MECHANISM FOR PROJECTILES. ANDRÉ VARAUD, Geneva, Switzerland. Filed July 18, 1932, Serial No. 623,192, and in Switzerland July 25, 1931. 2 Claims. (Cl. 102—36.)

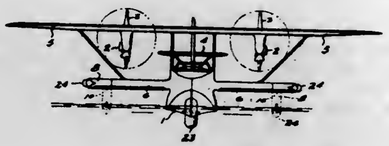
1. In clockwork time fuse mechanism for projectiles, a framework, clockwork mechanism in the upper part of said framework, a spring governed hammer slidable in the lower part of said framework and having a lateral

notch, a spring bolt adapted to engage in said notch, a spring governed trigger governing the action of said bolt, an internally toothed crown having an opening to which anti-clockwise movement of rotation is imparted by the



clockwork, a fixed abutment and an abutment secured to said internally toothed crown in such position in relation to the opening of the rotary member that when it comes in contact with said fixed abutment the said retaining bolt of the hammer is released.

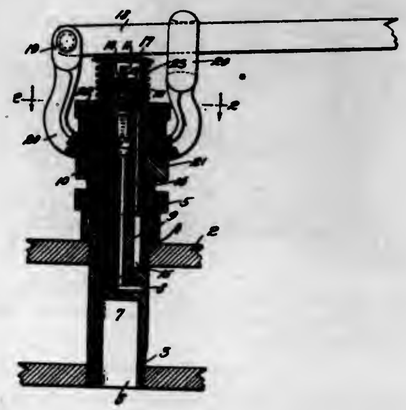
1,890,553. AIRPLANE. HUGH H. YOUNG, Baltimore, Md. Filed Jan. 30, 1931. Serial No. 512,480. 1 Claim. (Cl. 244—2.)



Landing gear for airplanes of the character described including, in combination, a single center wheel, and combination stabilizing pontoons and balancer wheels depending from the wing extremities of the plane, and normally disposed above the level of said center wheel, said combinations stabilizing means being adapted to function as part of the wing when in flying position, said pontoons being watertight in character, and said balancer wheels being journaled in and extending from the pontoons, means for moving said combination stabilizing means, and means extending from said stabilizing means and coacting with said wing extremities for guiding and limiting the movement of the stabilizing means with respect to the plane, said guiding and limiting means comprising a lever connected to said stabilizing means, guides on said wing, and lug means on said lever adapted to abut with the ends of said guides.

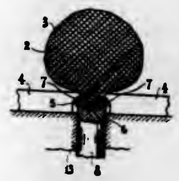
1,890,554. VALVE FOR GARMENT PRESSES. WILLIAM A. ZEIDLER, Bronxville, N. Y., assignor to The United States Hoffman Machinery Corporation, New York, N. Y., a Corporation of Delaware. Filed Aug. 27, 1931. Serial No. 559,698. 4 Claims. (Cl. 251—134.)

3. In a device of the class described, a valve body having a port, a floating valve adapted to close said port, a cap surrounding said floating valve and said port, a tubular part of the valve body partially surrounding said cap, and means for depressing the cap against the floating valve so as to open the same, and means for causing fluid adapted to flow through the port to jet through the



interior of the cap whereby a suction from the exterior to the interior between said cap and tubular part is provided and leakage is prevented.

1,890,555. APPARATUS FOR MANUFACTURING ARTIFICIAL SPONGES. LEWIS CROWFORD ABRAHAM, Auderghem, Belgium. Original application filed Oct. 8, 1930, Serial No. 487,352, and in Belgium Oct. 14, 1929. Divided and this application filed June 16, 1931. Serial No. 544,919. 8 Claims. (Cl. 300—1.)

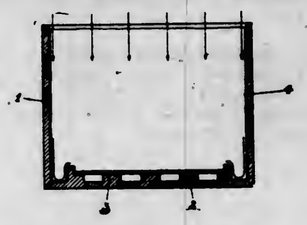


1. In an apparatus for closing the mouth of a wire gauze bag filled with any desired material by means of a metal cap, the combination of a frame, a stationary horizontal plate on said frame, radial grooves in said plate, fingers having bevelled hooks at one end and pushers guided in said radial grooves, means for moving said fingers and pushers in said grooves, towards the centre of said stationary plate, for the purpose of contracting the mouth of a wire gauze bag placed at the centre of said stationary plate, a vertical plunger arranged centrally to said plate and adapted to receive a metal cap with a toothed pin on its upper end, means for moving said plunger upwardly whereby said cap will be fitted upon the contracted mouth of the wire gauze bag and the teeth thereof bent inwardly against the heads of said fingers and pushers, substantially as set forth.

1,890,556. MACHINE FOR DYEING TEXTILE MATERIALS IN BUNDLES. JOSEPH ANNICQ, Renaix, Belgium. Filed June 19, 1931, Serial No. 545,539, and in Belgium Apr. 21, 1931. 5 Claims. (Cl. 8—19.)

1. In a vat for dyeing or otherwise treating textile materials with a liquid bath forced under pressure through the materials, the combination with the wall through which the bath escapes after having passed through the

mass of materials to be treated, of a projecting rib parallel to the rims of said wall and slightly apart therefrom, an offset trough formed by said rib along the rims of the wall for the reception of the compressed

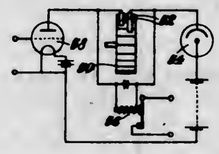


materials and formation of a tight joint preventing the bath from flowing freely along the walls of the vat, and exhaust ports for the bath provided in the portion surrounded by said projecting rib.

1,890,557. SOUND-RECORD CINEMATOGRAPH FILM. THOMAS THORNE BAKER, Hatch End, Middlesex, England, assignor to Spicers Limited, London, England, a British Company. Filed June 20, 1930, Serial No. 462,695, and in Great Britain July 1, 1929. 6 Claims. (Cl. 95—2.)

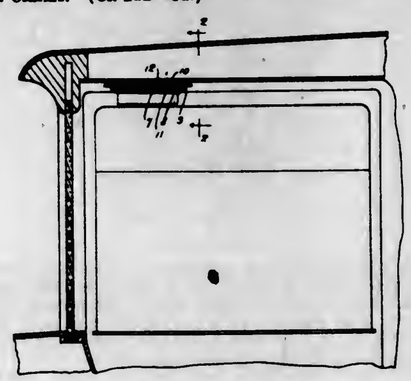
1. A method of making a sensitive film of the multicolor screen type for use in the production of sound record cinematograph films in natural colours which comprises applying to a cellulose acetate film, along a narrow strip which is to serve as a sound record track, a layer of bitumen dissolved in benzole, coating the surface of the film with a layer of collodion, forming a multicolour screen on the collodion layer, treating the film with benzole to remove the bitumen together with that portion of the collodion layer which overlies the said layer of bitumen and finally coating the film thus prepared with a photographic emulsion.

1,890,558. TELEVISION OR LIKE SYSTEM AND APPARATUS. JOHN LOGIE BAIRD, London, England, assignor to Television Limited, London, England, a British Company. Filed Apr. 8, 1929, Serial No. 353,632, and in Great Britain Apr. 16, 1928. 2 Claims. (Cl. 178—69.5.)



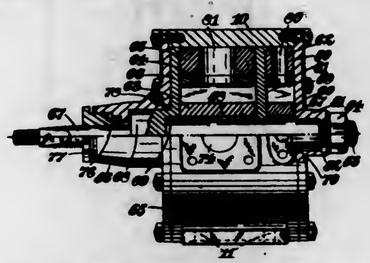
1. In a system for sending light images having a transmitting device and a receiving device, each of said devices including means for exploring the field of vision, the combination with motors for driving said exploring means, of a commutator operating in timed relation with the motor associated with the transmitting device, and means associated with the commutator segments for effecting a substantial variation in the intensity of the transmitted signal at predetermined intervals, the commutator segments being so spaced as to coact with said means when said exploring means is operating adjacent one side of the field of vision to produce a band of distinctive light intensity across one side of the received image, mechanism controlled by the intensity of the received signal for controlling the speed of the motor associated with the receiving device, and means for associating the received signal with said mechanism at intervals corresponding to said first mentioned intervals, said means including a commutator driven in timed relation to the motor associated with the receiving device, and means associated with said commutator to feed the received signal to said mechanism, whereby the phase relationship of said first and second mentioned intervals may be utilized to effect synchronization of the transmitting and receiving devices.

1,890,559. HAT HOLDER. GEORGE H. BROWN, Willow Grove, Pa. Filed Sept. 19, 1931. Serial No. 563,826. 2 Claims. (Cl. 211—81.)



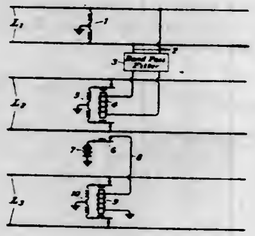
1. A hat holder comprising a single length of wire bent to be generally elliptical in shape, and having an open end and a closed end, the free ends of the wire adjacent the open end of the holder being reversely bent, loops opposite from each other adjacent the open end of the holder and twisted about themselves to form supports for attachment to a wall, and the closed end of the holder having a relatively short arcuate bight inset therefrom.

1,890,560. ROTARY PUMP AND THE LIKE. LEWIS BURN, Longparish, England, assignor of one-half to Thompson Brothers (Bilston) Limited, Bilston, Staffordshire, England, a British Company. Filed Nov. 30, 1931, Serial No. 578,086, and in Great Britain Dec. 5, 1930. 1 Claim. (Cl. 103—163.)



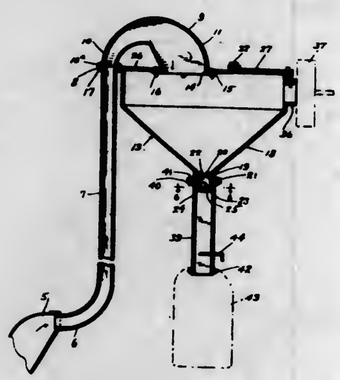
In a rotary pump, the combination with a plurality of sets of pumping elements, of a common outer casing for said elements, each set of elements comprising a drum supported within said casing for rotation with respect thereto, said drum having a rectangular recess therein, a rectangular frame slidably supported in said recess, a centrally disposed rectangular block supported for sliding movement within said frame and for rotation with respect to said casing about an axis eccentric to the rotational axis of said drum, said casing, drum, and frame being provided with cooperating fluid ports through which fluid may be pumped on relative rotation of said drum and casing, and a radial partition for separating adjacent sets of pumping elements, said partition and drums being connected for unitary rotation.

1,890,561. TELEPHONE CIRCUIT. CLAUDE C. CASH, New York, N. Y., assignor to American Telephone and Telegraph Company, a Corporation of New York. Filed Dec. 17, 1931. Serial No. 581,753. 5 Claims. (Cl. 179—175.3.)



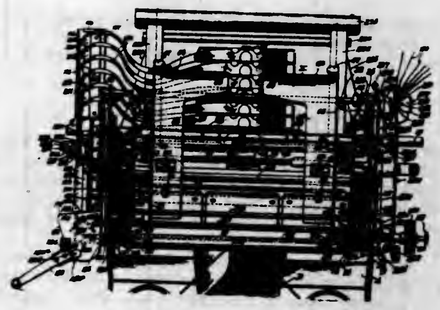
1. A telephone system comprising a line in which a translating device is connected, a circuit bridged across said line selective for a certain band of frequencies, relay means in said selective circuit, a second telephone line, and a translating device connected in said second telephone over the contacts of said relay.

1,890,562. ELEVATOR. HARVEY D. CLUTE, Rocky Ford, Colo. Filed Apr. 1, 1932. Serial No. 602,566. 2 Claims. (Cl. 302—59.)



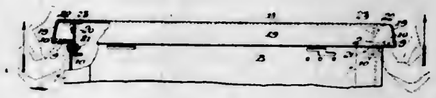
1. An elevator of the type described comprising a casing of inverted pyramidical form having a depending valved discharge means, a vertical elevator tube having its lower end disposed for taking up material to be elevated, a gradually enlarged elbow head on the upper end of the tube having its small end connected to the tube and its large end passed through an opening in the top of the casing and secured therein, a lateral tubular extension on the upper part of the casing to which is adapted to be connected suction blower means, a lateral flange on the large end of the elbow adapted to engage and be secured to the inside of the top of the casing around the opening, and detachable securing means therefor, the large end of the elbow and the opening being squared so that the detachable means may be loosened and the large end of the elbow pushed into the casing until a smaller portion of the elbow is within the opening, whereupon the elbow may be turned and then secured in a position different from that at first occupied.

1,890,563. MANIFOLDING DEVICE. GUSTAVE O. DEGENER, San Francisco, Calif., assignor to Royal Typewriter Company, Inc., New York, N. Y., a Corporation of New York. Filed July 30, 1930. Serial No. 471,801. 22 Claims. (Cl. 197—126.)



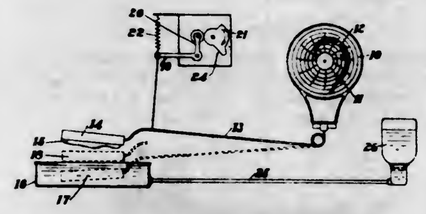
1. In a manifolding device; a carriage; a carriage return lever having a cam a platen mounted on the carriage and past which work sheets are moved; two cooperating sheet feeding rolls disposed above the platen and between which the work sheets are fed after leaving the platen; a plurality of carbon strips interleaved with the work sheets and extending transversely thereof in front of the platen; and separate means operated by the cam of the carriage return lever for rotating the sheet feeding rolls to effect a line spacing movement to the work sheets, and for feeding the carbon strips in advance of the line spacing movement of the sheet feeding rolls.

1,890,564. TYPEWRITING MACHINE. BERNARD J. DOWD, West Hartford, Conn., assignor to Royal Typewriter Company, Inc., New York, N. Y., a Corporation of New York. Filed Apr. 16, 1932. Serial No. 605,784. 9 Claims. (Cl. 197—186.)



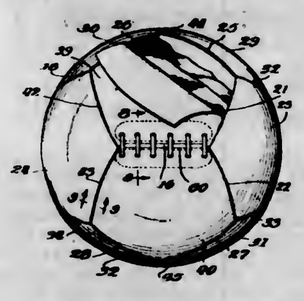
1. In a typewriter mask including frame body portions, a displaceable cover element having edges overhanging the edges of the body portions, and guard elements supported on the body portions adjacent the overhanging edges for guarding said edges from finger engagement by a person seeking to lift the typewriter and preventing displacement of said cover element during such lifting.

1,890,565. HYGROMETER. ARTHUR O. AUSTIN, near Barberton, Ohio, assignor, by mesne assignments, to The Ohio Brass Company, Mansfield, Ohio, a Corporation of New Jersey. Filed May 27, 1927. Serial No. 194,606. 8 Claims. (Cl. 234—1.)



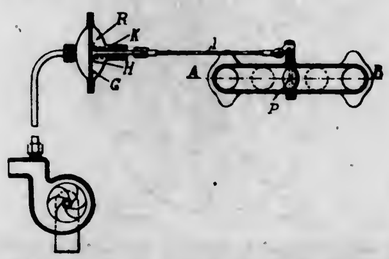
1. A hygrometer comprising a temperature responsive element, and means for alternately subjecting said element to wet and dry bulb conditions at regular intervals of time and means for determining said intervals.

1,890,566. BALL. WALTER BARTKY, Chicago, Ill., assignor to Wilson-Western Sporting Goods Company, Chicago, Ill., a Corporation of Delaware. Filed June 20, 1931. Serial No. 545,764. 3 Claims. (Cl. 273—65.)



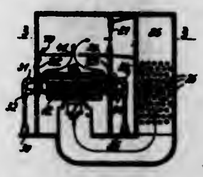
1. An inflatable ball cover comprising a multiplicity of regular, pentagonal, and like pieces of leather joined together at their edges by seams, said seams extending along lines corresponding to great circles and said seams forming a substantially uniform network which is symmetrically located with respect to the center of the ball.

1,890,567. INTERNAL COMBUSTION ENGINE FEEDING ARRANGEMENT. FRANÇOIS BAVEREY, Lyon, France, assignor to Etablissements Lyonnais Rochet-Shneider, Lyon, France. Filed Dec. 30, 1927, Serial No. 243,550, and in France June 24, 1927. 3 Claims. (Cl. 123—52.)



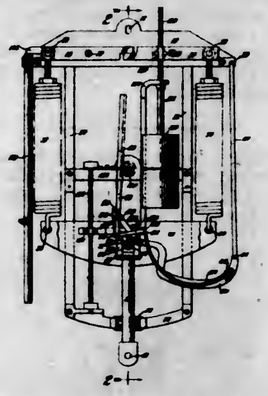
1. In a water cooled internal combustion engine having a pump, driven by the engine, for circulating the cooling water and an intake manifold common to several cylinders and at least two carburetors connected to said intake manifold, a throttling member in said intake manifold between said carbureters, a deformable member adapted to be deformed in proportion to the water pressure in the cooling water circuit of the engine, and means for connecting said deformable member to said throttling member.

1,890,568. APPARATUS FOR DRYING WEBS, STRIPS, FILMS OR SHEETS AS MANUFACTURED FROM CELLULOSE PRODUCTS. ERNST BLEIBLER, Winterthur, Switzerland, assignor to Sylvania Industrial Corporation, Fredericksburg, Va., a Corporation of Virginia. Filed Oct. 23, 1930, Serial No. 490,768, and in Germany Oct. 29, 1929. 10 Claims. (Cl. 34—48.)



9. Apparatus for drying strips and the like comprising, a chamber, means in said chamber for feeding said strip, a normally open attendance opening in the wall of said chamber and means including said walls for effecting a flow of drying gas past said strip in a direction transversely of said strip, said means being effective to establish a pressure in the interior of said chamber at said opening equal to that of the exterior atmosphere at said opening, and thereby substantially preventing a flow of air in or gas out through said opening.

1,890,569. SCALE. ADAM C. BURKHEISER, Detroit, Mich., assignor to The Standard Computing Scale Company, Detroit, Mich., a Corporation of Michigan. Filed Nov. 10, 1930. Serial No. 494,507. 8 Claims. (Cl. 265—69.)



3. In a scale, a supporting frame, load springs supported thereby, a movable cross bar connecting said springs and supported thereon, a knife edged bar secured to and positioned so as to be perpendicular to said cross bar, load supporting means suspended on said knife edged bar, an arm pivotally connected to said knife edged bar, an indicator moving rack, means operatively connecting said rack and said arm, the pivotal connection between said arm and said knife edged bar including a hinge, one of the leaves of the hinge being connected to said bar and the other to said arm.

8. In a scale, a supporting frame, load supporting springs carried thereby, a divided cross bar connecting said springs and supported thereby, a connecting member carried by said cross bar, load supporting means suspended

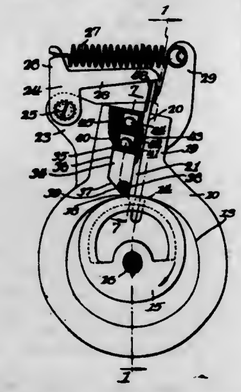
on said connecting member, an arm pivotally connected to said connecting member, an indicator moving rack, means operatively connecting said rack and said arm, and a thermostat means operatively connecting said rack and said arm independent of the last-mentioned connection.

1,890,570. DIVING APPARATUS. ROBERT HENRY DAVIS, London, England. Filed July 19, 1929, Serial No. 379,502, and in Great Britain Oct. 3, 1928. 1 Claim. (Cl. 61—69.)



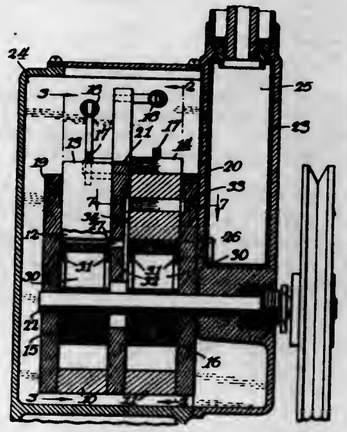
Apparatus for transporting divers to the surface from the first decompression stage of an ascent, which comprises a chamber adapted to be lowered to the first decompression stage of a diver in water and having in the floor thereof an entrance for a diver, means for supplying the chamber with a sufficiency of air at the pressure prevailing at the depth of the first decompression stage to prevent the chamber when lowered from becoming flooded with water, a door opening inwardly for closing said entrance after the diver has passed into the chamber from the water, means for gradually reducing the air pressure within said chamber to normal atmospheric pressure after closure of the entrance door and at least one exit in the structure of the chamber above the floor thereof, and a door for said exit arranged to open inwardly.

1,890,571. PUMP. JOHN DUBROVIN, Chicago, Ill., assignor to Central Scientific Company, Chicago, Ill., a Corporation of Illinois. Filed Oct. 11, 1928. Serial No. 311,733. 8 Claims. (Cl. 230—45.)



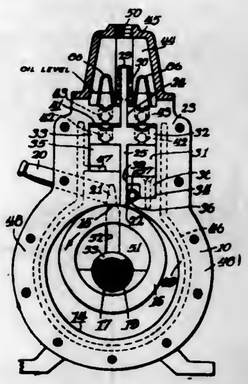
2. A vacuum pump comprising a casing provided with a chamber, an eccentric rotor in said chamber, said casing being provided with intake and discharge ports and passages leading to and from said ports, a sliding blade between said ports, a discharge valve for said discharge port and means in said discharge passage located radially outwardly from said chamber for receiving air passing through said discharge port and for positively discharging the same from said passage.

1,890,572. PUMP. JOHN DUBROVIN, Chicago, Ill., assignor to Central Scientific Company, Chicago, Ill., a Corporation of Illinois. Filed Dec. 5, 1929. Serial No. 411,754. 9 Claims. (Cl. 230—205.)



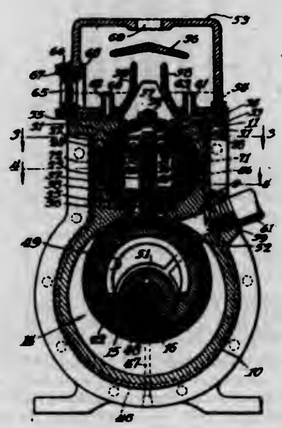
1. A vacuum pump comprising, in combination, a first stage including a casing and a pump chamber with intake and exhaust ports and a blade cavity therein, a rotor in the chamber and a blade movably mounted in the blade cavity, and cooperating with the periphery of the rotor to divide the intake from the exhaust, means to lubricate the blade, means to extract gas from the lubricant in the blade cavity and means for supplying oil to said blade.

1,890,573. VACUUM PUMP. JOHN DUBROVIN, Chicago, Ill., assignor to Central Scientific Company, a Corporation of Illinois. Filed Dec. 5, 1929. Serial No. 411,755. 9 Claims. (Cl. 230—205.)



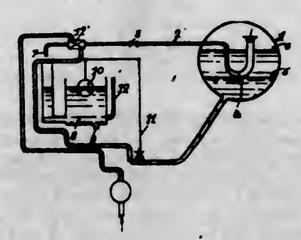
1. A vacuum pump comprising, in combination, a casing provided with a pump chamber and including two structurally separate parts having contacting surfaces where they join, one of the contacting surfaces having a groove between the pump chamber and the exterior of the casing, a sealing liquid filling the groove, an eccentric rotor in the pump chamber, a reciprocating valve in the casing and cooperating with the rotor, and a second pump operated by said valve and connected with the groove to reduce the gaseous content of the sealing liquid.

1,890,574. VACUUM PUMP. JOHN DUBROVIN, Chicago, Ill., assignor to Central Scientific Company, Chicago, Ill., a Corporation of Illinois. Filed May 12, 1930. Serial No. 451,567. 12 Claims. (Cl. 230—147.)



1. A vacuum pump of the rotary plunger type comprising a casing and a pump cylinder having inlet and exhaust passages, in combination, an eccentric in the cylinder, an eccentric strap, a blade separating the inlet and exhaust chambers of the cylinder, operatively connected to the strap, an oscillating gland within the casing forming an oscillating pump cylinder in which the blade reciprocates, a piston carried by the blade, the inlet passage to the reciprocating stage forming the exhaust passage of the first named stage, and a valve closing the passage.

1,890,575. FEED WATER REGULATOR FOR BOILERS AND THE LIKE. MARCEL EHLINGER, Mulhouse, France, assignor to Societe Alsacienne de Constructions Mecaniques, Mulhouse, France. Filed Sept. 30, 1929, Serial No. 396,125, and in France Jan. 17, 1929. 10 Claims. (Cl. 122—1.)



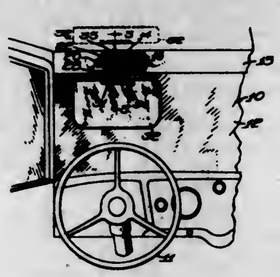
1. In combination: a closed chamber, supply means for supplying said chamber with liquid under pressure, blow down means for continuously discharging liquid from said chamber at a rate depending on the liquid level in said chamber, and controlling means responsive to the rate of discharge of the liquid through said blow down means for controlling said supply means.

1,890,576. VEHICLE BOLSTER CENTER BEARING. HOMER F. FELLOWS, Springfield, Mo. Filed Nov. 27, 1931. Serial No. 577,555. 1 Claim. (Cl. 280—126.)



In combination with a vehicle having a body bolster, a center bearing therefor, said center bearing including a housing having a base element and a cap element, antifriction elements supported by said base element and supporting said cap element, said cap element having a cambered supporting surface for the body bolster and slotted flanges embracing said body bolster, a king-pin traversing said housing and having a cross-head passing through the bolster and seated in the slots of said flanges, and means for securing the king-pin in place.

1,890,577. GLARE SHIELD. EUGENE A. FLAKE, Marshall, Mo. Filed June 21, 1932. Serial No. 618,544. 8 Claims. (Cl. 296—97.)

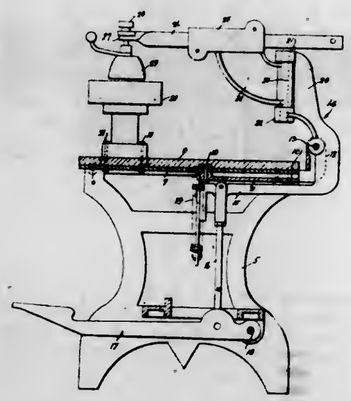


1. A glare shield comprising a shield element, a member connected at one end to said shield element, rotatable means supporting the other end of said member whereby said shield element is adapted to swing from a lower operative position to an upper inoperative position, means normally tending to move said shield element to inoperative position, said member being mounted to swing in the plane of the axis of said supporting means, and holding means having a portion arranged parallel to the axis of said supporting means and beneath which said member is adapted to be moved to hold the shield element in operative position.

1,890,578. MANUFACTURE OF GOODS OF RUBBER OR SIMILAR MATERIAL. CECIL HAYES, Sutton Coldfield, and EVELYN WILLIAM MADGE and FREDERICK CHARLES JENNINGS, Erdington, England, assignors to Dunlop Rubber Company Limited, a British Company. Filed Feb. 8, 1930, Serial No. 427,051, and in Great Britain Feb. 19, 1929. 6 Claims. (Cl. 18—50.)

1. A method of gelling rubber latex which comprises treating the latex with phenol and then adding sufficient formaldehyde to reduce the alkalinity of the latex without coagulating it.

1,890,579. PRESSING MACHINE. TOBIAS G. JASPER, Brooklyn, N. Y. Filed Feb. 6, 1932. Serial No. 591,277. 4 Claims. (Cl. 68—9.)



1. In a pressing machine, a supporting frame, and a resilient pressing-apparatus-carrying plate connected thereto for the purpose specified.

1,890,580. DASHPOT FOR SCALES. LEONARD O. KELLEY, Detroit, Mich., assignor to The Standard Computing Scale Company, Detroit, Mich., a Corporation of Michigan. Filed Apr. 13, 1931. Serial No. 529,748. 6 Claims. (Cl. 188—96.)



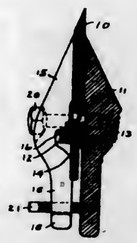
1. An oil containing dashpot including a casing having an apertured end, a valve in said casing and having a rod projecting thru said apertured end, an apertured piston in said casing and having a piston rod projecting thru said apertured end, the rods being connected to each other by means which permits their relative adjustment so that the valve can be moved to control the flow of oil thru the apertures of the piston, and a thermostat forming an operative part of one of the rods for lengthening or shortening the latter so as to subject the flow of oil thru the apertures to thermostatic control, said thermostat comprising a curved bimetallic strip having ends adjacent which and in operative connection with which rod portions are disposed.

1,890,581. BLADES FOR TURBINE ROTORS. GUSTAV KÖHLER, Mulheim-Ruhr, Germany, assignor to Siemens-Schuckertwerke Aktiengesellschaft, Berlin-Siemensstadt, Germany, a Corporation of Germany. Filed Jan. 18, 1930, Serial No. 421,721, and in Germany Dec. 29, 1928. 5 Claims. (Cl. 253—77.)



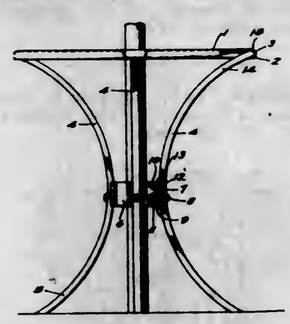
1. A turbine rotor disk having rigid blades extending radially from the disk periphery and having at least one curved medium guide surface, each blade having a solid base integral with the blade and being insertable into the disk rim in the direction of the disk axis, said base having a thickness, measured in the circumferential direction of the disk, which gradually increases from the blade thickness measured at the disk periphery, toward the extreme base end, whereby the transverse-sectional area of the base is gradually increased toward the base end in amounts to form together with the blade a structure of substantially uniform strength.

1,890,582. VENEER MACHINE KNIFE CLAMP. LOUIS F. KOSS, Jr., Indianapolis, Ind., assignor to Capital Machine Company, Indianapolis, Ind., a Corporation. Filed Mar. 28, 1932. Serial No. 601,473. 4 Claims. (Cl. 144—212.)



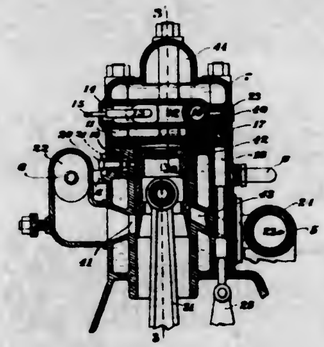
1. In a veneer cutting machine knife holding device, a knife and means for holding the knife in a vertical operating position comprising a knife bar, a ledge extending from the bar, a plurality of knife contacting clamps, shoulders on the clamps adapted to rest on said ledge, bolts slidably passed through the clamps and screw-threadedly engaged in said bar below the under edge of said knife, said clamps extending to below said ledge forwardly of said bar, means for making the clamps rockable on the bolts and set screws screw-threadedly passing through the clamps below said ledge and abutting said bar, said knife being carried between said bar and said clamps above said ledge, and said clamps being spaced along said ledge to have a space between adjacent clamps whereby access may be had between adjacent clamps to the face and lower edge of said knife.

1,890,583. KNOCK-DOWN TABLE. JOHN P. MEEHAN, Los Angeles, Calif. Filed Dec. 14, 1929. Serial No. 414,013. 4 Claims. (Cl. 45—117.)



2. In a knock-down table, the combination of a center piece, a plurality of legs attached to the center piece, having upwardly and outwardly disposed extensions above the center piece, a table top coaxial with the center piece and having socket-means for engaging the ends of said extensions, and a removable ring for engaging the inner sides of the said extensions for holding the same in engagement with the socket-means, said ring and said legs having interlocking means for yieldingly holding the ring against moving up or down between the said extensions.

1,890,584. INTERNAL COMBUSTION MOTOR. CELESTIN F. NARDIN, Ozone Park, N. Y. Filed Mar. 1, 1927. Serial No. 171,744. 2 Claims. (Cl. 123—182.)

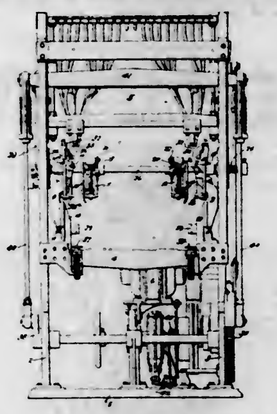


1. The method of facilitating the starting of an internal combustion motor including, first, the pre-heating of the immediate fuel supply, and second, relieving the compression within the cylinders, and enriching the mixture supplied to the cylinders, by means of diminishing the air supply while maintaining constant the fuel supply.

1,890,585. METHOD OF STABILIZING FATS AND OILS. ROY C. NEWTON and WILLIAM D. RICHARDSON, Chicago, Ill., assignors to Swift & Company, Chicago, Ill., a Corporation of Illinois. Filed Mar. 28, 1930. Serial No. 439,847. 6 Claims. (Cl. 87—12.)

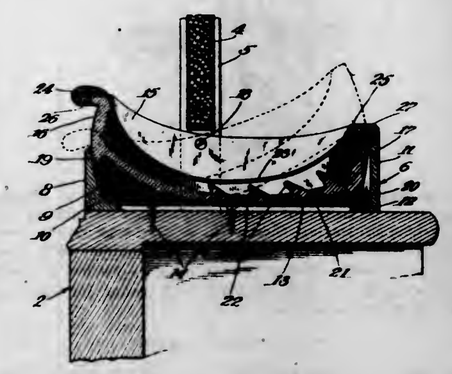
4. The process of stabilizing fats and oils against rancidity which comprises adding thereto about 5 to 10% of palm oil rich in carotinoid pigment, treating the mixture with caustic to remove the free fatty acids, and subjecting thereafter to heat treatment at temperatures between the boiling point of water and the decomposition point of the oil or fat for a sufficient time to effect a bleaching of the mixture and the production of a light colored product.

1,890,586. MACHINE FOR MAKING CRATES. GEORGE D. PARKER, Riverside, Calif.; Clara B. Parker executrix of will of said George D. Parker, deceased. Filed Dec. 16, 1929. Serial No. 414,357. 17 Claims. (Cl. 1—10.)



1. An apparatus for making slatted crates comprising means for receiving loosely previously made crate ends consisting of rectangular frame members and spaced thin slats, means for receiving loosely a plurality of side and bottom slats in the sequence of side, bottom and side, automatic means for engaging said crate ends and said positioned slats and giving them final alignment relative to each other, power means for operating said apparatus in cycles, nailing means for securing positioned slats to said crate ends during each cycle of operation, with means adapted for automatic reciprocation for supporting said crate ends comprising a member resting directly under the top bar of said rectangular frame members directly under the nailing line to prevent collapse of said crate ends during the nailing operation and means for automatically reciprocating said last mentioned supporting means.

1,890,587. TILTING RECEPTACLE. FRANCIS J. PLYM, Niles, Mich., assignor to The Kawneer Company, Niles, Mich., a Corporation of Michigan. Filed June 29, 1931. Serial No. 547,561. 17 Claims. (Cl. 20—1.01.)

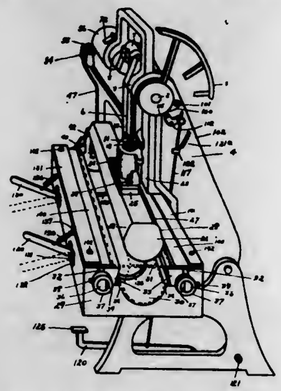


1. A protecting device adapted to be positioned in a partition of a teller's or cashier's cage, comprising a base, and a receptacle tiltably mounted in said base, said receptacle being concave and one side thereof extending

at all times above the lower part of said partition to prevent bullets from entering the cage and endangering the life of the occupant.

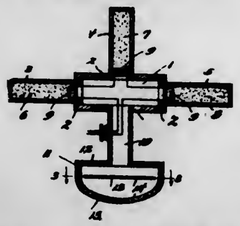
6. In a protecting device for preventing direct access to the interior of a teller's or cashier's window, a tilting concave receptacle provided with a base, and a metal covering spaced from said base.

1,890,588. SHEET METAL BENDING MACHINE. HERBERT S. POWELL, Utica, N. Y. Filed May 17, 1929. Serial No. 363,829. 8 Claims. (Cl. 153—34.)



1. In a sheet metal bending machine, a stationary member having a trough for holding a sheet of metal, a vertically movable member cooperating with said first named member, whereby to bend said sheet of metal a crank shaft connected with said second named member, whereby to actuate the same members for further bending said sheet metal and rock members in contact with said second named members, whereby to actuate the same.

1,890,589. BANK PROTECTIVE METHOD AND APPARATUS. ROBERT B. REYNOLDS, Pittsburgh, Pa., assignor to Federal Laboratories, Inc., Pittsburgh, Pa., a Corporation of Delaware. Filed Apr. 16, 1931. Serial No. 530,712. 9 Claims. (Cl. 102—1.)

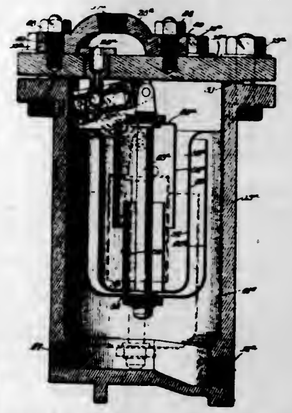


1. A gas dispersing apparatus embodying a mixing chamber, a plurality of gaseous substance containing elements communicating therewith, a discharge nozzle having openings therein, means in connection with said openings operable upon a predetermined pressure, fuelized gaseous charges in said elements, and means for effecting ignition of said charges.

1,890,590. MANUFACTURE OF GLUTAMIC ACID COMPOUNDS. FONG YIH SEN, Shanghai, China. Filed Feb. 4, 1929. Serial No. 337,521. 10 Claims. (Cl. 260—119.)

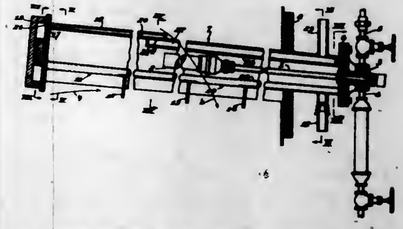
1. A process of the character described comprising hydrolising gluten with substantially concentrated hydrochloric acid in the presence of a minor proportion of a hydrolysis catalyst selected from the group consisting of nitric acid and manganese dioxide, converting the glutamic acid hydrochloride formed into free glutamic acid, and recovering said glutamic acid.

1,890,591. STEAM TRAP. CHARLES L. SHANK, North Canton, Ohio. Filed Jan. 31, 1930. Serial No. 425,045. 12 Claims. (Cl. 137—103.)



1. In a steam trap, the combination of an inlet chamber having therein a float which is open at the top, an outlet chamber having therein a float open at the bottom, said outlet chamber having an outlet, a valve for controlling the flow through said outlet, and means connected to said floats for controlling operation of said valve.

1,890,592. SAMPLING TUBE. JOSEPH A. STEIN, Pittsburgh, and LOUIS L. VAYDA, Aspinwall, Pa., assignors to Bacharach Industrial Instrument Company, a Corporation of Pennsylvania. Filed Feb. 4, 1932. Serial No. 590,915. 12 Claims. (Cl. 23—257.)

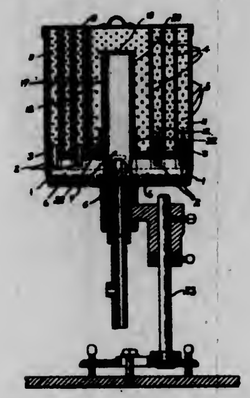


1. In combination with an approximately horizontal sampling tube provided at its free end with a filter, a protecting casing surrounding the tube and extending beyond the free end thereof, a pair of openings through the casing, one located outward from the filter and the other inward thereof, and baffling means projecting laterally from the casing for promoting a flow of gases through the portion of the casing between the two openings.

1,890,593. LIQUID FUEL BURNER. NAPOLEON R. THIBERT, Worcester, Mass. Filed Dec. 8, 1930. Serial No. 500,880. 12 Claims. (Cl. 158—87.)

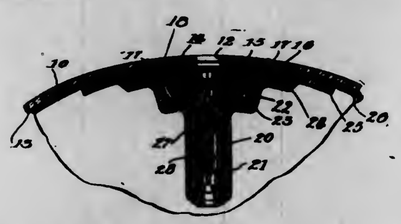
1. In a burner of the character described, a base member having a fuel channel, a combustion chamber above said channel comprising upstanding perforated walls, said base member having a well, forming a vaporising chamber.

and a vaporising sleeve composed of material having higher heat resistance than cast iron spaced from and independent of said combustion chamber and extending from the vaporising chamber, up within and beyond the walls of said well, to a location adjacent said combustion cham-



ber for heating thereby, means to supply liquid fuel to said vaporising chamber, and means establishing communication between said chamber and said fuel channel, comprising a conduit positioned to form an additional vaporising chamber.

1,890,594. INFLATABLE BALL. ARCHIBALD J. TURNER, Chicago, Ill., assignor to Wilson-Western Sporting Goods Co., Chicago, Ill., a Corporation of Delaware. Filed Jan. 5, 1931. Serial No. 506,555. 6 Claims. (Cl. 273—65.)



1. In an inflatable ball a leather cover having a closable bladder insertion opening, an inflation aperture spaced therefrom, a molded rubber nut-attaching member on the inside of the cover, a nut embraced thereby and held in alignment with the inflation aperture, the attaching member being of reduced thickness at its margins forming a marginal flange, and a ring of stitching through the flange and cover to fix the member on the inside of the cover, and a separate removable bladder having a sheet rubber wall with a cut-away opening, a saucer-shaped molded rubber valve supporting and anchoring member having a marginal flange secured to said bladder wall at the margin of said opening and having primary and secondary preformed central depressions, the primary depression being deeper and of lesser diameter and adapted to receive the nut embracing portion of said attaching member, and the secondary depression being shallower and of greater diameter for receiving the flange of said attaching member, an inflation stem carried by the supporting and anchoring member and protruding outwardly through the bottom of the primary depression and threaded for engagement with said nut, a neck portion of said supporting and anchoring member enveloping the inner end of said stem, to protect the inside of the bladder therefrom, and an inflation valve associated with the stem.

1,890,595. ACID-PROOF ALLOYS. EMANUEL VALENTA, Pilsen, Czechoslovakia, assignor to Firm Limited Company, formerly Skoda Works, Pilsen, Czechoslovakia. Filed Oct. 7, 1929, Serial No. 398,060, and in Czechoslovakia Oct. 31, 1928. 1 Claim. (Cl. 75—1.)

Acid-proof alloys consisting of from 0.01 to 10% of titanium, from 7 to 20% of silicon and the balance iron.

1,890,596. REMEDY FOR HEMORRHOIDS. GEORGE ZOGRAPHOS, Rieth, Oreg. Filed May 7, 1930. Serial No. 450,594. 1 Claim. (Cl. 167—63.)

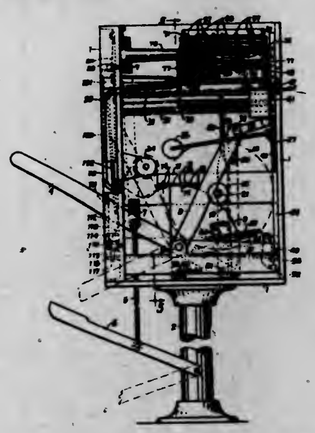
The process of preparing an ointment for hemorrhoids which consists in first heating tansy and mutton tallow together, thoroughly mixing while hot, then adding calomel and glycerine and thoroughly mixing the whole.

1,890,597. METHOD OF SECURING TOGETHER SLATS, STAVES, OR OTHER SECTIONAL DEVICES. HOWARD M. BISHOP, Toronto, Ontario, Canada. Filed Apr. 15, 1929, Serial No. 355,159, and in Canada Dec. 18, 1928. Renewed Mar. 8, 1932. 1 Claim. (Cl. 217—91.)



The combination with a barrel, or other similar article, provided with a continuous spiral groove thereabround, of a round binding element comprising a central body portion adapted to seat in said groove and laterally extending teeth from opposite sides thereof adapted to extend beyond the side walls of said groove and to be forced into said side walls in the seating of said body.

1,890,598. TRANSFER MACHINE. FREDERICK G. L. BOYER, Dayton, Ohio. Filed Feb. 2, 1928. Serial No. 616,509. 43 Claims. (Cl. 101—69.)

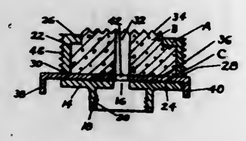


1. In combination: a paper feeding mechanism having a forward and return stroke at each operation thereof; a cutting mechanism adapted to be operated alternately in opposite directions by oppositely directed springs; a detent for preventing operation of said cutting mechanism while said feeding mechanism is intermediate the ends of its stroke in either direction; and means whereby the feeding mechanism, when it reaches the end of its stroke in either direction, releases said cutting mechanism from said

detent, thus permitting it to operate in one direction under the influence of one spring when the feeding mechanism is at the end of its forward stroke and in the other direction under the influence of the other spring when the feeding mechanism is at the end of its return stroke.

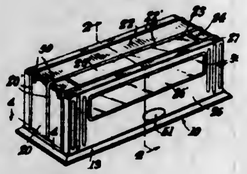
31. In a transfer machine: reciprocating mechanism carrying means for grasping paper and feeding it from a web having spaced perforations throughout its length, the spaces between successive perforations being variable within predetermined limits; and a member adapted to co-operate with perforations in the web for controlling said grasping means and thereby regulating the length of each feeding operation to the length of the space between the particular perforations to be fed out.

1,890,599. APPLICATOR FOR COLLAPSIBLE RESERVOIRS. JOSEPH FRANCIS COBELLO, Philadelphia, Pa., assignor of one-third to Albert H. Friedman, one-third to Norman Friedman, and one-third to Joseph F. Cobello, Philadelphia, Pa. Filed Nov. 21, 1929. Serial No. 408,801. 11 Claims. (Cl. 91—67.4.)



1. An applicator for a collapsible reservoir comprising a passageway, a slide valve closure therefor, a corrugated surface for massaging purposes, and means yieldingly holding the said valve in open or closed position.

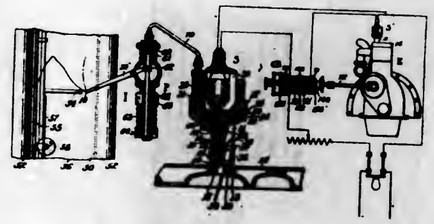
1,890,600. CONTAINER FOR MOVING ADVERTISING SIGNS AND THE LIKE. MORRIS J. COHAN, Brooklyn, N. Y., assignor to Reliance Specialties Mfg. Co., Inc., New York, N. Y., a Corporation of New York. Filed Dec. 10, 1931. Serial No. 580,049. 15 Claims. (Cl. 40—32.)



1. A casing comprising a base plate, a molding rising from said base plate, said molding having a supporting flange formed therewith and extending within the casing, side walls rising from said molding, a top wall integrally formed with and connecting said side walls, a front wall hingedly engaged to said molding, a rear wall hingedly engaged to said molding, an auxiliary base plate supported on said supporting flange within said casing, and means to retain said auxiliary base plate in position on said supporting flange.

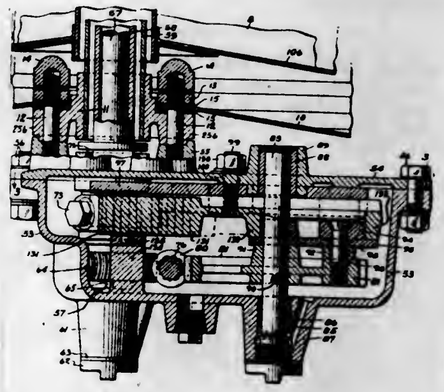
1,890,601. INTERNAL COMBUSTION INDICATOR. CLAUDE E. COX, Detroit, Mich. Filed July 29, 1929. Serial No. 381,993. 14 Claims. (Cl. 234—21.)

1. Recording means for concurrent pressure conditions in the several cylinders of a multi-cylinder engine, comprising a plurality of substantially simultaneously actuable recording means, one for each engine cylinder, a coordinated plurality of pressure-affected means interposed between said recording means and cylinders, and a single



means synchronized with the engine for activating all of said pressure-affected means in common phase relation with the engine.

1,890,602. GEARING. GEORGE W. DUNHAM, New Haven, Conn., assignor, by mesne assignments, to The Whirldry Corporation, New Haven, Conn., a Corporation of Connecticut. Filed Oct. 27, 1928. Serial No. 315,365. 10 Claims. (Cl. 74—14.)

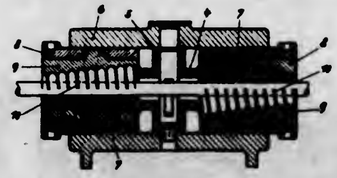


10. In combination, concentric rotary shafts adapted to impart different motions to devices to be driven thereby, a drive shaft transverse to said concentric shafts, worms on said drive shaft, a worm wheel on one of said concentric shafts engaging one of said worms, an idle worm wheel meshing said other worm and disposed on the opposite side of said drive shaft from said concentric shafts, means connecting said idle worm wheel and said other concentric shaft to oscillate the latter and a gear box enclosing said gears.

1,890,603. COMPOSITION OF BLEACHING AGENTS. RICHARD FEIBELMANN, Radebeul, Germany, assignor to Chemische Fabrik von Heyden, A. G., Radebeul, near Dresden, Germany, a Corporation of Germany. Filed Oct. 25, 1928, Serial No. 315,107, and in Germany Mar. 1, 1928. 5 Claims. (Cl. 8—2.)

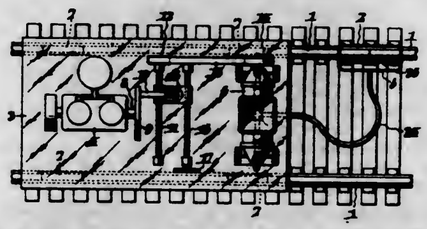
1. A solid and stable bleaching agent consisting of a dry mixture of a dichloride of an aromatic sulfoamide and of a water-soluble salt of alkaline reaction, which mixture, when treated with water, yields a bleaching solution containing an hypochlorite.

1,890,604. BEARING. KARL GOTTMANNS, Hilden, Germany. Filed Dec. 7, 1929, Serial No. 412,462, and in Germany Dec. 7, 1928. 8 Claims. (Cl. 308—70.)



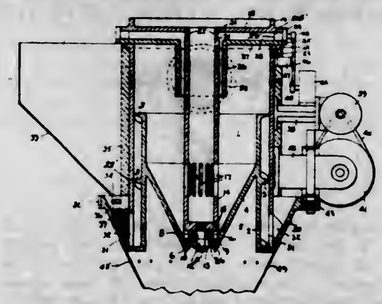
1. An adjustable bearing comprising a casing, a spiral band made up of a spirally wound bar fixed at some point with respect to said casing and having a cylindrical surface for receiving a shaft and an outer surface, a bush provided with a threaded inner surface shaped to correspond with the outer surface of said band and an outer surface shaped to correspond with the inner surface of said casing whereby rotation of said bush within the casing causes the interior diameter of the spiral band to vary uniformly over its entire length.

1,890,605. RAIL LUBRICATING DEVICE. FREDERICK M. GRAHAM, Hollidaysburg, and JAMES B. MCWILLIAMS, Pittsburgh, Pa. Filed Mar. 31, 1930. Serial No. 440,265. 1 Claim. (Cl. 184—3.)



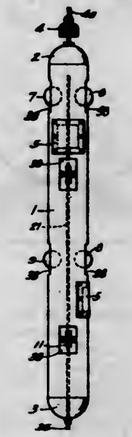
A device for injecting a measured quantity of a lubricant of the consistency of a thick grease into the space between a joint bar and the rails comprising a truck adapted to be moved along the track; a pump mounted on said truck, said pump including a piston, means for automatically stopping the travel of said piston upon the delivery of a measured quantity of said lubricant, and means for thereafter reversing the travel of said piston; and a discharge connection on said pump having an attachment with means thereon adapted to embrace opposite ends of a joint bar to seal the ends of the rail joint space aforesaid against the delivery pressure of the lubricant injected therein.

1,890,606. GAS GENERATOR. FRANK C. GREENE, Milwaukee, Wis. Filed Dec. 9, 1927. Serial No. 238,976. 6 Claims. (Cl. 48—76.)



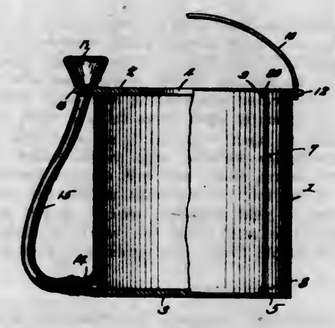
1. A fuel gas generator comprising a firepot, a gas offtake extending into said firepot and provided with slots for access of gas into said gas off-take, an air intake disposed concentrically about said gas offtake above said firepot and automatic means for feeding coal to said firepot.

1,890,607. DEPTH INDICATOR AND INCLINOMETER. SAMUEL V. HITE, Seminole, Okla. Filed Apr. 12, 1929. Serial No. 354,473. 5 Claims. (Cl. 234—1.)



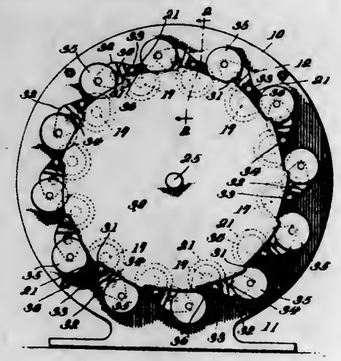
1. A device of the class described, having in combination, a thermetically sealed cylindrical shell connecting a supporting cable, a plurality of wheels operatively anchored on said shell adapted for peripheral contact with the interior of a well casing or drill pipe, for controlling the orientation of said shell, recording mechanism including a traveling tape within said shell and driven by some of said wheels for automatically receiving a register of the declination of said casing from the vertical upon said tape, and a pair of pens for registering said declination upon said tape, said pens mounted upon a pendulum pivotally mounted within said shell and adapted to swing in all directions.

1,890,608. WATERING DEVICE. CARLOS HURTADO, New York, N. Y. Filed Nov. 25, 1931. Serial No. 577,333. 3 Claims. (Cl. 299—101.)



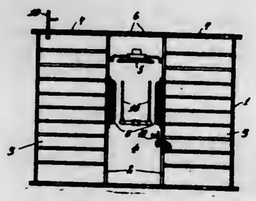
1. A sprinkling pot comprising a body having an outlet, a tube assembled with the outlet, a nozzle carried by the tube, means on the body for holding the tube upwardly extended, a bail resting against the nozzle, the nozzle holding the bail in a substantially upright position, for use, and pivot elements connecting the bail with the body, the nozzle engaging the bail above the pivot elements.

1,890,609. SPRING MOTOR. GEORGE O. JOYNER, St. Louis, Mo. Filed May 1, 1931. Serial No. 534,889. 16 Claims. (Cl. 185—11.)



1. In a motor, having a power shaft, and a series of spring power units connected to drive said shaft, the combination with means to rewind said power units comprising a driven member operatively connected to said shaft, and a connection between each of said units and said member effective upon actuation by said member to impart a successive series of fractional rotative movements to its unit, during a single rotation of said shaft.

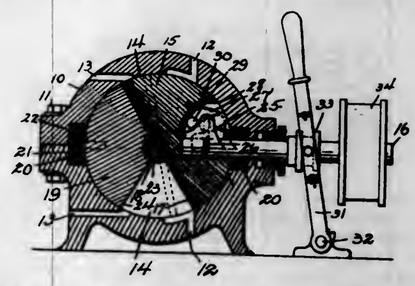
1,890,610. AIR MOISTENING APPARATUS FOR INCUBATORS. LEONARDUS JULIUS GEORGE KARTHAUS, Neerbosch, Netherlands. Filed Sept. 13, 1928, Serial No. 305,802, and in the Netherlands Sept. 24, 1927. 4 Claims. (Cl. 261—104.)



1. Air moistening apparatus for controlling the humidity in incubators, comprising a water evaporating means made of capillary material, a water supply means independent of the heating device of the incubator, a pipe connecting said water evaporating and said water supply means, a normally open valve in said pipe, resilient means tending to open said valve, an electrical control circuit magnetically holding said valve closed against said resilient means, and a wet bulb contact thermometer responsive to the relative humidity within the incubator and connected in said electrical control circuit so as to energize the same and cause the valve to close when the humidity within the incubator exceeds a given limit.

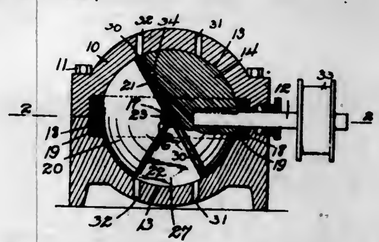
1,890,611. ENGINE. JAMES L. KEMPTHORNE, Montclair, N. J. Filed Apr. 1, 1931. Serial No. 526,813. 2 Claims. (Cl. 103—142.)

1. An engine comprising a casing having a spherical opening therein, an abutment in one half the opening and having substantially flat faces converging toward the centre of the opening, a ring arranged at the circumference of the opening and to which the abutment is secured whereby the ring and abutment may oscillate together, a plate adapted to both rock and rotate, a sealing strip fitting between the centre line of the plate and the central line of the abutment, a rotary member in rear of



the plate, a shaft for rotating the rotary member, and a connection between the shaft and the rotary member for varying the angle of the member relative to the shaft.

1,890,612. ENGINE. JAMES L. KEMPTHORNE, Montclair, N. J. Filed Apr. 1, 1931. Serial No. 526,814. 3 Claims. (Cl. 103—142.)



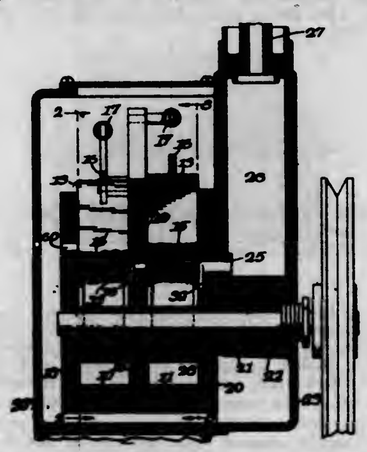
1. An engine comprising a casing having a spherical opening therein, a rotatable member partly filling said opening and having a face inclined to its axis of rotation, an abutment opposite the member and also partly filling said opening and spaced from said member except at the central portion thereof where the member and abutment contact, means for supporting the abutment to give it an oscillation to conform to the movement of the rotary member and to hold it against rotation with the rotary member, and a plate mounted so as to rock in said abutment and in contact with the face of the rotary member, and a shaft secured to the rotary member.

1,890,613. ATTACHABLE CROSS OR JOINT BOND WELDING TERMINAL. EDWARD C. KIRK, St. Albans, W. Va., assignor, by mesne assignments, to The Ohio Brass Company, Mansfield, Ohio, a Corporation of New Jersey. Filed Jan. 18, 1927, Serial No. 161,848. Renewed June 26, 1931. 8 Claims. (Cl. 73—278.)



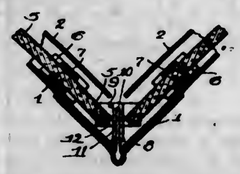
1. An attachable welding terminal for rail bonds comprising a body adapted to receive the end portion of a conductor, spaced pairs of ears associated with the body and adapted to be clamped upon the base flange of a rail, the space between two ears, one of each pair, forming a welding pool and the end of the conductor being arranged to extend into said space.

1,890,614. ECCENTRIC PUMP. PAUL H. KLOPSTEG, Chicago, Ill., assignor to Central Scientific Company, Chicago, Ill., a Corporation of Illinois. Filed Feb. 21, 1928. Serial No. 255,947. 15 Claims. (Cl. 230—149.)



1. In a device of the class described, a pump casing comprising a cylindrical wall with end closures and having inlet and exhaust ports, a hollow rotor eccentrically mounted in the casing with end surfaces in contact with the end closures and a peripheral surface having a zone of contact with the inner periphery of the cylindrical wall whereby the space between the cylindrical wall and the rotor forms a pump chamber, a blade projecting through the cylindrical wall into contact with the periphery of the rotor and dividing the intake from the exhaust, a long groove in the inner face of one end closure in register with the hollow of the rotor and a passage connecting said groove with the pump chamber.

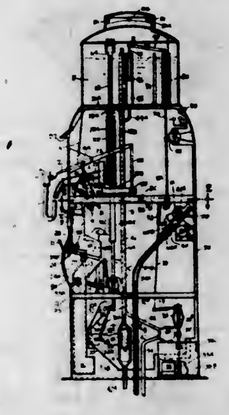
1,890,615. STORE FRONT CONSTRUCTION. GEORGE R. KNEESHAW, Niles, Mich., assignor to The Kawneer Company, Niles, Mich., a Corporation of Michigan. Filed Sept. 28, 1931. Serial No. 565,408. 11 Claims. (Cl. 20—56.4.)



1. In a store front construction provided with sash members for retaining adjacent panes of glass, a cap member adapted to connect the ends of adjacent sash members, said cap member being provided with a tongue adapted to project intermediate the sections of glass, and spaced members for frictionally engaging said tongue therebetween for retaining said cap member in position.

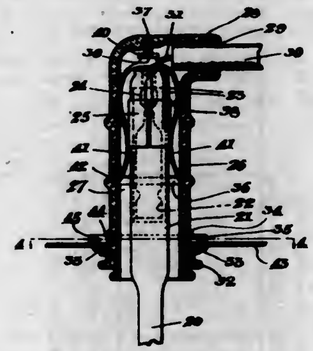
1,890,616. COIN CONTROLLED LIQUID DISPENSING DEVICE. PAUL KRAUSE, Babylon, N. Y., assignor, by direct and mesne assignments, of part interests to William E. Sprague and Harry Taylor, Babylon, N. Y.; Lucy A. Sprague administratrix of said William E. Sprague, deceased. Filed June 17, 1929. Serial No. 371,459. 7 Claims. (Cl. 194—13.)

1. A liquid dispensing mechanism comprising a supply tank, a pipe in the supply tank, an overflow receptacle associated with the tank, a motor, a pump, a motor circuit, switches controlling the circuit, a pipe support, and coin controlled means for moving the support to control



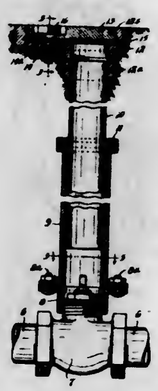
discharge of the liquid through the pipe and operation of the switches, and means operable by the receptacle for opening the motor circuit.

1,890,617. HOUSING AND MOUNTING FOR THE ELECTRODE CHAMBERS OF LUMINESCENT TUBES AND THE LIKE. GEORGES LAMY, Montreal, Quebec, Canada, assignor to Claude Neon General Advertising Limited, Montreal, Canada. Filed Apr. 13, 1931. Serial No. 529,757. 8 Claims. (Cl. 173—328.)



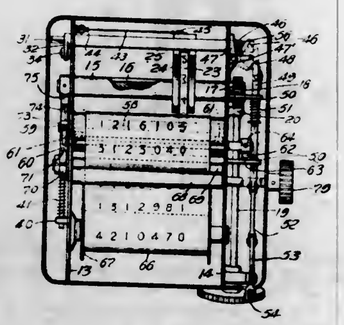
1. In combination, a housing for the electrode chamber of a luminescent tube comprising, a tubular casing having its front end open for the reception of the electrode chamber of the tube, and provided at its rear end with a ceble admitting orifice, the inner wall of the casing formed intermediately of its length with an annular recess, a U-shaped spring clip within the rear end of the casing, the legs of said clip directed forwardly and extending axially along the inner wall of the casing, said legs being of concavo-convex form and adapted to grip therebetween the electrode chamber intermediately of its length to retain it in position within the housing, the forward ends of the legs of the spring clip engaging within the annular recess in the casing.

1,890,618. STOP BOX FOR THE CURB VALVES OF WATERMAINS. FRED C. LEDUC, Minneapolis, Minn., assignor, by mesne assignments, to Crane Co. of Minnesota. Filed Oct. 16, 1930. Serial No. 489,117. 4 Claims. (Cl. 137—13.)



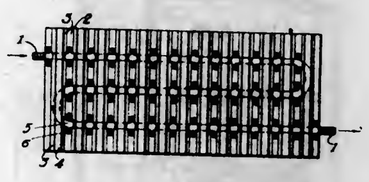
1. The combination with a stop valve box, of a housing for the upper end of said box, comprising an upwardly flanged head engageable with the top portion of said box, the upwardly extending flange of said head having an undercut recess therein, a cover fitting said head and provided with a lug disposed within the recess of said flange, a lipped nut, the floor of said head having an opening therethrough within which said nut is received, the walls of said floor adjacent said opening supporting said nut, the upper surface of the lip of said nut bearing against a portion of said head and a headed bolt extending through said cover and having screw threaded engagement with said nut for holding said cover in its closed position.

1,890,619. RECORDING DEVICE. FRANK LOWITZ, New York, N. Y. Filed Jan. 7, 1930. Serial No. 419,159. 15 Claims. (Cl. 234—33.5.)



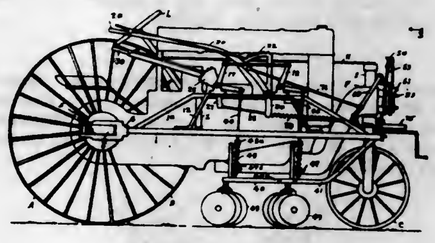
2. A recording device for use with dial telephones, a single numbering wheel mounted for rotation and axial movement, means for compelling rotative movement of the numbering wheel in each rotative movement of the dial, and means for compelling axial shifting movement of the wheel immediately following the completion of each dial movement.

1,890,620. RADIATOR AND THE LIKE. THOMAS E. MURRAY, Brooklyn, N. Y.; Joseph Bradley Murray, Thomas E. Murray, jr., and John F. Murray, executors of said Thomas E. Murray, deceased, assignors to Metropolitan Engineering Company, a Corporation of New York. Filed Feb. 9, 1929. Serial No. 338,677. 8 Claims. (Cl. 257—149.)



4. An apparatus of the character described including in combination a tubular structure and extended area structures applied to opposite sides thereof and recessed so as to substantially surround the tubular structure and to meet above and below it, mechanical fasteners beyond the tubular structure for holding the aforesaid structures together and a bonding metal coating on the faces of said structure and fasteners, said coating entering the spaces between the tubular structure and the extended area structure embracing it, and forming a continuous metal path for conducting heat from one structure to the other.

1,890,621. CULTIVATING IMPLEMENT. GEORGE A. NEWHOUSE, Yorktown, Ind. Filed June 22, 1932. Serial No. 618,794. 4 Claims. (Cl. 97—47.)

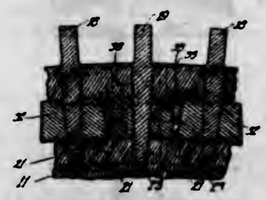


1. In agricultural apparatus of the kind described, the combination with a tractor, of a head member therefor at its forward end, a transverse carrier frame secured to said head member, a draft frame at each side of the tractor and having its rear end pivotally connected to a fixed part of the tractor, gang tools drawn by the draft frames, support members between the carrier frame and the front ends of the draft frames, connections between the steering gear of the tractor and the front ends of the draft frames whereby there is a shift of the front ends of the draft frames transversely coincidentally with the movement of the steering gear, and hand operable means to move the gang tools to, and to retain them in either the raised or the lowered position.

1,890,622. JORDAN ENGINE. EMIL A. PETERSON, Appleton, Wis., assignor to Valley Iron Works Company, Appleton, Wis., a Corporation of Wisconsin. Filed Aug. 26, 1929. Serial No. 388,352. 9 Claims. (Cl. 92—27.)

9. In a plug for a Jordan engine, the combination of a plug body, a plurality of knives mounted on the surface

on said body in circumferentially spaced relation, said knives being so shaped in cross section as to provide spaces therebetween which are wider at their bottoms than



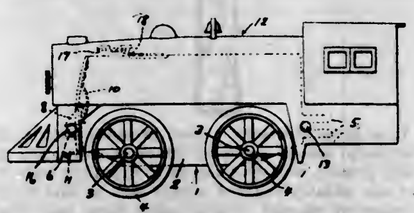
at their tops, means fitting in said spaces for locking the knives in operative position, and means radially spaced from said locking means for securing the latter in place.

1,890,623. HAND BRAKE RIGGING. JOHN E. SCOTT, Danville, Ill., assignor to Allith-Prouty Company, Danville, Ill., a Corporation of Delaware. Filed June 23, 1930. Serial No. 462,963. 9 Claims. (Cl. 74—110.)



1. A railway brake operating mechanism including a brake lever, a hand brake staff, a rocker, connections between said staff and said rocker, connections between said lever and said rocker, each of said connections having slidable engagement with said rocker, and members associated with said connections for causing arcuate movement of the ends of said connections in opposite directions along said rocker as said rocker oscillates.

1,890,624. TOY VEHICLE. FRANK SHADISH, Bridgeville, Pa. Filed June 13, 1932. Serial No. 616,979. 4 Claims. (Cl. 46—48.)

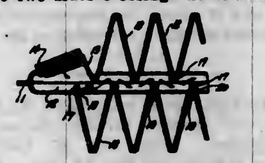


1. A vehicle comprising a wheeled truck, a body, and means for removably mounting the body on the truck, said means including spaced fingers on the truck, and a shaft on the body engageable between the fingers, said shaft having a reduced intermediate portion providing shoulders adjacent the fingers, said shoulders engageable with the fingers for retaining the body against lateral movement on the truck.

4. A vehicle comprising a wheeled truck, a body, and means for removably mounting the body on the truck, said means including a lip projecting from the truck, a shaft mounted on the body and engageable on the lip, and a latch mounted on the truck and engageable with the shaft for releasably securing said shaft on the lip.

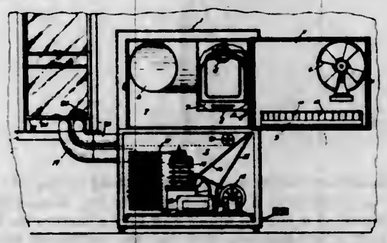
1,890,625. RADIATOR. HAROLD N. SHAW, Milwaukee, Wis. Filed July 7, 1930. Serial No. 465,873. 16 Claims. (Cl. 257—139.)

8. A radiator comprising a pan-like core having a plurality of grooves inclined in one direction on one side thereof and having a plurality of grooves inclined in the opposite direction on the other side, the rear of said grooves on the two sides crossing one another within the



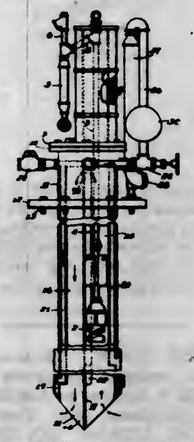
core, means for securing said grooves to one another at the cross over points, and substantially V-shaped fins projecting outwardly from said grooves.

1,890,626. AIR COOLING APPARATUS. JOHN Q. SHERMAN, Dayton, Ohio. Filed Oct. 25, 1926, Serial No. 143,992. Renewed July 29, 1932. 19 Claims. (Cl. 62—129.)



11. In an air cooling apparatus, a cabinet separated into two compartments, a cooling unit located in one of the compartments, and a complementary heat exchange unit located in the other compartment, the latter compartment being heat insulated from the first compartment and from the room to be cooled, means for circulating air through the first compartment and discharging same into said room, means for ventilating the second compartment including conduits extending from said compartment to an opening of the wall of the room to be cooled, and a sealing unit for removably connecting said conduits to the opening of the room so that air may circulate from the exterior of the room around the complementary unit in said second compartment.

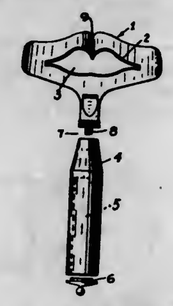
1,890,627. SAMPLING TUBE. JOSEPH A. STEIN, Pittsburgh, and LOUIS L. VAYDA, Aspinwall, Pa., assignors to Bacharach Industrial Instrument Company, a Corporation of Pennsylvania. Filed Feb. 4, 1932. Serial No. 590,914. 7 Claims. (Cl. 23—257.)



1. In combination with an approximately vertical sampling tube provided at its lower free end with a filter, a

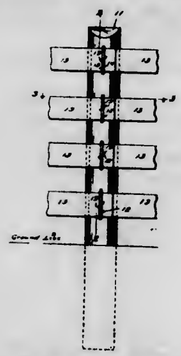
protecting casing surrounding the tube extending below the free end thereof, and open at its free end, and a vertical partition dividing the interior of the casing into two passageways in one of which the free end of the tube with its filter lies, said partition extending above and below the filter.

1,890,628. MOLDER FOR PAINTING THE LIPS. JULIAN SUETA and ALBERTO MANUEL GUASTAVINO, Buenos Aires, Argentina. Filed Jan. 25, 1932, Serial No. 588,532, and in Argentina Dec. 18, 1931. 4 Claims. (Cl. 132—1.)



1. Stencil device for use in the painting of the lips comprising a plate with a central opening for disclosing the lips and having a curved upper and lower portion each provided with a bevelled edge defining the outline of the lips, the curved upper portion being formed in its center with an inwardly projecting guide for determining the correct position of the device over the mouth.

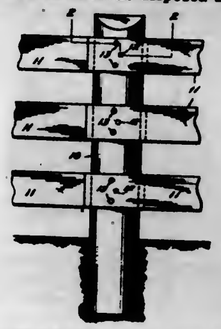
1,890,629. PLANK OR RAIL FENCE. THOMAS H. SYMINGTON, Baltimore, Md., assignor, by mesne assignments, of one-half to Edith R. Symington and one-half to Thomas R. Symington, Baltimore, Md. Filed Jan. 17, 1931. Serial No. 509,515. 10 Claims. (Cl. 256—65.)



1. In a fence construction, a post, a plurality of vertically spaced retaining members carried by the post, said retaining members having bight portions and offset arms and a pair of board members having their ends overlapped and engaged within each retaining member, the offsetting of said arms preventing contact of the boards with the post.

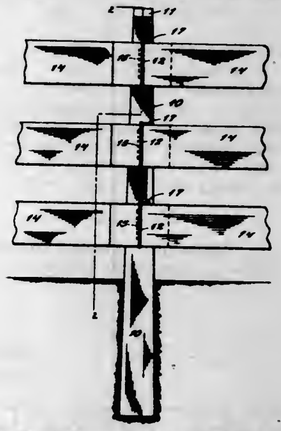
1,890,630. BOARD FENCE. THOMAS H. SYMINGTON, Baltimore, Md., assignor, by mesne assignments, of one-half to Edith R. Symington and one-half to Thomas R. Symington, Baltimore, Md. Filed Jan. 17, 1931. Serial No. 509,516. 8 Claims. (Cl. 256—65.)

1. In a fence construction, a post, a plurality of boards disposed thereagainst and projecting beyond one side thereof, securing members passing through said boards and into the post, other boards disposed against said first



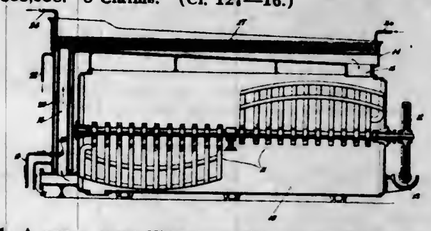
named boards with their ends in overlapping relation thereto, and other securing members passing through the first and second named boards and into the post.

1,890,631. BOARD FENCE. THOMAS H. SYMINGTON, Baltimore, Md., assignor, by mesne assignments, of one-half to Edith R. Symington and one-half to Thomas R. Symington, Baltimore, Md. Filed Sept. 4, 1931. Serial No. 561,247. 11 Claims. (Cl. 256—65.)



1. In a fence structure, a post provided with a series of vertically spaced retaining brackets projecting from one face thereof, a pair of boards having their ends overlapped and slidably engaged within each of said brackets and embraced thereby, means other than said bracket interposed between the post and the confronting face of the adjacent board for spacing them apart, and other means engaged between the overlapping ends for spacing them apart.

1,890,632. SUGAR CRYSTALLIZER. DUDLEY A. WALSH, New Orleans, La. Filed Jan. 29, 1929. Serial No. 335,958. 8 Claims. (Cl. 127—16.)

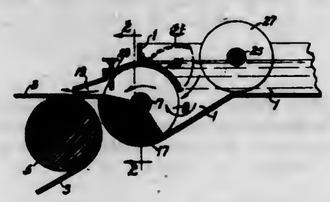


1. A sugar crystallizer comprising a tank, an agitator therein, a sloping trough supported above the tank and communicating at its lower end with said tank, a plurality of horizontal pipes therein, a conduit connecting the lower portions of said tank and the high end of said trough, and means for producing an upward draft of air in said conduit, a jacket surrounding said conduit and means for circulating fluid therethrough.

1,890,633. CHROMIUM PLATING. ELMER J. WALTZ, Riverside, N. J. Filed Jan. 21, 1929. Serial No. 334,131. 1 Claim. (Cl. 204—1.)

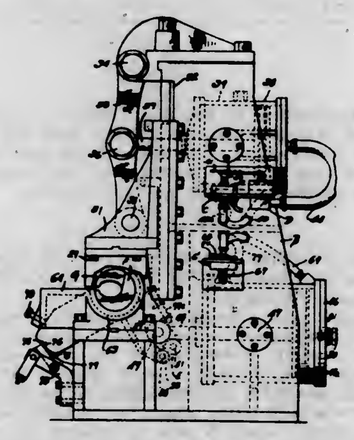
A bath for electrodepositing chromium containing a solution of chromic acid 18 ounces per gallon and sodium cyanide 1½ ounces per gallon.

1,890,634. FLOW RECTIFIER FOR PAPER STOCK. MAX WENZEL, Neidhardtsthal, Germany. Filed Dec. 23, 1931, Serial No. 582,895, and in Germany Dec. 23, 1930. 13 Claims. (Cl. 92—44.)



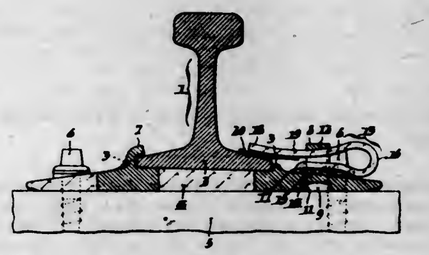
1. A flow rectifier for paper stock and the like comprising a rotatable shaft and a series of spaced discs mounted on said shaft, said shaft being positioned across the direction of flow of said stock, and flow obstructing members positioned between said discs adapted to restrict the region in which said stock is in contact with said discs.

1,890,635. METHOD FOR TWISTING CRANK SHAFTS. HENRY M. WOLFE and CORRINGTON A. NICHOL, Muskegon, Mich., assignors to Continental Motors Corporation, Detroit, Mich., a Corporation of Virginia. Original application filed Mar. 2, 1927, Serial No. 171,945. Divided and this application filed Mar. 8, 1929. Serial No. 345,294. 3 Claims. (Cl. 29—6.)



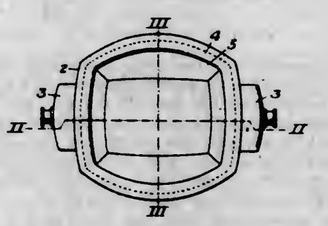
1. A method of forging and twisting six throw crankshafts consisting in forging said crank shaft placing the first, second, fifth and sixth throws in their utimate positions, all the throws, cheeks, and bearings being simultaneously fashioned substantially in final form, then subjecting the forging while heated to a device holding the positioned throws in a manner preventing their distortion, while at the same time twisting the third and fourth throws into their ultimate position relative to the positioned throws in a manner preventing their deformation during the twisting operation and maintaining the shaft bearings in axial alignment during the twisting operation.

1,890,636. SUPPORTING AND RETAINING MEANS FOR RAILS. CHARLES D. YOUNG, Haverford, Pa. Filed Dec. 24, 1931. Serial No. 583,015. 8 Claims. (Cl. 238—304.)



1. In combination, a rail, a tie plate having a projection at one side of the rail extending over the rail base to limit its vertical movement with respect to the tie plate, and retaining means on the tie plate at the other side of the rail comprising a relatively strong spring key projecting above the rail base clear of its top surface, and a relatively weak spring key engaging the top surface of the rail base.

1,890,637. METHOD OF MAKING WROUGHT IRON. JAMES ASTON and ADDISON M. BEALE, Pittsburgh, Pa., assignors, by mesne assignments, to A. M. Byers Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed July 19, 1928. Serial No. 294,048. 7 Claims. (Cl. 75—47.)

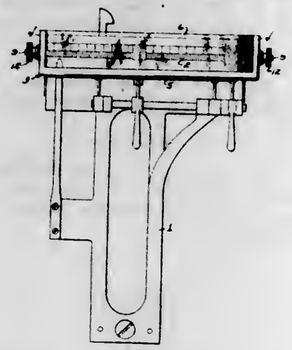


1. In the manufacture of wrought iron, the steps consisting of feeding molten ferrous material through a molten slag bath in a receptacle, and forming in the lower portion of the receptacle a ball having at least one horizontal dimension greater than its vertical dimension.

1,890,638. LENS FOR LINE CASTING MACHINES. GUSTAVUS ADOLPH BRADFORD, Bemidji, Minn. Filed Jan. 26, 1931. Serial No. 511,407. 3 Claims. (Cl. 88—39.)

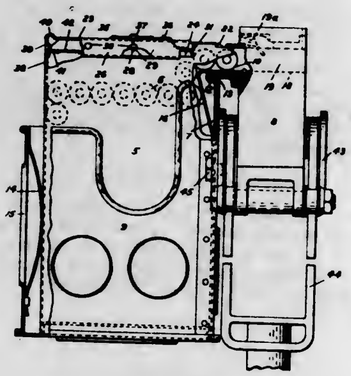
1. A device of the character set forth comprising an open frame, a lens carried by the frame, cushioning means

for each end of said lens and adapted to retain the latter in the frame, arms adjustably secured to the frame and



secured to the assembling elevator of a type setting machine.

1,890,639. AMMUNITION FEED BOX. RICHARD C. COUPLAND, U. S. Army, Norfolk, Va. Filed Apr. 16, 1931. Serial No. 530,583. 12 Claims. (Cl. 89—33.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)

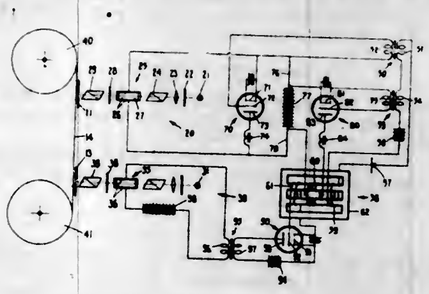


5. An ammunition feed box comprising a container having a cartridge exit at the upper end of its front wall, a shelf constituting the floor of the exit and projecting within and without the wall, the width of the shelf dimensioned to support two cartridges, the shelf having perpendicular sides with ends turned over parallel to the shelf to restrict the mouth of the exit, and the inside corners of the turned over ends being flared.

12. An ammunition feed box comprising a container, a cover slidable on the container, and wings extending along the inside walls of the container below the rear end of the cover.

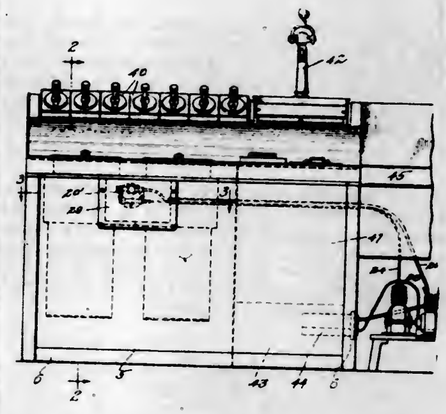
1,890,640. METHOD OF AND APPARATUS FOR SOUND RECORDING AND REPRODUCTION. NOEL DRISCH, Washington, D. C. Filed May 29, 1930. Serial No. 457,167. 11 Claims. (Cl. 179—100.3.)

1. A sound recording apparatus for reproducing a sound record including a quality component and an intensity component, comprising detecting means to convert said quality component into its electric current analogue and amplifying means to amplify said electric current analogue, detecting means to convert said intensity component into its electric current analogue and amplifying means to amplify said electric current analogue, each of said amplifying means including circuits having input and output stages, the output stage of each of the cir-



cuits of said amplifying means being in series relation, whereby the current flowing in said output stages is the resultant of the resistances of each output stage.

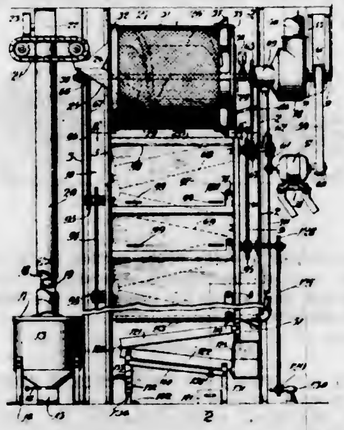
1,890,641. SODA FOUNTAIN AND ICE CREAM CABINET. WILLIAM F. DELEES, Milwaukee, Wis., assignor to Western Specialty Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed Apr. 10, 1929. Serial No. 353,981. 10 Claims. (Cl. 62—126.)



1. In combination, an insulated receptacle, an annular refrigerant container disposed coaxially with said receptacle and telescoping at its bottom with the upper margin thereof to form a cooled compartment, and means for feeding a refrigerant directly into said container.

1,890,642. COFFEE ROASTER. JAMES M. EDWARDS, Chicago, Ill. Filed July 15, 1929. Serial No. 378,370. 4 Claims. (Cl. 34—6.)

1. A coffee roaster comprising a support, a plurality of cylinders superposed in said support, the top cylinder being substantially horizontal and the other cylinders being inclined to the horizontal in opposite directions alternately, means for simultaneously rotating said cylinders in the same direction, means for delivering coffee to the top cylinder, means in said top cylinder for feeding coffee therethrough, means for transferring coffee from the lower end of each cylinder to the upper end of the cylinder immediately below, means for roasting the coffee moving by gravity through the inclined cylinders and for pre-heating the coffee in the top cylinder, and a foraminous partition extending entirely across each cylinder to retard the flow of beans and separate the beans from each other

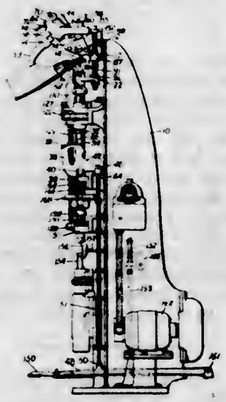


during said flow, said partition having a uniform mesh throughout its area sufficiently large to permit all the beans to pass therethrough.

1,890,643. MANUFACTURE OR TREATMENT OF TEXTILE OR OTHER MATERIAL. GEORGE HOLLAND ELLIS and HENRY CHARLES OLPIN, Spondon, near Derby, England, assignors to Celanese Corporation of America, a Corporation of Delaware. Filed Jan. 6, 1931, Serial No. 507,046, and in Great Britain Mar. 5, 1930. 7 Claims. (Cl. 26—48.)

1. Process for increasing at least locally the lustre of the materials containing cellulose derivatives which have been delustered by the action of hot aqueous media, comprising subjecting the materials to the action of superheated steam.

1,890,644. MACHINE FOR USE IN THE MANUFACTURE OF SHOES. ANDREW EPPLER, Lynn, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Dec. 29, 1930. Serial No. 505,297. 49 Claims. (Cl. 12—7.)

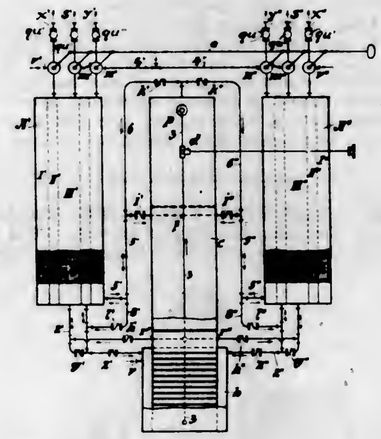


1. In a machine for progressively effecting attachment of successive portions of shoe uppers to soles by cement, the combination of a member for engaging a sole-attaching flange of an upper, a sole support, means for forcing the upper toward the member, and means for relatively operating the member and support to press the flange and sole together.

1,890,645. PROCESS OF METALLIZING. MAX OWESCHINGEN, Vienna, Austria. Filed Dec. 3, 1929, Serial No. 411,398, and in Austria Dec. 3, 1928. 2 Claims. (Cl. 91—68.3.)

1. Process of metallizing articles of condensation products of casein and albumin, consisting in first cleaning the article of fatty substances; then immersing the article in a 3 to 4% aqueous solution of hydroquinone; then drying the article and placing the same in a reducible solution of a metallic salt, thereby precipitating the metal.

1,890,646. PROCESS FOR SEPARATION OF GAS MIXTURES, ESPECIALLY OF AIR. MATHIAS FRÄNKL, Augsburg, Germany, assignor to American Oxythermic Corporation, New York, N. Y., a Corporation of Delaware. Filed Jan. 16, 1926, Serial No. 81,723, and in Germany Jan. 16, 1925. 16 Claims. (Cl. 183—115.)

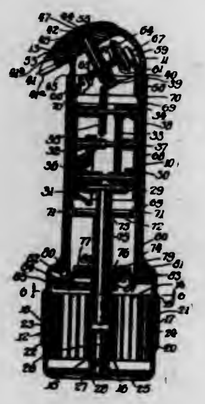


6. Apparatus for the separation of the components of gaseous mixtures by regenerative refrigeration, comprising two regenerators having metallic packing therein, means for effecting separation of the components of a gaseous mixture by fractional evaporation, conduits for charging a warm mixture of gases to one regenerator, conduits for conducting away from the second regenerator the cold separated components, whereby the packing in said second regenerator is chilled by said outflowing components, connections between said means and the regenerators for conducting the chilled gas mixture into said means and the cold separated components into said regenerators, and means for periodically reversing and alternating the flow of gases through said regenerators, whereby each regenerator acts alternately as a cold accumulator to store up the cold of the outflowing separated components, and as a cold exchanger to give up the stored-up cold to the inflowing warm gaseous mixture.

11. In a process for the separation of the components of gas mixtures, the steps which comprise separating a mixture into its components at low temperatures, passing at least one of the separated components in heat-exchange contact relation with regenerative bodies to transfer its cold to such bodies, and then passing a subsequent charge of the gas mixture in heat-exchange contact relation with the same surface of said bodies to be chilled by the cold stored in the latter.

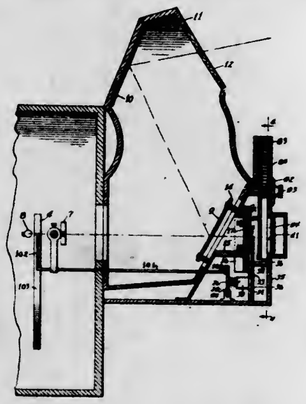
CARNEGIE LIBRARY OF ATLANTA

1,890,647. SAFETY RAZOR. RUSSELL P. HARSHBERGER, Chicago, Ill. Filed Dec. 31, 1928. Serial No. 329,489. 12 Claims. (Cl. 30—12.)



12. In a safety razor, the combination of a razor head, a razor blade on said head, means for imparting vibratory motion to said blade including a driven shaft journalled in said head, a second shaft rotatably mounted in said head adjacent to said first-mentioned shaft and extending transversely thereof, a governor operatively mounted on said second shaft, a worm gear on said first shaft, and a worm on said second shaft engageable by said worm gear.

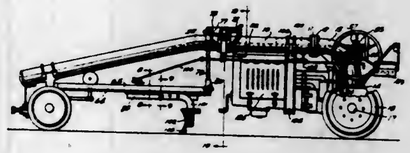
1,890,648. EXACT WEIGHT RECORDER. CHARLES P. HINMAN, Honolulu, Territory of Hawaii. Filed Mar. 11, 1930. Serial No. 434,879. 6 Claims. (Cl. 234—1.)



4. In a recording device, a sensitive strip, transparent members having characters thereon mounted over the printing surface of the strip, means for moving the members in different combinations, and means for directing light through the transparent members for photographing a selected combination of characters on the strip.

1,890,649. ROAD MACHINE. JAMES B. JARMIN, Dallas, Tex., assignor to Servis Equipment Company, Dallas, Tex., a Corporation of Texas. Filed May 8, 1930. Serial No. 450,715. 4 Claims. (Cl. 180—1.)

4. In a road machine, a front axle having steering wheels, a rear transverse axle including a differential housing, a central longitudinal pipe member connected with the front axle and elevated above the rear axle, an elbow having its upper end secured to the rear end of the pipe member and its lower end fastened to the differential housing, a tractor engine underlying the rear portion of

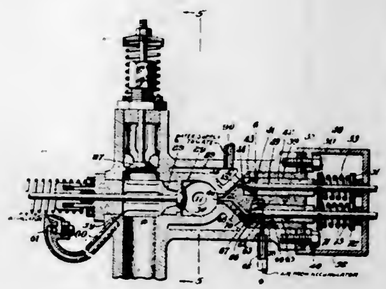


the pipe member and the upper portion of the elbow directly in front of the differential housing with which it is connected, and means for suspending the engine from the pipe member.

1,890,650. COMPOSITION AND PROCESS FOR TREATING WOOD. ALBERT H. KELSALL and OSCAR C. ALEXANDER, San Diego, Calif. Filed Mar. 19, 1929. Serial No. 348,354. 5 Claims. (Cl. 134—78.6.)

1. The herein described composition, comprising rosin, wax, castor oil and quick lime.

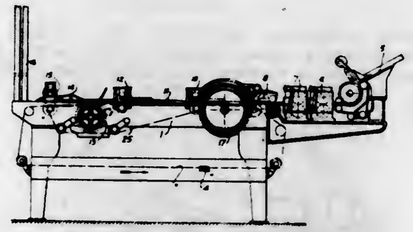
1,890,651. CHARGE FORMING MECHANISM. CHARLES N. KOCH, Kane, Pa. Filed July 14, 1922. Serial No. 574,878. 4 Claims. (Cl. 60—46.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)



4. In a device for forming motive fluid by combusting fuel, the combination of, a chamber; means for supplying air and fuel to said chamber and igniting the same; means for opening and closing said chamber; means for injecting further air into said chamber and to convert said fuel supply into a spray as it enters said chamber during the period they are synchronous; means for stopping said fuel injection and later stopping said further air supply; means for opening and closing said chamber; a water-jacket for cooling said chamber; and means for supplying moisture from said water-jacket in a plurality of fine streams commingling with the products coming from said chamber throughout substantially the period from said opening to said closing of said chamber.

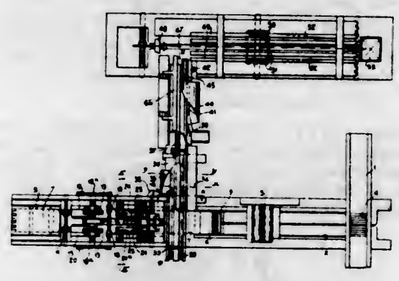
1,890,652. PACKET MAKING MACHINE. WALTER EVERETT MOLINS, Deptford, London, England. Filed Oct. 28, 1927, Serial No. 229,475, and in Great Britain Nov. 12, 1926. 10 Claims. (Cl. 93—52.)

1. In a shell making machine, the combination with means for folding and breaking a blank to complete the formation of all panels therein, of means for applying adhesive to one of the panels, means operative thereafter to press the adhesive coated panel against another panel,



and a continuous conveyor having pusher pieces for engaging and propelling successive blanks through said first named means.

1,890,653. CIGARETTE PACKING MACHINERY. WALTER EVERETT MOLINS, Deptford, London, England. Filed July 1, 1929, Serial No. 375,287, and in Great Britain July 11, 1928. 6 Claims. (Cl. 93—2.)

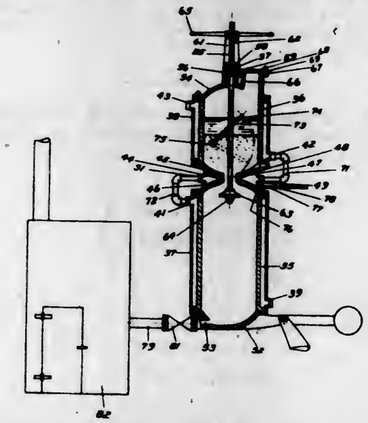


1. In a cigarette packing machine, the combination with means for depositing cigarettes on a blank having teeth formed in one end thereof, of means for folding the blank in U formation about the cigarettes, and means for holding the teeth between the cigarettes and that portion of the blank on which the teeth are formed whereby the teeth resiliently engage the cigarettes to prevent unintentional displacement thereof.

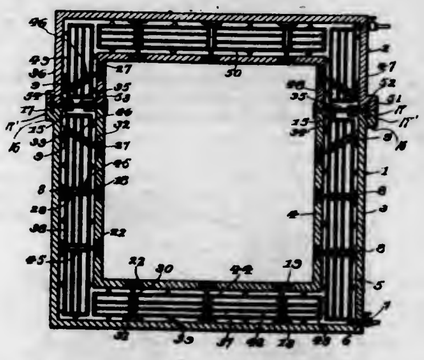
1,890,654. APPARATUS FOR DRYING HEXACHLORETHANE. ROLLAND D. MYERS, Edgewood Arsenal, Md. Filed June 25, 1929. Serial No. 373,674. 10 Claims. (Cl. 23—280.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)

1. An apparatus for removing a contained liquid from a solid, the contained liquid having a low intersolubility with and a different specific gravity than the solid when the latter is in its liquid phase, said apparatus comprising a two compartment container, an upper closure for said container, a discharge line connected to the container, means associated with each compartment for applying heat externally thereto so as to melt the solid, means mounted in one compartment for separately drawing off the liquid of lowest specific gravity after conversion of the solid into its liquid phase, and means associated with the container for effecting a closure between the compartments thereof.

10. An apparatus for removing a contained liquid from a solid, the contained liquid having a low intersolubility with and a different specific gravity than the solid when the latter is in its liquid phase, said apparatus comprising a vertically positioned container having its interior restricted at a point near its longitudinal center so as to divide the container into an upper and lower compartment, an upper closure for the container, a draw-off line communicating with the lower compartment of the container and a closure therefor, a heating jacket surrounding each of said compartments with a pipe connecting the jackets to each other, an angular shaped draw-off pipe rotatively mounted within the upper compartment, said last mentioned pipe communicating with the exterior of said container, a vertically adjustable rod extending through the upper compartment and into the lower compartment, the lower end of said rod being provided with a closure for shutting off the compartments when the rod is in its elevated position, the upper end of said rod extending through said container, means mounted upon the container and associated with said rod for raising and lowering it, and a pipe for introducing a gas under pressure into said container, said pipe being led into said container at a point near the top of said lower compartment.



1,890,655. VACUUM WALL RECEPTACLE. WILLIAM C. O'LEARY, Washington, D. C. Filed Feb. 14, 1927, Serial No. 168,102. Renewed Sept. 18, 1931. 16 Claims. (Cl. 220—9.)

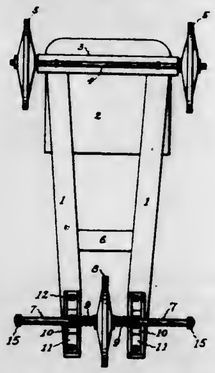


1. In a receptacle means to provide a chamber surrounded by a vacuum space, an intrawall structure for maintaining the walls in said space in position by pressure, and a heat insulating means arranged within said space and having spaced pointed barbs abutting the inner faces of said walls whereby said means is spaced from said walls.

12. In a receptacle, means to provide an open top cham-

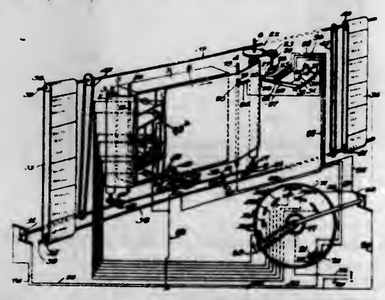
ber surrounded by a hollow space having opposed walls and open at its edge, an incompressible intrawall structure extending across said space for bracing and fixing said opposed walls in a stable spaced relation, said intrawall structure being connected to one of and engaging the other of the opposed walls, means for reducing the width of the opening at said edge and providing a narrow continuous open edge for said hollow space, a soft element of very low conductivity for closing said narrow open edge, said element making an edge heat insulation for the wall surrounding the closed space, said closed space when exhausted of air becoming a vacuum space having opposed walls, said opposed walls forming a vacuum wall surrounding said open top chamber.

1,890,656. THREE WHEELED WAGON OR COASTER. CARL PAULSEN, St. Louis, Mo. Filed Feb. 18, 1931. Serial No. 516,706. 1 Claim. (Cl. 280—87.5.)



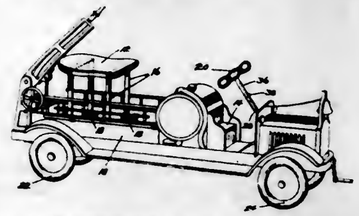
In a vehicle of the character described, comprising a body having side sills supported upon front and rear running gears, said front running gear consisting of channel plates secured to the under side of each side sill, guide plates longitudinally slidable in each channel, downwardly projecting wing portions carried by each guide plate, an aperture in each wing, a wheel carrying axle extending through each aperture and beyond the sides of the sills to afford foot-rests for the occupant of the vehicle and springs on the axle between the wheel and each wing portion of the guide plate whereby the wheel is maintained centrally of the side sills and at the same time is free to be turned by the occupant to steer the vehicle.

1,890,657. ADVERTISING DEVICE. LAWRENCE W. STONEQUIST and CHARLES ROTTUM, Chicago, Ill. Filed July 13, 1928. Serial No. 292,434. 10 Claims. (Cl. 40—31.)



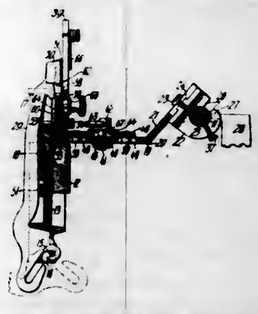
2. An advertising device comprising a screen having characters thereon to be displayed, a driving mechanism for said screen, a lighting system for successively lighting different portions of said screen, a separate controlling mechanism for said lighting system and an interconnection between the driving mechanism of the two systems whereby they alternately start and stop each other.

1,890,658. RIDABLE VEHICULAR TOY. EDWARD M. SWARTZ, Boston, Mass., assignor to Keystone Mfg. Co., Boston, Mass., a Corporation of Massachusetts. Filed Apr. 23, 1932. Serial No. 607,134. 1 Claim. (Cl. 280—87.5.)



A child's vehicular toy having a body, front and rear pairs of wheels, one pair being movable relative to the body and steering mechanism including a steering post at the forward part of said body operable to turn said movable pair of wheels for steering, all in miniature, and having an enlarged seat proportioned for the child to sit on and ride the toy supported by the rear part of said body, said steering post being provided with an enlarged steering handle proportioned for the child to grasp and steer the toy while riding it and means for adjusting said enlarged handle on its post to raise and lower it relative to said enlarged riding seat.

1,890,659. TYPE - SOLDERING DEVICE. EDWIN THORELL, West Hartford, Conn., assignor to Underwood Elliott Fisher Company, New York, N. Y., a Corporation of Delaware. Filed Jan. 15, 1930. Serial No. 420,868. 20 Claims. (Cl. 113—59.)

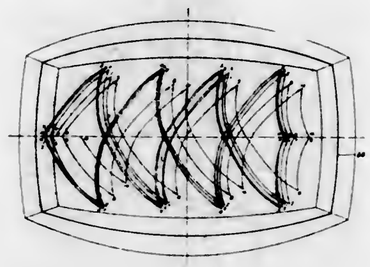


1. For use as an appliance for soldering type-blocks separately to bars already assembled in a segment permanently mounted in the frame of a typewriting machine, a fixture having adjustable means for mounting and locating it accurately upon the machine-frame, said fixture including a vertical universal flat platen for all the type-faces of the blocks to fit against, universal gages on said platen for locating each type-block at a printing position preparatory to being soldered to its bar, and universal means for fastening the types individually to the platen while gaged by said gages.

1,890,660. METHOD OF MAKING WROUGHT IRON. FREDRIK H. WILLE, Chicago, Ill., assignor to A. M. Byers Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Jan. 28, 1930. Serial No. 423,979. 8 Claims. (Cl. 75—27.)

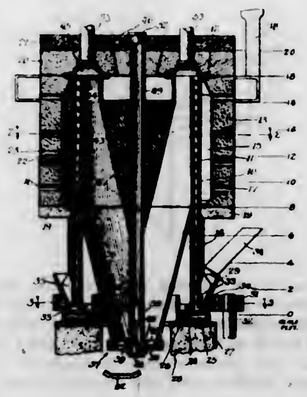
1. In a method of making wrought iron by pouring ferrous material into a slag bath, the steps comprising

altering the relative positions of the pouring stream and bath to trace by the pouring stream a path on the bath surface, and then further altering the relative positions



of the pouring stream and bath to deviate from said first mentioned path and trace by the pouring stream a different path on the bath surface.

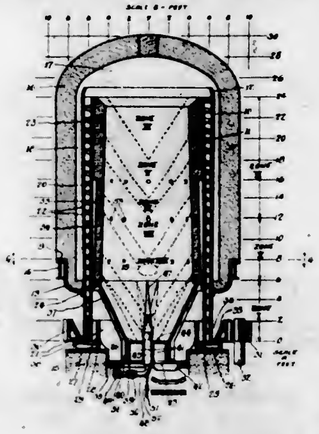
1,890,661. APPARATUS FOR CARBONIZING COAL AND LIKE MATERIAL. FRANK C. GREENE, Chicago, Ill. Filed Oct. 15, 1928. Serial No. 312,462. 10 Claims. (Cl. 202—117.)



8. In an apparatus for carbonizing coal and like materials, in combination, an elongated retort, a rotor in said retort extending longitudinally thereof, means on said rotor for impelling material through said retort, a conical insulating member extending into one end of said rotor, a pipe extending centrally and axially through said rotor and said member, and means for heating said retort.

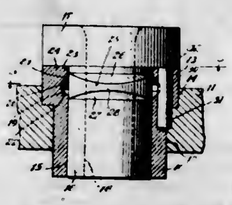
1,890,662. MEANS FOR HEAT TREATING MATERIAL. FRANK C. GREENE, Oconomowoc, Wis. Filed Feb. 2, 1928. Serial No. 251,301. 23 Claims. (Cl. 222—3.)

19. A kiln for burning cement and like material comprising, in combination, a vertical retort, a rotor extending axially through said retort and having means for conveying material upwardly therethrough, said rotor



being hollow, means for directing material from the upper end of said retort into said rotor, and means for directing air to the interior of said rotor.

1,890,663. SLIP BUSHING. CARROLL R. ALDEN and CHRISTIAN A. BIRKEBAK, Detroit, Mich., assignors to Ex-Cell-O Aircraft and Tool Corporation, Detroit, Mich., a Corporation of Michigan. Filed Apr. 18, 1929. Serial No. 356,088. 10 Claims. (Cl. 77—62.)

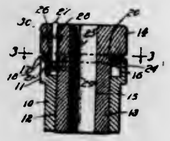


1. A slip bushing comprising, in combination, a liner having a bore, said bore being formed with a coaxial elliptical groove in its periphery, the sides of said groove being inclined inwardly and apart, said liner having an elliptical opening to said groove and coaxial with said bore and in alignment with said groove, a bushing slidably disposed in said bore, a head on said bushing adapted to engage one end of said liner, and a pair of diametrically opposed lobes formed on said bushing in spaced relation to said head and disposed in said groove, the sides of said lobes being conical in form, said lobes being adapted to coact with one side of said groove to clamp said head against said liner upon relative rotation of said bushing in either direction.

1,890,664. SLIP BUSHING. CARROLL R. ALDEN, Detroit, Mich., assignor to Ex-Cell-O Aircraft & Tool Corporation, Detroit, Mich., a Corporation of Michigan. Filed July 12, 1929. Serial No. 377,690. 9 Claims. (Cl. 77—62.)

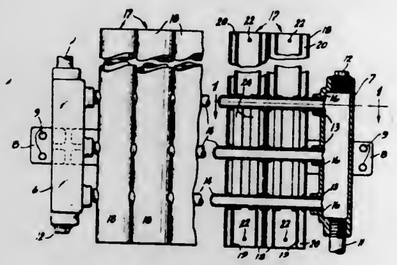
1. A slip bushing comprising, in combination, a liner having a bore opening therethrough and having an enlarged recess at one end of said bore, a locking ledge overhanging said recess and having a flat inner surface, said ledge defining an opening in registration with said bore, a bushing slidably and rotatably disposed in said bore and

having a head bearing over the outside of said ledge, one side of said opening being offset to define a space at one side of said bushing, a cam projection formed on the said inner surface of said ledge, and a locking projection



on one side of said bushing movable through said space, and also rotatable in either direction out of registration with said space into wedge locking engagement with said cam projection.

1,890,665. HEATING RADIATOR. ARTHUR ABBOTTS, Fairfield, Conn. Filed June 25, 1931. Serial No. 546,679. 6 Claims. (Cl. 257—142.)

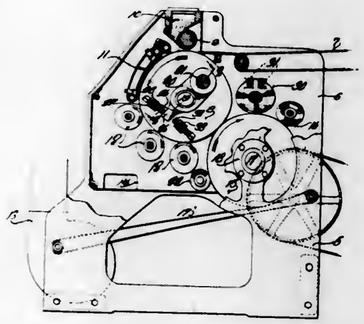


1. In a heating radiator, a pair of vertically arranged headers, a plurality of heat transfer units vertically disposed between said headers, one of said units including a pair of tubes of which one is arranged within and spaced from the other to provide a passage between the tubes, a plurality of horisontally arranged pipes forming passageways between the headers, the outer of said tubes having a plurality of openings each adapted to permit the passage of a pipe therethrough, the inner of said tubes having a slot therein of a length to permit a plurality of said pipes to pass therethrough, and said heat transfer units adapted to conduct heat from said pipe and transfer it to air flowing up and around and through said units.

1,890,666. BRONZING MACHINE. FRANK R. BELLUCHE, Racine, Wis., assignor to Christensen Machine Company, Racine, Wis., a Corporation of Wisconsin. Filed July 27, 1928. Serial No. 295,717. 21 Claims. (Cl. 91—59.)

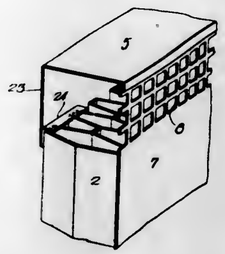
1. In a bronzing machine having a frame and a pair of superimposed work carrying cylinders, means to rotatably mount the upper cylinder from the frame with its weight partially carried by the lower cylinder to subject work passed through the machine and between the cylinders to calendering pressure, and means operable to hold the upper cylinder out of engagement with the lower cylinder whereby work may be passed between the cylinders without being subjected to calendering pressure.

7. In a combined bronzing and calendering machine, the combination with a frame, of a pair of superimposed cylinders, means to rotatably mount the upper cylinder in the frame with the weight of said upper cylinder carried partially by the frame and partially by the lower cylinder,



the weight of said upper cylinder producing calendering pressure between the cylinders, and means to vary said pressure.

1,890,667. HEATING APPARATUS. IRVING T. BENNETT, Brooklyn, N. Y., assignor, by mesne assignments, to American Radiator & Standard Sanitary Corporation, a Corporation of Delaware. Original application filed Nov. 16, 1927, Serial No. 233,594. Divided and this application filed Feb. 25, 1930. Serial No. 431,118. 12 Claims. (Cl. 257—136.)



2. A casing for a radiator which radiator has vertical channels open at their front and closed at their back, said casing being separate from the radiator and having a front panel which is adapted when the casing is in place to cover the open front of said channels and to cooperate with them to form flues substantially closed in cross-section.

1,890,668. POLYHYDRIC ALCOHOL-POLYBASIC ACID RESIN. THEODORE F. BRADLEY, Westfield, N. J., assignor to American Cyanamid Company, New York, N. Y., a Corporation of Maine. Filed Dec. 16, 1929. Serial No. 414,587. 4 Claims. (Cl. 260—8.)

3. A synthetic resinous ester comprising the reaction product of phthalic anhydride and a simple dihydric alcohol, devoid of monobasic acid, said resin being soluble in toluene.

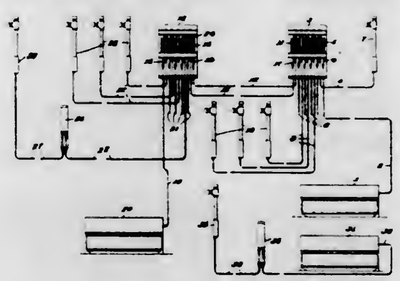
1,890,669. GUN. FRANK J. BRIDGEMAN, Cleveland, Ohio, assignor to The Lake Erie Chemical Company, Cleveland, Ohio, a Corporation of Ohio. Filed May 6, 1932. Serial No. 609,737. 10 Claims. (Cl. 42—1.)

1. A gas gun comprising a firing pin, a retractable release trigger, two parallel chambers, said pin in a first chamber, and said trigger in a second chamber, means cooperating with said trigger to engage and hold said



firing pin in the "set" position when said trigger is retracted, said means adapted to be disengaged and cause the discharge of said pin when said trigger is released.

1,890,670. MECHANICAL GAS GUN PROTECTIVE SYSTEM. FRANK J. BRIDGEMAN, Cleveland, Ohio, assignor to The Lake Erie Chemical Company, Cleveland, Ohio, a Corporation of Ohio. Filed May 6, 1932. Serial No. 609,738. 14 Claims. (Cl. 42—1.)

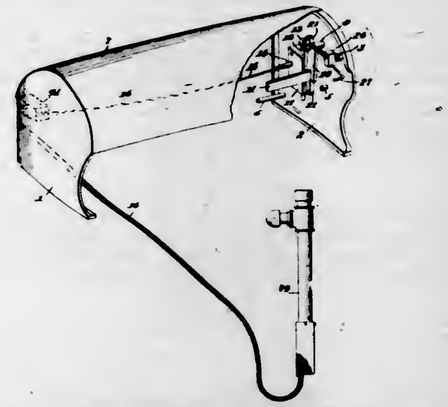


2. A mechanical gas gun protection system, comprising the combination of a control, tension wires, a master release, and a gas gun, said master release containing a trigger and a discharge rod, a first tension wire connecting said control and said trigger, and a second tension wire connecting said discharge rod and said gun.

18. An intermediate release comprising a retractable trigger, a spring to actuate said trigger, a discharge means, a movable element, said movable element adapted to engage and hold said discharge means in the "set" position when said trigger is retracted, said movable element adapted to be disengaged from said discharge means and release the same when said trigger is liberated.

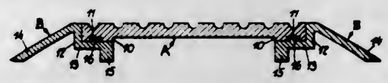
1,890,671. FOOT CONTROL FOR MECHANICALLY OPERATED GAS AND SMOKE DISCHARGE SYSTEMS FOR DAYLIGHT HOLDUP ROBBERIES. FRANK J. BRIDGEMAN, Cleveland, Ohio, assignor to The Lake Erie Chemical Company, Cleveland, Ohio, a Corporation of Ohio. Filed May 6, 1932. Serial No. 609,736. 7 Claims. (Cl. 42—1.)

7. In a foot control, a foot bar, an arm on said foot bar, a release mechanism, a plunger in said mechanism, a key rod, said foot bar arm adapted to depress said plunger, said key rod adapted to engage said plunger after said plunger received a first depression, said foot



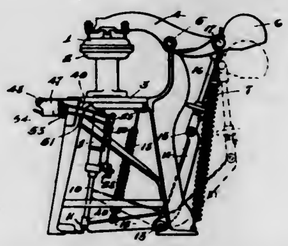
bar arm adapted to depress said key rod and depress said plunger to the discharge position upon a second movement of said foot bar.

1,890,672. DOOR SADDLE. JOSEPH COCO, Ozone Park, N. Y. Filed June 30, 1931. Serial No. 547,884. 5 Claims. (Cl. 20—64.)



1. A sectional structure of the character described comprising a plurality of separate elements, certain of said elements having vertical and lateral flanges abutting side and bottom faces, respectively, of other of said elements when the elements are in assembled relation, and interfitting tongue and slot formations on said elements for interlocking the same in assembled relation.

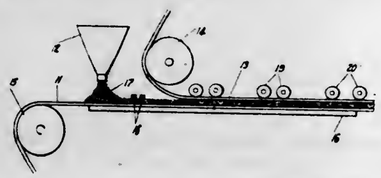
1,890,673. AUTOMATIC PRESSURE CONTROL MECHANISM FOR FLUID MOTORS. ERNEST DAVIS, Syracuse, N. Y., assignor to The Prosperity Company Inc., Syracuse, N. Y., a Corporation of New York. Filed Jan. 3, 1928. Serial No. 244,361. 1 Claim. (Cl. 121—38.)



In a pressing machine cooperative pressing elements; actuating mechanism for moving one of said elements to open and close the press; means tending to open the press; a fluid operated cylinder and piston motor for closing the press against the action of said means tending to open the same; a rack formed on the piston rod

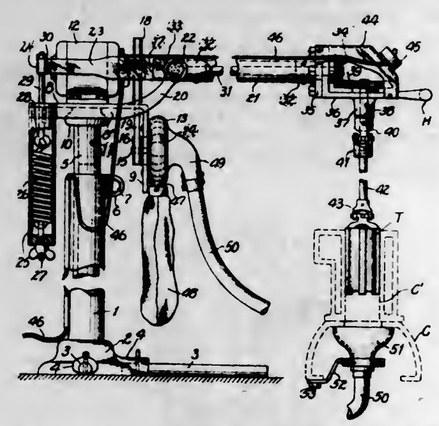
of the motor; a gear meshing with the rack and rotated thereby during movement of the motor upon closing and opening of the press; a conduit connected with the motor for the supply and exhaust of working fluid; a manual valve in the conduit; a normally open control valve in the conduit between the manual valve and the motor; a governor connected to the gear and rotated thereby; connections between the governor and the normally open control valve for operating said control valve toward closed position as the speed of rotation of the governor increases and thereby retards the flow of working fluid through the conduit and slows down the speed of the motor when said motor moves in either direction.

1,890,674. METHOD OF MAKING WALL COVERING. JOHN H. DELANEY, Los Angeles, Calif., assignor to Ada W. Delaney, Los Angeles, Calif. Filed May 17, 1928. Serial No. 278,537. 2 Claims. (Cl. 154—2.)



1. The process of manufacturing material, which includes depositing wet plastic material on a thin base to which it adheres, covering the material with an adherent cover member of thin perforated material, the outer surface of which is left exposed, and effervescing the plastic material when it is disposed between the base and the cover to ensure adhesion.

1,890,675. CYLINDER GRINDING AND HONING MACHINE. LOUIS J. DOERR and JUSTIN J. DOERR, St. Louis, Mo., assignors, by direct and mesne assignments, of four-fifths to Louis J. Doerr Motor Works Company, St. Louis, Mo., a Corporation of Missouri, and one-fifth to said Justin J. Doerr. Filed Feb. 19, 1931. Serial No. 516,918. 2 Claims. (Cl. 51—166.)



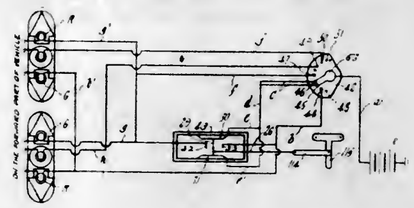
1. In a machine for grinding engine cylinders, a supporting standard, a table rotatably mounted thereon, a motor mounted on said table, a pair of supporting arms projecting outwardly from said table, a lever carriage pivotally mounted between said arms, a drive shaft mounted in said carriage, a flexible connection between said drive shaft and motor shaft, the axis of said connection and the pivotal axis of the lever carriage being in alignment, a tool head carried by the onter end of said carriage, the inner end of said carriage having a bifurcated extremity spanning the motor, and means connected to the bifurcated ends of the lever carriage for counterbalancing said carriage.

1,890,676. FRUIT TRIMMING AND SLICING APPARATUS. JOHN L. FOX, Sonoma, Calif. Filed Sept. 3, 1929. Serial No. 389,959. 6 Claims. (Cl. 146—55.)



1. In a fruit trimming and slicing apparatus, the combination of a continuous conveyor adapted to convey the fruit in a predetermined position, a rotary cutter mounted above said conveyor adapted to contact with the top of the fruit and remove the blossom thereof as the fruit passes thereunder, a horizontally disposed rotary tooth carrying member disposed below said conveyor adapted to engage and remove the stem of the fruit as it passes thereover, and a vertically extending rotary knife mounted below said conveyor and extending upwardly therethrough adapted to halve the fruit as it passes thereover.

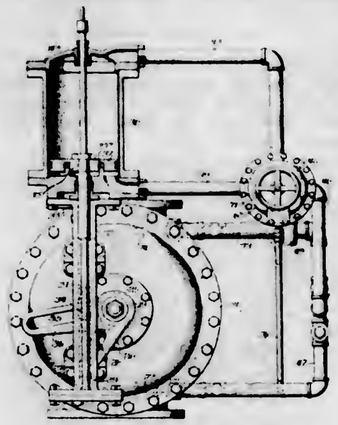
1,890,677. DIRECTION INDICATING DEVICE. EDWARD KIMBALL FRIEND, Jamaica Plain, Mass. Filed Nov. 27, 1925. Serial No. 71,635. 7 Claims. (Cl. 177—339.)



1. A direction signaling device for automobiles comprising, in combination with right and left indicating signals mounted on the forward part of the automobile and mechanism for turning the steering wheels of the automobile to right and left, an electric switch connected with the steering mechanism having means for causing the appropriate signal exclusively to be shown when the steering wheels are turned to right or left respectively, and a manual switch having a contact in series with the before named switch, other contacts flanking said contact, each in parallel circuit with one of the signals, and a circuit closer shiftable to engage the respective contacts independently or either of said flanking contacts and the first named contact simultaneously.

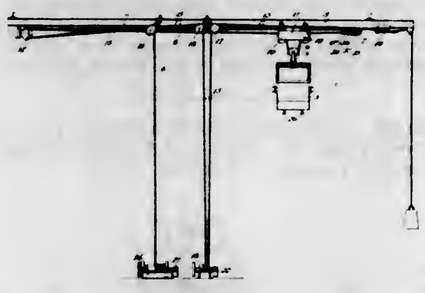
7. A direction signal apparatus for automobiles comprising signal devices mounted on the forward part of the vehicle, one adapted to indicate a right turn of the vehicle, and a second one to indicate a left turn, a switch contact in circuit with one of said signal devices exclusively, a second switch contact, a manual circuit closer in circuit with a source of electricity movable to close the circuit through either the first-named contact exclusively, or through both said contacts simultaneously, and an automatic switch interposed in the circuit between the second named contact and the second signal device, mechanically connected with the steering apparatus of the vehicle and causable thereby to actuate the second signal device when the manual circuit closer is in connection with both contacts and the steering apparatus is moved to turn the car oppositely to the direction first intended.

1,890,678. VALVE. DAVID D. GOLDBERG, Chicago, Ill. Filed June 21, 1928. Serial No. 287,141. 25 Claims. (Cl. 137—139.)



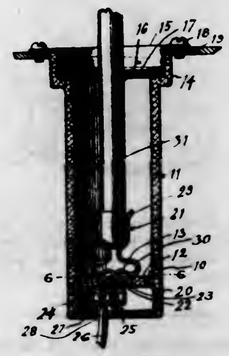
10. In a valve-structure, the combination of a valve-casing having a passage therethrough and a conical valve-seat, a ported conical valve in said casing cooperating with said valve-seat and movable to open and to close said passage, and actuating-means acting, during the opening of the valve, to slide the valve initially bodily axially away from the valve-seat in a substantially-straight line through a varying leverage and then to turn the valve, and, during the closing of the valve, first to turn the valve and then through said varying leverage to slide the valve bodily axially in a substantially-straight line to said valve-seat.

1,890,679. TRAVERSING HOIST. HAROLD E. HALLENBECK, Hudson, N. Y., assignor to Gifford-Wood Company, Hudson, N. Y., a Corporation of New York. Filed Jan. 13, 1930, Serial No. 420,482. Renewed Sept. 16, 1932. 2 Claims. (Cl. 212—86.)



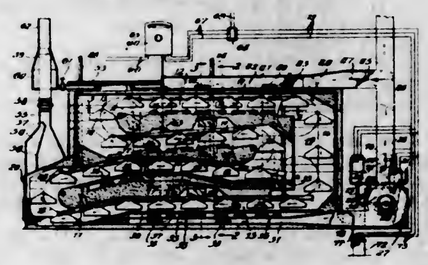
1. A controlling device for electric motor-operated trolley buckets comprising, in combination, a support; a frame connected to the support; a compression spring in the frame; a block in the frame reciprocable relative to the frame; the spring bearing against said block at one end and said frame at the other end; an eye bolt passing through the spring and the frame and secured to the block; a pair of arms projecting from the block; a pair of limit switches on the frame, connected in the hoist motor circuit and actuated by said arms to be closed and opened alternately as the block reciprocates relative to the frame thereby stopping and reversing the hoist motor; a hoist line wound and unwound by the hoist motor and connected to the eye bolt to cause the block to actuate the switches responsive to the tension on the hoist line.

1,890,680. GAS AND VACUUM TUBE ELECTRODE SOCKET. HANSABURO HARASE, Los Angeles, Calif. Filed Nov. 25, 1929. Serial No. 409,587. 8 Claims. (Cl. 173—328.)



1. In an electrode socket, a tubular container having an integral partition wall intermediate the upper and lower ends thereof, a contact member within the container above the partition wall and adapted to receive the terminal of a vacuum tube the contact member having a portion thereof extending through the partition wall, means for securing a service wire terminal to the contact member, and drainage apertures through the partition wall, and through the tubular wall and beneath the partition wall.

1,890,681. BAKE OVEN. FRIEDRICH A. HOPPE, Chicago, Ill., assignor to Schmidt Securities Company, Chicago, Ill., a Corporation of Illinois. Filed May 7, 1932. Serial No. 609,800. 20 Claims. (Cl. 107—57.)

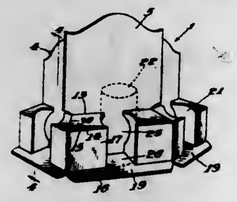


4. A bake oven comprising a plurality of substantially horizontal runs connected at their ends to provide a circuitous baking chamber, said oven being provided with a feed opening, pipes for injecting steam into the initial baking run, conduits opening into said run at a low level thereof, and a blower adapted to remove gases discharged through said feed opening and adapted to create suction within said conduits.

1,890,682. SELF-SUPPORTED DISPLAY DEVICE. JULIUS HORWATH, Chicago, Ill., assignor to Arvey Corporation, Chicago, Ill., a Corporation of Illinois. Filed Apr. 4, 1931. Serial No. 527,648. 8 Claims. (Cl. 211—73.)

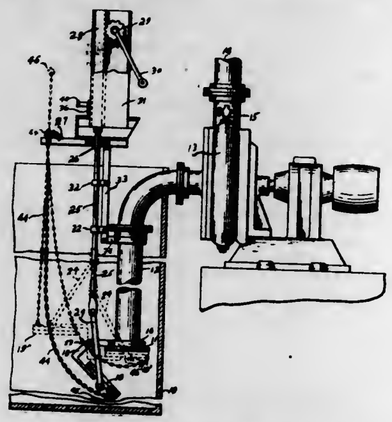
1. A self supporting display device comprising in combination, a unitary blank divided into a plurality of sections, each section being provided with a plurality of score lines along which said section is folded to form a rear panel, a platform disposed at an angle to said rear panel, a front panel disposed at an angle to said plat-

form, a base flange disposed at an angle to said front panel, said platform and front panel being provided with lines of incision defining a strip, a portion of which is disposed substantially in the plane of the rear panel and



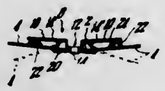
another portion of which is in the plane of the base, said lines of incision defining an aperture for the reception of a container, adjacent sections of said device being angularly disposed.

1,890,683. FOOT VALVE. OWEN J. HUGHES, Stamford, Conn. Filed Sept. 11, 1929. Serial No. 391,727. 9 Claims. (Cl. 251—17.)



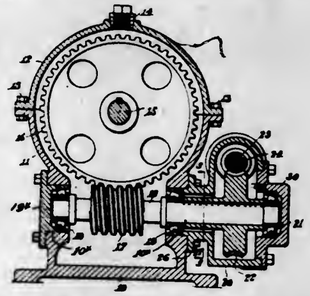
1. In a valve construction for the inlet end of a pump, a valve, an offset hinge for said valve, a control means for said valve comprising a vertical rod, a link connecting said rod and said valve, said means and valve having a dead center position relative to one another, said rod being reciprocable to actuate said valve, and a supplementary means for actuating said valve beyond dead center.

1,890,684. NECKTIE DEVICE. JOHN W. JOHNSON, Chicopee, Mass. Filed Mar. 14, 1932. Serial No. 598,682. 1 Claim. (Cl. 24—81.)



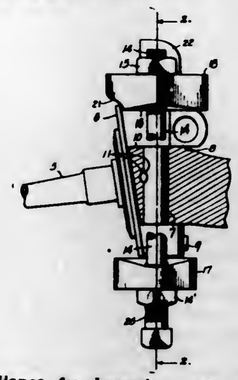
A device for attaching a tie to a collar comprising in combination, a body portion, clamp members arranged to be secured to a tie and pivoted at opposite ends of said body portion, a plate at the rear of and adjacent to said body portion, wings offset and extending from opposite ends of said plate and integral therewith, cam portions on the inner ends of said clamp members for bearing against said wings, a flat spring-like member at the forward side and adjacent to said body portion and having end portions for bearing on the inner ends of said clamp members, ears extending forwardly and downwardly from said plate to embrace said body portion and spring-like member, projections on the inner sides of said clamp members having central apertures therein, and prongs on said wings receivable in said apertures.

1,890,685. COMPOUND SPEED REDUCER. KARL E. JOHNSON, Quincy, Mass., assignor to Boston Gear Works, Inc., Quincy, Mass., a Corporation of Massachusetts. Filed Feb. 28, 1931. Serial No. 519,092. 15 Claims. (Cl. 74—101.)



1. In a compound speed reducer for actuating heavy machinery, a large main chambered casing having upper and lower parts, the lower part being provided with a base flange by which the casing may be secured rigidly to a stationary member in fixed position and provided at the top with an opening whereby said casing may be filled with lubricant; driving mechanism in the chamber of said casing including a horizontal driving shaft extending through one side wall of said casing adjacent the base thereof; a thrust bearing for the inner end of said shaft in the opposite wall of said casing; a gear disposed outside of said main casing on the projecting end of said driving shaft; means coacting with said gear for rotating said driving shaft; said rotating means being in a plane perpendicular to said shaft; a smaller supplemental casing enclosing said gear and shaft-rotating means and provided with a bearing through which projects a cylindrical extension of said shaft-rotating means; said smaller casing having a centering projection in a cylindrical opening in a wall of the larger casing; and means whereby said supplemental casing may be moved in a vertical plane about the axis of said gear and be secured to said main casing in a plurality of immovable positions radial to the axis of said shaft.

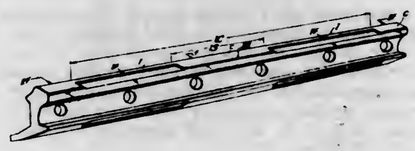
1,890,686. AUTO MECHANIC'S ACCESSORY. ERNEST KEHR, Dixon, Mo. Filed Apr. 13, 1932. Serial No. 604,952. 2 Claims. (Cl. 29—85.)



1. An appliance for loosening and removing spindle bolts from their bearing structure, comprising a pair of

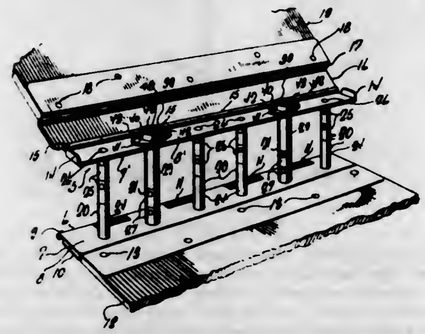
blocks for embracing opposite sides of said bearing structure, bolts connecting said blocks at opposite sides of the spindle bolt, said blocks having bolt openings slightly larger than the bolt diameters, for permitting not only free longitudinal but also slight lateral or angular play of said bolts within said openings one of the blocks being formed with an opening for clearance of the head of the spindle bolt, and the other block carrying an impact screw element in impact alinement with one end of said spindle bolt.

1,890,687. RAIL JOINT BAR. GEORGE LANGFORD, Joliet, Ill., assignor to McKenna Process Company of Illinois, Joliet, Ill., a Corporation of Illinois. Filed Jan. 15, 1931. Serial No. 508,824. 6 Claims. (Cl. 238—243.)



1. A rail joint bar having its top fishing surface narrowed throughout an intermediate length of said fishing surface between each of its end portions and its center portion, said intermediate lengths of said fishing surface being narrowed on the inside.

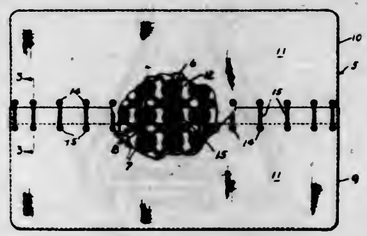
1,890,688. LOOSE LEAF BINDER. ADOLPH G. LOTTER, Milwaukee, Wis., assignor to H. C. Miller Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed Sept. 12, 1929. Serial No. 392,120. 7 Claims. (Cl. 129—13.)



6. In a loose leaf binder having clamping members and means expansibly connecting the clamping members, means for locking the clamping members against relative movement comprising a tubular post section, an expansion member received in the tubular post section, screw means for effecting expansion of said member into intimate engagement with the tubular post section, and cap means connected with one of the clamping members and positioned over the screw means for maintaining the same assembled with the expansion member.

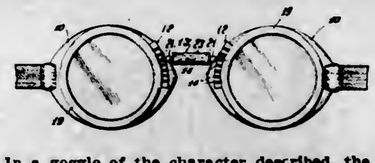
1,890,689. BED-SPRING COVER. LUCIENNE J. LOUIS, Oakland, Calif. Filed June 17, 1930. Serial No. 461,697. 1 Claim. (Cl. 5—354.)

A cover for a bed spring which comprises a pair of fabric box shaped members adapted to be slipped over opposite sides of the spring and overlap each other centrally of the spring to completely enclose the spring, and means for securing the edges of said members to-



gether above and below the spring, said means being so positioned that they may be fastened and unfastened from above the spring.

1,890,690. GOGGLES. ROBERT MALCOM, Chicago, Ill. Filed June 10, 1931. Serial No. 543,303. 6 Claims. (Cl. 2—14.)



1. In a goggle of the character described, the eye-cups whereof are provided with removable lens holding rings, a detachable nose-bridge provided with transversely disposed interstices spaced apart lengthwise of the nose-bridge, and means disposed circumferentially on the nose sides of the eye-cups and provided with transversely disposed spaced apart slots open at one side of said means, said slots being adapted to match the interstices in the nose-bridge and the open ends of the slots being disposed toward the eye-cups into proximity of the lower side of the lens holding rings, whereby passage of the attached end of the nose-bridge through said open ends of the slots is prevented when the rings are on the eye-cups in lens holding position.

1,890,691. MILK BOTTLE CAP. ROSS H. MERGENTHEIM, Winnetka, Ill. Filed Feb. 6, 1931. Serial No. 513,908. 9 Claims. (Cl. 215—51.)

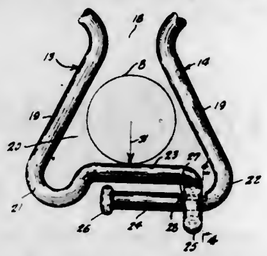


1. A milk bottle cap which comprises in combination, a substantially circular disc of fibrous material provided with a plurality of lines of incision upon each face of the disc defining an integral tab, each of said lines of incision penetrating beyond the center of the thickness of the disc.

1,890,692. OVERALL LOOP. CHARLES A. MOSCROVE, Waterbury, Conn., assignor to The Autoyre Company, Inc., Oakville, Conn., a Corporation of Connecticut. Filed Feb. 27, 1931. Serial No. 518,625. 7 Claims. (Cl. 24—224.)

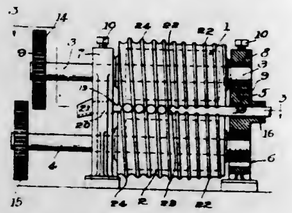
1. A loop fastener of the class described including an attaching portion and a pair of relatively movable arms having a normal position with respect to one another, nor-

mally ineffective locking means for securing said arms against movement away from one another beyond their normal positions, and said locking means arranged in



such a manner as to be made immediately effective to secure said arms in their normal position by a strain placed on the loop.

1,890,693. BALL FORMING MACHINE. ALEXANDER C. MUNRO, Britannia Beach, British Columbia, Canada. Filed Jan. 9, 1930. Serial No. 419,818. 1 Claim. (Cl. 80—23.)



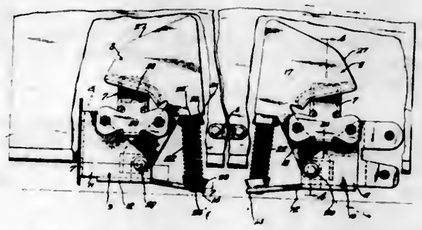
In a ball forming machine, a pair of rolls having parallel axes, means for driving each roll in the same rotative direction, each roll having a helical rib formed thereon and increasing gradually in depth from one end of the respective roll toward the other end thereof, said rib forming a series of spaced convolutions about the body of the roll, one convolution on each roll having a projection extending around the roll through a minor portion of its circumference, the projections of the two rolls being arranged to oppose each other once during each revolution of the rolls.

1,890,694. TACKER. FRIDOLIN POLZER, South Norwalk, Conn., assignor to The E. H. Hotchkiss Company, Norwalk, Conn., a Corporation of Connecticut. Filed July 28, 1930. Serial No. 471,353. 8 Claims. (Cl. 1—49.)



1. In a tacking machine, a shank, a handle at one end of the shank, a housing at the other end of the shank, a guide bar within the shank and adapted to have a strip of staples supported thereon, means for feeding the staples along the guide bar to the housing, a stem extending from the housing, a weight secured to the outer end of the stem, a plunger secured to the stem, spring means for normally maintaining the stem weight and plunger elevated, a stop means to be engaged by the stem to limit the movement of the stem into the housing, and said weight adapted to overcome the action of the spring means and depress the plunger to drive a staple when the machine is forcefully brought into contact with the object to be tacked.

1,890,695. FASTENING DEVICE FOR AUTOMOBILE HOODS. LOUIS G. RANDALL, Milwaukee, Wis., assignor to E. R. Wagner Mfg. Co., North Milwaukee, Wis., a Corporation of Wisconsin. Filed Sept. 11, 1930. Serial No. 481,093. 18 Claims. (Cl. 292—18.)



1. A fastening device for the hood of an automobile including a pair of oppositely disposed latching hooks supported for swinging movement longitudinally of the hood and provided with oppositely inclined latching shoulders, spring means biasing the hooks to latching position and co-operable latching projections adapted to be secured to the inner side of the hood and extending inwardly and upwardly therefrom.

1,890,696. PUNCHING BAG APPARATUS. CARL ROSENHAHN, Hillside, N. J. Filed June 30, 1932. Serial No. 620,060. 9 Claims. (Cl. 272—78.)



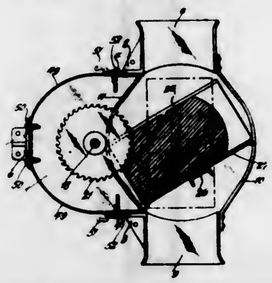
1. In a punching bag apparatus of the character described, the combination with a punching bag, of a standard therefor, supporting means for said standard, said supporting means providing a universal mounting for said standard, resilient means cooperable with said standard for urging said standard toward a vertical position, and lock mechanism for locking said standard in its vertical position.

1,890,697. PROCESS OF MANUFACTURING PUFFED CEREAL FOOD. ROBERT W. SCANLAN, St. Louis, Mo., assignor to Ralston Purina Company, St. Louis, Mo., a Corporation of Missouri. Filed Dec. 8, 1928. Serial No. 324,731. 3 Claims. (Cl. 99—10.)



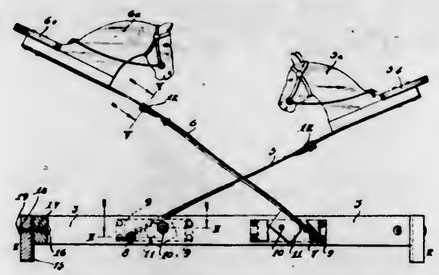
1. The process of manufacturing food units of hollow globular form, which comprises forming a dough of a plurality of cereal flours embodying a puffing starch, dividing the uncooked dough into pellets, cooking the pellets, heating the pellets by dry steam, rolling the pellets while hot to form them into thin flakes, baking the flakes at a moderate temperature to puff or expand them into globular form, and then subjecting the resultant puffed unit to a higher temperature to toast them.

1,890,698. ICE SCORING MACHINE. JOHN H. SCHREIBER, St. Louis, Mo. Filed Feb. 7, 1929. Serial No. 338,107. 17 Claims. (Cl. 125—13.)



2. A machine of the character described comprising scoring devices, mechanism for operating said scoring devices, and mechanism for supporting and rotating an ice block about a vertical axis to bring a number of sides of the ice block successively into contact with the scoring devices.

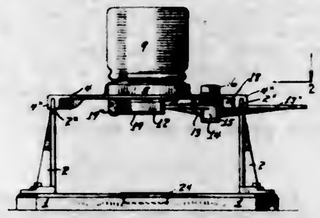
1,890,699. EXERCISING APPARATUS. JOSEPH J. SHOEMAKER, Clawson, Mich. Filed June 18, 1930. Serial No. 462,075. 3 Claims. (Cl. 272—55.)



1. In an apparatus of the kind described, the combination of a base having a vertical side, a bar spring pivotally secured at one end to said side of said base and extending in an inclined direction, a block pivoted to said side of said base so as to turn parallel to said side and having an edge engaging said spring, said block being adapted to support said spring by its edge engaging thereunder at a distance from the pivot of said spring.

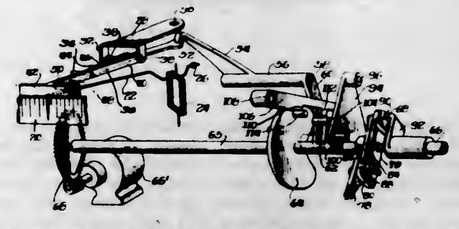
1,890,700. MEASURING-DISPENSING APPARATUS FOR FLUIDS. JESSE CONRAD SMITH, New York, N. Y., assignor to International Products Corporation, New York, N. Y., a Corporation of New York. Filed Mar. 18, 1931. Serial No. 523,400. 4 Claims. (Cl. 221—104.)

1. A dispensing apparatus particularly adapted for dispensing measured quantities of liquid, comprising a frame having a base member and standards rising from the base member, a plate for removably supporting in reversed position a container for the material to be dispensed, a dispensing cup open at top and bottom, a closure plate carried by and laterally of the cup and having its top surface in line with the upper wall of the cup, an operating handle secured to the cup, means pivotally connecting the operating handle to said plate, spring means for holding the cup normally in register with an aperture formed in the plate and for communication with said container,



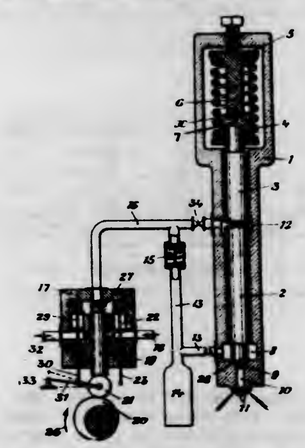
and a spring closure normally below the cup, said closure being held against edgewise movement but being free for movement toward the cup.

1,890,701. PYROMETER. ALBERT F. SPITZGLASS and OTTO T. HANDWERK, Chicago, Ill., assignors to Republic Flow Meters Company, Chicago, Ill., a Corporation of Illinois. Filed Dec. 20, 1928. Serial No. 327,223. 33 Claims. (Cl. 236—70.)



1. In a control device, the combination of an operating shaft, an operated shaft, means for connecting said shafts including a clutch, said clutch including links for disengaging said clutch, said links normally resisting declutching operation.

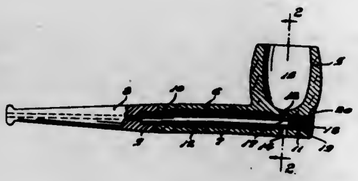
1,890,702. FUEL INJECTION DEVICE FOR INTERNAL COMBUSTION ENGINES. HANS STEINER, Winterthur, Switzerland, assignor to the Firm of Sulzer Freres Societe Anonyme, Winterthur, Switzerland. Filed May 19, 1930, Serial No. 453,502, and in Switzerland July 22, 1929. 7 Claims. (Cl. 299—107.5.)



1. A fuel injection device comprising a valve, a primary piston operating said valve, a resiliently pressed control piston operable to move the primary piston to close

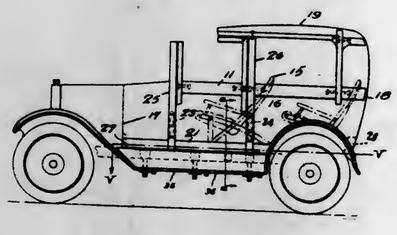
the valve, means for supplying a charge of fuel under pressure against the control piston to cause it to release the primary piston, against the primary piston to cause it to retain the valve in a closed position and against a smaller area of the primary piston and the valve to urge the primary piston to open the valve; means for releasing the pressure against the control piston and against the larger area of the primary piston so that the primary piston may move under the influence of pressure against the smaller area to open the valve despite the action of the control piston and inject the charge of fuel under pressure.

1,890,703. TOBACCO PIPE. SVEND E. SVENDSEN, Seattle, Wash. Filed Mar. 31, 1930. Serial No. 440,250. 2 Claims. (Cl. 131—12.)



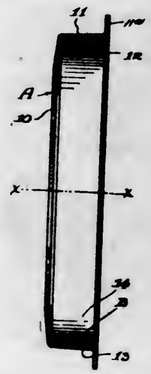
2. In a smoking pipe, a bowl portion providing a tobacco-receiving chamber, said bowl portion having a passage running the length of the same below the chamber open at both ends to the atmosphere and also providing aligned ports leading from the chamber to the passage and from the passage to the atmosphere, said alignment of the ports accommodating introduction of a pipe cleaner through one and withdrawal from the other port, said open end passage accommodating introduction of a pipe cleaner through one end of the same for withdrawal from the other end, and means insertable in said passage for normally sealing one end of the same and the port leading from the passage to the atmosphere, said means providing a smoke passage for drawing the smoke from said chamber.

1,890,704. VEHICLE BODY. GEORGE TASMAN, Brooklyn, N. Y. Filed Jan. 13, 1925, Serial No. 2,073. Renewed Jan. 28, 1929. 9 Claims. (Cl. 296—35.)



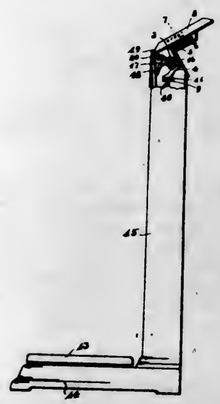
1. In an automobile, the combination with a chassis frame having a floor whose longitudinal edges overhang the chassis frame, a reinforcing plate, longitudinal body sides mounted upon the plate, said plate being spaced from and substantially parallel to the longitudinal edges of the floor and being secured at its ends to the said chassis frame and on the outside thereof.

1,890,705. BRAKE DRUM. JOHN W. TATTER, Detroit, Mich., assignor to Lewis Differential Company, Chicago, Ill., a Corporation of Illinois. Filed Mar. 21, 1931. Serial No. 524,229. 7 Claims. (Cl. 188—218.)



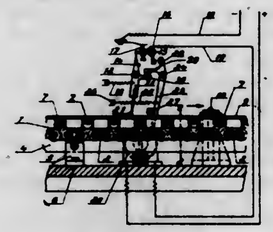
1. A brake drum comprising a steel body portion having an inner frusto-conical surface, and a cast iron liner held within said body portion, said liner having an outer frusto-conical surface engaging said frusto-conical surface of the body portion, said liner having an inner cylindrical braking surface.

1,890,706. SCALE MECHANISM. NORMAN TATHAM, Los Angeles, Calif. Filed Nov. 30, 1929. Serial No. 410,724. 3 Claims. (Cl. 265—68.)



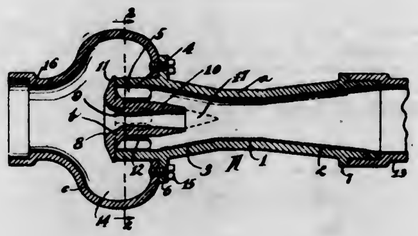
1. In a scale, in combination with a weight-supporting mechanism and a weight-indicating mechanism, a lever comprising substantially two swingable ends with a common central pivot-support with means for pivotal connection with said indicating mechanism at one end and embodying a curved portion in the other of said ends forming the operating-radius varying contacting means by which the various movements of the weight-supporting mechanism can be transformed into certain proportioned movements in the weight-indicating mechanism.

1,890,707. MEANS FOR ARRANGING OVAL CIGARETTES. ROBERT WILHELM VOIGT, Dresden, Germany, assignor to the Firm "Universelle" Cigarettenmaschinen-Fabrik, J. C. Müller & Co., Dresden, Germany. Filed Feb. 20, 1929, Serial No. 341,387, and in Germany Feb. 25, 1928. 13 Claims. (Cl. 226—5.)



1. Apparatus for arranging oval cigarettes with respect to their imprints comprising a feeler, means for feeding the cigarettes to be arranged past said feeler, said feeler engageable with the cigarette seams, means for controlling an electric circuit, said means controlled by said feeler, means for rotating the cigarettes about their longitudinal axes, means controlled by said electric circuit for bringing said cigarettes into engagement with said rotating means and means for moving said cigarettes out of engagement with said rotating means.

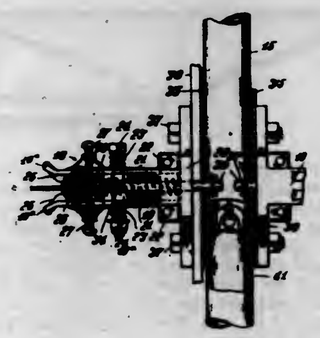
1,890,708. SUPERCHARGER. ERNEST M. WHITE, Los Angeles, Calif. Filed May 31, 1930. Serial No. 458,806. 4 Claims. (Cl. 230—95.)



1. In a supercharger, a Venturi-type draft tube having entrance and exit portions, a nozzle fitted within the entrance portion of the draft tube and having a Venturi-type bore; and said nozzle being provided with a flange adapted to close direct entrance into the draft tube, said draft tube being formed with an angularly cut slot adjacent the entrance of said tube, said draft tube being adapted for association with an exhauster at the exit end thereof, and whereby when said exhauster is in operation, fluid is drawn through said nozzle and said slot, the said nozzle creating a low pressure area and the said slot inducing a whirling motion to the fluid whereby a greater weight of air is passed through the draft tube.

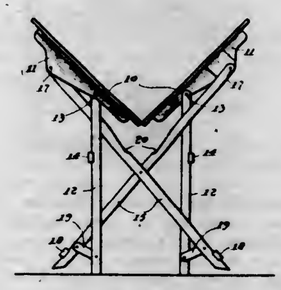
1,890,709. TRAIN ORDER HOOP HOLDING MEANS. WILEY L. WHITE, Calwa, Calif. Filed Sept. 18, 1931. Serial No. 563,514. 11 Claims. (Cl. 258—2.)

1. Means of the character described comprising vertically disposed supporting means; order-holder holding means mounted on the supporting means and adapted to release the holders in the direction of train movement;



and means whereby the holders are automatically ejected from said holding means.

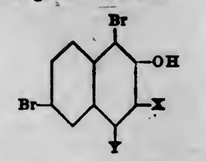
1,890,710. FOLDING TABLE. LEWIS S. WILLIAMS, Berrien Springs, Mich. Filed Sept. 28, 1931. Serial No. 565,426. 4 Claims. (Cl. 45—116.)



1. A folding table comprising two table parts foldable upwardly along a central line; a side support for each table part foldable relatively thereto; and crossed folding bars pivotally connected with said table parts and said supports and foldable as said parts fold.

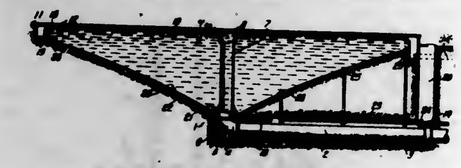
1,890,711. PROCESS FOR THE MANUFACTURE OF 6-BROMO-2-HYDROXY-NAPHTHALENE AND ITS SUBSTITUTION PRODUCTS. JOHANNES WOLLEMANN, Offenbach-on-the-Main, Germany, assignor to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Oct. 26, 1931, Serial No. 571,276, and in Germany Nov. 1, 1930. 3 Claims. (Cl. 260—110.)

1. Process which comprises heating a hydroxynaphthalene compound of the general formula:



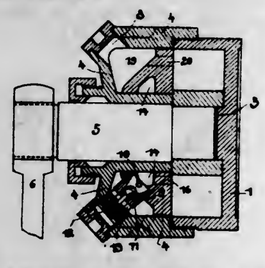
wherein X means hydrogen or the group COO-alkali metal, Y means hydrogen or bromine and at least one of X and Y is hydrogen, with an alkali metal sulfite.

1,890,712. APPARATUS FOR CLARIFYING LIQUIDS. ARTHUR H. ZEITZ, Kansas City, Mo. Filed Oct. 7, 1929. Serial No. 397,934. 16 Claims. (Cl. 210—58.)



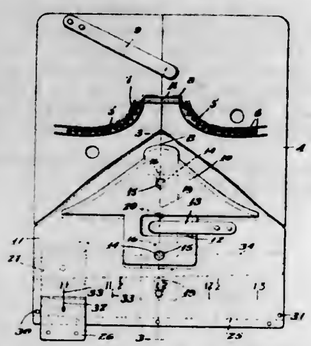
1. In clarifying apparatus including, a tank having a conical bottom, an inlet conduit including a portion extending through the apex of the bottom upwardly on the axis of the tank and having a discharge mouth adjacent the liquid level, a flume at the edge of the tank for receiving liquid distributed radially from the inlet, a sludge drain having an intake communicating with the bottom of the tank adjacent the inlet conduit, and a conical baffle supported by said inlet conduit immediately above the intake of the drain.

1,890,713. SHOCK ABSORBER. LUDWIG ZUBER, Mannheim-Feudenheim, Germany. Filed May 21, 1931, Serial No. 538,980, and in Germany May 19, 1930. 2 Claims. (Cl. 188—89.)



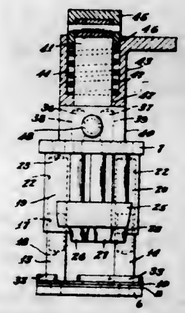
1. A shock absorber for motor vehicles of the character described, comprising a casing having rigid radial walls, a valveless, double piston arranged between said walls, a cover for the casing having annular channels and openings in said channels, and a check valve on the cover for regulating the flow of liquid through said channels and openings to and from the working spaces of said piston.

1,890,714. GAUGE. ARTHUR W. ALTVATER, University City, Mo., assignor to Western Supplies Company, St. Louis, Mo., a Corporation of Missouri. Filed June 9, 1930. Serial No. 460,081. 9 Claims. (Cl. 69—2.)



1. In a machine for operating on shoe upper blanks the combination with means for gauging singly a series of upper blanks having both center graded and regular graded portions, of means under the control of the operative for adjusting the gauging means in the direction of the length of the blank to locate the regular graded portions uniformly in the machine notwithstanding variations in the grade thereof.

1,890,715. UNITARY DIE ASSEMBLY. ARTHUR W. ALTVATER, University City, Mo., assignor to Western Supplies Company, St. Louis, Mo., a Corporation of Missouri. Filed June 9, 1930. Serial No. 460,082. 16 Claims. (Cl. 164—29.)



16. In a die assembly for use in a cut-out forming machine, the combination with a base member, a striking plate supported thereby, posts upstanding from said base member, an overhead die, a support therefor having depending sleeves telescopically receiving said posts for aligning and guiding the vertical movement of the die, means for resiliently impelling said die away from said striking plate, and a gage plate supported by said striking plate for positioning stock relatively to the die, of means carried by the die support for detachably securing the die assembly to the cut-out forming machine.

1,890,716. METHOD AND MEANS FOR LATERAL TRANSFER OF AUTOMOTIVE VEHICLES. CLAUDE G. ANDREASEN, Oakland, and RAYMOND N. ANDREASEN, San Leandro, Calif. Filed May 20, 1931. Serial No. 538,722. 2 Claims. (Cl. 180—1.)



1. In combination with a vehicle, transfer means for said vehicle comprising a cylinder secured to the axle of the vehicle, a piston in said cylinder, a rectangular piston rod operating through a rectangular aperture in the head of said cylinder, resilient means for raising said piston, a road wheel pivoted at the lower end of said piston rod, said wheel having internal gear teeth formed therein, a pinion cooperating with said internal gear teeth, a bracket secured to said piston rod and an electric motor mounted on said bracket, said pinion being mounted on the shaft of said motor.

1,890,717. MILDEWPROOF FABRIC AND PROCESS OF MAKING THE SAME. WILLIAM H. ADAMS, Kenyon, R. I., assignor to Eastern Finishing Works, Kenyon, R. I., a Corporation of Rhode Island. Filed Sept. 4, 1929. Serial No. 390,419. 6 Claims. (Cl. 168—37.)

1. A mildewproof fabric comprising a fabric saturated with a mildew-resistant agent which is repellent to mildews of one group, said fabric having on each face a superficially applied mildew-resistant agent which is repellent to mildews of a particular individual group, the mildew-resistant agents which are superficially applied to the faces of the fabric having the capacity of neutralising each other when brought into contact and the protective agent with which the fabric is saturated being impermeable to the other mildew-resistant agents and constituting a barrier between them which prevents them from reacting on each other.

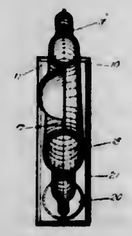
1,890,718. VAT DYESTUFF OF THE THIONAPHTHENE-INDIGOID SERIES. WILHELM BAUER and JOSEF HALLER, Leverkusen-Wiesdorf, and GEORG RÖSCH, Cologne-Mulheim, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Mar. 19, 1931, Serial No. 523,982, and in Germany Mar. 21, 1930. 12 Claims. (Cl. 260—48.)

1. The new vat dyestuffs of the probable general formula

$$J-(CO-NH-A)_n$$

wherein J means the radical of an indigoid dyestuff of the group consisting of thionaphthene-indole indigos thionaphthene-acenaphthene indigos and thioindigos, A stands for an anthraquinone nucleus, which may be substituted by halogen atoms, alkyl-alkoxy- or aroylamino groups, n means one of the numbers 1 or 2, and wherein the —CO—NH—A group is linked to a carbocyclic nucleus of the radical J, said dyestuffs forming yellow-orange to black crystals, difficultly soluble in the usual organic solvents, dissolving in strong sulfuric acid with various colorations, dyeing cotton from an alkaline hydrosulfite vat strong orange to black shades of good fastness properties.

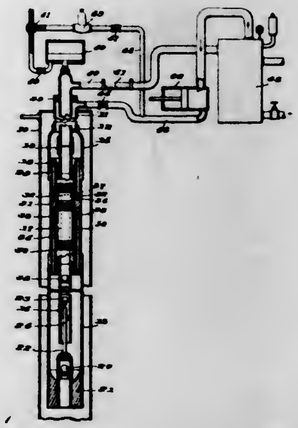
1,890,719. HORN. VERN W. BUSCH, South Bend, Ind. Filed July 5, 1928. Serial No. 290,557. 5 Claims. (Cl. 181—27.)



1. A sound amplifying device constructed of celluloid-like material, having a sound amplifying passageway therein of convolute form gradually increased in area from the inlet to the outlet thereof, the walls of said passageway being decreased in thickness as the chord perpendicular to the convolute plane is increased in length.

1,890,720. PNEUMATIC PUMPING APPARATUS. ROY L. CHENAULT, Pittsburgh, Pa., assignor to Gulf Production Company, Pittsburgh, Pa., a Corporation of Texas. Filed Jan. 14, 1932. Serial No. 586,684. 18 Claims. (Cl. 103—231.)

1. Pneumatic pumping apparatus for deep wells which comprises a displacement chamber adapted to extend into the liquid of a well, an eduction pipe extending into said displacement chamber, a source of pneumatic pressure, valve means positioned on said eduction pipe for alternately connecting said source of pneumatic pressure with the displacement chamber and then with the eduction pipe, whereby when the valve means is in one position the pressure of pneumatic fluid is directed into the displacement chamber to force liquid therefrom into the eduction pipe and upon reversal of the said valve means



the pressure of the pneumatic fluid is directed into the eduction pipe to lift the liquid in the eduction pipe to the surface of the well.

1,890,721. TUNING APPARATUS. HIRAM D. CURRIER, Chicago, Ill., assignor to Kellogg Switchboard and Supply Company, Chicago, Ill., a Corporation of Illinois. Filed June 17, 1925. Serial No. 37,634. 7 Claims. (Cl. 200—11.)



1. A device of the character described including a wiper arm, a raised portion on said wiper arm intermediate the ends of said arm adapted to engage sets of contacts, said wiper arm being rotatably supported on a shaft, a rigid second arm secured to said shaft and having a stud affixed thereto adapted to engage said first arm intermediate said raised portion and the shaft to impart movement to the said wiper arm when the said second arm is moved, and means associated with said shaft for adjusting the contactual engagement between said wiper arm and said contacts.

1,890,722. NECKTIE. CHARLES H. DAVIS, Dayton, Ohio. Filed Jan. 23, 1932. Serial No. 588,387. 6 Claims. (Cl. 2—146.)

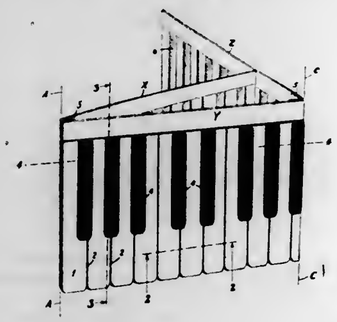


1. A four-in-hand necktie comprising a pair of angularly disposed end portions, and a curved knot forming portion between said end portions, said knot forming portion having the marginal edges thereof curved in the same direction.

1,890,723. COATING MATERIAL. MAX DESENISS and ANDREAS NIELSEN, Hamburg, Germany, assignors to the Firm New-York Hamburger Gummiwaaren Compagnie, Hamburg, Germany, a Company Incorporated in Germany. Filed Apr. 14, 1931, Serial No. 530,126, and in Germany Apr. 8, 1929. 4 Claims. (Cl. 134—17.)

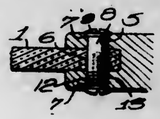
1. An insulating coating material comprising a mixture of chlorinated rubber and a bituminous substance selected from the group consisting of tar, tar-pitch, and asphalt.

1,890,724. PRACTICE KEYBOARD AND METHOD OF PRODUCING THE SAME. FRANKLIN DUNHAM, Brooklyn, N. Y., assignor to Radio Corporation of America, a Corporation of Delaware. Filed May 2, 1931. Serial No. 534,580. 6 Claims. (Cl. 84—467.)



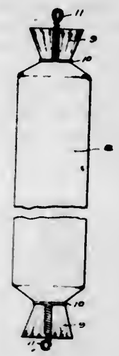
1. A practice keyboard comprising a strip of material, white keys outlined on said material flush with the surface thereof, depressions in said board between said white keys and black keys on said board raised above the surface thereof.

1,890,725. EYEGLASS LENS FASTENING. LUTHER H. ECHOLS, Lexington, Ky. Filed Oct. 3, 1931. Serial No. 566,729. 1 Claim. (Cl. 88—47.)



In an eyeglass lens fastening, the combination with the lens and ears embracing the edges of said lens and each formed with an aligning opening, a fastening screw mounted in the said aligning openings with a head at one end and exterior threads at its other end, a threaded socket in the said exteriorly threaded end of said screw, and a locking screw fitting said threaded socket and formed with a head, the head of said locking screw having its underface tapered and the end of the fastening screw being tapered to co-act therewith, said threads of the locking screw and the exterior threads on the fastening screw being in reverse direction to form a locking connection between the fastening and locking screw.

1,890,726. WATER-TIGHT EXPLOSIVE CARTRIDGE. WILLIAM R. FARREN, Tamaqua, Pa., assignor to Atlas Powder Company, Wilmington, Del., a Corporation of Delaware. Filed Aug. 20, 1930. Serial No. 476,681. 5 Claims. (Cl. 102—6.)



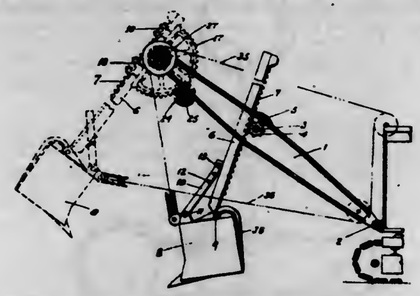
3. An explosive assembly of the character described, comprising a body of explosive material, a tubular fabric sheath for the same having a rubberized side disposed inwardly, a plug of waterproof and compressible material of considerably smaller diameter than the diameter of the sheath, disposed in a gathered, open end of said sheath and a twisted wire strand compressing the material of the sheath forcibly against and into the material of the plug, a terminal end of said wire strand being bent into substantially longitudinal alignment with the body of the sheath and terminating in a suspension means for the assembly.

1,890,727. EXCAVATOR CONSTRUCTION. EARL H. FUNDOM, Kenton, Ohio, assignor, by mesne assignments, to The Marion Steam Shovel Company, Marion, Ohio, a Corporation of Ohio. Filed Nov. 11, 1929. Serial No. 406,397. 17 Claims. (Cl. 214—138.)

1. In an excavating machine, a boom, a standard dipper stick, means for mounting said dipper stick intermediate the ends of said boom for movement longitudinally of itself, and other means for pivotally mounting said dipper stick on the outer end of said boom.

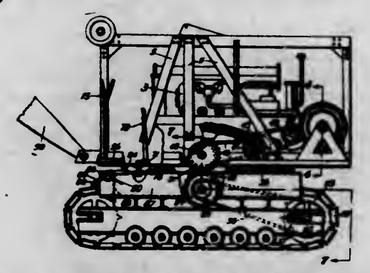
12. An excavating apparatus comprising a boom pivoted for up and down movement, a dipper stick pivotally

mounted thereon, gear mechanism connected with said boom and said dipper stick for causing said dipper stick to swing about its pivot on said boom, a cable connected with said gear mechanism and being also connected to



drum mechanism disposed on the body portion of said excavating apparatus, said cable and drum mechanism being adapted to actuate said gear mechanism and to raise and lower said boom.

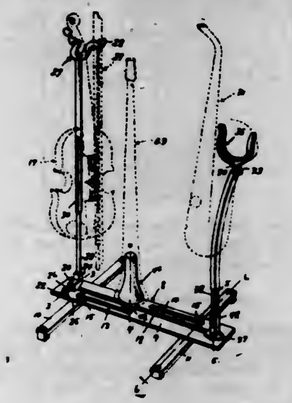
1,890,728. POWER EXCAVATOR. EARL H. FUNDOM, Kenton, Ohio, assignor, by mesne assignments, to The Marion Steam Shovel Company, Marion, Ohio, a Corporation of Ohio. Continuation of application Serial No. 330,748, filed Jan. 7, 1929. This application filed Nov. 11, 1929. Serial No. 406,398. 2 Claims. (Cl. 212—70.)



1. Excavating apparatus comprising a chassis, a turntable mounted on said chassis, a non-driving center pin bearing structure between said chassis and said turntable, said center pin structure being mounted in anti-friction bearings, and an annular anti-friction bearing structure disposed in surrounding and concentric relation to said center pin structure and serving to assist said center pin structure in preventing tilting of said turntable upon said chassis, said annular anti-friction bearing structure comprising ball bearings and opposed ball race members, each of said ball race members comprising a groove having vertically opposed side walls of unequal depth, said groove having side and bottom walls of the same curvature as said balls, one of said race members being mounted upon said chassis and the other on said turntable, the side wall of said turntable raceway which is closest to said center pin structure being of greater depth than the complemental wall of said chassis raceway and being in cooperative relation with said complemental wall of said chassis raceway and the side walls of said turntable raceway lying directly over the side walls of said chassis raceway.

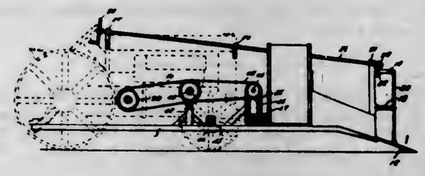
1,890,729. FOLDABLE STAND FOR MUSICAL INSTRUMENTS. JESSE LEWIS GANSON, Wallace, Kans. Filed Oct. 27, 1931. Serial No. 571,434. 4 Claims. (Cl. 248—40.)

1. A multiple instrument stand of the class described comprising a base plate formed adjacent its longitudinal edges with elongated slots, a pair of duplicate arms being adapted to occupy positions intersecting the longitudinal axis of said plate when the latter is in use, and said arms being proportioned to fold beneath and within the limits of the marginal edges of said plate when not in use, and



said plate being formed between said first named slots with a longitudinally elongated central slot, and a plurality of instrument supports adjustably mounted in said last-named slot and including instrument holders foldable into close proximity with said plate when not in use.

1,890,730. SNOW REMOVING DEVICE. HERBERT R. HUNT, Cottonwood, S. Dak. Filed May 5, 1932. Serial No. 609,528. 1 Claim. (Cl. 37—45.)

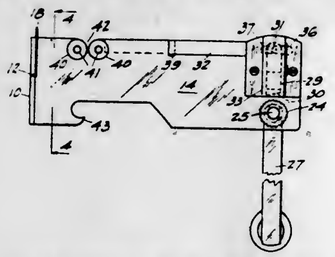


A snow plow attachment for a vehicle comprising a frame, means for attaching the frame to a vehicle with the front part of the frame extending in front of the vehicle, a downwardly and forwardly sloping trough supported at the front end of the frame, a plate having its rear edge hinged to the front edge of the bottom part of the trough, uprights having their lower portions connected with the front of the trough, a pair of shafts journalled in the upright and extending horizontally, arms connected with each shaft, vertically arranged rods supported by the outer ends of the said arms, means for connecting the lower ends of said rods to the said plate, a rearwardly extending rod, and worm gearing connecting the front end thereof with one of the shafts.

1,890,731. CAN OPENER. AXEL JOHNSON, Oakland, Calif. Filed Feb. 9, 1931. Serial No. 514,501. 1 Claim. (Cl. 30—8.)

A can opener comprising a bracket, a guide removably secured vertically on said bracket, a lever, a cutter of substantially rectangular cross-section having a rearwardly projecting gauge piece adapted to coincidently form a spacing element for said lever and a gauge adapted to cooperate with the top edge of the rim of a can and slidably mounted in said guide, said lever having one end pivotally secured to the upper end of said cutter and

having an intermediately disposed rearwardly projecting pin rotatable and slidable in a transversely disposed straight slot formed in said bracket, and a pivotally



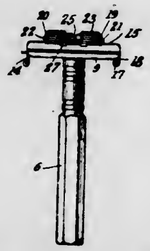
mounted toothed element disposed beneath and in spaced relation to the bottom of said guide and an operating crank for said toothed element.

1,890,732. NEON FLASH SIGN. WILLIAM E. JOOST, Oakland, Calif., assignor to Electrical Products Associates, Los Angeles, Calif., a Corporation of California. Filed Sept. 19, 1932. Serial No. 633,698. 3 Claims. (Cl. 40—130.)



1. An illuminated sign comprising a character divided into a plurality of sections, each section being formed of a length of neon gas filled tubing, and provided with individual terminals, an individual source of high tension current for each section, and means for successively making the circuits and simultaneously breaking the circuits to the sections.

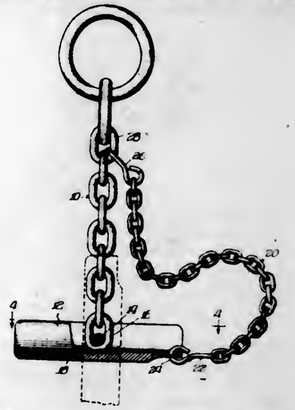
1,890,733. SAFETY RAZOR. JOHN L. KING, New York, N. Y., assignor to The King Holdings, Inc., a Corporation of Rhode Island. Filed Oct. 3, 1930, Serial No. 486,265. Renewed Apr. 12, 1932. 9 Claims. (Cl. 30—12.)



1. In a safety razor, a handle, a razor blade support attached to the handle, a plate for retaining the blade on the support, a saddle slidably mounted on said plate, a pin projecting from the saddle, and cam means rotatably mounted on the plate for cooperating with the pin to reciprocate the saddle.

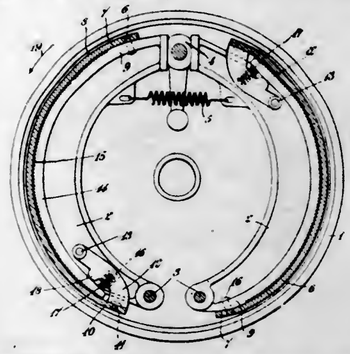
1,890,734. LIFTING HOOK. FRANK KUBERKA, Virginia, Minn. Filed May 16, 1931. Serial No. 537,945. 8 Claims. (Cl. 294—82.)

1. A lifting hook, comprising in combination, a chain or the like having connection to hoisting mechanism, a member pivotally secured to the lower end of said chain, said member being channel-shaped and having two operative positions with respect to said chain, one position with the member at right angles to the chain whereby



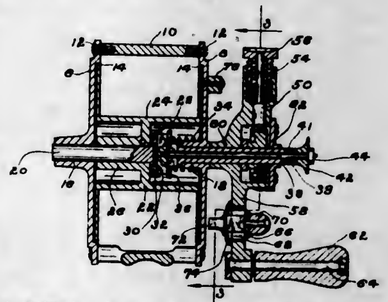
the same forms a hook, and the other position with the member extending longitudinally of the chain substantially enclosing the chain.

1,890,735. BRAKE. WILLIAM BEARD LAKE, Mount Place, Braintree, England. Filed Oct. 5, 1931, Serial No. 567,016, and in Great Britain Oct. 16, 1930. 17 Claims. (Cl. 188—250.)



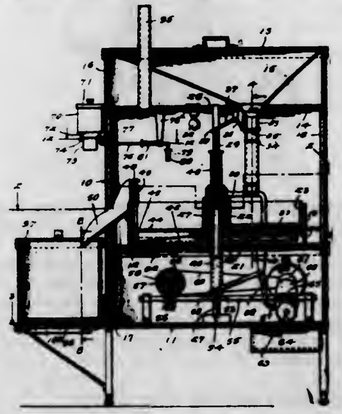
1. A brake of the internal expanding type including a brake shoe and a lining therefor, and resilient means for connecting one end of the lining with the shoe.

1,890,736. COMBINATION REEL. HERMAN O. LENZ, Seattle, Wash. Filed Oct. 25, 1930. Serial No. 491,118. 5 Claims. (Cl. 242—84.6.)



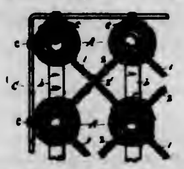
1. A fishing reel consisting of spaced side plates having bearings therein; a revolvable shaft disposed within said bearings; a line holding spool journaled upon said shaft; a hollow handle revolvably mounted upon said shaft having disposed therein a ratchet fixedly secured to said shaft; a pawl adapted to engage said ratchet; an adjustable nut disposed upon said handle; and a spring arranged for co-action with said nut to provide variable spring tension, disposed between said pawl and said nut adapted to urge said pawl into engagement with said ratchet.

1,890,737. ELECTRIC AUTOMATIC PEANUT COOKER. HAROLD A. LEWERS, Greenville, Mich. Filed Mar. 10, 1931. Serial No. 521,562. 16 Claims. (Cl. 53—7.)



1. A nut cooker including a tank, a vertically movable basket coacting therewith, a hopper disposed above the tank and basket and having a duct leading therefrom, the opening of said duct being disposed just above the tank and into position to be closed by the side wall of the basket when the basket is raised, means for automatically at predetermined intervals raising and lowering the basket, and means for discharging cooked nuts from the basket when the basket is raised.

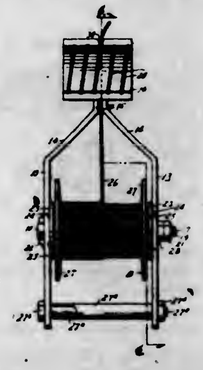
1,890,738. METHOD OF INTERLOCKING COILED SPRINGS. WILLIAM LEWIS, Utica, N. Y. Filed July 15, 1929. Serial No. 378,548. 1 Claim. (Cl. 140—3.)



The herein described method of interlocking two similar helical springs consisting in spreading adjacent helices of one spring apart a distance greater than the diameter of the other coil, placing said other coil crosswise between the spread helices of the first coil and then turning the first coil about its axis relatively to the second coil to interlock the helices of the crossing portions of the coils with each other against radial displacement and thereby to cause the crossing portions of both coils to lie in substantially the same plane.

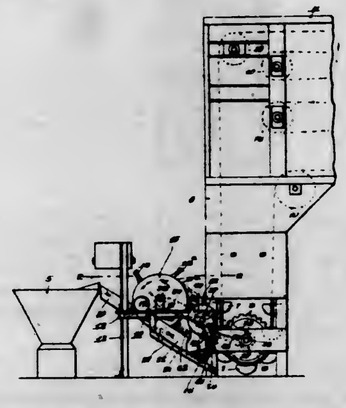
1,890,739. APPARATUS FOR WRAPPING CABLE. GORDON R. LUNT, Des Moines, Iowa, assignor to Pittsburgh-Des Moines Steel Company, Des Moines, Iowa, a Corporation. Filed Jan. 4, 1932. Serial No. 584,694. 5 Claims. (Cl. 117—37.)

1. A shell, having an inner semi-cylindrical face adapted to fit on a cable provided with spaced grooves in the forms of parts of spirals to fit wire already spirally wound on a cable or the like and to guide the spiral spacing



of the wire being wound, a spool carrying frame associated with said shell, said shell having guide means for wire drawn from the spool.

1,890,740. LOADING APPARATUS FOR PROOFERS. FRED MARASSO, Joliet, Ill., assignor to Union Machinery Company, Joliet, Ill., a Corporation of Illinois. Filed Apr. 22, 1932. Serial No. 606,789. 15 Claims. (Cl. 198—31.)

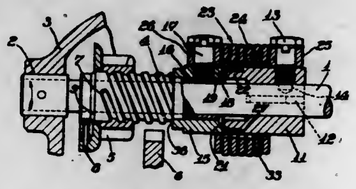


1. Loading apparatus for proofers comprising in combination a rotary distributing element having passageways all extending obliquely therethrough and containing inlet openings disposed in a common plane and discharge openings disposed in separate individual planes, means for conveying lumps of dough to the inlet openings of said passageways, a loading shelf into which the lumps of dough are delivered in spaced relation from said distributing element, and means for simultaneously discharging said lumps of dough from the loading shelf into an elongated tray.

1,890,741. ENGINE STARTER DRIVE. WILLIAM L. MCGRATH, Elmira, N. Y., assignor to Eclipse Machine Company, Elmira, N. Y., a Corporation of New York. Filed Mar. 1, 1932. Serial No. 596,120. 16 Claims. (Cl. 74—7.)

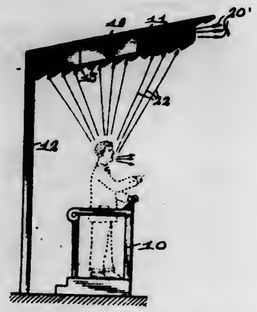
1. In an engine starter drive, a rotatable shaft having a cylindrical driving head thereon, a driven shaft having a cylindrical head normally abutting and forming an extension of said driving head and yielding driving means

for connecting said heads comprising a coiled spring adapted to loosely surround the cylinder formed by the driving and driven heads the end convolutions of the



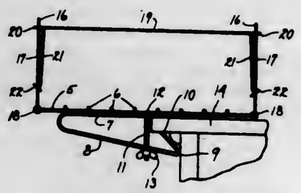
spring being displaced inwardly and reduced in radius so as to bear on said heads a substantial distance from the ends of the springs.

1,890,742. MICROPHONE AND LOUD-SPEAKER SYSTEM FOR CHURCHES, PUBLIC HALLS AND THE LIKE. RODOLPHE MESSNER, Montreal, Quebec, Canada. Filed June 27, 1932. Serial No. 619,478. 6 Claims. (Cl. 181—31.)



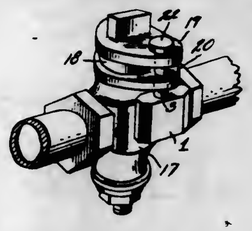
1. A sound reproducing system, comprising sound operated microphones, means to amplify the electrical impulses from the microphones, sound reproducing devices operated by the amplifying means, and means between the sound reproducers and microphones to deflect the sound waves issued from the sound reproducers away from the field of the microphones.

1,890,743. FOLDABLE EXTENSION COUNTER SHELF. LEVI J. MURPHY and ERNEST L. STAUFFER, Spokane, Wash. Filed Nov. 2, 1931. Serial No. 572,474. 3 Claims. (Cl. 45—141.)



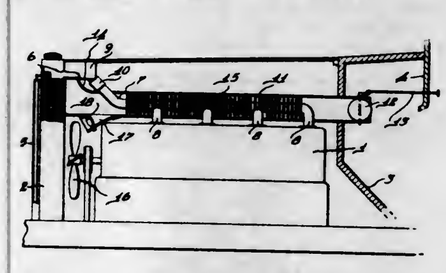
1. The combination of a foldable shelf of the character described with the forward portion of a store counter, of clamps secured to the bottom end portions of the shelf, said clamps bent to form lower spring portions, said lower portions bent inwardly to form heel and toe portions, a bolt passing loosely through the lower spring portions and having a nut arranged to compress said lower spring portions, and the rear bottom portion of the shelf resting on the top of the counter with the toe and heel portions of the clamps respectively engaging under the overhanging top portion and against the front face of the counter.

1,890,744. LOCK. THOMAS F. NOONAN, Chicago, Ill., assignor to Fred. H. Rix, Chicago, Ill. Filed Apr. 7, 1932. Serial No. 603,845. 8 Claims. (Cl. 70—125.)



1. A lock comprising a body, a bolt slidably mounted in said body for axial movement, a guide pin carried by the body and extending through a slot in one end of the bolt, said guide pin forming means for maintaining the slot in registration with a key receiving aperture in the body, spring actuated detent means carried by the body and cooperating with the bolt for holding the same within the body, said detent means being in the plane of the slot and positioned whereby when a key is forced axially into the slot of the bolt it will be engaged by the key and disengaged by said key from the bolt.

1,890,745. AUTOMOBILE HEATER. ALEXANDER T. O'CONNOR, Detroit, Mich., assignor of one-half to George Yeoman, Birmingham, Mich. Filed Mar. 8, 1930. Serial No. 434,397. 1 Claim. (Cl. 237—12.3.)

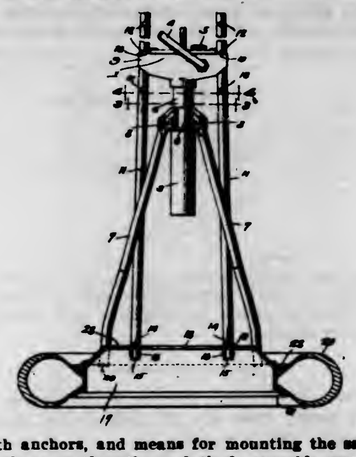


The combination with an automobile having a radiator, cooling fins in said radiator, an engine, a water jacket for said engine, a cooling fan, and a passenger compartment, of a pipe having one end connected to said radiator and its opposite end connected to said water jacket, heat radiating fins mounted on the outside of said pipe, a casing surrounding said pipe and having its front end opening against said radiator cooling fins, and its rear end opening into said passenger compartment, a thermostat in said pipe adapted to prevent circulation of water therethrough until a predetermined temperature has been reached, and a funnel-like air intake member mounted in said casing and having its intake end projecting into the path of the air current from said cooling fan.

1,890,746. HYDRAULIC TIRE PRESS. CHARLES B. O'DELL, McMinnville, Oreg. Filed June 27, 1931. Serial No. 547,381. 4 Claims. (Cl. 157—6.)

1. The combination with a hydraulic press, including relatively movable piston and cylinder members, of legs

pivoted to one member of the press, to swing inwardly and outwardly, tension members provided at their lower



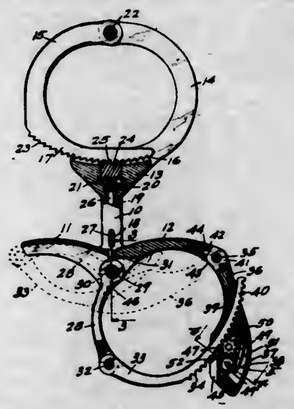
ends with anchors, and means for mounting the said tension members on the other relatively movable member of the press for longitudinal adjustment.

1,890,747. METHOD OF MAKING HOLLOW METALLIC AIR SCREWS. MARCEL PILLARD, Marseille, France, assignor to l'Helice Metallique, Brevets Paulhan-Pillard, Societe Anonyme, Marseille, France. Filed Apr. 7, 1930, Serial No. 442,281, and in France Apr. 19, 1929. 2 Claims. (Cl. 29—156.8.)



1. A method of making metallic air screws consisting in first working a tubular blank so as to vary the thickness of the shell both from one end to the other and on any cross section at right angles to the length of the blank, then cutting the blank longitudinally into entirely separate parts, shaping said parts whilst entirely separated from one another and joining two such parts along their edges.

1,890,748. HANDCUFF. GEORGE W. PRATT, Oakland, Calif. Filed Dec. 21, 1931. Serial No. 582,261. 5 Claims. (Cl. 70—24.)



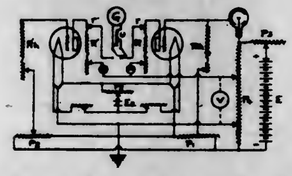
1. In a pair of handcuffs, in combination, a cylindrical stock, a retractile cuff, a transverse handle connected to said stock and consisting of oppositely extending members, one of said members coincidently forming a sheath for reception of a section of said retractile cuff, the other of said members forming coincidently one section of said retractile cuff.

1,890,749. LOCKING SLIDER FOR FASTENERS. GEORGE E. PRENTICE, Berlin, Conn. Filed Jan. 6, 1932. Serial No. 584,994. 13 Claims. (Cl. 24—205.)



1. A slider for use with separable fasteners of the kind having opposed series of interengageable fastener elements, said slider having convergent guide channels for the reception of the opposed series and comprising front and rear wings rigidly united by a neck, a part secured at one end to the neck, said part comprising a pull-retaining member having bearing means intermediate its ends, the opposite end of said part constituting a friction shoe disposed for engagement with the fastener elements, and a pull tab provided with a pivot member journaled in said bearing means, said pull tab having a cam portion engageable with said friction shoe in certain positions of the tab and operative to press the shoe into retaining engagement with the fastener means, the front wing of the slider being so shaped as to permit engagement of the cam portion of the tab with the friction shoe.

1,890,750. METHOD AND APPARATUS FOR SECURING HIGH AMPLIFICATION IN ELECTRICAL CIRCUITS. JOSEPH RAZEK, Upper Darby, and PETER J. MULDER, Drexel Hill, Pa. Filed Dec. 22, 1930. Serial No. 503,884. 11 Claims. (Cl. 179—171.)



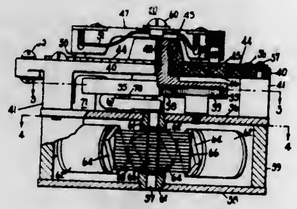
1. A system for obtaining current amplifications upwards of one million comprising a thermionic tube, means for negatively biasing the grid of the tube to such extent that the positive ion current is predominant, and resistance for the grid circuit of the tube having a magnitude of one thousand megohms or upwards.

1,890,751. HIGHWAY GUARD RAIL. WALLACE W. RUSSELL, Kansas City, Mo. Filed Oct. 12, 1931. Serial No. 568,839. 6 Claims. (Cl. 256—13.1.)



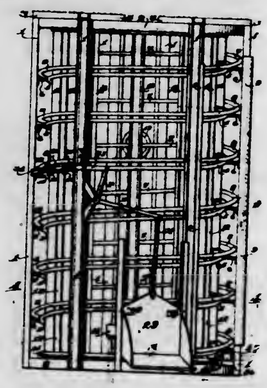
1. In a highway guard including spaced supports and metallic rail sections, means for connecting the sections to each other and to the supports including reversely curved ends on the rail sections forming laterally extending inner and outer curved portions, means for clamping the outer portions on the supports, and means for connecting the inner portions of adjacent sections.

1,890,752. SWITCHING MECHANISM. SELDEN BRADLEY SANFORD, Yonkers, N. Y., assignor to Otis Elevator Company, New York, N. Y., a Corporation of New Jersey. Filed Dec. 28, 1930. Serial No. 504,230. 13 Claims. (Cl. 172—239.)



2. An impulse motor comprising an armature and a plurality of field poles each having a substantially quadrangular shaped pole face having unequal dimensions, each pole face being skewed at an angle with respect to the armature axis to dispose a diagonal dimension of said pole face parallel to said rotor axis.

1,890,753. MERCHANDISE VENDING APPARATUS. PAUL P. SCHAURER, Wichita Falls, Tex., assignor to Will McKemie, sr., Wichita Falls, Tex. Filed July 14, 1932. Serial No. 622,431. 11 Claims. (Cl. 312—35.)

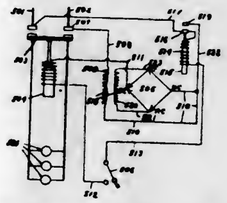


1. A machine for vending articles of merchandise including a continuous spirally arranged shelf having a point of discharge at its base, vertically arranged pusher members for moving the bulk of merchandise along said shelf, means for actuating said members, and means carried by said actuating means for intermittently projecting articles of merchandise singly through said point of discharge.

11. A machine for dispensing articles of merchandise including a spirally arranged article support having a series of loading levels, a guide member cooperating with said support for normally retaining said articles upon the latter, said guide member being provided with a movable section adjacent each of said loading levels, said sections being vertically aligned with respect to each other, and means connecting said sections whereby to permit the latter to be moved as a unit manually toward and away from the article support to allow loading of articles on said support at said loading levels.

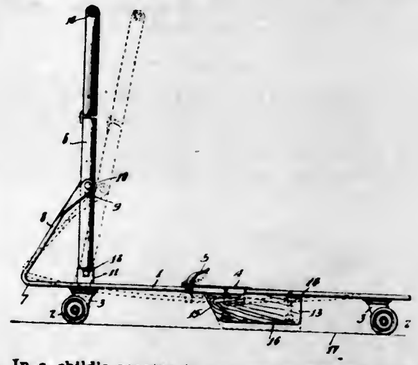
1,890,754. MOTOR CONTROL. OSCAR F. SHEPARD, Cincinnati, Ohio. Filed May 9, 1930. Serial No. 451,157. 14 Claims. (Cl. 172—179.)

1. In a controllable electric system, the combination of a device responsive to alternating current, an alternating current source of supply, direct current responsive means including a relay connected to the alternating current source of supply controlling inclusion and exclusion of said device in and out of circuit with said



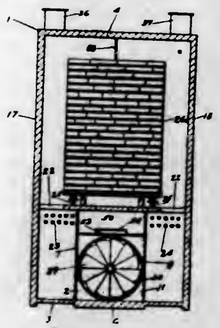
alternating current source of supply, and means for providing rectified current from said alternating current source of supply for operating said direct current responsive means.

1,890,755. SCOOTER. HOWARD F. SHEPHERD, Los Angeles, Calif. Filed Apr. 22, 1932. Serial No. 606,859. 4 Claims. (Cl. 208—182.)



1. In a child's scooter to run on a pavement, the combination of a body in the form of a resilient bar, wheels for supporting the same, a brake attached to said bar, a post attached to said body and extending upwardly to be seized by the child riding on the scooter, and means connecting the post with said body for flexing the body to apply the brake to the pavement.

1,890,756. KILN FOR DRYING LUMBER AND OTHER SUBSTANCES. JOSEPH I. STEEL, Portland, Oreg., assignor to Moore Dry Kiln Company of Oregon, a Corporation of Oregon. Filed Feb. 1, 1929. Serial No. 336,698. 4 Claims. (Cl. 34—46.)



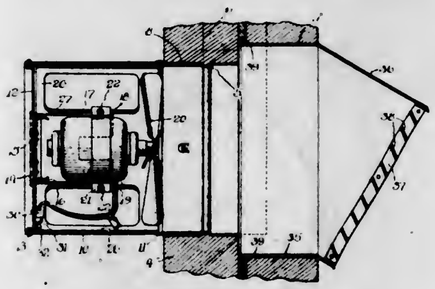
1. In a dry kiln, a rotary fan therein, means for defining suction and discharge sides for said fan, a housing for said fan, a fresh-air intake adjacent said housing and spaced therefrom, atmospheric communication means between said intake and both ends of said fan housing, whereby upon rotation of said fan in either direction fresh air is inspired at the suction and discharge sides, respectively, of said fan.

1,890,757. CONCRETE REENFORCING STEEL TIE. ARTHUR C. STRICKLER, Long Beach, Calif. Filed Dec. 22, 1930. Serial No. 504,111. 1 Claim. (Cl. 72—122.)



The combination with crossed bars, of a tie comprising a sheet metal body adapted to straddle one of the bars at the crossing point thereof and having a loop at each end, and substantially U-shaped wires, one loosely engaged in each loop and adapted to straddle the other bar with the ends twisted together to embrace said straddled bar.

1,890,758. VENTILATOR. JOHN R. TOWNSEND, Lake Bluff, Ill. Filed Dec. 11, 1930. Serial No. 501,577. 9 Claims. (Cl. 98—43.)



1. In a ventilator, an outer shell and an inner shell having corresponding openings and movable relatively to open and close the openings, a motor mounted upon one of the shells and a fan carried by the motor within the shells, a switch for the motor carried by one of the shells and engaged for actuation by the relative movement of the other shell, to actuate the fan motor when the shells are relatively moved to register the openings and to stop the motor when the openings are closed.

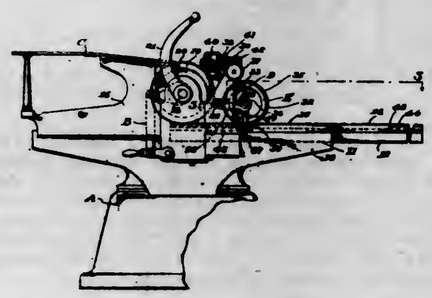
1,890,759. AERIAL TOY. ARTHUR H. VOGT, Aurora, Ill. Filed Jan. 26, 1932. Serial No. 588,992. 8 Claims. (Cl. 46—52.)

1. An aerial toy comprising a tube having a relatively large open end and a comparatively small weighted end, the latter being adapted to lead when the tube is impelled upwardly and descends, an elastic sling in said tube secured to the latter at opposite sides of its larger end, a hook shank connected at one end with said sling and at its other end having a straight lateral hook bill, a shaft extending across the interior of said tube near the smaller end of the latter and adapted to be engaged by said hook bill to hold the sling stretched, a parachute receivable in collapsed form in the larger end of the tube and adapted to rest on said sling, said parachute



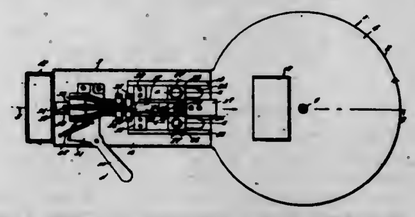
having cords secured to said tube, and means operable upon inversion of the tube for turning said shaft in a direction to move the hook bill therefrom.

1,890,760. PRINTING PRESS. HENRY R. TROTTER, Chicago, Ill., assignor to Hacker Manufacturing Co., Chicago, Ill., a Corporation of Illinois. Filed Apr. 13, 1932. Serial No. 605,046. 4 Claims. (Cl. 101—357.)



1. In a printing press, an impression cylinder, a reciprocating form carrying bed one movement of which is a printing stroke and the other a non-printing stroke, a form inking roller, inking means into and out of contact with which the form inking roller is movable, and means automatically operable at the end of each stroke of the bed to move the form inking roller from form inking position into contact with said inking means.

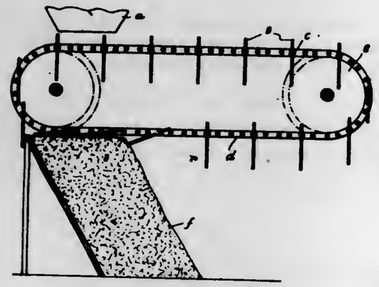
1,890,761. VENDING MACHINE AND MONEY CHANGER. JAMES E. WALKER, Wapello, Iowa. Filed Feb. 23, 1932. Serial No. 594,669. 3 Claims. (Cl. 194—69.)



1. A coin controlled vending apparatus comprising a plate, an ejector slidably mounted on the plate having slots therein for the reception of coins for shifting said

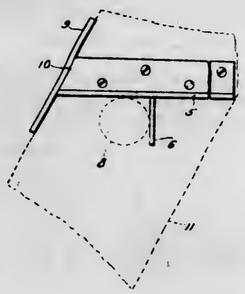
coins with the ejector, change magazines rising from the plate, change slides operatively associated with the magazines for discharging coins therefrom, arms projecting from the slides in the path of certain of the first named coins for engagement thereby for actuating the change slides in unison with the ejector, means for actuating the ejector, pins rising from the plate, lock bars mounted for vertical sliding movement on the pins and normally resting by gravity on the ejector, and abutments on the ejector engageable with the lock bars for preventing operation of the ejector, said lock bars being engageable by the first named coins for actuation thereby to inoperative position.

1,890,762. CONVEYING APPARATUS. JOHN NICOLAS WHYTE, London, England. Filed Mar. 28, 1932, Serial No. 601,633, and in Great Britain July 30, 1931. 2 Claims. (Cl. 198—36.)



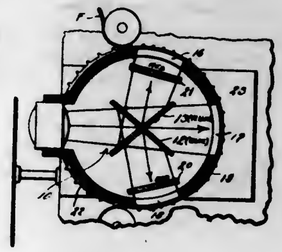
1. Conveying apparatus comprising a plurality of endless ropes between which a plurality of plates, normally in a vertical position are pivotally mounted, the plates being so arranged that their lower ends throughout a portion of their travel brush over and are supported by the upper surface of a heap of material, such plates after reaching one edge of the heap of material automatically re-assuming a substantially vertical position.

1,890,763. PORTABLE STEP FOR A LADDER. RUSSELL C. WILSON, Detroit, Mich. Filed Feb. 19, 1932. Serial No. 594,084. 3 Claims. (Cl. 228—60.)



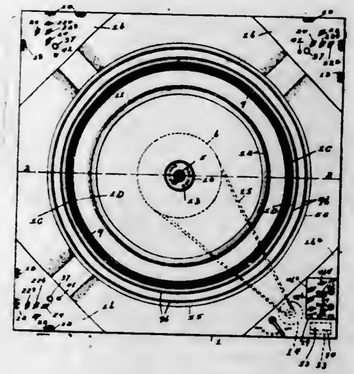
1. In a device of the class described, a step, a projection depending from the step, and plates mounted on the ends of the step adjacent one side thereof and disposed in planes oblique to the plane of the step.

1,890,764. METHOD OF PRODUCING MOTION PICTURES. WALTER L. WRIGHT, Santa Monica, Calif., assignor to Synchrome Corporation, Los Angeles County, Calif., a Corporation of California. Filed Nov. 5, 1928. Serial No. 317,385. 3 Claims. (Cl. 88—16.4.)



1. The cinematographic process including, holding a portion of a length of film curved about a center, receiving a shaft of light from a subject and dividing it into a plurality of shafts to pass radially to the curved portion of the film to make a plurality of photographic exposures in longitudinal alignment simultaneously on the film and spaced apart longitudinally of the film at distances substantially equal to their lengths, and intermittently advancing the film distances that are approximately multiples of the spacing of the exposures to obtain meshing series of exposures on the film.

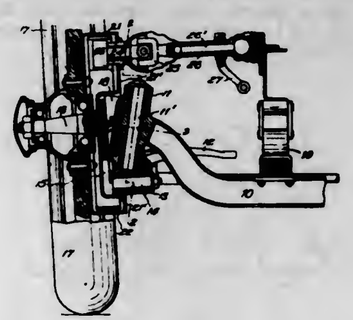
1,890,765. AMUSEMENT DEVICE. WAYNE P. ZENT, Troy, N. Y. Filed June 27, 1929. Serial No. 374,261. 16 Claims. (Cl. 272—31.)



1. In an amusement device, the combination of a power driven disc, a housing having an opening in the top thereof, a rim associated with said disc extending upward through and above said opening, tracks on each side of the opening, contact plates for said tracks, a remote control panel, means for electrical connection between the panel and the aforesaid rim, and plural control means on the panel.

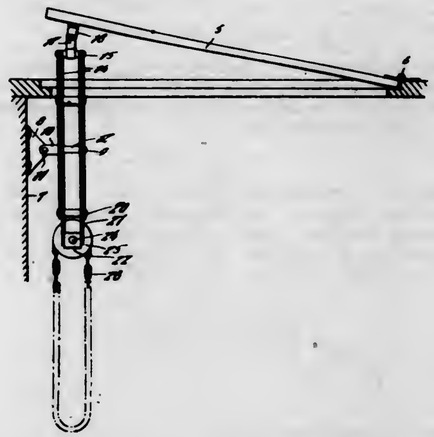
1,890,766. MOUNTING THE STEERED WHEELS OF ROAD VEHICLES. FRANK JOHN ADAMS, Brighton, Victoria, Australia. Filed May 2, 1929, Serial No. 359,979, and in Australia Jan. 31, 1929. 17 Claims. (Cl. 280—95.)

1. In a road vehicle, a chassis, steering knuckles oscillatively mounted on the chassis, means for displacing the steering knuckles in unison, spindles projecting laterally from the steering knuckles, hollow eccentrics oscillatively supported on and projecting upwardly from the spindles,



arms on the spindles within the eccentrics, and resilient members arranged within the eccentrics and adapted to coact with the said arms and steered wheels rotatively mounted on the eccentrics.

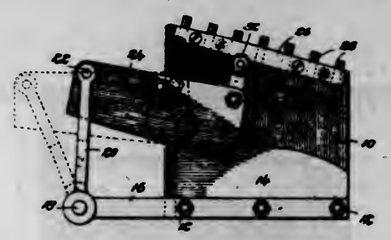
1,890,767. SKYLIGHT LIFTER. MAC B. ADAMS, Hobart, Okla. Filed July 9, 1929. Serial No. 376,942. 1 Claim. (Cl. 268—101.)



An actuator of the character described comprising a pair of lazy-tong structures, each structure being built up of a plurality of pivotally connected sections, the ends of the sections at one end of each lazy-tong structure being connected together and adapted for attachment to the body to be actuated, nuts between the lazy-tong structures at the opposite end thereof, a screw threaded through the structure, said screw being provided with right and left handed threads, the right handed threads being for one of the nuts and the left handed threads being for the other nut, a pin connecting the lazy-tong structures together at their intermediate portions and projecting beyond one of the said structures, and a stationary bracket to which said pin is pivotally secured.

1,890,768. RADIO APPARATUS. DORSEY F. ASBURY, Broomes Island, Md. Filed Feb. 19, 1926. Serial No. 89,443. 5 Claims. (Cl. 175—41.5.)

1. An electric condenser comprising an arm swingable about a fixed pivot, a movable plate pivotally connected with said arm, a stator plate with respect to which said first mentioned plate is movable into different overlapping relations by swinging movements of said arm, and means

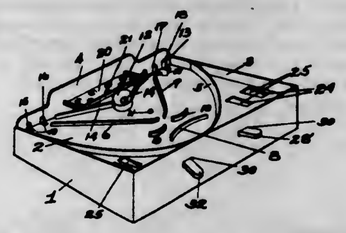


to produce pivotal movements of said first mentioned plate with respect to said arm during swinging movements of said arm.

1,890,769. COATING COMPOSITION. CHARLES E. BURKS, Wilmington, Del., assignor to E. I. du Pont de Nemours & Company, Wilmington, Del., a Corporation of Delaware. Original application filed Jan. 27, 1928, Serial No. 250,093. Divided and this application filed Jan. 28, 1930. Serial No. 424,186. 6 Claims. (Cl. 134—79.)

1. A composition comprising cellulose nitrate and an ethyl ether of pentaerythrite.

1,890,770. GAME APPARATUS. MILLICENT V. COPLEN and CLARENCE W. COPLEN, Nine Mile Falls, and WILLIAM B. MAJORS, Spokane, Wash. Filed Sept. 9, 1929. Serial No. 391,134. 1 Claim. (Cl. 273—95.)

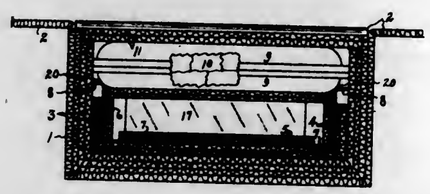


In a game apparatus the combination with an inclined board and a laterally extending upright boundary strip at the front of the board, and a back board, said inclined board having a plurality of successively arranged seats spaced on a central line perpendicular to the strip and adapted to receive a ball, mechanical tossers located beneath the board in operative position with relation to the seats for tossing a ball from a seat, a back-seat at each side of the center line and formed in part by openings in said back board adapted to receive a ball, a mechanical tosser in operative relation to each back seat for tossing a ball from the seat, and barrier strips at each side of the center line of the board and coacting with the boundary strip to form guide ways for directing free balls to said back seats.

1,890,771. TRANSPORTATION AND DISPLAY PACKAGE AND METHOD. DONALD WATCHORN DRUMMOND, New Rochelle, N. Y., assignor to Solid Carbonic Company, Ltd., New York, N. Y., a Corporation of Delaware. Filed Jan. 29, 1931. Serial No. 512,064. 4 Claims. (Cl. 62—91.5.)

1. A transportation package of the type described comprising a substantially air tight, heat insulating cas-

ing, an inner receptacle within said casing, a body of refrigerating material within said receptacle, a metal encased package of perishable food products within said



casing and heat conducting means between said package and said refrigerant, proportioned to have a predetermined heat conducting capacity.

1,890,772. CHLORINATION OF META STYRENE. HARRY B. DYKSTRA, Wilmington, Del., assignor to E. I. du Pont de Nemours & Company, Wilmington, Del., a Corporation of Delaware. Filed Jan. 28, 1930. Serial No. 424,133. 8 Claims. (Cl. 260—161.)

1. Chlorinated meta styrene.

5. The method of chlorinating meta styrene consisting in treating a solution of meta styrene with chlorine under conditions which favor nuclear substitution.

1,890,773. INDUCTION ELECTRIC FURNACE CONSTRUCTION. FRANZ EIBL, Finow, Germany, assignor to Ajax Electrothermic Corporation, Ajax Park, N. J., a Corporation of New Jersey. Filed June 30, 1930, Serial No. 464,808, and in Germany Dec. 31, 1929. 3 Claims. (Cl. 219—47.)

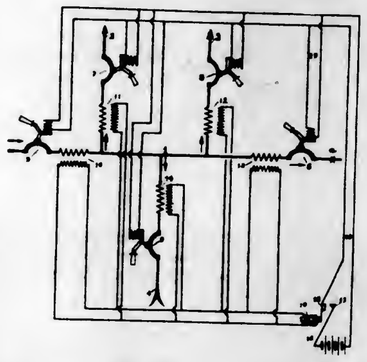


1. In an electric induction furnace, an inductor coil having tubular integral walls folded upon themselves at the inside of the coil, leaving an interior passage near the periphery of the coil.

1,890,774. PROCESS OF MAKING DUST DISINFECTANTS. MAX ENGELMANN, Wilmington, Del., assignor to E. I. du Pont de Nemours & Company, Wilmington, Del., a Corporation of Delaware. Filed Dec. 20, 1927. Serial No. 241,461. 16 Claims. (Cl. 167—38.)

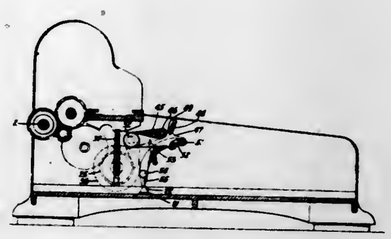
1. The process of making disinfectants which comprises effecting a reaction by grinding in the dry state, between an organic aromatic cyclic compound and a mercury compound taken from a group consisting of a mercuric salt and mercuric oxide, and obtaining the mercurised product directly in dust form.

1,890,775. INSTANTANEOUS SELECTIVE PROTECTIVE ARRANGEMENT FOR DIRECT CURRENT NETWORKS. AIMÉ BARTHELEMY FOURNIER, Paris, France, assignor to Union d'Electricite, Paris, France, a Corporation of France. Filed Sept. 10, 1931, Serial No. 562,184, and in France Sept. 26, 1930. 8 Claims. (Cl. 175—294.)



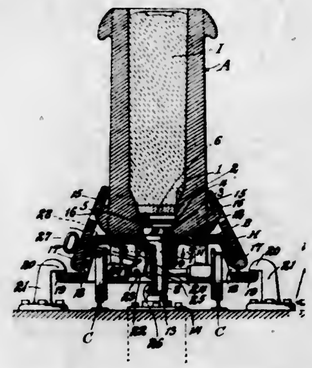
1. Protecting system for a zone of direct current electric conductors comprising circuit breakers on each conductor inside said zone, for each circuit breaker a trip coil, an electric power supply able to feed said coils, a relay controlling said feeding current, and means for energizing said relay by a current proportional to the variations of the algebraic sum of the currents entering the zone to be protected.

1,890,776. CALCULATING MACHINE. CARL M. F. FRIDEN, Oakland, Calif., assignor to Marchant Calculating Machine Company, Emeryville, Calif., a Corporation of California. Filed Sept. 1, 1928. Serial No. 303,387. 4 Claims. (Cl. 235—63.)



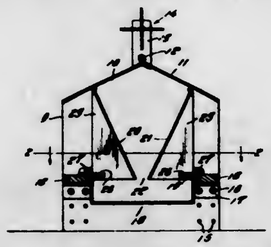
1. In a motor driven calculating machine, numeral wheels, a transversely movable carriage on which said wheels are mounted, means for moving said carriage, a rotary actuator for the numeral wheels, means for predetermining the number of revolutions of the actuator comprising a plurality of value keys of different denominations, a trip device common to all of said keys, means operated by the depression of any value key for initiating the calculating operation and differentially positioning the trip device, a member actuated by the trip device for terminating the calculating operation and means actuated by said member for controlling said carriage moving means.

1,890,777. INGOT MOLD. EMIL GATHMANN, Baltimore, Md. Filed Oct. 4, 1930. Serial No. 486,463. 4 Claims. (Cl. 22—139.)



1. In an ingot mold of the kind provided with a bottom opening through which a stripper device is adapted to be moved for stripping a contained ingot partially from the mold, the combination of a primary closure plug seated in said opening, and a secondary closure comprising a plate also seated in said opening below and out of contact with said primary closure plug, said plate being disposed entirely within said opening and not projecting below the bottom thereof.

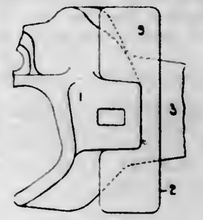
1,890,778. POULTRY FEEDER. DELMAR L. GERMAN, Glen Elder, Kans. Filed July 3, 1930. Serial No. 465,699. 2 Claims. (Cl. 119—52.)



1. A poultry feeder of the class described comprising a trough, a hopper having downwardly converging sides, the lower ends of which extend slightly into the trough, spaced partition plates connected to the outer face of each side of the hopper with their lower ends in alinement with the lower edges of the sides of the hopper, a slide member located over each side of the trough and adjustable toward and away from the hopper for regulating the feeding openings of the trough, said partition members having slots in their outer edges adjacent their lower ends for receiving the sliding members.

1,890,779. CENTRAL BUFFING AND DRAW GEAR. RICHARD THOMSON GLASCODINE, London, England. Filed Sept. 19, 1929, Serial No. 393,725, and in Great Britain May 14, 1929. 1 Claim. (Cl. 213—59.)

The combination with an end sill, of a casing secured thereto having a front opening surrounding by an inwardly projecting flange, a buffing spring in the casing, an open centered compression plate located between the spring and the flange of the casing and having a flange extending through the front of the casing, a coupler head having a shank extending through the compression plate, the casing and the end sill, and an adapter surrounding the shank, said adapter having a front face conforming



to the rear face of the head and a rear face to engage the flange of the compression plate upon inward movement of the coupler head.

1,890,780. HEATING ELEMENT STRUCTURE AND PROCESS OF MAKING THE SAME. PERCY GRAY, Jefferson, Iowa. Filed Aug. 26, 1929. Serial No. 388,440. 3 Claims. (Cl. 201—67.)



1. A process for making a heating element structure of the character disclosed, comprising the placing of a heating element and insulation between a pair of metal bars, at least one of said bars being resilient and having out-turned edges, the clamping of the assembly formed thereby together, and the welding of the edges of the bars together for connecting them, enclosing the heating element and clamping it evenly throughout its entire surface between the bars.

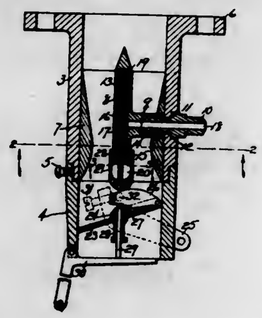
1,890,781. PUMP JACK. WILBUR G. HALL and NORMAN G. HALL, Port Angeles, Wash.; said Norman G. Hall assignor to said Wilbur G. Hall. Filed July 26, 1930. Serial No. 470,789. 1 Claim. (Cl. 74—14.)



In combination, a pump cylinder having a piston, a hollow pipe for actuating the piston, and a pump jack comprising a housing, a bearing in the upper end of the housing, a cross head vertically reciprocable therein, a pipe fixed in the cross head and extending slidably through the bearing and connected at the outside of

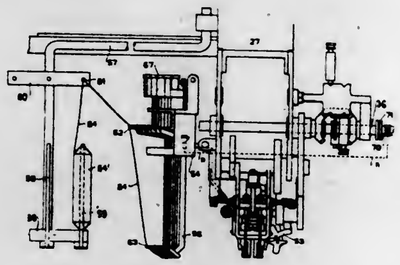
the housing with the piston actuating pipe and connected with said piston actuating pipe, a pair of sprocket wheels vertically spaced in the housing, means for driving the sprockets, a chain belt extended about the sprockets and an attachment link in the chain through which operative connection is provided with the cross head and whereby it is reciprocated incident to travel of the belt about the sprockets.

1,890,782. CARBURETOR. GRANT HAMMOND, New Haven, Conn., assignor of one-eighth to Henry P. Sage and one-eighth to William A. McLean, New Haven, Conn. Filed Mar. 29, 1929. Serial No. 351,019. 19 Claims. (Cl. 261—50.)



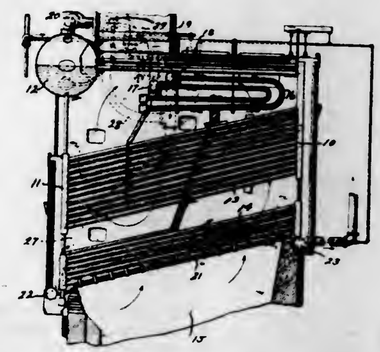
1. An upflow carburetor including a casing having vertically aligned air inlet and mixture outlet openings, a vacuum member with a vacuum chamber therein located in said casing in the path of a current of air flowing through said casing, means providing a passage from said chamber to a source of fuel supply, means for causing the fuel to change its direction of flow in said chamber below the first mentioned means, a valve to regulate flow of fuel to said chamber, and means for applying force mechanically to said valve to open it.

1,890,783. MACHINE FOR THE MANUFACTURING OF KNOTTED CARPETS AND THE LIKE. FRANZ HUEBNER, Zwittau, Czechoslovakia, assignor to Smyrna Automat G. m. b. H., Zittau, Saxony, Germany. Filed Sept. 16, 1930, Serial No. 482,307, and in Austria Aug. 27, 1929. 11 Claims. (Cl. 139—6.)



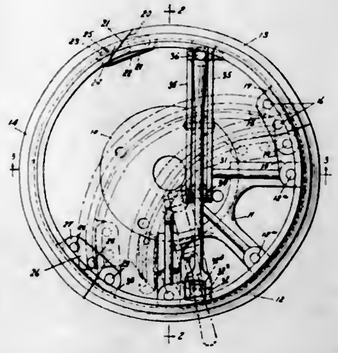
1. In a device for the manufacture of knotted carpets and the like with Smyrna or Persian knots, having a mechanism for forming the knots and means for feeding forward the knotting device and nippers for withdrawing pile threads, a series of thread setters associated with the pile threads and adjustable independently of each other within the grasping range of said nippers, actuating means for the knotting mechanism being set in motion by the adjustment of one of said thread setters within the grasping range of said nippers.

1,890,784. SUPERHEATER STEAM BOILER. DAVID S. JACOBUS, Jersey City, N. J., assignor to The Babcock & Wilcox Company, Bayonne, N. J., a Corporation of New Jersey. Original application filed June 17, 1924, Serial No. 720,502. Divided and this application filed June 20, 1924, Serial No. 721,184. Renewed Apr. 8, 1932. 16 Claims. (Cl. 122—478.)



10. In combination, a furnace chamber, a superheater tube so placed as to be exposed to radiant heat from said chamber, a boiler tube disposed at least in part behind said superheater tube so as to be shielded thereby from the radiant heat of the chamber, and means for holding said tubes in close thermal contact with each other.

1,890,785. COLLAPSIBLE TIRE BUILDING FORM. FRANK L. JOHNSON, Akron, Ohio. Filed Mar. 22, 1930. Serial No. 438,177. 8 Claims. (Cl. 154—9.)

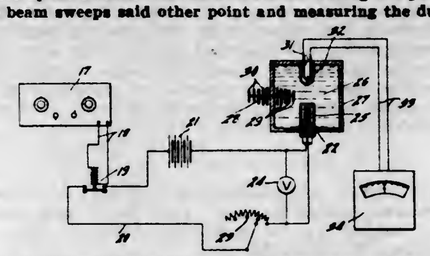


2. A collapsible tire building form comprising a plurality of sections hinged together including an intermediate fixed section and means spanning the fixed section and a hinged section adapted to be contracted and expanded to collapse and expand said movable section.

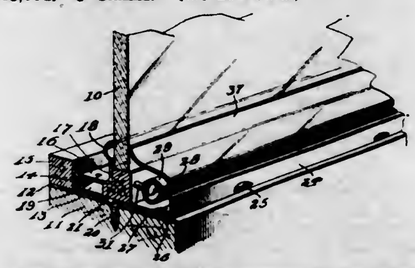
1,890,786. RADIO DISTANCE OR LOCATION FINDER. WILLIAM S. JOHNSTON, Akron, Ohio. Filed Mar. 3, 1930. Serial No. 432,782. 15 Claims. (Cl. 250—11.)

3. That method of determining distances by radio which comprises rotating a focused radio beam at one point, causing the signal received from said beam at another point

to set up an electric current in a circuit during the period the beam sweeps said other point and measuring the duration of said current by converting the current to heat and supplying the heat to a calorimeter to measure the same.

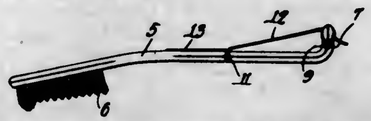


1,890,787. STORE FRONT CONSTRUCTION. LOUIS LAMER, Ramsey, N. J. Filed Apr. 29, 1930. Serial No. 448,354. 5 Claims. (Cl. 20—56.4.)



1. A store front construction comprising front and rear rails, a sill arranged between the rails and adapted to support the pane of glass, the front rail having a resilient hollow bead, a plurality of screws engaging the hollow bead and extending rearwardly through the sill and through the rear rail, and adjusting means mounted upon the rear ends of said screws.

1,890,788. DENTAL FLOSS HOLDER. JESSE A. LANDIS, Eaton, Ohio. Filed June 16, 1930. Serial No. 461,558. 1 Claim. (Cl. 132—91.)

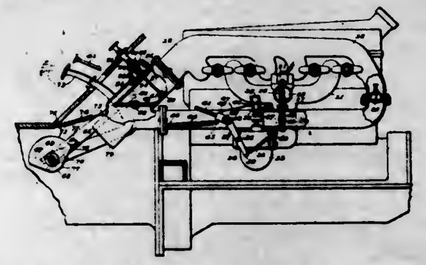


A tooth brush handle comprising a body portion, one end of the body portion extending at right angles with respect to the main portion of the handle and having a notch, said right angled portion having a notch formed in the side edge thereof, said notches adapted to receive one end of a length of dental floss, said handle having notches in the opposite side edges thereof at points intermediate the ends of the handle, said notches adapted to receive the dental floss which is looped around the handle, said handle having a flat surface against which the dental floss is pressed by the finger of the user, removably securing the dental floss in position.

1,890,789. PROCESS AND PRODUCT FOR TREATING EMULSIONS OF MINERAL OILS OR THE LIKE. WILLIAM B. LERCH, Bartlesville, Okla., assignor, by direct and mesne assignments, to Curo Process Company, Bartlesville, Okla., a Corporation of Delaware. Filed Oct. 11, 1929. Serial No. 399,098. 10 Claims. (Cl. 196—4.)

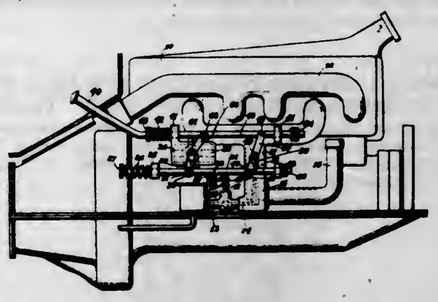
8. The process of resolving oil emulsions which comprises mixing therewith a demulsifying agent comprising the product of reacting a chlorinated tarry material, formed by chlorinating tarry material of the polyolefine, cyclopentene and cyclohexene series, with sulphonated cottonseed oil.

1,890,790. BRAKING ATTACHMENT FOR INTERNAL COMBUSTION ENGINES. LESTER H. MESSINGER, Jr., Bridgeport, Conn. Filed Apr. 15, 1926, Serial No. 102,346. Renewed Jan. 13, 1932. 30 Claims. (Cl. 128—97.)



1. In an internal combustion engine, a carburetor, a cylinder, a piston in said cylinder, an intake manifold between said carburetor and cylinder, an exhaust line with which said cylinder is adapted to communicate, a throttle, throttle actuating means, air inlet means in said intake manifold, means holding said air inlet means in closed position, means for moving said air inlet means to open position, said last mentioned means being operative only when said throttle actuating means is in the idling position of said throttle and the engine speed is above a predetermined speed, and mechanism for closing said exhaust line only when said throttle actuating means is in the idling position of said throttle and the engine speed is above said predetermined speed to build up pressure in said cylinder adapted to retard the advancement of said piston, whereby to produce a braking action against said piston.

1,890,791. ATTACHMENT FOR INTERNAL COMBUSTION ENGINES. LESTER H. MESSINGER, Jr., Bridgeport, and ANDREW L. RIKER, Fairfield, Conn. Filed Mar. 15, 1927. Serial No. 175,484. 22 Claims. (Cl. 123—97.)

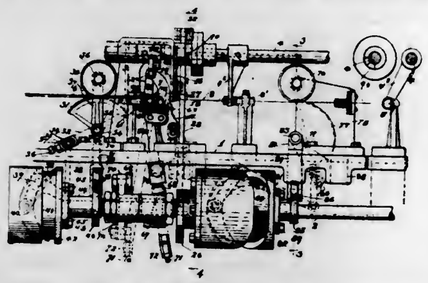


1. In an internal combustion engine, a carburetor including a fuel supply line and an air inlet, a cylinder, an intake manifold between said carburetor and cylinder, a fuel control valve in said fuel supply line, a throttle valve in said intake manifold between said carburetor and cylinder, means for holding said fuel control valve to open said fuel supply line, throttle actuating means for manipulating said throttle valve when said fuel supply line is open to cause a feed of explosive mixture to said cylinder, and means for moving said fuel control valve to close said fuel supply line and for simultaneously moving said throttle valve to open position.

1,890,792. WELDING MACHINE. VANDOLAH MORRISON, Cleveland, Ohio, assignor to Edith J. Conway, Cleveland, Ohio. Filed Sept. 12, 1929. Serial No. 392,070. 7 Claims. (Cl. 219—4.)

1. In a machine of the character described, spaced adjustable mechanism for gripping and feeding the end sec-

tions of a composite lamp wire into alinement with each other in longitudinally spaced positions in said machine, adjustable means for automatically shearing said sections to their desired lengths, and means for releasing said gripping means, automatically acting and adjustable means

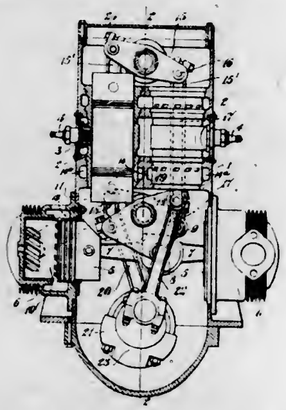


for feeding the intermediate section into said machine, and means for transferring the same into the gap between said end sections and into an alinement therewith, a common operating shaft and an adjustable cam thereon for each of said operating means, said operating means being adjustable relatively to each other.

1,890,793. PROCESS FOR THE EXECUTION OF GAS REACTIONS. ERICH NOACK, Wiesdorf-on-the-Rhine, and OSWIN NITZSCHKE, Leverkusen-on-the-Rhine, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed Oct. 13, 1927, Serial No. 226,086, and in Germany Oct. 20, 1926. 2 Claims. (Cl. 204—31.)

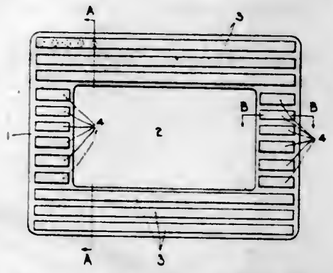
1. The process which comprises passing a mixture of hydrogen and oxygen through a zone of silent electrical discharges while subjecting said mixture to silent electrical discharges and maintaining the temperature of said mixture and of the resulting reaction products above their dew points while in said zone.

1,890,794. INTERNAL COMBUSTION ENGINE OF THE OPPOSITELY-MOVING PISTON TYPE. CORNELIS JOANNES HUGO PENNING, Victorias, Negros Occidental, Philippine Islands. Filed Jan. 24, 1931, Serial No. 511,025, and in Great Britain June 17, 1930. 5 Claims. (Cl. 123—51.)



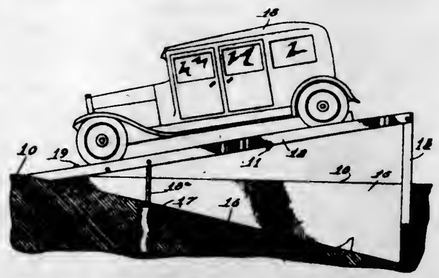
5. In a reciprocating engine having a pair of parallel cylinders with oppositely disposed pistons in each cylinder and a crank at one end of said cylinders, rockers at each end of said cylinder, the rocker adjacent the crank connected directly thereto by a connecting rod, the rocker remote from the crank connected indirectly to the crank through an idler rocker coaxial with the first mentioned adjacent rocker, said crank and remote rocker being connected to opposite ends of said idler rocker by connecting rods, the remote pistons connected to opposite ends of the remote rocker and the pistons adjacent the crank connected to opposite ends of the adjacent rocker.

1,890,795. INDIA-RUBBER SPRING. ALEXANDER SPENCER, London, England. Filed May 8, 1929, Serial No. 360,293, and in Great Britain Apr. 9, 1929. 4 Claims. (Cl. 267—63.)



1. An india-rubber spring unit comprising a rectangular metal plate having parallel perforations and straight bars of india-rubber extending parallelly across said plate on both sides thereof united through said perforations and operative on force being applied at an inclination to be stressed uniformly in both lateral directions.

1,890,796. STORAGE APPARATUS. MARCUS C. STEARNS, Chicago, Ill. Filed Sept. 13, 1929. Serial No. 392,298. 5 Claims. (Cl. 214—1.)

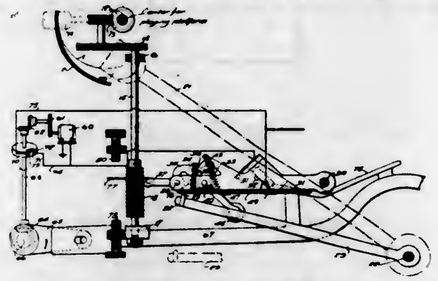


1. Storage apparatus for vehicles including; a supporting surface with a depression therein having a slanting bottom, the upper end of said bottom being substantially level with said surface; an inclined platform above said depression with its lower end substantially level with said surface and its upper end pivotally supported above the deeper end of said depression, said platform adapted to hold a vehicle stored thereon; and means for raising the lower end of said platform to permit the storage of a second vehicle in said depression and under said platform.

1,890,797. AUTOMATIC CONTROL FOR PHONOGRAPHS. JACK POTTER STOCKTON, Spring Lake, N. J., assignor to Stromberg-Carlson Telephone Manufacturing Company, a Corporation of New York. Filed June 3, 1929. Serial No. 368,086. 9 Claims. (Cl. 274—1.)

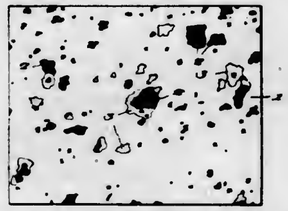
1. The combination with a talking machine having a rotatable record support, and sound reproducing means including a stylus cooperative with sound grooves on the sound record and moved thereby across said support, of a

pivotally supported swingable arm carrying a member bodily moving therewith and normally having a fixed position relative thereto, the said member being actuated by the stylus at a speed proportional to the pitch of the record groove, a worm driven synchronously with the record support, a follower for the worm carried by the arm to actuate the arm at the same speed it is normally



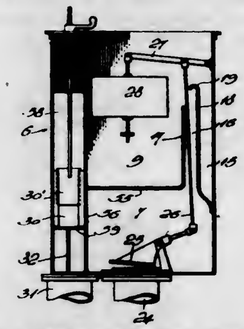
moved by the stylus actuated member, whereby the arm and member operate as a unit so long as the record groove is of uniform pitch and a differential movement is brought about by a variation in pitch of the record groove, and phonograph controlling trigger mechanism mounted on the first arm, said trigger mechanism being released by a sudden movement of the stylus.

1,890,798. ARTIFICIAL STONE. JOHN WRIGHT WARREN, Knoxville, Tenn. Filed Feb. 5, 1931. Serial No. 513,691. 4 Claims. (Cl. 106—24.)



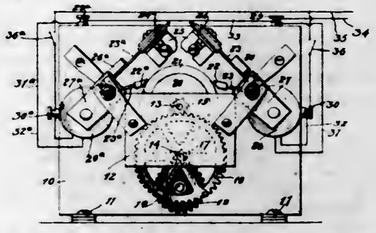
1. The method of making void-containing artificial stone which comprises mixing a cementitious material, insoluble aggregates and water to form an intimate plastic mix, adding to the mix lumps of a material selected from the group consisting of iron sulphate and copper sulphate, and then allowing the mix to set.

1,890,799. PAPER STOCK REGULATOR. HAROLD DONALD WELLS, Glens Falls, N. Y. Filed May 22, 1930. Serial No. 454,703. 17 Claims. (Cl. 92—46.)



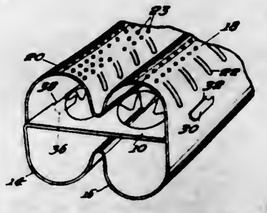
1. A stock regulating apparatus comprising a stock-rectifying chamber, stock-conducting means leading to said rectifying chamber and embodying a stock valve, water-conducting means leading to said rectifying chamber and embodying a water valve, a stock-raised float in said rectifying chamber and means connecting said float with said stock valve for controlling the latter, a stock-receiving control chamber and a passage leading thereto from said rectifying chamber, a stock-lifted float in said control chamber and means connecting this float with said water valve to control the latter, and a discharge passage leading from said control chamber.

1,890,800. ELECTRIC MOTOR. WARD WILLIAMS, Brandon, Wis. Filed June 21, 1930. Serial No. 462,839. 2 Claims. (Cl. 172—126.)



1. In a vibratory electric motor of the type embodying a friction wheel and a friction pawl adapted to successively strike said wheel to rotate the latter; an inherently resilient oscillatory arm fixedly mounted at one of its ends and carrying said pawl, the resiliency of said arm alone constituting means for limiting its oscillation, an armature secured to said arm and hence movable along a predetermined path as said arm oscillates, and a stationary electro-magnet entirely out of the path of said arm, said electro-magnet having a pole-piece co-operable with said armature for oscillating said arm, said pole-piece being permanently spaced from said armature in a direction transverse to said path of the armature to prevent contact of said pole-piece and armature, whereby a quiet motor having strong torque is provided.

1,890,801. EGG CARTON. CHRIST S. ANTON, Chicago, Ill. Filed Mar. 17, 1931. Serial No. 523,222. 4 Claims. (Cl. 229—29.)

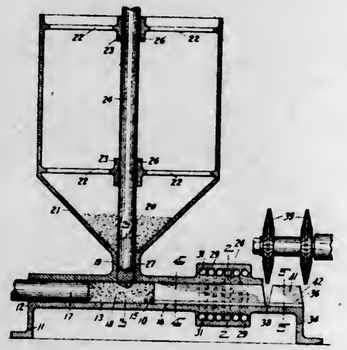


1. An egg carton, composed of a single blank, one end of the blank comprising a flat egg supporting element having indentations therein for receiving eggs, and a pair of shell-like top and bottom sections adapted to be disposed respectively about the egg receiving section, said bottom section having slots therein adapted to receive tongues integral with the egg receiving section, and additional tongues on the end of the cover member adapted to be received in slots in the edge of the egg receiving member.

1,890,802. AUTOMATIC MOLDING METHOD AND MACHINE. VINCENT G. APPLE, Dayton, Ohio. Filed Sept. 21, 1929. Serial No. 394,340. 1 Claim. (Cl. 18—12.)

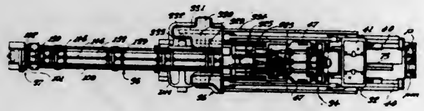
A continuously operable machine for forming a loose thermo plastic molding compound into parts of uniform cross section and of an exact length, comprising, in combination, a hollow cylinder having at one end an internal cross section corresponding to the cross section of the

part to be molded, means to heat the part within said end to cure said part, a plunger in the other end slidably fitted and endwise movable a predetermined distance to compact a quantity of said loose compound exactly sufficient to form one of said parts and to force the part previously formed from the end of the cylinder, a hopper containing a supply of the molding compound above said cylinder forward of the end of said plunger and connected



by a cylindrical opening to said cylinder, a vertically withdrawable plunger in said opening operable upwardly to admit to said cylinder a volume of said compound sufficient for one of said parts then downwardly to confine said volume to said cylinder, and two intermittently operable saws operable intermediate the movement of said plunger to cut said parts to an exact length, the one saw positioned to separate the cured part from the part being cured and the other positioned to slightly trim off the free end.

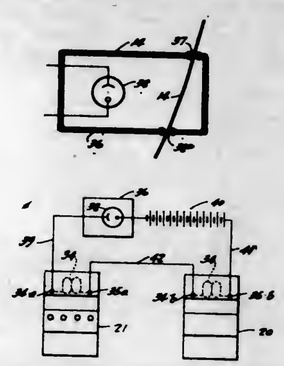
1,890,803. METHOD AND APPARATUS FOR WORKING METAL. GEORGE B. COE, Waterbury, Conn., assignor, by mesne assignments, to Tube Reducing Corporation, Wilmington, Del., a Corporation of Delaware. Filed Apr. 29, 1930. Serial No. 448,222. 60 Claims. (Cl. 80—14.)



43. Apparatus for reducing stock which is movable along a substantially fixed longitudinal axis, comprising in combination, a bed, guideways on said bed, a saddle mounted to reciprocate on said guideways, oscillating swaging devices mounted in bearings in said saddle, means for adjusting said saddle on said guides from opposite sides to maintain the saddle axis in coincidence with said stock axis, means to adjust said swaging devices from both sides of said axis to maintain said bearing axes at equal distances from said stock axis, and means to adjust the effective radial length of said swaging devices.

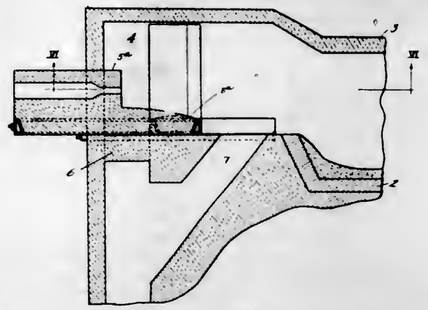
1,890,804. FIRE CONTROL FOR FILM UTILIZING MACHINES. WILLIAM H. DE WITT, Los Angeles, Calif., assignor of one-half to J. Glenn Marks, Los Angeles, Calif. Filed May 5, 1931. Serial No. 535,189. 5 Claims. (Cl. 88—17.)

1. A fire controlled system for action upon an inflammable travelling strip comprising in combination an inflammable strip, a dark box having openings for the passage therethrough of said strip, a light sensitive cell subject to light rays derived from inflammation of said strip within said box, electromechanical means to act upon said strip upon inflammation of the latter; a circuit containing



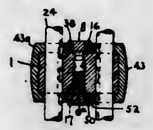
a source of electrical energy, said cell and said electromechanical means whereby upon inflammation of said strip said electromechanical means is operated.

1,890,805. OPEN-HEARTH FURNACE. NIKLAS F. EGLER, Monessen, Pa. Filed Apr. 30, 1931. Serial No. 533,960. 4 Claims. (Cl. 263—15.)



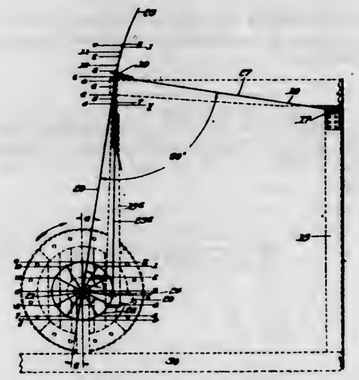
3. In an open-hearth metallurgical furnace of reversing type the combination with a furnace chamber of duplicate ports at opposite ends thereof, an uptake opening through the floor of the port in a position remote from the furnace chamber, a passage opening through the floor of the port in a position adjacent to the furnace chamber, a slide movable within the port from a position of closure above said passage to a position remote therefrom, and a fuel nozzle mounted integrally with and movable in unison with said slide from active to inactive position.

1,890,806. CLICK LOCK. ALEXANDER ENOS, New York, N. Y. Filed Apr. 14, 1931. Serial No. 529,953. 10 Claims. (Cl. 70—113.)



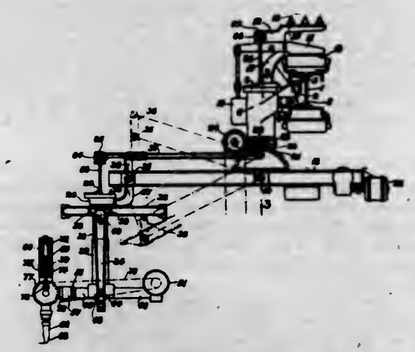
1. In a lock of the character described, wherein the legs of a shackle are slidably and removably mounted in holes in a cylindrical body which is a part of said lock and formed with holes adjacent each end, means for securing the shackle to said body, comprising a revolvable operating ring mounted on said body and carrying pins on each side engageable and cooperating with pins in locking rings mounted on said body on each side of said operating ring, said locking rings having notches therein adapted to be positioned to unlock said shackle and a means within said body cooperating with said operating ring in providing a clicking means.

1,890,807. METHOD OF AND APPARATUS FOR PUMPING WELLS. ARTHUR L. FABER, Pine Bluff, Ark. Filed Dec. 31, 1930. Serial No. 505,765. 3 Claims. (Cl. 74—14.)



1. In a pumping rig, the combination with a Samson post, of a walking beam fulcrumed thereon, a transverse crank shaft rotatably mounted below and outwardly beyond an end of said beam on a line perpendicular to the beam lever arm, a crank rotatable with said shaft, and a pitman pivotally connected to the beam and the crank, whereby the parts produce substantially even acceleration.

1,890,808. SAND MOLDING MACHINE. EDGAR CHARLES FIELDING, Walsall, England. Filed Apr. 22, 1932, Serial No. 606,776, and in Great Britain May 2, 1931. 20 Claims. (Cl. 22—36.)



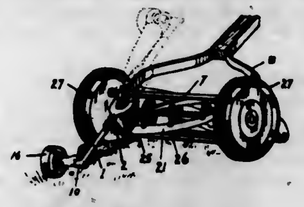
1. A sand molding machine comprising a sand delivery chamber, a ram in said chamber, automatic mechanical means for causing sand to be delivered intermittently in predetermined quantities into said chamber, and mechanical means for operating the ram, after each delivery of sand, to discharge sand from the chamber and pack it into the mold.

1,890,809. SENSITIVE DOOR EDGE SWITCH. PARIS R. FORMAN, Rahway, N. J., assignor to National Pneumatic Company, New York, N. Y., a Corporation of West Virginia. Filed Mar. 29, 1932. Serial No. 601,758. 7 Claims. (Cl. 200—6.)



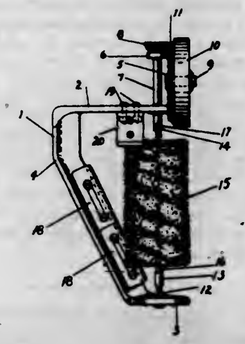
7. A device as described, comprising a door, a pair of arms pivotally mounted on the edge of the door, a pair of metal bands secured to said arms, springs for attaching the other ends of said bands to the edge of the door, means for limiting rotation of the arms under the tension of said springs, means for normally holding the bands in spaced relation, flexible means for enclosing all of said elements, and means for making electrical connection with said bands.

1,890,810. ATTACHMENT FOR LAWN MOWERS. ERNEST ALBERT GAST, Cincinnati, Ohio. Filed July 21, 1931. Serial No. 552,161. 12 Claims. (Cl. 56—249.)



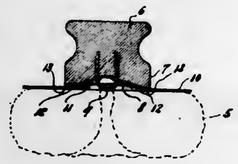
1. A device of the character specified comprising a brush, means for mounting said brush on a lawn mower on an axis disposed at an angle with respect to the cutting elements of said mower, and means for rotating said brush.

1,890,811. LAWN TRIMMING DEVICE. ERNEST ALBERT GAST, Cincinnati, Ohio. Filed Jan. 18, 1932. Serial No. 586,261. 13 Claims. (Cl. 56—229.)



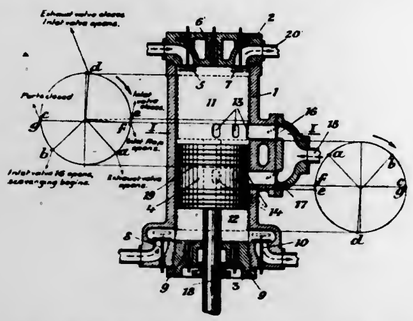
1. A device of the character specified comprising a frame, a cutter carried by said frame, a non-cutting member movably mounted in said frame, and means for the movement of said member, whereby objects to be cut are moved against said cutter.

1,890,812. SCOURING DEVICE. RALF L. HARTWELL, Orange, N. J., assignor to Metal Textile Corporation, West Orange, N. J., a Corporation of Delaware. Filed Apr. 25, 1932. Serial No. 607,331. 3 Claims. (Cl. 15—210.)



1. An abrasive scouring device, comprising a metallic abrasive body, a hand grip therefor, fastening means for securing the central core of said abrasive body to the lower end of said hand grip, and a shield of more or less flexible sheet material interposed between said abrasive body and hand grip to overlie outwardly extending portions of the former, said shield having a central opening of less diameter than the lower end of the hand grip whereby the secured central core of said abrasive body may extend therethrough to thus retain the shield against lateral displacement from its assembled relation to and between said abrasive body and hand grip.

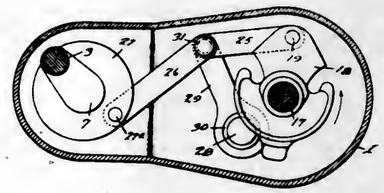
1,890,813. FOUR-STROKE INTERNAL COMBUSTION ENGINE. HANS HEINZELMANN, Kusnacht, Switzerland. Filed July 16, 1929, Serial No. 378,639, and in Switzerland Mar. 4, 1929. 4 Claims. (Cl. 123—75.)



1. In a four-stroke internal combustion engine, a cylinder having inlet and exhaust valves disposed in the end thereof and a plurality of air inlet ports arranged in the wall thereof, a piston in said cylinder, said air inlet ports being so arranged as to be covered by said piston during its travel in said cylinder and to be uncovered by said piston during its travel in said cylinder after the inlet valve has closed during the suction stroke, means for supplying air under pressure to said air inlet ports, and means responsive to a difference in pressure between said cylinder and said air supply for controlling the supply of air to said cylinder, whereby during the exhaust stroke air is introduced into said cylinder from said air inlet ports and during the suction stroke air is introduced into said cylinder first from said inlet valve and subsequently from said air inlet ports.

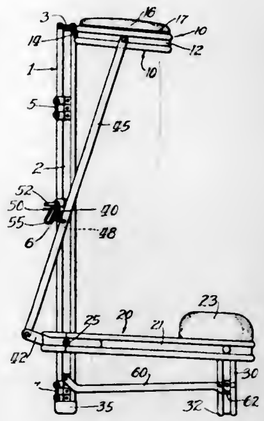
1,890,814. CHECKING FLOOR HINGE. HENRY E. HUBBS, Shelby, Ohio, assignor to The Shelby Spring Hinge Company, Shelby, Ohio, a Corporation of Ohio. Filed Jan. 23, 1932. Serial No. 588,407. 4 Claims. (Cl. 16—55.)

1. In a door check of the character described, the combination of a door supporting spindle, door cushioning means connected with said spindle adapted to check the movement of the door toward closing position, a door closing spring, a non-rigid connection between said spring and said spindle including three links pivotally connected so as to pro-



duce a toggle action as the door moves from closed to open positions, and means constraining one of said links to move about a fixed pivot.

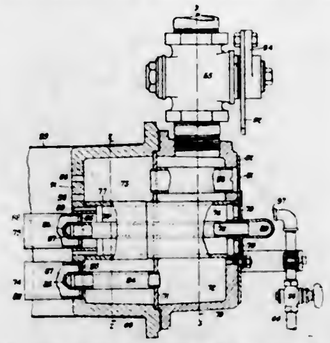
1,890,815. KNEELING BENCH. JOHN KAZOWSKI, Chicago, Ill., assignor to Joseph Silverman, Chicago, Ill. Filed Apr. 9, 1930. Serial No. 442,751. 6 Claims. (Cl. 155—166.)



6. A collapsible kneeling bench comprising a frame, an arm rest pivoted to said frame, a knee rest pivoted to said frame, means for swinging said rests simultaneously into substantial horizontal position one above the other on the same side of said frame member, a support for said frame pivoted to said knee rest, and means connecting said support to said frame for swinging said support about its pivot.

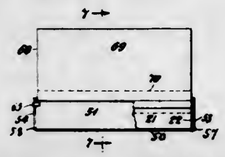
1,890,816. GAS HEATING SYSTEM. GEORGE KEITH, London, England, assignor to The Surface Combustion Company, Incorporated, New York, N. Y., a Corporation of New York. Filed June 25, 1931, Serial No. 546,905, and in Great Britain July 31, 1930. 5 Claims. (Cl. 158—109.)

1. A gas heating system, comprising at least one set of burners, a tube surrounding said burners, said tube being open at the discharge end, a combustion chamber into which said tube extends, connections for supplying separately combustible and combustion-supporting media to said burners, means permitting passage of a secondary supply of combustion-supporting medium to the opposite end of said tube, means for controlling separately the supplies of said media to said burners, said last mentioned means including a governor loaded to a pressure equal to that of the supply of combustion-supporting medium entering said burners, said governor serving to maintain a constant proportion between the combustible medium and the combustion-supporting medium supplied to said burn-



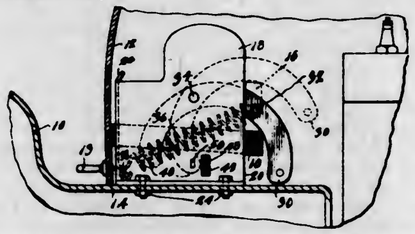
ers, draught means for removing the products of combustion from said chamber, and means for varying the draught to regulate the flow of said media to said burners.

1,890,817. CARDBOARD CIGAR BOX. MORRIS LAZOW, Brooklyn, N. Y. Filed Oct. 13, 1930. Serial No. 488,314. 2 Claims. (Cl. 229—28.)



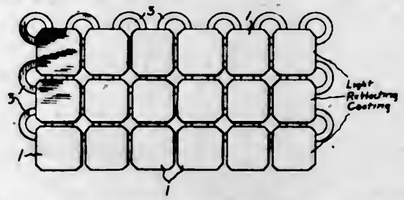
1. In a box the combination of a body of one piece of material comprising a bottom wall, and a front wall, rear wall and side walls extending up from said bottom wall, the top edges of the side walls on a level higher than the top edges of the front and rear wall, said side walls covering the side edges of the said front and rear wall forming sharp corners, means to connect said side walls and said front and rear wall, a neck consisting of one strip of material comprising a plurality of members within the said body and fastened thereto, the members of the neck adjacent to the side walls of the body on the same level with the top edges of said side walls, the members of the neck adjacent to the front and rear walls of the body having their top edges on the same level with the top edges of the said front and rear walls, and lugs extending from the members of the neck that are adjacent to the side walls of the body extending and bearing on the upper edges of the other members of the neck and bearing upon the top edges of the front and rear walls of said body.

1,890,818. HOOD LOCK. ANDREW R. LUCIE, Cleveland, Ohio. Filed Apr. 9, 1931. Serial No. 528,913. 5 Claims. (Cl. 292—78.)



1. The combination with an automotive vehicle having a hood, a sill therefor and a door, of a locking device secured to the sill, a movable member forming a part of said locking device and normally and yieldingly engaging the hood to hold the same against rattling, a locking element movable into the path of movement of said member to prevent disengagement of the member with the hood, and a connection between said locking element and the door to effect movement of the locking element out of the path of movement of said member to permit opening of the hood when the door is opened.

1,890,819. SOUND TRANSMITTING AND LIGHT REFLECTING SCREEN. SAHATIEL G. MANDALIAN, North Attleboro, Mass. Filed Aug. 6, 1930. Serial No. 473,353. 5 Claims. (Cl. 88—24.)



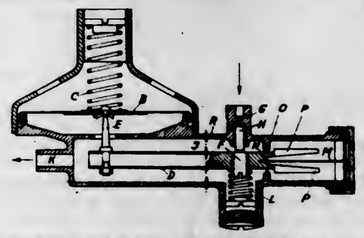
5. A light reflecting and sound transmitting screen, comprising a plurality of individual metal plates in substantially the same plane each having a light diffusing surface, and means interconnecting the metal plates to form an articulated surface, the relative area of the plates and the spaces between them being such as to give efficient sound transmission and to present an apparently continuous surface to the eye when viewed from a predetermined distance.

1,890,820. AIRPLANE. ROSCOE I. MARKEY, Nassau County, N. Y., assignor to The Aviation Patent and Research Corporation, New York, N. Y., a Corporation of New York. Filed Dec. 9, 1931. Serial No. 579,869. 8 Claims. (Cl. 244—31.)



1. An aerofoil of composite structure comprising separately and independently formed upper and lower parts to form a front wing section, a rear wing section detachably secured to said front section, said upper and lower parts being braced by means of ribs releasably secured to each other at the leading edge of the wing, a partition plate comprised of flanges on the rear end of the ribs of the front wing section, said ribs being releasably connected to each other at said plate, and said rear wing section being connected to said plate.

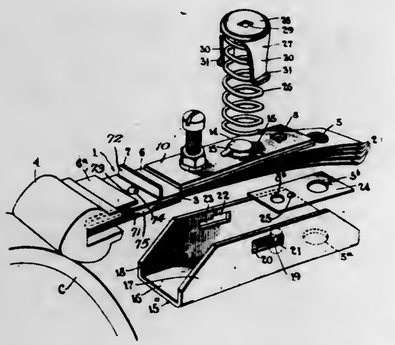
1,890,821. PRESSURE REDUCING VALVE. HANS MEYER, Kiel-Wellingdorf, Germany, assignor to Deutsche Gasglublicht-Auer-Gesellschaft m. b. H., Berlin, Germany, a Corporation of Germany. Filed Sept. 8, 1930, Serial No. 480,359, and in Germany Sept. 14, 1929. 3 Claims. (Cl. 50—26.)



1. A pressure reducing valve comprising a housing, a valve therein, a lever controlling said valve, a spring se-

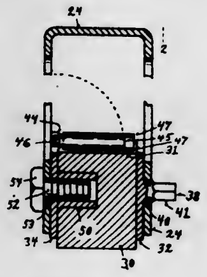
cured to said housing and to said lever, and a knife edge on said housing adjacent to the joint of the lever with said spring constituting a fulcrum for said lever and stabilizing the pivotal movements thereof, the weight of said lever being approximately balanced relatively to said fulcrum, so that the valve will operate equally well in any position.

1,890,822. CONTACT DEVICE. CHRISTOPHER W. MURRAY, Tonawanda, N. Y., assignor to Niagara Falls Smelting & Refining Corporation, Buffalo, N. Y. Filed June 20, 1930. Serial No. 462,507. 6 Claims. (Cl. 200—166.)



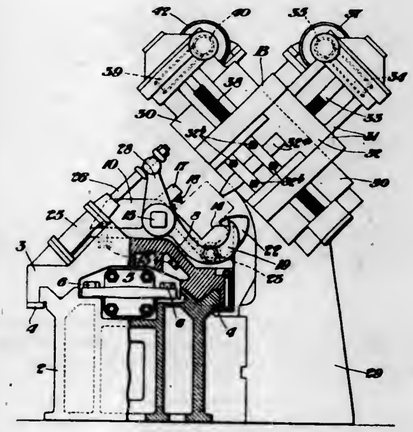
1. In a contact device for controllers, a mounting member, a contact finger having a resilient portion mounted on said mounting member and having a semi-rigid portion extending therefrom provided with a contact tip, a tension receiving member connected to said semi-rigid portion and overlying said resilient portion, tensioning means on said mounting member acting upon said tension receiving member to load the semi-rigid portion of the contact finger, and fulcrum means spacing said tension receiving member from said resilient portion whereby torque loads applied to said tip are transferred to said resilient portion and said tension receiving member is simultaneously movable on said fulcrum means in spaced relation to said resilient portion.

1,890,823. HOSE REEL. CHARLES NUHRING, Cincinnati, Ohio. Filed Sept. 17, 1930. Serial No. 482,538. 5 Claims. (Cl. 242—86.)



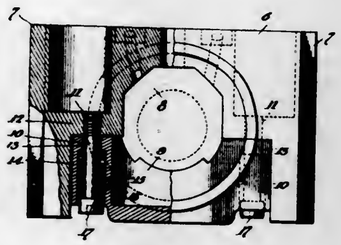
1. A hose reel comprising a supporting frame, a hub having a member to engage a loop of the hose to wind the hose upon said hub, and provided with a polygonal stud shaft at one end and a threaded socket at its opposite end adapted to receive the shank of a bolt, and a bolt, said stud shaft and said bolt serving to rotatably support and rotate said hub with reference to said frame and to enable the hub to be inserted into and removed from said frame.

1,890,824. BLOOM PLANER. JOHN W. OFFUTT, Ellwood City, Pa. Filed Jan. 11, 1930. Serial No. 420,165. 12 Claims. (Cl. 90—34.)



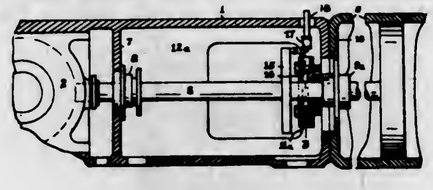
5. In a planer, a table mounted for reciprocatory movement, power operated means mounted on said table for lifting the work vertically, means mounted on said table for confining the force of gravity to cause the work to turn through an angle of approximately 90°.

1,890,825. LOCOMOTIVE JOURNAL BOX. ARTHUR FRED PHELPS, Bluefield, W. Va., assignor to West Virginia Armature Co., Bluefield, W. Va. Filed Apr. 28, 1931. Serial No. 533,533. 1 Claim. (Cl. 308—88.)



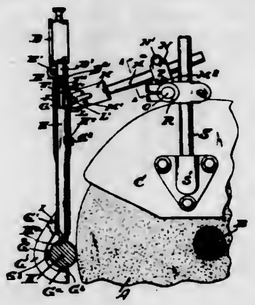
A journal box for railway car axles comprising a suitable support having an upper recess and a relatively larger under recess therein of rectangular cross section forming squared friction bearing surfaces, an upper axle bearing block fixedly mounted in said upper recess, a lower axle bearing block movably mounted in said under recess, said lower block having squared bearing surfaces fitting closely adjacent the complementary squared bearing surfaces formed in said under recess, depending bolts having fixed screw threaded engagement with the support freely passing through apertures in said lower block, cylindrical shaped openings extending entirely through the lower bearing block continuous with and larger than said bolt apertures, said fixed bolts having heads closely fitting within the lower ends of said large openings, and springs fitting wholly within said large openings on said bolts and resiliently mounting the lower block on said bolt heads, said springs and bolts operable to permit of limited angular movements of said lower block and restoring to normal position thereof, substantially as set forth.

1,890,826. POWER PUMP. JOHN B. PICARD, Toledo, Ohio. Filed Dec. 24, 1929. Serial No. 416,264. 2 Claims. (Cl. 103—202.)



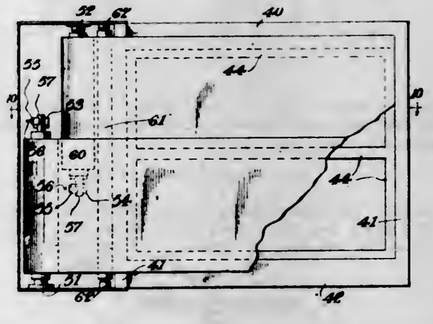
1. In a power pump, a pump chamber, a plunger therein, a power-transmitting means, a plunger rod connecting the plunger to the power-transmitting means, a packing for the plunger rod at the end of the chamber through which the rod reciprocates, a baffle on the rod, a chamber in which the baffle reciprocates with the rod, a chamber between the baffle and the pump chamber to dissipate the velocity of any liquid escaping from the pump chamber past the packing, and means for washing the said fluid from the velocity dissipating chamber.

1,890,827. GRINDING GAUGE. FREDERICK JACKSON PRATT, Ferndale, Mich. Filed Dec. 13, 1930. Serial No. 502,170. 1 Claim. (Cl. 33—147.)



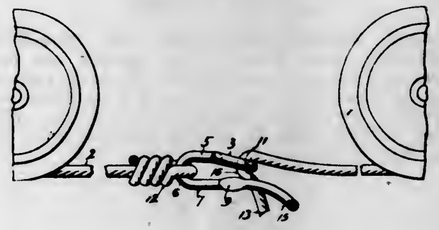
In a device for measuring rotating elements while grinding to size; a depending sleeve having a lateral, substantially arc-shaped extension, adapted to partially encircle the work element as it is ground to size; a transverse lug integral with the sleeve; a rod fitted with a yoke-shaped bracket, pivoted to the transverse lug of the sleeve; a shaft; a split bracket fitted to the shaft adapted to support said rod; a pair of springs coiled upon the shaft, respectively engaged at one end of the shaft and at their opposite ends to the split bracket, whereby the depending sleeve may be yieldingly supported and its vibrating movement checked; a post and means for securing the post to the frame of a grinding machine; a clamping member secured to the post for supporting the shaft; a movable rod housed in the depending sleeve and projecting through its lower end; a stylus fitted to the end of said rod formed of relatively hard metal; means for yieldingly forcing said rod to the limit of its movement in one direction; a dial indicator actuated by the movement of said rod; and a plurality of contact plates, adapted to bear upon the work element as it is ground to size, supported in the lateral substantially arc-shaped extension of the depending sleeve.

1,890,828. PROJECTION SCREEN. FRANK HERBERT RICHARDSON, South Lyme, Conn., and JAY CLEIS KROEBEN, Belleville, N. J. Filed Feb. 18, 1928. Serial No. 255,280. 7 Claims. (Cl. 88—24.)



1. A projection screen comprising a plurality of strips of carbonate coated paper joined at their adjacent edges by integral skived portions thereof in overlapping relation to form a substantially invisible seam.

1,890,829. ROPE TIGHTENER. RAYMOND R. RUNDELL, Waterville, Conn. Filed Feb. 24, 1930, Serial No. 430,690. Renewed Oct. 28, 1932. 7 Claims. (Cl. 24—131.)

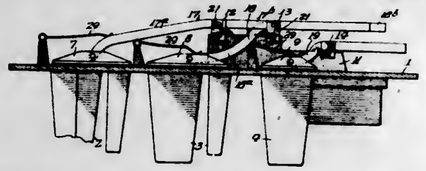


1. A tightener for rope having means for attachment to a support, said tightener having an eye member, a crotch member disposed substantially parallel to said eye member and having a converging crotch, the apex of which is disposed in a vertical plane adjacent that side of the opening of said eye member which is farthest away from said attaching means, said crotch member extending outwardly and downwardly away from said eye member and beyond the apex of said crotch, said eye member and said crotch member being adapted to receive the rope successively therethrough and adapted to move toward each other whereby tension on the main portion of the rope will cause the grip of said crotch and eye members to tighten upon the rope.

1,890,830. ACTION FOR A CONCERTINA. OTTO A. SCHLICHT, Chicago, Ill. Filed June 15, 1932. Serial No. 617,277. 8 Claims. (Cl. 84—476.)

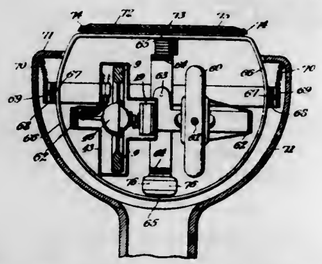
4. In an action for musical instruments of the concertina type, in combination with a pivot rod, a plurality

of valve supporting and operating bars, non-metallic blocks secured rigidly to said bars, and sleeve bushings



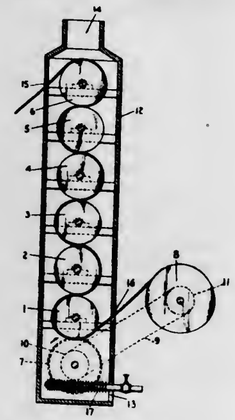
pressed through bores in said members out of contact with said bars and mounted on said rods so as to pivotally support the bars.

1,890,831. LIQUID GYROSCOPIC COMPASS. RODOLFO M. SMYTH, San Jose, Costa Rica. Filed Mar. 24, 1928. Serial No. 264,353. 11 Claims. (Cl. 33—226.)



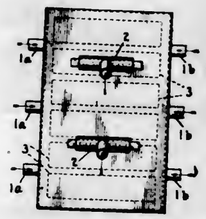
1. In a device of the class described, a liquid, means to hold said liquid, means to spin said liquid and means to detect any deflection of the spinning axis of the liquid relatively to any predetermined system of reference.

1,890,832. METHOD FOR DRYING THIN CELLULOSE SHEETS. CARL HERMANN VON HOESSLE and OTTO MARTIN SCHADE, Radebeul-Dresden, Germany, assignors to Chemische Fabrik von Heyden, A. G., Radebeul near Dresden, Germany, a Corporation of Germany. Filed Dec. 6, 1930, Serial No. 500,559, and in Germany Nov. 8, 1924. 8 Claims. (Cl. 34—24.)



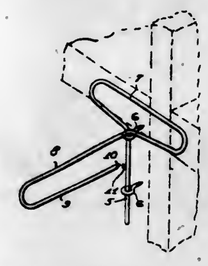
1. The method of drying webs of cellulose made from cellulose solutions, said method comprising causing the wet web of cellulose to follow a downwardly directed sinuous path and passing air over the moving web in one direction along both sides of the same.

1,890,833. MEANS FOR DRYING LONG WEBS OF THIN CELLULOSE SHEETS. CARL HERMANN VON HOESSLE and OTTO MARTIN SCHADE, Radebeul-Dresden, Germany, assignors to Chemische Fabrik von Heyden, A. G., Radebeul near Dresden, Germany, a Corporation of Germany. Filed Dec. 6, 1930, Serial No. 500,560, and in Germany May 18, 1927. 1 Claim. (Cl. 34—48.)



Means for drying moving webs of cellulose made from cellulose solutions, said means comprising the combination with a drying chamber having both an inlet and an outlet for the web, of a plurality of spaced apart cylinders, rotarily arranged horizontally in perpendicular alinement, means disposed on both sides of the chamber discharging air into the same in a lateral direction parallel to the moving web, means disposed in the front and rear of the drying chamber admitting air from without in a substantially horizontal direction upon the moving web, and an exit for the air.

1,890,834. DISPLAY AND DISPENSING HOOK. LEONARD C. WARAGER, Floral Park, N. Y., assignor to Shen Manufacturing Company, Germantown, Philadelphia, Pa. Filed May 13, 1931. Serial No. 537,119. 2 Claims. (Cl. 211—57.)

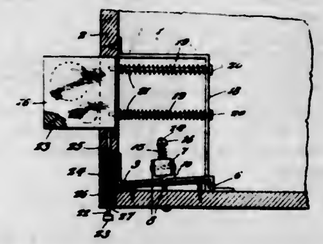


1. A hook of the character described formed of a single piece of wire and bent to form a vertical leg, a transverse head, a forwardly projecting upper substantially horizontal bar and a rearwardly projecting substantially horizontal lower bar, the end of the latter terminating short of and lying always in spaced relation to said leg, as and for the purposes set forth.

1,890,835. TABLE. GEORGE C. WEBB, Buffalo, N. Y. Filed June 13, 1931. Serial No. 544,168. 1 Claim. (Cl. 45—75.)

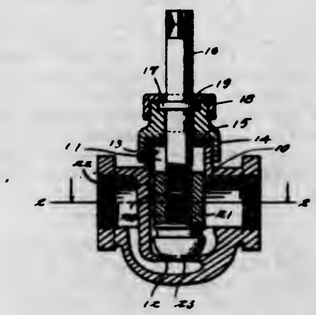
In a table, the combination with meeting rails, of a rightangular bracket secured to the inner sides of the rails, one rail having an opening therethrough with one end of the opening flush with one side of the bracket, a holder slidably mounted in the opening in the rail and arranged to bear against the flush side of the bracket, guiding and supporting pins secured in the inner end of the holder and slidably fitting through that side of the bracket which is parallel with the rail having the opening, expansion springs mounted on said pins and bearing at one end against the holder and at their opposite ends

against said side of the bracket, a locking pin mounted in and housed by the table rail having the opening at the side of the opening and adapted to engage the holder to



retain it in retracted position, and means housed in the rail yieldably holding the locking pin in the holder-engaging position.

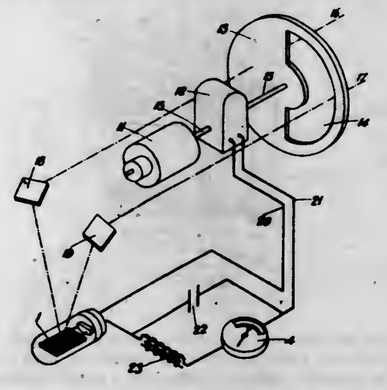
1,890,836. GLOBE VALVE. JOHN O. WEBB, Tulsa, Okla. Filed May 12, 1931. Serial No. 536,898. 1 Claim. (Cl. 251—48.)



A valve of the character described, comprising a body formed with a vertically extending valve chamber, a seat at the lower end of the chamber, a bonnet having screw-threaded engagement with the body, packing disposed between the bonnet and the body and extending across the upper end of the body, the upper end of the bonnet being formed with a recess, a stem extending through the packing and the bonnet and having a shoulder fitting within said recess, a cap nut having screw-threaded engagement with the bonnet and extending over the shoulder on the stem, the lower end of the stem being screwthreaded, and a valve disposed within the valve chamber and having interior screw-threads engaging the screw-threads on the stem, the valve having a globular lower end coacting with said seat, the valve and side wall of the chamber being splined to prevent rotation of the valve.

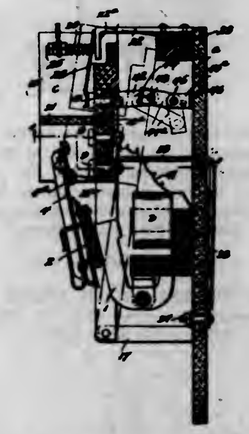
1,890,837. INSTRUMENT FOR THE COMPARISON OF THE INTENSITY OF LIGHT RAYS. FRANCIS CUTHBERT WHALEN, London, England, assignor to Radiovisor Foreign & Colonial Limited, London, England, a Corporation of Great Britain. Filed May 22, 1931, Serial No. 539,899, and in Great Britain May 24, 1930. 7 Claims. (Cl. 88—23.)

1. An instrument of the character referred to comprising a light-sensitive cell, an indicating instrument in series with said cell, means for supplying alternating current to said cell and to said instrument, a shutter rotated in phase with said alternating current, said shutter having a slot therein, two sources of illumination



for said cell, rays from said sources passing alternately through said slot whereby said cell is illuminated alternately by said sources of illumination.

1,890,838. MOTOR CONTROL SWITCH MECHANISM. GEORGE H. WHITTINGHAM, Baltimore, Md.; Safe Deposit and Trust Company of Baltimore and Eleanor V. D. Whittingham, executors of said George H. Whittingham, deceased, assignors to Monitor Controller Company, Baltimore, Md., a Corporation of Maryland. Filed Apr. 22, 1931. Serial No. 532,065. 10 Claims. (Cl. 200—7.)

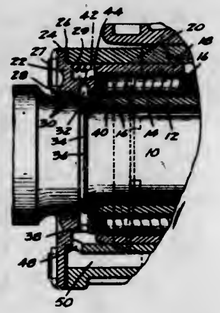


1. A motor control switch mechanism comprising a normally stationary contact, a switch member having a limited range of movement toward and from said contact and biased away from the contact, a magnet for moving said member into engagement with the contact, and manually controlled means for quickly moving the contact beyond the range of movement of said member.

1,890,839. SEAL OR GUARD. OTTO W. YOUNG, East Orange, N. J., assignor to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Filed Oct. 12, 1929. Serial No. 399,878. 4 Claims. (Cl. 308—187.)

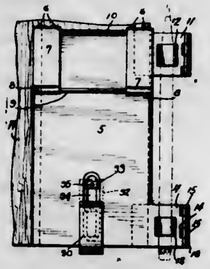
1. In a device of the character described, a casing, a shaft extending into the casing, a bearing between the

shaft and the casing, an end cap secured at the end of the casing and making a close joint with the shaft, the cap having an axially extending flange with a thrust face



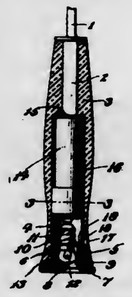
for the bearing, and the exterior wall of the flange having a peripheral relief groove communicating with the bearing to conduct lubricant therefrom; substantially as described.

1,890,840. PAD HOLDER. ALICE L. BREWER, East Hartford, Conn. Filed Nov. 29, 1930. Serial No. 499,118. 1 Claim. (Cl. 281—44.)



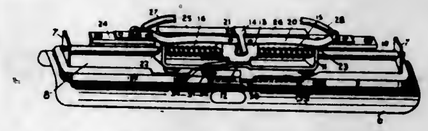
A pad holder comprising a rectangular plate having pad holding means on the upper part to hold a pad, and lateral extensions providing support for pencil holders, said extensions having clamping plates hinged to the outer edges thereof provided with clamping screws adapted to secure the clamping plates to the edge of a table.

1,890,841. KNIFE AND FLASH LIGHT. RICHARD D. BROWN, Olean, N. Y. Filed Feb. 14, 1931. Serial No. 515,856. 4 Claims. (Cl. 240—6.46.)



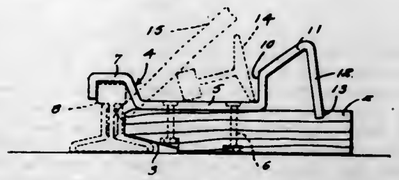
1. A knife having a blade and a handle extending rearwardly therefrom and formed with a pocket opening through its rear end, there being a side opening leading from the pocket, a cap for the rear end of said handle having a center opening and a neck extending from the cap about the opening into said pocket, marginal portions of the cap being folded inwardly to engage about the neck and bear against the rear end of the handle, a sleeve fitted into said neck, a bulb mounted in said sleeve with its base extending from the inner end of the sleeve towards the inner end of said pocket, said sleeve serving as a reflector for the bulb, a battery in said pocket having its center contact engaged by the center contact of the bulb base, a strip of conducting material operatively connected with the battery and provided with a contact adapted to engage the sleeve, a split resilient ring carried by said strip and tending to hold the contact thereof out of engagement with the sleeve, and an actuating element carried by the strip and projecting through the side opening of the handle.

1,890,842. ELECTRIC SWITCH. ARTHUR A. BULL and WALTER A. WOOD, Detroit, Mich., assignors to Handy Governor Corporation, Detroit, Mich., a Corporation of Michigan. Filed Jan. 26, 1931. Serial No. 511,227. 3 Claims. (Cl. 74—14.)



1. In a switch a snap mechanism comprising a reciprocating member having a cam surface, means for reciprocating the said member, a reciprocating cam member having a surface opposed to the aforesaid reciprocating member, and a pivoted latch adapted to be pivoted into abutting latching relation with the reciprocating member by the opposed cam member and held in abutting relation by the surface of the opposed cam member, the cam surface of the reciprocating member being adapted to release the latch after it has traversed the surface of the opposed cam member.

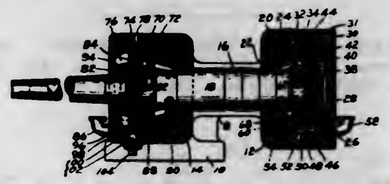
1,890,843. DEVICE FOR FACILITATING THE BREAKING OF METALLIC RAILS. JUNIUS E. BUSBY, Jackson, Ky., assignor of one-half to Bradley Coomer, Beattyville, Ky. Filed Sept. 19, 1931. Serial No. 563,884. 7 Claims. (Cl. 29—66.)



1. In a supporting device of the character described, a body having a flat area in which an elongated piece of work may rest, means located at one side of said area for coupling the body with an adjacent fixed member, and means at the opposite side of said area from said first means providing an abutment facing the area against which the said piece of work may bear, the said area and means at the two sides thereof being in a line extending transversely of the piece of work lying across the area.

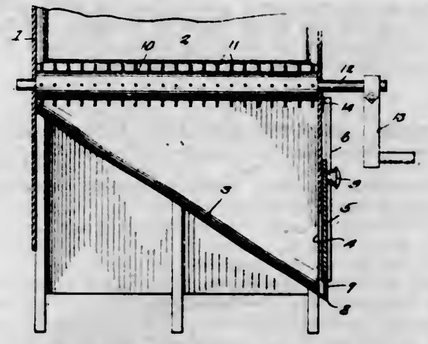
1,890,844. SHAFT MOUNTING AND LUBRICATOR. THOMAS C. DELAVAL-CROW, Bristol, Conn., assignor to The New Departure Manufacturing Company, Bristol, Conn., a Corporation of Connecticut. Filed Oct. 19, 1927. Serial No. 227,184. 8 Claims. (Cl. 308—131.)

1. In a device of the character described, a housing, a shaft having a bearing in the housing, the shaft having a tapered portion for forming a thin film of lubricant supplied to the shaft, a lubricant reservoir, a wick extending at a small inclination from the reservoir into contact with the tapered portion of the shaft, means for rotating the shaft to cause the film of lubricant to blow into a fine



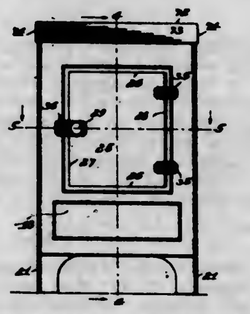
mist, and means at the other side of the bearing for drawing the lubricant through the bearing and comprising a stationary conical face on the housing and a rotary conical face in closely adjacent pumping relation thereto; substantially as described.

1,890,845. NAIL BIN. WILLIAM H. ELSTON, Marietta, Ohio. Filed Apr. 20, 1931. Serial No. 531,559. 5 Claims. (Cl. 221—146.)



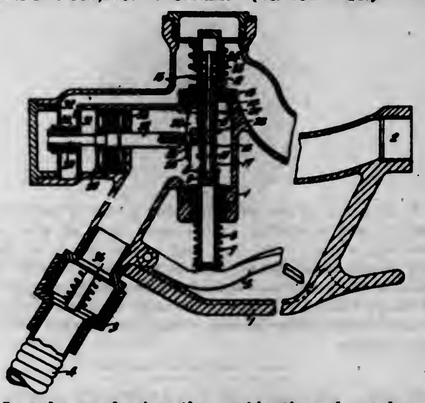
1. A dispensing apparatus including a bin, a delivery channel for receiving nails and the like from the bin, said channel having an inclined bottom, an agitating roll mounted for rotation in the top of the channel and having oppositely extending rows of spikes substantially bridging the channel, and a cut-off gate at the outlet of the channel.

1,890,846. TOY CABINET. HOWARD M. FANCHER, Rochester, N. Y., assignor to The Rochester Folding Box Co., Rochester, N. Y., a Corporation of New York. Filed Apr. 29, 1932. Serial No. 608,280. 11 Claims. (Cl. 46—37.)



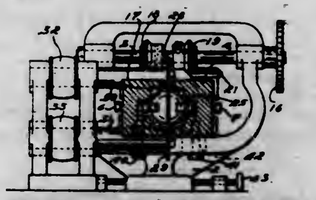
1. A toy cabinet comprising, in combination, a folding wall structure, a collapsible horizontal shelf member positioned within said wall structure and serving to hold the latter in erected position, and means for supporting said shelf member.

1,890,847. VALVE. HARRY GUNN FLORY and SAMUEL GEORGE COLEY, Luton, England, assignors to George Kent, Limited, London, England. Filed Jan. 6, 1932. Serial No. 585,139. 7 Claims. (Cl. 251—134.)



3. In valve mechanism the combination of a valve, an operating member, a detent device adapted to hold the valve in a predetermined degree of opening, means for effecting opening of the valve so that it can be held by the detent device, a detent device which normally holds the said opening means inoperative, and is released by actuation of operating member so that the valve is caused quickly to move and to be retained in the predetermined degree of opening, a pressure responsive device which is responsive to the pressure on both sides of the valve, and means controlled by the pressure responsive device for rendering the operating member inoperative when the pressures reach a predetermined relative value.

1,890,848. BEARING DIVIDING MACHINE. PHILLIP J. FORBRT, Detroit, Mich., assignor to Detroit Aluminum & Brass Company, Detroit, Mich., a Corporation of Michigan. Filed Jan. 16, 1930. Serial No. 421,322. 2 Claims. (Cl. 29—70.)



1. A machine for severing cylindrical bearing members into halves, comprising guide elements presenting four plane guide surfaces disposed at angles of substantially ninety degrees and defining a passageway for the bearing members which is substantially a parallelogram in cross section, means for engaging cylindrical bearing members and for moving same through the passageway with the bearing members substantially contacting with the four guide surfaces, cutting means projecting into the passageway for cutting the members into halves, at least two of said plane guide surfaces being associated with each other and means for adjusting them in unison toward and away from the other two guide surfaces for altering the parallelogram cross-sectional shape of the passageway for bearings of different diameters.

1,890,849. USE OF PINE OIL IN EMULSION BREAKERS. FRITZ EMIL FUCHS, Maplewood, N. J., assignor to Samuel J. Singer, New York, N. Y. Filed Sept. 18, 1930. Serial No. 481,808. 4 Claims. (Cl. 252—1.)

1. In combination with an emulsion breaker having a sulphonated oil content of pine oil to decrease the viscosity thereof at low temperatures.

1,890,850. PIVOT MEANS FOR SHEARS AND THE LIKE. ROBERT R. GONSETT, Los Angeles, Calif. Filed Sept. 12, 1930. Serial No. 481,461. 9 Claims. (Cl. 30—13.)

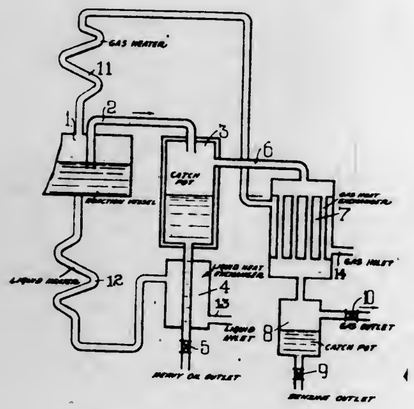


8. In a pair of shears comprising a pair of cutting members, a bolt extending transversely through the cutting members, a nut on the bolt, and means on one of the cutting members for locking said bolt against rotation in the member and additional means for resiliently engaging and yieldably locking said nut to the same member, both of said locking means being located within the surface contour of said member.

1,890,851. EXTRACT OF PARATHYROID GLAND AND PROCESS OF PREPARING THE SAME. ADOLPH M. HANSON, Faribault, Minn., assignor to Parke, Davis & Company, Detroit, Mich., a Corporation of Michigan. Filed Mar. 30, 1925. Serial No. 19,541. 6 Claims. (Cl. 167—74.)

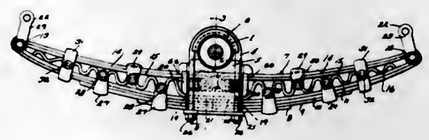
1. A new therapeutic product of manufacture containing an extract of mammalian parathyroid glands, said product being substantially free from calcium and characterized by its physiological property of raising the blood serum calcium above its normal value when administered to mammals.

1,890,852. SEPARATION OF GASEOUS AND LIQUID PRODUCTS. CHARLES FREDERICK REED HARRISON, Norton-on-Tees, England, assignor to Imperial Chemical Industries Limited, London, England, a British Company. Filed Nov. 12, 1928, Serial No. 318,928, and in Great Britain Dec. 31, 1927. 3 Claims. (Cl. 196—62.)



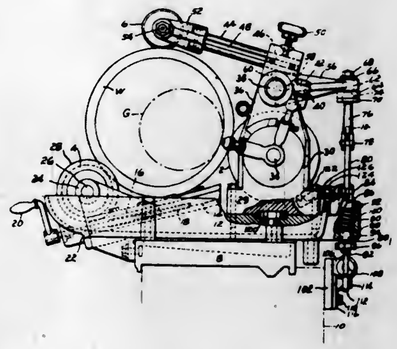
1. In a process for the destructive hydrogenation of carbonaceous materials in the liquid phase, the steps of withdrawing all of both the liquid phase and vapour phase, reaction products in a single stream from a reaction zone into a separation zone maintained at substantially the same pressure as that maintained in the reaction zone, and at a temperature sufficient to maintain the major quantity of the lower boiling hydrocarbons in the vapour phase, allowing the reaction products to separate in said zone, withdrawing the vapourous products from said separation zone, cooling them whereby to condense the lower boiling hydrocarbons, and separating uncondensed gas and liquid under high pressure.

1,890,853. VEHICLE SUSPENSION SPRING. WALTER HOWARD, Detroit, Mich. Filed Apr. 27, 1931. Serial No. 533,133. 6 Claims. (Cl. 267—47.)



1. A vehicle suspension spring comprising a plurality of spring leaves, some of the upper leaves of the spring being return-bent and lying in spaced relation to the main portion of the leaves, a flexible spreader positioned between the return-bent portion and the main portion of the leaves, and spring means so positioned in relation to the return-bent portion of the leaves as to resist downward pressure applied to the ends thereof.

1,890,854. GRINDING MACHINE. PHILIP H. HUTCHINSON, Montclair, N. J., assignor to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Filed Mar. 16, 1931. Serial No. 522,843. 12 Claims. (Cl. 51—103.)



1. In a grinding machine, a grinding wheel, a work-head, a sliding carriage for one of said members, a frame supporting the carriage, a movable work-holding member on the work-head, and mechanism operated by the movement of the carriage for moving the work-holding member into and out of operative position, said mechanism being constructed and arranged to transmit forces between the carriage and the frame substantially in the direction of sliding of the carriage; substantially as described.

1,890,855. SPEED INDICATOR SWITCH. DAVID C. LEAMING, Spokane, Wash. Filed Feb. 5, 1930. Serial No. 426,148. 2 Claims. (Cl. 200—52.)

1. In a speed indicator system for vehicles, the combination of a rotatable indicator shaft, a plurality of stationary contacts arranged end to end in an annular series concentric with the shaft, conductors connected to the respective contacts, a supporting frame insulated from said contacts and supporting the shaft, a conductor connected to the frame, a plate carried by the shaft, a contact member mounted on said plate and including a roller



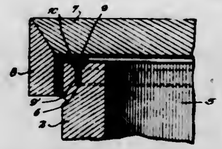
arranged to rest on and travel over the respective stationary contacts, and means for yieldably holding the roller to the contacts.

1,890,856. PROCESS FOR THE CLARIFICATION OF ELECTROLYTE. TANNIS LEWIN, University City, Mo. Filed Aug. 17, 1931. Serial No. 557,493. 22 Claims. (Cl. 204—15.)

6. Those steps, supplemental to the electrolytic deposition of copper from anodes of secondary metals, in which deposition anodic impurities are disseminated both into the electrolyte-solution and into the cell-slime, which consist in roasting the cell-slime for oxidation of contained anodic impurities, and then employing the roasted slime as an oxide agent for effecting flocculation of anodic impurities colloidally suspended in the electrolyte-solution.

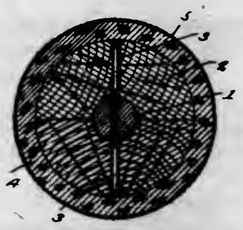
15. Those steps, supplemental to the electrolyte deposition of copper from anodes of secondary metals, in which deposition anodic impurities are disseminated both into the electrolyte-solution and into the cell-slime, which consist in roasting the cell-slime for oxidation of contained anodic impurities, employing the roasted slime as an oxide agent for effecting flocculation of anodic impurities colloidally suspended in the electrolyte-solution, introducing live steam and its condensate into the solution for accelerating the flocculation of said colloidally suspended matter, and then coagulating and settling the flocculated matter from the solution.

1,890,857. MOTHPROOF RECEPTACLE. LAWRENCE K. LOFTIN, Altavista, Va., assignor to The Lane Company, Inc., a Corporation of Virginia.. Filed Aug. 1, 1930. Serial No. 472,442. 1 Claim. (Cl. 206—10.)



In a cedar chest, in combination, a storage body, and a closure therefor, the top edge of each wall of said body having a groove therein extending lengthwise thereof, said groove having an inner portion of uniform width and a flaring outer portion and a moth proof sealing strip secured in said grooves, and comprising a bulbous head of resilient stuffer or filler yarns, and a folded covering, the edges of which are secured together to form a flange, said flange being secured in the groove portion of uniform diameter and the base of the head being formed to conform to and snugly fitting in the flaring groove portion and said head having an upper contact surface convexly curved in a transverse direction and adapted to flatten and spread laterally under pressure of the closure when the latter is closed.

1,890,858. PRINTER'S ROLLER. HERBERT JAMES LOWE, Galesburg, Ill. Filed Apr. 4, 1931. Serial No. 527,807. 2 Claims. (Cl. 91—67.8.)



1. A roller of the class described including a one-piece solid core, a split wooden cylinder surrounding and secured to the core, strips of cork wrapped spirally about and affixed to the cylinder, and an outer covering of fabric affixed to the cork.

1,890,859. CATHODE FOR ELECTRON DISCHARGE DEVICES. ARISTOTE MAVROGENIS, Milwaukee, Wis. Filed Nov. 26, 1926. Serial No. 150,644. 18 Claims. (Cl. 250—27.5.)



1. An indirectly heated cathode for electron discharge devices comprising a gaseous discharge heat radiating body and an electrically conducting element serving as an electron emitter and closely surrounding said heat radiating body, all of said parts being formed as a unit, said electrically conducting element being directly electrically insulated from said heat radiating body.

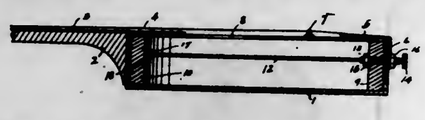
1,890,860. THERAPEUTIC AGENT. ALLEN L. OMOHUNDRO, Detroit, Mich., assignor to Frederick Stearns & Company, Detroit, Mich., a Corporation of Michigan. Filed Mar. 22, 1930. Serial No. 438,242. 4 Claims. (Cl. 167—58.)

1. A composition for application to mucous membranes of the nose, mouth and the respiratory system comprising a liquid in liquid emulsion, one of said liquids being oil and the other of said liquids being water, and a therapeutic substance having vaso-constrictive action dissolved in one of the phases of said emulsion, said composition having a low interfacial tension between the dispersion phase of said emulsion and aqueous mucous membrane and said composition being characterized by its freedom from unpleasant reaction when applied to aqueous mucous membrane.

1,890,861. MUSICAL INSTRUMENT. VALDY C. OVERTON, Houston, Tex. Filed Jan. 21, 1932. Serial No. 587,881. 1 Claim. (Cl. 84—267.)

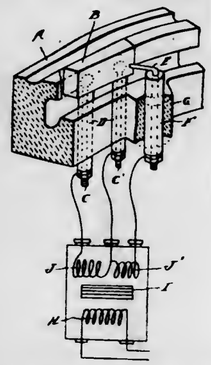
The combination with a musical instrument having a body provided with an inside bearing member on one end wall, said bearing member having a bearing, of a

sound post extending lengthwise through the body one end of which is enlarged and threaded through the other end wall on said body and whose other end works in said



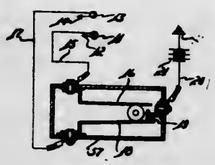
bearing, an external grip on the enlarged end of said post and clamp nuts on said enlarged end, clamping opposite sides of the adjacent wall of said body.

1,890,862. IGNITER. MILTON A. POWERS, Detroit, Mich., assignor to The Timken Silent Automatic Company, Detroit, Mich., a Corporation of Michigan. Filed Oct. 7, 1929. Serial No. 398,037. 4 Claims. (Cl. 175—115.)



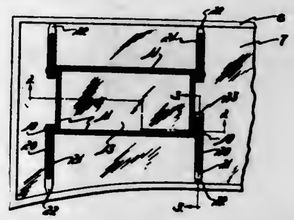
1. An electrical igniter for liquid fuel burners comprising a high resistance refractory resistor on which liquid fuel is deposited, terminals embedded therein, an electrode spaced from said resistor and means for supplying high tension current to both traverse the resistor and to form a jump spark between the same and said electrode.

1,890,863. SIGNAL OPERATING MECHANISM. CLARENCE C. RAYMOND, Detroit, Mich. Filed June 30, 1931. Serial No. 547,939. 5 Claims. (Cl. 200—80.)



5. A device of the class described comprising: a rotatable shaft; means for rotating said shaft; a collar slidably mounted on said shaft; an arm pivotally mounted intermediate its ends and connected at one end to said collar; means operable dependent upon the speed of rotation of said shaft for moving said collar axially of said shaft and effecting a rocking of said arm on its pivot; a stationary contact member; a pair of independent, resilient contact arms, each fixedly mounted at one end and adapted for engaging at their opposite ends on opposite sides of said contact member, the free end of said pivotally mounted arm engaging between said resilient contact arms and adapted upon rocking in opposite directions for moving said contact arms alternately out of engagement with said contact member.

1,890,864. WINDSHIELD ATTACHMENT. LOUIS RIBAR, Plymouth, Mich. Filed Jan. 22, 1931. Serial No. 510,420. 4 Claims. (Cl. 20—40.5.)



1. A device of the class described, comprising: a frame; a transparent closure mounted in said frame at one side thereof; a flange projecting outwardly from said frame at the opposite side and provided in one of its faces with a groove; a strip of yieldable material engaging in said groove and adapted for being positioned in engagement with the glass of a windshield; a pair of lugs projecting outwardly from said flange at opposite edges; and a locking finger slidably mounted on each of said lugs and engageable with a windshield frame for retaining said first mentioned frame in position thereon.

1,890,865. EYESHIELD. EMIL SCHERZ, Wilkes-Barre, Pa. Filed June 30, 1931. Serial No. 547,970. 5 Claims. (Cl. 2—10.)



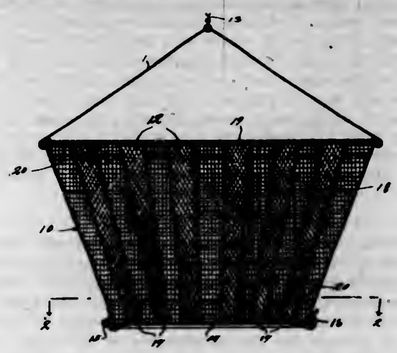
1. In combination with a hat having a visor at its front, a bracket carried by the visor, a mounting pivoted to said bracket for swinging movement from a depending vertical position to a raised horizontal position, means being provided to yieldably resist movement of said mounting from one position to the other, and shields pivoted to said mounting and movable in the plane of the mounting to adjusted positions.

1,890,866. MAKING ANTHRAQUINONE-SULPHONIC ACIDS. ERWIN SCHWENK, Berlin-Westend, Germany, assignor, by mesne assignments, to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Mar. 11, 1931, Serial No. 521,875, and in Germany Dec. 31, 1929. 7 Claims. (Cl. 260—57.)

1. A method for making sulphonic acids of substances of the anthraquinone series which comprises condensing sulphonic acids of phthalic acid anhydride with aromatic hydrocarbons and treating the sulphonic acids of aroylarylcarboxylic acids obtained as condensation products with substances causing ring formation in such a manner as to effect ring formation.

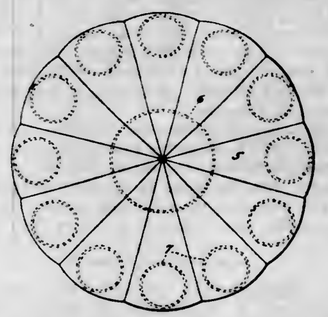
1,890,867. APPARATUS FOR USE IN TREATING PEANUTS. JOSEPH MELVIN SHAMAS, Lowell, Mass. Filed Sept. 8, 1931. Serial No. 561,727. 3 Claims. (Cl. 53—7.)

1. As a new article of manufacture, an apparatus for treating peanuts comprising a receptacle having perforated side walls, a plurality of perforated tubular members disposed longitudinally of the receptacle and having open opposite end portions, a perforated bottom having



openings therethrough registering with the tubular members, hinge means for the bottom, and releasable locking means for the bottom.

1,890,868. ATTACHMENT FOR PARACHUTES. LEWIS E. SIMPSON and CHARLES H. BARTHOLOMEW, Wichita, Kans. Filed Jan. 10, 1930, Serial No. 419,855. Renewed Apr. 26, 1932. 3 Claims. (Cl. 244—21.)



3. Means for initially opening a parachute comprising an annular series of spring rings secured to the skirt of the parachute, each of said rings being capable of folding into a plurality of concentric annuli.

1,890,869. LIGHTPROOF FABRIC FOR WINDOW SHADES AND THE LIKE. WILLIAM M. ST. CLAIR, Chicago, Ill. Filed July 30, 1932. Serial No. 626,883. 6 Claims. (Cl. 156—10.)

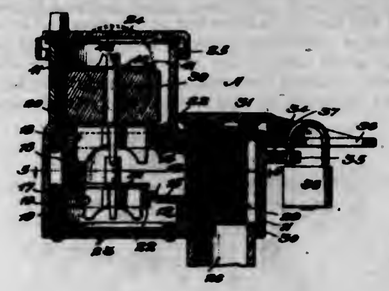


1. A fabric of the character described comprising a woven web having non-textile wefts and textile warps, and a flexible backing member secured to such web.

1,890,870. CONTROL VALVE FOR VOLATILE LIQUID STORAGE TANKS. JOHN J. TOKHEIM, Cedar Rapids, Iowa. Filed Apr. 9, 1929. Serial No. 353,833. 11 Claims. (Cl. 220—85.)

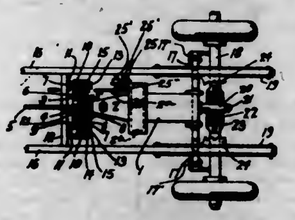
1. A valve device of the character described comprising a hollow member, a pair of spaced transverse partition

members within said hollow member having ports therein respectively, valves controlling said ports, a second hollow member disposed to one side of said first hollow mem-



ber and connected with the space between said partition member, said second hollow member being adapted for connection at one end with a liquid storage tank, and a removable cover normally closing the other end thereof.

1,890,871. AUTOMOTIVE VEHICLE. ROLLAND S. TROTT, Denver, Colo. Filed Nov. 24, 1928. Serial No. 321,634. 37 Claims. (Cl. 180—64.)



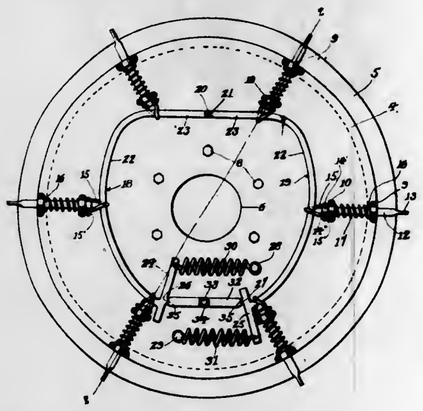
18. In an automotive vehicle, the combination of an engine unit having inherent oscillation about a longitudinal axis, means mounting an end portion of the engine unit on the vehicle and permitting approximately universal movement of said engine unit while holding said end portion against substantial lateral movement, and resilient means mounting and supporting another portion of the engine unit spaced longitudinally from said first-mentioned portion on the vehicle and constructed and arranged to permit approximately orbital movement of the engine unit at least at that portion in response to the impulses incident to the operation of the engine unit.

36. In a vehicle engine unit mounting, the method of minimizing transmission of engine tremor to the vehicle body which comprises providing a support for one end of the unit which serves to provide a fulcrum point for said end of the unit and which restrains substantial movement of said end, and providing another support longitudinally spaced from said first support to resiliently support the unit on the vehicle for a substantial degree of movement of the other end of the unit relatively to said fulcrum point thereby enabling engine actuated impulses to orbitally move said unit and during such movement causing engine tremor to be substantially dissipated.

1,890,872. ANTISKID DEVICE. LELAND S. VAN KLEECK, Montgomery, N. Y. Filed Dec. 30, 1931. Serial No. 584,003. 6 Claims. (Cl. 301—51.)

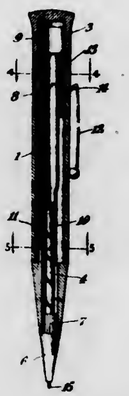
6. An anti-skid device comprising a disc adapted to be secured to one side of a wheel, a carrier formed of a pair of oppositely disposed sections, one end of one section opposing one end of the other section, each of said sections including a bow-shaped vertical part merging at one end into a horizontal part extending inwardly substantially at

right angles to said other part, means for pivotally supporting the inner ends of said horisontal parts, each of said bow-shaped parts merging at its other end into and eccentrically of an inclined arm, said arms disposed at opposite inclinations, a controlling spring anchored at one end to said disc and at its other end to the inner end of one of said arms, a controlling spring anchored at one end to said disc and at its other end to the outer end of the other of said arms, normally retracted, cushioned anti-skid members shiftably connected to said sections and slidably attached



to said disc, shiftable means coacting with said arms for extending the carrier to shift said members to and for maintaining them in active position against the action of said controlling springs, each arm being eccentrically disposed with respect to that end of the section from which it extends, said arms being oppositely disposed with respect to each other, said shiftable means having recesses in the ends thereof, and said arms formed with lugs for extension into said recesses for holding said shiftable means in position to extend the carrier.

1,890,873. PENCIL. FRANK WAGNER, Laurel Hill, Long Island, N. Y. Filed Oct. 22, 1929. Serial No. 401,429. 1 Claim. (Cl. 120—18.)



In a pencil of the character described a tubular casing tapered at one end, a holder having a contracted portion adapted to be inserted therein at the untapered end, said contracted portion being provided with an internal longitudinal groove, an enlargement on said holder adapted to make frictional contact with the casing adjacent the said end, an anchoring block closing the tapered end of the casing and having feeding mechanism mounted on its inner end and a tip on its outer end, said feeding mechanism comprising a spirally slotted screw sleeve, a slotted guide tube within said sleeve and a clutch carried within the guide tube and cooperating with said sleeve and tube by means of a member thereon extending through the slots in the guide tube and sleeve, and studs on said screw sleeve for holding the feeding mechanism and holder in adjustable alignment, substantially as and for the purpose set forth.

1,890,874. MANUFACTURE OF HYDROGEN IODIDE. PAUL E. WESTON, Sewaren, N. J., assignor, by mesne assignments, to The Roessler & Hasslacher Chemical Company, a Corporation of Delaware. Filed Feb. 25, 1930. Serial No. 431,337. 19 Claims. (Cl. 23—152.)

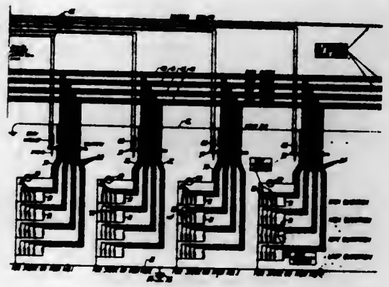
1. A process for the preparation of hydrogen iodide, which comprises reacting iodine in the presence of a solvent for either iodine or hydrogen iodide or a common solvent for both with hydrogen.

19. A process for the preparation of hydrogen iodide, which comprises reacting iodine in the presence of water with hydrogen at a temperature between 150° C. and 200° C., and at pressures of over 200 pounds per square inch with chromic chloride present as a catalyst.

1,890,875. PREPARATIONS WHICH GIVE OFF OXYGEN AND MANUFACTURE OF SAME. WALTER ZISCH, Frankfort-on-the-Main, Germany, assignor, by mesne assignments, to The Roessler & Hasslacher Chemical Company, a Corporation of Delaware. Filed Jan. 31, 1929, Serial No. 336,630, and in Germany Jan. 30, 1928. 5 Claims. (Cl. 23—184.)

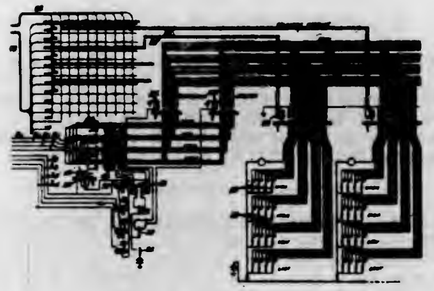
1. A process for the manufacture of preparations for giving off oxygen which comprises hydrating alkali metal peroxides while dissipating the heat of reaction by incorporation of water with the latter in the ratio of about ⅛ to 1 mol of water per mol of peroxide and heating the resulting hydrated product to a temperature below 150° C.

1,890,876. ELECTRICAL SIGNALING. MERTON L. HASELTON, Rye, N. Y., assignor, by mesne assignments, to The Teleregister Corporation, New York, N. Y., a Corporation of Delaware. Filed Jan. 6, 1928, Serial No. 244,873. Renewed May 6, 1932. 26 Claims. (Cl. 177—353.)



1. A signaling system comprising a plurality of electromagnetic indicators at a receiving station, said indicators being divided into relatively small groups, means for transmitting distinctive current variations for the selection and control of said indicators, line wires providing a number of impulse channels at least equal in number to the number of indicators of each group and extending from said transmitting means to the receiving station, a plurality of complementary selecting devices at the receiving station operated respectively by current variations transmitted over said impulse channels, and electrical connecting means whereby said selectors act to choose at least one of said groups, and means for thereafter bringing said channels respectively into operative relationship with the various indicators of the group chosen.

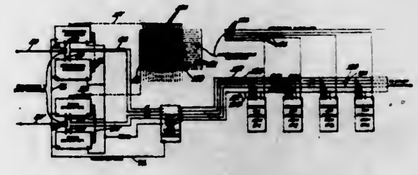
1,890,877. ELECTRICAL SIGNALING. MERTON L. HASELTON, Rye, N. Y., assignor to The Teleregister Corporation, New York, N. Y., a Corporation of Delaware. Original application filed Jan. 6, 1928, Serial No. 244,873. Divided and this application filed Jan. 6, 1930, Serial No. 418,801. Renewed May 6, 1932. 32 Claims. (Cl. 177—353.)



1. In an electrical system for transmitting and registering items of information, the combination of a plurality of groups of registers, impulse transmitting channels equal in number to the number of register elements in each register, main actuating channels for said registers common to all of the registers, main bus lines common to corresponding registers in all of the groups of registers, pairs of parallel restoration and setting-up busses common to corresponding registers in all of the groups of registers, means responsive to combinations of potentials on the impulse transmitting channels for selectively connecting all of the restoration and setting-up busses to the main bus lines and for selectively connecting said main bus lines to said main actuating channels, and means responsive to interruptions of potentials on said transmitting channels for connecting all of said restoration and setting-up busses to a group of registers and for electrically connecting said main actuating channels to said impulse transmitting channels.

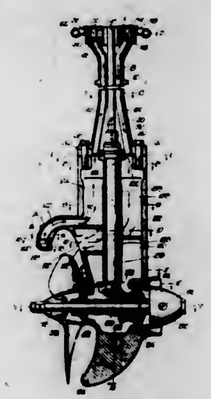
1,890,878. ELECTRICAL INDICATING SYSTEM. MERTON L. HASELTON, Rye, N. Y., and PAUL S. HASELTON, Montclair, N. J., assignors, by mesne assignments, to The Teleregister Corporation, New York, N. Y., a Corporation of Delaware. Filed Feb. 23, 1928, Serial No. 256,160. Renewed May 7, 1932. 20 Claims. (Cl. 177—353.)

3. The combination of a plurality of groups of indicators, each group of indicators comprising a plurality of electromagnetically actuated indicator elements, of transmission lines equal in number to one-half of the number of indicator elements in each group of indicators, pairs of cooperating selectors, each pair comprising one selector element responsive to positive impulses on one line and another selector element responsive to negative impulses over



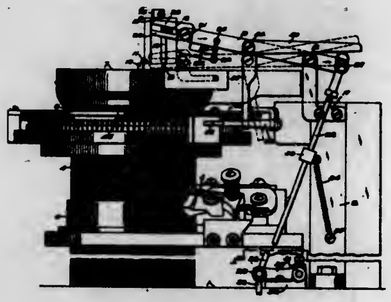
said line, said pairs cooperating to selectively prepare electrical paths to said groups of indicators, and means responsive to impulses over portions of said paths for completing the path to one of the indicators in said selected group.

1,890,879. OUTBOARD MOTOR ASSEMBLY. LOUIS J. JOHNSON, South Bend, Ind., and HARRY L. JOHNSON, Waukegan, Ill., assignors, by mesne assignments, to Johnson Brothers Engineering Corporation, South Bend, Ind., a Corporation of Indiana. Filed Jan. 16, 1928. Serial No. 247,004. 11 Claims. (Cl. 115—18.)



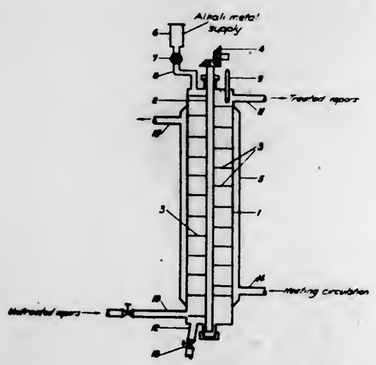
1. In an outboard motor construction, the combination of a motor having a water jacket, a housing carrying a propeller and means enclosed by the housing for driving the propeller from the motor, said housing extending upwardly to the water level and being of stream line construction; and water circulating means for conducting water from a point below the water level upwardly to the water jacket of the engine by means including a passageway housed by the housing, said passageway terminating in a water gathering mouth located at the rear of the housing and of sufficient width to extend outwardly laterally thereof beyond the outermost plane of the stream line side surfaces of the housing.

1,890,880. METHOD OF AND ATTACHMENT FOR RUNNING-ON KNITTING FABRICS. ROBERT H. LAWSON, Pawtucket, and ARTHUR N. CLOUTIER, Lonsdale, R. I., assignors to Hemphill Company, Central Falls, R. I., a Corporation of Massachusetts. Filed Aug. 29, 1928. Serial No. 302,666. 20 Claims. (Cl. 66—108.)



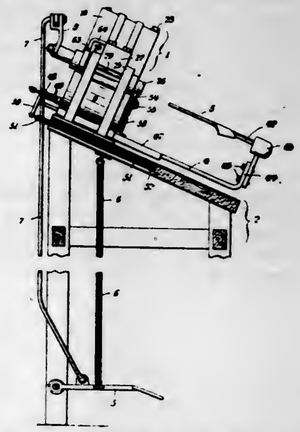
1. That method of commencing knitting upon bare needles which includes supplying a non-knitting yarn or thread to the series of needles in such position as to participate in the imprisoning of the knitting yarn or yarns in the hooks of the needles.

1,890,881. PROCESS FOR TREATING HYDROCARBONS. PAUL LA FRONE MAGILL, Niagara Falls, N. Y., assignor, by mesne assignments, to The Roessler & Hasslacher Chemical Company, a Corporation of Delaware. Filed Mar. 23, 1929. Serial No. 349,312. 5 Claims. (Cl. 196—36.)



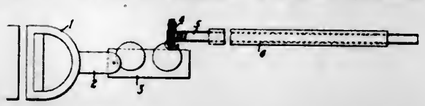
1. Process comprising passing hydrocarbon vapors, at a temperature above that at which substantial amounts of vapors condense, through a mechanically agitated treating mixture comprising finely divided alkali metal intimately dispersed in a semi-solid mass of by-products produced by the reaction of said alkali metal on hydrocarbons.

1,890,882. PRESSING MACHINE. EDWARD V. MCTAGUE, Millville, N. J., assignor to The Convertible Duplex Die Corporation, Millville, N. J., a Corporation of New Jersey. Filed Apr. 7, 1932. Serial No. 603,692. 12 Claims. (Cl. 223—55.)



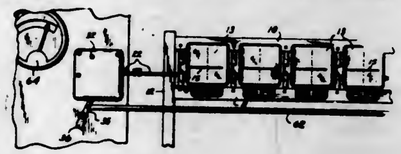
1. In a pressing machine of the character described, relatively movable die holders, pressing dies carried by said die holders having opposing faces, defining a pressing mold, one of said pressing dies being freely mounted within its die holder with capacity for limited movement therein, and means whereby incident to separation of the die holders the face of said latter die is caused to assume a parallel relation with the face of the other die.

1,890,883. WARE TRANSFERRING MECHANISM. WILLIAM A. MORTON, Pittsburgh, and PAUL L. GEER, Bellevue, Pa., assignors to Amco, Incorporated, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Aug. 26, 1927. Serial No. 215,614. 2 Claims. (Cl. 214—1.)



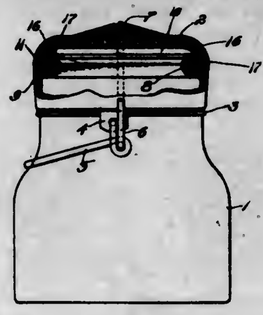
2. Apparatus for transferring articles of glassware from a fixed receiving station to different delivery stations, comprising ware gripping means movable in a horizontal plane and operating mechanism therefor consisting of a plurality of independently operable actuating means which in one direction of their travel extend said ware gripping means to said fixed receiving station and in their other direction of travel stop said gripping means at different delivery stations.

1,890,884. METER CALIBRATING APPARATUS. ADOLF PETER, Zug, Switzerland, assignor to Landis & Gyr, A.-G., a Joint-Stock Company of Switzerland. Filed Aug. 24, 1929, Serial No. 388,184, and in Switzerland Aug. 28, 1928. 13 Claims. (Cl. 73—51.)



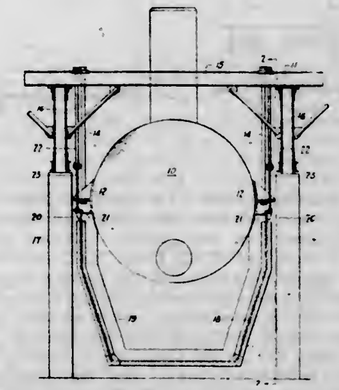
1. Apparatus for the calibration of a plurality of meters of the type having a rotatable metering disc, including in combination means for simultaneously energizing the disc driving means of each of the meters to be tested, and means for uniformly stopping all the discs at a definite point in their rotation.

1,890,885. CLOSURE FOR JARS AND THE LIKE. EDWARD JOHN PRIME, Groveland, Mass. Filed Dec. 12, 1929. Serial No. 413,463. 2 Claims. (Cl. 215—37.)



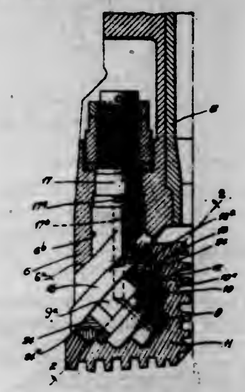
1. The combination with a jar having a neck provided upon its exterior with an annular shoulder that is below the top thereof and at its top with a radially disposed annular lip which provides said neck with an annular groove disposed between said lip and said shoulder; a cup-shaped cap made upon its under side with a neck-receiving cavity whose side wall is oblique with respect to the axis of the jar, and means upon said jar for clamping said cap in position thereon, of a joint sealing gasket annulus of compressible material comprising an intermediate interiorly and exteriorly cylindrical portion surrounding said neck made at its top with an inwardly extending flange seated upon the top of said neck and at its bottom with an outwardly extending flange clamped between the chime of said cap and said shoulder, the upper corner portion of said annulus being clamped between said oblique side wall of the cap and the lip of said neck so as to compress said annulus radially and crowd said intermediate cylindrical portion into said groove thereby to embed said lip in the material of said annulus.

1,890,886. STILL AND FIRE BOX. JAMES B. RATHER, Brooklyn, N. Y., assignor to Magnolia Petroleum Company, Dallas, Tex., a Corporation of Texas. Filed July 19, 1929. Serial No. 379,390. 8 Claims. (Cl. 196—116.)



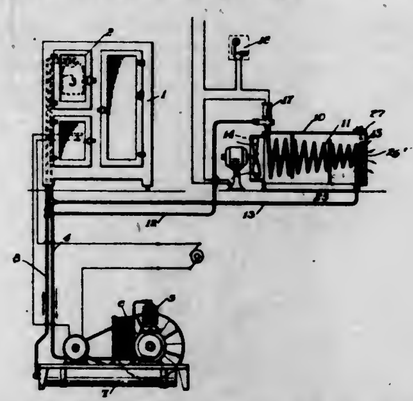
7. Apparatus of the character disclosed which comprises an overhead support, a still and a fire-box disposed below said overhead support, supporting means for suspending said still from said overhead support, and independent supporting means for suspending said fire-box from said overhead support.

1,890,887. EARTH BORING APPARATUS. CLARENCE E. REED, Wichita, Kans., assignor to Chicago Pneumatic Tool Company, New York, N. Y., a Corporation of New Jersey. Filed June 26, 1929. Serial No. 373,714. 16 Claims. (Cl. 255—71.)



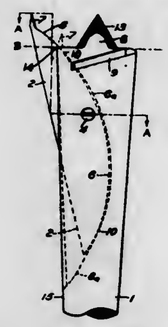
1. In combination, a bit head having a spindle projecting therefrom, segmental wear members encircling at least a part of said spindle, a roller cutter on said spindle having a bearing on said members, means locking said cutter upon said spindle, and means including cooperating flats on said spindle and said members for holding the latter against rotative movement.

1,890,888. AIR COOLING APPARATUS. JOHN Q. SHERMAN, Dayton, Ohio. Filed June 26, 1926. Serial No. 118,788. 17 Claims. (Cl. 62—176.)



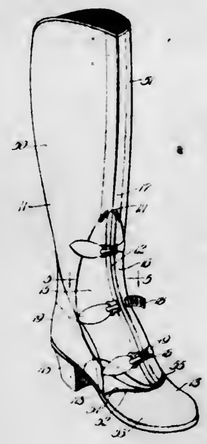
1. In a ventilating apparatus of the character described, the combination with a refrigerating system having an excess capacity factor of an air cooling apparatus including a refrigerating coil additional to and removed from that of the refrigerating system but connected to and operated by said refrigerating system, an air compartment in which the coil is located, said compartment discharging into a chamber to be cooled, a blower directing a current of air through said compartment and about said coils into the chamber and thermostatic means controlling the operation of said air cooling apparatus independent of the refrigerating system.

1,890,889. EXPANSION BIT. CHARLES STURNI, Pittsburgh, and JOHN HAYS SMITH, Camp Hill, Pa. Filed Dec. 24, 1930. Serial No. 504,558. 22 Claims. (Cl. 145—127.)



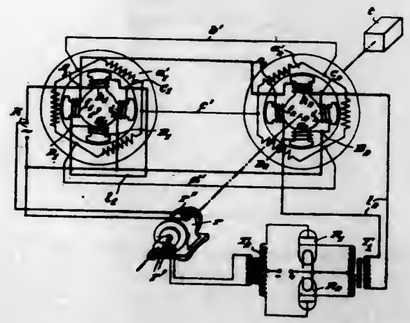
18. A boring tool having a slot in its body for directing the movement of an adjustable member, said slot being defined by a compoundly curved rear wall.

1,890,890. FORM FITTING RUBBER BOOT AND METHOD OF MAKING SAME. GEORGE L. VAN DINTER and CONRAD FERRETTIE, Mishawaka, Ind., assignors to Mishawaka Rubber and Woolen Manufacturing Company, Mishawaka, Ind., a Corporation of Indiana. Filed Apr. 7, 1930. Serial No. 442,049. 10 Claims. (Cl. 12—142.)



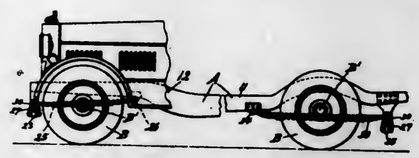
1. In a boot the combination of a rubber upper having an elongated rubber pocket member therein at the front, comprising front and back wall layers of rubber composition having portions along the marginal edges joined together in face to face relation around the periphery of the pocket, said front wall layer having a central longitudinal slit, the upper and lower ends of which are closed and terminate respectively below the upper end and above the lower end of the pocket, and said upper having a corresponding slit at the front with closed upper and lower ends and having the marginal portion of the upper around said slit consolidated with a corresponding marginal portion around the slit of the pocket front wall layer.

1,890,891. ELECTRICAL REMOTE CONTROL SYSTEM. JOHANNES VOPEL, Berlin-Zehlendorf-Mitte, and RUDOLF OETKER, Berlin, Germany, assignors to Gesellschaft für Elektrische Apparate m. b. H., Marienfelde near Berlin, Germany, a Corporation of Germany. Filed June 6, 1931, Serial No. 542,559, and in Germany May 10, 1930. 9 Claims. (Cl. 172—239.)



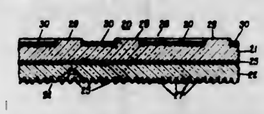
1. An apparatus for determining and equalizing differences in the positions of two shafts located at a distance apart, comprising a rotary transformer on each of said shafts, each transformer having two relatively movable parts, four windings, in bridge connection, located on one of the parts of each rotary transformer, interconnected windings on the other part of each of said transformers, a source of alternating current connected with said bridge-connected windings, leads connecting the zero points of the bridges, and current-responsive means in said connecting leads between said zero points.

1,890,892. STABILIZING SPRING SUSPENSION SYSTEM. MANUEL AFLAGUE, Detroit, Mich., assignor to American Car and Foundry Motors Company, New York, N. Y., a Corporation of Delaware. Filed Jan. 8, 1931. Serial No. 506,404. 2 Claims. (Cl. 267—11.)



1. In a spring support for a vehicle, a frame comprising longitudinal members, front and rear wheeled axles under the frame, a substantially V-shaped transverse member at each end of the frame, rigid equalizer members for supporting and permitting rocking movement of said transverse members thereon and pivotally connected to said transverse members in a plane at least as low as the center line of said axles, springs supported by said axles at each side of the frame, each connected at one end with a longitudinal member, and right-angular shackle connections for universally connecting the other end of each of said springs to an adjacent end of said equalizer member.

1,890,893. INDICATOR AND METHOD OF MANUFACTURING PARTS THEREOF. CHARLES MICHAEL ANDERS, Yonkers, N. Y., assignor to Otis Elevator Company, New York, N. Y., a Corporation of New Jersey. Filed Mar. 12, 1931. Serial No. 522,181. 8 Claims. (Cl. 40—182.)



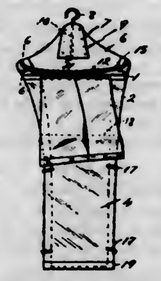
1. A light transmitting medium for a luminous indicator comprising, a light transmitting body having one surface roughened to form peaks and recesses therein, and a coating fixed in said recesses but not covering said peaks.

1,890,894. SPONGE BRUSH. SANDFORD M. ARNOLD, St. Louis, and ARNOLD ERBER, University City, Mo., assignors to S. M. Arnold, Inc., St. Louis, Mo., a Corporation of Missouri. Filed May 20, 1931. Serial No. 538,706. 3 Claims. (Cl. 15—244.)



1. An implement of the character described including a wire folded and twisted, a plurality of sponge sections secured between the folds of the wire, strips of tough non-metallic material interposed in the folds at the points where the wire crosses itself, and a handle secured to the free ends of the folded wire.

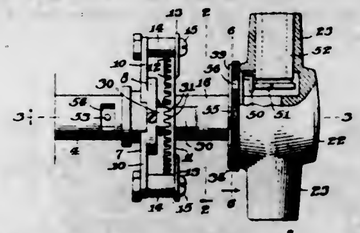
1,890,895. COAT AND TROUSERS PRESS. FRANK J. BARNES, Detroit, Mich. Filed Nov. 7, 1929. Serial No. 405,850. 6 Claims. (Cl. 223—62.)



1. In a device of the character described, the combination with a plate having an upper edge conforming to the shoulders of a coat and having a pair of sockets adjacent to said edge, of a bowed wire member for expanding the breast portion of a coat, said element having down-turned ends removably inserted in said sockets.

1,890,896. LOCKABLE REGULATING DEVICE. WILLIAM BARR, Philadelphia, Pa. Filed Jan. 22, 1932. Serial No. 588,061. 10 Claims. (Cl. 70—14.)

1. The combination of a support, a shaft fitted to turn therein, an operating handle keyed on the shaft and slidable longitudinally thereon to either of two positions, said handle being free to turn the shaft when the handle is in one of said positions, means to prevent the handle from turning from any one of a plurality of adjusted positions when the handle is in the other of said two positions, and a locking member movable into and from a locking position and provided with means to prevent



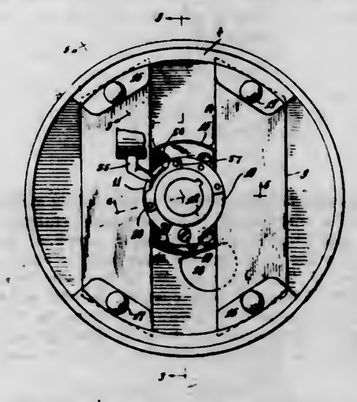
longitudinal movement of the handle from the last named position when said member is in the locking position.

1,890,897. CONTINUOUS ENAMEL WARE MANUFACTURE. HARRY T. BEBB, Canton, Ohio, assignor to The Canton Stamping & Enameling Company, Canton, Ohio, a Corporation of Ohio. Filed Jan. 22, 1931. Serial No. 510,447. 8 Claims. (Cl. 25—142.)



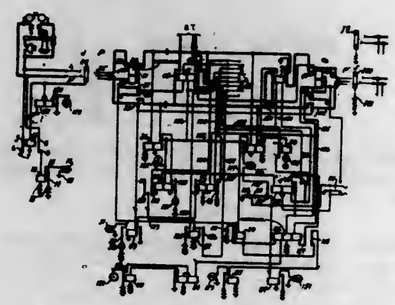
1. Apparatus for the continuous manufacture of enamel ware and the like, including walls forming a plurality of communicating drying chambers laterally adjacent to each other, means for conveying ware having liquid enamel applied thereon continuously through the successive drying chambers, and separate means for maintaining a temperature in each drying chamber different from the temperature in the others.

1,890,898. FLYWHEEL MAGNETO. LOUIS BEEH and WOLFGANG E. SCHWARZMANN, Longmeadow, Mass., assignors to United American Bosch Corporation, Springfield, Mass., a Corporation of New York. Filed Apr. 23, 1932. Serial No. 607,076. 10 Claims. (Cl. 171—209.)



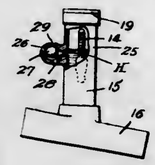
1. A magneto comprising a rotor carrying a source of magnetic flux, a stator, a generating coil on the stator, a circuit breaker for said coil operated by the rotor, and means comprising a fixed and a movable terminal to prevent said coil from delivering ignition current except at the desired instant.

1,890,899. TELEPHONE SYSTEM. ALOIS CAPEK and FRANS VAN DEN BROECKE, Antwerp, Belgium, assignors to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Sept. 6, 1924, Serial No. 736,218, and in Great Britain Oct. 8, 1923. 4 Claims. (Cl. 179—9.)



1. In a telephone system, a calling line, a plurality of called lines, one of which has a sleeve circuit resistance substantially lower than the others, a link circuit for interconnecting said calling line with any one of said called lines, said link circuit including a supervisory relay associated with the calling end thereof, a position meter associated with said link circuit, means automatically responsive to the operation of said supervisory relay when said calling line is connected with one of said high resistance called lines for operating said position meter, and marginal means responsive to the connection of said calling line with said lower resistance called line to prevent the operation of said first mentioned means.

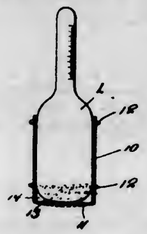
1,890,900. INDICATOR FOR COOLING SYSTEMS OF AUTOMOBILES. HOWARD E. CHRISTIE and KIBBEY W. COUSE, Bronx, N. Y. Filed July 16, 1926. Serial No. 122,783. 7 Claims. (Cl. 265—45.)



3. The combination with the water cooling system of an engine, of a transparent indicator tube arranged in said system, said transparent tube being closed at its upper end and having its lower end open and arranged to permit water of the system to rise in the tube, said transparent tube having a vent opening formed through the side wall thereof spaced downwardly from its upper end, and a float valve arranged in said opening constructed to permit egress of air and prevent egress of water.

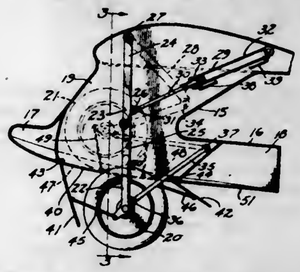
1,890,901. COMPENSATING HYDROMETER FLOAT. HOWARD E. CHRISTIE and KIBBEY W. COUSE, Bronx, N. Y. Filed June 7, 1927. Serial No. 197,192. 3 Claims. (Cl. 265—45.)

1. A hydrometer float comprising the usual bulbular portion and stem portion, a member within which the bulbular portion engages and providing an air pocket associated with the bulbular portion, and said member providing a flexible wall for said air pocket, the degree of



flexibility of which permits it to flex and thus change the displacement of the float in response to expansion and contraction of the air in said pocket incident to temperature changes of said air in use.

1,890,902. AMPHIBIAN AIR VEHICLE. DONALD W. DOUGLAS, Santa Monica, Calif., assignor to Douglas Aircraft Company, Inc., Santa Monica, Calif., a Corporation of Delaware. Filed May 19, 1930. Serial No. 453,516. 8 Claims. (Cl. 244—2.)



5. In a plane of the character described, including: a gondola; wing structure extending laterally with respect to said gondola; a housing extending downward from said wing; a pontoon at the lower part of said housing, said pontoon having an opening in the lower part thereof; a landing member; and mechanism located within said pontoon and said housing for moving said landing member in and out of said pontoon through said opening.

1,890,903. HEAT PLASTIC COMPOSITION AND METHOD OF MAKING SAME. HARRY L. FISHER, Akron, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y., a Corporation of New York. Filed Dec. 28, 1926. Serial No. 157,624. 18 Claims. (Cl. 260—2.)

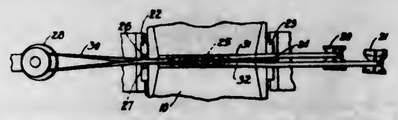
1. A strong thermoplastic material comprising the reaction product of a chlorine-containing rubber derivative and a phenol in which a substantial portion of the chlorine is displaced by the phenol.

3. The method which comprises treating a chlorine-containing rubber derivative with a compound of the general formula R-X where R represents an aromatic nucleus and X represents a hydroxyl or amino group until a substantial part of the chlorine has been eliminated therefrom.

1,890,904. TRANSLATING DEVICE. EDGAR W. GENT, Morristown, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed May 14, 1930. Serial No. 452,165. 18 Claims. (Cl. 88—61.)

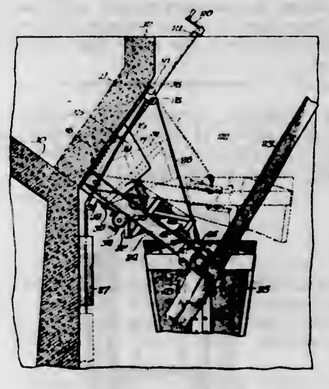
1. The combination in a translating device of a member having a light-transmitting aperture therein, a magnet,

and a filament suspended in the field of said magnet and carrying a modulated current, said filament crossing over



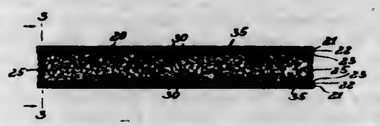
itself to form a loop and mounted such that opposite portions thereof diverge from each other to define the opening through said aperture.

1,890,905. AUTOMATIC PIT GATE AND OPERATING MEANS THEREFOR. JACOB LEWIS GOOD and WALTER E. CLICK, Elkhart, Ind., assignors to The Godfrey Conveyor Co., Elkhart, Ind., a Corporation of Indiana. Filed June 26, 1930. Serial No. 463,871. 9 Claims. (Cl. 214—125.)



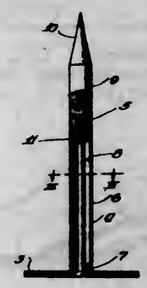
1. In combination, a hopper having a discharge opening therein, a stationary chute in register with said opening, a chute pivotally mounted on the outer edge of said fixed chute, a pair of pivotally mounted fulcrum arms, curved tracks on the under side of said pivotally mounted chute, means on said fulcrum arms for engaging the curved tracks, and counterweights secured to said fulcrum arms.

1,890,906. INSULATING BAT. FRANCIS W. HARNEY, Lockport, N. Y., assignor to The Upson Company, Lockport, N. Y., a Corporation of New York. Filed Apr. 8, 1930. Serial No. 441,369. 13 Claims. (Cl. 154—44.)



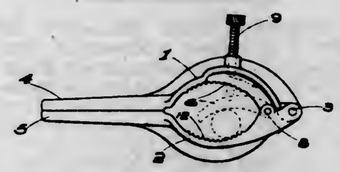
1. In an insulating bat, the combination with a bat filling having a chemical associated therewith, of a liner for said filling, said liner comprising a material capable of reacting with said chemical, and a layer of sheet material interposed between said material and said filling to reduce the reaction between said material and said chemical.

1,890,907. SKEWER. JOHN E. HOOVER, Elmhurst, Ill. Filed Apr. 2, 1931. Serial No. 527,221. 5 Claims. (Cl. 53—5.)



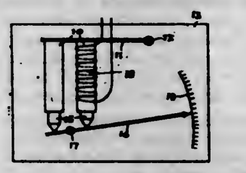
1. A skewer comprising a base plate, a stem connected therewith, a sleeve engaged around said stem, and spaced therefrom, and a head section connected with said stem for removably holding said sleeve in position.

1,890,908. WRENCH FOR SCREW CAPS FOR JARS AND LIKE CONTAINERS. HORACE R. LAYTON, Franklin, Pa. Filed Dec. 10, 1931. Serial No. 580,105. 8 Claims. (Cl. 81—3.1.)



1. A wrench for the removal of screw caps for various containers consisting, in combination, of a pair of primary jaw-levers hinged together at one end and which are curved respectively divergently outwardly adjacent said end so that an opening is formed therebetween, suitable for the reception of and engagement by said levers, of a screw cap of substantially large size, a secondary jaw section arranged in relation to one of said primary jaws so that the inner face of said secondary jaw-section when in its normal position coincides with and forms a continuation of the supplementary gripping face of the primary jaws to which said secondary jaw is so related, and an adjusting screw carried by said related primary jaw with its point projecting therethrough and into actuative contact with said secondary jaw whereby said secondary jaw may be adjusted inwardly for actuative engagement of a screw cap of substantially smaller size than said first mentioned cap.

1,890,909. THERMOSTATIC ELEMENT. PAUL M. LINCOLN, Ithaca, N. Y. Filed Aug. 22, 1929. Serial No. 387,662. 5 Claims. (Cl. 171—308.)



2. A thermostatic device, comprising a pair of soft rubber bodies each separately confined under permanent compression whereby the total volumetric expansive ef-

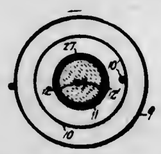
fort may be utilized, means for differentially heating said compressed rubber bodies, and means for measuring the difference in the total volumetric expansion of said soft rubber bodies.

1,890,910. ARCH SUPPORT. ADAM MARSHALL, Newark, N. J. Filed Feb. 12, 1932. Serial No. 592,480. 3 Claims. (Cl. 36—71.)



1. An orthopedic arch support comprising a plurality of laminated strips of woven fabric impregnated with a phenol condensate, superimposed longitudinally, transversely and diagonally with respect to each other and made into a unit of uniform thickness under heat and pressure to form a front resting portion, a boss adjacent said front resting portion to stimulate circulation in the metatarsal region, a rear or heel resting portion, and a supporting resilient bridge intermediate said front and rear resting portions.

1,890,911. ELECTRON TUBE. BENJAMIN F. MIESSNER, Short Hills, N. J., assignor to Miessner Inventions Inc., Short Hills, N. J., a Corporation of New Jersey. Filed Mar. 1, 1930. Serial No. 432,286. 4 Claims. (Cl. 250—27.5.)



1. A cathode for electron emission including an elongated thimble of electron-emissive outer surface and a bent-upon-itself electric heater element extending interiorly of said thimble substantially co-axially therewith, the ratio of a shortest distance between current centers of two contiguous portions of opposite current flow of said heater element to a distance as traced by dropping a perpendicular from the midpoint of said shortest distance onto a surface element in said electron-emissive thimble having for each said element a numerical value of at most 1 divided by 10.

1,890,912. SNAP FASTENER. ALBERT MOMM, Irvington, N. J., assignor to August Goertz & Co. Inc., a Corporation of New Jersey. Filed May 8, 1931. Serial No. 535,826. 4 Claims. (Cl. 292—204.)

1. A snap fastener for containers having hinge sections or the like comprising, an upper casing portion and a lower casing portion adapted to be secured to the cover and body sections, respectively, of a container, said casing portions having similar front walls and being open at their rear, a pivotal pin secured to said upper casing portion front wall, a swivel latch bar pivotally mounted upon said pin, said swivel latch bar having a hooked end for engaging said lower casing portion in locked relation, said upper casing portion having a slot in the upper surface thereof, and a handle formed on said swivel latch bar and extending through said slot and exteriorly of said upper casing portion for manual manipulation, and a spring plate mounted on said pivotal pin and interposed between said upper casing portion front wall and said latch bar, said spring plate having a bowed portion projecting into the path of movement of said handle for engaging the handle of said latch bar to thereby retain said

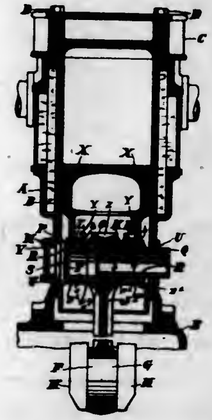


handle in either locked or unlocked position and causing said latch bar when manipulated in use to snap from one of these positions to the other.

1,890,913. MANUFACTURE OF HYDROUS DEXTROSE FROM HIGH PURITY SOLUTIONS. WILLIAM B. NEWKIRK, Western Springs, Ill., assignor to International Patents Development Company, Wilmington, Del., a Corporation of Delaware. Filed Nov. 14, 1929. Serial No. 407,285. 7 Claims. (Cl. 127—61.)

1. Method of making high purity hydrous dextrose consisting of separate naturally formed granules of crystalline structure from starch converted dextrose solutions in accordance with which a dextrose solution having a purity of between 96% and 100% and a density of between 36° and 38° Baumé is supersaturated at a temperature favorable to crystallization of the hydrate while being given a slow agitation to keep the solid phase dispersed in the liquid.

1,890,914. ENGINE. FREDERICK W. PARSONS, Sr., Corning, N. Y., assignor to Ingersoll-Rand Company, Jersey City, N. J., a Corporation of New Jersey. Filed Sept. 12, 1929. Serial No. 392,034. 2 Claims. (Cl. 74—108.)

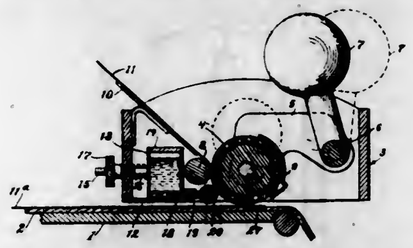


1. In an engine and the like, the combination of a cylindrical chamber and a reciprocating member therein, said chamber having openings in its side wall, a connecting rod, a bushing in the rod and projecting from opposite sides thereof, annular bosses on the reciprocating member extending transversely thereof, bushings in the bosses having heads thereon abutting the projecting ends of the first bushing, a wrist pin extending through the bushings in the rod and reciprocating member, said wrist pin being accessible through the openings in the chamber wall, means in the headed bushings forming abutments for the ends of the wrist pin, and plates normally closing said openings.

1,890,915. DUPLICATING MEANS AND METHOD. LOUIS J. SAUER, Oak Park, Ill., assignor to Charles H. Joy, sr., Chicago, Ill. Filed Nov. 28, 1931. Serial No. 576,736. 15 Claims. (Cl. 101—133.)

1. The method of duplicating comprising preparing an original sheet having transferable copy on the face thereof

and similar transferable copy in reverse on the back thereof, applying the face of said original to a hectograph printing surface to transfer the original to the printing surface, then applying consecutively blank sheets to the hecto-



graph to provide a limited number of copies, then applying the original to the hectograph surface and thereafter applying blank sheets to the reverse side of the original to provide a further limited number of copies.

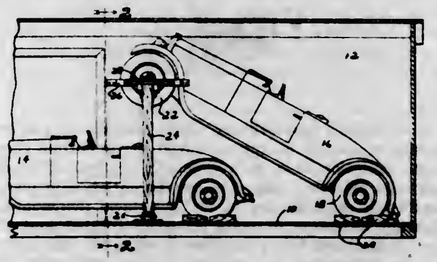
1,890,916. RUBBER COMPOSITION AND METHOD OF PRESERVING RUBBER. WALDO L. SEMON, Silver Lake Village, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y., a Corporation of New York. Filed May 16, 1932. Serial No. 611,642. 20 Claims. (Cl. 18—50.)

1. The method of preserving rubber which comprises treating rubber with the product of the condensation of a substance selected from the group consisting of diarylamines and alkoxy substituted diarylamines with formaldehyde with the elimination of water.

1,890,917. RUBBER COMPOSITION AND METHOD OF PRESERVING RUBBER. WALDO L. SEMON, Silver Lake Village, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y., a Corporation of New York. Filed May 16, 1932. Serial No. 611,643. 20 Claims. (Cl. 18—50.)

1. The method of preserving rubber which comprises treating rubber with the product of the condensation of a substance selected from the group consisting of diarylamines and alkoxy substituted diarylamines with an aliphatic aldehyde containing more than two carbon atoms.

1,890,918. AUTOMOBILE DECKING DEVICE. RUSSELL W. STIPES and WILLIAM M. HOOSE, Detroit, Mich., assignors, by direct and mesne assignments, of one-third to The Evans Auto Loading Company, Inc., Detroit, Mich., a Corporation of Delaware, of one-third to Copony Auto Loading Company, Detroit, Mich., a Corporation of Michigan, and one-third to The Studebaker Corporation, South Bend, Ind., a Corporation of New Jersey. Filed July 12, 1928. Serial No. 292,288. 10 Claims. (Cl. 105—368.)



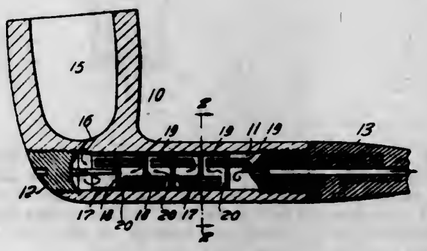
1. A motor vehicle decking apparatus comprising a horizontal plate adapted to receive a hub of an automobile, a vertical supporting member engaging the under surface of said plate, and triangular bracing means on a horizontal line with the plane of said plate adapted to be secured to the side walls of a freight car.

1,890,919. SHROUD. ALEXANDER H. STRAUS, Woodmere, N. Y. Filed Feb. 17, 1931. Serial No. 516,324. 2 Claims. (Cl. 2—87.)



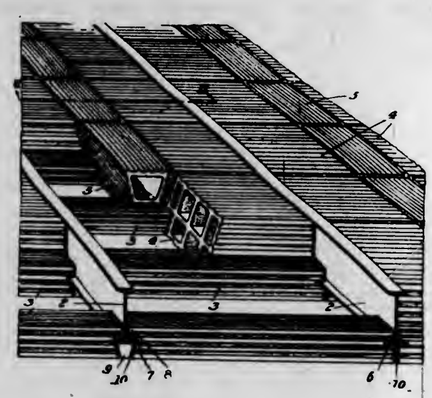
1. A shroud for totally enclosing a corpse, consisting of a moisture-proof paper sheet having a central torso-embracing part provided with wings adapted to be brought to a position of overlap, fastening means for holding said wings in their overlapped position, head and foot extensions on the opposite ends of the torso-embracing part, said extensions being provided with side flaps which are brought together and overlapped to form said extensions into pockets into which the head and feet respectively of the corpse are contained, the pockets thus formed being bodily folded inwardly and toward one another and caused to overlie the opposite ends of the torso-embracing part of the sheet.

1,890,920. SMOKING PIPE. JAMES A. STRAWN, Brooklyn, N. Y. Filed Dec. 13, 1930. Serial No. 502,168. 3 Claims. (Cl. 131—12.)



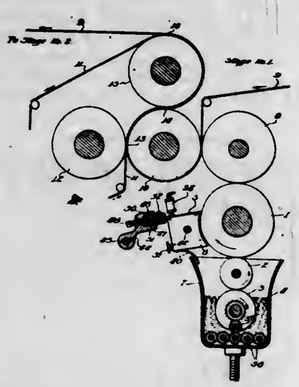
1. A smoking pipe comprising a stem portion having a cylindrical bore therethrough, a substantially cylindrical shell snugly and removably fitted within the bore of said stem, said cylindrical shell provided with a transversely extending wall portion integrally formed therewith and a relatively thin tubular member extending through said transverse wall and secured thereto, substantially midway its length thereof.

1,890,921. FLOOR SYSTEM. FREDERIC D. STURGES, Pittsburgh, Pa., assignor to Jones & Laughlin Steel Corporation, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed May 13, 1929. Serial No. 362,785. 10 Claims. (Cl. 72—66.)



3. In a floor system, spaced beams, primary tiles extending between the beams and spaced from one another, and floor tiles extending horizontally over the primary tiles and supported thereby.

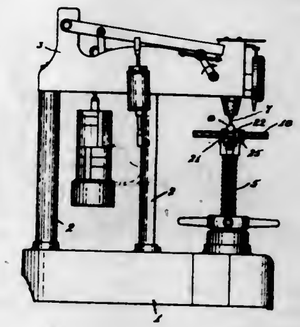
1,890,922. MULTICOLOR PRINTING PRESS. EDWARD A. WALLER, Chicago, Ill. Filed Apr. 18, 1929. Serial No. 354,930. 4 Claims. (Cl. 101—152.)



1. A printing press comprising an etched roll having longitudinally distinct zones each bearing subject matter of its own, in combination with a common doctor blade and a support for said blade, said support having spaced roll-wiping parts formed and adapted to maintain non-inked margins between the etched sections.

1,890,923. TEST PIECE SUPPORT FOR HARDNESS TESTERS. CHARLES H. WILSON, Pelham, N. Y., assignor to Wilson Mechanical Instrument Co. Inc., New York, N. Y., a Corporation of New York. Filed May 15, 1928. Serial No. 277,941. 14 Claims. (Cl. 265—12.)

11. An auxiliary work support, including a frame having a plurality of bores, a threaded stud, stud adjusting means associated with said stud and frame to lock the stud in desired operative position, a cylindrical member

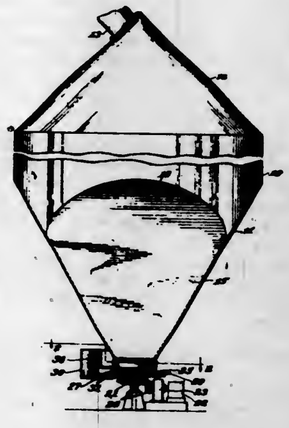


mounted on said stud and movable therewith, and work supporting means adjustably connected to said cylindrical member.

1,890,924. COMPOSITION OF MATTER AND METHOD OF MAKING SAME. HERBERT A. WINKELMANN, Akron, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y., a Corporation of New York. Filed Oct. 25, 1927. Serial No. 228,703. 18 Claims. (Cl. 260—1.)

1. The method which comprises intimately admixing an organic sulfonate of a heavy metal with rubber and heating the admixture.

1,890,925. AUTOMATIC DELIVERY STORAGE VAULT. WILLIAM E. ALLINGTON, Highland Park, Ill. Filed July 12, 1928. Serial No. 292,311. 10 Claims. (Cl. 221—118.)



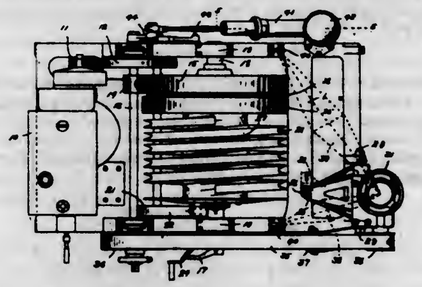
6. A storage and delivery vault comprising a material storage receptacle having an outlet at its bottom through which material flows in a generally vertical direction, a rotatable platform spaced below the outlet, said platform supporting the material in the receptacle thereabove and effecting discharge of material when rotated and cessation of discharge when rotation is stopped, and a mounting for supporting the platform at an inclination which varies during rotation whereby material supported by the platform is vertically undulated.

1,890,926. ELECTRODE FOR VAPOR GAS ELECTRIC DEVICES. WILLIAM T. ANDERSON, Jr., Newark, and HUGH D. FRASER, Verona, N. J., assignors to Hanovia Chemical and Manufacturing Company, Newark, N. J., a Corporation of New Jersey. Filed June 16, 1931. Serial No. 544,770. 3 Claims. (Cl. 250—27.5.)



1. In an electrode for a vapor electric device, a gas tight insulating container, a lead-in wire sealed in the container, an electrode medium of liquid mercury, and a coil of metal having greater thermal conductance than mercury immersed in the mercury and contacting the walls of the container.

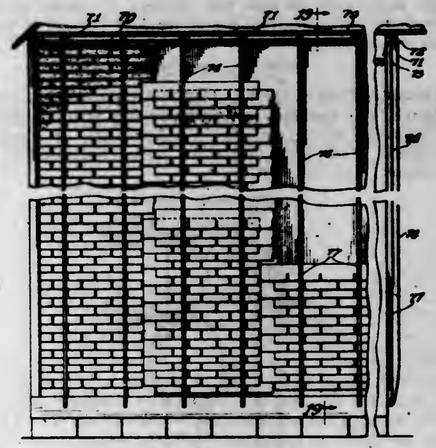
1,890,927. PORTABLE POWER UNIT. ABRAM M. BEVER, Duluth, Minn. Filed Sept. 6, 1930. Serial No. 480,173. 1 Claim. (Cl. 255—19.)



A one man portable drilling machine of the type described, comprising a rectangular frame, a winding drum mounted centrally thereon, a power unit in rear of said drum, control levers for the winding drum on one side of the frame, a drill head mounted upon the forward corner of the frame adjacent the control lever, and a pump carried by the frame at the opposite forward corner to counterbalance the drill head whereby there is an even distribution of the weight of all the elements on the frame and the operator can operate the levers with one hand and feel or turn the drill with the other hand.

1,890,928. BUILDING COVERING. EDWARD R. BLACK, Chicago, Ill., assignor to Black Systems, Inc., Chicago, Ill., a Corporation of Illinois. Filed May 6, 1931. Serial No. 535,433. 17 Claims. (Cl. 108—9.)

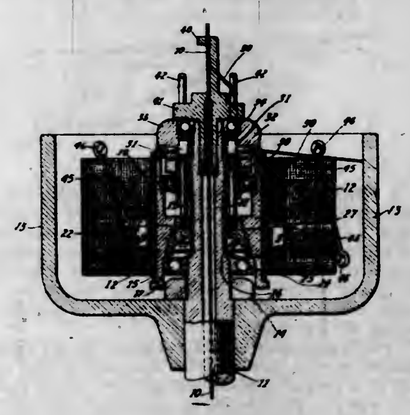
1. The method of applying to a building structure a covering of flexible prepared roofing material which includes the steps of forming an aggregate by temporarily applying to a positioning strip a plurality of units of the material in the vertically overlapping relation to be assumed thereby when finally placed on the building, applying such aggregates to the building structure, securing each unit to the building structure, and finally withdrawing the positioning strip.



5. A building covering aggregate comprising a temporary holding and gaging strip having a plurality of shoulders occurring at regular intervals therealong, and a plurality of covering units temporarily retained in engagement with the shoulders and thereby located in the vertically overlapping relation to be assumed when in position on the building structure.

16. Equipment for placing building covering units comprising a pulley, a belt trained over the pulley, and a gaging strip carried by the belt, said strip having a series of covering unit retaining shoulders located at regularly spaced intervals therealong.

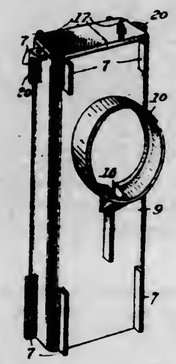
1,890,929. APPARATUS FOR SERVING STRANDED MATERIAL. SIDNEY E. BORGESON, Rome, N. Y., assignor to General Cable Corporation, New York, N. Y., a Corporation of New Jersey. Filed Dec. 31, 1930. Serial No. 505,820. 10 Claims. (Cl. 117—42.)



1. Apparatus for serving a strand to a core, comprising in combination, a rotatable hollow spindle receiv-

ing the core, a package supporting arbor rotatably mounted on said spindle, means for exerting a drag on the package arbor resisting its rotation relative to the spindle, and means responsive to the tension on said strand for regulating the action of said drag means on said arbor, said drag means including a friction brake and said regulating means including a hub member oscillatable with respect to said spindle and arms hinged at their inner ends to said hub member to swing upward to permit the introduction and removal of strand packages thereover.

1,890,930. VENT PIPE. JAMES S. BLACKMORE, Pittsburgh, Pa., assignor to Automatic Gas Steam Radiator Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Apr. 17, 1929. Serial No. 355,972. 2 Claims. (Cl. 126—307.)



1. A metallic vent section having a flue opening therein said opening being restricted by an inwardly projecting flange extending approximately entirely around the opening, and a passageway formed in a wall of said section adjacent said flue opening and extending through said inwardly projecting flange for draining accumulations of liquid from said opening.

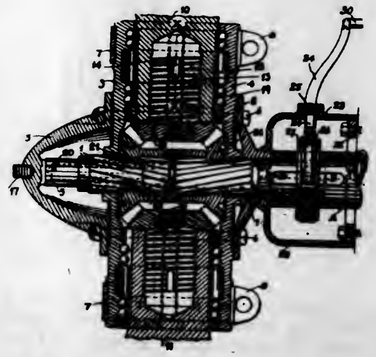
1,890,931. AIRCRAFT AND METHOD OF FLIGHT. EMIL A. BRINER, East Orange, N. J. Filed Jan. 6, 1928. Serial No. 244,829. 27 Claims. (Cl. 244—15.)



3. A flying and lifting unit of a flying machine comprising a large revolving wing mounted on a turret of a fuselage, whose motor and central shaft transmit power through differential gears, shafting, and other means, to planetary propellers mounted on the wings, said differential gears serving to automatically compensate the propeller torques while driving the wings in rotation for obtaining lift and flight.

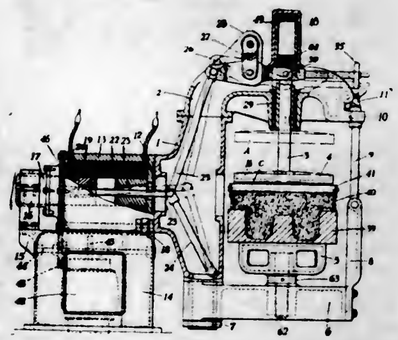
27. The combination with an airplane having essential machinery weights including the aircooled driving motor located in a substantially central position in the fuselage close to the airplane's center of sustention and below the center of gravity to thereby minimize dissemination of vibration and ensure lateral and longitudinal stability, of means to continuously remove the boundary layer of air from the upper surface of the airplane fuselage to thereby minimize parasite drag, and means to utilize the air thus removed as a cooling medium for the driving motor.

1,890,932. VARIABLE PITCH PROPELLER. EMIL A. BRINER, East Orange, N. J. Original application filed Jan. 6, 1928, Serial No. 244,829. Divided and this application filed Apr. 26, 1929. Serial No. 358,387. 14 Claims. (Cl. 170—163.)



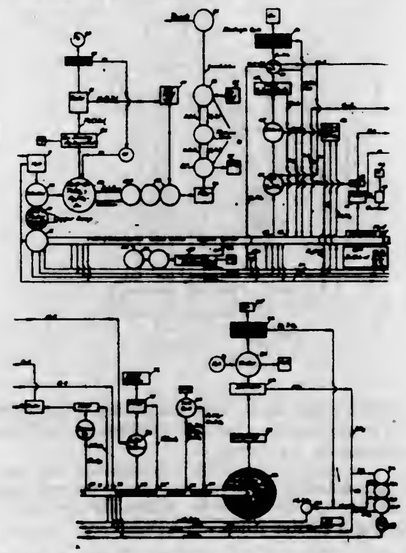
1. A variable pitch propeller, comprising a hollow power shaft, a hollow hub fixed to said shaft, axially rotatable propeller blades having their roots entered in said hub, ballbearing means engaged between said hub and blade roots to sustain the centrifugal load on said blades and to reduce friction of axial rotation thereof, a shifting rod axially movable within said power shaft, separate counter balancing right and left spiral splines carried by said shifting rod, cooperating gears connected between respective blade roots and the right and left hand spiral splines respectively, and means for manually actuating said shifting rod.

1,890,933. FOUNDRY MOLDING MACHINE OF ROLL-OVER TYPE. THOMAS WOODWARD BULLOCK, Rainhill, England, assignor to British Insulated Cables Limited, Prescot, England, a British Company. Filed Dec. 4, 1931, Serial No. 578,949, and in Great Britain Dec. 23, 1930. 6 Claims. (Cl. 22—32.)



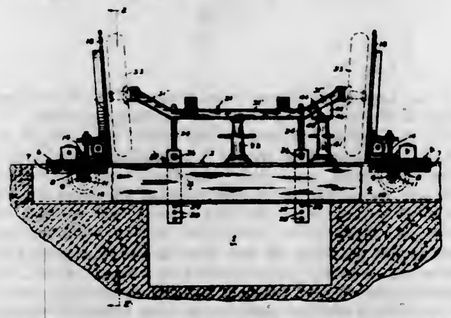
1. A molding machine of the roll-over type comprising a frame, a horizontal projecting portion on said frame, a bearing rotatably supporting said projecting portion, an electromagnetic device mounted in said projecting portion, a pair of relatively movable pressing members carried by the frame, a toggle mechanism connecting said electromagnetic device with one of the pressing members and transmitting the pressing movement from said device to said pressing member.

1,890,934. METHOD OF AND MEANS FOR PRODUCING SULPHATES FROM MIXED SULPHIDE MATERIALS AND THE RECOVERY OF VALUES THEREFROM. GEORGE CAMPBELL CARSON, Los Angeles, Calif. Filed Apr. 19, 1930. Serial No. 445,779. 20 Claims. (Cl. 23—117.)



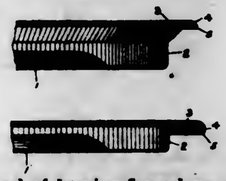
20. The herein described method which comprises maintaining a body of liquid sulphating material, the acid strength of which varies from point to point in the body; introducing into said body a mixture of metallic sulphides containing the sulphides of iron and zinc, moving the sulphides in said body to points where the strength of the material is sufficient to attack them; sulphating the various sulphides into the corresponding sulphates, crystallising the sulphates of iron and zinc and dehydrating the mixed crystals, heating the dehydrated crystals to a temperature sufficient to dissociate the iron sulphate crystals only, forming iron oxide and SO_3, dissolving the zinc sulphate crystals, separating the dissolved zinc sulphate from the iron oxide, treating the zinc sulphate for the recovery of its metal value, and introducing such part of the SO_3 into the body at its various points as is required to maintain its acid strength, at those points.

1,890,935. CAMBER CORRECTING DEVICE. JOHN C. CRAGMILE, Berkeley, and FRED H. REIMAN, San Francisco, Calif. Original application filed Nov. 19, 1928, Serial No. 320,395, Patent No. 1,791,803. Divided and this application filed Dec. 26, 1929. Serial No. 416,453. 1 Claim. (Cl. 153—2.)



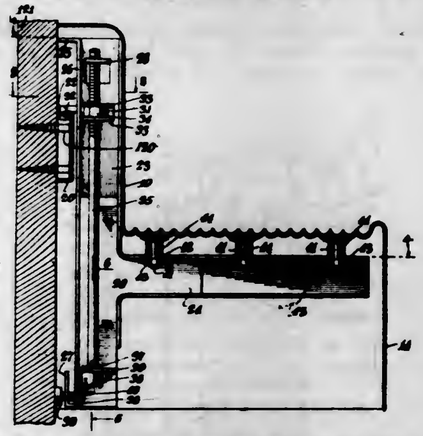
A wheel aligning device comprising a supporting beam, gauge members mounted on said beam and providing opposed and relatively adjustable reference surfaces, means for supporting an axle carried by dirigible wheels on and above said beam to dispose said wheels in facing relation to said surfaces, said axle comprising angularly related portions and one said axle portion being fixedly secured to said beam in parallel relation thereto, and a thrust member engaged between said beam and the second axle portion and operative perpendicularly to said beam and obliquely with respect to said second axle portion, and means releasably fixing said jack to said second axle portion at its point of engagement therewith.

1,890,936. METHOD OF FORMING FLANGED CAN ENDS WITH CURLED EDGES. HENRY JAMES DOUGLASS, San Francisco, Calif. Filed Jan. 5, 1932. Serial No. 584,815. 2 Claims. (Cl. 113—121.)



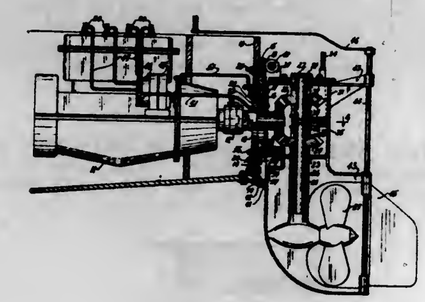
1. The method of forming flanged can ends with curled turned in edges comprising the stamping of can ends with tapering flanges having curled non-inwardly turned outer edges, and the turning of said curled edges inwards after said stamping by altering the angle of taper of said flanges.

1,890,937. ADJUSTABLE BRACKET FOR SINKS. EDWARD S. ERICKSON, Salem, Ohio, assignor to The International Nickel Company, Inc., New York, N. Y., a Corporation of Delaware. Filed Dec. 31, 1930. Serial No. 505,885. 4 Claims. (Cl. 248—30.)



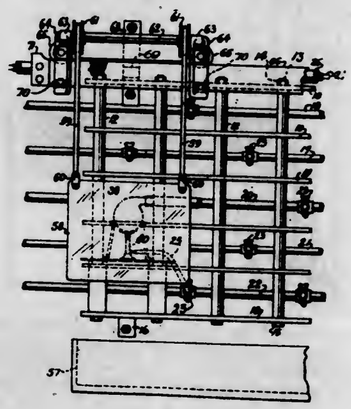
3. In a support for a kitchen sink or the like, a T-shaped bracket comprising a vertical channel and a horizontal channel, said vertical channel having its flanges extending parallel to the wall, a reinforcing T-iron in the channels of said bracket, said vertical channel having a vertical slot in its flange nearer the wall and adjacent its web and an upper guide flange in the channel thereof, a hook member comprising a hook part extending through said slot for engaging a supporting member, said hook member also comprising a second part positioned within said vertical channel, the lower end of said T-iron having a lower guide flange located in said vertical channel, an adjusting screw in said vertical channel passing loosely through said lower and upper guide flanges and fixed vertically relative thereto, and means for threading said screw to said second part.

1,890,938. MEANS FOR PROTECTING THE PROPELLERS AND RUDDERS OF BOATS. EMERY H. FAHRNEY, Chicago, Ill. Filed Dec. 15, 1930. Serial No. 502,276. 5 Claims. (Cl. 115—17.)



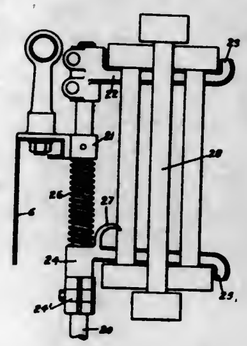
1. In combination, a boat, a propeller, a support for the propeller, a propeller shaft, a motor for driving the shaft, means swingingly connecting the support to the boat, means holding the propeller in a position to project below the bottom of the boat, a separable connection between the propeller shaft and the motor, the second said means operating automatically to permit the support to swing about its pivot under abnormal conditions to render the connection between the propeller shaft and the motor inactive, resilient means acting directly upon the support for maintaining the support in the position to which it has been moved and serving as a cushion for the support, and means for rendering the motor inactive when the said support is thus swung about its pivot.

1,890,939. SUPPORTING RACK STRUCTURE. EMERY H. FAHRNEY, Chicago, Ill. Filed Mar. 4, 1932. Serial No. 596,782. 19 Claims. (Cl. 23—253.)



1. In combination, a supporting rack structure embodying spaced superposed horizontal members, laterally spaced uprights securing the horizontal members together, supply pipes running along said rack for supplying an operating medium, article supporting brackets detachably connected with the rack, and service outlets in the pipes for the connection thereto of a conduit for conducting the said medium to an article or apparatus supported upon said brackets.

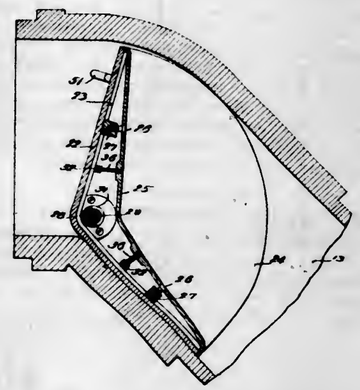
1,890,940. FIRE ENGINE. CHARLES H. FOX, Cincinnati, Ohio, assignor to The Ahrens-Fox Fire Engine Company, Cincinnati, Ohio, a Corporation of Ohio. Original application filed Nov. 14, 1930, Serial No. 495,653. Divided and this application filed Oct. 26, 1931. Serial No. 571,023. 9 Claims. (Cl. 248—20.)



2. A plaster pole support for use on fire trucks consisting of a sleeve having a bayonet slot therein, and a supporting clamp on the sleeve.

6. In a truck having a body, a bracket on the body, a post attached to the bracket, ladder-clamping and holding arms on the post, and a sleeve on the post for receiving and holding a plaster pole.

1,890,941. NIGHT VAULT. CLARENCE L. FLAGO, Atlantic, Mass., assignor to Bankers Electric Protective Association, Boston, Mass., a Corporation of Massachusetts. Filed July 30, 1929. Serial No. 382,255. 6 Claims. (Cl. 177—316.)



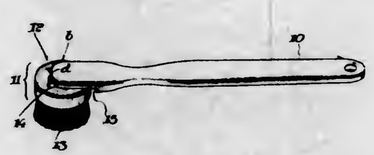
1. In apparatus of the class described, a downwardly inclined chute leading from an exterior entrance to a vault, a trapdoor pivoted in the chute adjacent its entrance and adapted to receive a package and discharge it down the chute, said door comprising top and bottom members connected in spaced relation and each of said members having parts meeting at an angle so that the chute is substantially obstructed in the receiving and discharging positions of the door, a switch mounted between said members and connected in a signal circuit, and means on one of said members normally holding the switch in inoperative position, said means being arranged to cause operation of the switch when the two members are displaced relatively to each other.

1,890,942. BOTTLE PACKAGE. HERMAN E. GOODMAN, Providence, R. I. Filed June 22, 1931. Serial No. 545,925. 4 Claims. (Cl. 229—89.)



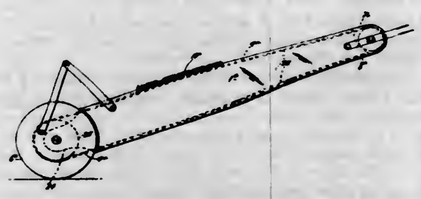
1. A bottle covering comprising a fashioned sheet of protective material of the general contour of said bottle having a top portion fashioned to the neck of the bottle and an integral top wall, an integral cover for the bottom of the bottle pivoted on the bottom of the covering, and mechanical clasp means for repeatedly securing said bottom cover to said covering.

1,890,943. TOOTHBRUSH. JACOB S. HOFFMAN, New York, N. Y. Filed May 4, 1932. Serial No. 609,060. 4 Claims. (Cl. 15—28.)



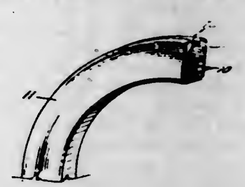
1. A toothbrush comprising a handle member and a rotatable brush member adjacent one end thereof, one of said members having guide grooves therein with a common point of entrance and constituting a raceway, and the other member having a pivot projection in interlocking sliding engagement with said raceway and operable therein by orbital manipulation of the handle member to effect the rotation of the brush member against the surface of the teeth.

1,890,944. TOY. THEODORE DANIEL HOLMES, Brooklyn, N. Y. Filed Oct. 24, 1931. Serial No. 570,885. 1 Claim. (Cl. 46—48.)



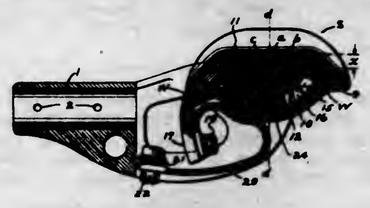
In a toy, in combination, a substantially flat, elongated handle, the same being recessed at its intended rear end so as to provide laterally disposed roller ears, and being grooved out along its edges, a laterally offset wheel ear extended at the intended forward end of the handle, a wheel journaled upon the said offset ear, the same being grooved peripherally in alignment with the grooves of the handle, a roller journaled between the roller ears at the rear end of the handle, a train carrying belt trained over the said wheel and roller and within the said handle grooves, a toy train mounted upon the outer side of the belt, and a set of pivotally connected arms eccentrically and pivotally connected at one end to the open side of the wheel and pivotally connected at the other end to the adjacent side of the handle, the said arms simulating the action of the connecting rod of a locomotive concurrently with the movement of the belt and toy train.

1,890,945. REEL FOR METALLIC TAPES. CHARLES C. HORMEL, Denver, Colo. Filed July 13, 1931. Serial No. 550,491. 2 Claims. (Cl. 175—376.)



1. A reel for metallic tapes comprising: an annular, hollow, outwardly-opening channel member, the peripheral edges of said channel member being turned toward each other at the outer circumference of said member, thence turned inwardly toward the axis of said member so as to form two rounded edges, said edges being spaced apart so as to leave an open slot entirely around the outer circumference of said member opening to the interior thereof.

1,890,946. TROLLEY HEAD. ERNST A. LARSSON, Mansfield, Ohio, assignor to The Ohio Brass Company, Mansfield, Ohio, a Corporation of Ohio. Filed Sept. 16, 1931. Serial No. 563,115. 24 Claims. (Cl. 191—59.1.)

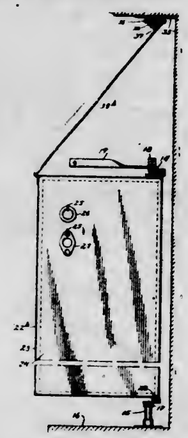


1. A current collector comprising a harp member having means for attachment to a support and spaced arms, a current collecting member mounted between the arms and having an elongated contact surface between flanges and a transverse arcuate slot having parallel arcuate bearing surfaces having a common center of radii, the said center being positioned adjacent the said elongated contact surface and adjacent its longitudinal center and a bearing member positioned in said slot and secured to the arms and having oppositely disposed and parallel arcuate bearing surfaces conforming to those surfaces on the collector member.

1,890,947. DISPLAY RACK. THEODORE H. OTTO, Brooklyn, N. Y. Filed June 9, 1932. Serial No. 616,167. 15 Claims. (Cl. 40—102.)

1. A rack of the class described comprising a frame consisting of vertically spaced plates, a plurality of panels disposed between and pivotally mounted in connection with said plates to permit independent swinging movement of the panels in said frame, means on one panel cooperating with an adjacent panel for maintaining said panels in definitely spaced relation with respect to each

other when in closed position, means whereby articles of various kinds and classes may be supported in connection with said panels to be visible at both side faces thereof,

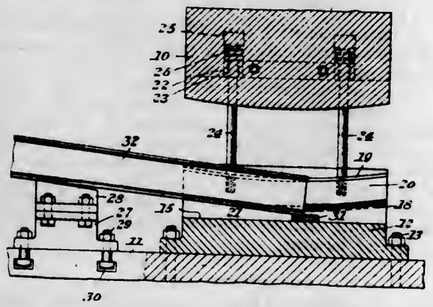


and means for pivotally mounting the frame to permit collective swinging movement of said panels with the frame.

1,890,948. CHEESE AND METHOD OF PROCESSING SAME. RICHARD PASTERNACK and RICHARD W. BURNHAM, Brooklyn, N. Y., assignors to Charles Pfizer & Company, Brooklyn, N. Y., a Corporation of New Jersey. Filed June 13, 1930. Serial No. 461,041. 11 Claims. (Cl. 99—11.)

2. The method of processing cheese comprising adding to the cheese a small proportion of a soluble salt of gluconic acid, heating the mass to a temperature high enough to destroy undesirable bacteria contained in the cheese but not sufficiently high to disintegrate the cheese, and maintaining the temperature until the cheese is sterilized.

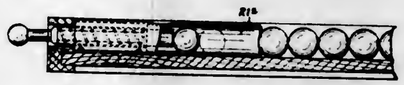
1,890,949. METHOD AND APPARATUS FOR BENDING. ROBERT V. PROCTOR, Youngstown, Ohio, assignor to The Commercial Shearing & Stamping Company, Youngstown, Ohio, a Corporation of Ohio. Filed May 7, 1931. Serial No. 535,610. 10 Claims. (Cl. 153—48.)



1. Bending dies for members having a web and a flange extending therefrom, comprising opposed, movable jaws having flange-engaging shoulders, and web-engaging faces, said faces being recessed to accommodate portions of said members, and a shoe with inclined walls for forcing said jaws together.

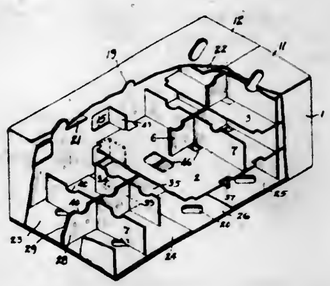
9. In a method of bending members having a web and flanges at the edges of the web, the steps including supporting one flange uppermost vertically to suspend another flange freely therebelow, supporting the web laterally throughout the bending zone, and applying pressure to the upper flange only.

1,890,950. GAME BOARD. CHARLES L. SHARP, Pittsburgh, Pa., assignor of one-half to I. T. Sharp. Filed Mar. 31, 1932. Serial No. 602,230. 4 Claims. (Cl. 273—129.)



1. The combination with a runway, of a plunger mounted at the lower end of the runway, an ejector ball normally having engagement with said plunger and movable into engagement with playing balls contained in said runway, and means in said runway for limiting forward travel of the ejector ball.

1,890,951. SHIPPING CARTON. ELROY P. SHERMAN, Ashtabula, Ohio, assignor to The Ashtabula Corrugated Box Company, Ashtabula, Ohio, a Corporation of Ohio. Filed Feb. 16, 1932. Serial No. 593,291. 9 Claims. (Cl. 225—27.)

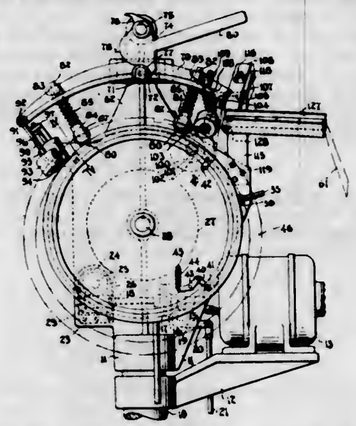


1. In a fruit shipping carton having interior ventilating passages from top to bottom, top and bottom openings vertically aligned, each of said openings being relatively long to give ventilating area and narrow to prevent pilfering, said openings in the top being uniformly inclined in one direction and those in the bottom being uniformly inclined in the opposite direction, thereby causing the bottom openings in an upper carton to overlap the top openings in the next lower carton, when piled, even when said cartons are out of vertical alignment.

1,890,952. MACHINE FOR APPLYING GUM STRIPS TO BEADS. JESS A. SHIVELY, Akron, Ohio, assignor to The Goodyear Tire & Rubber Company, Akron, Ohio, a Corporation of Ohio. Filed Dec. 21, 1929. Serial No. 415,847. 6 Claims. (Cl. 154—14.)

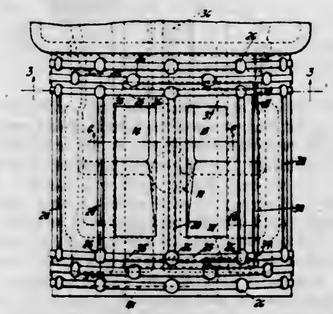
1. In a machine for applying a rubber strip to a bead having a skirt which is normally frusto-conical in shape, means for rotating the bead, means for tilting the skirt from its normal shape and inwardly toward the axis of the bead, said means also being adapted to apply a rubber strip to the skirt of the bead while thus tilted, the strip being so applied that an edge thereof projects from the edge of the skirt, whereby reversion of the skirt to its normal shape results in curling of the projecting edge of the strip to the opposite side of the skirt, and means for stitching the strip to the sides of the skirt.

6. The method of applying elongate strips of rubber to the skirts of beads, which comprises moving the skirt inwardly toward the axis of the bead, applying a strip of rubber to the outer side of the skirt while so positioned, with an edge of such strip projecting from the free edge of the skirt, and thereafter reverting the skirt to its



normal position, which operation first tensions the projecting edge of the rubber strip and thereafter causes it to curl to the other side of the skirt.

1,890,953. VALVE. SAMUEL B. SMITH, Cleveland, Ohio. Filed Mar. 7, 1929. Serial No. 345,029. 25 Claims. (Cl. 123—190.)



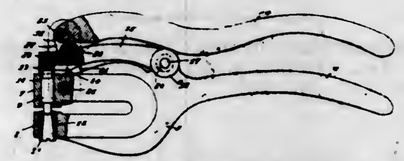
1. In a valve construction, a valve having a port therein and a groove disposed alongside such port, such groove being provided with depressions intersecting its bottom at spaced points, barrier elements seated in such depressions and blocking the groove, and a sealing member fitted to such groove, the end of said member abutting said elements.

1,890,954. FILLER STRIP FOR FLOORS AND OTHER CONSTRUCTIONS. CLIFFORD L. SNYDER, Detroit, Mich., assignor to The Evans Auto Loading Co. Inc., Detroit, Mich. Filed July 16, 1930. Serial No. 468,432. 1 Claim. (Cl. 20—6.)



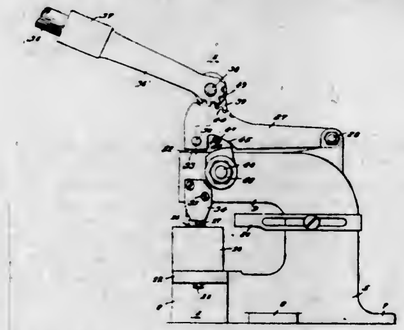
In a floor or similar construction, members having opposed grooves in adjacent side edges thereof, and a closed tubular resilient metallic filler strip having spaced side walls, and an outwardly directed longitudinally extending bead on each side wall to be received in an adjacent member groove, and the connecting top and bottom walls between the side walls of the tubular strip lying substantially in the planes of the upper and lower faces of the members.

1,890,955. PUNCH. HAROLD C. SPENGLER, Rockford, Ill. Filed July 6, 1931. Serial No. 548,972. 2 Claims. (Cl. 164—120.)



1. In a punch, a handle having a head thereon providing upper and lower jaws, a punch guided in a hole in the upper jaw, a die for cooperation with the punch mounted in the lower jaw in axial alignment therewith, side plates pivotally connected to the jaw of the head on opposite sides thereof, a hand lever pivotally mounted between said side plates above the head, an intermediate lever for actuating the punch pivotally mounted on the head and extending forwardly between the side plates and operatively connected at its front end with the punch to communicate movement thereto, said hand lever and intermediate lever being arranged to be connected by means of projecting ears on the front end of one of said levers receiving a front portion of the other lever therebetween, and a full-floating roller pin freely received in registering transverse holes provided in the interengaging front portions of said levers for positively interconnecting the same, said side plates being constructed and arranged so as to oscillate with respect to the head in the operation of the hand lever and still cover the end of said roller pin in any operative position, whereby to hold the same against endwise movement out of said holes.

1,890,956. BENCH PUNCH. HAROLD C. SPENGLER, Rockford, Ill. Filed July 6, 1931. Serial No. 548,973. 1 Claim. (Cl. 164—96.)



In a bench punch of the hand lever type, comprising a body portion formed to provide an anvil and an over-arm, a die mounted on the anvil, and a plunger guided for movement in a hole in the over-arm to operate a punch in alignment with the die, a lever for actuating the plunger pivotally mounted at one end on the body portion and having its other end disposed over the plunger and arranged by direct engagement therewith to operate the same on the downstroke, the abutting ends of said lever and plunger being bifurcated, a link connection between the plunger and said lever in the bifurcated portions whereby to permit nearly full length engagement of the plunger in the hole in said over-arm for guide purposes, and a hand lever mounted for swinging movement relative to the body portion and operatively connected with the aforesaid lever for positively operating the punch holder on the downstroke by

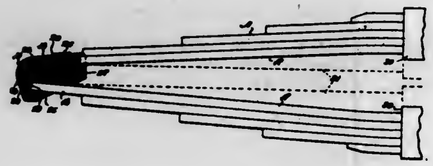
movement of the lever in one direction and on the upstroke by movement of the lever in the opposite direction, the link connection being constructed for a predetermined lost motion between the lever and plunger, whereby to insure positive engagement between the plunger and lever for downward movement of the plunger independently of the link connection, and whereby the link connection serves to move the plunger upwardly on the return movement of the lever.

1,890,957. ANTISKID DEVICE. ARTHUR HYNSON SQUIER, Reno, Pa. Filed Dec. 6, 1930. Serial No. 500,633. 3 Claims. (Cl. 152—14.)



2. An anti-skid device comprising a rectangular base plate, having its opposite ends bifurcated and a series of anti-skid plates pivoted to each other and laterally offset with respect to adjacent plates.

1,890,958. VEHICLE SPRING. JOHN J. TATUM, Baltimore, Md. Filed Apr. 1, 1929. Serial No. 351,803. 20 Claims. (Cl. 267—55.)



1. An elliptical spring comprising an upper and a lower bundle each composed of a plurality of plates with free ends, a housing receiving and interlocked with the free end of the main plate of one of said bundles, and receiving the free end of the main plate of the other bundle and maintaining it in unattached spaced slidable relation to the end of the other main plate, whereby the spring when assembled, and riding in load, will be working approximately with its main plates on a straight line from end to end of the spring.

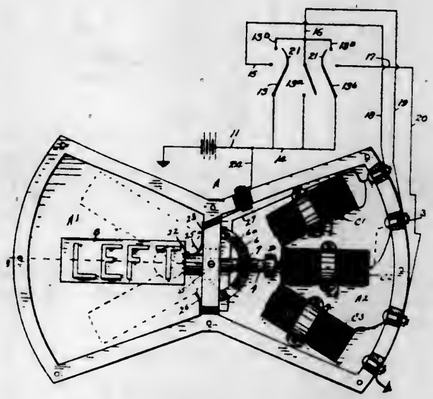
1,890,959. WOVEN FABRIC. NORBERT VOHS, Munich-Gladbach, Germany. Filed Mar. 12, 1931, Serial No. 522,166, and in Germany Apr. 25, 1930. 3 Claims. (Cl. 139—426.)

1. A fulled fabric with warp threads consisting essentially of wool and a weft in each shed consisting of two different threads, both essentially of wool, those fibres which have about the same length of staple and similar physical and chemical properties being combined in each of these threads, and the length of staple and the physical and chemical properties of one of the two weft threads being different from the corresponding properties of the other weft thread, and the two weft threads lying side by side in the same shed without being twisted together.

1,890,960. PROCESS OF MANUFACTURING SMOKELESS POWDER. RICHARD WEINGAND and HANS ISAAC SCHULZ, Bomlits near Walsrode, Germany. Filed Mar. 25, 1931, Serial No. 525,328, and in Germany Mar. 28, 1930. 3 Claims. (Cl. 52—20.)

1. The process of manufacturing smokeless powder which comprises submitting nitrocellulose containing at least 12.8 per cent nitrogen to more than 100 atmospheres pressure in the presence of volatile organic liquids incapable of producing gelatinization at ordinary pressure and thereby gelatinising the nitrocellulose.

1,890,961. DIRECTION SIGNAL FOR VEHICLES. JOSEPH S. WIGNALL, Payson, Utah. Filed May 24, 1926. Serial No. 111,200. 1 Claim. (Cl. 177—327.)



In a device of the class described the combination of a casing formed of wing shaped segments one of which has a transparent covering thereover; a three sided signal housing carried under the transparent end of said casing; a shaft secured to one end of said housing and carried in said casing; a bearing for said shaft to allow said shaft to rotate therein said bearing being pivoted in said casing; a plurality of electro-magnets mounted in the opposite end of said casing to said sign housing; a weight secured on the end of said shaft said weight to be actuated by the magnetic attraction of said magnets; a segment rack secured to said casing adjacent said electromagnets; a pinion gear secured on said shaft meshing with said rack; and an electric light globe carried in said signal housing.

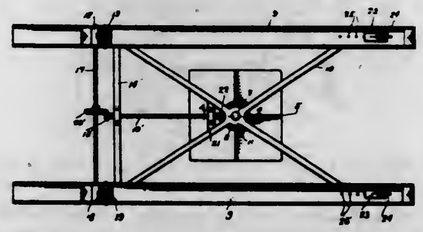
1,890,962. PARACHUTE FOR ILLUMINATING FLARES. SAMUEL WILEY, Metuchen, N. J. Filed July 26, 1930. Serial No. 470,977. 5 Claims. (Cl. 102—24.)



1. A parachute having its intermediate portion puckered substantially to provide a drag element and gathered inwardly beneath the element to provide a neck, and means for removably holding the gathered portion together.

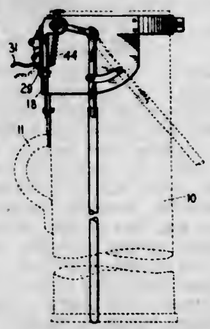
5. A flare having a casing open at one end, a cap removably fitted on the open end of the casing for closing the same, and a supporting parachute enclosed at its lower end portion in the casing and projecting at its upper end portion beyond the open end of the casing, said cap being of a depth to receive and enclose the projecting upper end portion of the parachute and adapted when removed from the casing to expose said upper projecting end portion of the parachute to the air for the withdrawal of the parachute from the casing by air pressure.

1,890,963. AUTOMOBILE LIFT. JOSH F. WILLIAMS, Lexington, Miss., assignor of one-half to Dewitt Buck, Lexington, Miss. Filed July 17, 1931. Serial No. 551,476. 1 Claim. (Cl. 254—92.)



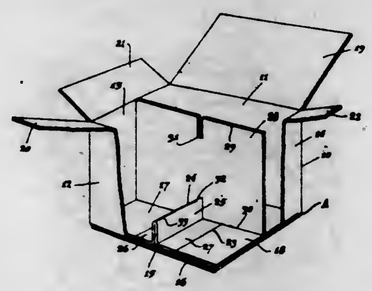
In an automobile rack, a pair of spaced parallel tracks and a cross bar secured rigidly at the ends thereof to said tracks, traction devices carried by said tracks, a cross shaft having connection with said traction devices, a longitudinally extending shaft rotatably connected to said cross member and operatively connected to said cross shaft, a spider connected to said tracks, a lifting screw connected to said spider, a driving connection between said longitudinally extending shaft and said screw, and means carried by said spider to rotatably support one end portion of said longitudinally extending shaft.

1,890,964. GOLF BAG SUPPORTING DEVICE. FRANK ZAHOSIK, Racine, Wis. Filed May 16, 1932. Serial No. 611,588. 7 Claims. (Cl. 150—1.5.)



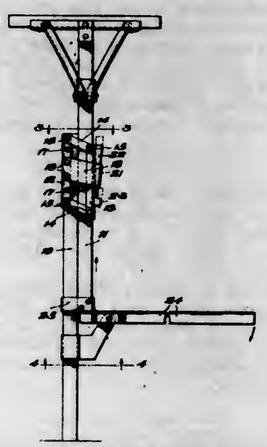
7. A golf bag stand comprising an arcuate shell; adjustable means to removably secure the same about a golf bag; a plate slidably mounted on said shell and having side apertures; a manually operable lever pivoted upon the face of said plate; spring means mounted adjacent said lever adapted to normally hold the lever in locking position; a locking stud on said lever adapted to removably lock said plate in a predetermined position; and a pair of legs having bell-crank arms pivoted on opposite sides of said shell, the ends of said bell-crank arms pivotally engaging the apertures in said slidable plate, the downward movement of said plate being adapted to project said legs outwardly.

1,890,965. BOX. PAUL F. BOSYE, St. Paul, Minn., assignor to Waldorf Paper Products Company, St. Paul, Minn., a Corporation of Minnesota. Filed Feb. 28, 1931. Serial No. 519,047. 8 Claims. (Cl. 229—15.)



1. A box comprising a walled body portion, a divider having a base portion of a width less than the width of the box and resting upon one of the walls thereof, another divider intersecting said first named divider and extending at right angles thereto, said second named divider being of a length substantially equal to the length of the box, a slot in said second named divider for engaging said first named divider, said slot operating to retain said first named divider in a position intermediate the sides of the box, said second named divider resting upon the base of said first named divider.

1,890,966. SHORING. JOHN R. BULLIS, Silver Spring, Md. Filed Dec. 30, 1930. Serial No. 505,637. 2 Claims. (Cl. 248—2.)

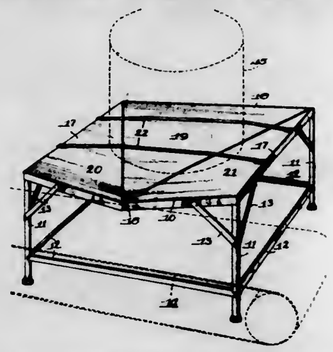


1. A clamp, consisting of two jaws, links pivotally connecting the jaws together, a strap connected to one of the jaws and encompassing the other jaw, and means interposed between the strap and encompassed jaw for holding the jaws in engagement with a supporting member confined therebetween.

1,890,967. TABLE. MIRON S. CANADAY, Rochester, Minn., assignor to Reid, Murdoch & Co., Chicago, Ill., a Corporation of Illinois. Filed Mar. 16, 1931. Serial No. 522,829. 4 Claims. (Cl. 108—52.)

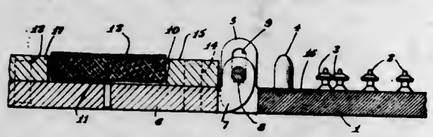
3. A table comprising, in combination, a top having an inclined central triangular portion, and a pair of side por-

tions connected to said central portion along its side edges and sloping upwardly therefrom, a plurality of legs for



supporting said top, and means extending upwardly from said top and secured thereto adapted to engage a crate to steady it.

1,890,968. HEEL MOLD. EDWARD B. CARTER, Lexington, Mass. Filed Nov. 28, 1930. Serial No. 498,600. 9 Claims. (Cl. 18—42.)



9. A two-part heel mold comprising a base plate and having a plurality of groups of washer-receiving pins thereon, a plate hinged to said base plate and having a plurality of biscuit-receiving cavities therein, each cavity being alined with a cooperating group of pins when said plates are in closed position, and biscuit-penetrating means in each cavity to retain said biscuits in said cavities in any position of said cavity plate, whereby each biscuit will be properly centered upon its respective group of pins.

1,890,969. METHOD OF TREATING WATER. NEWCOMB K. CHANEY, Lakewood, Ohio, assignor to National Carbon Co., Inc., a Corporation of New York. Filed Dec. 13, 1928. Serial No. 325,923. 6 Claims. (Cl. 210—28.)

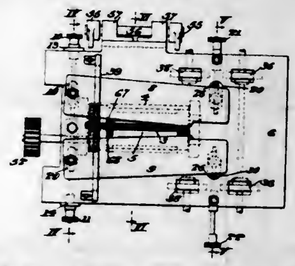
1. The method of treating liquid containing bacteria destroying agents which react chemically and combine with active carbon which first comprises treating the liquid with a partially activated carbonaceous material having a low absorptive value and then with a highly absorptive material.

1,890,970. MECHANICAL FLOATING DEVICE. ERNESTO CORRADINO, New York, N. Y. Filed Aug. 22, 1931. Serial No. 558,697. 6 Claims. (Cl. 115—24.)



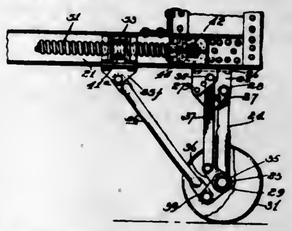
1. A mechanical floating device comprising a bow section, a stern section, buoyant boat rim sections extending therebetween, forming a rigid open center boat-shaped frame therewith, a passenger carrying frame downwardly spaced from said rim sections, also extending between said bow and stern sections, a propeller carrying shaft longitudinally extending underneath said passenger carrying frame, and means operable by the occupant for actuating said shaft.

1,890,971. SIGNATURE FOLDING MACHINE. CONSTANT T. CUNDALL, Pawcatuck, Conn., assignor to C. B. Cottrell & Sons Company, Westerly, R. I., a Corporation of Delaware. Filed June 10, 1931. Serial No. 543,267. 13 Claims. (Cl. 270—80.)



1. In a signature folding machine, a table having a folding slot therethrough, and means for changing the size and shape of said slot comprising two plates located in the same plane, one of said plates being adjustable with respect to the other in said plane.

1,890,972. JACK FOR SEMITRAILERS. DURREL H. DAVIS, Edgerton, Wis., assignor to Highway Trailer Company, Edgerton, Wis., a Corporation of Wisconsin. Filed Feb. 15, 1932. Serial No. 592,968. 8 Claims. (Cl. 280—33.1.)

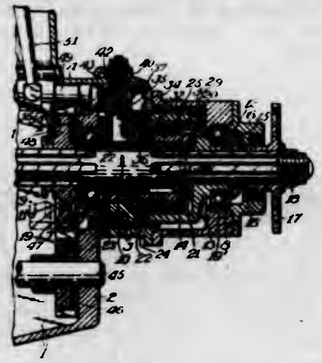


1. In an apparatus comprising a horizontally extending frame structure to be supported, in combination with said frame structure, a leg element hinged at the upper end to the frame structure for depending therefrom in frame-supporting position, and carrying at its depending end a ground wheel axle; control linkage hinged at the upper end to the frame structure proximate to the leg hinge and depending normally substantially parallel to the depending leg; link means connecting the lower end of said control linkage with the lower end of the leg element at the ground wheel axle, said link means having lever means extending from the ground wheel axle axis transversely with respect to said link means; the frame structure having a longitudinally extending guideway proximate the level of the leg hinge; a head block mounted slidingly in said guideway; means for adjusting the head block along the guideway and holding it at adjusted position, and an operating link member connecting said lever means with the head block.

1,890,973. ANTIREVERSE BRAKE MECHANISM. CHARLES DERXLER and DALMAR T. BROWNLEE, Indianapolis, Ind., assignors to L. G. S. Devices Corporation, Indianapolis, Ind., a Corporation of Indiana. Filed Oct. 29, 1929. Serial No. 403,814. 15 Claims. (Cl. 192—4.)

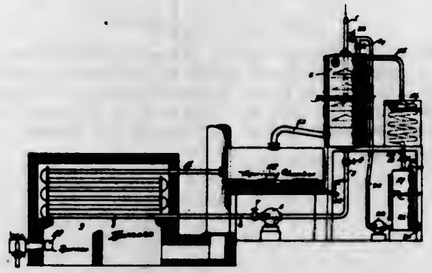
1. Anti-reverse brake mechanism having an operable clutch device for stopping a rotary shaft, a roller to

co-operate with the device for controlling its operation, a shiftable retainer to control the roller and having an



opening therein, a rock shaft and a crank on said shaft disposed in said opening and operable to control the retainer.

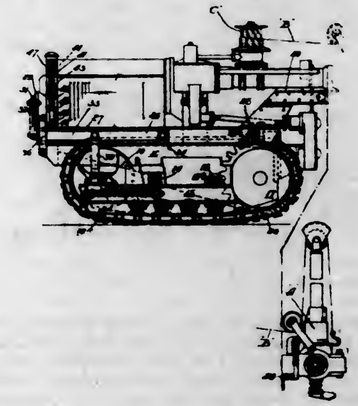
1,890,974. PROCESS FOR CONVERTING HYDROCARBONS. CARBON P. DUBBS, Wilmette, Ill., assignor to Universal Oil Products Company, Chicago, Ill., a Corporation of South Dakota. Continuation of application Serial No. 411,619, filed May 23, 1921. This application filed Feb. 15, 1926. Serial No. 88,501. 4 Claims. (Cl. 196—48.)



1. A process for cracking hydrocarbon oil, consisting in raising the oil to a cracking temperature in a heating zone, in passing vapors evolved from the oil to a dephlegmator, in condensing the dephlegmated vapors issuing from said dephlegmator, in collecting the resulting distillate, in controlling the percentage of vapors condensed in said dephlegmator by introducing a regulated quantity of said distillate to the dephlegmator adjacent the vapor outlet therefrom and by introducing regulated quantities of incoming charging oil to said dephlegmator at a point well below the vapor discharge therefrom, and in maintaining a superatmospheric pressure on the oil undergoing conversion in the process.

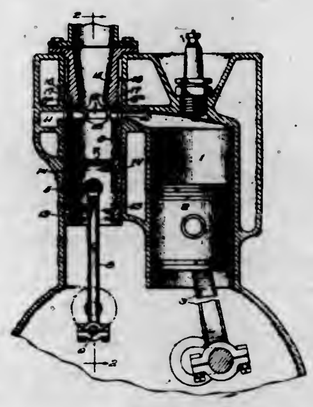
1,890,975. TIE-MEMBER LINKAGE FOR CRAWLER TRACTORS. NICHOLAI M. ERDAHL, Edgerton, Wis., assignor to Highway Trailer Company, Edgerton, Wis., a Corporation of Wisconsin. Filed July 16, 1930. Serial No. 468,333. 12 Claims. (Cl. 280—104.)

8. In combination with a vehicle chassis, a pair of transversely spaced crawler units pivotally connected adjacent one end to said chassis, spring means located at a distance from said pivot for yieldingly supporting the other end of the chassis on the crawler units, a supporting frame pivotally connected to the chassis at the end adjacent the pivot to the crawlers, said frame including a pair of longitudinally extending side members, and a tie connecting said members at the end remote from the pivot, a pair of links pivoted at one end to said side members, a transversely disposed beam



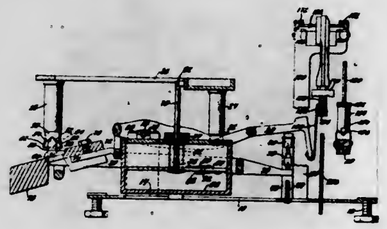
pivoted to said tie of the frame, means pivotally connected to the other ends of said links and the end of said beam, and means directly connecting said links to the adjacent crawler units.

1,890,976. SLIDE VALVE FOR ENGINES. OSCAR G. ERICKSON, Detroit, Mich. Filed Jan. 8, 1930. Serial No. 419,434. 6 Claims. (Cl. 123—188.)



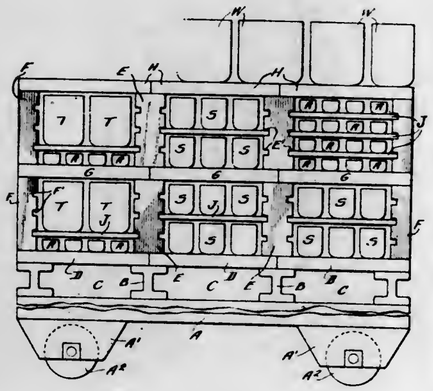
1. In an internal combustion engine, a valve structure comprising a cylinder with one end connecting into the engine crank case, a passageway directly connecting the cylinder to the engine combustion chamber, a conduit connecting into the opposite end of the cylinder, a tubular member in the cylinder into which the conduit connects, means for reciprocating the same, said tubular member having ports through its wall designed to establish communication with the passageway and conduit in a predetermined position of the tubular member, a partition located intermediate the ends of the tubular member which forms a closure and defines a closed passageway from the conduit to the combustion chamber, and a chamber substantially surrounding the cylinder and located in alignment with said ports when the ports establish communication with the passageway and conduit.

1,890,977. PENDULUM TYPE SCALE. LEONARD O. KELLEY, Detroit, Mich., assignor to The Standard Computing Scale Company, Detroit, Mich., a Corporation of Michigan. Filed Sept. 26, 1930. Serial No. 484,587. 16 Claims. (Cl. 265—62.)



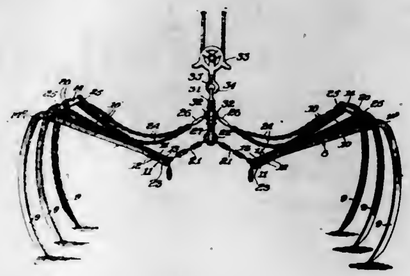
1. A weighing scale including a load platform, a main lever pivotally connected at one end to the frame of the scale, pivotally connected at an intermediate point to a pendulum type counterweight, and operatively connected at its other end to an indicator, and a full floating sub-lever pivotally suspended from the main lever and partially supporting at one end the load platform the other end of said sub-lever being restrained from upward movement.

1,890,978. KILN CAR SUPERSTRUCTURE. HARRY EDGAR FRAR, Lakewood, Ohio, assignor to New Castle Refractories Company, New Castle, Pa., a Corporation of Delaware. Filed Nov. 19, 1929. Serial No. 408,188. 2 Claims. (Cl. 125—142.)



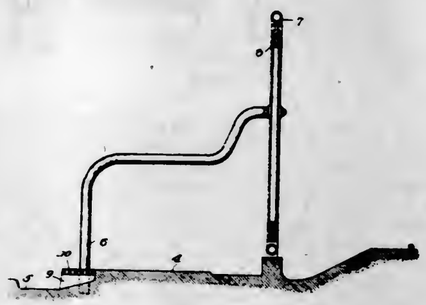
1. In a kiln car, a ware supporting superstructure comprising a permanently positioned section consisting of a pair of spaced ware supporting decks formed by horizontally arranged refractory slabs and a series of vertical refractory posts positioned at spaced points on the lower of said decks and arranged to support the upper of said decks, whereby the space between said decks is openly exposed to the kiln atmosphere on all sides, and means for supporting ware pieces of various dimensions in the spaces between said decks consisting of horizontal notches formed in the sides of said posts at various levels therein and interchangeable auxiliary refractory shelves horizontally slidable in corresponding notches of adjacent posts at levels varying with the dimensions of the ware directly supported thereon.

1,890,979. GRAPPLE FORK. HENRY L. FERRIS, Harvard, Ill.; Howard J. Ferris and Eugene C. Ferris, executors of said Henry L. Ferris, deceased, assignors to Starline, Inc., Harvard, Ill., a Corporation of Illinois. Filed Nov. 28, 1930. Serial No. 498,849. 5 Claims. (Cl. 294—107.)



1. A hay fork of the type including a block, a pair of opposing tine-sections provided at their inner ends with means flexibly connecting them together and releasably to the block and adapted to be closed on the load when carried by said connection, said tine-sections being also connected near their distal ends with the block by a dumping bridle which opens them when the first connection is released, the hay fork being characterized by the fact that the first named connection is constructed to permit independent, universal, pivotal and in and out movement, whereby each tine section may be separately adjusted in loading without moving the other.

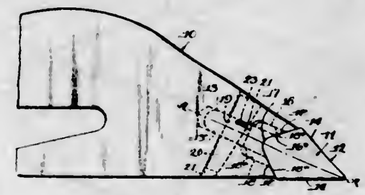
1,890,980. ANIMAL STALL. HENRY L. FERRIS, Harvard, Ill.; Howard J. Ferris and Eugene C. Ferris, executors of said Henry L. Ferris, deceased, assignors to Starline, Inc., Harvard, Ill., a Corporation of Illinois. Filed Dec. 10, 1930. Serial No. 501,452. 5 Claims. (Cl. 119—28.)



1. In a structure of the class described, the combination of a stall floor having a gutter extending along the rear portion thereof free from obstructions throughout substantially the full width of a stall, a grating overhanging a forward portion of said gutter, and hinge means between said floor and grating providing free bodily removal of the grating from the floor.

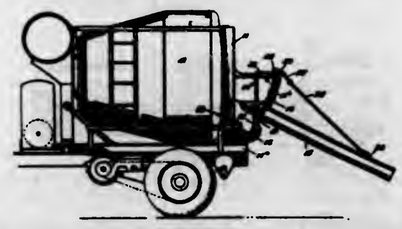
1,890,981. FORGED DIPPER TOOTH. FRED FINKL, Chicago, Ill., assignor to A. Finkl & Sons Company, Chicago, Ill., a Corporation of Illinois. Filed May 20, 1932. Serial No. 612,422. 9 Claims. (Cl. 137—142.)

7. A removable and invertible dipper tooth, which consists of a head and a rearwardly projecting shank, both having similar parts symmetrically formed about the median plane of said tooth, said head having upper and lower forward faces converging to form the point of the tooth, and rearwardly inclined faces merging into said



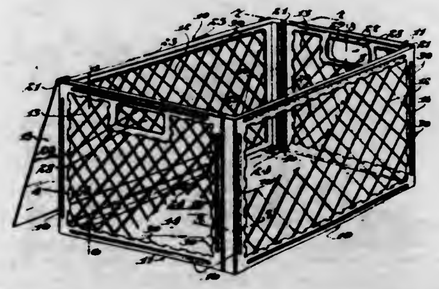
shank at an obtuse angle to said median plane, and ribs formed at the meeting angles of and merging into said rear faces and shank, said shank having an aperture adjacent its rearward end for receiving a securing pin.

1,890,982. DISCHARGE AND DISTRIBUTING MECHANISM FOR CONCRETE MIXERS. ALEXANDER FOSTER, Jr., Philadelphia, Pa., and CHARLES F. BALL, Milwaukee, Wis., assignors to Chain Belt Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed Jan. 20, 1931. Serial No. 510,004. 16 Claims. (Cl. 193—10.)



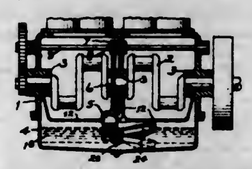
1. In a concrete mixer, the combination with a frame and a mixing receptacle having a discharge opening, of a chute outside of said receptacle for receiving concrete discharged through said opening; and an arm pivotally secured to said frame for supporting said chute in receiving position relative to said opening, said arm and chute being movable about said pivot to bring said chute to a non-receiving position adjacent said receptacle.

1,890,983. METAL FOLDING CRATE. WILLIAM P. GRIFFITH, deceased, Minneapolis, Minn., by Anna Griffith, administratrix, Minneapolis, Minn. Filed May 15, 1930. Serial No. 452,743. 2 Claims. (Cl. 220—6.)



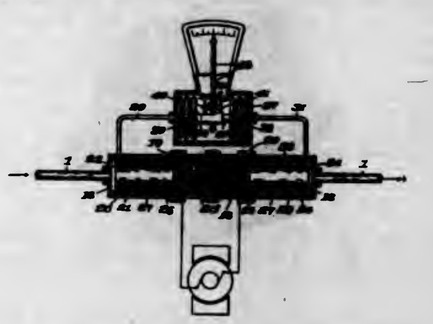
1. In a crate, a section thereof comprising a marginal frame having on its inner edge a multiplicity of hook-like lugs that are folded over the inner face of the frame and spaced therefrom, and a reticulate panel having an endless marginal member between the frame and lugs and held thereby against movement in all directions in respect to the frame.

1,890,984. ENGINE LUBRICATING DEVICE. EDWARD J. GULICK, Elkhart, Ind. Filed Dec. 6, 1929. Serial No. 412,250. 18 Claims. (Cl. 184—6.)



1. In a device of the character described, and in combination, an oil pump, a pivotally mounted oil suction pipe adapted to swing in a vertical plane, an oil conduit connecting said suction pipe with the pump, a hollow float element rigidly mounted upon said suction pipe, said float being made of sheet metal and provided with an annular peripheral groove formed in its side-wall, the bottom wall of said float being provided with radially arranged depending ribs to form channels therein, and a screen arranged over said bottom wall ribs and having its outer edge rigidly secured in said side-wall groove.

1,890,985. MOTOR-EFFICIENCY-INDICATING DEVICE. JENNINGS B. HAMBLEN, Whiting, Ind., and WEBSTER B. KAY, Chicago, Ill., assignors to Jennings B. Hamblen, Harold V. Atwell, and Webster B. Kay, trustees. Filed Oct. 7, 1929. Serial No. 398,016. 9 Claims. (Cl. 235—1.)

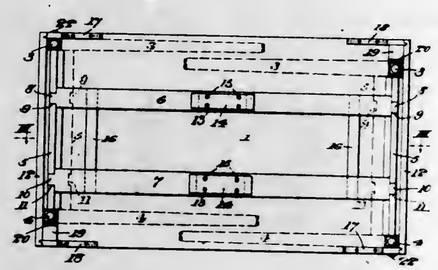


9. In an efficiency indicator for a motor, a fuel supply, a conduit leading from said supply to the motor, means for changing the temperature of fuel in said conduit, the degree of said temperature change being proportional to the speed of a moving part driven by said motor, and means for indicating the rate of movement of the motor per unit quantity of fuel consumed.

1,890,986. FOLDING LEG SUPPORT FOR TABLES. WILLIAM HANLEY, East Orange, N. J., assignor to Ferguson Brothers Manufacturing Company, Hoboken, N. J., a Corporation of New Jersey. Filed Nov. 7, 1930. Serial No. 494,055. 1 Claim. (Cl. 45—11.)

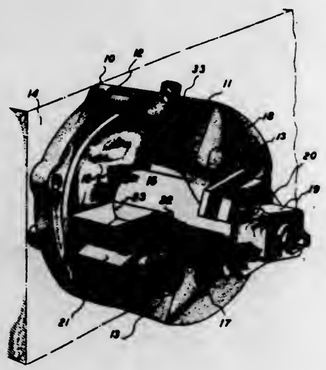
A folding leg support for tables comprising two pairs of oppositely folding legs, a cross brace connecting the two legs of each pair, two longitudinally disposed slats engaging said cross braces upon opposite sides of the middle longitudinal line of the table for locking the legs in their unfolded positions and yieldingly holding the legs in their folded positions, cross braces rigidly connecting

the free ends of the said slats, short longitudinally disposed spacing strips located between the slats and the underside of the table top, longer resilient metal plates ex-



tending along the under faces of the slats, and means for securing the strips, slats and plates to the underside of the table top.

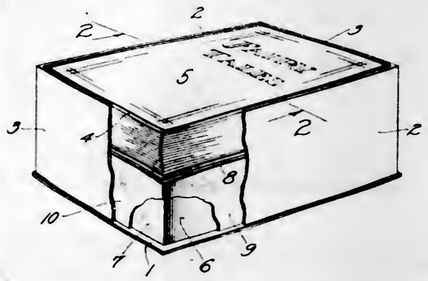
1,890,987. MOTOR SUSPENSION SPRING REBOUND DAMPER. WALTER HALL HANSFORD, Earlwood, near Sydney, New South Wales, Australia. Filed Dec. 22, 1930, Serial No. 504,137, and in Australia Dec. 28, 1929. 3 Claims. (Cl. 188—89.)



1. In a suspension spring damper of the rocking vane segmental chamber type, a chamber having a base plate and a cap and being divided by partition segments held by fixing bolts which clamp the chamber body to the base plate a vane spindle footed in the base plate, a control spindle fitted axially in the vane spindle, crossed slot passageways in the vane connecting the four chambers, and flats formed on the control spindle where it meets the crossed slot passages, all constructed substantially as described with reference to the accompanying drawings.

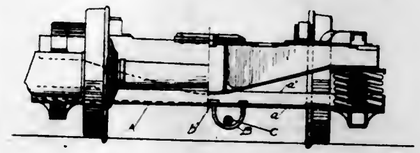
1,890,988. COMBINATION PACKAGE. RALPH L. HARDEN, North Attleboro, Mass., assignor to The Mason Box Company, Attleboro Falls, Mass., a Corporation of Massachusetts. Filed Jan. 20, 1930. Serial No. 421,952. 2 Claims. (Cl. 206—47.)

1. In a combination package for achieving a certain display effect, a rectangular box provided with a bottom, side and end walls, a rectangular slip cover for and resting on the box and comprising side and end walls having a medial horizontal partition forming two compartments, the walls of one of the compartments extending adjacent or close to the bottom edge of the box and so constructed



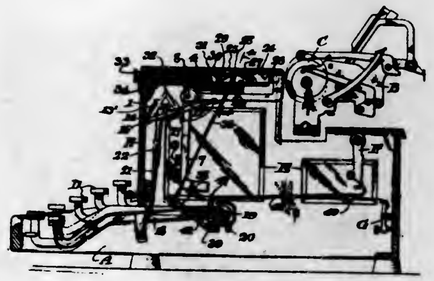
as to maintain the box in its proper associated position, and a rectangular article filling the top compartment of the slip cover and constituting a display top.

1,890,989. BRAKE BEAM SAFETY SUPPORT. HARRY S. HART, Barrington, Ill. Filed June 3, 1931. Serial No. 541,748. 1 Claim. (Cl. 188—210.)



A brake beam support comprising a spring plank having in its bottom member a longitudinally extending slot, a loop member loosely mounted in said slot and depending below said slot, said loop member having side portions extending upwardly through the slot at each end thereof, said side portions being provided at their tops with flange members resting on the upper face of the spring plank adjacent to the slot ends.

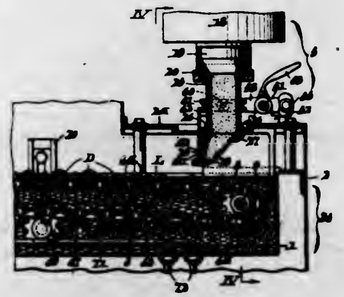
1,890,990. TYPEWRITING MACHINE. EDWARD B. HESS, Orlando, Fla., assignor to Royal Typewriter Company, Inc., New York, N. Y., a Corporation of New York. Filed Aug. 10, 1927. Serial No. 212,025. 44 Claims. (Cl. 197—23.)



41. In a typewriting machine having a platen, a key action including a series of key levers, a series of type bars, type carriers movably mounted in the heads of said

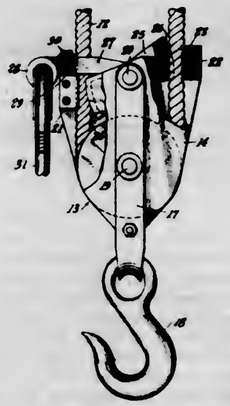
bars, operative connections between the key levers and type bars for moving the type bars to a position where the type carriers are disposed adjacent the platen, operative connections from the key levers for subsequently moving said type carriers through a plane substantially at right angles to the axis of the platen until the type engages the platen.

1,890,991. FORMING MEANS FOR COOKING APPARATUS. HERBERT T. HUNTER, Baltimore, Md., assignor to Doughnut Machine Corporation, New York, N. Y., a Corporation of New York. Original application filed Oct. 10, 1928, Serial No. 311,609. Divided and this application filed Feb. 5, 1931. Serial No. 513,603. 5 Claims. (Cl. 107—14.)



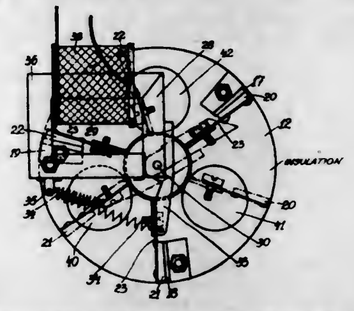
2. In machines for forming stick doughnuts or the like including a magazine for raw dough, and means for maintaining a suitable head pressure above said dough; the combination of a tubular neck extension terminating in a tranverse enlargement having an elongate forming-die outlet, a collar slidable up and down on the tubular neck extension, a dough cutter blade supported by straps from said collar and guided over the neck-extensions outlet, and mechanism for intermittently-operating said cutter blade.

1,890,992. TACKLE BLOCK. CHARLES F. JANSSEN, Astoria, N. Y. Filed May 16, 1931. Serial No. 537,849. 1 Claim. (Cl. 188—65.)



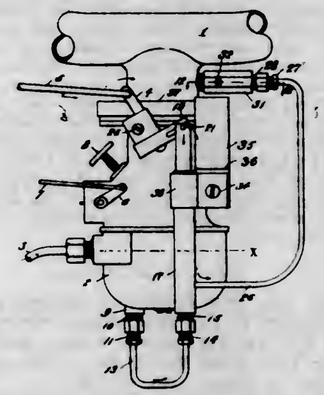
In a multiple sheave block, a pair of cheek members, a plurality of stationary cable engaging spacers, a plurality of pivotally mounted cable gripping members operatively located between said spacers and forming one movable unit, a releasing arm extending from the unit, a spring controlled member slidable in a recess in said arm and bearing against one of said spacers and adapted to normally elevate said arm, thereby keeping said cable gripping members normally in light engagement with a cable passing through the block without affecting the usual operation of such cable while it moves in one direction during the hoisting of a load, said gripping members adapted to firmly engage and press such cable against said spacer when such cable either or moves in oppositely to the aforementioned direction.

1,890,993. MULTIPHASE PROTECTIVE SYSTEM. GEORG KELLER, Gorlitz, Germany, assignor to the Firm: Paul Strobach, Gorlitz, Germany. Filed Nov. 5, 1928, Serial No. 317,364, and in Germany Nov. 8, 1927. 8 Claims. (Cl. 175—294.)



1. A multiphase protective system comprising in combination with the device to be protected, in each supply conductor a first switch, a solenoid arranged in each said conductor between said switch and said device, the movable contacts of each of said switches being arranged upon a rotatable axle, a first means for rotating said axle so as to close the said switches upon the main current circuit being completed, a coupling between the said first means and the said axle, each of said solenoids being provided with a low-current core adapted to be held constantly attracted during the flow of current of any strength through said solenoid, each of said solenoids having an overload-core adapted to be attracted upon a predetermined current strength being exceeded, a second means for disengaging the said coupling, each of said cores being adapted to act upon said second means, and third means for rotating the axle so as to open the said switches.

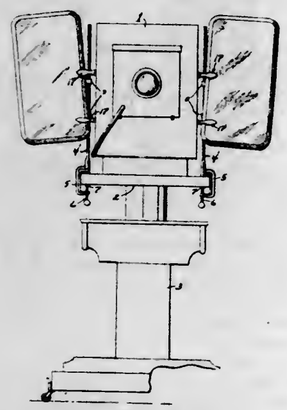
1,890,994. CARBURETOR. HOWARD G. KERCHNER and ROY F. KERCHNER, near Belleville, Ill. Filed May 20, 1929. Serial No. 364,446. 2 Claims. (Cl. 261—34.)



1. The combination with the neck or outlet of the carburetor of an internal combustion engine, a main carburetor communicating therewith, said carburetor hav-

ing a constant level fuel chamber, and a throttle valve lever below said neck, of a mixer valve consisting of a horizontal barrel threaded by one end into said neck above said throttle valve and having air inlet holes, a nipple in the other end of said barrel having a seat, a spring-controlled ball valve mounted in said seat, a vertical casing, a plunger in said casing, a pin at the top and positioned midway of said main carburetor, said casing communicating with said constant level chamber, a pipe connection from said casing to said mixer valve, and an operating connection from the plunger pin to said throttle valve lever, substantially as described.

1,890,995. REFLECTIVE ATTACHMENT FOR CAMERAS. EMMA L. KINNAMAN, Gillette, Wyo. Filed July 9, 1930. Serial No. 466,827. 1 Claim. (Cl. 45—99.)

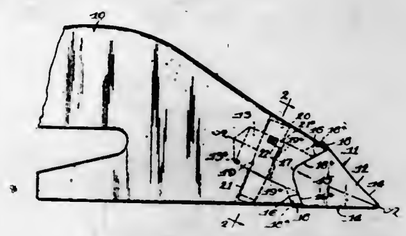


A reflecting attachment for cameras for enabling the subject to be photographed to view his or her reflected image, the said attachment comprising an upright, means upon the upright for attachment to a support, and a mirror clamping and supporting means mounted upon the upright and adjustable longitudinally thereof and angularly about the same, the said means comprising an upright supporting member, a clamp comprising two jaw members fitting the upright, at one of their ends, and fitting the supporting member, at their other ends, means coacting with the jaw members between their ends to effect simultaneous clamping of the upright and the supporting member, whereby the supporting member may be adjusted longitudinally of the upright and also angularly about the same, and whereby the supporting member may be rotatably adjusted with respect to the clamp, the said supporting member having arms extending from its ends, and a mirror clamp mounted upon the outer end of each arm, the said clamp comprising a jaw pivotally mounted upon the respective arm, a companion jaw assembled therewith, and a bolt fitted through the jaws at one side of the pivot for the first mentioned jaw and adjustable to effect clamping engagement of the jaws with the marginal portion of a mirror disposed between the jaws at the other side of the pivot.

1,890,996. INK FOR INTAGLIO PRINTING AND IMPROVEMENT IN THE PRODUCTION OF SUCH INKS. HANS KURZ and KARL ALBERT, Vienna, Austria. Filed Feb. 19, 1931, Serial No. 517,107, and in Austria Feb. 25, 1930. 6 Claims. (Cl. 134—35.)

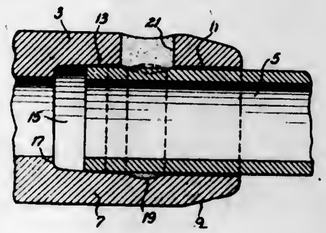
1. A process for producing intaglio printing inks consisting in rubbing the pigments with a binding medium containing as its main constituent a resinous substance dissolved in a water soluble medium, then partially saponifying the resin by addition of an alkaline reacting substance and then introducing in the mixture a high boiling solvent miscible with the said water soluble medium and adding a sufficient quantity of water.

1,890,997. FORGED DIPPER TOOTH. AUBREY R. LANE, Chicago, Ill., assignor to A. Finkl & Sons Company, Chicago, Ill., a Corporation of Illinois. Filed May 25, 1932. Serial No. 613,587. 3 Claims. (Cl. 37—142.)



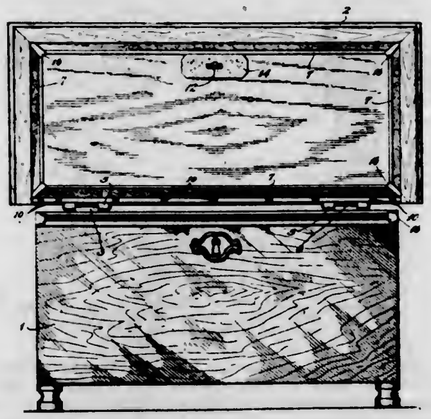
3. A removable dipper tooth adapted to be formed by forging, which consists of a head and rearwardly projecting cylindrical shank, said head having forward top and bottom faces converging to form the point of said tooth, rearwardly inclined plane faces merging into said shank, a pair of ribs extending outwardly and centrally along the length of said rear faces and merging into said shank, said shank having a transversely extending aperture adjacent its rearward end for receiving a securing pin.

1,890,998. JOINT. DAVID E. LINDQUIST, Port Huron, Mich., assignor to Mueller Brass Co., Port Huron, Mich., a Corporation of Michigan. Filed Dec. 31, 1930. Serial No. 505,828. 2 Claims. (Cl. 285—111.)



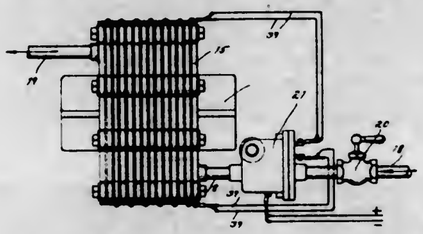
1. A joint comprising, in combination, a receiving portion having a socket, said socket comprising a front substantially cylindrical portion and a rearward inwardly tapered portion, and a straight cylindrical member comprising any portion of straight pipe adapted to be received by said socket, said member being in diameter slightly less than the diameter of said front portion, but greater than the minimum diameter of said tapered portion, whereby, upon telescoping said member into said socket, the end of said member engages said tapered portion to position the side walls of said member a uniform distance from said front portion, as well as to effectively correct deviation from true shape in said member, the uniform annular space between said member and said front portion then being of such dimension as to induce capillary flow of a then liquid sealing material introduced therein, throughout said space.

1,890,999. CEDAR CHEST. LAWRENCE K. LOFTIN, Altavista, Va., assignor to The Lane Company, Inc., a Corporation of Virginia. Filed Aug. 22, 1929. Serial No. 387,688. 18 Claims. (Cl. 206—10.)



1. A receptacle of the character described comprising a body member having comparatively broad flat upper edges, a closure hinged to said body, a resilient metal strip secured at one edge to the under face of said closure along its edges, and a pliable sealing mass not soluble in cedar oil between said strips and closure and at the juncture of the strips at the corners of the closure.

1,891,000. ELECTRIC WATER HEATER. EDWARD A. LONERGAN, New York, N. Y. Filed May 22, 1931. Serial No. 539,390. 7 Claims. (Cl. 219—38.)



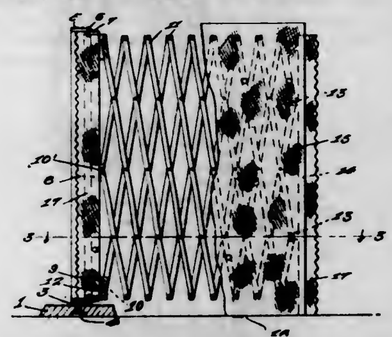
1. An electric water heater comprising a plurality of heating units secured together, each of said heating units comprising a frame, side plates completely closing said frame, a grille member mounted within said frame, a high resistance conductor surrounding said grille member, and means for supplying electric current individually to said heating elements, said last mentioned means including one of the end members of the frame of each heating unit.

1,891,001. HEATING BAG. FREDERICK MARSHALL, Pittsburgh, Pa. Filed Mar. 1, 1932. Serial No. 596,044. 2 Claims. (Cl. 128—258.)



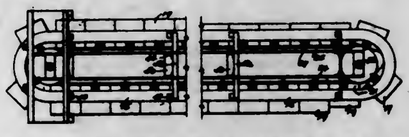
1. A heating bag comprising a triangularly prismatic container of flexible waterproof material having one of its sides laterally extended in both directions to form a base on which the remainder of the bag is collapsible, and reinforcing ribs extending transversely around the remaining sides of the container to assist in holding the container in prismatic form when filled and to prevent direct contact of the foot soles with the body of the container.

1,891,002. PORTABLE DRAFT SCREEN. EARLE D. MCCOMBIE, Marquette, Mich. Filed June 21, 1929. Serial No. 372,726. 1 Claim. (Cl. 45—106.)



A portable draft screen comprising a base, a vertical post adjustably and detachably secured to the base, plates secured to the upper and lower ends of the posts and projecting laterally of one face thereof, plates pivoted to the first mentioned plates, a vertical member secured to the second mentioned plates and spaced from the post, a compressible draft preventing strip secured to the member and the first named plates to close the space between the member and post, lazy tong elements secured to the member, a second post carried by the lazy tong elements, flexible covering elements overlying opposite sides of the lazy tong elements and connected to certain of said elements, said covering elements secured to the second post and to the vertical member, and a second compressible draft preventing strip secured to the second post and projecting beyond the latter.

1,891,003. MEANS AND METHOD FOR BUILDING EMBANKMENTS. CHARLES J. MCFARLIN, Keeling, Tenn. Filed June 24, 1932. Serial No. 619,035. 6 Claims. (Cl. 198—155.)

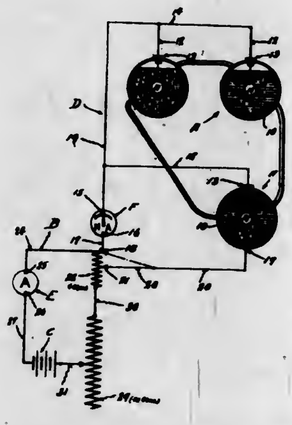


1. In conveying apparatus, an overhead track, a roller supported hanger depending therefrom, an apron hinged to said hanger, said apron having a rearward extension carrying rollers adjacent the end thereof, a track resisting upward movement of said rollers and adapted thereby to hold said apron in horizontal position and traction means acting independently on said apron for shifting it along said trackways.

1,891,004. MEANS FOR PREVENTING SCALING AND CORROSION OF METAL UNITS. GEORGE S. NEELEY, Hartford, Ill., assignor of one-half to Griffin Watkins, Alton, Ill. Filed Aug. 12, 1929. Serial No. 385,149. 8 Claims. (Cl. 204—25.)

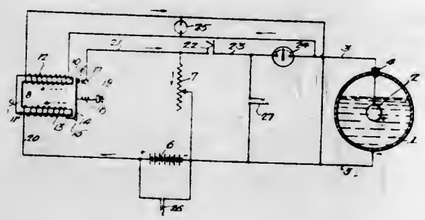
1. A system for stopping undesired electrolytic action in a heated fluid-containing metallic body caused by current flow set up by an internal force within said body, comprising a source of electromotive force, means for

deriving an adjustably variable electromotive force from said source, means for applying said variable electromotive force to said body in opposition to said internal force, whereby a statical balance of opposed forces may be obtained to prevent current flow within said body, and in-



dicating means continuously in circuit with said body and said means for continuously indicating any current flow within said body due to said internal force, whereby the statical balance of forces may be preserved as long as said body is in operation.

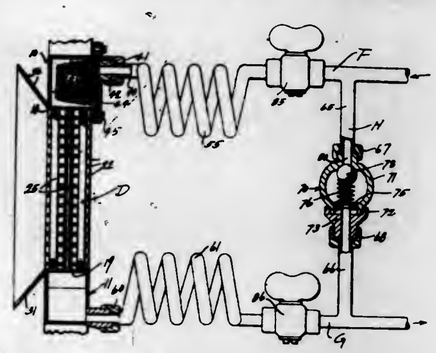
1,891,005. METHOD OF AND MEANS FOR PREVENTING SCALING, CORROSION, OR LIKE ACTION IN METALLIC BODIES. GEORGE S. NEELEY, Hartford, Ill., assignor of one-half to Griffin Watkins, Alton, Ill. Filed Feb. 4, 1931. Serial No. 513,405. 9 Claims. (Cl. 204—25.)



1. A method of stopping undesired electrolytic action in a heated fluid-containing metallic body caused by current flow set up by forces within said body, which consists in opposing said forces with an external force of sufficient magnitude to obtain a statical balance of forces, whereby current flow within said body is prevented, and utilising variations of said external force to control said external force, whereby the statical balance of forces is automatically maintained.

4. A system for stopping undesired electrolytic action in a heated fluid-containing metallic body caused by current flow set up by forces within said body, which comprises means for applying an opposing external force to said body of sufficient magnitude to cause a statical balance of forces, whereby current flow within said body is prevented, and means controlled by variations of said external force for controlling said external force, whereby the statical balance of forces is automatically maintained.

1,891,006. LUBRICATION COOLER FOR GAS ENGINES. OTTO D. NORMAN, Parkersburg, W. Va. Filed Aug. 14, 1928. Serial No. 299,565. 6 Claims. (Cl. 123—196.)

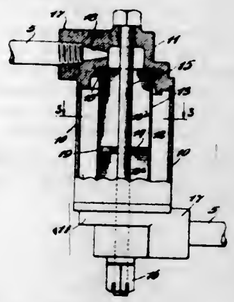


1. In combination with an internal combustion engine including a water cooling system with a radiator and a cooling fan for directing air thru the water cooling radiator in the direction of the engine, an oil cooling radiator carried by the engine at the opposite side of the fan from the water cooling radiator, the oil cooling radiator comprising a plurality of spaced oil dividing conduits having upper and lower inlet and outlet manifolds.

1,891,007. PROCESS FOR PRODUCING CALCIUM PHOSPHATES RICH IN PHOSPHORIC ACID SOLUBLE IN WATER. FRANCESCO CARLO PALAZZO, Florence, Italy. Filed Apr. 12, 1929, Serial No. 354,709, and in Italy Apr. 26, 1928. 1 Claim. (Cl. 71—7.)

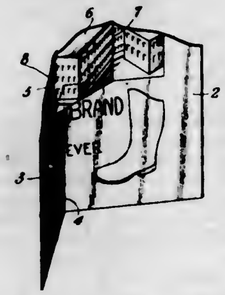
A method of producing a phosphatic manure, rich in water soluble phosphoric acid, which consists in first concentrating to about 52 to 53° Baumé under reduced pressure, a solution of phosphoric acid, adding to said acid while still warm a quantity of precipitated di-calcium phosphate greater than that corresponding to the relation $H_3PO_4 : CaHPO_4$, the time of reaction being only a few hours in order to obtain a stiff mass, then drying the mass in vacuum at about 50° C. and finally grinding the mass.

1,891,008. PRESSURE IMPULSE DAMPENER. EDWIN S. PEARCE and EDMOND C. KARIBO, Indianapolis, Ind. Original application filed Oct. 21, 1925, Serial No. 63,827. Divided and this application filed Oct. 26, 1929. Serial No. 402,556. 3 Claims. (Cl. 137—111.)



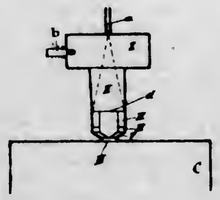
1. A fluid-pressure-pulsation dampener comprising a casing; a tubular screen positioned within and longitudinally of said casing; an inwardly extending annular member in said screen; a removable cap at each end of the casing having a central aperture, a laterally extending tapered port and a shoulder abutting against said screen; and a retaining member extending through said cap apertures and said annular member.

1,891,009. ADVERTISING DEVICE. ERASTUS R. PHELPS, Chicago, Ill., assignor to American Lithographic Company, Inc., New York, N. Y., a Corporation of New York. Filed Apr. 7, 1931, Serial No. 528,293. Renewed Nov. 1, 1932. 1 Claim. (Cl. 40—149.)



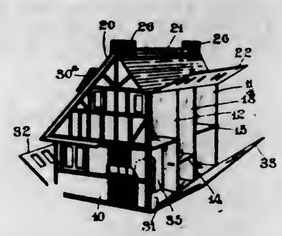
An advertising device consisting of a single sheet of material having a basal edge portion and a creased vertical fold line extending upwardly from the basal edge, the upper part of said sheet being cut downwardly from the upper edge in lateral spacing to one side of the fold line, there being a transverse slit extending from the lower end of the said cut and extending across the upper end of the fold line to a point in spaced relation to the fold line, said sheet further having a second creased fold line extending upwardly to the top edge of the sheet from the terminal end of the slit, said cut and slit partially severing a portion of the sheet from the body thereof to constitute a brace member, said body having a slot adjacent the said cut and the brace member being cut at its free edge to shorten the member and provide a tab adapted to engage in said slot to hold the parts of the body on opposite sides of the first fold line in angular relation, said body having a portion of the advertising matter to be displayed thereon and the brace member having correlated advertising thereon.

1,891,010. HIGH SPEED DIESEL OIL ENGINE. FERDINAND PORSCHE, Stuttgart-Unterturkheim, Germany, assignor to Daimler-Benz Aktiengesellschaft, Stuttgart-Unterturkheim, Germany, a Company of Germany. Filed Jan. 4, 1929, Serial No. 330,337, and in Germany Oct. 15, 1928. 1 Claim. (Cl. 123—33.)



In a high speed Diesel oil engine, a working cylinder and a pre-ignition chamber therefor, said pre-ignition chamber comprising a first compartment, fuel injection means associated with said compartment, said compartment being of cylindrical form and being greater in diameter than in height, a second compartment of less diameter than and communicating with the first compartment, a third compartment constituted by a plurality of channels having an aggregate cross sectional area less than the second mentioned compartment and communicating therewith, a fourth compartment of annular form communicating with and of greater cross sectional area than the third compartment but of less cubical content than the latter, a fifth compartment communicating with the fourth compartment and constituted by a hollow annular cone-shaped passage, a sixth compartment constituted by an outlet passage in communication with the fifth compartment through which gas is admitted to the engine cylinder, each of said compartments being of less cubical content than the preceding compartment, the volume of said chamber being to the volume of the compression chamber of the engine cylinder plus the volume of said chamber as one is to from three and one-half to four and one-half.

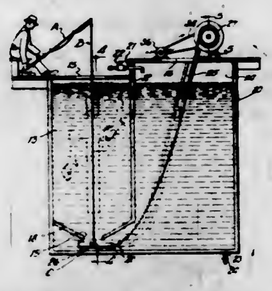
1,891,011. TOY HOUSE. FREDERICK L. PURDY, Columbus, Ohio. Filed Jan. 14, 1932. Serial No. 586,583. 6 Claims. (Cl. 46—37.)



1. In a toy house, a slanting roof portion cut to form the front of a dormer, said house having partitions intermediate its end walls, said partitions having portions extended through the roof to form the sides of said dormer.

6. In a toy house, end walls each provided with a horizontal slit opening at the eave portion thereof at one side of the house, and a slanting roof portion provided at its lower edge with an integral horizontal portion bent inward, said inwardly bent portion forming a floor member and provided with slits to interlock with the said slits of the end walls.

1,891,012. DISPLAY DEVICE. FRANK B. RAYNOR, Baldwin, N. Y. Filed May 25, 1932. Serial No. 613,350. 7 Claims. (Cl. 272—8.)

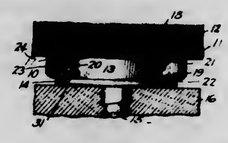


1. A display device comprising a pair of communicating compartments adapted to contain water, windows provided in one of said compartments, a line adapted to be dropped into the window compartment, and means for drawing said line into the other compartment to enable the attachment of an object thereon.

1,891,013. PRONGED SOCKET. DANIEL I. REITER, New York, N. Y. Filed Aug. 9, 1932. Serial No. 628,080. 17 Claims. (Cl. 24—208.)

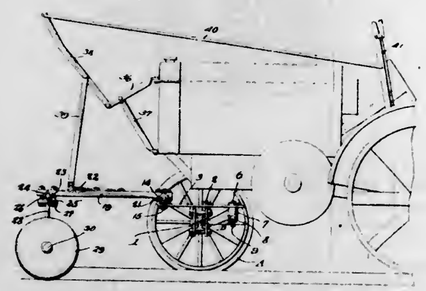
4. In a socket having an inner and an outer wall and adapted to be formed from a metal blank, a set of prongs

on one of the walls bent radially in one direction and a second set of prongs on the other wall bent radially in the opposite direction, one of said sets of prongs forming part



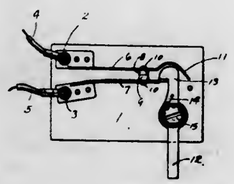
of the inner wall of the socket and surrounding an opening in the socket and thereby adapted to engage a stud passed into the opening.

1,891,014. GUIDING ATTACHMENT FOR TRACTORS. WALTER BYRON REMINGTON, Big Springs, Nebr. Filed Aug. 13, 1931. Serial No. 556,915. 3 Claims. (Cl. 97—49.)



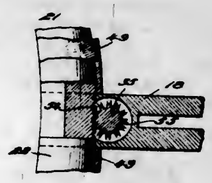
1. A guide attachment for tractors including spaced levers, means for connecting them pivotally to an axle, means for connecting them pivotally to the steering mechanism of a tractor, a frame pivotally connected to both levers for movement therewith, an angular cross bar carried by the frame, standards adjustably connected to the bar, and opposed wheels connected to the standards.

1,891,015. SWITCH. CLAUDE R. RICH, Grand Rapids, Mich., assignor to Teesdale Manufacturing Company, Grand Rapids, Mich., a Corporation of Michigan. Filed May 20, 1931. Serial No. 538,687. 3 Claims. (Cl. 200—116.)



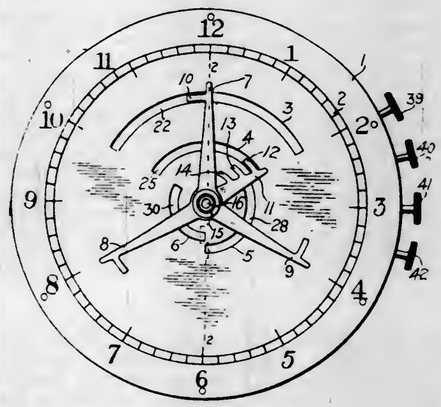
1. In an electric switch, a pair of circuit making and breaking members, one of said members being thermally responsively flexible for braking the circuit, and a manually operable member for closing the circuit, said manually operable member when operated prematurely being so arranged that the circuit making and breaking contact points are further separated by a movement of said member beyond its normal movement for closing the circuit.

1,891,016. OPHTHALMIC FRAME. WAYNE S. SEARLES, Providence, R. I., assignor to Universal Optical Corporation, Providence, R. I., a Corporation of Rhode Island. Filed Aug. 25, 1931. Serial No. 559,241. 8 Claims. (Cl. 88—47.)



1. In an ophthalmic frame, an end piece provided with a guideway, a split rim having one end fixed to the end piece and its free end slidable in the guideway towards and from the fixed end, an operating roll rotatably mounted in the end piece transversely of and in contact with the free end of the rim, said roll and said free end having interengaging parts whereby rotation of said roll moves said free end.

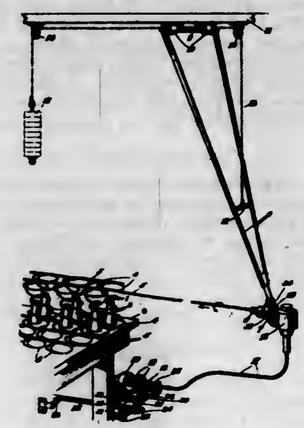
1,891,017. PERIODIC ELECTRIC TIME SWITCH. ABRAHAM J. SHEKTER, Jamaica, N. Y. Filed June 19, 1931. Serial No. 545,597. 5 Claims. (Cl. 200—36.)



2. In a periodic electric time switch, the combination of a dial cover plate of insulating material, clockwork mechanism, said clockwork having a three-part minute hand arranged to sweep the dial plate, said plate having a slot concentric with the dial plate, the parts of said clock hand having fingers adapted to enter the said slot, a member arranged below the dial plate and revoluble about the same axis as the said minute hand and insulated therefrom, means for adjusting said member rotatively, said member having a metal ring movable beneath the said slot in the dial plate, and the said ring having a portion of its upper surface insulated.

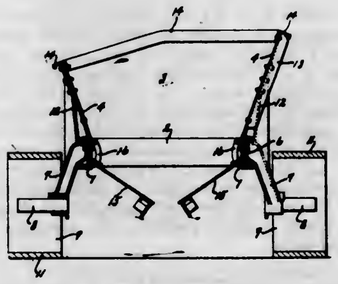
1,891,018. MATTRESS MAKING MACHINERY. MILTON LOUIS SHIPMAN, East Orange, N. J., assignor to Shipman Bros., Newark, N. J., a Corporation of New Jersey. Filed Mar. 18, 1931. Serial No. 523,600. 7 Claims. (Cl. 140—3.)

1. In a machine for manufacturing coil spring mattresses, the combination with means for holding mattress springs in rows, of a pivoted supporting frame movable towards and away from the spring supporting means, a weight for holding the frame normally away from the



spring supporting means to keep a binding spring under tension, and binding spring rotating means mounted on the frame.

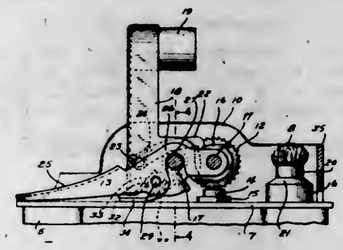
1,891,019. DUMPING VEHICLE. ARTHUR P. ARMINGTON, Willoughby, Ohio, assignor to The Euclid Road Machinery Company, Euclid, Ohio, a Corporation of Ohio. Filed Jan. 5, 1932. Serial No. 584,803. 8 Claims. (Cl. 298—35.)



6. In a vehicle of the class described, a pair of vertically spaced frames each defining an unobstructed opening, said frames being joined intermediate their ends by bracket means at the sides, said bracket means extending below the lower frame and being there associated with wheel means, walls connecting said frames to define an open hopper having an unobstructed bottom opening, and door means for controlling said opening.

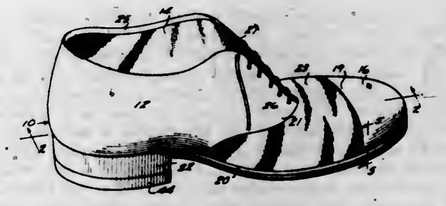
1,891,020. LIGHTER CONSTRUCTION. ROBERT S. BLAIR, Stamford, Conn., assignor to Evans Case Company, North Attleboro, Mass., a Corporation of Massachusetts. Filed Dec. 13, 1928. Serial No. 325,746. 18 Claims. (Cl. 67—7.1.)

5. In construction for lighters and the like, in combination, a fuel tank having an elongated top wall, a wick projecting from said wall adjacent one end thereof, an abrasive wheel journaled above said wall, a pyrophoric element cooperating with said wheel, a snuffer for said wick journaled on said tank over said wall, an actuating



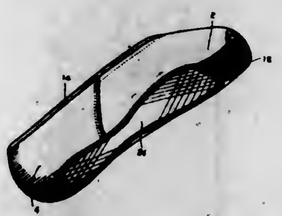
lever for said wheel fulcrumed on the axis of the wheel, and means acting to multiply the movement of the wheel relative to the movement of the lever.

1,891,021. METAL SHOE. PAUL BURDOTTI, New York, N. Y. Filed May 21, 1930. Serial No. 457,961. 10 Claims. (Cl. 36—2.5.)



1. As an article of manufacture, a shoe comprising a metallic sole and heel, and flexible metallic upper portions adapted to be drawn towards each other for fastening the shoe on the foot, the upper portions of the shoe lined with a metallic mesh material, but with the vamp of said shoe consisting solely of said metallic mesh material.

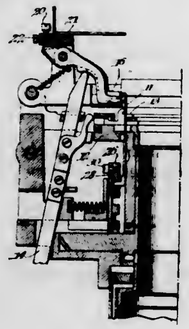
1,891,022. BALLET SLIPPER OR TOE SHOE AND METHOD OF MAKING THE SAME. SALVATORE CAPEZIO, East Paterson, N. J. Filed May 29, 1931. Serial No. 540,838. 27 Claims. (Cl. 36—8.3.)



1. In the manufacture of ballet slippers or toe shoes having an outsole terminating a substantial distance short of the toe of the slipper in the conventional manner, the method which includes forming an upper, applying the said upper in inverted condition to a last provided with an outsole, folding the toe portion of the upper over the toe and flat onto the toe portion of the sole of the last, thereafter folding the sides of the upper material

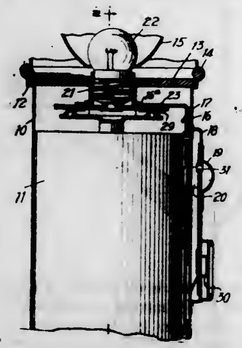
near the toe inwardly over the toe portion of the sole of the last, attaching the thus flatly folded upper material to the sole, removing the slipper from the last, and inverting the same to bring the folds of the upper material inside in a flat and inconspicuous manner.

1,891,023. KNITTING MACHINE. ADAM M. COX, Lynchburg, Va., assignor to Lynchburg Hosiery Mills, Lynchburg, Va., a Corporation of Virginia. Filed Dec. 3, 1929. Serial No. 411,302. 1 Claim. (Cl. 66—49.)



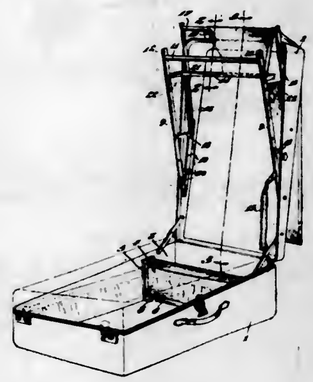
In an independent needle hosiery knitting machine, a slotted needle cylinder, needles in slots of the needle cylinder including a series of long-butt needles at one side of the needle cylinder, a series of medium-butt needles at the other side and short-butt needles intercalated among the needles of said series; means for guiding a main or body yarn to the needles and for guiding a pattern yarn thereto at a point higher up than the main yarn and in advance thereof; and a needle-actuating cam set including stitch-cams, a top center cam, and a cam for lowering the long-butt and medium-butt needles before they pass the yarn guiding means to a level where they take only the main or body yarn, said top center cam being mounted for circumferential sliding movement relatively to the needle circle, as and for the purposes set forth.

1,891,024. FLASH LIGHT. HARRY KORETZKY, Jersey City, N. J., MAX HOROWITZ, Brooklyn, N. Y., and ANTHONY J. DESIMONE, Lyndhurst, N. J., assignors to Bright Star Battery Company, Hoboken, N. J., a Corporation of New York. Filed Mar. 27, 1931. Serial No. 525,805. 11 Claims. (Cl. 240—10.69.)



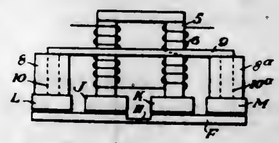
1. In a flashlight, a casing, a slide supported by said casing, a socket carried by said slide and being electrically connected thereto, an insulating disk carried by said casing and having an aperture through which said socket projects, a contact member supported by said disk, a second contact member insulatingly supported by said slide and having sliding engagement with said first contact member in any position of the slide, said second contact member being adapted for electrical connection with a terminal of a bulb in said socket, a housing supported by the casing, an actuating member slidably mounted on said housing, connections between said actuating member and slide for effecting movement of the latter by the former and a switch in said housing for controlling current flow through the bulb.

1,891,025. TRAVELING CASE. JOSEPH A. LUTTMANN, Cincinnati, Ohio, assignor to The Mendel-Drucker Company, Norwood, Ohio, a Corporation of Ohio. Filed Oct. 30, 1930. Serial No. 492,259. 5 Claims. (Cl. 312—185.)



3. In a suitcase or the like, having a hinged cover, a garment supporting fixture mounted within said cover, comprising a pair of swinging rack frames pivotally mounted as a unit within said compartment and to the opposite side walls thereof, the frames having link connections whereby the same may be simultaneously swung from the compartment to a position outward thereof, one frame serving to hold the garments and the second when swung to an open position from the garment holding compartment serving to protect the garments from contact with the end of the cover opposite its hinged end and in a closed position confining the garments within said compartment.

1,891,026. ELECTRICAL RELAY. PAUL N. MARTIN, Swissvale, Pa., assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Original application filed Jan. 7, 1932, Serial No. 585,826. Divided and this application filed Sept. 13, 1932. Serial No. 632,925. 2 Claims. (Cl. 175—336.)



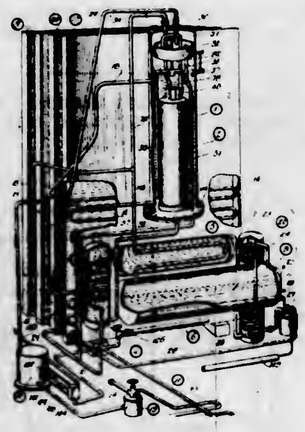
1. A relay comprising a core provided with the usual main pole pieces and operating winding, an auxiliary core member having two auxiliary pole pieces, means for delaying the change of flux in said auxiliary core member, and an armature coacting with all four of said pole pieces, said armature having a portion of restricted section between said two main pole pieces to force flux through said auxiliary core member.

1,891,027. ARTIFICIAL LEATHER AND PROCESS OF MANUFACTURING SAME. GEORGE A. RICHTER, Berlin, N. H., assignor to Brown Company, Berlin, N. H., a Corporation of Maine. Filed Mar. 16, 1927, Serial No. 175,946. Renewed Oct. 25, 1932. 18 Claims. (Cl. 91—68.)

1. An article of manufacture, comprising a loosely felted, uncompacted paper web of a high alpha cellulose-containing wood fiber permeated with rubber.

9. A process which comprises impregnating a bibulous web of interfelted cellulose fiber with a volatilizable liquid having a much lower surface tension than water alone to swell said web and drying the web to remove said liquid under said lower surface tension and thereby to enhance the porosity of said web.

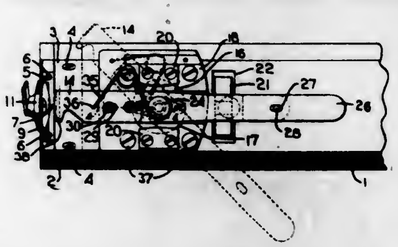
1,891,028. REFRIGERATING SYSTEM. RALPH E. SCHURTZ, Kansas City, Mo., assignor, by mesne assignments, of one-half to R. W. Bailey and C. T. Jobes, Kansas City, Mo. Filed May 18, 1923. Serial No. 639,860. 7 Claims. (Cl. 62—5.)



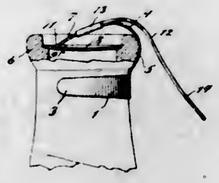
1. In a continuous absorption refrigeration system, a still, a condenser, a liquefied gas collector, an evaporator, an absorber, and conduits connecting the above mentioned elements, in combination with still-operated means to conduct weak liquor from the still to the absorber, means responsive to variations of temperature in the still for controlling the flow of liquor from the still to the absorber, and cooperatively associated means to conduct liquor from the absorber to the still adapted to operate substantially constantly and simultaneously with the flow of liquor from the still to absorber, to maintain a predetermined uniform strength of liquor in the still and in the absorber, and a heater for the still.

1,891,029. SELF-ADJUSTING TRIMMING ATTACHMENT FOR SEWING MACHINES. JOSEPH N. STEIN, Dorchester, Mass. Filed Sept. 17, 1931. Serial No. 563,258. 2 Claims. (Cl. 112—127.)

1. A sewing machine attachment for trimming work during the stitching operation comprising a power driven pivoted cutter having a shank, a knife blade slidably mounted thereon and movable toward and from the pivot point, a work support, a needle plate fixed thereto presenting a vertical stop shoulder, a vertical face upon the end of said knife and resilient means acting to maintain the vertical face of said knife blade in engagement with said stop shoulder.

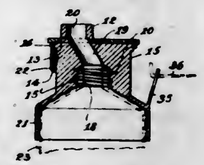


1,891,030. BOTTLE CAP REMOVER. JOSEPH W. SWENSON, Summit, N. J. Filed Nov. 23, 1931. Serial No. 576,627. 5 Claims. (Cl. 65—47.)



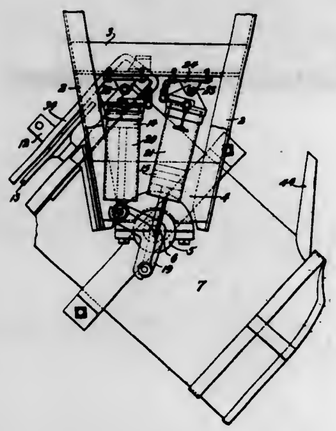
1. A bottle cap remover comprising a clip adapted to engage a bottle, a spring secured to said clip and adapted to extend over the cap when the clip is in engagement with the bottle, a prong on the end of said spring to engage said cap, and means to flex said spring to move the prong and the cap away from the bottle.

1,891,031. CLOSURE FOR CONTAINERS AND RECEPTACLES. HENRY VAN ARSDALE, New Rochelle, N. Y. Filed Mar. 9, 1932. Serial No. 597,684. 20 Claims. (Cl. 221—60.)



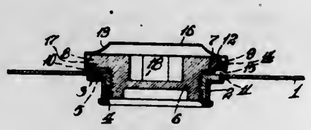
1. A closure device of the character described, including, the combination with a projecting member having a discharge orifice, of a closure member eccentrically associated therewith and having an aperture and a closing portion, and so mounted as to be rotatable and bodily movable relatively thereto selectively into one position in which the projecting member projects through and outwardly of the aperture of the closure member and into another position in which the closing portion of the closure member covers and closes the orifice of the projecting member.

1,891,032. MATERIAL HANDLING AND MEASURING APPARATUS. WILLIAM MAYO VENABLE, Pittsburgh, Pa., assignor to Blaw-Knox Company, Pittsburgh, Pa., a Corporation of New Jersey. Filed Dec. 26, 1929. Serial No. 416,497. 28 Claims. (Cl. 221—95.)



1. In apparatus of the character described the combination of a material handling vessel mounted for movement to different positions for filling and dumping, means for varying the capacity of the vessel, and means adapted to be carried by the vessel and adjustable to at least partially counteract the changes in thrust of a movement of the vessel resulting from adjustments of capacity.

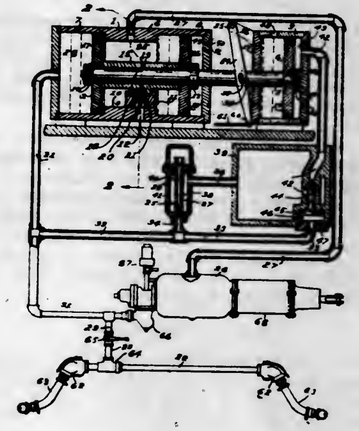
1,891,033. SEALING CAP FOR THE PLUGS OF METALLIC DRUMS AND THE LIKE. LOUIS B. WACKMAN, St. Louis, Mo. Filed Dec. 23, 1929. Serial No. 415,965. 3 Claims. (Cl. 220—39.)



1. A threaded plug for a container having a flanged end, said flange being beveled on its outer perimeter and having a horizontal inner surface, and a cap having a resilient inturned lip at its open end adapted to be forceably engaged over the beveled edge of said plug into under engagement with the horizontal inner surface of said flange.

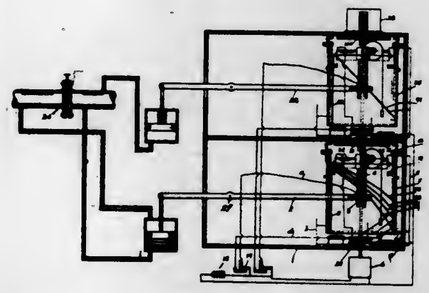
1,891,034. AUTOMATIC RELEASE VALVE. JESSE N. WOOD, Venice, Ill., assignor of forty-nine per cent to George H. Whicher, Venice, Ill., and Charles W. Peake, Granite City, Ill. Filed June 21, 1929. Serial No. 372,595. 15 Claims. (Cl. 303—80.)

14. An automatic air brake system including an auxiliary reservoir, a release valve for the reservoir, and a pressure operated mechanism for actuating said valve, said mechanism having means to place it in condition to be operated when the brake pipe is charged above its normal service pressure, and means for operating said



mechanism to actuate said release valve, said means being controlled by the discharge of air from the brake pipe.

1,891,035. MEASURING APPARATUS. ARCHER E. YOUNG, Pittsburgh, Pa. Filed May 6, 1930. Serial No. 450,115. 5 Claims. (Cl. 73—167.)



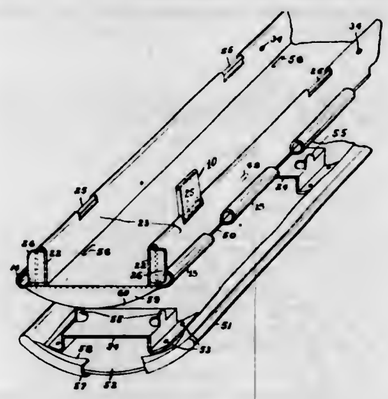
1. In apparatus for measuring gas flowing in a main, the combination, with a gas main, an orifice structure of variable aperture arranged in the main, and means for bringing the orifice structure to one or another of a plurality of alternate positions, of a rotary cylinder; a second rotatable member; and means for transmitting rotation from the said cylinder to the said second rotary member; such rotation-transmitting means including a clutch and means for rendering the clutch effective during a greater or less portion of the period of cylinder rotation, as the differential pressure across the orifice in the main varies; the means last named including an electric circuit, a plurality of contact pieces, one for each orifice position, borne by and circumferentially spaced upon the said cylinder, together with means for bringing into such circuit at will one or another of the said contact pieces.

1,891,036. LENS FOR EYEGLASSES AND PROCESS FOR MAKING SAME. BENJAMIN F. ALBITZ, Minneapolis, Minn. Filed Mar. 13, 1930. Serial No. 435,445. 4 Claims. (Cl. 88—54.)



1. A method of forming an eyeglass lens in which an unfinished lens, somewhat larger than a finished eyeglass lens, is supported before the eye of the person to be fitted, a line shaped to conform to the line of the chin and jaw is traced on the lower portion of said unfinished lens, other suitable lines are traced on the inner, upper and outer portions of said unfinished lens, adjacent ends of adjacent pairs of said traced lines are connected, said connected series of lines defining an area, and said eyeglass lens is cut to have the same shape and size as said area.

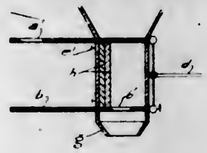
1,891,037. BINDER FOR LOOSE LEAVES OR SHEETS. HUBERT AUBURN, Mount Healthy, Ohio. Filed Nov. 9, 1931. Serial No. 573,911. 4 Claims. (Cl. 129—24.)



3. A loose leaf binder structure comprising in combination a substantially flat back plate, hinge members thereon, a sheet holding member adapted to receive thereon a stack of sheets, means on the back plate in parallelism with the hinge members for detachably supporting the sheet holding member, a back plate cover having an inner and an outer face, a bridge plate extending from the inner surface of the back plate cover, cooperative securing means for connecting the bridge plate and the back plate one to the other, a cover material on the outer face of the back plate cover and having its edges turned inwardly over the edges of the back plate cover and in contact with the inner surface thereof for disposition between the back plate and the back plate cover.

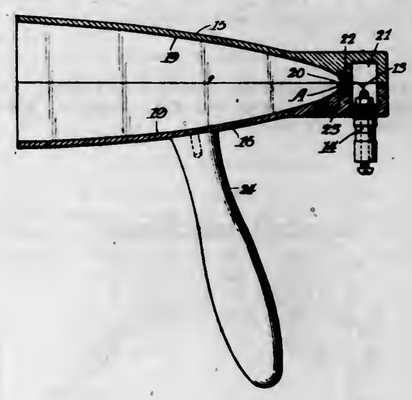
1,891,038. AUTOMATIC FILLER. RAMÓN BARROS, Cordoba, Argentina. Filed Mar. 24, 1930. Serial No. 438,596. 1 Claim. (Cl. 221—118.)

In a measuring device, a measuring chamber, a pair of obturator plates, having openings at opposite ends of the same diameter as the chamber, means connecting said plates at one end, and eccentrically controlled means to operate said plates successively to open the upper end of said chamber by the operation of the upper plate, allowing a filling of said chamber and closing its upper and lower ends, and open the lower end of said chamber for the discharge of its contents, said lower plate maintaining the discharge opening closed during the opening, filling and



closing operation of the upper plate, a door for said chamber, supplementary plates adapted to be introduced into said chamber through said door to regulate the volume of the chamber and means for attaching the supplementary plates to said door.

1,891,039. RADIANT HEAT APPARATUS. ROGER BARTON, Chicago, Ill. Filed Dec. 2, 1929. Serial No. 411,194. 7 Claims. (Cl. 136—4.)

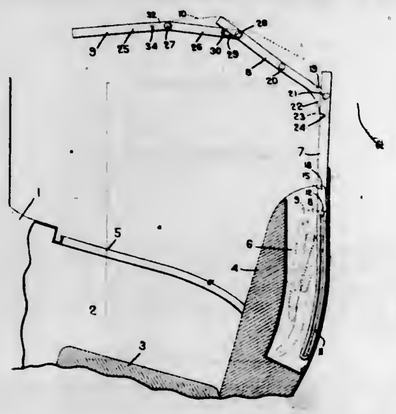


1. In a device of the class described, a reflector in which parallel sections are parabolas having foci in line, said reflector having a narrow slot adjacent to the foci, and a thermopile including a plurality of "hot" points mounted in said slot.

1,891,040. TOP FOR RUMBLE SEATS OF AUTOMOBILES. EDWARD H. BENN, Boston, Mass., assignor to Rumbletop Corporation, Boston, Mass., a Corporation of Massachusetts. Filed Nov. 2, 1929. Serial No. 404,275. 1 Claim. (Cl. 296—99.)

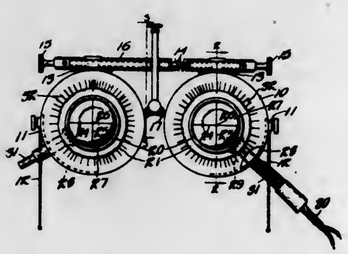
The combination with an automobile having a rear compartment equipped with a rumble seat, of a pivoted back for said seat which also constitutes a closure for said compartment, said seat back having a top-storing compartment located therein, two guide members fixed in said compartment, one at each end thereof, the upper end of each guide member coming substantially flush with the mouth of the compartment and having a locking aperture and each guide member having a slot extending from a point below said aperture to the bottom thereof, a folding top comprising a rigid rear bow having legs of fixed length and other bows extensible forwardly from the rear bow and collapsible thereagainst, the legs of said rear bow having projections at their lower ends which operate in

the slots of said guides, and a spring-pressed locking pin carried by each leg of said rear bow and adapted to enter the locking aperture in the corresponding guide member



when the bow is fully raised with the projections at the upper ends of the slots, said top when in folded position being storable in said compartment.

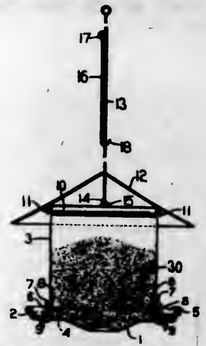
1,891,041. IRIDOMETER. REUEL W. BENNETT, Indianapolis, Ind. Filed Dec. 14, 1929. Serial No. 414,191. 8 Claims. (Cl. 88—20.)



1. A device of the kind described comprising ring frames adjustable toward and from each other, eye pieces rotatably mounted in the ring frames, the eye pieces having magnifying lenses in one end, wires crossed at right angles to each other mounted in the other end, the ring frame being graduated to indicate degree marks, rotation of the eye pieces serving to position any one of the cross wires to any predetermined angular position, the degree marks indicating the position to which it is turned, substantially as set forth.

1,891,042. CHICKEN FEEDER. JOSEPH F. BENOIT, Wells, Me. Filed June 30, 1931. Serial No. 547,817. 2 Claims. (Cl. 119—52.)

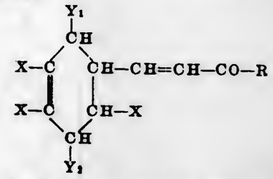
1. A poultry feeder comprising a container having a bottom member provided with an upwardly curved peripheral edge, a cylindrical side wall member formed of wire mesh, means to secure said wire mesh member to the bottom member with the lower edge of the wire mesh member spaced above the bottom member, a rigid handle member extending diametrically across the wire mesh member at the top thereof and secured thereto, a suspender connected to the handle member and by which the container is suspended, a cover for the container having an opening through which the suspender extends, and a cover-supporting hook pivotally connected to the



suspender at a point above the cover and having a length to engage the edge of the cover when the latter is raised from the container and thereby hold said cover raised.

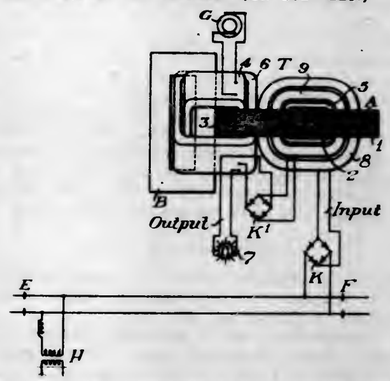
1,891,043. HYDRO-AROMATIC KETONES. OTTO DIELS and KURT ALDER, Kiel, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed June 11, 1929, Serial No. 370,152, and in Germany Jan. 21, 1929. 6 Claims. (Cl. 260—131.)

5. As new products, the compounds of the following general formula:



wherein R stands for an organic radical of the group consisting of methyl, ethyl and phenyl, wherein at least one but not more than three of the positions marked X, Y_1 and Y_2 are occupied by methyl, the others by hydrogen, or Y_1 and Y_2 jointly stand for $—CH_2—CH_2—$ in which case the X's are hydrogen or one X is methyl, being substances of an agreeable odor.

1,891,044. ELECTRICAL TRANSLATING APPARATUS. PHILIP H. DOWLING, Swissvale, Pa., assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed Mar. 25, 1930. Serial No. 438,916. 14 Claims. (Cl. 171—119.)



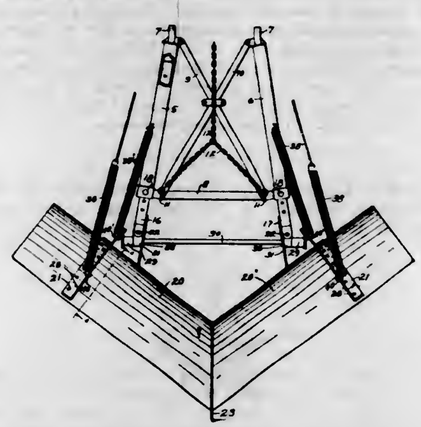
1. A transformer comprising a first winding supplied with periodic current, two magnetic paths both linking all of said first winding, a second winding linking both said magnetic paths in such manner that the fluxes in said paths due to current in said first winding induce opposing electromotive forces in such second winding, and means for controlling the distribution of flux from said first winding between said two paths.

1,891,045. SAFETY DISK CUTTER. WALTER HENRY FREYGANG, Weehawken, N. J., assignor to Walter Kidde & Company, Inc., a Corporation of New York. Filed July 7, 1930. Serial No. 466,056. 7 Claims. (Cl. 221—73.5.)



1. In a safety disk cutter of the type described, the combination comprising a hollow tubular member having a cutting edge lying at a small angle with respect to a plane at right angles to the longitudinal axis of the tubular member, said cutting edge being on the inner diameter of the tubular member.

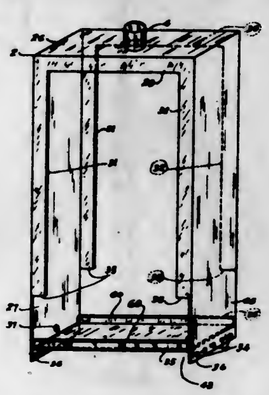
1,891,046. SNOWPLOW. FREDRICK GETTELMAN, Milwaukee, Wis. Filed Sept. 24, 1928. Serial No. 307,815. 6 Claims. (Cl. 37—44.)



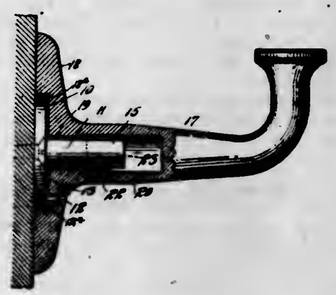
1. The combination with a guiding frame, of a wedge type plow pivoted thereto for oscillation about a transverse axis, stops on said frame defining the extent of oscillation of said plow in either direction of oscillation about said axis, and means yieldably maintaining said plow against certain of said stops, said plow being yieldable from said stops toward a position in which its outer ends will be elevated with reference to the road.

1,891,047. WALL AND PARTITION STOVE. CHARLES GWALTNEY, Oklahoma City, Okla. Filed Mar. 25, 1930. Serial No. 438,722. 2 Claims. (Cl. 126—90.)

1. A stove having a burner, an inclosed element for housing said burner, and an enclosing element for said inclosed element adapted to be disposed in a wall of a building, said enclosing element embodying a box-like structure having closed sides and top and a raised bottom, and an open front and back, and having a heat insulating covering upon its sides and top, said inclosed element embodying a box-like structure of smaller dimensions than said enclosing element, having closed sides, top, front and back, and having a raised bottom, said front and back having a plurality of perforations in their lower portions for supplying air to said burner, said inclosed element disposed within said enclosing element in spaced relation to its sides, top, and bottom, a pair of louvred doors for the front and back of said enclosing element, and means for conveying fumes from within said inclosed element to a flue in said building.



1,891,048. SUPPORTING DEVICE. THOMAS M. KEEFE, Boston, Mass., assignor to J. P. Eustis Manufacturing Company, Cambridge, Mass., a Corporation of Massachusetts. Filed Sept. 26, 1930. Serial No. 484,586. 3 Claims. (Cl. 248—20.)



1. A supporting device comprising a tubular member having at one end a substantially flat base for abutment against a body standing perpendicularly to the axis of the member and having a bore of varying diameter, and a stem having means for attachment to an abutment and formed with a longitudinally extending gap to produce oppositely disposed portions adapted to be spread apart, said tubular member being mounted upon said stem and axially slidable thereon and formed with a screw-threaded hole bisected by the plane in which the gap extends, and a screw fitted in said screwthreaded hole and formed with a tapered terminal positioned to lie within the gap formed in the stem and bear against opposite walls of the separated portions of the stem, and functioning to spread apart said portions within the larger diameter of the bore of the tubular member and also move the tubular member axially of said stem.

1,891,049. DENSITY DEMONSTRATING APPARATUS. PAUL E. KLOPSTEG, Chicago, Ill., assignor to Central Scientific Company, a Corporation of Illinois. Filed Sept. 27, 1929. Serial No. 395,728. 4 Claims. (Cl. 265—44.)



4. In a jolly balance, a standard, a spring suspended therefrom designed to elongate equal distances for equal increments of load within its limit of elasticity, a specimen holder secured to the lower end of the spring and adapted to support any one of a plurality of specimens of different substances having geometrical congruity each with the other, an index associated with the specimen holder, a vertical scale removably secured to the standard, said scale being equally graduated and so calibrated that when a selected one of the specimens is placed in the holder, the index will point to a graduation on the scale corresponding to the specific gravity of that specimen.

1,891,050. ELECTRICAL CONTACT. CLEMENS A. LAISE, North Bergen, N. J., assignor to Eisler Electric Corporation, Wilmington, Del., a Corporation of Delaware. Filed Sept. 11, 1930. Serial No. 481,337. 12 Claims. (Cl. 200—166.)

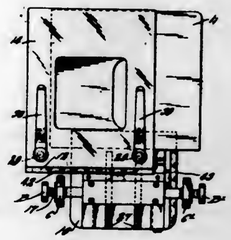
1. A wrought tungsten electrical contact having a finely grained structure as distinguished from a fibrous or flaky structure.

1,891,051. OPERATING MECHANISM FOR DOORS. WILLIAM A. NEESE, Hartland, Wis., assignor of one-half to John W. Harling, Hartland, Wis. Filed Feb. 4, 1931. Serial No. 513,332. 2 Claims. (Cl. 268—64.)



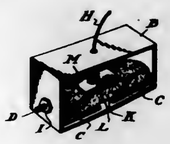
1. Door operating mechanism including a cylinder having aligned chambers therein communicating with one another, pistons movable in said cylinders, cross heads having connection with the pistons, with each cross head having connection with the piston at the opposite end of the cylinder, a rotatable shaft disposed beyond each end of the cylinder, a sprocket carried by each shaft, toggle links connecting each shaft with a door, chains passing around said sprockets and having one of their ends connected with the cross heads, a tension spring connected to the other end of each chain, means for introducing fluid into the cylinder for actuating the pistons and cross heads to rotate said shafts and open said doors placing the springs under tension, means for relieving the pressure within the cylinder whereby the tension of said springs will return the door to a closed position.

1,891,052. ADJUSTING MECHANISM FOR MICROSCOPE STAGES AND THE LIKE. HARVEY N. OTT, Buffalo, N. Y., assignor to Spencer Lens Company, Buffalo, N. Y. Filed May 29, 1930. Serial No. 456,833. 12 Claims. (Cl. 88—39.)



1. The combination of a base, an intermediate member guided to move in a straight path relatively to said base, an outer member mounted on said intermediate member to move relatively thereto transversely of the path of movement of said intermediate member relatively to said base, two pairs of coaxial adjusting knobs, a pair of knobs being arranged at each side of said intermediate member, means connecting one knob of each pair with said base for moving said intermediate member relatively to said base, and means connecting the other knob of each pair with said outer member for actuating the same.

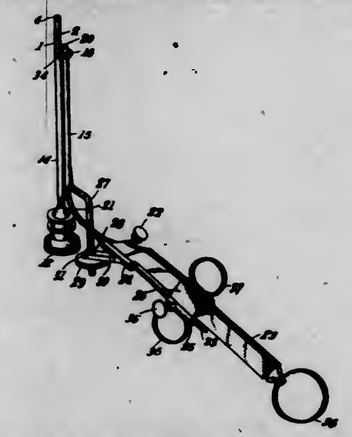
1,891,053. RADIO GRID LEAK. FREDERICK OLIVER PASCHALL, Brooklyn, N. Y. Filed June 1, 1927. Serial No. 195,725. 3 Claims. (Cl. 250—16.)



1. A grid leak comprising an insulated box, a block of coal within the box, two lower contact members and a single upper contact member engaging the coal, a spring located between the upper contact member and the box which serves to hold the coal and contacts into firm engagement, and terminal means connected to each of the contact members.

1,891,054. SURGICAL INSTRUMENT. LOUIS K. PITMAN, New York, N. Y. Filed Mar. 28, 1931. Serial No. 525,901. 23 Claims. (Cl. 128—320.)

15. An observation tube comprising a lateral opening at a substantial distance from one end of the tube, a source of light at the said end of the tube, a substantially cylindrical member acting to seal the tube at the opening and comprising opposed terminal portions of transparent material and an intermediate portion bearing oppositely disposed mirror surfaces whereby light from the source



is reflected to the exterior through the opening and light from the exterior is received through the opening and reflected to the other end of the tube.

1,891,055. PRODUCTION OF SATURATED FATTY ACID NITRILES. WALTHER REPPE and ULRICH HOFFMANN, Ludwigshafen-on-the-Rhine, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Filed Oct. 27, 1931, Serial No. 571,465, and in Germany Nov. 20, 1930. 10 Claims. (Cl. 260—108.)

1. The process for the production of saturated fatty acid nitriles which comprises acting with hydrogen on an unsaturated fatty acid nitrile in the presence of a hydrogenation catalyst essentially containing copper, under mild conditions of working.

1,891,056. ORNAMENTAL CHAIN CONSTRUCTION. ADOLF SCHOENINGER, Glen Ridge, N. J., assignor to Forstner Chain Corporation, a Corporation of New Jersey. Filed May 28, 1932. Serial No. 612,995. 4 Claims. (Cl. 59—80.)

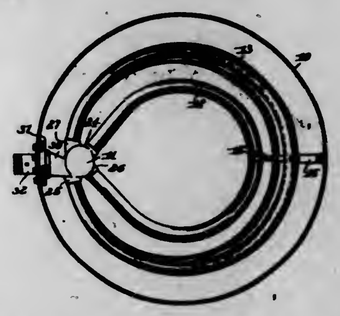


1. In an ornamental chain, a plurality of links, the body portion of each link having an elongated opening, each link having an imperforate element of a width greater than the link opening width and of a length less than the link opening length and bendable to a plan perpendicular to the general plane of the link, each said element being capable of being passed through the link opening of the adjacent link when in said perpendicular position and bent towards the plane of the link body portion to lock the links together.

1,891,057. PRODUCTION OF INDOLE AND DERIVATIVES THEREOF. CURT SCHUMANN, EDUARD MUENCH, and BRUNO CHRIST, Ludwigshafen-on-the-Rhine, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed May 21, 1929, Serial No. 364,933, and in Germany May 26, 1928. 12 Claims. (Cl. 260—47.)

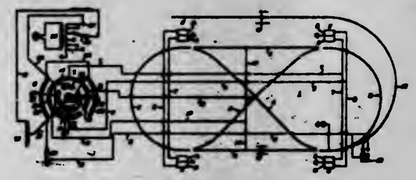
1. A process of producing compounds of the indole series which comprises acting on a compound selected from the group consisting of indoxyl, naphthindoxyl, their homologues, -N-acyl and (-N-acyl, -O-acyl) compounds, with a gas containing hydrogen in the presence of a hydrogenation catalyst.

1,891,058. HEAT TRANSFER DEVICE. HAROLD H. SMITH, Brighton, N. Y., assignor to The Pfaudler Co., Rochester, N. Y., a Corporation of New York. Filed June 2, 1932. Serial No. 614,908. 6 Claims. (Cl. 257—229.)



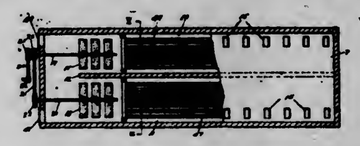
1. A heat transfer device comprising two series of coils, and a single header for the coils of both series, said header having a substantially central inlet passage for certain of said coils and discharge passages for certain coils of both series on opposite sides of said inlet passage.

1,891,059. APPARATUS FOR TOY ELECTRIC RAILWAYS. LEON W. ROSENTHAL, New York, N. Y. Filed Jan. 21, 1931. Serial No. 510,192. 12 Claims. (Cl. 104—149.)



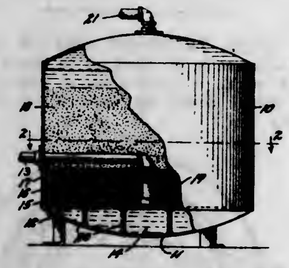
1. In combination, a toy electric railway, a stationary power-operated track or way device to control said track, a power source, and means for disconnecting the entire track from and connecting the power device to said source.

1,891,060. DRY KILN. JAMES FORREST COBB, Portland, Oreg. Filed July 7, 1927. Serial No. 204,022. 10 Claims. (Cl. 34—46.)



1. As part of a dry kiln, a convertible duct consisting of an oblong substantially rectangular trunk provided with a series of transverse elongated openings, in combination with a movable cover-plate snugly fitting over said openings and medially pivoted to the trunk, whereby movement of said plate may at will convert the said openings into a series of ports graduated in size towards either end of the trunk.

1,891,061. WATER TREATING DEVICE. ROBERT OWEN FRIEND and JOHN ARTHUR MONTGOMERY, Chicago, Ill. Filed June 27, 1931. Serial No. 547,270. 3 Claims. (Cl. 210—24.)



1. Means for supporting treating material in a water treating device comprising: a dispersion medium for dividing the incoming water into a series of jets; a series of intersecting vertical plates positioned above said dispersion medium so as to divide the area of the latter into a series of cells; and a bed of gravel placed in and over said cells, said bed of gravel having sufficient thickness to extend above the top of said plates.

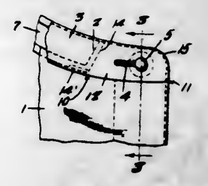
1,891,062. WELL DRILLING STRUCTURE. JOHN L. SAGER, Los Angeles, Calif. Filed Aug. 16, 1929. Serial No. 386,468. 22 Claims. (Cl. 255—4.)



1. In a drilling structure, the combination of: a plunger; a primary solenoid means for moving said plunger in a given direction; a secondary solenoid means acting on said plunger in a direction opposite to that of said primary solenoid means; supply means for energizing said primary and secondary solenoid means; control means for de-energizing said primary solenoid means during the period of energization of said secondary solenoid means; and means for quickly decreasing the current in said primary solenoid means when said primary solenoid means is de-energized.

1,891,063. NECKBAND. ARTHUR J. SHAUKIS, Haverhill, Mass. Filed Feb. 16, 1931. Serial No. 516,131. 1 Claim. (Cl. 2—127.)

A shirt body having an opening, a reinforcement at the edge of the opening, said body having an upwardly extending neck portion at the edge of said opening and disposed beyond the upper edge of the reinforcement, an inner neck band stitched at its lower edge to the shirt body and said extension and the reinforcement, an outer neck band consisting of a strip of folded material, a reinforcement located between the folds of the outer neck band, said outer neck band and the reinforcement therein stitched to the body of the shirt and an end portion of the extension thereby leaving a pocket opening at the extension above the upper edge of the first mentioned reinforcement, means binding the upper edges of the inner and outer neck bands, the extension and the second mentioned reinforcement together, and the second mentioned reinforcement and outer neck band having registering button holes at the side of the pocket and above the upper edge of the first mentioned reinforcement.



1,891,064. SHOE. MORRIS SIMONOVITS, Garfield, N. J. Filed July 23, 1931. Serial No. 552,707. 1 Claim. (Cl. 36—16.)



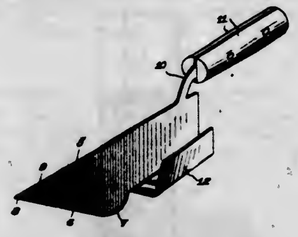
A footwear comprising outer, intermediate and inner soles, an upper having an outturned flange portion resting on the inner sole at the edges thereof, stitching securing the inner sole to the flange portion of the upper and outwardly of the latter, a binding strip of substantially U-shape in cross section receiving the flange portion and the edges of the inner sole and extending between the latter and the intermediate sole to underlie said stitching, stitching extending through the strip, flange portion of the upper and the inner sole and engaged and protected by the intermediate sole, stitching extending through the strip, flange portion of the upper and the inner and intermediate soles and engaged and protected by the outer sole, said outer sole cemented to the intermediate sole, and one wall of the strip overlying the first named stitching to conceal and protect the latter.

1,891,065. EYELET. THOMAS E. SITTON, Edgewood Arsenal, Md. Filed Apr. 1, 1932. Serial No. 602,552. 3 Claims. (Cl. 24—141.)



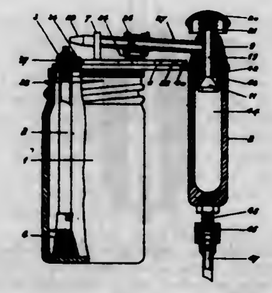
1. In combination with a belt having metallic eyelets, auxiliary eyelets removably mounted in the eyelets of the belt and covering the latter and capable of being removed for cleaning and polishing.

1,891,066. LAWN TRIMMER. LLOYD SMITH, Paris, Tenn. Filed Dec. 14, 1931. Serial No. 580,998. 1 Claim. (Cl. 97—227.)



A lawn trimmer comprising a vertically disposed flat blade having its rear portion formed with a trough-like guide disposed at one side of said blade and extended laterally from the lower edge thereof, a forwardly inclined portion on the blade in advance of the trough, a rounded cutting heel between the inclined portion and the trough extending below the plane of the bottom of said trough-like guide, the inclined portion and heel presenting a continuous cutting edge, and a handle extended above the upper edge of the blade and rearwardly directed.

1,891,067. PAINT PULVERIZER. LEOPOLD SPIRA, Zurich, Switzerland. Filed July 22, 1929, Serial No. 380,096, and in Switzerland July 28, 1928. 1 Claim. (Cl. 91—45.)



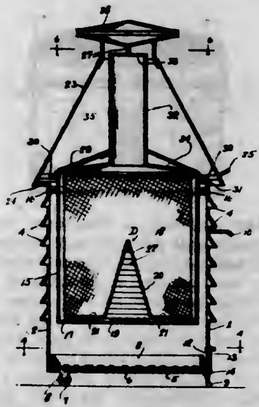
Apparatus of the class described, including a suction nozzle for the discharge of paint and the like, and a nozzle for the discharge of fluid under pressure, said nozzles being arranged substantially at right angles to each other and each with its discharge end spaced from the discharge end of the other, the second named nozzle being movable axially and being also movable laterally with respect to the paint discharge nozzle.

1,891,068. COMPASS. HARRY E. STAHL, Sr., Trenton, N. J. Filed July 5, 1929. Serial No. 376,148. 2 Claims. (Cl. 33—222.)



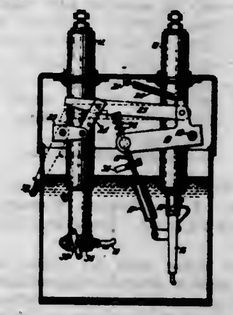
2. In a compass, a housing, a magnetically controlled compass card therein, a lens closing the top of the housing, a lens retaining annulus surrounding the outer edge of the lens and having a portion spaced therefrom to define an annular groove around the inner edge of the annulus, a curved arm, a rib extending around said arm within said groove to slidingly mount the arm, an indicator carried by the arm, said indicator being adapted to be positioned with respect to a point upon the compass card, and a finger piece extending from the arm.

1,891,069. PORTABLE RUBBISH CONSUMER. MARY N. SUCIU, Flint, Mich. Filed Feb. 17, 1931. Serial No. 516,429. 4 Claims. (Cl. 110—18.)



1. A rubbish consumer comprising in combination a casing, the walls of which are provided with louvres, a flame shield arranged within said casing and spaced relative to the walls of said casing, said casing being open at its top and bottom, said flame shield being open at its top and bottom, and the walls of said flame shield at the bottom thereof directed inwardly to provide a supporting flange extending along all sides of the flame shield, a wire mesh rubbish receptacle arranged in said flame shield for rest on said flange, and a distributor arranged within said wire mesh receptacle, said distributor comprising a pyramidal body portion extending axially of said wire mesh receptacle, a hinged closure for the upper end of said casing adapted to be opened for insertion of rubbish, a second flame shield arranged in said closure in spaced relation to the walls of said closure, and adapted to close the first mentioned flame shield when said closure is in a closed position.

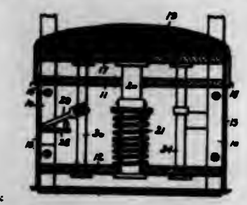
1,891,070. ELECTRIC CIRCUIT BREAKER. HENRY TRENCHAM, Ruislip, and HERBERT C. HEATH, Wembley, England, assignors to General Electric Company, a Corporation of New York. Filed Apr. 30, 1931, Serial No. 534,062, and in Great Britain May 12, 1930. 12 Claims. (Cl. 200—89.)



1. An electric circuit breaker comprising a movable switch member, coacting contacts controlled thereby, operating mechanism restraining said switch member in

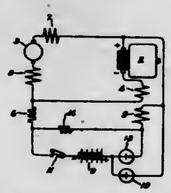
the closed circuit position, and means responsive to an abnormal circuit condition causing an initial movement of said switch member in the switch closing direction, said initial movement causing collapse of said operating mechanism and circuit opening movement of said switch member.

1,891,071. SHOE-SHINING CHAIR. ROBERT SEYMOUR TRULOCK, Oklahoma City, Okla. Filed Sept. 8, 1930. Serial No. 480,545. 2 Claims. (Cl. 116—67.)



1. In a chair structure, a stationary frame including vertical and horizontal portions, said horizontal portions being formed with vertically aligned openings constituting guides, a seat portion, a plurality of vertically arranged depending members secured upon the underside of the seat portion and slidable through said guide openings whereby the seat will have only rectilinear movement with respect to the stationary frame, an abutment collar on one of said depending members, a spring engaging said abutment collar and the lower horizontal member for opposing downward movement of the seat, an arm on another of said depending members, a pivoted trip on said arm, a bell mounted on one of the vertical members, and a pivoted clapper for the bell having one end disposed in the path of travel of said trip whereby the bell will be sounded when the seat is depressed.

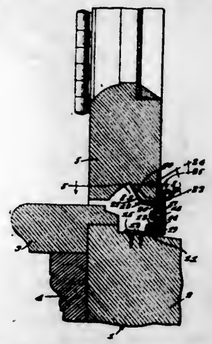
1,891,072. GENERATOR EXCITATION SYSTEM. LAURANCE E. TYRRELL, Erie, Pa., assignor to General Electric Company, a Corporation of New York. Filed May 30, 1930. Serial No. 457,671. 8 Claims. (Cl. 290—16.)



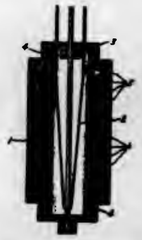
4. In a generator excitation system including a shunt connected field exciting winding and a battery, means connecting said battery in parallel with said field exciting winding for providing auxiliary excitation of said winding by said battery when the voltage of said generator is less than a predetermined value, and means connecting said battery in series with said winding for causing charging of the battery by said generator when the generator voltage exceeds said predetermined value.

1,891,073. AUTOMATIC WATER SHED FOR INSIDE CASEMENTS. JACOB MORTON WARNER, Bryn Mawr, Pa. Filed July 20, 1931. Serial No. 552,056. 1 Claim. (Cl. 20—66.)

An automatic water shed for inside casements comprising a plate bent to provide intermediate and end portions arranged angularly to each other and one of the end portions having slots, fasteners extending through the slots, hinges secured to a casement and having slots to receive the fasteners permitting the latter to adjustably secure the plate to the casement, said other end portion of the plate adapted to move into and out of a recess of a window associated with the casement during the closing and opening of said window, and a member adjustably secured to the plate by said fasteners and disposed at substantially right angles to the intermediate portion to be engaged by the window moving into closed position for swinging the plate into the recess of the window when the latter moves into a fully closed position.

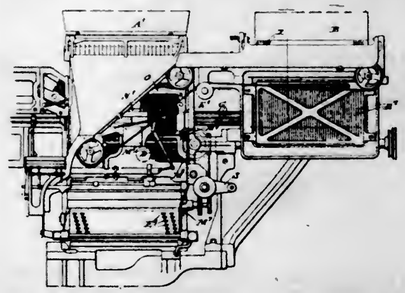


1,891,074. CATHODE FOR ELECTRIC DISCHARGE DEVICES. WILLIAM F. WINTER, Jr., Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Feb. 19, 1931. Serial No. 517,001. 4 Claims. (Cl. 250—275.)



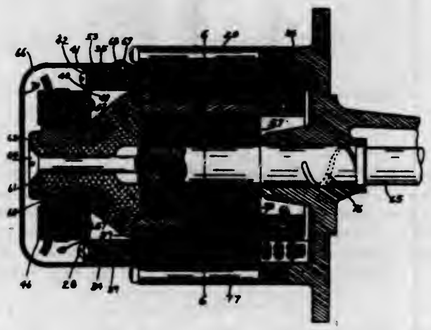
4. A cathode for an electric discharge device comprising a plurality of metal discs coated on both sides with electron-emitting material, said coatings being in direct physical contact with one another.

1,891,075. TYPOGRAPHICAL COMPOSING MACHINE. WILLIAM ACKERMAN, Towners, N. Y., assignor to Mergenthaler Linotype Company, a Corporation of New York. Filed Sept. 30, 1930. Serial No. 485,466. 20 Claims. (Cl. 199—20.)



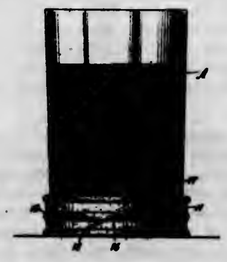
1. In a keyboard mechanism for typographical composing machines, the combination of a key-controlled operating member, two actuating members, two permanently connected motion transmitting members arranged therebetween, one of said members being arranged in constant operative relation to the key-controlled operating member, and means for establishing an operative relation between either of said motion transmitting members and the corresponding actuating member.

1,891,076. DYNAMO ELECTRIC MACHINE. VINCENT G. APPLE, Dayton, Ohio. Original application filed Jan. 5, 1928, Serial No. 244,735. Divided and this application filed May 1, 1929. Serial No. 359,706. 2 Claims. (Cl. 172—36.)



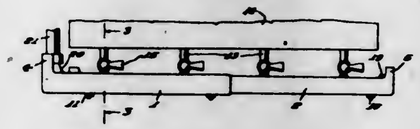
1. The combination, in an electric starting motor, of a bracket comprising a mounting flange, an arm having a bearing hub in its outer end extending axially from one side of said flange, a second bearing hub and an annulus concentrically surrounding said second hub at some distance therefrom, both extending from the other side of said flange a substantially equal distance, a shaft journaled in the two said hubs and having a stub end extending through the second said hub but having no other support, a starter drive on said shaft between said hubs, an armature secured to the stub end of said shaft with the core against the end of the second said hub, a field element having the core secured to the end of said annulus, one winding head of said field element and the back winding head of said armature extending into the space surrounding the said second hub between said second hub and said annulus.

1,891,077. COASTER. HENRY L. BEACH, New York, N. Y. Filed Jan. 21, 1932. Serial No. 588,009. 7 Claims. (Cl. 65—53.)



1. A coaster comprising a substantially cup shaped body of absorbent resilient material having a centrally apertured radially slitted bottom and a marginal rim formed with a diagonal slit communicating with one of the bottom slits.

1,891,078. GUARD FOR GAS STOVES. JOSEPH BERNSTEIN, Chicago, Ill. Filed Feb. 12, 1930. Serial No. 427,817. 1 Claim. (Cl. 126—42.)

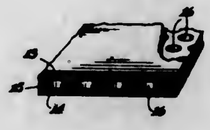


In guards for the feed pipes of gas stoves, a gas cock shield reversible end for end and including telescopic sections, the sections being U-shaped in cross section, means for securing said sections together in adjusted positions, and means for securing said sections to the feed pipe, the relatively outer ends of said telescopic sections being bent at right angles to the body portions to form heads whereby to receive the end and elbow-joint of the feed pipe, the sides of said telescopic sections being disposed above and below the gas stove burners.

1,891,079. VARNISH AND PAINT OIL MANUFACTURE. MARTIN B. CHITTICK, Chicago, Ill., assignor to The Pure Oil Company, Chicago, Ill., a Corporation of Ohio. Filed July 2, 1930. Serial No. 465,448. 1 Claim. (Cl. 134—26.)

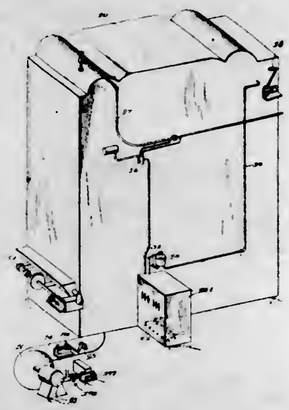
The method of producing a varnish, which consists in heating a mixture of substantially six parts of reduced hydrocarbon polymers and four parts of linseed oil to a temperature of between three hundred to five hundred degrees Fah., retaining the mixture at said temperatures for substantially one hour's time then permitting the mixture to cool to a temperature of approximately two hundred degrees Fah., and adding a japan drier and subsequently reducing the mixture to brushing consistency by the addition of turpentine.

1,891,080. ELECTRICAL CONDENSER AND METHOD OF MAKING SAME. HAROLD I. DANZIGER, New York, N. Y. Filed Dec. 26, 1928. Serial No. 328,888. 3 Claims. (Cl. 175—41.)



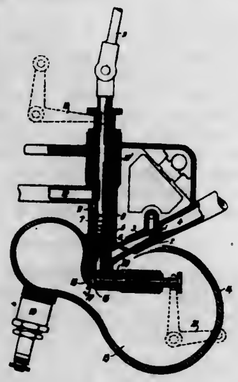
1. An electrical condenser comprising a set of alternately arranged conducting and foraminated insulating layers, the latter being in direct contacting sandwiched relationship to the conducting layers, and the conducting layers being sufficiently tensioned to prevent buckling thereof.

1,891,081. INTEGRATED FURNACE CONTROL. THOMAS W. DELANNY, St. Paul, Minn. Filed Oct. 16, 1930. Serial No. 489,221. 19 Claims. (Cl. 236—14.)



1. In a device of the character described, a primary controller shaft, controller arms driven therefrom, a secondary controller shaft, and controller disks driven therefrom, said arms and disks cooperating to control auxiliary operating circuits.

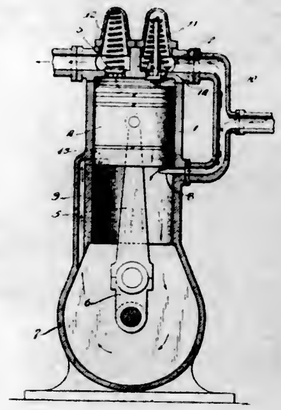
1,891,082. FUEL INJECTION DEVICE FOR INTERNAL COMBUSTION ENGINES. EDWARD DODSON, Streatham, London, England. Filed Sept. 19, 1930, Serial No. 483,098, and in Great Britain Dec. 13, 1929. 2 Claims. (Cl. 123—33.)



1. Means for injecting fuel into internal combustion engines comprising, an injection pump, including a pump cylinder and a plunger adapted to reciprocate in said cylinder; an ejection port adjacent one end of said cylinder; an inlet port adjacent said ejection port; a carburetter communicating with said inlet port; a throttle valve for said carburetter; an unregulated inlet port adjacent the other end of said pump cylinder; a sleeve valve surrounding said plunger for controlling said inlet port and means for mechanically actuating said sleeve valve independently of the plunger.

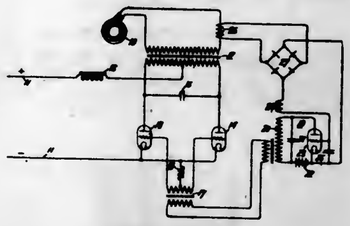
1,891,083. AIR COMPRESSOR. ADIEL Y. DODGE, South Bend, Ind. Filed Oct. 18, 1928. Serial No. 313,213. 1 Claim. (Cl. 230—46.)

A fluid compressor, comprising a cylinder, a piston operating in said cylinder, a connecting rod pivotally connected with said piston for actuating it, a crank for actuating said connecting rod, and a fluid-tight crank case for said crank, the effective length of said cylinder being substantially twice the length of the crank throw and the effective length of said piston being substantially one-half the effective length of the cylinder, said cylinder having inlet and outlet ports for the space at the



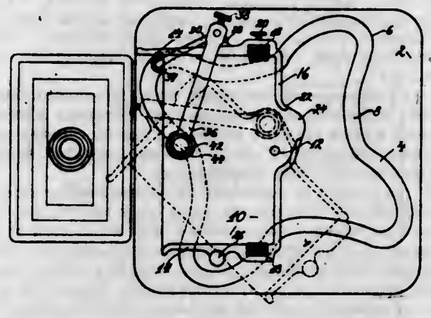
outer end of the cylinder, and having an inlet port just closed by the outer edge of the piston when the piston is in its inner position and another port just closed by the inner edge of the piston when the piston is in its outer position, a conduit affording communication between the crank case and said last port, and a manifold for supplying both said inlet ports.

1,891,084. ELECTRIC POWER CONVERTING APPARATUS. ALAN S. FITZ GERALD, Wynnewood, Pa., assignor to General Electric Company, a Corporation of New York. Filed May 12, 1931. Serial No. 536,819. 5 Claims. (Cl. 172—274.)



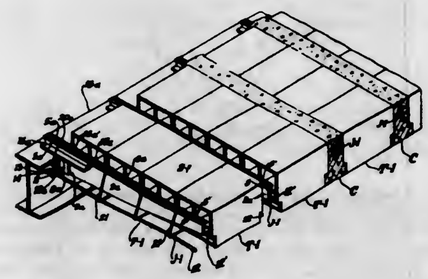
1. In combination, a direct current supply circuit, an alternating current load device, means for transmitting energy therebetween including a plurality of electric valves provided with control grids, a source of electrical oscillations for exciting said control grids to determine the frequency of the alternating current delivered by said apparatus, said source including an electric valve provided with a control grid, and means for impressing upon the grid of said last mentioned valve a uni-directional potential variable in magnitude to vary the frequency of said electrical oscillations.

1,891,085. CARD DEALING DEVICE. IRVING FLORMAN, New York, N. Y. Filed Oct. 26 1932. Serial No. 639,698. 11 Claims. (Cl. 273—149.)



1. In a card dealing device, a base having a cam track therein formed of a plurality of similar sections, a card holder rotatably mounted on said base, and means mounted on said card holder for movement therewith to deal cards individually from the holder, said means being operated once by each section of said cam track.

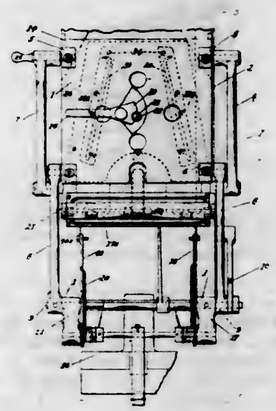
1,891,086. JOIST AND TILE CONSTRUCTION FOR FLOORS AND THE LIKE. HURXTHAL F. FREARS, Canton, Ohio. Filed May 23, 1931. Serial No. 539,545. 18 Claims. (Cl. 72—66.)



18. A structure for floors and the like including a plurality of laterally spaced longitudinally extending joist members, and a plurality of tile each extending between adjacent joist members, each tile including transversely spaced outer walls and a web wall extending between the transversely spaced walls, the web wall including spaced end portions, and each web wall end portion having a notch formed therein, and each notched web wall end portion interlocking with the adjacent joist member.

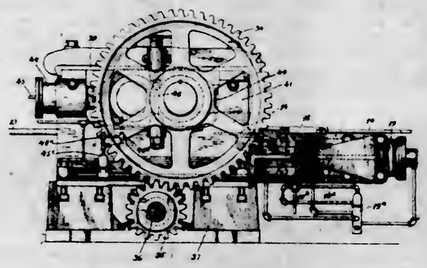
1,891,087. PROCESS FOR MARKING AND CEMENTING SHOES. BENJAMIN W. FREEMAN, Cincinnati, Ohio, WILLIAM S. HERSCHEL, St. Louis, Mo., and HERBERT E. PATTERSON, Columbus, Ohio, assignors to The Louis G. Freeman Company, Cincinnati, Ohio, a Corporation of Ohio. Original application filed June 28, 1927, Serial No. 202,107. Divided and this application filed Oct. 18, 1928. Serial No. 313,356. 9 Claims. (Cl. 216—62.)

1. A shoe ornamenting process which consists in applying cement to a shoe part through a perforation in a member with which the part is being held on a support, and then applying to the part, a decorative piece of corresponding shape as the perforation in the member through



which the cement has been applied and then pressing the piece against the shoe part with a member corresponding in shape to the decorative piece.

1,891,088. MOLD FILLING MACHINE. JOHN R. GAMMETER, Akron, Ohio. Filed July 26, 1928. Serial No. 295,371. 20 Claims. (Cl. 18—30.)

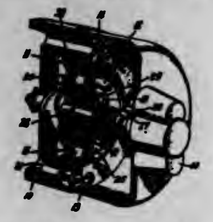


19. In a mold filling machine, a pair of forcing rolls for passing plastic vulcanizable material between them, a member contacting with both rolls at the delivery side thereof and providing a pressure chamber for receiving the material from the rolls, said pressure chamber having a narrow outlet slot at a mold filling position, means including a pressure cylinder for retractably supporting said member against the rolls, pressure actuated means for intermittently feeding molds past said outlet slot, and means including a pressure cylinder for permitting withdrawal of one of the rolls from contact with the pressure chamber member to suspend the material feed during the periods of inaction of the mold feeding means, said pressure cylinder being controlled by the mold feeding means.

1,891,089. SNAP SWITCH. FRITZ GRAF, Annaberg, Germany, assignor to General Electric Company, a Corporation of New York. Filed May 20, 1932, Serial No. 612,585, and in Germany May 29, 1931. 4 Claims. (Cl. 200—65.)

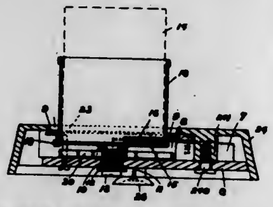
1. In an electric switch, a base of insulating material having a central cavity, stationary contacts secured to

said base and having portions extending within said cavity, a rotary member mounted in said cavity, a spindle connected to said rotary member, a spring contact seated



in an annular trough in said member, the sides of the annular trough limiting the radial movement of the contact carried by the rotary member.

1,891,090. PACKAGE OPENER. LOUIS M. HALL, Fort Thomas, Ky., assignor to The Monarch Tool & Manufacturing Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Oct. 7, 1931. Serial No. 567,424. 5 Claims. (Cl. 131—59.)

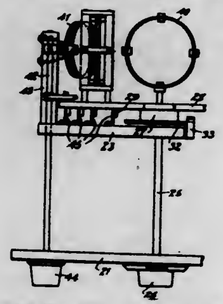


1. In a package opener the combination of a plate member having a fixed cutter blade projecting substantially parallel thereto, and a package receiver rotatably mounted on said plate, said receiver having a slit adjacent the bottom through which the cutter may pass upon rotation of the receiver relative to the cutter.

1,891,091. INSECTICIDE SPRAY. THOMAS J. HEADLEE, Dayton, and JOSEPH M. GINSBURG, New Brunswick, N. J., assignors to Tobacco By-Products & Chemical Corporation, Louisville, Ky., a Corporation of Delaware. Filed Jan. 31, 1931. Serial No. 512,744. 4 Claims. (Cl. 167—34.)

1. A stomach and a contact poison insecticide, consisting of a chemical combination of tannic acid and nicotine, known as nicotine tannate.

1,891,092. RADIO RECEIVING APPARATUS. ANTHONY P. HINSKY, Brooklyn, N. Y. Filed Oct. 19, 1928. Serial No. 313,551. 4 Claims. (Cl. 171—119.)



1. In a device of the character described, a plurality of rotatably mounted coils adapted for selective association in a radio circuit, and a pivotally mounted coil adapted to move within the confines of the selected coil for variable electrical association therewith.

1,891,093. ARTIFICIALLY COLORED MOTOR FUEL. JULIUS HYMAN, Chicago, Ill., assignor to The Pure Oil Company, Chicago, Ill., a Corporation of Ohio. Filed Sept. 25, 1929. Serial No. 395,198. 8 Claims. (Cl. 44—9.)

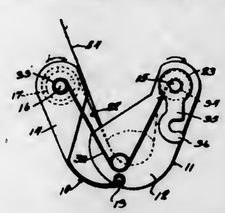
1. A fuel composed essentially of volatile hydrocarbons for use in internal combustion engines containing a soluble coloring matter normally tending to lose its coloring power under conditions of storage and an anti-agent tending to stabilize such color deterioration.

2. The method of stabilizing the characteristics of artificially colored hydrocarbon motor fuel oils of the type containing soluble coloring matter and which tend to deteriorate in color upon exposure to light and air, which comprises adding thereto prior to such deterioration a small proportion of a hydroxy-aromatic compound sufficient to reduce the activity of organic per-acids present in said oil and inhibit loss of the desired color thereof.

6. A fuel composed essentially of volatile hydrocarbons for use in internal combustion engines containing a soluble coloring matter normally tending to fade upon storage and a color stabilizing agent composed of amino derivatives.

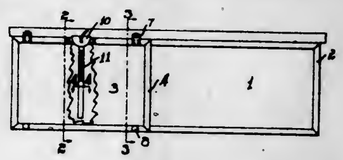
8. A fuel composed essentially of volatile hydrocarbons for use in internal combustion engines containing a soluble coloring matter normally tending to fade upon storage and a color stabilizing agent comprising ammonia.

1,891,094. CIGARETTE MAKING DEVICE. THOMAS A. KILLMAN, Nashville, Tenn. Filed Oct. 6, 1931. Serial No. 567,261. 11 Claims. (Cl. 131—5.)



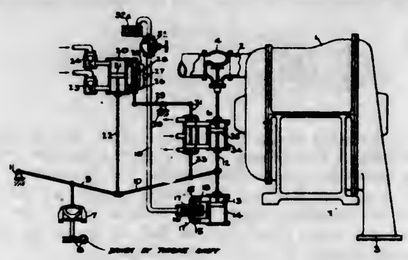
6. A cigarette making machine as described comprising two rotatable members movable toward or away from each other, a belt trained over each of said members, automatic rewinding means carried by one of said members for rewinding the belt thereupon, and resilient brake means engaging the other of said members for preventing rewinding of the belt upon movement of the members toward each other.

1,891,095. WINDSHIELD HEATER. BERNARD A. KNOWLES, Azalia, Mich. Filed Nov. 18, 1931. Serial No. 575,694. 4 Claims. (Cl. 20—40.5.)



1. A windshield having double transparent portions separated in the line of vision therethrough to form an air space therebetween, and means for supplying heat to said air space and movable in said space to agitate and set up a circulation of air therein.

1,891,096. SPEED GOVERNING MECHANISM. HANS KRAFT, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Mar. 6, 1931. Serial No. 520,638. 6 Claims. (Cl. 264—14.)



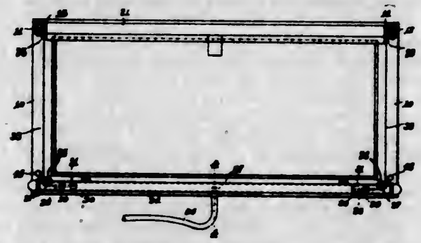
1. A governing mechanism for prime movers comprising a fluid admitting valve means, a motor for actuating it, a pilot valve controlling the motor, a governor for the pilot valve, and damping means connected to the motor and means for actuating the damping means in response to the rate of the governor speed change for preventing overtravel, and oscillations of said motor and valve.

1,891,097. COPPER IODIDE RECTIFIER. WALTHER KRAUSS, Berlin-Zehlendorf, Germany, assignor to General Electric Company, a Corporation of New York. Filed Sept. 8, 1930, Serial No. 480,404, and in Germany Oct. 8, 1929. 2 Claims. (Cl. 175—366.)



1. A rectifier comprising a lead electrode having a lead sulphate surface formed thereon, and an element in contact with said surface comprising a mixture of copper iodide and free iodine.

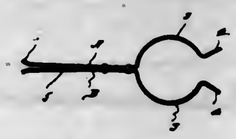
1,891,098. DEVICE FOR OPERATING REAR CURTAINS OF CARS. RICHARD A. KURTH, Boston, Mass. Filed Oct. 19, 1931. Serial No. 569,669. 4 Claims. (Cl. 156—28.)



1. In a device of the class described, a spring controlled curtain roller; a curtain attached thereto and having a bar at its lower end; cords secured to the opposite ends of said bar; an enclosed reciprocating piston connected to each cord, said pistons being movable independently of each other; and means for simultaneously moving both pistons in opposite directions relatively to each other to lower the curtain against the tension of said spring.

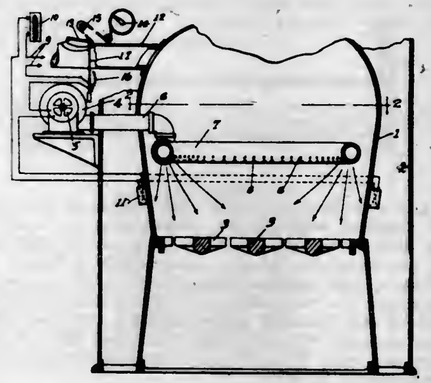
1,891,099. BOTTLE NAPKIN HOLDER. ROSS POLOCK LAND, Milton, Fla. Filed May 11, 1932. Serial No. 610,696. 1 Claim. (Cl. 24—81.)

A napkin clamp for a bottle or the like comprising a pair of members each having a diagonal intermediate part, a substantially semi-circular part connected to the upper end of the diagonal part, and a substantially straight jaw forming part connected to the lower end



of the diagonal part, means for connecting together the diagonal parts of the two members, the two jaw parts slightly diverging and the two semi-circular parts forming a clamp for engaging the neck of a bottle.

1,891,100. FURNACE AND FURNACE DRAFT CONTROL. FRANK X. LAUTERBUR and EDWARD J. LAUTERBUR, Sidney, Ohio. Filed Oct. 30, 1929. Serial No 408,501. 4 Claims. (Cl. 110—72.)



1. In combination with a furnace, means to induce a forced draft in the furnace, means for starting the operation of said draft-inducing means upon a predetermined low temperature in a space to be heated by the furnace, and means preventing starting of said operation if there is a predetermined low temperature in the furnace.

1,891,101. SPRING DRIVE. GEORGE E. LE COUNT, Pittsfield, Mass., assignor to General Electric Company, a Corporation of New York. Filed Nov. 23, 1931. Serial No. 576,686. 6 Claims. (Cl. 74—14.)



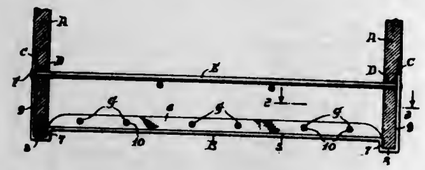
1. A spring drive including a driving shaft and a driven shaft, a spring, means for tensioning said spring from either end, means for holding either end of said spring while the spring is being tensioned from the other end, and means for automatically releasing the spring to rotate the driven shaft after the spring has been tensioned.

1,891,102. MACHINE TOOL DEAD CENTER. CHARLES F. MARQUIS, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Dec. 28, 1929. Serial No. 417,209. 4 Claims. (Cl. 82—33.)



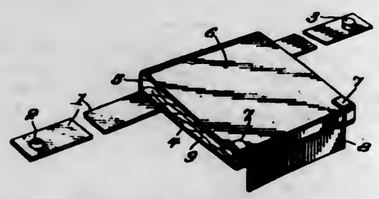
1. In a machine center, a work supporting member comprising a relatively soft metal shank having a conical end portion, a relatively hard metal conical cap of substantially uniform thickness throughout its extent mounted on said end portion and rigidly secured thereto.

1,891,103. BOTTLE CRATE BRACE. JOHN F. MAURER, Jr., North Bergen, N. J. Filed Mar. 14, 1930. Serial No. 435,925. 2 Claims. (Cl. 217—19.)



1. A cross brace for bottle crate structures comprising an elongated body portion corresponding in length to the distance between the inner sides of the side walls of the crate and integral substantially U-shaped terminals at the opposite ends of said body portion for embracing the lower edges of the side walls of the crate, each of said terminals presenting inner and outer shoulders engaging with the inner and outer sides of said crate side walls for bracing same against inward and outward relative movement.

1,891,104. REENFORCE ROD AND WALL PLUG. JAMES MCLAUGHLIN, Glen Cove, N. Y. Filed June 15, 1931. Serial No. 544,685. 1 Claim. (Cl. 72—105.)



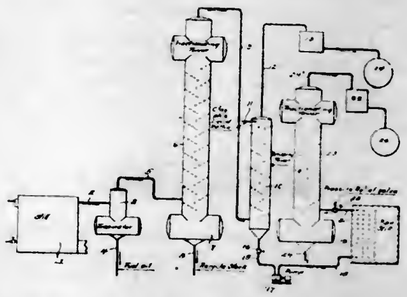
A plug for either a concrete or brick wall comprising a casing to be embedded in the wall, said casing being constructed from a single sheet of metal to afford a bottom, an inner end wall extending at a right angle from the bottom and a top which is of a less length than the bottom and which is arranged at a downward angle with respect to the bottom, a wedge-shaped block designed to be received in the casing, bendable clips integrally formed on the corners of the bottom designed to be bent over the top and to hold the top against the wedge block and for sustaining the wedge block in the casing and said casing having its bottom, between the clips, formed with a depending apron to contact with the outer face of the wall to hold the plug in proper position in the wall structure.

1,891,105. CHAIN SAW STRUCTURE FOR PORTABLE MOTOR TREE SAWS. FRIEDRICH WILHELM MEYER, Vienna, Austria. Filed Oct. 9, 1931, Serial No. 567,959, and in Austria Oct. 14, 1930. 9 Claims. (Cl. 143—32.)



1. In portable motor tree saws a chain saw structure comprising an endless saw chain, a driving sprocket wheel, and a yieldable and twistable guide bar fastened to the motor, a guiding sprocket wheel fixed to said bar, the centers of the sprocket wheels being located in the line connecting the chain return points and the guide bar being arranged outside of such connection line.

1,891,106. METHOD OF POLYMERIZING UNSATURATED HYDROCARBON OILS. RUDOLPH C. OSTERSTROM, Chicago, Ill., assignor to The Pure Oil Company, Chicago, Ill., a Corporation of Ohio. Filed Dec. 31, 1928. Serial No. 329,417. 7 Claims. (Cl. 196—96.)

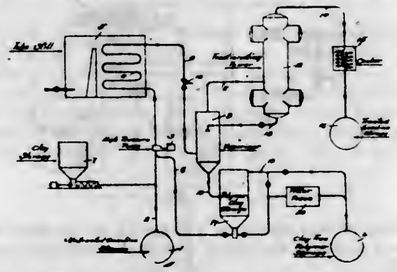


1. A system for removing color-imparting and gum-forming compounds from hydrocarbon oils comprising a scrubber, means admitting of the introduction of heated oil vapors into the lower portion of said scrubber to permit of the flow of said vapors upwardly therethrough, there being a vapor outlet near the top of said scrubber, means for introducing a finely divided solid treating agent into the upper portion of said scrubber to cause said treating agent to pass through the scrubber in countercurrent relationship to the ascending vapors, a polymerising still, a transfer line uniting the lower portion of said scrubber with said polymerising still, a pump situated in said line for forcing the condensate and treating mixture from the bottom of said scrubber through said polymerising still wherein said mixture is subjected to pressures and temperatures necessary to reduce the same to vaporous state without cracking while passing through the still, separating apparatus for receiving the vaporized mixture discharged from said still, and a valved connection between said polymerising still and separating apparatus, said valve connection serving to remove the pressures on the products discharged from said still.

1,891,107. METHOD OF POLYMERIZING HYDROCARBON OILS. RUDOLPH C. OSTERSTROM, Chicago, Ill., assignor to The Pure Oil Company, Chicago, Ill., a Corporation of Ohio. Filed Nov. 6, 1929. Serial No. 405,251. 4 Claims. (Cl. 196—79.)

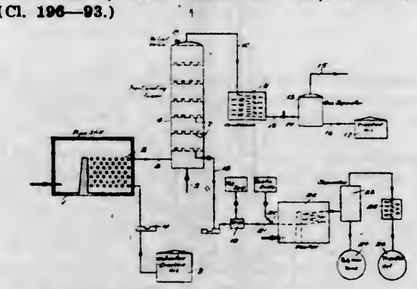
1. The method of decolorising and degumming cracked petroleum distillates which contain a high proportion of unsaturated compounds and gum-forming constituents comprising: adding a catalyst of the nature of fuller's earth and capable of polymerising gum-forming constituents to a flowing stream of cracked distillate containing

such gum-forming constituents, subjecting the mixture of distillate and catalyst to an elevated temperature and to a superatmospheric pressure whereby to substantially vaporize the distillate without cracking the same, then reducing the pressure on said mixture to separate the va-



porized distillate from the catalyst and the gum-forming constituents produced by the heating step, and returning a portion, at least, of the gum-forming constituents and said catalyst to the heating stage for repassage through said stage with said distillates.

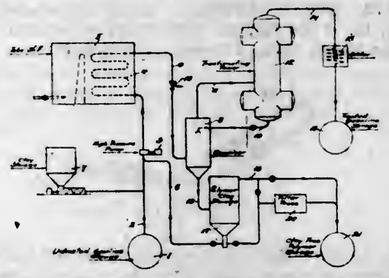
1,891,108. METHOD OF TREATING CRACKED PETROLEUM DISTILLATES. RUDOLPH C. OSTERSTROM and CARY R. WAGNER, Chicago, Ill., assignors to The Pure Oil Company, Chicago, Ill., a Corporation of Ohio. Filed Feb. 5, 1930. Serial No. 426,122. 4 Claims. (Cl. 196—93.)



1. The method of treating cracked low boiling petroleum oils containing unsaturated compounds to remove therefrom gum-forming and color-imparting bodies, which comprises heating such oils to temperatures above their normal vaporising temperatures but insufficient to effect any substantial cracking thereof, introducing such heated oils alone and unmixed with other substances into a fractionating zone wherein said oils in a vapor state are maintained under superatmospheric pressures, retaining the oils in said zone while in substantially the vapor state and under the influence of said pressures for a sufficient period of time not in excess of thirty minutes to effect the formation of compounds having a higher boiling range than that of the oils originally heated, withdrawing from one portion of said fractionating zone the treated vaporised oils, and separately withdrawing from another portion of said fractionating zone as liquids the oils containing the high boiling compounds.

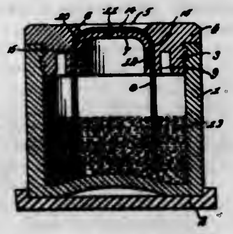
1,891,109. OIL PURIFYING SYSTEM. RUDOLPH C. OSTERSTROM, Chicago, Ill., assignor to The Pure Oil Company, Chicago, Ill., a Corporation of Ohio. Filed Feb. 18, 1930. Serial No. 429,303. 4 Claims. (Cl. 196—79.)

1. The method of removing gum-forming and color-imparting bodies from cracked low boiling petroleum oils containing large quantities of unsaturated hydrocarbons which comprises: heating a confined flow-stream composed of such an oil and a finely divided solid treating agent in a heating zone to a temperature above the vaporization point of the oil while applying pressure to the stream to prevent substantially the evolution of oil vapor, maintaining said flow stream in said zone under said conditions of temperature and pressure for a sufficient period of time to effect polymerization of the undesired hydrocarbons, then passing the flow-stream under materially reduced pressures through a vaporizing zone maintained at



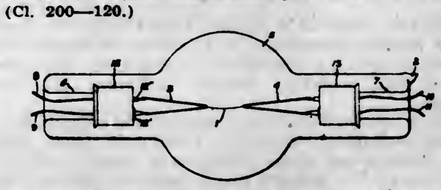
a temperature to keep in a vaporous state the desired treated oils and separate therefrom higher boiling polymerised oils and said treating agent, and returning a portion, at least, of said polymerised oils and treating agent to said heating zone for repassage through said heating zone in admixture with fresh oils.

1,891,110. MOISTENER. GEORGE PETRANOVICH, Clawson, Mich. Filed Apr. 9, 1931. Serial No. 528,869. 1 Claim. (Cl. 91—54.4.)



A cover for a receptacle containing an antiseptic fluid, said cover having an outer threaded flange which is screwed in the receptacle and an inner flange for the top of the closure being depressed to afford an inner flat wall that provides a table for a capillary agent and which also provides the top connecting wall for the inner flange, and which table is apertured, the side walls provided by the depression being flanged in opposite directions and toward the sides of the closure and the inner flange having two of its sides provided with openings that have rounded outer portions to afford rounded corners for the table, the inner flange having series of apertures communicating with the openings and said openings designed to have passed therethrough the side portions of the capillary agent whose outer portion rests on the table.

1,891,111. HIGH VACUUM FUSE. DAVID C. PRINCE, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Mar. 23, 1928, Serial No. 264,117. Renewed July 14, 1932. 6 Claims. (Cl. 200—120.)



1. A high vacuum fuse comprising an evacuated vessel, a pair of metal terminals within said vessel, a fusible ele-

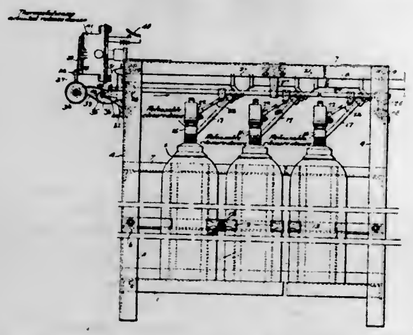
ment connected in series with said terminals, said terminals each being in the form of a loop, two sides of the loop terminating each in a leading-in wire extending through the walls of the vessel.

1,891,112. STRAP SUPPORT. ALVIN RHINEHART, Chicago, Ill. Filed July 23, 1930, Serial No. 470,010. Renewed May 6, 1932. 4 Claims. (Cl. 224—5.)



1. In a strap support, an anchor plate, notched posts carried thereby, a second plate adjustably received upon said notched posts, a latch plate pivotally secured to said second plate for releasable engagement with the notches of said posts, a spur struck up from said second plate in the path of movement of said latch plate, a U-shaped member secured to said second plate, a strap secured to said U-shaped member, and a hook carried by said strap.

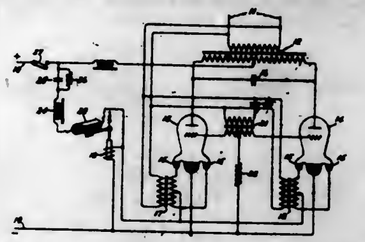
1,891,113. FIRE EXTINGUISHING SYSTEM. ARTHUR C. ROWLEY, Philadelphia, Pa., assignor to Globe Automatic Sprinkler Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Nov. 7, 1930. Serial No. 494,141. 1 Claim. (Cl. 169—11.)



In fire-extinguishing apparatus, the combination with a container for a fluid fire-extinguishing medium, of a releasable closure member for said container, a longitudinally slidable actuating rod operatively connected with said releasable closure member, a pivoted lever operatively connected with said rod, actuating means comprising a member adapted when released to impinge upon the said pivoted lever to thereby actuate the said rod and through said rod to release the said closure means, and interlocking means on said pivoted lever and the actuating member for preventing accidental displacement of the said actuating rod.

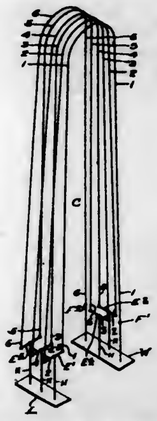
1,891,114. ELECTRIC TRANSLATING CIRCUIT. CAMIL A. SARRAH, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Mar. 30, 1931. Serial No. 526,336. 2 Claims. (Cl. 175—363.)

1. In combination, a direct current supply circuit, a normally deenergized alternating current load circuit, means for transmitting energy therebetween including an electric valve of the mercury pool cathode type provided with auxiliary arc-maintaining electrodes, means for initiating operation of the apparatus upon energisation of the direct current circuit comprising reactance means connected to be energised momentarily and simultaneously therewith and means for exciting the auxiliary electrodes with the



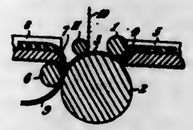
discharge of said reactance, and means for normally exciting said auxiliary electrodes from said alternating current circuit.

1,891,115. ELEVATOR TACKLE. WILLIAM E. SCOTT, Philadelphia, Pa., assignor of one-half to Reuben W. Ebling, Norristown, Pa., and one-half to William T. Scott, Philadelphia, Pa. Filed May 3, 1932. Serial No. 609,010. 6 Claims. (Cl. 187—1.)



1. The combination with an elevator car, a counterweight for the car, and an operating drum for the counterpoised bodies, of a plurality of cables extending respectively from the car to the weight around the drum, and a plurality of equalising elements on the car and weight respectively and connected in single series relation with the cables for producing in effect a single cable tackle passing back and forth between the car and the weight with each of the opposite ends of the single tackle fixedly secured to one of the said counterpoised bodies.

1,891,116. ROLLING OF COMPOSITE GLASS STRIPS. HARRY SMITH, St. Helens, England, assignor to Pilkington Brothers Limited, Liverpool, England. Filed June 3, 1932, Serial No. 615,092, and in Great Britain June 8, 1931. 4 Claims. (Cl. 49—86.)



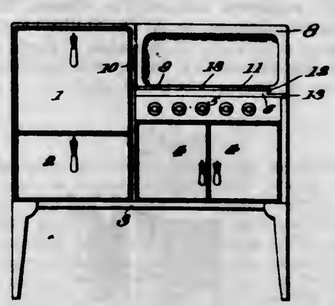
4. Process of making a composite strip of glass by continuously rolling a first strip of width sufficient to give a strip of the desired width by supplying molten glass to the surface of the said strip and rolling it thereon to form a second and wider strip of which the edges overlap the edges of the first strip and interposing a wire net between the first and second strips.

1,891,117. SHIFTING POINT FOR FULL-FASHION KNITTING MACHINES. FRANK STEVENSON, West Lawn, Pa., assignor to Howard Hosiery Company, Inc., Sinking Springs, Pa., a Corporation of Pennsylvania. Original application filed Aug. 11, 1932, Serial No. 628,387. Divided and this application filed Aug. 11, 1932. Serial No. 628,388. 2 Claims. (Cl. 66—96.)



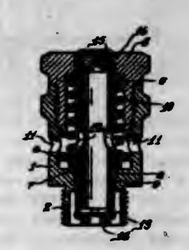
1. As an article of manufacture a stitch shifting point for cooperation of a full fashion knitting machine needle, comprising a body and a shank, the body of the shifting point having a groove for the shorter portion thereof for the reception of the needle for a partial movement of the shifting point and needle, the greater portion of the body of the shifting point having one of its side walls and back cut away down to the extremity of the remaining side wall, which so cooperates with the grooved face of the needle on the downward motion thereof and the shifting point, whereby one half of the stitch of a piece of nonrun fabric may be retained by the beard of the needle and the other half of the stitch caught by the shifting point and shifted laterally and locked with an adjacent stitch, the remaining wall of said point at its lower part being angular in cross section.

1,891,118. RANGE. ARTHUR STOCKSTROM, St. Louis, Mo., assignor to American Stove Company, St. Louis, Mo., a Corporation of New Jersey. Filed May 23, 1931. Serial No. 539,566. 8 Claims. (Cl. 126—214.)



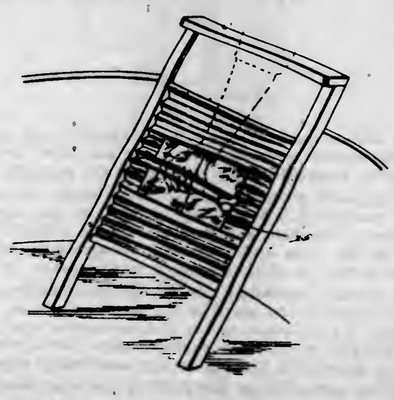
1. A range having a cooking top and a folding cover therefor consisting of an inner and an outer member extending transverse the cooking top, the inner member connected at its inner end to be movable to a vertical position and the outer member connected at its outer end with the cooking top at a point inside of the outer edge of said cooking top, whereby the latter member when moved to horisontal position is supported therein to form a working space.

1,891,119. SAFETY VALVE. FRANK B. STOVER, Detroit, Mich., assignor to Sky Specialties Corporation, Detroit, Mich., a Corporation of Michigan. Filed July 13, 1931. Serial No. 550,503. 5 Claims. (Cl. 277—45.)



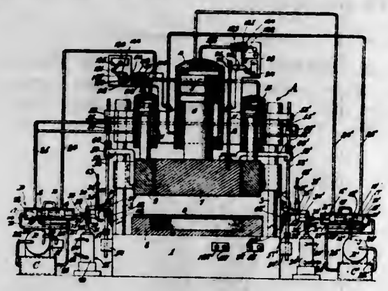
1. A safety valve comprising a body having an outlet portion adapted for fluid communication with a pressure vessel, a sleeve slidably mounted in said body, a valve seat formed in said body and a cooperating valve face formed on said sleeve, said body and valve being spaced apart between said seat and said outlet portion, a spring between said body and sleeve and tending to hold said face in closed position on said seat, said body having ports in communication with the atmosphere, a floating disk mounted in said outlet portion and adapted to close the adjacent end of said sleeve under pressure in the vessel, and a spring detent carried by said sleeve and normally inoperatively held within said body, said detent being adapted to expand over said body when said sleeve is extruded from said body by a pressure on said disk exceeding the pressure of said spring, whereby to hold said valve face spaced from said valve seat.

1,891,120. CLOTHES SCRUBBING DEVICE. IDA WHALEY STRAHAN, Montclair, N. J. Filed May 28, 1930. Serial No. 456,769. 1 Claim. (Cl. 68—8.)



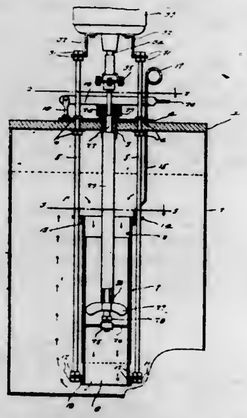
A scrubbing device adapted to be used with a washboard comprising a body having an elongated rounded scrubbing head, and an elongated rounded hand grip, the opposite sides of said device intermediate the hand grip and head having longitudinally extending concavities to accommodate portions of the hand when rubbing the device against a wash board.

1,891,121. DRAWING PRESS OR THE LIKE. REUBEN THOMSON, Mount Gilead, Ohio, assignor to The Hydraulic Press Manufacturing Company, Mount Gilead, Ohio. Filed Nov. 18, 1931. Serial No. 575,921. 29 Claims. (Cl. 113—45.)



1. The combination with a drawing press having a drawing ram and a blank-holder ram mounted for movements independently of the drawing ram; of means for applying fluid pressure to said rams; and control mechanism including means responsive to pressure acting on said blank-holder ram for automatically effecting application of pressure upon said drawing ram.

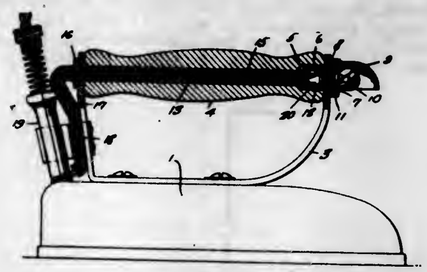
1,891,122. PORTABLE MIXING MACHINE. MARION W. USCH, Council Bluffs, Iowa. Filed Dec. 10, 1931. Serial No. 580,136. 1 Claim. (Cl. 259—97.)



A mixing machine comprising a support, rods mounted on the support and extending above and below the same, a motor mounted on the rods above the support, a mixing chamber mounted on the rods below the support and comprising a lower section fixed on the lower end portion of the rods, and an upper section slidably mounted on the rods and extending telescopically over the fixed section, a shaft, connected to the motor for actuation thereby, extending into the mixing chamber, a propeller fixed on the shaft in the mixing chamber, an adjusting rod connected to the slidable section and extending slidably through the support, and a locking bar pivotally mounted on the support and operatively engageable with the adjusting bar for securing the same in adjusted position.

1,891,123. LIGHT ATTACHMENT FOR IRONS. LULA UTSEVIS, Newark, Ohio. Filed Apr. 18, 1931. Serial No. 531,229. 1 Claim. (Cl. 240—2.)

An electric heating iron having the usual posts for the heater coils and having a U-shaped handle support thereon and a handle arranged between the upstanding ends of the support, said handle having a socket and a bore communicating with the socket and the arms of the support having openings to register with the socket and with the bore, a sleeve having a threaded end and its second end enlarged and formed with an outstanding shoulder and having a threaded portion outward of said shoulder, said sleeve designed to be passed through the openings in the support and through the bore of the

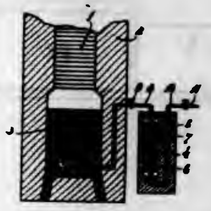


handle to arrange its enlarged end in the socket of the handle, and a nut screwed on the reduced and projecting end of the sleeve for drawing the ends of the support into tight frictional engagement with the ends of the handle, a lamp having its base in the enlarged end of the sleeve but insulated therefrom, wrapped conductors for the bulb trained through the sleeve and connected to the posts, and a reflector for the lamp bulb to be removably screwed on the enlarged end of the sleeve.

1,891,124. PROCESS OF PRECIPITATING METALS ON AN INCANDESCENT BODY. ANTON EDUARD VAN ARKEL, JAN HENDRIK DE BOER, and WILHELMUS KOOPMAN, Eindhoven, Netherlands, assignors to N. V. Philips' Gloeilampenfabrieken, Eindhoven, Netherlands, a Limited Liability Company of the Netherlands. Filed Apr. 29, 1929, Serial No. 359,164, and in the Netherlands June 14, 1928. 2 Claims. (Cl. 91—70.1.)

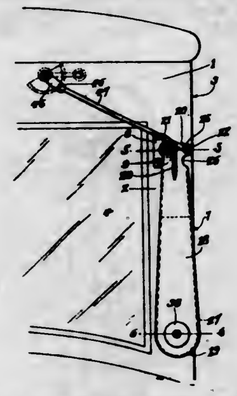
1. A process of producing vanadium in the form of a pure ductile deposit on a solid body enclosed in a vessel, which comprises heating an auxiliary body in an atmosphere containing a dissociable iodide of vanadium to approximately 1100° C., so as to produce a precipitate of vanadium, introducing the said precipitate together with pure iodine into the said vessel, heating the latter so as to form iodide of vanadium and heating to incandescence the said solid body, metallic vanadium being deposited thereby on the incandescent body by dissociating the iodide.

1,891,125. PROCESS FOR SEPARATING MIXED GASES. JOHANNES ANTOON VAN GESSEL, Eindhoven, Netherlands, assignor to N. V. Philips' Gloeilampenfabrieken, Eindhoven, Netherlands. Filed Mar. 13, 1930, Serial No. 435,571, and in the Netherlands Apr. 19, 1929. 6 Claims. (Cl. 183—115.)



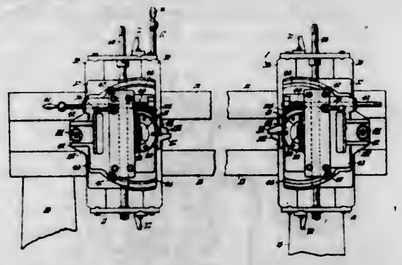
4. A process for separating mixed gases which consists in bringing the mixture of gases in the liquid state into contact with absorbing substance having a selective absorbent action in respect of a liquid constituent of said mixture, after which said substance is deprived of the absorbed gases.

1,891,126. SIGNALING APPARATUS. LAWRENCE L. WAGNER, Shirleysburg, Pa. Filed June 14, 1932. Serial No. 617,207. 5 Claims. (Cl. 116—32.)



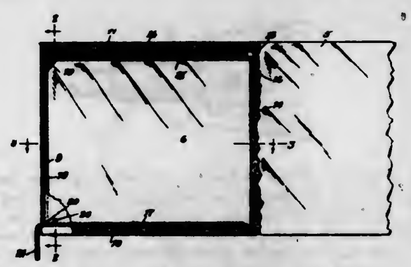
1. In a direction signaling apparatus for motor vehicles, an adjustable signal arm, a revoluble supporting shaft therefor, said shaft having a reduced part, said arm being carried by said part, said arm and reduced part having coacting means to provide for bodily moving in unison, a bearing for the portion of said shaft other than said reduced part and adapted to be secured to the vehicle, said bearing and shaft having coacting means to arrest the outward shift of the shaft relative to the bearing, and means engaging with said reduced part for securing said arm upon the latter, said means bodily moving with the shaft.

1,891,127. APPARATUS FOR ASSEMBLING AND SECURING STRENGTHENING SLEEVES TO THE ENDS OF TUBULAR MEMBERS. BARNES NEVILLE WALLIS, Weybridge, England, assignor to Vickers (Aviation) Limited, Weybridge, England. Filed Mar. 14, 1932, Serial No. 598,820, and in Great Britain Apr. 11, 1931. 9 Claims. (Cl. 29—89.)



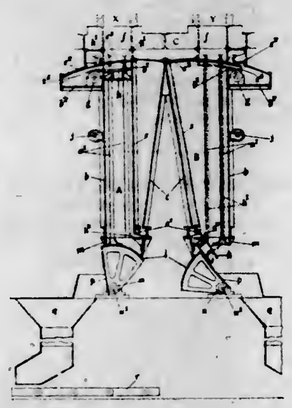
1. Apparatus for use in registering a tubular member with respect to flanged strengthening sleeves adapted to fit within its ends, comprising in combination a bed, two headstocks, face plates mounted on said headstocks, means for supporting strengthening sleeves with their faces flush with the faces of said face plates, means for effecting relative movement of the headstocks along the bed, means for effecting relative movement between the face plates and the headstocks across the bed and perpendicular to the plane of the bed, and means for effecting angular adjustment of each face plate about an axis through the centre of its face at right angles to the plane of the bed.

1,891,128. WINDSHIELD FOR VEHICLES. WILLIAM H. WATLINGTON, Denver, Colo. Filed June 24, 1931. Serial No. 546,597. 2 Claims. (Cl. 20—40.5.)



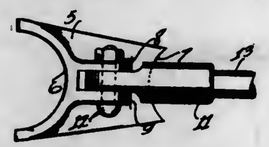
1. A windshield for vehicles including a transparent panel having a hollow portion extending inwardly from one side between its front and rear surfaces and its upper and lower edges, a closure element closing the open side of said hollow portion to define a closed chamber and means within said chamber for heating the surrounding area of said panel to a temperature for preventing the formation of ice on the surface thereof, the inner vertical side wall of the chamber having a notch adjacent its upper end, the lower edge of which notch is spaced from the upper wall of the chamber and a lug projecting inwardly into the chamber from the closure element and presenting an upper surface spaced from the upper wall of the chamber, said lower edge of the notch and upper surface of the lug of the closure element supporting the chamber heating means.

1,891,129. COKE EXTRACTOR FOR VERTICAL CARBONIZATION RETORTS. ERNEST WEST, Manchester, England, assignor to West's Gas Improvement Company, Limited, Manchester, England, a British Company. Filed Aug. 18, 1930, Serial No. 476,117, and in Great Britain Dec. 12, 1929. 9 Claims. (Cl. 214—18.)



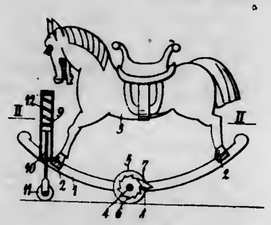
1. The combination with a vertical carbonization retort, of a coke chamber fixed beneath said retort to form a continuous chamber therewith and having an opening at its lower end, a table movable in said coke chamber, a rear inclined wall of said coke chamber, a false back tiltable towards said inclined wall to facilitate coke discharge from said coke chamber, an enclosed shutter for cutting off said retort from said coke chamber, and a door for sealing said opening at the lower end of said coke chamber.

1,891,130. GAME PIECE. CHARLES H. WILSON, Oakland, Calif. Filed May 23, 1930. Serial No. 455,040. 1 Claim. (Cl. 273—129.)



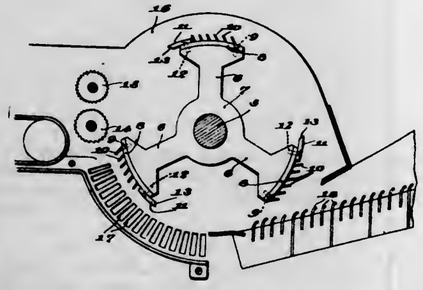
In a device of the character described, a base having a flat surface adapted to be projected over a playing surface, semi-circular recesses formed in the opposite ends of said base, a pair of spaced ears projecting upwardly from said base, a ferrule pivotally supported between said ears whereby said ferrule may be rotated into a plane substantially perpendicular to said base and in either direction, and a handle secured in said ferrule for the purpose specified.

1,891,131. ROCKING HORSE, ROCKING CHAIR, AND THE LIKE. ZAHARIJE ŽIVKOVIĆ, Belgrade, Yugoslavia. Filed Mar. 31, 1932, Serial No. 602,250, and in Yugoslavia Oct. 29, 1931. 3 Claims. (Cl. 272—53.)



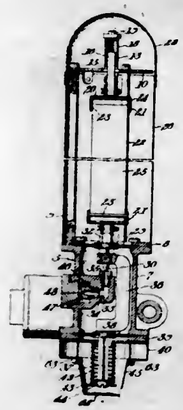
1. A rocking horse, rocking chair or like device, comprising rockers, running wheels rotatably mounted on the rockers at the point where the rockers would normally be in contact with the floor when stationary, means for preventing the wheels from rotating backwards, guides secured to the rockers near the front ends of the rockers, spindles longitudinally movable up and down in the guides, small running wheels journalled at the lower ends of the spindles, and yielding means tending to push the spindles downwards out of the guides.

1,891,132. COMBINATION BLADE AND PIN BEATER. WILLIAM W. ARNOLD, Jr., Knoxville, Tenn. Original application filed Dec. 9, 1930, Serial No. 501,123. Divided and this application filed Sept. 16, 1931. Serial No. 563,208. 4 Claims. (Cl. 19—94.)



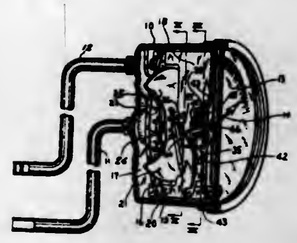
1. A combination blade and pin beater for cleaning cotton or other fibres including a plurality of rotatable arms, a blade mounted at the forward edge of each of said arms and a plurality of pins rearwardly of each of said blades, the outer surface of the blade being located beyond the inner ends of the pins.

1,891,133. HUMIDITY CONTROLLED VALVE. FREDERIC F. BAHNSON, Winston-Salem, N. C., assignor to The Bahnson Company, Winston-Salem, N. C., a Corporation of North Carolina. Filed Aug. 29, 1930. Serial No. 478,761. 7 Claims. (Cl. 236—44.)



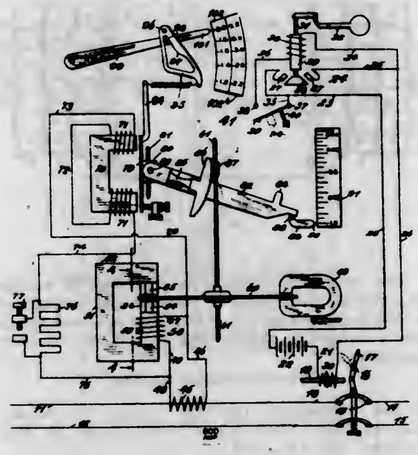
1. A unit control device for air conditioning apparatus comprising a housing having inlet and outlet ports, said housing comprising a cylindrical member having a pair of diaphragms closing the ends thereof, means connecting said diaphragms to each other, a valve controlled by said connecting means and cooperating with said inlet port, spring means tending to move said connecting means to seat said valve, a hygroscopic element comprising a strip of hygroscopic material, and means connecting said element to said diaphragm connecting means.

1,891,134. INDICATING APPARATUS. ERICH H. BARTHEL, Darby, Pa., assignor to Aircraft Control Corporation, a Corporation of Pennsylvania. Filed Dec. 31, 1929. Serial No. 417,828. 10 Claims. (Cl. 73—2.)



1. In an air speed indicator having an indicating element operated by mechanism including a diaphragm element subject to dynamic and static pressures, the combination of a base plate member supporting the diaphragm element and provided with terminal slots and a plate member disposed normally to the base plate member and having legs fitting said slots and connected to the base plate member, said normal plate member supporting the remainder of said mechanism and said indicating element.

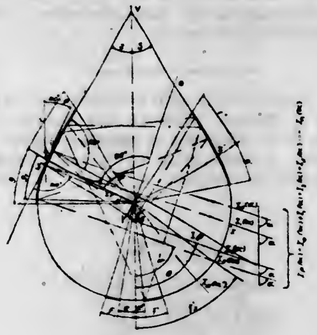
1,891,135. TIME LIMIT RELAY. ERNST BAUMBERGER and EMIL HEUSSER, Aarau, Switzerland, assignors to Fabrik Electrischer Apparate Sprecher & Schuh, Aktien-Gesellschaft, Aarau, Switzerland, a Joint Stock Company of Switzerland. Filed Nov. 7, 1927. Serial No. 231,663. 14 Claims. (Cl. 200—97.)



3. In a variable time-limit overload relay for controlling electrical circuits, a tripping means for interrupting or changing the circuit, an electromagnetic time motor operative at variable speed under control of the current in the circuit, a traveling time member adapted to be moved by the time motor and at the end of its travel to operate the tripping means, a normally open coupling device between the time motor and the time member, and an electromagnetic coupling means for causing the closing of the coupling device with a predetermined current overload, and the reopening thereof with a restoration of normal current, comprising a magnet in a circuit variably energised from the circuit to be controlled, an armature connected with the coupling device, and a retracting spring for the armature of such strength as to prevent shift of the armature during normal load and until a predetermined overload.

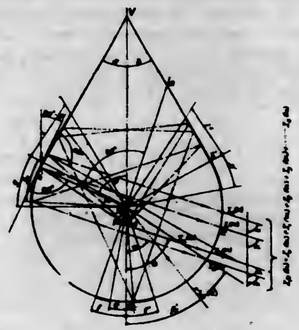
1,891,136. STREET ILLUMINATION. MORRIS B. BECK, New York, and JOHN D. WHITTAKER, Babylon, N. Y., assignors to Welsbach Street Lighting Company of America, Philadelphia, Pa., a Corporation of Delaware. Substitute for application Serial No. 546,904, filed June 25, 1931. This application filed Oct. 4, 1932. Serial No. 636,239. 3 Claims. (Cl. 240—25.)

3. An electric bulb to serve as a unit in a street lighting system and in which a plurality of units are to be mounted in spaced relation both with reference to each other and with reference to the street to be illuminated, said bulb having a filament which is relatively condensed about its focal point and having a normal bare lamp light distribution, and means associated therewith for modifying the distribution to change the bare lamp curve into an approximation of a prototype distribution of light flux, said means comprising an opaque specular reflective medium upon an area thereof curved vertically and positioned in such opposition to said focal point so as to reflect the light therefrom to below the horisontal and upon an area to one side of and of a different character from, said first mentioned reflecting area, for reflecting light from the filament upon said first mentioned area, said reflecting areas serving to so supplement the direct light with reflected light, that the light is distributed to give an approximation to a prototype street lighting distribution, the extent, location and configuration of said areas in their relation to the light source being dependent upon and varying with the ratio of the



distance between the units, to their elevation, and being such as to give for each unit the prototype light distribution called for by the particular ratio.

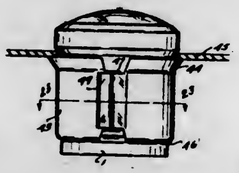
1,891,137. STREET ILLUMINATION. MORRIS B. BECK, New York, and JOHN D. WHITTAKER, Babylon, N. Y., assignors to Welsbach Street Lighting Company of America, Philadelphia, Pa., a Corporation of Delaware. Substitute for application Serial No. 551,732, filed July 18, 1931. This application filed Oct. 4, 1932. Serial No. 636,240. 3 Claims. (Cl. 240—25.)



3. An electric bulb to serve as a unit in a street lighting system and in which a plurality of units are to be mounted in spaced relation both with reference to each other and with reference to the street to be illuminated, said bulb having a filament which is relatively condensed about its focal point and having a normal bare lamp light distribution and means associated therewith for modifying the distribution to change the bare lamp curve into an approximation of a prototype asymmetric distribution of light flux, said means comprising an opaque specular reflective medium upon an area of the bulb curved vertically and positioned in such opposition to said focal point so as to reflect the light therefrom to below the horisontal and also upon an area to one side of and of a different character from, said first mentioned reflecting area for reflecting light from the filament upon said first mentioned area said reflecting areas serving to so supplement the direct

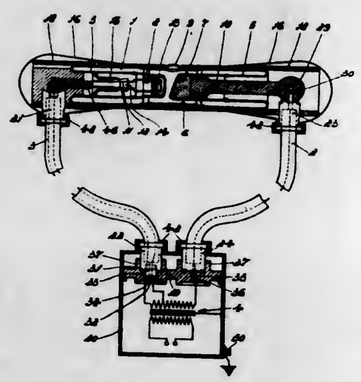
light with reflected light that the light is distributed to give an approximation to prototype asymmetric street lighting, the extent, location and configuration of said areas in their relation to the light source being dependent upon and varying with the ratio of the distance between the units, to their elevation, and being such as to give for each unit the prototype light distribution curve called for by the particular ratio.

1,891,138. REFLECTOR AND FASTENING THEREFOR. WILLIAM V. BERGEN, Hillsboro, and ARTHUR C. SHUTE, Portland, Oreg., assignors to Niterday Signal Co., Portland, Oreg., a Corporation of Oregon. Filed Dec. 1, 1930. Serial No. 499,298. 4 Claims. (Cl. 88—1.)



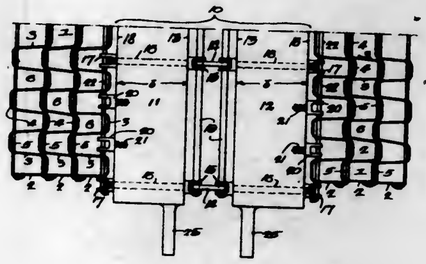
1. In a device of the class described, in combination with a supporting surface of a reflector unit and means for locking the reflector unit relative to the supporting surface, said locking means being comprised of an annular ring, having a flare outwardly extending from one of its peripheral edges; a crimp disposed upon its oppositely disposed peripheral edge and a locking latch formed from the opposite ends of the locking ring.

1,891,139. PORTABLE HIGH TENSION TRANSFORMER. ALBERT BOUWERS, Eindhoven, Netherlands, assignor to N. V. Phillips' Gloeilampenfabrieken, Eindhoven, Netherlands. Original application filed July 13, 1928, Serial No. 292,390, and in the Netherlands Aug. 5, 1927. Divided and this application filed Dec. 15, 1930. Serial No. 502,523. 5 Claims. (Cl. 175—361.)



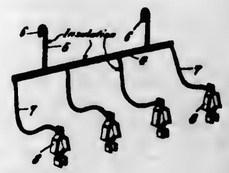
1. A transformer, comprising an enclosing envelope, a high tension transformer winding mounted therein, contact members disposed in said envelope and located behind apertures in the wall thereof, and in which contact members the high tension winding of the transformer terminates the said contact members being adapted to interchangeably and lockingly receive a handle and high tension cables, the said handle when in position, closing the said apertures.

1,891,140. CONVEYER. PHILIP W. BUR, Philadelphia, Pa., assignor to Proctor & Schwartz, Incorporated, Philadelphia, Pa., a Corporation of Pennsylvania. Filed June 14, 1929. Serial No. 370,911. 11 Claims. (Cl. 198—116.)



1. The combination with a conveyer belt of a sectional rectangular girt interposed in said belt and having a thickness substantially equal to that of the belt, and means for pivotally connecting the sections of said girt transversely of said belt.

1,891,141. TESTING DEVICE. LOUIS J. COMBS, Los Angeles, Calif. Filed May 10, 1930. Serial No. 451,471. 1 Claim. (Cl. 175—183.)



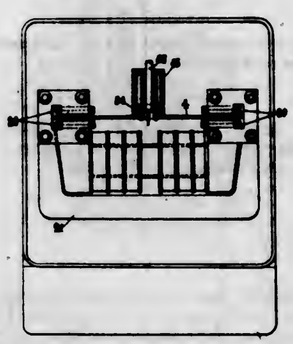
A testing device for the spark plugs of internal combustion engines of automobiles, comprising a tubular head of flexible and insulating material, reinforced stems of flexible and insulating material projecting from the head and merging into hooks, a conductor wire having a sheathing of flexible and insulating material compressed in the head and having end portions extending through both ends of the head, said wire having uncovered ends, spring metal clips fixed on the uncovered ends of said wire, intermediate conductor wires connected to the first-named wire, sheathings of flexible and insulating material for said intermediate wires connected to the head, the length of said intermediate wires being approximately equal to the length of the end portions of the first-named wires which extend beyond the ends of the head, said intermediate wires having their outer ends uncovered, and spring metal clips fixed on said uncovered ends of the wires.

1,891,142. EXCAVATING MECHANISM. LE ROY L. DEAN, Longview, Tex. Filed July 28, 1931. Serial No. 553,632. 10 Claims. (Cl. 37—115.)



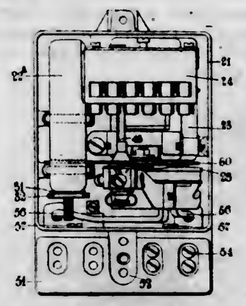
1. In an apparatus of the character described, a pair of spaced terminal pulley members, driving means therefor, an endless element trained around said terminal members, a plurality of excavating elements loosely connected to said endless element, means intermediate of said terminal members for supporting the flights of said endless element in vertically spaced relation, and a movable guide means for positively disposing the excavating elements in excavating position.

1,891,143. INDUCTION ELECTRICITY METER. SEBASTIAN ZIANI DE FERRANTI, Hollinwood, England, assignor to Ferranti Inc., New York, N. Y. Filed Oct. 28, 1929, Serial No. 403,030, and in Great Britain Nov. 5, 1928. 2 Claims. (Cl. 171—264.)



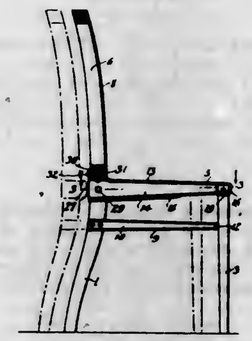
1. An alternating current single-phase three-wire induction electricity meter including two voltage coils mounted upon a common magnetic core having a leakage field path of low reluctance and two air gaps occupied by a common rotor, said coils being adapted to be connected respectively between an outer wire and the neutral wire of a three-wire system, a pair of further magnetic cores each carrying a current coil mounted adjacent to each air gap, said current coils being adapted to be connected in series in the respective outer wires.

1,891,144. ALTERNATING-CURRENT ELECTRICITY METER. SEBASTIAN ZIANI DE FERRANTI, Hollinwood, England, assignor to Ferranti Inc., New York, N. Y. Filed Oct. 28, 1929, Serial No. 403,031, and in Great Britain Nov. 15, 1928. 6 Claims. (Cl. 171—264.)



1. An A. C. electricity meter including a rotor, series and shunt electromagnets, braking means for said rotor and supporting members for said electromagnet cores comprising tongues having bifurcated extremities and occupying notches in the core laminæ and pierced cover plates clamped by said bifurcated ends.

1,891,145. NESTED CHAIR. LOUIS DELLERT, New York, N. Y. Filed Feb. 27, 1930. Serial No. 431,811. 6 Claims. (Cl. 155—2.)



2. A chair of the character described, comprising a pair of wood front legs, a pair of wood rear legs, a metallic seat inclined from the back to the front formed of a single piece of metal having depending side flanges presenting a stiffened seat frame, a front flange and a plurality of ears on the side flanges, a plurality of securing means extending through said ears for securing the side members to the rear legs, and means for securing the side members to the front legs.

1,891,146. MANUFACTURE AND PRODUCTION OF ARTIFICIAL THREADS AND FILAMENTS AND PRODUCTS THEREFROM. CLAUDE DIAMOND, Leamington, England, assignor to Courtaulds Limited, London, England. Filed Mar. 10, 1931, Serial No. 521,611, and in Great Britain Feb. 3, 1931. 4 Claims. (Cl. 28—59.)

1. An artificial thread consisting of an organic ester of cellulose and a small proportion of glucose pentacetate.

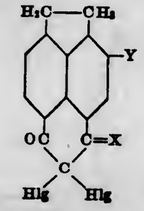
1,891,147. COLLAPSIBLE WINDER SHAFT. GUSTAVE ROBERT DUBUS, Mobile, Ala. Filed Apr. 30, 1932. Serial No. 608,528. 9 Claims. (Cl. 242—72.)



1. A collapsible shaft for paper rolls including a solid shaft having a diametral slot extending from end to end and dividing the shaft into a pair of segments, said segments having opposed link pockets formed in their proximal faces and arranged to form spaced pairs of pockets, and links each held in a respective pair of pockets and bearing at all times against the bottoms of the respective pockets to form struts between the segments and to take the stresses tending to move the segments together.

1,891,148. HALOGENATION PRODUCT OF THE KETIMIDES OF ACENAPHTH-PERI-INDANDIONE AND ITS DERIVATIVES. WILHELM ECKERT and HEINRICH SIEBEN. Frankfort-on-the-Main-Hochst, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Mar. 19, 1931, Serial No. 523,936, and in Germany Mar. 26, 1930. 4 Claims. (Cl. 260—127.)

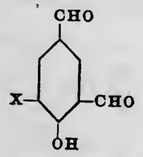
1. As new products, the compounds of the general probable constitution:



wherein Y represents hydrogen or chlorine, Hlg stands for a halogen of the group consisting of chlorine and bromine and X stands for oxygen or the group =N—Hlg (the means of Hlg being like above) however, all halogen atoms of the molecule being of the same kind.

1,891,149. PROCESS FOR THE MANUFACTURE OF PROTOCATECHUIC ALDEHYDE AND ITS SUBSTITUTION PRODUCTS. FRANZ ELGER, Basel, Switzerland, assignor to Hoffman-La Roche Inc., Nutley, N. J., a Corporation of New Jersey. Filed Nov. 19, 1931, Serial No. 576,218, and in Germany Dec. 8, 1930. 2 Claims. (Cl. 260—136.)

1. The process for the manufacture of a protocatechuic aldehyde which consists in treating compounds of the general type,



X representing hydrogen or alkoxy, with hydrogen peroxide in alkaline solution.

1,891,150. PRESS BLANKET. WILLIAM FENNONE, San Francisco, Calif. Filed Jan. 22, 1931. Serial No. 510,562. 11 Claims. (Cl. 154—54.5.)

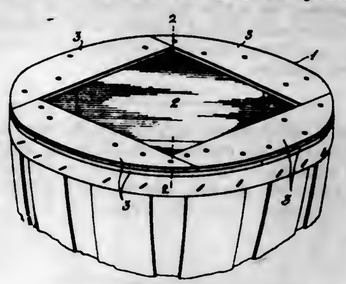


1. A press blanket unit comprising a layer of paper felt, a backing of woven textile fabric, and a layer of adhesive material between the paper felt and the backing forming a bond therebetween, the adhesive material, upon application, being capable of permeating the first-named layer and the fabric backing, and of hardening when dry,

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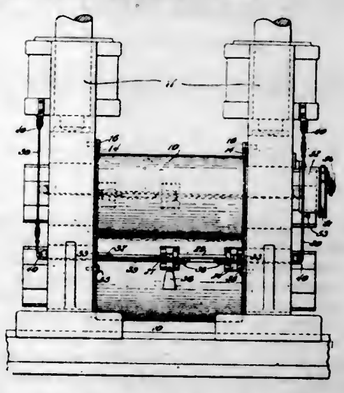
1,891,151. COVER FOR CONTAINERS. EMIL A. FLORANG, Burlington, Iowa. Filed Sept. 4, 1931. Serial No. 561,237. 3 Claims. (Cl. 217—124.)

1. In a cover for baskets and the like, upper and lower open-center layers secured to each other, each layer being composed of short straight sections abutting at their ends the sections of one layer bridging the joints of the



sections of the other layer, and a transparent window insertion for said open center.

1,891,152. ROLL POLISHING RIG. ROY H. GROVE, Vandergrift, Pa. Filed Aug. 27, 1929. Serial No. 388,782. 15 Claims. (Cl. 51—254.)



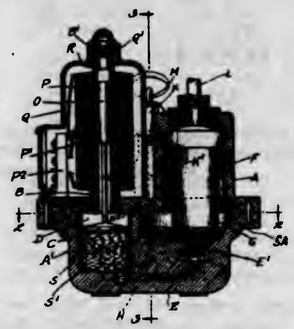
11. In a polishing rig for sheet mill rolls, a supporting frame having arms suspended from the riders to move up and down as the top roll moves; a guide bar adjustably carried by said arms so as to be maintained in a definite relation with respect to the face of the upper roll; and polishing stones slidably supported on said bar.

1,891,153. PLUG RECEPTACLE. FREDERIC P. GATES, West Hartford, Conn., assignor, by mesne assignments, to The Arrow-Hart & Hegeman Electric Company, Hartford, Conn., a Corporation of Connecticut. Filed Aug. 24, 1928. Serial No. 301,745. 4 Claims. (Cl. 173—330.)



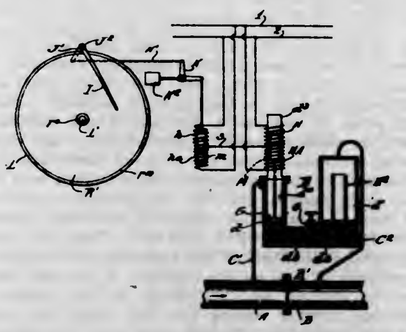
1. A two part connector comprising a plug and a receptacle, a clip carried by said receptacle, means for electrically connecting said clip to an article to be grounded, a metallic strip extending partly around the exterior of said plug, said strip having a contact blade at one end which removably contacts with said clip, said metallic strip being adapted to be grounded at its other end.

1,891,154. MANOMETER. THOMAS R. HARRISON, Philadelphia, Pa., assignor to The Brown Instrument Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Aug. 10, 1926. Serial No. 128,466. 5 Claims. (Cl. 73—31.)



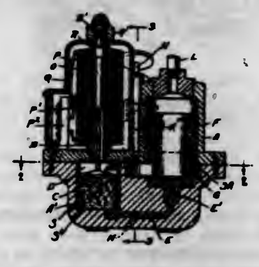
4. A manometer comprising a body formed with one chamber constituting one manometer leg and with a second chamber alongside the first mentioned chamber, a passage connected at one end to the lower end of the first mentioned chamber and formed at its other end with an upwardly extending internally threaded portion at the bottom of said second chamber, a standpipe part having a threaded portion adapted to fit said internally threaded portion located within said second chamber but which does not fill the same, and a valved passage connecting the lower end of the first mentioned chamber to the space in said second chamber not filled by said standpipe.

1,891,155. METERING. THOMAS R. HARRISON, Philadelphia, Pa., assignor to The Brown Instrument Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Aug. 2, 1926. Serial No. 126,562. 4 Claims. (Cl. 73—167.)



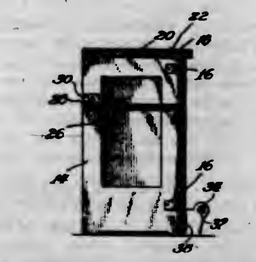
2. In a flow meter, the combination with a pressure responsive device including a seat for a replaceable adjustment part, an exhibitor and means whereby said exhibitor may be actuated by said device, said exhibitor having a scale support, of a series of adjustment parts, means whereby said parts may be interchangeably mounted in said device seat, a series of scale parts of different maximum scale values and means whereby said scale parts may be interchangeably mounted on said scale support, the ratio of the scale values of each two successive scale parts of the series of such parts being constant, and the different adjustment parts of the series of such parts being so proportioned that the ratio of the pressure required for a given exhibitor actuation when said device includes one of said adjustment parts to that required when said device includes the next part in the series of such adjustment parts is constant and bears a proportionality to the first mentioned ratio determined by the law relating the pressure acting on the device to the flow measured.

1,891,156. MANOMETER. THOMAS R. HARRISON, Philadelphia, Pa., assignor to The Brown Instrument Company, Philadelphia, Pa., a Corporation of Pennsylvania. Original application filed Aug. 10, 1926, Serial No. 128,466. Divided and this application filed Sept. 10, 1927. Serial No. 218,688. 7 Claims. (Cl. 177—351.)



1. A manometer having chambers interconnected by a passage and arranged to receive a liquid, the level of which is variable in response to variations in the pressure to be measured, a float riding on the liquid in one of said chambers, a magnetic armature connected to said float for movement thereby, a tube connected to the float containing chamber and closing said chamber to the atmosphere, an inductance coil positioned exteriorly of said tube for accurately responding to the motion of the armature, said armature being arranged in said tube for movement in the electromagnetic field of said inductance coil, said tube being relatively thin walled and said inductance coil and armature being arranged closely thereto whereby the electromagnetic coupling between the inductance coil and armature is close, said tube being made of a metallic steel-like alloy having noncorrodible properties and of high tensile strength, nonmagnetic and of high resistivity.

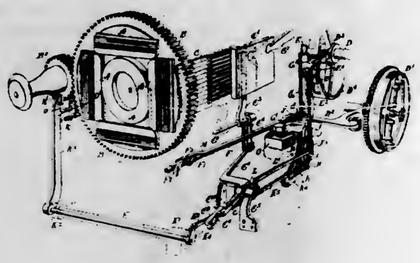
1,891,157. PORTABLE BAR. WILBUR J. HAUER, Milwaukee, Wis. Filed Jan. 27, 1932. Serial No. 589,111. 1 Claim. (Cl. 45—140.)



In a portable bar, the combination of a vertical front wall, a pair of vertical side walls hinged to said front wall so as to be foldable snugly against the rear surface of said front wall, a top hinged to said front wall at a distance spaced from the upper edge of the front wall sufficiently to permit the top to be folded down-

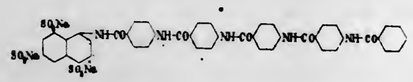
wardly behind the side walls when the latter are folded inwardly behind the front wall, and means to hold said side walls in extended position comprising a removable shelf and means on the side walls to support said shelf.

1,891,158. TYPOGRAPHICAL CASTING MACHINE. JOHN H. HILPMAN, Hollis, N. Y., assignor to Mergenthaler Linotype Company, a Corporation of New York. Filed June 10, 1930. Serial No. 460,128. 14 Claims. (Cl. 199—52.)



1. In a slug casting machine, the combination of a mold apparatus adjustable to provide mold slots of different lengths, an ejector adjustable in width to correspond to the selected mold slot, power devices for operating the ejector, means controlled by the adjustment of the mold apparatus for locking the power devices out of action, and means controlled by the adjustment of the ejector for effecting the release of the power devices.

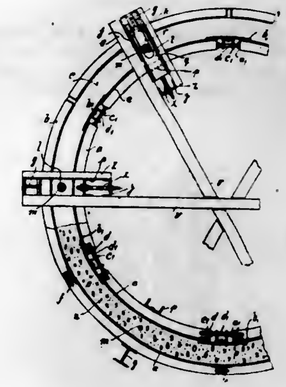
1,891,159. MANUFACTURE OF AMIDES OF THE BENZENE, NAPHTHALENE, AND ACENAPHTHENE SERIES. LEONARD JOSEPH HOOLEY and JOHN THOMAS, Grangemouth, Scotland, assignors to Scottish Dyes, Limited, Grangemouth, Scotland. Filed Aug. 31, 1928, Serial No. 303,314, and in Great Britain Jan. 3, 1928. 17 Claims. (Cl. 260—124.)



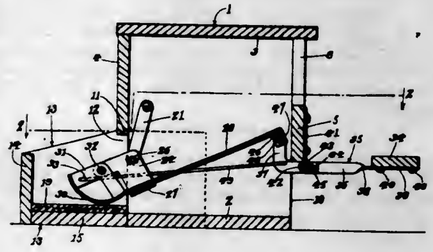
2. The method which consists in the condensation of 1-naphthylamine-4.6.8-trisulphonic acid with para-nitrobenzoyl-chloride followed by reduction, this operation being repeated three times until four benzoyl groups have been introduced after which the resulting compound is condensed with benzoyl chloride.

1,891,160. SLIDING FORM FOR CASTING COLUMNAR OR BOX SHAPED CONCRETE STRUCTURES, SUCH AS CHIMNEYS, SILOS, AND THE LIKE. CARSTEN FRIIS JESPERSEN, Bangkok, Siam, assignor to Svend Friis Jespersen, Copenhagen, Denmark. Filed Feb. 16, 1931. Serial No. 516,237. 6 Claims. (Cl. 25—131.)

6. A mold for making concrete annular walls of considerable height comprising two spaced shells each consisting of a circumferential series of sections, means for supporting the two shells of the mold on vertical rods, means associated with the said supporting means and adapted to adjust the relative position of the two shells in a radial direction, means to elevate the supporting means gradually along vertically disposed rods, sliding joints between adjacent sections in each shell, and means for gradually varying the circumferential length of the shells.



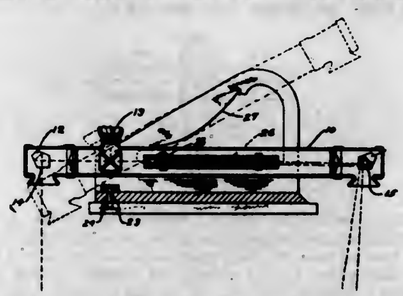
1,891,161. TRAP NEST. JOHN A. JOHNSTON, Provo, Utah. Filed June 6, 1932. Serial No. 615,681. 6 Claims. (Cl. 119—47.)



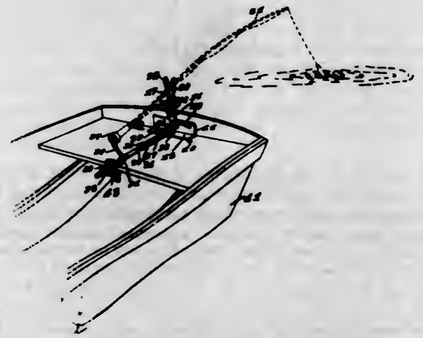
1. A structure providing a nest, said nest having a suspended, reticulated bottom normally extending at an upward inclination from rear to front, a combined entrance and exit at its front for the hen and a discharge passage at its rear for a laid egg; and a combined egg discharge passage guard for discharging a laid egg, nest closing and opening and hen trapping mechanism pivotally suspended from and within said structure, said mechanism being fixed to the rear and pivotally connected to the front of said bottom, extending rearwardly from said structure, and extending forwardly from and hingedly suspended at the front of said structure, said bottom being depressible by and on the entrance of the hen into the nest for shifting said mechanism to hen trapping, egg discharge passage closing and egg discharging position and said mechanism being actuated by the hen when leaving the nest for shifting it to nest opening and laid egg receiving positions.

1,891,162. GROUND SPEED INDICATOR. BRADLEY JONES, Cincinnati, Ohio. Filed July 7, 1930. Serial No. 466,337. 9 Claims. (Cl. 88—2.7.)

1. A ground speed indicator for a moving body comprising a range finder having altitude determining means, a supporting member therefor having a generated cam surface representing a fixed distance of travel upon the ground, and means carrying said altitude determining means and cooperating with said cam surface for governing the angular movement of said range finder in computing ground speed.

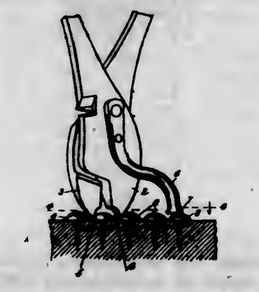


1,891,163. FISHING ROD HOLDER. BENEDICT ARTHUR KABELE, Schenectady, N. Y. Filed May 24, 1932. Serial No. 613,282. 7 Claims. (Cl. 248—37.)



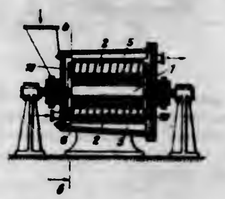
1. A holder of the character described comprising a base piece, a tail piece slidably and swingingly connected to the base piece, an upright slidably and swingingly connected to the base piece and having a fishing rod rest, an extension on the tail piece, an upright detachably connected with the extension, and means for detachably coupling a fishing rod with said last named upright.

1,891,164. NAIL AND TACK PULLER. THEOBALD KLÜGLEIN, New York, N. Y. Filed Feb. 21, 1931, Serial No. 517,593, and in Germany Oct. 20, 1930. 8 Claims. (Cl. 254—22.)



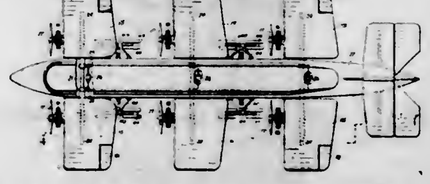
1. A tack puller comprising a plier structure having two pivotally connected members formed with tack engaging claws and a fulcrum rigidly secured to the pliers near the pivotal connection of said members, said fulcrum extending laterally and longitudinally of the plier structure to substantially the plane of the claws but spaced therefrom at approximately a forty-five degree angle from a line forming the axis of said claws whereby when the claws engage a tack the fulcrum will act as a proper pivot point therefor during the pulling operation.

1,891,165. ROLLER MILL. PAUL R. v. KNUPFFER, Berlin-Friedenau, Germany. Filed Dec. 11, 1929, Serial No. 413,362, and in Germany Dec. 14, 1928. 8 Claims. (Cl. 83—9.)



1. A roller mill for crushing materials of all kinds, comprising in combination a housing, a non-elastic roll and an elastic roll rotatable in said housing and in operative contact with one another, said elastic roll being supported solely at the periphery, and means on said housing operatively connected to the elastic roll for producing an initial stress in the said elastic roll, as and for the purposes set forth.

1,891,166. TILTING-ENGINE WING PLANE. MATHIAS LEUPOLD, Jamaica, N. Y. Filed May 23, 1931. Serial No. 539,574. 2 Claims. (Cl. 244—14.)

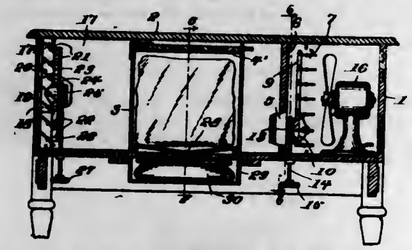


1. An airplane having a fuselage and a plurality of pairs of supporting wings, a wing in each pair extending at each side of the fuselage, the wings being pivoted on transverse axes between the top and bottom of the wings to the fuselage and above the bottom of the fuselage in approximately a straight line longitudinally of the fuselage, a plurality of motors mounted on edges of the wings with shafts extending from the motors longitudinally of the fuselage and with the axes of the motor shafts disposed between the upper and lower surfaces of the wings respectively, the axes of the wings being disposed nearer the said edges of the wings than the wings' opposite edges which, with the disposal of the motors with the axes of their shafts between the upper and lower surfaces of the wings, will balance each wing and its motor on the axes of the wings, the distance between the motors on the wings and the adjacent wings being approximately the same as the width of the wings, propellers mounted on the motor shafts, and means to rock the wings on their axes.

1,891,167. AIR COOLER. HIRAM A. LOCKWOOD, Phoenix, Ariz. Filed Mar. 11, 1932. Serial No. 598,246. 2 Claims. (Cl. 62—131.)

1. A cold air circulating device, comprising a cabinet, a receptacle for a refrigerating agent in the cabinet, a blower fan in the cabinet, a series of shutter valves in the cabinet adjacent to the blower fan, means for simultaneous-

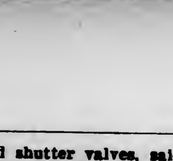
ly operating said shutter valves, said cabinet having a cold air outlet at one end thereof, a series of shutter valves in the cabinet opposite the outlet, and means for simultaneously operating the shutter valves opposite the outlet,



said operating means for each series of shutters comprising shafts journaled in bearings and projecting from the bottom of the cabinet, worms on the shafts, and toothed segments on the trunnions of certain of the shutter valves in mesh with the worms.

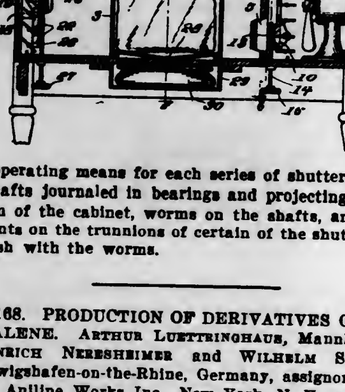
1,891,168. PRODUCTION OF DERIVATIVES OF NAPHTHALENE. ARTHUR LUETTRINGHAUS, Mannheim, and HEINRICH NERESHEIMER and WILHELM SCHNEIDER, Ludwigshafen-on-the-Rhine, Germany, assignors to General Aniline Works Inc., New York, N. Y., a Corporation of Delaware. Filed June 10, 1929, Serial No. 369,917, and in Germany July 11, 1928. 4 Claims. (Cl. 260—56.)

1. As new article of manufacture 1.4-naphthoquinone corresponding to the formula:



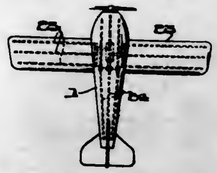
in which X stands for C or C—H, Y for H, halogen or CH_3 and Z for H or CH_3.

1,891,169. RADIATOR CASING. JAMES J. MUNDORF, Sharon, Pa., assignor to The Mundorf Heating Systems Company, Sharon, Pa. Filed Feb. 16, 1931. Serial No. 516,137. 11 Claims. (Cl. 257—136.)



1. A radiator enclosing structure, comprising vertical walls, some of which permit of air circulation therethrough, a cover member, and a lower wall formed in a plurality of independent sections.

1,891,170. AEROPLANE. TOICHI NOSE KAMAKURA MACHI, Kamakura Gun, Kanagawa Ken, Japan. Filed June 16, 1931, Serial No. 544,868, and in Japan June 13, 1930. 15 Claims. (Cl. 244—31.)



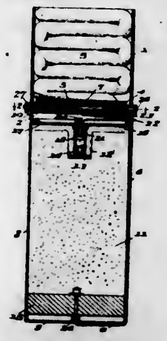
1. In an aeroplane having a fuselage and wings; a tank containing ammonia gas under pressure; valved distributor pipes leading from the tank disposed in the wings and fuselage, said pipes having spaced jet orifices, a fuel tank, a jacket enveloping the fuel tank, and a valved pipe connecting the gas tank with the jacket.

1,891,171. VAPORIZER. HENRY A. ODENDAHL, Little Falls, N. J. Filed July 17, 1931. Serial No. 551,484. 1 Claim. (Cl. 48—180.)



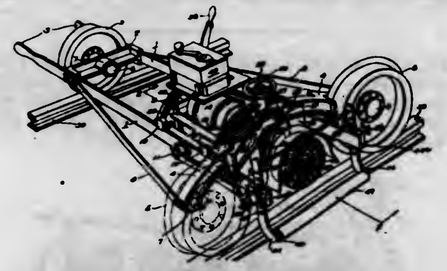
A mixing device comprising a circular plate provided with a centrally located opening to receive a shaft and having cut-away portions forming segmental shaped portions bent to form blades and said segmental shaped portions having their curved edges serrated, each of the segmental shaped portions being arcuately severed adjacent the opening and bent angularly to form an extension to each blade and having perforations therein and provided with serrations in the free edges thereof, said extensions having the adjacent ends thereof substantially in abutting engagement and disposed over the opening and spaced therefrom and from the shaft, and a hub secured to the plate and journalled on the shaft.

1,891,172. PARACHUTE FLARE. CHARLES L. PAULUS, Dayton, Ohio. Filed June 24, 1931. Serial No. 546,630. 10 Claims. (Cl. 102—24.)



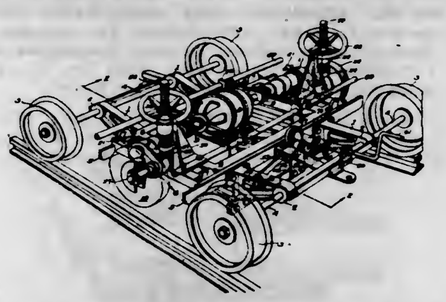
1. A parachute flare comprising a parachute-supported flare candle, means for launching said flare candle, means for imparting a tumbling motion to the flare candle subsequently to the launching thereof, and means actuated by the tumbling motion of the candle for igniting the latter.

1,891,173. RAILWAY TRACK GRINDER. HENRY PERAZZOLI, Philadelphia, Pa. Filed Feb. 18, 1931. Serial No. 516,715. 5 Claims. (Cl. 51—178.)



1. In a portable railway track grinding machine comprising a frame, traction wheels supporting said frame and adapted to travel on the rails to be ground, a subframe slidably mounted on the said main frame, a supporting frame slidably mounted upon the subframe, an abrasive wheel mounted on the said supporting frame, a source of power mounted on the supporting frame and coupled with the said abrasive wheel, a jack screw mounted on the said supporting frame for varying the vertical relation of the supporting frame with respect to the subframe thereby affording adjustment of the abrasive wheel with respect to the track rails, a hand lever and jack bar mounted on the subframe for raising the flanges of the track wheels above the track rails to permit the machine to be turned to grind opposite rails, and a roller rotatably mounted in adjustable vertical supports mounted on the main frame for facilitating the removal of the said machine from the railway track.

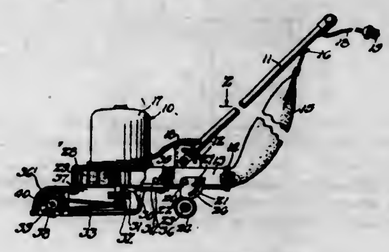
1,891,174. RAILWAY TRACK GRINDER. HENRY PERAZZOLI, Philadelphia, Pa. Filed Feb. 18, 1931. Serial No. 516,716. 3 Claims. (Cl. 51—178.)



1. In a railway track grinding machine of the type described comprising a frame and having traction wheels supporting said frame, a pair of rollers secured to the under side of the frame and parallel to the rails of the track, a pair of bell crank levers, one arm of each being connected to one of the rollers, means for operating the said bell crank levers to cause the rollers to be respectively raised or lowered, means for locking the said rollers in the fully raised or fully lowered position, and sets of auxiliary rails disposed transversely to the track rails and adapted to support the rollers when in the fully lowered position.

1,891,175. COMBINATION VACUUM CLEANER AND FLOOR WAXING MACHINE. CHRISTIAN PETERSEN, Golf, Ill. Filed Nov. 14, 1930. Serial No. 495,754. 1 Claim. (Cl. 15—9.)

In a device of the class described, a housing, laterally projecting horisontal flanges extending from the periphery of said housing and spaced about the bottom of the same, each of said flanges being provided with an opening, a second housing, bolts carried by said second housing projected through said openings, wing nuts on said bolts to clamp



the second-named housing to said flanges and below the first-named housing, a motor driven shaft in the first-named housing, and means driven by said shaft to operate a mechanism in the second-named housing.

1,891,176. JOINT FOR THE EYE-WIRES OF OPHTHALMIC MOUNTINGS. JACOB J. POMERANZ, Brooklyn, and VINCENT TANASSO, Harrison, N. Y. Filed July 1, 1931. Serial No. 548,180. 2 Claims. (Cl. 88—44.)



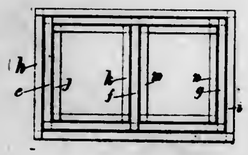
1. In an ophthalmic mounting, a joint for the ends of the eye-wires of spring bridge Oxford frames including mating screw receiving elements carried by the opposite ends of the eye-wire, one of said elements having a closed over end and an extension at the inner end telescopically fitting within the inner end of the other element, said other element having a bridge spring casing at the outer end and a bore opening into the spring casing for receiving a retaining screw.

1,891,177. BOX STUD AND NOSE GUARD FOR OPHTHALMIC MOUNTINGS. JACOB J. POMERANZ, Brooklyn, and VINCENT TANASSO, Harrison, N. Y. Filed July 1, 1931. Serial No. 548,182. 4 Claims. (Cl. 88—42.)



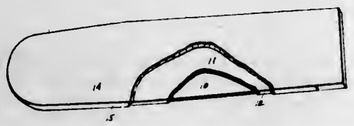
1. In ophthalmic mountings, a device for anchoring a nose guard terminal to an eye-wire including a box stud fashioned from sheet material to provide horisontal walls having divergent sides and joined by divergent side walls to provide a socket of inwardly decreasing width for snugly receiving a correspondingly shaped nose guard terminal.

1,891,178. ELECTRIC TRANSFORMER. GRAHAM LEIGH PORTER, Hollinwood, England, assignor to Ferranti Inc., New York, N. Y. Filed Dec. 1, 1930, Serial No. 499,868, and in Great Britain Jan. 30, 1930. 8 Claims. (Cl. 175—356.)



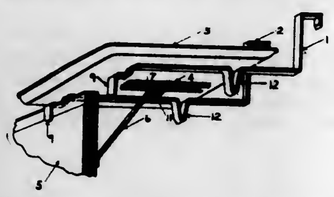
1. A three-phase electric transformer core subdivision system wherein the core is divided into a three-limbed section and a plurality of two-limbed sections.

1,891,179. METAL FIRE RESISTING IRONING BOARD. LEIGH PRUDEN, Los Angeles, Calif. Filed Sept. 22, 1928. Serial No. 307,641. 1 Claim. (Cl. 68—10.)



In combination with a wooden ironing board, an asbestos sheet having marginal portions folded in rigid contact with the upper face of the board with its end edges and side edges thereof respectively, a sheet metal strip placed in overlying relation and in contact with the upper flat face of the asbestos sheet and being operatively folded at right angles to the strip in L-shape formation to provide portions which are brought into rigid contact with the longitudinal side and end edges of the asbestos sheet, and also engaging with its marginal portions the underside of the board, and fasteners securing the marginal portions of the metal strip to the board.

1,891,180. COMBINATION SUPPORT FOR SERVING TRAYS FOR USE ON AUTOMOBILES. FREDERICK F. RAVLIN, South Miami, Fla. Filed July 15, 1932. Serial No. 622,581. 2 Claims. (Cl. 45—51.)



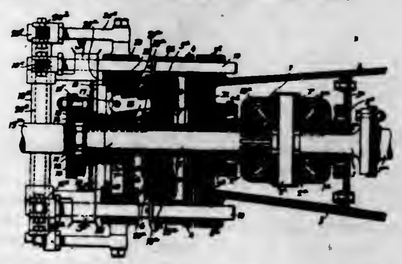
1. In combination, a tray, frame bars secured to the tray and extending upwardly therefrom, said bars having terminal hooks to engage an automobile door window pocket, and a brace connecting said bars above the tray and formed as a receptacle.

1,891,181. MOTOR FUEL. CHARLES T. RICHMAN, Philadelphia, Pa., assignor, by direct and mesne assignments, of one-third to William C. Kuhn and one-third to Peter J. Smith, Philadelphia, Pa. Filed Oct. 28, 1930. Serial No. 491,821. 6 Claims. (Cl. 44—6.)

1. An improved motor fuel consisting of alcohol of approximately 180 proof, pyroligneous acid, and camphor, the acid being employed in the proportion of approximately 2 ounces to 126 ounces of the alcohol.

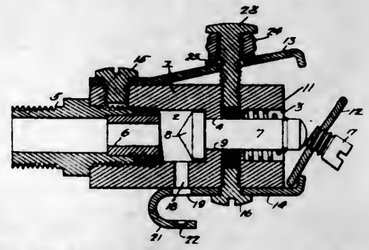
3. An improved motor fuel consisting of alcohol, pyroligneous acid, camphor, and an oil.

1,891,182. CLUTCH MECHANISM FOR PLANETARY GEARING. DAVID E. ROSS, Lafayette, Ind., assignor to The Fairfield Manufacturing Company, Lafayette, Ind., a Corporation of Indiana. Filed Nov. 9, 1931. Serial No. 573,971. 8 Claims. (Cl. 74—34.)



1. In mechanism of the character specified, a driving shaft, a driven shaft, gears on the adjacent ends of said shafts, planetary gears between the gears on the driving and driven shafts, a housing for said gears, manually controlled mechanism for locking the housing against rotation to cause reverse rotation of the driven shaft; a clutch fixed to the housing and rotatable therewith, a clutch engaging member fixed on the driven shaft adapted to be engaged with said clutch, spring means for causing said member to engage the clutch, dogs pivoted on said member and adapted to hold the clutch disengaged, means for normally holding the dogs out of operative engagement with the clutch, and means for releasing the dogs to permit the clutch to lock the housing to the driven shaft.

1,891,183. AUTOMATIC HEAT RESPONSIVE UNIT. ARTHUR C. ROWLEY, Philadelphia, Pa., assignor to Globe Automatic Sprinkler Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Dec. 26, 1930. Serial No. 504,918. 4 Claims. (Cl. 169—40.)



1. In a device of the stated character, the combination with a valve casing having intake and discharge ports, of a valve adapted to close one of said ports, and means for retaining the valve to its seat comprising a latch element engaging said valve, a pair of separable members adapted normally to retain said element in operative position and normally resiliently retained in a separated and inoperative position relative to the latch, and fusible means for retaining said members in latch-retaining position.

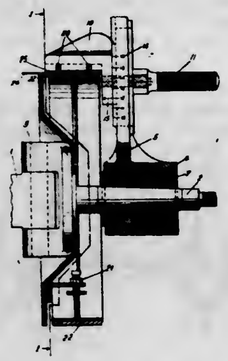
1,891,184. UMBRELLA AND CASE THEREFOR. IVAN J. SALOMON, Baltimore, Md. Filed Nov. 14, 1930. Serial No. 495,728. 1 Claim. (Cl. 135—33.)

In combination with an umbrella including a shaft and a straight handle thereon, said handle comprising a neck portion secured to the end of said shaft and an integral disk-like head portion formed thereon and projecting radially beyond the neck, the junction of said head portion and neck providing a downwardly facing shoulder; of a flexible tubular casing for said umbrella applicable to the latter and fitting snugly about the same when in place, the upper portion of said casing fitting about the neck of said handle with its peripheral edge in abutment against said shoulder to limit the upward movement of said casing on the umbrella, a flexible strap secured at one end to the upper portion of said



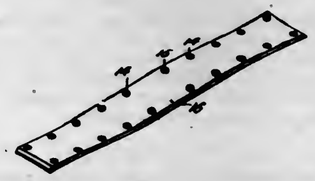
casing and extending longitudinally thereof and projecting upwardly therefrom to extend over the disk-like head of said handle diametrically across the upper face thereof with its free end extending downwardly at the opposite side of the casing from its attached end, detachable means for securing the free end of said strap to the upper end of said casing, whereby to limit the downward movement of the casing on the umbrella, and means on said handle forming a suspension therefor and simultaneously preventing casual disengagement of the strap member from said head.

1,891,185. GAUGE DEVICE. ALVIN L. MILLER and RUSSELL H. MILLER, Detroit, Mich. Filed Aug. 17, 1928, Serial No. 300,168, and in Canada June 14, 1929. 4 Claims. (Cl. 33—180.)



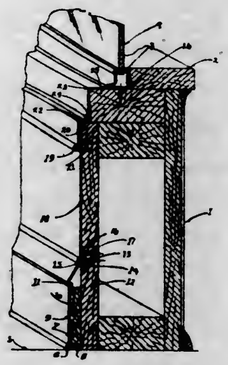
1. A gauge device for use in adjusting brakes of an automotive vehicle, comprising a rigid elongated body member adapted to be rotatably mounted upon a wheel spindle, said body member being provided with an elongated longitudinally extending slot, a gauging head on one side of said body member and overlying the adjacent brake band, a handle on the side of the body member opposite the gauging head, a screw threaded stud extending through the slot and connecting the said gauging head and handle, said head and handle being adjustable longitudinally in the slot by loosening the connection between the two, the body member and head having indicia thereon by means of which the position of the head may be accurately determined for brakes of different diameters.

1,891,186. BRAKE LINING. CARL F. OGREN, Trenton, N. J., assignor to Thermoid Rubber Company, Trenton, N. J., a Corporation of New Jersey. Filed June 4, 1929. Serial No. 368,408. 1 Claim. (Cl. 188—250.)



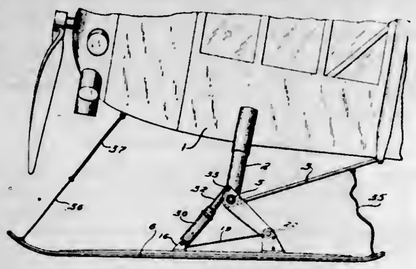
The combination with a brake shoe having a series of securing-element-receiving openings extending longitudinally thereof, of a brake lining comprising a composite strip capable of limited longitudinal stretching and having formed therein a series of openings corresponding in arrangement to the openings of the brake shoe with which it is to be employed but spaced from one another a distance slightly less than the distance through which the corresponding openings of the brake shoe are spaced whereby said brake shoe lining must be stretched in application to the shoe in order to bring the openings thereof into alignment with the openings of the shoe.

1,891,187. BULKHEAD CONSTRUCTION. FRANCIS J. PLYM, Niles, Mich., assignor to The Kawneer Company, Niles, Mich., a Corporation of Michigan. Filed Nov. 30, 1928. Serial No. 322,720. 5 Claims. (Cl. 189—85.)



1. In a bulkhead construction for store windows, a metallic moulding comprising a series of sections, one edge of each of said sections being over-lapped by an edge of an adjacent section, and an intermediate retaining member between the edges of said sections, said member being provided with a beading adapted to engage the over-lapping edge of said sections for holding the same in position.

1,891,188. AIRPLANE LANDING GEAR. ARTHUR RALSTON STALB, Jr., Detroit, Mich. Filed Feb. 6, 1930. Serial No. 426,257. 9 Claims. (Cl. 244—2.)



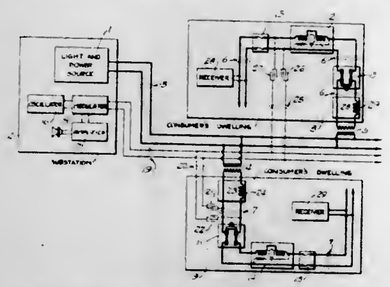
1. In a ski mounting for airplanes, a structure having a three point connection with the ski, said structure including a shock absorbing element connected to one of said points, and an associated element connecting with the other points, said structure being adapted for connection with an airplane strut or the like.

1,891,189. SOUND INSULATING FLOOR CONSTRUCTION. BRUNO E. BALDUF, Chicago, Ill. Filed Aug. 11, 1930. Serial No. 474,387. 14 Claims. (Cl. 20—6.)



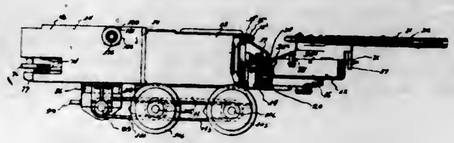
1. A resilient sound absorber comprising a metal clip having a flat central portion, integral resilient loops extending upwardly and outwardly at an angle to said central portion, flanges extending from said loops parallel to and in a plane below the flat central portion, and a portion of said flanges slotted and bent out of the plane of said flanges to form a lug adapted to interlock with a grouting attachment.

1,891,190. SYSTEM OF ELECTRICAL DISTRIBUTION. ROBERT D. DUNCAN, Jr., East Orange, N. J., assignor to Wired Radio, Inc., New York, N. Y., a Corporation of Delaware. Filed June 7, 1930. Serial No. 459,785. 6 Claims. (Cl. 179—2.5.)



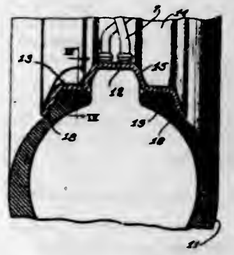
1. In an electrical distribution system, a local distribution circuit confined within a consumer's premises, a source of electric light and power current, wire lines adapted to deliver said light and power current to said local distribution circuit in said consumer's premises, a source of modulated high frequency current, wire lines adapted to deliver said modulated high frequency current to said consumer's premises, and means adapted to impress said high frequency currents on said local distribution circuit in said consumer's premises only.

1,891,191. MINING MACHINE. FRANK A. LINDGREN, Western Springs, Ill., assignor to Goodman Manufacturing Company, Chicago, Ill., a Corporation of Illinois. Filed Dec. 31, 1926, Serial No. 158,211. Renewed June 22, 1931. 18 Claims. (Cl. 267—28.)



1. In a mining apparatus, the combination of a wheeled truck, a mining machine detachably mounted thereon comprising a frame, a motor, a cutter head including a cutting element operably driven from said motor, feed driving mechanism disposed rearwardly of said motor, said mechanism comprising a longitudinally extending drive shaft having a driving connection with said motor, a variable speed reduction device disposed on said shaft, a second longitudinally disposed shaft having a worm disposed thereon, said shaft having operable connection with said first mentioned drive shaft and adapted to be driven thereby at a plurality of speeds through said reduction device, a worm gear and shaft disposed on a vertical axis and operably driven by said worm, and truck driving means detachably connectible with said latter shaft.

1,891,192. ORNAMENTING RING FOR WHEEL RIMS. GEORGE ALBERT LYON, Allenhurst, N. J. Filed Mar. 7, 1932. Serial No. 597,233. 20 Claims. (Cl. 41—10.)



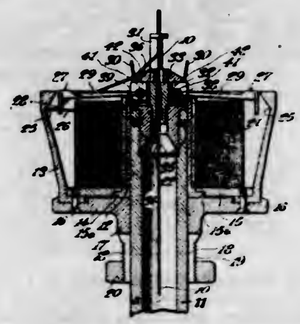
1. An automobile wheel rim including a base and side flanges, said base having an annular recess spaced inwardly from said side flanges and an annular ornamenting member partially concealing one of said flanges and including a plurality of spaced teeth seated in the recess in said base.

1,891,193. METER HANGER. FRANK H. MUELLER, Decatur, Ill., assignor to Mueller Co., Decatur, Ill., a Corporation of Illinois. Filed July 6, 1932. Serial No. 621,096. 8 Claims. (Cl. 285—3.)



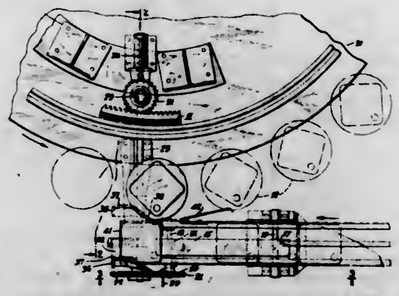
1. Means for spacing the service pipes of meters, comprising a bar having at one end thereof means for establishing communication with the meter and at the other end thereof an opening, the wall of said opening being formed with a seat portion intermediate its ends, said opening being adapted to receive a service pipe, a connector associated with the pipe and with a second pipe for establishing communication with the meter and provided with a portion adapted to engage said seat, and means for securing the connector to the bar.

1,891,194. METHOD OF AND APPARATUS FOR SERVING STRANDS. FRANK M. POTTER and CHARLES E. TRAXEL, Rome, N. Y., assignors to General Cable Corporation, New York, N. Y., a Corporation of New Jersey. Filed Oct. 15, 1930. Serial No. 488,754. 13 Claims. (Cl. 117—34.)



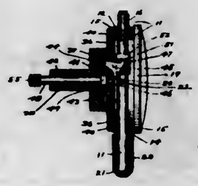
1. Apparatus for winding a covering upon a core, comprising in combination, a rotatable hollow spindle, a core to be covered disposed along the axis of said spindle, a package of stranded material rotatable with said spindle, the package being universal wound so the strand may readily travel axially of the package as it is removed therefrom, a retaining wall surrounding said package and rotatable with the package and spindle, said wall being tapered interiorly toward an annular groove remote from the axis of said spindle and approximately co-planar with one end of the strand package, said package being rotated at sufficient speed to cause a loop of strand to balloon off said package and creep toward the groove in said wall, and means disposed approximately co-axial with said groove for guiding the strand toward said core upon which it is wound.

1,891,195. CAN FEEDING MACHINE. LEON D. TITUS, Port Arthur, Tex., assignor to The Texas Company, New York, N. Y., a Corporation of Delaware. Filed June 6, 1930. Serial No. 459,488. 4 Claims. (Cl. 198—24.)



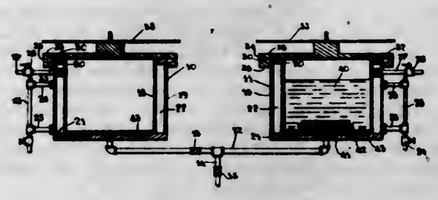
1. Can feeding apparatus, comprising a conveyor for moving a can to a predetermined point, a can positioning and actuating member, formed with a portion thereof parallel to the side faces of the can for engaging a corner of the can to turn it on its axis, and another portion thereof at an angle to the first portion for maintaining the can in the turned position while ejecting it from the conveyor, and means for actuating said can positioning and ejecting member.

1,891,196. COMBINATION DIAL INDICATOR. ERIK H. ALDSBOROH and CHRISTIAN E. RUF, Poughkeepsie, N. Y., assignors to Standard Gage Company, Inc., Poughkeepsie, N. Y., a Corporation of New York. Filed May 11, 1932. Serial No. 610,552. 4 Claims. (Cl. 33—172.)



1. A dial indicator of the class described, comprising in combination a casing having a contact plunger operated mechanism therein, a back plate for said casing and a plunger for operating said mechanism protruding from said casing and a second contact plunger mounted in said back plate and means for imparting movement from the second contact plunger to the first plunger.

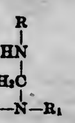
1,891,197. METHOD FOR CLEANING MOLDS. GEORGE G. ANDREWS, Akron, Ohio, assignor to The Goodyear Tire & Rubber Company, Akron, Ohio, a Corporation of Ohio. Filed Feb. 6, 1928. Serial No. 252,121. 1 Claim. (Cl. 87—5.)



The process of cleaning a metal mold, which comprises applying an alkaline solution to the mold in a confined space, heating the solution to generate a vapor pressure thereon and until the solution is at a temperature corresponding to the vapor pressure thereon, and removing the mold from the solution by utilizing the vapor pressure on the solution to force the latter out of the confined space.

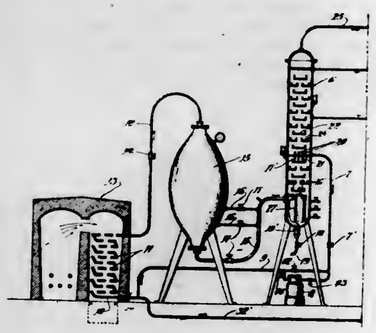
1,891,198. METHOD OF MANUFACTURING MERCAPTOBENZOTHIAZOLE. ALBERT M. CLIFFORD, Akron, Ohio, assignor to The Goodyear Tire & Rubber Company, Akron, Ohio, a Corporation of Ohio. Filed Nov. 6, 1929. Serial No. 405,284. 5 Claims. (Cl. 260—44.)

1. A method of manufacturing mercaptobenzothiazoles which comprises subjecting a material having the following structural formula:



in which R and R_1 are phenyl groups to the action of carbon bisulfide and sulphur under superatmospheric conditions of heat and pressure.

1,891,199. PROCESS FOR TREATING HYDROCARBONS. CARBON P. DUBBS, Wilmette, Ill., assignor to Universal Oil Products Company, Chicago, Ill., a Corporation of South Dakota. Filed Aug. 13, 1926. Serial No. 128,933. 11 Claims. (Cl. 196—51.)



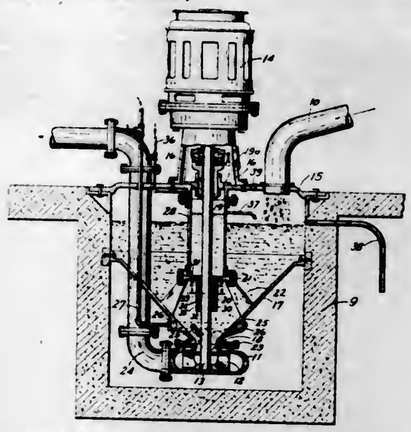
4. A continuous process for cracking high boiling point hydrocarbon oils to produce gasoline-like products comprising passing the oil once only through a heating coil wherein the oil is raised to an effective cracking temperature under a superatmospheric pressure, discharging the heated products from the coil to the upper end of an unheated vertically elongated reaction chamber also maintained under pressure and wherein said products are subjected to an additional minimum time of reaction while at a cracking temperature, preventing any appreciable accumulation of liquid in said chamber, removing all the products from said chamber from the lower end thereof, delivering said products to a zone of lower pressure wherein separation of vapors is in large part effected by the contained heat of the oil, withdrawing the unvaporized residue from said zone of lower pressure in a form suitable as a liquid fuel, passing the vapors from said zone of lower pressure to a dephlegmating zone, effecting partial condensation of the vapors in said dephlegmating zone by the cooling action of charging oil for the process, condensing the vapors uncondensed by dephlegmation and collecting the resulting distillate, and continuously pumping charging oil and reflux condensate from said dephlegmating zone to and through said heating coil.

1,891,200. COIL RETAINING MEANS. HARRISON H. EATON, Toledo, Ohio, assignor to The Electric Auto-Lite Company, Toledo, Ohio, a Corporation of Ohio. Original application filed May 14, 1928, Serial No. 277,648. Divided and this application filed Mar. 28, 1930. Serial No. 439,810. 5 Claims. (Cl. 171—206.)



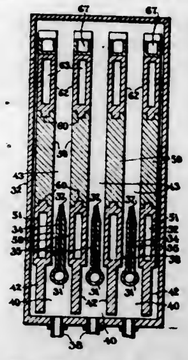
1. The combination with an armature having longitudinally extending recesses having throats narrower than the recesses, of coils in said recesses and fibrous rope extending full length of said recesses and arranged to lie between the coils and the walls of throats of the recesses thereby closing the throats throughout their full length.

1,891,201. CENTRIFUGAL PUMP. LEIGH P. HOFF, Philadelphia, Pa., assignor to The Allen-Sherman-Hoff Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed May 16, 1929. Serial No. 363,442. 6 Claims. (Cl. 103—103.)



1. A pump assembly which includes an impeller pump adapted to be submerged in the liquid to be pumped, a driving motor above said pump, a shaft connecting said pump and said motor, spaced bearings for said shaft, one of the bearings being submerged during pumping and adapted to permit liquid to flow between the bearing and shaft, a casing surrounding said shaft and extending from said submerged bearing to above the level of liquid to be pumped, and means for maintaining a column of clear liquid in said casing having a level above the level of the liquid to be pumped, said means including a conduit extending from said casing to a source of supply of liquid other than that being pumped and an overflow pipe extending from said casing at a point above the maximum level of the liquid being pumped.

1,891,202. METHOD OF AND APPARATUS FOR PREPARING GAS BLACK. WARREN K. LEWIS, Newton, Mass., assignor to The Goodyear Tire & Rubber Company, Akron, Ohio, a Corporation of Ohio. Filed Dec. 15, 1928. Serial No. 326,368. 4 Claims. (Cl. 134—60.)



1. A method of producing carbon black which comprises directing sheets of gas between a plurality of parallel walls from a common source of supply at a velocity sufficiently low to maintain stream-line flow of the gas, directing a sheet of air in stream-line relation along each side of each sheet of gas partially burning the gas while maintaining the stream-line flow of the gas and air, supplying a cooling medium adjacent the gas before and after it passes through the burning zone and subsequently collecting the products of combustion.

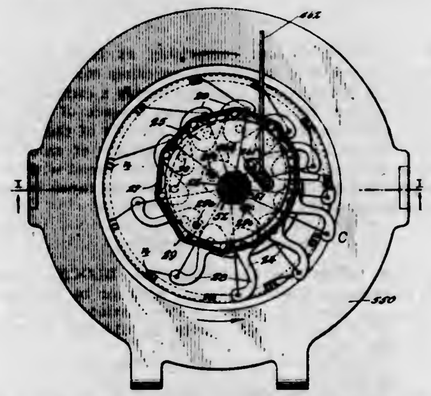
1,891,203. POLYMERIZATION OF UNSATURATED ORGANIC COMPOUNDS. OTTO AMBROS and HANS REINDEL, Ludwigshafen-on-the-Rhine, and JULIUS EISELE and JOHANNES STOEHREL, Mannheim, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Filed Jan. 30, 1930, Serial No. 424,716, and in Germany Feb. 5, 1929. 24 Claims. (Cl. 260—6.)

1. The process for the polymerization of polymerizable unsaturated, liquid organic compounds which comprises incorporating the said compounds with a small quantity of a carbonyl of a heavy metal.

21. The process for the polymerization of polymerizable unsaturated liquid organic compounds which comprises incorporating a polymerizable polymerization product of a diolefine with a small quantity of iron carbonyl, painting the mixture onto a substratum in a thin layer and then heating to about 95° C.

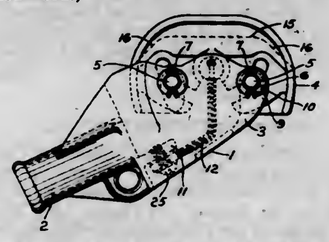
23. As a new article of manufacture polymerized butadiene containing a small quantity of iron carbonyl.

1,891,204. CIRCULAR KNITTING MACHINE. JAMES L. GETAZ, Maryville, Tenn., assignor to Scott & Williams, Incorporated, New York, N. Y., a Corporation of Massachusetts. Filed Aug. 1, 1930. Serial No. 472,354. 11 Claims. (Cl. 66—135.)



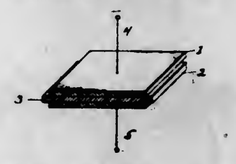
1. A circular knitting machine having a revolving needle cylinder and striping yarn fingers revolubly mounted within said cylinder, each finger also having its own individual pivot point in combination with cam means having a contact surface lying partially outside and partially inside the pivot points of said fingers in a radial direction for the purpose of oscillating said fingers about their pivots in the plane of the needle circle, the path of said fingers intersecting the needle circle.

1,891,205. CURRENT COLLECTOR. ANGUS D. MCKENZIE, Mansfield, Ohio, assignor to The Ohio Brass Company, Mansfield, Ohio, a Corporation of New Jersey. Filed Jan. 4, 1932. Serial No. 584,667. 11 Claims. (Cl. 191—591.)



1. A current collector comprising a support having a socket and spaced arms, a pair of transversely disposed pins through said arms and a shoe mounted between said arms upon said pins to oscillate in a plane at right angles to the axes of the pins.

1,891,206. POLARIZED ELECTROLYTIC COUPLE. SAMUEL RUBEN, New Rochelle, N. Y., assignor, by mesne assignments, to Ruben Condenser Company, New Rochelle, N. Y., a Corporation of Delaware. Filed June 22, 1927, Serial No. 200,753. Renewed Nov. 17, 1931. 10 Claims. (Cl. 175—315.)



1. In a polarized electrically conductive couple, the combination with polarized aluminum electrodes, of a spacer positioned between the electrodes and composed of a fibrous sheet material impregnated with a mixture of a crystallized film-maintaining electrolyte containing boric acid and borax crystals and acting as a suspension medium for the electrolyte.

1,891,207. ELECTROLYTIC CONDENSER. SAMUEL RUBEN, New Rochelle, N. Y., assignor, by mesne assignments to Ruben Condenser Company, New Rochelle, N. Y., a Corporation of Delaware. Filed June 19, 1930. Serial No. 462,393. 22 Claims. (Cl. 175—315.)



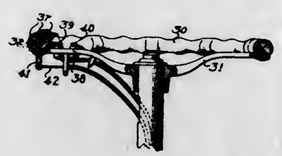
1. In an electrolytic condenser the combination, with spaced electrode plates, one of which is electrolytically film-formed, of a conductive composition therebetween, containing ethylene glycol and a film-maintaining electrolyte of one of the weak acids boric, citric, malic, lactic, tartaric and phosphoric with a salt of one of said acids suspended therein, the whole forming a crystallized electrolyte.

10. The method of making an electrolytic condenser which consists in partially coating the anode member of two electrode plates with an insulating material, electrolytically forming the uncoated part of said plate in a solution containing ammonium borate, boric acid and water, at substantially 450 volts, mixing finely ground ammonium borate and boric acid with ethylene glycol at the boiling temperature as an electrolyte, said electrolyte in appearance at normal room temperatures being a viscous mass of a syrupy material in which solid particles are suspended and of at least molasses-like consistency, and applying said mixture in plastic form to a reticular spacer and compressing said spacer and electrolyte between said plate and connecting said plates as cooperating electrodes in an electrical circuit.

1,891,208. STEERING GEAR. ROBERT C. SCHUETZ, Detroit, Mich., assignor to Hermine Schuetz, Dexter, Mich. Filed Mar. 6, 1930. Serial No. 433,585. 1 Claim. (Cl. 74—39.)

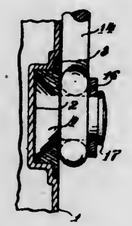
In control mechanism for the operation of motor boats and the like, and wherein the power plant and rudder are remote from the steering mechanism, the combination

with a steering mechanism adapted to be operatively connected to the rudder, said mechanism including a steering post and wheel with the latter of circular contour and having spokes, of means carried by the steering wheel and adapted to be operatively connected with the power plant for controlling operations of the latter, said means including a rotatable gripping member carried by and forming a portion of and completing the wheel rim, said member being positioned immediately adjacent to and in rear of one of the wheel spokes, said member carrying a depending arm movable with the member during rotation of the latter, said arm being adapted to be operatively



connected to a power plant element by connections a part of which are located within the steering post, said spoke carrying a depending guiding and supprting element for such connections, and an independent electrical control mechanism for power plant operations, said latter mechanism including a make and break device and connections therefrom leading to the power plant with a portion of the connections also located within the steering post, said make and break device being carried by such spoke adjacent the forward end of the member and in position to be actuated by the thumb of the hand gripping said member.

1,891,209. BAIL EAR AND METHOD THEREFOR. WILLIAM B. SMITH, Baltimore, Md., assignor of one-half to Carl T. Weber, Baltimore, Md. Filed July 30, 1932. Serial No. 626,331. 10 Claims. (Cl. 113—120.)

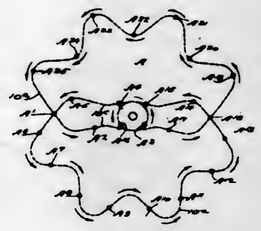


1. A bail attaching means comprising a sheet metal wall having an inwardly pressed imperforate seat, a flat headed pivot stud having its head in said seat, the head and seat wall forming a channel, and solder in said channel, the outer extent of said head and solder being substantially flush with the outer sheet metal wall, said stud forming a pivot for an eye of a bail.

1,891,210. GREEN MINERAL PIGMENT. HANS WOLFF, Ludwigshafen-on-the-Rhine, Germany, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Filed Nov. 5, 1931, Serial No. 573,295, and in Germany Nov. 6, 1930. 4 Claims. (Cl. 134—58.)

1. As new articles of manufacture pigment colors consisting of from 5 to 75 per cent by weight of magnesium orthotitanate, at least 5 per cent by weight of cobalt chromite and any remainder up to 100 per cent of a chromite of a metal selected from the group consisting of nickel, zinc and magnesium.

1,891,211. BRAIDED PRODUCT AND PROCESS OF MAKING THE SAME. SIDNEY B. BLAISDELL, Wyncote, Pa., assignor to Fidelity Machine Company, Philadelphia, Pa., a Corporation of Delaware. Filed July 1, 1932. Serial No. 620,501. 10 Claims. (Cl. 96—26.)



1. A braided product comprising at least one core thread incased in a multilayer covering composed of a plurality of interbraided threads forming a complete tubular outer layer, with predetermined threads of said plurality passing into and out of the interior of the product at predetermined points circumferentially of said outer tubular layer and passing around a core thread within the product forming therein an intermediate layer between the said core thread and said outer layer.

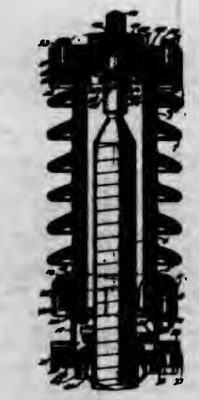
1,891,212. ELECTRICAL TERMINAL BLOCK. HENRY J. BLAKESLEE, Marlboro, Conn., assignor to The States Company, Hartford, Conn., a Corporation of Connecticut. Filed May 16, 1932. Serial No. 611,483. 9 Claims. (Cl. 200—2.)



1. An electrical terminal block comprising a base, two conducting fingers mounted on said base with their ends overlapping and spaced from each other, and a connector mounted on one of said fingers and slidable thereon between circuit opening and circuit closing positions, said connector having two plate portions, one on each side of the finger upon which it slides, and one adapted to pass into and out of the space between the overlapping ends of the fingers, and means for binding said connector and fingers into electrical connection when the connector is in circuit closing position.

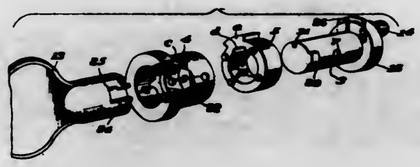
1,891,213. POTHEAD DEVICE. GEORGE P. EDMONDS, Chicago, Ill., assignor to G & W Electric Specialty Co., Chicago, Ill., a Corporation of Illinois. Filed Aug. 13, 1929. Serial No. 385,642. 12 Claims. (Cl. 173—353.)

1. In a device of the character described, the combination of a tubular insulator member adapted to receive a cable therein and provided with an annular shoulder at one end and a second annular shoulder longitudinally spaced therefrom, a sectional member engaging said second



shoulder, and a closure member for said end means for connecting the said sectional member for engaging said first shoulder.

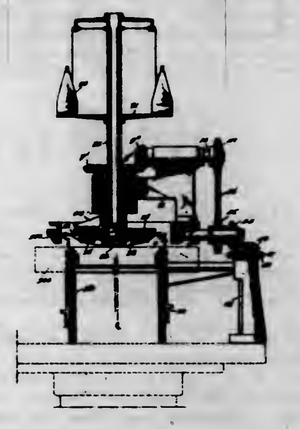
1,891,214. LOCK. MORRIS FALK, Leominster, Mass., assignor to Independent Lock Co., Fitchburg, Mass., a Corporation of Massachusetts. Filed Dec. 5, 1931. Serial No. 579,165. 20 Claims. (Cl. 70—47.)



1. A lock of the pin tumbler type including an outer shell; a locking unit removably mounted in said shell and having a set of combination pins and a set of locking pins cooperating with them, said pins extending parallel to the axis of said lock; and means for releasably securing said unit in said shell, said lock being constructed to prevent the operation of said means when the lock is in its locked condition but permitting such operation when the lock is unlocked.

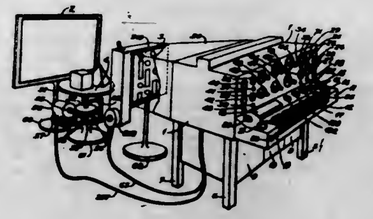
1,891,215. CIRCULAR KNITTING MACHINE. JAMES L. GETAZ, Maryville, Tenn., assignor to Scott & Williams, Inc., New York, N. Y., a Corporation of Massachusetts. Filed May 17, 1929. Serial No. 363,811. 25 Claims. (Cl. 66—135.)

1. A circular knitting machine having a revolving needle cylinder, striping yarn fingers revolubly mounted within said cylinder, each finger also having its own individual pivot, means to oscillate each finger about its own pivot and means adapted to give said individual pivots a camming



movement in the plane of and relative to the needle circle, the path of the feeding ends of said yarn fingers intersecting the needle circle.

1,891,216. SYSTEM FOR PROJECTING LIGHT IN VARIANT COLORS. CLINTON W. HOUGH, New York, N. Y., assignor to Wired Radio, Inc., New York, N. Y., a Corporation of Delaware. Original application filed Jan. 24, 1930, Serial No. 423,004. Divided and this application filed Apr. 30, 1931. Serial No. 533,940. 7 Claims. (Cl. 84—464.)

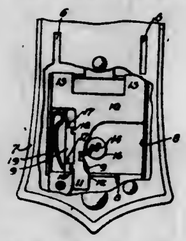


2. A projector system comprising, a plurality of projectors, a plurality of color screens adjacent each of said projectors, means controlling said projectors and said color screens to produce overlapping beams of light of variant colors to form a composite pattern, means for utilizing electric currents of audio frequencies to control the intensity of the light from each of said projectors in accordance with the rhythm and intensity of said currents, and means for selectively receiving said audio currents from any one of several broadcast sources.

1,891,217. TRUNK LOCK. ALBERT J. KOMENAK, Stamford, Conn., assignor to The Excelsior Hardware Co., Stamford, Conn., a Corporation of Connecticut. Filed May 31, 1930. Serial No. 458,549. 1 Claim. (Cl. 70—115.)

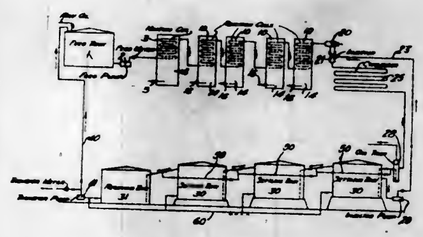
A trunk lock, comprising a hasp member pivotally swung from the trunk lid and carrying at its outer extremity spaced inwardly extended open gated members, an escutcheon plate secured to the trunk body and having spaced openings in its lower portion adapted to receive said gated

members when the hasp is swung downwardly to locking position, a casing within said portion and secured to said escutcheon plate, a spring actuated tumbler slidably guided within said casing and having at its inner edge spaced outwardly projecting lugs, a locking member having a tail portion that is guided through the lower wall of said casing and is adjacent to and rests upon said tumbler, said locking member having bolts which are spaced to corre-



spond to the spacing of said openings in said escutcheon plate, and said tail portion having lugs that extend horizontally from its inner edge to abut the lower faces of the tumbler lugs when said bolts are retracted, said tumbler being adapted to be thrust away from said tail by a key thereby disengaging said lugs and causing said bolts to engage within said gated members and effecting the engagement of the tail lugs with the upper faces of the tumbler lugs.

1,891,218. CRACKING PROCESS FOR HYDROCARBON OILS. DANIEL PYZEL, Piedmont, Calif., assignor, by mesne assignments, to Universal Oil Products Company, a Corporation of South Dakota. Filed July 24, 1922. Serial No. 576,926. 3 Claims. (Cl. 196—51.)



1. A process for the conversion of hydrocarbon oils consisting in heating a stream of oil to a cracking temperature, in passing such heated oil through a reacting zone where the oil is maintained under a superatmospheric pressure and where a substantial portion of the oil remains in liquid phase, in continuously introducing said oil to a zone of lower pressure in such a manner as would permit vaporization of said oil, and in checking such vaporization by introducing regulated quantities of a cooling medium to said zone of reduced pressure.

CARNEGIE LIBRARY OF ATLANTA

Patents Nos. 1,891,219 to 1,891,897

THE

OFFICIAL GAZETTE

OF THE

United States Patent Office

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Issue of December 20, 1932

Trade-Marks	167	No. 302,704 to No.	302,870,	inclusive.
T. M. Renewals	15			
Labels	16	No. 41,542 to No.	41,557,	inclusive.
Prints	4	No. 13,688 to No.	13,691,	inclusive.
Reissues	11	No. 18,693 to No.	18,703,	inclusive.
Plant Patents	9	No. 49 to No.	57,	inclusive.
Designs	26	No. 83,704 to No.	83,741,	inclusive.
Patents	679	No. 1,891,219 to No. 1,891,897,		inclusive.
Total	875			

U. S. COURT OF CUSTOMS AND PATENT APPEALS

INTERPRETATION OF RULE XIII

Printing of Documentary Exhibits

NOVEMBER 28, 1932.

I have been instructed by the court to make the following statement:

"In view of some misunderstanding, it has been thought advisable to explain somewhat the provisions of Rule XIII of the United States Court of Customs and Patent Appeals, relative to the printing of documentary exhibits in the Transcript of Record. This rule was not intended to apply to documentary exhibits impracticable to reproduce in printed form, such as pictures, blue prints, drawings, tabulated forms, and the like. Reproduction of such exhibits in the printed record may be dispensed with by application to the court therefor, or by stipulation of the parties. In addition, the clerk of the court, in the absence of such order or stipulation, will exercise his discretion in selecting from the documentary exhibits such as it may be practicable to print, and is under instructions from the court to administer the rule in a liberal way, to avoid unnecessary expense to litigants."

ARTHUR B. SHELTON,
Clerk.

Interference Notices

U. S. PATENT OFFICE, *Washington, Nov. 22, 1932.*

Goody Nectar Company, its assigns or legal representatives, take notice:

An interference having been declared by this office between the application of Harry H. Grigsby, 111 West California Avenue, Oklahoma City, Okla., for registration of a trade-mark and trade-mark registered October 23, 1928, No. 246,458, to Goody Nectar Company, 120 East Main Street, Oklahoma City, Okla., and a notice of such declaration sent by registered mail to said Goody Nectar Company, at the said address, having been returned by the post office as undeliverable, notice is hereby given that unless said Goody Nectar Company, its assigns or legal representatives, shall enter an appearance therein within 30 days from the first publication of this order the interference will be proceeded with as in case of default. This notice will be published in the OFFICIAL GAZETTE for three consecutive weeks.

WM. A. KINNAN,
First Assistant Commissioner.

U. S. PATENT OFFICE, *Washington, December 5, 1932.*

James De Villa, his assigns or legal representatives, take notice:

An interference having been declared by this Office between an application for patent filed by James De Villa, 299 Grove Street, Jersey City, N. J., and an application for patent filed by Christ T. Pychos, 3007 College Avenue, Kansas City, Mo., and the Office having failed to secure service on De Villa, notice is hereby given that unless said De Villa, his assigns or legal representatives, shall enter an appearance therein within 30 days from the first publication of this order the interference will be proceeded with as in case of default. This notice will be published in the OFFICIAL GAZETTE for three consecutive weeks.

WM. A. KINNAN,
First Assistant Commissioner.

Notice of Cancellation

U. S. PATENT OFFICE, *Washington, Nov. 22, 1932.*

Jack Daniel Distilling Company, its assigns or legal representatives, take notice:

A cancellation proceeding having been instituted by this Office upon the application of Lem Motlow, of Lynchburg, Tenn., to effect the cancellation of the trade-mark registration of the Jack Daniel Distilling Company, of 117 South Broadway, St. Louis, Missouri, No. 125,797, dated June 17, 1919, and the notice of such proceeding sent by registered mail to the said Jack Daniel Distilling Company at the said address having been returned by the post-office as undeliverable, notice is hereby given that unless said Jack Daniel Distilling Company, its assigns or legal representatives, shall enter an appearance therein within 30 days from the first publication of this order the cancellation will be proceeded with as in case of default. This notice will be published in the OFFICIAL GAZETTE for three consecutive weeks.

WM. A. KINNAN,
First Assistant Commissioner.

Condition of Applications Under Examination at Close of Business December 3, 1932

(Total number of applications awaiting action, excluding Trade-Mark Division, 61,878; Trade-Mark Division, 1,070. Oldest new case, June 3, 1932; oldest amended, June 3, 1932.)

Room No.	Divisions, Examiners, and Subjects of Inventions	Oldest new application and oldest action by applicant awaiting office action: New	Amended	No. of applications awaiting action
6624	1. LOEFFLER, F. A., Closure Operators; Fences; Gates; Tillage; Handling Implements	Sept. 30	Oct. 24	240
6708	2. HERMAN, D. (Act.), Fishing and Trapping; Dairy; Animal Husbandry; Presses; Tobacco; Velocipedes.	Aug. 5	Aug. 4	918
4093	3. LINDSEY, A., Heating; Metal Founding; Metallurgy; Metal Treatment; Electric Furnaces	Sept. 6	Sept. 7	652
7063	4. MERRITT, A. D., Conveyers; Hoists; Handling Apparatus; Excavating	Sept. 10	Oct. 13	303
3628	5. MACNAB, J. F., Harvesters; Music; Acoustics; Sound Recording; Knotters	Aug. 19	Aug. 24	294
4898C	6. LEWERS, A. M., Carbon Chemistry	June 14	June 18	1,774
5725	7. JARBOE, C. G., Optics; Photography	July 29	July 28	1,238
7514	8. ADAMS, F. L., Beds; Chairs; Kitchen and Table Articles; Racks and Cabinets	Aug. 2	Aug. 15	781
4624	9. ADAMS, R. E., Pumps; Fluid and Fluid-Current Motors	Sept. 12	Sept. 26	560
6612	10. HUNTER, O. F., Land Vehicles—Animal Draft Appliances, Bodies and Tops	July 18	July 23	691
5087B	11. BENHAM, E. V., Boots, Shoes, and Leggins; Button, Eyelet, and Rivet Setting; Harness; Leather Manufactures; Nailing and Stapling; Whip Apparatus.	Aug. 5	Aug. 4	575
7701	12. HENRY, C. C., Machine Elements	Sept. 1	Aug. 30	329
5096	13. BORLIK, F. J., Gear Cutting, Milling, and Planing; Metal Drawing; Metal Forging and Welding; Metal Rolling; Metal Working; Needle and Pin Making; Turning; Boring and Drilling.	Aug. 4	Aug. 8	915
5097	14. BRUMBAUGH, N. J., Farriery; Metal Bending; Metal Tools and Implements, Making; Sheet Metal Ware, Making; Wire Fabrics; Wire Working; Metal Working, Blanks and Processes.	Aug. 24	Sept. 2	614
4897	15. WORRELL, L. W., Glass; Plastic Block and Earthenware Apparatus; Plastics	July 16	July 16	1,571
5612	16. SPENCER, C. J., Telegraphy; Telephony	Aug. 22	Aug. 22	695
5701	17. ARMSTRONG, H. (Act.), Label Pasting and Paper Hanging; Ornamentation; Paper Manufactures; Printing; Type Casting; Sheet-Material Associating or Folding; Sheet or Web Feeding; Type Setting.	June 9	June 9	1,378
4612	18. PORTER, M. E., Motors, Expansible-Chamber Type; Power Plants; Speed-Responsive Devices	Aug. 31	Sept. 2	493
4096	19. KENNEDY, A. R., Furnaces and Stoves; Heating Systems; Fuel Burners	June 20	June 20	1,681
6613	20. GROVE, S. D., Miscellaneous Hardware; Closure Fasteners; Locks and Latches; Safes; Undertaking	Sept. 17	Sept. 17	435
7733	21. THOMPSON, T. J., Textiles; Cloth Finishing	July 28	Aug. 4	534
5724	22. RINGLE, D. (Act.), Aeronautics; Firearms, Ordnance, and Explosive Devices; Air Guns, Catapults, and Targets; Boats and Buoys; Ships; Marine Propulsion.	Sept. 15	Sept. 24	371
7892	23. GROESBECK, W. D., Coin Handling; Recorders; Registers	June 14	June 7	797
5083	24. DURAS, C. O., Apparel; Apparel Apparatus; Garment Supporters; Sewing Machines	Oct. 5	Sept. 17	504
5709	25. BLAKELY, C. F., Agitating; Butchering; Classifying Solids; Centrifugal-Bowl Separators; Mills; Threshing; Vegetable and Meat Cutters and Comminutors.	July 5	July 5	1,373
5893	26. ADAMS, W. M. (Act.), Electricity, Generation; Motive Power	July 12	July 13	746
5708	27. CLARK, W. N. (Act.), Brushing, Scrubbing, and Cleaning; Washing Apparatus	Aug. 15	Aug. 11	725
4628	28. BENSON, A. R., Internal-Combustion Engines	June 15	June 15	1,212
5062	29. MORRIS, B. N., Woodworking; Tools; Compound Tools; Furniture; Metal Working, Assembling	June 18	June 21	645
4074	30. SHIPMAN, J. L., Automatic Temperature and Humidity Regulation, Illuminating Burners; Illumination; Thermostats and Humidostats.	Aug. 3	Aug. 5	720
4716	31. HOLMES, W. N., Gas, Heating and Illuminating; Mineral Oils	July 9	July 9	1,361
4086	32. BARTHOLOMEW, J. A., Gas and Liquid Contact Apparatus; Heat Exchange; Gas Separation	Aug. 19	Aug. 29	696
6096	33. WYMAN, W. I., Bridges; Masonry and Concrete Structures; Metallic Building Structures; Roads and Pavements; Roofs; Wooden Buildings.	June 11	June 9	2,046
6625	34. SAPERSTEIN, S. (Act.), Electricity, Transmission to Vehicles; Pneumatic Dispatch; Railways, Rolling Stock, Switches, and Signals; Store Service; Vehicle Fenders; Track Sanders.	July 6	July 7	802
3600	35. REYNOLDS, E. C., Buckles, Buttons, Clasps, Etc.; Card and Sign Exhibiting; Signals; Toilet Measuring.	Oct. 14	Oct. 22	264
7624	36. McFAYDEN, A. D. (Act.), Automatic Weighers; Geometrical and Measuring Instruments; Force	June 11	June 14	1,460
5889	37. WEAVER, M. E., Electricity, Circuit Makers and Breakers	July 25	July 25	864
7510	38. KRAFFT, C. F., Earth Boring; Hydraulic and Earth Engineering; Mining, Quarrying, and Ice Harvesting; Stoneworking; Wells.	Oct. 15	Sept. 7	106
4874	39. WHITNEY, F. J. (Act.), Fluid-Pressure Regulators; Multiple Valves; Valves; Water Distribution	June 10	June 10	1,242
7880	40. OBERLIN, J. J., Receptacles	July 20	July 20	2,054
6062	41. WHITNEY, M. L., Land Vehicles, Wheels, and Axles: Resilient Tires and Wheels; Wheel Substitutes; Railway Draft Appliances; Spring Devices.	Sept. 26	Oct. 3	452
5882	42. CUTTING, H. O., Electric Signaling	June 13	June 11	1,270
4886B	43. KLINGE, E. F., Baths, Closets, Sinks, and Spittoons; Sewerage; Electricity, Medical and Surgical; Medicines; Surgery; Dentistry; Artificial Body Members.	July 2	July 4	1,521
4087B	44. SHAFFER, C. H., Dispensing; Filling and Closing Portable Receptacles; Refrigeration	June 3	June 3	1,626
7097	45. HILL, H. D., Pulleys and Shafting; Lubrication; Bearings and Guides	Sept. 3	Sept. 2	770
4613	46. TAYLOR, M., Evaporators; Fluid Sprinkling; Fire Extinguishers; Boilers	Aug. 24	Aug. 30	461
7600	47. BARKER, H., Clutches and Power Stops; Brakes; Motors	July 5	July 5	1,819
5731	48. ROEPKE, O. B., Electricity, General Applications	Aug. 3	Aug. 3	631
7725	49. SHEFFIELD, E. L., Check-Controlled Apparatus; Domestic Cooking Vessels; Ventilation; Driers; Liquid Separation or Purification.	June 11	June 16	1,368
4701	50. BLAKE, C. L., Plastic and Liquid Coating Compositions; Coasting	June 6	June 6	1,971
5628	51. BACKUS, C. D., Radiant Energy	July 30	July 30	1,025
7709	52. KNOTTS, M. K., Supports; Chucks; Joint Packing; Pipe and Rod Joints or Couplings; Tool-Handle Fastenings.	Sept. 16	Sept. 26	542
6897	53. PECK, M. K., Books; Manifolding; Printed Matter; Stationery, Educational Appliances; Paper Files and Binders; Tents, Canopies, Umbrellas, and Canes; Curtains, Shades, and Screens.	Sept. 17	Sept. 17	389
5874	54. WAITE, W. E., Electric Lamps; Vapor Electric Devices; Space Discharge Tubes; Light Sensitive Circuits.	July 8	July 8	1,013
6887	55. BOWEN, S. T.—Bread, Pastry, and Confection Making; Cutlery	Sept. 23	Sept. 23	313
	55. BOWEN, S. T.—Designs	Nov. 3	Nov. 11	291
4725	56. PORTER, F. J., Electrochemistry; Laminated Fabrics; Paper Making; Substance Preparation	July 8	June 17	1,219
3623	57. NICOLSON, G. D. G., Cutting and Punching; Bolt, Nut, Rivet, Nail, Screw, Chain, and Horse-Shoe Making; Driven and Screw Fastenings; Jewelry; Nut and Bolt Locks.	July 29	Aug. 2	635
5605	58. DOWELL, E. F., Abrading; Typewriting	June 28	June 29	1,172
4709	59. RICHARD, V. L., Chemistry; Alcohol; Fertilizers; Cement and Lime; Hides, Skins, and Leather; Fuel.	June 10	June 10	1,545
5896	60. GLASS, R. L., Electricity, Heating, and Welding; Batteries; Resistances and Rheostats; Prime Mover Dynamo Plants.	June 27	June 27	1,327
6724	61. PARKS, G. E., Elevators; Winding and Reeling; Pushing and Pulling; Fire Escapes; Ladders; Scaffolds; Horology; Time-Controlling Apparatus.	July 8	July 5	1,185
7525	62. COCHRAN, W. W., Toys; Amusement Devices; Baggage; Package and Article Carriers; Bottles and Jars; Deposit and Collection Receptacles.	July 25	July 25	1,253
4888	63. WINKELSTEIN, A. H., Bleaching and Dyeing; Explosive Pyrotechnic, and Match Compositions; Preserving; Sugar, Starch, and Carbohydrates.	June 23	June 23	1,284
4708	64. NASH, P. N., Acetylene; Distillation; Gas Mixers; Oils, Fats, and Glue	Sept. 16	Sept. 20	355
5524	65. McDERMOTT, F. P., Electricity, Conductors; Conduits and Housings; Repeaters; Relays; Wave Transmission.	June 20	June 21	1,460
2099B	Trade-Marks, Labels, and Prints: F. A. RICHMOND.—Trade-Marks	Nov. 3	Nov. 18	958
	Trade-Marks, Labels, and Prints: F. A. RICHMOND.—Labels and Prints	Nov. 4	Nov. 21	112

DECISIONS IN PATENT AND TRADE-MARK CASES

Commissioner's Decision

Ex parte Francis

Decided November 30, 1932

Complete Application—When Drawing is Necessary.

As a general rule when claims are made to apparatus or to an article illustration is possible and therefore necessary because of the requirement of the statute (sec. 4,889 R. S.). Where an article claimed specifies a particular material the character of that material can be indicated on the drawing by legends.

On Petition.

In the matter of the incomplete application of Carleton S. Francis, jr., Incandescent mantles and method of making the same.

Messrs. I. Seltzer & C. W. Levinson for applicant.

Kinnan, *First Assistant Commissioner:*

Applicant petitions that this application be given a complete date as of November 16, 1932, when the formal petition, specification, oath, and fee were received, although no drawings accompanied those papers.

Section 4889, Revised Statutes (U. S. C. title 35, section 34), provides—

when the nature of the case admits of drawings the applicant shall furnish one copy signed by the inventor or his attorney in fact.

As a general rule when claims are made to apparatus or to an article illustration is possible and therefore necessary because of the requirement of the statute. It will be apparent furthermore such illustration is of very great advantage in understanding the construction and in making searches for novelty after such patent is granted. To avoid all question as to when a complete disclosure was filed in this office it is deemed better, in all such cases, to require the filing of a drawing before an application is given a date of filing as a complete application.

The Examiner in the instant case has stated that the invention claimed can be illustrated.

It is evident the article claimed can be illustrated even though it be necessary to place legends on the drawing to indicate the character of the material.

As the case thus "admits of drawings," there was no error in holding the application incomplete until the drawing is filed.

The petition is denied.

U. S. Circuit Court of Appeals—Second Circuit

Anderson & Writer Corporation *v.* Hanky Beret, Inc., et al.

No. 350. Decided April 4, 1932

1. Patentability—Anticipation.

To modify the prior patent to K. so as to do the work of the patent in suit would so change its purpose and design that it cannot be an anticipation of the latter.

2. Patents.

Writer patent, No. 1,725,500, relating to process for making berets out of one piece of cloth and machine therefor, claims 7–11 *Held* valid and infringed.

Appeal from the District Court of the United States for the Southern District of New York.

Suit by Anderson & Writer Corporation against Hanky Beret, Incorporated, and another. From a decree holding claims 7–11, inclusive, of Patent No. 1,725,500, issued August 20, 1929, to Victor P. Writer, valid and infringed, defendants appeal. Affirmed.

See also (D. C.) 36 F.(2d) 412; (C. C. A.) 40 F.(2d) 196.

Mr. O. Ellery Edwards, of New York city, for appellants.

Messrs. Kenyon & Kenyon, of New York city (*Mr. Wm. Houston Kenyon* and *Mr. W. Houston Kenyon, Jr.*, both of New York city, of counsel), for appellee.

Before Manton, Augustus N. Hand, and Chase, Circuit Judges.

Chase, *Cir. J.:*

The patent in suit relates to a process for making berets out of one piece of cloth and to a machine by means of which it is done. The process claim involved is No. 7, and reads as follows:

7. The method of producing tam-o'-shanters or the like from a sheet of material, comprising the steps of folding the outer portions of the material inwardly toward its center and holding the marginal edge of the folded material against contraction, pulling the free inner end of the material inwardly from the marginal edge, and subjecting the folded material to the action of pressure in the presence of heat and moisture.

Claims 8, 9, 10, and 11, for the machine, are:

8. A machine for making tam-o'-shanters or the like, comprising a lower die having a base and an upstanding flange defining the effective area of the base, an upper die for movement within the flange of the lower die and having an opening extending therethrough and spaced from its outer marginal edge, a separate shaping element adapted for insertion within the flange of the lower die and adapted to have the material of the article folded over the same and serving to hold the marginal edge of the material against contraction, the opening in the upper die affording access to the free inner end of the material whereby it may be pulled inwardly from the marginal edge, means to effect a relative closing movement between the dies, and means to heat one die.

9. A machine for making tam'o-shanters or the like, comprising a lower die having a substantially flat face and an upstanding flange at its outer edge, an upper die for movement within the flange of the lower die and having an opening extending therethrough and spaced from its marginal edge, a separate shaping element adapted for insertion within the flange of the lower die and adapted to have the material of the article folded over the same and serving to hold the marginal edge of the material against contraction, the opening in the upper die affording access to the free inner end of the material whereby it may be pulled inwardly from the marginal edge, means to effect a relative closing movement between the dies, and means to heat one die.

10. A machine for making tam-o'-shanters or the like, comprising a lower female die having a recess to bodily receive the article being formed, an upper male die to enter the female die and having an opening formed therethrough which is spaced from its marginal edge, a separate shaping element for insertion within the female die and adapted to have the material of the article folded over the same to define the marginal edge of the article, the opening in the male die affording access to the free inner edge of such material for pulling action, means to effect a relative closing movement between the dies and means to heat one die.

11. In a machine for making tam-o'-shanters or the like, a lower die, an upper die for co-action therewith and having an opening formed therethrough and spaced from its marginal edge, a shaping element to be removably mounted between said dies and adapted to have the material of the article folded about the same, said shaping element having a diameter approximating that of the upper die whereby the outer edge of the shaping element is disposed adjacent to the outer edge of the upper die and remote from the opening of the upper die, the opening in the upper

die affording access to the free inner edge of the material for pulling action, means to heat one die, and means to effect a relative closing movement between the dies.

When this patent was previously before us on an appeal from an order granting a preliminary injunction, the questions of validity and infringement were expressly left for final hearing, though the order appealed from was reversed. The process was there fully and accurately described. *Anderson & Writer Corporation* v. *Hanky Beret, Inc., et al.*, 40 F.(2d) 196. It now appears from the answers to the interrogatories that there is no substantial issue as to infringement. We accept that to have been established, and take up the issue as to validity.

The problem presented to Writer was that of making a beret out of one piece of material and in such a way that it would be free from wrinkles. Not less important from a practical commercial standpoint was a reduction in waste both of material and time. After conducting various experiments, he found that a suitable machine to do what was wanted could be constructed by using what might be called three major elements—an upper die, a lower die, and a plate to use as a form over which the material was stretched. So far there was nothing new. What he did discover lay in the fact that, when the moistened material stretched over the form plate was put between the upper and lower dies, heat applied to both of these dies and the material subjected, while stretched on the plate, to pressure from the heated dies above and below, the beret was quickly formed and dried into a permanent smoothness in the desired shape. It could then be removed from the plate and such additional attention given to it without waiting for any further drying as would make it ready for shipment to the buyer. The virtue in the process lay in the fact that a beret could be made out of one piece, without wrinkles and with a minimum of waste of material and time. The result was economy in manufacture. The inventive thought which produced the machine for the process brought about the simultaneous action of pull and pressure on wet material in the presence of drying heat. This combination of physical forces on and in the material produced the beret with such comparative quickness that in the few years since the patent was issued production and sale have been large. In practice the stretching of the material over the plate was done by means of a drawstring sewed around the periphery of a circular piece of material cut to size and then pulled taut and tied before the covered plate was put into the machine which carried the heated dies and pressed them against the material on the plate. The operator could add to the tension on the moist material by manually pulling the edges as gathered by the drawstring up through a central opening in the upper die. This helped remove any wrinkles which might otherwise remain where the material had taken any pronounced folds when drawn together by the string.

The defendant relies for anticipation mainly on the patent to Kiwad, No. 1,530,001, dated March 17, 1925. The Stevens patent, No. 1,316,813, and that to Wilde & Lyon, No. 36,927, were said at first, at least, to be of some significance. However, the two last-mentioned patents are so far afield that an examination of them supports the broad statement without more that they do not anticipate Kiwad. Kiwad shows a machine for making a hat by stretching the crown and the brim while the material is moistened with steam. He uses two dies—an upper and a lower, although what is now called the upper die is no more than a narrow ring—in a machine which stretches the material while moist from steam that is permitted to escape from the lower die. He does not otherwise wet the material; nor does he use pressure with stretching except to some extent under the narrow unheated ring, already referred to as the upper die. This is brought down over a comparatively high turret in the center of the former to stretch the material in the brim and to some very slight extent, perhaps, that in the crown although clamps at the edge of the former would limit the crown-stretching action. As was suggested in our previous opinion the fact that Kiwad worked toward a hat with a crown instead of a flat-topped beret is not of vital importance. So far as that is concerned, the difference is merely one of shaping dies. We agree with the defendant that the crown-forming portion may be treated as being no more than a means for making a crown of any shape or a flat top which would serve the same purpose without being really a crown at all.

But Kiwad needed a high turret on his former at the top of which the edges of the material to be stretched into shape for the brim were impaled on pins. Then this material extended from the outside edge of the former to the top of the turret to form, when visualized in cross section, the hypotenuse of a right triangle of which the flat surface of the former was the base and the upright plane of the turret the other side. The comparatively thin ring, unheated, was then pushed down over the turret so that the hypotenuse of the triangle was drawn into right triangular shape and lay against the other two sides. Thus it was stretched to the extent this operation would permit and held by the ring now at the base of the turret, being drawn tightly between the pins at the top of the turret and the clamps at the edge of the former together with the added tension of the material over the edge of the former and down around the crown of the hat. There was no added pressure on the material against the former on either side except on the small surface directly under the ring and some at the jaws of the clamps at the outer edge. The material went into the machine dry and received whatever wetting took place as a result of the application of steam to it from the lower die. It is true that this steam could be shut off when desired and then the material would dry in its stretched condition. Also, the drying process would be hastened by the heat in the lower die. There was no upper die for heating and pressing the material against the top of the former to dry it or press out any wrinkles. They were taken out by stretching alone and that portion of the material was dried as

though suspended in air at room temperature plus what heat may have come up through the former from the lower die. As was pointed out in our previous opinion, supra, Kiwad did not iron the material. Except for that he did show the salient features of the patent in suit. True, the machine of Kiwad had to be changed somewhat to make a beret instead of a hat but really in ways most obvious to a skillful mechanic. Yet when so changed Kiwad would not press the material and so dry it between heated dies. When we had this case before this difference certainly appeared to be no more than what the proof on hearing might show to be only specious and that the one was in reality the equivalent of the other. Smoothing cloth, either damp or dry, with the pressure of a hot iron is too ancient a process upon which alone to rely safely for an inventive advance over the disclosure of Kiwad. But the proof now shows that this is not all there is to the Writer patent. He has combined stretching and ironing so that the turret of Kiwad is entirely eliminated as an element of the stretching means with a resultant saving of material and probably of time in manufacture. He has produced a device which works with only such stretching as is had from a drawstring and some manual pulling through a hole in the center of the upper die which is filled in Kiwad by the high turret and when put in the light most favorable to the contentions of the defendant aids this stretching to the extent necessary by ironing. What he really does, as the proof discloses, is to iron his material when damp to press and shrink out the wrinkles which have been made by the pull of the drawstring in puckering the edge of the cloth into a much smaller circle than it was before drawn over the former. So in Writer the wrinkles are deliberately put into the part of the beret which may be said to correspond to the brim of a hat, when a hat-making device like Kiwad's is to be compared to this patent, and then ironed out; while in Kiwad such stretching takes place while the brim of the hat is being formed that, if wrinkles are formed, none remain in that part of the material which eventually forms the hat brim. So, while we can believe that Kiwad has shown a way to make a beret, his method would have to be so altered before it can be said to show what Writer accomplished that it cannot be held to anticipate the patent in suit. Kiwad aimed to stretch wrinkles out when forming hat brims. Writer succeeded in pressing them out when making berets. In Kiwad a permanent readjustment in the shape of the material was brought about by displacement under tension so severe that all ability to resume its former shape was lost. This was the sine qua non of Kiwad, and his machine was designed to produce such a pulling, while in Writer all stretching was incidental to his setting his material by pressure with heat and moisture and his design differed accordingly. To modify Kiwad to do the work of Writer would so change the purpose and design of his patent that it cannot be an anticipation. *Metropolitan Device Corp.* v. *Williamsbury Electric Supply Co.* (C. C. A.) 19 F.(2d) 442; *Block* v. *Nathan Anklet Support Co.* (C. C. A.) 9 F.(2d) 311.

A divisional application of the Kiwad patent, filed December 9, 1929, is also relied upon for anticipation. This was divided out of his original application of May 22, 1926, and canceled December 8, 1927. But little can be said in support of the claim that it does anticipate Writer even if we ignore all technical objections to considering it a part of the prior art. It revolved around the central idea which seems to have been uppermost in Kiwad's mind to steam material and stretch it so that no wrinkles would remain. This had to do with a turban hat. He uses a blocking ring "preferably made of rubber." He does not iron wrinkles out, but steams and stretches to keep them out. The pressure he mentions is pressure secured by inflating a collapsible form which presses against and stretches the material out to the die or is pressure against rubber.

In view of the result on final hearing the defendant has no cause of action on the injunction bond even though the order granting a preliminary injunction was reversed, and the order of cancellation will not be modified.

Decree affirmed.

Patent Suits

[Notices under sec. 4921, R. S., as amended Feb. 18, 1922]

842,819, G. A. Krentler, Last; 969,244, R. Carl, same, filed Sept. 12, 1932, D. C. Mass., Doc. E 1852, *Krentler-Arnold Hinge Last Co.* v. *G. B. Belcher Last Co.*

969,244. (See 842,819.)

1,128,292, E. H. Colpitts, Electric wave amplifier; 1,281,764, F. Lowenstein, Telephone relay; 1,426,754, R. C. Mathes, Circuit for electron discharge devices; 1,482,022, R. A. Heising, Circuit connection of electron discharge apparatus; 1,448,550, H. D. Arnold, Thermionic amplifier circuit; 1,504,537, same, Power limiting amplifying device; 1,483,273, D. G. Blattner, Circuit for heating the filaments of audions; 1,493,595, same, Amplifying with vacuum tubes, D. C., S. D. N. Y., Doc. E 49/14, *Western Electric Co., Inc., et al.* v. *Pacent Reproducers Corp. et al.* Consent decree for plaintiff, dismissed as to all patents except 1,231,764 (notice Oct. 22, 1932).

1,203,190, C. E. Fritts, Recording and reproduction of pulsations or variations in sound and other phenomena; 1,213,614, same, Recording of pulsations of sound and analogous phenomena and process and apparatus for producing same; 1,223,496, I. Langmuir, Electrostatic telephone system; 1,318,094, same, System for amplifying variable currents; 1,316,967, D. M. Moore, Gaseous conduction lamp; 1,756,868, C. A. Hoxie, Method of making motion picture film, filed Oct. 10, 1932, D. C., S. D. Calif. (Los Angeles), Doc. E Y-6-H, *E. C. A. Photophone, Inc., et al.* v. *Disney Film Recording Co., Ltd., et al.*

1,213,614. (See 1,203,190.) 1,223,496. (See 1,203,190.)

1,223,650, W. S. Barnickel, Treatment of crude oil; 1,467,831, same, Process for treating petroleum emulsions; 1,454,616, E. E. Ayres, jr., Process for resolving emulsions; 1,596,587, M. DeGrotte, Treatment of water in oil emulsions; 1,596,589, same, Process for treating petroleum emulsions; 1,596,590, same, Process for breaking petroleum emulsions, filed Oct. 19, 1932, D. C., S. D. Calif. (Los Angeles), Doc. E Y-14-M, *The Tretolite Co. et al.* v. *T. James (All American Chemical Products Co.) et al.*

1,227,481, W. L. Norris, Lubricating mechanism; 1,682,724, E. J. Bloom, Terminal construction for central lubricating installations; 1,682,767, same, Chassis lubrica-

tion; 1,632,771, J. Bijur, Lubricating installation; 1,632,772, 1,732,828, 1,734,026, 1,734,027, same, Flow control fitting; 1,732,212, same, Chassis-lubricating installation, appeal filed Sept. 3, 1932, C. C. A., 3d Cir., Doc. 4981, *Auto Research Corp. et al* v. *Alemite Corp.*

1,231,764. (See 1,128,292.) 1,313,094. (See 1,203,190.)

1,316,967. (See 1,203,190.)

1,324,983, R. R. Rosenbaum, Process and apparatus for treating hydrocarbons; 1,869,337, Howard & Loomis, Art of converting oil, filed Oct. 22, 1932, D. C. Kans., 2 Div., Doc. 725–N, *Gasoline Products Co., Inc.*, v. *Winkler-Koch Engineering Co. et al.*

1,326,806, S. B. Tily, Tag printing and pinning machine; 1,528,023, F. Kohnle, Method of securing price marking tags; 1,667,810, same, Ticket or tag attaching machine, filed Oct. 15, 1932, D. C., N. D. Ohio, E. Div., Doc. E 4471, *The Monarch Marking System Co.* v. *Dennison Mfg. Co.* Doc. E 4472, *The Monarch Marking System Co.* v. *The May Co.*

1,340,461. (See 1,641,813.)

1,385,741, J. W. Dillon, Sound-deadener for building structures, filed Oct. 21, 1932, D. C., S. D. N. Y., Doc. E 72/24, *Guaranty Trust Co. of New York et al.* v. *Johns-Manville Corp.*

1,402,589, H. A. Farrand, Rule; 1,799,044, 1,799,094, same, Means for controlling resilient rules; 1,828,401; same, Resilient rule, filed Oct. 24, 1932, D. C., S. D. N. Y., Doc. E 72/88, *H. A. Farrand, Inc.*, v. *Kirsh & Kirsh, Inc.*

1,426,754. (See 1,128,292.)

1,428,605, P. Neary, Portable hopper, filed May 16, 1932, D. C., W. D. Wash., N. Div., Doc. 927, *E. Neary et al.* v. *King County, Wash.*

1,432,022. (See 1,128,292.)

1,445,961, P. M. Kree, Electrolysis Apparatus, filed Oct. 20, 1932, D. C., S. D. N. Y., Doc. E 72/8, *P. M. Kree* v. *H. Hoffman et al.* (*Hoffman Electrolysis Institute*). Doc. E 72/9, *P. M. Kree* v. *B. Fishbein et al.* (*Electrope Co.*).

1,448,550. (See 1,128,292.) 1,454,616. (See 1,223,659.)

1,467,831. (See 1,223,659.)

1,470,524, H. B. Burt, Process of making frozen confections; 1,718,997, same, Frozen confection, D. C., W. D. N. Y., Doc. 1516, *Good Humor Corp. of America* v. *J. Matheos et al.* (*Matheos Bros.*). Dismissed Oct. 20, 1932.

1,483,273. (See 1,128,292.) 1,493,595. (See 1,128,292.)

1,504,537. (See 1,128,292.) 1,528,023. (See 1,326,806.)

1,577,732, C. Lamb, Piston for slush pump, filed Oct. 1, 1932, D. C., S. D. Calif. (Los Angeles), Doc. E X–116–C, *C. Lamb et al.* v. *F. Dalton, et al.* (*D. & M. Machine Works*).

1,594,235. (See Re. 16,665.) 1,596,587. (See 1,223,659.)

1,596,589. (See 1,223,659.) 1,596,590. (See 1,223,659.)

1,607,230. (See 1,641,813.) 1,632,724. (See 1,227,481.)

1,632,767. (See 1,227,481.) 1,632,771. (See 1,227,481.)

1,632,772. (See 1,227,481.) 1,641,802. (See 1,641,813.)

1,641,803. (See 1,641,813.)

1,641,813, Johnston & Danly, Tractor; 1,641,802, 1,641,803, P. H. Danly, same; 1,607,230, B. R. Benjamin et al., Cultivator attachment for tractors; 1,340,461, Ronning & Ronning, Combination tractor implement; Re. 16,352, same, Tractor cultivator, filed Oct. 15, 1932, D. C., W. D. Mich., S. Div., Doc. E 2588, *International Harvester Co.* v. *Sears, Roebuck & Co.*

1,643,159, S. Greenberg, Child's overcoat, filed Oct. 19, 1932, D. C., S. D. N. Y., Doc. E 71/397, *L. Greenberg & Bro., Inc.*, v. *Scher & Feldman.* Same, Doc. E 70/384, *L. Greenberg & Bro., Inc.*, v. *A. F. Kneale, Inc.* Consent order of discontinuance (notice Oct. 25, 1932).

1,667,810. (See 1,326,806.)

1,673,727, L. V. Aronson, Cigar lighter; Des. 80,770, same, Combined cigarette container and pyrophoric lighter, filed Oct. 15, 1932, D. C., S. D. N. Y., Doc. E 71/329, *Art Metal Works, Inc.*, v. *Busch Kredit Jewelry Co., Inc.*

1,689,988. (See Re. 17,487.)

1,710,073, 1,714,191, S. Ruben, Electrical condenser, filed Oct. 25, 1932, D. C., S. D. N. Y., Doc. E 72/53, *Ruben Condenser Co. et al.* v. *Bloomingdale Bros., Inc.*

1,714,191. (See 1,710,073.) 1,718,997. (See 1,470,524.)

1,724,680, P. C. Ripley, Rosin core solder, filed Oct. 24, 1932, D. C., S. D. N. Y., Doc. E 72/39, *Kester Solder Co.* v. *Berry Solder Co., Inc., et al.*

1,782,212. (See 1,227,481.) 1,782,828. (See 1,227,481.)

1,734,026. (See 1,227,481.) 1,784,027. (See 1,227,481.)

1,754,009, J. M. Cage, Dehydration of oil and water emulsions, D. C., S. D. Calif. (Los Angeles), Doc. E S–94–M, *Dehydrators, Inc.*, v. *Petroleum Rectifying Co.* Dismissed pursuant to stipulation Sept. 9, 1932.

1,756,863. (See 1,203,190.)

1,763,380, 1,798,962, C. E. Trube, Electric coupling system, filed Oct. 21, 1932, D. C., E. D. N. Y., Doc. E 6630, *Haseltine Corp.* v. *Davega City Radio, Inc.*

1,768,462, A. H. Dixon et al., Method of making shredders; 1,768,463, same, Shredder, D. C., N. D. Ohio, W. Div., Doc. E 1072, *Rapid Mfg. Co.* v. *H. W. Kramer* (*Nu Wa Mfg. Co. et al.*). Patent 1,768,462 held valid and infringed, 1,768,463 held invalid (notice Oct. 21, 1932).

1,768,463. (See 1,768,462.)

1,779,193, D. Silberman, Garment fastening tape, D. C., S. D. N. Y., Doc. E 57/163, *Waldes Koh-I-Noor, Inc.*, v. *L. M. Rabinowitz & Co.*, Inc. Consent order of discontinuance (notice Oct. 24, 1932).

1,798,962. (See 1,763,380.) 1,799,044. (See 1,402,589.)

1,799,094. (See 1,402,589.)

1,818,804, W. Huppert, Electrical outlet, filed Oct. 26, 1932, D. C., E. D. N. Y., Doc. E 6635, *W. Huppert* v. *Deal Electric Co., Inc.*

1,828,401. (See 1,402,589.)

1,848,069, E. A. Wilson, Process of and gauge for weaving pile fabric, filed Oct. 20, 1932, D. C. Md., Doc. E 2108, *The Wilson Plush Mfg. Corp.* v. *Kay & Todd Co.*

1,855,168, C. L. Farrand, Loud speaker, filed Oct. 25, 1932, D. C., E. D. N. Y., Doc. E 6634, *Utah Radio Products Co. et al.* v. *Davega City Radio, Inc.*

1,869,337. (See 1,324,983.)

1,869,894, L. A. Hazeltine, Radio receiving system, filed Oct. 21, 1932, D. C., E. D. N. Y., Doc. E 6631, *Hazeltine Corp.* v. *Davega City Radio, Inc.*

Re. 16,352. (See 1,641,813.)

Re. 16,665 (of 1,594,235), E. A. Arndt, Automobile trunk, C. C. A., 8th Cir. (St. Louis), Doc. 9507, *Richards & Conover Hardware Co.* v. *Kar-Keen Mfg. Co., Inc., et al.* Decree of lower court dismissed on motion of appellant and mandate issued Oct. 18, 1932.

Re. 16,937, S. Iserman et al., Fuel for use in internal combustion engines, D. C., S. D. Calif. (Los Angeles), Doc. E V–22–M, *Patent Fuels & Color Corp.* v. *St. Helens Petroleum Co., Ltd.* Dismissed pursuant to stipulation Sept. 9, 1932.

Re. 17,323, R. D. Davies, Process of facing the cutting edges of drilling tools, D. C., S. D. Calif. (Los Angeles), Doc. E T–105–M, *P. L. & M. Co.* v. *J. C. Ballagh et al.* (*Armite Laboratories*). Dismissed for want of prosecution Sept. 14, 1932.

Re. 17,487, Re. 17,488, J. A. Heins, Floral rack; 1,689,988, C. J. White, same, D. C., S. D. Ill., N. Div., Doc. 1075, *Heinz Floral Rack Co.* v. *C. J. White* (*White Mfg. Co.*). Decree for plaintiff Oct. 25, 1932.

Re. 17,488. (See Re. 17,487.)

Des. 78,777, H. C. Mundstock et al., Pencil; Des. 78,795, C. R. Sheaffer, Fountain pen, D. C., S. D. N. Y., Doc. E 62/212, *W. A. Sheaffer Pen Co.* v. *Eagle Pencil Co.* Consent decree for plaintiff (notice Oct. 18, 1932).

Des. 78,795. (See Des. 78,777.)

Des. 80,770. (See 1,673,727.)

Des. 87,020, F. E. Packard, Shoe, filed Oct. 17, 1932, D. C., W. D. N. C. (Asheville), Doc. E 804, *G. E. Keith Co.* v. *Pollock's, Inc., et al.*

Des. 87,433, W. F. Haas, Button; Des. 87,434, same, Clasp, filed Oct. 24, 1932, D. C., S. D. N. Y., Doc. E 72/40, *B. Blumenthal & Co., Inc.*, v. *Dickson Mfg. Co.*

Des. 87,434. (See Des. 87,433.)

Changes in Classification

Order No. 3229, November 22, 1932, directs:

In *class 29, Metal Working* (Division 14), establish the following subclasses and definitions:

Blanks and processes
Carriage irons
152.1 Brake elements
152.2 Drums,
Electrical devices
155.51 Spark plugs,
155.52 Insulators,
155.53 Rotors,
155.54 Commutators,
155.55 Contacts and terminals.

152.1. BLANKS AND PROCESSES, CARRIAGE IRONS, BRAKE ELEMENTS. Blanks and processes for forming brake shoes and other brake elements, except brake drums, for use in carriages, automobiles, and railway cars.

Note.—Molding processes are in classes 18, PLASTICS, and 22, METAL FOUNDING.

152.2. BLANKS AND PROCESSES, CARRIAGE IRONS, BRAKE ELEMENTS, DRUMS. Blanks and processes for forming brake drums for use in carriages, automobiles, and railway cars.

155.51. BLANKS AND PROCESSES, ELECTRICAL DEVICES, SPARK PLUGS. Blanks and processes for making spark plugs.

155.52. BLANKS AND PROCESSES, ELECTRICAL DEVICES, INSULATORS. Blanks and processes for making metal insulators, parts and supports therefor.

Note.—See also this class, subclass 159.01, for similar processes.

155.53. BLANKS AND PROCESSES, ELECTRICAL DEVICES, ROTORS. Blanks and processes for making rotors and parts thereof, other than commutators, for dynamo-electric machines.

Note.—For molding processes per se, see classes 18, PLASTICS, and 22, METAL FOUNDING.

155.54. BLANKS AND PROCESSES, ELECTRICAL DEVICES, COMMUTATORS. Blanks and processes for making commutators and commutator parts.

155.55. BLANKS AND PROCESSES, ELECTRICAL DEVICES, CONTACTS AND TERMINALS. Blanks and processes for making contacts and terminals for electrical apparatus.

Note. See also this class, subclass 169, and class 113, SHEET METAL WARE, MAKING, subclass 119.

The patents contained in subclasses 152.1 and 152.2 have been taken for the most part from class 29, subclass 152, and those contained in subclasses 155.51–155.55 have been taken for the most part from class 29, subclass 155.5.

In *class 29, Metal Working* (Division 14), change the existing definition of subclass 155.5, Blanks and processes, Electrical devices, to read:

Blanks and processes for making electrical devices coming under the class definition.

In *class 36, Boots, Shoes, and Leggings* (Division 11), abolish the following subclasses, with their definitions:

Boots and shoes
Rubber
5 Overshoes
6 Heelless,
Sandals
11.6 Protective
11.7 Spring.
Antislipping devices
Detachable
63 Sandal.

The patents formerly contained in these subclasses have been placed in class 36, subclasses 7.1–7.8, established in this order.

In *class 36, Boots, Shoes, and Leggings* (Division 11), establish the following subclasses and definitions, said subclasses to be coordinate with and preceding subclass 8.1:

Boots and shoes
7.1 Overshoes
7.2 Heelless,
7.3 Rubber
7.4 Heelless,
7.5 Sandals
7.6 Antislipping
7.7 Heelless,
7.8 Spring.

7.1. BOOTS AND SHOES, OVERSHOES. Overshoes not provided for in the subclasses indented hereunder.

7.2. BOOTS AND SHOES, OVERSHOES, HEELLESS. Overshoes, the sole portions of which do not extend under the heels of the shoes protected.

Note.—See this class, subclasses 7.4 and 7.7.

7.3. BOOTS AND SHOES, OVERSHOES, RUBBER. Rubber overshoes.

7.4. BOOTS AND SHOES, OVERSHOES, RUBBER, HEELLESS. Rubber overshoes, the sole portions of which do not extend under the heels of the shoes protected.

7.5. BOOTS AND SHOES, OVERSHOES, SANDALS. Overshoes of the sandal-type.

7.6. BOOTS AND SHOES, OVERSHOES, SANDALS, ANTISLIPPING. Sandal overshoes having antislip means on the sole surface thereof.

Note.—For other antislipping means on boots and shoes, see this class, subclass 59, and the subclasses indented thereunder.

7.7. BOOTS AND SHOES, OVERSHOES, SANDALS, ANTISLIPPING, HEELLESS. Sandal overshoes having antislip means on the sole surface thereof and in which the sole portions do not extend under the heels of the shoes protected.

7.8. BOOTS AND SHOES, OVERSHOES, SANDALS, SPRING. Sandal overshoes provided with cushioning means. This subclass includes jumping sandals.

The patents contained in these subclasses have been taken from various subclasses in class 36, including those subclasses abolished in this order.

In *class 36, Boots, Shoes, and Leggings* (Division 11), add the following search-note to the definitions of subclasses 59, Antislipping devices, and 62, Antislipping devices, Detachable:

Note.—For sandals provided with antislipping means, search this class, subclasses 7.6 and 7.7.

In *class 272, Amusement and Exercising Devices* (Division 62), subclass 70, Exercising, Walking, change the search-note following the definition to read:

Search Class—
36—BOOTS, SHOES, AND LEGGINGS, subclass 7.8, for jumping sandals.

In *class 137, Water Distribution* (Division 39), establish the following subclasses, to come after subclass 157:

164 Proportional flow
165 With mixing,
166 Dividers.

The patents contained in these subclasses have been taken for the most part from class 137, subclass 78, and are directed to automatic means for controlling the flow of a plurality of streams of fluid so that there is a substantially constant ratio between them, including means to combine various streams proportionally or to divide a single stream into proportional streams.

Adjudicated Patents

(D. C. Md.) Urschel patent, No. 1,256,491, for process for snipping string beans, *Held* invalid. *Chisholm-Ryder Co.* v. *Buck*, 1 F. Supp. 268.

(D. C. Md.) Urschel patent, No. 1,256,492, for apparatus for snipping string beans, claims 1 and 7 *Held* not infringed. *Id.*

(D. C. Md.) Urschel patent, No. 1,336,991, for apparatus for snipping string beans, claims 1, 2, and 8 *Held* not infringed. *Id.*

(D. C. N. Y.) Ceasar patent, No. 1,571,930, for steaming device for yarns, claims 1 and 2 *Held* not infringed. *Ceasar v. Joseph Pernick Co.*, 1 F. Supp. 290.

(D. C. Pa.) Aram reissue patent, No. 17,416, for stoker construction, claims 2, 9, 10, and 11 *Held* invalid. *Westinghouse Electric & Mfg. Co.* v. *American Engineering Co.*, 1 F. Supp. 287.

Adverse Decisions in Interference

In interferences involving the indicated claims of the following patents final decisions have been rendered that the respective patentees were not the first inventors with respect to the claims listed:

Pat. 1,757,473, A. F. Pieper, Syringe, decided November 25, 1932, claims 1, 2, 3, 7, 8, 21, 23, and 24.

Pat. 1,772 932, Sol Einstein, Grinding machinery, decided November 28, 1932, claims 1, 2, 3, 5, 6, 7, 9, 12, 13, 14, 16, 17, 18, 19, 20, 23, 24, 27, 28, 35, and 36.

Pat. 1,779,467, Sol Einstein, Process of grinding, decided November 28, 1932, claims 1, 2, 3, 4, 5, 6, 8, and 9.

Pat. 1,807,101, E. J. Lees, Automatic temperature control, decided October 3, 1932, claim 5.

Pat. 1,846,789, E. T. Bush and A. J. Sower, Carburetor, decided November 22, 1932, claim 1.

Disclaimers

155,994.—*The W. H. Killian Co.*, Baltimore, Md. CANNED FOODSTUFFS—NAMELY, CANNED FRUITS, CANNED VEGETABLES, CANNED SOUPS, CANNED OYSTERS, AND BEANS WITH PORK. Trade-Mark Registered June 13, 1922. Disclaimer filed November 28, 1932, by the registrant.

Hereby declares that it has abandoned the use of the words "White House" as a trade-mark for canned fruits and hereby disclaims any right to the exclusive use of such words as a trade-mark for such goods, viz.: canned fruits.

1,788,819.—*Addison C. Armstrong*, Baltimore, Md. RADIATOR SUPPORT. Patent dated January 13, 1931. Disclaimer filed November 28, 1932, by the assignee, *Campbell Metal Window Corporation*.

Hereby enters this disclaimer to said patent, as follows:

It disclaims from the scope of said Letters Patent the claims numbered 4, 5, 6, 7, 8, and 9.

1,808,716.—*Israel Rosenblum*, Jackson Heights, N. Y. RESIN COMPLEX AND METHOD OF PRODUCING THE SAME. Patent dated June 2, 1931. Disclaimer filed November 19, 1932, by the patentee.

Hereby enters this disclaimer to that part of the said specification which is in the following words, to wit:

The following words on page 3, line 100: "by refluxing or".

The following words on page 4, line 1: "by refluxing or".

The following words on page 4, line 12: "by refluxing or".

1,830,401.—*Benjamin F. Miessner*, Short Hills, N. J. ELECTROMAGNETIC SOUND REPRODUCER. Patent dated November 3, 1931. Disclaimer filed November 25, 1932, by the assignee, *Miessner Inventions, Inc.*

Hereby enter this disclaimer to that part of the claim in said specification which is in the following words, to wit:

"3. In an electromagnetic sound reproducer the combination of a magnet including means for the energizing thereof by direct current, an air gap in the magnetic circuit of said magnet, a dynamic coil adapted to be energized with sound representing current operatively located in said gap, a second coil associated with said magnetic system connected in opposing series with said dynamic coil, and a magnetic shield substantially isolating said second coil from stray fields of said magnetic system extraneous to said gap not effective on said dynamic coil."

TRADE-MARKS

OFFICIAL GAZETTE, DECEMBER 20, 1932

[VOL. 425. No. 3]

The following trade-marks are published in compliance with section 6 of the act of February 20, 1905, as amended March 2, 1907. Notice of opposition must be filed within thirty days of this publication.

Marks applied for "under the ten-year proviso" are registrable under the provision in clause (b) of section 5 of said act as amended February 18, 1911.

As provided by section 1 of said act, a fee of ten dollars must accompany each notice of opposition.

CLASS 1

Raw or Partly-Prepared Materials

Ser. No. 331,570. THE AMERICAN OAK LEATHER COMPANY, Cincinnati, Ohio. Filed Oct. 26, 1932.

Am-O-Flex

For Sole Leather.
Claims use since June 27, 1925.

CLASS 2

Receptacles

Ser. No. 324,353. PAC-KUPS INCORPORATED, Easton, Pa. Filed Feb. 20, 1932.

CHILY BEAR

For Containers of Paper or Cardboard-Like Material for Frozen Confections.
Claims use since Feb. 12, 1932.

CLASS 3

Baggage, Animal Equipments, Portfolios, and Pocketbooks

Ser. No. 329,835. H. G. MILES LIMITED, London, England. Filed Aug. 4, 1932.

SPANDIT

For Device in the Form of a Flexible Strap or Band to Facilitate the Carrying of Articles.
Claims use since June 12, 1931.

CLASS 4

Abrasive, Detergent, and Polishing Materials

Ser. No. 326,161. RUSSELL SABOR, doing business as Aeronautical Industries Research, Minneapolis, Minn. Filed Apr. 15, 1932.

HANGAIR

For Soaps, Scrubbing Compounds, Abrasive Cleaning Compounds for Cleaning Porcelain Vitreous China and Enameled Iron Ware, Scouring Powders; Detergents for Cleaning Floors, Wood Work, and Painted Surfaces; and Enamel Cleaners, Tile, Terrazzo, and Floor Cleaners.
Claims use since Mar. 7, 1932.

Ser. No. 328,168. HENRY S. GUIO, Los Angeles, Calif. Filed June 21, 1932.



For Razor Strops.
Claims use since May 1, 1932.

Ser. No. 329,153. RAYNORSHYNE PRODUCTS, INC., San Antonio, Tex. Filed July 23, 1932.



For Automobile Top Dressing, a Leather Dressing, a Shoe Polish, and a Black Preparation Combining a Dye and Polish, for Shoes.
Claims use since Apr. 19, 1932.

Ser. No. 329,202. EDWARD RICHARDSON, doing business as R. D. R. Manufacturing Co., Maywood, Ill. Filed July 29, 1932.

Run
Dirt
Run

For Cleaning Preparation for General Household and Laundry Use.
Claims use since June 5, 1931.

Ser. No. 329,704. CHARLES COOPER & COMPANY, Newark, N. J., and New York, N. Y. Filed Aug. 20, 1932.

COOPERS
SINCE 1857

CREAM AMMONIA

The words "Cream Ammonia" are hereby disclaimed apart from the other features of the mark as shown on the drawing.
For Liquid Ammonia Cleaning Compound.
Claims use since July 27, 1932.

Ser. No. 331,240. ELIZABETH ARDEN, INC., New York, N. Y. Filed Oct. 14, 1932.

VELVA BATH

No claim is made to the word "Bath" apart from the mark as shown.
For Liquid Soaps.
Claims use since 1923.

Ser. No. 331,342. FREDERICK H. PARKER, doing business as Olminol, North Arlington, N. J. Filed Oct. 18, 1932.

OLMINOL

For Hand Cleanser.
Claims use since July 5, 1932.

Ser. No. 331,393. CHARLES B. WILLIAMS, doing business as C. W. Mfg. Co., Cleveland, Ohio. Filed Oct. 18, 1932.

CW

The trade-mark consists of the initials of the applicant's first and last names as written by himself.
For Cleaning Compounds for White Shoes.
Claims use since Oct. 12, 1932.

Ser. No. 331,634. AMERICAN DISINFECTING COMPANY, Sedalia, Mo. Filed Oct. 28, 1932.

DRI-SHEEN

For Detergents for Use in Dry-Cleaning.
Claims use since Oct. 10, 1932.

CLASS 5

Adhesives

Ser. No. 331,727. MARTIN DENNIS COMPANY, Newark, N. J. Filed Oct. 31, 1932.

TAK

For Mild Adhesive Preparation for Application to the Hands to Assure Secure Gripping of Tools, Golf Clubs, Tennis Racquets, and Other Hand Manipulated Implements.
Claims use since July, 1932.

CLASS 6

Chemicals, Medicines, and Pharmaceutical Preparations

Ser. No. 322,601. DESIDER ROSENBERG, doing business as Seboline Chemical Company, Kansas City, Mo. Filed Dec. 31, 1931.

SEBOLINE

The portrait appearing on the drawing is fanciful.
For Preparation for Skin Diseases.
Claims use since Oct. 21, 1930.

Ser. No. 323,956. MORTON MANUFACTURING CORPORATION, doing business as Blair Laboratories, Lynchburg, Va. Filed Feb. 8, 1932.

SNOW WHITE

For Hair Beautifying Cream.
Claims use since Jan. 26, 1930.

Ser. No. 326,386. ROBERT MCNEIL, Philadelphia, Pa. Filed Apr. 22, 1932.

Duo-test

No registration rights are claimed for the word "Test" apart from the mark shown on the drawing.
For Cardiac Stimulant and Diuretic.
Claims use since Apr. 24, 1928.

Ser. No. 326,444. THE URBANA LABORATORIES, Urbana, Ill. Filed Apr. 22, 1932.

Lac-hi-potash

The word "Potash" is hereby disclaimed.
For Chemical Reagents for Use in Testing the Available and Water Soluble Potassium in Soils.
Claims use since Mar. 1, 1932.

Ser. No. 326,929. ABBOTT LABORATORIES, Chicago, Ill. Filed May 10, 1932.

DULCET

For Calomel Thyroid, Bismuth, Phenol-phthalein, Calcium, Iron, Arseno-Iron, Arsenic, Atropine, Albutannin, Tartar Emetic, and Terpin Hydrate.
Claims use since Oct. 7, 1931.

Ser. No. 327,803. JOHN NUNZIO MICELI, M. D., doing business as Hyg-A-Tabs Laboratories, Brooklyn, N. Y. Filed June 7, 1932.

HYG-A-TABS

For Antiseptic Vaginal Tablets.
Claims use since Sept. 17, 1931.

Ser. No. 327,887. NEW LIFE MEDICINE CO., Hollywood, Calif. Filed June 10, 1932.



The portraits shown in the drawing are purely fanciful. The words "Beauty" and "Strength" are disclaimed apart from the other features of the mark shown in the drawing.
For Medicinal Tablets Acting as a Ductless Gland Food and Nerve Stimulant Beneficial in Cases of Enlarged Prostate Gland with Men and Postpones Menopause in Women.
Claims use since May 1, 1932.

Ser. No. 329,146. LES PARFUMS DE MOLYNEUX (SOCIETE A RESPONSABILITE LIMITEE), Paris, France. Filed July 28, 1932.

CHARM DE MOLYNEUX

For Perfumes, Toilet Water, Face Powder, Talcum Powder, Rouge, Lipsticks, Lotion for the Skin and Hair.
Claims use since Dec. 28, 1928.

Ser. No. 329,273. R. F. DOWNS, doing business as Dow Pharmacal Co., Dallas, Tex. Filed July 30, 1932.

BISMA-ROID

For Antacid and Indigestion Preparation.
Claims use since Jan. 15, 1932.

Ser. No. 329,288. CHAS. L. HUISKING & CO., INC., New York, N. Y. Filed Aug. 2, 1932.



No claim is made to the term "Brand" appearing in the drawing apart from the word "Tower" and the representation of the tower.

For Milk Sugar U. S. P., Lanoline Anhydrous U. S. P., Coal Tar Disinfectant, Extract Witch Hazel, Peroxide Hydrogen U. S. P., and Cocoa Butter U. S. P.

Claims use since January, 1931.

Ser. No. 329,398. DUART MANUFACTURING CO. LTD., formerly Pacific Hair Goods Company, Ltd., San Francisco, Calif. Filed Aug. 8, 1932.

No-ambor

For Permanent Waving Solution.
Claims use since May 5, 1932.

Ser. No. 329,641. MIRACLO DRUG COMPANY, Celoron, N. Y. Filed Aug. 18, 1932.

XLENTO

For Herb Preparation for the Treatment of Heart; Dropsy, Kidney; Indigestion, Nervousness, Stomach; Gall Stones; Fits, Epilepsy, Falling Sickness; Constipation, Bladder, Backache; Rheumatism; Bright's Disease, Diabetes, Pimples, Muddy Complexion; Greasy or Flabby Skin and Piles.

Claims use since May 3, 1932.

Ser. No. 329,928. BECK, KOLLER & COMPANY, INC., Detroit, Mich. Filed Aug. 29, 1932.

KOPOL

No claim is made herein to the words "Synthetic Resin" apart from the mark as shown.

For Synthetic Resin.
Claims use since Feb. 19, 1929.

Ser. No. 329,971. MATA-HARI, INCORPORATED, Washington, D. C. Filed Aug. 29, 1932.

Mata-Hari

For Cosmetics, Namely—Face Powder, Rouge (Dry), Lip Stick, Anti-Wrinkle Cream, Liquid Cleansing Cream, Solid Cleansing Cream, Freckle Cream, Blackhead Cream, Astringent Vegetal, Dermol Astringent, Pore Cream, Rouge Cream, Nourishing Cream, Protection Cream, Acne Crystals Perfumes, Toilet Waters, Bath Salts, Body Powder, Talcum Powder and Acne Tablets, Epsom Salts, and Creams and Ointments for The Treatment of the Skin, Including Top and Lower Layers.

Claims use since July, 1930.

Ser. No. 330,195. BRADY & SCHMIDGALL, Vienna, Austria. Filed Sept. 9, 1932.



For Purgament and Preparation for Treating Obesity.
Claims use since Dec. 17, 1927.

Ser. No. 330,206. NAAMLOOZE VENNOOTSCHAP CHEMISCH-PHARMACEUTISCHE FAPRIEK "MENOLINE" (MENOLINE DRUG COMPANY), The Hague, Netherlands. Filed Sept. 9, 1932.

MIL-SAN

For Pharmaceutical Products More Especially Contraceptive Preparations.
Claims use since July 1, 1931.

Ser. No. 330,290. CAPITAL CHEMICAL DRUG COMPANY, INC., Montgomery, Ala. Filed Sept. 13, 1932.

P.I. SPRAY
PEAGLER'S
INSECTICIDE SPRAY

No claim is made herein, under the statute, to the name "Peagler's", nor to the words "Spray" and "Insecticide Spray," except when used in conjunction with the mark shown.

For Insecticides.
Claims use since 1926.

Ser. No. 330,382. THOMAS ROSA, New York, N. Y. Filed Sept. 15, 1932.

TRADE **CUFERA** MARK
CUFEREX

Applicant hereby disclaims any exclusive right to the words "Trade Mark."

For Preparation of a Tonic for Anemia.
Claims use since June 1, 1932.

Ser. No. 330,411. ROBERT G. REAVES, Knoxville, Tenn. Filed Sept. 16, 1932.

VENTOLEUM

For Medicinal Preparation Used to Shrink the Nasal Mucous Membrane and to Aid in the Ventilation of the Sinuses.

Claims use since Aug. 10, 1932.

Ser. No. 330,418. CAVENDISH CHEMICAL CORPORATION, New York, N. Y. Filed Sept. 17, 1932.

CAVOSEPT

For Antiseptic Preparation.
Claims use since July, 1929.

Ser. No. 330,507. ALLEN & HANBURYS, LIMITED, London, England. Filed Sept. 20, 1932.

I-SO-GEL

No claim being made to the exclusive use of the term "Gel" apart from the mark shown in the drawing.

For Medicinal Laxative Preparation.
Claims use since March, 1931.

Ser. No. 330,641. WALKER, CORP & CO. INC., Syracuse, N. Y. Filed Sept. 24, 1932.

LETH-O-GERM

The word "Germ" is disclaimed apart from the mark as shown.

For Vaginal Antiseptic.
Claims use since Aug. 31, 1932.

Ser. No. 330,734. NORVAL S. HERBERT, doing business as Busze's Pharmaceutical Company, Washington, D. C. Filed Sept. 27, 1932.



For Preparation Recommended for Athlete's Foot and Other Fungi Infections.
Claims use since Aug. 17, 1932.

Ser. No. 330,835. RICHEL COMPANY, INC., Upper Darby, Pa. Filed Sept. 30, 1932.



No claim is made to the word "Philadelphia" apart from the mark shown in the drawing.

For Cosmetics—Namely, Cleansing Cream, Tissue Cream, Finishing Cream, Pore Cream, Acne Cream, Deodorant Cream, Scalp Ointment and Eye Lash Grower.
Claims use since Nov. 15, 1931.

Ser. No. 330,849. SAMUEL HELLER, doing business as Karsal Laboratories, Brooklyn, N. Y. Filed Oct. 1, 1932.

KAR-SAL

For Palatable Effervescent Preparations for Internal Use as a Laxative and Refrigerant.
Claims use since Aug. 1, 1932.

Ser. No. 330,882. VIVIAN L. APPLETON, doing business as The Actomint Company, St. Louis, Mo. Filed Oct. 3, 1932.

Acto-Mint

No exclusive claim is made to the word "Mint" apart from the mark shown.

For Medicinal Preparation for the Relief of Constipation.

Claims use since Sept. 1, 1932.

Ser. No. 330,938. JOSEPH A. STREKER, doing business as Twoclaimz Mfg. Co., Providence, R. I. Filed Oct. 4, 1932.

TWOCLAIMZ

For Medicinal Preparations for Personal Use—Namely, Tooth Powders, Tooth Pastes, Antiseptic Solutions.

Claims use since Sept. 15, 1932.

Ser. No. 330,949. GARBER-EAGLE OIL CORP., Brooklyn, N. Y. Filed Oct. 5, 1932.

ELECTRIFIED CLEANSER

The word "Cleanser" is disclaimed apart from the mark shown in the drawing.

For Bleaching and Washing Solution with Incidental Deodorizing, Disinfecting, and Sterilizing Qualities.

Claims use since January, 1931.

Ser. No. 331,098. THE BEVILITE COMPANY LTD., Los Angeles, Calif. Filed Oct. 10, 1932.



For Chemical Compound to be Added to Gasoline to Increase Its Power and to Reduce Carbon.

Claims use since Sept. 23, 1932.

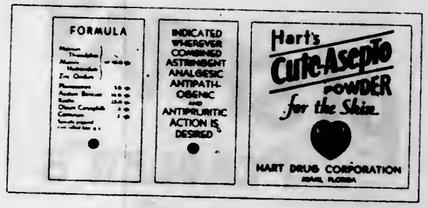
Ser. No. 331,102. WILLIAM B. CRONIN, doing business as Cronin's Drug Store, Hartford City, Ind. Filed Oct. 10, 1932.

CRON-A-CIDE

For Medicine for Athlete's Foot, Golfer's Itch and Other Ring Worm Infections.

Claims use since May 14, 1932.

Ser. No. 331,107. HART DRUG CORPORATION, Miami, Fla. Filed Oct. 10, 1932.



No claim is made to the wording on the drawing with the exception of "Hart's", "Cute-Asepto," "Hart," and "Hart Drug Corporation," nor to the representation of the label.

For Medicinal Powder Preparation for the Skin and Mucous Membranes.

Claims use since Sept. 19, 1932.

Ser. No. 331,153. JOHN R. IVEY, Littleton, N. C. Filed Oct. 11, 1932.

"BOIL-DETH"

For Preparation for Relief of Boils.

Claims use since Oct. 5, 1932.

Ser. No. 331,179. THE FIRESTONE TIRE & RUBBER COMPANY, Akron, Ohio. Filed Oct. 12, 1932.



For Anti-Freeze Solution for Automobile Radiators, and Rubber Solvent.

Claims use since Oct. 20, 1931, on anti-freeze; Oct. 29, 1926, on rubber solvent.

Ser. No. 331,180. MARCO AURELIO HERRADORA, doing business as Unite Pharmaceutique Francaise, New York, N. Y. Filed Oct. 12, 1932.

VITAMINERALIS

For Medicine for Internal Use—to wit, Vitamin Rich Tonic and Reconstructant.

Claims use since December, 1930.

Ser. No. 331,229. SAKS & COMPANY, New York, N. Y. Filed Oct. 13, 1932.



For Perfumes.

Claims use since Apr. 1, 1932.

Ser. No. 331,239. ELIZABETH ARDEN, INC., New York, N. Y. Filed Oct. 14, 1932.

MA RUE

For Perfumes and Perfumery.

Claims use since September, 1932.

Ser. No. 331,247. COTY, INC., Wilmington, Del., and New York, N. Y. Filed Oct. 14, 1932.

LA FOUGERAIE
AU CRÉPUSCULE

For Perfumes and Face Powder.

Claims use since Oct. 7, 1932.

Ser. No. 331,261. THEODORE LEVINE, doing business as The Myalora Company, Brooklyn, N. Y. Filed Oct. 14, 1932.



For Preparation Used in the Treatment of Rheumatism and Gouty Conditions.

Claims use since Oct. 11, 1932.

Ser. No. 331,268. SMITH, KLINE & FRENCH LABORATORIES, Philadelphia, Pa. Filed Oct. 14, 1932.

PENTNUCLEOTIDE

For Medicinal Preparation Recommended for Intramuscular and Intravenous Use.

Claims use since July 12, 1932.

Ser. No. 331,314. BENJAMIN NAAR, doing business as Rev. Naar & Sons, New Brunswick, N. J. Filed Oct. 17, 1932.



The words "Epileptic Compound" and "A New Discovery" are disclaimed apart from the other features of the mark shown in the drawing.

For Preparation for Treating Epilepsy.

Claims use since Sept. 2, 1932.

Ser. No. 331,693. ODORA COMPANY, INC., New York, N. Y. Filed Oct. 29, 1932.

VAPORATOR

For Moth Repellant.

Claims use since Jan. 15, 1932.

Ser. No. 331,717. THE AMMONOL CHEMICAL COMPANY, New York, N. Y. Filed Oct. 29, 1932.

U-CAM

For Disinfectant, Antiseptic, and Deodorant.

Claims use since Aug. 3, 1931.

CLASS 13

Hardware and Plumbing and Steam-Fitting Supplies

Ser. No. 302,975. VEREINIGTE STAHLWERKE AKTIENGESELLSCHAFT, Dusseldorf, Germany. Filed June 28, 1930.



The exclusive use of the words "Patina Brand" is disclaimed apart from the mark as shown.

For Wire Goods—Namely, Wire Gauze, Wire Netting, and Other Wire Fencing Materials, Wire Lace, Wire Pins, Wire Nails, Wire Rings, Barbed Wire, Anchor Strip Iron Wire; Chains; Small Iron Ware—Namely, Clips, Screws, Tie Rods, Spikes; Kettles of Sheet Metal, Steel Conduits, Metal Coal Channels, Water Ducts for Mining Purposes; Steam, Gas, and Water Pipes; Anchor Chains, Woven Wire, Fence Wire, Sleeper Screws, Bolts and Nuts, Rivets, and Heavy Metal Chains.

Claims use since Dec. 16, 1929.

Ser. No. 321,775. NASON MANUFACTURING COMPANY, New York, N. Y. Filed Dec. 4, 1931.

TITAN

For Steam Traps and Parts Thereof.

Claims use since Jan. 15, 1931.

Ser. No. 328,383. COLUMBIAN ENAMELING & STAMPING CO., Terre Haute, Ind. Filed June 28, 1932.



The representation of the label per se, the representation of the goods, and all words except "Columbian Dishmaster" and applicant's corporate name, as shown in the drawing of the mark are disclaimed. Linings shown in the drawing indicate colors—red, green, and yellow.

For Rectangular Enameled Dish Pans.

Claims use since May 4, 1932.

Ser. No. 330,999. ISADORE JAFFE, Cleveland, Ohio. Filed Oct. 6, 1932.



The representation of the goods shown in the drawing is herein disclaimed.

For Human Heel and Toe Plates.

Claims use since July 1, 1932.

Ser. No. 331,116. NORTHERN INDIANA BRASS COMPANY, Elkhart, Ind. Filed Oct. 10, 1932.



No claim is made to the words "Sub-Surface Irrigation" and the representation of the goods apart from the mark shown.

For Sub-Surface Irrigation Apparatus Consisting of Water Pipes, Valves, Controls, and Pipe Fittings.

Claims use since Apr. 1, 1932.

Ser. No. 331,695. OTIS ELEVATOR COMPANY, Jersey City, N. J., and New York, N. Y. Filed Oct. 29, 1932.



For Door Closers.

Claims use since July 15, 1924.

Ser. No. 331,698. OTIS ELEVATOR COMPANY, Jersey City, N. J., and New York, N. Y. Filed Oct. 29, 1932. Under section 5b, of the act of 1905, as amended in 1920.

OTIS

Applicant claims ownership of trade-mark registration No. 204,849 effected Oct. 27, 1925, under the 10-year proviso clause of the act of Feb. 20, 1905.

For Door Closers and Door Hangers.

Claims use since June 15, 1924.

CLASS 16

Paints and Painters' Materials

Ser. No. 330,991. THE CINCINNATI VARNISH COMPANY, Cincinnati, Ohio. Filed Oct. 6, 1932.

CALCUTTA-NAMEL

No claim is made to the term "Namel" apart from the mark as shown. The applicant is the owner of registration No. 253,322 dated Feb. 26, 1929, covering "Calcutta" under the ten-year proviso of the act of 1905.

For Ready Mixed Paints, Paint Enamels, Stains, Varnishes, and Lacquers.

Claims use since June 14, 1932.

Ser. No. 331,306. FURNITURE CITY POLISH COMPANY, Grand Rapids, Mich. Filed Oct. 17, 1932.

FURNITONE

For Polishing Material and More Particularly for a Polishing Preparation for Furniture and the Like.

Claims use since Sept. 15, 1932.

Ser. No. 331,998. THE TOCO CHEMICAL COMPANY, Denver, Colo. Filed Nov. 8, 1932.



For Cleaner and Polish for Automobiles.

Claims use since Oct. 12, 1932.

CLASS 17

Tobacco Products

Ser. No. 330,572. JOSE ESCALANTE & CO., Chicago, Ill. Filed Sept. 22, 1932.



The portrait or picture which forms a part of the trade-mark is merely fanciful.

For Cigars.

Claims use since 1884.

Ser. No. 330,576. LILIENFIELD BROS. & CO., Chicago, Ill. Filed Sept. 22, 1932.



For Cigars.

Claims use since 1899.

Ser. No. 330,675. ISIDOR I. ZEEMAN, New York, N. Y. Filed Sept. 26, 1932.

TEL-AVIV

For Cigarettes.

Claims use since Sept. 1, 1931.

CLASS 22

Games, Toys, and Sporting Goods

Ser. No. 330,718. THEODORE WILLIAMS, Syracuse, N. Y. Filed Sept. 27, 1932.

ROW-FIT

For Exercising Machines.

Claims use since Aug. 15, 1932.

Ser. No. 331,709. DONALD H. SWEET, doing business as Freeman and Sweet, Chicago, Ill. Filed Oct. 29, 1932.

CHECKAWORDS

No claim is made to the lines appearing on the drawing, such lines being shown only for the purpose of indicating the position of the trade-mark on the goods.

For Table Board Game Played with Pieces.

Claims use since Apr. 8, 1931.

CLASS 23

Cutlery, Machinery, and Tools, and Parts Thereof

Ser. No. 311,496. THE UNION FORK & HOE COMPANY, Columbus, Ohio. Filed Feb. 26, 1931.



Dad Atterbury

The picture is that of an imaginary individual known to applicant's trade as "Dad Atterbury."

For Hand Agricultural Implements—Namely, Cutters, Harvesters, Chisels, Cleaners, Cultivators, Edgers, Forks, Hoes, Mattocks, Hooks, Scrapers, Spades, Trowels, Weeders, Drags, Shovels, Scoops, and Rakes.

Claims use since July 1, 1930.

Ser. No. 327,823. L & M MANUFACTURING CO., Cleveland, Ohio. Filed June 8, 1932.

GIANT GRIP

For Concrete Forming Hand Tools—Namely, Scrapers, Hand Floats, Concrete Brooms, Split Floats, Rollers, Split Edgers, Hand Lutes, Curb Edgers, Slab Edgers, Groovers, and Stake Pullers.

Claims use since Mar. 19, 1932.

Ser. No. 329,221. COCKSHUTT PLOW COMPANY LIMITED, Brantford, Ontario, Canada. Filed July 30, 1932.

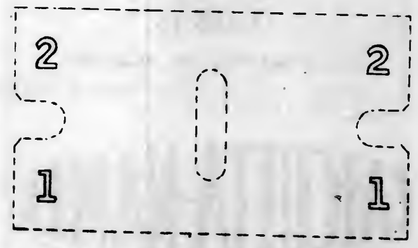
TILLER COMBINE

The applicant disclaims registration rights only to the word "Tiller" apart from the mark as shown.

For Implements for Simultaneously Plowing, Cultivating, and Seeding, and Parts of Such Implements.

Claims use since Apr. 7, 1931.

Ser. No. 330,152. AMERICAN SAFETY RAZOR CORPORATION, Brooklyn, N. Y. Filed Sept. 7, 1932.



No exclusive claim is made to the outline representation of a razor blade and the perforations shown in the drawing. The mark comprises the numerals "1—1" adjacent one edge of the goods at opposite ends respectively, and the numerals "2—2" adjacent the other edge of the goods at opposite ends respectively, on both faces of the goods.

For Safety Razors and Safety Razor Blades.

Claims use since June 15, 1932.

Ser. No. 330,441. GLOBE AUTOMATIC SPRINKLER COMPANY, Philadelphia, Pa. Filed Sept. 19, 1932.

SAVEALL

For Water Motors and Portable Hand Fire Extinguishers.

Claims use since Dec. 23, 1927.

Ser. No. 330,445. THE BRISTOL AEROPLANE COMPANY LIMITED, Bristol, England. Filed Sept. 19, 1932.

PEGASUS

For Aircraft Engines.

Claims use since Feb. 3, 1932.

Ser. No. 331,343. RAY DAY PISTON CORPORATION OF DETROIT, Detroit, Mich. Filed Oct. 18, 1932.

RAY DAY

For Pistons for Internal Combustion Engines.

Claims use since Mar. 15, 1928.

CARNEGIE LIBRARY OF ATLANTA

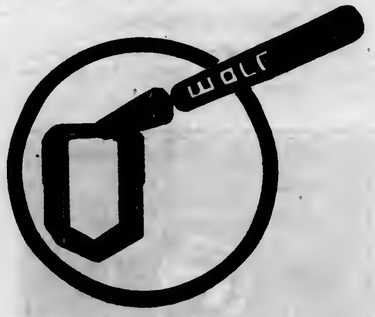
Ser. No. 331,344. RAY DAY PISTON CORPORATION OF DETROIT, Detroit, Mich. Filed Oct. 18, 1932.

"PEPPER"

For Pistons for Internal Combustion Engines.

Claims use since Feb. 15, 1932.

Ser. No. 331,524. AUGUST WOLF, EISENWARENFABRIK GBS. M. BESCHR. HAFTUNG, Betzdorf, (Sieg), Germany. Filed Oct. 24, 1932.



No claim is made to the exclusive use of the word "Betzdorf" nor to the representation of the goods shown in the drawing.

For Garden and Agricultural Tools—Namely, Hand Planters, Dibbles, Cultivators, Rakes, Plows, Weeding-Claws, Grubbers, Spades, and Hoes.

Claims use since Jan. 1, 1931.

Ser. No. 331,664. BAR-BA-SAL DISTRIBUTING CORPORATION, New York, N. Y. Filed Oct. 29, 1932.

Bar-ba-sal

For Razor and Razor Blades.

Claims use since Aug. 15, 1932.

CLASS 26

Measuring and Scientific Appliances

Ser. No. 321,039. SPRAGUE SPECIALTIES COMPANY, North Adams, Mass. Filed Nov. 11, 1931.

VISIVOX

For Synchronised Sound and Picture Projector with Phonograph and Radio Set Features in Combination.

Claims use since Feb. 11, 1931.

Ser. No. 324,396. PICTORIAL REVIEW COMPANY, New York, N. Y. Filed Feb. 23, 1932.



The word "Smartfit" is disclaimed when used apart from the mark shown.

For Paper Dress Patterns.

Claims use since June 6, 1931.

Ser. No. 331,086. WILLARD E. JACKSON, Indianapolis, Ind. Filed Oct. 8, 1932.

Check-O-Lite

For attachments to Weighing Scales and Similar Devices, Said Attachment Consisting Essentially of an Electrically Operated Device to Indicate or Register, Visibly or Audibly, Predetermined Limits of Weight or Load on Said Weighing Scales or Similar Device.

Claims use since Nov. 1, 1930.

Ser. No. 331,238. AKTIEBOLAGET IMOINDUSTRI, Stockholm, Sweden. Filed Oct. 14, 1932.

IMO

For Liquid Meters.

Claims use since Sept. 24, 1931.

CLASS 32

Furniture and Upholstery

Ser. No. 307,088. AMERICAN CAN COMPANY, New York, N. Y. Filed Oct. 23, 1930.

CANCO

For Advertising Cases and Cabinets Made of Sheet Metal or Fibre or Made Partly of Sheet Metal and Partly of Fibre for the Display of a Great Variety of Products, Both Indoors and Outdoors.

Claims use since May 1, 1930.

Ser. No. 330,118. BULLOCK'S, INC., Los Angeles, Calif. Filed Sept. 6, 1932.

BULLOCK'S PULLMAN

The surnames "Pullman" and "Bullock's" are disclaimed apart from the mark as shown on the drawing.

For Pillows.

Claims use since May 6, 1932.

Ser. No. 331,538. BARCALO MANUFACTURING COMPANY, Buffalo, N. Y. Filed Oct. 25, 1932.

Filled with Comfort

For Pillows, Cushions, and Bed Mattresses.
Claims use since Oct. 10, 1932.

CLASS 34

Heating, Lighting, and Ventilating Apparatus, Not Including Electrical Apparatus

Ser. No. 327,460. AMERICAN AIR FILTER COMPANY, INC., Louisville, Ky. Filed May 26, 1932.

PHOENIX

For Automatic Endless-Chain Impingement or Open Baffle Type of Ventilating Units.
Claims use since May 12, 1924.

Ser. No. 330,948. CONTINENTAL STOVE CORPORATION, Ironton, Ohio. Filed Oct. 5, 1932.

FYR-FAN

The applicant disclaims the exclusive right to the use of the word "Fan", except in combination with the word "Fyr".
For Radiant Gas Heaters.
Claims use since July 9, 1932.

Ser. No. 331,299. DETROIT STOKER COMPANY, Monroe and Detroit, Mich. Filed Oct. 17, 1932.

ROTOSTOKER

The word "Stoker" is disclaimed apart from the mark shown.
For Stokers.
Claims use since July 1, 1932.

Ser. No. 331,486. THE ALASCO OIL BURNER CO. INC., Winchendon, Mass. Filed Oct. 24, 1932.

ALASCO

For Oil Burners for Stoves and Ranges and Parts Thereof.
Claims use since Aug. 6, 1932.

CLASS 35

Belting, Hose, Machinery Packing, and Non-metallic Tires

Ser. No. 331,443. BENNO SELIGER, Chicago, Ill. Filed Oct. 21, 1932.

AECO

For Packing for Stuffing Boxes Made of Metal.
Claims use since January, 1931.

Ser. No. 331,444. BENNO SELIGER, Chicago, Ill. Filed Oct. 21, 1932.

PLASKET

For Non-Metallic Packing for Flanges.
Claims use since January, 1931.

CLASS 37

Paper and Stationery

Ser. No. 325,964. EQUITABLE SERVICE CORPORATION, now by change of name Esco Service Corporation, Providence, R. I. Filed Apr. 4, 1932.



Each specific word on the mark is disclaimed apart from its combination with the other words and the mark as a whole.
For Letter Heads and Blank Forms Sold to the Trade as Such.
Claims use since Mar. 30, 1932.

Ser. No. 325,966. EQUITABLE SERVICE CORPORATION, now by change of name Esco Service Corporation, Providence, R. I. Filed Apr. 4, 1932.

EQUITABLE SERVICE PLAN

The words "Service Plan" appearing in this mark are disclaimed apart from the mark as shown.
For Letter Heads, Loaning Applications, and Blank Forms Sold to the Trade as Such.
Claims use since Mar. 30, 1932.

Ser. No. 331,513. THE PARKER-YOUNG COMPANY, Boston, Mass. Filed Oct. 24, 1932.

PARKWORTH BOND

No claim is made to the word "Bond" except in connection with the mark as shown.
For Bond Paper.
Claims use since July 14, 1932.

Ser. No. 331,748. NEHER-WHITEHEAD & COMPANY, St. Louis, Mo. Filed Oct. 31, 1932.

Bottlegram

For Printed Labels Sold to the Trade as Such.
Claims use since Oct. 20, 1932.

CLASS 38

Prints and Publications

Ser. No. 325,965. EQUITABLE SERVICE CORPORATION, now by change of name Esco Service Corporation, Providence, R. I. Filed Apr. 4, 1932.



For Brochures, Circulars, and Newspaper Advertising Sold to the Trade as Such.
Claims use since Mar. 30, 1932.

CLASS 39

Clothing

Ser. No. 328,310. SCRUGGS-VANDERVOORT-BARNEY DRY GOODS COMPANY, St. Louis, Mo. Filed June 25, 1932.

Van Moor

For Ladies' Shoes Made of One or a Combination of One or More of the Following Materials: Leather, Rubber, Canvas, Paper, Wood, Metal and Cloth of Various Kinds, Namely—Silk, Cotton, and Wool; and for Misses' Ready-to-Wear Clothing, Namely—Dresses for Either House Wear, Street Wear, or More Formal Occasions Made of Either Wool, Silk, Rayon, or Cotton.
Claims use since Mar. 14, 1932.

Ser. No. 330,637. HARRY ROBERTS & CO. INC., New York, N. Y. Filed Sept. 24, 1932.

HAND BLOCKED *Suaze* IMPORTED *felts*

Applicant disclaims the words "Hand Blocked," "Imported," and "Felts" separate and apart from the mark as shown in the drawing.
For Women's Hats.
Claims use since July 1, 1932.

Ser. No. 330,721. WELLS-LAMONT-SMITH CORPORATION, Minneapolis, Minn. Filed Sept. 27, 1932.

NORTH WESTERN

Applicant disclaims the right to the exclusive use of the words "Chicago" and "Line," except in the combination shown.
For Work Gloves of Fabric and Combined Fabric and Leather.
Claims use since Aug. 15, 1932.

Ser. No. 330,765. B. TOBIAS, INC., New York, N. Y. Filed Sept. 28, 1932.

Miss Junior Modes

The word "Modes" is disclaimed apart from the mark shown in the drawing.
For Dresses for Women, Misses, and Children.
Claims use since Aug. 5, 1932.

Ser. No. 330,906. WELLS-LAMONT-SMITH CORPORATION, Minneapolis, Minn. Filed Oct. 3, 1932.



Applicant disclaims the right to the exclusive use of the word "Line" except in the combination set forth.
For Work Gloves of Fabric and Combined Fabric and Leather.
Claims use since Aug. 15, 1932.

Ser. No. 330,956. KRESGE DEPARTMENT STORE CORP., Newark, N. J. Filed Oct. 5, 1932.

MODERN
DEB-SHOES

No claim is made to the word "Shoes" apart from the mark shown in the drawing.
For Ladies' and Misses' Shoes Made of Leather, Rubber, and Fabric and/or Combinations Thereof.
Claims use since Sept. 1, 1932.

Ser. No. 331,163. I. NEWMAN & SONS, INC., New Haven, Conn. Filed Oct. 11, 1932.

PRINCESS YOUTH

For Corsets and Brassieres.
Claims use since Sept. 19, 1932.

Ser. No. 331,489. BLOOMINGDALE BROS. INC., New York, N. Y. Filed Oct. 24, 1932.

Pent House
FROCKS

No claim is made to the word "Frocks" apart from mark as shown on the drawing.
For Women's and Misses' Dresses.
Claims use since Oct. 1, 1932.

Ser. No. 331,496. ELY & WALKER DRY GOODS COMPANY, St. Louis, Mo. Filed Oct. 24, 1932.

Patricia Moody

The trade-mark consists of the longhand signature of an individual named Patricia Moody.
For Ladies', Misses', Children's, and Infants' Dresses, Aprons, and Pajamas of All Kinds made of Cotton, Wool, Silk, or Rayon Fabrics.
Claims use since July 1, 1931.

Ser. No. 331,594. CHESTER H. ROTH CO., INC., New York, N. Y. Filed Oct. 26, 1932.

HTAL-KNIT

No claim is made to the word "Knit" apart from the mark shown in the drawing.
For Hosiery.
Claims use since Sept. 14, 1932.

CLASS 40

Fancy Goods, Furnishings, and Notions

Ser. No. 331,118. EARL H. RESSEGUIE, Flint, Mich. Filed Oct. 10, 1932.

EZEON

For Necktie Fasteners of the Hook and Eye Type.
Claims use since Aug. 6, 1932.

CLASS 42

Knitted, Netted, and Textile Fabrics

Ser. No. 321,143. MOSSE, INCORPORATED, New York, N. Y. Filed Nov. 14, 1931.

„VIGORUB"

For Textile Bath Towels.
Claims use since Sept. 28, 1931.

Ser. No. 321,483. EDWIN E. BERLINER & CO., New York, N. Y. Filed Nov. 25, 1931.

Kelleary

For Linen Dress Goods in the Piece.
Claims use since July 15, 1931.

Ser. No. 331,575. COHN HALL MARX CO., New York, N. Y. Filed Oct. 26, 1932.

CREPE FOGA

Applicant disclaims the right to the exclusive use of the word "Crepe".
For Silk Piece Goods.
Claims use since Sept. 15, 1932.

Ser. No. 331,840. WEST POINT MANUFACTURING COMPANY, Langdale, Ala. Filed Nov. 2, 1932.

FAIRFAX
INDICIA
THE SILENT JANITOR

For Towelling.
Claims use since Sept. 30, 1932.

Ser. No. 331,944. BEACON MANUFACTURING COMPANY, New Bedford, Mass. Filed Nov. 7, 1932.

THETIS

For Blankets Made of Cotton or Cotton and Wool.
Claims use since Oct. 19, 1932.

CLASS 44

Dental, Medical, and Surgical Appliances

Ser. No. 330,439. PENN SURGICAL MFG. CO. INC., Philadelphia, Pa. Filed Sept. 17, 1932.

PSMCO.

For Surgical Instruments Such as Blood Lancets, Inhalers and Masks, Anæsthesia Tubes, Tongue Seising Forceps, Operating Knives, Operating Scissors, Bandage Scissors, Hæmostatic Forceps, Dressing Forceps, Tissue Forceps, Intestinal Forceps, Sponge Holding Forceps, Bone Chisels, Bone Gouges, Retractors, Eye Forceps, Ear Forceps, Curettes, Tonsil Instruments, Catheters, Irrigators, and the Like.
Claims use since Feb. 20, 1905.

CLASS 45

Beverages, Nonalcoholic

Ser. No. 331,112. ABE KANNER, doing business as The Globe Bottling Co., Los Angeles, Calif. Filed Oct. 10, 1932.

WILSHIRE CLUB

For Carbonated, Nonalcoholic, Noncereal, Maltless Beverages Sold as Soft Drinks, and for Syrups and Extracts Used in Making the Same.
Claims use since Jan. 1, 1931.

CLASS 46

Foods and Ingredients of Foods

Ser. No. 325,220. GENERAL MILLS, INC., Minneapolis, Minn. Filed Mar. 17, 1932.

CAQUICK

For Cake Flour.
Claims use since Mar. 1, 1932.

Ser. No. 326,677. FROSTED FRUIT CORPORATION, Chicago, Ill. Filed May 2, 1932.

PHROSTED
PHROOT
PIE

No claim is made to the words "Phrosted Phroot" for registration purposes apart from the mark shown in the drawing.
For Frozen Confections.
Claims use since Apr. 12, 1932.

Ser. No. 327,172. WM. H. STANLEY, INC., New York, N. Y. Filed May 16, 1932.

SERVMOR

For Canned Fish.
Claims use since Apr. 27, 1932.

Ser. No. 327,175. VINCENNES PACKING CORPORATION, Vincennes, Ind. Filed May 16, 1932.

VINCO

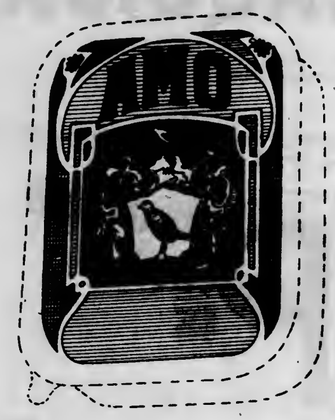
For Canned or Bottled Tomato Juice, Tomato Juice Cocktail, Tomato Catsup, Pork and Beans, Red Beans, Tomato Puree, Hominy, Sauerkraut, Pumpkin, Green Beans, Kidney Beans, Tomatoes.
Claims use since Sept. 1, 1930.

Ser. No. 330,188. NATHAN WOLOSKY, New York, N. Y. Filed Sept. 3, 1932.

JERI-OLA

For Frozen Confection in Icicle Form.
Claims use since Apr. 1, 1931.

Ser. No. 330,232. ROSENTHLISBERGER & CO. INC., New York, N. Y. Filed Sept. 10, 1932.



The container shown in dotted outline in the drawing is disclaimed per se.
For Canned Sardines.
Claims use since July 12, 1932.

Ser. No. 330,575. JAMES AUGUSTUS HOWARD, Jr., Dallas, Tex. Filed Sept. 22, 1932.



La Fiesta

For Condensed Brick Chili.
Claims use since Sept. 20, 1931.

Ser. No. 330,883. ARNOLD BROS., INCORPORATED, Chicago, Ill. Filed Oct. 3, 1932.

Luxemburgers

For Sausage.
Claims use since Feb. 21, 1932.

Ser. No. 330,997. ICE CREAM CAKE COMPANY, Philadelphia, Pa. Filed Oct. 6, 1932.

"Old Friends United"



Ice Cream CAKE

No claim is made to the representation of the cake and the wording except the words "Old Friends United" apart from the other features of the mark.
For Ice Cream Cake.
Claims use since Aug. 8, 1932.

Ser. No. 330,998. ICE CREAM CAKE COMPANY, Philadelphia, Pa. Filed Oct. 6, 1932.

KAK-O BAR

No claim is made to the word "Bar" apart from the other features of the mark.
For Edible Food Product Consisting of Layers of Cake and Ice Cream with a Coating Surrounding the Layers.
Claims use since Aug. 8, 1932.

Ser. No. 331,307. GOLDBERG, BOWEN & CO., San Francisco, Calif. Filed Oct. 17, 1932. Under 10-year proviso.

ALCALDE

For Canned Fruits and Vegetables.
Claims use since Feb. 1, 1895.

Ser. No. 331,312. MICKY MALTO PRODUCTS CO., San Francisco, Calif. Filed Oct. 17, 1932.

MICKY MALTO

For Powdered Composition Including Malt, Eggs, and Milk Used as a Base for Food Beverages.
Claims use since Aug. 15, 1932.

Ser. No. 331,332. FROZEN SPONGES, INC., Brooklyn, N. Y. Filed Oct. 18, 1932.

FROZEN SPONGES

No claim is made to the word "Frozen" apart from the mark as shown in the drawing.
For Ice Cream.
Claims use since May 18, 1932.

Ser. No. 331,505. LOUISIANA STATE RICE MILLING COMPANY, INC., Abbeville, La. Filed Oct. 24, 1932.

FAG

For Rice.
Claims use since Nov. 18, 1930.

Ser. No. 331,565. SCHLESSER BROTHERS, Portland, Oreg. Filed Oct. 25, 1932.

MAN-KIND



For Foods for Dogs, Cats, Foxes, and All Carnivorous Animals, and for Human Consumption.
Claims use since July 8, 1932.

Ser. No. 331,958. LIBERTY MILLS, San Antonio, Tex. Filed Nov. 7, 1932.

ROSE OF TEXAS

For Wheat Flour.
Claims use since Aug. 19, 1926.

Ser. No. 331,977. MILANI'S, INC., doing business as Lunchour Food Products Co., Seattle, Wash. Filed Nov. 5, 1932.

LUNCHOUR

For Chicken Broth with Rice.
Claims use since August, 1932.

CLASS 48

Malt Beverages and Liquors

Ser. No. 331,728. CHRISTIE & HOOVER, Houston, Tex. Filed Oct. 31, 1932.

CONTENTS 12 OZS.

Southern Select

A SELECTED BEVERAGE
DISTRIBUTED BY
CHRISTIE & HOOVER
HOUSTON, TEXAS.

No claim is made to any of the words appearing on the drawing with the exception of the word "Southern" except in the association shown.

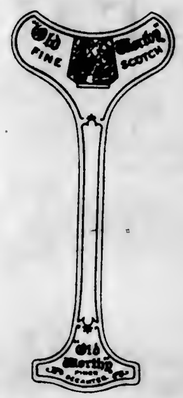
For Malt Beverages with Not More Than the Legal Alcoholic Content, and Extracts Therefor.

Claims use since Oct. 27, 1932.

CLASS 49

Distilled Alcoholic Liquors

Ser. No. 332,028. BLOCH BROS., Glasgow, Scotland. Filed Nov. 10, 1932.



No claim is made to any of the words appearing on the drawing except in the association shown.

For Whiskey.

Claims use since 1924.

Ser. No. 332,104. JOSEPH E. SEAGRAM & SONS LIMITED, Waterloo, Ontario, Canada. Filed Nov. 12, 1932. Under 10-year proviso.

WHITE WHEAT

For Whiskey and Potable Spirits.

Claims use since 1883.

TRADE-MARK REGISTRATIONS GRANTED

[ACT OF FEBRUARY 20, 1905]

DECEMBER 20, 1932

299,704. BALL-PROJECTING TABLE BOARD GAME. IDEAL STEEL PRODUCTS CORPORATION, Chicago, Ill. Filed May 16, 1932. Serial No. 327,148. PUBLISHED OCTOBER 11, 1932. Class 22.

299,705. SALAD DRESSING. STANDARD BRANDS INCORPORATED, New York, N. Y. Filed March 7, 1932. Serial No. 324,853. PUBLISHED OCTOBER 4, 1932. Class 46.

299,706. BURNER BOX LININGS. DETROIT VAPOR STOVE COMPANY, Detroit, Mich. Filed February 27, 1932. Serial No. 324,549. PUBLISHED OCTOBER 11, 1932. Class 34.

299,707. ROD AND SHEET PACKING, RUBBER HOSE, FIBRE HOSE AND BELTING. THE WM. L. MCLELLAN CO., Norwalk, Conn. Filed February 6, 1932. Serial No. 323,901. PUBLISHED OCTOBER 4, 1932. Class 35.

299,708. EMPTY VANITY CASES. COHN & ROSENBERGER, INC., New York, N. Y. Filed June 9, 1932. Serial No. 327,845. PUBLISHED OCTOBER 11, 1932. Class 2.

299,709. NON-ALCOHOLIC, MALTLESS BEVERAGES SOLD AS SOFT DRINKS AND WATER. NORDMARK-WERKE G. M. B. H., Hamburg, Germany. Filed May 31, 1932. Serial No. 327,599. PUBLISHED OCTOBER 11, 1932. Class 45.

299,710. REFRIGERATORS AND PARTS THEREOF. NORGE CORPORATION, Detroit, Mich. Filed July 5, 1932. Serial No. 328,562. PUBLISHED OCTOBER 11, 1932. Class 31.

299,711. COAL, WOOD, COKE, OIL, AND GAS WARM AIR FURNACES. HESS WARMING AND VENTILATING COMPANY, Chicago, Ill. Filed June 30, 1932. Serial No. 328,424. PUBLISHED OCTOBER 11, 1932. Class 34.

299,712. AUTOMOBILE BUSINESS-CARS, AND MOTOR TRUCKS AND STRUCTURAL PARTS THEREOF. THE AUTOCAR COMPANY, Ardmore, Pa. Filed January 18, 1932. Serial No. 323,118. PUBLISHED SEPTEMBER 27, 1932. Class 19.

299,713. HAND SPRAYER FOR LIQUID AND POWDER INSECTICIDES. S. H. KRESS & Co., New York, N. Y. Filed January 27, 1932. Serial No. 323,559. PUBLISHED OCTOBER 11, 1932. Class 28.

299,714. WEARING APPAREL FOR MEN, WOMEN, AND CHILDREN—NAMELY, HATS; HOSIERY, UNDERWEAR MADE OF KNITTED, NETTED, AND TEXTILE FABRIC FOR MEN, WOMEN, AND CHILDREN. WOLLNER & SMITH, New York, N. Y. Filed January 8, 1932. Serial No. 322,840. PUBLISHED OCTOBER 4, 1932. Class 39.

299,715. DOG FOOD. N. C. COAN, doing business as Animal Foods Company, San Jose, Calif., assignor to Animal Foods Company, San Jose, Calif., a Corporation of California. Filed December 22, 1931. Serial No. 322,857. PUBLISHED APRIL 5, 1932. Class 46.

299,716. CANNED CITRUS FRUITS AND CANNED CITRUS FRUIT JUICES FOR FOOD PURPOSES. FLORIDARADO CANNERIES, INC., Mount Dora, Fla. Filed November 20, 1931. Serial No. 321,333. PUBLISHED JUNE 21, 1932. Class 46.

299,717. NONALCOHOLIC, MALTLESS SYRUP USED IN THE PREPARATION OF SOFT DRINKS. KOTARO TAKAHASHI, Tokyo Fu, Japan. Filed October 23, 1931. Serial No. 320,380. PUBLISHED OCTOBER 11, 1932. Class 45.

299,718. OLIVE OIL. SOCIETA ANONIMA LUCCHESE OLII E VINI, Lucca, Italy. Filed October 12, 1931. Serial No. 320,012. PUBLISHED OCTOBER 4, 1932. Class 46.

299,719. SHOES MADE OF LEATHER, RUBBER, FABRIC, OR COMBINATIONS OF ONE OR MORE OF THESE MATERIALS. RUBIN BROS. FOOT-WEAR INC., Long Island City, N. Y. Filed October 10, 1931. Serial No. 319,944. PUBLISHED OCTOBER 4, 1932. Class 39.

299,720. ACIDULOUS COMPOUND FOR FLAVORING SOFT DRINKS. SMITH-JUNIOR COMPANY, INC., Rochester, N. Y. Filed September 23, 1931. Serial No. 319,344. PUBLISHED OCTOBER 11, 1932. Class 45.

299,721. RADIO INTERFERENCE AND NOISE ELIMINATOR. JAMES KERR, Jenners, Pa. Filed August 22, 1931. Serial No. 318,314. PUBLISHED SEPTEMBER 27, 1932. Class 21.

299,722. RUBBER MATS AND MATTING. O. W. JACKSON & CO., INC., New York, N. Y. Filed August 12, 1931. Serial No. 317,917. PUBLISHED OCTOBER 11, 1932. Class 50.

299,723. SHOES CONSTRUCTED FROM LEATHER OR FABRIC OR FROM THE COMBINATION OF LEATHER AND FABRIC. PETTY SHOE COMPANY, Pittsburgh, Pa. Filed July 31, 1931. Serial No. 317,532. PUBLISHED OCTOBER 4, 1932. Class 39.

299,724. RELIGIOUS PERIODICAL. LAMAR & WHITMORE, BOOK AGENTS, PUBLISHING HOUSE, M. E. CHURCH, SOUTH, doing business as Cokesbury Press, Nashville, Tenn. Filed July 31, 1931. Serial No. 317,521. PUBLISHED SEPTEMBER 22, 1931. Class 38.

299,725. DOUGHNUTS, CAKES, PIES, BREADS, AND CANDIES. ORPHAN ANNIE GREASELESS DOUGHNUT SHOP, Clearwater, Fla. Filed July 29, 1931. Serial No. 317,439. PUBLISHED SEPTEMBER 29, 1931. Class 46.

299,726. TABLE KNIVES AND CARVERS, CAN OPENERS, RAZORS, ETC. FRIEDR. HERDER ABR. SOHN, Solingen, Germany. Filed June 4, 1931. Serial No. 315,401. PUBLISHED NOVEMBER 24, 1931. Class 23.

299,727. OLIVE OIL, CANNED TUNA FISH, DRIED SPLIT PEAS, RICE, AND LENTILS. G. CUCCIA & SONS, INC., New York, N. Y. Filed June 2, 1931. Serial No. 315,301. PUBLISHED DECEMBER 22, 1931. Class 46.

299,728. PERIODICAL. THE METHODIST BOOK CONCERN, New York, N. Y. Filed June 9, 1931. Serial No. 315,601. PUBLISHED JULY 21, 1931. Class 38.

299,729. RUSSIAN OIL FOR MEDICINAL USE. THE LOUIS HEISTER COMPANY, Cincinnati, Ohio. Filed May 29, 1931. Serial No. 315,199. PUBLISHED MAY 31, 1932. Class 6.

299,730. ELECTRIC AUDIBLE ANNUNCIATOR EQUIPMENT FOR USE IN RESTAURANTS AND THE LIKE, CONSISTING OF MICROPHONES, ELECTRIC AMPLIFICATION MEANS, AND REMOTE LOUD SPEAKERS. KENNETH B. WALTON, doing business as Kents Orderphone Co., Atlantic City, N. J. Filed August 5, 1930. Serial No. 304,265. PUBLISHED OCTOBER 4, 1932. Class 21.

299,731. CANNED SWEET CORN AND CANNED TOMATOES. KLAUS & MOERSEN, Columbus, Nebr.
Filed July 26, 1929. Serial No. 287,706. PUBLISHED OCTOBER 4, 1932. Class 46.

299,732. BASE PLATES USED IN THE MANUFACTURING OF ARTIFICIAL DENTURES. THE S. S. WHITE DENTAL MANUFACTURING COMPANY, Philadelphia, Pa.
Filed August 19, 1932. Serial No. 329,695. PUBLISHED OCTOBER 4, 1932. Class 44.

299,733. ARCH SUPPORTS, ETC. FOOT FORM SHOE SHOPS, INC., New York, N. Y.
Filed August 18, 1932. Serial No. 329,633. PUBLISHED OCTOBER 11, 1932. Class 44.

299,734. DRY CLEANING LIQUID. EMIL J. SCHUMACHER, doing business as The Bidal Products Co., Erie, Pa.
Filed August 16, 1932. Serial No. 329,587. PUBLISHED OCTOBER 4, 1932. Class 4.

299,735. DENTAL INVESTMENT COMPOUNDS. DETROIT DENTAL MANUFACTURING CO., Detroit, Mich.
Filed August 15, 1932. Serial No. 329,551. PUBLISHED OCTOBER 11, 1932. Class 44.

299,736. ABRASIVES FOR GRINDING LENSES. BAUSCH & LOMB OPTICAL COMPANY, Rochester, N. Y.
Filed August 13, 1932. Serial No. 329,519. PUBLISHED OCTOBER 11, 1932. Class 4.

299,737. MASSAGE DEVICES. GRO-FLEX CORPORATION, Indianapolis, Ind.
Filed August 10, 1932. Serial No. 329,445. PUBLISHED OCTOBER 11, 1932. Class 44.

299,738. SURGICAL GAUZE, BANDAGES, ETC. THE DEANE PLASTER CO., Yonkers, N. Y.
Filed July 26, 1932. Serial No. 329,081. PUBLISHED OCTOBER 4, 1932. Class 44.

299,739. PORTABLE COLONIC IRRIGATOR. AAGUT S. COCKS, doing business as Cocks Manufacturing Company, New York, N. Y.
Filed July 9, 1932. Serial No. 328,662. PUBLISHED OCTOBER 11, 1932. Class 44.

299,740. ELECTRIC BELTS. CHARLES H. GRAHAM, doing business as Magnator Company, Syracuse, N. Y.
Filed June 24, 1932. Serial No. 328,271. PUBLISHED OCTOBER 11, 1932. Class 44.

299,741. HAND CLEANSING PREPARATION. KEYSTONE LUBRICATING COMPANY, Philadelphia, Pa.
Filed July 30, 1932. Serial No. 329,286. PUBLISHED OCTOBER 4, 1932. Class 4.

299,742. HAND AND SKIN CLEANERS. FREDERICK A. HESSEL, doing business as Marfred Laboratories, New York, N. Y.
Filed June 29, 1932. Serial No. 328,462. PUBLISHED OCTOBER 4, 1932. Class 4.

299,743. SOAP. WILLIAM WARREN TAYLOR, Los Angeles, Calif.
Filed June 15, 1932. Serial No. 328,022. PUBLISHED OCTOBER 11, 1932. Class 4.

299,744. SCOURING PADS MADE OF STEEL WOOL. DIETRICH DAMMANN, Chicago, Ill.
Filed May 18, 1932. Serial No. 327,208. PUBLISHED OCTOBER 11, 1932. Class 4.

299,745. CLEANSING AND SCOURING COMPOUND, ETC. THE SOLVAY PROCESS COMPANY, Geddes, N. Y.
Filed March 31, 1932. Serial No. 325,697. PUBLISHED JUNE 14, 1932. Class 4.

299,746. AUTOMOBILE POLISHING CLOTHS, MECHANICS' HAND SOAP, POWDERED SOAP, ETC. ATLAS SUPPLY COMPANY, Newark, N. J.
Filed March 9, 1932. Serial No. 324,941. PUBLISHED OCTOBER 4, 1932. Class 4.

299,747. PAPER, CARDBOARD, AND FIBREBOARD AND TRANSPARENT CELLULOSIC MATERIAL CARTONS, PACKAGES, BOXES, AND BLANKS THEREFOR. NU-PAK CORPORATION, New York, N. Y.
Filed August 25, 1932. Serial No. 329,837. PUBLISHED OCTOBER 4, 1932. Class 2.

299,748. CEDAR CHESTS AND CEDAR CABINETS. WEST BRANCH NOVELTY COMPANY, Milton, Pa.
Filed August 29, 1932. Serial No. 329,964. PUBLISHED OCTOBER 11, 1932. Class 32.

299,749. YERBA MATE (PARAGUAYAN TEA). FRANCISCO MENDES & COMPAÑIA LIMITADA, Buenos Aires, Argentina.
Filed June 29, 1932. Serial No. 328,395. PUBLISHED OCTOBER 11, 1932. Class 46.

299,750. COCOA MALTED MILK. E. & A. OPLER, INC., Chicago, Ill.
Filed July 20, 1932. Serial No. 328,924. PUBLISHED OCTOBER 11, 1932. Class 46.

299,751. CIGARS AND CIGARETTES. ALHAMBRA CIGAR & CIGARETTE MFG. CO., Manila, P. I.
Filed August 9, 1932. Serial No. 329,416. PUBLISHED OCTOBER 11, 1932. Class 17.

299,752. CIGARS AND CIGARETTES. ALHAMBRA CIGAR & CIGARETTE MFG. CO., Manila, P. I.
Filed August 9, 1932. Serial No. 329,417. PUBLISHED OCTOBER 11, 1932. Class 17.

299,753. COAL. MORRIS RUN COAL MINING COMPANY, Wilkes-Barre, Pa.
Filed August 11, 1932. Serial No. 329,479. PUBLISHED OCTOBER 11, 1932. Class 1.

299,754. COFFEE. KING, DOBBS & COMPANY, Chattanooga, Tenn.
Filed August 11, 1932. Serial No. 329,476. PUBLISHED OCTOBER 4, 1932. Class 46.

299,755. FRESH CITRUS FRUITS. CANOGA CITRUS ASSOCIATION, Canoga Park, Calif.
Filed August 12, 1932. Serial No. 329,501. PUBLISHED OCTOBER 4, 1932. Class 46.

299,756. CANNED FRUITS. SUNICAL PACKING COMPANY, San Francisco, Calif.
Filed August 12, 1932. Serial No. 329,509. PUBLISHED OCTOBER 4, 1932. Class 46.

299,757. SHOES COMPOSED OF LEATHER. BADORF SHOE COMPANY, Lititz, Pa.
Filed June 22, 1932. Serial No. 328,292. PUBLISHED OCTOBER 4, 1932. Class 39.

299,758. TIRES, INNER TUBES, HOOK-ON BOOTS, ETC. INDIA TIRE AND RUBBER COMPANY, Akron and Mogadore, Ohio.
Filed July 12, 1932. Serial No. 328,731. PUBLISHED OCTOBER 11, 1932. Class 35.

299,759. LADIES' AND MISSES' HATS, DRESSES, AND COATS. LA MODE CHEZ TAPPE, INC., New York, N. Y.
Filed June 11, 1932. Serial No. 327,911. PUBLISHED OCTOBER 4, 1932. Class 39.

299,760. CHILDREN'S SLIPPERS MADE OF LEATHER, FABRIC, OR A COMBINATION OF BOTH LEATHER AND FABRIC. B. & B. SHOE COMPANY, Chicago, Ill.
Filed July 22, 1932. Serial No. 328,972. PUBLISHED OCTOBER 4, 1932. Class 39.

299,761. MEN'S AND WOMEN'S HATS. WILLIAM KATZ, St. Louis, Mo.
Filed July 22, 1932. Serial No. 328,990. PUBLISHED OCTOBER 4, 1932. Class 39.

299,762. CERTAIN NAMED WEARING APPAREL. ARCHER RUBBER COMPANY, Milford, Mass.
Filed July 23, 1932. Serial No. 329,011. PUBLISHED OCTOBER 4, 1932. Class 39.

299,763. LADIES' HATS. M. APPEL & BRO., INC., New York, N. Y.
Filed July 29, 1932. Serial No. 329,173. PUBLISHED OCTOBER 4, 1932. Class 39.

299,764. SYRUP CONCENTRATES USED IN THE PREPARATION OF NONALCOHOLIC, MALTLESS SOFT DRINKS. MORRIS WERNIK, Metuchen, N. J.
Filed July 13, 1932. Serial No. 328,765. PUBLISHED OCTOBER 11, 1932. Class 45.

299,765. SILENT AND/OR SOUND OR TALKING MOTION-PICTURE FILMS. PATRICK A. POWERS, New York, N. Y.
Filed July 26, 1932. Serial No. 329,097. PUBLISHED OCTOBER 11, 1932. Class 26.

299,766. TOAST. DEVON BAKERIES, INC., New York, N. Y.
Filed August 16, 1932. Serial No. 329,574. PUBLISHED OCTOBER 4, 1932. Class 46.

299,767. COKE. MICHIGAN ALKALI COMPANY, Wyandotte, Mich.
Filed August 24, 1932. Serial No. 329,804. PUBLISHED OCTOBER 11, 1932. Class 1.

299,768. WHEAT FLOUR. THE MIDLAND FLOUR MILLING COMPANY, Kansas City, Mo.
Filed September 8, 1932. Serial No. 330,006. PUBLISHED OCTOBER 11, 1932. Class 46.

299,769. TOOL STEEL. LEHIGH STEEL COMPANY, New York, N. Y.
Filed August 30, 1932. Serial No. 329,996. PUBLISHED OCTOBER 11, 1932. Class 14.

299,770. INSECTICIDES. CHASE & CO., Sanford, Fla.
Filed July 28, 1932. Serial No. 329,134. PUBLISHED SEPTEMBER 27, 1932. Class 6.

299,771. CANNED SALMON. THE GREAT ATLANTIC & PACIFIC TEA COMPANY, New York, N. Y.
Filed June 25, 1932. Serial No. 328,317. PUBLISHED OCTOBER 11, 1932. Class 46.

299,772. ICE CREAM, CANDY, COOKIES, FROZEN CONFECTIONS, AND FROZEN MALTED MILK. BENNETT & LAYTON INC., Susanville, Calif.
Filed June 13, 1932. Serial No. 327,932. PUBLISHED OCTOBER 4, 1932. Class 46.

299,773. YERBA MATE (PARAGUAYAN TEA). EMPRESA MATE LARANGUERA SOCIEDAD ANONIMA, Buenos Aires, Argentina.
Filed June 29, 1932. Serial No. 328,393. PUBLISHED OCTOBER 11, 1932. Class 46.

299,774. CUSHION INSERTS FOR SHOE INSOLES. JOHN FENTON, Los Angeles, Calif., assignor to The Fenton Corporation, Los Angeles, Calif., a Corporation of California.
Filed July 30, 1932. Serial No. 329,227. PUBLISHED OCTOBER 4, 1932. Class 39.

299,775. RUBBER HEELS, RUBBER SOLES, AND HALF SOLES. BRADSTONE RUBBER COMPANY, Woodbine, N. J.
Filed August 2, 1932. Serial No. 329,277. PUBLISHED OCTOBER 4, 1932. Class 39.

299,776. PISTON RINGS. BURD PISTON RING COMPANY, Rockford, Ill.
Filed August 4, 1932. Serial No. 329,323. PUBLISHED OCTOBER 4, 1932. Class 35.

299,777. RUBBER HEELS, RUBBER SOLES, AND HALF SOLES. BRADSTONE RUBBER COMPANY, Woodbine, N. J.
Filed August 17, 1932. Serial No. 329,594. PUBLISHED OCTOBER 4, 1932. Class 39.

299,778. RUBBER HEELS, RUBBER SOLES, AND HALF SOLES. BRADSTONE RUBBER COMPANY, Woodbine, N. J.
Filed August 17, 1932. Serial No. 329,595. PUBLISHED OCTOBER 4, 1932. Class 39.

299,779. ICE. NORDMARK-WERKE G. M. B. H., Hamburg, Germany.
Filed March 17, 1932. Serial No. 325,235. PUBLISHED OCTOBER 11, 1932. Class 1.

299,780. BOTTLE CAPS OR SO-CALLED MILK BOTTLE CAPS. OSWEGO FALLS CORPORATION, Fulton, N. Y.
Filed March 12, 1932. Serial No. 325,074. PUBLISHED OCTOBER 11, 1932. Class 50.

299,781. DUSTING MITTENS, DISH MOPS, FLOOR MOPS, WHISK BROOMS, WALL BRUSHES, SCRUB BRUSHES, DUSTING BRUSHES, FLOOR BRUSHES, CLOTHES BRUSHES, HAIR BRUSHES, NAIL BRUSHES, TOOTH BRUSHES, COMPLEXION BRUSHES, SHAVING BRUSHES, BATH BRUSHES, PAINT BRUSHES, AND ARTISTS' BRUSHES. S. H. KRESS & CO., New York, N. Y.
Filed April 27, 1932. Serial No. 326,549. PUBLISHED OCTOBER 11, 1932. Class 29.

299,782. ICE CREAM CONFECTIONS. MILCH & HARRISON, Minneapolis, Minn.
Filed April 30, 1932. Serial No. 326,643. PUBLISHED OCTOBER 4, 1932. Class 46.

299,783. HUMIDIFIERS CHARACTERIZED BY AN INDIVIDUAL UNIT OR UNITS FED BY HOT WATER FROM A HEATING SOURCE, FOR USE IN HOMES, OFFICES, AND THE LIKE. THE YOST COMPANY, St. Louis, Mo.
Filed August 1, 1932. Serial No. 329,271. PUBLISHED OCTOBER 11, 1932. Class 34.

299,784. PIECE GOODS—NAMELY, SILK, COTTON, AND RAYON FABRIC. RELIANCE PIECE DYE WORKS, Paterson, N. J.
Filed August 4, 1932. Serial No. 329,337. PUBLISHED OCTOBER 4, 1932. Class 42.

299,785. HOSIERY. JULIUS KAYSER & CO., New York, N. Y.
Filed August 13, 1932. Serial No. 329,530. PUBLISHED SEPTEMBER 27, 1932. Class 39.

299,786. PILE FABRICS IN THE PIECE. SIDNEY BLUMENTHAL & CO. INC., New York, N. Y.
Filed August 25, 1932. Serial No. 329,826. PUBLISHED OCTOBER 4, 1932. Class 42.

299,787. READY MIXED PAINT. C. A. WOOLSEY PAINT & COLOR CO., Jersey City, N. J.
Filed July 13, 1932. Serial No. 328,766. PUBLISHED OCTOBER 11, 1932. Class 16.

299,788. DOMESTIC HOT WATER HEATERS, ELECTRIC OR ELECTRICALLY OPERATED TIME SWITCHES, AND ELECTRIC FLASHERS FOR SIGN LIGHTS. TRIPLEX PRODUCTS CORPORATION, Clifton, N. J., and New York, N. Y.
Filed June 14, 1932. Serial No. 327,993. PUBLISHED OCTOBER 4, 1932. Class 21.

299,789. LUBRICATING OILS AND GREASES. OILRITE CORPORATION, Red Bank, N. J.
Filed May 10, 1932. Serial No. 327,000. PUBLISHED JULY 5, 1932. Class 15.

299,790. AUTOMOBILE AND RADIO STORAGE BATTERIES. L. L. CONNELL & SON, Lincoln, Nebr.
Filed August 22, 1932. Serial No. 329,739. PUBLISHED OCTOBER 4, 1932. Class 21.

299,791. STORAGE BATTERIES. THE GOODYEAR TIRE & RUBBER COMPANY, Akron, Ohio.
Filed August 16, 1932. Serial No. 329,580. PUBLISHED SEPTEMBER 27, 1932. Class 21.

299,792. INSULATED WIRES AND CABLES. THE OKONITE COMPANY, Passaic, N. J.
Filed August 13, 1932. Serial No. 329,535. PUBLISHED OCTOBER 4, 1932. Class 21.

299,793. INSULATED WIRES AND CABLES. THE OKONITE COMPANY, Passaic, N. J.
Filed August 13, 1932. Serial No. 329,534. PUBLISHED OCTOBER 4, 1932. Class 21.

299,794. INSULATED WIRES AND CABLES. THE OKONITE COMPANY, Passaic, N. J.
Filed August 13, 1932. Serial No. 329,533. PUBLISHED OCTOBER 4, 1932. Class 21.

299,795. GASOLINE. JOHN B. JOHNSON, Pittsburgh, Pa.
Filed August 11, 1932. Serial No. 329,475. PUBLISHED OCTOBER 4, 1932. Class 15.

299,796. BATTERY CARRIERS. MUELLER ELECTRIC COMPANY, Cleveland, Ohio.
Filed August 10, 1932. Serial No. 329,451. PUBLISHED SEPTEMBER 27, 1932. Class 19.

299,797. LUBRICATING OILS. STANDARD OIL COMPANY OF NEW JERSEY, Wilmington, Del.
Filed August 9, 1932. Serial No. 329,430. PUBLISHED SEPTEMBER 27, 1932. Class 15.

299,798. FUSE PLUGS. ALPINE ELECTRIC CORPORATION, Schenectady, N. Y.
Filed August 9, 1932. Serial No. 329,418. PUBLISHED SEPTEMBER 27, 1932. Class 21.

299,799. ELECTRICALLY OPERATED PORTABLE VACUUM CLEANERS AND ATTACHMENTS THEREFOR FOR CLEANING, BLOWING, AND FUMIGATING. WHISK-BRUSH VACUUM MACHINE CO., INC., New York, N. Y.
Filed July 30, 1932. Serial No. 329,248. PUBLISHED SEPTEMBER 27, 1932. Class 21.

299,800. ANODES FOR USE IN ELECTROLYTIC SYSTEMS FOR THE PROTECTION OF CONTAINERS. ELECTRO ANTI-CORROSION CORPORATION, New York, N. Y.
Filed July 28, 1932. Serial No. 329,140. PUBLISHED SEPTEMBER 27, 1932. Class 21.

299,801. ELECTRICAL FUSE PLUGS AND PARTS THEREOF. THE BULLS-EYE ELECTRIC MANUFACTURING COMPANY, Torrington, Conn.
Filed July 28, 1932. Serial No. 329,132. PUBLISHED OCTOBER 4, 1932. Class 21.

299,802. ELECTRICAL COFFEE MAKERS. LEYSE ALUMINUM COMPANY, Kewaunee, Wis.
Filed July 5, 1932. Serial No. 328,556. PUBLISHED OCTOBER 4, 1932. Class 21.

299,803. GASOLINE, LUBRICATING OILS, AND CRUDE OIL. HAYMAN OIL CO., Los Angeles, Calif.
Filed June 28, 1932. Serial No. 328,353. PUBLISHED OCTOBER 4, 1932. Class 15.

[ACT OF MARCH 19, 1920, SEC. 1 (b)]
THESE REGISTRATIONS ARE NOT SUBJECT TO OPPOSITION

299,804. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) BECKER'S BAKERY, Spartanburg, S. C. Filed Mar. 1, 1932. Serial No. 324,649.

MILK-N-HONEY

For Bread.
Claims use since Nov. 1, 1931.

299,805. (CLASS 38. PRINTS AND PUBLICATIONS.) THOMAS D. TAYLOR, Philadelphia, Pa. Filed Jan. 26, 1932. Serial No. 323,510.

Quality Wants

For Classified Advertising in Newspapers and Magazines.
Claims use since March, 1916.

299,806. (CLASS 34. HEATING, LIGHTING, AND VENTILATING APPARATUS, NOT INCLUDING ELECTRICAL APPARATUS.) DURFEE & CANNING, INC., Fall River, Mass. Filed Jan. 22, 1932. Serial No. 323,282.

Kwik Lite

For Automatic Oil Burners.
Claims use since Nov. 2, 1931.

299,807. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) SCIENTIFIC LABORATORIES, INC., Chicago, Ill. Filed Dec. 26, 1931. Serial No. 322,472.

Run-Proof

For Chemical Compound for the Preservation of Threads of Knitted and Woven Textile Fabrics.
Claims use since August, 1931.

299,808. (CLASS 13. HARDWARE AND PLUMBING AND STEAM-FITTING SUPPLIES.) NASON MANUFACTURING COMPANY, New York, N. Y. Filed Dec. 4, 1931. Serial No. 321,776.

TINY

For Steam Traps and Parts Thereof.
Claims use since Oct. 30, 1931.

299,809. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) ASAEL FARR & SONS COMPANY, Ogden, Utah. Filed Sept. 24, 1932. Serial No. 330,616.

Farr BETTER

For Ice Cream, Ices, and Frozen Confections.
Claims use since July 1, 1920.

299,810. (CLASS 32. FURNITURE AND UPHOLSTERY.) WILLIAM J. C. VOLCKMAN, doing business as Volckman Furniture Manufacturing Company, Clinton, Iowa. Filed July 8, 1932. Serial No. 328,651.

Clinton Comfort Chair

For Upholstered Chairs.
Claims use since October, 1931.

TRADE-MARK REGISTRATIONS RENEWED

39,756. RIBBONS. Registered February 10, 1903. ERNEST & HERMAN LEVY. Renewed February 10, 1933, to Century Ribbon Mills, Inc. (Ernest & Herman Levy), New York, N. Y., a Corporation of New York, successor.

39,919. CARPET SWEEPERS. Registered March 10, 1903. BISSELL CARPET SWEEPER CO. Renewed March 10, 1933, to Bissell Carpet Sweeper Company, Grand Rapids, Mich., a Corporation of Michigan, assignee.

40,024. WHITE LAUNDRY SOAP. Registered March 31, 1903. WILLARD G. CRANE, Auburn, N. Y. Renewed March 31, 1933, to Luxor, Limited, Chicago, Ill., a Corporation of Maine, assignee by mesne assignments.

40,115. CERTAIN NAMED CHEMICAL PRODUCT. Registered April 14, 1903. E. MERCK, Darmstadt, Germany. Renewed April 14, 1933, to Winthrop Chemical Company, Inc., New York, N. Y., a Corporation of New York, assignee by mesne assignments.

89,123. CANDY. Registered November 12, 1912. GEORGE W. LOFT, New York, N. Y. Renewed November 12, 1932, to Loft, Inc., Long Island City, N. Y., a Corporation of Delaware, assignee by mesne assignments.

89,855. HAMS AND SAUSAGES. Registered January 14, 1913. KINGAN & COMPANY, Limited, Belfast, Ireland, and Indianapolis, Ind. Renewed January 14, 1933, to Kingan & Co. Incorporated, Indianapolis, Ind., a Corporation of New Jersey, assignee.

90,062. BUTTER. Registered January 28, 1913. P. E. SHARPLESS COMPANY, Concordville, Pa. Renewed January 28, 1933, to P. E. Sharpless Company, Philadelphia, Pa., a Corporation of Pennsylvania.

90,069. BLACKBOARDS. Registered January 28, 1913. WEBER COSTELLO COMPANY, Chicago Heights, Ill., a Corporation of Illinois. Renewed January 28, 1933.

90,333. JAPANESE SAKE. Registered February 18, 1913. HON KANO SHOTEN. Renewed February 18, 1933, to Kabushikikaisha Honkaho Shoten, Mikage Town, Japan, a Corporation of Japan, successor.

90,546. BUTTER. Registered March 4, 1913. KINGAN & COMPANY, LIMITED, Belfast, Ireland; Indianapolis, Ind.; Richmond and Norfolk, Va.; Jacksonville, Fla.; San Francisco, Calif.; Washington, D. C.; Atlanta, Ga.; Baltimore, Md.; Atlantic City, N. J.; New York and Syracuse, N. Y.; Columbus, Ohio; Pittsburgh, Philadelphia, and Harrisburg, Pa. Renewed March 4, 1933, to Kingan & Co. Incorporated, Indianapolis, Ind., a Corporation of New Jersey, assignee.

91,055. CERTAIN NAMED ARTICLES OF MEN'S CLOTHING. Registered April 8, 1913. THE YORKE SHIRT CO., Glens Falls and New York, N. Y., a Corporation of New York. Renewed April 8, 1933.

91,322. SOAP. Registered April 29, 1913. COLGATE & CO., Jersey City, N. J., and New York, N. Y. Renewed April 29, 1933, to Colgate-Palmolive-Peet Company, Chicago, Ill., a Corporation of Delaware, assignee.

91,359. CORSETS. Registered April 29, 1913. LILY OF FRANCE CORSET CO., New York, N. Y., a Corporation of New York. Renewed April 29, 1933.

91,419. A HEMATINIC TONIC. Registered April 29, 1913. FARBENFABRIKEN OF ELBERFELD COMPANY. Renewed April 29, 1933, to Winthrop Chemical Company, Inc., of New York, N. Y., a Corporation of New York, assignee by mesne assignments.

91,494. CORSETS. Registered May 6, 1913. LILY OF FRANCE CORSET CO., New York, N. Y., a Corporation of New York. Renewed May 6, 1933.

LABELS

REGISTERED DECEMBER 20, 1932

41,542.—*Title:* GOLDEN PACKET. For Tea. ARABAN COFFEE CO., INC., Boston, Mass. Published September 6, 1932.

41,543.—*Title:* KUMFO LOUNGING SLIPPERS. For Slippers. BADGER GLOVE & MITTEN COMPANY, Milwaukee, Wis. Published August 17, 1932.

41,544.—*Title:* ROYAL MOUNTIE. For Malt Syrup. P. BALLANTINE & SONS, Newark, N. J. Published October 22, 1932.

41,545.—*Title:* DESIGN NO. 306. For Ice Cream. BLOOMER BROS. COMPANY, Newark, N. Y. Published March 14, 1927.

41,546.—*Title:* DESIGN NO. 506. For Ice Cream. BLOOMER BROS. COMPANY, Newark, N. Y. Published March 14, 1927.

41,547.—*Title:* BURGESS SOUND PROJECTION BATTERY. For Batteries. BURGESS BATTERY COMPANY, Freeport, Ill. Published August 23, 1932.

41,548.—*Title:* NEDICK'S ORANGE DRINK. For Orange Drink. BURNES CORPORATION, New York, N. Y. Published October 28, 1932.

41,549.—*Title:* DESERT GOLD DATES. For Dates. CALIFORNIA DATE GROWERS ASSOCIATION, Los Angeles, Calif. Published September 27, 1932.

41,550.—*Title:* DICKINSON'S WITCH HAZEL. For Witch Hazel. THE E. E. DICKINSON CO., Essex, Conn. Published October 10, 1932.

41,551.—*Title:* TIP-A-TOPPER CAKES. For Cakes. GOLD SEAL BAKING CORPORATION, Baltimore, Md. Published October 14, 1932.

41,552.—*Title:* CLUB. For Crackers. KEEBLER WEYL BAKING COMPANY, Philadelphia, Pa. Published December 1, 1929.

41,553.—*Title:* KRAMER. For Oranges, Grapefruit, and Tangerines. L. H. KRAMER, Lake Wales, Fla. Published October 5, 1932.

41,554.—*Title:* TANG. For Mustard with Horse Radish. MARCIA LYON, Portland, Oreg. Published July 5, 1932.

41,555.—*Title:* CLUB KINGSBEER SPECIAL. For Lager Beer. THE NATIONAL BREWERIES, LIMITED, Montreal, Quebec, Canada. Published September 1, 1932.

41,556.—*Title:* LUCKY FORTUNE TELLER INCENSE. For Incense. MORTON G. NEUMANN, doing business as Valmor Products Company, Chicago, Ill. Published Sept. 15, 1932.

41,557.—*Title:* PRATTLOW BRAND STEWED READY TO SERVE PRUNES. For Canned Prunes. PRATTLOW PRESERVING COMPANY, Santa Clara, Calif. Published August 1, 1932.

41,558.—*Title:* PRATTLOW BRAND SOLID PACK TOMATOES. For Canned Tomatoes. PRATT-LOW PRESERVING COMPANY, Santa Clara, Calif. Published August 1, 1932.

41,559.—*Title:* FLEISCHMANN'S. For Refined Invertase. STANDARD BRANDS INCORPORATED, New York, N. Y. Published October 21, 1932.

PRINTS

REGISTERED DECEMBER 20, 1932

13,981.—*Title:* GIFTS OF BEAUTY THAT KEEP ON GIVING BEAUTY. For Powder, Lipstick, Perfume, Bath Salts, and Soap. ELIZABETH ARDEN OF NEW YORK, LTD., doing business as Elizabeth Arden, New York, N. Y. Published November 18, 1932.

13,982.—*Title:* KRIS KRINGLE STOLLEN. For Flour. GENERAL MILLS, INC., Minneapolis, Minn. Published November 7, 1932.

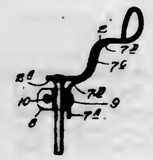
13,983.—*Title:* IT'S HUMAN MILEAGE THAT COUNTS. For Automobile Tires. THE GENERAL TIRE & RUBBER COMPANY, Akron, Ohio. Published September 28, 1932.

13,984.—*Title:* RAMONA CHILI SQUARE. For Food Seasoning. RAMONA FOOD PRODUCTS CO., San Antonio, Tex. Published September 1, 1932.

REISSUES

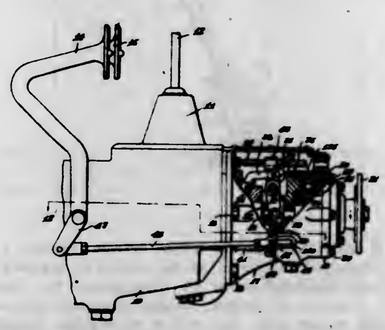
DECEMBER 20, 1932

18,692. ORNAMENTAL SIDE RING FOR WIRE-SPOKED WHEELS. WILLIAM A. CLARK, Chicago, Ill., assignor of one-half to Leonard Westphalen, Chicago, Ill. Original No. 1,797,546, dated Mar. 24, 1931, Serial No. 396,026, filed Sept. 30, 1929. Application for reissue filed Oct. 22, 1932. Serial No. 639,128. 5 Claims. (Cl. 41—10.)



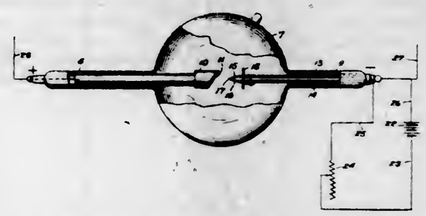
1. An ornament for a wheel having wire spokes, comprising a ring-shaped metal member bearing laterally against the outer face of the rim of the wheel and extending radially inward of the wheel adjacent to certain of the spokes for a minor fraction of the length of the spokes, and plural attaching means carried by the said member adjacent to the said rim and each effectively embracing one of the said adjacent spokes.

18,693. REVERSE BRAKE. CARL A. MATSON, Lynnfield, Mass., assignor to The Matson Company, Concord, N. H., a Corporation of New Hampshire. Original No. 1,718,392, dated May 14, 1929, Serial No. 226,970, filed Oct. 18, 1927. Application for reissue filed Nov. 27, 1929. Serial No. 411,016. 20 Claims. (Cl. 192—4.)



1. In a device of the kind described, including a speed gear box for the transmission of power, and having a shaft adapted to be rotated in either direction for the transmission of power, the combination of a mechanism normally connected to such shaft to automatically arrest movement thereof in one direction only, a device for rendering said mechanism inoperative, means including a pivoted lever for maintaining said mechanism in inoperative position indefinitely, and means operable by the transmission mechanism for placing said mechanism in operative position.

18,694. VACUUM TUBE DISCHARGE DEVICE. ARTHUR MUTSCHELLER, New York, N. Y., assignor to Wappler Electric Co., Inc., Long Island City, N. Y., a Corporation of New York. Original No. 1,788,959, dated Dec. 10, 1929, Serial No. 560,545, filed May 13, 1922. Application for reissue filed Sept. 17, 1930. Serial No. 482,631. 7 Claims. (Cl. 250—35.)



1. In a discharge device the combination with a highly evacuated vessel of an anode with great active area and a filamentary cathode having portions converging to a point whose cross sectional area is a minimum compared to said converging portions.

18,695. HAIR DEVICE. HENRY EISLER, New York, N. Y., assignor to Emeth Financial Corporation, a Corporation of New York. Original No. 1,844,644, dated Feb. 9, 1932, Serial No. 549,239, filed July 8, 1931. Application for reissue filed Sept. 30, 1932. Serial No. 635,697. 6 Claims. (Cl. 132—38.)

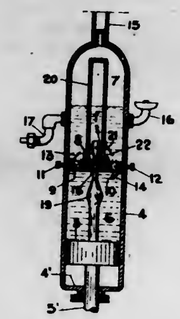


6. A device for forming hair in a roll, comprising upper and lower flexible wire portions connected together at two spaced points along the length of said portions, said flexible wire portions being adapted to engage the hair in between said portions and to be turned axially as a unit to wind the hair thereon, and pliable wire portions projecting outwardly beyond the points of connection, said pliable projecting portions being adapted to be bent inwardly and under to fasten the roll and to secure the device in place.

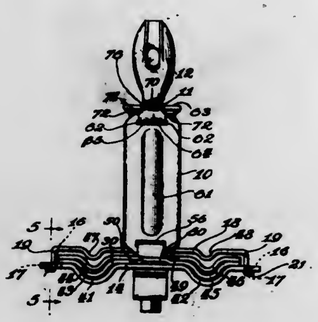
18,696. PNEUMATIC SUSPENSION FOR AIRPLANES. GEORGES LOUIS RENÉ JEAN MESSIER, Montrouge, France. Original No. 1,780,531, dated Nov. 4, 1930, Serial No. 304,433, filed Sept. 7, 1928, and in France Sept. 22, 1927. Application for reissue filed Nov. 3, 1932. Serial No. 640,984. 4 Claims. (Cl. 267—64.)

1. In a pneumatic suspension for the landing gear of airplanes, in combination, a cylinder pivotally attached to said airplane, a piston pivoted on the landing gear and

contained in said cylinder, a volume of gas in said cylinder, a volume of liquid in said cylinder, a diaphragm centrally positioned in said cylinder below the level of said liquid, said diaphragm being provided with a central orifice and intermediate orifices, a rod having a restricted portion, integral with said piston and passing through said central orifice, a closed tube mounted on said diaphragm over said central orifice being provided with a side orifice and a flap valve covering said side orifice when said piston descends.

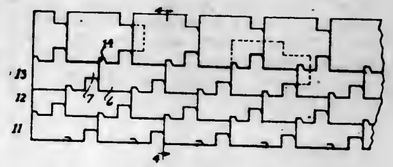


18,697. EARTH ANCHOR. ALBERT B. CHANCE, Centralia, Mo. Original No. 1,786,228, dated Dec. 28, 1930, Serial No. 280,699, filed May 26, 1928. Application for reissue filed Jan. 23, 1932. Serial No. 588,452. 21 Claims. (Cl. 189—92.)



15. In an earth anchor the combination of a metal crosshead having a centrally located bore for receiving a guy rod with a metal strip adapted to form pivotal supports for pivoted members, said strip being provided with an aperture registering with said bore and being formed with curved portions on both sides of said aperture for pivotally supporting said pivoted members, the ends of said strip being fixedly secured to said metal crosshead.

18,698. COMPOSITION SHINGLE. NORMAN P. HARSHBERGER, Scarsdale, N. Y. Original No. 1,717,608, dated June 18, 1929, Serial No. 132,121, filed Aug. 28, 1926. Application for reissue filed June 29, 1931. Serial No. 547,758. 10 Claims. (Cl. 108—7.)



1. An assembly of shingles comprising individual shingles spaced apart at their lowermost edges, one of said shingles having extensions lying below an adjacent shingle in the same course, said extension serving as a support for a shingle in the next overlying course.

18,699. CONTROL SYSTEM FOR MOTOR VEHICLES. HENRY E. LIPPERT, Norfolk, Va. Original No. 1,881,025, dated Oct. 4, 1932, Serial No. 337,711, filed Feb. 5, 1929. Application for reissue filed Nov. 7, 1932. Serial No. 641,687. 1 Claim. (Cl. 192—85.)

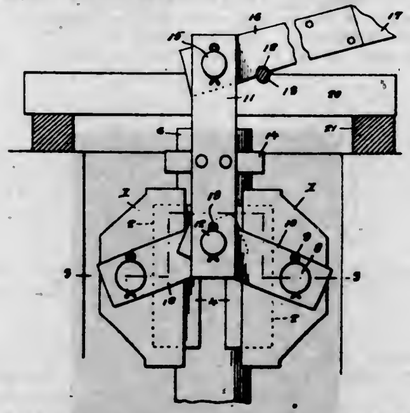


In a control system for motor driven vehicles, a pedal for disengaging the clutch of the vehicle by manual effort, a vacuum operated motor for disengaging the clutch by power, a source of suction, means connecting the vacuum operated motor with the source of suction including a conduit providing communication therebetween and a valve interposed in the conduit, separate and apart from the vacuum operated motor, for controlling communication therebetween, said means having an atmosphere inlet therein intermediate the vacuum operated motor and the source of suction for admitting atmosphere to the vacuum operated motor, means arranged at the atmosphere inlet to vary the rate at which atmosphere is admitted to the vacuum operated motor and thereby vary the speed of engagement of the clutch, common manually operable means for actuating the valve and thereby control the vacuum operated motor and for actuating a second element of the vehicle in controlling the latter, means operatively connecting the common manually operable means with the valve whereby movement of the common manually operable means will directly actuate the valve, and means for rendering both the valve inoperative to place the vacuum operated motor in communication with the source of suction and the common manually operable means inoperative to control the vacuum operated motor whereby the common manually operable means can be used to actuate said second element of the vehicle only.

18,700. PROCESS FOR THE PRODUCTION OF PERFECTLY SPHERICAL CULTURE PEARLS. KOKICHI MIKIMOTO, Ginsa, Kyobashi-Ku, Tokyo-Shi, Japan. Original No. 1,847,128, dated Mar. 1, 1932, Serial No. 537,507, filed May 14, 1931. Application for reissue filed Aug. 26, 1932. Serial No. 630,609. 1 Claim. (Cl. 119—4.)

In culture pearl production, a process comprising covering a nucleus of suitably rough surface by a single layer of a piece of the pliable and relatively poorly contractive mantle of a selected living pearl-oyster by binding the closing end with a draw string, cutting away the whole surplus part of the mantle cover and removing the draw string and inserting the mantle-covered nucleus into a suitable location in the mantle of another living pearl-oyster.

18,701. PULLER. GEORGE WILSON NICKERSON, Cotuit, Mass. Original No. 1,877,684, dated Sept. 13, 1932, Serial No. 553,467, filed July 27, 1931. Application for reissue filed Oct. 21, 1932. Serial No. 638,983. 1 Claim. (Cl. 254—81.)



A holder for the driven pipes of wells, comprising facing blocks having pockets therein at the confronting faces thereof, gripping jaws removably received in the pockets, links pivotally secured to the sides of the blocks and having their outer ends arranged in lapping relation, pairs of straps contacting with the outer faces of the links and pivoted thereto, plates pivotally secured to the outer ends of the straps, a pry bar fixed between the plates, an open platform having a transverse fulcrum pin supported thereon, and the plates having their lower edges provided with semi-cylindrical depressions to engage with the pin and a laterally extending plate on each of the inner straps disposed in close proximity to the upper ends of the blocks, for the purpose set forth.

18,702. SELF-INKING FOUNTAIN PEN. FRANK FUREDY, New York, N. Y., assignor to Inkpak Manufacturing Co. Inc., a Corporation of New York. Original No. 1,880,128, dated Sept. 27, 1932, Serial No. 605,229, filed Apr. 14, 1932. Application for reissue filed Oct. 13, 1932. Serial No. 637,663. 7 Claims. (Cl. 120—42.)



1. An improved fountain pen comprising a barrel adapted to contain water, a feeder member mounted in said barrel and having a bore extending longitudinally therethrough communicating at its inner end with the interior of the barrel and at its outer end being exposed outwardly of the barrel, said feeder member having a slot in its side wall communicating with the bore and opening outwardly, a pen point associated with said feeder member and extending about the slot thereof, and a cartridge removably and frictionally inserted in the bore of said feeder member, said cartridge comprising an outer metallic case having an inner open end communicating with the water in the barrel and a closed outer end exposed through the outer open end of the barrel, said case having a perforated side wall communicating with the slot of the feeder member, an ink making material in said cartridge, and a hook upon the outer closed end of the cartridge case exposed for withdrawing the cartridge axially out of the feeder member.

PLANT PATENTS

GRANTED DECEMBER 20, 1932

49. HYBRID TEA ROSE. NICHOLAS GRILLO, Milldale, Conn. Filed Apr. 28, 1932. Serial No. 608,091. 1 Claim. (Cl. 47—1.)

The hybrid tea rose herein shown and described, characterised particularly by its large white flowers having conical or pointed centers, often slightly suffused with pink.

50. HYBRID TEA ROSE. JAMES DIDATO, Middlesex, N. J. Filed June 8, 1932. Serial No. 616,154. 1 Claim. (Cl. 47—1.)

The variety of hybrid tea rose herein shown and described, characterised particularly by its reddish-pink buds, opening into a yellow flower with pink-tipped outer petals.

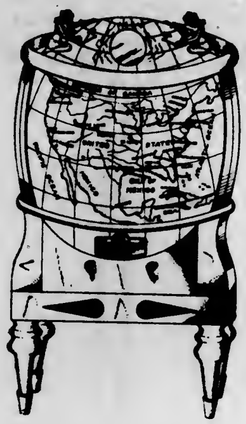
51. PEACH. WILLIAM F. RAMSEY, Okanogan, and ANDREW T. GOSSMAN, Wenatchee, Wash.; said Ramsey assignor to said Gossman. Filed June 29, 1932. Serial No. 620,044. 1 Claim. (Cl. 47—1.)

A variety of freestone peach of the J. H. Hale type as herein shown and described, characterised particularly by higher coloring, better flavor, almost entire absence of fuss, firmer flesh and superior shipping qualities.

DESIGNS

DECEMBER 20, 1932

88,704. RADIOCABINET. ARTHUR T. CARNEY, Blairsville, Pa., assignor of one-third to R. E. Miles, jr., Wilkinsburg, Pa. Filed Apr. 20, 1932. Serial No. 43,556. Term of patent 14 years.



The ornamental design for a radio cabinet, as shown and described.

88,705. TEXTILE FABRIC OR THE LIKE. LIZZIE DERRIEY, New York, N. Y. Filed Nov. 18, 1932. Serial No. 46,046. Term of patent 3½ years.



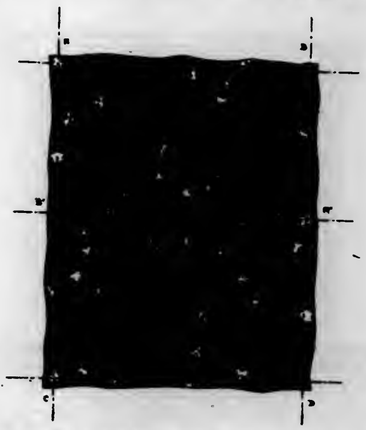
The ornamental design for a textile fabric or the like, as shown and described.

88,706. REFRESHMENT WAGON. JOSEPH GILLOW GARTON, New York, N. Y. Filed Aug. 31, 1932. Serial No. 44,725. Term of patent 3½ years.



The ornamental design for a refreshment wagon as shown.

88,707. TEXTILE FABRIC OR SIMILAR ARTICLE. JOSEPH M. GOTTESMAN, Paris, France, assignor to William Willheim Co., Inc., New York, N. Y. Filed Nov. 18, 1932. Serial No. 46,036. Term of patent 3½ years.



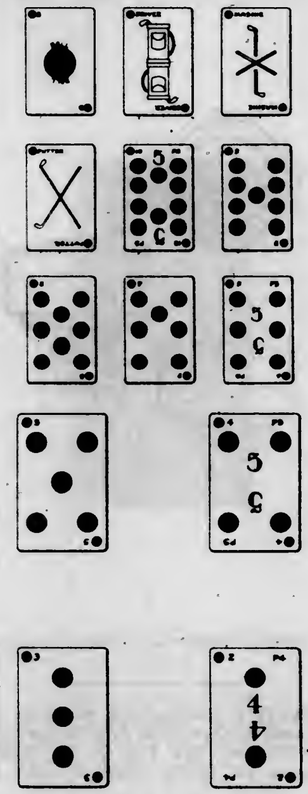
The ornamental design for a textile fabric or similar article as shown and described.

88,708. PRICE TAG. ISHMAEL H. GRAY, Indianapolis, Ind. Filed Oct. 24, 1932. Serial No. 45,539. Term of patent 14 years.



The ornamental design for a price tag, as shown.

88,709. DECK OF PLAYING CARDS. WILLIAM HAYES, Detroit, Mich. Filed Oct. 1, 1931. Serial No. 41,276. Term of patent 7 years.



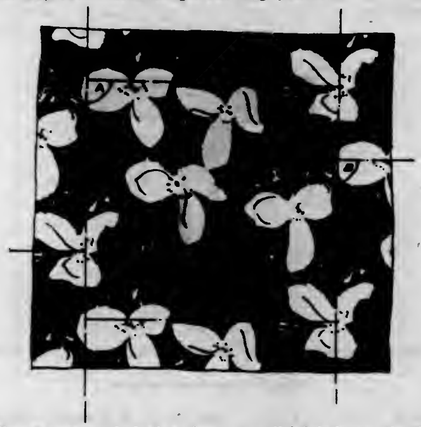
The ornamental design for a deck of playing cards, as shown and described.

88,710. TEXTILE FABRIC OR THE LIKE. ALFRED J. HEINKE, Towaco, N. J. Filed Nov. 10, 1932. Serial No. 45,860. Term of patent 3½ years.



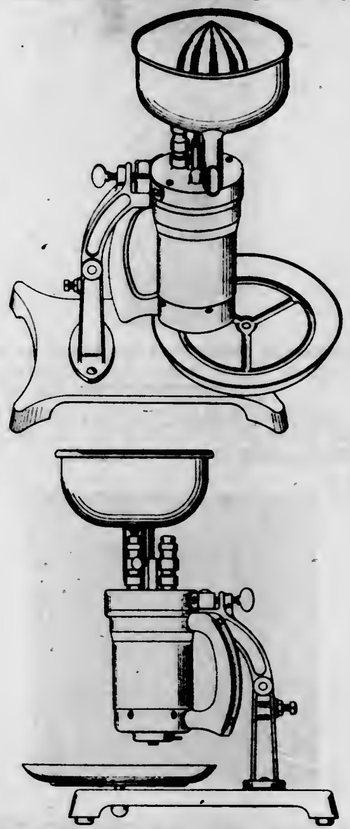
The ornamental design for a textile fabric or the like, as shown and described.

88,711. TEXTILE FABRIC OR THE LIKE. ALFRED J. HEINKE, Towaco, N. J. Filed Nov. 15, 1932. Serial No. 45,978. Term of patent 3½ years.



The ornamental design for a textile fabric or the like, as shown and described.

88,712. ELECTRIC FRUIT JUICE EXTRACTOR. FRED W. JUENGST and OSCAR M. ANDERSON, New Britain, Conn., assignors to Landers, Frary & Clark, New Britain, Conn., a Corporation of Connecticut. Filed Sept. 29, 1932. Serial No. 45,160. Term of patent 14 years.



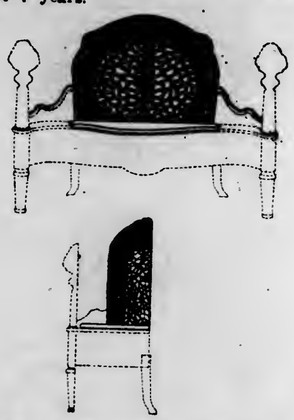
The ornamental design for an electric fruit juice extractor, as shown.

88,713. PEDESTAL LAVATORY. HERBERT V. KOHLER, Sheboygan, and FRANK G. BROTZ, Kohler, Wis. Filed Apr. 11, 1932. Serial No. 43,468. Term of patent 14 years.



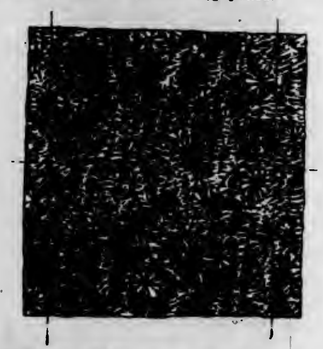
The ornamental design for a pedestal lavatory as shown.

88,714. GAS HEATER. GEORGE H. MCFADDEN, Steubenville, Ohio, assignor to The Ohio Foundry & Manufacturing Company, Steubenville, Ohio, a Corporation of Ohio. Filed Oct. 26, 1932. Serial No. 45,588. Term of patent 7 years.



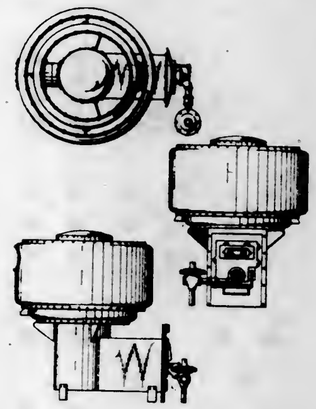
The ornamental design for a gas heater, as shown.

88,715. TEXTILE FABRIC OR THE LIKE. GEORGES MEGROZ, Bronxville, N. Y. Filed Nov. 18, 1932. Serial No. 46,052. Term of patent 3½ years.



The ornamental design for a textile fabric or the like, as shown and described.

88,716. FURNACE. DAVID W. NORRIS, Pasadena, Calif. Filed Feb. 4, 1932. Serial No. 42,739. Term of patent 14 years.



The ornamental design for a furnace substantially as shown.

88,717. TEXTILE FABRIC OR SIMILAR ARTICLE. JOHN OVERMEYER, New York, N. Y., assignor to William Willheim Co., Inc., New York, N. Y. Filed Nov. 18, 1932. Serial No. 46,081. Term of patent 3½ years.



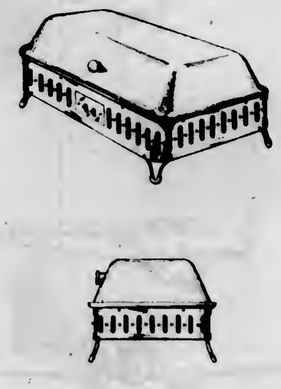
The ornamental design for a textile fabric or similar article as shown and described.

88,718. TEXTILE FABRIC OR SIMILAR ARTICLE. WILLARD D. ROBERSON, New York, N. Y., assignor to William Willheim Co., Inc., New York, N. Y. Filed Nov. 18, 1932. Serial No. 46,045. Term of patent 3½ years.



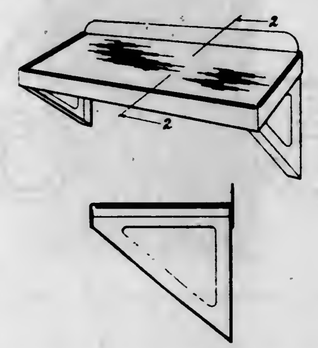
The ornamental design for a textile fabric or similar article as shown and described.

88,719. PORTABLE ELECTRIC COOKER. HERMAN J. TIETZ, San Pedro, Calif. Filed Jan. 4, 1932. Serial No. 42,362. Term of patent 14 years.



The ornamental design for a portable electric cooker, substantially as shown and described.

88,720. SHELF OR THE LIKE. GEORGE DOUGLAS WINFERT, New Haven, Conn., assignor to Sargent & Company, New Haven, Conn., a Corporation of Connecticut. Filed Aug. 25, 1932. Serial No. 44,689. Term of patent 14 years.



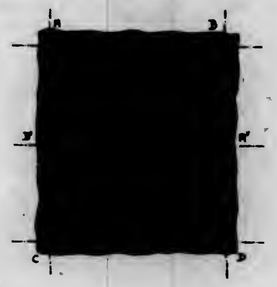
The ornamental design for a shelf or the like substantially as shown.

88,721. TEXTILE FABRIC OR SIMILAR ARTICLE. WILLIAM WILLHEIM, New York, N. Y. Filed Nov. 4, 1932. Serial No. 45,753. Term of patent 3½ years.



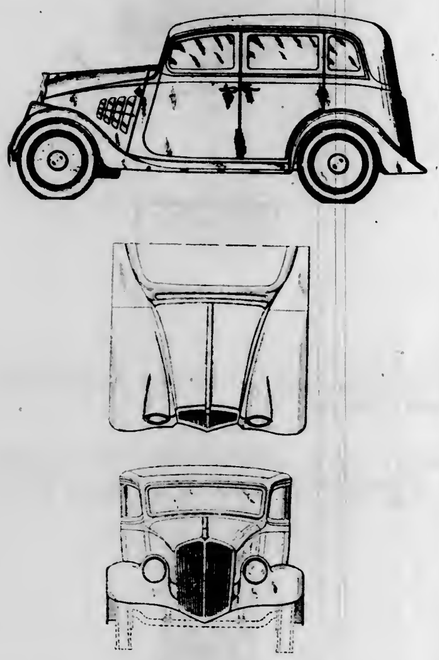
The ornamental design for a textile fabric or similar article as shown and described.

88,722. TEXTILE FABRIC OR SIMILAR ARTICLE. WILLIAM WILLHEIM, New York, N. Y. Filed Nov. 12 1932. Serial No. 45,919. Term of patent 3½ years



The ornamental design for a textile fabric or similar article as shown and described.

88,722. AUTOMOBILE. ARTHUR J. BAKER, Toledo, Ohio, assignor to The Willys-Overland Company, Toledo, Ohio, a Corporation of Ohio. Filed Oct. 28, 1932. Serial No. 45,617. Term of patent 14 years.



The ornamental design for an automobile substantially as shown and described.

88,724. AUTOMOBILE LAMP. BURNELL MALCOLM CALVERT, Terre Haute, Ind. Filed Apr. 21, 1932. Serial No. 43,559. Term of patent 3½ years.



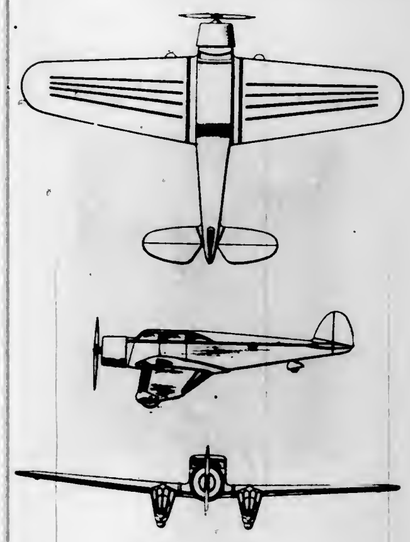
The ornamental design for an automobile lamp as shown and described.

88,725. TEXTILE FABRIC. LOUIS GOLDSTEIN, Brooklyn, N. Y. Filed Nov. 1, 1932. Serial No. 45,685. Term of patent 7 years.



The ornamental design for a textile fabric as shown.

88,726. AIRPLANE. CLIFFORD C. JONES, Washington, D. C. Filed Oct. 26, 1932. Serial No. 45,586. Term of patent 3½ years.



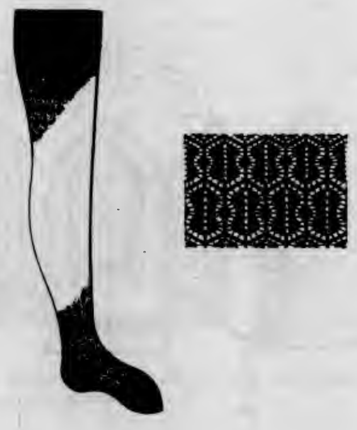
The ornamental design for an airplane, as shown.

88,727. ASTRONOMICAL STAR-DOME. BRUNO C. METZNER, New York, N. Y. Filed Oct. 15, 1932. Serial No. 45,870. Term of patent 7 years.



The ornamental design for an astronomical star-dome, as shown.

88,728. STOCKING. ROBERT B. SCHINDLER, Spring City, Pa., assignor to Schuylkill Valley Mills, Inc., Spring City, Pa. Filed Apr. 13, 1932. Serial No. 43,484. Term of patent 3½ years.



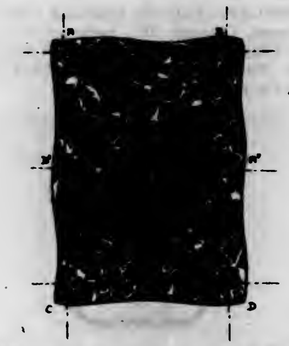
The ornamental design for a stocking as shown and described.

88,729. TEXTILE FABRIC OR SIMILAR ARTICLE. FERNAND BRIDIER, Paris, France. Filed Nov. 12, 1932. Serial No. 45,902. Term of patent 3½ years.



The ornamental design for a textile fabric or similar article as shown and described.

88,730. TEXTILE FABRIC OR SIMILAR ARTICLE. FERNAND BRIDIER, Paris, France. Filed Nov. 12, 1932. Serial No. 45,903. Term of patent 3½ years.



The ornamental design for a textile fabric or similar article as shown and described.

88,731. TEXTILE FABRIC OR THE LIKE. HAROLD CRUDEN, Ridgewood, N. J. Filed Nov. 16, 1932. Serial No. 45,996. Term of patent 3½ years.



The ornamental design for a textile fabric or the like, as shown and described.

88,732. CONTAINER. NELLIE SPOTTS ELLSWORTH, San Francisco, Calif. Filed July 5, 1932. Serial No. 44,258. Term of patent 3½ years.



The ornamental design for a container substantially as shown.

88,733. DISPLAY CARD OR SIMILAR ARTICLE. SOL H. GOLDBERG, Chicago, Ill., assignor to Chain Store Products Corporation, Chicago, Ill., a Corporation of Delaware. Filed Dec. 2, 1931. Serial No. 41,936. Term of patent 3½ years.



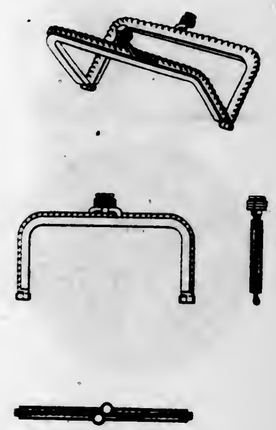
The ornamental design for a display card or similar article, as shown and described.

88,734. BIRD FIGURE. LYLE D. GRUBBS, Hinsdale, Ill. Filed Sept. 26, 1932. Serial No. 45,070. Term of patent 3½ years.



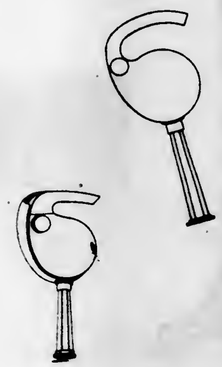
The ornamental design for a bird figure, as shown.

88,735. HAND BAG FRAME. WILLIAM C. HERRING, Wyoming, N. J., assignor to The J. E. Mergott Company, Newark, N. J., a Corporation of Delaware. Filed Sept. 27, 1932. Serial No. 45,084. Term of patent 3½ years.



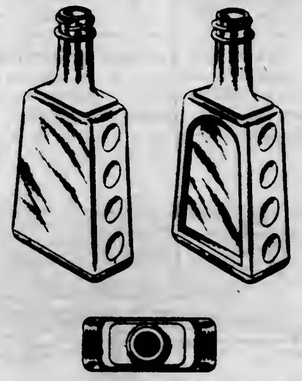
The ornamental design for a hand bag frame as shown.

88,736. RAZOR. MAURICE ETIENNE JULLIARD, Paris, France. Filed Aug. 19, 1931. Serial No. 40,884. Term of patent 3½ years.



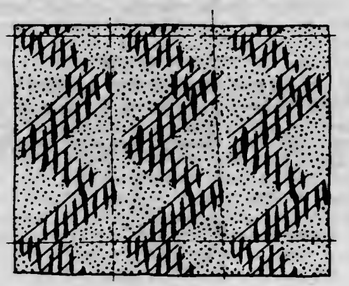
The ornamental design for a razor as shown.

88,737. BOTTLE. WILLOUGHBY M. MCCORMICK, Baltimore, Md., assignor to McCormick & Co., Incorporated, Baltimore, Md., a Corporation of Maryland. Filed Oct. 20, 1932. Serial No. 45,422. Term of patent 14 years.



The ornamental design for a bottle, substantially as shown.

88,738. TEXTILE FABRIC OR THE LIKE. GERTRUDE MORRIS, New York, N. Y. Filed Nov. 14, 1932. Serial No. 45,953. Term of patent 3½ years.



The ornamental design for a textile fabric or the like, as shown and described.

88,739. TRINITY SACRAMENTAL CHEST. FRANCIS J. QUINN, Chicago, Ill. Filed June 20, 1931. Serial No. 40,284. Term of patent 3½ years.



The ornamental design for a trinity sacramental chest as shown and described.

88,740. TEXTILE FABRIC OR THE LIKE. ROBERT SCHEY, New York, N. Y. Filed Nov. 15, 1932. Serial No. 45,972. Term of patent 3½ years.



The ornamental design for a textile fabric or the like, as shown and described.

88,741. SMOKER'S STAND OR SIMILAR ARTICLE. WILLIAM L. WALLIS, College Park, Ga. Filed Oct. 29, 1932. Serial No. 45,631. Term of patent 14 years.



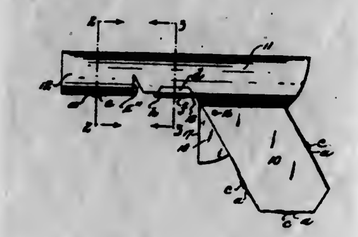
The ornamental design for a smoker's stand or similar article, as shown.

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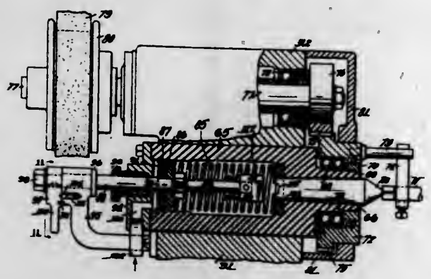
GRANTED DECEMBER 20, 1932

1,891,219. TOY FIREARM. ALFRED Z. BAKER, Newark, N. J. Filed Apr. 15, 1932. Serial No. 605,404. 4 Claims. (Cl. 46—46.)



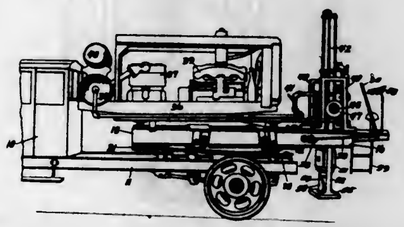
1. In a toy firearm, a sheet metal blank folded upon itself to form a main body comprising a barrel and butt, certain meeting edge portions of said folded blank having slotted tongues and opposed meeting edge portions having clinching lugs extended through and clinched over said slotted tongues to secure said folded blank in body forming condition, a bridge piece springing from one side and extending between the sides of said folded body, the free end of said bridge piece having a slotted tongue, a resiliently flexible sounder having a rim bound buckle adapted to "crack" when the sounder is flexed, one end of said sounder being supported on said bridge piece, and said folded body including anchor lugs to embrace and clinch over the supported end of said sounder, one of said anchor lugs also extending through the slotted tongue of said bridge piece to interlock the latter with the opposite side of said folded body.

1,891,220. HEAD-STOCK FOR MACHINE TOOLS. STANLEY W. BATH, Shrewsbury, Mass., assignor to John Bath, Worcester, Mass. Filed July 17, 1931. Serial No. 551,539. 11 Claims. (Cl. 82—28.)



1. In a head-stock, a head-stock frame, a work center, a support for said center mounted for sliding movement in said frame, a spring to move said support and center toward the work, fluid-operated means to move said support and center away from the work, and a device effective in one position to limit movement of said support and center away from the work and effective in another position to eject said center from said support.

1,891,221. PAVEMENT BREAKING MACHINE. WALTER VANCE CORNETT, Brooklyn, N. Y., assignor to Rapid Pavement Breaker Corporation, a Corporation of Nevada. Filed Mar. 18, 1930. Serial No. 436,661. 17 Claims. (Cl. 262—15.)



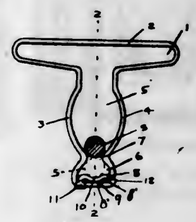
1. A pavement breaking machine comprising a vehicle, a movable support thereon, an impact tool mounted upon one end of said support, means on said support for securing said tool rigidly thereto during operation, and a source of power mounted on the other end of said support for balancing said impact tool and for moving said support.

1,891,222. TOOL FOR DEMOLITION MACHINES. WALTER VANCE CORNETT, Brooklyn, N. Y., assignor to Rapid Pavement Breaker Corporation, a Corporation of Nevada. Filed Mar. 18, 1930. Serial No. 436,662. 3 Claims. (Cl. 262—33.)



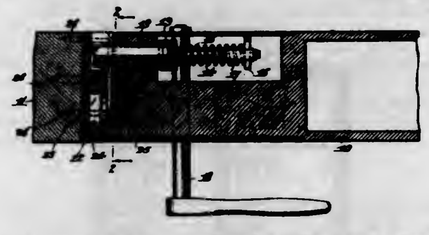
1. In a demolition machine, a tool having a contact face of substantially spherical form, a flat face opposite said spherical face and a flaring tendon located on said flat face.

1,891,223. BUTTON LOOP. JOHN H. DOMKEE, West Haven, Conn., assignor to The Wire Novelty Manufacturing Company, West Haven, Conn., a Corporation of Connecticut. Filed May 6, 1931. Serial No. 535,417. 4 Claims. (Cl. 24—224.)



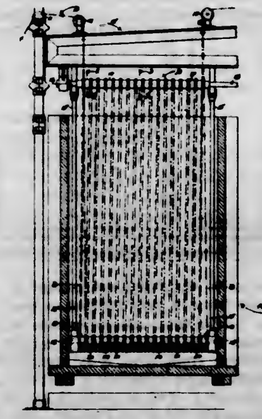
4. A button loop comprising a piece of wire of which a middle portion is bent to provide a suspension loop, and the remaining wire portions being formed to include a pair of spring arms providing axially associated button-receiving and button-retaining loops having an intermediate contracted portion, the wire extremities extending in opposite directions and overlapped to complete the button-retaining loop, one of said overlapped extremities being free and its end provided with an enlargement, and the other of said overlapped extremities being provided with a seat-depression for the shank of a button and also provided with a looped end loosely surrounding the free extremity and spaced from the enlargement.

1,891,224. LATCHING DEVICE. GEORGE H. EDWARDS, Brooklyn, N. Y. Filed Oct. 31, 1931. Serial No. 573,359. 18 Claims. (Cl. 292—340.)



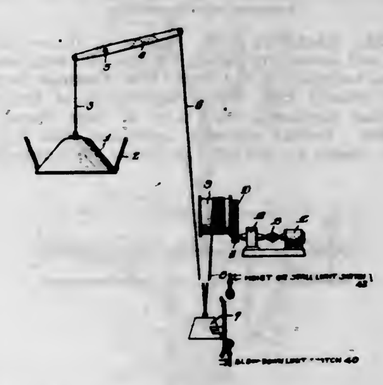
1. A device for use in conjunction with a latch member, said device comprising a fixed member, a pair of cooperative pivoted keeper members on said fixed member, and resilient means which cooperates with each of said keeper members, the provision and arrangement being such that the keeper members are operatively yielding under the pressure exerted by the latch member moving into its latching position, and the keeper members being provided with eccentric bearing surfaces which engage with said latch member, whereby said keeper members are adapted to exert a camming action on said latch member while the latter is in its latching position, the engaging surface of said latch member being approximately parallel to the pivotal axes of said keeper members, and said latch member when in the latching position being located beyond the line between the centers of said pivoted members in the direction of motion of said latch member toward the latching position, whereby said eccentric surfaces produce a continual tendency to cause said latch member to move to a tighter latching position.

1,891,225. MOTION PICTURE FILM TREATING APPARATUS. RALPH G. FEAR, Los Angeles, Calif. Filed Nov. 22, 1929. Serial No. 408,989. 8 Claims. (Cl. 271—2.8.)



1. In a film treating apparatus, means for driving a film through said apparatus, said driving means being non-positively operated at progressively changing angular velocity.

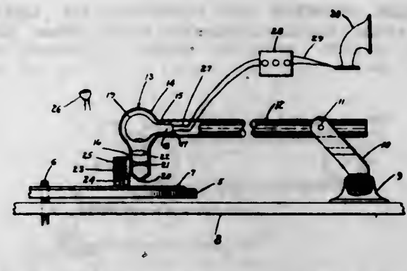
1,891,226. MOTOR CONTROL SYSTEM. GORDON FOX, Chicago, Ill., assignor to Freyn Engineering Company, Chicago, Ill., a Corporation of Maine. Filed Mar. 26, 1926. Serial No. 97,811. 11 Claims. (Cl. 172—182.)



1. In combination, weight means, a dynamo-electric machine for lifting said weight means, a switch for controlling said dynamo-electric machine, and means responsive to said switch for maintaining a cycle of movement of said weight means from its lowermost position to its uppermost position and back to its lowermost position, said cycle maintaining means including resistance means and a switch responsive to the position of said weight means for inserting said resistance means into circuit with said dynamo-electric machine for stalling said dynamo-electric machine, and time responsive means for reducing the energization of said motor to permit the descent of said weight means.

11. In combination, weight means, an electric motor for lifting said weight means and electric control means for inaugurating and maintaining a single cycle of movement for lifting said weight means and returning same to its original position, said electric control means including a switch-controlled resistor for carrying braking current set up by rotation of the rotor of said motor, and switch-controlled stalling means for holding said weight means at the upper limit of its movement, and time responsive means for controlling said stalling means.

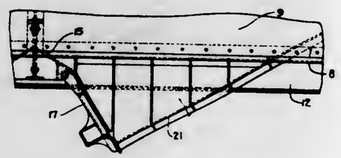
1,891,227. SOUND REPRODUCING MEANS AND METHOD. REGINALD T. FRIESUS, Montclair, N. J., assignor to Columbia Phonograph Company, Inc., Bridgeport, Conn., a Corporation of New York. Filed Sept. 25, 1929. Serial No. 394,998. 4 Claims. (Cl. 179—100.1.)



1. In a machine for reproducing recorded matter, in combination, a record having a record groove therein, means for throwing a beam of light onto said record, a lens system positioned to receive reflected light rays from said record, a light sensitive cell positioned to receive light rays passing through said lens system, means co-

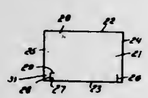
operating with the record groove of said record and guiding the lens system with respect to said groove, and said means comprising a soft metal pin having a rounded point operating in said groove.

1,891,228. RAILWAY CAR. GARTH G. GILPIN, Riverside, and ARTHUR E. SMALL, Chicago, Ill., assignors, by mesne assignments, to General Steel Castings Corporation, Granite City, Ill., a Corporation of Delaware. Original application filed Apr. 8, 1929, Serial No. 353,494. Divided and this application filed July 15, 1931. Serial No. 550,937. 12 Claims. (Cl. 105—249.)



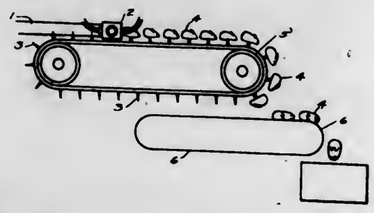
1. In a railway car, the combination of a center sill, a side wall, a cross bearer extending between and secured directly to the center sill and the side wall, said cross bearer formed of a pair of members secured together, each consisting of an integral casting comprising a vertical web, a downwardly sloping portion extending from said web, and an upper stiffening flange.

1,891,229. INTERLOCKING SHINGLE. MARSTON LOVELL HAMLIN, Lynbrook, N. Y., assignor to The Barrett Company, New York, N. Y., a Corporation of New Jersey. Filed Dec. 9, 1931. Serial No. 579,884. 10 Claims. (Cl. 108—7.)



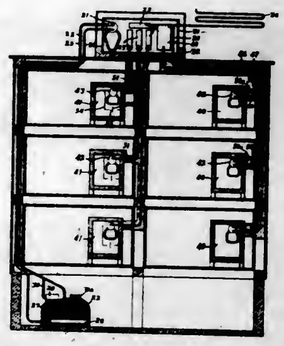
1. A flexible shingle having a locking slit within the border edges thereof spaced from one transverse edge and leading into the forward edge of said shingle, a projection spaced from the opposite transverse edge, one side of which is defined by a slit leading into said forward edge, said shingle being adapted to be laid in courses with other like shingles with the projection of one shingle locking with the slit of an adjacent shingle in the same course.

1,891,230. PROCESS OF STAMPING ICE CREAM SHAPES. MILLARD G. HARNDEN, Seattle, Wash. Filed May 6, 1930. Serial No. 450,321. 6 Claims. (Cl. 107—54.)



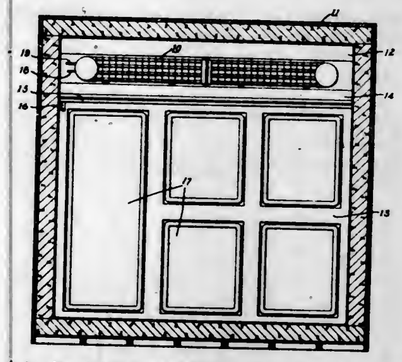
6. The process of stamping ice cream from bulk into shapes which consists in freezing the exterior of the cream forming a hard frozen crust with a ductile center, forming the ice cream into individual shapes in which the forming means is at a higher temperature than the ice cream, and the temperature thereof is controlled, embossing characters or designs on the said shapes by said forming means, and supporting the bulk ice cream and shapes by points extending into the ice cream and shapes at points corresponding with the centers of the shapes.

1,891,231. REFRIGERATING APPARATUS. HARRY B. HULL, Dayton, Ohio, assignor to Frigidaire Corporation, Dayton, Ohio, a Corporation of Delaware. Filed May 30, 1929. Serial No. 367,168. 13 Claims. (Cl. 62—115.)



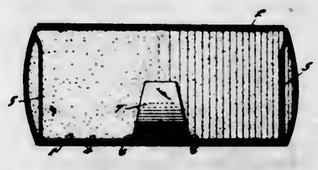
1. A refrigerating system including a heat transfer receptacle, a refrigerating apparatus for maintaining said receptacle below a predetermined temperature limit, means for automatically placing said receptacle in thermal contact with the atmosphere when the temperature of the atmosphere falls below said predetermined limit, means enclosing a space to be refrigerated and a heat transfer system from said space to said receptacle.

1,891,232. REFRIGERATING APPARATUS. JAMES R. KILLEN, Dayton, Ohio, assignor to Frigidaire Corporation, Dayton, Ohio, a Corporation of Delaware. Filed Feb. 19, 1930. Serial No. 429,788. 9 Claims. (Cl. 62—126.)



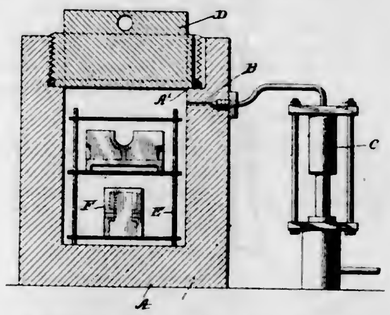
4. A horizontally elongated evaporator of a refrigerating system comprising in combination, a header adapted to contain liquid refrigerant, means within said header for preventing liquid from rising above a certain level, a second header spaced from said first mentioned header, a plurality of duct means connecting both of said headers, some of said plurality of duct means being disposed above the liquid refrigerant level and some other of said plurality of duct means being disposed below the liquid level, cross-over means between said headers and connected with all of said duct means extending between said headers.

1,891,233. EYEGLASS CASE. SAUL L. LACHTER, Irvington, N. J. Filed May 4, 1932. Serial No. 609,057. 8 Claims. (Cl. 206—5.)



1. A spectacle case comprising a pouch of flexible material provided with a closing flap, a substantially U-shaped resilient frame arranged in the pouch and consisting of a strip occupying the bottom of the pouch and having resilient end members bearing against the ends of the pouch, a block positioned on the strip and prongs struck up from and projecting upwardly from the strip and embedded in and embracing opposite ends of the block to immovably position the same on the strip.

1,891,234. METHOD OF MODIFYING INTERNAL STRAINS IN METAL OBJECTS. FREDERICK C. LANGENBERG, Edgewater Park, N. J., assignor to United States Pipe & Foundry Company, Burlington, N. J., a Corporation of New Jersey. Filed Nov. 6, 1929. Serial No. 405,080. 6 Claims. (Cl. 148—12.)



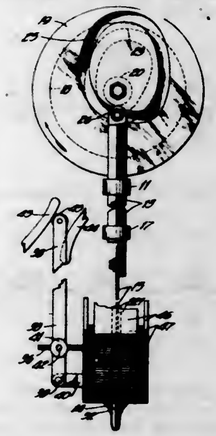
1. The method of modifying injurious strains in the body of previously formed metal castings and forgings which consists in ascertaining experimentally a degree of pressure which will advantageously modify internal strains existing in the metal object to be treated and then subjecting such metallic bodies to such determined and known high pressure simultaneously exerted on all parts of the body as will advantageously modify the internal strains thereof without materially changing the form of the body.

1,891,235. MANUFACTURE OF MAGNETIC MATERIAL. GEORGE LAWTON and WILLIAM HOGHTON DEARDEN, Aldwych, London, England, assignors to International Standard Electric Corporation, New York, N. Y. Filed May 20, 1930, Serial No. 454,179, and in Great Britain May 31, 1929. 4 Claims. (Cl. 175—21.)

1. A method of treating magnetic material by subjecting same to the action of ferrochrome.

1,891,236. BRISTLING MACHINE. RICHARD MAROGG, Troy, N. Y., assignor to Autograf Tooth Brush Co., Inc., Troy, N. Y., a Corporation of New York. Filed Aug. 4, 1931. Serial No. 555,041. 19 Claims. (Cl. 300—5.)

1. In a device of the character described, a reciprocable nozzle provided with a slot of predetermined fixed dimensions adapted to contain bristles in excess of the number required to form a tuft, a magazine adapted to contain bristles exposed along one portion of the magazine and along which exposed portion the slotted portion of said



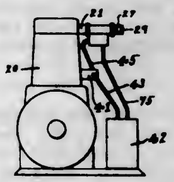
nozzle may slide, and means for segregating from the bristles in said slot a sufficient number only to form a tuft.

1,891,237. AIRCRAFT CONTROL. HENRY ANTON MEYER, St. Paul, Minn. Filed Oct. 13, 1931. Serial No. 568,569. 8 Claims. (Cl. 244—6.)



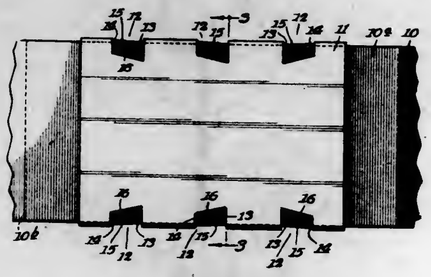
1. In a structure of the character described, supports extending laterally from the body of the aircraft, tracks carried by said supports and arranged in substantially parallel planes, rods connecting said tracks to hold them a definite distance apart, a cage having tracks upon its ends adjacent and parallel with the first mentioned tracks, antifriction means separating the tracks, a framework connecting the second mentioned tracks and rotatable therewith, a shaft in the second mentioned framework and rotatable about an axis at a right angle to the axis of rotation of the cage, a motor carried by said shaft to rotate therewith and means to rotate the cage and the shaft about their respective axes.

1,891,238. CARBURETOR. LOUIS C. OSWALD, Dayton, Ohio, assignor to Delco-Light Company, Dayton, Ohio, a Corporation of Delaware. Filed Jan. 29, 1930. Serial No. 424,317. 5 Claims. (Cl. 261—39.)



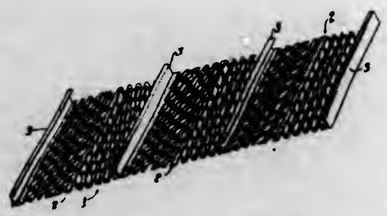
1. In a carburetor, the combination with a fuel chamber having a fuel outlet passage, of a movable fuel overflow outlet for said chamber, and bimetallic thermostatic means associated with said movable overflow outlet for varying the level of fuel in said chamber.

1,891,239. STRAP SEAL AND METHOD OF FORMING THE SAME. JOHN HENRY OTT, Chicago, Ill., assignor to Acme Steel Company, Chicago, Ill., a Corporation of Illinois. Filed Jan. 28, 1932. Serial No. 588,317. 8 Claims. (Cl. 24—28.)



5. A strap seal comprising overlapped strap ends and a sleeve embracing them, marginal portions of the sleeve and enclosed strap ends being sheared transversely of the strap to form along each edge of said sleeve a plurality of transversely projecting lugs, the cuts on the opposite sides of each lug being of unequal depth and of the same depth as the cuts on the opposite sides of the other lugs, said lugs being located opposite each other in pairs with the inner margins of the lugs of one pair converging longitudinally of the strap in a direction opposite to the convergence of other opposite lugs formed by said cuts.

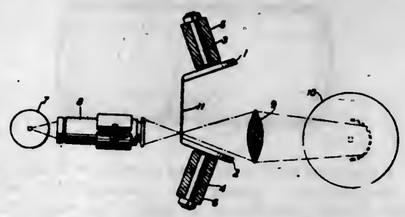
1,891,240. RIBBED LATH. JAMES W. PEARCE, Philadelphia, Pa. Filed July 30, 1930. Serial No. 471,640. 2 Claims. (Cl. 72—117.)



1. An integral metallic sheet for reinforcing concrete, plaster and the like having an plurality of open work flat portions therein with a rib along each side of each flat portion, which rib includes a pair of substantially upright, closely adjacent integral side walls at least one of which is integral with the sheet, a portion of the side walls of each rib being bent laterally to provide a double thickness integral flange overhanging the associated open work flat portions of the sheet but spaced above the same, each rib having a V-shaped opening between the lower portion of the walls.

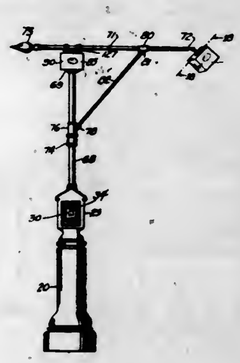
1,891,241. SOUND PICTURE SYSTEM. HARRY PFANNENSTIEHL, Mountain Lakes, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Oct. 31, 1930. Serial No. 492,388. 7 Claims. (Cl. 179—100.3.)

1. The combination in a sound picture system of means for producing a beam of light, a lens for focusing said beam of light, a film, means for driving said film through said beam of light substantially at the focal point, a pair of rollers disposed obliquely with respect to said film and engaging the marginal edges thereof on either side of the light beam and rotatable in response to the movement of said film for the purpose of guiding and maintaining said



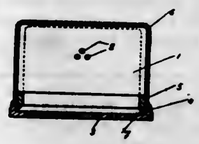
film in its proper location with respect to said focal point, a photoelectric cell, and a lens for collecting the light passing through said film and for directing it to said cell.

1,891,242. FIRE ALARM SIGNAL AND PHOTOGRAPHIC APPARATUS. MORRIS ROTHMAN and ESTELLE TANENBAUM ROTHMAN, Bayonne, N. J. Filed May 21, 1930. Serial No. 454,310. 4 Claims. (Cl. 177—379.)



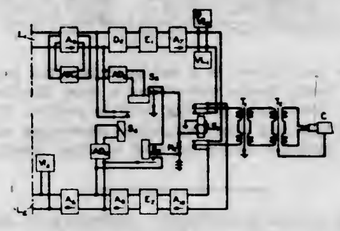
2. In an apparatus of the character described the combination of a fire alarm signal box, means connected to the fire alarm signal box to operate the same, an electric circuit, means for closing said circuit operated by the operation of the fire alarm signal box, an arm supported above said fire alarm signal box, means included in said circuit to revolve said arm, a motion picture camera supported by the arm and means interposed between said fire alarm signal box and said motion picture camera to operate the latter when said electric circuit is closed.

1,891,243. CONTAINER FOR SHAVING SOAP. OCTAVE GONZALÈS ROUBA, Paris, France. Filed Aug. 26, 1930, Serial No. 477,961, and in France Apr. 30, 1930. 1 Claim. (Cl. 206—56.)



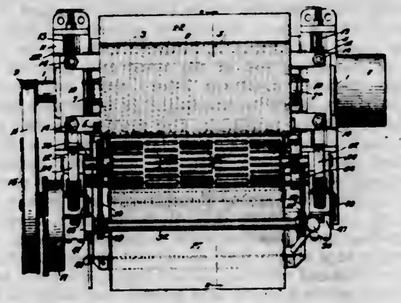
A container for a block of shaving soap having an enlarged shoulder around one end comprising a moulded non-metallic base, an upturned flange on said base, a screw thread on the inner surface of said upturned flange, a screwed ring of greater thickness than the depth of the screwed portion of said upturned flange, said screwed ring having a recessed under surface to engage the said enlarged ridge on the soap block, and an internally threaded cover to engage the portion of said screwed ring projecting above the moulded base.

1,891,244. SUBMARINE CABLE. EDWARD K. SANDEMAN, PHILIP R. THOMAS, and SYDNEY H. GROVE, Aldwych, London, England, assignors to International Standard Electric Corporation, New York, N. Y., a Corporation of Delaware. Filed Feb. 12, 1931, Serial No. 515,256, and in Spain Apr. 29, 1930. 7 Claims. (Cl. 179—4.)



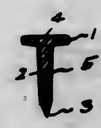
1. In a submarine cable telephone system the combination with the cable of a circuit comprising a receiving branch and a transmitting branch, a switching device in said circuit adapted to connect said cable respectively with either the receiving branch or the transmitting branch and means for operating said switching device by voice currents in said circuit.

1,891,245. SHREDDING MACHINE. DELL W. SARVAY, JOHN J. GRIEB, and ALLEN J. FRITZ, Carthage, N. Y., assignors to Ryther and Pringle Company, Carthage, N. Y., a Corporation of New York. Filed Mar. 9, 1932. Serial No. 597,670. 13 Claims. (Cl. 92—20.)



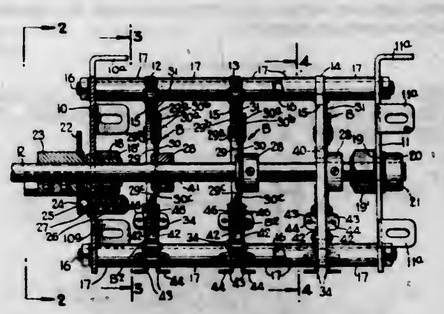
1. In a machine of the class described, the combination of a rotatable arbor, a plurality of larger shredding blades having teeth and mounted on said arbor in spaced relation, a plurality of smaller shredding blades having teeth and mounted on said arbor in alternate relation with the larger blades, a bed or support adjacent to the larger blades and a series of bed bars adjacent to the smaller blades, and feeding rolls for the stock adjacent to the shredding mechanism, together with a gear mechanism operatively connected with the rotary shredding devices and the feed rolls for positively driving each feed roll independently of the other, said gear mechanism including a speed reducer and automatic belt tightener, and means for adjusting the top feed roll at any desired elevation with relation to the lower feed roll.

1,891,246. NAIL. JAMES L. SHANKLIN, Houston, TEX. Filed Apr. 9, 1931. Serial No. 528,864. 4 Claims. (Cl. 85—10.)



1. A fastener having a head, a shank and a tang, said fastener having a restricted zone located centrally at the outer end of the head which is subject to magnetic influence.

1,891,247. SWITCH. SAM A. SHAPIRO, Lawrence, Mass., assignor to Pilot Radio and Tube Corporation, Lawrence, Mass., a Corporation of Delaware. Filed Dec. 10, 1931. Serial No. 580,019. 10 Claims. (Cl. 200—14.)



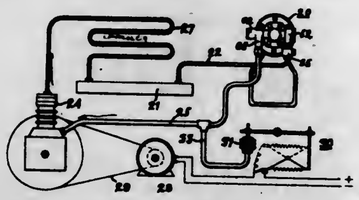
1. A switch of the class described, comprising a series of contact sections, some being in the form of single plates and the others in the form of yoked plates, and a rotor member cooperating simultaneously with a plurality of said contact plates, said rotor member having a plurality of blades, the blades cooperating with the single plate contact being formed of a yoked section surrounding and contacting with both sides of said single plate, and the blade cooperating with said yoked contact plates comprising a unitary section disposed to wipe between said yoked plates contact.

1,891,248. CAMEO. MORRIS STAMER, Newark, N. J. Filed Feb. 19, 1932. Serial No. 593,950. 4 Claims. (Cl. 63—32.)



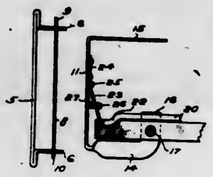
1. A cameo including a base having a partial design portion in relief thereon, said design portion being integral with said base and projecting therefrom, and a supplemental relief section fitted to said design portion.

1,891,249. REFRIGERATING APPARATUS. OTTO M. SUMMERS, Dayton, Ohio, assignor to Frigidaire Corporation, Dayton, Ohio, a Corporation of Delaware. Filed Mar. 31, 1930. Serial No. 440,501. 8 Claims. (Cl. 62—115.)



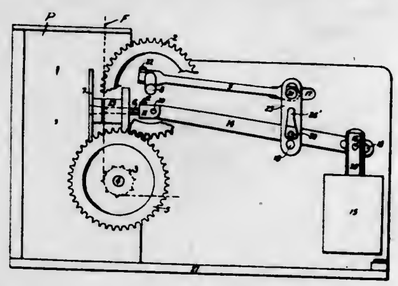
1. Refrigerating apparatus comprising in combination, a refrigerant chamber, refrigerant flow control means including means responsive to the condition within said chamber and a valve operatively associated therewith, a housing for said valve, a coupling for connecting said housing with a refrigerant circulating means, said housing having an opening through which said valve can be removed, a removable cover for said opening, and a shut off valve between said first valve and float chamber for preventing the escape of refrigerant from the chamber when the cover is removed.

1,891,250. GARMENT HANGER. IRVING ALANSON THOMPSON, Milwaukee, Wis. Filed Dec. 30, 1929. Serial No. 417,408. 2 Claims. (Cl. 248—1.)



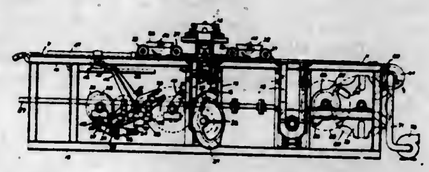
2. In a hanger of the character described, the combination with a bracket support comprising a flat metal strap having its lower end bent outwardly and twisted through an angle of substantially 90°, of a hanger arm pivotally mounted to said lower end for vertical swinging movement, and releasable means mounted on said bracket support for holding said arm horizontally positioned.

1,891,251. MACHINE FOR PUNCHING FILMS. SVATOPLUK C. VOLNEY, New York, N. Y. Filed Apr. 6, 1929. Serial No. 353,039. 6 Claims. (Cl. 164—89.)



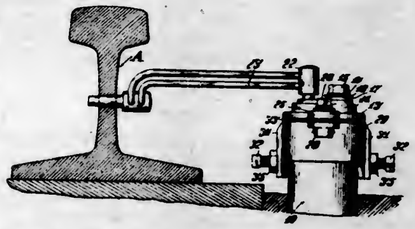
1. In an assembly of the character described, means to feed a film intermittently with interposed periods of dwell, corresponding to periods of projection, and manually controlled means operable on the film during said periods of dwell to mark such points in the length of the film as the operator may elect.

1,891,252. PRINTING MACHINE. WILLIAM H. WALDRON, New Brunswick, N. J., assignor to John Waldron Corporation, New Brunswick, N. J., a Corporation of New Jersey. Filed Feb. 19, 1931. Serial No. 516,850. 10 Claims. (Cl. 101—199.)



1. The combination in a flat block printing press, of a printing head, means comprising a cam functioning to positively lower said printing head to perform the printing operation and disabling means associated with said printing head for rendering said printing head inoperative.

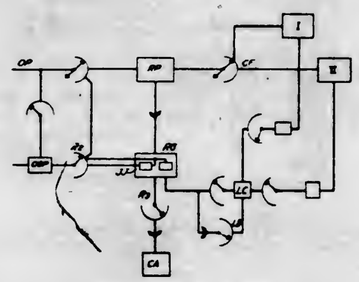
1,891,253. CABLE OUTLET. FREDERICK B. WIEGAND, Cleveland, and BERNARD J. SCHWENDT, Lakewood, Ohio. Filed Sept. 10, 1930. Serial No. 480,988. 1 Claim. (Cl. 247—1.)



In a cable outlet, the combination of a hollow cable receiving stand adapted to be vertically arranged in the ground; with a sleeve adapted to encircle the upper end of the stand and having an inturned flange at its top to rest on the upper end of the stand and provided with radially disposed apertured lobes; clamp bolts carried by the sleeve whereby the latter is removably secured to the stand; an insulating disc seatable on the upper face of said sleeve; a conductor plate arranged on the disc provided with radially disposed apertured extensions coincident with the lobes of the sleeve and provided with a cable wire opening therethrough and with a bond wire pin receiving hole, said conductor plate having an upstanding boss provided with a tapped opening, with the upper face of the boss about said opening having an annular cable-end receiving recess; bolt and washer means for clamping the cable in said recess; and insulated bolts disposed through the apertured extensions of the top plate and into the apertured lobes of the sleeve for removably securing said plate to the sleeve.

1,891,254. AUTOMATIC TELEPHONE SYSTEM. EDMOND PHILIP GOODWIN WRIGHT, Aldwych, London, England, and LESLIE BAINES HAIGH, Paris, France, assignors to International Standard Electric Corporation, New York, N. Y., a Corporation of Delaware. Filed Oct. 30, 1930, Serial No. 492,228, and in Great Britain Nov. 18, 1929. 18 Claims. (Cl. 179—27.)

1. A telephone exchange system comprising an automatic exchange and a manual exchange, a two-wire order wire between said exchanges, register means for automatically selecting said order wire when a call is from an automatic exchange to a manual exchange, means by which signals indicative of a wanted subscriber's designation are transmitted automatically from said register

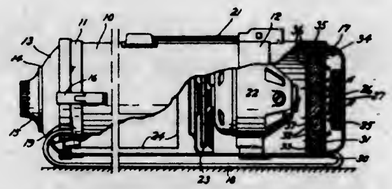


over the order wire, and means for releasing said order wire when connection with the manual exchange has been made.

1,891,255. NITRATED CARBOHYDRATE EXPLOSIVES AND PROCESS OF PRODUCING THE SAME. PHILIP G. WRIGHTSMAN, Chester, Pa., assignor to E. I. du Pont de Nemours & Company, Wilmington, Del., a Corporation of Delaware. Filed Dec. 20, 1927. Serial No. 241,457. 14 Claims. (Cl. 52—22.)

1. A process of manufacturing an explosive containing nitrated carbohydrate, which comprises nitrating a solution containing chlorhydrin and the maximum proportion of sucrose that is soluble in a chlorhydrin medium, and a sugar that is more soluble than sucrose.

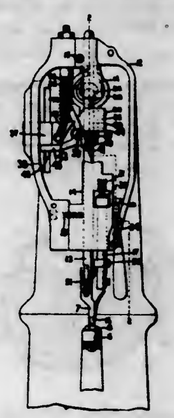
1,891,256. VACUUM CLEANER. TORD ERIK DANIEL BILDS, Stockholm, Sweden, assignor, by mesne assignments, to Electrolux Corporation, a Corporation of Delaware. Filed Feb. 26, 1930, Serial No. 431,360, and in Germany Apr. 22, 1929. 25 Claims. (Cl. 183—36.)



1. A vacuum cleaner comprising a casing, means within said casing for producing flow of air, said casing having an outlet port, means for supporting said casing above a horizontal surface and means within said outlet port for directing air passing through said outlet port away from the supporting surface.

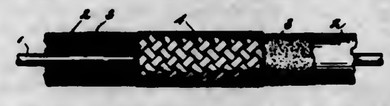
1,891,257. TRIMMING MACHINE. JOHN MCPHERSON COOKE, Beachmont, Mass., assignor to Nicholas W. Mathey, Lynn, Mass. Filed Oct. 18, 1928. Serial No. 313,214. 9 Claims. (Cl. 164—47.)

1. An edge trimming machine comprising a frame, a work support, a cutter bar of circular cross-section, a cutter mounted thereon, a guide block rigid with the bar and guided in the frame thereby to prevent rotation of the bar about its longitudinal axis, a collar loosely mounted upon the cutter bar and guided in the frame to prevent rotation thereof about the bar, driving means acting to



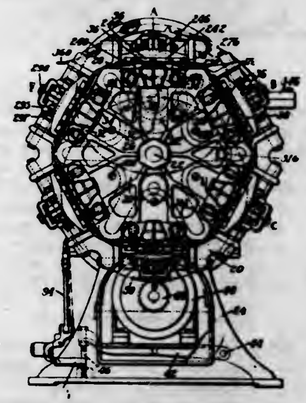
reciprocate the collar and means to detachably connect said collar to said cutter bar thereby to reciprocate the same.

1,891,258. METHOD FOR FLAME-PROOFING COMBUSTIBLE MATERIALS AND PRODUCT RESULTING THEREFROM. ERNEST C. CROCKER, Belmont, Mass., assignor to Arthur D. Little, Incorporated, Cambridge, Mass., a Corporation of Massachusetts. Filed Feb. 14, 1924. Serial No. 692,914. 18 Claims. (Cl. 178—264.)



1. An insulated wire having a portion including selenium for flame proofing.

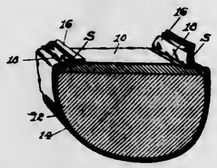
1,891,259. MACHINE FOR SHAPING SHOE PARTS. RENÉ H. DUPLESSIS, Beverly, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Jan. 4, 1930. Serial No. 418,682. 89 Claims. (Cl. 12—97.)



1. In an upper shaping machine, the combination of a carrier, a plurality of sets of upper shaping mechanisms

on the carrier, power-operated means for moving the carrier to present each of the sets in upper receiving position for introduction of an upper, and power means for operating in turn each set so presented to shape the upper while in said position.

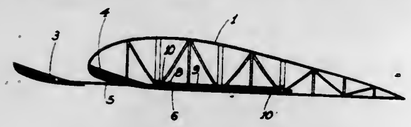
1,891,260. MANUFACTURE OF TURN SHOES. ARTHUR T. FOSTER, Beverly, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Oct. 17, 1929. Serial No. 400,399. 8 Claims. (Cl. 12—142.)



1. That improvement in methods of making turn shoes which consists in assembling on a last shoe materials comprising an upper and a sole having an inside channel lip with the shoe materials wrong side out, subjecting portions of the upper to lasting strain and while holding them under strain securing them initially yet permanently to said lip by inserting fastenings through the upper and the lip in locations over the bottom of the last, and thereafter removing the last and turning the shoe.

7. A turn shoe having a sole provided with an inside channel lip and having its upper secured to the sole by a thread seam and additionally along said seam by lasting staples of fine wire extending through the upper and said lip in locations where the upper was subjected to pulling strain in the lasting of the shoe, the cross-bars of the staples engaging the upper inside of the shoe in substantially parallel relation to the inner face of the sole and the legs of the staples being inclined at such small angles to said face that the legs and cross-bar of each staple lie in a plane approximately parallel to the bottom of the wearer's foot.

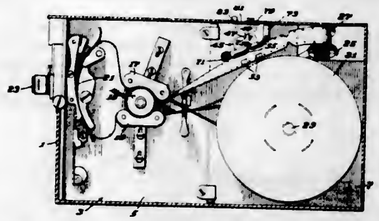
1,891,261. SAFETY WING FOR AIRPLANES. CHARLES H. GUNN, Burlingame, Calif. Filed Oct. 5, 1931. Serial No. 566,986. 2 Claims. (Cl. 244—12.)



1. An auxiliary wing structure for airplanes comprising, with a main wing of the airplane having a recess in its under side extending rearwardly from its forward edge, an auxiliary wing normally fitting in said recess, arms rigid with and projecting rearwardly from the upper surface of the auxiliary wing and through the back wall of the recess into the main wing, members fixed in the main wing and slidably supporting the arms, and means applied to the arms within the wing to move the arms lengthwise in either direction selectively.

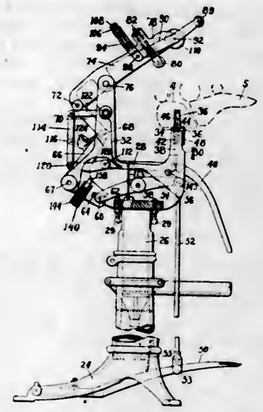
1,891,262. MOTION PICTURE CAMERA. ARTHUR C. HAYDEN, Brockton, Mass. Filed Feb. 20, 1929. Serial No. 341,421. 9 Claims. (Cl. 88—17.)

3. In a motion picture camera, the combination of take-up and let-off spools, a ribbon having sprocket feed holes along the margins thereof and comprising alternating film stretches and opaque leaders, said film stretches and leaders being in sections connected in end-to-end relation, means cooperating with said feed holes



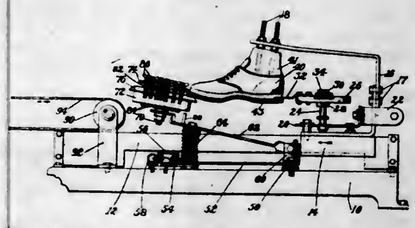
for feeding the ribbon, and means automatically to break a leader after a film stretch has been wound on the take-up spool.

1,891,263. MACHINE FOR OPERATING ON LASTS. ERIC A. HOLMGREN, Lynn, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Mar. 12, 1930. Serial No. 435,301. 29 Claims. (Cl. 12—15.)



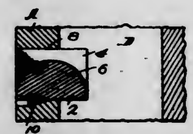
1. In a machine for operating on lasts, means for supporting one part of a last, and means constructed and arranged for first relatively tilting and thereafter relatively sliding the last parts.

1,891,264. MACHINE FOR OPERATING ON SOLES. FAY D. KINNEY, Wenham, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Dec. 6, 1928. Serial No. 324,242. 28 Claims. (Cl. 12—1.)



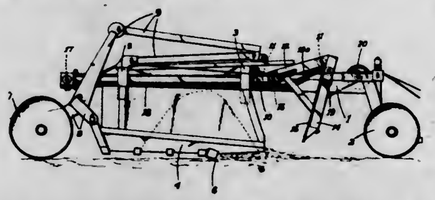
1. A machine for operating on rubber soled shoes, having in combination, a shoe support, and a pair of oppositely disposed tools shaped to engage and close the marginal edges of the sole of a shoe thereon, said support and tools being relatively movable to cause each of the tools progressively to operate on one side of the forepart and shank portions of the sole from the same point at the toe to the heel thereof.

1,891,265. SASH CORD SUPPORT. JOSEPH KREIMER and DUNCAN G. DEWAR, Kansas City, Mo.; said Dewar assignor of one-half to Alba C. Honeycutt, Kansas City, Mo. Filed May 12, 1928. Serial No. 277,273. 1 Claim. (Cl. 16—214.)



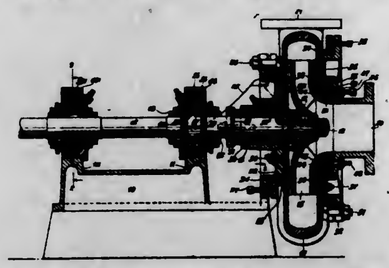
The combination with a window frame having vertical pockets communicating with cylindrical openings, sash slidable in said frame, counterweights operable in said pockets, and cords connecting said sash and said counterweights, of one-piece wooden cylindrical elements driven into said cylindrical openings and each having a groove extending from end to end and through the upper portion thereof and provided with a convex bottom portion over which the respective cord is adapted to operate, and triangular-shaped wedge members which are countersunk in the cylindrical elements and driven into the frame.

1,891,266. SCRAPER. ROBERT G. LE TOURNEAU, Stockton, Calif. Filed Mar. 25, 1932. Serial No. 601,145. 13 Claims. (Cl. 37—126.)



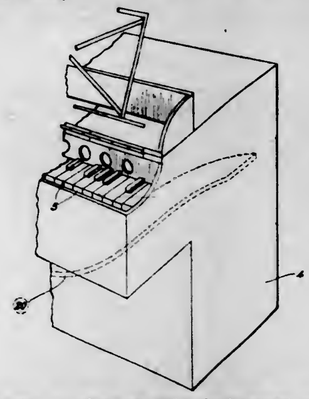
1. A scraper including a bowl adapted to be hauled along the ground and open at both ends, and a gate associated with the bowl normaly disposed at the front end of the bowl and adapted to be moved rearwardly in and lengthwise of the bowl while engaged with the forward surface of the load of dirt scraped up by the advancing movement of the scraper.

1,891,267. CENTRIFUGAL PUMP. VICTOR J. MILKOWSKI, Baldwinsville, N. Y. Filed Feb. 14, 1931. Serial No. 515,796. 4 Claims. (Cl. 103—114.)



1. A centrifugal pump comprising a casing having an inlet duct; an impeller rotatably arranged within said casing; a throat ring coaxially disposed within said casing at the inner end of said inlet duct; an inner lining plate disposed within said casing and engaging the periphery of said throat ring; and an outer lining plate having an outer diameter approximately that of the impeller disposed within said casing and engaging the periphery of said inner lining plate.

1,891,268. PIANETTE. DOROTHY MILLER, Kansas City, Mo. Filed Feb. 24, 1930. Serial No. 431,082. 1 Claim. (Cl. 84—404.)

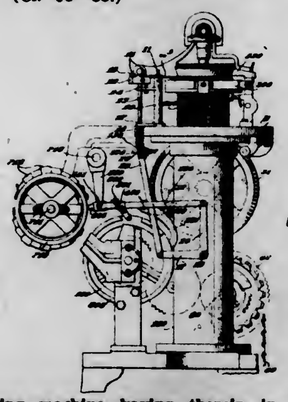


A pianette or piano practice instrument comprising a case, a series of tone members of glass or equivalent material, resiliently supported, a key and hammer action corresponding to each of said tone members, and a sounding board arranged beneath said tone members and curving downwardly and gradually increasing in width from the treble to the opposite end of the case.

1,891,269. CONCRETE. CHARLES L. NORTON, Boston, Mass. Filed Nov. 14, 1930. Serial No. 495,786. 2 Claims. (Cl. 106—24.)

1. Concrete of hydraulic cement and hard-burned kaolin comminuted to particle size of the same order as that of the cement.

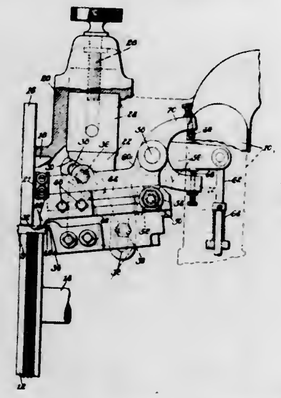
1,891,270. PATTERN MECHANISM FOR KNITTING MACHINES. ALBERT E. PAGE, Brooklyn, N. Y., assignor to Scott & Williams, Incorporated, New York, N. Y., a Corporation of Massachusetts. Filed Jan. 5, 1931, Serial No. 506,609. Renewed Dec. 7, 1931. 18 Claims. (Cl. 66—55.)



1. Knitting machine having therein in combination means for knitting including needles and a series of ce-

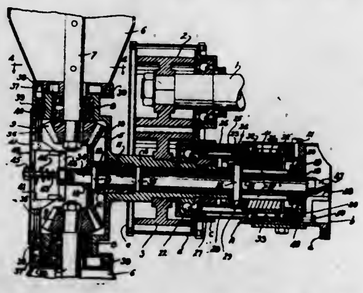
operative instrumentalities adapted to be shifted in relation to the needles for a variation of the effect of the needles on the knit fabric being made, movable cam means reacting with said instrumentalities severally for operating upon them selectively to vary their cooperation with the needles, a pattern device, and connections from the pattern device to said cam, means for selectively positioning the latter, said connections being mounted independently of the pattern device and operative to compensate for axial adjustment of the needle carrier, the connections comprising a part actuable by the pattern device and movable in a path substantially perpendicular to the direction in which said series of instrumentalities are shifted.

1,891,271. CHANNELING MACHINE. FRED RICKS, Leicester, England, assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed July 9, 1930, Serial No. 466,616, and in Great Britain July 16, 1929. 18 Claims. (Cl. 12—27.)



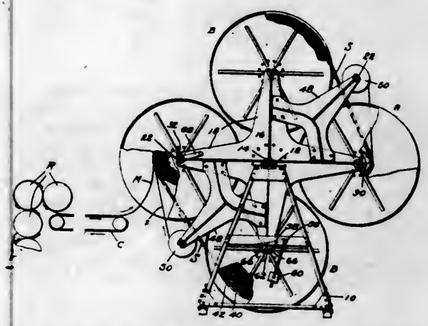
1. In a channeling machine, two knives constructed and arranged to co-operate in cutting a channel of one type at one part of a sole and to co-operate also in cutting a channel of another type at another part of the sole, said knives being relatively movable to enable one of them to mask a cutting portion of the other during the cutting of the channel at one of said parts of the sole.

1,891,272. AIRPLANE PROPELLER. SAMUEL E. SLONIMSKY, Chelsea, Mass. Filed Nov. 23, 1931. Serial No. 576,774. 6 Claims. (Cl. 170—163.)



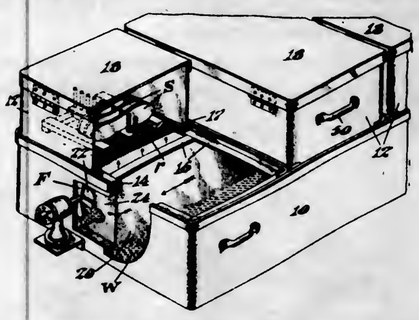
1. A propeller mechanism comprising in combination a plurality of propeller blades together rotatable about a common axis and independently rotatable on different axes for changing the pitch thereof, a driving shaft, bevel gears rotatably connecting all of said propellers for common rotation with said shaft, means for locking said propellers against adjusting as to pitch, and means including a shaft axially disposed relative to the propeller longitudinally extensible for engaging said locking means for unlocking said blades, and relatively telescoping means rotatably adjustable for changing the pitch of said propeller at will.

1,891,273. REELING SYSTEM. ERNEST W. STACEY, Beverly, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Jan. 2, 1929. Serial No. 329,702. 8 Claims. (Cl. 242—64.)



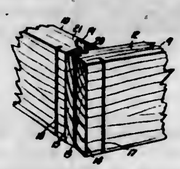
6. In a reeling system, a movable support, a material-receiving reel provided with a portion of a securing device and rotatable upon the support, a reel rotatable upon the support and containing a coil of separator having at its outer extremity another portion of the securing device attached to that portion upon the receiving reel, said separator carrying a portion of a second securing device, and still another reel rotatable upon the support and containing a coil of separator with a portion of the second securing device at its outer extremity attached to that portion upon the first-mentioned separator.

1,891,274. METHOD OF AND SYSTEM FOR TEMPERING MATERIAL. ERASTUS E. WINKLEY, Lynn, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Jan. 9, 1929. Serial No. 331,380. 22 Claims. (Cl. 12—1.)



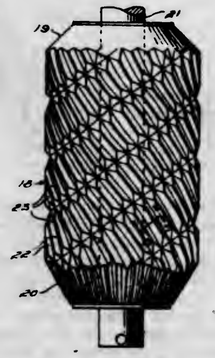
1. The method of tempering work-portions, which consists in subjecting the work to the action of a tempering medium, simultaneously subjecting a test-piece of the material to the action of the medium, and applying a force resisted by the test-piece to vary the application of the tempering medium to the work-portions as said test-piece becomes tempered.

1,891,275. GRAIN BIN. CHARLES J. CARTER, Kansas City, Mo. Filed Mar. 8, 1929. Serial No. 345,412. 8 Claims. (Cl. 20—12.)



1. In a bin of the character described, a side wall including a strip having a vertical kerf in a side surface perpendicular to said surface, an end wall including a strip having a kerf in its end registering with said side wall kerf, and a clamp in said registering kerfs for binding said strips together and projecting vertically from said strips to engage in kerfs in similarly kerfed strips.

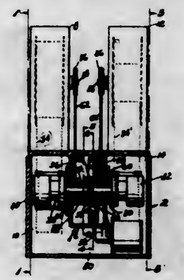
1,891,276. ROCK DRILL. WILLIAM F. DALZEN, Grosse Pointe, Mich. Filed Nov. 26, 1930. Serial No. 498,869. 5 Claims. (Cl. 255—78.)



1. A rock drill reamer having cylindrical side cutting surfaces with elongated teeth of helical shape disposed in helical rows thereon, and a frusto-conical lower end portion having straight teeth.

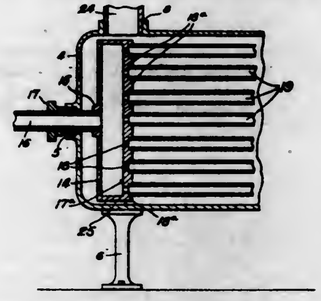
1,891,277. COMBINED PHOTOGRAPHIC CAMERA AND SOUND RECORDING APPARATUS. RALPH GORDON FRAR, Los Angeles, Calif. Filed Sept. 15, 1930. Serial No. 481,961. 2 Claims. (Cl. 88—16.2.)

1. In the apparatus of the class described including a motion picture camera and a sound recording apparatus, the combination of, an enclosure comprising a plurality of compartments for said motion picture camera and said sound recording apparatus having a plurality of film magazines connected thereto, a sound proof compartment centrally positioned within said enclosure and between said compartments therein, a driving mechanism positioned within said sound proof compartment, a drive shaft connected to said driving mechanism and protruding through the side walls of said sound proof compartment, means connected to said drive shaft whereby a picture film and sound recording film of varied widths may be fed through said apparatus simultaneously and



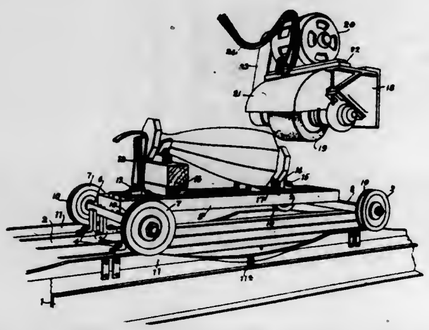
vibration absorbing means connected to said drive shaft so that said driving mechanism irregularities may be rectified, while said apparatus is in operation.

1,891,278. WATER HEATER. JOSEPH WILLIAM GUIMONT, Lachine, Quebec, Canada, assignor to Heating Systems Limited, Montreal, Quebec, Canada. Filed Mar. 23, 1931. Serial No. 524,653. 1 Claim. (Cl. 257—236.)



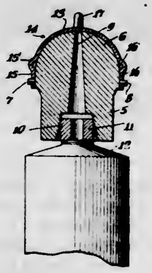
A water heater comprising a main outer-shell having an open end and provided with a water inlet, a water outlet and a steam inlet located in one end thereof, a steam-chest mounted within said outer shell adjacent said steam-inlet, said steam-chest having on one side a wall of relatively greater thickness, than its adjacent walls, provided with a plurality of relatively large holes on one side thereof, a cover suitably secured to the open end of said main outer-shell, said cover having a condensation outlet, a tube plate located intermediate of said main shell and cover and adapted to form a partition wall therebetween, said tube plate having a plurality of holes, each of which are of equal diameter and in alinement with the holes of large diameters located in the wall of said steam-chest, tubes suitably secured in each of said holes connecting said steam-chest with said tube plate, a steam supply pipe passing through said steam inlet and connected to said steam-chest, said steam-chest wall having on its inner side a plurality of holes of smaller diameter than that of said tubes, each of which communicates and registers with one of the holes of larger diameter located upon the opposite side in which are secured the ends of said tubes.

1,891,279. MARBLE AND GRANITE SHAPING MACHINE. PAUL HAUK, Piqua, Ohio, assignor to The Piqua Granite and Marble Company, Piqua, Ohio. Filed Apr. 30, 1931. Serial No. 535,883. 8 Claims. (Cl. 51—100.)



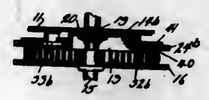
1. In a stone-shaping apparatus, a horizontally movable truck, a stationary undulating trackway composed of rails, one on each side of the truck, a platform having supporting wheels on the trackway and adapted to be moved by the truck, a connection between the platform and truck permitting relative movement therebetween, said platform being adapted to support a stone being worked on, and a stationary roller grinder adapted to engage the stone as the platform moves along the trackway for grinding and shaping the stone.

1,891,280. CLOSURE FOR COLLAPSIBLE TUBES AND THE LIKE. WALLACE W. HAZLETT and CHARLES Z. FIRST, New York, N. Y., and MORTON R. GOODMAN, Union City, N. J. Filed June 30, 1931. Serial No. 547,932. 1 Claim. (Cl. 221—60.)



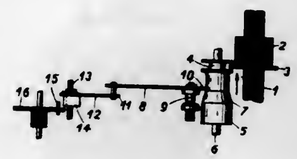
A closure for containers consisting of a spherical head having a neck formed with an internal tapered screw thread capable of being coupled to the neck of an externally threaded collapsible tube, said neck also having a central discharge orifice opening through the outer end of the head, said head having trunnions on the opposite sides thereof, and a yoke including holding side bars and a bowed closure bar, said side bars having sockets engaged with the trunnions to hold the bowed closure bar in pivotal relation to the edges of the orifice, the holding side bars being formed with outset spring loops to maintain tension upon the bowed closure bar, whereby a sealing engagement with the outer edges of the orifice is maintained when the closure bar is in normal closed position, said closure bar having an external operating finger thereon.

1,891,281. CLOCK. WILLIAM D. JOHNSON, Miller, S. Dak. Filed May 11, 1929. Serial No. 362,392. 1 Claim. (Cl. 58—46.)



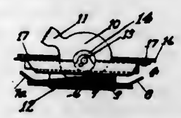
In a clock, an alarm mechanism, a time governor mechanism, a main spring staff, a barrel coaxial therewith, said barrel comprising a spring retaining portion and a semi-cylindrical portion of reduced diameter, a ring gear provided with external spur teeth and internal ratchet teeth rotatably mounted on the barrel and receiving said reduced barrel portion, a drive gear rotatably mounted on the shaft, a main spring secured at its inner end to the staff and at its outer end to the barrel, a winding shaft secured to the barrel, one of said mechanisms including a train of gears meshing with the ring and a pawl pivoted on the barrel within said ring gear and engaging said ratchet teeth thereof, the parts being so arranged that the pawl allows the barrel to rotate free from the ring gear in the direction of winding the spring.

1,891,282. ELECTRICALLY WOUND CLOCK. HELMUT JUNGHANS, Schramberg, Wurtemberg, Germany. Filed May 25, 1931, Serial No. 539,871, and in Germany July 11, 1930. 2 Claims. (Cl. 58—41.)



1. In a striking clock having a common driving spring for the movement and for the striking mechanism and an electromotor for winding up said spring, the combination of a screw spindle, a nut mounted on said screw spindle and adapted to be moved along the same in one direction by said motor in winding up said spring and in the opposite direction by the clock movement when said spring runs down, locking means for the striking mechanism, and means adapted to be moved by said nut and to operate said locking means so as to lock the striking mechanism, when said spring has run down to a predetermined amount, and to unlock said mechanism, when said spring is wound up again.

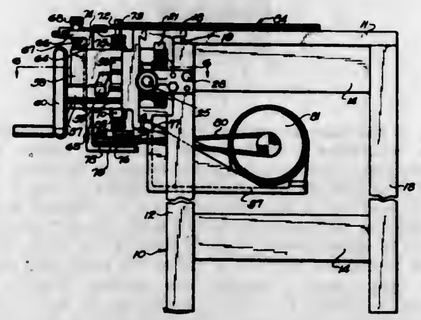
1,891,283. RADIO CONDENSER TUNING CONTROL. CHARLES E. KILGOUR, Cincinnati, Ohio, assignor to The Crosley Radio Corporation, Cincinnati, Ohio, a Corporation of Ohio. Filed Jan. 27, 1928. Serial No. 250,024. 2 Claims. (Cl. 175—41.5.)



2. In combination with a variable flat plate hinged type radio condenser, a casing formed of an integral blank of sheet metal bent into a C-shaped cross section,

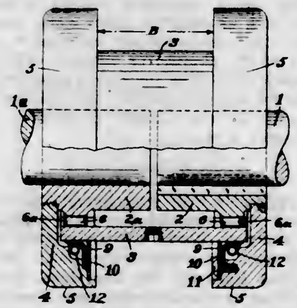
the part of said casing corresponding to the top of the C having an aperture therein, and the part of said casing corresponding to the bottom of the C supporting said condenser, and a control for said condenser extending through said aperture and having a manually operative portion and a cam shaped portion, said cam shaped portion adapted to bear against a plate of said condenser and vary the distance between said plates, and integral means extended from said top of said casing in which said control member is pivotally mounted.

1,891,284. UNDERCUTTING MACHINE. PAUL C. LAWSON and CONRAD B. SCHAFER, Toledo, Ohio, assignors to Libbey-Owens-Ford Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed Feb. 2, 1929. Serial No. 337,159. 9 Claims. (Cl. 49—14.)



8. An apparatus for undercutting laminated glass consisting of two sheets of glass and an interposed non-brittle membrane, including means for supporting the laminated sheet, and a rotatable freely floating tool adapted to be received between the two glass sheets of said laminated structure and movable relative to said sheet for undercutting the same.

1,891,285. SHAFT COUPLING. JULIAN S. LOEWUS, Baltimore, Md. Filed Mar. 12, 1931. Serial No. 522,088. 14 Claims. (Cl. 64—91.)



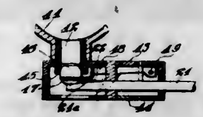
1. In combination, shaft hubs, a surrounding sleeve, intermeshing teeth on the hubs and sleeve, collars extending from the hubs, closing the ends of the coupling and having portions overlying the outer surface of the sleeve, and packing attached to said collars and bearing against the outer surface of the sleeve, said packing being subject to the pressure of the oil due to centrifugal force for pressing said packing against the sleeve.

1,891,286. SHEET DELIVERING AND PILING APPARATUS FOR PRINTING, RULING, CUTTING MACHINES, AND THE LIKE. HEINRICH MIEBACH, Leipsig, Germany, assignor to Messrs. G. E. Reinhardt, Leipsig, Germany. Filed Sept. 28, 1929, Serial No. 395,857, and in Germany Oct. 31, 1928. 5 Claims. (Cl. 271—86.)



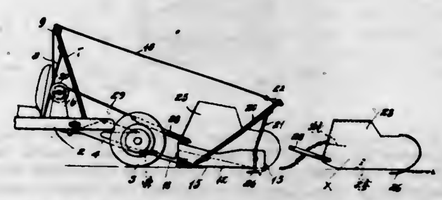
1. In an apparatus for collecting sheets of paper issuing from printing, ruling and like machines the combination with conveying means adapted to carry forward the sheets in transit at a relatively high speed exceeding 160 feet per minute of rigidifying means adapted to gradually curl up the lateral edges of the sheets in transit for their full length, stretching means cooperatively associated with the said rigidifying means so as to keep flat and under tension the middle section of the sheets intermediate their curled edges, and piling means controlling the final position of the sheets as they drop upon each other and being adapted to produce a strictly straight edged pile.

1,891,287. OIL DRAINING VALVE. LOUIS W. NILES, Oak Park, and HAROLD F. NILES, River Forest, Ill. Filed Nov. 5, 1928, Serial No. 317,421. Renewed July 4, 1931. 4 Claims. (Cl. 137—139.)



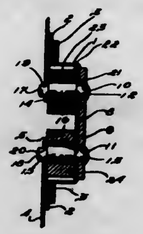
1. A valve mechanism comprising a conduit having a bottom outlet formed with a seat, a valve for the latter, and a laterally-movable member effective to seat the valve when moved in one direction, a movable support for the valve, and means carried by said member and effective when the latter is moved in the opposite direction to bear on the cam element whereby to depress the support and unseat the valve.

1,891,288. SCRAPER. WILLIAM W. SHANOS, Saginaw, Mich. Filed Aug. 20, 1931. Serial No. 558,277. 15 Claims. (Cl. 37—115.)



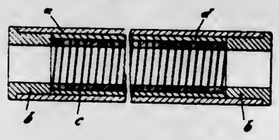
1. A loading device comprising a vehicle, a skip pivotally connected thereto, a scraper adapted to be mounted on said skip when loaded, and means for swinging said skip and scraper onto the vehicle for transporting to the dumping place.

1,891,289. DOOR DOVETAIL. HORACE T. THOMAS, Lansing, Mich., assignor to Reo Motor Car Company, a Corporation of Michigan. Filed Jan. 16, 1931. Serial No. 509,147. 4 Claims. (Cl. 16—86.)



1. In a door dovetail structure adapted to be mounted on a door pillar, a casing having transverse dowel pins protruding beyond one side thereof and receivable in apertures in said door pillar for locating said casing on said pillar, and a pair of spaced contact elements, one journaled on each dowel pin.

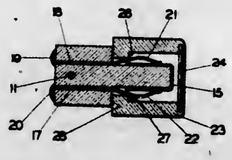
1,891,290. WORK PIECE GUIDE FOR MACHINE TOOLS. KARL TESSKY, Esslingen-on-the-Neckar, Germany. Filed Aug. 13, 1930, Serial No. 474,949, and in Germany Aug. 24, 1929. 6 Claims. (Cl. 29—38.)



1. Stationary work-piece guide for rotating blanks fed to machine tools comprising a guide tube, a wire coil lining said tube and a shock absorbing means inserted between said tube and said coil.

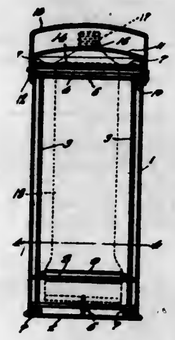
5. Stationary work-piece guide for rotating blanks fed to machine tools comprising a guide tube, and a wire coil lining said tube, said wire coil and said tube defining a space for receiving a shock-absorbing liquid.

1,891,291. FUSE. ADOLF UEFER, Brooklyn, N. Y., assignor to Pioneer Instrument Company, Incorporated, Brooklyn, N. Y., a Corporation of New York. Filed Dec. 19, 1929. Serial No. 415,176. 7 Claims. (Cl. 200—130.)



1. A fuse comprising a fuse supporting element having an extension, conductors mounted on said element, one adjacent each side of the extension, said conductors being bowed away from said extension but the ends of which are adapted to engage said extension and terminating short of the end of said extension, and a cap for enclosing the extension of said element and the portions of said conductors adjacent said extension so that said conductors are caused to bear against said extension whereby a piece of fusible metal may be held in operative position thereon.

1,891,292. DISPENSER. ALFRED D. VAN BUREN, New York, N. Y. Filed Apr. 8, 1931. Serial No. 527,533. 6 Claims. (Cl. 221—60.)



1. A dispenser for ejecting the contents of a collapsible tube comprising a substantially cylindrical casing, said casing being open at one end and closed at its other end, a pair of spaced rings removably disposed in upper and lower portions of the casing, a pair of threaded shafts disposed in the casing and having their end portions journaled in diametrically opposite sides of the rings, gears fixed on the end portions of the shafts above and below the rings, a pair of opposed rolls rotatably mounted between the shafts for vertical movement on said shafts, the rings and the shafts being reversible in the casing, the rolls being operatively engageable with opposite sides of the tube in a manner to eject the contents thereof, said tube being disposed in the casing, and means for simultaneously rotating the shafts.

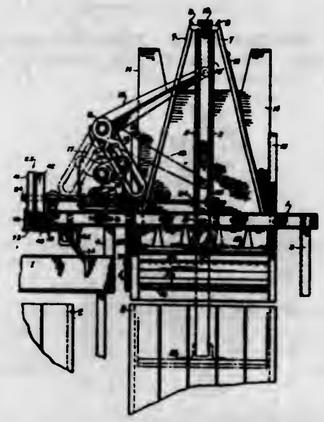
1,891,293. PRODUCTION OF ALKALI PHOSPHATES FROM METAL-PHOSPHORUS ALLOYS. CONWAY, FREIHERR V. GIRSEWALD, and HANS WEIDMANN, Frankfort-on-the-Main, Germany, assignors to American Lurgi Corporation, New York, N. Y., a Corporation of New York. Filed Oct. 30, 1929, Serial No. 403,649, and in Germany Nov. 2, 1928. 4 Claims. (Cl. 23—106.)

1. Process for the production of compounds containing the radicle of phosphoric acid by the aid of metal-phosphorus alloys, which comprises heating a metal phosphorus alloy with an alkaline alkali metal compound in the presence of oxygen in amount sufficient to oxidize all of the metal of the phosphorus alloy to oxide and at a reacting temperature below the fusion temperature of the reaction mixture and maintaining the temperature below the fusion point of the mixture, by blowing in a very abundant amount of air.

1,891,294. PROCESS FOR FACILITATING THE SEPARATION OF THE PRECIPITATE OF ARSENIC SULPHIDE. CONWAY, BARON VON GIRSEWALD and WOLFHART SIECKE, Frankfort-on-the-Main, and ERICH THIELER, Bad Homburg Vor Der Hohe, Germany, assignors to American Lurgi Corporation, New York, N. Y., a Corporation of New York. Filed Apr. 7, 1931, Serial No. 528,450, and in Great Britain and Sweden Apr. 10, 1930. 4 Claims. (Cl. 23—136.)

1. A method for removal of arsenic sulphide precipitates from acid liquids which comprises adding thereto an organic liquid which is lighter than the acid liquid, is substantially insoluble therein, and is substantially resistant thereto at the temperature of treatment, and an oily frothing agent, vigorously agitating the mixture and allowing it to stand.

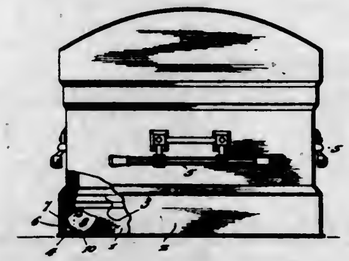
1,891,295. COTTON TRAMPER. JEFFREY JOHN WALLACE, Amite, La., assignor to Gullett Gin Company, Amite, La., a Corporation of Louisiana. Filed Nov. 7, 1929. Serial No. 405,447. 5 Claims. (Cl. 100—25.)



1. A cotton tramper including tramper head mechanism and a gate movable with said tramper head mechanism, a feed roll including a drum having projecting flexible strips engageable with said gate when the latter is in closed position for exerting a braking effect on said feed roll.

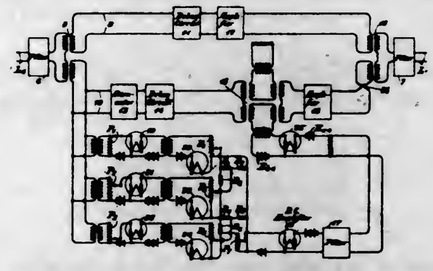
5. In a cotton tramper, tramper head mechanism and a feed roll, driving means for said tramper head mechanism and feed roll including a clutch between the source of power and said feed roll, said tramper head including a plunger, cam slides carried by said plunger, and clutch releasing means including a rod extending transversely of said cam slides and having elements engaged by said slides for reciprocating said rod to release said clutch at a determined point in the descent of said plunger and for re-engaging said clutch at a determined point in the ascent of said plunger.

1,891,296. VAULT LOCK. CLARENCE J. WEGNER, Galion, Ohio, assignor to Perfection Burial Vault Company, Galion, Ohio, a Corporation of Ohio. Filed Nov. 30, 1931. Serial No. 578,093. 3 Claims. (Cl. 292—224.)



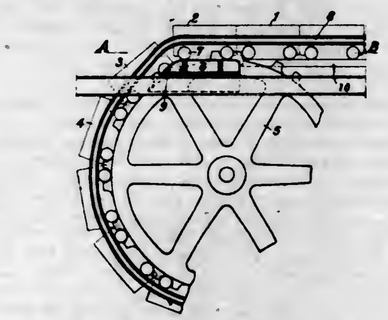
1. Means for locking a cover upon a relatively stationary hollow member, said means comprising a locking body pivotally mounted on a side of the hollow member to swing in a plane parallel with said side and project therefrom to engage the cover, said body having an eccentric recess therein open to the side of the hollow member, and a rock shaft journaled in the side of the hollow member and having a crank at its outer end disposed in the recess in the locking body to engage a side of said recess and provided with a handle at its inner end within the hollow member.

1,891,297. VARIABLE GAIN CIRCUIT DEVICE. WILLIAM T. WINTRINGHAM, Brooklyn, N. Y., assignor to American Telephone and Telegraph Company, a Corporation of New York. Filed June 25, 1929. Serial No. 373,679. 15 Claims. (Cl. 179—171.)



1. A transmission system including a double Wheatstone bridge comprising four arms forming one bridge, one arm of said bridge comprising four arms forming a second bridge, a source connected to one pair of opposite neutral points of said first bridge, a second source connected to the remaining neutral points of said first bridge, a third source connected to opposite neutral points of said second bridge, and a work circuit so related to said double Wheatstone bridge as to receive transmission from each of said sources.

1,891,298. SINTERING APPARATUS. HERBERT WITTENBERG, Schonberg near Kronberg in Taunus, Germany, assignor to American Lurgi Corporation, New York, N. Y., a Corporation of New York. Filed Nov. 24, 1931, Serial No. 577,143, and in Germany Dec. 5, 1930. 4 Claims. (Cl. 266—21.)

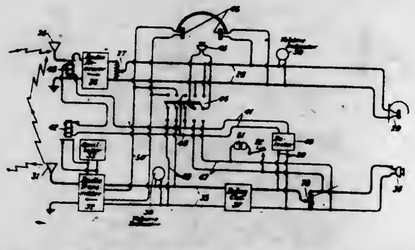


4. An improved sintering apparatus having guiding means including an upper horizontal track upon which the pallets travel in an endless chain, actuating means to move said pallets on said guiding means, and leveling means for said pallets, said leveling means comprising a fixed curved rail at each side of the entrance end of the upper horizontal track and widened treads on the rear wheels of the pallets to engage with said rail.

1,891,299. RADIO TELEPHONE SYSTEM. CLIFFORD N. ANDERSON and EDMUND R. TAYLOR, New York, N. Y., and SUMNER B. WRIGHT, South Orange, N. J., assignors to American Telephone and Telegraph Company, a Corporation of New York. Filed Sept. 20, 1929. Serial No. 394,048. 2 Claims. (Cl. 250—6.)

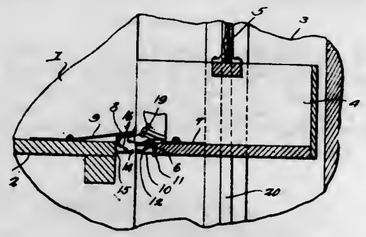
1. In a system for establishing radio communication between two points, terminal apparatus at one of said points comprising a receiving circuit including radio receiver apparatus, a transmitter circuit including radio

transmitter apparatus, a control circuit for normally maintaining the output of said radio transmitter apparatus in a disabled condition and for maintaining the input of said radio receiver apparatus in an operating condition, an operator's monitoring set connected to the



output of said radio transmitter and to the output of said radio receiver, switching means for connecting said monitoring set to the input of said radio transmitter, and means controlled by said switching means in establishing said last mentioned connection for disabling said control circuit.

1,891,300. ELEVATOR. EUGENE L. BAKER, Taunton, Mass. Filed Feb. 17, 1930. Serial No. 429,148. 4 Claims. (Cl. 187—98.)



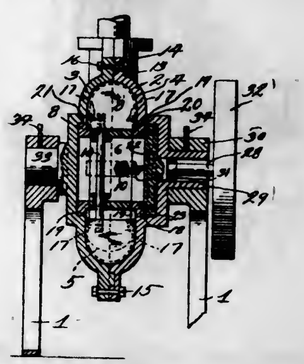
1. In improvements in elevator construction, a landing and an elevator movable vertically with respect to the landing, each including a fixed floor section, a movable floor section hinged to one of the fixed floor sections for upward swinging movement, and a signal strip located below the movable floor section and hinged to the said fixed floor section for upward swinging movement, the signal strip being lighter than the movable floor section, whereby the said strip will strike a protruding foot and afford a warning signal before the foot comes into contact with the movable floor section, the movable floor section lying above the signal strip to protect the signal strip against injury during the movement of passengers and goods to and from the elevator.

1,891,301. TRUCK BODY. EPHRIAM P. BORDEAUX, Gallon, Ohio, assignor to Perfection Steel Body Company, Gallon, Ohio, a Corporation of Ohio. Filed May 8, 1931. Serial No. 536,019. 7 Claims. (Cl. 296—10.)



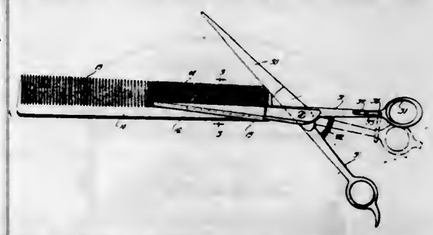
1. A vehicle body comprising a floor, vertical plates at the opposite sides and ends of the floor, filler strips extending between the lower ends of said vertical plates along the side edges of the floor, facing strips secured against the outer sides of the filler strips and the vertical plates and side members hingedly mounted at the outer sides of the facing strips.

1,891,302. ROTARY PUMP. EMMETT CASKEY, Council Bluffs, Iowa. Filed Jan. 21, 1931. Serial No. 510,263. 1 Claim. (Cl. 103—138.)



A rotary pump comprising a casing, an eccentrically mounted rotor within said casing, slidable vanes carried by the rotor and movable diametrically through the rotor by engagement with the wall of an eccentric chamber in the casing, said casing being formed from registering sections having auxiliary chambers in communication with the chamber of the casing at opposite sides thereof, rings of greater diameter than the rotor secured to opposite sides of the rotor and having recesses in their inner sides extending outside the periphery of the rotor into which portions of the vanes enter, said rings being rotatably mounted in the auxiliary chambers, a drive disc detachably connected to one of said rings within the auxiliary chamber at one side of the casing, packing rings carried by said drive disc and a drive shaft carried by said drive disc.

1,891,303. BARBER'S COMB. JOHN CAZES and CARMINE CLAPS, New York, N. Y. Filed Dec. 19, 1931. Serial No. 582,186. 6 Claims. (Cl. 132—19.)



1. In a comb, a shears supporting member comprising a channel shaped member separately attached to said comb, and a magnetic shears supporting member carried by said channel shaped member.

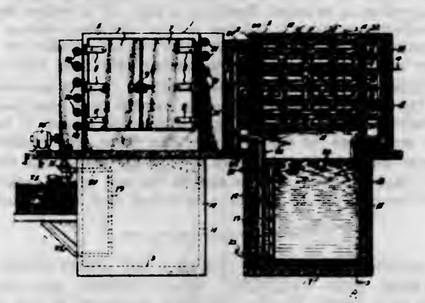
1,891,304. MANUFACTURE OF POINTED TUBULAR METAL ARTICLES. SAMUEL JAMES EVERETT, Thornton Heath, England. Filed Aug. 4, 1930, Serial No. 473,125, and in Great Britain Aug. 22, 1929. 7 Claims. (Cl. 29—148.2.)

1. In the manufacture of hypodermic syringe needles, reducing to a small gauge a composite wire comprising a hard metal outer tube containing a core of metal capable of extreme elongation and retention of tensile strength, heating said wire to a temperature sufficient for annealing the core, controlling such heat so as to temper the tube whilst the tube remains on the core,



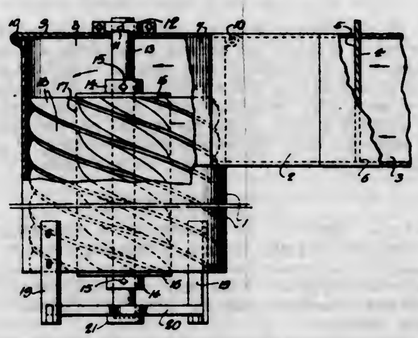
grinding and finishing a needle point on the tube whilst still on the core, severing a needle length of said tube and withdrawing the tempered and finished needle length from the core.

1,891,305. PROCESS AND APPARATUS FOR REFRIGERATION. WILLIAM A. FOSBERRY, Gloucester, Mass. Filed Jan. 7, 1930. Serial No. 419,081. 8 Claims. (Cl. 62—101.)



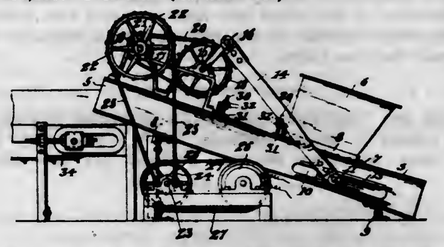
1. A refrigerating cabinet having a plurality of separate conduits formed therein, a plurality of flues positioned within said conduits, and means for closing any number of said conduits so as to circulate a cooling agent through the remainder of said conduits.

1,891,306. WORM WATER MOTOR. LELAND L. FOSS, Statesboro, Ga., assignor, by direct and mesne assignments, of part interests to Edward T. Skeffington, Bert H. De Loach and Arthur H. Barrington, Savannah, Ga.; Sam J. Foss, Statesboro, Ga.; and Lee V. Graham, Chatham County, Ga. Filed Dec. 29, 1930. Serial No. 505,401. 3 Claims. (Cl. 253—148.)



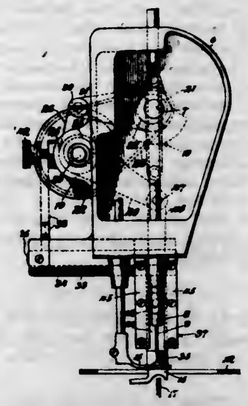
1. In a water motor, the combination of a cylindrical casing, a shaft rotatably mounted in the casing, a hub cylinder mounted on the shaft and a series of spaced spiral blades mounted on the hub cylinder, a chamber above the cylinder and blades, and a water passage opening into said chamber, said water passage being of reduced size where it opens into the chamber, whereby to increase the force of the flow of water, the cylindrical motor casing having divided lids hingedly mounted thereon and a divided bearing positioned above said lids and in which the motor shaft is mounted.

1,891,307. FEEDING DEVICE. JOSEPH HENRY FULMER, Nazareth, Pa. Filed Nov. 15, 1929. Serial No. 407,439. 1 Claim. (Cl. 198—59.)



In a hay feeding device, an elongated body portion, a hopper supported on the body portion and communicating with the interior thereof to feed material to the body portion, a packer comprising a vertically movable plate of a width to extend across the body portion, said plate having upwardly and inwardly extended flanges, headed bolts extending through the flanges and through the body portion, the heads of the bolts engaging the lower sides of the flanges providing supports for the packer, and a sliding pusher operating in the body portion and adapted to force material through the body portion forming the material into a ribbon-like mass.

1,891,308. COMBINED SEAMING AND PINKING MACHINE. HORACE FRANKLYN GRUMAN, St. Louis, Mo., assignor to Lewis Invisible Stitch Machine Company, St. Louis, Mo., a Corporation of Maine. Filed Aug. 6, 1930. Serial No. 473,404. 27 Claims. (Cl. 112—122.)



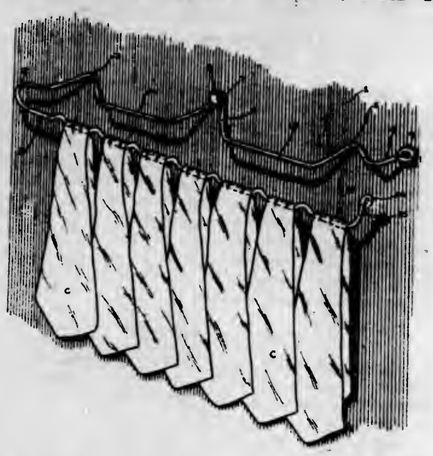
1. A combined seaming and pinking machine including a vertically reciprocable needle, and a pinking mechanism disposed at one side of the needle and including a horizontally disposed ledger blade having an opening forming converging cutting edges, and a blade movable upwardly and downwardly with respect to the ledger blade and having converging cutting walls cooperating with the cutting edges of the ledger blade, the angle of the cutting edges of the ledger blade being more than the angle of the cutting walls of the movable blade.

1,891,309. SKIMMING AIRCRAFT LANDING SAIL. HERMANN HEIN, Bremen, Germany. Filed Apr. 4, 1932, Serial No. 603,135, and in Germany Apr. 10, 1931. 8 Claims. (Cl. 114—0.5.)



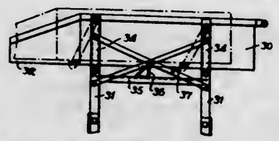
1. A skimming aircraft landing sail comprising cross slats arranged on the top surface of the sail on that part skimming on the water, said slats extending over almost the entire breadth of the sail and being arranged at small distances apart.

1,891,310. NECKTIE OR OTHER ARTICLE HOLDER. ROBERT J. HICKS, Rochester, N. Y. Filed Feb. 16, 1932. Serial No. 593,362. 1 Claim. (Cl. 211—106.)



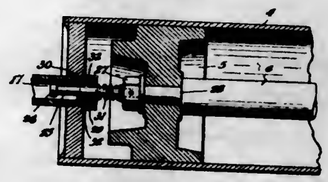
A holder for necktles, or other articles, composed of a single piece of material bent upon itself to provide upper and lower members and a connecting suspension bend at one end of the members, the other ends of the members being free and normally unconnected, the upper member having rearwardly extending central and terminal wall abutting approximately V-shaped loops, the central wall abutting loop being bent upwardly at an angle to provide an attaching portion and the free end of the upper member being extended from the outer side of the adjacent wall abutting loop to form a keeper loop to receive the free end of the lower member, said lower member having spaced depressions to receive and space necktles or other articles.

1,891,311. FURNACE FEEDING DEVICE. PEYTON R. HORD, Pittsburgh, Pa. Filed Dec. 29, 1930. Serial No. 505,450. 10 Claims. (Cl. 126—283.)



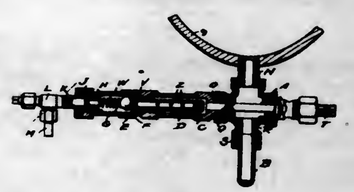
1. A coal chute or the like having an elongated bottom wall and outwardly flared side walls, a spout having a bottom wall positioned as a continuation of the first-named bottom wall and having vertical side walls, the space between each spout side wall and the adjacent outwardly-flared side wall being closed by a plate-like member of triangular form.

1,891,312. HYDRAULIC HOIST FOR DUMPING TRUCKS. ARTHUR E. KNECHT, Galion, Ohio, assignor to The Perfection Steel Body Co., Galion, Ohio, a Corporation of Ohio. Filed Jan. 21, 1932. Serial No. 587,998. 2 Claims. (Cl. 188—9.)



1. A hydraulic hoisting mechanism for dumping trucks comprising a cylinder forming a part of a closed fluid-circulating system, a piston in the cylinder, means for supplying a non-compressible fluid to the cylinder at the rear of the piston and withdrawing said fluid from the cylinder at the front of the piston to impart movement to the piston, a stem extending axially from the piston, a valve slidably mounted upon said stem, means to limit the movement of the valve on the stem, and yieldable means for holding said valve toward the end of the stem, the valve being adapted to seat in the end of the cylinder and constructed to permit a retarded flow when seated.

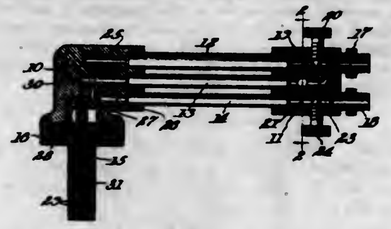
1,891,313. IMPROVED MEANS OF PROVIDING A LEAK FOR LIQUIDS. ISAAC LUBBOCK and JOHN RUSKIN JOYCE, London, England, assignors to The Asiatic Petroleum Company Limited, London, England. Filed June 17, 1931, Serial No. 545,136, and in Great Britain July 7, 1930. 6 Claims. (Cl. 210—166.)



1. In combination with the heatable liquid-containing reservoir of a liquid fuel burning installation, a conduit connected to the bottom of said reservoir, a spring-loaded valve in said conduit, and a restricted leak orifice mounted in series with the spring-loaded valve, said valve being adjusted to open under the normal pressure within the reservoir, when the installation is working, to pass liquid from the reservoir through the leak orifice.

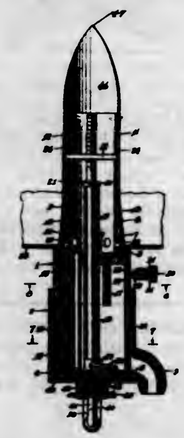
1,891,314. METHOD OF PRODUCING A HEATING OR WELDING FLAME. SAMUEL W. MILLER, Hollis, N. Y., assignor to Oxweld Acetylene Company, a Corporation of West Virginia. Filed May 15, 1928, Serial No. 278,024. Renewed July 28, 1930. 13 Claims. (Cl. 158—117.5.)

1. The method of producing a heating or welding flame which comprises passing a stream of hydrocarbon through a pre-combustion zone to a combustion zone; mixing oxygen with the hydrocarbon in the pre-combustion zone to support primary combustion; injecting additional oxygen into the combustion zone to stimulate and localize the secondary combustion; and so regulating the total



quantity of oxygen employed that it shall be insufficient to render the flame detrimentally oxidizing when used for heating or welding metal.

1,891,315. DISPENSING DEVICE. LAURITS MARTIN NARBO, Madison, Wis. Filed Nov. 30, 1931. Serial No. 578,153. 6 Claims. (Cl. 221—23.)



1. A dispensing device for containers comprising a tubular body section having an open inner end and an open outer end, a tubular shank metal puncturing section, and a cylindrical faucet section movably mounted on the body section, said body being provided with a peripheral abutment shoulder, an intermediate portion of less diameter than said shoulder, and a third portion of still less diameter over which said shank section telescopes, said shank having a radially expansible and normally contracted end, means on said intermediate portion coacting with the contractible and expansible end of the shank section upon movement thereof toward the peripheral abutment shoulder for radially expanding said end to approximately the diameter of the abutment shoulder, means for moving said shank section and said body section longitudinally of each other for gripping the container wall around an outlet opening in the container, and pivotally connected means for telescopically moving said faucet section for closing the outer end of said body section.

1,891,316. METHOD OF PRODUCING PRESSED STEEL HATCH FRAMES. OLAF J. NYSTRAND, Youngstown, Ohio, assignor to Youngstown Steel Car Corporation, a Corporation of Ohio. Filed Dec. 18, 1930. Serial No. 502,172. 6 Claims. (Cl. 113—116.)

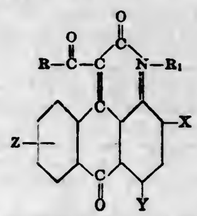
1. The method of making a one-piece pressed metal hatch frame or the like having an inwardly tapering rectangular central well of a depth at least approximately equal to the width of the bottom of the well, which comprises the steps of first pressing a shallow rectangular pan from a metal blank, the radii of curvature of the corners of said rectangular pan being relatively larger than of the finished well, deepening the rectangular pan so formed while maintaining the original radii of curvature of said corners,



again deepening the pan and simultaneously reducing the radii of curvature of said corners, cutting out the bottom of the pan after the third pressing operation along lines spaced from the side and end walls thereof, and then straightening the marginal edges of the bottom into alignment with said side and end walls thereby to increase the depth of the central well.

1,891,317. PROCESS FOR THE PREPARATION OF NEW CONDENSATION PRODUCTS OF THE ANTHRAQUINONE SERIES. ALBIN PETER, Basel, Switzerland, assignor to the Firm of Chemical Works formerly Sandoz, Basel, Switzerland. Filed July 7, 1931, Serial No. 549,325, and in Germany July 18, 1930. 14 Claims. (Cl. 260—39.)

9. As new articles of manufacture the condensation products of the general formula:

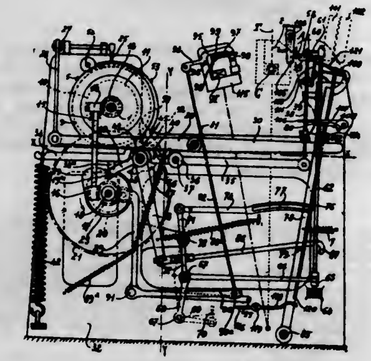


wherein R represents alkyl, alkoxy and phenyl, R_1 hydrogen, alkyl, X hydrogen, halogen, alkyl, alkoxy, Y hydrogen, halogen, hydroxy, alkoxy, amino, alkylamino and an arylamino group of the benzene series, and Z hydrogen, halogen, hydroxy, alkoxy, amino, alkylamino and an arylamino group of the benzene series, which are in dry state well crystallized compounds, insoluble in water, more or less soluble in organic solvents with yellow, red to red violet coloration and in concentrated sulphuric acid with a yellow, red, violet, and blue coloration, and unable to yield leuco-anthraquinone derivatives when heated in alkaline solutions of sodium hydrosulphite.

1,891,318. AUTOMATIC SHUTTLE CHANGING MECHANISM FOR A LOOM WEAVING WITH ONE OR SEVERAL SHUTTLES. ALBERT PONCET, Champier, France. Filed Jan. 7, 1932, Serial No. 585,801, and in France Jan. 14, 1931. 6 Claims. (Cl. 139—227.)

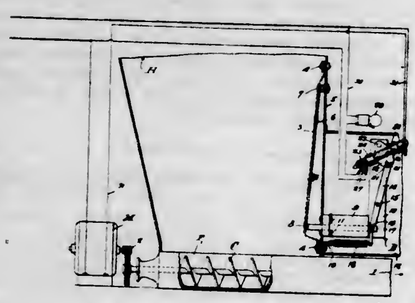
1. A shuttle-changing mechanism for looms operating with several shuttles, comprising in combination a selector device adapted to be selectively actuated by the weft feeler of the loom when the pirn is exhausted said weft feeler being on the side of the loom opposed to the shuttle boxes; means adapted to reject the exhausted shuttle from the slay; a plurality of shuttle stocks on the side of the loom opposed to the shuttle boxes; means adapted to each one of said stocks to extract but one shuttle therefrom; a shuttle carrier adapted to selectively receive the fresh shuttle extracted from one of said stocks; means on said carrier, to selectively operate said shuttle-extracting means; a control mechanism responsive to the shuttle box control, to drive said shuttle carrier in accordance therewith so

that it cooperates with the stock corresponding to the shuttle in operation in the loom; means to move said shuttle carrier so that it brings the fresh shuttle into the slay; a cam gearing adapted, when in operation, to drive all the aforesaid means in appropriate succession; a double clutch rotated by the general drive of the loom, said double clutch being able to rotate either the loom proper or said cam gearing; braking means adapted to stop the loom when it is de-clutched from said double clutch; a cam gear continuously driven by the loom; and a spring gear, retained



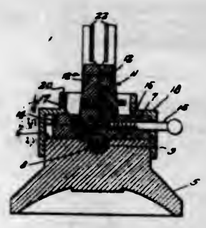
simultaneously by said last-named cam gear and by said selector device, said spring gear being adapted, when freed, to actuate said double clutch so as to stop the loom and rotate said first-named cam gearing, the latter being arranged to reload said spring gear and also to restore said double clutch into its normal weaving position when the shuttle changing operation is perfected; and said second-named cam gear being so adjusted with respect to the loom, that it frees said spring gear only during a short period of time and slightly before the operation of the weft feeler.

1,891,819. STOKER CONTROL. JOHN ORA STAYTON, Chattanooga, Tenn. Filed Apr. 15, 1932. Serial No. 605,527. 3 Claims. (Cl. 198—37.)



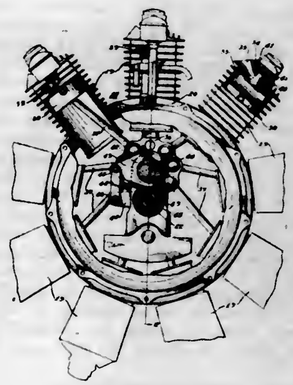
1. The combination with a fuel hopper, a conveyor into which a hopper discharges, an electric motor operatively connected with the conveyor, and a motor circuit; of an electric switch interposed in the motor circuit, a member movably mounted in the hopper, a flexible shield within the hopper, between said member and the contents of the hopper, means for securing the shield about its margin to one wall of the hopper, to form a pocket in which said member works, the shield constituting means for transmitting pressure from the contents of the hopper to said member, and also preventing the contents of the hopper from clogging the action of said member by lodgment between said member and said wall, and mechanism for operatively connecting said member with the switch, the said member being movable, responsive to the pressure of fuel against the shield to close the switch, said mechanism comprising automatically acting yieldable means for operating the switch, after the fuel in the hopper has been depleted to a predetermined degree, to open the switch.

1,891,820. GRINDING HEAD FOR LENS SURFACING MACHINES. HAROLD C. ST. DENNIS, Syracuse, N. Y. Filed May 18, 1932. Serial No. 611,191. 4 Claims. (Cl. 51—209.)



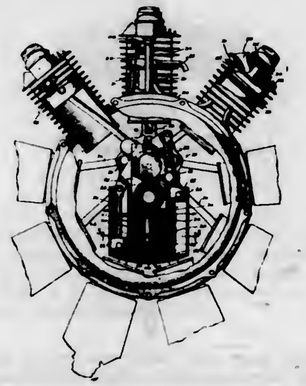
1. In a grinding head for lens surfacing machines, a base section, a top section on said base section, said sections having grooves in contiguous faces thereof providing an opening extending through the head, a shaft journalled in said opening, an adjustable adapter mounted on said top section, an emery shield covering said top section and provided with an opening through which said adapter extends, oppositely disposed pairs of fingers, and means for mounting said fingers on said shaft for rotation therewith.

1,891,821. INTERNAL COMBUSTION ENGINE. LIONEL M. WOOLSON, Detroit, Mich., assignor to Packard Motor Car Company, Detroit, Mich., a Corporation of Michigan. Filed Oct. 23, 1929. Serial No. 401,650. 10 Claims. (Cl. 123—48.)



1. In an internal combustion engine having a pressure lubricating system, compression ratio regulating mechanism including an eccentric bearing sleeve, a rotatable vane connected to actuate the sleeve, hydraulic means for controlling the position of the vane, and means for controlling the effective relation of the hydraulic means with the vane.

1,891,822. INTERNAL COMBUSTION ENGINE. HERBERT C. EDWARDS, Detroit, Mich., assignor to Packard Motor Car Company, Detroit, Mich., a Corporation of Michigan. Filed Nov. 25, 1929. Serial No. 409,529. 15 Claims. (Cl. 123—48.)



1. In an internal combustion engine, a pressure lubricating system, mechanism controlled by the lubricating system regulating the engine compression ratio, and valve means actuated by centrifugal force associated to automatically control the application of the lubricating system to control the mechanism.

1,891,823. METHOD OF PRINTING ON CELLOPHANE OR THE LIKE. ABRAHAM D. EISENBERG, Brooklyn, N. Y., assignor to Continental Process Corporation, New York, N. Y., a Corporation of New York. Filed Apr. 3, 1931. Serial No. 527,398. 2 Claims. (Cl. 41—33.)



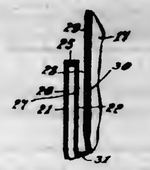
1. The process of printing on cellophane, which consists in first applying a pigment paper thereto, then applying heated dies to certain areas of the pigment paper, removing the pigment paper, and then printing upon the pigmented areas.

1,891,824. POCKET FOUNTAIN TOOTHBRUSH. AYRAULT D. FERGUSON, Kansas City, Kans. Filed Dec. 26, 1930. Serial No. 504,757. 2 Claims. (Cl. 15—137.)



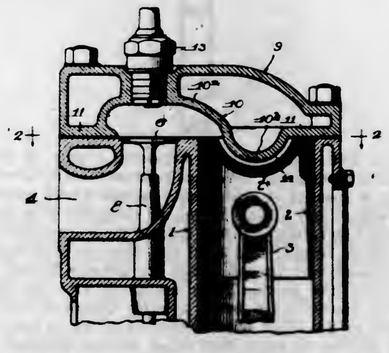
1. In a fountain tooth brush, a magazine; a brushhead; a removable coupling between the magazine and head; a rotatable rod extending longitudinally of said magazine; a plurality of grooves along the inner face of said magazine; a removable bearing plate for said rod; and lugs integral with said plate and extending into said grooves whereby to prevent rotation of the plate within said magazine, said coupling being positioned against the bearing plate to prevent longitudinal displacement, and to maintain the plate lugs against one end of said grooves.

1,891,825. SPRAYER DEVICE. JOHN FITCH, Richmond Hill, N. Y., assignor to William Martin Vogel, Glen Ridge, N. J. Filed Sept. 6, 1930. Serial No. 480,055. 4 Claims. (Cl. 299—88.)



1. A sprayer of the kind described having means for producing blasts of air including a cylindrical body with a head end provided with an aperture, a piston within the body movable toward said head end for the discharge of the blasts of air through said aperture, a suction tube closed at its upper end disposed outside the body with an open space open to the atmosphere between itself and said head end, the front and rear walls of said tube respectively being provided with larger and smaller apertures in line with the aperture of the head end, and a fluid receptacle supported by the body exteriorly thereof adjacent said head end and in which the lower open end of said suction tube is disposed.

1,891,826. INTERNAL COMBUSTION MOTOR. DREW HEAD, Chicago, Ill. Filed Feb. 24, 1930. Serial No. 430,570. 3 Claims. (Cl. 123—191.)

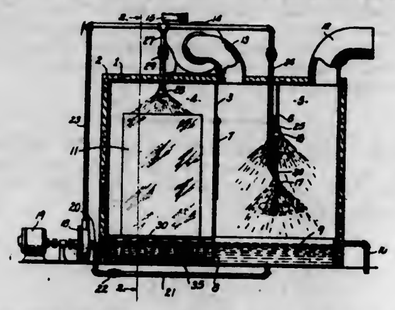


1. In an internal combustion engine, the combination of a cylinder having a head provided with a substantially semi-spherical portion projecting into said cylinder and presenting an uninterrupted convex surface, and a piston in said cylinder having a concave head complementing the convexity of said cylinder head.

1,891,827. AIR CONDITIONING DEVICE. JOHN H. KITCHEN, Kansas City, Mo., and FRANCIS A. KITCHEN, Cleveland, Ohio, assignors to Mabel L. Kitchen, Kansas City, Mo., and Francis A. Kitchen, Cleveland, Ohio. Filed Aug. 3, 1931. Serial No. 554,746. 8 Claims. (Cl. 62—130.)

1. In an air conditioning device the combination with an ice receiving compartment, a separate spray compart-

ment, an extended metal surface support for the ice, said surface partially immersed in a water reservoir in the ice



compartment and means for circulating the water from the reservoir to the spray compartment.

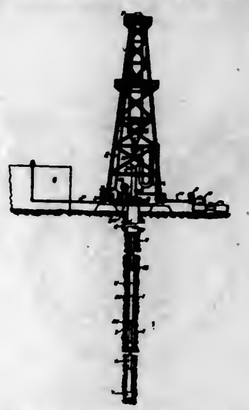
1,891,328. ROTARY OIL WELL DRILLING APPARATUS. EDWARD J. LE COMPTE and CARTER A. HARRISSON, St. Louis, Mo., assignors to National Oil Drill Corporation, St. Louis, Mo., a Corporation of Delaware. Filed Feb. 23, 1932. Serial No. 594,540. 15 Claims. (Cl. 255—28.)



1. A drill stem section comprising a pair of tubular members arranged in telescopic relation; means to restrict rotary movement of said tubular members with respect to each other; and a head having an elongated stem portion extended therefrom which is tapered for a substantial portion of its length; said head and stem portion having a fluid passageway formed within the interior thereof; said head and stem portion being associated with one of said tubular members and being movable therewith and with respect to the other tubular member so as to cause said stem portion to enter said other tubular member when sufficient telescopic movement of said tubular members takes place and progressively lessen the area of a portion of the bore of said other tubular member as the tapered stem portion moves into said bore of said other tubular member.

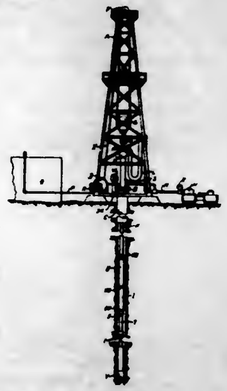
1,891,329. BRAKING MECHANISM FOR ROTARY OIL WELL DRILLING APPARATUS. EDWARD J. LE COMPTE and CARTER A. HARRISSON, St. Louis, Mo., assignors to National Oil Drill Corporation, St. Louis, Mo., a Corporation of Delaware. Original application filed Feb. 23, 1932, Serial No. 594,540. Divided and this application filed June 3, 1932. Serial No. 615,088. 10 Claims. (Cl. 255—19.)

1. In combination with an oil drilling apparatus comprising a string of rotary oil well drill stems through which fluid is pumped under pressure and provided with a means for controlling vertical movement of said oil drilling apparatus, a braking mechanism cooperable with said means,



said braking mechanism being actuated in response to pressure of the fluid pumped through the drill stems of the drilling apparatus.

1,891,330. SIGNALING MEANS FOR ROTARY OIL WELL DRILLING APPARATUS. EDWARD J. LE COMPTE and CARTER A. HARRISSON, St. Louis, Mo., assignors to National Oil Drill Corporation, St. Louis, Mo., a Corporation of Delaware. Original application filed Feb. 23, 1932, Serial No. 594,540. Divided and this application filed June 3, 1932. Serial No. 615,089. 8 Claims. (Cl. 255—1.)



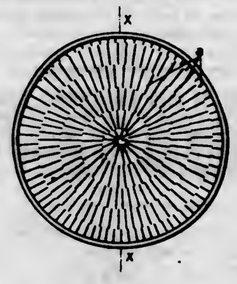
1. In combination, a string of rotary oil well drill stems divided into two sections telescopically connected together in a manner to permit relative longitudinal movement between said two sections, said two sections being provided with related openings formed therethrough which produce a continuous fluid passageway through which fluid may be pumped, an element of unsymmetrical cross-sectional shape associated with one of said two sections between which element and the opening formed through the other of said two sections relative movement takes place on relative movement of said two sections, such relative movement of said element and said opening serving to progressively decrease and increase the effective area of a portion of said opening, whereby the pressure of fluid passing through a portion of the continuous fluid passageway is varied, and signaling means for giving distinguishable signals indicating different pressure conditions resulting from movement of said two sections with respect to each other.

1,891,331. APPARATUS FOR CLEANING OR POLISHING RODS. HUGH C. LOEB, Erie, Pa. Filed May 5, 1930. Serial No. 449,970. 4 Claims. (Cl. 15—77.)



1. In a rod cleaning or polishing machine, the combination of a rotatable brush; a guide for the article to be cleaned opposing the rotatable brush; and means introducing fluid under pressure to the guide in position to act on the article to be cleaned on the guide in opposition to the thrust on the rotatable brush.

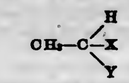
1,891,332. RÖNTGEN DIAPHRAGM. RUDOLF MANNL, Karlsbad, Czechoslovakia. Filed Apr. 27, 1927, Serial No. 187,021, and in Czechoslovakia Apr. 30, 1926. 2 Claims. (Cl. 250—84.)



1. A Röntgen diaphragm comprising a plate of ray pervious material and a plurality of short straight screening elements of ray impervious material mounted thereon, said screening elements being distributed over substantially the entire surface of the plate in substantially end to end and side to side spaced relation with the side to side spacing of all of the elements being substantially equal.

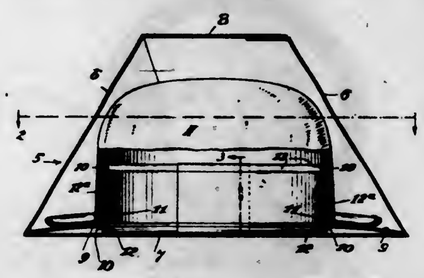
1,891,333. PRODUCTION OF ACETONE. HANS MEERWEIN and HEINRICH MORSCHEL, Konigsberg, Germany, assignors to the Firm Schering-Kahlbaum A. G., Berlin, Germany. Filed June 5, 1928, Serial No. 283,121, and in Germany Apr. 22, 1927. 4 Claims. (Cl. 260—134.)

1. The method of producing acetone which comprises conducting a compound of the formula



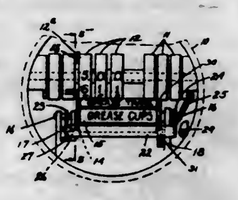
(wherein X may be hydroxyl and Y hydrogen or X + Y an oxygen atom) in the vapour phase together with steam over a contact mass containing a mixture of an oxide of tin with a compound of the group comprising the oxides of the rare earth metals or of thorium, zirconium and zinc and the carbonates of alkaline earth metals.

1,891,334. SHIPPING DEVICE FOR HATS. GEORGE S. OVERTON, East Norwalk, Conn., assignor to The American Hat Co. Inc., Norwalk, Conn., a Corporation of Connecticut. Filed Dec. 11, 1929. Serial No. 413,153. 11 Claims. (Cl. 206—8.)



1. In combination with a box or container, hat supporting means including a base of flexible yieldable material of greater dimension in one direction than the corresponding dimension of the container, and means carried by said base for attachment to the inside of the hat whereby said device and the hat are insertable as a unit into the container, and opposite edges of said base being adapted to frictionally engage with the opposite side walls of the container and retain the base in fixed relation thereto whereby the hat is supported by said base out of contact with the container walls in any position of the latter.

1,891,335. AUTOMATIC LUBRICATION ANNUNCIATOR FOR MOTOR VEHICLES. FRANK X. REISINGER, Jr., Schenectady, N. Y. Filed Aug. 12, 1930. Serial No. 474,704. 6 Claims. (Cl. 40—44.)

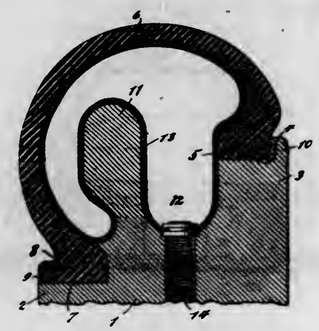


1. A device of the class described comprising a casing, a cylinder rotatably supported in said casing and having circumferentially spaced sections arranged thereon and extending longitudinally thereof, each of said sections being adapted to be moved into registering alinement with an aperture in said casing to be displayed through said opening, a member mounted on the axis of said cylinder and movable relatively to said opening, said member being moved with and relatively to the periphery of said cylinder in controlling the exposure of said sections through said opening, a registering mechanism involving a plurality of registering dials arranged at one side of the cylinder, means for placing one of said dials in operative engagement with said cylinder to actuate the same when said dial reaches a predetermined, registering position to expose one of said sections in this operation, and means on said member positively engaging said cylinder in the movement imparted thereto by said dial.

1,891,336. WHEEL. ELY M. T. RYDER, Yonkers, N. Y. Filed July 8, 1931. Serial No. 549,372. 9 Claims. (Cl. 152—18.)

1. A wheel provided with a rim having one side of substantially greater diameter than the other, a pneumatic tire

mounted on said rim and having one edge seated on each of said sides, a rigid projection secured to said rim in fixed position and extending within the space surrounded by the

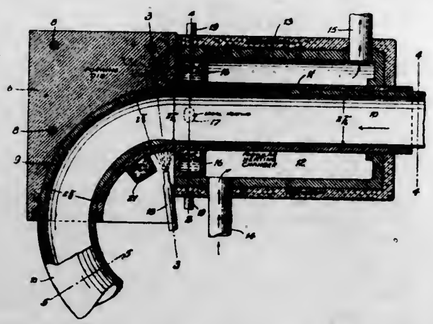


tire and of a larger diameter than the large-diameter side of the rim, and an inner tube between said projection and tire.

1,891,337. PROCESS OF PRODUCING CELLULOSE. STEWART ELMER SEAMAN, Buffalo, N. Y., assignor to E. I. du Pont de Nemours & Company, Wilmington, Del., a Corporation of Delaware. Filed Jan. 9, 1930. Serial No. 419,729. 23 Claims. (Cl. 92—11.)

1. A process of purifying cellulose which comprises cooking vegetable fibrous material with an aqueous solution comprising a mixture of ammonium sulphite and ammonium sulphide.

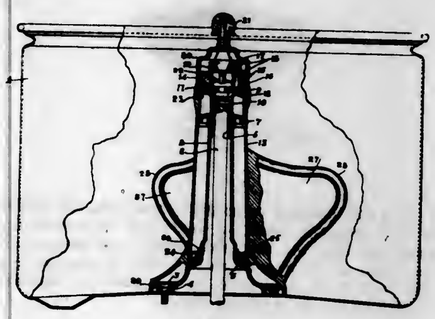
1,891,338. METHOD OF AND MEANS FOR BENDING TUBES. LESTER W. SNELL, Alton, Ill. Filed Feb. 9, 1931. Serial No. 514,348. 18 Claims. (Cl. 153—32.)



1. The method of bending a tube having thick and thin portions which comprises imparting a longitudinal upsetting thrust to the thick and thin material undergoing the bending operation, maintaining said thin material at a relatively high temperature to permit free upsetting and thickening thereof, and maintaining said thick material at a lower temperature, so as to produce a bent tube having a substantially uniform thickness.

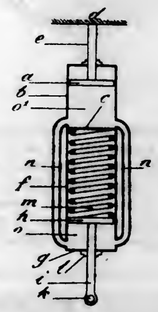
17. In a tube bending apparatus, a bending die having a curved passageway through which the tube is forced to form the desired bend, and means whereby different portions of the tube are subjected to different temperatures during the bending operation, said means including a heater to increase the temperature of the tube as it passes to the bending die, and a local cooler adjacent to the course of the tube, so as to reduce the temperature in a local area extending longitudinally of the tube.

1,891,339. WASHING MACHINE. ROBERT J. WATERWORTH, Sidney, Ohio, assignor to Prima Manufacturing Company, Inc., Sidney, Ohio, a Corporation of Ohio. Filed Oct. 8, 1930. Serial No. 487,159. 6 Claims. (Cl. 259—101.)



1. In a washing machine in combination with a tub, a bell-shaped agitator extending to the bottom of the tub adapted to oscillate in the tub and consisting of a dolly stem having a plurality of triangularly shaped radiating vanes extending therefrom and the upper edge of each vane being substantially parallel to the bottom of the tub, the lower edge of each vane being at substantially forty-five degrees to the bottom of the tub, the outer periphery of each vane having a bead thereon.

1,891,340. SYSTEM FOR REDUCING SHOCKS. DAVID AMMIRANDOLI and CINO BALDI, Prato in Tuscany, Italy. Filed Apr. 1, 1930, Serial No. 440,705, and in Italy Apr. 11, 1929. 6 Claims. (Cl. 267—34.)

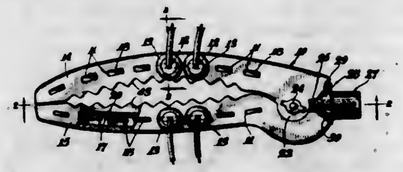


1. Apparatus for reducing and eliminating shocks, comprising a cylindrical casing divided into separate chambers with intercommunicating conduits, a piston for each chamber, a resilient member supporting the casing on at least one of said pistons, and a liquid medium disposed in the chambers and conduits and between the pistons to transmit any movement of the pistons through the resilient means to the casing.

1,891,341. ELECTRIC LIGHT ATTACHMENT SET. ABRAHAM J. BAROCAS, Brooklyn, N. Y. Filed Mar. 7, 1930. Serial No. 433,959. 3 Claims. (Cl. 173—334.)

1. An electric light attachment set comprising two complementary hinged members provided with clamping

means, each member being electrically insulated from the other and having therein a continuous contact bar and a plurality of sockets communicating therewith, and adapt-



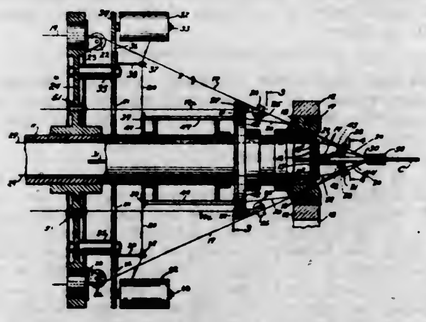
ed to receive single wire plugs for contacting with said bars, and means to yieldably hold the contact element of said plugs against said bars.

1,891,342. FOLDING CRATE. ELBERT C. BOTTRELL, Milwaukee, Wis. Filed Apr. 30, 1930. Serial No. 448,584. 5 Claims. (Cl. 220—6.)



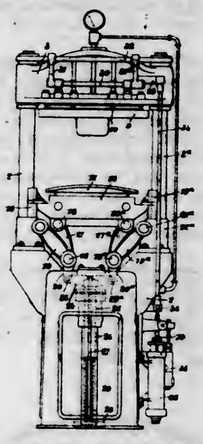
1. A folding container, comprising a base member, a pair of side members foldable with respect to said base member and medially foldable upon themselves, a top carried only by said side members, another pair of rigid side members foldable only upon said base member, and latch means for releasably connecting said last-mentioned side members in unfolded position to said top to secure all of the parts in open, unfolded positions.

1,891,343. STRANDING. GORMAN C. BURD, Adrian, Mich., assignor to American Cable Company, Inc., New York, N. Y., a Corporation of Delaware. Filed July 14, 1931. Serial No. 550,679. 8 Claims. (Cl. 117—34.)



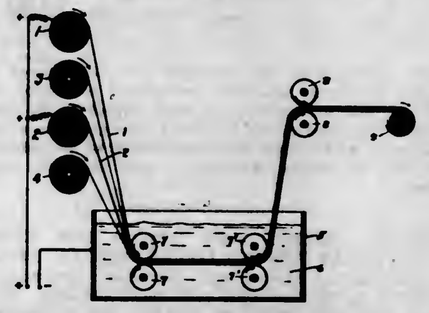
1. The process of fabricating stranded structures of the type characterised by a central core and an outer layer of wire laid helically thereon, with an intermediate layer of packing material, said process comprising the step of feeding said core forward, and concurrently laying thereon in helical relation a series of strands of packing material and a series of wires, said packing strands and wires being applied to the periphery of said core in alternate series, side by side, and said packing strands occupying the inner helical interstices between said wire components.

1,891,344. HAT PRESS. MARCEL CASES, Essonnes, France. Filed Feb. 5, 1931, Serial No. 513,570, and in France Feb. 10, 1930. 7 Claims. (Cl. 223—31.)



1. A hydraulic press of the type described especially adapted to the hat making industry which comprises in combination a stationary frame, a stationary member carried by said frame, a rubber bag secured to said stationary member, a pipe opening into said rubber bag, a movable member adapted to slide with respect to said frame, a hat mould secured to said movable member opposite the rubber bag, a main hydraulic piston adapted to actuate said movable member, a valve element connected to a source of liquid under pressure, for controlling said main piston, manually operable means for operating said valve element, whereby the main piston is caused to apply the movable member against the stationary member, means, operated by said main piston, for sending liquid under pressure through said pipe into said rubber bag about the end of the stroke of said piston, a release hydraulic piston, a second valve element for controlling said release hydraulic piston, means, actuated by said release piston, for operating said first mentioned valve element, whereby the main piston is caused to cease to apply the movable member against the stationary member, means, actuated by said release piston for causing liquid under pressure to escape from said rubber bag, and means, actuated by said main piston, for operating said second mentioned valve element, whereby said release piston is brought into play.

1,891,345. ELECTRICAL CONDENSER. JOHN CLYDE DAVIDSON, Brooklyn, N. Y. Filed May 16, 1928. Serial No. 278,101. 16 Claims. (Cl. 175—315.)



8. The method of making an electrical condenser which comprises passing a plurality of conductive elements separated by a spacing element through an impregnating solu-

tion, simultaneously applying a forming current to at least one of the conductive elements in such manner as to form a dielectric film thereon, assembling a condenser body of the desired shape therefrom, and dipping said body in a compound to prevent loss of the impregnating material.

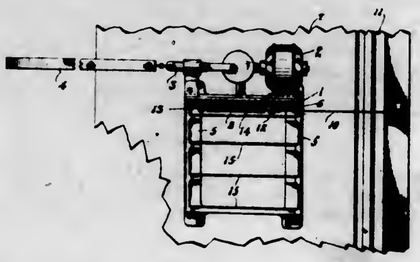
4. In the art of making a dry electrolytic condenser, the method which comprises preparing a solution of film forming inorganic base and organic acid chemicals and water, heating the solution beyond the point where the said chemicals would crystallize out when the solution cools so that, upon hardening in a condenser body, the resultant compound will be substantially non-crystalline with a tenacious outer layer and a relatively soft interior having water in combination therewith, and impregnating a condenser body with said solution.

1,891,346. LONG SPAN BUILDING AND ARCH CONSTRUCTION. LOUIS DAVIDSON, New York, N. Y. Filed May 1, 1924, Serial No. 710,385. Renewed Sept. 28, 1931. 5 Claims. (Cl. 108—1.)



1. A building comprising a plurality of long span arches comprising shoes and segments, a floor at substantially the level of the ends of the arches, supports at the ends of the arches, and arch sub-segments extending from the arches to the supports and bearing on said respective elements, each sub-segment and its complemental segment of the arch being connected to the same shoe.

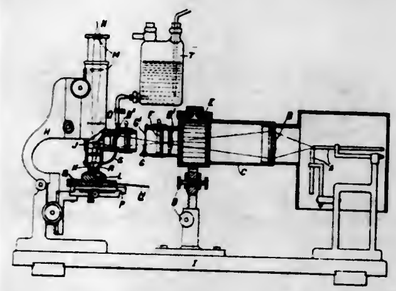
1.891,347. EXERCISING APPARATUS. FRANK L. DYER, New York, N. Y. Filed Feb. 2, 1929. Serial No. 337,123. 1 Claim. (Cl. 312—22.)



The combination with a hinged door, of a motor operated exercising apparatus carried by said door and movable in a horizontal plane with respect to the same, a strap connected to the exercising apparatus and a fixed anchorage with which said strap connects for relieving the door of stresses developed in said exercising apparatus.

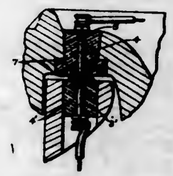
1.891,348. METHOD AND DEVICE FOR MICROSCOPICALLY VIEWING LIVING OBJECTS. PHILIPP ELLINGER and AUGUST HIRT, Heidelberg, Germany, assignors to the Firm Carl Zeiss, Jena, Germany. Filed Oct. 23, 1930, Serial No. 490,800, and in Germany Oct. 29, 1929. 21 Claims. (Cl. 88—39.)

1. A method of presenting microscopic views of living objects in function, consisting in applying a light source adapted to emit rays of short-wave length, injecting into the object substances adapted to emit fluorescence light,



directing the said rays to the object, and then receiving the fluorescence rays by means of a microscope.

1,891,349. TELEPHONE WIRE CONNECTING MEANS FOR RAILWAY TRAINS. THOMAS J. FITZSIMMONS, Topeka, Kans. Filed Feb. 14, 1927. Serial No. 168,180. 2 Claims. (Cl. 173—332.)

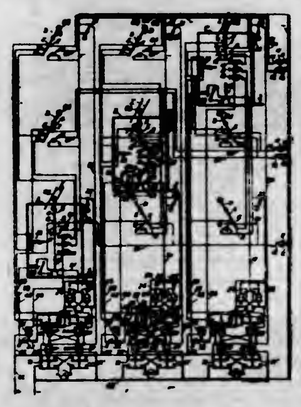


2. In a metallic circuit connection means in combination with a train line air coupling, a metallic circuit comprising two insulated metal wires, the wires connected to two binding posts in each half of the coupling, the binding posts being positioned in the nose and lug of each half of the coupling and insulated therefrom, buttons positioned on the ends of the binding posts as contact means between the halves of the couplings substantially as shown.

1,891,350. ELEVATOR CONTROL SYSTEM. ERNEST L. GALE, Yonkers, N. Y., assignor to Gurney Elevator Company, Inc., New York, N. Y., a Corporation of Pennsylvania. Filed Dec. 1, 1926. Serial No. 151,872. 8 Claims. (Cl. 187—29.)

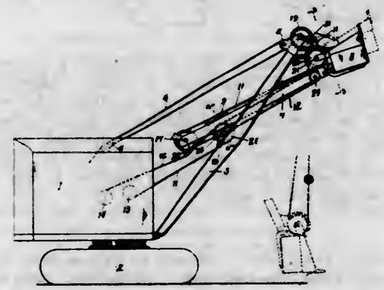
1. In an intercepting control system, the combination with a bank of cars, a hoisting motor for each car, "up" and "down" reversing switches for each hoisting motor, each having a winding and a self-holding circuit therefor to effect floor to floor movement of the car automatically, subsequently to car start as effected manually, a stop switch in said self-holding circuit having an operating winding, car controlled "up and down" direction switches for each car actuated at the car's limits to establish direction for reverse car travel, an energizing circuit for said stop switch operating winding of each system divided at said direction switches to form "up" and "down" circuits, floor-control circuit-controllers for each car operable automatically in accordance with the car's position to control said "up" and "down" energizing circuit, all of said circuit controllers for any one landing which correspond as to direction being electrically interconnected, one "up" and one "down" push-button actuated contactors for each intermediate landing to control respectively said "up" and "down" energizing circuits to

control stop of all the cars which form the bank, so that any car of the bank which is first to reach landings at which buttons are set and whose direction of travel corresponds to buttons set will be automatically intercepted at such landings by actuation of said stop switch for such first car, by causing its associated self-holding circuit to open, said contactors remaining in actuated position when the buttons are released, a re-set winding for each hall push-button in said "up" and "down" circuits arranged to be energized by any such first car which is so stopped to re-set the button which effected the stop, a set of car button actuated contactors for each car to control an additional energizing circuit for said stop-



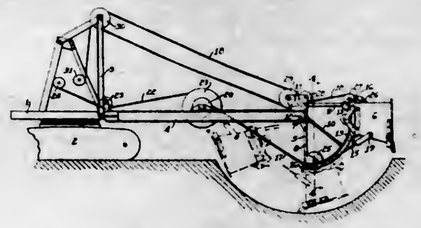
switch operating winding to control the latter whereby each set of car buttons controls its own car exclusively to effect automatic stops thereof successively at all landings toward which car travel is directed, said car button contactors remaining in actuated position when pressed, and means controlled automatically by each car to re-set its own set of car buttons, and a transfer switch for each car operable manually at will to open said hall push-button controlled energizing circuit for said stop switch winding of its individual system only, whereby the stopping effect of said hall-buttons is rendered ineffective and the car will continue as express to any desired point and the stopping effect of the hall-buttons is thereby transferred to another car of the bank.

1,891,351. DIPPER-STICK CONTROL FOR EXCAVATING MACHINES. CHARLES L. GEORGE, Findlay, Ohio, assignor to The Buckeye Traction Ditcher Company, a Corporation of Ohio. Filed Mar. 7, 1931. Serial No. 520,856. 2 Claims. (Cl. 214—135.)



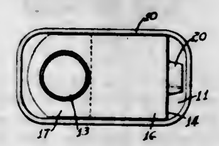
1. In an apparatus of the class described, a boom having a sheave at its outer end, a dipper-stick having a sheave at its outer end, a crowd and hoist cable for the dipper stick, coacting guard parts carried by said boom and dipper-stick to have coaction with each other and prevent contact of said sheaves when the dipper stick is raised, one of said parts being pivotally mounted and having rolling coaction with the other part.

1,891,352. SHOVEL TYPE EXCAVATOR. CHARLES L. GEORGE, Findlay, Ohio, assignor to The Buckeye Traction Ditcher Company, Findlay, Ohio, a Corporation of Ohio. Filed Feb. 8, 1932. Serial No. 591,533. 15 Claims. (Cl. 214—102.)



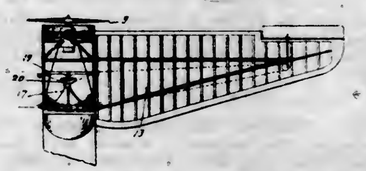
1. In an excavating machine of the class described, a boom, a member pivotally carried by the outer end portion of the boom and having a curved track portion, a bucket carried by said member for movements therewith and guided by said track for predetermined movements relative thereto lengthwise of the boom and from one side to the other of the member pivot, and means for controlling the digging and retracting movements of the bucket.

1,891,353. ADVERTISING FOLDER. MATHIAS G. KOHRMAN, Toledo, Ohio, assignor to Roberts Printing Company, Toledo, Ohio, a Corporation of Ohio. Filed June 18, 1932. Serial No. 617,980. 5 Claims. (Cl. 40—2.)



1. An advertising device comprising a one-piece folder having a plurality of leaves, an extension on the outermost sheet constructed and arranged for attachment to a container, and a pull tab on the innermost leaf and extending from the folder in diametrically opposed relation to said extension.

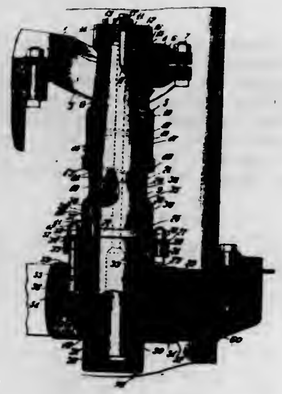
1,891,354. AIRPLANE. JOSEPH J. LERAY, West Warwick, R. I. Filed Feb. 18, 1932. Serial No. 593,795. 1 Claim. (Cl. 244—12.)



The combination in an airplane having a fuselage, wings and ailerons thereon, a control stick for actuating the ailerons, and an engine driven pusher propeller mounted substantially at the rear of the wings, a circular housing cooperating with the fuselage and surrounding the

engine and opening closely adjacent the front of said propeller, troughs communicating with said circular housing and located longitudinally of the wings, imbedded therein and communicating with screened slots in the upper surface of the wings, whereby air is drawn from the surface of said wings, due to the suction caused by the operation of said propeller, through said troughs and over said engine and out said circular housing, a swinging air gate connected to the control stick which in neutral position keeps the gate in center leaving the troughs from the wings open to communication with the housing and when to one side or the other the corresponding trough is discontinued from communication with the housing whereby a dual control is effected with the ailerons and air suction from the slots.

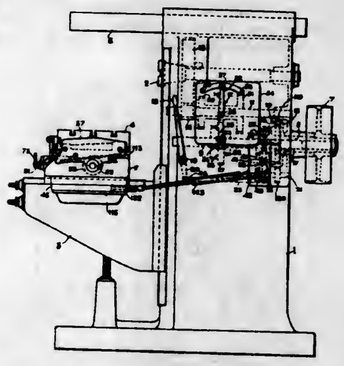
1,891,355. JOURNAL FOR PULVERIZING MILL ROLLERS. CHARLES E. NEEDHAM, Chicago, Ill., assignor to The Raymond Brothers Impact Pulverizer Co., Chicago, Ill., a Corporation of Illinois. Filed Jan. 5, 1929. Serial No. 330,501. 6 Claims. (Cl. 308—168.)



1. In an apparatus of the character described, a shaft, means for suspending the shaft in a substantially vertical position, the shaft being held in the suspending means against rotation about its own axis but being bodily revoluble about a fixed vertical axis, there being a central lubricant passage extending axially through the shaft, a roller assembly rotatably supported on the shaft and enclosing the lower end of the shaft so as to form a lubricant well below the shaft, the lubricant passage in the shaft communicating with this well, the upper portion of the shaft being of a smaller diameter so as to form an inwardly extending and upwardly facing annular shoulder on the outer surface of the shaft, a bushing interposed between the roller assembly and shaft and rotating with the roller, this bushing having an upper portion of smaller inner diameter so as to engage the shaft above the shoulder, means for sealing the joint between the upper end of this bushing and the shaft, and an oil duct leading from the surface of the shoulder on the shaft to the central oil passage, the duct being so positioned that centrifugal force will cause oil to flow inwardly through this duct.

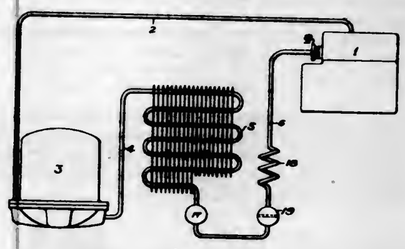
1,891,356. MILLING MACHINE. FRED A. PARSONS, Milwaukee, Wis., assignor to Kearney & Trecker Corporation, West Allis, Wis. Filed Sept. 5, 1931. Serial No. 561,332. 8 Claims. (Cl. 90—18.)

1. In a milling machine, the combination of a rotatable tool spindle, a support for said spindle, a work support adjacent said spindle, said supports being relatively movable in a first path transverse to the axis of said spindle for forward direction cutting movements and reverse direction idle movements, one of said supports being movable in a second path transverse to said first path to an advanced cutting position or alternatively to a retracted non-cutting position, a spindle transmission, a transmission for said relative movement in said first path driven from said spindle transmission and including a reverser operable for said forward and reverse movements, a power train for movement of said movable support in said second path including a fluid operable device oppositely movable



to two positions respectively corresponding to different of said positions of said movable support, a power operated pump, channels connectible from said pump for operation of said device to each of said positions thereof, valve means associated with said channels and having two positions respectively for movement of said device to the different positions thereof, and means for operation of said valve means in accordance with said forward and reverse movement.

1,891,357. REFRIGERATION. FRANK D. PELTIER, Evansville, Ind., assignor to Servel Inc., New York, N. Y., a Corporation of Delaware. Filed Sept. 27, 1930. Serial No. 484,745. 4 Claims. (Cl. 62—126.)

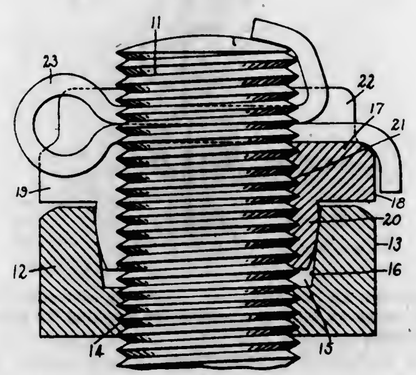


1. In a refrigerating system including a compressor unit, condenser, an evaporator, a conduit between said condenser and said evaporator, a capillary tube in said conduit for controlling the volume of liquid refrigerant supplied to said conduit from the condenser, a loaded valve in said conduit operable responsive to the fluid pressure of the liquid refrigerant admitted by the capillary tube into said conduit.

1,891,358. LOCK NUT. GEORGE B. PICKOP, New Haven, Conn. Filed Jan. 8, 1932. Serial No. 585,420. 2 Claims. (Cl. 151—19.)

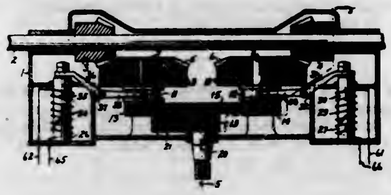
2. A bolt and nut construction comprising a threaded bolt having a transverse opening through the threaded portion and spaced from the end thereof, a nut having a threaded opening therein to receive the bolt, a recess

opening through the upper face of the nut and surrounding the bolt opening, a lock nut having wrench faces upon the body portion thereof and a tapered boss projecting from its lower surface, the body portion and the boss being provided with a threaded opening to receive the bolt, and the body and boss of said nut being split whereby the nut may be contracted upon the bolt when the



nut is screwed thereon so that the boss enters the recess in the first-named nut, the upper surface of said last-named nut being provided with grooves to receive a member passing through the transverse opening in the bolt to hold the nut against rotation thereon, said tapered boss being provided with a barrel-shaped outer surface to lessen the surface contact with the first-named nut.

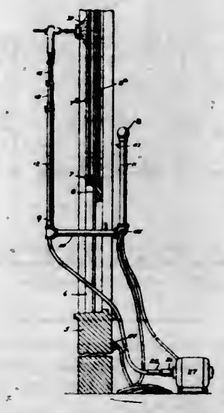
1,891,359. DOOR OPERATING MECHANISM. HAROLD ROWNTREE, Scarsdale, N. Y., assignor to National Pneumatic Company, New York, N. Y., a Corporation of West Virginia. Filed Jan. 14, 1930. Serial No. 420,808. 2 Claims. (Cl. 268—19.)



1. In a mechanism of the type described, the combination with a continuously revolving shaft and means for operating the shaft, of a door, means for selectively connecting the shaft to the door to operate it in either direction, said means including clutches, electro-magnetic means for operating the clutches, switch means for controlling said electro-magnetic means for operating the clutches to open the door, a holding coil controlled by the switch means for maintaining the switch in operated position, and means for deenergizing the holding coil to close the door.

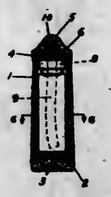
1,891,360. WINDOW CLEANING APPARATUS. FREDERICK SEHINMAN, New York, N. Y. Filed July 24, 1931. Serial No. 552,870. 1 Claim. (Cl. 15—103.)

In an apparatus of the class described, a frame consisting of tubular frame members, one constituting a crosshead, an arm extending angularly up from one end of the crosshead, said arm being composed of tubular telescoping parts, the upper part carrying a mechanism driven by a flexible shaft, said flexible shaft and a housing therefor extending through and projecting from the



telescoping parts and from said frame, and a clamp fixed to the crosshead to clamp the housing of said shaft to support the same and said telescoping parts in different positions of adjustment.

1,891,361. LIQUID DISPENSER. NATHAN M. STANLEY, Dayton, Ohio. Filed Sept. 24, 1930. Serial No. 484,093. 10 Claims. (Cl. 215—12.)

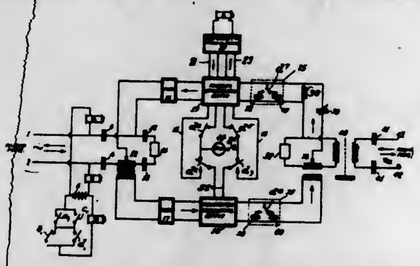


1. In a dispenser, in combination with a container having a stopper and a wick in the stopper, a casing having an opening in one end to receive the container and a flange and a restricted opening at the other end, said restricted opening being adapted to receive the wick and the flange adapted to engage the stopper, and means adapted to close the container receiving opening and press the stopper against the flange.

1,891,362. APPARATUS ADAPTED TO DUPLEX TELEPHONY OVER A SINGLE CARRIER FREQUENCY. PAUL TITZ, Berlin, Germany, assignor to Telefunken Gesellschaft fur Drahtlose Telegraphie m. b. H., Berlin, Germany. Filed July 11, 1929, Serial No. 377,390, and in Germany May 4, 1928. 8 Claims. (Cl. 179—15.)

1. A two way communication system comprising a bridge arrangement having a receiver circuit and a transmitter circuit connected respectively at diagonally opposite points of said bridge, a low frequency circuit and a high frequency circuit connected respectively to the other two diagonally opposite points of said bridge, a source of high frequency current having variable contacting means

adapted in one position to connect said source diagonally across said bridge so as to supply energy to both said receiver circuit and said transmitter circuit and in an-

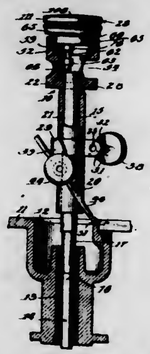


other position to disconnect said source from both said circuits, and means in said low frequency circuit for controlling said variable contacting means.

1,891,363. EGG YOLK SUBSTITUTE FOR TANNING. OTTO RÖHN, Darmstadt, Germany. Filed Nov. 4, 1929, Serial No. 404,866, and in Germany Dec. 6, 1928. 2 Claims. (Cl. 149—4.)

1. A fatty product for use in the manufacture of kid leather, comprising an ordinary oil emulsion and an admixture of a salt of glycerine phosphoric acid.

1,891,364. VALVE SEAT GAUGE. FRANS O. ALBERTSON and AXEL MADSEN, Sioux City, Iowa, assignors to Albertson & Company, Inc., Sioux City, Iowa, a Corporation of Iowa. Filed Oct. 8, 1930. Serial No. 487,134. 11 Claims. (Cl. 33—172.)



5. A valve seat gauge comprising a cylindrical body formed with an axial bore for receiving a pilot stem, and carrying a head and having a socket for receiving an indicating unit, a dial indicator carried in said socket and having a plunger for engaging a pilot stem received in the bore of said body, an adjustable collar carried by said cylindrical body, a valve seat engaging arm and means for slidably and pivotally supporting said arm on said collar.

1,891,365. VALVE SEAT GAUGE. FRANS O. ALBERTSON and AXEL MADSEN, Sioux City, Iowa, assignors to Albertson & Company, Inc., Sioux City, Iowa, a Corporation of Iowa. Original application filed Oct. 8, 1930, Serial No. 487,134. Divided and this application filed Mar. 21, 1932. Serial No. 600,106. 13 Claims. (Cl. 33—172.)

1. In a valve seat gauge, the combination of a pilot stem adapted to be fixedly secured in a valve stem guide, with a gauge body slidably and rotatably mounted on said pilot stem, means carried by said body for engaging a



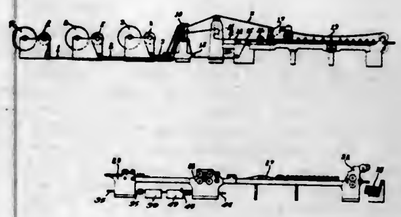
valve seat, an indicating unit carried by said pilot stem and having an actuating member for engaging the end of said body.

1,891,366. PLATEN ROLLER. MIHRAN H. ALEXANIAN, Coytesville, N. J. Filed Mar. 15, 1930. Serial No. 436,017. 3 Claims. (Cl. 197—147.)



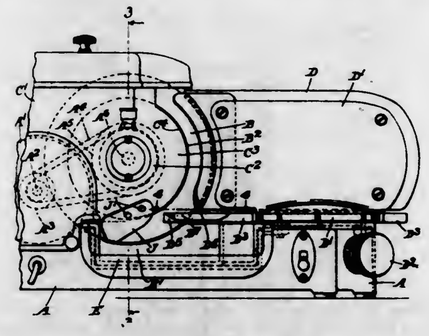
1. A platen roller having a core, strips of bias fabric spirally wound about said core, a cork layer about said fabric strips, additional layers of fabric about said cork, a filler for said outermost fabric layers, the outermost fabric layer impregnated with a binding material to bind same to the underneath layer.

1,891,367. PAPER BOX MAKING MACHINERY. GEORGE H. BRODERICK, Monroe, Mich., assignor to Ottawa River Paper Company, Toledo, Ohio, a Corporation of Ohio. Filed Nov. 1, 1930. Serial No. 492,657. 19 Claims. (Cl. 93—48.)



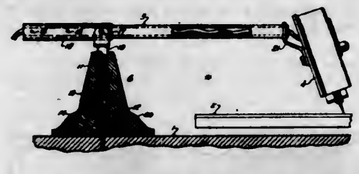
1. In box making machinery, means for continuously feeding a web of sheet material, an intermittently operable mechanism for cutting blanks from the traveling web, a train of continuously driven mechanism acting on the cut blanks and operable periodically to trip the cutting mechanism, and means to adjust the timing of the cut-off mechanism to cut blanks of a desired length.

1,891,368. SLICING MACHINE. WILLIAM J. CAMPBELL, Indianapolis, Ind., assignor to American Slicing Machine Company, Chicago, Ill., a Corporation of New York. Filed Sept. 8, 1930. Serial No. 480,396. 12 Claims. (Cl. 146—102.)



1. In a slicing machine including a rotary knife and means for rotating it, a carriage and means for conveying said carriage past the cutting edge of the knife, a slice and work support positioned adjacent said carriage adapted to support the work and slice at the point of severance, and deflector means adjacent said support adapted to deflect the severed slice, said deflector means being closely adjacent but out of contact with the rear face of the knife, and being separated therefrom by a distance increasing progressively inwardly from the periphery of the knife, the approach of the deflector to the knife at the severing point being close.

1,891,369. CARRIER FOR ELECTROMAGNETIC PICK-UP. LESLIE F. CURTIS, Springfield, Mass., assignor to American Bosch Magneto Corporation, Springfield, Mass., a Corporation of New York. Filed Aug. 23, 1929. Serial No. 387,842. 7 Claims. (Cl. 179—100.41.)

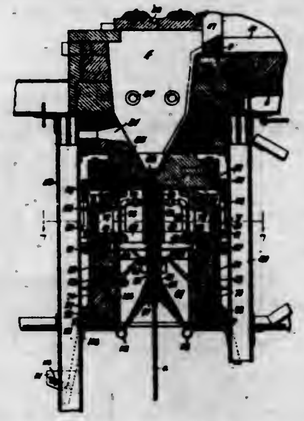


1. A carrier for electromagnetic pickups comprising a base, a rotatable yoke mounted thereon having opposed pins, and an arm having depressions along its length engageable by said pins to provide means for adjusting the point of support of said arm.

1,891,370. METHOD AND APPARATUS FOR MANUFACTURING GLASSWARE. EDWARD DANNER, Toledo, Ohio. Filed May 23, 1922. Serial No. 563,107. 48 Claims. (Cl. 49—3.)

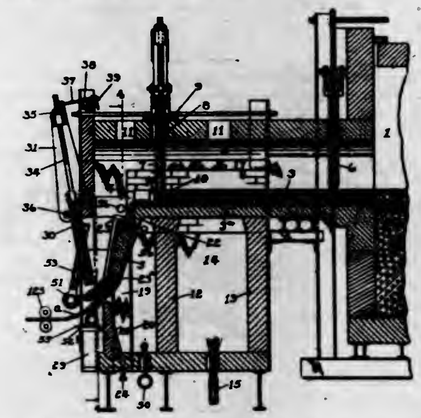
5. In an apparatus of the class described, means for directing the flow of molten glass in shallow broad stream form from a source of supply to a sheet glass forming point, said means forming a plurality of successive tempering chambers for the stream, partitions parallel with the flow of glass and dividing one of said chambers into a plurality of separate tempering zones, and temperature regulating means for the separate chambers and tempering zones.

36. In glass drawing apparatus, a receptacle having downwardly converging side portions, means for supplying molten glass to the interior of the receptacle, the receptacle having a spillway at the upper portion thereof where-



from the molten glass overflows down the converging sides, and means below the receptacle for guiding and drawing away the glass formed from the overflow.

1,891,371. METHOD AND APPARATUS FOR MAKING GLASSWARE. EDWARD DANNER, Newark, Ohio. Continuation of original application filed Apr. 2, 1919, Serial No. 286,833. Renewed July 14, 1920, Serial No. 396,339. Again renewed July 5, 1922, Serial No. 572,959, now Patent No. 1,555,358, dated Sept. 29, 1925. Divided and this application filed June 28, 1924. Serial No. 722,899. 43 Claims. (Cl. 49—3.)

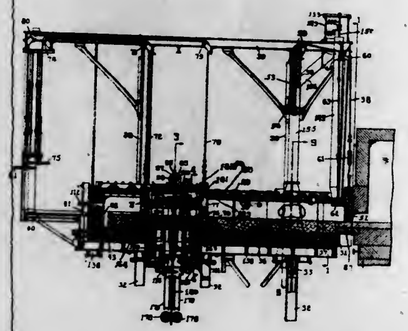


1. The process of forming sheet glass, which consists in flowing a sheet of molten glass with one face in contact with a directing surface and the other face exposed to gases only, dividing the flowing sheet into two films, and flowing the films to a point of merger with their inner faces in contact with directing surfaces and their outer faces in contact with gases.

1,891,372. METHOD OF AND APPARATUS FOR PRODUCING SHEET GLASS. EDWARD DANNER, Newark, Ohio. Filed Dec. 1, 1924. Serial No. 753,034. 60 Claims. (Cl. 49—3.)

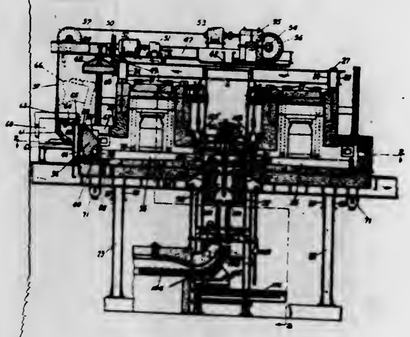
1. In apparatus of the character described, a glass tank furnace, a forehearth connected with the furnace, a well in the forehearth having an opening in its bottom, par-

titions in the forehearth dividing the glass flowing from the tank into a middle stream flowing to the side of the well towards the tank and side streams flowing along the side and end of the forehearth to the other side of the



well, and a supplementary side wall spaced inwardly from the main side wall of the forehearth and forming an outer limit for the stream of glass flowing along the side of the forehearth.

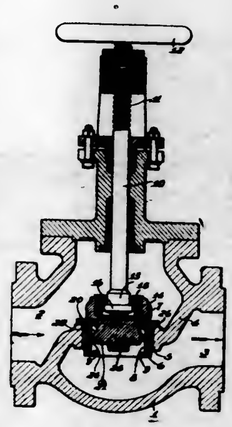
1,891,373. GLASS FORMING METHOD AND APPARATUS. EDWARD DANNER, Newark, Ohio. Filed June 11, 1931. Serial No. 543,520. 13 Claims. (Cl. 49—3.)



5. The method of making a continuous sheet of glass which comprises melting the glass in pots, pouring the molten glass from the pots in succession into a working furnace so as to produce a continuous supply of glass in said furnace, diverting the major part of the glass in contact with the pots, before pouring, from the mass which enters the main pool of the working furnace during pouring, and forming a continuous sheet from the glass in the furnace.

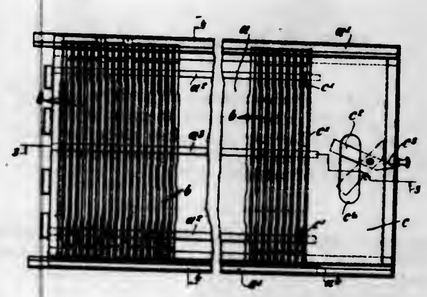
1,891,374. VALVE. WILLIAM EHRMANN, Aliquippa, Pa. Filed May 2, 1930. Serial No. 449,174. 1 Claim. (Cl. 251—28.)

A valve mechanism comprising a casing, a diaphragm therein having a port therethrough, a valve seat comprising a cylindrical bore about the port, a valve member having a tapered seating portion adapted to cooperate with the seat to close the port, a stem carrying and controlling the valve member, the valve member being loosely mounted on the stem to allow the valve to oscillate when not in complete contact with the seat, and a depending extension beneath the seating portion of the valve adapted



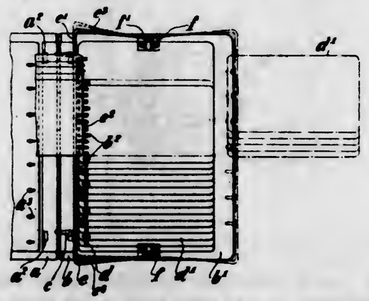
to fit closely but movably in the cylindrical bore of the seat member and having an annular angular channel just beneath the seating portion of the valve member formed by a knife-edged enlargement around the extension adapted to fit closely but slidably in the cylindrical bore when the valve member is on or near its seat.

1,891,375. CARD INDEX. ROLAND A. FURLONG and JAMES R. CLARK, Rochester, N. Y., assignors to The Yawman & Erbe Manufacturing Company, Rochester, N. Y., a Corporation of New York. Filed Nov. 5, 1928. Serial No. 317,179. 20 Claims. (Cl. 129—16.)



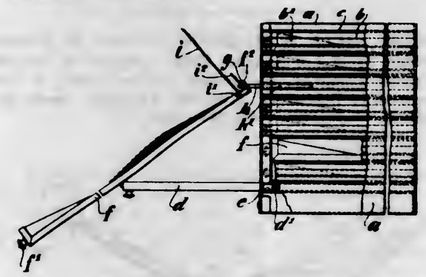
1. An apparatus of the class described comprising a tray, a plurality of space bars, means to retain the bars in the tray to permit lateral displacement thereof with respect to the tray whereby certain cards may be moved to a temporarily displaced identifying position, a rib on the tray and extending longitudinally thereof, and means on the bars to cooperate with the rib to secure the bars in a displaced position.

1,891,376. SHEET SHIFTER FOR VISIBLE INDEX BINDERS. ROLAND A. FURLONG, Rochester, N. Y., assignor to The Yawman & Erbe Manufacturing Company, Rochester, N. Y., a Corporation of New York. Filed Nov. 29, 1929. Serial No. 410,300. 13 Claims. (Cl. 219—1.)



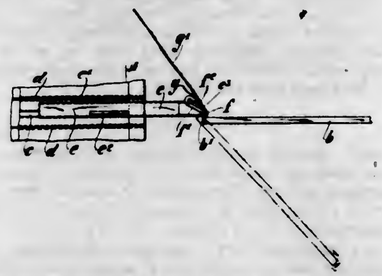
1. In a visible index binder a sheet shifter movable longitudinally of the binder and hingedly attached to one of the covers of the binder and having means for engagement with the sheets.

1,891,377. VISIBLE INDEX. ROLAND A. FURLONG, Rochester, N. Y., assignor to The Yawman & Erbe Manufacturing Company, Rochester, N. Y., a Corporation of New York. Filed Nov. 26, 1929. Serial No. 409,771. 4 Claims. (Cl. 45—2.)



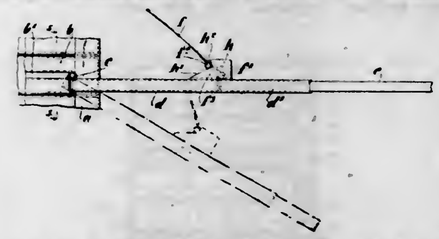
1. A carrier for a slidable tray comprising a horizontally disposed U-shaped member having reversely extending legs in the same plane therewith for movement in supporting ways.

1,891,378. VISIBLE INDEX TRAY. ROLAND A. FURLONG, Rochester, N. Y., assignor to The Yawman & Erbe Manufacturing Company, Rochester, N. Y., a Corporation of New York. Filed June 27, 1930. Serial No. 464,162. 10 Claims. (Cl. 45—2.)



1. A card index tray, means to support the tray slidably, a top plate carried therewith, and means connected between the top plate and the tray to swing the plate automatically at predetermined times upon movement of the tray.

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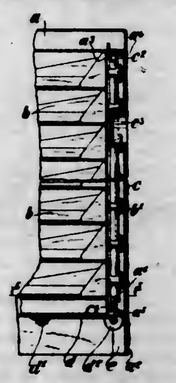
1. A support for a visible index tray comprising a unitary member having channels to receive the tray slidably and telescopically, a top card hinged to the tray, a cam stop carried by the support and means on the top card to engage the cam stop when the tray is moved in one direction with respect to the support whereby the top card is swung upwardly and further relative movement of the tray and support positively checked.

1,891,380. PORTABLE VISIBLE INDEX. ROLAND A. FURLONG, Rochester, N. Y., assignor to The Yawman & Erbe Manufacturing Company, Rochester, N. Y., a Corporation of New York. Filed June 27, 1930. Serial No. 464,165. 13 Claims. (Cl. 129—34.)



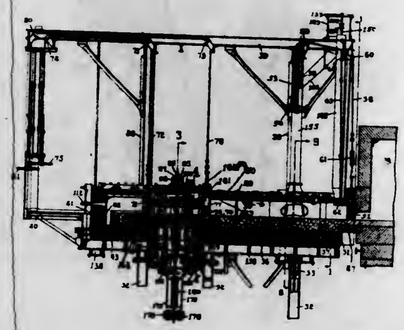
13. A plurality of index indicia-carrying members, means to connect the members hingedly, and means on the hinge means extending between the index-carrying means when the latter are closed to prevent lateral movement therebetween.

1,891,381. VISIBLE INDEX CABINET. ROLAND A. FURLONG, Rochester, N. Y., assignor to The Yawman & Erbe Manufacturing Company, Rochester, N. Y., a Corporation of New York. Filed Oct. 23, 1930. Serial No. 490,591. 5 Claims. (Cl. 312—189.)



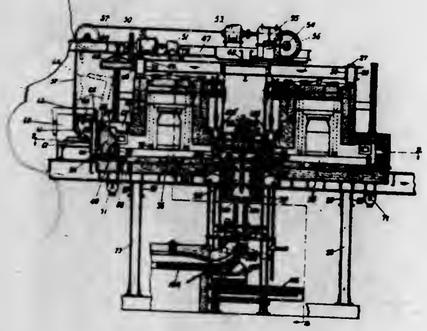
5. In a cabinet for visible indexes having an opening, a door mounted vertically within the opening with provision for a movement of translation in its own plane,

titions in the forehearth dividing the glass flowing from the tank into a middle stream flowing to the side of the well towards the tank and side streams flowing along the side and end of the forehearth to the other side of the



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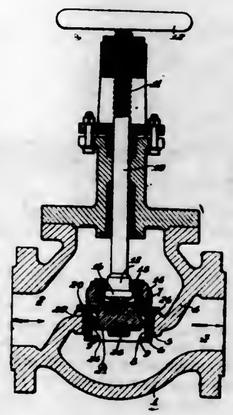
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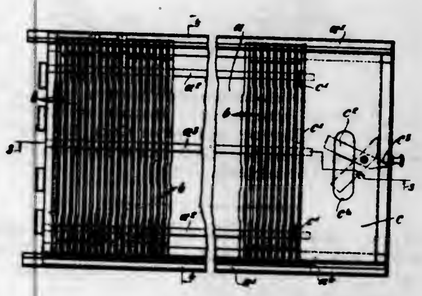
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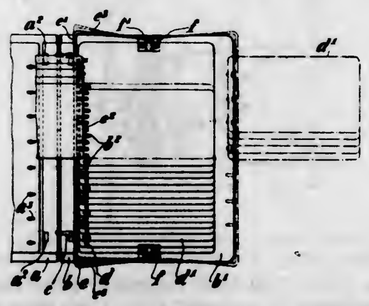
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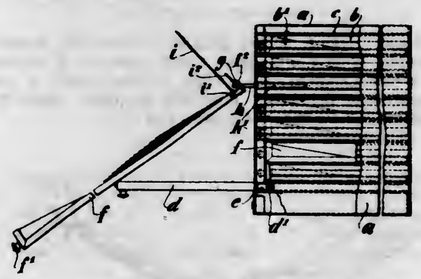
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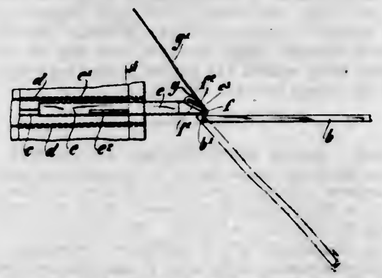
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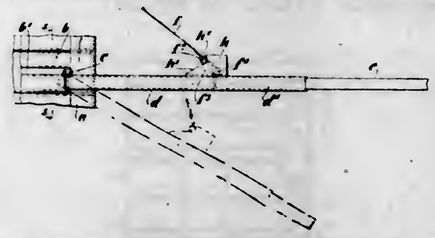
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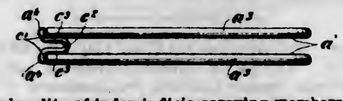
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13. A plurality of index indicia-carrying members, means to connect the members hingedly, and means on the hinge means extending between the index-carrying means when the latter are closed to prevent lateral movement therebetween.

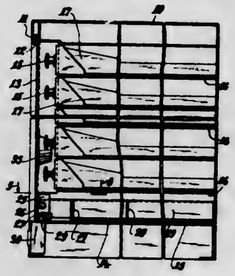
1,891,381. VISIBLE INDEX CABINET. ROLAND A. FURLONG, Rochester, N. Y., assignor to The Yawman & Erbe Manufacturing Company, Rochester, N. Y., a Corporation of New York. Filed Oct. 23, 1930. Serial No. 490,591. 5 Claims. (Cl. 312—189.)



5. In a cabinet for visible indexes having an opening, a door mounted vertically within the opening with provision for a movement of translation in its own plane,

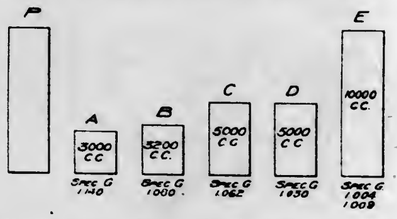
means to support the door for swinging movement, means to retain the door against swinging movement, and spring means to hold the door yieldingly in engagement with said retaining means.

1,891,382. VISIBLE INDEX CABINET. ROLAND A. FURLONG, Rochester, N. Y., assignor to The Yawman & Erbe Manufacturing Company, Rochester, N. Y., a Corporation of New York. Filed Dec. 23, 1930. Serial No. 504,241. 5 Claims. (Cl. 312—186.)



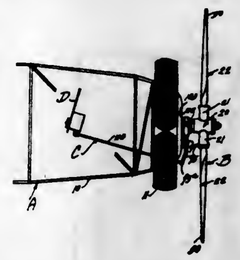
3. In combination with a cabinet having a door opening, a door, a horizontally disposed extensible shelf slidable in the cabinet, means adjacent the lower edge of the door to support the door pivotally on the shelf adjacent its outer edge, means to prevent movement of the door outwardly and downwardly with respect to the shelf while permitting the door upon extension of the shelf to be moved inwardly and downwardly to rest flatwise on the shelf and means whereby movement of the shelf into the cabinet causes movement of the door to closed position in the door opening.

1,891,383. METHOD OF MAKING LIQUID COFFEE EXTRACT. WILLIAM W. GIFFEN, Pittsburgh, and CLINTON W. CARTER, Mount Lebanon, Pa., assignors to The International Liquid Coffee Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Sept. 24, 1930. Serial No. 484,126. 8 Claims. (Cl. 99—11.)



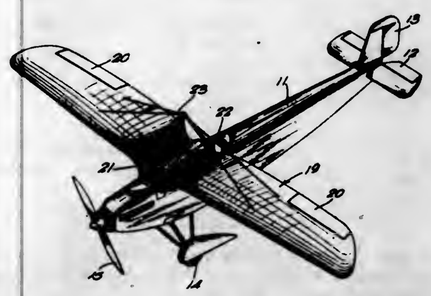
4. The step in the method of preparing liquid coffee extract which comprises infusing roasted ground coffee with water equal to approximately the weight of the ground coffee, allowing the mass to macerate for a period of from 6 to 12 hours, withdrawing the infusion from the ground coffee and simultaneously replacing the withdrawn volume with an equal volume of fresh water and adding sufficient additional water to withdraw, 1st, a solution of a volume sufficient to dampen a second mass of roasted and ground coffee of equal volume with the first mass of coffee; 2nd, a solution of a volume equal to the volume of water previously added to the dampened mass; 3rd, a solution equal to the volume of water added after maceration; and a final solution of a volume sufficient to complete extraction of the ground coffee, such final solution being of a volume approximately 300% of the weight of the original ground coffee, and at all times from the beginning to the end of said process maintaining the infusion at a temperature between 30 and 50 degrees cent.

1,891,384. AIRCRAFT PROPELLER. JOSEPH R. GILLIS and FRANK P. KAISER, Lansing, Mich. Filed Aug. 4, 1930. Serial No. 472,950. 5 Claims. (Cl. 170—163.)



1. In a pitch angle blade changing propeller structure the combination of a propeller shaft, a hub keyed to the shaft, a plurality of propeller blades oscillatively mounted in the hub structure on definite non-tipping axes therein, a cam sleeve slidably splined on the propeller shaft having a plurality of arcuated slots longitudinally arranged therein in general line transverse to the axes of the blades, each blade having a plurality of relatively spaced rigid lugs thereon all of which are in cam engagement in the same adjacent cam slot of said sleeve so that upon longitudinal movement of the sleeve upon the propeller shaft the blades will be respectively turned on their axes for changing the pitch angles thereof.

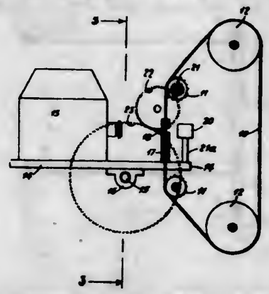
1,891,385. GULL WING PLANE. JAMES H. KINDELBERGER, West Los Angeles, Calif., assignor to Douglas Aircraft Company, Inc., Santa Monica, Calif., a Corporation of Delaware. Filed Oct. 10, 1931. Serial No. 568,091. 3 Claims. (Cl. 244—12.)



1. In an airplane: a fuselage having a pilot's seat wherein a pilot may look forward over said fuselage; and a wing structure connected thereto, having a plurality of channels through which the pilot may see, all of said channels being conical and having apexes near the point where the pilot's eyes are located.

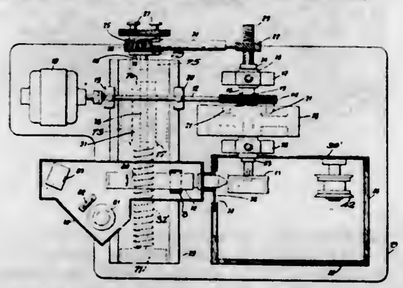
1,891,386. SOUND REPRODUCING APPARATUS. JAY CLEIS KROESEN, Belleville, N. J., assignor, by mesne assignments, to Radio Corporation of America, New York, N. Y., a Corporation of Delaware. Filed Oct. 14, 1931. Serial No. 568,727. 4 Claims. (Cl. 274—5.)

1. In combination with a continuous transparent light sensitive film having a plurality of sound records thereon arranged in parallel relationship with respect to each other and progressively spaced across said film to form a continuous helical record, a source of light rays, and means for causing said rays to pass through a single record, a light sensitive cell adapted to receive and translate said



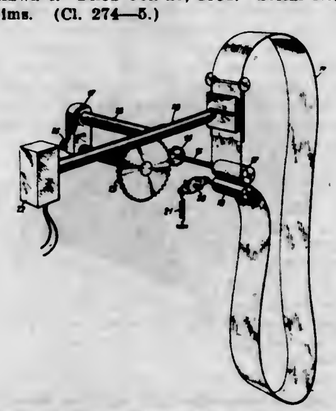
rays into an electric current, and means for relatively moving said film and said light rays whereby said rays are caused to follow one of said records.

1,891,387. FILM PHONOGRAPH. JOHN A. MAURER, Jr., New York, N. Y., assignor to Radio Corporation of America, a Corporation of Delaware. Filed Oct. 28, 1931. Serial No. 571,532. 11 Claims. (Cl. 274—5.)



1. An apparatus for recording sound on a continuous loop of light sensitive film including frictional means for moving said film at a substantially uniform linear speed, and means for moving a recording light beam across said film at a rate of speed proportional to said linear speed.

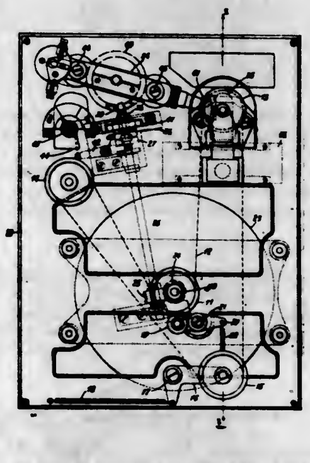
1,891,388. RECORDING AND REPRODUCTION OF SOUND. JOHN A. MAURER, Jr., New York, N. Y., assignor to Radio Corporation of America, a Corporation of Delaware. Filed Oct. 28, 1931. Serial No. 571,533. 9 Claims. (Cl. 274—5.)



1. In an apparatus for producing relative movement between a record strip and a light beam, the combination of frictional drive means for moving said strip at a substantially uniform linear speed, and means for moving said beam across said strip at a rate of speed proportional to said linear speed.

5. The method of producing relative movement between a record strip and a light beam which includes moving said beam at a substantially uniform linear speed, and moving said strip at a rate of speed which does not vary with respect to said linear speed irrespective of change in the dimensions of said strip.

1,891,389. REPRODUCTION OF SOUND. JOHN A. MAURER, Jr., New York, N. Y., assignor to Radio Corporation of America, a Corporation of Delaware. Filed Oct. 28, 1931. Serial No. 571,534. 19 Claims. (Cl. 274—5.)



1. The combination of a record support, record driving means, a light source, a mechanism for moving said source transversely of said support, and coupling means including a clutch interposed between said driving means and said mechanism.

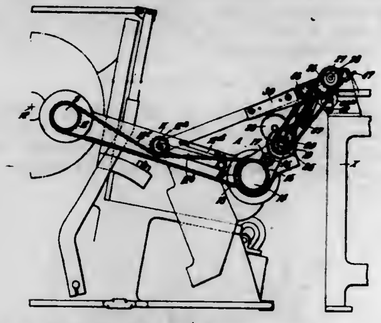
11. The combination of means for movably supporting an endless film loop bearing a record arranged in a helical path, a light sensitive cell mounted within said support means, a light source arranged to be moved relatively to said support for projecting light into said cell along said path, and means operable to move said loop at a speed independent of changes in its dimensions.

1,891,390. VENTILATOR FOR MOTOR CARS. HEINRICH LIESIG, Nordhausen/Harz, Germany. Filed Dec. 15, 1930, Serial No. 502,492, and in Germany Dec. 16, 1929. 2 Claims. (Cl. 98—2.)



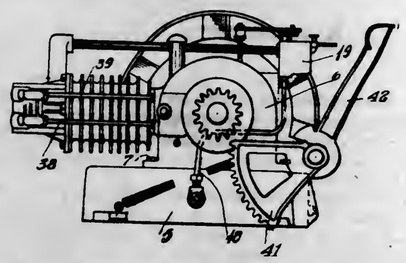
1. A ventilator for motor cars and other vehicles, comprising in combination a straight guide plate adapted to be inserted in the open window on the opposite side to the direction of travel and filling about one third of the window width its front edge projecting into the interior of the vehicle and its rear edge projecting from the vehicle, and two vertical cover plates one on the top and the other on the bottom of said guide plate.

1,891,391. CUTTING AND CREASING PRESSES FOR PAPER, CARDBOARD, OR THE LIKE. JOHN IRVING NASMITH, Erith, England, assignor to Vickers-Armstrongs Limited, Westminster, England, a British Company. Filed Nov. 3, 1930, Serial No. 492,925, and in Great Britain Oct. 9, 1930. 24 Claims. (Cl. 93—58.)



1. In a cutting and creasing press comprising a platen and forme, the provision of means for feeding sheets of paper directly in a rectilinear manner to the platen and in a plane substantially parallel thereto, said means and its actuating mechanism being mounted upon the platen and moving therewith to and from the forme.

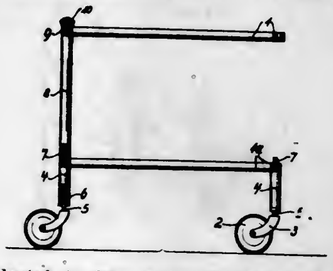
1,891,392. PUMP ASSEMBLY FOR INTERNAL COMBUSTION ENGINES. HARRY B. NELSON, Saginaw, Mich., assignor to Nelson Brothers Company, Saginaw, Mich., a Corporation of Michigan. Filed July 22, 1931. Serial No. 552,382. 6 Claims. (Cl. 123—139.)



1. A pump assembly for internal combustion engines comprising spaced apart individual pumps, a horizontally disposed bar mounted on the upper end of one of the pump plungers and engaging the opposite plunger, means for intermittently engaging one of said pump plungers for simultaneously actuating both pumps, and resilient means for forcing said plunger back to original position.

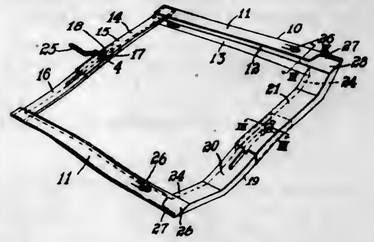
1,891,393. COLLAPSIBLE DINNER OR TEA WAGON. KARL OPPENLÄNDER, Waiblingen, Germany. Filed Apr. 11, 1931, Serial No. 529,440, and in Germany Feb. 7, 1931. 1 Claim. (Cl. 280—36.)

A collapsible serving wagon, comprising in combination a table plate having a hole at each corner, a shelf plate of the same shape as said table plate, also having a hole at each corner, uprights each having an axial screw-threaded bore at its lower end, one of said uprights between each of the corners of said plates adapted to hold said plates at a uniform distance apart, screw pins, one on the end of each upright adapted to be inserted through one of the holes in said table plate, a screw knob adapted to be screwed on each of said screw pins to hold said table plate on said uprights, and feet each having a screw pin adapted to be inserted through one of the holes in said shelf plate and to engage in the screw threaded bores of said uprights to hold said shelf plate rigidly on said uprights, said



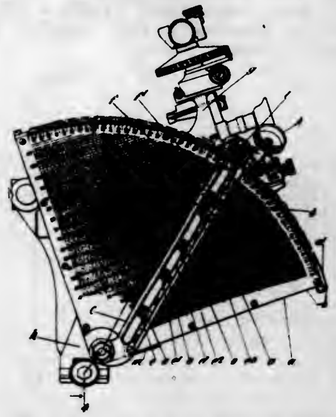
plates adapted to form a box for accommodating all of the above mentioned parts, when the wagon is dismantled for storage or transport.

1,891,394. COMPARTMENT. OTHO M. OTTE, Tarentum, Pa. Filed June 10, 1929. Serial No. 369,772. 14 Claims. (Cl. 126—337.)



1. The combination in a compartment of an open rectangular tray supporting frame slidable into and out of said compartment and provided with tray receiving grooves formed along each side thereof and adjustable cross members connecting said side members so as to adapt said frame to different widths of compartments.

1,891,395. GUN SIGHT. GEOFFREY OLIVER CARWARDINE PROBERT, Woolwich, London, England. Filed Jan. 13, 1930, Serial No. 420,547, and in Great Britain June 7, 1926. 9 Claims. (Cl. 33—48.)

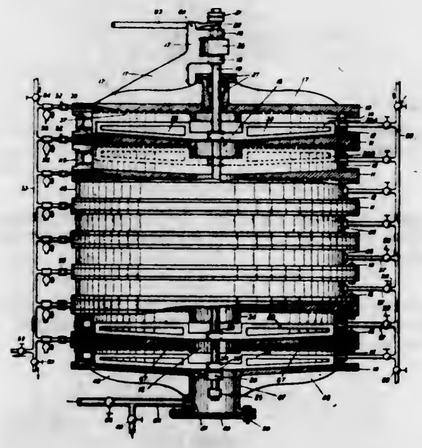


9. For use in connection with sighting apparatus for guns, an indicator having range table data plotted thereon in suitable coordinates, a pivoted arm bearing a mus-

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sle velocity scale and movable over said data, a slider carried by said arm, a range pointer on said slider by which said arm is set to the required range line on the indicator and means whereby the inclination of said arm indicates the elevation.

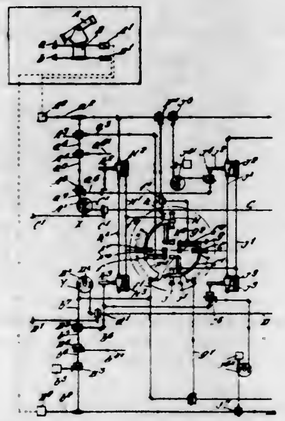
1,891,396. FILTER PRESS. PAUL W. PRUTEMAN, Los Angeles, Calif. Filed Mar. 3, 1930. Serial No. 432,769. 7 Claims. (Cl. 210—192.)

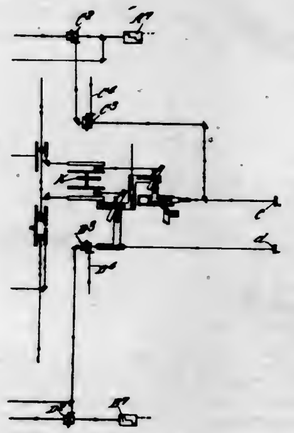


1. In a filter press adapted to be supported in a fixed vertical position and having a plurality of horizontally disposed rigid filtering plates, spacing means between each pair of plates, an upper head, a lower head, means for locking said plates and heads into a unitary structure adapted to resist internal pressure, means for introducing a suspension of solid and liquid into said structure under pressure, each said plate having a central opening and being superficially channeled on its lower surface and provided with a passage leading from said channels to the exterior of said structure, a centrally located rotatable shaft having scrapers affixed thereto, a centrally located opening in said lower head and a detachable closure for said opening; the improvement comprising: an impervious upper surface on each said plate; a filtering medium fixed adjacent the lower face of said plate around said opening, and means for imparting a limited vertical movement to said rotatable shaft to cause each said scraper to remove solids from said medium when said shaft and scraper are moved upwardly and to move said solids into said central opening when said shaft and scraper are moved downwardly.

1,891,397. APPARATUS FOR USE IN THE FIRE CONTROL OF ANTIAIRCRAFT GUNS. JOHN PERCIVAL WATSON, Westminster, England, assignor to Vickers-Armstrongs Limited, London, England, a British Company. Filed Nov. 28, 1931, Serial No. 577,345, and in Great Britain Dec. 1, 1930. 12 Claims. (Cl. 89—41.)

1. Apparatus for use in the fire control of antiaircraft guns on a ship or other unstable platform, comprising a calculator for producing the generated angle of elevation of the target, said angle being independent of the rolling and rocking of the platform, a controlling sight which, in following the target gives the uncorrected, "unstabilised" angle of elevation of the target, means for correcting said "unstabilised" angle of elevation for the vertical error due to the rolling and rocking of the platform, and means for comparing the corrected, "stabilised" angle of elevation, or a function thereof, with the "gen-



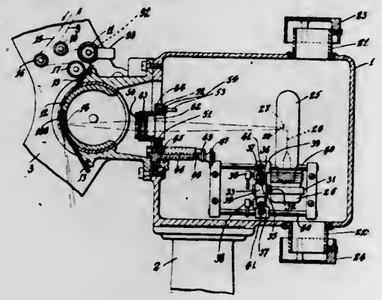


erated" angle of elevation produced by the calculator so as to enable the setting of the latter to be kept properly adjusted.

1,891,398. APPARATUS FOR PRINTING CONTINUOUS FILMS. ANTHONY G. WISS, Beverly Hills, Calif., assignor to Metro-Goldwyn-Mayer Corporation, Culver City, Calif., a Corporation of New York. Filed Mar. 20, 1929. Serial No. 348,425. 9 Claims. (Cl. 95—75.)

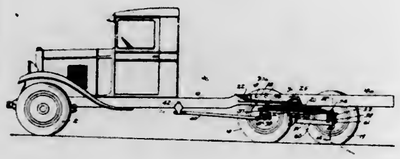
1. In a printing apparatus for continuous films a substantially light-tight housing, a base for a light source within the housing, a printing aperture in said housing, a lens system positioned between the light source and said printing aperture, means for moving the lens system to and from the printing aperture, means for adjust-

ably positioning said lens system, means for adjustably positioning the light source base with respect to said



lens system, and means for partially rotating and adjustably and angularly positioning the light source base about an axis parallel to the axis of the lens system.

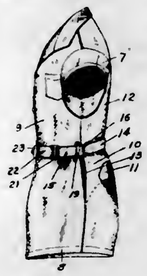
1,891,399. MOTOR VEHICLE MECHANISM. CHARLES E. F. AHLM, Cleveland Heights, and GEORGE L. ELMSLIE, Cleveland, Ohio, assignors to Continuous Torque Transmission Company, Cleveland, Ohio, a Corporation of Ohio. Filed Apr. 11, 1930. Serial No. 443,421. 8 Claims. (Cl. 280—124.)



1. A road vehicle, including a load supporting frame, a main driving axle and a supplemental axle, said axles being located near the rear end of the frame, wheels associated with the axles, rigid members comprising positioning means for said axles extending forwardly from respective axles to determine the paths of movement thereof, each of said members being secured to the frame and each being secured to a different one of the axles, said members effecting independent universal connections between the axles and the frame, and spring members interposed between the axles and the frame to transfer the load from the frame to the axles, and guiding means connecting said spring members to respective axles for free floating relative movement between the axles and the springs in directions lengthwise of the vehicle and vertically, whereby the axles are free to move bodily substantially vertically and to tilt transversely of the vehicle, without imposing thrust on the springs lengthwise of the vehicle, or twisting strains thereon.

1,891,400. GARMENT. MAURICE B. BLEHERT, St. Paul, Minn. Filed Aug. 20, 1932. Serial No. 629,578. 9 Claims. (Cl. 2—79.)

1. The combination with a garment having a drop seat, of a pair of belt sections having corresponding ends permanently secured to upper corners of the seat and having their opposite ends permanently secured to corresponding points at opposite sides of the garment proper, and separable connector devices slidably engaging portions of the belt sections intermediate the respective ends of each.



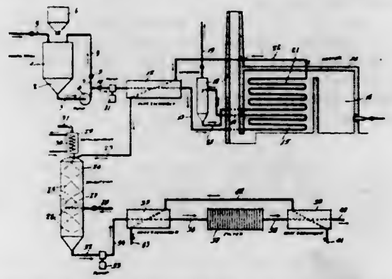
1,891,401. OIL WELL SURVEYING DEVICE. GLENN H. BOWLUS, Alhambra, Calif. Filed Sept. 30, 1930. Serial No. 485,568. 1 Claim. (Cl. 33—205.)



In an instrument for measuring the inclination of a drill pipe: a transparent disc having a spherically curved upper surface and concentric rings marked on said surface, a ball of a high specific gravity solid resting thereon, and a shallow coating of a solidifiable material on that surface of said disc which carries the said ball.

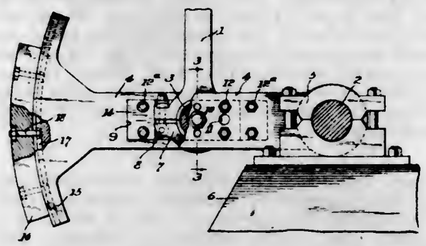
1,891,402. METHOD OF TREATING OILS. FRED L. CRAIGE, El Segundo, and HOWARD G. VESPER and HURLEY G. GRIFFITH, Inglewood, Calif., assignors to Standard Oil Company of California, San Francisco, Calif., a Corporation of Delaware. Filed Sept. 5, 1928. Serial No. 304,090. 2 Claims. (Cl. 87—12.)

1. In a process of producing bright oils, the steps of mixing an oil to be treated with an adsorbent, heating the mixture under pressure, partially releasing the pressure on said heated oil mixture to permit vaporization of a portion of water contained in said mixture, removing such vaporized water, again heating said mixture to above 250° F. and reducing the water content of the heated oil to below the saturation content of water which would exist in said oil at a predetermined low temperature by reducing the pressure to subatmospheric



to reduce the partial pressure of the water vapor below the vapor tension of the water in solution in the oil being treated.

1,891,403. OPERATING MECHANISM FOR PUMPING OUTFITS AND THE LIKE. CHARLES A. DAILEY, Torrance, Calif. Filed Sept. 10, 1931. Serial No. 562,061. 4 Claims. (Cl. 74—38.)



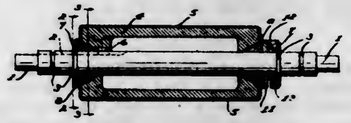
1. In operating mechanism for converting rotary to reciprocating motion, a double crank comprising parallel arms having longitudinal guide recesses at their inner surfaces, a wrist pin having integral end supporting plates adapted for sliding reception in the guide recesses for adjustment of the wrist pin longitudinally of the double crank, means for securing the supporting plates in adjusted position in the guide recesses, plates adapted for removable mounting in the guide recesses between the ends of the supporting plates and the ends of the recesses, and a connecting rod journaled on the wrist pin.

1,891,404. LOUD SPEAKER. BERNARD A. ENGHOLM, Lakewood, Ohio, assignor to The Rola Company, Oakland, Calif., a Corporation of Washington. Filed May 30, 1930. Serial No. 457,552. 10 Claims. (Cl. 179—115.5.)



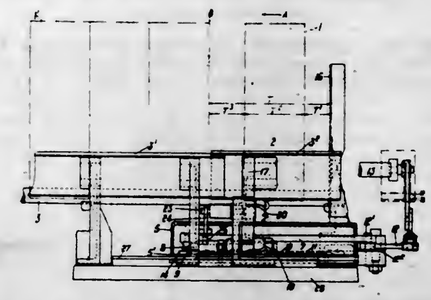
10. An electromagnetic sound reproducer comprising an electromagnetic driver, a sound reproducing diaphragm, a moving coil form connected to the diaphragm, and comprising a substantially cylindrical tubular member, a coil mounted on said tubular member, means for fixing the coil against axial movement thereon, the inner face of said form being provided with a recess, said form being provided with an aperture adjacent to said recess, and a terminal lead on said coil passing through said aperture and lying in said recess.

1,891,405. CYLINDER MOUNTING FOR PRINTING PRESSES. EMIL ERICKSSON, Chicago, Ill., assignor to Standard Process Corporation, Chicago, Ill., a Corporation of Delaware. Filed Mar. 21, 1930. Serial No. 437,841. 2 Claims. (Cl. 101—375.)



1. In a mounting for the printing cylinders of a printing press, an arbor, a printing cylinder on said arbor, a plurality of grooves in said arbor beyond each end of said cylinder, stop members selectively engageable in said grooves for securing various sizes of cylinders to said arbor, split cones between each stop member and the cylinder, and engageable in conical openings in said cylinder, and a slidable collar on said arbor between one of said cones and the adjacent stop, and means longitudinally adjustable on said collar for simultaneously wedging said cones in said conical openings and for clamping the same between said cylinder and said stop means.

1,891,406. APPARATUS FOR RECEIVING BALLS OR ROLLS OF SLIVER DISCHARGED FROM A SLIVER BALLING MACHINE. GORDON FRASER, NORMAN FRASER, and JOHN FRASER, Arbroath, Angus, Scotland. Filed June 4, 1931, Serial No. 542,170, and in Great Britain June 4, 1930. 5 Claims. (Cl. 198—24.)



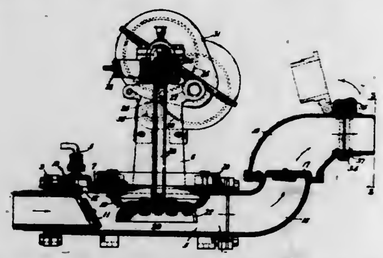
5. A sliver roll receiver for the purpose specified, comprising, in combination, members for guiding the sliver rolls from a receiving station to a delivery point, one of said members being movable under the influence of the weight of a roll, a carriage movable in the direction of the axes of the rolls, means effective on depression of said movable guide member by a roll to propel said carriage in the direction away from said receiving station, and means effective on relief of said movable guide member from the weight of a roll for returning said carriage.

1,891,407. ACTIVATION OF CARBONACEOUS SUBSTANCES. ALBERT GODEL, Paris, France, assignor to Societe de Recherches & d'Exploitations Petrolifères, Paris, France. Filed Aug. 4, 1930, Serial No. 473,012, and in France Aug. 27, 1929. 5 Claims. (Cl. 252—8.)

1. In the activation of carbonaceous materials by means of gases, the improvement which consists in treating the carbonaceous material in alternate phases of heating and activation, said heating phase including the heating of the carbonaceous material by gases brought into contact with said material, and said activation phase including the treatment of said material by activating gases, said activating gases being of a composition such that their reaction upon said material yields combustible

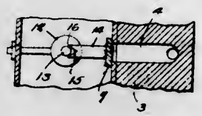
gases, said combustible gases being burnt with a limited quantity of air and the resulting gases being utilized in connection with a heating phase, and the gases leaving said material during a heating phase being treated to secure the combustion of combustible constituents, the sensible heat developed by said combustion being utilized to preheat said activating gases.

1,891,408. **DIAPHRAGM CONVERTIBLE PUMP.** JAMES C. GORMAN, Mansfield, Ohio, assignor to The Barnes Manufacturing Company, Mansfield, Ohio, a Corporation of Ohio. Filed July 8, 1931. Serial No. 549,547. 10 Claims. (Cl. 103—202.)



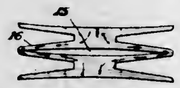
1. A pump having a nozzle attachment with hose-coupling in swing connection with the pump discharge mouth adapted to convert the pump from open discharge to force-lift operation by simple adjustment from position free to position over said mouth without attachment or removal of any element.

1,891,409. **ACTION FOR PIPE ORGANS.** CASPER ELDRED GRANT, Portsmouth, Va. Filed June 3, 1931. Serial No. 541,896. 2 Claims. (Cl. 84—339.)



2. In a pipe organ construction the combination with a wind chest having an outlet port, of means for controlling the flow of air through the port from the chest, including an arm, a core extending therefrom, a hanger pivotally connected to the arm and extended downwardly therefrom, an armature integral with the hanger and supported close to and movable across one end of the core, said armature and end of the core being substantially concentric with the axis of movement of the hanger, a magnet coil on the core, and a valve on the hanger normally closing the port by gravity, said armature having a V-shaped recess extending into the free end thereof, the edges of said recess being substantially tangent to the core and converging to the apex of the recess at one end, the other ends of said edges constituting spaced terminals supported in the field of the core whereby, when the magnet is energized it will exert the maximum pull longitudinally of the armature and unseat the valve.

1,891,410. **RHEOSTAT.** OTTO W. GREENE, Elyria, Ohio. Filed Sept. 30, 1927. Serial No. 223,002. 11 Claims. (Cl. 201—51.)



6. A rheostat comprising blocks of resistance material having contact surfaces normally non-mating and contacting only at their ends but adapted to be pressed into full contact by pressure, said contact surfaces having a varying radius of curvature whereby an even and progressive increase in area of contact is obtained upon application of pressure.

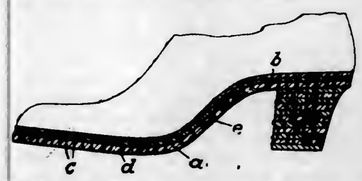
9. A rheostat comprising carbon blocks disposed in abutting relation and provided with concave adjoining surfaces which make contact normally only at their ends, the blocks increasing in thickness from their ends to intermediate portions thereof, and means for selectively pressing the blocks together.

1,891,411. **PERCUSSIVE DRILL.** LOUIS W. GREVE, Cleveland, Ohio, assignor to The Cleveland Rock Drill Company, Cleveland, Ohio. Filed Feb. 24, 1928. Serial No. 256,614. 1 Claim. (Cl. 121—17.)



A drill having a cylinder and a piston reciprocable therein, there being passages leading to opposite ends of the cylinder, valve means on the piston for alternately directing motive fluid through said passages to the opposite ends of the cylinder, an auxiliary passage connecting the rear end of the cylinder with that one of said passages for conducting motive fluid to the forward end of the cylinder, an exhaust port in the cylinder arranged to be closed by the piston adjacent one end of its stroke, said port being arranged to be opened selectively to both ends by the piston.

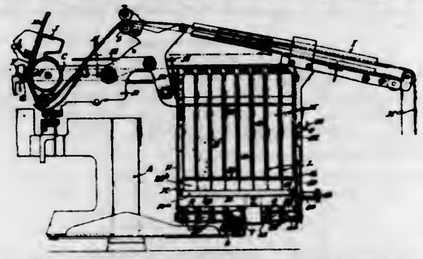
1,891,412. **PROCESS FOR BINDING TOGETHER TWO OR MORE LAYERS OF LEATHER, MORE PARTICULARLY FOR THE MANUFACTURE OF BOOTS AND SHOES.** MAX GRUNE, Pirmasens, Germany. Filed Sept. 6, 1929, Serial No. 390,766, and in Germany Sept. 18, 1928. 1 Claim. (Cl. 12—142.)



A process for binding together layers of leather particularly for the manufacture of boots or shoes which comprises fully driving in jointing media consisting at least partially of celluloid, and then applying a liquid solvent of celluloid so that it dissolves the outer layers of the jointing media and binds said media after drying to the surrounding fibres of the hole of the leather into which the jointing media are driven in.

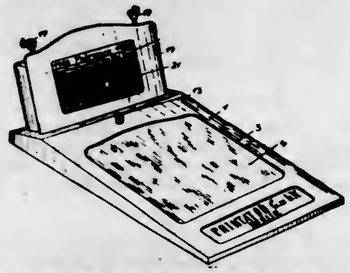
1,891,413. **TYPEWRITING MACHINE.** GEORGE F. HANDLEY, Glendale, and LEWIS C. MYERS, Freeport, N. Y., assignors to Royal Typewriter Company, Inc., New York, N. Y., a Corporation of New York. Filed June 29, 1931. Serial No. 547,694. 35 Claims. (Cl. 197—153.)

1. In a manifolding typewriter, the combination with a carriage having a platen past which a work sheet is fed, a ribbon spool journaled on the carriage, ribbon feeding means mounted on the carriage, means for guiding the ribbon from the spool across the work sheet to said feeding means, a member connected to the ribbon spool to rotate therewith and provided with a serrated periphery, means cooperating with the periphery of said member for tensioning the feeding movement of the ribbon, normally ineffective locking means adapted to cooperate with the periphery of the member to retain the spool against



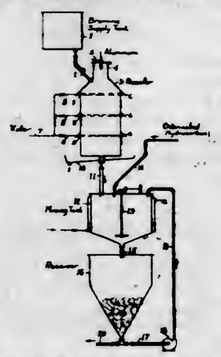
rotation, and means for actuating the ribbon feeding means and concomitantly rendering said locking means effective.

1,891,414. **WRITING AND DRAWING PAD.** HUGO HAHN, Charlottenburg near Berlin, Germany, assignor to Printator G. m. b. H., Berlin, Germany. Filed July 2, 1928, Serial No. 289,905, and in Germany Mar. 8, 1928. 11 Claims. (Cl. 35—10.)



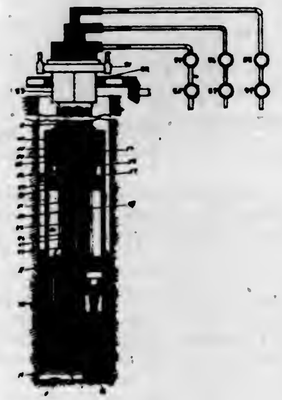
1. A writing pad including a casing having a top wall formed with an opening, a plurality of elements underlying the opening and including an element presenting a dark adhesive face, an immediately superimposed element of transparent paper and a further superimposed element of a flexible transparent material, means for normally holding all of said elements in contact, and means for moving the element with the dark adhesive surface in a direction away from the transparent paper.

1,891,415. **PREPARATION OF BROMINATED HYDROCARBONS.** IVAN F. HARLOW and OTTO C. ROSS, Midland, Mich., assignors to The Dow Chemical Company, Midland, Mich., a Corporation of Michigan. Filed Apr. 9, 1930. Serial No. 442,983. 4 Claims. (Cl. 260—162.)



1. The method of preparing a brominated hydrocarbon which comprises adding molten aluminum bromide to the corresponding chlorinated hydrocarbon while maintaining the temperature of the reaction mixture below the boiling point of such chlorinated compound.

1,891,416. **WELL DRILLING MACHINE.** IRVING C. HARRIS, Los Angeles, Calif. Filed July 26, 1929. Serial No. 381,328. 13 Claims. (Cl. 255—4.)

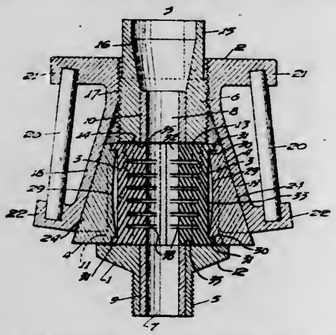


1. In a drilling machine of the character described, a rotatable drill-pipe containing a plurality of conduits for the conveyance of fluid; a drilling mechanism, operated by fluid, connected to the drill-pipe and rotatable with it; means for regulating the operation of the drilling mechanism; means of conveying to and from the drilling mechanism the fluids required in its operation; one or more cutting tools projecting through openings in the bottom of the drilling mechanism and supported in operative position by means situated at the bottom of the drilling mechanism; packings installed in each of the said openings and inwardly from the said supporting means toward the actuating mechanism named below, the said packings comprising an assembly of packing rings and retaining and guide sleeves, so constructed and disposed as to be automatically expanded and pressed inwardly against the stem of the cutting tool and outwardly against the wall of the opening in which the packing is installed by the pressure of the fluid which the packing is intended to prevent from passing through the opening for the cutting tool; fluid operated means of actuating the cutting tools by means of percussive blows; means of returning and holding each cutting tool in position to receive the following blow after the force of the preceding blow has been spent; means of removing the cuttings made by the cutting tools.

1,891,417. **STUFFING BOX.** ALFRED G. HEGGEM, Tulsa, Okla. Filed Sept. 23, 1929. Serial No. 394,611. 10 Claims. (Cl. 286—16.)

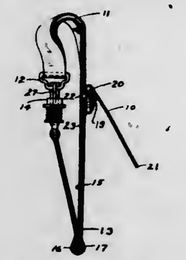
1. In a stuffing box, the combination with a body member having an aperture therethrough for the passage of a reciprocating element and having laterally opening slots communicating with said aperture, of a rotatable housing adjustably mounted upon said body member and having a tapering interior surface, yielding packing elements disposed in said slots, and followers interposed between said housing and the respective packing elements, the tapering surface of said housing being adapted to cooperate with said followers to cause the latter to press

against the respective packing elements, and said followers and the packing elements being provided with cooperating initially dissimilar faces whereby the pressure



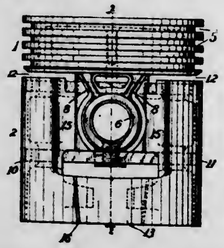
exerted by the followers on the respective packing elements is greater at one portion of the packing elements than at another portion thereof.

1,891,418. AERIAL SAFETY STRAP. EDWARD L. HOFFMAN, Dayton, Ohio. Filed Aug. 6, 1930. Serial No. 473,417. 13 Claims. (Cl. 244—1.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)



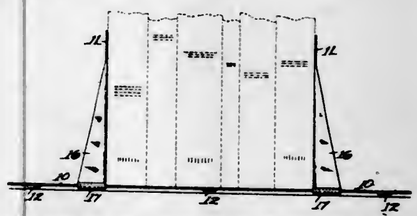
1. A safety device for aircraft, comprising, in combination, means of looped formation having separable portions, a quickly releasable fastening device for securing said separable portions together, one of said portions being adapted for connection with the leg straps of a parachute body harness or the like, the other portion being permanently secured to the floor of said aircraft.

1,891,419. PISTON. FRANK JARDINE, Cleveland, Ohio, assignor, by mesne assignments, to The Cleveland Trust Company, Cleveland, Ohio, a Corporation of Ohio, as trustee. Filed Apr. 9, 1926. Serial No. 100,774. 8 Claims. (Cl. 74—108.)



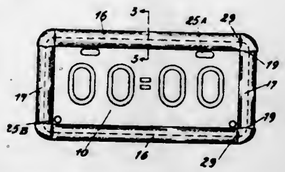
1. A piston comprising a head, depending wrist pin bearings carried thereby, a skirt composed of two spaced bearing faces, means resiliently connecting said bearing faces together and to the wrist pin bearings and means controlling the distance between the bearing faces and resisting outward movement of the wrist pin bearings.

1,891,420. BOOKRACK. EUGENE H. JAQUITH, Clinton, Mass., assignor to Wickwire Spencer Steel Company, New York, N. Y., a Corporation of Delaware. Filed Jan. 10, 1931. Serial No. 507,888. 1 Claim. (Cl. 211—43.)



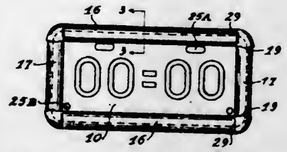
An adjustable rack comprising a flat base of sheet material, and a pair of slidable end members each comprising a book-engaging portion, a rearwardly extending bottom flange and having side flanges extending rearward over said bottom flange, the end portion of said bottom flange being extended and reversely bent to embrace and underlie the side edges of said base.

1,891,421. TRIM FRAME FOR PANELS. UDO K. JOHANNSEN, Cortland, N. Y., assignor to The Brewer-Titchener Corporation, Cortland, N. Y., a Corporation of New York. Filed Jan. 8, 1932. Serial No. 585,585. 11 Claims. (Cl. 40—125.)



9. A segmental framework comprising a pair of rectilinear, strip-stock bars superimposed to intersect in oblique relation to constitute an overlapping corner region of sector-like shape having a rounded perimetric frame edge and which bars extend oppositely away from the respective radial marginal edges of said sector shape, prong means integrally associated with one such bar at the end region of the rounded perimeter edge thereof, and fastening means securing together the intersecting bars.

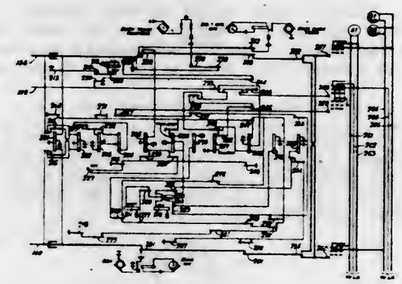
1,891,422. METHOD OF MAKING TRIM FRAMES. UDO K. JOHANNSEN, Cortland, N. Y., assignor to The Brewer-Titchener Corporation, Cortland, N. Y., a Corporation of New York. Original application filed Jan. 8, 1932, Serial No. 585,585. Divided and this application filed July 14, 1932. Serial No. 622,428. 10 Claims. (Cl. 113—116.)



1. The method of making adjoined segmental frame-bars and which method includes the following steps, viz:

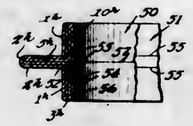
stamping complementary sheet metal blanks from flat, relatively narrow strip stock, an end region of one such blank being provided with an overhanging tongue disposed within the longitudinal edge confines of the strip width without shearing either of the medial strip edge regions and a terminal region of the other blank being apertured to receive said tongue; then forming complementary rectilinear frame-bars by imparting a channel-like transverse profile to the respective blanks and shaping up an offset socket-like terminal portion for one such blank adapted to cooperatively nest therein the terminal region of the other blank in crosswise overlapping relation; and thereupon, adjoining said cooperatively nested terminals into a series of tongue interconnected frame-bars.

1,891,423. TELEPHONE SYSTEM. FREDERICK L. KAHN, Chicago, Ill., assignor, by mesne assignments, to Associated Electric Laboratories, Inc., Chicago, Ill., a Corporation of Delaware. Filed Nov. 30, 1931. Serial No. 577,931. 10 Claims. (Cl. 179—18.)



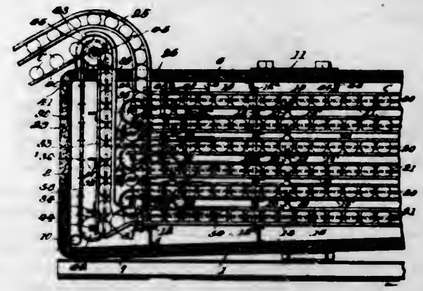
1. In an automatic telephone system, a connector switch, a group of lines accessible to said switch, means responsive to a predetermined first digit for preparing said switch to operate as a regular connector to select any particular line in said group of lines, and means responsive to a different predetermined first digit for preparing said switch to operate as a rotary connector to automatically select the first idle line encountered in said group of lines.

1,891,424. GASKET. LIGE H. KIRKPATRICK, Lawton, Okla., assignor of one-half to A. G. Sechrist, Lawton, Okla. Filed Mar. 11, 1929. Serial No. 346,207. 1 Claim. (Cl. 288—1.)



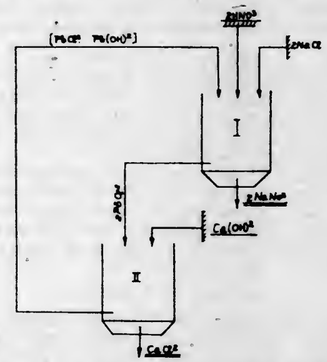
A packing made up of outer and inner gaskets, each of one-piece construction, each gasket comprising a U-shaped outstanding flange provided at its inner edges with oppositely projecting walls disposed at right angles to the flange, the walls being formed at their remote edges into wings which overlap the inner surfaces of the walls, and are in contact therewith, the flange of the inner gasket being closed tightly together and fitting closely within the flange of the outer gasket, the adjacent edges of the wings of the outer gasket being spaced apart, but being in engagement with the flange of the inner gasket, the walls of the inner gasket being in contact with the wings of the outer gasket, and the free edges of the wings of the inner gasket being in contact with each other.

1,891,425. FREEZING APPARATUS. ALFRED L. KRONQUEST, Syracuse, N. Y., assignor to Continental Can Company, Inc., New York, N. Y., a Corporation of New York. Filed Aug. 3, 1931. Serial No. 554,861. 4 Claims. (Cl. 257—28.)



2. A freezing apparatus comprising a substantially closed chamber adapted to contain a liquid refrigerant, supporting and guiding rails for cylindrical containers located in the chamber, guide rails disposed above the containers and normally out of contact therewith, means for rolling the containers along said supporting and guiding rails while submerged in the liquid refrigerant, means for delivering the containers into the chamber and on to the supporting rails, and means for elevating and removing the containers from the chamber, the supporting and guiding rails for the containers having substantially horizontal supporting faces and guiding faces inclining away from each other for insuring that the containers will rest and roll on the end seams thereof.

1,891,426. PROCESS OF MANUFACTURING ALKALI METAL NITRATES. HENRI LAWARREE, Brussels, Belgium. Filed Mar. 2, 1931, Serial No. 519,637, and in Belgium Mar. 25, 1930. 3 Claims. (Cl. 23—102.)

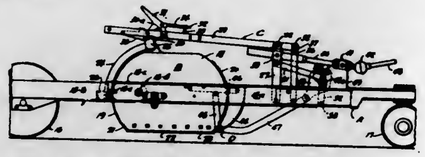


1. A process of manufacturing alkali metal nitrates from the corresponding chlorides, comprising the steps of adding basic chloride of lead to alkali metal chloride and nitric acid, and of filtering off the alkali metal nitrates formed.

1,891,427. SCRAPER AND APRON. CHARLES LE BLEU, Los Angeles, Calif. Filed Aug. 10, 1931. Serial No. 556,058. 16 Claims. (Cl. 37—126.)

1. A scraper comprising a frame supported at the front and rear, and a revoluble bucket mounted on said frame between the front and rear; said frame having side bars with rule joints intermediate the ends to enable said joints to break upwardly, restrain downward breaking and

hold the sections of said side bars in alinement; a revoluble bucket journalled on opposite like sections of said side bars on axes offset rearwardly of the center of gravity of said bucket whereby the bucket in rolling over to dump will engage the ground and break said joints and may be disposed to clear the ground in carrying position.



10. An earth moving device adapted to be moved across the surface of the ground comprising a supporting frame; a revoluble bucket on said frame adapted to be disposed in carrying, digging or dumping position, an apron adapted to close or open the mouth of said bucket; means connecting said apron, and frame, and mechanism for engagement with said bucket to tilt the latter and connected to said apron to maintain the latter in position closing said mouth in carrying position of said bucket and to maintain said apron in open position in dumping and digging position of said bucket.

1,891,428. SCRAPER FOR DIGGING OR LEVELING. CHARLES LE BLEU, Los Angeles, Calif. Filed Apr. 8, 1932. Serial No. 603,958. 7 Claims. (Cl. 37—126.)

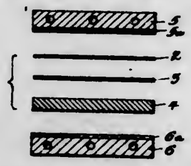


1. A bowl for dirt moving machines adapted to be drawn across the surface of the ground, said bowl being adapted to be positioned at selected angles with relation to the ground and comprising: a transversely extending scraper blade at the rear of the bowl and a detachable bottom with a digging blade at its forward edge.

1,891,429. MEANS FOR AND METHOD OF DETECTING THE PRESENCE OF CARBON MONOXIDE. GUSTAF LJUNGGREN, Lund, Sweden. Filed Jan. 5, 1931, Serial No. 506,823, and in Great Britain Jan. 20, 1930. 6 Claims. (Cl. 23—230.)

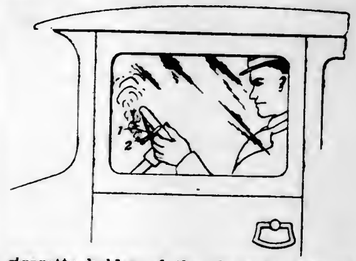
1. A method for the production of reaction means for detecting carbon monoxide in quantities injurious to health in the air characterized in that porous paper is impregnated with a palladious salt and also, in a higher concentration, with a salt of a strong base (such as of an alkaline metal) and a weak acid.

1,891,430. METHOD OF GLUING WOOD WITH PHENOL CONDENSATION PRODUCTS. EMIL C. LOETSCHER, Dubuque, Iowa. Filed Aug. 22, 1931. Serial No. 558,835. 3 Claims. (Cl. 144—309.)



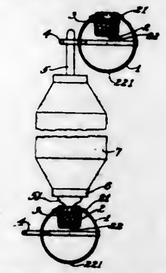
1. The method of veneering a base, consisting in treating a fibrous sheet with a synthetic resin rendered plastic by a solvent, drying out the treated sheet to remove approximately from 85 to 90 per cent of the solvent, then placing the sheet between a base and a layer of wood veneer approximately 1/100 inch thick and subjecting the pack to heat to react the synthetic resin and also subjecting the pack to pressure sufficiently lower than 1,500 pounds per square inch as not to injure the veneer.

1,891,431. CIGARETTE HOLDER. JOSEPH J. MARKART, Merrick, N. Y. Filed Dec. 3, 1931. Serial No. 578,779. 4 Claims. (Cl. 131—51.)



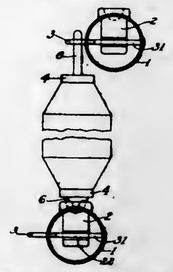
1. A cigarette holder of the character described comprising a ring part and a clasp part, the latter being formed to embrace a cigarette and consisting of a forked jaw and a coacting jaw fitting in the fork of the forked jaw.

1,891,432. CREEL. FAY H. MARTIN, Woonsocket, R. I., assignor, by mesne assignments, to Whitin Machine Works, Whitinsville, Mass., a Corporation of Massachusetts. Filed Jan. 8, 1929. Serial No. 331,044. 13 Claims. (Cl. 242—131.)



13. A creel construction characterized by longitudinally extending bobbin-sustaining elements consisting of tubular rails composed of tubing of curvilinear cross-section having combined therewith bobbin-skewer steps and skewer-tip-retainers.

1,891,433. CREEL. FAY H. MARTIN, Woonsocket, R. I., assignor, by mesne assignments, to Whitin Machine Works, Whitinsville, Mass., a Corporation of Massachusetts. Filed Jan. 12, 1929. Serial No. 331,962. 7 Claims. (Cl. 242—131.)



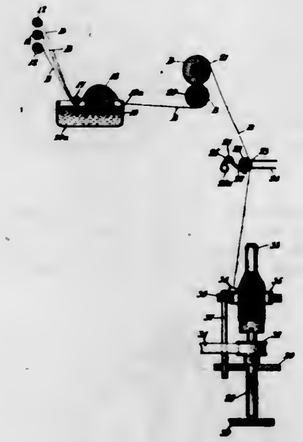
1. In a creel, the combination with a creel-rail of hollow shell-like cross-section having in its top a hole for occupancy by a skewer-step, of a skewer-step occupying said hole having a flange which rests upon the surface of the rail adjacent the hole and supports the step with its body within and protected by the enclosure of the shell-like creel-rail.

1,891,434. HEAT EXCHANGE APPARATUS FOR HEATING OR COOLING FLUIDS. JOHN GRAVES MCKEAN, Mount Vernon, and ROBERT FREDERICK JONES, Glasgow, Scotland. Filed Dec. 14, 1931, Serial No. 580,974, and in Great Britain June 23, 1931. 10 Claims. (Cl. 257—245.)



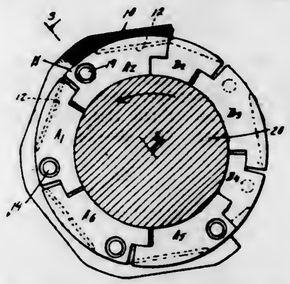
1. A heat exchange apparatus for heating or cooling fluids comprising two sets of straight channels cut in opposite faces or surfaces of a metal plate with the ends of the channels spaced from the ends of the plate so that the channels of one set alternate with the channels of the other set and means whereby a fluid is caused to flow through each set of channels in one or more passes.

1,891,435. YARN DETWISTING AND YARN TREATING SYSTEM. AUBREY E. MEYER, Paris, France, assignor to Aubrey Meyer, Inc., Jersey City, N. J., a Corporation of New Jersey. Filed Nov. 7, 1929. Serial No. 405,319. 11 Claims. (Cl. 117—2.)



1. The combination with mechanism for detwisting a strand of twisted, gummed yarn, the gum on said yarn being moist or tacky, of a member rotatable in the direction of and substantially at the speed of yarn movement and engaged by the yarn strand while passing toward said mechanism, said member guiding the yarn strand along a predetermined path toward said mechanism and collecting some gum from the yarn strand.

1,891,436. PACKING. ANTHONY G. M. MICHELL, Melbourne, Australia. Filed Nov. 5, 1929. Serial No. 404,909. 4 Claims. (Cl. 286—22.)



1. Packing for rotating shafts comprising an annular series of segmental, overlapping blocks adapted to engage the shaft, and resilient means engaging an end portion only of each block to force said portion into contact with the shaft.

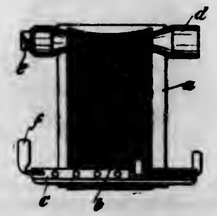
1,891,437. RAPID REVOLVER LOADER. THOMAS A. MILMORE, Brooklyn, N. Y. Refiling of abandoned application Serial No. 395,235, filed Sept. 26, 1929. This application filed Dec. 14, 1931. Serial No. 581,030. 8 Claims. (Cl. 42—89.)



1. In a device of the class described, a spring member normally forming a hoop but having its ends free, and a plurality of cartridge clips secured in spaced relation on said spring member, the cartridge clips being disengageable from the cartridges inserted therein by a tangential pull on one end of the spring member.

8. In a device of the class described, a plurality of spring-actuated links, a cartridge clip attached to each of said links, a handle member attached to one of said links, means associated with all of said links for limiting their movements from that of a substantially straight position to that of a circular position, the spring acting upon the links being such as to cause them to assume the last mentioned position when in its straight position, the device being containable in a substantially straight casing and the cartridge clips being disengageable from the cartridges inserted therein by a tangential pull on the handle member.

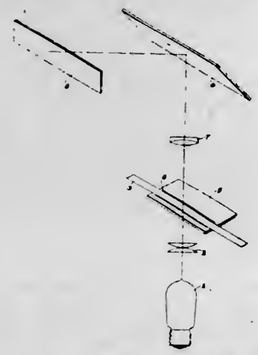
1,891,438. HAIR CURLING PROCESS. ADOLF NEFZGER, Vienna, Austria. Filed May 19, 1932, Serial No. 612,308, and in Austria July 13, 1931. 2 Claims. (Cl. 132—36.2.)



1. The method of curling hair by which a sheet of material which is conductive of heat and impervious to mois-

ture is clamped along one edge together with a wisp of hair in the head-protecting clip of a curler, and is then wound to the end and tightened together with the hair on the already partly wound pin of the curler.

1,891,439. PROJECTION SYSTEM. DAVID F. NEWMAN, Freeport, N. Y., assignor to Trans-Lux Daylight Picture Screen Corporation, New York, N. Y., a Corporation of Delaware. Filed Dec. 10, 1928. Serial No. 324,873. 1 Claim. (Cl. 88—24.)

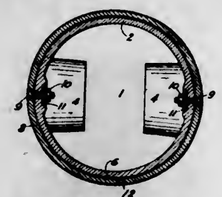


The combination with a light transmission ticker tape having a light diffusing characteristic which has been increased beyond that imparted thereto by the normal tape constituents, a source of light, a screen the transparency of which has been increased in view of the increased light diffusing characteristic of the tape, and means for projecting light from said source through the tape, whereby satisfactory character definition is obtained on the screen from characters on the tape.

1,891,440. TAWING, DEHYDRATING, AND ASTRINGENT PRODUCT. HAROLD OMAR NOLAN, New York, N. Y., assignor of one-half to Carleton Ellis, Montclair, N. J. Filed Feb. 24, 1926. Serial No. 90,427. 9 Claims. (Cl. 149—5.)

1. A stable composition comprising an aluminum salt dissolved in a liquid containing volatile alcoholic material, the concentration of the salt being between 5 and 25% by weight of the composition; said composition yielding a continuous film without segregating into irregular "oily" patches on application to animal membrane.

1,891,441. PISTON. ALLEN B. NORTON, Cleveland, Ohio, assignor, by mesne assignments, to The Cleveland Trust Company, Cleveland, Ohio, a Corporation of Ohio, as trustee. Filed Mar. 15, 1929. Serial No. 347,226. 6 Claims. (Cl. 74—108.)



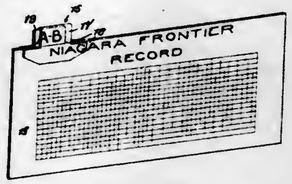
1. In a piston of aluminum or magnesium or an alloy of either, a circumferentially continuous skirt provided with a groove in the exterior thereof, a bearing ring of material of lower coefficient of expansion than aluminum within said groove and having its exterior surface substantially flush with that of the skirt when the piston is raised to its highest operating temperature, and securing means between said ring and skirt intermediate the bearing faces of the piston, said ring being free from the skirt except at the point of the securing means.

1,891,442. WELDING TORCH. SAMUEL R. OLDHAM and LLOYD W. YOUNG, Chicago, Ill., assignors to The Oxweld Railroad Service Company, a Corporation of Delaware. Filed Aug. 20, 1929. Serial No. 387,199. 10 Claims. (Cl. 158—27.4.)



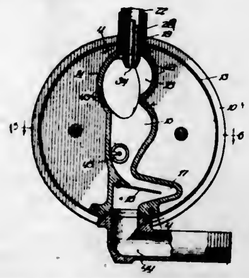
1. A welding torch comprising a body member having a pocket therein, a mixing device mounted within said pocket, a flame tip member cooperating therewith, a handle attached to said body at an angle, gas supply passages within said handle, and valve members cooperating between said gas supply passages and said mixing member, said mixing member comprising a plurality of small mixing jet members, the size thereof being sufficiently small to extinguish a flame within.

1,891,443. PYROXYLIN PLASTIC TAB OR FACING AND METHOD OF SECURING THE SAME TO AN ARTICLE. CHARLES F. RAND, North Tonawanda, N. Y. Filed May 26, 1930. Serial No. 455,943. 21 Claims. (Cl. 154—2.)



1. An article of the character described, including an opaque body, a piece of solid pyroxylin plastic or the like adapted to be secured to one face of said body, a piece of transparent paper interposed between said body and said piece of pyroxylin plastic and adhesive means applied to the opposing faces of said piece of transparent paper and said body and piece of pyroxylin plastic.

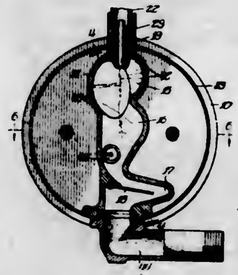
1,891,444. PROCESS FOR GASIFYING LIQUID FUELS. GEORGE L. REICHHELM, New York, N. Y., assignor to The Gasifier Company, Elizabeth, N. J., a Corporation of New Jersey. Filed Aug. 15, 1921. Serial No. 492,237. 14 Claims. (Cl. 48—212.)



3. The method of converting a heavy liquid fuel into a combustible gas, which consists of causing said fuel to take

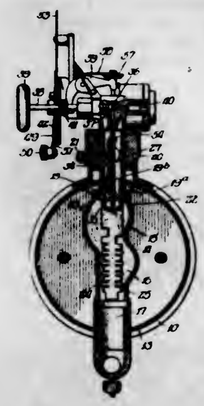
the form of a spray with air mixed therewith, said spray having inner and outer zones, directing opposed extraneous jets of air against said spray to promote combustion of the outer zone thereof, and igniting the outer zone to thereby gasify the inner zone of said spray.

1,891,445. OIL GASIFIER. GEORGE L. REICHHELM, Elizabeth, N. J., assignor to The Gasifier Company, Elizabeth, N. J., a Corporation of New Jersey. Original application filed Aug. 15, 1921, Serial No. 492,237. Divided and this application filed Nov. 24, 1924. Serial No. 752,049. 17 Claims. (Cl. 48—107.)



5. An oil gasifier including a nozzle for projecting a mixture of liquid fuel vapor and air, a primary gasifying chamber for receiving said mixture from said nozzle, said primary chamber having portions of its inner wall curved about axes normal to the axis of said nozzle, and a secondary gasifying chamber communicating with said primary chamber through a neck unsymmetrically disposed relative to said axis of said nozzle.

1,891,446. METHOD FOR GASIFYING LIQUID FUELS. GEORGE L. REICHHELM, Short Beach, Conn., assignor to The Gasifier Company, Elizabeth, N. J., a Corporation of New Jersey. Filed Sept. 16, 1926, Serial No. 135,794. Renewed Aug. 5, 1932. 25 Claims. (Cl. 48—212.)



24. The method of converting an oil fuel into a combustible gas, which consists of supplying oil atomized by air through a nozzle projecting into a chamber, diverting a portion of said atomized oil at a sufficiently small angle to reduce the speed thereof to a value to permit flame propagation, and igniting a portion of said atomized oil surrounding said nozzle to convert the remaining portion of said atomized fuel into a combustible gas.

1,891,447. PROCESS OF PREPARING DIARYL-1,2,5,6-ANTHRAQUINONE-DITHIAZOLE BODIES. WILLIAM L. RINTELMAN, Milwaukee, and ROBERT J. GOODRICH, South Milwaukee, Wis., assignors, by mesne assignments, to E. I. du Pont de Nemours & Company, a Corporation of Delaware. Filed Apr. 20, 1931. Serial No. 531,634. 6 Claims. (Cl. 260—44.)

1. In the process of preparing a dyestuff of the diphenyl-1,2,5,6-anthraquinone-dithiazole series, the step which comprises condensing with benzaldehyde a sulfide derivative of 2,6-diamino-anthraquinone obtainable by mild oxidation of 1,5-dimercapto-2,6-diamino-anthraquinone.

1,891,448. PROCESS OF PURIFYING DIPHENYL-1,2,5,6-ANTHRAQUINONE DITHIAZOLE BODIES. WILLIAM L. RINTELMAN, Milwaukee, Wis., assignor, by mesne assignments, to E. I. du Pont de Nemours & Company, a Corporation of Delaware. Filed Apr. 20, 1931. Serial No. 531,635. 5 Claims. (Cl. 260—44.)

1. The process of purifying an impure diphenyl-1,2,5,6-anthraquinone dithiazole body which comprises treating the impure body with sulfuric acid having a concentration from about 76 to 93% and recovering the insoluble portion of the dyestuff.

1,891,449. PREPARATION OF DIARYL-1,2,5,6-ANTHRAQUINONE-DITHIAZOLE BODIES. WILLIAM L. RINTELMAN, Milwaukee, and ROBERT J. GOODRICH, South Milwaukee, Wis., assignors, by mesne assignments, to E. I. du Pont de Nemours & Company, a Corporation of Delaware. Filed Apr. 20, 1931. Serial No. 531,636. 7 Claims. (Cl. 260—44.)

1. In the process of preparing diphenyl-1,2,5,6-anthraquinone-dithiazole bodies by condensing a 1,5-dimercapto-2,6-diamino-anthraquinone body with an aryl aldehyde of the benzene series, the improvement which comprises effecting the condensation reaction in a medium selected from the group consisting of water, sulfuric acid, oleum and mixtures thereof.

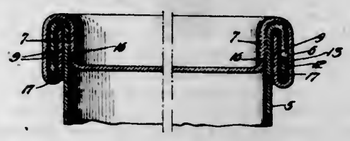
1,891,450. COAL BRIQUETTE. ISIDOR ROSENWALD, Parksville, N. Y. Filed Dec. 5, 1930. Serial No. 500,423. 5 Claims. (Cl. 44—18.)

4. A briquette comprising comminuted particles of fuel material held together by a binder consisting of cheese.

1,891,451. PAINT. WALTER C. SAMPLE, Alhambra, Calif., assignor of one-fourth to Ole John Lovik, Alhambra, Calif. Filed Dec. 20, 1930. Serial No. 503,858. 1 Claim. (Cl. 134—39.)

A paint composition of the character described, comprising white lead, Keen's cement, tartaric acid, linseed oil, turpentine, japan drier, paraffin, and carbon tetrachloride.

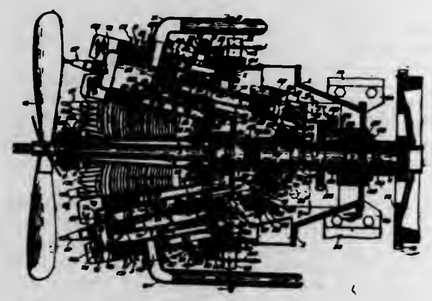
1,891,452. CAN AND METHOD OF SEALING SAME. HELGE SCHIPSTED, Syracuse, N. Y., assignor, by mesne assignments, to The Borden Company, New York, N. Y., a Corporation of New Jersey. Filed Aug. 2, 1929. Serial No. 382,910. 4 Claims. (Cl. 220—81.)



1. In a can for containing dry products and comprising a body portion having a lip and a cover having a lip, one of said lips having on one surface a coating of seaming material, a layer of sealing composition of a different char-

acter than the seaming material and containing an oily material as its major ingredient applied directly on the seaming material and forming a coating therefor, the sealing material being disposed toward the contents of the can, said lips being brought together in a joint with the seaming material and the sealing composition interposed between them.

1,891,453. INTERNAL COMBUSTION ENGINE. CHARLES E. SCHLENKER, Lakewood, Ohio, assignor to Western Reserve Air Motors Corporation, a Corporation of Ohio. Filed May 31, 1929. Serial No. 367,223. 14 Claims. (Cl. 123—58.)



8. In an internal combustion engine, a housing, a manifold member carried thereby, a shaft rotatably supported by the housing, piston rod guides and cylinders supported by the manifold member, said piston rod guides closing the base of the cylinders, pistons reciprocable in said cylinders, piston rods rigidly carried by the pistons and reciprocable in said piston rod guides, a cam rigidly carried by the shaft with its periphery disposed eccentrically and obliquely upon the shaft, the edges of said cam forming ball races, a cam operating annulus disposed about said cam the inner face of said annulus supporting outer races and ball bearings disposed between said inner and outer races, a universal joint connecting said rod to the periphery of said annulus, the walls of said cylinder defining fluid passages to conduct a gas from said manifold to a primary chamber and from said primary chamber to said combustion chamber, a valve carried by one of said passages to admit air to said primary chamber.

1,891,454. IDENTIFYING MECHANISM. WALTER SCHLUMPF, Fanwood, N. J., assignor to Shur-Chek Company, Inc., Fanwood Township, N. J. Filed Aug. 4, 1932. Serial No. 627,426. 8 Claims. (Cl. 40—19.5.)

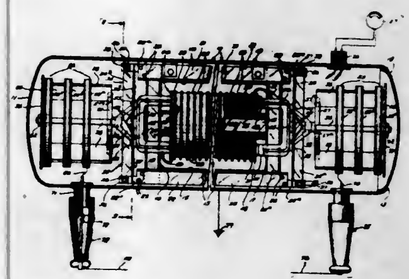


1. A rack having a channel for receiving a tag, a rocker projecting into the channel and having notches in its ends, in combination with a tag having projections spaced to fit the notches of the rocker.

1,891,455. PROCESS FOR PURIFYING PHENOL-ALDEHYDE CONDENSATION PRODUCTS. FRITZ SIEBACH, Erkner near Berlin, Germany, assignor to Bakelite Gesellschaft mit beschrankter Haftung, Berlin-Charlottenburg, Germany. Filed May 3, 1929, Serial No. 360,325, and in Germany May 5, 1928. 5 Claims. (Cl. 260—4.)

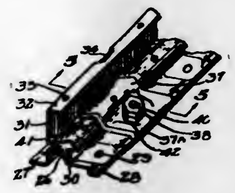
1. Process for completely purifying permanently fusible non-reactive phenolaldehyde resins with respect to uncombined phenol comprising the distillation of said phenolic resins at a temperature of at least 140° C. in presence of high boiling non-resinous organic fluxing compounds.

1,891,456. TRANSFORMER CONSTRUCTION. FRANKLIN S. SMITH, New Haven, Conn. Filed Dec. 30, 1931. Serial No. 583,840. 30 Claims. (Cl. 175—356.)



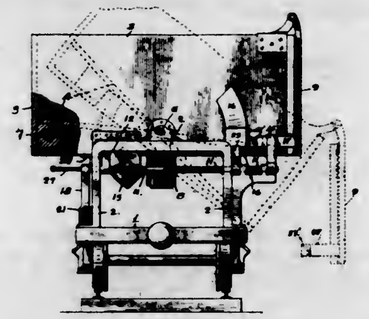
1. In transformer construction, in combination, a shell type of core, a low tension winding related thereto, a high tension winding spaced about the middle leg thereof, metallic supports engaging the ends of said high tension winding and spaced from said core, and a plurality of solid dielectric beams supported by and in spaced relation from said core for supporting said metallic supports.

1,891,457. VEHICLE SEAT ADJUSTER. BAUCE M. STANNARD, Binghamton, N. Y., assignor to The Brewer-Titchener Corporation, Cortland, N. Y., a Corporation of New York. Filed July 31, 1930. Serial No. 471,934. 4 Claims. (Cl. 155—14.)



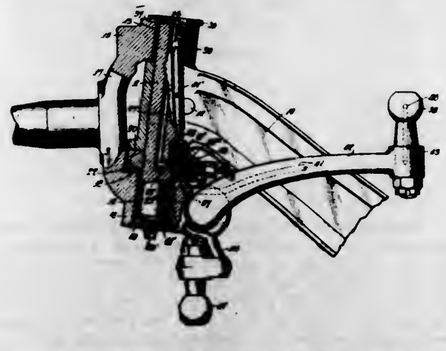
1. In a shiftable vehicle seat or the like, a pair of spaced guide-rails having a cross-sectionally V-shaped head portion, a seat-base mounted crosswise of said rails, side-bar means for each of the rails, each such bar being provided with a toe-strip that slidably cooperates with one of the respective V-shaped rail-heads, releasable keeper means for each of the respective cooperating toe-strips and rail-heads and which keepers each have a portion slidably engaging with their respective toe-strips and a bridge-like portion overlapping their respective guide-rails, and fastening means detachably securing the bridge-like portion of said keepers to their respective contiguous guide-rails.

1,891,458. DUMP-BODY. ALEXIS STARK, San Francisco, Calif. Filed May 2, 1932. Serial No. 608,725. 6 Claims. (Cl. 105—270.)



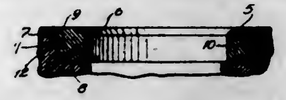
1. A dump truck comprising a frame; a body pivotally mounted upon the frame and movable upon its pivot from and to loading and dumping positions, said body having an inclined bottom and open on the side adjacent the bottom of said incline; a weight attached to the opposite side of said body whereby said body may be normally retained in loading position when unloaded; a gate hingedly suspended from said body to close the open side thereof; a series of connected latches mounted upon the frame and movable to engage said body and retain the same in a loading or dumping position; means for normally moving said latches into engaging relation with said body to prevent relative movement thereof with said frame; and means for moving said latches to release said body whereby the same may be moved to and from dumping and loading positions.

1,891,459. STEERING KNUCKLE LUBRICATION. THOMAS R. THOMAS, Newark, N. J., assignor to Auto Research Corporation, a Corporation of Delaware. Original application filed Sept. 23, 1925, Serial No. 59,002. Divided and this application filed June 8, 1929. Serial No. 369,398. 26 Claims. (Cl. 184—7.)



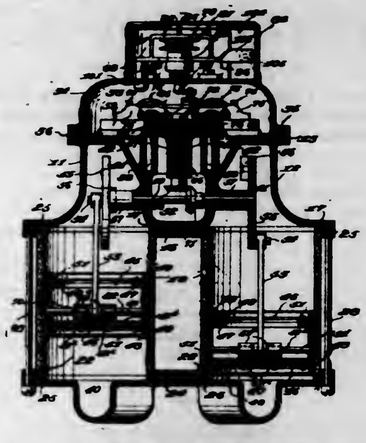
1. In a motor vehicle, in combination, an axle, a knuckle carrying a pair of bearings, one of said members having a clevis straddling the other, a thrust bearing member sustaining the axle on the knuckle, a king pin rigid with the straddled member and bearing in the clevis jaws of the straddling member, a pair of lubricant inlets rigid with the axle and substantially contiguous to said thrust bearing, one of said inlets communicating with a bore extending therefrom axially upward along the king pin, a conduit in flow intercepting relationship with respect to lubricant through said bore and extending along the structure of the knuckle to one of the bearings thereof, the other inlet draining across the plane of the thrust bearing surfaces of the knuckle and a conduit along the structure of the knuckle conveying the lubricant therefrom to the other bearing.

1,891,460. METHOD OF AND MEANS FOR RENEWING VALVE SEATS. CHARLES D. VLAHEK, East St. Louis, Ill. Filed Aug. 9, 1929. Serial No. 384,787. 3 Claims. (Cl. 251—167.)



3. A valve chamber having a circular recess, a valve seat in the form of a ring having its peripheral face in frictional engagement with the circular wall of said recess, said peripheral face and circular wall being provided with annular grooves registering with each other and having substantially flat parallel upper and lower walls, and a spring ring located in said grooves to secure the valve seat in said recess, said spring ring having substantially flat upper and lower faces in contact with the respective flat upper and lower walls of said annular grooves.

1,891,461. PISTON TYPE METER. HARRY G. WHITMOUTH, Pittsburgh, Pa., assignor to Pittsburgh Equitable Meter Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Dec. 21, 1929. Serial No. 415,716. 9 Claims. (Cl. 73—30.)

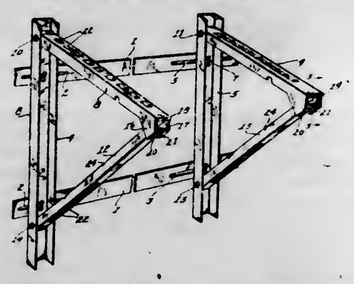


1. A meter for a gasoline dispensing system comprising a ported valve supporting member provided with inlet and outlet connections; with some of said ports in communication with said outlet connection; a cover supported on said member defining therewith a distributing chamber in communication with said inlet connection; a plurality of cylinders connected to said member and with corresponding ends of the cylinders communicating with others of said ports; means connected to said member and said cylinders for effecting communication between the opposite ends of said cylinders and the others of said ports; pistons reciprocably mounted in said cylinders; a connecting rod secured to each piston; a crankshaft disposed in said distributing chamber and having cranks to which the connecting rods are secured; and valve means operatively cooperating with said ports and operable by the crank and crank shaft by movement of said pistons for admitting fluid alternately in opposite ends of said cylinders for effecting reciprocation of said pistons therein, and for discharging fluid through said outlet connection.

1,891,462. GERMICIDE. CYRUS B. WOOD, Washington, D. C. Filed May 12, 1928. Serial No. 277,381. 1 Claim. (Cl. 167—22.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)

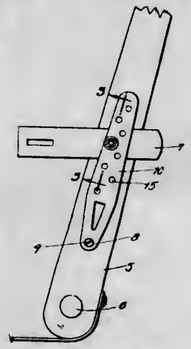
A germicide for water comprising succinchlorimide.

1,891,463. DRYING RACK FOR WASHING AND IRONING. FRANCIS C. YOCK, Portland, Oreg. Filed Mar. 2, 1931. Serial No. 519,509. 2 Claims. (Cl. 211—89.)



1. In a device of the class described, the combination of pairs of vertically disposed members spaced apart and adjustably secured to one or more back bars, a bracket secured to each of the vertical members and hinged relative thereto, a strut secured to each of the vertical members and disposed in spaced relation to the brackets, the strut of the bracket being hinged relative to the vertical member and slidably secured to the meeting end of the top of the bracket and locking clips disposed upon the top surface of the horizontal member of the bracket and to the bottom surface of the strut member of the bracket.

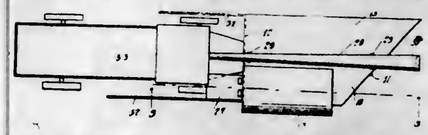
1,891,464. LOOM PICKER STICK. JOSEPH S. ARIENTA, Paterson, N. J. Filed Jan. 15, 1932. Serial No. 586,790. 4 Claims. (Cl. 139—154.)



1. A lug strap attaching means for loom picker sticks comprising an arm, a lug projecting from one of the faces of said arm, said arm and said lug having a perforation passing therethrough, means passing through said perforation to secure said arm to loom picker stick with the lugs spacing the arm from the picker stick, a plurality of staggered perforations in said arm, a lug strap, and means on the lug strap removably mounted in one of the staggered perforations of the arm.

1,891,465. SNOWPLOW. CHARLES N. ARNOLD, Chaumont, N. Y. Filed Feb. 10, 1932. Serial No. 592,102. 5 Claims. (Cl. 37—43.)

1. A plow of the class described having a hollow body adapted to be pushed into the snow, said body having a discharge opening, a fan arranged to be engaged by the snow and to discharge the same through the opening, wings extending rearwardly from the body to define a



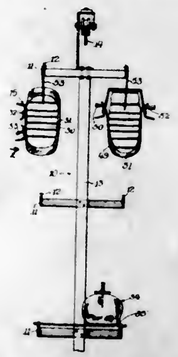
zone for engagement by a propelling vehicle, said body having a wall at an angle to the wings adapted for abutment by the said vehicle.

1,891,466. DEVICE FOR USE IN BLOWING SMOKE RINGS. MILLARD S. BANKS, New York, N. Y. Filed Nov. 24, 1931. Serial No. 577,067. 9 Claims. (Cl. 46—37.)



1. A device for use in blowing smoke rings comprising a tubular member through which the smoke is blown lengthwise, and a transverse baffle composed of a single part arranged therein and which is immovable in use relatively to said tubular member and which forms an obstruction in the middle portion of said member and permits the passage of smoke past said obstruction only adjacent the wall of said member.

1,891,467. APPARATUS FOR PREPARING MEAT FOR SMOKING. ALONZO N. BENN, Chicago, Ill. Filed Sept. 22, 1930. Serial No. 483,543. 13 Claims. (Cl. 99—1.)

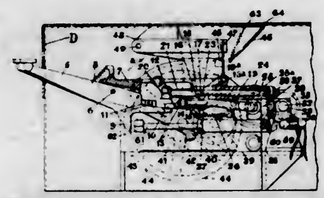


8. An apparatus for smoking meat comprising a member adapted to be positioned on the meat, a positioning spike for embedding in the meat, the meat contacting side of said member except for said spike being substantially flat whereby the member may snugly adhere to the meat surface, and a smoking cloth adapted to be bound around other portions of the meat, said cloth being secured at its ends to said member.

1,891,468. TICKET ISSUING MACHINE. GRAHAM CHARLES PEARSE CHUBB, WILLIAM ELLIS COLMER, and ALBERT RICHARD BANNISTER, London, England, assignors to The Bell Punch and Printing Company Limited, Uxbridge, England. Filed Apr. 25, 1932, Serial No. 607,466, and in Great Britain May 8, 1931. 28 Claims. (Cl. 271—2.3.)

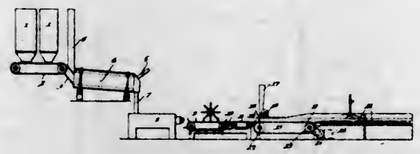
1. A ticket issuing machine which comprises in combination a rotary feed drum provided with peripheral pins

adapted to extend through holes formed in a ticket strip whereby rotation of said drum feeds said strip, a Geneva mechanism operatively connected to said drum and operable upon each actuation to rotate said drum and feed one ticket from the machine, an electric motor and



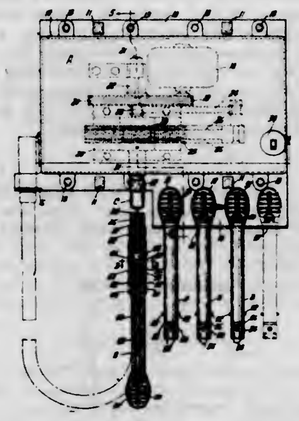
manually operable selector devices adapted to control the circuit of said motor and couple the same in driving relationship to said Geneva mechanism to deliver one or a plurality of tickets solely in accordance with the manually operable device selected.

1,891,469. KILN. CARUTHERS A. COLEMAN, Ashland, Ky. Filed Feb. 13, 1931. Serial No. 515,615. 8 Claims. (Cl. 25—142.)



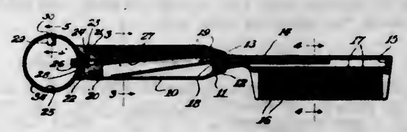
1. In a kiln, a passage therethrough, a burner therein, conveying means comprising a perforated endless conveyor and rollers in said passage, and means for maintaining constantly different phases of temperature throughout said passage.

1,891,470. ROTARY TOOTHBRUSH. ALLISON F. ERRINGTON and GEORGE L. HEADLEY, Akron, Ohio. Filed May 18, 1932. Serial No. 612,088. 1 Claim. (Cl. 15—23.)



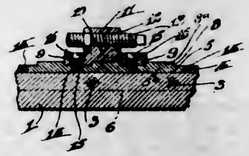
In a device of the character described, the combination of a rotary tooth brush, a motor for imparting rotary movement thereto, and automatic means for periodically reversing the direction of said rotary movement.

1,891,471. FOUNTAIN COMB. PETER FOTZA, Chicago, Ill. Filed Feb. 15, 1932. Serial No. 592,938. 7 Claims. (Cl. 132—13.)



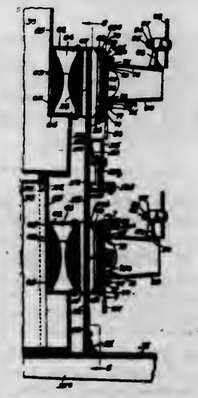
1. A fountain comb comprising a hollow back, teeth projecting from said back, said back being provided with vent holes between said teeth, a casing mounted upon said back, said casing constituting a handle for the comb and being adapted to receive hair dressing liquid, and means for creating pressure upon said liquid within said casing for forcing said liquid into said back.

1,891,472. ADJUSTABLE STOP FOR THREAD CARRIER RODS. GUSTAV GASTRICH, Wyomissing, and MAX RICHTER, West Reading, Pa., assignors to Textile Machine Works, Wyomissing, Pa., a Corporation of Pennsylvania. Filed Jan. 30, 1932. Serial No. 589,820. 15 Claims. (Cl. 66—128.)



1. In a straight knitting machine, the combination of a stop member, a bar reciprocable with respect to said stop member, a second stop member carried by said bar and adapted to engage the first named stop member to arrest said bar at a predetermined point in its path of travel, means for obtaining a fine adjustment of the second stop member relative to the first named stop member to accurately position the bar when arrested in its travel thereby, and additional means for varying the throw of said bar comprising means for detachably securing the second stop member in any one of a plurality of predetermined positions along said bar.

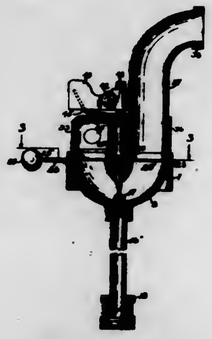
1,891,473. PICTURE PROJECTION MACHINE. JOSEPH H. GOLDBERG, Chicago, Ill., assignor to Chicago Cinema Equipment Company, Chicago, Ill., a Corporation of Illinois. Filed June 7, 1929. Serial No. 369,062. 4 Claims. (Cl. 88—28.)



1. In apparatus of the class described, a lamp housing having means for projecting a beam of light, a screen

support mounted in front of said lamp housing, a screen slidable in said support, said screen being provided with a slot, a pivoted arm having a pin engaging said slot, a pinion for turning said arm, a rack engaging said pinion, and means for operating said rack.

1,891,474. CARBURETOR. RALPH M. HEINTZ, Palo Alto, Calif., assignor to Heintz & Kaufman, Ltd., San Francisco, Calif., a Corporation of Nevada. Filed Nov. 24, 1930. Serial No. 497,818. 6 Claims. (Cl. 261—52.)



1. A carburetor comprising a U-shaped Venturi tube, a fuel jet entering said tube in the curved portion thereof, and a throttle comprising an apertured diaphragm pivotally mounted between the arms of said Venturi tube and arranged across both arms of said U-tube.

1,891,475. DISCHARGE TUBE ELECTRODE. FRED HOTCHNER, Los Angeles, Calif. Filed Mar. 30, 1929. Serial No. 351,196. 10 Claims. (Cl. 176—126.)



1. In a discharge tube, a pair of electrode elements, having emission surfaces disposed parallel to each other and spaced a short distance apart, and a constricted orifice providing communication between the space within the chamber defined by the said surfaces and the main chamber of said discharge tube.

1,891,476. MOLDING PROCESS. CHARLES L. KELLER, Cincinnati, Ohio, assignor to The Richardson Company, Lockland, Ohio, a Corporation of Ohio. Filed July 2, 1928. Serial No. 290,085. 4 Claims. (Cl. 92—54.)

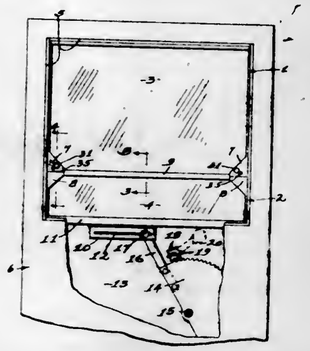
1. That process of manufacturing articles of plastic composition comprising bringing a binder material and a fibrous material into intimate association, dispersing said associated materials in a liquid vehicle to form a pulp thereof, forming a sheet of said pulp upon a screen, drying said sheet, cutting a mold charge from said sheet, plasticising said mold charge and molding it into a finished article by causing it to flow under pressure and fill a mold cavity.

1,891,477. LONGITUDINALLY FOLDING WASHABLE NECKTIE. MABEL C. MCCURRACH, Brooklyn, N. Y. Substitute for application Serial No. 405,606, filed Nov. 8, 1929. This application filed Sept. 2, 1932. Serial No. 631,608. 2 Claims. (Cl. 2—146.)



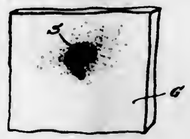
1. A necktie consisting of a blank structure, having a neckband portion provided with a preformed curve concaved toward the ends of the blank structure, the latter being longitudinally folded along diverging lines with respect to the center line, forming the necktie.

1,891,478. AUTOMOBILE WINDOW STRUCTURE. RUSSELL W. MEATHERINGHAM, San Marino, Calif. Filed June 28, 1931. Serial No. 546,188. 5 Claims. (Cl. 296—44.)



1. A window structure comprising, in combination with a frame having a window opening therein, a pair of separately framed sashes detachably connected together and slidably mounted in said frame for closing said opening, means for raising and lowering said sashes, and means enclosed in the frame of one of the sashes and connected with the other sash for operatively connecting the sashes for simultaneously opening and closing, and adjustable for disconnecting the sashes to permit the lowering of one sash independently of the other sash.

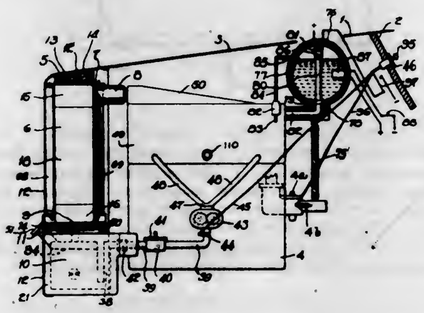
1,891,479. COLORATION OF CONCRETE ARTICLES. CHARLES L. NORTON, Boston, Mass. Filed Nov. 15, 1930. Serial No. 496,031. 4 Claims. (Cl. 72—36.)



1. Concrete sheet material, comprising varicolored components of mixture of hydraulic cement and a hard aggregate, the latter comminuted to particle size of the same

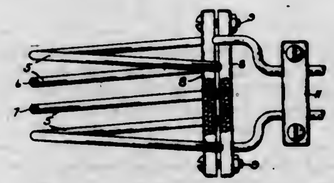
order as that of the cement particles, the varicolored components of said concrete being fortuitously distributed and the materials thereof mutually interpenetrating to form cloudy marginal color effects.

1,891,480. LIQUID CIRCULATING COOLING SYSTEM FOR INTERNAL COMBUSTION MOTORS. OSCAR A. ROSS, New York, N. Y. Filed Aug. 9, 1928. Serial No. 298,435. 28 Claims. (Cl. 123—174.)



1. In combination with an internal combustion motor having a substantially inclosed liquid circulating cooling system associated therewith, of a radiator for cooling the liquid in the system, a reservoir positioned below the lowest liquid level of the motor and the radiator, arranged to receive all the liquid normally circulating in the system, a flexible conduit connecting the radiator and the reservoir for conducting the liquid of the system therebetween, and means for flexibly supporting the reservoir from the radiator body.

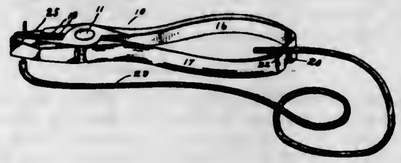
1,891,481. INDUCTANCE COIL. PHILIP F. SCOFIELD, Palo Alto, Calif., assignor to Heintz & Kaufman, Ltd., San Francisco, Calif., a Corporation of Nevada. Filed Feb. 24, 1931. Serial No. 517,851. 8 Claims. (Cl. 175—359.)



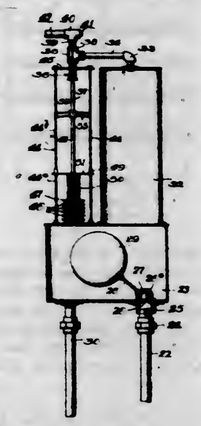
1. An inductor comprising a conductor disposed in a coil of at least one turn, said conductor having a core of material having a low coefficient of thermal expansion fixed to a shell of conducting material having a high electrical conductivity and a relatively high coefficient of expansion.

1,891,482. TOOL. PAUL F. REICHHELM, Montclair, N. J., assignor to American Swiss File & Tool Co., Elisabeth, N. J., a Corporation of New Jersey. Filed Apr. 7, 1930. Serial No. 442,119. 1 Claim. (Cl. 81—9.5.)

A wire insulation cutting tool comprising pivoted arms having a common fulcrum between the ends thereof, cooperating arm portions on one side of said fulcrum adapted to hold a wire, cooperating handle portions of greater extent on the other side of said fulcrum having opposed curved cutting means adapted to encompass and cut the insulation of said wire, said fulcrum being positioned so as to proportion the clearance between adjacent portions in direct ratio to the wire and insulation diameters.

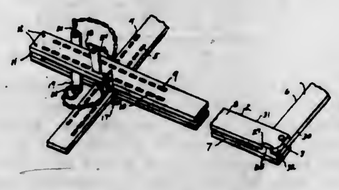


1,891,483. AUTOMATIC EVACUATOR FOR STEAM HEATING SYSTEMS. EDWIN B. TIDD, Chicago, Ill. Filed Mar. 20, 1931. Serial No. 524,196. Renewed Nov. 7, 1932. 12 Claims. (Cl. 103—253.)



1. A device of the kind described, comprising a condensation chamber, thermo-sensitive means controlling the admission of steam to said condensation chamber, a plurality of conduits leading from said condensation chamber, one of which conduits is provided with means for preventing a back flow therethrough and a float actuated valve for controlling the discharge through the other of said conduits.

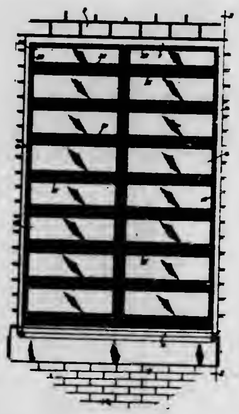
1,891,484. COLUMN CLAMP. JOHN EVERETTE TOMPKINS, Cleveland, Ohio, assignor to The Cleveland Wheelbarrow & Mfg. Co., Cleveland, Ohio, a Corporation of Ohio. Filed Dec. 9, 1929. Serial No. 412,666. 15 Claims. (Cl. 144—291.)



14. In a clamp unit for molds or the like, a pair of bar elements connected together at one end, said connection comprising means whereby the bar elements may be hing-

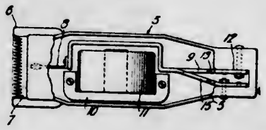
edly folded together for transportation or unfolded for use, and providing means whereby the bars may be moved relatively bodily to each other, mutually interlockingly engageable portions on the respective bars for locking them against hinging movement in either folding or unfolding directions when they have been opened to a predetermined angle therebetween.

1,891,485. WINDOW. MICHAEL J. TRACY, St. Louis, County, Mo., assignor to Pauly Jail Building Company, St. Louis, Mo., a Corporation of Missouri. Filed Oct. 14, 1931. Serial No. 568,686. 9 Claims. (Cl. 189—69.)



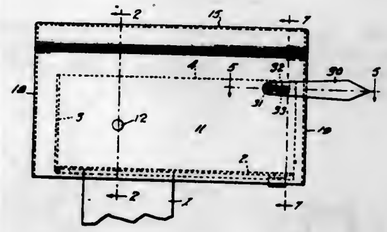
1. A window comprising a vertical series of pivotally supported window sections, a ventilator section pivotally supported adjacent to said window sections, operating cranks for said window sections and said ventilator section, an actuator for said cranks movable from and to a starting position, and connections for operating said cranks by said actuator for swinging said ventilator section first to open position and then swinging said window sections outwardly to outwardly inclined positions by continued operation of said actuator in one direction from said starting position and for moving said window sections and said ventilator section to closed positions successively in reverse order from the order that they were moved outwardly and by continued operation of said actuator toward said starting position of said actuator.

1,891,486. ELECTROMAGNETIC CLIPPER REGULATION. LEO J. WAHL, Sterling, Ill., assignor to Wahl Clipper Corporation, Sterling, Ill., a Corporation of Illinois. Filed Sept. 21, 1931. Serial No. 564,061. 12 Claims. (Cl. 175—338.)



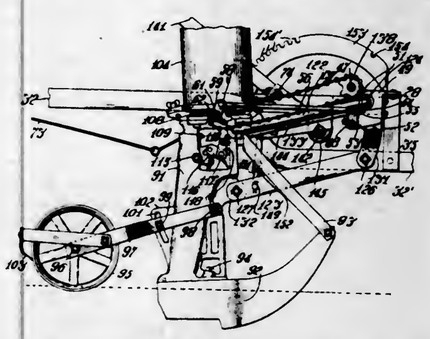
1. An electromagnetic vibrating device comprising an electromagnet having means whereby it may be energized by pulsating electric current, an armature movable relative thereto in response to the pulsations of the energizing current and adapted to carry a work piece, and a regulating arm mounted to vibrate in response to energization of said electromagnet, said arm being attracted more as the voltage increases whereby to shunt more of the magnetic field around the work piece carrying armature and reduce the effect of the increased voltage thereon.

1,891,487. MAIL BOX. IRA R. WENNER, Sycamore, Ohio, assignor to Alfred E. Park, Bucyrus, Ohio, and Charles W. Wenner, Sycamore, Ohio. Filed Jan. 29, 1930. Serial No. 424,165. 2 Claims. (Cl. 232—17.)



1. A mail box including a receptacle portion, a cover portion secured thereto by pivot means and having flanges extending substantially to the bottom thereof when in closed position, and means cooperating with said pivot means to yieldably hold said cover portion in open position, said last means including a cam attached to the cover portion and a spring cam follower attached to said receptacle portion and cooperating with said cam.

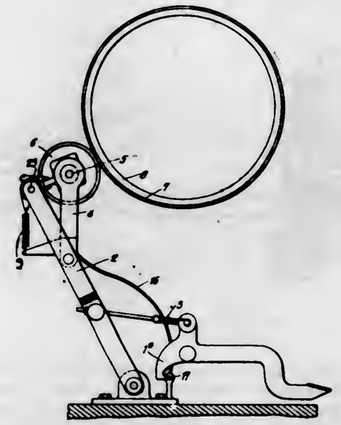
1,891,488. MULTIPLE ROW PLANTER. CHARLES H. WHITE, Moline, Ill., assignor to Deere & Company, Moline, Ill., a Corporation of Illinois. Filed Sept. 19, 1927. Serial No. 220,473. 18 Claims. (Cl. 111—52.)



1. In a planting implement, the combination of a frame, a planter unit comprising seed dropping mechanism, means for connecting the planter unit with said frame arranged whereby said unit is free to rise and fall relative to said frame while being maintained in its same angular relation to the vertical, operating mechanism for said seed dropping mechanism mounted on said frame, and motion transmitting means connecting said operating mechanism with said seed dropping mechanism comprising a rigid reciprocable member arranged to move substantially in parallelism with said connecting means in the rise and fall of said planter unit.

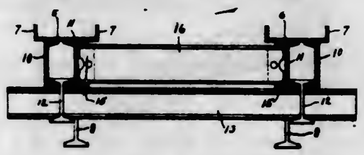
1,891,489. MANUFACTURE OF PNEUMATIC TIRE CASINGS AND APPARATUS THEREFOR. HARRY WILLSHAW, Birmingham, England, assignor to Dunlop Rubber Company, Limited, Birmingham, England. Filed Sept. 21, 1929. Serial No. 394,223. 7 Claims. (Cl. 154—10.)

1. Tire making apparatus comprising a rotatable drum, separable discs, a guide rod, a pivoted arm carrying said rod, a pedal, a resilient connection from said pedal to said arm to swing said arm towards said drum when said pedal is depressed, a detent for retaining said pedal in depressed position, brackets on said rod carrying said discs, one for each disc, a right and left threaded screw shaft, and half nuts in said brackets resiliently pressed



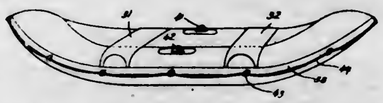
out of engagement with said screw shaft and moved into engagement therewith by reaction of said discs against said drum.

1,891,490. AUTOMOBILE FRAME STRAIGHTENING MACHINE. HENRY WOCHNER, Rock Island, Ill., assignor to Bear Manufacturing Company, Rock Island, Ill. Filed Sept. 23, 1931. Serial No. 564,577. 4 Claims. (Cl. 153—32.)



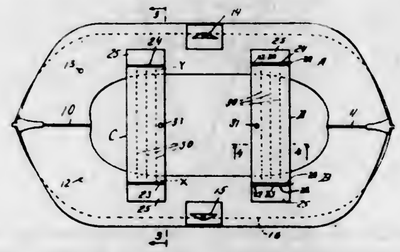
1. An automobile frame straightening machine, comprising a pair of tracks and means for support thereof, a pair of angle-plates supported from said tracks in parallel spaced relation with each other, I-beams supported from said tracks in parallel spaced relation with each other, and in parallel spaced relation with said angle-plates, to form run-ways for cross-beam supports, and one or more cross-beams supported at their ends by said I-beams.

1,891,491. INFLATABLE BOAT. AXEL V. ANDERSON, Beacon, N. Y., assignor to New York Rubber Corporation, New York, N. Y., a Corporation of New York. Filed May 3, 1930. Serial No. 449,384. 15 Claims. (Cl. 9—2.)



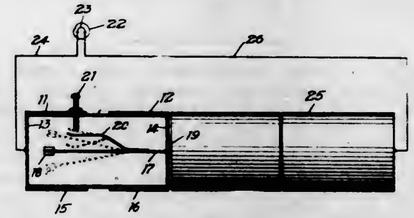
1. The method of making an inflatable boat which consists of forming a pair of longitudinal chambers hinged together at their ends, inflating said chambers, pressing the chambers toward each other about the hinged ends, and securing a sheet of material to the bottoms of the chambers while they are so held, whereby the ends of the boat will turn upwardly.

1,891,492. INFLATABLE OR PNEUMATIC BOAT. AXEL V. ANDERSON, Beacon, N. Y., assignor to New York Rubber Corporation, New York, N. Y., a Corporation of New York. Filed Jan. 9, 1932. Serial No. 585,686. 2 Claims. (Cl. 9—2.)



1. An inflatable boat comprising longitudinally extending chambers hingedly connected at their ends on a common axial line, and inflatable bracing means extending transversely between said chambers for holding the chambers apart.

1,891,493. OSCILLATING PULSATOR. SERGIUS APOSTOLOFF, New York, N. Y. Filed Sept. 2, 1931. Serial No. 560,861. 1 Claim. (Cl. 200—52.)



An oscillating pulsator comprising a housing having an insulatory portion circumferentially disposed and having a metallic portion carried at one end of the insulatory portion for providing external electrical contact and another contact at the other end of said housing electrically separated from the first said metallic portion by the said insulatory portion, a screw projecting through said metallic and insulatory portions radially thereof, and a vibratory member longitudinally positioned within the said housing supported by and in electrical contact with the second mentioned contact and opposed to but normally out of contact from said screw and adapted to vibrate into contact with said screw whereby an electric circuit will be intermittently completed between said metallic portion and said contact.

1,891,494. BINDER CLIP. LOUIS E. BALTZLEY, Glen Ridge, N. J. Filed June 8, 1931. Serial No. 542,711. 9 Claims. (Cl. 24—255.)

1. A binder of the character disclosed, comprising cooperating members having jaw portions and connected hinge portions, said hinge portions meeting in edge to edge relation and having lugs extending beyond such edges and inclined angularly to the outside of the binder, said angularly extended lugs of the two hinge portions being arranged in alternating order to hingedly retain the hinge portions in the edge to edge relation, said hinge portions of the members having spring anchorage lugs extending therefrom at opposite sides of the hinging axis, a compression spring of bowed cross section having inturned flanges at the edges of the same and engaged over

said spring anchorage lugs, and the hinge lugs being angled to the rear of the binder sufficiently to permit hinging movement of the hinge portions past the dead center

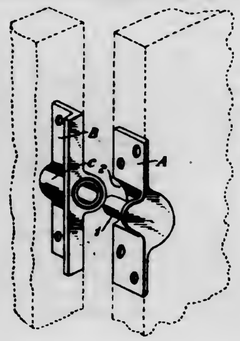


in the jaw opening operation and thereby enabling the compression spring to hold the binder in the open relation as well as in the closed relation.

1,891,495. ALLOY. WILLIAM H. BASSETT, Jr., Scarsdale, N. Y., and ROBERT H. LEACH, Fairfield, Conn., assignors to Anaconda Wire & Cable Company, New York, N. Y., a Corporation of Delaware. Filed Feb. 20, 1931. Serial No. 517,301. 3 Claims. (Cl. 75—1.)

1. An alloy consisting of copper, cadmium and silver, the cadmium content being between approximately one-quarter of a per cent and 1%, and the silver content being between approximately one-eighth of a percent and three-quarters of a per cent.

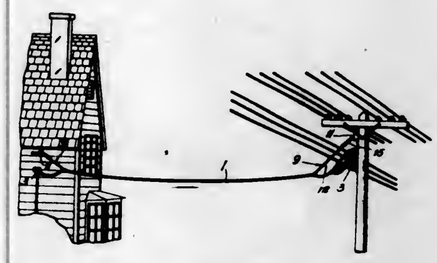
1,891,496. DOOR ATTACHMENT FOR VEHICLES. JOHN SAMUEL BEDFORD, Twickenham, England. Filed Nov. 23, 1931, Serial No. 576,638, and in Great Britain Dec. 1, 1930. 10 Claims. (Cl. 16—86.)



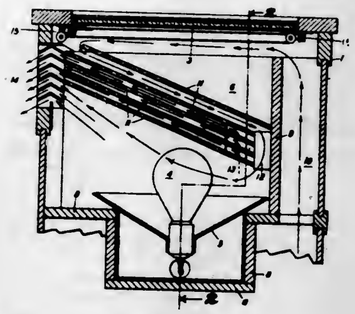
1. An attachment for doors comprising a socket and plug one associated with the moving door itself and the other with the fixed support therefor, a thimble within said socket to engage the plug, a layer of resilient material on said thimble and means for adjusting the effective internal diameter of said thimble.

1,891,497. GRIP. THEODORE BIRKENMAIER, St. Louis, Mo., assignor to W. N. Matthews Corporation, St. Louis, Mo., a Corporation of Missouri. Filed May 15, 1931. Serial No. 537,654. 10 Claims. (Cl. 289—1.)

9. As an article of manufacture, a grip comprising a strand, the portions near the ends of said strand being joined to form a supporting loop, a gripping loop formed by an extension of the strand from the supporting loop, said gripping loop comprising leads completely surrounding a strand to be guyed and helically arranged thereon to effect a tightening on the guyed strand when it is supported by said gripping loop, said gripping loop comprising substantially one turn about the guyed wire.



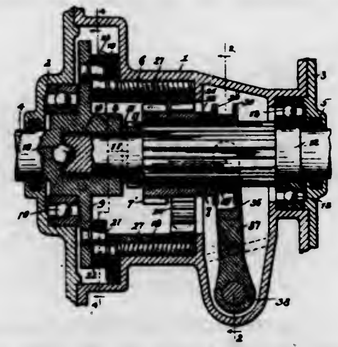
1,891,498. ILLUMINATING CABINET. FRED W. BORDEN, San Francisco, Calif. Filed July 31, 1928. Serial No. 296,529. 9 Claims. (Cl. 40—132.)



1. In an illuminating system for stereoscopes and the like comprising a casing having openings in its sides, a source of light located in the casing, a film support located at the top of the casing, and a plurality of separated transparent inclined sheets located in the casing between the source of light and the support, the said sheets being so positioned that air from the openings in the casing may pass between the sheets.

1,891,499. TRANSMISSION GEARING. HARRY L. BURKHARDT, Cleveland Heights, Ohio. Filed Nov. 30, 1927. Serial No. 236,612. 2 Claims. (Cl. 74—58.)

2. A transmission comprising a driving shaft having an annular flange, an internal driving gear eccentric to the axis of the driving shaft and having an annular flange, means for permanently coupling said flanges for rotation together at all times, splines on the rear end of the driving shaft, a driven shaft, a sleeve splined to said driven shaft concentric therewith and with the driving shaft, a gear carried by said sleeve, and means for moving said sleeve axially of the driven shaft whereby the gear carried by the sleeve may be meshed with the internal gear,

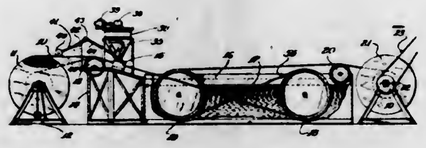


the splines of the sleeve engaged with the driving shaft splines, or the sleeve operatively disconnected from the driving shaft.

1,891,500. EXPLOSIVE COMPOSITION. EDWIN H. BURROWS, Cleveland, Ohio, assignor of one-half to Worthington Hoyt, Cleveland Heights, Ohio. Filed May 2, 1931. Serial No. 534,710. 2 Claims. (Cl. 52—15.)

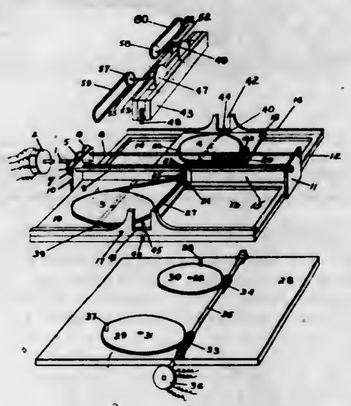
1. An explosive compound consisting substantially of 54 parts ammonium perchlorate, 29½ parts barium nitrate, 1½ parts fine aluminum powder, 9 parts aluminum granules, and 3 parts resin.

1,891,501. METHOD OF COATING INSULATED WIRE OR THE LIKE AND APPARATUS THEREFOR. ALBERT T. CANDY, Jr., Oak Park, Ill., assignor to Candy & Company, Inc., Chicago, Ill., a Corporation of Illinois. Filed Feb. 16, 1932. Serial No. 593,370. 11 Claims. (Cl. 91—70.)



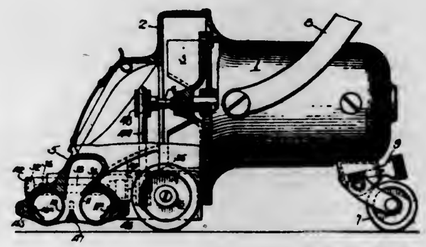
1. The method of coating a wire which consists in first treating the wire to render its surface substantially non-absorbent, then continuously passing a run of the wire, thus treated and at a temperature well below the melting point of the coating material, through a short distance in a body of the melted coating material wherein the relatively cool surface of the wire causes coating material to congeal as a layer thereon, passing the wire with its congealed layer through a discharge bore of considerable length, the diameter of which is larger than the diameter of the wire to be coated by substantially twice the thickness of the desired coating, maintaining the surface of the discharge bore at a temperature higher than the melting point of the coating material to preserve a surface film of still melted material, withdrawing the wire from the discharge bore along with the film of melted coating material surrounding the layer of congealed coating material, the film being so thin that it sets without substantial aberration, and passing the wire from the discharge bore through an intervening air space and into a tempering liquid to set the coating before it touches any wire guiding part.

1,891,502. PLOTTING INSTRUMENT. FRANK N. SAYRE, San Francisco, Calif. Filed Jan. 21, 1927. Serial No. 162,582. 23 Claims. (Cl. 234—26.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)



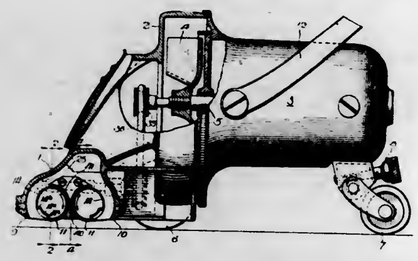
9. In the operation of recording the course of the relative motion of a body and a plane surface, the method consisting of the step of making a plurality of definite movements proportional to the velocity and direction of said motion, the step of resolving said movements into a resultant single movement upon a record, and intermediate said steps varying the rate of movement to be transmitted from one of said intermediate movements to compensate for variable directional conditions.

1,891,503. SUCTION CLEANER. DONALD G. SMELLIE, Canton, Ohio, assignor to The Hoover Company, North Canton, Ohio, a Corporation of Ohio. Filed Dec. 1, 1930. Serial No. 499,134. 10 Claims. (Cl. 15—13.)



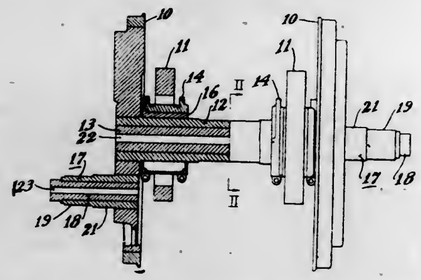
1. A suction cleaner comprising a suction conduit, means to draw a cleaning fluid thru said conduit, a rotary surface-contacting agitator forming a lip of the mouth of said conduit, and means to rotate said agitator, characterized by the fact that said cleaning fluid passes under said agitator in gaining entrance to said conduit.

1,891,504. SUCTION CLEANER. DONALD G. SMELLIE, Canton, Ohio, assignor to The Hoover Company, North Canton, Ohio, a Corporation of Ohio. Filed Jan. 22, 1931. Serial No. 510,413. 10 Claims. (Cl. 15—13.)



1. A rotary agitator for a suction cleaner comprising a smooth-surfaced elongated body, a narrow depressed portion in the surface of said body extending longitudinally thereof, and means to rotatably support said body.

1,891,505. LOCOMOTIVE AXLE AND CRANK PIN AND METHOD OF CONSTRUCTING THE SAME. CHARLES J. SCUDDER, Scranton, Pa. Filed Nov. 3, 1931. Serial No. 572,813. 15 Claims. (Cl. 29—165.)



2. The method of constructing locomotive axles and crank pins which consists in forging solid the member to be constructed, boring out the interior of the member, heat treating the hollow shell thus formed, forging a core to fit the hollow shell, heat treating the core, and without subjecting either of said parts to further heating joining the core to the hollow shell to form a composite structure.

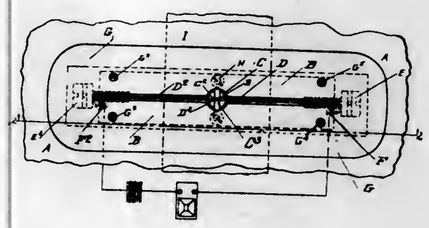
9. In a device of the character described, an outer heat treated shell of relatively hard, ductile resilient steel, and an inner central core firmly mechanically united to the outer shell and comprising separately heat treated steel relatively tougher, stronger and harder than the outer shell.

1,891,506. REPAIR LEAK COMPOUND. NORMAN SOMMERS and ALLEN P. KARR, Philadelphia, Pa. Filed May 28, 1930. Serial No. 456,822. 2 Claims. (Cl. 134—17.5.)

1. A leak repair compound for hot water circulating systems, comprising flaxseed meal, pulverized aluminum, dry sodium silicate, and casein.

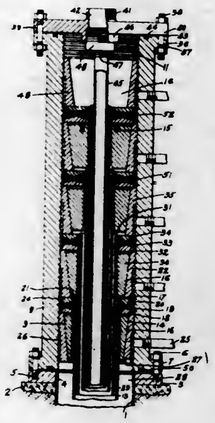
1,891,507. SIGNAL ALARM SYSTEM. CHARLES P. STANBON, Lynn, Mass. Filed Feb. 2, 1932. Serial No. 590,454. 5 Claims. (Cl. 200—137.)

1. In a device of the kind described, an insulation block, two wires mounted upon said insulation block, a slotted post extending from one side of said block, said post having an orifice therethrough at substantially right angles to said slot adaptable to hold the ends of said wires directly and positively in line, the ends of said wires being positioned in said orifice so that said ends are visible at said slot and sufficiently distanced therein to contact with the heat expansion of the wires at any



desired degrees Fahrenheit, said wires extending along said insulation block around the ends thereof to fixed terminals and contacts on the side of said insulation block opposite said post, adjustment screws at the ends of said block, said wires passing beneath the heads of said adjusting screws.

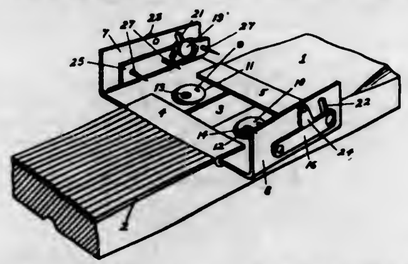
1,891,508. CASING HANGER FOR SUSPENDING AND PACKING STRINGS OF CASING. OSCAR KEZER STEPHENS, San Gabriel, Calif. Filed Apr. 13, 1931. Serial No. 529,782. 15 Claims. (Cl. 166—14.)



1. In a casing head apparatus for deep wells, the combination of a bottom collar having means for securing the same to an outer well casing of relatively large diameter, said collar having a seat on its upper side, a casing hanger body resting on the said seat with means for securing the same, said body having a bore with a thread, a plurality of landing heads having threads and mounted in the threaded bore, and means cooperating with the landing heads for suspending casing strings of progressively smaller diameter.

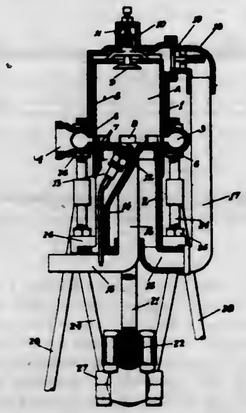
1,891,509. SKI BINDER. RAGNAR I. SVORSTOL, Kent, Wash. Filed Jan. 26, 1932. Serial No. 588,968. 8 Claims. (Cl. 208—184.)

1. In a device of the character described, a base plate adapted to be mounted on a ski, a pair of angular shoe embracing members adjustably mounted on the base plate, pins mounted on each of said shoe embracing members and extending inwardly thereof, a pair of strips pro-



vided with means for attachment to the edges of a shoe sole and having means adapted to pivotally engage the pins carried by said shoe embracing members.

1,891,510. TWO-CYCLE GAS ENGINE. EMMITT M. TUCKER, Sacramento, Calif., assignor to Tucker Diesel Motor Co., Ltd., a Corporation of California. Filed June 23, 1930. Serial No. 463,156. 5 Claims. (Cl. 123—66.)



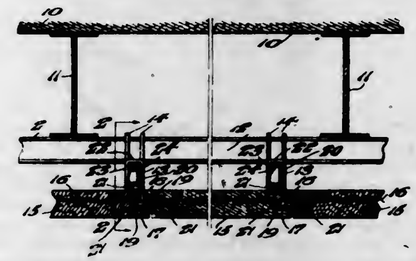
2. In a two-cycle gas engine having a cylinder open on one end, a cylindrical head alined and fixed with and extending beyond the cylinder from the open end thereof, and a sleeve piston slidably engaging the head and cylinder and closed on that end which is within the cylinder; an enclosed chamber formed within the head, a fuel-mixture pipe leading into said chamber and terminating in an open end facing the end of the head which is nearest the head of the piston, and an outlet pipe from the opposite end of the chamber, the cylinder having an intake passage with which said outlet communicates.

1,891,511. BUILDING CONSTRUCTION. FREDERICK M. VENZIE, Philadelphia, Pa. Filed Dec. 20, 1930. Serial No. 503,635. 13 Claims. (Cl. 72—118.)



1. In a ceiling structure of the character stated, floor members of metal having flanged portions, pre-cast ceiling slabs of cementitious material arranged beneath said floor members end to end in abutting relation, said abutting ends having interlocked relation one with another, the sides of said ceiling slabs having longitudinal grooves therein, and metal clips for suspending said ceiling slabs from said floor members, each clip comprising a flat plate having extended therefrom at right angles fingers for engaging in the grooves of said slabs and being notched in a plane above said fingers to engage over the flanged portion of said floor members.

1,891,512. BUILDING STRUCTURE. FREDERICK M. VENZIE, Philadelphia, Pa. Filed May 19, 1931. Serial No. 538,405. 10 Claims. (Cl. 72—118.)



1. A clip of the character stated comprising an integral structure made up of a single blank having a vertical, flat body the bottom of which is provided with oppositely disposed horizontally arranged wings and the top of which body is bent over to form a relatively hook-shaped portion, the pendant portion of which bent-over portion has stamped therefrom an inclined tongue, said body having stamped therefrom oppositely disposed wings arranged in a plane above the first mentioned wings, the combined wings being arranged to accept the ends of adjacent precast ceiling slabs.

1,891,513. FLOOR STRUCTURE. FREDERICK M. VENZIE, Philadelphia, Pa. Filed Nov. 18, 1931. Serial No. 575,838. 4 Claims. (Cl. 72—68.)



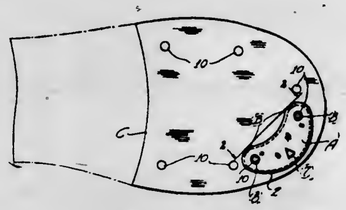
1. In a building construction of the character stated, flanged floor beams, pre-cast slabs the ends of which are cut away to fit over the upper flanges of and be supported by said beams, said slabs having embedded therein longitudinally extended reinforcing rods, the terminals of which rods extend first through the slab ends at an upwardly extending angle entirely free of the beam flange and thereafter are extended verfically beyond a slab end, means for tying together the vertically extended portions of said reinforcing rods of companion slabs, a cementitious fill covering said slabs including said coupled together ends of said reinforcing rods, each slab being provided laterally considered with a notched portion, and a tie-piece accommodated in said notched portions the terminals of said tie-pieces being clamped beneath the undersides of the beam flanges.

1,891,514. PROCESS OF MAKING DIPHENYL. THOMAS E. WARREN, Ottawa, Ontario, Canada, and CHARLES B. DURGIN, Anniston, Ala., assignors to Swann Research, Inc., a Corporation of Alabama. Filed Jan. 9, 1930. Serial No. 419,659. 5 Claims. (Cl. 260—168.)

1. In a process of producing diphenyl, passing benzol vapors through a molten inorganic salt having a melting

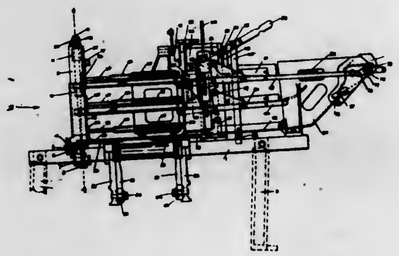
point less than the diphenyl forming temperature, and inert with respect to the benzol vapors and heated to a temperature at which substantial quantities of diphenyl are formed, and condensing the vapors.

1,891,515. WEAR-PLATE FOR SHOE-HEELS AND THE LIKE. LEON WEINSTEIN, St. Louis, Mo. Filed May 31, 1930. Serial No. 457,724. Renewed Dec. 10, 1931. 4 Claims. (Cl. 36—74.)



1. As a new article of manufacture, a wear-plate for shoes comprising a longitudinally bowed bendable body-member, and heel-engaging hooks projecting laterally from one face and at the opposite ends of the body-member, the shanks of the hooks extending in converging relation and the bills of the hooks being disposed in opposed relation outwardly of the bow of the body-member.

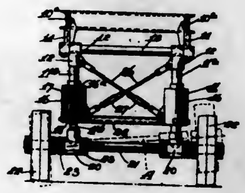
1,891,516. CASE FILLING MACHINE. CHARLES HENRY WILD, Baltimore, Md., assignor to Burt Machine Company, Inc., a Corporation of Maryland. Filed Feb. 23, 1931. Serial No. 517,644. 17 Claims. (Cl. 226—15.)



1. In a machine for filling cases with cans or other packages having feeding means consisting of tracks spaced apart in a substantially vertical direction, and a plunger reciprocating on a path transverse to the feed the plunger carrying an automatically adjustable head, said adjustable head comprising extension members and means to automatically adjust the extreme scope thereof and maintain said adjustment between fixed limits to accommodate varying size containers.

1,891,517. TEMPORARY LOAD SUPPORT FOR SEMI-TRAILERS. LEROY E. WILLIAMS, Edgerton, Wis., assignor to Highway Trailer Company, Edgerton, Wis., a Corporation of Wisconsin. Filed Mar. 4, 1931. Serial No. 520,022. 6 Claims. (Cl. 280—33.1.)

1. A temporary load support for a semitrailer, including a pair of transversely spaced supporting legs carried by the trailer frame and movable to and from operative position, ground-engaging elements carried at the lower ends of said legs, and separate spring means associated with each of said legs and arranged to yield independently of each other, whereby to provide a compensating action so



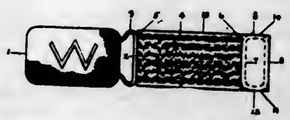
that each of said spring means carries a portion of the trailer load when the legs are in operative position and the trailer is uncoupled from the tractor.

1,891,518. REENFORCEMENT FOR HEAT INTERCHANGERS. KIRK K. WRIGHT, Kenmore, N. Y., assignor to R. G. Wright & Company, Buffalo, N. Y. Filed Dec. 30, 1930. Serial No. 505,570. 15 Claims. (Cl. 220—71.)



1. A vat for a heat interchanger having a plurality of reenforcing bars secured to the sides of said vat and having flanges extending outwardly from said sides and recesses in said flanges, rods extending transversely of said bars and into said recesses, means extending crosswise of the outer ends of said recesses for confining said bars in said recesses and preventing relative movement between said rods and said base, and means for holding the end portions of said bars against movement relatively to said vat.

1,891,519. BELT BUCKLE. WILLIAM BECKER, Chicago, Ill. Filed Dec. 13, 1930. Serial No. 502,231. 1 Claim. (Cl. 267—74.)



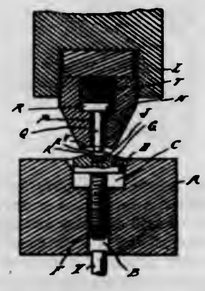
In a belt buckle, a buckle part, a belt clamping means pivoted thereto, a bail secured to said clamping member, an elastic tensioning means secured to said bail comprising a plurality of parallel extending coiled springs, each having one of their ends secured to said bail in spaced relation to each other and held against transverse movement on said bail by soldering said springs thereto, a loop member having the other ends of said springs secured thereto in spaced relation by soldering, said loop forming means for permanently attaching an end of a belt to said buckle, a flexible tubular protecting member enclosing said springs, and a plate member secured to said loop member and spaced therefrom, said flexible tubular member and plate member forming means to retain the free end of a belt projecting beyond said clamping means.

1,891,520. METHOD OF COLORING CELLULOSIC PLASTICS. EDWARD J. BOWLEY, Newark, N. J., assignor to Rubber & Celluloid Products Co., Newark, N. J., a Corporation of New Jersey. Filed Mar. 12, 1930. Serial No. 435,178. 2 Claims. (Cl. 8—5.)



1. The method of coloring an object composed of a cellulosic plastic which consists in dipping the object into a solution of an oil soluble dye in butyl acetate.

1,891,521. APPARATUS FOR FORMING VALVE OR TAPPET HEADS. CLARE L. BRACKETT, Detroit, Mich. Filed Nov. 7, 1929. Serial No. 405,817. 4 Claims. (Cl. 10—26.)

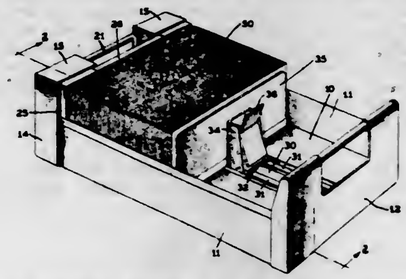


1. Means for effecting the structural integration of a body of relatively soft metal having a depression in its top surface and an inserted slug of harder metal in the depression comprising a holding die adapted to hold inserted the softer metallic body against centrifugal expansion in the presence of pressure applied to the top surface thereof, and a composite die member having a downwardly projecting portion adapted to first yieldingly engage the top of said slug when the die member as a whole descends, after which the impact and continued pressure of the other portion of the composite die member upon the top surface of the positioned soft metal body acts to force its component metal surrounding its bore centripetally into firm holding engagement against the sides of the hard metal slug.

1,891,522. INDEX CARD COMPRESSOR. EARLE C. BULLOCK, Grand Rapids, Mich., assignor to Metal Office Furniture Company, Grand Rapids, Mich., a Corporation of Michigan. Filed Aug. 17, 1931. Serial No. 557,577. 11 Claims. (Cl. 129—26.)

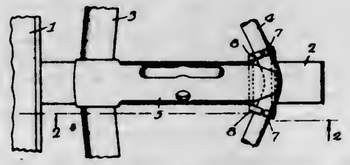
6. In combination, a guiding track, a slide plate mounted thereon, a lever loosely pivoted upon said plate whereby it may oscillate and also have a slight rectilinear movement, a roller upon the lever, said roller being adapted to engage the track, and means for rotating said lever member whereby the roller is moved from engagement with the track.

10. The combination with a drawer adapted to receive cards arranged on edge, of two spaced-apart compressing members adapted to receive said cards between them, means for movably mounted one of said compression members for movement toward or away from the other compression member, means for clamping said movable compression member to the position to which it is adjusted,



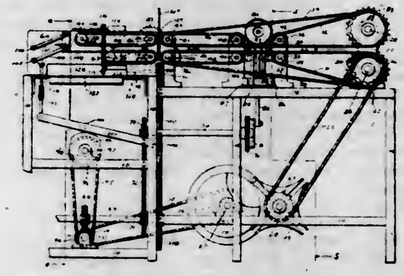
and a yieldable abutment on one of said compression members mounted to yield in a direction opposed to the other compression member, said yieldable abutment being of substantially the same size as the cards and being normally held in parallelism therewith.

1,891,523. BRAKE BEAM SUPPORT. THOMAS L. BURTON, New York, N. Y., assignor to Chicago Railway Equipment Company, Chicago, Ill., a Corporation of Illinois. Filed Jan. 13, 1928. Serial No. 246,572. 6 Claims. (Cl. 188—213.)



5. A brake beam support comprising a rigid, track-engaging rubbing shoe adapted to engage the tension member of the brake beam and having means, including bendable lugs, for rigidly securing the shoe against relative movement upon the brake beam, substantially as described.

1,891,524. POSITIVE FEEDING AND CUTTING DEVICE. EDWARD A. CAPOCEFALO, Syracuse, N. Y., assignor to Sterilek Company, Inc., Brooklyn, N. Y., a Corporation of New York. Filed Mar. 8, 1930. Serial No. 434,436. 4 Claims. (Cl. 164—61.)



1. In a device of the class described, a frame structure, a plurality of pairs of upper shafts and a plurality of pairs of lower shafts, a plurality of sprockets wheels secured on each of these shafts, chains operating on the

sprocket wheels secured on each of said pairs of shafts, a parallel passage formed between the lower parts of the upper chains and the upper parts of all the lower chains, means for causing all the chains to travel in the same direction relative to the passage between them, means for causing the travel of all of said chains to be interrupted at regular intervals, a knife operating between two of the groups of upper and lower chains for severing the material being fed, a descending shelf for receiving the severed part of the material, and means for actuating said knife and shelf in timed relation to the interrupted travel of the chains.

1,891,525. RECEPTACLE. RICHARD H. DIETZ, Jr., Holyoke, Mass. Filed Apr. 14, 1930. Serial No. 443,986. 1 Claim. (Cl. 206—44.)



A package comprising in combination, upper, side and end walls extending upwardly from a lower wall to form a receptacle for a plurality of circular objects in stacked relation between the said end walls with the marginal edges thereof resting on said lower wall and bearing on said side walls, the upper marginal edges of said side and end walls curving from a higher central portion substantially in the plane of the upper side of the articles in the receptacle to relatively lower points at the jointure of the said side and end walls and a wrapper of transparent material around said receptacle and overlying articles in the receptacle which is supported by the central portions of the side and end walls whereby said wrapper is out of contact with articles in the receptacle at either side of the line extending between the higher portions of the end walls.

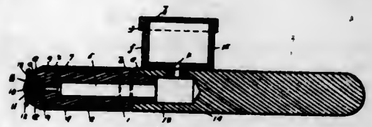
1,891,526. HARVESTER. JOSEPH A. E. DUPUIS, St. Jacques, Quebec, Canada, assignor of one-half to David Dupuis, St. Jacques, Quebec, Canada. Filed Dec. 4, 1930. Serial No. 500,043. 8 Claims. (Cl. 56—25.)



1. In a machine of the character described, a frame, a drive and carrier wheel rotatably associated with the frame in a substantially central position, a rotatable saw mounted horizontally on the forward portion of the frame, a motor mounted on the frame, mechaniam associated with the motor and the drive wheel for driving the latter, an operating connection between the motor and the rotary saw for actuating the latter, a steering roller connected with the rear portion of the frame and an adjustable shoe on the frame, adjacent the saw, to support the front of the machine and regulate the height of the saw above the ground.

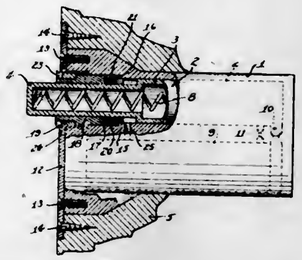
1,891,527. PAINT STRIPING DEVICE. KARL V. EKLOV, Detroit, Mich. Filed Sept. 25, 1930. Serial No. 484,283. 5 Claims. (Cl. 91—62.6.)

1. A paint striping device adapted for striping a plane surface, comprising a suitable casing member formed with a liquid passage channel therein opened at one casing end, a pinned surface cylindrical disc rotatably mounted within the open end of said casing channel positioned with one disc edge projected therefrom, a circumferential disc shield mounted in said channel passage end opening partially inclosing said disc rim, means mounted on the



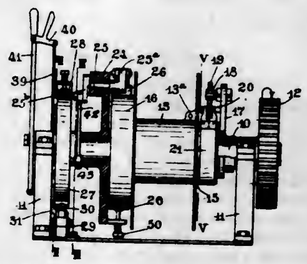
casing member for engaging said disc shield for adjusting same to the disc rim, and means mounted on the casing member for retaining the flowing liquid paint into the liquid passage channel.

1,891,528. PACKING FOR DOORCHECK PLUNGERS. SILAS W. C. FITTS, Alameda, Calif., assignor to The Condor Company, San Francisco, Calif., a Corporation of Nevada. Filed Mar. 17, 1931. Serial No. 523,268. 2 Claims. (Cl. 286—35.)



1. A packing structure for apparatus of the described type having a cylinder, a face plate at one end thereof, and a plunger operable in said cylinder and projecting through said face plate, comprising a ring fixed in said cylinder and surrounding said plunger, a movable bushing spaced from said fixed ring, a flexible packing ring between said bushing and said fixed ring, said flexible ring having a tubular portion, a spring ring having one end face seated against said fixed ring and surrounding said tubular portion for contracting it about the plunger, and a nut for forcing said bushing against said flexible ring, said nut extending through said face plate to an accessible position.

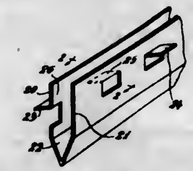
1,891,529. LATCH OPERATING DEVICE FOR POWER SHOVELS. ROBERT G. FAYE, Hilliards, Ohio. Filed June 23, 1930. Serial No. 463,074. 6 Claims. (Cl. 254—187.)



1. In means of the kind described, a power shaft to rotate in one direction, a cable winding drum loose on said shaft, said cable winding drum having a friction

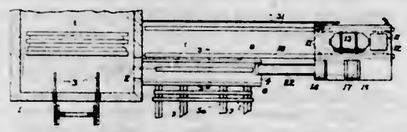
drum, an arm secured to said power driven shaft to rotate therewith, a brake band for application to the perimeter of said friction drum, said band anchored at one end to said arm and resilient means anchoring said band at its other end to said arm, said last named anchored end being, in operation, the advancing end of said brake band.

1,891,530. STRIP FOR TERRAZZO AND SIMILAR FLOORS. PASQUALE GALASSI, New York, N. Y. Filed Feb. 8, 1930. Serial No. 426,883. 10 Claims. (Cl. 94—17.)



1. A dividing strip for terrazzo and like floors comprising in unitary form an open top metal shell adapted for insertion within plastic material, said shell extending for the entire depth of the strip, a filler filling the space within the shell and means for anchoring said filler within said shell.

1,891,531. CHARGING APPARATUS FOR METAL-HEATING FURNACES, AND THE LIKE. JEROME R. GEORGE, Worcester, Mass., assignor to Morgan Construction Company, Worcester, Mass., a Corporation of Massachusetts. Filed Apr. 28, 1931. Serial No. 538,504. 8 Claims. (Cl. 214—18.)



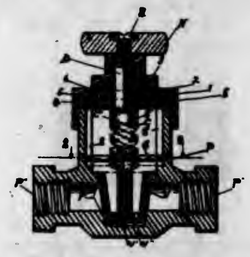
1. In charging apparatus of the class described, the combination with a furnace having a charging opening, of a trough alined with said opening and adapted for the reception and endwise delivery to said opening of elongated pieces of stock, a track alongside said trough and offset therefrom, a carriage movable on said track, and a pusher for engaging the rear ends of said pieces, said pusher being supported by said carriage in overhanging relation to said trough, with its stock-engaging end appreciably nearer to said opening than said carriage.

1,891,532. PROCESS FOR EXTRACTING METALS FROM ORES, MINERALS, AND OTHER MATERIALS. ALLAN ROBERT GIBSON, Bristol, England. Filed Nov. 24, 1930, Serial No. 497,843, and in Great Britain Nov. 29, 1929. 7 Claims. (Cl. 75—18.)

1. A process for extracting metal values from metalliferous materials containing zinc, copper or tin values which comprises leaching the metalliferous material at ordinary temperature and with substantial exclusion of air with a solution containing ammonia and sulphur dioxide, one of the constituents of the solution being in excess according to the metal value it is required to extract.

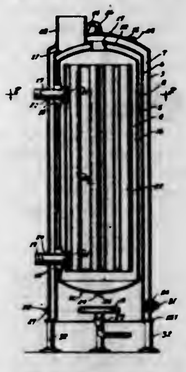
1,891,533. VALVE. JOHN L. GISH, South Bend, Ind. Filed Jan. 15, 1930. Serial No. 420,985. 1 Claim. (Cl. 251—39.)

In a valve, a valve body having a passageway therethrough and a valve seat therein, said valve body being provided with two parallel diametrically arranged vertical grooves extending from near the top line of the valve seat therein to the top line of the said valve body; a hollow plug-type reciprocating valve adapted to engage said seat for controlling said passage-way, said valve having a valve stem projecting perpendicularly from its bottom wall; a removable spindle-bearing bonnet, a non-rising operating spindle within said bonnet, said spindle at its outer end being provided with an operating handle, said spindle at its inner end provided with an integral spirally slotted hollow cylinder shaped section adapted to receive said valve stem in such a manner as to admit of a reciprocating movement within the said hollow cyl-



inder shaped section forming an axial guide for said valve whereby said valve is kept in its working vertical alinement with its valve seat, said valve stem being provided with a guide arm adapted to pass through and engage in a loose running fit the said spiral slots in the said hollow cylinder section, said guide arm at its ends adapted to engage, in a loose running fit, the said vertical grooves in said valve body, thereby forming means to prevent rotation of said valve and impart a stable vertical lift to the said valve, as the said guide arm follows the curve or lead of said spiral slots, when the operating spindle is operated to open the said valve, and a draw bolt adapted to assemble the parts in their respective operative positions.

1,891,534. HEATER FOR LIQUIDS. ANDREW TENNANT GRAY, Los Angeles, Calif., assignor to Pacific Pipe and Supply Company, Los Angeles, Calif., a Corporation of California. Filed Jan. 17, 1931. Serial No. 509,446. 5 Claims. (Cl. 122—33.)



5. An indirect heater for liquids, having an outer jacket, a flue shell within the jacket and spaced from the jacket so as to form a water jacket for the primary water, an outer container for the primary water mounted within the flue shell with its wall spaced therefrom so as to form an annular flue surrounding the outer container, said flue shell having an upper head and said outer container having an upper head adjacent the same, means for directly connecting the heads to support a

portion of the weight of the outer container on the flue shell head, an inner container for the secondary water mounted within the outer container, nipples passing through the walls of said containers and through the outer jacket and flue shell for circulating the secondary water through the secondary container, means for effecting communication between the water jacket and the interior of the outer container, and means for heating the lower end of the outer container.

1,891,535. PAPER OR FIBER CAN. DICKINSON E. GRIFFITH, Lowville, N. Y., assignor to Smith-Lewis Fibre Can Corporation, Lowville, N. Y., a Corporation of New York. Filed Feb. 3, 1930. Serial No. 425,561. 5 Claims. (Cl. 225—5.6.)



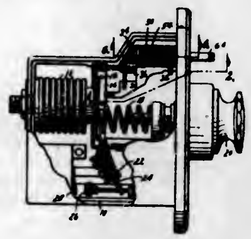
1. The method of forming a paper can comprising forming a tubular side wall consisting of two thicknesses of paper, forming an end wall by the provision of two disks having their edges flanged and in contact with each other, the outer flange being of an external diameter approximately the same as the internal diameter of the side wall of the can, inserting the end wall within the side wall, forming the lower edge of the side wall with an internally extending bead lying upon itself adjacent the edge of said flanges on the end wall and then molding the beaded portion of the side wall about and with the lower edges of the flanges on the end wall to form a composite bead consisting of the bead on the side wall, a portion of the side wall adjacent said bead and a portion of the flanges on the end wall.

1,891,536. TEMPORARY CONTROL DEVICE FOR SWITCH MECHANISM. MALCOLM E. HENNING, Des Moines, Iowa, assignor to Penn Electric Switch Co., Des Moines, Iowa, a Corporation of Iowa. Filed Apr. 23, 1929. Serial No. 357,393. 9 Claims. (Cl. 200—83.)



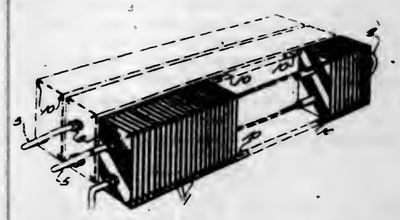
1. For use with a switch operable as a result in the change of temperature and initially set at a predetermined degree, means for changing the temperature point of operation of said switch comprising a manually operable control arm, a plate adjacent said arm, said arm being movable in a plane parallel with said plate, said plate having a slot therein, a control handle on said arm and depressible relative thereto, said control handle extending through said slot, a pin carried by said arm and slidable relative thereto, means constraining said pin toward said plate and spaced openings in said plate for said pin to selectively enter, said control handle being operatively connected with said pin to retract it from any one of said openings when said handle is depressed.

1,891,537. AUTOMATIC CONTROL SWITCH. MALCOLM E. HENNING, Des Moines, Iowa, assignor to Penn Electric Switch Co., Des Moines, Iowa, a Corporation of Iowa. Filed July 29, 1932. Serial No. 625,780. 15 Claims. (Cl. 74—14.)



1. For use with a control mechanism including a cyclically operated movable member, means for temporarily modifying the operation of a device controlled by said control mechanism comprising an actuating member to be moved by said movable member, a spring loaded toggle pin, a pair of toggle levers interposed between said pin and said actuating member and means engaging one of said toggle levers to impart pivotal movement thereto past alined position when said toggle pin is moved against the action of the spring loading it.

1,891,538. EVAPORATOR. FREDERICK W. HICKS, Detroit, Mich., assignor to McCord Radiator & Mfg. Co., Detroit, Mich., a Corporation of Maine. Filed Dec. 26, 1931. Serial No. 583,332. 7 Claims. (Cl. 257—248.)



1. An evaporator of the character described, comprising a conduit, a multiplicity of relatively flat fin plates secured to the conduit in spaced relation along the same, said plates extending outward from the conduit and being in a form having corners, said plates having a kerf or slot in each of the corners thereof, and flat strips secured to the plates in said slots for holding the outer edges of the plates properly spaced.

1,891,539. DRAWING ROLL COUPLING. OSCAR L. HONNORS, Whitinsville, Mass., assignor to Whitin Machine Works, Whitinsville, Mass., a Corporation of Massachusetts. Filed Mar. 16, 1931. Serial No. 522,922. 1 Claim. (Cl. 19—141.)

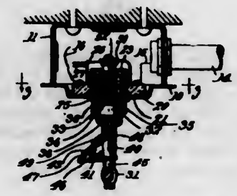
In a textile drawing roll, roll sections having axial openings at the opposite ends thereof, each comprising

an outer cylindrical recess, a straight intermediate internally threaded portion and an inner cylindrical recess, the inner end walls of said inner recesses being spaced apart at a predetermined distance, and a coupling member having a middle cylindrical bearing portion, straight threaded portions adjacent said bearing portions



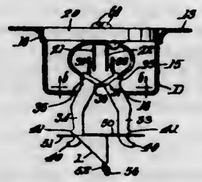
and cylindrical end portions, the overall length of said coupling member being accurately predetermined and the ends of said coupling member seating firmly against the inner end walls of said inner recesses, but the ends of said bearing portion being substantially spaced from the inner ends of said outer recesses.

1,891,540. CONTROL DEVICE FOR ALARM MECHANISM. CLIFTON P. HOWARD, Worcester, Mass., assignor to Rockwood Sprinkler Company of Massachusetts, a Corporation of Massachusetts. Filed May 19, 1931. Serial No. 538,493. 10 Claims. (Cl. 200—142.)



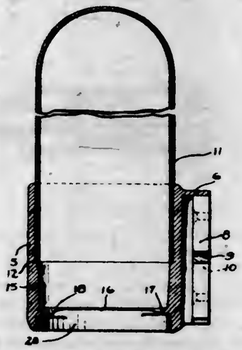
1. A control device to be supported by a junction box having a cover plate with an opening therethrough, said control device comprising a ring of non-conducting material aligned with said opening, a cup-shaped member extending through said ring and said opening and securing said ring and plate together, contact members mounted on said ring and at opposite sides of the opening therein, with one of said members extending outside of and across the bottom of said cup-shaped member, a plunger extending through said cup and having a bearing in the inner end of said cup, said plunger engaging said contact member, and means acting normally to force said plunger against said contact member and to thereby hold said contact members in a predetermined relation.

1,891,541. CONTROL DEVICE FOR ALARM MECHANISM. CLIFTON P. HOWARD, Worcester, Mass., assignor to Rockwood Sprinkler Company of Massachusetts, a Corporation of Massachusetts. Filed May 19, 1931. Serial No. 538,494. 6 Claims. (Cl. 200—142.)



1. A control device for alarm mechanism comprising a non-conducting support, contact members mounted on said support, a pair of toggle levers having portions adapted to engage said contact members, a spring having its ends in engagement with said levers and forming the entire and floating support for said levers, said spring tending to move said levers to change the operative relation of said lever portions and contact members, and heat-releasable means normally preventing such movement of said levers by said spring.

1,891,542. DRINKING CUP DISPENSER. ERNEST HUFF, Milwaukee, Wis., assignor to American Lace Paper Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed Mar. 5, 1931. Serial No. 520,201. 9 Claims. (Cl. 312—43.)

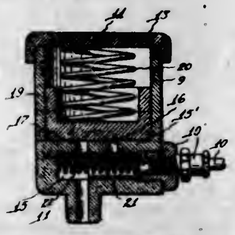


1. A dispensing device comprising a sleeve having a stack receiving portion, a cup delivering portion of greater diameter than said stack receiving portion, circumferentially spaced means between said portions adapted to engage the marginal bead portion of the lowermost cup of a stack, said sleeve being recessed intermediate said cup engaging means to receive bead portions of a single cup passing said means.

1,891,543. METHOD OF PRODUCING MONONITRODIPHENYLS. ERNEST H. HUNTRESS, Cambridge, Mass., and CAMPBELL R. MCCULLOUGH and CHARLES F. BOOTH, Anniston, Ala., assignors to Swann Research, Inc., a Corporation of Alabama. Filed Mar. 13, 1929. Serial No. 346,802. 12 Claims. (Cl. 260—142.)

1. The process of producing mononitrodiphenyls which consists in providing a suspension of diphenyl in an acid solution containing nitric acid and of a strength below that at which substantial nitration of the diphenyl occurs, and adding to the suspension concentrated sulphuric acid to bring about a reaction between the nitric acid and the diphenyl.

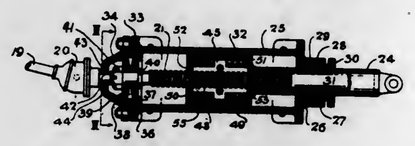
1,891,544. LUBRICATING DEVICE. LEONARD R. KERNS, Chicago, Ill., assignor to Lubrication Devices Incorporated, Battle Creek, Mich., a Corporation of Michigan. Filed Feb. 23, 1929. Serial No. 341,959. Renewed Apr. 6, 1932. 6 Claims. (Cl. 184—7.)



1. A lubricating device comprising a reservoir, a gun in communication therewith, a pump including a body and a piston reciprocable therein, said body having loading and discharge passages in advance of said piston, a con-

nection from said gun to said loading opening, a spring behind said piston and tending to move the latter towards said passages, and means for obstructing said loading opening by relief of loading pressure therein and for obstructing said discharge opening by pressure in the loading opening, said valve being dimensioned to close either of said passages completely before permitting flow through the other passage.

1,891,545. REVERSE GEAR MECHANISM. JULIUS KINDERVATER, Great Neck, N. Y. Filed Dec. 29, 1930. Serial No. 505,325. 2 Claims. (Cl. 24—40.)



1. In a reverse gear mechanism, the combination of a fixed casing; a reciprocable non-rotatable power rod having a hollow end portion extending into said casing at one end thereof and engaging the walls of the casing to permit sliding reciprocable movement, said hollow portion being provided interiorly with spaced spring seats; a nut disposed within said hollow portion; means preventing said nut from rotating while permitting limited longitudinal movement relative to said rod; means on said nut providing spring seats spaced respectively from and opposite to the first mentioned spring seats; helical springs disposed within said spaces having their respective ends abutting oppositely disposed seats to provide a resilient driving connection between said nut and said rod and adapted to resiliently resist end thrusts from said rod; a rotatable shaft extending within said casing through the opposite end thereof and having a threaded portion engaging the threads of said nut; a thrust bearing for said shaft engaging said casing and permitting rotation of said shaft but preventing longitudinal movement thereof, whereby by the rotation of said shaft said rod will be moved longitudinally; and power means for rotating said shaft.

1,891,546. BRAZING ROD. OTTMAR M. KREMBS, Glencoe, Ill. Filed Sept. 24, 1928. Serial No. 307,883. 3 Claims. (Cl. 113—110.)



1. A brazing rod consisting of a loose mass of flux and a thin strip of metal folded around to enclose the mass, the strip being folded longitudinally into a hollow rectangular section with the edges adjacently disposed at one side of the rod, and a second strip of metal folded tightly around the rod formed by the inner strip and said mass with the edges brought together on the opposite side of the rod so that the sheath formed by the outer strip prevents the inner sheath from spreading and opening up at the edges.

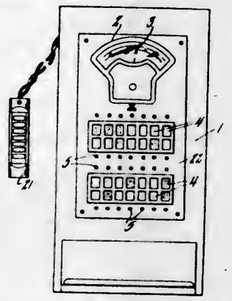
1,891,547. AUXILIARY OPERATED GOVERNING VALVE. WILLIAM F. KRICHBAUM, Millburn, N. J. Filed July 2, 1930. Serial No. 465,270. 2 Claims. (Cl. 137—153.)

1. An auxiliary governing valve including a casing having a main valve, pressure responsive means for moving said main valve, means for conducting intake pressure to said pressure responsive means including an auxiliary valve having a stem one end of which projects through an opening in said casing into a chamber, a yielding control member in said chamber for exerting pressure upon said end of the stem, means for conducting discharge pressure to said chamber at one side of said yielding control member, means for exerting pressure on the other side of said yielding control member, a bellows support imperviously seated in said chamber around said opening, a top plug in said chamber clamping said support im-



perviously in place and providing an interior slideway with a stop near the control member, a head in said slideway adapted to engage said stop and project therebeyond to abuttingly engage the control member, and a cup-shaped flexible bellows between said stem and said slidable head enclosing said end of the stem and having its edges imperviously connected to said support.

1,891,548. SWITCH MEANS FOR TELETHERMOMETERS. CARL H. KUHLMAN, Toledo, Ohio, assignor to The American Temperature Indicating Company, Toledo, Ohio, a Corporation of Ohio. Filed Dec. 23, 1929. Serial No. 415,991. 12 Claims. (Cl. 200—7.)

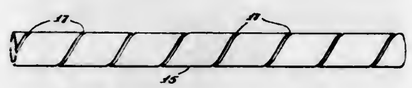


1. A pair of terminals, means for flexing one to contact the other for circuit closing therebetween, a container mounted on said flexing terminal for movement therewith and having a pair of terminals, and mercury located during said flexing to close a circuit between said container terminals during the movement of said three terminals.

1,891,549. TREATMENT OF ALUMINUM ALLOYS. NORMAN B. LANE, Niagara Falls, and WILLIAM T. ENNOR, Massena, N. Y., assignors to Aluminum Company of America, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Dec. 3, 1930. Serial No. 499,847. 2 Claims. (Cl. 148—211.)

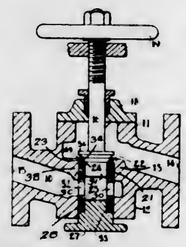
1. A method of producing an improved wrought article formed from an aluminum base alloy which comprises plastically deforming the metal of said alloy by a series of metal working operations and immersing the partially formed article in a caustic solution prior to the final metal working operation.

1,891,550. METHOD OF MAKING GOLF CLUB GRIPS. GEORGE L. LAWRENCE, Melrose, Mass., assignor to Tyler Rubber Company, Andover, Mass., a Corporation of Massachusetts. Filed Feb. 17, 1931. Serial No. 516,330. 2 Claims. (Cl. 18—61.)



1. The method of manufacturing rubber golf grips, which comprises the steps of extruding a seamless rubber tube, mounting said tube in its uncured condition upon a mandrel, spirally winding a cord throughout the length of said uncured tube under sufficient pressure to indent said cord in said uncured tube, curing said tube, and then removing said cord.

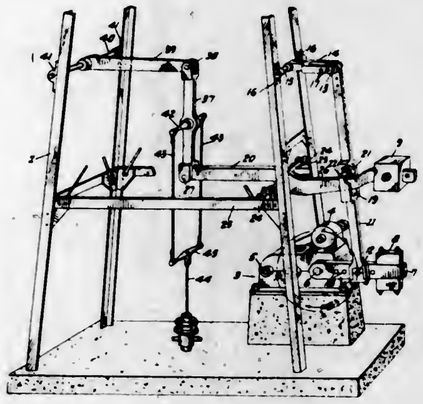
1,891,551. STOP VALVE FOR STEAM OR OTHER FLUIDS AND LIQUIDS. HAROLD LYALL MASON, Hampstead, London, England. Filed Nov. 24, 1926, Serial No. 150,590, and in Great Britain Dec. 1, 1925. 3 Claims. (Cl. 277—33.)



. 1. A valve for steam and other fluids and liquids having multiple closures in different planes, one of which is formed by a closure member and a seating and another by an imperforate piston forming part of the closure member and moving into and out of fluid tight sliding contact with an adjustable yielding packing element compressible from without the valve in the direction of the gland; the packing element comprising a plurality of packing rings at opposite ends of and supported by a cage member through which the fluid can flow.

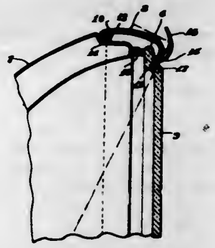
1,891,552. QUICK RETURN STRAIGHT LINE PUMP JACK. FRED B. MCCROSKY, Walnut Park, Calif. Filed Dec. 18, 1931. Serial No. 581,826. 9 Claims. (Cl. 74—14.)

1. In a quick return stroke construction for pumps, a driving shaft, a crank fixed to said shaft, a pitman having one of its ends operatively connected with said crank to be reciprocated thereby, a link adjustably and pivotally connected with the other end of said pitman, a support whereon said link is pivotally mounted, a polish rod, a walking beam pivotally supported between its ends, its inner end being connected with said polish rod and having its outer end portion extending transversely and loosely through said pitman, said pitman having a shifting engagement with the outer portion of said walking beam to regulate the upstroke of the pump, said shifting engagement being nearest to the pivotal support of



said walking beam during the down stroke of the pump to permit an accelerated down stroke, and means adapted to operatively connect the inner end of said walking beam with said polish rod.

1,891,553. ATTACHMENT FOR HEADLIGHTS. THOMAS J. H. PEIRCE, Providence, R. I., assignor to Lewis R. Smith, Receiver of The Apco Mossberg Corporation, a Corporation of Massachusetts. Filed June 23, 1931. Serial No. 546,207. 1 Claim. (Cl. 240—8.4.)

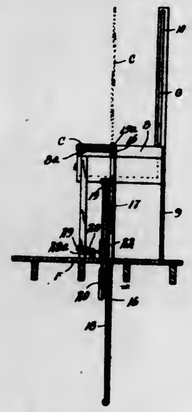


An attachment for headlights comprising a spring member, having a body portion folded to hook with the forward end of the headlight rim, a pair of bowed arms projecting rearwardly from said body portion, a crooked end on each of said arms to engage with the rear edge of the headlight rim, said crooked ends and folded body portion forming a clip, an upwardly and forwardly extending adjustable curved reflecting member integral with said body member and having an opening in the lower part thereof through which light from the headlight passes to illuminate the upper part of said curved reflecting member, whereby light may be reflected rearwardly.

1,891,554. HOLDUP PROTECTION DEVICE. THOMAS F. ROBINSON, Rye, N. Y. Filed June 8, 1931. Serial No. 542,818. 6 Claims. (Cl. 20—1.01.)

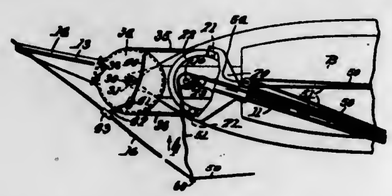
1. In protective apparatus of the class described, a bullet-proof curtain, means for anchoring the lower edge of said curtain to a support, weight-actuated means connected with the upper edge of said curtain for suddenly raising the same into vertical position, a pair of hori-

zontally extending retaining elements for retaining said weights in position to operate, thrust elements interposed between said retaining elements for holding the same



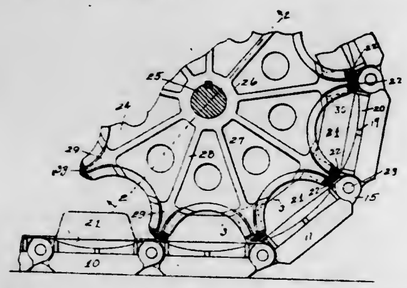
apart in operative retaining position, said thrust elements including a removable spaced and means for dislodging said spacer to operate said curtain.

1,891,555. MECHANISM FOR ANGULAR ADJUSTMENT OF THE BOWSPRIT OF A SAILBOAT. GEORGE I. ROCKWOOD, Worcester, Mass. Filed June 10, 1932. Serial No. 616,510. 11 Claims. (Cl. 114—39.)



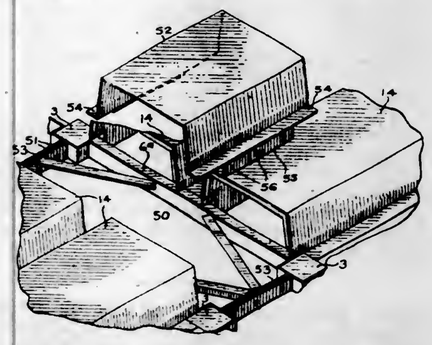
1. In a sailboat having a mainmast, a mainsail, a boom for said sail, a jib and a jib-stay, in combination, a bowsprit to which the forward lower end of the jib-stay is secured, and means to move said bowsprit and mainsail boom simultaneously.

1,891,556. TRACTOR TREAD. GEORGE T. RONK, Cedar Rapids, Iowa. Filed Feb. 28, 1928. Serial No. 257,774. 5 Claims. (Cl. 74—31.)



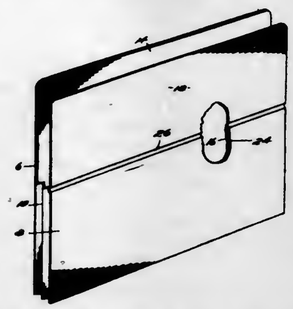
1. A tread for tractors comprising a tread member formed of a series of pivoted shoes, a sprocket wheel having spaced teeth for supporting and imparting movement to said tread member, each of the teeth of said wheel having its contact surfaces provided with radially projecting pockets and its outer end beveled transversely, each of said shoes being provided with inwardly extending lugs for entering said pockets, and ribs for engaging the beveled faces of said teeth when the tread member is being passed around said sprocket wheels.

1,891,557. APPARATUS FOR LAYING CONCRETE FLOORS. HENRY W. ROOS, Cincinnati, Ohio. Filed Jan. 17, 1930. Serial No. 421,489. 7 Claims. (Cl. 25—131.5.)



1. An apparatus for laying concrete floors comprising a plurality of frames adapted to be supported at their corners on temporary supports, and a plurality of dome-shaped forms mounted on each of said frames spaced from each other to form joists between them and flush with the ends of said frames so that the forms on adjacent frames lie in close contact with each other and cooperate to form continuous domes.

1,891,558. FILE FOLDER. FRANK E. RUPP, Kansas City, Mo., assignor to Wilson-Jones Company, Chicago, Ill., a Corporation of Massachusetts. Filed Feb. 23, 1932. Serial No. 594,421. 6 Claims. (Cl. 129—16.7.)

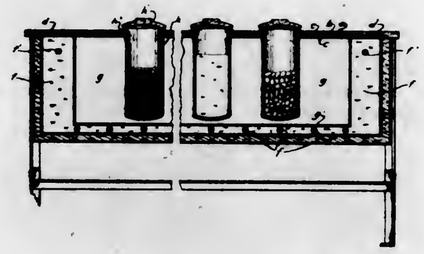


2. In a file folder, a pair of side walls; folding ends and a bottom connecting said walls; a reenforcing sheet secured to one of said walls; a flap created by the extension of the reenforced wall beyond said sheet; and a bead formed by the said flap adjacent the upper edge of said reenforcing sheet and overlying the said edge.

1,891,559. SALAD TABLE. MARGARET RYAN, Portland, Oreg. Filed Mar. 24, 1928. Serial No. 264,544. 4 Claims. (Cl. 62—95.)

1. A cooling cabinet provided with a top made of insulating material, the upper face of which is formed to

constitute a table, an enclosed continuous, air-filled cooling chamber arranged immediately beneath said top, a plurality of readily removable open-mouthed containers extending above, and depending from, said top, the mouths of said containers extending upwardly from said top and



provided with removable covers, said containers being relatively thick-walled and having a substantial factor of heat retention to enable them, when removed from said depending position within said cooling chamber, to tend to prevent temperature fluctuation within said containers.

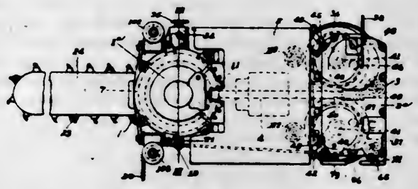
1,891,560. PISTON RING CONTRACTOR. THEOPHILUS R. LAWRENCE, Oakland, Calif. Filed Dec. 10, 1931. Serial No. 580,137. 4 Claims. (Cl. 29—86.4.)



1. A piston ring contractor comprising a contractible collar, a chain secured to one end of said collar for contracting the latter when pulled circumferentially thereof, means secured to said collar for engagement with said chain to hold the collar contracted, and tongs for tightening said chain, one jaw of said tongs being engageable with the chain, the collar being provided with means to engage the other jaw of the tongs.

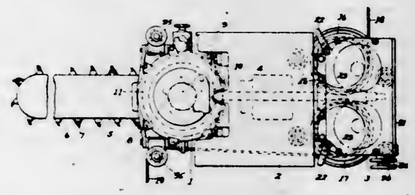
1,891,561. COAL CUTTING MACHINE. NILS D. LEVIN, Columbus, Ohio, assignor to The Jeffrey Manufacturing Company, Columbus, Ohio, a Corporation of Ohio. Filed Nov. 1, 1928, Serial No. 316,584. Renewed Apr. 10, 1931. 51 Claims. (Cl. 262—30.)

24. In a mining machine, the combination with a frame adapted to be moved over a mine floor, a motor mounted on said frame, a pair of drums mounted on said frame, a rotatable drive element for one of said drums, power connections between said motor and said drive element



for rotating the latter in either direction, and constant direction driving connections between said drive element and the other of said drums.

1,891,562. COAL CUTTING MACHINE. NILS D. LEVIN, Columbus, Ohio, assignor to The Jeffrey Manufacturing Company, Columbus, Ohio, a Corporation of Ohio. Filed Nov. 1, 1928, Serial No. 316,585. Renewed Oct. 7, 1931. 30 Claims. (Cl. 262—30.)



1. In a machine of the class described, the combination with a frame adapted to rest upon and slide in any direction over the floor of a mine, of mining mechanism mounted thereon, feeding and guiding mechanism comprising two flexible draft elements adapted to cooperate with anchoring devices external of the machine, two winding drums mounted for rotation about vertical axes and adapted to wind said draft elements, and optionally controlled power actuated means to cause rotation of either or both of said drums in a winding direction either simultaneously or separately at either of two speeds or to cause the simultaneous rotation of the drums each at a different speed as and for the purpose set forth.

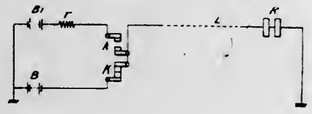
1,891,563. BOLT AND NUT LOCK. NICHOLAS RICHARD LILLIG, Portland, Oreg., assignor to Tice Lock-Washer Manufacturing Co., Portland, Oreg., a Corporation of Oregon. Filed Apr. 25, 1930. Serial No. 447,331. 2 Claims. (Cl. 151—35.)



1. A lock washer comprising a disk having a bolt hole surrounded by a continuous annular body which is provided with a pair of longitudinal slits merging with outwardly extending slits at the proximate ends of said longitudinal slits, thereby defining a pair of jaws and a tongue located between the proximate ends of said jaws and sepa-

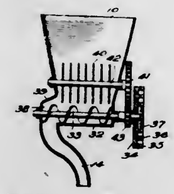
rated therefrom, said jaws being offset from opposite faces of said disk whereby the ends lie a distance beyond said faces, said jaws and said tongue together extending through an arc of ninety degrees, said disk having a second pair of longitudinal slits merging with outwardly extending slits at the remote ends of said longitudinal slits, thereby defining a second pair of jaws, and a tongue-like portion located between the proximate ends of said jaws and integral therewith, said second pair of jaws being offset from opposite faces of said disk whereby their free ends lie a distance beyond said faces, said second pair of jaws and said tongue-like portion together extending through an arc of ninety degrees and diametrically opposite the first mentioned arc, the remaining 180 degrees of the washer disk being uninterrupted and said jaws lying a greater distance from the center of the disk than the lesser diameter of the nut with which the washer is to be used and lying a lesser distance from the center of the disk than the maximum diameter of the said nut.

1,891,564. CIRCUIT ARRANGEMENT FOR TELEGRAPHIC APPARATUS. LEANDRO MAZZA, Florence, and ROMUALDO REGNONI, Rome, Italy. Filed Sept. 10, 1931, Serial No. 562,182, and in Germany Mar. 6, 1930. 8 Claims. (Cl. 178—3.)



1. In a telegraph apparatus, a telegraph line, a main battery connected to said line, an auxiliary battery also connected to said line and both batteries being grounded at opposite poles, a sending device for transmitting current impulses over said line, means controlled by said sending device for changing over the line from the main battery to the auxiliary battery and vice versa without interrupting the current passing through said line at each operation of the sending device.

1,891,565. FERTILIZER DISTRIBUTOR. CHRISTOPHER C. MAY and VERNON H. WHITTEN, Bodcaw, Ark. Filed July 24, 1930. Serial No. 470,513. 2 Claims. (Cl. 275—2.)



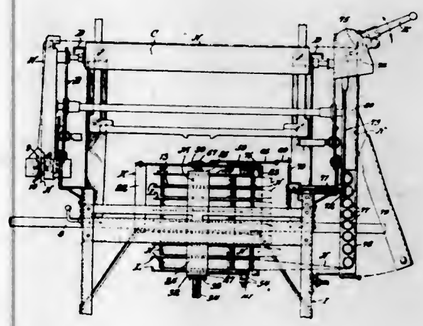
1. A fertilizer distributor comprising the combination with a portable hopper having inwardly inclined walls, of a discharge chamber at one side of the bottom of said hopper, a downwardly inclined top wall for said chamber, a screw conveyor for discharging material from the bottom of the hopper terminating in the discharge chamber adjacent the bottom of the inclined wall, and a discharge spout extending from the bottom of the chamber.

1,891,566. FLEXIBLE HINGE RING. SPENCER W. McKELLIP, Philadelphia, Pa., assignor to Philadelphia Storage Battery Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Jan. 7, 1932. Serial No. 585,372. 7 Claims. (Cl. 181—31.)



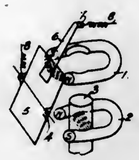
1. A corrugated supporting ring for sound reproducing diaphragms composed of rubberized paper.

1,891,567. MANIFOLDING ATTACHMENT. WILLIAM O. MICHELSEN, Woodhaven, N. Y., assignor to Royal Typewriter Company, Inc., New York, N. Y., a Corporation of New York. Filed July 9, 1931. Serial No. 549,772. 39 Claims. (Cl. 197—153.)



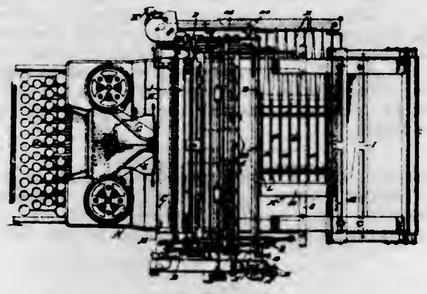
1. In a typewriting machine, the combination with a rotatable ribbon spool including a disc, of ribbon feeding means, means directly engaging one face of the disc for tensioning the spool against feeding rotation, and means for actuating the ribbon feeding means and concomitantly increasing the tension of the tensioning means to lock the spool against feeding rotation.

1,891,568. MAGNETICALLY OPERATED APPARATUS. JOHN NEVILLE MORRIS, London, and MURRAY DUNCAN SCOTT, Enfield, England. Filed Mar. 27, 1930, Serial No. 439,425, and in Great Britain July 25, 1929. 17 Claims. (Cl. 172—126.)



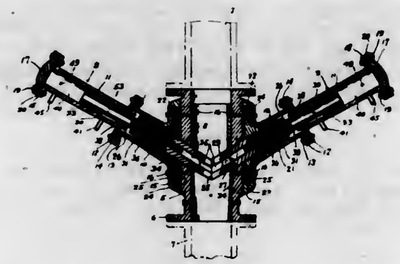
1. In a magnetically operated relay the combination of two permanent magnets spaced apart from one another and each having an air gap, a magnetically attractable armature mounted to respond to variations in the leakage fields across the said air gaps, and a body of magnetic material which is movable for alternately shunting the magnetic fields across the said air gaps of said magnets, whereby the leakage fields of said magnets are alternately decreased with respect to each other to effect actuation of the armature.

1,891,569. MANIFOLDING ATTACHMENT. LEWIS C. MYERS, Freeport, and GEORGE F. HANDLEY, Glendale, N. Y., assignors to Royal Typewriter Company, Inc., New York, N. Y., a Corporation of New York. Filed June 27, 1931. Serial No. 547,382. 41 Claims. (Cl. 197—153.)



1. In a typewriter, a rotatable ribbon spool including a peripheral member, ribbon feeding means, means for tensioning the spool against feeding movement, normally ineffective means, separate from the tensioning means adapted to cooperate with the periphery of said member to lock the spool against feeding movement, and means for actuating the ribbon feeding means and concomitantly rendering said locking means effective.

1,891,570. TWIN PRESSURE VALVE. ORVAL E. NELSON, Crosby, Tex. Filed Apr. 15, 1932. Serial No. 605,509. 4 Claims. (Cl. 166—15.)



1. A safety valve for oil wells and the like comprising a casing adapted to be secured to the well casing in alinement therewith and provided with diametrically opposed openings, outwardly projecting upwardly inclined cylinders alined with said openings, a fixed guide in one end of each cylinder, an outer hollow valve plunger arranged to reciprocate in each of the guides, a hollow valve stem connected with each plunger and opened at its ends, a piston on each stem, an inner valve plunger slidable in each of said hollow plungers, elastic means normally retaining each inner plunger retracted, and valved conduits connecting the cylinders on relatively opposite sides of the respective pistons with the casing and with an outside source of pressure supply.

1,891,571. PRINTING PROCESS EMPLOYED IN COLOR PHOTOGRAPHY. LESLIE WALTER OLIVER and WILLIAM GEORGE CLARE, London, England, assignors to Colour Photographs (British and Foreign) Limited, London, England, a British Company. Filed June 2, 1931, Serial No. 541,686, and in Great Britain June 23, 1930. 5 Claims. (Cl. 95—2.)

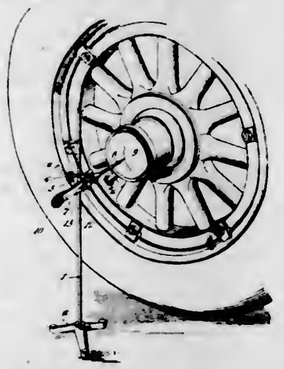
1. In a color-photographic printing process in which relief images obtained by differential hardening are formed on colloid layers, a method of transferring the developed image from a temporary support of regenerated cellulose to a final base of another material which consists in soaking the image-bearing sheet in water until fully swollen, then mounting it face downwards upon the final support using a dilute solution of gelatine as a mountant, partially drying the sandwich, then immersing it in a dilute solution of a gelatine hardening agent, and finally stripping off the development support.

1,891,572. ELECTRIC FILLING FEELER FOR LOOMS. ALEXANDER OTT, Scranton, Pa. Filed Sept. 30, 1930. Serial No. 485,514. 2 Claims. (Cl. 139—273.)



1. In an electric circuit closer for looms, the combination with the shuttle a bobbin held therein, an elongated metallic cylinder on the base of the bobbin, a conductor member contacting an exterior part of the cylinder and forming part of an electric circuit, a bracket supported by the shuttle and located therein, and forming a part of the electric circuit, and a longitudinally extending row of spaced resilient fingers formed of very light stock, attached to the bracket and extending at right angles to the cylinder and having portions thereof bearing transversely against portions of the cylinder when the thread is withdrawn from those portions of the cylinder located opposite the fingers.

1,891,573. CASTER GAUGE TARGET. CLYDE H. PHELPS, Mount Vernon, N. Y., assignor to Riess Manufacturing Company, Kokomo, Ind., a Corporation of Indiana. Filed Sept. 21, 1931. Serial No. 564,193. 3 Claims. (Cl. 33—203.)

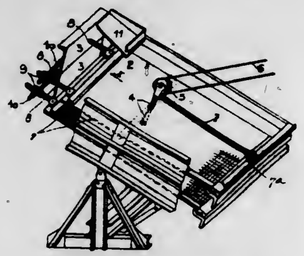


1. A target comprising a support, and an index bar vertically adjustable upon the support and mounted for pivotal movement in a vertical plane, the bar being provided with a pointer at one end and with a sighting emblem on its side at its opposite end.

1,891,574. VIBRATING SIFTING SCREEN. FRÉDÉRIC PIRLOT, Ixelles, Belgium. Filed July 26, 1930, Serial No. 470,981, and in Belgium Aug. 3, 1929. 3 Claims. (Cl. 209—346.)

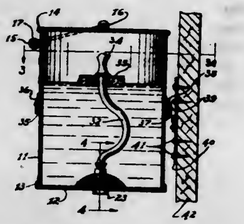
1. A sifting apparatus comprising a fixed frame, sieves therein, a rotatable unbalanced weight, a pivoted lever for

supporting the axis of said rotatable unbalanced weight, means for rotating the latter and rods between the pivoted lever and the sieves disposed substantially perpen-



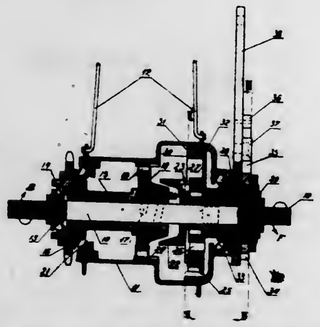
dicular to the latter for transmitting directly to the latter the vibration of the pivoted lever in a direction perpendicular to the plane of these sieves.

1,891,575. CALF FEEDER. NIKOLAIS DAVID PITTSON, Hanna, Alberta, Canada. Filed Dec. 10, 1930. Serial No. 501,357. 4 Claims. (Cl. 119—71.)



1. A calf feeder including the combination with a receptacle having a central opening in its bottom of a rigid tube carried in said opening and provided with inlet openings in its sides while its lower end is closed; a strainer mounted over said tube within said receptacle; a flexible tube connected with the first mentioned tube; a float carried on said flexible tube; a nipple carried on the said flexible tube above said float; and means for holding said receptacle in upright position on a stationary support.

1,891,576. REVERSE GEAR FOR CYCLES. GEORGES POIRIER, St.-Symphorien, France. Filed Nov. 20, 1930, Serial No. 496,987, and in France Nov. 28, 1929. 3 Claims. (Cl. 192—6.)



1. In a transmission system for hand-propelled or foot-propelled vehicles, a movable hub, a shaft stationary with respect to the vehicle, a sleeve turning freely on the shaft, a driving pinion carried by the sleeve, a back-pedal brake, a coupling device carried by the sleeve and cooperating with the movable portion of the back-pedal brake, the back-pedal brake comprising a cheek which acts on the hub, a rim carrying the cheek of the back-pedal brake, said rim having the hub rotatively mounted thereon, and means for rendering the rim stationary with respect to the vehicle when the latter is moving in a forward direction, said means comprising a ratchet mechanism, one of the members of the ratchet mechanism being carried by the rim, the other member of the ratchet mechanism being carried by a member integral with the vehicle, the rim frictionally engaging the member integral with the vehicle.

1,891,577. COLLAPSIBLE TRIPOD FOR USE IN HARVESTING CROPS. ALEXANDER PROCTOR, Blairgowrie, Scotland. Filed Aug. 6, 1930, Serial No. 473,502, and in Great Britain Aug. 9, 1929. 2 Claims. (Cl. 56—431.)



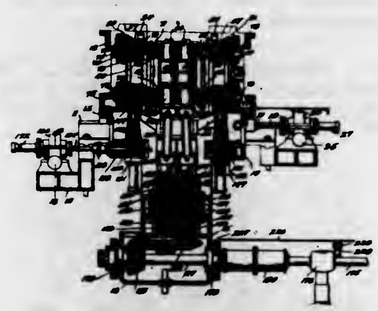
1. In a tripod for supporting agricultural crops, three legs loosely bolted together at their upper extremities to expand to any desired extent when erected, each of said legs in transverse section forming an angle of 60 degrees to support at the desired height a metal hoop of the form of an equilateral triangle.

1,891,578. FOUR WHEEL STEERING GEAR FOR AUTOMOBILES. MORRIS VIRGIL REED, Evansville, Ind. Filed June 21, 1930. Serial No. 462,840. 1 Claim. (Cl. 280—91.)



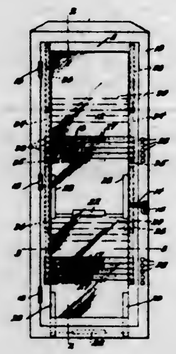
In a unitary-chassis four-wheel automobile, a permanently equalized steering gear for the four wheels thereof, embodying the combination with a front axle, of front steering wheels pivoted to the front axle, steering arms and a tie rod for the front steering wheels to cause them to shift in unison, a rear axle, rear steering wheels pivoted to said rear axle, steering arms and a tie rod connecting the rear steering wheels to cause them to shift in unison, steering knuckles for the front and rear steering wheels, manually operable steering means, a main steering arm, a single pivot carried by said main steering arm, a steering rod connected to said single pivot and permanently connecting the main steering arm to the steering knuckle for the front steering wheels, an equalizing lever or rocker pivoted on a single pivot intermediate its ends to oscillate in its own plane, a link permanently connecting said rocker on one side of its pivot with the single pivot on the main steering arm aforesaid, and a link connecting the rocker on the other side of its pivot with the steering knuckle for the rear wheels, said main steering arm, equalizing lever, and links permanently equalizing the steering gear for the front and rear wheels without resort to additional means for that purpose, whereby the rear wheels always "track" the front wheels.

1,891,579. ROLLING MILL. HANS L. SCHRECK, Easton, Pa., assignor to Treadwell Engineering Company, Easton, Pa., a Corporation of Pennsylvania. Filed Mar. 22, 1930. Serial No. 438,098. 49 Claims. (Cl. 80—31.1.)



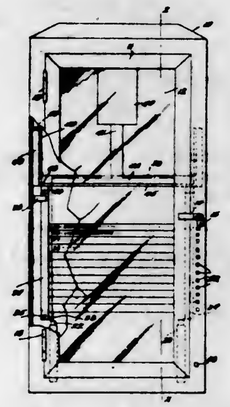
35. In a rolling mill in combination, a cylindrical roll having a neck portion and a shoulder portion at each end, a roll bearing supporting frame disposed at each end of said roll, a roll bearing at each end of said roll adapted to bear against said shoulders, said roll bearings being mounted in said frames so that they may be adjusted axially of said rolls to take up the wear on said bearing surfaces.

1,891,580. DISPLAY CABINET. HORACE K. T. SHERWOOD and JOSEPH G. MOORE, Albany, N. Y. Filed Dec. 1, 1930. Serial No. 499,361. 14 Claims. (Cl. 40—52.)



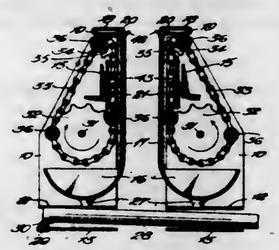
1. In a device of the character described, in combination, a casing, a plurality of display cards slidably mounted therein and normally occupying retracted positions, a portion of each card having identifying indicia thereon and being exposed to view when said cards are in retracted positions, and means for selectively moving said cards to fully displayed positions, said means including actuating elements, the manipulative portion of each of which is disposed exteriorly of said cabinet and adjacent the exposed indicia carrying portion of its associated card when said card is in its retracted position.

1,891,581. DISPLAY CABINET. HORACE K. T. SHERWOOD and JOSEPH G. MOORE, Albany, N. Y. Filed Dec. 1, 1930. Serial No. 499,362. 21 Claims. (Cl. 40—52.)



1. In a device of the class described, in combination, supporting means, a display card or the like disposed within said supporting means, and normally occupying a retracted position, means for raising said card to display position comprising a solenoid, a member adapted to be raised by said solenoid, and a magnet carried by said member and adapted to connect said card to said member.

1,891,582. MILKING MACHINE. GEORGE N. SMITH, Hamilton, Ontario, Canada, assignor of one-half to Armand M. Smith, Union, Ontario, Canada. Filed Mar. 27, 1931. Serial No. 525,639. 2 Claims. (Cl. 31—79.)

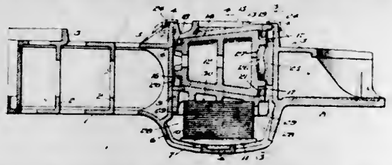


1. In a milking machine, a frame consisting of end plates and means for spacing said plates, an endless milking bar conveyor having a fixed path in the frame and a plurality of milking bars spaced on said conveyor, part of the path of said conveyor being straight, a resiliently yieldable back plate in constant parallel relation with a straight path of said conveyor and adapted to receive teats lengthwise to be worked by said plurality of bars thereagainst, arms rigid on the back plate extending forwardly and slidable in conforming sleeves on the end plates, and means urging the back plate toward said straight path of said conveyor.

1,891,583. TRUCK BOLSTER. THOMAS H. SYMINGTON and PERCY R. DRENNING, Baltimore, Md., assignors, by mesne assignments, to T. H. Symington and Son, Inc., Baltimore, Md., a Corporation of Maryland. Filed Apr. 9, 1926. Serial No. 100,943. 18 Claims. (Cl. 308—226.)

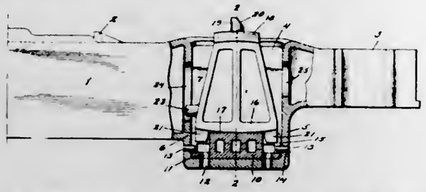
1. A railway truck bolster having a pocket therein, a roller mounted within the pocket and capable of movement

laterally of the bolster, means engaging the roller for coaction with side bearing elements of a body bolster, means



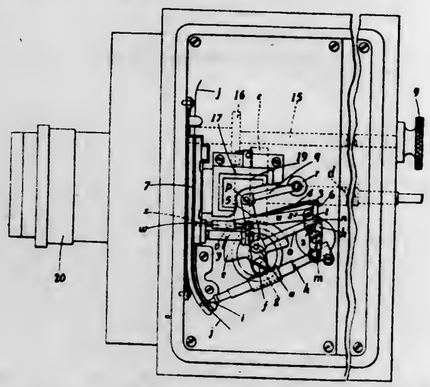
normally maintaining the roller in centered relation to the bolster, and thrust means at the outer end of the roller and carried thereby.

1,891,584. TRUCK BOLSTER. THOMAS H. SYMINGTON, Baltimore, Md., assignor to T. H. Symington & Son, Inc., Baltimore, Md., a Corporation of Maryland. Filed Mar. 22, 1927. Serial No. 177,287. 10 Claims. (Cl. 308—224.)



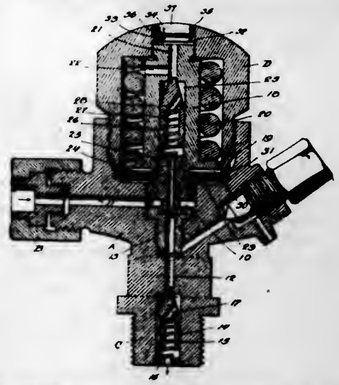
1. A truck bolster provided at each end portion with a pocket, a bearing member removably mounted within the bottom of each pocket, a rocker seated upon said bearing member and having its top and bottom surfaces formed as spherical sections, a lug on the top of the rocker adapted for coaction with the depending element on a body bolster, and coacting means at the bottom of the rocker and on the bearing member for limiting the rocker to rocking movement and effecting return of the parts to neutral position subsequent to relative movement of the truck and body bolsters.

1,891,585. CINEMATOGRAPHIC FILM FEED MECHANISM. WILLIAM VINTEN, London, England. Filed Apr. 26, 1932, Serial No. 607,641, and in Great Britain May 18, 1931. 4 Claims. (Cl. 88—18.4.)



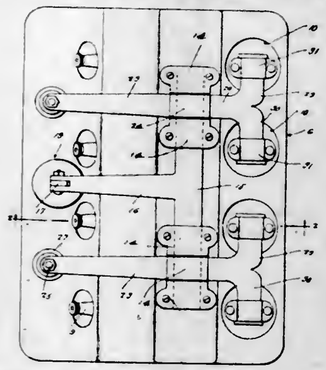
1. Transmission gear for driving cinematographic film feed mechanism of the claw and register pin type comprising in combination a driven rotating balanced disc carrying a crank pin from which depends a tubular bracket within which reciprocates a rod the forward end of which carries the feed pins whilst the rear end is attached to an oscillatory beam mounted about a fixed axis, whereby an arcuate motion is imparted to said feed pins which are projected and withdrawn to engage and disengage the film, the upper part of said beam supporting one end of a connecting rod the opposite end of which is attached to a vertically disposed arm mounted on the crank pin aforesaid the upper end of said arm carrying a connecting rod the opposite end of which is supported on a fixed axis so as to secure the up and down movement of said arm and the arcuate movement thereof, said oscillatory beam also supporting a link that abuts against the end of a horizontally disposed connecting rod that is coupled to a crosshead pin said crosshead being supported in guides in a fixed bracket so that an intermittent horizontal reciprocatory motion is imparted to said crosshead and the register pins carried thereby.

1,891,586. PRESSURE-OPERATED VALVE. EUGEN WOERNER, Feuerbach, Germany. Filed Feb. 2, 1932, Serial No. 590,497, and in Germany June 26, 1931. 4 Claims. (Cl. 137—153.)



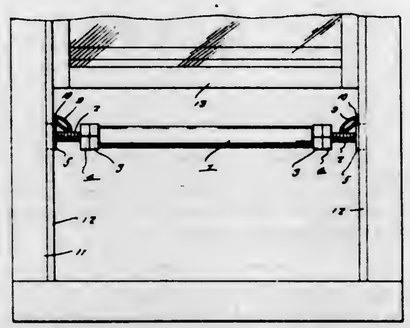
1. In a device of the character described a body provided with inlet and outlet passages and a valve member having a pressure responsive membrane for controlling the communication between the passages, said valve member having an axial port, and pressure actuated means carried by said valve and preventing communication through said port between said outlet and one side of said membrane, said pressure actuated means being further operable to maintain communication between the passages in the event of rupture of the membrane.

1,891,587. AUTOMATIC COMPRESSION REGULATOR. WILSON WRIGHT, Russell Springs, Kans. Filed Feb. 23, 1932. Serial No. 594,668. 1 Claim. (Cl. 123—78.)



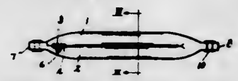
In a structure of the class described, a motor block provided with primary cylinders, pistons mounted for reciprocation therein, said block including a head having auxiliary cylinders in alinement with the primary cylinders and defining variable compression and firing chambers, pistons in the auxiliary cylinders, a rocker shaft mounted in bearings on said block, operating connections between the pistons and said rocker shaft, rocker arms carried by said rocker shaft, springs mounted on the block, the free ends of the rocker arms being operatively connected with said springs, an additional rocker arm carried by the rocker shaft, a fluid check device in the form of a dash pot having a piston operatively connected to said last named rocker arm.

1,891,588. WINDOW SAFETY DEVICE. FRANK CLAUS, Plattsmouth, Nebr. Filed May 20, 1932. Serial No. 612,593. 3 Claims. (Cl. 304—24.)



3. A window safety device comprising an elongated tube, threaded rods extending into the end portions of the tube, nuts threaded on the rods and engageable with the ends of the tube for adjusting the rods longitudinally, nuts mounted on the outer end portions of the rods, and pins mounted in the last named nuts and engaged with the rods for securing said last named nuts thereon.

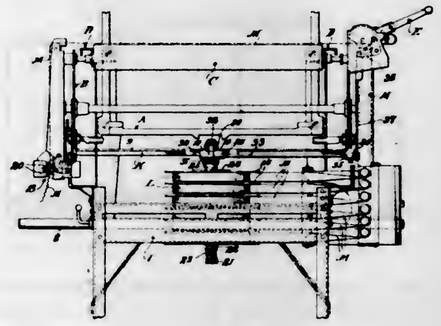
1,891,589. BOBBY FORM. SARA DAVID, Bellevue, Pa. Filed Feb. 23, 1932. Serial No. 594,496. 3 Claims. (Cl. 132—48.)



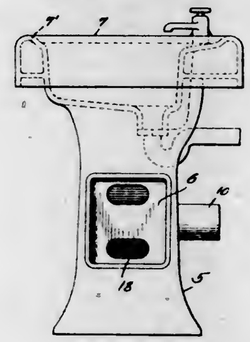
1. A bobby form for hair, which form includes a plurality of elongated body members of flexible and elastic material adapted to be secured together adjacent their ends, and adapted to clamp between their meeting faces a strand of hair, said body members comprising together a hair-dressing form upon which the hair may be rolled, and means adjacent the ends of said body members shaped for co-operation with hair-pins in securing the hair-enveloped form to the head of the wearer.

1,891,590. TYPEWRITING MACHINE. BERNARD JOSEPH DOWD, West Hartford, Conn., assignor to Royal Typewriter Company, Inc., New York, N. Y., a Corporation of New York. Filed Sept. 14, 1931. Serial No. 562,788. 12 Claims. (Cl. 127—153.)

11. In a typewriting machine, the combination with a rotatable ribbon spool including a hub, of ribbon feeding means, means located on opposite sides of the hub and directly engaging the same for normally applying a slight tension to the spool against the action of the ribbon feeding means, and means for concomitantly actuating the ribbon feeding means and the tensioning means for increasing the tension against said spool.



1,891,591. HEATER. WILLIAM ANDREW FINLEY, Valdosta, Ga. Filed Aug. 19, 1931. Serial No. 558,171. 1 Claim. (Cl. 4—166.)

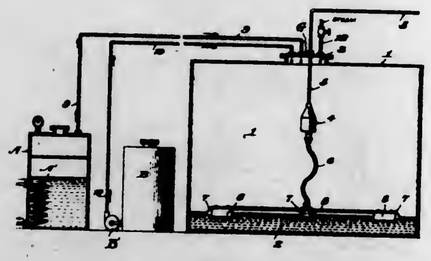


A wash basin fixture comprising a hollow pedestal having an opening in the front wall thereof, a body portion fitted in the opening, a partition in the body portion dividing the body portion into a rear heat radiating chamber, the partition being disposed at a point intermediate the front and rear walls of the body portion, and said partition having upper and lower openings to allow heat to be directed forwardly through the partition, and said partition being disposed in spaced relation with the front wall of the pedestal.

1,891,592. METHOD OF CLEANING AND GAS-FREEING HYDROCARBON STORAGE TANKS. JAMES W. FITZGERALD, Savannah, Ga. Filed July 26, 1932. Serial No. 624,889. 2 Claims. (Cl. 87—5.)

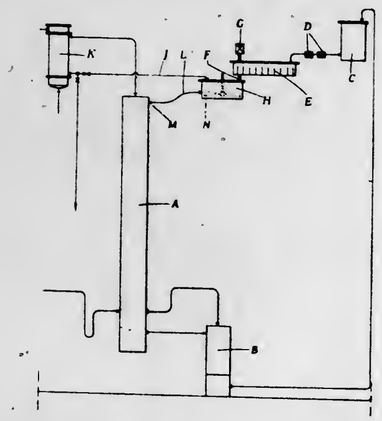
2. A process for gas-freeing and removing hydrocarbon deposits from closed containers which consists in injecting

a halogenated aliphatic hydrocarbon vapor to erode the said deposits, subsequently injecting steam in sufficient quantity to condense and precipitate the gaseous mixture



resulting from the injection of the vaporized halogenated aliphatic hydrocarbon, and finally removing the resulting sludge.

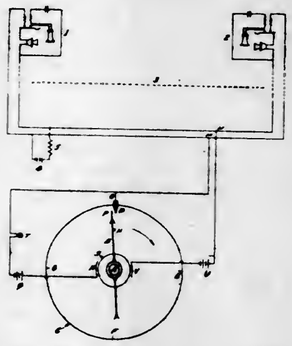
1,891,593. APPARATUS FOR THE MANUFACTURE OF WATER-FREE ETHYL ALCOHOL. ADOLF GORHAN, Liesing, near Vienna, Austria, assignor to Deutsche Gold- und Silber-Scheideanstalt vormals Roessler, Frankfort (Main), Germany, a Company of Germany. Filed Nov. 3, 1931, Serial No. 572,887, and in Germany June 19, 1931. 6 Claims. (Cl. 202—176.)



1. Continuously operable system for the dehydration of aqueous alcohol comprising a reaction column in which an alcoholic dehydrator meets aqueous alcohol, a separator for alcohol connected with a lower portion of said reaction column, a container for storing aqueous dehydrator connected with said separator, a condenser connected to an upper portion of said reaction column, a heatable pan having communication with said container, said condenser and with an upper portion of said reaction column, and fluid-flow control means interposed between said pan and said container.

1,891,594. METHOD FOR TIMING TOLL TELEPHONE CIRCUITS. HENRY W. GRIMM, Moline, Ill. Filed May 13, 1929. Serial No. 362,693. 8 Claims. (Cl. 161—19.)

1. In combination with a telephone system including subscribers' stations and lines; a member movable continuously at a predetermined rate of speed, an element mounted on said member for movement by the latter, releasable means for holding said element normally against movement during movement of said member, said means being adapted for release to enable said element to move with said member when a circuit is established between



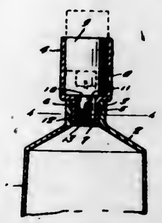
a pair of subscribers' stations in the telephone system and when conversation between said stations begins, and means operable by movement of said element to effect signal variations in the current of the subscriber's line at predetermined intervals of time.

1,891,595. ELECTRIC WALL HEATER. RONALD GRIERSON, London, England. Filed Feb. 7, 1930, Serial No. 426,651, and in Great Britain Feb. 25, 1929. 1 Claim. (Cl. 219—19.)



An electrically heated wall board comprising a slab of heat insulating material, a reinforcing backing member for said slab, electrical resistance wiring spaced from said slab, and a monolithic slab formed on said insulating slab and embedding said resistance wiring therein, said resistance wiring being tensioned and securely held in a predetermined arrangement before being embedded to form convolutions extending throughout the entire area of said monolithic slab, and a slab of finishing material over said monolithic slab.

1,891,596. COLLAPSIBLE TUBE CLOSURE. LEO R. INGHRAM, Cedar Grove, W. Va. Filed Mar. 8, 1932. Serial No. 597,573. 3 Claims. (Cl. 221—60.)



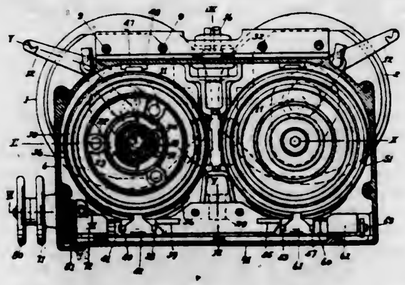
1. A tube closure comprising a cylinder having a port at an intermediate point therein, a reduced neck on one end of the cylinder engageable in the tube for mounting the cylinder in position thereon, the other end of the cylinder being open, a valve slidably operable in the cylinder for controlling the port, a reduced shank on one end of the valve engageable in the neck, a bar mounted transversely in the neck, and a spring having one end connected to the bar and its other end connected to the shank for yieldingly securing the valve in operative position.

1,891,597. BUILDING BLOCK AND THE CONSTRUCTION OF FLOORS AND THE LIKE. KARL E. W. JAGDMANN, Cambridge Springs, Pa. Filed Nov. 5, 1926. Serial No. 146,322. 18 Claims. (Cl. 72—68.)



1. A building block having projections to space it from other blocks and an opening through one of such projections at the lower edge of the block so that, when a plurality of such blocks are assembled in a beam, a tension member may be inserted through such openings and the blocks clamped to produce an arching effect and form a structural beam.

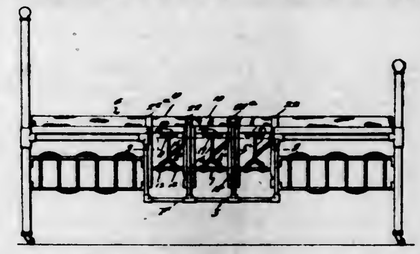
1,891,598. ROPE WINDING DEVICE. CHARLES J. KIENZLE, Columbus, Ohio, assignor to The Jeffrey Manufacturing Company, Columbus, Ohio, a Corporation of Ohio. Filed Nov. 1, 1928. Serial No. 316,536. 18 Claims. (Cl. 254—184.)



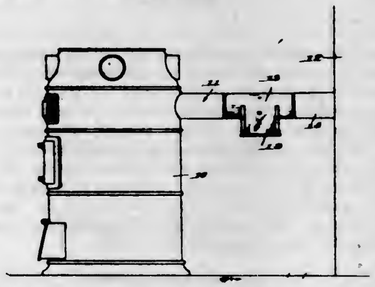
1. In a machine of the class described, the combination with a frame, of a winding drum mounted thereon, a system of power transmission devices arranged to connect said drum with a source of rotative power, said system including two cylindrical brake elements and brake bands cooperating therewith, and a control device movable in one direction to engage with one of said brake bands and thereby cause rotation of said drum at relatively high speed and movable in the other direction to engage with the other brake band and thereby cause rotation of said drum at relatively low speed.

1,891,599. INVALID BED. ANDREW S. KUSHNER, Beccaria, Pa. Filed July 28, 1930. Serial No. 471,273. 3 Claims. (Cl. 5—65.)

1. An invalid bed comprising a bedstead having a mattress platform, said platform having a centralized opening inwardly of one side thereof, a series of upholstered slides adapted to be positioned in said opening at the level of said platform, each of said slides being adapted to be lowered to a point below said platform to accommodate a bed pan below said platform, a shaft mounted below the platform, a series of levers having one end pivoted on said shaft, a vertical link on each lever connected with a companion slide, a series of notched bars on the bedstead adjacent the free ends of the levers opposite the shaft, the notches being adapted to be engaged by the free ends of the levers for maintaining the slides in raised and lowered positions, and a frame carried by the bedstead at the said opening for supporting said slides, said shaft, and said notched bars, the outward side of said frame being constructed as a continuation of the side of the bedstead.



1,891,600. DAMPER. LLEWELLYN C. LANCASTER, Conrad, Mont. Filed Apr. 28, 1931. Serial No. 533,519. 3 Claims. (Cl. 126—307.)



1. A flue construction comprising a flue pipe, a casing intercalated in the flue pipe and provided with an opening in the lower portion thereof, an air intake depending from said opening and open to the atmosphere, a baffle depending from the inner wall of the casing terminating adjacent the opening, and a valve pivotally mounted at the outer end of the air intake and aiding in controlling the flow of air through the intake to the casing, said valve being operated in response to a draft, and a counterbalance connected to said valve.

1,891,601. UNSYMMETRICAL DIARYL ETHANES AS PLASTICIZERS. WALTER E. LAWSON, Wilmington, Del., assignor to E. I. du Pont de Nemours & Company, Wilmington, Del., a Corporation of Delaware. Filed May 28, 1928. Serial No. 281,371. 12 Claims. (Cl. 134—79.)

7. A composition of matter containing a cellulose ester and an unsymmetrical diaryl ethane from the group consisting of diphenyl ethane, ditolyl ethane, dixylyl ethane, and dinitrodiphenyl ethane.

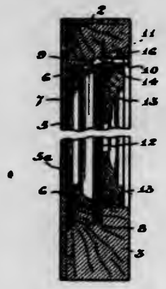
1,891,602. SECTIONAL CRUISER. CHARLES W. NEILL, Syracuse, N. Y. Filed July 21, 1930. Serial No. 469,291. 20 Claims. (Cl. 114—77.)



1. A sectional boat including a bow section; a plurality of intermediate sections; a rib member secured to one of said intermediate sections; a rib member secured

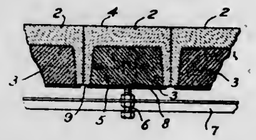
to another of said intermediate sections; and a connecting hull section secured at opposite ends to each of said rib members, said connecting hull section being of shorter length than the sections to which it is connected.

1,891,603. MOTION PICTURE SCREEN. HAROLD D. NORTH, Cleveland, Ohio. Filed Dec. 30, 1930. Serial No. 505,506. 8 Claims. (Cl. 88—24.)



1. A portable motion picture screen comprising a panel having a reflecting screen on its front face, a frame secured to the margin of said panel and forming a border for said screen, the bottom portion of said frame having a channel on the interior thereof extending parallel with the face of the panel and spaced outwardly therefrom, removable shielding panel fitting within the frame and having an edge portion extending into said channel, and a yielding retaining element carried by the frame and engaging the upper edge of the shielding panel for holding the same in place in the frame.

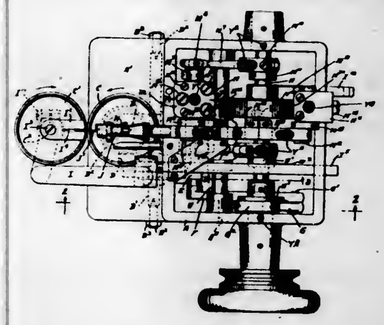
1,891,604. HEAT INSULATED REFRACTORY FOR MOLTEN GLASS CONTAINERS. KARL E. PEILER, West Hartford, Conn., assignor to Hartford-Empire Company, Hartford, Conn., a Corporation of Delaware. Filed Jan. 15, 1929. Serial No. 332,651. 9 Claims. (Cl. 49—54.)



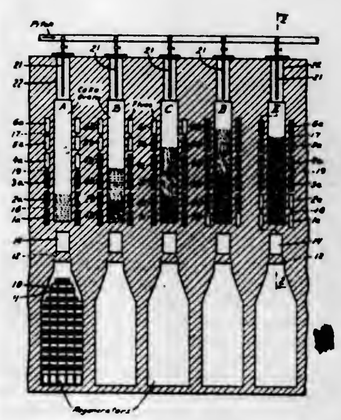
3. A block for contact with molten glass comprising a refractory wall portion for engagement with the glass, and a flange extending from all the edges of said glass-engaging wall portion and forming an enclosure open on the side opposite the side wall portion, and solid heat insulating material disposed within said enclosure.

1,891,605. OVERSEAMING SEWING MACHINE. RAYMOND L. PLUMLEY, Brooklyn, N. Y., assignor to Frederick Osann Company, New York, N. Y., a Corporation of New York. Filed May 19, 1927. Serial No. 192,698. 6 Claims. (Cl. 112—16.)

1. In a sewing machine for overseaming comprising a supporting structure, a reciprocating needle and a driving shaft having a crank portion both mounted in said structure, a cooperating looper and a looper supporting member, the improved means for supporting and moving said member comprising a rock-shaft extending transversely to the direction of needle movement, a bearing for said rock-shaft adjustable to move said rock-shaft transversely to its length, a crank carried by said rock-shaft and operatively connected to said member, a second crank carried by said rock-shaft, an operative connection between said second crank and said crank portion, and guiding means engaging said member at a distance from the connection between said member and the first mentioned crank.



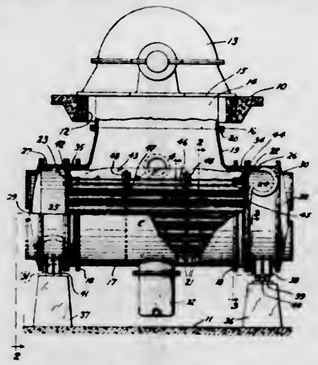
1,891,606. COKING PITCH. ARTHUR H. RADASCH, South Orange, N. J., assignor to The Barrett Company, New York, N. Y., a Corporation of New Jersey. Filed Dec. 28, 1929. Serial No. 417,078. 11 Claims. (Cl. 202—5.)



3. The method of coking pitch in a coke oven, which comprises gradually adding pitch to a substantially stationary mass of pitch in the oven while coking the mass, and extending the zone of intense heating of the walls of the oven from the bottom upwardly as the coking layer of the mass rises in the oven.

1,891,607. CONDENSING APPARATUS. CLEMENT A. RAINEY, Riverside, Ill. Filed Aug. 18, 1929. Serial No. 385,539. 4 Claims. (Cl. 257—43.)

1. A condenser comprising a shell, tube sheets, members cooperating with said tube sheets to form water boxes, tubes inserted in said tube sheets and passing through said shell, flexible fluid tight joint members between said shell and said water boxes, means for supporting the tubes intermediate the tube sheets comprising a beam, means for supporting said beam on the water boxes, means for permitting relative movement between



said beam and one of said water boxes, and means for supporting said water boxes independently of said shell and permitting relative movement thereof.

1,891,608. PROCESS OF PRODUCING ALUMINA. ALFRED W. SCHEIDT, Sewaren, N. J., assignor to The Electric Smelting & Aluminum Company, Cleveland, Ohio, a Corporation of Ohio. Filed Dec. 26, 1929, Serial No. 416,766. Renewed June 16, 1932. 10 Claims. (Cl. 23—52.)

2. The process of treating aluminous silicious material, which comprises forming a charge consisting of ground aluminous silicious material mixed with bauxite, calcium carbonate and soda ash, sintering the charge, and dissolving the sodium aluminate.

8. The process of treating coal ashes and like materials consisting predominantly of aluminous silicate in variable quantities, which comprises forming a charge of such material with calcium carbonate and alkali metal carbonate and with the addition of bauxite in molecular proportions to yield a sinter of uniform composition having not less than one molecule of alkali metal aluminate to each molecule of dicalcium silicate, sintering the charge in a suitable furnace and dissolving the alkali metal aluminate.

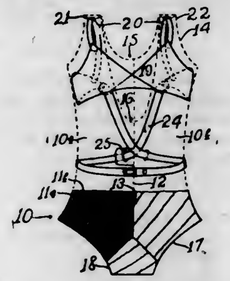
1,891,609. PROCESS OF PRODUCING ALUMINA FROM WASTE COAL PRODUCTS. ALFRED W. SCHEIDT, Sewaren, N. J., assignor to The Electric Smelting & Aluminum Company, Cleveland, Ohio, a Corporation of Ohio. Filed Dec. 26, 1929, Serial No. 416,767. Renewed June 16, 1932. 9 Claims. (Cl. 23—52.)

2. The process of recovering alumina from powdered coal ash and the like which comprises mixing the powdered coal ash with a finely divided calcium carbonate sludge and soda ash, sintering the mixture and extracting the resulting sodium aluminate from the sinter.

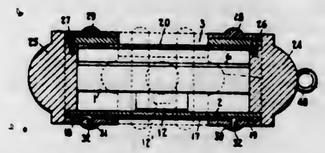
9. The process of recovering alumina from powdered coal ash which comprises forming a furnace charge of the powdered coal ash, calcium carbonate sludge, soda ash and bauxite in the proportion of one part of the powdered coal ash and bauxite together, one and a half to two parts calcium carbonate and one-half to one part of soda ash, sintering the mixture, and extracting the sodium aluminate from the sintered material.

1,891,610. WEARING APPAREL. ELSA SCHIAPARELLI, Paris, France. Filed Dec. 13, 1930, Serial No. 502,015, and in France Nov. 3, 1930. 12 Claims. (Cl. 2—67.)

1. As a new article of manufacture, in combination, a torsal garment having a cut out back, a brassière band inside of said garment and having ends at the back, each of said ends being attached to a strap member passing downwardly inside of the garment without traversing the back opening, and means on the back of the garment and below the back opening for holding the strap members in such downwardly extended position.

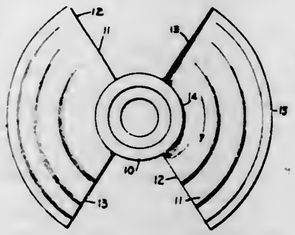


1,891,611. TUBULAR WATCHCASE. HERMAN SCHLACHT, Woodhaven, N. Y. Filed May 11, 1931. Serial No. 536,353. 7 Claims. (Cl. 58—88.)



1. A watch case comprising a tube having a cut out portion in its wall, a rectangular movement mounted therein and having its face in register with said cut out portion, the stem of said movement projecting beyond the wall of the tube, and movable means mounted on the tube to close said cut out portion.

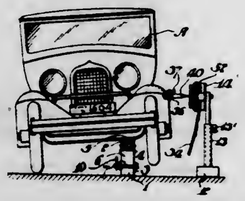
1,891,612. METHOD OF MANUFACTURING PROPELLERS. HENRY F. SCHMIDT, Lansdowne, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Jan. 11, 1930. Serial No. 420,212. 12 Claims. (Cl. 29—156.8.)



7. The method of manufacturing a propeller which includes forming a cylindrical hub having helical grooves of uniform pitch provided therein, forming an annular, flat disc having an inner diameter approximately equal to twice the diameter of the hub and a radial width approximately equal to the height of a blade from its tip to its root, machining the disc so that its radial cross sec-

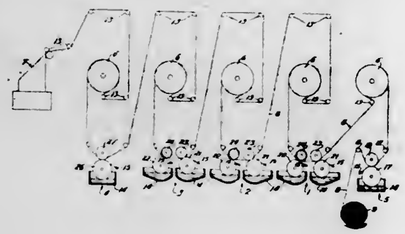
tion is that of a blade, dividing the disc, circumferentially, into a plurality of sections, warping the respective sections to form blades having the required pitch and having blade root portions which are a true helix, and assembling the propeller blades upon the hub and securing their root portions in the grooves thereof.

1,891,613. METHOD OF AND APPARATUS FOR TESTING THE RIDING QUALITIES OF VEHICLES. STANLEY W. WIDNEY, Philadelphia, Pa., assignor to Ride-O-Graph Corporation, a Corporation of Delaware. Filed Oct. 23, 1930. Serial No. 490,610. 8 Claims. (Cl. 265—2.)



1. The method of testing the riding qualities of a vehicle having a running gear and a body spring-supported from the running gear, which consists in dropping the vehicle from a position of rest until a portion of its running gear contacts with an impact receiving surface, and determining the amplitude and duration of vibrations imparted to the body.

1,891,614. PRINTING PRESS. OTTO R. WOLF, River Forest, Ill., assignor to The Tribune Company, Chicago, Ill., a Corporation of Illinois. Filed Jan. 3, 1931. Serial No. 506,344. 7 Claims. (Cl. 101—152.)



1. In a printing press for printing in intaglio, a printing unit comprising a pair of printing couples, each couple including an impression cylinder and an intaglio cylinder for printing a portion of the width of the web, one of the cylinders of the second couple being under-cut circumferentially over that portion of its length corresponding to the width of the section of the web printed by the first couple to allow said web section to pass through the unit without contacting the cylinders of the second couple.

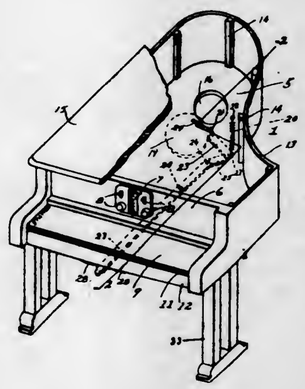
1,891,615. OPERATING ROD GUIDE. RALPH R. BOSTIC, Long Beach, Calif. Filed June 21, 1929. Serial No. 372,728. 7 Claims. (Cl. 308—4.)

1. In a device of the class described, a body portion, said body portion being made of a resilient material and formed in spiral shape, a core in said body, said core being made of a spring metal and shaped to conform to said



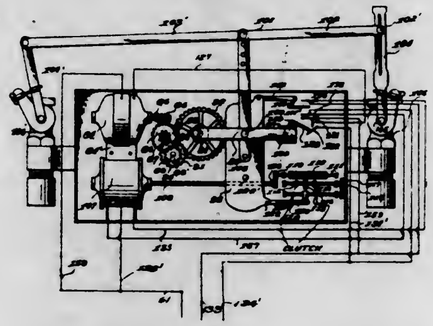
body, there being a plurality of recesses in the outer face of said body portion and a filling of lubricant in said recesses.

1,891,616. ARTICLE OF MANUFACTURE IN A COMBINED RADIO CABINET AND SOUND AMPLIFYING DEVICE. DONALD L. BROOKS, Glendale, Calif. Filed May 31, 1929. Serial No. 367,214. 2 Claims. (Cl. 274—2.)



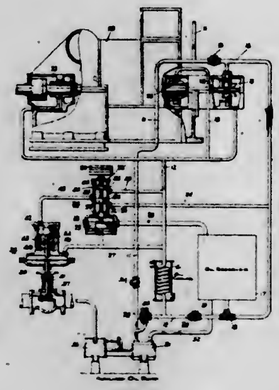
1. In a radio apparatus and sound amplifying unit comprising an irregular shaped hollow body with a bottom having an aperture and a hingeably affixed top, leg members attached to said body for holding the same above the floor, said bottom comprising a baffle board, a shutter pivotably attahed thereto, a spring engaging said shutter, a pin and a lever engaging said baffle board, said pin, lever and spring means funtioning to normally position said shutter in open relation to said aperture in said baffle board and whereby said aperture may be manually positioned to partially or wholly close said aperture for the purpose described.

1,891,617. CONTROL METHOD AND APPARATUS. RICHARD P. BROWN, Philadelphia, Pa., assignor to The Brown Instrument Company, Philadelphia, Pa. Filed Dec. 1, 1927. Serial No. 237,103. 19 Claims. (Cl. 236—70.)



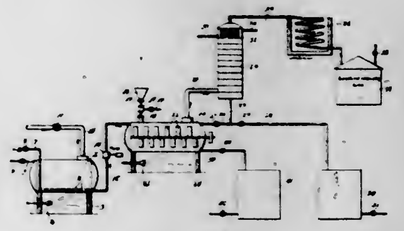
1. In a control system, a device to be maintained at a predetermined temperature, a motor mechanism for controlling the rate of fuel supply to said device and a control mechanism for variably operating said motor mechanism in accordance with the variations in temperature of said device from a predetermined temperature, said control mechanism comprising a galvanometer with a pointer movable from a normal position in accordance with the departure of said temperature from said predetermined value and contacts controlled by said pointer when deflected from its normal position, the contacts being arranged to move in the direction of the deflection of said pointer, said motor mechanism being arranged under predetermined conditions to be non-operative to vary said fuel supply in response to the first few operations thereof by said control mechanism.

1,891,618. AUXILIARY OIL PUMP REGULATOR. CLARENCE B. CAMPBELL, Moores, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Aug. 28, 1930. Serial No. 478,538. 7 Claims. (Cl. 103—11.)



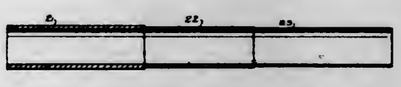
3. The combination with a prime mover, an admission valve for the prime mover, and a pump driven by the prime mover and providing fluid pressure in an enclosed space, of a regulating mechanism for the admission valve comprising pressure-responsive means including an element responsive to the fluid pressure in said space and directly actuating the admission valve to regulate the same, and means responsive to a given value of said fluid pressure for applying additional fluid pressure to the pressure-responsive means in order to hold the admission valve tightly on its seat.

1,891,619. PROCESS OF PRODUCING HYDROCARBON PRODUCTS BY THE ACTION OF A METALLIC HALIDE AND A PARTIALLY CHLORINATED MINERAL OIL OF THE CARBO-CYCLIC SERIES. MARVIN L. CHAPPELL, Los Angeles, Calif., assignor to Standard Oil Company of California, San Francisco, Calif., a Corporation of Delaware. Filed Mar. 7, 1927. Serial No. 173,253. 1 Claim. (Cl. 196—54.)



A process of converting mineral oils of relatively high boiling point into motor fuels, while a part of the oils are simultaneously polymerised into refined viscous oils which comprises first contacting the same with chlorine at a temperature sufficient to chlorinate substantially only the unsaturated oils while separating the light petroleum vapors, and thereafter subjecting the liquid chlorinated mineral oils to reaction with a metallic halide at a temperature between 300° and 650° F., and at a pressure about seventy pounds per square inch above atmospheric.

1,891,620. POLE STRUCTURE. THOMAS J. CRAWFORD, Youngstown, Ohio. Filed Sept. 30, 1929. Serial No. 396,158. 2 Claims. (Cl. 189—23.)

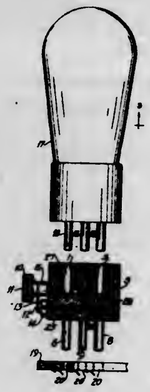


1. A hollow metal one piece cantilever member comprising successive sections of different thickness, butt-welded together and having internal and external dimensions, the average of which lies between the external and internal dimensions of the section having the thickest walls.

1,891,621. ELECTRON DISCHARGE TUBE ADAPTER. ROBERT D. DUNCAN, Jr., East Orange, N. J., assignor to Wired Radio, Inc., New York, N. Y., a Corporation of Delaware. Filed Feb. 25, 1930. Serial No. 431,116. 1 Claim. (Cl. 173—344.)

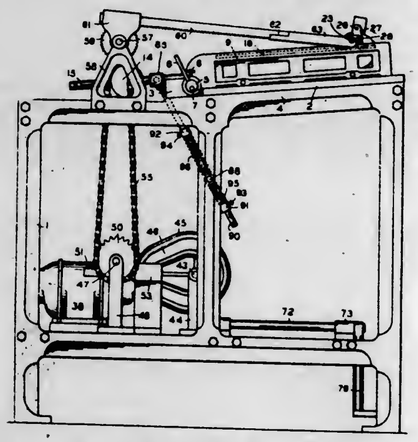
An adapter for use between an electron discharge tube and socket therefor comprising, an insulating structure, metal receptacles in said structure for receiving and supporting the terminal pins of said tube, terminal pins in said structure for insertion in said socket in substitution for the terminal pins of said tube, a switch mounted on said structure including a pair of contacts and a movable blade for selective engagement therewith, said blade

being electrically connected with one of said receptacles, one of said contacts being electrically connected with one of said terminals, the other of said contacts being adapted



for connection with an auxiliary circuit, and electrical connections respectively between the other of said receptacles and said terminal pins of said adapter.

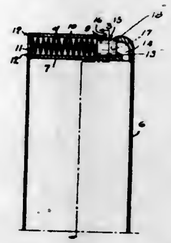
1,891,622. SCREEN PRINTING MACHINE. JAMES FLOCKHART, San Francisco, Calif. Filed Dec. 13, 1930. Serial No. 502,113. 12 Claims. (Cl. 101—123.)



1. A screen printing machine including a main frame; a platen; a swing frame pivoted on said main frame and adapted to carry a stencil above said platen; inking means guided on said swing frame; rack and pinion means engaging said inking means adapted to raise and lower said serving frame; and a power driven cam means operatively engaging said rack and pinion means.

1,891,623. CLOSURE MEANS FOR COLLAPSIBLE TUBES. JULIUS G. GORDON, Yakima, Wash., assignor of one-half to Peter Meinardi, Yakima, Wash. Filed Oct. 28, 1931. Serial No. 571,514. 8 Claims. (Cl. 221—60.)

1. In devices of the class described, a collapsible tube having a top, a tubular member having a cylindrical valve chamber formed therein, a seat at one end of said valve chamber, said valve chamber having an opening at said seat end communicating with the interior of said tube and having a discharge opening on one side at a short distance from said seat, a cylindrical valve member movable within said valve chamber and having a concave end forming a relatively sharp annular face portion arranged to rest on



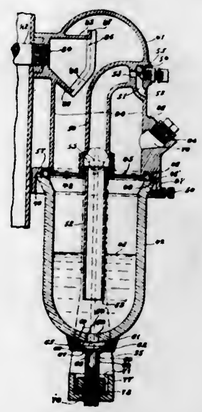
said seat, and a spring yieldingly urging said valve against said seat said valve being movable by pressure of the material within said tube to uncover said discharge opening.

1,891,624. PATCH PACKAGE. LELAND S. GRAFF, Arlington, Mass., assignor to George B. Graff Company, Cambridge, Mass., a Corporation of Massachusetts. Filed Sept. 24, 1931. Serial No. 564,772. 11 Claims. (Cl. 206—56.)



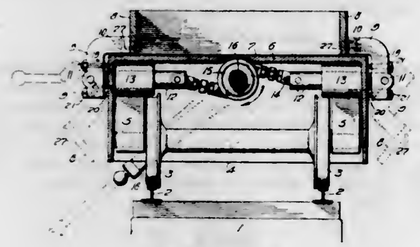
1. A tubular container enclosing a stack of perforated patches, having one end thereof circumferentially restricted to retain a stack of patches therein without obstructing the perforation in the bottom patch, and having at the opposite end a light, easily-broken seal.

1,891,625. SAND BLAST AIR WASHING. FOSTER J. HULL, Hagerstown, Md., assignor to Pangborn Corporation, Hagerstown, Md., a Corporation of Maryland. Filed July 25, 1929. Serial No. 380,785. 6 Claims. (Cl. 183—22.)



1. In a sand blast air washer having an air chamber with an opening at the bottom, a sediment cup removably secured thereto covering said opening, the air chamber having a downwardly disposed air pipe near the center, an air passage leading from the outside to the vicinity of the upper end of said air pipe, said air passage being of extended lateral dimension, a reduced air opening connecting the top of said air pipe and said air passage and a pressure air nozzle directed across said air passage and into said reduced opening toward said air pipe, which extends down into its sediment cup, the air chamber having an outlet for washed air.

1,891,626. MACHINE FOR MAKING SLABS. CHARLES G. MORTIMER, Glen Ridge, N. J., assignor to Structural Gypsum Corporation, Linden, N. J., a Corporation of Delaware. Filed Jan. 9, 1931. Serial No. 507,592. 5 Claims. (Cl. 25—41.)



1. An apparatus for casting shapes of plastic material, comprising an element having a bed portion, upstanding walls on opposite sides of the bed, said walls being carried by brackets pivotally mounted to one side of the bed, and means to move each bracket and wall laterally of the bed, comprising a toggle assembly mounted below the upper surface of the bed and spring means to throw the wall upwardly upon lateral movement thereof.

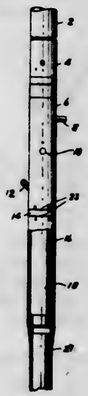
1,891,627. SAFETY RAZOR. JOSEPH MUROS, New York, N. Y., assignor to Gillette Safety Razor Company, Boston, Mass., a Corporation of Delaware. Filed May 8, 1931. Serial No. 535,899. 9 Claims. (Cl. 30—12.)



6. An adapter for a safety razor blade holder having side portions to engage guard teeth of the holder to position the adapter to the holder, said adapter having means to locate a blade on the holder.

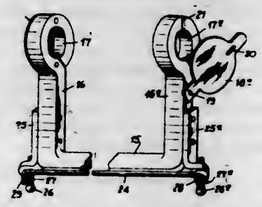
1,891,628. METHOD OF DETERMINING ANGLE AND DIRECTION OF DIP OF GEOLOGICAL FORMATIONS. CHARLES R. NICHOLS, Dallas, Tex., assignor to Sperry-Sun Well Surveying Company, Philadelphia, Pa., a Corporation of Delaware. Filed Nov. 22, 1930. Serial No. 497,480. 12 Claims. (Cl. 255—1.)

1. The method of ascertaining the dip of a bedding plane intersected by a bore hole which includes taking adjacent the plane a plurality of cores whose axes extend in different directions and bear a determinable relationship with



each other during the taking of the cores said cores being taken by straight line movements of angularly related cutters in the directions of said axis.

1,891,629. SANITARY PAPER ROLL. LESTER VAN WAGNER, Richmond Hill, N. Y. Filed Dec. 5, 1931. Serial No. 579,181. 5 Claims. (Cl. 242—55.5.)



1. In a roll holder for a roll of paper, the combination of a spindle for the roll of the same diameter throughout and of a length to project beyond the ends of the roll, a U-shaped frame, the ends of the side arms of which have openings therein providing radially closed bearings for the ends of the spindle, one of said bearings being permanently closed beyond the end of the spindle, while the other of said bearing is open at both sides of its arm longitudinally of the spindle, the latter bearing being of sufficiently larger diameter than the spindle that when the latter is pushed through this bearing, it may be rocked therein clear of the end of the other side arm having therein the said closed bearing, and a closure adapted to be opened for closing the said open bearing beyond the end of the spindle for retaining the latter in its operative position in both bearings.

1,891,630. NECKTIE. WILLIAM H. VE RELLE, Philadelphia, Pa. Filed Aug. 22, 1932. Serial No. 629,974. 8 Claims. (Cl. 2—150.)

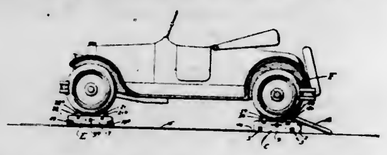
1. A necktie of the class described comprising a member formed of stiff fabric having its ends folded upon itself, portions of its ends sewn to the major portion to provide a casing at each end of the member, a member formed of wire and bent to provide a straight bar with upwardly extending hook portions the free ends of which extend below the straight bar, said hook portions being located in

the casings with the straight portion extending through holes in the casings, necktie material having an intermediate portion connected with the straight portion of the wire member and the upper part of said material being sewn into tubular form to enclose the first mentioned



member and the wire member to form a knot when the first mentioned member is bent into knot forming position and a neck band having one end connected with the straight part of the wire with its other end adapted to be passed through the knot forming portion.

1,891,631. APPARATUS FOR TESTING BRAKES. WILLIS H. WATROUS, Oakland, Calif. Filed Nov. 19, 1928. Serial No. 320,295. 5 Claims. (Cl. 265—1.)



1. A brake testing apparatus comprising a pair of trackways, a pair of stationary trucks at one end thereof, one for each trackway, a pair of movable trucks one for each trackway, said trucks having wheels engaging the trackways and permitting movement of the trucks from end to end of the trackways said trackways having an irregular portion at one end thereof engageable with wheels of the movable trucks to temporarily maintain the trucks motionless on the trackways.

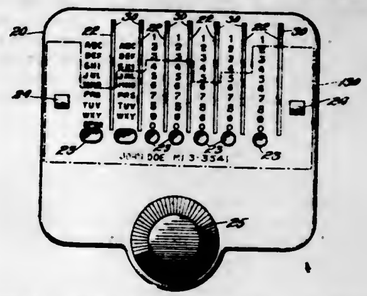
1,891,632. LUBRICATOR. JOHN R. BATTLE, Ardmore, Pa., assignor Gun-Fil Corporation, a Corporation of Delaware. Filed Oct. 20, 1927. Serial No. 227,380. 20 Claims. (Cl. 184—45.)



1. A lubricator comprising a lubricant container having a port, a plunger in said container by which lubricant may be forced through said port, and a port controlling valve carried by said plunger and having its valve acting portion arranged to be removed and replaced through said plunger.

1,891,633. AUTOMATIC TELEPHONE SIGNAL-TRANSMITTING METHOD AND DEVICE. CHARLES S. BATDORF, Brooklyn, N. Y. Filed Feb. 1, 1932. Serial No. 589,998. 12 Claims. (Cl. 179—90.)

1. The method of transmitting telephone signals which consists in automatically placing in proper relative positions a set of electrical contacts corresponding to the elements of the predetermined signal to be transmitted,



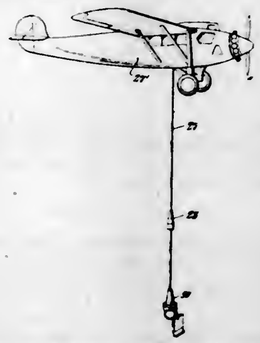
and causing a contacting signal transmitting member to traverse the set of contacts.

1,891,634. BRUSH MECHANISM FOR DYNAMO-ELECTRIC MACHINES. FREDRIK CARLSTEDT, Stockholm, Sweden, assignor, by mesne assignments, to Electrolux Corporation, a Corporation of Delaware. Continuation of application Serial No. 504,440, filed Dec. 24, 1930, and in Germany Dec. 28, 1929. This application filed Jan. 5, 1931. Serial No. 506,635. 14 Claims. (Cl. 171—323.)



1. In a dynamo-electric machine, a commutator, a brush guide having a longitudinal bore in alignment with the commutator contact surface, a brush in said guide, means to urge said brush against said commutator and means to automatically remove the brush from contact with the commutator when the brush is substantially worn.

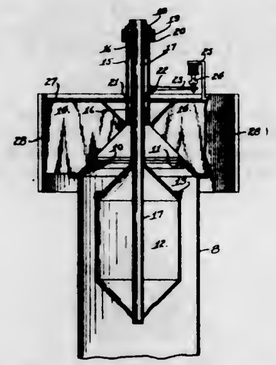
1,891,635. MEANS FOR RELEASING OBJECTS TO BE DROPPED FROM AIRCRAFT. ERICH DEUBEL, Brooklyn, N. Y. Filed Feb. 4, 1932. Serial No. 590,860. 7 Claims. (Cl. 258—1.)



1. A device for releasing objects from an aircraft during flight comprising a cable of a predetermined length,

a wrapper for said objects sliding along said cable and having a bottom closure, means for normally holding the wrapper closed, means for releasing said closing means during the downward movement of the wrapper on said cable to operate said wrapper closing means to allow a dropping of its contents and means for retrieving the empty wrappers.

1,891,636. SURGE PRESSURE CONTROLLING MEANS. CHARLES V. FOULDS, Berkeley, Calif., assignor to The Pelton Water Wheel Company, San Francisco, Calif., a Corporation of California. Filed Mar. 31, 1930. Serial No. 440,271. 6 Claims. (Cl. 103—11.)



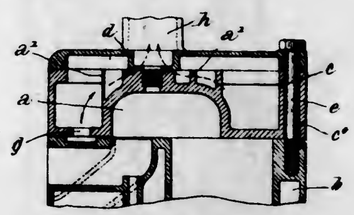
1. In an apparatus for the described purpose, and in combination with a pump and a pipe line, a stand-pipe connected with said pipe line, said stand-pipe having an aperture above the static level of the liquid in said line, a valve for closing said aperture under normal operation of said pump, and means for holding said valve open upon the cessation of said pump operation.

1,891,637. LOCK FASTENER. LEON FRANK, Baltimore, Md., assignor to Alma Manufacturing Company, Baltimore, Md., a Corporation of Maryland. Filed Sept. 20, 1932. Serial No. 633,939. 5 Claims. (Cl. 24—222.)



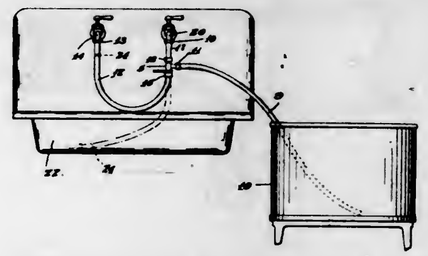
1. A lock fastener with a metal cap consisting of a top comprised of two interlocking flanged members, a shank with a flanged end, the flanged end being held between said members, a cap having a head, a neck and a flange, the shank being adapted to be upset within the head to hold the material to which the fastener is attached between the cap flange and the top, a female member co-operating with the male member and having a face plate and a mushroom device whereby the face plate is attached to the material, the face plate having an opening adapted to pass the head freely and a slot extending from said opening in the direction of the tension on the fastening when in operation, the slot being of reduced width adjacent said opening providing a resistance to the passage of the neck, the head having a shoulder opposed to the head flange, the shoulder and flange being spaced in correspondence with the width of the face plate, the edge of which enters between the shoulder and flange in the fastening operation, the shoulder serving to prevent play of the head relatively to the face plate.

1,891,638. CYLINDER BLOCK CONSTRUCTION. ANDRÉ GADOUX, La Trette, France, assignor, by direct and mesne assignments, of one-half to Société pour l'Exploitation des Brevets Gadoux, Paris, France, and one-half to Hupp Motor Car Corporation, Detroit, Mich., a Corporation of Virginia. Filed Oct. 23, 1929, Serial No. 401,782, and in Belgium Oct. 30, 1928. 8 Claims. (Cl. 123—173.)



1. In an internal combustion engine, a ferrous material block having a cylindrical bore therein, a hollow cylinder head mounted on said block and having ports formed therein for the passage of cooling water, said cylinder head having a combustion chamber formed therein whose walls are composed of metal having a higher heat conductivity than said ferrous metal block, the hollow interior of said cylinder head having a plurality of parallel spaced elongated ribs formed thereon on portions of the walls thereof in direct heat communication with said combustion chamber.

1,891,639. RECEPTACLE FILLING DEVICE. GEORGE V. GAVAZA, Quincy, Mass. Filed Apr. 14, 1930. Serial No. 444,088. 3 Claims. (Cl. 137—111.)

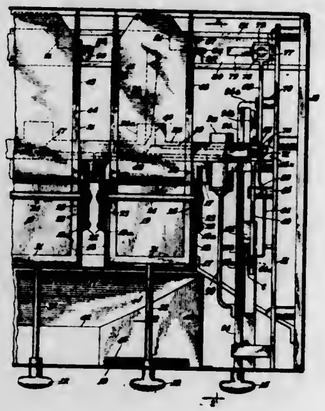


1. In a combined filler and drainer, a T having three outlets, two flexible conduits connected, respectively, to two of said outlets, a tube connected to the third outlet, a coupling for connecting the tube to a faucet, the shorter one of said conduits having integral means for connecting it to a faucet and means for preventing simultaneous flow of water and air therein in opposite directions when its open end is positioned for draining.

1,891,640. VENDING MACHINE. JOHN GOTTFRIED, Brooklyn, N. Y., assignor to Cameo Scale Corporation, New York, N. Y., a Corporation of New York. Filed Sept. 16, 1930. Serial No. 482,268. 20 Claims. (Cl. 194—39.)

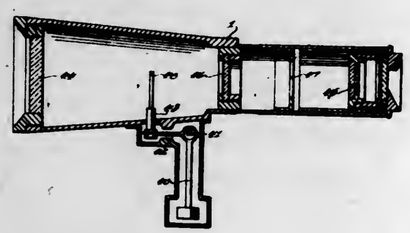
1. In a vending machine, the combination of article extracting means, a device normally preventing operation of said extracting means, spring means for insuring return of said device from abnormal releasing position to normal locking position, said spring means being normally ineffective and becoming operative on said device only near the end of the return movement of said package

extracting means to normal position after operation, and means for rendering said spring means effective independent of said device, the tension of said spring means



remaining constant until the instant of operation and returning to its constant normal state on the return of the package extracting means to normal.

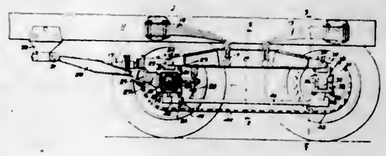
1,891,641. ARTIFICIAL HORIZON FOR SEXTANTS. WENZEL HABEL, Rochester, N. Y. Filed Aug. 12, 1931. Serial No. 556,491. 7 Claims. (Cl. 88—2.2.)



1. An artificial horizon for a sextant comprising a tube, a fixed hair line therein, a pendulum and a support therefor, a bracket on said pendulum extending laterally therefrom, a standard extending up from said bracket, a wandering hair line supported on said standard and adapted to rise and fall with the swing of the pendulum, an erector lens between the two hair lines adapted to focus the image of one hair line on the other when the wandering hair line intersects the optical axis of the lens, said wandering hair line and pendulum being adjusted so that the intersection occurs when the optical axis is horizontal.

1,891,642. SIX WHEEL SUSPENSION FOR VEHICLES. ARTHUR W. HARRISON, Los Angeles, Calif., assignor of one-half to Kay-Brunner Steel Products, Inc., Los Angeles, Calif., a Corporation of Delaware. Filed May 14, 1930. Serial No. 452,276. 10 Claims. (Cl. 180—22.)

1. A vehicle having a vehicle frame, a forward and a trailing set of wheels, the forward set having a differential axle housing with a driven axle therein, the trailing set having a stationary axle, a beam at each side of the vehicle connected at its forward end to the axle housing and at its rear end to the axle of the trailing wheels, a pair of springs on each side of the vehicle connected to a forward and a rearward part of the beam, radius rods



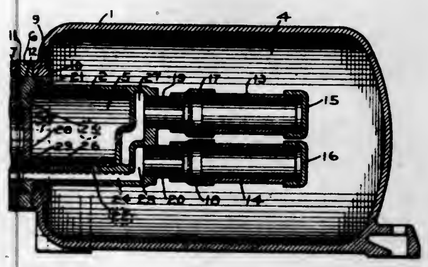
connecting from the differential housing to the vehicle frame, means to drive the front axle and means to convey a drive from the leading to the trailing set of wheels.

1,891,643. TIP FOR FURNITURE LEGS. ARTHUR G. HENRIKSON, Providence, R. I., assignor of one-half to Frank B. Perry, Providence, R. I. Filed May 14, 1932. Serial No. 611,327. 13 Claims. (Cl. 16—42.)



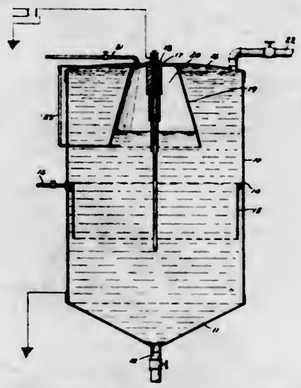
1. A tip for furniture legs, comprising a body having a metallic surface on one side and a soft surface on the other side, and means including an additional member for securing said body to a furniture leg to present either the metal or soft surface outwardly.

1,891,644. RESERVOIR CONSTRUCTION. ELLIS E. HEWITT, Edgewood, Pa., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa., a Corporation of Pennsylvania. Filed Feb. 13, 1931. Serial No. 515,438. 1 Claim. (Cl. 303—1.)



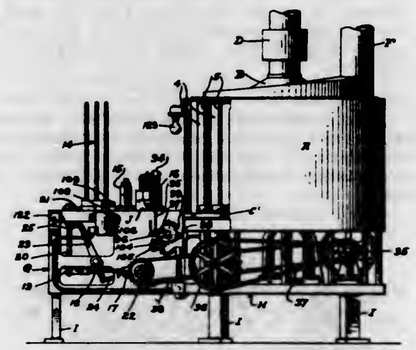
In a multiple fluid pressure chamber construction, the combination with a reservoir casting having a clamping face and a chamber, of a supporting member having a clamping face, a casting having a flange interposed between and engaging said clamping faces and having a chambered portion extending into the chamber of said reservoir casting, and a section of pipe secured to said flanged casting within the reservoir chamber and having the chamber within the pipe section connected to a passage formed in said flanged casting.

1,891,645. METHOD OF INSULATING HIGH VOLTAGES IN ELECTRICAL PRECIPITATORS. RAYMOND T. HOWES, Los Angeles, Calif., assignor of one-third to A. A. Anderson, Los Angeles, Calif., and one-third to L. A. Snyder, Wilmington, Calif. Filed Jan. 29, 1930. Serial No. 424,218. 4 Claims. (Cl. 204—24.)



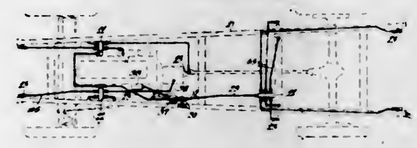
1. An electrical dehydrator for oil and the like comprising a shell, an electrode extending into the shell, a bushing of insulating material surrounding the electrode adjacent the shell, and a shield disposed wholly within the shell having a closed top and an open bottom surrounding the bushing, said shield serving to confine an insulating gas about the bushing to prevent short circuiting between the electrode and the shield.

1,891,646. APPARATUS FOR DRYING CAN ENDS CONTAINING A SEALING COMPOUND. FRANK KRUEGER and HENRY DOUGLASS, San Francisco, Calif., assignors to Pacific Can Co., San Francisco, Calif., a Corporation of Nevada. Original application filed June 12, 1929, Serial No. 370,444. Divided and this application filed Dec. 20, 1930. Serial No. 503,785. 9 Claims. (Cl. 113—80.)



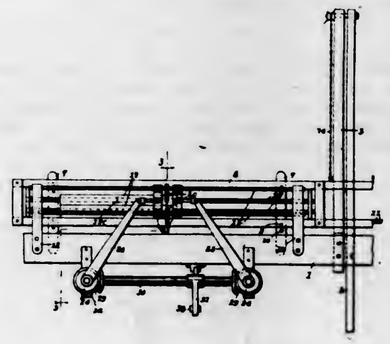
1. In a machine of the character described a rotary supporting member having a plurality of can end stacking and supporting receivers mounted thereon, a can end magazine, means for releasing the can ends one by one, a compound can end liner, a main feeder adapted to remove the can ends when released and to deliver them to the compound liner, where the rim of the can end is filled with a sealing compound, and means whereby the feeder removes the can ends from the liner and delivers and stacks the ends in the receivers carried by the rotary supporting member.

1,891,647. LUBRICATING SYSTEM. CHARLES W. MANZEL, Buffalo, N. Y. Filed Apr. 6, 1925. Serial No. 20,884. 25 Claims. (Cl. 184—7.)



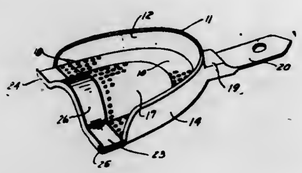
1. A lubricating system for the bearings of motor vehicles and the like, comprising a pump for delivering lubricant under pressure to the bearings, and nipples applied to the bearings and each including a measuring chamber for the lubricant having an inlet connected with the pump and an outlet, and a ported valve slidable in said chamber for controlling the admission and discharge of lubricant to and from the same, the operating stroke of the pump moving the ported valve in a direction to expel the lubricant from its chamber and the return stroke thereof moving said valve in the opposite direction to draw the lubricant through the port of the valve in the measuring chamber, said port being arranged to prevent the admission of lubricant to said chamber during the major portion of the operating stroke of its valve and to permit the admission of lubricant thereto when the valve approaches the end of its return stroke.

1,891,648. SHUTTLE MOTION. FLOYD C. MATTHEWS, Paterson, N. J., assignor of one-half to James C. Gaynor, Paterson, N. J. Filed Sept. 30, 1931. Serial No. 566,080. 9 Claims. (Cl. 139—137.)



1. In a shuttle motion, the combination of supporting structure, means therein to be reciprocated, a pair of actuators movable in said structure, in paths substantially parallel with the path of the first means, means to move the actuators together toward and together from each other in said paths, repeatedly, the first means having catching portions movable into the paths of the respective actuators, and means to move said portions one into and the other out of the path of its respective actuator on the alternate reciprocations, and vice-versa on the remaining reciprocations, of the actuators.

1,891,649. DENTAL IMPRESSION DEVICE. NICOLAUS MEURER, Cleveland, Ohio. Filed May 31, 1932. Serial No. 614,375. 4 Claims. (Cl. 32—6.)



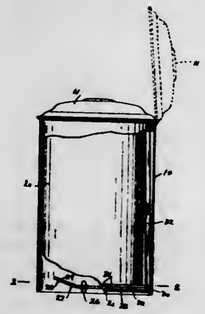
1. A dental impression device comprising a tray having double side walls spaced apart and extending around the edge of the tray bottom, and a removable base slidable between said walls and spaced under the bottom of the tray to form a cooling chamber.

1,891,650. AEROPLANE. PETER NACHTSHEIM, New York, N. Y. Filed Oct. 3, 1930. Serial No. 486,161. 18 Claims. (Cl. 244—18.)



1. An aeroplane actuating device comprising an aeroplane having supporting wings, a plurality of means mounted on a horizontal axis or axes to centrifuge air installed on both sides of and spaced symmetrically about the longitudinal centerline of the aeroplane, additional means to direct the suction supply of air from forward and above, also means to lead the air suction supply through the first mentioned means and means to direct the centrifuged air rearward and backward.

1,891,651. WASTE RECEPTACLE. LESTER E. PADELFORD and LOUIS J. KUKOWITZ, Buffalo, N. Y., assignors to The Republic Metalware Company, Buffalo, N. Y., a Corporation of New York. Filed Feb. 11, 1930. Serial No. 427,596. 1 Claim. (Cl. 220—36.)



A waste receptacle comprising an outer can, an inner can, brackets carried by the outer can and secured to the inner surface thereof for supporting the inner can, said brackets having portions thereof in interspaced relation with the outer can, a pivotally mounted cover for the outer can, an operating rod enclosed between the inner and outer cans and pivotally suspended from the cover, an operating shaft passing through the outer can at one end only and formed at that end with an outwardly extending arm terminating in a foot pedal, said operating shaft being pivotally supported in the interspaced portions of the brackets, and a crank member being formed on the shaft and pivotally connected to the operating rod.

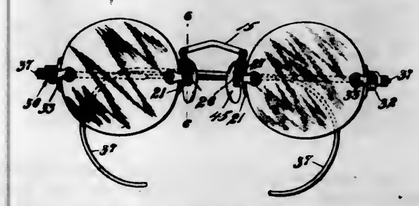
1,891,652. BRAKE TESTING APPARATUS. DAVID C. SCOTT, Providence, R. I., assignor to Henry L. Scott Company, a Corporation of Rhode Island. Filed Jan. 9, 1931. Serial No. 507,590. 12 Claims. (Cl. 73—51.)



1. The method of testing brake effectiveness of a motor vehicle having a plurality of wheels comprising steps of positioning a plurality of wheels of the vehicle on a plane surface, then while the vehicle is at rest braking said wheels against tendency to rotative movement, and then varying the pitch of the plane surface to a point necessary to move said braked wheels and plane surface relative to each other.

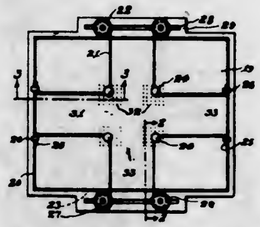
9. In a testing apparatus, a runway, carriages on said runway, movable means for supporting said carriages on said runway, means for securing any one or more of said carriages against movement relative to said runway, and means to incline said runway at an angle to the horizontal.

1,891,653. OPHTHALMIC MOUNTING. WAYNE S. SEARLES, Providence, R. I., assignor to Universal Optical Corporation, a Corporation of Rhode Island. Filed Apr. 25, 1932. Serial No. 607,378. 16 Claims. (Cl. 88—42.)



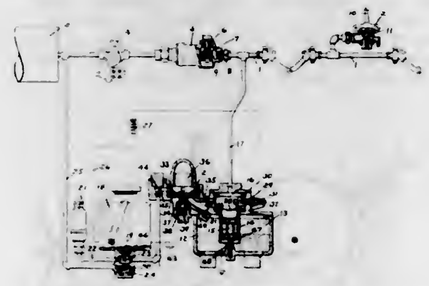
1. In an ophthalmic mounting, a rigid bridge, a pair of nose guard arms rigidly secured to said bridge for permanent adjustment, a pair of lens holders, means for pivotally mounting said lens holders on said bridge about a vertical axis, and resilient means tending to normally hold said lens holders in position desired for visual use.

1,891,654. ACCIDENT DISPLAY BOARD. MORTIMER R. SIMON, Passaic, N. J. Filed Mar. 16, 1931. Serial No. 523,034. 11 Claims. (Cl. 35—12.)



1. In a device of the class described in combination, a board member having an upstanding flange, a set of tapes for defining the streets, pins attached to said board member, said pins being movable, said tapes bent around said pins, one end of each said tape movably fastened to said flange and the other end leading from a spool movably attached to said board member.

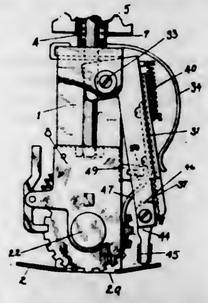
1,891,655. ELECTROPNEUMATIC SIGNAL SYSTEM. CARLTON D. STEWART, Berkeley, Calif., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa., a Corporation of Pennsylvania. Filed Oct. 30, 1928. Serial No. 316,056. 5 Claims. (Cl. 177—352.)



2. In a train signal system, the combination with a train signal pipe normally charged with fluid under pressure and a fluid pressure operated signal device, of a casing having a liquid containing chamber and a fluid pressure chamber connected to said pipe, a cylinder, a piston in said cylinder subject on one side to the pressure in said fluid pressure chamber and exposed on the opposite side to the liquid in said liquid chamber, the area of the piston being substantially less than the area of the liquid in said liquid chamber, means for normally permitting equalization of fluid pressures between the fluid pressure chamber and the liquid containing chamber at a restricted rate, means controlled by the movement of said piston for controlling the fluid pressure for operating said signal device, means for reducing the pressure in the train signal pipe, said piston being moved through the medium of the liquid in the liquid chamber by the fluid pressure acting on the liquid, upon a reduction in pressure in said signal pipe and the consequent reduction in fluid pressure in said fluid pressure chamber.

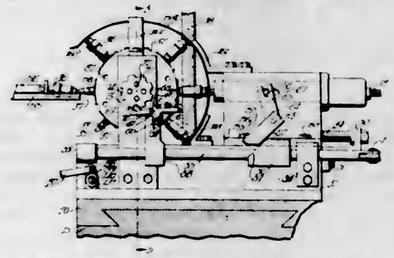
1,891,656. MARKING MACHINE. GEORGE STIEGLER, Cincinnati, Ohio. Filed May 24, 1930. Serial No. 455,392. 12 Claims. (Cl. 101—101.)

1. In a marking machine, a frame, a marking element reciprocating in said frame, an inking device for said marking element comprising a mounting member secured to the frame, an inking pad on the mounting member, means for normally retaining the inking pad out of contact with the marking member, means for moving the inking pad into contact with the marking member and



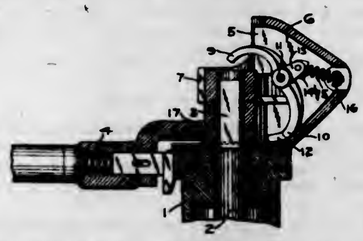
a device on the marking member for operating and then releasing the inking pad moving means during the movement of the marking member.

1,891,657. GRINDING MACHINE. FREDERICK J. THELER, Cincinnati, Ohio, assignor to Cincinnati Grinders Incorporated, Cincinnati, Ohio, a Corporation of Ohio. Filed Aug. 6, 1931. Serial No. 555,576. 22 Claims. (Cl. 51—108.)



1. In a grinding machine the combination of a bed, a grinding wheel rotatably mounted thereon, an opposed friction drive wheel spaced from the grinding wheel for providing a grinding throat therebetween, an indexible turret supporting work pieces in the grinding throat in simultaneous engagement with the grinding wheel and friction drive wheel, and additional supporting means in the grinding throat cooperating wth the turret for supporting work pieces.

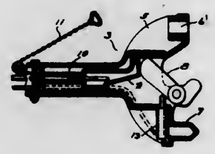
1,891,658. LOCKING MEANS FOR ROTATABLE ELEMENTS. FRANK B. THOMAS, Forest Hills Borough, Pa., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa., a Corporation of Pennsylvania. Filed Nov. 15, 1930. Serial No. 495,936. 18 Claims. (Cl. 74—38.)



1. The combination with a rotatable element, of a member removably mounted on said element through

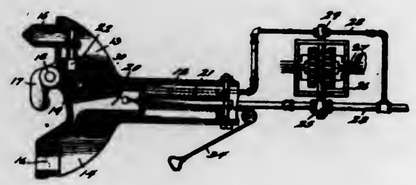
the medium of which the rotation of said element is controlled, and rockable means operated by said member, upon the removal of the member from said element, to lock said element against rotation.

1,891,659. COUPLING MECHANISM. CHARLES H. TOMLINSON, Mansfield, Ohio, assignor to The Tomlinson Coupler Company, Mansfield, Ohio, a Corporation of Ohio. Filed July 11, 1929. Serial No. 377,473. 18 Claims. (Cl. 213—76.)



15. The combination with a car having a brake line and a valve for closing said brake line, of a coupler for said car having a coupling knuckle, controlled means for bleeding said brake line, a valve for closing said bleeding means and common means for opening said valve and actuating said coupling knuckle.

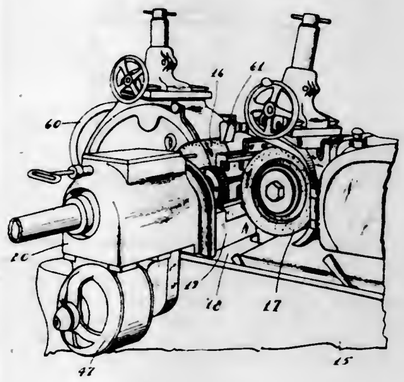
1,891,660. CAR COUPLING MECHANISM. CHARLES H. TOMLINSON, Mansfield, Ohio, assignor to The Tomlinson Coupler Company, Mansfield, Ohio, a Corporation of Ohio. Filed Mar. 17, 1930. Serial No. 436,638. 24 Claims. (Cl. 213—76.)



1. The combination with cars having brake lines and brake line connectors, of means for mechanically coupling said cars, and means automatically placed in operable condition by the mechanical coupling means of the cars for preventing movement of said cars if said brake line is not properly conditioned for train operation.

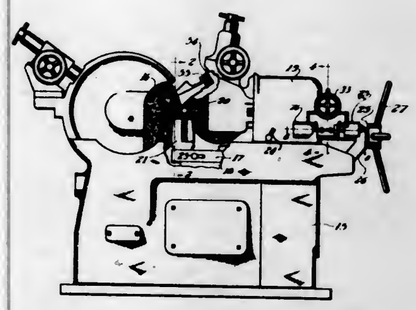
1,891,661. GRINDING. GEORGE W. BINNS, Cincinnati, Ohio, assignor, by mesne assignments, to Cincinnati Grinders Incorporated, Cincinnati, Ohio, a Corporation of Ohio. Filed May 9, 1925. Serial No. 29,213. 11 Claims. (Cl. 51—103.)

1. A machine of the character described including opposed grinding and regulating wheels having their opposed portions parallel and forming a grinding throat, and a work support extending transversely in said throat, said parts having correspondingly tapered portions at the entrant side of the machine to support and engage a workpiece and reduce it to proper size to enter said throat,



the regulating wheel serving to frictionally engage and rotate the work, and additional means exterior to the throat for imparting a positive rotation thereto.

1,891,662. MACHINE TOOL. CLEMENT BOOTH and FREDERICK S. HAAS, Cincinnati, Ohio, assignors to Cincinnati Grinders Incorporated, Cincinnati, Ohio, a Corporation of Ohio. Filed Sept. 27, 1929. Serial No. 395,710. 17 Claims. (Cl. 51—103.)

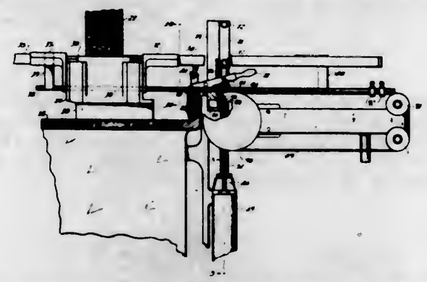


3. In a feeding mechanism, the combination of an oscillatable member for effecting predetermined feed increments upon oscillation thereof in one direction, means for imparting a rapid feed oscillation and a retarded return movement to the member including an hydraulically operated actuating member and an electrical control circuit for determining the actuation thereof.

1,891,663. GRINDING MACHINERY. CLEMENT BOOTH, Cincinnati, Ohio, assignor to The Cincinnati Grinders Incorporated, Cincinnati, Ohio, a Corporation of Ohio. Filed Oct. 16, 1929. Serial No. 400,136. 21 Claims. (Cl. 51—103.)

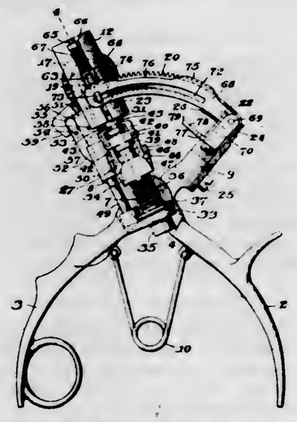
1. A machine of the character described for grinding circular contoured articles including a bed or support, opposed grinding and regulating wheels carried thereby to provide a work receiving throat therebetween, said wheels being operable respectively at a high grinding rate of speed to effect a stock removal from the work and at a relatively slow work controlling rate of speed, a work

support sub-tending the throat relative to which the work is shifted, means for varying the width of the grinding throat, means for feeding the work piece along



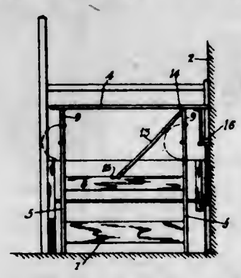
said work support and means for simultaneously effecting the actuation of the throat varying and work feeding mechanisms.

1,891,664. WIRE SPLICING DEVICE. ORSON W. BRENIZER, Philadelphia, Pa. Filed May 6, 1932. Serial No. 609,584. 25 Claims. (Cl. 140—119.)



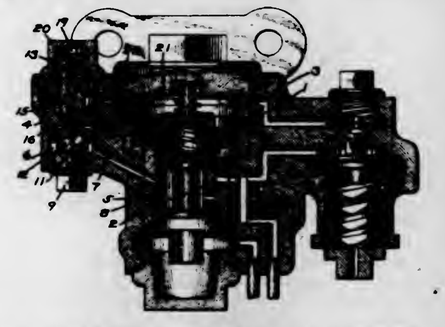
1. The combination of a support, means thereon for receiving and holding a pair of wires, a rotatable twisting device, a wire clamp carried by the twisting device and movable thereon into closed and open positions, means to rotate said device, and means to operate said clamp.

1,891,665. COMBINATION BENCH AND TABLE. ROY BRENHOLTS, Columbus, Ohio. Filed Jan. 11, 1930. Serial No. 420,240. 4 Claims. (Cl. 45—51.)



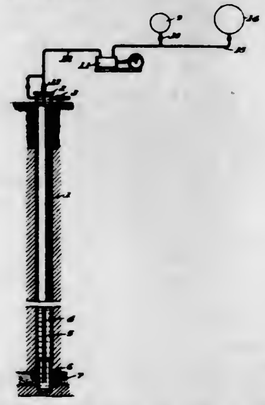
2. A table of the class described, formed to comprise a pair of end supports, a table top capable of being raised and lowered, and rails provided on the under side of said top and arranged on the corresponding sides of the respective supports, movable leaves having their upper edges hinged to the upper ends of said supports and their lower edges hinged to the lower edges of said end rails, said leaves being positioned between the rails and the upper ends of said supports when the table top is in its lowered position, and when swung with said top to a raised position said leaves will then be positioned in vertical alignment with said supports and rails.

1,891,666. FEED VALVE DEVICE. DONALD F. BROWN, London, England, assignor to The Westinghouse Air Brake Company, Wilmerding, Pa., a Corporation of Pennsylvania. Filed Mar. 20, 1929, Serial No. 348,537, and in Great Britain July 18, 1928. 2 Claims. (Cl. 183—75.)



1. A casing having two chambers, one of which is normally charged with fluid under pressure, a plug mounted in said casing and having a restricted passageway through which fluid under pressure is supplied from the normally charged chamber to the other chamber, the end of said plug extending into a space communicating with the normally charged chamber, and a member removably mounted in said casing and having a cup-shaped wall extending into said space and surrounding said end of the plug, said member being removable independently of and without removing said plug.

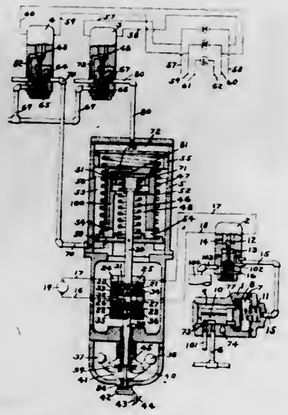
1,891,667. METHOD FOR FACILITATING THE FLOW OF WELLS. RICHARD H. CARR, Chicago, Ill., assignor to The Pure Oil Company, Chicago, Ill., a Corporation of Ohio. Filed June 30, 1932. Serial No. 620,179. 6 Claims. (Cl. 166—21.)



1. The method of treating oil wells having producing regions disposed in lime formations, which consists in filling the casing and tubing of the well with oil to

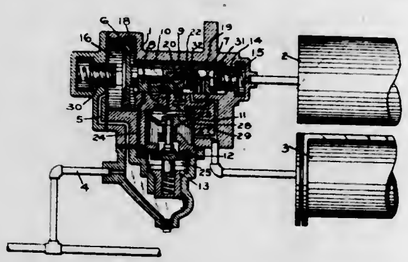
eliminate gas pockets therefrom, introducing a chemical reagent into the tubing of the well and to displace the oil ordinarily contained in the tubing, confining the oil in the space provided between said tubing and casing to prevent the escape of the oil from said space, displacing the acid from the tubing by applying a liquid under pressure thereto, whereby said agent is disseminated in the lime formation of the well, and closing the outlets of the tubing and the casing for a sufficient period of time to permit the acid reagent to react with the lime formation.

1,891,668. MULTIPLE SPEED GOVERNOR DEVICE. HARLE S. COOK, Wilmerding, Pa., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa., a Corporation of Pennsylvania. Filed Jan. 31, 1929. Serial No. 336,407. 34 Claims. (Cl. 303—21.)



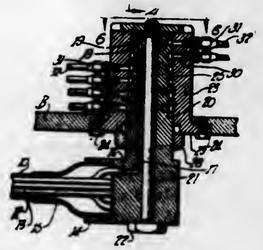
1. The combination with a speed governor, of a member movable by said governor according to the speed, means for opposing the movement of said member by the operation of said governor, and means operated upon an increase in fluid pressure for increasing the force with which the first mentioned means opposes movement of said member.

1,891,669. FLUID PRESSURE BRAKE. SIDNEY G. DOWN, Edgewood, Pa., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa., a Corporation of Pennsylvania. Filed Jan. 29, 1932. Serial No. 589,639. 4 Claims. (Cl. 303—72.)



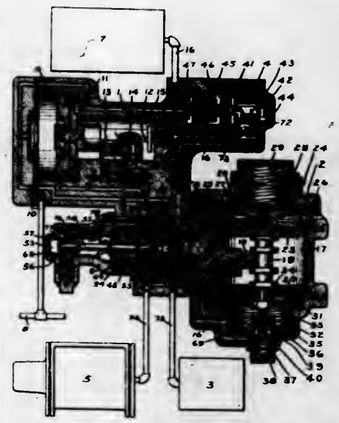
1. In a fluid pressure brake, the combination with a brake pipe and auxiliary reservoir, of a triple valve device comprising a casing containing a piston subject to the opposing pressures of the auxiliary reservoir and brake pipe and having a feed groove controlled by said piston through which communication is established from the brake pipe to the auxiliary reservoir, and a main slide valve and a graduating valve operated by said piston upon a reduction in brake pipe pressure to effect an application of the brakes, a loading cavity at the seat of the main slide valve being connected to the atmosphere upon movement of the graduating valve by said piston.

1,891,670. MULTICONNECTION HYDRAULIC CABLE. HANS ERNST, Cincinnati, Ohio, assignor to The Cincinnati Milling Machine Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Nov. 28, 1930. Serial No. 498,633. 9 Claims. (Cl. 285—184.)



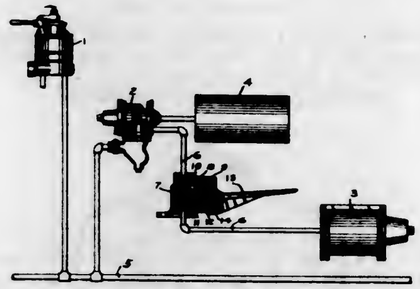
1. An hydraulic connector comprising a multi-channel cable, coupling means secured to the end of the cable, said coupling means comprising an elbow having a tapered shank, the channels of said cable terminating in outlet ports formed in said shank, an associate member having a tapered socket for receiving the shank, outlet channels formed in the member registering with the ports of said elbow, means for securing the parts together to simultaneously establish flow communication between the individual ports and the channels, and additional means for disassembling the parts, said last named means comprising an ejecting member threaded on said shank and into engagement with said associate member.

1,891,671. FLUID PRESSURE BRAKE. CLYDE C. FARMER, Pittsburgh, Pa., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa., a Corporation of Pennsylvania. Filed May 5, 1930. Serial No. 449,763. 24 Claims. (Cl. 303—74.)



1. In a fluid pressure brake, the combination with a brake pipe, of means for effecting a graduated release of the brakes, and means subject to variations in brake pipe pressure for rendering the first mentioned means either effective or ineffective to graduate the release of the brakes.

1,891,672. FLUID PRESSURE BRAKE. FRED B. FARMER, Eugene, Oreg., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa., a Corporation of Pennsylvania. Filed Feb. 18, 1931. Serial No. 515,456. 6 Claims. (Cl. 303—47.)

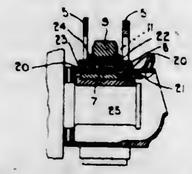


1. In a fluid pressure brake, the combination with a brake controlling valve device normally operable to effect an application of the brakes on the locomotive, of means operable manually by the engineer from the locomotive cab for rendering said valve device ineffective to apply the brakes on the locomotive.

1,891,673. FIRE EXTINGUISHING COMPOUND. ACIE J. GILLEO, Detroit, Mich., assignor to The Outrite Fire Extinguisher Corporation, Detroit, Mich., a Corporation of Ohio. Filed Apr. 25, 1931. Serial No. 533,002. 9 Claims. (Cl. 23—243.)

1. A fire extinguishing compound consisting of a powdered material capable of liberating carbonic acid gas when decomposed by heat, and a fatty acid with which said material is coated so as to render it substantially water-repellent and free-flowing.

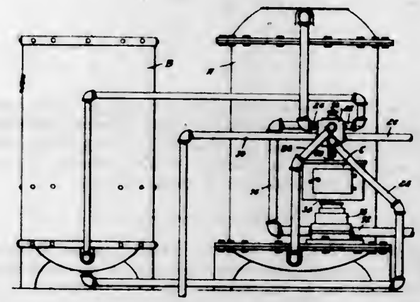
1,891,674. ROLLING STOCK. RICHARD THOMSON GLASCODINE, London, England. Filed Mar. 5, 1931, Serial No. 520,404, and in Great Britain Oct. 10, 1930. 2 Claims. (Cl. 105—218.)



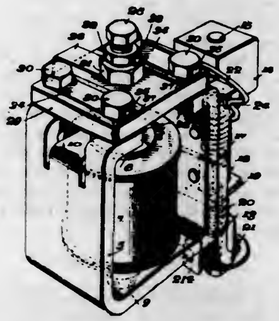
1. In a railway vehicle the combination with an axle box of shock absorbing means for carrying the vehicle, comprising a seat on said box, a substantial cushion of India-rubber located on said seat and extending over the side walls of the axle box, a cover plate carrying the vehicle and uniformly distributing the load over said cushion and lugs on said cover plate depending over the side walls of said box and co-operating with the extended portions of the cushion to provide longitudinal resiliency between the axle box and the vehicle.

1,891,675. WATER SOFTENER. STANLEY G. HARWOOD and DONALD GRISWOLD, Rockford, Ill., assignors, by mesne assignments, to The Permutit Company, Wilmington, Del., a Corporation of Delaware. Original application filed Mar. 21, 1925, Serial No. 17,446. Divided and this application filed Aug. 28, 1926. Serial No. 130,806. 9 Claims. (Cl. 210—24.)

1. In a water softening apparatus, the combination with a softener tank, and a brine tank, having a single source of water supply from which water is supplied to the softener in softening and again to the softener and brine tank in regeneration, of valve mechanism serving to control the circulation in the apparatus for the periods of softening and regeneration, a meter serving to measure the water passing through the apparatus, and means under control of the meter for automatically operating said valve mechanism after a predetermined amount of water has passed through the meter in softening, and for automatically operating the said mechanism again after a different amount of water has passed through the meter in regeneration, said operating means comprising valve-actuating means and controlling means therefor including means driven by the meter during the flow for softening and other means driven by the meter during the flow other than for softening, the first valve operation being controlled by the meter through said first named means driven thereby and the second valve operation being controlled by the meter through the second named means driven thereby.



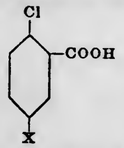
1,891,676. ELECTRICAL APPARATUS. RAYMOND P. LANSING, Montclair, N. J., assignor to Eclipse Machine Company, Elmira Heights, N. Y., a Corporation of New York. Filed Jan. 5, 1929. Serial No. 330,680. 9 Claims. (Cl. 200—90.)



1. In a regulator of the class described, a magnet, a substantially rectangular supporting member for the magnet, one end of said member having a cut away portion, a swinging armature carried by said member, a contact carried by the armature, a plate bridged across the cut away portion of said member, a contact carried by said plate and engageable by said first named contact, means for insulating the second named contact from the supporting member, and adjustable means having operative engagement with the armature for yieldingly maintaining said contacts closed.

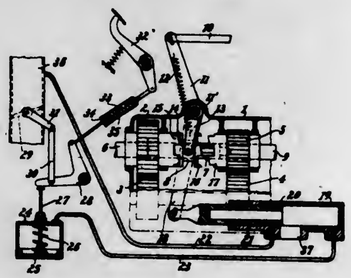
1,891,677. NEW SUBSTITUTED PHENOL-CARBOXYLIC ACIDS AND PROCESS OF MAKING SAME. LEOPOLD LASKA and OSKAR HALLER, Offenbach-on-the-Main, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Mar. 19, 1931, Serial No. 523,934, and in Germany Apr. 3, 1930. 6 Claims. (Cl. 260—111.)

4. As new compounds the substituted phenol carboxylic acids of the probable general formula:



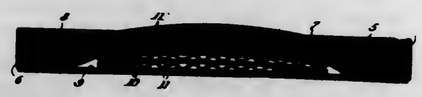
wherein X represents chlorine or a methyl group, which compounds represent when dry nearly colorless substances, having a definite melting point, soluble in alkalies, showing when dissolved in alcohol a violet coloration after the addition of a dilute solution of ferric chloride.

1,891,678. CHANGE SPEED GEAR. KARL MAYBACH, Friedrichshafen, Germany, assignor to Maybach-Motorenbau G. m. b. H., Friedrichshafen, Germany. Filed Aug. 29, 1931, Serial No. 560,175, and in Germany Sept. 8, 1930. 3 Claims. (Cl. 74—107.)



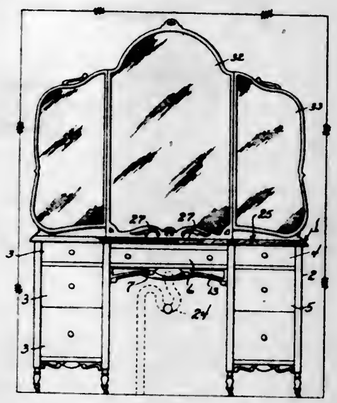
1. In a change speed gear comprising two pairs of constantly meshing gears and a pair of alternately operating claw couplings inserted between said pairs, the teeth of said claw couplings being provided with so inclined front faces that the halves of each of said couplings on approaching do not engage but rattle past each other until the originally faster half becomes the slower one and vice versa; means for tensioning either of said claw couplings toward engagement; an auxiliary device working in dependency of said claw couplings but not of said tensioning means and adapted to influence the opening of the intake of the motor associated with said change speed gear during the period of said claw coupling halves rattling past each other.

1,891,679. PACKAGE OF FACIALS. EDWARD A. MCCORMICK, New Brunswick, N. J., assignor to Chicopee Manufacturing Corporation, New Brunswick, N. J., a Corporation of Massachusetts. Filed May 28, 1932. Serial No. 614,228. 2 Claims. (Cl. 206—57.)



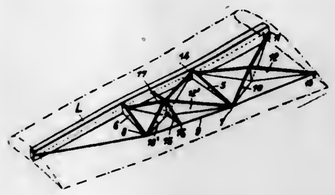
1. A package, comprising a carton having a display window through which sheeted articles may be grasped and withdrawn, a filling for the carton consisting of a plurality of sheeted articles in superposed order of arrangement, and a backing for the filling having a boss-like projection in the form of a cellular pad centered with respect to the window and impinging upon the filling centrally to stress the same upon the rim of the window.

1,891,680. VANITY DRESSER. HORACE S. MELDAHL, Charleston, W. Va. Filed Dec. 11, 1929. Serial No. 413,327. 1 Claim. (Cl. 45—5.)



A vanity dresser comprising a supporting structure having a chamber beneath the top wall thereof, a basin in said chamber and having laterally extending flanges secured to the supporting structure and providing drains to the basin to direct the splashed water back into the basin, mirrors on the supporting structure, hinged covers on said structure and concealing the basin and chamber from view when in a closed position and when in an open position adapted to provide shields to prevent the splashed water from the basin from engaging the mirrors.

1,891,681. FRAMEWORK FOR THE WINGS OF AEROPLANES AND FOR OTHER OBJECTS. GEORGE LOUIS RENÉ JEAN MESSIER, Montrouge, France. Filed July 7, 1932, Serial No. 621,272, and in France Oct. 29, 1931. 7 Claims. (Cl. 244—31.)



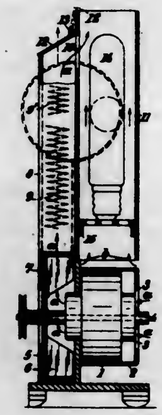
1. In an airplane including wings and a rigid structure to which said wings are attached, a wing framework which comprises in combination, a single spar rigidly secured to said structure, a plurality of arms rigidly secured to said spar transversally thereto, a plurality of ribs carried by said spar, a plurality of elements extending between said arms for supporting said ribs, and a truss consisting of diagonal crossed members each rigidly interconnecting two adjacent arms, the two members at the end of said truss being rigidly secured to said rigid structure of the airplane.

1,891,682. PENCIL. NICHOLAS MEYER, Tonawanda, N. Y. Filed Mar. 22, 1932. Serial No. 600,533. 2 Claims. (Cl. 120—19.)



1. A pencil of the class described comprising a cylindrical longitudinally bored body having a slot formed in one side and opening through its outer surface and communicating with the bore, said slot terminating short of the opposite ends of said body, a paper wrapper surrounding said body and covering said slot, and a slidable lead feeder arranged in the bore and slot and co-operable with the adjacent end of a lead and having a cutting knife movable in said slot for gradually cutting the paper as the slide is fed progressively toward the writing end of the pencil.

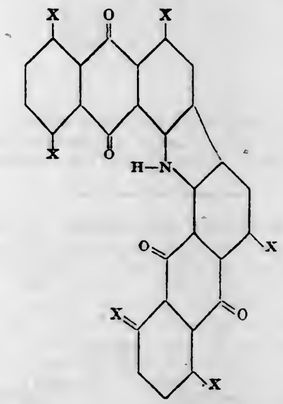
1,891,683. MOVING PICTURE PROJECTION APPARATUS. KURT MORSBACH, Berlin-Lichterfelde, Germany, assignor, by mesne assignments, to Projector G. m. b. H., Berlin, Germany, a Corporation of Germany. Filed June 27, 1929, Serial No. 374,158, and in Germany July 7, 1928. 2 Claims. (Cl. 88—24.)



1. In a projection apparatus, the combination of a projection lamp, a housing for said lamp, a resistance, a second housing for said resistance, a fan, a passage between said fan and second housing to conduct cooling air from said fan to said resistance, a connecting passage between said two housings and an outlet from said first named housing whereby the cooling air from said fan passes through said second housing, said connecting passage and said outlet to eject heated air from said first named housing.

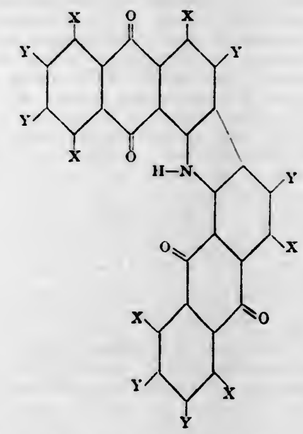
1,891,684. VAT DYESTUFFS OF THE DIPHTHALOYLCARBAZOLE SERIES. PAUL NAWIASKY, Ludwigshafen-on-the-Rhine, ERNST HONOLD, Frankfort-on-the-Main-Fechenheim, and HUGO WOLFF, Mannheim, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Oct. 17, 1930, Serial No. 489,478, and in Germany Oct. 24, 1929. 6 Claims. (Cl. 260—36.)

1. As new articles of manufacture vat dyestuffs derived from diphthaloylcarbazole corresponding to the general formula:



in which at least one of the positions marked X is connected by means of an imino group to one of the peri positions of a benzanthrone.

3. As new articles of manufacture vat dyestuffs derived from diphthaloylcarbazole corresponding to the general formula:

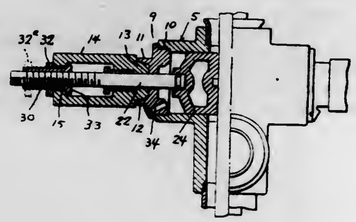


in which at least one of the positions marked X is connected by means of an imino group to one of the peri positions of a benzanthrone, the other peri position of the said benzanthrone being connected to a position marked Y vicinal to the substituted X-position, the dyestuffs dyeing cotton deep red brown to brown shades.

1,891,685. BLOW-OUT PREVENTER ATTACHMENT. JOE HENRY NICKS and ELERY EDWARD MOSHER, Refugio, Tex. Filed Dec. 10, 1930. Serial No. 501,420. 5 Claims. (Cl. 137—139.)

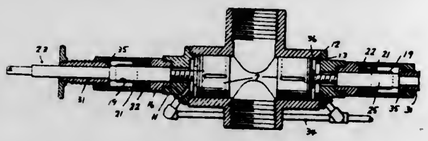
3. An attachment for a blow-out preventer head, comprising a housing adapted to be mounted thereon, a stem

slidable in the housing and rotatably connected with a ram of the preventer head, rotatable and slidable means



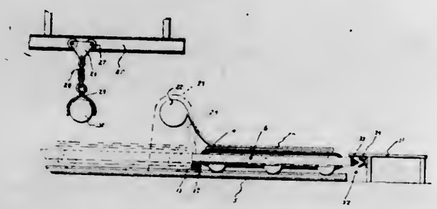
adapted to be moved into a position in which it cooperates with a portion of the housing and the stem whereby the stem can be moved longitudinally only by rotating it.

1,891,686. BLOW-OUT PREVENTER ATTACHMENT. JOE H. NICKS and ELBRY E. MOSHER, Corpus Christi, Tex. Filed Apr. 16, 1931, Serial No. 530,650. Renewed Oct. 14, 1932. 5 Claims. (Cl. 137—139.)



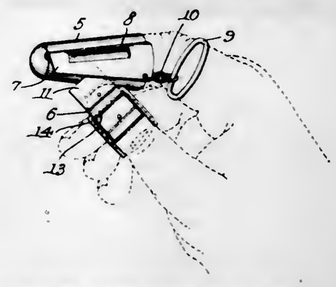
1. A blow-out preventer of the type described comprising in combination a standard ram head having the ends of its horizontal cylindrical portions interiorly screw-threaded, a cylindrical block screw-threaded into each of the said horizontal portions having in turn screw-threaded thereinto another block having shaft packing means in its outward end, a shaft slidable through said blocks, a hollow sleeve screw-threaded to extend axially outward from said other block the outward end portion of which is interiorly screw-threaded, a locking nut slidable on a reduced portion of said shaft and engageable with said interiorly screw-threaded portion of the sleeve and adapted to be rotated to abut a shoulder formed by said reduced portion of the shaft with the balance of the shaft to prevent outward movement of the shaft, said shaft being connected at its inner end with one of the rams in the ram head.

1,891,687. AUTOMATIC VENEER TABLE. SEAWELL C. NORMAN, Goldsboro, N. C. Filed Dec. 1, 1930. Serial No. 499,344. 3 Claims. (Cl. 270—30.)



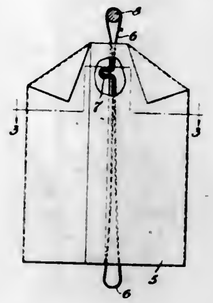
1. A veneer table comprising a track, a wheeled vehicle, a conveyor on the vehicle, a motor for operating the conveyor, a stationary contact separate from the vehicle, the contact on the vehicle, a motor circuit including the contact, and a motor on the vehicle, said circuit including the contact and a switch in the circuit for closing the circuit when the contacts are engaged.

1,891,688. FRUIT PICKING KNIFE. CECIL T. PARKER and BENJAMIN F. PARKER, Yakima, Wash. Filed Sept. 29, 1931. Serial No. 565,878. 1 Claims. (Cl. 30—24.)



A fruit picking device comprising a tubular body portion formed of a length of sheet metal material curved to fit over the index finger of the user, one end of the length of sheet metal material being extended laterally and overlying the body portion in spaced relation therewith, providing a blade, said blade having an elongated cut out portion formed at the base thereof, a thumb blade positioned on the thumb of the user and adapted to move under the first mentioned blade in cutting an article, and the edge of the last mentioned blade adapted to extend into the elongated cut out portion of the first mentioned blade, and said blades being supported independently of each other.

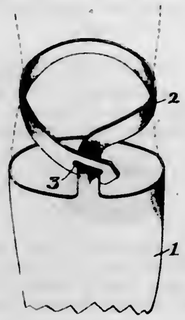
1,891,689. GARMENT BAG. KING M. RANDOLPH, Knoxville, Tenn., assignor of forty one-hundredths to Cary F. Spence, Knoxville, Tenn. Filed Oct. 14, 1931. Serial No. 568,808. 3 Claims. (Cl. 206—7.)



1. A garment bag comprising, in combination, a bag having an open bottom and a top which is partly open; and a string secured inside the bag intermediate its ends so that its connection will give way as soon as any substantial weight is put on the string, without tearing the bag; said string being longer than the bag, and its connection comprising a loop.

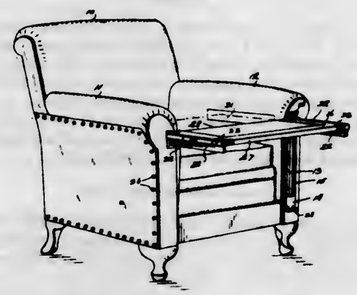
1,891,690. COMBINED HOSE SUPPORTER AND HOSE. NATHAN ERNEST RICKEY, Massillon, Ohio. Filed Jan. 20, 1932. Serial No. 587,781. 1 Claim. (Cl. 2—240.)

As a new article of manufacture, a single-piece hose body and strap, said strap provided at its outer end with a long slot of a length greater than the width of the strap, and portions of said strap between its ends laid



full-width together and threaded freely through said long slot forming an automatically adjustable loop to grip a leg, substantially as shown and described.

1,891,691. COMBINATION CHAIR AND WRITING DESK. ELSIE M. RUNKLES, Detroit, Mich. Filed Mar. 22, 1930, Serial No. 438,167. Renewed May 2, 1932. 3 Claims. (Cl. 155—127.)

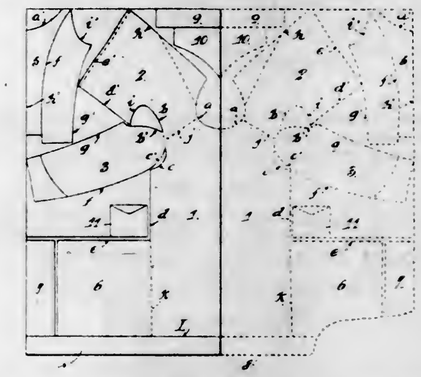


1. In combination, a chair having an elongated compartment in one arm opening through the front thereof, desk means, means for slidably mounting said desk means in said compartment, a pair of desk supporting members slidably mounted in the opposite arms of said chair, said desk supporting members comprising each an elongated bar, an upstanding lug secured to one end of each bar, stop means secured to the opposite end of each bar, and means for slidably mounting said bars in the arms of the chair, said desk means having recesses whereby to receive said upstanding lugs of said supporting means.

1,891,692. ART OF COAT MAKING. MATHIAS SENZER, Highland Park, N. J. Filed Aug. 5, 1932. Serial No. 627,654. 3 Claims. (Cl. 2—93.)

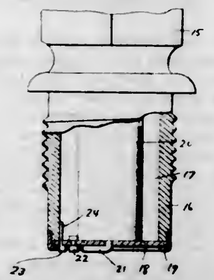
1. In the art of coat manufacture, the method of cutting coats from rectangular blanks of cloth which consists in laying out the back of the coat, two upper quarter-front sections, two lower quarter-front sections and two top sleeves as an integral structure, the upper quarter sections being integral with the back sections along the shoulders, and the lower quarter sections being integral with the back section along the sides thereof, the top sleeves being integral with the back section and the upper quarter-front sections at the shoulders, cutting the parts to provide arm holes to the edges of which the sleeves

are adapted to be sewn, said upper quarter-front sections being cut with edges adapted to be sewn to the back section along vertical lines extending from the arm holes to the belt line of the garment, said upper and lower front sections being cut with cooperating edges adapted



to be sewn together along the belt line, under sleeves and front edge facing strips cut from the blank at the corners beyond the upper quarter-front sections and above the top sleeves, and locating facing strips along the extreme vertical edge of the lower quarter-front sections.

1,891,693. SPARK PLUG. DAVID C. SMITH and WALTER PATE WALDEN, Shreveport, La. Filed Dec. 27, 1929. Serial No. 416,845. 1 Claim. (Cl. 123—169.)

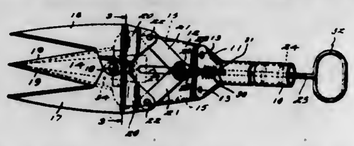


A spark plug of the class described comprising a shell, a thin disk of mica having its edges abutting the lower end of the shell, a retaining ring on the lower end of the shell holding the disk in place, a body of non-conducting material carried by the shell and having its lower end contacting the upper face of the disk, a main electrode passing through the body and through a centrally arranged hole in the disk with its end bent at right angles over the outer face of the disk, a ground electrode connected to an inner wall of the shell passing through a hole in the disk and having its outer part bent at right angles over the outer face of the disk, and a button carried by the disk and arranged between and spaced from the extremities of the main and ground electrode to form a pair of spark gaps.

1,891,694. GRASS SHEARS. SVERRE R. SVENDSGAARD, Marshfield, Oreg. Filed Feb. 24, 1932. Serial No. 594,861. 2 Claims. (Cl. 56—241.)

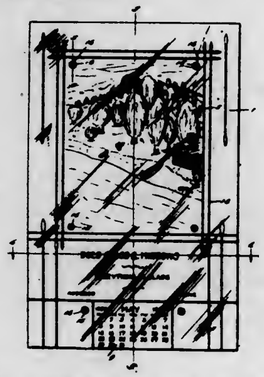
1. A shears as set forth comprising a fixed blade having keen portions on the opposite edges thereof, a pair of movable blades, a slotted plate carried by the fixed blade,

a handle secured to the plate, operating means for the movable blades, means engaging the slot in the plate and connecting the operating means with the movable blades



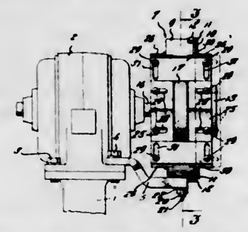
whereby to swing said blades toward or from each other, and yieldable means engaging the operating means to constantly urge said movable blades into open position.

1,891,695. CALENDAR. RAYMOND F. TATROE, Coffeyville, Kans. Filed May 20, 1932. Serial No. 612,575. 2 Claims. (Cl. 40—107.)



1. A calendar comprising a back, a glass plate, a filler between the glass plate and the back, means for securing the glass plate, the filler and the back together, the filler having an opening therein spaced from its edges, a picture in the opening, said filler further having a pocket extending horizontally thereinto from one vertical edge thereof and terminating in spaced relation to the other vertical edge of said filler, a removable advertising card slidably inserted in the pocket, the filler still further having a vertical pocket therein extending from its lower edge to an intermediate portion of the first named pocket, a removable calendar pad slidably mounted in the second named pocket, an opaque coating on the back of the glass plate having openings therein registering with the opening and the pockets in the filler for exposing the picture, the advertising card and the calendar pad.

1,891,696. GRINDING WHEEL GUARD. FRED J. TRIMBLE, Maywood, Calif. Filed Sept. 30, 1931. Serial No. 566,082. 4 Claims. (Cl. 51—269.)



1. A grinding wheel guard comprising a bracket, a substantially segmental housing mounted on the bracket, the cut-away portion of the housing being open, the wheel being operable in the housing and projecting through the opening, guard plates shiftably mounted on the housing for lateral adjustment toward and away from the side faces of the wheel, and guard plates shiftably mounted on the housing for adjustment toward and away from the periphery of the wheel.

1,891,697. FOOD ACCESSORY COMPOUND. LOUIS A. TUVIN, New York, N. Y. Filed July 10, 1931. Serial No. 549,977. 1 Claim. (Cl. 167—56.)



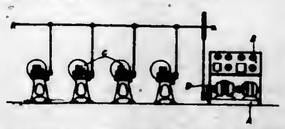
A food accessory compound of the character described, comprising a psyllium seed; a coating of sugar applied to said psyllium seed, and a coating of gum capable of absorbing moisture applied to said coating of sugar.

1,891,698. METHOD OF PRODUCING A FOOD ACCESSORY COMPOUND. LOUIS A. TUVIN, Great Neck, N. Y. Original application filed July 10, 1931, Serial No. 549,977. Divided and this application filed June 17, 1932. Serial No. 617,916. 2 Claims. (Cl. 167—56.)



1. A method of producing a food accessory compound consisting of heating and agitating under heat treatment a mass of psyllium seed; applying to the mass during agitation thereof a coating of sugar; then while continuing agitation of the mass applying thereto a coating of gum capable of absorbing moisture and continuing the agitation of the mass until the coatings applied to the mass of seed have become thoroughly dry.

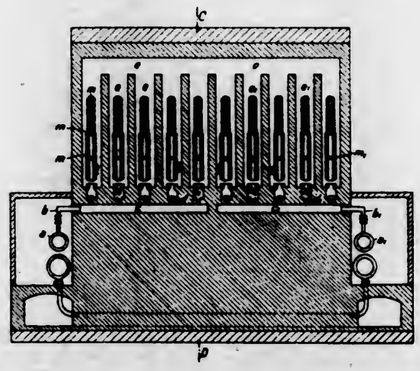
1,891,699. AUTOMATIC MACHINE HEATING BY INDUCTION. PIERRE VIBY, Chatellerault, France. Filed Dec. 4, 1928, Serial No. 323,711, and in France Dec. 12, 1927. 3 Claims. (Cl. 219—47.)



1. An improvement for regulating the heating by induction in automatic machines which comprises an electrical converter for generating electrical heating current, the heating current being regulated by the varying speeds of the converter group and machines, mechanical means for driving said automatic machines from said group and indicating means for said generating group according to which the voltage for said automatic machine heating units may be regulated.

1,891,700. METHOD OF HEATING COKE OVENS. CARL WESSEL, Essen-Borbeck, Germany, assignor to the Firm Carl Still, Recklinghausen, Germany. Filed Jan. 30, 1928, Serial No. 250,664, and in Germany Jan. 31, 1927. 1 Claim. (Cl. 202—12.)

The method of uniformly heating the flues of a coke-oven by fuel gas subject to decomposition by heat, which comprises the steps of mixing the fuel gas preliminary to introduction into the flues with a quantity of highly heated air insufficient to support combustion, but sufficient to prevent decomposition under the influence of the surrounding heat, separately supplying to the flues secondary air sufficient with the amount in the mixture aforesaid to support combustion, and then conducting the mixture

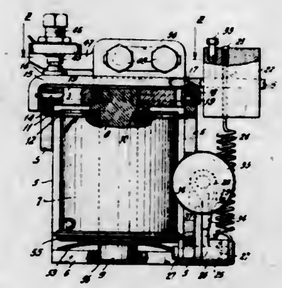


of gas and air first mentioned to various distributing points spaced lengthwise in the flues, whereby combustion is effected at the distributing points.

1,891,701. METHOD OF MANUFACTURING CONCRETE. KASPAR WINKLER, Zurich, Switzerland. Filed Aug. 14, 1930, Serial No. 475,381, and in Germany Feb. 25, 1929. 3 Claims. (Cl. 106—27.)

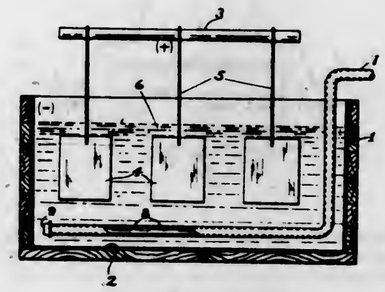
1. A method of manufacturing special cement, comprising mixing cement with an addition of clinker of comparatively rough grain, said clinker having been previously treated with a compound selected from a group consisting of alkali compounds, alkaline earth compounds, oxalic acid, oxalates and fluorine-containing compounds.

1,891,702. ELECTRICAL APPARATUS. JOSEPH WILLIAM ALLEN, East Orange, N. J., assignor to Bendix Aviation Corporation, East Orange, N. J., a Corporation of Delaware. Filed Oct. 30, 1931. Serial No. 572,187. 15 Claims. (Cl. 175—336.)



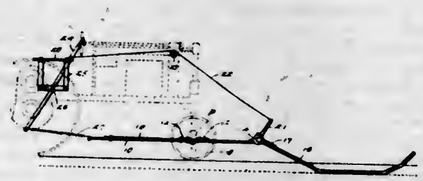
1. Means for regulating changes in the overall length of a solenoid core comprising a flange on said core near one end thereof, a frame surrounding said solenoid, said frame including a transversely disposed plate apertured to receive one end of said core, and resilient means engaging said core near the other end thereof and acting to urge said flange into engagement with said plate, said resilient means also acting to yieldably support the solenoid.

1,891,703. METHOD OF COATING. HELMER BENGSTON, Indianapolis, Ind., assignor to Aluminum Colors Incorporated, Indianapolis, Ind., a Corporation of Delaware. Filed May 27, 1932. Serial No. 613,997. 1 Claim. (Cl. 204—1.)



A process of anodically coating aluminum with an oxide coating which comprises making the aluminum an anode in an electrolytic cell, the electrolyte of which is a coating-forming solution and, during the coating process, maintaining all points at the aluminum anode surface-electrolyte interface at a substantially constant temperature.

1,891,704. TRACTOR GUIDING DEVICE. HENRY BLUME, Tulare, S. Dak. Filed July 7, 1931. Serial No. 549,232. 5 Claims. (Cl. 97—49.)

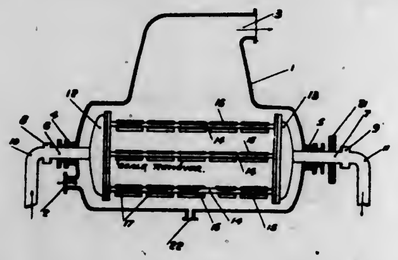


1. The combination with a tractor having a horizontally swingable steering wheel, of a longitudinal bar operatively engaged with the axle of said wheel to cause the wheel to swing in a horizontal plane as the bar is swung, a furrow engaging guide operatively supported upon said bar adjacent one end to swing therewith, a contractile spring engaging the bar adjacent the other end and tending to urge the bar in a direction to swing the wheels toward the land side and away from the furrow, manually operable means for raising or lowering the guide out of or into the furrow, and simultaneously releasing or increasing the tension on said spring.

1,891,705. HEAT EXCHANGER. FRANÇOIS XAVIER JOSEPH ALBERT DELAS, Paris, France. Filed May 17, 1932, Serial No. 611,906, and in France Sept. 28, 1931. 4 Claims. (Cl. 257—79.)

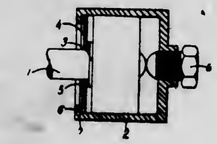
1. An apparatus for exchange of heat between two fluids comprising a set of pipes, means for causing one fluid to circulate inside said pipes, means for causing the other fluid to bathe the outside thereof, means for rotating said set of pipes around an axis, around each pipe a tubular member loosely slipped thereon, on each of said members a counterweight heavy enough for maintaining it in the same angular position during the rotation of the set, each of said

members being provided along a generatrix with a slot the width of which is smaller than the outside diameter of the corresponding pipe, said members being resilient



enough to allow said slot to be enlarged so that the width thereof becomes larger than the diameter of the corresponding pipe.

1,891,706. LEAKLESS JOINT FOR ROTATING SHAFTS. GEORGES HENRI ERNEST DE RAM, Boulogne sur Seine, France. Filed Aug. 8, 1930, Serial No. 473,989, and in France Sept. 3, 1929. 5 Claims. (Cl. 286—11.)



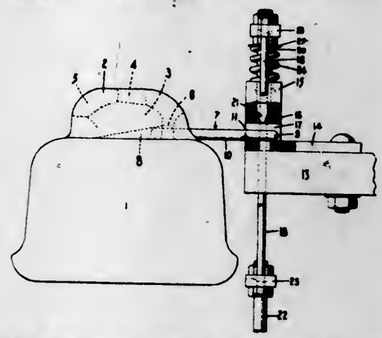
1. A joint for the purpose specified comprising a casing having a closed end and provided at the other end with an annular flange defining an opening, a shaft extending through the opening, a flexible disk under elastic tension on the shaft, packing members interposed, respectively, between the flexible disk and the casing and the shaft, the pressure imparted to the packing members being due to the direct application of the disk under tension on the packing members, and means carried by the casing engaged with the shaft for moving the casing axially with respect thereto to cause binding engagement of the disk with the flange and shaft.

1,891,707. SHADE. JAN DROPINSKI, San Francisco, Calif. Filed Sept. 24, 1930. Serial No. 484,101. 3 Claims. (Cl. 41—21.)



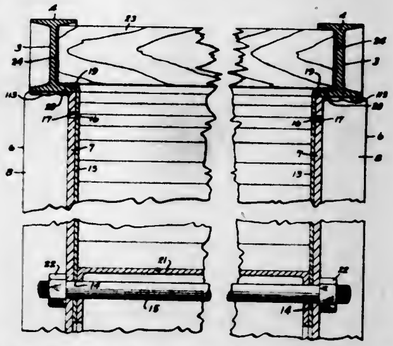
1. A shade comprising an opaque stencil having a design cut thereon, the edges of the design being bent away to the back side of the stencil out of the plane of the same to permit light rays from the rear of the stencil to shine through, a transparent cover on the other face of the stencil having a design thereon substantially corresponding to the boundaries of the group of stencil design to form a decoration of the shade independently of the stencil cuts at one time, and coacting with the stencil design reflected thereon through the cut edges of the stencil design from a source of light behind the stencil to form a different and illuminated decoration.

1,891,708. INSULATOR COTTER AND MODE OF USE. HOWARD L. GALLOWAY, Baltimore, Md., assignor to Locke Insulator Corporation, Baltimore, Md., a Corporation of Maryland. Filed Mar. 8, 1929. Serial No. 345,887. 8 Claims. (Cl. 29—86.1.)



1. The method of applying a cotter to an insulator cap of the type having a socket for receiving a headed suspension member and having the wall of the socket provided with a hole and the cotter being of general U-shape with an elongated head and arms joined thereto by a constricted portion, the head being of a width no greater than that of the hole, said method comprising inserting the cotter head first through said hole from within the socket, and expanding the head to increase the width thereof beyond the width of the hole to prevent subsequent withdrawal of the cotter through the hole.

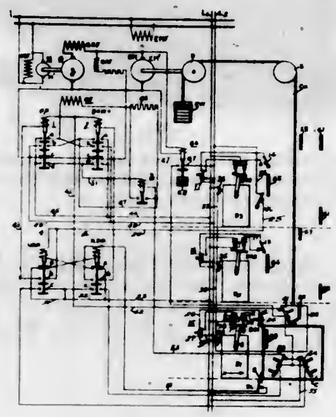
1,891,709. METAL CABLE REEL. ETHAN N. HEACOCK, Westfield, N. J., assignor to Henry B. Newhall Corporation, Garwood, N. J., a Corporation of New Jersey. Filed Dec. 18, 1929. Serial No. 414,912. 2 Claims. (Cl. 242—77.)



1. A new article of manufacture comprising a cable reel having heads formed of a structural shape of metal bent to form an irregular circular rim or felloe, a hub, spokes securing the hub and felloe together, and side or lining plates having their edges peened over a portion of the felloe and compensating for any irregularity in the circumference of the structural shape.

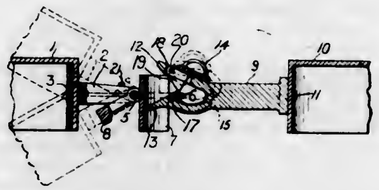
1,891,710. ELEVATOR CONTROL SYSTEM. RAY P. HIGBEE, Germantown, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Mar. 27, 1928. Serial No. 265,203. 11 Claims. (Cl. 187—29.)

1. In an elevator control system, in combination, an elevator operable in a hatchway past a plurality of floors, a door for said hatchway at each floor, motive means for the elevator, means for controlling the movements of said elevator, said control means comprising means for automatically stopping the elevator at each floor, means for automatically opening the hatchway door upon the arrival of said elevator opposite a floor landing, means mounted re-



motely from said elevator for simultaneously closing the hatchway door and starting the elevator, and means for biasing said elevator to provide movement thereof in a predetermined direction until all of said floors have been passed in either direction of travel.

1,891,711. TRAILER COUPLING. WILLIAM H. HIMMELBERGER, Lansing, Mich., assignor to Lansing Company, Lansing, Mich., a Corporation of Michigan. Filed June 5, 1931. Serial No. 542,414. 2 Claims. (Cl. 280—33.15.)



2. In a trailer coupling, the combination with a member adapted to be secured to a truck and having divergent upper and lower jaws, said upper jaw having a slot, a pivoted latch block located in said slot, a hand hold whereby said block may be pivotally raised, said hand hold by contact with said upper jaw limiting the downward movement of the block, said hand hold having spaced fingers normally resting on opposite sides of the said lower jaw of said member, and a yoke adapted to be secured to an adjacent truck and having a link extending between said divergent jaws and above the fingers of said latch block.

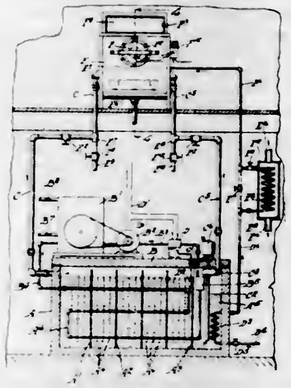
1,891,712. MEAT CHOPPER. AUGUST JAHN, Hamburg, Germany. Filed Jan. 23, 1931, Serial No. 510,776, and in Germany Feb. 19, 1930. 1 Claim. (Cl. 146—189.)

In a meat chopper the combination of exchangeable double-edged blades, each having a non-circular hole, a star-shaped member with a plurality of arms, each arm adapted to carry one of said blades, pivot pins each with a hammer-shaped head arranged one on each of said arms adapted to allow limited movement of the blades within the general plane of each, the hammer head overlaying the blade preventing removal thereof when the blade extends in the general direction of the arm and said hammer



head being so shaped and proportioned as to register with the hole in the blade when said blade extends transversely to the arm to permit removal therefrom, one end of the blade when in operative position being adjacent the end of the arm and the other spaced from the next adjacent arm.

1,891,713. AIR CONDITIONING SYSTEM. WAYNE D. JORDAN and PAUL D. VAN VLIET, Chicago, Ill., assignors to Air Control Systems Inc., Chicago, Ill., a Corporation of Delaware. Filed Apr. 16, 1932. Serial No. 605,598. 11 Claims. (Cl. 62—129.)

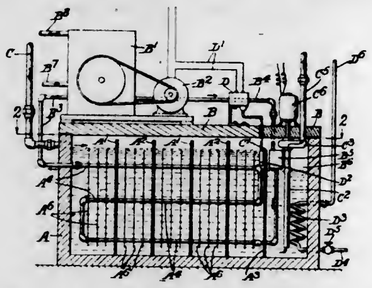


1. A refrigerating system comprising a storage tank, an air cooling element, means for circulating freezible liquid through them, a refrigerant condenser unit, and means to freeze part of the liquid in the tank when the heat absorption capacity of the condenser unit exceeds the amount of heat transferred to the freezible liquid including an expansion member in the storage tank, and means for constraining the freezible liquid to flow along a predetermined path through the tank and in intimate contact with both the frozen liquid and such areas of the expansion member as are not encased in frozen liquid.

1,891,714. REFRIGERATING SYSTEM. WAYNE D. JORDAN and PAUL D. VAN VLIET, Chicago, Ill., assignors to Air Control Systems Inc., Chicago, Ill., a Corporation of Delaware. Filed Apr. 16, 1932. Serial No. 605,594. 8 Claims. (Cl. 62—141.)

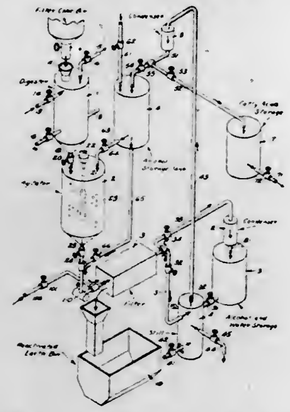
7. The method of cooling a stream of freezable liquid for purposes of non-continuous refrigeration, which includes intermittently freezing a body of such liquid, di-

recting a flow of such liquid in contact with the surface of said frozen body, and subjecting both the frozen body and the flowing liquid to the more nearly continuous action



of an additional cooling medium, while guiding the flow of said liquid in contact with the frozen body in a predetermined path.

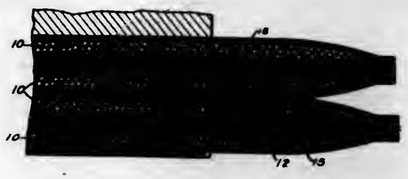
1,891,715. METHOD OF RECOVERING RETAINED OIL AND FATS FROM FILTER-PRESS CAKE AND REACTIVATION OF THE SPENT CAKE. WILLIAM KELLEY, Los Angeles, Calif., assignor of one-half to Walter S. Baylis, Los Angeles, Calif. Filed Nov. 12, 1930. Serial No. 495,154. 10 Claims. (Cl. 87—4.)



1. A process of utilizing vegetable fats and oils contained in spent filter cake which comprises: mixing said filter cake with water; subjecting the mixture to sufficient heat and pressure to convert the fats and oils into fatty acids; removing the water from the mixture dissolving the fatty acids in a solvent; filtering out the solid materials; and separating the fatty acids from the solvent.

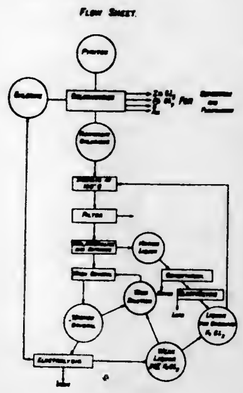
1,891,716. WINDING FOR DYNAMO ELECTRIC MACHINES. CARTHRAE M. LAFFOON, Irwin, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Apr. 4, 1930. Serial No. 441,589. 11 Claims. (Cl. 171—206.)

1. A dynamo-electric machine comprising a rotor and a stator, the stator having winding slots therein, said winding slots having an arcuate bottom portion, windings in said slots, said windings comprising a plurality of superposed conductor bars assembled to form a rectangular conductor section of less size than the slots, half-round potential-equalizer strips applied to the top and bottom of said conductor section, said strips being of less length than the conductor section to provide space at the end of such section for the end connections, said equalizer strips tapering at the ends to facilitate the application of insulating material, conducting surfaces on said potential equalizer strips, insulating material applied to said con-



ductor section and said stress strips as a unit, said insulating material being of such thickness that the complete winding snugly fits the winding slots.

1,891,717. TREATMENT OF IRON PYRITES. STANLEY ISAAC LEVY, London, England, assignor to Sulphide Corporation, New York, N. Y., a Corporation of Delaware. Filed Feb. 25, 1928, Serial No. 257,095, and in Great Britain Feb. 10, 1928. 12 Claims. (Cl. 204—15.)



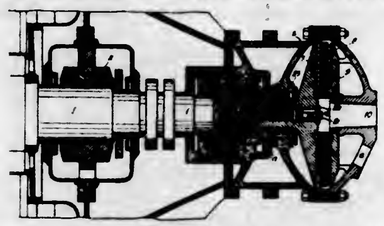
1. A process of treating pyrites and other sulphide materials which comprises treating the material at temperatures up to 1000° C. with a chlorinating agent substantially free from moisture and hydrogen compounds to drive off and recover the volatile chlorides substantially free from sulphur chlorides and ferric chloride and form a residue containing non-volatile chlorides, separating the ferrous chlorides from the chlorides of non-ferrous metals, electrolyzing for the deposition of iron and the recovery of chlorine, and treating further quantities of sulphide material by means of such chlorine.

1,891,718. SHAFT FOR OVERHUNG ELASTIC FLUID TURBINES. ALF LYSHOLM, Stockholm, Sweden, assignor to Aktiebolaget Ljungstroms Angturbin, Stockholm, Sweden, a Joint-Stock Company of Sweden. Filed July 3, 1930, Serial No. 465,507, and in Germany Feb. 5, 1930. 7 Claims. (Cl. 253—16.5.)

1. In a radial flow elastic fluid turbine, means providing a steam chamber, a turbine member comprising a blade-carrying disc in said chamber and a stub shaft rigidly connected with said disc, there being an axial bore through said member, said stub shaft having a conically tapered end portion and a cylindrical portion between the end portion and the disc, said cylindrical portion having a diameter at least as great as that of the end portion, a stuffing box around said cylindrical portion, a journaled shaft for carrying said member in overhung relation, said

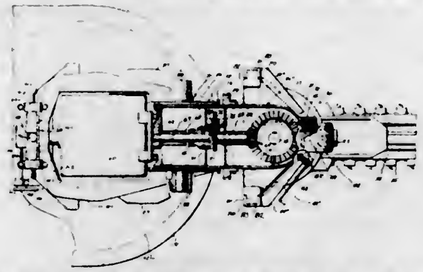
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journaled shaft having a conical socket receiving the tapered end of the stub shaft, bolt means seating in said bore and extending therethrough into said journaled shaft



for securing said shafts together and means providing a closure for said bore between said bolt means and said chamber.

1,891,719. MINING MACHINE. WILLIAM T. McCULLOUGH, Chicago, Ill., assignor to Goodman Manufacturing Company, Chicago, Ill., a Corporation of Illinois. Filed Dec. 25, 1926, Serial No. 157,005. Renewed Sept. 10, 1931. 29 Claims. (Cl. 262—28.)



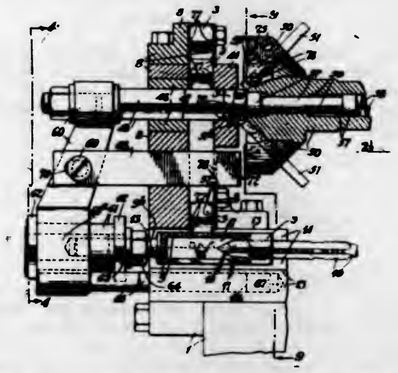
12. In a mining machine, the combination of a wheeled frame, cutting mechanism on said wheeled frame including a motor having a cutter head extending forwardly therefrom beyond the forward limits of said wheeled frame, a cutting element offset from said cutter head movable towards and away from said cutter head including a projecting cutter arm having a cutter chain movable thereabout, drive means connecting said cutter head with said cutting element for driving said cutter chain from said motor in all positions of said cutting element with respect to said cutter head, and extensible means disposed forwardly of said cutter chain drive means for moving said cutting element towards and away from said cutter head.

1,891,720. SHOWER HEAD. GEORGE R. McCURDY, Wilmette, and JAMES R. TURBK, Berwyn, Ill., assignors to Crane Co., Chicago, Ill., a Corporation of Illinois. Filed Mar. 28, 1931. Serial No. 524,482. 5 Claims. (Cl. 299—141.)



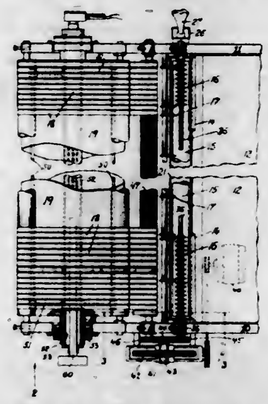
4. In a shower head, a body, a face plate spanning the open end thereof, means extending through said plate rotatable relatively to said plate for removably securing the latter to said body, and means associated with and detachable from said securing means for locking said plate to said body, said associated means being arranged to engage the plate upon removal of said securing means whereby disengagement of said securing means from said body will forcibly remove the plate from said body.

1,891,721. MACHINE FOR FINISHING AND TAPPING NUT BLANKS. JOSEPH MERCADANTE, Larchmont, N. Y., and ALFRED MORRIS THOMSON, Newark, N. J., assignors to Dardelet Threadlock Corporation, New York, N. Y., a Corporation of Delaware. Filed Oct. 23, 1930. Serial No. 490,620. 18 Claims. (Cl. 10—75.)



11. In a nut blank tapping machine, the combination of blank tapping means; means for presenting blanks to said tapping means, including a guideway along which blanks pass to said tapping means and in which blanks are held to move edgewise of the blanks; a stationary blank-holding chuck located at a side of said guideway faced by one end of blanks guided therein and having a passage opening into said way at the inner end of the chuck for receiving and holding against rotation endwisely inserted blanks; a rotatably mounted end-finishing tool having a cutting end face opposite the outer end of the chuck; means for rotating said tool; a pair of opposed plungers registering with said chuck passage; and means for actuating said plungers once for each nut tapped to grip a nut blank in said guideway between their adjacent ends and carry it first into said chuck against said tool and then carry it back into the guideway and release it.

1,891,722. SENSITIZED PAPER DEVELOPING APPARATUS. KNUD MURCK, Forest Hills, N. Y., assignor to Charles Bruning Company Inc., a Corporation of New York. Filed Sept. 22, 1931. Serial No. 564,275. 6 Claims. (Cl. 95—94.)



1. Apparatus for developing sensitized paper comprising a driven roller for applying developing liquid to the surface of a sheet to be developed, means for supplying developing liquid to the surface of said roller, a con-

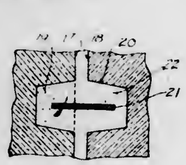
tacting unit resting on said roller and adapted to rest thereupon by gravity, said contacting unit consisting of a nonrotatable shaft, a plurality of closely adjacent contacting disks rotatably carried by said shaft for maintaining contact between the sheet and the said roller and for moving the sheet in developing contact therewith.

1,891,723. **COMPOSITE FRICTION BLOCK.** IZADOR JACOB NOVAK, Bridgeport, Conn., assignor to Raybestos-Manhattan, Inc., Bridgeport, Conn., a Corporation of New Jersey. Filed May 17, 1930. Serial No. 453,410. 6 Claims. (Cl. 154—52.)



1. In a friction mechanism, a composite block comprising a wearing face layer of relatively low density comprising unwoven asbestos and a reinforcing back layer of relatively higher density comprising bonded asbestos, the static frictional coefficient of the back being equal to or greater than the kinetic frictional coefficient of the face.

1,891,724. **MASONRY JOINT.** PETER C. OLSEN, Perth Amboy, N. J., assignor to Federal Seaboard Terra Cotta Corporation, New York, N. Y., a Corporation of New Jersey. Filed May 23, 1930. Serial No. 454,970. 2 Claims. (Cl. 72—106.)



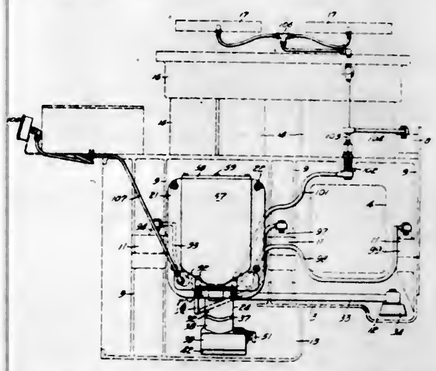
1. A wall construction comprising adjacently disposed blocks of terra cotta, a groove in each of the contiguous vertical faces of said blocks, said grooves being in substantial alignment and inclined with respect to the exterior exposed faces of the blocks, a metallic bar extending into each of said grooves, and means for sealing the bar in each of the grooves.

1,891,725. **BUSHING PACKING.** FRANK E. PAYNE, Glencoe, Ill., assignor to Crane Packing Company, Chicago, Ill., a Corporation of Illinois. Filed Apr. 25, 1931. Serial No. 532,745. 11 Claims. (Cl. 288—1.)



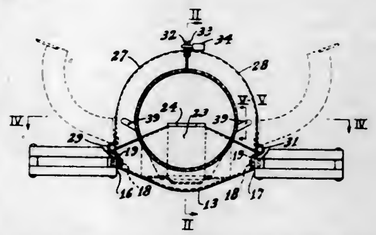
11. Packing comprising a pair of non-metallic bushings having counterbored portions facing each other and a metallic ring insert seated in said portions, the inner surfaces of the bushings and ring being substantially flush with each other, and a rib formed on said ring intermediate the ends thereof and projecting between the opposed ends of said bushings, the outer surfaces of said bushings and rib being substantially flush with each other.

1,891,726. **OILING SYSTEM.** WILLIAM H. RADFORD, San Leandro, Calif., assignor to Caterpillar Tractor Co., San Leandro, Calif., a Corporation of California. Filed July 25, 1928. Serial No. 295,328. 13 Claims. (Cl. 184—6.)



1. An oiling system comprising a crankcase having an aperture therein, means to be lubricated in said crankcase, an oil lead through said crankcase, a filter housing secured to said crankcase to cover said aperture and having an opening communicating with the interior of the housing and registering with said oil lead, an oil filter in said housing discharging through said opening and into said oil lead, and an oil pump within said crankcase and mounted on said housing for withdrawal thru said aperture, an oil conduit connecting said pump to said filter and oil conducting means between said oil lead and said means to be lubricated.

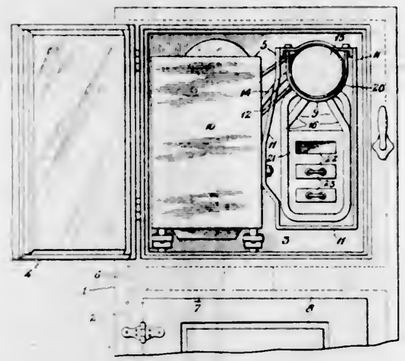
1,891,727. **METALLIC TIRE COVER.** ANDREW C. RAMSAY and ROBERT T. BAGBY, Birmingham, Ala. Filed Oct. 20, 1930. Serial No. 489,849. 6 Claims. (Cl. 224—29.)



1. In a metallic tire cover, a lower arcuate, concave member, less than a semicircle, and adapted to fit about the lower portion of a tire, a pair of similar arcuate concave members hinged to the upper ends of the lower member and adapted to encircle the upper portion of the tire, a tool box disposed alongside the lower concave member, a lid for the tool box, means for locking the upper ends of the upper concave members about a tire, and means automatically effective upon so locking said members to lock the tool box.

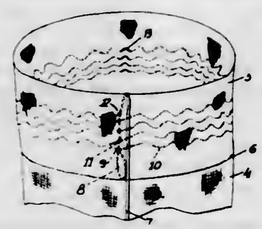
1,891,728. **REFRIGERATOR UNIT.** JOHN R. REPLOGLE, Detroit, Mich., assignor, by mesne assignments, to Kelvinator Corporation, Detroit, Mich., a Corporation of Michigan. Original application filed June 6, 1921, Serial No. 475,344, and in Canada Feb. 11, 1922. Divided and this application filed May 12, 1927. Serial No. 190,769. 16 Claims. (Cl. 62—126.)

1. In refrigerating apparatus, the combination of a brineless flooded vaporizer comprising a header and a plurality of pipe loops depending therefrom; means for maintaining the liquid level in the vaporizer a height sufficient to substantially fill the pipe loops and the



lower part of the header; trays for food, water or the like; and means carried by said pipe loops for supporting the said trays within the said loops.

1,891,729. **GARMENT ATTACHMENT.** MARGUERITE E. RISACHER, Brooklyn, N. Y. Filed Sept. 3, 1930. Serial No. 479,485. 4 Claims. (Cl. 2—239.)



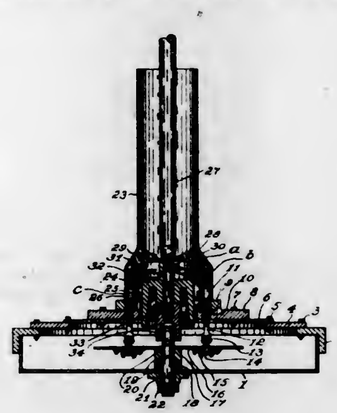
1. In combination with a seamed stocking, a mending thread loosely encircling said stocking, ends on said thread tied upon the back seam of said stocking, and a loop in said thread extending through the wall of said stocking at the front thereof.

1,891,730. **COMPOSITION FOR AND METHOD OF PAPERMAKING.** GEORGE A. RICHTER, Berlin, N. H., assignor to Brown Company, Berlin, N. H., a Corporation of Maine. Filed May 25, 1928. Serial No. 280,655. 14 Claims. (Cl. 92—21.)

1. A papermaking composition comprising only the separated and cleaner long fiber fraction of a cellulose pulp of the character of pre-liberated wood pulp mixed with gelatinized cellulose.

1,891,731. **MACHINE FOR CONSTRUCTING CONCRETE PIPE.** ALFRED W. SCHULTZ, Waterloo, Iowa, assignor to Zeidler Concrete Products Machinery Company, St. Joseph, Mo. Filed Mar. 24, 1930. Serial No. 438,486. 2 Claims. (Cl. 25—36.)

1. The combination with a mold and a rotary packer head within it to shape a concrete body from a mixture of flowable finer and coarser concrete materials, of a rotary table associated with and spaced from the basal termination of the mold and having a roller mounted eccentrically relative to the table center, an adjustable sectional tappet supported in the interspace of the table and said basal termination and having a roller mounted upon its lower end to ride across the roller on said table

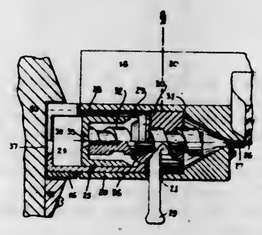


during each rotation of the table to lift the tappet and cause it to tape said basal termination to jar the contents thereof, causing the settling of the finer cementitious material below the coarser material of the concrete while the concrete body is being shaped within said mold.

1,891,732. **BUILDING BOARD.** EDWARD S. SHEPERD, deceased, Vincennes, Ind., by Lela E. Sheperd, administratrix, Vincennes, Ind., assignor to Albert D. Stewart, St. Joseph, Mo. Filed Jan. 25, 1932. Serial No. 588,842. 1 Claim. (Cl. 92—8.)

As a new article of manufacture, relatively long cereal straw fibres interlaced and felted into a rigid self-sustaining fibrous structure having a maximum thermal conductivity of about .34 B. t. u. per square foot per hour, per inch of thickness for each degree F. difference in temperature, the fibres having been relieved of the gummy components naturally associated with the raw cereal straw from which the structure is made by water whereby the fibres are characterized by being resilient and non-moisture absorbent.

1,891,733. **REVOLVING WINDOW SASH.** MAX J. SIEGEL, New York, N. Y., assignor to Vincent W. Cahill and B. Robert Swartburg, New York, N. Y. Filed Oct. 17, 1930. Serial No. 489,301. 14 Claims. (Cl. 20—49.)



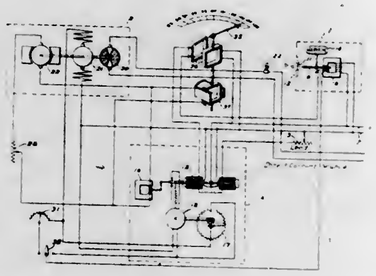
1. In combination with a sash, stiles forming a frame, a window fitting into said frame, coaxially disposed studs extending from opposite sides of said frame into said window and rotatably supporting said window in said frame, and tongues in said window adapted to be slid in said studs into engagement with said frame.

1,891,734. FOLDING TABLE. ARTHUR L. SLEE, San Francisco, Calif. Filed Aug. 5, 1931. Serial No. 555,166. 10 Claims. (Cl. 45—11.)



1. A table comprising a top or body; and a plurality of sets of nested legs, each set of a different length and each longer leg of a set being nested within a shorter leg, whereby said top of body may be supported at different elevations above a supporting surface.

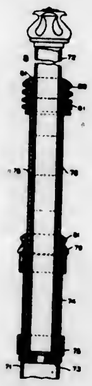
1,891,735. METHOD OF AND APPARATUS FOR CALIBRATING ELECTRIC INSTRUMENTS. HARRY P. SPARKES, West Orange, N. J., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Original application filed Sept. 16, 1926, Serial No. 135,981. Divided and this application filed Apr. 27, 1929, Serial No. 358,619. Renewed May 27, 1932. 11 Claims. (Cl. 175—183.)



1. Calibrating apparatus for integrating instruments comprising stroboscopic means for checking the speed of rotation of the instrument upon a predetermined load, an indicating device comprising a wattmeter element and a second element mechanically coupled together and connections between the elements of said device and the circuits of the integrating instrument and the stroboscopic means, whereby the device indicates the degree of accuracy of the instrument.

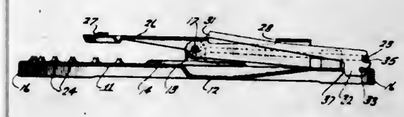
1,891,736. METAL POLE FOR ELECTRIC POWER SYSTEMS. PHILIP SPORN, New York, N. Y. Filed Nov. 3, 1930. Serial No. 492,992. 1 Claim. (Cl. 189—27.)

A metal pole for supporting overhead portions of an electrical power distribution system operating at dangerous voltage comprising a tubular metallic lower section secured in the ground and extending upwardly to outside the reach of a person standing on the ground, a tubular metallic upper section of smaller diameter than said lower section inserted into the upper end of said lower section and extending upwardly to support the elements operating at a dangerous voltage, a metallic supporting member extending transversely into the hollow interior of the lower pole section from the inner walls thereof, at a short distance below its upper end, carrying the lower



end of said upper pole section, insulating means associated with said supporting member insulating the lower end of the upper pole section from the portion of said lower section holding said support, and a sleeve of insulating material interposed between the opposing surfaces of the overlapped portions of said lower and upper pole sections and extending around said upper section for a distance above the upper edge of the lower section to hold said sections rigidly together while maintaining the same insulated from each other.

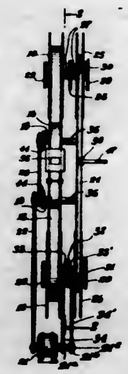
1,891,737. ANIMAL TRAP. HERBERT A. STILSON, Chicago, Ill. Filed Mar. 2, 1928. Serial No. 258,516. 4 Claims. (Cl. 43—83.)



1. An animal trap comprising, a base, a spring actuated jaw and a bait holding treadle, both pivoted on the base for concentric movement, and a latch interlockingly engaged with said base and restraining movement of said jaw under control of said bait treadle, the interlocking connection between said base and latch comprising slotted interengaged portions of said latch and base brought into registration by projection of the latch through the base.

1,891,738. TALKING MOVIE. ADOLPH A. THOMAS, New York, N. Y. Filed Mar. 20, 1928. Serial No. 263,088. 17 Claims. (Cl. 88—16.2.)

1. Talking movie apparatus having a flexible sound tape wound off one reel onto another simultaneously with motion picture film, sprockets for driving said tape and other sprockets for driving said film, shafts for supporting the tape sprockets and other shafts for supporting the film sprockets, a gear connection between each tape shaft and the associated film shaft for driving the first shaft



at a different rate of speed than the other shaft, and mechanism operatively associated with the moving tape to reproduce recorded sound therefrom.

1,891,739. AUTOMATIC RAILROAD CROSSING SIGNAL. SAMUEL WENGER, New York, N. Y. Filed Dec. 18, 1931. Serial No. 581,833. 7 Claims. (Cl. 246—126.)

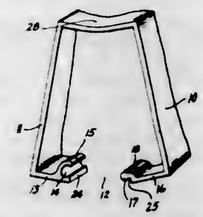


1. An automatic railway gate, comprising a stationary post, a rotatable section thereon and having a hollow extending from one side to the other, adjustable means for resiliently holding said rotative section in a predetermined stationary position, a lazy tongs structure mounted within the hollow of the rotatable post section and extendible from opposite sides thereof, cushioned members on the ends of said lazy tongs structure, and means for extending and retracting said lazy tongs structure comprising a bell crank connected with one of the links of the lazy tongs structure, a solenoid connected with said bell crank, and circuits including said solenoid, a switch on the track to cause operation of the solenoid, and a switch on the track past the first mentioned switch to cause de-energization of the solenoid.

1,891,740. EXTRUDED SHAPES WITH INTERLOCKED JOINTS AND METHOD OF MAKING. GEORGE F. WESTERMAN, Ansonia, Conn., assignor to The American Brass Company, Waterbury, Conn., a Corporation of Connecticut. Filed Nov. 18, 1930. Serial No. 496,422. 6 Claims. (Cl. 29—148.2.)

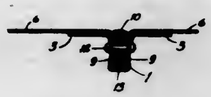
1. The process of making tubular extruded shapes which comprises extruding metal through a die to form the shape in an integral piece open longitudinally along one side with a complementary tongue and groove formed along the opposed edges on opposite sides of said opening, then forcing the opposite sides together to bring the tongue into the groove, and folding one side of the groove around the tongue to interlock them together and form a closed section.

6. A tubular section of extruded metal having a longitudinal joint along one side comprising a longitudinal groove and a longitudinal rib seated therein, the inner side of the groove being folded over the rib to lock the sides of the tube together, and the rib and groove being spaced inwardly from the outer surface of the tube so that



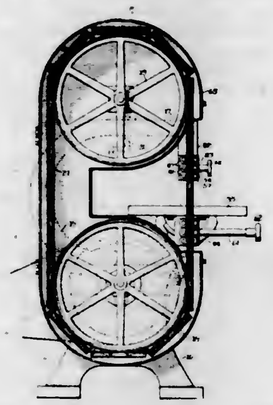
when interlocked the opposite sides of the joint abut at the outer surface and the portions of this surface on opposite sides of the joint form continuations of each other.

1,891,741. CAR ROOF. RALPH BAND WINSHIP, Montreal, Quebec, Canada. Filed Jan. 20, 1932. Serial No. 587,613. 8 Claims. (Cl. 108—5.6.)



1. A car roof comprising channel-shaped car-line members extending from side plate to side plate, roof sheets on said members with side marginal flanges extending into the channels thereof, and secondary car-line members between said sheet flanges, all clamped together horizontally.

1,891,742. FILING MACHINE. WILLIAM ANDERSON, Chicago, Ill. Filed Aug. 9, 1930. Serial No. 474,233. 14 Claims. (Cl. 29—76.)



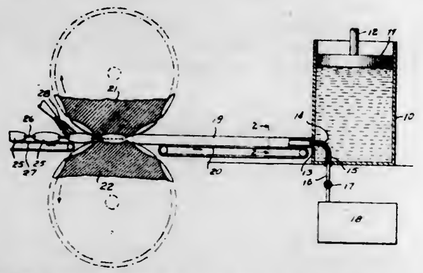
1. In a machine of the class described, the combination with a driving wheel and a driven wheel, of a flexible carrier supported by said wheels and including a plurality of file supports, a filing element connected to said file supports in a plane parallel to the plane of said flexible carrier, link connections pivotally mounted in said supports, whereby to permit the carrier to flex in its passage about the wheels, but to maintain said supports in alignment in the stretches between the wheels, a work

support, and means oppositely disposed with respect to said filing elements for bracing said carrier to maintain the file supports in rigid relation to the work on said support as the file supports pass the same.

1,891,743. PROCESS OF MANUFACTURING VULCANIZED RUBBER AND PRODUCTS OBTAINED THEREBY. OSWALD BEHREND, Nitro, W. Va., assignor to The Rubber Service Laboratories Co., Akron, Ohio, a Corporation of Ohio. Filed Feb. 12, 1930. Serial No. 427,990. 10 Claims. (Cl. 18—53.)

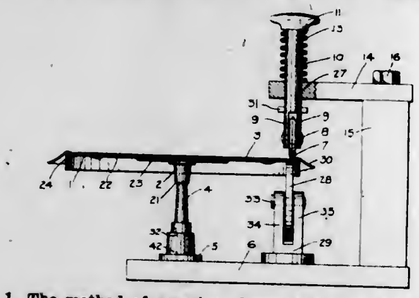
1. The process of vulcanizing rubber which comprises heating rubber and sulfur in the presence of an accelerator comprising a reaction product of toluene, containing a halogen substituted methyl group, and a product formed by treating an aliphatic aldehyde with ammonia.

1,891,744. SOAP MAKING. ROBERT S. BLAIR, Stamford, Conn. Filed Nov. 1, 1930. Serial No. 492,655. 13 Claims. (Cl. 25—7.)



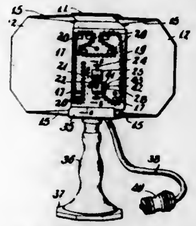
7. The herein described art which consists in extruding a hollow soap member and compressing the same between dies of a temperature different from that of the soap with which they engage and thereby form a succession of hollow cakes with substantially closed ends.

1,891,745. METHOD FOR COVERING A TURNTABLE. LE BONSIEUR, Elyria, Ohio, assignor to The General Industries Company, Elyria, Ohio, a Corporation of Ohio. Original application filed Jan. 21, 1929, Serial No. 333,879. Divided and this application filed Feb. 10, 1930. Serial No. 427,397. 6 Claims. (Cl. 274—39.)



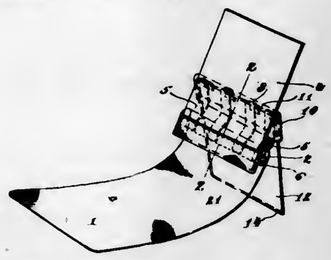
1. The method of covering phonograph turntables with a cloth of disc form disposed to adhere concentrically to the upper surface of the turntable, comprising the application of an adhesive to the turntable upper surface, then placing a sheet of the material larger than the surface of the turntable desired to be covered, leaving border portions of the material projecting laterally from the prepared surface, then rotating the turntable on a fixed axis while applying a cutting edge to the cloth material at a predetermined distance from the periphery of the turntable.

1,891,746. FLASH LIGHT AND MEDICAL HEATER. ADOLPH BREUSCH, New York, N. Y. Filed Feb. 19, 1932. Serial No. 593,948. 7 Claims. (Cl. 219—34.)



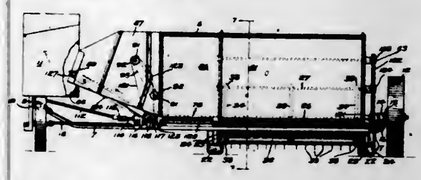
1. A flashlight and medical heater, comprising a body element open at the front and sides, baffles hinged upon the sides of the rear of the body element so as to be capable of closing the sides of the body, a heating winding supported to the front of the rear of the body, electric arc elements supported to the front of the rear of the body, a circuit including said winding in series and the arc elements shunted therein, means for holding said baffles in various pivoted positions, and said electric arc comprising a stationary carbon element, a pivoted carbon element, a handle connected with said pivoted carbon element and extending from the rear of the body element, a stop limiting separation of the carbon elements, and resilient means urging the movable carbon element into the separated position.

1,891,747. BODY SUPPORT. WELLINGTON I. CLEMENTS, Norfolk, Va. Filed Mar. 21, 1931. Serial No. 524,259. 2 Claims. (Cl. 155—158.)



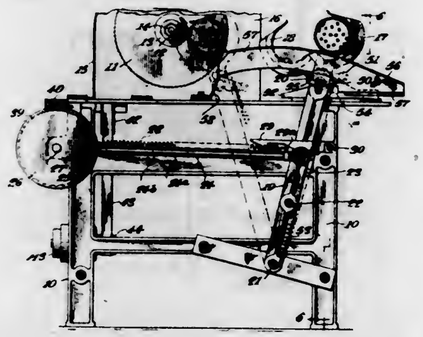
1. A body support comprising a flat piece of fabric material, one end of which is adapted to be held by the weight of the body, the other end being held by a vertical flat rigid supporting member, a pocket member fitting snugly over the upper end of the vertical member and curved elastic bands extending forwardly from the pocket member and secured to the fabric.

1,891,748. PICK-UP. JACOB CLOVE, Stockton, Calif., assignor, by mesne assignments, to Caterpillar Tractor Co., San Leandro, Calif., a Corporation of California. Filed Apr. 23, 1927. Serial No. 186,138. 48 Claims. (Cl. 56—364.)



1. A pick-up comprising a framework, a draper on said framework, means for discharging cut bundles of grain onto one end of said draper, means for further handling said grain adjacent the other end of said draper, and an accumulating chamber intermediate the ends of said draper.

1,891,749. APPARATUS FOR TRIMMING DRINKING STRAWS. EUGENE CONTI, Mount Vernon, N. Y., assignor to Alexander Herz, New Rochelle, N. Y. Filed Apr. 24, 1930. Serial No. 446,891. 8 Claims. (Cl. 164—61.)



1. Apparatus for trimming drinking straws, comprising in combination, fixed and movable bundle gripping jaws mounted upon a swinging frame, an apron disposed where it will support bundles in said jaws before and after engagement, resilient driving means for swinging said frame, said driving means including a telescopic spring-joined pitman rod, a latch controlled manually for limiting the movement of said frame in feeding direction, and spaced saws on axially spaced shafts at each side of the path of the swing frame for severing the bundles of straws when fed thereto.

1,891,750. BACTERIAL PRODUCT. FRANKLIN M. CORNELL, Brooklyn, N. Y., assignor to Stimuplant Laboratories, Inc., Long Island City, N. Y., a Corporation of New York. Filed June 16, 1928. Serial No. 286,061. 8 Claims. (Cl. 71—10.)

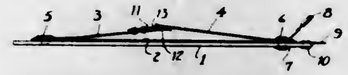
3. A bacterial product in powder form containing *Bacterium radicicola*, an inert silicious base, a carbohydrate bacteria food, said product also containing calcium chloride to stimulate the growth of the bacteria, potassium alum to promote the growth and functioning of the bacteria under adverse circumstances and sodium bicarbonate for controlling the hydrogen ion concentration of the bacterial product.

1,891,751. ELECTRIC CIRCUIT BREAKER AND BURGLAR ALARM. DAVID COYNE, New York, N. Y. Filed Apr. 2, 1932. Serial No. 602,681. 6 Claims. (Cl. 200—86.)



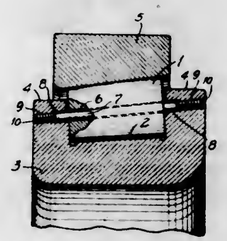
1. As a new article of manufacture an electrical circuit breaker composed of a mat of flexible material having a cavity in its interior with a pair of electrical contacts located in said cavity in such relation that while normally closed one on the other they may be separated, and contact opened, by movement of one wall of such cavity tending to collapse it.

1,891,752. ELECTRIC CIRCUIT CONTROLLER. DAVID COYNE, New York, N. Y. Filed June 24, 1932. Serial No. 619,050. 6 Claims. (Cl. 200—86.)



1. An electrical circuit breaker adapted to be operated by external pressure applied directly to its circuit breaking elements, which circuit breaker comprises, in combination, two yieldingly supported conducting members having free ends normally resting one upon the other, but otherwise electrically insulated one from the other, means for connecting a circuit terminal to each such member, and electrically insulating means adapted on the joint movement of said members toward their yielding supports to be thereby inserted between said overlapping ends and so separate the same sufficiently to open the circuit.

1,891,753. ROLLER BEARING. WILLIAM P. COX, Canton, Ohio, assignor to The Timken Roller Bearing Company, Canton, Ohio, a Corporation of Ohio. Filed Oct. 5, 1931. Serial No. 566,893. 4 Claims. (Cl. 308—206.)

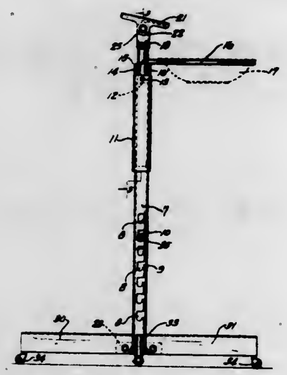


1. A roller bearing comprising a bearing member, an annular series of rollers thereon, said bearing member having integral upstanding portions overlapping the ends of said rollers and provided with annular grooves, positioning pins extending from said rollers and running in said grooves, one of said upstanding portions having a hole therethrough to permit assembly of said rollers and pins and means for closing said hole.

1,891,754. GRANULATED PHTHALIC ANHYDRIDE. LLOYD C. DANIELS, Crafton, and CHRISTIAN J. SCHWINDT, Pittsburgh, Pa. Filed Nov. 27, 1931. Serial No. 577,706. 11 Claims. (Cl. 260—123.)

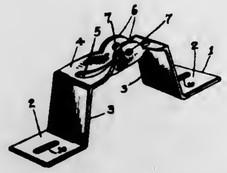
8. As a new product, granulated phthalic anhydride, the granules having a hard, glazed outer coating produced by solidifying a liquid coating of phthalic anhydride upon the surface of an originally solid phthalic anhydride particle.

1,891,755. LIMB REST STAND. IRVIN W. DAVIS, South Milwaukee, Wis. Filed July 2, 1930. Serial No. 465,397. 7 Claims. (Cl. 128—82.)



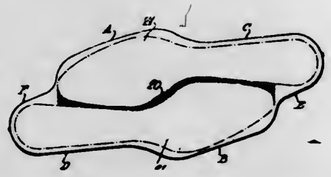
2. An adjustable stand, comprising a supporting member, a post vertically adjustably carried thereby, a yoke member swivelingly carried by an upper portion of the post, a rest member tiltably carried by said yoke member, and a receptacle holder swivelingly mounted about said post below the rest member.

1,891,756. REVERSIBLE BRIDGE SUSPENSION STRAP. HENRY D'OLIER, Jr., Bridgeport, Conn. Filed Sept. 24, 1930. Serial No. 484,087. 5 Claims. (Cl. 247—20.)



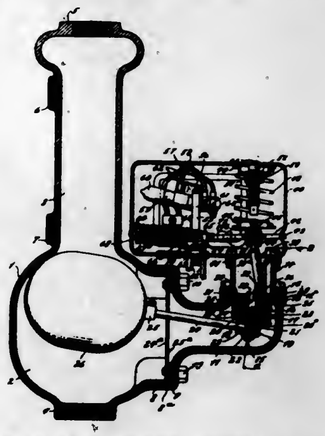
1. A bridge suspension strap for electrical outlet boxes, having a centrally disposed opening, the sides of the strap adjacent said opening being formed at right angles to the body of the strap and means through the sides formed at right angles to support a lighting fixture.

1,891,757. MULTIPLE SOLE BLANK. MILTON DOUSHKESS, New York, N. Y. Filed Mar. 6, 1930. Serial No. 433,577. 5 Claims. (Cl. 36—25.)



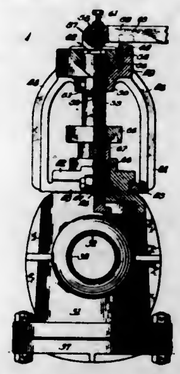
1. As a new article of manufacture, a double sole blank having an enlarged central body portion with approximately straight opposite exposed sides and including rounded tongues projecting from opposite sides of said body portion in axial alignment with each other and with the central axis of the body portion.

1,891,758. CONTROL DEVICE FOR HEATING APPARATUS. LEWIS W. EGGLESTON, Clarence Township, Erie County, N. Y., assignor to American Radiator Company, New York, N. Y., a Corporation of New Jersey. Filed Sept. 22, 1926. Serial No. 137,116. 9 Claims. (Cl. 200—84.)



1. In a device of the character described, a casing having a float chamber, a float in said chamber and responsive to variation of liquid level therein, a controller, a lever having a connection with said controller to move the same, a pin supported at the end of said lever and extending lengthwise of said lever, means operatively connecting said float and said lever, fluid pressure-responsive means sealing said chamber and acting through said operating means to move said lever in one direction, a spring opposing said fluid-pressure means and operable to move said lever in the opposite direction, and a second spring opposing said fluid-pressure means when in one position and having a rocking support at one end and at its other end engaging said pin, said support being so arranged that the resistance of the second spring is reduced when said operating means moves said lever.

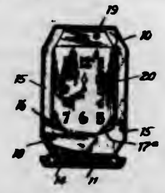
1,891,759. COCK. VICTOR E. FLODIN Oak Park, Ill., assignor to Crane Co., Chicago, Ill., a Corporation of Illinois. Filed Mar. 22, 1930. Serial No. 438,021. 1 Claim. (Cl. 251—97.)



In a cock, a body, a closure rotatable within said body to selectively obstruct or permit flow through said body, a yoke secured to said body for rotation with respect thereto, means connecting said yoke to said closure for rotation therewith, a block rotatably supported by said yoke, an operating handle pivoted to said block, and means for selectively connecting said handle to said yoke for rotation

therewith, said handle also being connected to said closure for moving said closure in a direction parallel to the axis thereof, said connections being arranged whereby said handle is inoperative to rotate said closure until said closure has first been moved in a direction parallel to its axis.

1,891,760. SELF-WINDING WATCH. EMIL FREY, Bienne, Switzerland, assignor, by mesne assignments, to Perpetual Self Winding Watch Corporation, New York, N. Y., a Corporation of Delaware. Filed Nov. 1, 1930, Serial No. 492,630, and in Switzerland Dec. 5, 1929. 3 Claims. (Cl. 58—82.)



3. In combination, an elongated self-winding watch movement having a winding pendulum pivoted thereto adjacent one end and extending substantially lengthwise thereof, said pendulum having a weighted portion offset from the remainder and overlying the other end of said movement, and an elongated case in which said movement is received, said case being provided with shoulders to engage said movement to anchor it with the first named end thereof in contact with the corresponding end of the case.

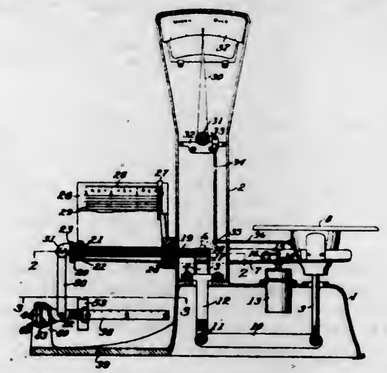
1,891,761. VAGINAL RECEPTACLE. LESTER J. GODDARD, Miami, Fla., assignor, by mesne assignments, to The Coezene Company, Cleveland, Ohio, a Corporation of Ohio. Filed Oct. 6, 1932. Serial No. 636,440. 5 Claims. (Cl. 128—285.)



1. A vaginal receptacle for th purposes described, comprising a cup having a soft, imperforate, impervious, resilient side wall, said cup having a portion open at one end and a portion closed at the opposite end, said closed end portion being of smaller cross sectional area throughout than the open end portion, and a smooth, external annular shoulder extending inwardly from the side wall of the larger portion and overhanging the closed end portion, and merging therewith the closed end portion being of sufficient size to lie in the vaginal entrance passage and engage the wall thereof for a material distance beyond the shoulder and being of sufficient yieldability to be distorted by normal muscular contraction of the entrance passage wall, the wall of the cup and the shoulder being sufficiently resilient to be folded by pressure of human fingers and to tend to return toward their normal unfolded condition for engaging the vaginal walls consequent upon release of said pressure, said shoulder being positioned longitudinally of the cup to lie upon the interior wall surface of the wall defining the vaginal entrance when the receptacle is positioned in the vagina with the open end in spaced relation to the cervix.

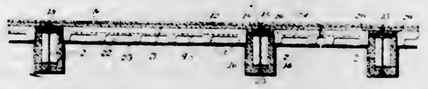
1,891,762. WEIGHING SCALE. NATHAN A. HALLWOOD, Columbus, Ohio. Filed May 28, 1931. Serial No. 540,638. 4 Claims. (Cl. 265—30.)

1. In a weighing scale, a base, a beam pivotally mounted intermediate its ends on said base, a weight receiver pivotally carried by one end of said beam, a slidable weight carried by the other end of said beam, an auxiliary beam pivoted on said base, a torsional ribbon constituting the



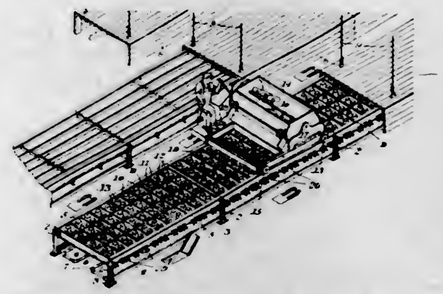
pivot for said auxiliary beam, a connecting link between said latter beam and the weight carrying end of said first beam, and a weight slidably positioned upon said auxiliary beam.

1,891,763. FLOOR STRUCTURE AND SLAB THEREFOR. ALBERT HENDERSON, Pittsburgh, Pa., assignor to General Cement Products Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Nov. 3, 1927. Serial No. 230,768. 4 Claims. (Cl. 72—68.)



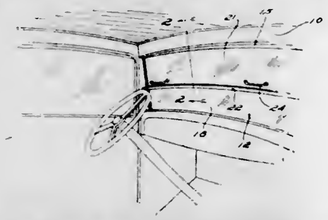
4. A floor comprising a plurality of precast slabs extending between supporting beams and so positioned as to leave recesses between their adjacent ends, tie means projecting from the top surface of the slabs, reinforcing rods in the recesses and a cementitious coat extending over the slabs and into the recesses so as to embed the tie means and the reinforcing rods.

1,891,764. METHOD AND APPARATUS FOR MAKING CEMENTITIOUS ARTICLES. ALBERT HENDERSON, Pittsburgh, Pa., assignor, by mesne assignments, to Cement Products Research Corporation, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Aug. 29, 1928. Serial No. 302,690. 14 Claims. (Cl. 25—2.)



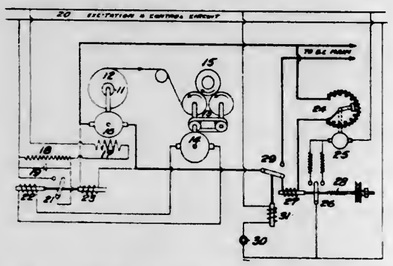
14. Apparatus for making cementitious articles, comprising a curing chamber, a mold positioned therein, and a traveling mixing device for delivering a cementitious mix into said mold.

1,891,765. WINDSHIELD. OLLIE L. HERRON, Chicago, Ill., assignor of thirty per cent to Anna L. Herron, twenty per cent to Joseph B. Zimmers, and thirty per cent to Wilma M. Zimmers, Chicago, Ill. Filed Sept. 12, 1931. Serial No. 562,494. 8 Claims. (Cl. 296—89.)



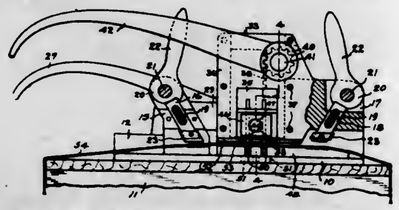
1. A windshield comprising a frame, a main shield having its entire peripheral edge mounted in the frame, an auxiliary and smaller shield slidably mounted in the frame in spaced relation to the main shield, and means for sealing the space between the shields.

1,891,766. TENSION REGULATING MEANS FOR WINDING MACHINES. RALPH G. JOHNSTONE and REGINALD J. S. PHILLIPS, Montreal, Quebec, Canada, assignors to The Harland Engineering Company of Canada Limited, Montreal, Canada. Filed Sept. 20, 1930. Serial No. 483,218. 7 Claims. (Cl. 242—75.)



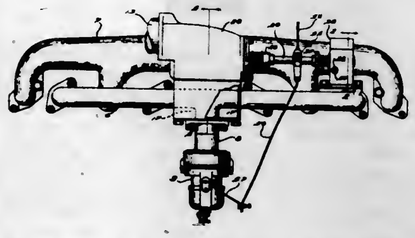
2. Tension regulating means for winding machines comprising the combination with a supply roll and a winding roll, of a direct current generator direct connected to the supply roll, a variable resistance normally in circuit with the armature of said generator, means responsive to variations in generator speed to vary said variable resistance directly as the generator speed, means connected with the winding roll to furnish reference voltage directly proportional to the lineal speed of the material being wound, and means to apply the reference voltage against the generator voltage to vary the field value of the generator.

1,891,767. STRAPPING JACK AND PUNCH. ERNEST J. KETCHAM, Seattle, Wash., assignor to Acme Steel Company, Chicago, Ill., a Corporation of Illinois. Filed Mar. 28, 1929. Serial No. 350,486. 7 Claims. (Cl. 89—9.1.)



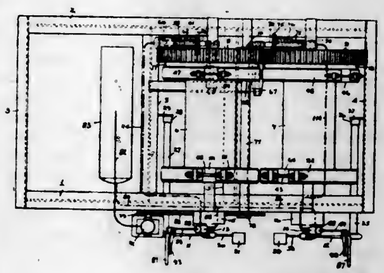
1. In a strap tightening and clinching machine, a frame including a base, means on said frame for gripping a metal strap which extends around a package and drawing the two ends of said strap together in overlapping relation, a die plate whereon said two overlapping ends may rest, said die plate having openings therein, a stripper plate above the overlapping ends of said strap, said stripper plate having holes therein, a die block guided for movement above said stripper plate, punch members in said die block in alignment with the holes in said stripper plate and said die plate, means for moving said die block to force said punch members through said overlapped strap ends and carry integral clinching portions of one strap end through openings in the other strap end, anvil members for clinching said clinching portions and means for moving said anvil members.

1,891,768. MANIFOLD HEAT CONTROL. FLOYD F. KISHLINE, Detroit, Mich., assignor to Graham-Paige Motors Corporation, a Corporation of Michigan. Filed Aug. 7, 1930. Serial No. 473,705. 2 Claims. (Cl. 123—122.)



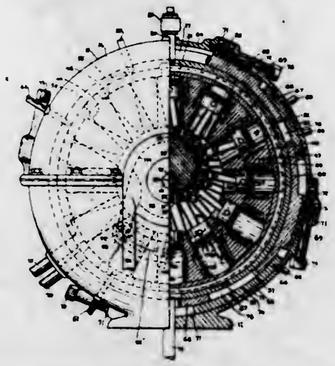
1. In an internal combustion motor, the combination of an intake manifold, an exhaust manifold having a passageway leading to a wall of said intake manifold, a valve for controlling the passage of exhaust gases through said passageway, manually operable means for moving said valve to an open position for directing exhaust gases into contact with said intake manifold, yielding means normally urging said valve to a closed position, locking means for releasably securing said valve in open position, thermo-responsive means for releasing said locking means, and means for releasably securing said valve in a partially closed position, said thermo-responsive means being adapted to release said locking means at partially closed position so as to permit said yielding means to fully close said valve.

1,891,769. HOISTING MECHANISM. JOHN R. MCGIFFERT and OLA L. BERRY, Duluth, Minn., assignors to Clyde Iron Works, Duluth, Minn., a Corporation of Maine. Filed Nov. 13, 1929. Serial No. 406,803. 1 Claim. (Cl. 188—170.)



In a hoisting machine having a winding spool, means for driving said spool, a lever for effecting driving communication between said driving means and said spool, a brake band mounted on said drum, and resilient means for normally engaging said band on said drum, the combination of fluid actuated means for releasing said brake, valve means associated with said lever for controlling the fluid supply to said last-named means, and means for actuating said valves mounted on said handle and positioned so as to be grasped by the operator while manipulating such lever.

1,891,770. INTERNAL COMBUSTION MOTOR. BERNHARD MEISSNER, Woodside, N. Y. Filed Nov. 7, 1929. Serial No. 405,342. 22 Claims. (Cl. 123—44.)



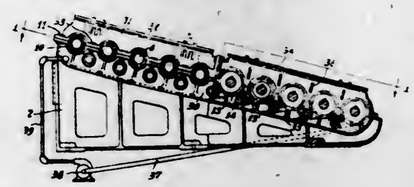
9. In an internal combustion engine, a housing, a cylinder head rotatably mounted in said housing, valve and ignition means substantially annularly arranged in said housing and slidable upon the cylindrical circumference of said head, and two sets of combustion chambers substantially radially arranged in said cylinder head in substantially parallel planes, said combustion chambers of said two sets being respectively offset in zig-zag arrangement and the overlapping parts of said combustion chambers of said two sets opening upon said valve and ignition means.

1,891,771. DOUBLE-ACTING RECIPROCATING PUMP. EARL MENDENHALL and JUNIUS B. VAN HORN, Los Angeles, Calif. Filed June 16, 1931. Serial No. 544,793. 15 Claims. (Cl. 103—202.)



1. In a submersible structure, the combination of: an enclosing structure including a cylinder and a transmission chamber communicating therewith; a plunger slidable relative to said enclosing structure and providing walls slidable in said cylinder to define a space, the volume of which changes when said plunger is reciprocated; a deformable member around said plunger and secured at one end in fluid-tight relationship relative to said plunger and at the other end secured in fluid-tight relationship with said enclosing structure; intercommunicating means through which said space communicates with the chamber around said plunger and inside said deformable member; and means in said transmission chamber and operatively connected to said plunger to reciprocate same.

1,891,772. ROTARY GRIZZLY. ALBERT J. MYERS, Pittsburgh, Pa., assignor to The Koppers Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Original application filed July 3, 1925, Serial No. 41,420. Divided and this application filed Nov. 18, 1930. Serial No. 496,389. 4 Claims. (Cl. 184—6.)



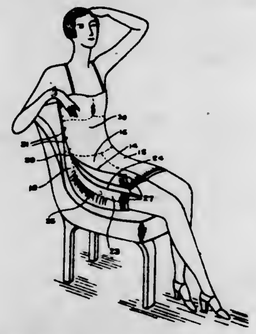
1. In a rotary grizzly the combination: of opposite side frames, a plurality of shafts journaled in said side frame and disposed in inclined series, one shaft higher than the other, rotary screening rollers on said shafts, an inclined housing adjacent one of said side frames and in which the driven end of said shafts are journaled, said housing constituting an oil retaining reservoir provided with upstanding baffles dividing said reservoir into a plurality of oil holding compartments in an inclined series that communicate with each other over the intervening baffles whereby oil descends by centrifugal flowage induced by toothed wheels therein over the baffles from each compartment to the next compartment, driving mechanism for said shafts including toothed wheels, certain of said wheels being arranged in said oil holding compartments respectively for lubricating the gearing elements of said shafts and for effecting the aforesaid centrifugal flowage over the intervening baffles, and means for driving said gearing elements.

1,891,773. UNDERGARMENTS FOR WOMEN SUCH AS SLIPS, PAJAMAS, BLOUSES AND THE LIKE. MARY D. NEILSON, Minneapolis, Minn. Filed July 14, 1930. Serial No. 467,815. 2 Claims. (Cl. 2—115.)



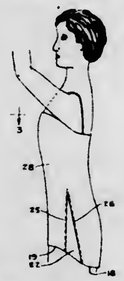
1. A garment for women wherein each front section is cut with parallel side edges and extra length of material at the arm scye, the said arm scye extending in a continuous curve from the shoulder seam to the side edge of the front, said curve being accentuated adjacent to said edge, and said extra length of material being reduced by a pleat extending in reverse radial direction inwardly from a point adjacent to the center of said accentuated part of the curve of the arm scye.

1,891,774. BLOOMERS FOR WOMEN. MARY D. NEILSON, Minneapolis, Minn. Filed July 14, 1930. Serial No. 467,816. 1 Claim. (Cl. 2—78.)



A bloomer garment comprising a back piece and front pieces adapted to be sewed to the edges of the back piece and to each other, the edges of the said back piece being longer than the edges of the front piece whereby the back piece edges are gathered where sewed to the front piece edges, an insert of roughly triangular shape having its two long edges equal in length to each other and to the edge of the front piece and having one of its edges sewed to an edge of the back piece said back piece edge being gathered thereto, and a pair of fasteners spaced apart along a circumferential line at the bottom of the front piece and of the insert for holding said front piece in overlapping position in respect to said insert.

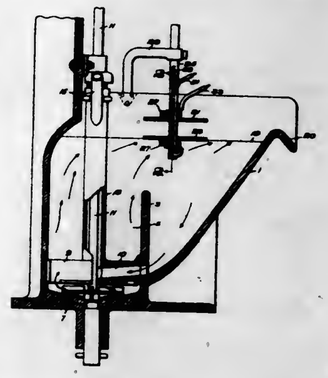
1,891,775. WOMAN'S VEST. MARY D. NEILSON, Minneapolis, Minn. Filed July 14, 1930. Serial No. 467,817. 1 Claim. (Cl. 2—113.)



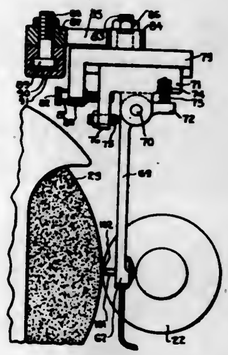
A fitted vest comprising a section of a tube of knitted or elastic material of uniform cross-sectional diameter thruout its length cut across at top and bottom with parallel reverse curves such that the front of the resulting garment will extend up higher on the body of the wearer than the back and the garment will fit the wearer without pulling or bunching, said cuts at the bottom of said tube being offset along the longitudinal centers of the sides and the tube being cut in an extension of said offset lines, and a triangular piece being sewed into said side cuts to form a continuation of the bottom edge of the garment and increase its diameter about the hips of the wearer so that the upper portions of the garment may be small enough to act as a brassière.

1,891,776. SELECTIVE SEPARATION OF ORES. LOUIS J. O'MALLEY, Boston, Mass. Filed June 14, 1930. Serial No. 461,093. 9 Claims. (Cl. 209—166.)

1. The process of ore separation which comprises subjecting an ore pulp to froth flotation to produce a metal-value-bearing froth over the froth liquor, and electrically attracting the metal-value-bearing fractions of said froth upward relative to the surface of said liquor by causing the froth to pass between electrodes having opposite electrical charges at a relatively high potential difference, one of which electrodes is above the surface of the liquor in electrical contact with the froth.



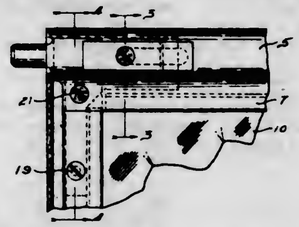
1,891,777. GRINDING MACHINE. ALFRED G. PLIMMER, Cincinnati, Ohio, assignor to Cincinnati Grinders Incorporated, Cincinnati, Ohio, a Corporation of Ohio. Filed Apr. 4, 1932. Serial No. 602,990. 17 Claims. (Cl. 51—165.)



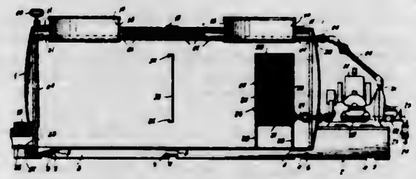
1. In a device of the class described the combination of a tool, a support for the tool, a work support adjacent the tool, means for actuating the tool and work support toward and from one another, means for engaging the tool after it has approached the work a predetermined amount, said means generating a current upon contact of the work therewith, and means amplifying said current for discontinuing the relative feed between the work and tool.

1,891,778. CORNER CONSTRUCTION FOR FRAMES. ALBERT T. POTTER, Detroit, Mich., assignor to Ainsworth Manufacturing Company, a Corporation of Michigan. Filed Mar. 10, 1930. Serial No. 434,554. 6 Claims. (Cl. 296—84.)

1. In a corner construction for frames, a sheet metal frame member having a hollow end and a pair of spaced parallel sides forming a glass channel, said hollow end having an open-ended slot in alignment with said glass channel, a reinforcing brace member having a portion housed within and secured to said hollow end, a transversely disposed portion on said brace member extending through said slot and embraced by the walls thereof, and a second frame member secured to said transversely extending portion.

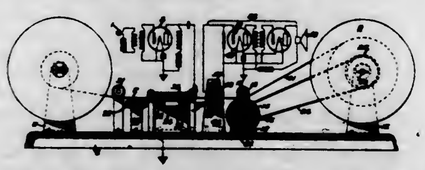


1,891,779. APPARATUS FOR TRANSPORTING LIVE FISH. HENRY GRANT ROBBINS, Forest Home, Calif. Filed Oct. 8, 1929. Serial No. 398,224. 4 Claims. (Cl. 119—5.)



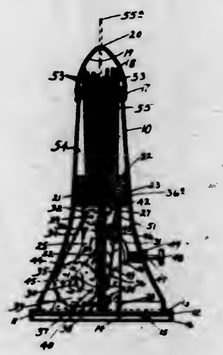
4. A fish transporting apparatus comprising a tank adapted to contain water and provided in its upper side with openings permitting the circulation of air longitudinally through the upper portion of the tank, collars secured to the wall of the tank and extending downwardly through the openings for a short distance to provide aprons preventing the water from splashing out of said openings, a pump, and operating means therefor, the pump being located outside the tank and having an intake port and a discharge port, the intake port communicating with the lower side of the tank, and pipes extending longitudinally within the upper portion of the tank, and having their inner ends closed and communicating at their other ends with the discharge port or pump, the pipes being located close to opposite sides of the collars and close to the lower edges thereof and being provided with outlet openings discharging downward and across the axes of said collars by which water is sprayed into the air circulating longitudinally through the upper side of the tank and passing downward through said openings defined by the collars.

1,891,780. METHOD OF AND APPARATUS FOR RECORDING AND REPRODUCING ELECTRICAL IMPULSES. ROBERT E. RUTHERFORD, Philadelphia, Pa. Filed Dec. 20, 1928, Serial No. 327,333. Renewed July 29, 1932. 19 Claims. (Cl. 179—100.1.)



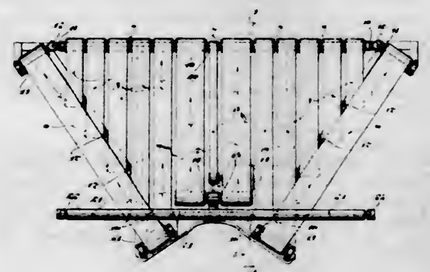
1. The step in the method of recording sound impulses which comprises electrizing a dielectric.

1,891,781. TOOTHPICK DISPENSING DEVICE. HARRY SADJIAN, Philadelphia, Pa. Filed Mar. 15, 1930. Serial No. 436,019. 2 Claims. (Cl. 312—79.)



1. In a tooth pick dispensing device adapted to eject one tooth pick longitudinally and vertically at a time, and having a plunger for ejecting said tooth pick, a frame, two sprocket wheels journaled in said frame, one of said wheels being smaller than the other, the smaller of said wheels being uppermost, a sprocket chain engaging said wheels, said chain being connected with said plunger, and means for actuating said wheels to move said chain manually.

1,891,782. LAUNDRY FLAT PIECE SPREADER. LEE R. SAGER, Minneapolis, Minn., assignor, by direct and mesne assignments, of one-third to Antone Wayne Julien, Minneapolis, Minn., and one-third to Merton A. Pocock, Minneapolis, Minn. Filed Dec. 9, 1929. Serial No. 412,747. 18 Claims. (Cl. 68—11.)

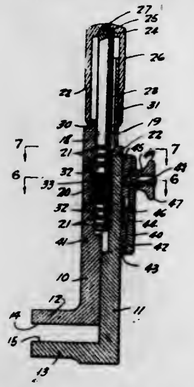


7. A device of the class described comprising a pair of diverging conveyor spreaders on which a flat piece may be loosely placed with its outer longitudinal edge portions hanging down from the outer longitudinal edge portions thereof, and means for positively moving the conveyor spreaders in the direction of their divergence, whereby the diverging spreaders will transversely stretch the flat piece therebetween and progressively lift the hanging portions thereof and spread the same on the conveyor spreaders.

1,891,783. MICROMETER. RALPH V. SAVAGE, Los Angeles, Calif. Filed Mar. 17, 1930. Serial No. 436,397. 12 Claims. (Cl. 33—164.)

1. A micrometer comprising a body including two relatively movable members having opposed faces, each member having a jaw thereon, means for adjustably connect-

ing said members to each other, each member having a recess in the opposed face thereof, one of said recesses

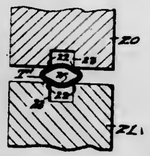


having spaced lugs and the other having threads therein, and a rod having threads engaging the first named threads and having peripheral recesses engaging said lugs.

1,891,784. PHOTOGRAPHIC PRINTING PROCESS. FRANCIS JOHN SHEPHERD and FRANK FORSTER RENWICK, London, England, assignors to Ilford Limited, Ilford, England, a British Company. Filed Aug. 29, 1930, Serial No. 478,800, and in Great Britain Oct. 23, 1929. 14 Claims. (Cl. 95—5.)

1. A process of the Bromoil type for obtaining a print in oil pigment on a non-reticulated gelatin surface, which consists in forming the photographic print on a layer of silver-halide-gelatin emulsion which, by the addition of a hardening agent, has been pre-hardened to a degree such that its melting point is above 105° F., developing the print in a non-tanning developer, selectively hardening in a bleaching and tanning bath those portions of the gelatin which were in immediate contact with the metallic silver of the image, applying greasy ink to the surface of the bleached fixed print, and developing gradation in the damp inked print by rolling it with a roller of material which will pick up ink from the non-tanned portions of the gelatin and transfer it preferentially to the tanned portions.

1,891,785. METHOD AND APPARATUS FOR SHAPING TUBING. OTTO W. SIEBERT and CARL J. BJORSON, Gardner, Mass., assignors to O. W. Siebert Company, Gardner, Mass., a Corporation of Massachusetts. Filed Jan. 12, 1931. Serial No. 508,113. 8 Claims. (Cl. 153—21.)



1. The method of changing the cross section of circular tubing which consists in applying pressure along two spaced parallel lines at one side of the tubing and in a direction substantially perpendicular to the plane of said parallel lines, such pressure being resisted along two spaced and opposed parallel lines at the opposite side of the tubing, the tubing being free from direct pressure between the first two lines and also between the last two lines.

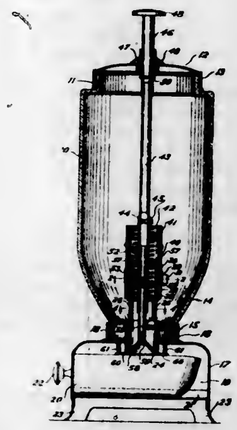
3. Apparatus for use in changing the cross section of circular tubing to a substantially elliptical cross section which comprises a pair of dies, each having two parallel angular tube-engaging edge portions substantially spaced apart by an intervening recessed non-engaging portion, the tube-engaging portions of said dies being positioned directly opposite to each other, and the recessed portions of said dies also being positioned directly opposite to each other when said dies are applied to a tube.

1,891,786. CHALK LINE DEVICE. ROBERT M. SMITH, Sioux Falls, S. Dak. Filed Apr. 12, 1930. Serial No. 443,803. 4 Claims. (Cl. 33—8.)



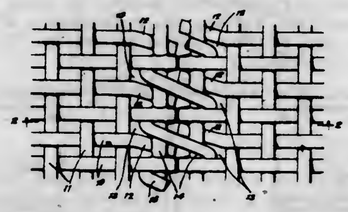
1. In a chalk line device, a support having sides and ends and having graduations along each end, guide means carried by the support, an endless cord movably engaged with said guide means, a rod at one end of the support extending transversely thereof, a slidable member on said rod connected to the cord so as to be slid on the rod upon movement of the cord and having an indicator cooperating with the graduations at said end of the support, and a chalk line connected at one end to the slidable member so as to move therewith and having its opposite end cooperating with the graduations at the opposite end of the support.

1,891,787. DISPENSER. RICHEY L. SWARTZ, Canton, Ohio. Filed Dec. 4, 1931. Serial No. 578,903. 11 Claims. (Cl. 221—95.)



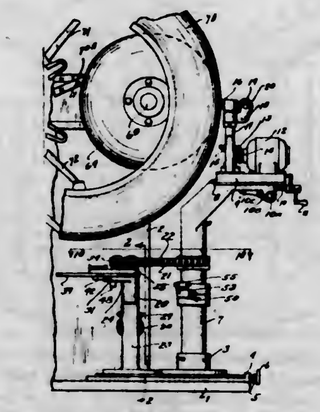
1. A dispenser including a container, a discharge tube in the lower portion of the container and provided with openings in its sides, a sleeve slidable over the discharge tube, a valve normally closing the lower end of the discharge tube, and means for sliding the sleeve over the openings in the discharge tube and for opening said valve.

1,891,788. WOVEN WIRE BELT FOR PAPER-MAKING MACHINES. NELSON W. WEBB, Belleville, N. J., assignor to Eastwood Wire Corporation, Belleville, N. J., a Corporation of New Jersey. Filed Aug. 29, 1930. Serial No. 478,622. 5 Claims. (Cl. 245—10.)



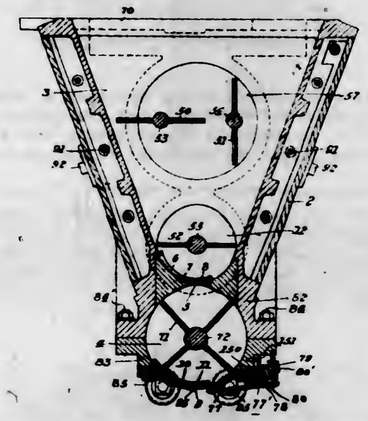
1. In a wire cloth belt, a length of woven wire cloth comprising warp and weft wires and having its ends adjacent, the warp and weft wires being spaced to provide mesh openings, certain mesh openings contiguous to the ends of the cloth being relatively wider than the other mesh openings disposed in transverse alignment therewith, said certain mesh openings being bounded by the end weft wire, the next adjacent weft wire, a warp wire end overlying said end weft wire, and a warp wire end underlying said end weft wire, said underlying warp wire end being disposed in divergent relation to the overlying warp wire end, means fixedly securing said warp wire ends to said end weft wire whereby said relatively wider mesh openings are of predeterminedly fixed size for having a lacing wire passed therethrough, and a lacing wire connecting the ends of the cloth and passed only through said relatively wider mesh openings and overlying said end weft wires at points contiguously opposed to said underlying warp wire ends.

1,891,789. TIRE RECLAIMING MACHINE. OMAR A. WHEELER, Portland, Oreg. Filed Oct. 13, 1930. Serial No. 488,416. 14 Claims. (Cl. 164—63.)



1. In a device of the class described, the combination of a base, a column upwardly extending from the base and partially rotatable relative to the base, a table disposed upon the column, a cutter head base slidably disposed upon the table, a cutter head frame secured to the table, a cutter head disposed within the frame, a prime mover disposed upon the table, coacting gears disposed between the prime mover and the cutter head, a gear rack disposed upon the column, a secondary column disposed upon the base, a sub-base supporting the column, gears mounted upon journals associated with the sub-base, said gears adapted for coacting with the gear rack, and means for disengaging one of the gears and for engaging the other of the gears with the gear rack, to predetermine the direction of rotation of the column carrying the cutter head about a vertical axis.

1,891,790. SPREADING APPARATUS. MEYER WILDERMAN, Monte Carlo, Monaco, assignor to The American Wilderman Porous Ebonite Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Jan. 8, 1931, Serial No. 507,352, and in Great Britain Dec. 20, 1928. 19 Claims. (Cl. 18—30.)



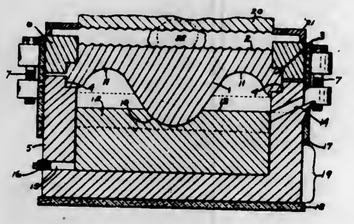
6. Apparatus for spreading finely divided solid material into a mold, comprising a container, means for moving the mold and container relative to each other, means for heating the container, a stirrer in the container, the container being provided with a distributing slot, a shutter controlling the slot, said stirrer being mounted on a stirrer shaft extending beyond the container at each end thereof, a rotatable disc mounted on each end of the stirrer shaft, the shutter being connected to said discs, a lever pivotally mounted on each end of the container, a cam roller on one end of each lever, links connecting the discs and levers, a cam rail, and means for holding the rollers in contact with the rail.

1,891,791. STEERING OR TURNING LAMP ARRANGEMENT FOR MOTOR VEHICLES. HARRY ARCHIBALD WISEMAN, Hamanskraal, Transvaal, Union of South Africa. Filed Apr. 15, 1931, Serial No. 530,279, and in Union of South Africa June 20, 1930. 5 Claims. (Cl. 240—62.7.)



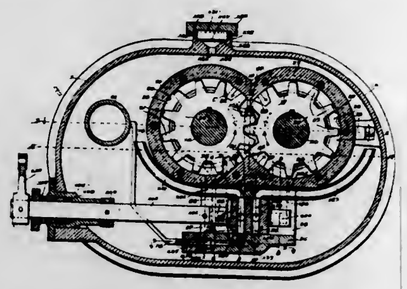
1. In a steering or turning lamp arrangement for motor vehicles, the combination with the steering gear of the vehicle of a lamp, a rear rotatable element mounted on a fixed portion of the vehicle and adjustable longitudinally and transversely of said portion, means in the form of a lever, which at one end is rigidly connected to and rotates said rear element off a portion of the steering gear, and is slotted at its other end to engage with the steering gear, means for resiliently connecting said slotted end of the lever to the steering gear, a rotatable element mounted at the front of the vehicle and carrying the lamp, and flexible means for rotating said front rotatable element off the rear rotatable element, as set forth.

1,891,792. GLASS WORKING APPARATUS. WILLIAM H. WOOD, South Euclid, Ohio. Filed Oct. 19, 1927. Serial No. 227,112. 18 Claims. (Cl. 49—72.)



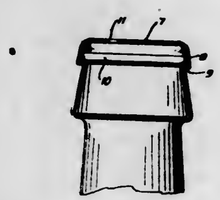
11. In glass article pressing machinery, a metal die member, means for obstructing heat loss from the margins of said member, and for providing a path of heat loss vertically from the mid point of said die member.

1,891,793. HYDRAULIC BRAKE. PAUL R. KAUFFMAN, Seattle, Wash., assignor to McCleary Hydraulic Brake Company, Seattle, Wash., a Corporation of Washington. Filed Sept. 29, 1930. Serial No. 484,959. 13 Claims. (Cl. 188—92.)



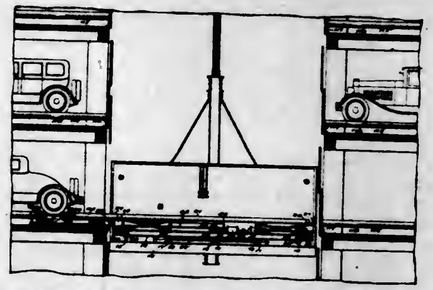
1. In a vehicular hydraulic brake, vehicularly operated gears for building up pressure against either forward or rearward movement of the vehicle, a casing enclosing said gears and having chambers on opposite sides of the point of mesh engagement of said gears and either chamber being adapted to act as a suction or pressure chamber dependent upon the direction of rotation of said gears, and said casing having oil ingress ports delivering circumferentially of said gears located between said chambers, and adapted to supply said gears with oil irrespective of the direction of rotation of said gears.

1,891,794. BOTTLE CAP. MAYO A. BOSBICK, Cleveland, Heights, Ohio. Filed Dec. 22, 1931. Serial No. 582,565. 4 Claims. (Cl. 215—100.)



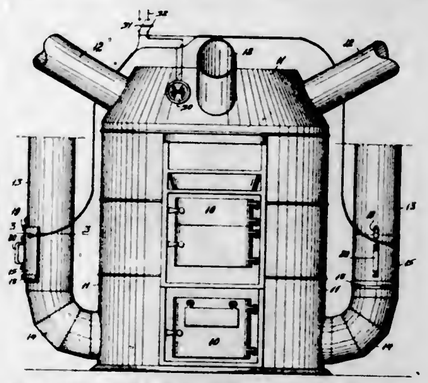
1. A soft rubber bottle cap having a relatively flat top to be placed against the lips of a drinker, the top having an opening through the same through which the contents of the bottle may be discharged without distorting the cap.

1,891,795. VEHICLE STORAGE SYSTEM. SAMUEL E. BUETTELL, Chicago, Ill., assignor to Cross Parking Systems, Inc., Chicago, Ill., a Corporation of Illinois. Filed Apr. 23, 1928. Serial No. 272,169. 17 Claims. (Cl. 214—16.1.)



1. In a vehicle storage structure, an elevator hatchway, a plurality of floors having a number of storage spaces on opposite sides of the elevator hatchway on each floor, car handling mechanism mounted upon said elevator, means for moving said elevator to a predetermined floor, and means operative during the elevator movement for moving said car handling mechanism in vertical alignment with a predetermined row of stalls.

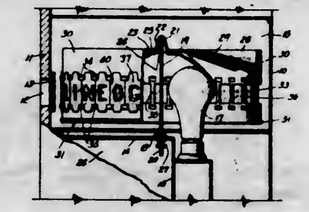
1,891,796. REVERSIBLE CONTROL FOR HOT AND COLD AIR IN FURNACES. ALBERT M. CARDES, Newton, Iowa, assignor of one-half to Mary Jane Carder, Newton, Iowa. Filed Apr. 30, 1931. Serial No. 533,918. 5 Claims. (Cl. 126—110.)



1. In a heating system having an air conduit, an aperture in a wall of said conduit, a supporting step adjacent the lower margin of said aperture, a closure plate supported by said step in closing relation with said aperture and an electric fan mounted on said plate in operative relation within said conduit.

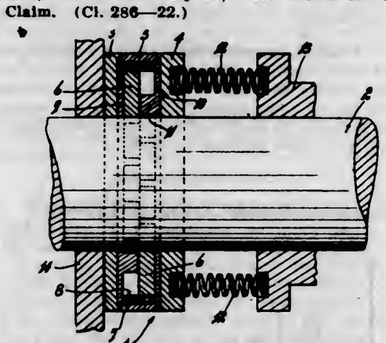
1,891,797. ROTOR FOR DISPLAY DEVICES. CHARLES E. CHASE and EDWIN J. FIEGEL, Kansas City, Mo., assignors to Line-O-Graph Company, Kansas City, Mo., a Corporation of Missouri. Filed Mar. 11, 1931. Serial No. 521,674. 23 Claims. (Cl. 40—40.)

1. In a display device, a housing having an opening therein, illuminating means in said housing, a rotor in said housing having a vertical axis and comprising an opaque vertical circumferential wall portion extending around said illuminating means, said circumferential wall portion having a circumferential series of openings therein adapted to



align with the opening in said housing and display means on said rotor overlying said openings and having opaque and transparent portions.

1,891,798. PACKING. HOWARD B. CHESHIRE, Long Beach, Calif. Filed July 30, 1929. Serial No. 382,128. 1 Claim. (Cl. 286—22.)



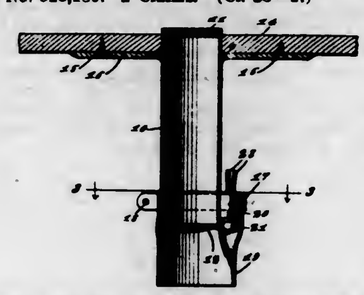
A metallic packing adapted to be placed around a shaft or the like, comprising a plurality of circumferentially spaced segments bearing against the shaft, a second group of superimposed segments upon the first named segments, said second group of segments being so arranged as to bear upon and cover the spaces between the first named segments, a coil spring surrounding each of said groups of segments whereby the segments are urged inwardly, end plates, an annular ring between the end plates, a pair of spacing plates adjacent said segments, said plates being formed in one integral piece, spacing lugs projecting inwardly from the spacing plates between the segments whereby the segments are spaced about the shaft and from each other, the side edges of each of said segments being parallel to each other and said parallel edges fitting closely against the spacing lugs whereby a tight metallic packing is provided.

1,891,799. ELECTRIC SWITCH. JOHN M. CLEVELAND, Kansas City, Mo. Filed Aug. 15, 1932. Serial No. 628,792. 8 Claims. (Cl. 200—6.)



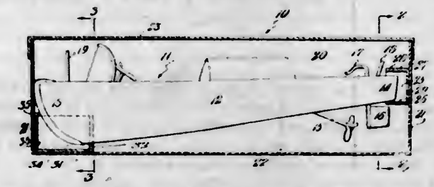
1. In an electric switch, a housing; a plurality of stationary contact fingers carried by the housing; a rotor within the housing adjacent all of said fingers; a contact leaf bearing against each finger respectively and carried by said rotor; and means to rotate said rotor, said means having a number of contact arms each against one of said contact leaves.

1,891,800. ATTACHMENT FOR INCUBATOR. WILLIAM O. COLLINS, Wellsville, Kans. Filed Apr. 6, 1931. Serial No. 528,180. 2 Claims. (Cl. 88—1.)



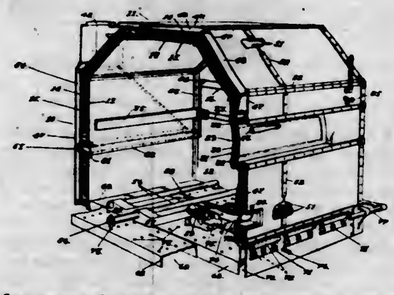
1. Means for the purpose indicated comprising a pendent tube provided with a lens at its lower end, and a lamp carried by the tube as a lateral attachment to the latter adjacent the lens to illuminate an object placed below the tube, the tube having a flexible tubular extension below the plane of the lens and the rays from the lamp passing through said extension onto the object under observation.

1,891,801. BOX. WILLIAM J. DE WITT, Auburn, N. Y., assignor to Shoe Form Co., Inc., Auburn, N. Y., a Corporation of New York. Filed Mar. 12, 1931. Serial No. 521,982. 3 Claims. (Cl. 206—1.)



1. In a box for containing a boat having a propeller projecting from the hull thereof, a supporting member including a flange on which the stern of the boat rests with the propeller out of contact with the walls of the box, and a second flange parallel to the first flange and projecting above the stern of the boat, and a second supporting member including a flange having a notch therein, in which notch the bow of the boat rests.

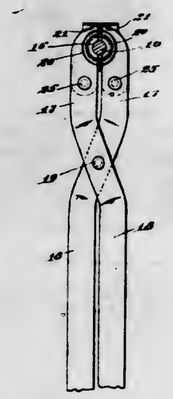
1,891,802. OVEN. WILLIAM F. DREW, Los Angeles, Calif. Filed Feb. 2, 1929. Serial No. 337,089. 18 Claims. (Cl. 107—59.)



1. In an oven having a casing and material supporting means within the upper portion thereof: of burners within said casing near the bottom thereof; a mixing chamber for

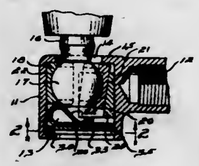
each burner and adjacent thereto; valve means without said casing adapted to independently vary the supply of fuel to each burner, said valve means having a single unitary body; a fuel supply pipe connected to said body; tubes independently connecting said body with the mixing chamber of each of said burners, a duct in the casing, under the burners, supplying air to each of mixing chambers; an intake opening in said duct outside said casing and means controlling the supply of air from said duct to each of said mixing chambers.

1,891,803. VALVE SPRING LOCK TOOL. WRAY FALWELL, Allston, Mass. Filed Jan. 28, 1932. Serial No. 589,369. 4 Claims. (Cl. 81—5.1.)



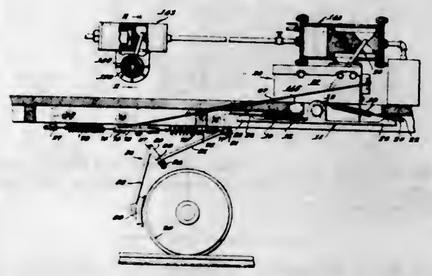
1. A tool for holding in place valve stem spring locking members comprising a pair of flat bladed pliers, the inner front surfaces adapted to receive split cone lock members, spring members adapted to engage the bottom portions of said lock members, friction means adapted to the jaws of said pliers and said lock members, substantially as shown and described.

1,891,804. JOINT CONSTRUCTION. WILLIAM A. FLUHRERELT, Columbus, Ohio, assignor to The Columbus Auto Parts Company, a Corporation of Ohio. Filed Feb. 10, 1931. Serial No. 514,810. 3 Claims. (Cl. 287—90.)



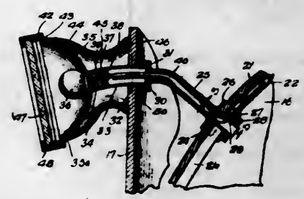
1. A housing having a cylindrical aperture provided with an inturned flange at one end forming an opening to said aperture, a ball within said aperture having a stem extending through said opening, a socket on one side of said ball abutting against said flange and offsetting said ball within said aperture, a second socket engaging the other side of said ball and spaced from the wall of said aperture, a wedge within said space for forcing the socket into engagement with said ball and a spring having a turn disposed in a plane with the ends thereof bent back upon the turn forming arms for engaging the bottom of said wedge.

1,891,805. BRAKE. CRUTHERS I. FRANTZ, Los Angeles, Calif., assignor of one-half to Paul A. Frantz, San Francisco, Calif. Filed Mar. 17, 1932. Serial No. 599,446. 20 Claims. (Cl. 188—167.)



1. In a brake, a rotatable shaft having a spring motor to rotate such shaft, a slidable crosshead having means connected thereto to apply brakes, means to initiate a sliding action for application of the brakes, and means interacting between the shaft and the crosshead to urge said crosshead into brake applying position.

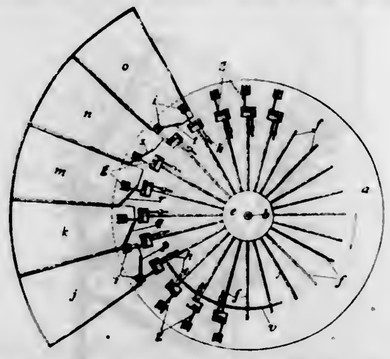
1,891,806. ILLUMINATED FIREMAN'S HELMET. RAYMOND E. M. FROHDER, Brooklyn, N. Y. Filed Mar. 8, 1932. Serial No. 597,577. 5 Claims. (Cl. 240—60.)



1. The combination with a head piece having a rigid crown and plate-like emblem member spaced therefrom, a conduit section passing through and secured to the crown, a second conduit section passing through the plate-like member, a coupling for the conduit sections, and a lamp on the second conduit member clamped against said plate-like member by said coupling.

1,891,807. MACHINE FOR WEIGHING AND GRADING EGGS. WALTER FROST, Rochdale, England. Filed Mar. 28, 1930, Serial No. 439,774, and in Great Britain Apr. 2, 1929. 1 Claim. (Cl. 209—121.)

An egg weighing and grading machine comprising, in combination, a fixed circular table, a vertical spindle mounted in said table, means for rotating said spindle, a disc carried by the spindle, arms radiating from said disc, a balance arm fulcrumed upon the outer end of each radial arm, an adjustable weight mounted upon the inner end of each balance arm, a cradle pivotally mounted to the outer end of said balance arm, into which an egg is placed so as to depress the cradle to an extent varying with the weight of the egg, trays arranged around the outside of the circular table to receive the graded eggs, guide walls arranged one at each entrance to the trays, the said walls being of gradually increasing height and disposed angularly across the path of rotation of the cradles, a projection on each cradle which engages one or other of the said guide



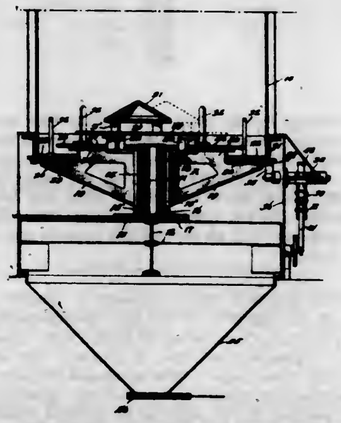
walls thereby tilting the cradle and discharging the egg into its corresponding tray, and a fixed wall for supporting the cradles against depression during loading.

1,891,808. WINDOW CURTAIN ROD GUIDE. NORMAN GALLIHER, Cleveland, Ohio. Filed Feb. 3, 1932. Serial No. 590,723. 2 Claims. (Cl. 223—88.)



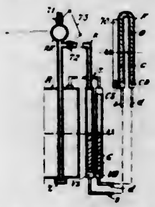
1. A curtain rod attachment comprising a head member of substantially rectangular formation but having one of its ends rounded and reduced in width and in thickness from the sides to the opposite faces of the head and the said end and the corners of the said end being rounded, said head having a socket entering from its inner end, a spring plate received in and projecting through the socket, and an arched spring tongue integrally formed at the center of the inner end of the plate, engaging with one of the walls of the socket and exerting a tension thereagainst to cause the plate to normally frictionally contact with the second wall of the socket.

1,891,809. SELF-CLEARING GRATE. ALBERT LEET GALUBHA, Caldwell, N. J. Filed July 20, 1928. Serial No. 294,132. 14 Claims. (Cl. 126—182.)



1. A rotatable grate comprising a number of vertically spaced annular plates of progressively smaller size, the peripheries of certain of said annular plates being mutually eccentric, and the periphery of each of said plates above the bottom plate being defined by a circle substantially concentric with the circle defining the inner edge of the plate next below it.

1,891,810. LEVEL GAUGE INDICATING AT A DISTANCE THE LEVEL OF A LIQUID CONTAINED IN A TANK. GIUSEPPE GIANOLIO, Turin, Italy. Filed Dec. 1, 1928, Serial No. 323,061, and in Italy May 25, 1928. 10 Claims. (Cl. 73—54.)



1. In a liquid level indicating apparatus, an indicating tube having two connected branches and partly filled with an indicating liquid, a pressure transmitter comprising two adjacent tubular cisterns one for each branch, piping connecting each cistern to its branch, and a pressure transmitting liquid, non-miscible with the indicating liquid and with the liquid to be gauged, filling part of said cisterns, filling the pipings and the remaining portions of the indicating tube, a tank and a siphon connecting one cistern with the liquid in the tank at the maximum depth to be indicated, a pipe connecting the gas space above the liquid in the tank with the other cistern whereby the indicating liquid in one of the indicating tube branches is subjected to the combined hydrostatic pressure of the liquid to be measured and the gas above it and in the other branch to the gas pressure only, and a graduated scale alongside the index bearing branch which is the branch in which the plane of separation between the indicating liquid and the transmitting liquid may function as an index as it rises with the rising of the liquid in the tank and vice versa.

1,891,811. BROODER. CURTIS C. GAIMES, Yale, Okla. Filed Aug. 4, 1930. Serial No. 472,925. 6 Claims. (Cl. 119—17.)

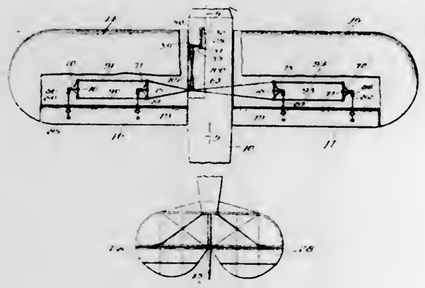


1. A brooder composed of superposed units, said units comprising side and end walls and a mesh floor member, an upstanding flange formed on opposed side walls, a Z-shaped angle member extending inwardly from each flange, said Z-shaped member comprising a supporting track for said next superposed unit and a tray slidably supported on the lower portion of said Z-shaped members.

1,891,812. AIRPLANE. ROY E. GUTHRIE, Chicago, Ill., assignor to Guthier Airplane Company, a Corporation of Illinois. Filed Aug. 10, 1931. Serial No. 556,282. 7 Claims. (Cl. 244—29.)

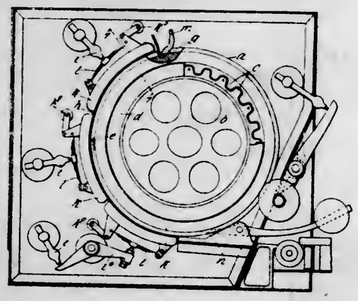
1. An airplane provided with wings, ailerons pivoted to said wings, a joy stick movable in two planes at right

angles to each other, means for connecting said joy stick to elevators on the tail of the airplane, a rotatably mounted member, means operatively connecting said joy stick to said rotatably mounted member whereby said joy stick



may be manipulated to displace said rotatable member in a plane normal to its axis of rotation, a handle member for rotating said rotatable member, and means operatively connecting said rotatable member with said ailerons.

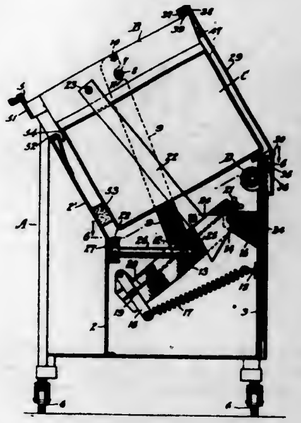
1,891,813. MANUFACTURE OF METAL BILLETS, BARS, AND THE LIKE. FRANK WILLIAM HARBORD and VERNON HARBORD, London, England. Filed Oct. 23, 1929, Serial No. 401,872, and in Great Britain Nov. 14, 1928. 6 Claims. (Cl. 207—13.)



1. An apparatus for producing metal billets, bars or the like directly from molten metal, comprising a ring member having a peripheral channel, a flexible metal strip member supported adjacent to and yieldingly overlying and in close contact with the periphery of said ring member for a portion of the length of said channel and forming with the latter a mold cavity, one of said members being stationary and the other being movable lengthwise of said channel, and a stripper mounted adjacent to and projecting into one end of said mold cavity whereby the solid portion of an ingot is removed from the channel.

1,891,814. BOOKRACK. WALTER EASTER HASKIN, Flushing, N. Y., assignor to Pressed & Welded Steel Products Company, Inc., New York, N. Y., a Corporation of New York. Filed June 12, 1930. Serial No. 460,716. 17 Claims. (Cl. 312—34.)

1. In a bookrack, the combination with a support, of a book holder pivotally mounted on the support and adapted to support a book normally in suspended closed position, and adapted to be swung on its pivot to a reverse position to support the book and permit opening thereof, automatic and progressively variable counterbalancing tension



means pivotally connected to one side of the book holder, and movement cushioning means pivotally connected to the other side of the book holder.

1,891,815. BODKIN FOR DRAWING MATERIAL THROUGH HOLLOW HEMS. HELENE HEIDRICH, geboren NOPPENZ, Dresden, Germany. Filed Mar. 6, 1931, Serial No. 520,679, and in Germany Nov. 24, 1930. 8 Claims. (Cl. 223—38.)

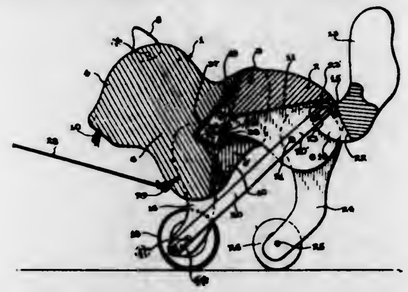


1. A bodkin for drawing material through hollow hems comprising in combination with a flat casing a wire having a hooked portion movable in the casing to permit the hooked portion to be extended beyond the casing and means for limiting the movement of the wire, the hooked portion having a width somewhat greater than that of the casing, substantially as and for the purpose set forth.

1,891,816. FIGURE TOY. ELMER L. HEWITT, Churchville, N. Y., assignor to All Fair Incorporated, Churchville, N. Y., a Corporation of New York. Filed Mar. 5, 1932. Serial No. 597,030. 8 Claims. (Cl. 46—45.)

1. A toy comprising a body composed of front and rear body sections pivotally connected at substantially the central portion of the body so as to have relative movement, a head carried by the front body section, a tail swingingly carried by the rear body section, a wheeled

supporting means for the body of the toy including a crank axle, and a link pivoted at one end to the crank axle and at its other end pivoted to one of the body sections and



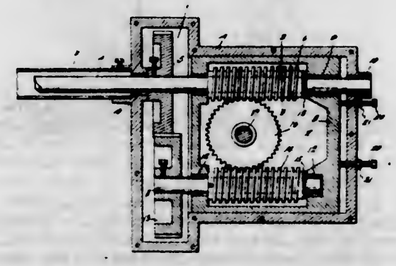
also having pivotal connection with the tail so as to actuate the body sections up and down on their pivotal connection and to move the tail on its pivot.

1,891,817. EJECTOR PACKAGE. AXEL G. HILDEBRAND, Brooklyn, N. Y. Filed July 19, 1930. Serial No. 469,170. 1 Claim. (Cl. 206—56.)



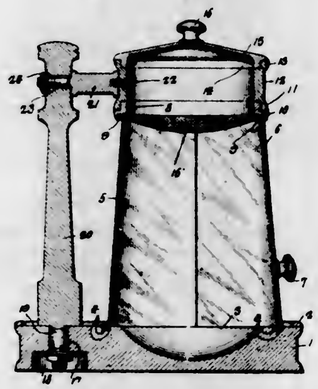
A tablet container comprising a cylindrical body consisting of side sections having flanges adapted to overlap and frictionally engage each other, said sections being substantially the same shape and dimensions, the body being provided at one side edge with an arcuate mouth having side depressions, a disk journaled concentrically in said mouth and provided with peripheral notches and having side projections entering said depressions, a peripheral portion of the disk entering the body of the container and a peripheral portion of the disk being disposed beyond the edge of the mouth.

1,891,818. STEERING GEAR. ALFRED J. HILLS, Abilene, Kans. Filed May 27, 1932. Serial No. 614,004. 1 Claim. (Cl. 74—79.)



In combination with a steering shaft and a shaft extending at right angles therefrom and connected with the steering mechanism, a housing into which both shafts extend, a worm gear on the second-mentioned shaft, a stub shaft paralleling the steering shaft and located in the housing, a left hand worm on the steering shaft meshing with the worm gear at one side thereof, a left hand worm on the stub shaft meshing with the worm gear at the opposite side thereof, thrust bearings at the lower ends of said worms, gears connected with the stub shaft and the steering shaft and meshing with each other, an adjustable member in the housing with which the thrust bearings engage and which carries the stub shaft, the gear and the worm of the stub shaft being attached thereto and means for slidably connecting the worm of the steering shaft thereto, and means for adjusting the member to take up wear.

1,891,819. FACE POWDER DISPENSER. JOSEPH HOFMEISTER, Pittsburgh, Pa. Filed Apr. 18, 1932. Serial No. 606,012. 6 Claims. (Cl. 132—82.)



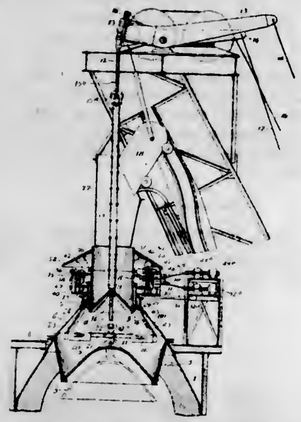
1. A powder dispenser comprising a base adapted to receive a powder puff, a housing supported upon said base and enclosing said puff, a door for said housing, a powder container supported upon the housing, a cover for said powder container and a screen between the powder container and housing.

1,891,820. DESCALING OF TUBES. JOHN JOHNSTON and FRED ARLAND, Norton-on-Tees, England, assignors to Imperial Chemical Industries Ltd., a Corporation of Great Britain. Filed Jan. 17, 1931, Serial No. 509,470, and in Great Britain Jan. 17, 1930. 5 Claims. (Cl. 15—104.07.)



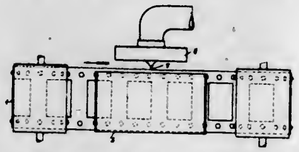
1. Apparatus for descaling metal tubes comprising a rigid rotary crank shaft having one or more cranks of small throw formed thereon, a number of loosely fitting rings on said cranks, the said crank shaft and rings being adapted to be inserted in the tube to be descaled, and means for rotating said crank shaft at high speed,

1,891,821. CHARGING MEANS FOR BLAST FURNACES. KARL F. JUENGLING, Lakewood, Ohio. Filed June 8, 1931. Serial No. 542,801. 25 Claims. (Cl. 214—37.)



1. Charging means for blast furnaces comprising a charging bell and hopper; stock-splitting means having a plurality of spaced vanes extended into the path of stock discharged from the bell; and means for rotating the vanes independently of the bell and hopper.

1,891,822. APPARATUS FOR MAKING SOUND RECORDS. THEODOR KAHN, Berlin-Charlottenburg, Germany. Filed Nov. 30, 1929, Serial No. 410,894, and in Germany Nov. 27, 1928. 1 Claim. (Cl. 274—11.)



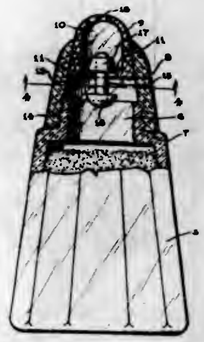
A machine for making sound records comprising a sound box, a cutter adapted to be operated by said sound box, means for feeding a film past said cutter in a straight line, with its edge presented to said cutter, and a curved cutting edge on said cutter with its concave side turned toward the edge of said film.

1,891,823. SILENT GEAR. ROBERT W. LYTLE, Cincinnati, Ohio, assignor to The Formica Insulation Company, Cincinnati, Ohio, a Corporation of Ohio. Original application filed Oct. 28, 1930, Serial No. 488,123. Divided and this application filed July 6, 1931. Serial No. 549,070. 5 Claims. (Cl. 74—28.)



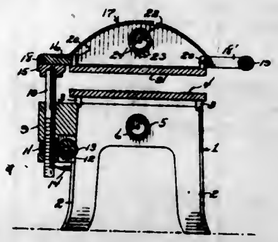
1. A gear as specified in claim 5, in which the center-structure comprises polygonal sheets, each having not more than four edges.

1,891,824. CONDIMENT HOLDER OR CONTAINER. THOMAS J. MADIGAN, New York, N. Y., assignor of one-half to Fred Auerbach, New York, N. Y. Filed Dec. 3, 1931. Serial No. 578,780. 8 Claims. (Cl. 65—45.)



1. A condiment dispenser comprising a body portion provided with an exteriorly threaded neck, a closure for the body portion including a collar having an interiorly threaded portion for threaded fit with said threaded neck and a head secured within the collar at the outer end of the latter and having a chamber provided with a discharge orifice and also having an opening aligning with said discharge orifice, and a double acting valve device normally suspended from said head and operable under the influence of gravity to close the last mentioned opening whereby to exclude moisture from the interior of the body and to prevent discharge of the material from the body whether the dispenser stands in normal position or be inverted, and permitting discharge of the contents through such opening into the chamber of the head for passage through the discharge orifice only under the influence of a shaking action of the dispenser.

1,891,825. GAS SPEED TOASTER. PHILIP J. MARTELL and WALLACE B. MCMURRAY, Maryville, Tenn. Filed Apr. 2, 1931. Serial No. 527,802. 1 Claim. (Cl. 126—41.)



In a device for the purpose set forth, a hollow substantially rectangular frame having a heating element therein and a plate thereon to absorb heat from the heating unit and having one of its sides, adjacent its ends, provided with block-like lugs, a shield arranged above the frame carrying a plate and having means for heating the plate and said shield having one of its sides, adjacent its end, formed with outwardly extending lugs, screws passing freely through the blocks of the plate and having upper heads that afford rests for the lugs of the shield and to which heads the lugs are pivoted, worm nuts housed in the lugs and engaging the screws, worm wheels meshing with the worm nuts, and an operating shaft connected to the worm wheels.

1,891,826. SPOUT AND CLOSURE. EDWARD L. MCGINNIS, Highland Park, N. J., assignor to Consolidated Fruit Jar Company, New Brunswick, N. J., a Corporation of New Jersey. Filed Jan. 15, 1932. Serial No. 586,859. 1 Claim. (Cl. 221—28.)

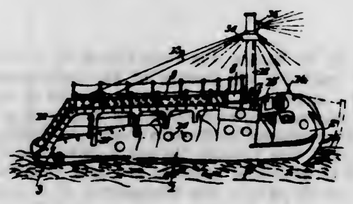


The combination with a spout and a closure therefor having screw-threaded engagement, said closure and spout being composed of soft metal, and the spout between the threaded portion thereof and the extremity being of general tapering form, said spout having a tapering annular seat at a point removed from its extremity, said seat acting as a guide for tools to sever the closed end of the spout and said closure having two tapering internal seats, one engaging the seat on the spout and the other the extremity of the spout.

1,891,827. PHOSPHORESCENT OR LUMINOUS MASSES OR COMPOUNDS. HENRY MONTAGUE MINNS, Liverpool, England. Filed Dec. 20, 1930, Serial No. 503,857, and in Great Britain Oct. 18, 1929. 1 Claim. (Cl. 134—47.)

The manufacture or production of a phosphorescent or luminous mass or compound, by heating strontium carbonate, calcium carbonate and magnesium carbonate in an oxidising furnace; grinding the compound oxide so formed and incorporating the same with lithium carbonate, rubidium carbonate, aluminium silicate, carbonaceous matter, sulphurs, one or more phosphorogens and one or more luminophores; heating the mixture in a non-oxidising furnace; grinding the mixture; and re-heating the mixture in the presence of a current of dry hydrogen.

1,891,828. HYDRAULICALLY PROPELLED LIFEBOAT. CHARLES MARIUS MOTTE, Paris, France. Filed Mar. 6, 1931, Serial No. 520,646, and in France Mar. 6, 1930. Renewed May 4, 1932. 5 Claims. (Cl. 9—4.)

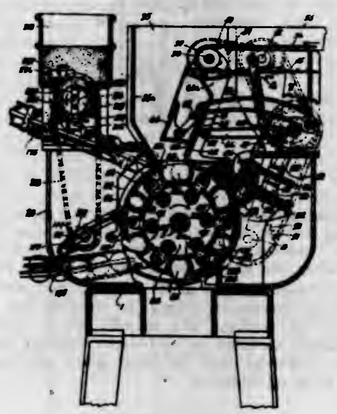


1. A life boat comprising a hull entirely made of metal, completely water-tight and in the shape of a frustum of circular cross-section, half-spherical compartments at the bow and stern respectively, three curved transverse channels on the upper plane of this hull, a cavity of special shape for constituting the pilot's cockpit, and a double wall on the lower portion of the hull, this double wall forming a water-tight compartment in case of damage at any point of the hull.

1,891,829. PROCESS OF HIGHLY POLYMERIZING CELLULOSE ACETATE AND THE PRODUCT THEREOF. ALEXANDER NATHANSOHN, Berlin-Wilmersdorf, Germany. Filed Oct. 3, 1929, Serial No. 397,165, and in Germany Oct. 16, 1928. 8 Claims. (Cl. 260—102.)

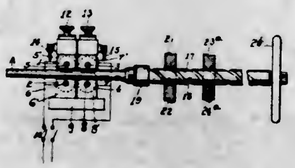
1. A process of manufacturing highly polymerized cellulose acetates which comprises treating cellulose acetate with an organic solvent which is substantially inert with respect to a halogen-phosphorus compound, and adding to the product a quantity of the halogen-phosphorus compound.

1,891,830. CAN FILLING MACHINE. NIELS C. NICHOLSON, Seattle, Wash., assignor, by mesne assignments, to Continental Can Company, Inc., New York, N. Y., a Corporation of New York. Filed June 18, 1928. Serial No. 286,181. 32 Claims. (Cl. 226—101.)



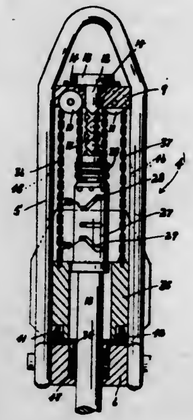
30. In a can filling machine, a rotating turret having a plurality of measuring pockets, mechanical means operable to forcibly supply the measuring pockets in succession with a food product, and means for causing the supply means to advance in timing with each pocket through an extended filling arc.

1,891,831. MACHINE FOR MANUFACTURING TWIST DRILLS. MASATOSI OKOCHI, Tokyo, and MAKOTO OKOSHI, Tokyo Prefecture, Japan, assignors to Zaidan Hojin Rikagaku Kenkyujo, Tokyo, Japan. Filed Sept. 24, 1929, Serial No. 394,880, and in Japan June 16, 1928. 6 Claims. (Cl. 219—1.)



1. A machine for manufacturing twist drills comprising an electric circuit, two sets of rollers engageable in the grooves of a drill blank, the respective roller sets engaging the drill blank at different points in the length of the latter and being connected in said circuit whereby the portion of the drill blank interposed between the sets of rollers is heated incident to the passage of current therethrough, drill clamping and operating means.

1,891,832. ELEVATING AND ROTATING DEVICE. ROBERT F. PARKS, Compton, Calif. Filed June 23, 1930. Serial No. 463,161. 11 Claims. (Cl. 255—35.)



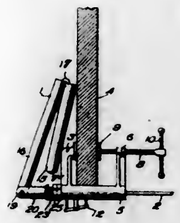
1. An elevating and rotating device for pipe comprising travelling blocks, a bail suspended from the travelling blocks, a threaded shaft mounted in the bail, a sleeve extending over the shaft, means on the sleeve engageable with the threads of the shaft whereby said sleeve is rotated as the blocks are raised, an elevator and links attached to the elevator and to said sleeve, and counter weight means attached to said sleeve whereby said sleeve is drawn upwardly over the shaft when the pipe is disengaged from the elevator.

1,891,833. FRAME FOR HAND BAGS AND LIKE CONTAINERS. LEO PAWLICEK, Modling near Vienna, Austria, assignor to Rabl & Grün, Vienna, Austria, a Partnership composed of Josef Jolles, Alfred Grün, and Otto Rabl. Filed Mar. 23, 1932, Serial No. 600,805, and in Austria Feb. 9, 1932. 25 Claims. (Cl. 150—29.)



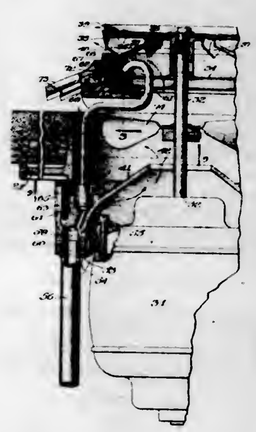
2. A holder having openable and closable sides with openable end edges at least at one end edge thereof, said edges being movable toward each other to some extent at least when the holder is in a closed condition for opening the holder, said edges overlying two elemental portions of two rods with the elemental portions movable toward each other, said rods crossing each other in such manner that each respective rod engages the top edge of the opposite side of the holder, said rods beyond the aforesaid elemental portions toward the bottom of the holder being engaged with each other by a pivotal connection and said rods being so located as to be unobstructed in their movement by the contents of the holder.

1,891,834. AUTOMOBILE LUNCH TABLE. ELDRIDGE M. PENDLETON, Vicksburg, Miss. Filed Apr. 15, 1932. Serial No. 605,536. 3 Claims. (Cl. 45—51.)



2. A table comprising supporting clamps having grooves in their opposing faces, a table element slidable in said grooves, a second table element pivoted to the clamps, said table elements capable of occupying inoperative positions out of the way of each other when one or the other of said table elements is positioned for use.

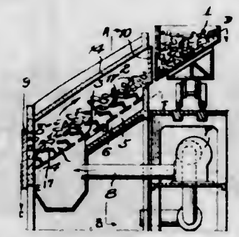
1,891,835. OIL BURNER. STANLEY PERRY, Chicago, Ill., assignor to Automatic Burner Corporation, Chicago, Ill., a Corporation of Illinois. Filed Jan. 21, 1929. Serial No. 333,882. 11 Claims. (Cl. 158—77.)



1. In an oil burner, the combination of a motor, an atomizer open for the passage of air therethrough and driven by said motor and to which the oil is supplied, members spaced from each other and from said atomizer, and a fan positioned to direct air into and through said atomizer and also through the space between said members and between said members and said atomizer.

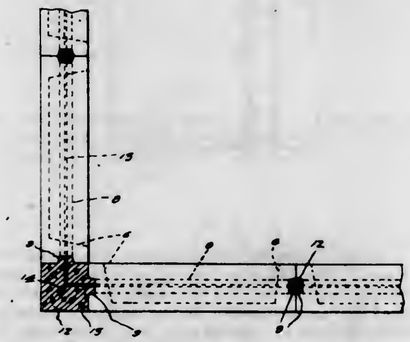
4. In an oil burner, the combination of a motor, an atomizer open for the passage of air therethrough and driven by said member and rotatable about a substantially vertical axis and to which the oil is supplied and comprising an air-forcing element located adjacent the discharge portion of said atomizer and operating to force atomizing air through said atomizer, a deflector above said element and forming with the upper edge of said atomizer a laterally opening space through which the oil and the air operated on by said element flow, and a fan operating to supplement said air-forcing element in forcing the air through said atomizer.

1,891,836. APPARATUS FOR DRY COOLING COKE. OLIVIER PIETTE, Brussels, Belgium, assignor to Union Chimique Belge, Societe Anonyme, Brussels, Belgium. Filed Mar. 14, 1929, Serial No. 347,077, and in Belgium Feb. 2, 1929. 1 Claim. (Cl. 202—228.)



An apparatus for the dry cooling of coke spread in a thin layer comprising a series of adjacent compartments, an inclined stepped grate with pivoted shutter-like plates forming the floors of said compartments, said compartments having sidewalls and roofs of refractory brick, each sidewall extending below the inclined stepped grate and providing a separate upper and lower space below each compartment, the side walls having channels connecting the upper space of one chamber with the lower space of the subsequent chamber, means for passing a continuous current of non-oxidizing gas through each compartment, first upwards through the lower space and the lower part of the layer of coke, then through the upper part of the layer of coke and through the upper space of the same chamber, and then through channels in the sidewalls from the upper space of one compartment into the lower space of the adjacent compartment.

1,891,837. CONCRETE UNIT FOR WALL CONSTRUCTION. VINCENT V. PITTMAN, Glendale, Calif. Filed July 23, 1929, Serial No. 380,345. Renewed May 18, 1932. 1 Claim. (Cl. 72—40.)



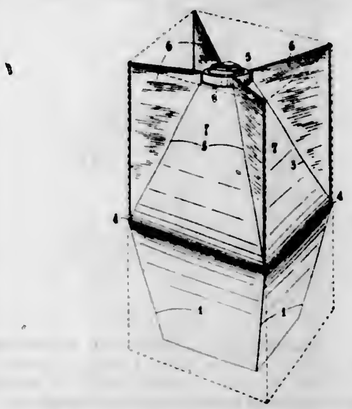
In a wall construction, a plurality of concrete panels, each of which includes a longitudinally extending body having side and end flanges and a plurality of equidistantly spaced transversely extending ribs connecting the side flanges together, the side flanges having their outer faces provided with longitudinally extending grooves, the rims being provided with openings communicating with the grooves, the side flanges of adjacent panels being adapted to be placed in abutting relation whereby the grooves therein form a closed pocket, reinforcing rods extending through the openings of the ribs of adjacent panels and through the pocket, and a cementitious binder placed in said pocket around the rod.

1,891,838. BROODER. GUS PORTELA, Afton, Wyo. Filed May 19, 1931. Serial No. 538,512. 2 Claims. (Cl. 119—32.)



1. In a brooder, a trough adapted to be embedded in the ground and open at its opposite ends to the atmosphere, said trough having its opposite sides provided with lateral flanges, a housing comprising a box like structure supported on the flanged sides of said trough and open at its top, said housing being provided with a plurality of entrance and exit openings at substantially the ground level, a heating element arranged within said trough, and hinged doors for closing the top of said housing, a water pan suspended from the bottom of said housing and extending into said trough, a partition horizontally disposed in said housing and dividing the same into a lower chick compartment and an upper air compartment, said partition comprising a sheet of fabric.

1,891,839. CARDBOARD OR LIKE BOX AND CARTON. FOSTER GOTCH ROBINSON, Bristol, England, assignor to E. S. and A. Robinson, Limited, Bristol, England. Filed Oct. 30, 1929, Serial No. 403,594, and in Great Britain Nov. 29, 1928. 7 Claims. (Cl. 229—6.)

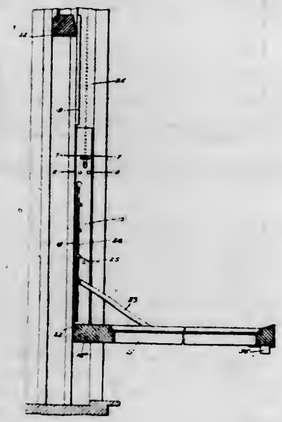


3. An improved support for the reception of a fragile article, comprising a hollow pyramidal portion adapted to provide a seating for the article, and a contiguous portion having fold lines therein, said portion being bent along said fold lines to give the support a double truncated pyramidal form having wing-like extensions adapted to contact with the walls of a containing box or carton.

1,891,840. WINDOW. GEORGE FRANK RUHL, Detroit, Mich. Filed May 28, 1931. Serial No. 540,751. 6 Claims. (Cl. 20—49.)

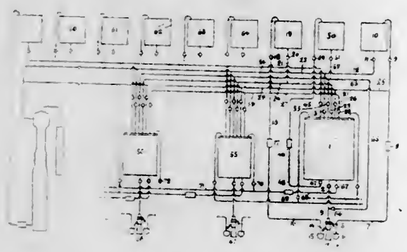
1. In combination, a window frame, a window sash slidably and pivotally mounted therein, a member slidable

between adjacent window stops of said frame, means operatively connecting said member with said sash whereby provision is made for guiding the sash during sliding movement thereof, said means including hinge means connecting said member with the sash whereby said member



may be swung inwardly toward the sash from between said window stops whereby the sash will be free for swinging movement relative to the frame, and yieldable means for normally urging said member into position between said window stops.

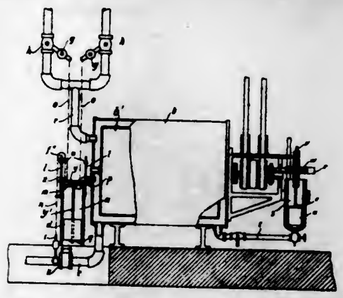
1,891,841. YEAST PROPAGATION CONTROLLING METHOD. SØREN SAK, Charlottenlund, Denmark. Filed Dec. 20, 1927, Serial No. 241,393, and in Norway Jan. 8, 1927. 26 Claims. (Cl. 195—20.)



26. In a continuous addition-continuous withdrawal process of propagating yeast in which addition and withdrawal is controlled in such a manner that the weight of yeast per unit volume of propagating wort is decreasing, the step of reducing this decrease by reduction of the rate of withdrawal and keeping constant the rate of addition.

1,891,842. WASHING MACHINE. JOSEF SCHMID-DOMANN, Lucerne, Switzerland. Filed Feb. 5, 1931, Serial No. 513,565, and in Germany July 21, 1930. 1 Claim. (Cl. 68—18.)

A washing machine comprising a tank, water supply pipes for said tank, valves in said pipes, a movable vertically guided water vessel having a draining aperture, an overflow pipe on the tank adapted to feed water into said vessel, flexible connections between said valve and the vessel adapted to raise the vessel on one of the valves being opened and adapted to close the valves under the weight of the vessel on the latter being filled with water, an outlet valve for said tank, a weight tending to maintain said outlet valve closed, and a flexible connection between said

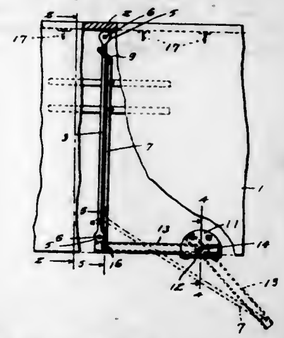


vessel and said outlet valve adapted to open the latter under the weight of the vessel on the latter being filled with water.

1,891,843. PRODUCTION OF HALOGENATED PHTHALIC ANHYDRIDE. CECIL SHAW, Grangemouth, and JOHN THOMAS, Polmont, Scotland, assignors to Imperial Chemical Industries Limited, a Corporation of Great Britain. Filed Mar. 13, 1931, Serial No. 522,523, and in Great Britain Mar. 14, 1930. 10 Claims. (Cl. 260—123.)

1. Process for the production of halogenated phthalic anhydride which comprises reacting nitro-substituted phthalic anhydride with a halogen until at least one nitro group is replaced by a halogen atom.

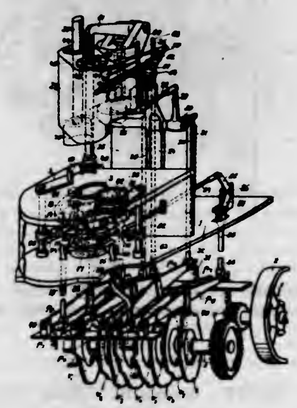
1,891,844. SWINGABLE GARMENT HANGER SUPPORT. ALBERT R. SPIKINGS, Lake Placid Club, N. Y. Filed May 9, 1931. Serial No. 536,234. 7 Claims. (Cl. 211—162.)



1. A swinging clothes hanger support comprising a fixed bar member designed to be secured in horisontal position, a shiftable bar having one end slidably connected with the fixed bar, an oscillatable supporting arm adapted to be pivotally mounted at one end at a point to one side of the fixed bar, and a pivotal connection between the other end of the shiftable bar and the other or free end of said arm.

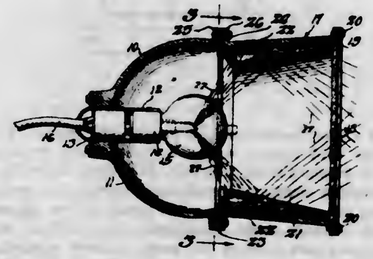
1,891,845. FOLDING KAISER ROLL. MAX SPITS and JOSEF SROVNAL, Liberec, Czechoslovakia; said Srovnal assignor to said Spits. Filed July 11, 1932, Serial No. 621,958, and in Czechoslovakia July 14, 1931. 16 Claims. (Cl. 107—8.)

9. A machine for folding "kaiser" rolls, comprising a cylinder open at one end, a piston head longitudinally displaceable in the cylinder, a plurality of pins adapted to be inserted radially into the cylinder and withdrawn when required, a movable guiding head, a radially arranged rolling out member rotatably and slidably mounted in the movable guiding head in such a position that in one position of the guiding head the axis of the rolling out member is in alignment with the axis of the cylinder, an annular pressing member slidably mounted in the guiding head and adapted in one position of the guiding head to press down the folds of the "kaiser" roll at the periphery, means for shifting the guiding head so as to bring the rolling out member and the pressing member into alignment with the cylinder alternately, a common actuating member adapted to introduce the rolling out member and the pressing member into the cylinder alternatively, whichever is



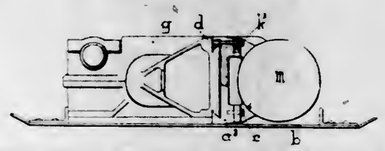
in alignment with the cylinder, means for retracting the piston head to enable a piece of dough to be introduced into the cylinder, means for pushing the pins radially into the cylinder, means for advancing the piston head so as to press the dough against the pins and thereby form radial furrows dividing the piece of dough into a plurality of sector-shaped panels only united to one another by a thin bottom layer of dough, means for rotating the rolling out member and thereby rolling out each panel of dough over an adjacent panel, means for withdrawing the pins and the rolling out member from the cylinder, and means for expelling the folded dough from the cylinder.

1,891,846. DIFFUSED LIGHT LAMP. ANTON STAUBER, Jr., Chicago, Ill. Filed May 20, 1931. Serial No. 538,816. 1 Claim. (Cl. 240—48.4.)



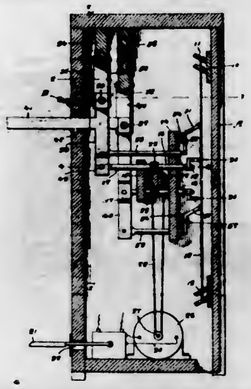
A lamp comprising a substantially hemispherical hollow body having an open end, said body being adapted to house illuminating means and being provided on its inner side with a reflecting surface, a reflector disposed forwardly of said body, said reflector having its rear end attached to the open end of said body and having an open end, a lens, means for retaining said lens over the open end of said reflector, and a substantially frustoconical translucent glass insert in said reflector and substantially coextensive therewith, said insert having its side walls spaced from the inner wall of said reflector, and having its smaller end directed toward said body.

1,891,847. ELECTRICALLY ACTUATING MACHINERY. KARL STROEDTER, Bochum, Germany, assignor to the Firm: Gebr. Eickhoff, Maschinenfabrik, Bochum, Germany. Filed Aug. 1, 1927, Serial No. 209,989, and in Germany Nov. 10, 1926. 3 Claims. (Cl. 76—7.)



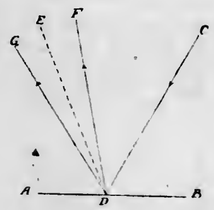
3. In a device of the class described including a base frame, a transmission gear system housing having perpendicular walls mounted on said frame, a motor, means for securing said motor on one of the perpendicular walls of said housing, said motor being axially movable on said wall and solely supported thereby.

1,891,848. MUSICAL INSTRUMENT. ANDREW STYBLOWSKY, Astoria, N. Y. Filed Apr. 18, 1932. Serial No. 605,956. 2 Claims. (Cl. 84—258.)



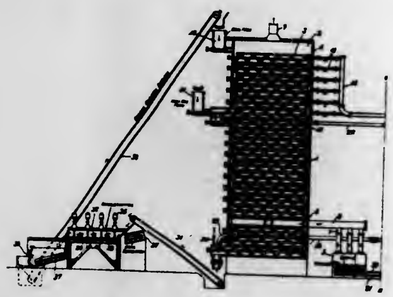
1. A musical instrument of the character described comprising a case, vibratory strings supported within said case at the back thereof, spaced bars arranged transversely of said case, picker spindles slidably and rotatably supported in said bars, each spindle including separably connected sections, worm pinions engaged and held fast between the sections of the respective spindles, a worm drive screw journaled in the case and engageable by the worm pinions, picker fingers adjustably coupled with the spindles and engageable with the vibratory strings, hangers supported in the case, suspension shafts carried by said hangers, long and short rockers arranged on said suspension shafts and having actuator keys projected outwardly of the case beyond the front thereof, forks formed on the rockers, universal couplings fitted in the forks and having swiveled therewith the said spindles, and power means connected with the worm drive screw.

1,891,849. PROCESS OF MAKING PROJECTING SCREENS. TSUNEO SUZUKI, Tokyo, Japan, assignor to Zaidan Hojin Rikagaku Kenkyujo, Tokyo, Japan. Original application filed Feb. 6, 1928, Serial No. 252,856. and in Japan Mar. 31, 1927. Divided and this application filed July 2, 1930. Serial No. 465,403. 2 Claims. (Cl. 91—68.)



1. A process of making projecting screens comprising the steps of first suspending lamellar crystals in water, then immersing a coated plate therein and maintaining the suspension immobile, then removing the supernatant water, and finally finishing the surface of the plate.

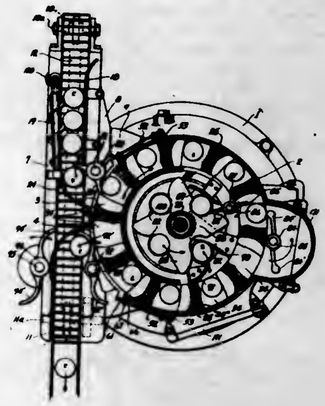
1,891,850. DIRECT IRON ORE REDUCTION. WALTER EDWIN TRENT, New York, N. Y., assignor to Trent Process Corporation, New York, N. Y., a Corporation of Delaware. Filed Dec. 3, 1930. Serial No. 499,793. 11 Claims. (Cl. 75—14.)



1. A process for the direct reduction of iron ore, which comprises mixing the ore with low temperature coke having a substantial volatile hydrogen content, heating the mixture to reduction temperature in an atmosphere of hydrogen and carbon monoxide, separating the reduced iron from the gangue and excess coke, and recycling through the reduction zone gases evolved therein to provide said atmosphere.

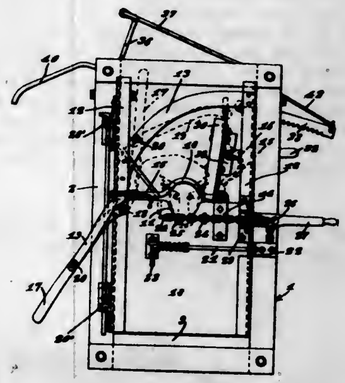
1,891,851. CAN VACUUMIZING AND SEALING MACHINE. NELSON TROYER and PAUL E. PEARSON, Seattle, Wash., assignors, by mesne assignments, to Continental Can Company, Inc., New York, N. Y., a Corporation of New York. Filed July 24, 1928. Serial No. 295,013. 32 Claims. (Cl. 113—24.)

1. In a can vacuumizing and sealing machine, the combination of a can sealing mechanism, a casing, forming a vacuum chamber in which the sealing mechanism is located; said casing having an opening through which cans are conveyed, and an annular pocketed valve encircling the sealing machine and sealing said opening



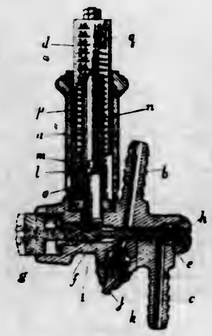
and continuously rotating to convey cans within its pockets through the opening to and from the sealing machine.

1,891,852. CHUTE. GEORGE K. TURNER, Elizabethtown, N. Mex. Filed Aug. 3, 1931. Serial No. 554,892. 2. Claims. (Cl. 119—99.)



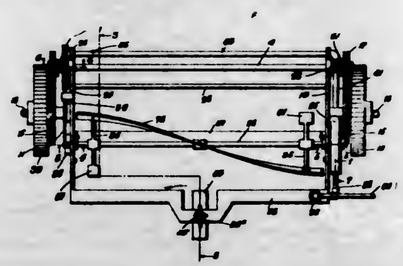
1. A chute comprising an opened end frame, a hinged door for said frame, means for detachably securing the door in frame closing position, said door including vertical members connected by a panel having the upper edge thereof notched to receive the neck of an animal, an arcuate shaped guide connecting the vertical members above the upper edge of the panel, a neck engaging yoke pivoted to the panel at one side of the notch and having its free end bifurcated to slidably engage the guide, a lever pivoted to one of the vertical members, and a link pivoted at one end to the lever and having its other end curved and pivoted to the yoke adjacent its bifurcated end.

1,891,853. FLUID PRESSURE INDICATOR FOR PNEUMATIC TIRES AND OTHER INFLATED BODIES. WILLIAM TURNER, Sheffield, England. Filed Feb. 7, 1930, Serial No. 426,734, and in Great Britain Dec. 19, 1929. 1 Claim. (Cl. 73—111.)



In a fluid pressure indicator of the character described a piston, a rod upon which the piston is mounted, a fixed tube within which said piston is slidably movable, a pressure indicating tubular member of comparatively large diameter, secured to said rod and surrounding said fixed tube, and spaced therefrom, a coiled spring located between said fixed tube and said indicating tube, with one end secured to said rod, an adjustable collar, to which the other end of the coiled spring is attached, screwed on to the fixed tube and a lock nut to hold said collar in position on the fixed tube.

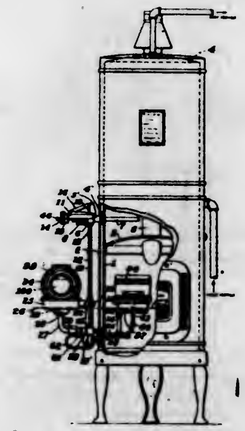
1,891,854. COMBINED LAWN-MOWER AND SPRINKLER. FRANCIS W. WADE, Canon City, Colo. Filed Sept. 20, 1929. Serial No. 393,982. 5 Claims. (Cl. 56—26.)



1. A combined mower and sprinkler comprising a frame mounted upon propelling wheels, a fluid operated motor mounted upon the frame, said motor having a rotor, means operatively connecting the propelling wheels together, a cutting mechanism having a shaft operatively connected with the rotor of the motor, and a sprinkler adapted to receive exhaust fluid from the motor.

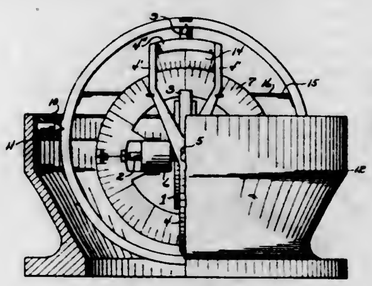
1,891,855. AUTOMATIC HEATER FOR WATER AND OTHER PURPOSES. FRED E. WHITE and ALFRED RUTTIMAN, Gardner, Mass., assignors to Florence Stove Company, Boston, Mass., a Corporation of Massachusetts. Filed May 6, 1930. Serial No. 450,177. 30 Claims. (Cl. 236—1.)

1. A thermally operated oil supply controlling apparatus comprising a chamber containing oil, a conduit communicating with said chamber for supplying oil to a consuming device, means for holding an air bubble within the chamber and in contact with the oil in said chamber, and thermally operated means for actuating



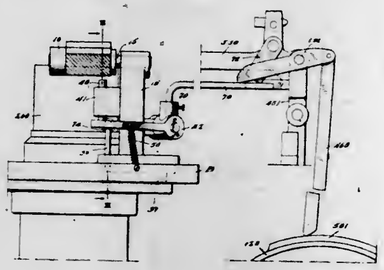
said bubble holding means to cause the body of air forming said bubble to regulate, restrain or permit the flow of oil through the conduit.

1,891,856. GYROSCOPIC INSTRUMENT. EUGENE B. WILLIAMS, Fort Pierce, Fla. Filed Aug. 29, 1929. Serial No. 389,268. 1 Claim. (Cl. 33—204.)



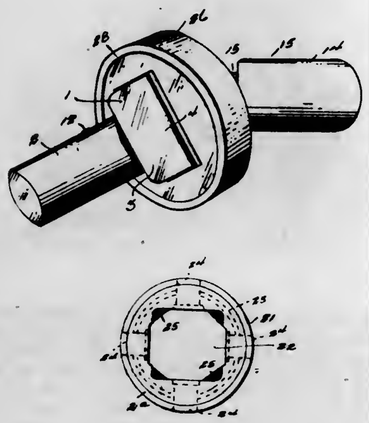
A gyroscopic instrument including a support and a motor driven gyroscope having a ring-shaped dial, a substantially oval-shaped frame positioned about the gyroscope and having a pair of spaced members, means pivoting the gyroscope to the frame for movement about a horizontal axis, a pair of rings arranged at right angles to each other and secured together and positioned about the frame, means pivoting the frame to said rings for movement about a vertical axis, an annular supporting member pivoted to the support for movement about a horizontal axis and located in a plane above the pivots between the gyroscope and the frame, means pivoting the annular member to said rings for movement about a horizontal axis, a cross piece connecting the members of the frame, a vernier suspended from the cross piece and associated with the ring-shaped dial, a lubber ring carried by said first rings, and a compass ring carried by the frame and cooperating with the lubber ring for orienting the device.

1,891,857. **TRANSFER MECHANISM FOR CIRCULAR KNITTING MACHINES.** LOUIS N. D. WILLIAMS, Ogonts, Pa., assignor to Scott and Williams, Incorporated, New York, N. Y., a Corporation of Massachusetts. Filed Apr. 17, 1929. Serial No. 355,765. 9 Claims. (Cl. 66—148.)



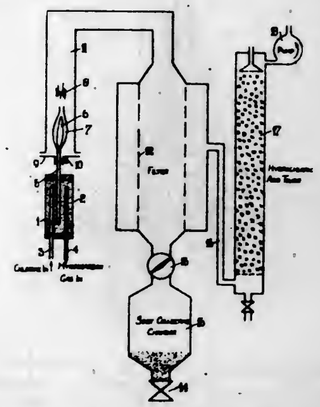
1. In a circular knitting machine having a revoluble needle cylinder, mechanism for selecting the knitting operations, and a quilled transfer ring mounted on said machine and movable into and out of position for transferring stitches to said cylinder, in combination with means controlled by said selecting mechanism to lock said needle cylinder against rotation and in position for the needles to register with the quills of said transfer ring during the transfer operation.

1,891,858. **UNIVERSAL JOINT WITH SHROUD.** VILLOR P. WILLIAMS, Baltimore, Md., assignor, by mesne assignments, to Estelle P. Williams, Baltimore, Md. Filed Nov. 19, 1930. Serial No. 496,756. 2 Claims. (Cl. 64—102.)



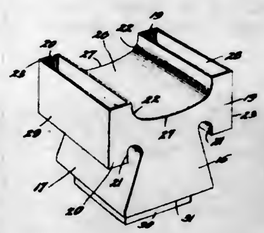
1. In a universal joint of the type having knuckles and pins on the knuckles, and a ring formed in two similar sections to engage and hold the pins in assembly; the sections of said rings having each a squared opening in the outer face through which the knuckles extend, and web parts inwardly beveled toward the center of the joint, said web parts located at the corners of the respective openings of the ring sections to provide reinforcements at said corners and at the same time to permit a wide flexibility.

1,891,859. **PRODUCTION OF CARBON AND HYDROGEN CHLORIDE.** RAMSAY MIDDLETON WINTER, Norton-on-Tees, England, assignor to Imperial Chemical Industries, Limited, London, England, a British Company. Filed May 28, 1929, Serial No. 366,724, and in Great Britain June 9, 1928. 7 Claims. (Cl. 23—156.)



1. A process for the joint production of hydrogen chloride and carbon from hydrocarbon containing gas and chlorine which comprises causing the gases to combine in a flame burning in an atmosphere of air.

1,891,860. **CHIMNEY VENT.** ISAAC WOOLF, Providence, R. I. Filed Dec. 12, 1930. Serial No. 501,981. 1 Claim. (Cl. 98—66.)

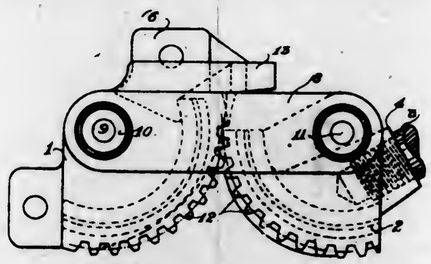


A chimney vent comprising a central flue having flat sheet metal front, rear, and side walls tapering gradually from the bottom toward the top, said front and rear walls having integral lateral extensions projecting outwardly, said extensions also projecting upwardly and downwardly, said side walls having integral upper downwardly reflexed curved portions connected to the downwardly projecting portions of said lateral extensions, a flat sheet metal top wall connected to the upper ends of said front and rear walls and to the upwardly projecting portions of said lateral extensions thereof, and flat sheet metal side walls connected to the vertical edges of said lateral extensions forming side flues therewith open at the top and bottom.

1,891,861. **DEVICE FOR BENDING TUBES, PIPES, AND THE LIKE.** ERNEST CHARLES WRIGHT, Belvedere, England. Filed Dec. 15, 1930, Serial No. 502,501, and in Great Britain Jan. 14, 1930. 2 Claims. (Cl. 153—43.)

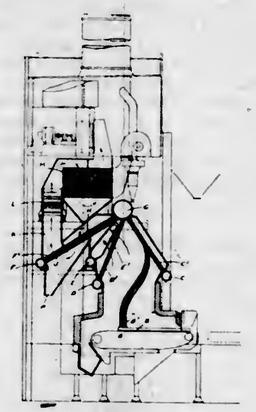
1. Apparatus for bending tubes, pipes and the like comprising two bodies, each having an arcuate surface, the two arcuate surfaces being substantially symmetrically

opposed and contiguous to each other, a positive driving connection between said two bodies and means for moving one of said bodies about the axis of the arcuate surface of the other whereby said driving connection produces a



substantially planetary movement of the movable body, and a circumferential channel in one of said surfaces and having a radius greater than the radius of the body containing it.

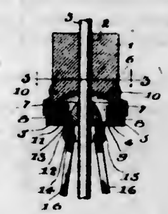
1,891,862. **WATER TUBE BOILER.** HAROLD EDGAR YARROW, Glasgow, Scotland. Filed Sept. 28, 1931, Serial No. 565,592, and in Great Britain Nov. 4, 1930. 5 Claims. (Cl. 122—327.)



1. A water tube boiler of the Yarrow type having two water drums on one side of the furnace and two banks of water tubes, namely an outer and an inner bank, connecting the respective water drums with the saturated steam drum of the boiler, the said outer bank being of considerably greater length than the said inner bank of tubes, baffles for the outer bank, said baffles being constructed and arranged to compel the gases to traverse said outer bank of tubes in several passes, and a soot hopper arranged beneath said outer bank over a considerable portion of its length.

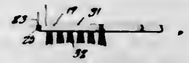
1,891,863. **AUTOMATICALLY LUBRICATING WINDMILL.** GROVER C. BAIRD, Lusk, Wyo. Filed Feb. 27, 1929. Serial No. 342,986. 1 Claim. (Cl. 184—4.)

A combined lubricating bearing and tower element connector for a windmill superstructure comprising a cup-like lubricant receiving support, a tower frame member confining socket extending from the bottom of said support at approximately the medial portion thereof, means for securing the tower frame members to said socket, the interior of said cup having a medial substantially conical shaped bearing boss concentric with said socket, a main superstructure stem having a recessed end providing a circular flange insertible into said cup-like member and supported upon the bottom thereof about said boss, a skirt secured to the lower end of said stem and receiving the upper portion of said lubricant receiving support, and a bearing shaft extending through said boss and stem, the



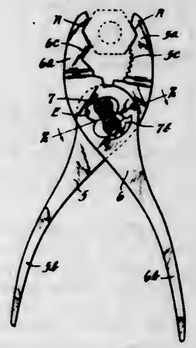
end of said boss extending substantially to the rear wall of said stem recess, said stem having means for the introduction of a lubricant to said cup and lubricant drain means in the bottom of said cup.

1,891,864. **TONGUE BRUSH AND SCRAPER.** CORNELIUS P. BARRETT, Pittsburgh, Pa. Filed Oct. 14, 1931. Serial No. 568,827. 2 Claims. (Cl. 128—304.)



2. A tongue cleaning brush having its head provided with a pocket that enters from its outer end formed with a depression above the pocket whose end wall is cut at an angle, a plate slidably received in the pocket, spring arms carried by the plate and formed with hooks, pins in the pocket to be engaged by the hooks, a pivotally supported spring influenced blade on the outer end of the head having a beveled end to be received in the transverse angle wall of the head when in inactive position and having a depending lug to contact with the end of the brush head when the plate is moved slightly out of its pocket sufficiently to bring the sharpened edge of the blade away from the angle wall of the head and thereafter again moved into the pocket to bring the hooks to engage with the pins.

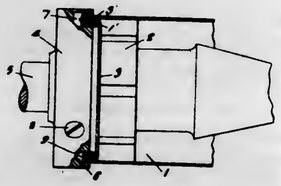
1,891,865. **PLIERS.** GUSTAF C. F. BECK, Minneapolis, Minn., assignor of forty-nine one-hundredths to George O. Darrow, Mission San Jose, Calif. Filed Apr. 3, 1931. Serial No. 527,372. 4 Claims. (Cl. 81—51.3.)



1. In pliers, a pair of swingably united crossed members having cooperating jaw portions, one of said members carrying at its crossed portion a substantially elliptical

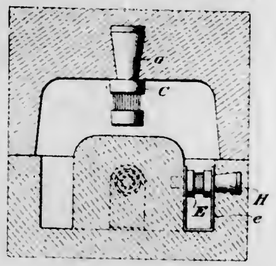
upstanding cam pivot, the other of said members having a substantially elliptical apertured portion provided with a bearing edge, said apertured portion being substantially equal in its longer dimension to the longer dimension of the cross section of said cam pivot but substantially greater in its shorter dimension than the shorter dimension of said cross section and means associated with said cam pivot for retaining said members together for swinging movement.

1,891,866. SPINNER FOR PAPER CONTAINERS. ANDREW BODOR, Newark, N. J., assignor to Reinforced Paper Bottle Corporation, New York, N. Y., a Corporation of Delaware. Filed Sept. 26, 1929, Serial No. 395,427. Renewed Oct. 15, 1932. 5 Claims. (Cl. 93—36.)



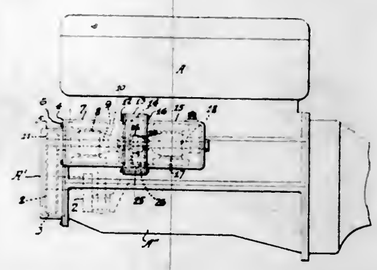
1. The hereindescribed means of forming a crimped rim at the bottom cylindrical end of a container and the flanged bottom thereof comprising means for holding the bottom with the flange thereof adjacent the bottom edge of the container securely in position, means for positioning the container, a spinner comprising a disc having a face groove into which the bottom edge of the container and the flange of the bottom are designed to be brought, means for rotating the disc, and means situated within and located at the base of and cooperating with the sides of the groove whereby the bottom edge of the container and the bottom edge of the flange of the bottom are given an inward turn and formed up or spun to produce a crimped rim.

1,891,867. METHOD OF PRODUCING CASTINGS WITH TAPPED HOLES THEREIN. RALPH V. BURDICK, Albany, and LOUIS R. KRUG, West Albany, N. Y., assignors to Burdick & Son, Albany, N. Y., a Corporation of New York. Filed June 24, 1929. Serial No. 373,375. 1 Claim. (Cl. 22—203.)



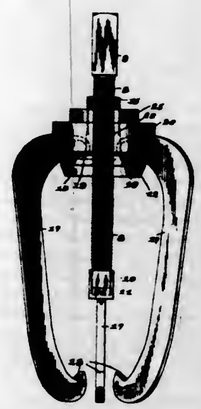
A method of producing castings with tapped holes therein, comprising the use of a pattern having an opening therein, and a mold surrounding the pattern, placing a metallic internally threaded insert in the opening of the pattern, partly driving a tapered wooden plug in the insert and utilizing the same to support the insert from the mold when the pattern is withdrawn, and finally pouring the mold, whereby heat from the molten metal is transmitted through the metallic insert to said plug, causing the latter to char and separate itself from the insert.

1,891,868. ENGINE STARTING DEVICE. WENDELL S. CRABLOM, Detroit, Mich., assignor of one-half to Camille Roy, Edmond J. Roy, and Joseph Abentrod, Detroit, Mich. Filed Apr. 1, 1931. Serial No. 526,984. 3 Claims. (Cl. 290—47.)



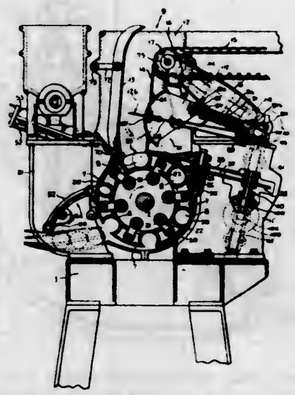
1. In an electric starter-generator for an internal combustion engine a casing at the forward end of said engine and having an offset portion extending laterally beyond the side of said engine, gearing in said casing for transmitting power to and from the crank shaft of said engine, a generator casing secured at one end to said offset portion of said casing on said engine to extend rearwardly therefrom alongside the engine, a generator in said generator casing having a shaft to extend into said offset portion of said casing on said engine for operative connection with said gearing, a motor casing, an electric motor in said motor casing having a shaft extending from said casing, a clutch casing interposed between the adjacent ends of said motor and generator casings for rigidly connecting the same and of a diameter substantially equal to the diameter of said casings, and overrunning clutch mechanism in said clutch casing for transmitting motion between said motor shaft and said generator shaft.

1,891,869. SHAFT EXTRACTOR. ALLEN COX, Ames, Iowa, assignor of one-half to F. E. Brown, Ames, Iowa. Filed May 19, 1931. Serial No. 538,539. 3 Claims. (Cl. 29—85.)



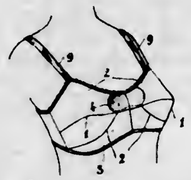
1. A shaft extractor comprising an assembly, long arms detachably connected to said assembly, the arms being turnably connected to said assembly and the latter functioning to distribute, guide and lock the arms against angular movement while in position, said assembly including a cap having notches into which the heads of the arms extend.

1,891,870. CAN FILLING MACHINE. MERTON L. DODGE, Seattle, Wash., assignor to Continental Can Company, Inc., New York, N. Y., a Corporation of New York. Filed Mar. 28, 1929. Serial No. 350,607. 20 Claims. (Cl. 226—101.)



1. In a machine of the character described, a hopper having an outlet of substantially fixed dimensions, a plurality of traveling molds adapted successively to come into fitted relation with the said outlet for filling from the hopper and means for causing the hopper outlet to travel along with each mold through an extended interval for filling.

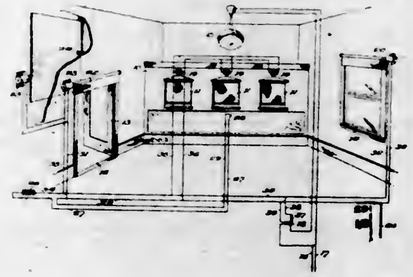
1,891,871. BRASSIÈRE. MARGUERITE DONNET, Bern, Switzerland. Filed July 16, 1931, Serial No. 551,233, and in Switzerland Jan. 31, 1931. 1 Claim. (Cl. 2—42.)



A brassière or bust-holder made of soft tissue and comprising two breast pockets shaped so as to apply closely to the bosoms and resting with their borders on the pectoral cavity, to envelop the bosom fully down to its base line, an intermediate bosom portion connecting said breast pockets and extended downward over the pit of the stomach, a stiff resilient and bent strip having rounded ends adapted as separating member of the two bosoms and sewed to the rear side of the intermediate tissue portion, two dorsal girdle portions attached to the intermediate tissue portion and the breast pockets, an elastic member formed as a detachable joint between said girdle portions, and shoulder straps attached to the breast pockets and to the girdle portions.

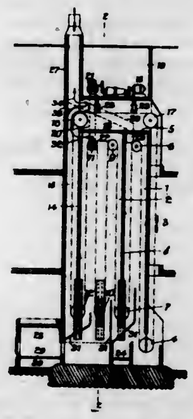
1,891,872. BANK PROTECTIVE SYSTEM AND MEANS. PERCY R. DRUAY, Boyce, Va. Filed Jan. 29, 1931. Serial No. 512,142. 4 Claims. (Cl. 20—1.01.)

1. The method of frustrating robbery in the interior of a building through rendering victims invisible to perpetrators which consists in projecting a dazzling light into the face of a perpetrator from a portion of the interior and simultaneously darkening the interior on the occurrence of an attempt at robbery.



2. Robbery frustrating means for building interiors, comprising means for plunging the major portion of the interior into darkness on an attempt at robbery, and means simultaneously operable therewith for projecting light onto the portion of the interior occupied by perpetrators of the attempt.

1,891,873. APPARATUS FOR TREATING FOOD STUFFS SUCH AS MEAT AND FISH. RUDOLF ELBE, Wandsbek near Hamburg, Germany. Filed Oct. 23, 1930, Serial No. 490,700, and in Germany June 10, 1930. 6 Claims. (Cl. 99—9.)

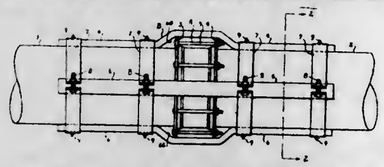


1. An apparatus for curing and conditioning meat, fish, and other food products, comprising a plurality of chambers arranged in juxtaposition and communicating with one another from under the lower edges of the intervening walls, endless conveying chains operative to move the materials through the different chambers in succession, and baffles arranged at the bottom of the chambers for directing the gases into their proper channels.

1,891,874. COUPLING. PHILIP D. ELKINS, Houston, Tex. Filed Feb. 17, 1930. Serial No. 428,944. 4 Claims. (Cl. 285—98.)

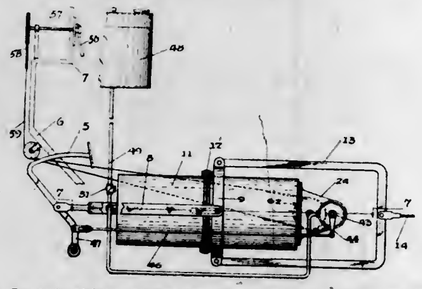
1. A coupling comprising a plurality of longitudinally disposed elongated members substantially U-shaped in

cross section to form inwardly extending arms, each of said members having an outwardly offset portion between its ends, and a plurality of straps to hold said members



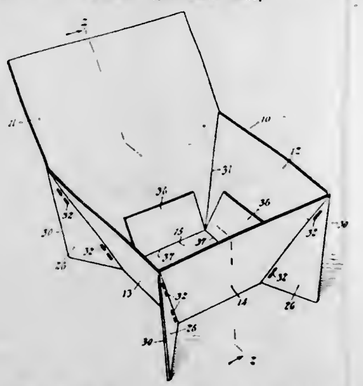
in spaced relation, said straps being angular in cross section and having flattened corners for the reception of said members.

1,891,875. **BRAKE MECHANISM.** JOSEPH ERBEL, San Francisco, Calif. Filed Oct. 30, 1931. Serial No. 572,124. 4 Claims. (Cl. 188—265.)



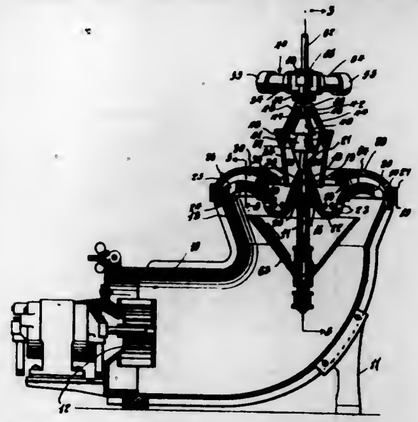
1. In a braking mechanism for a motor vehicle having a brake system including a brake pedal and a pull-rod, a dumb-bell piston interposed between said pedal and said pull rod, a stationary cylinder surrounding said piston, a fluid interposed between the ends of said piston and said cylinder, and means for controlling the flow of said fluid between the opposite ends of said cylinder comprising a hollow tube connecting opposite ends of said piston.

1,891,876. **DISPLAY BASKET.** FRANKLIN E. EVERSON, New York, N. Y. Filed Aug. 27, 1931. Serial No. 559,793. 7 Claims. (Cl. 229—16.)



1. A display basket comprising a back, front and side walls, said walls flaring outwardly from the bottom to the top thereof, a folded extension projecting outwardly at each corner of the basket operating to hold the basket upright, and a bottom connected to one of said walls, said bottom being provided with outwardly extended sections adapted to overlie a portion of the remaining walls of the basket on the inside thereof and operating to hold the bottom in position and the walls of the basket extended.

1,891,877. **WHIRL FIRE OIL BURNER.** OSCAR FALKENWALDE and ROBERT H. LYON, Baltimore, Md. Filed May 9, 1929. Serial No. 361,808. 2 Claims. (Cl. 158—92.)

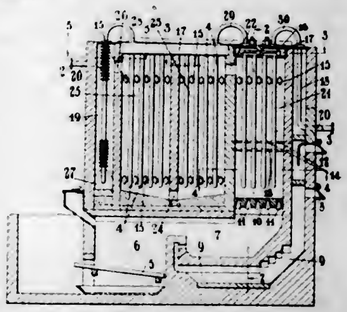


2. A burner construction comprising a base plate having an arched portion provided with perforations for the passage of air therethrough, a burner bowl surrounded by the arched portion, an upwardly extending fuel nozzle therein, a crown having integral depending vanes resting on the arched portion, said vanes providing passages in communication with said perforations and the space adjacent said nozzle whereby air may reach the nozzle, said vanes having their under surfaces resting on and conforming in shape to the arched portion, said vanes being positioned to impart a whirling motion to the air, a mixer mounted on the nozzle and having inwardly extending vanes with inclined edges, one set of said edges resting on the nozzle, and means above the mixer operative to evaporate water and supply the product to the mixer.

1,891,878. **COATING COMPOSITION.** JOHN FELTER, Haverstraw, N. Y. Filed May 27, 1931. Serial No. 540,517. 5 Claims. (Cl. 106—29.)

4. A coating composition comprising mineral material, calcined magnesite, finely-divided cellulose material impregnated with mono-chlor-naphthalene and evaporated from the surface thereof, and a solution of magnesium chloride.

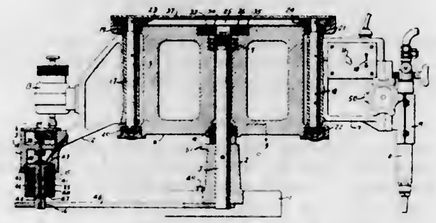
1,891,879. **HEATER SUITABLE FOR GASEOUS FLUIDS.** ALEXANDRE FOLLIET and NICOLAS SAINDERICHIN, Paris, France. Filed Dec. 26, 1930, Serial No. 504,818, and in France Dec. 30, 1929. 4 Claims. (Cl. 122—485.)



1. Fluid-heating apparatus, comprising in combination a series of tubes arranged in parallel vertical planes and spaced apart to contain the fluid to be heated, and means

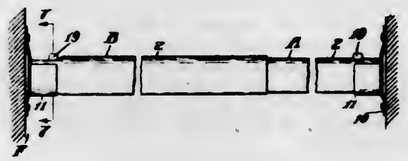
disposed below said tubes for introducing between said tubes and without contact therewith thin moving sheets of a heated gaseous medium to heat said tubes by radiation, said introducing means including a plate and a series of slot-like nozzles alternating in position with said vertical planes.

1,891,880. **GAS CUTTING MACHINE.** JAMES L. ANDERSON, Closter, N. J., assignor to Air Reduction Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Oct. 4, 1929, Serial No. 397,208. Renewed June 22, 1932. 18 Claims. (Cl. 266—23.)



2. A machine of the character described, comprising a support, a double arm swung on said support, a torch-bearing arm and a follower arm swung on the two parts of said double arm, a motor-driven rolling tracer or follower on said follower arm, a belt interconnecting said torch-bearing and follower arms for movement in unison relative to said double arm, and means for continually and automatically taking up slack in both courses of said belt.

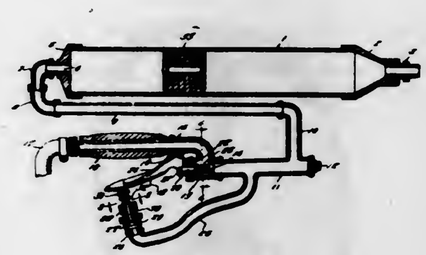
1,891,881. **CURTAIN FIXTURE.** WILLIAM C. KENNEY and GEORGE M. KENNEY, Cranston, R. I., assignors to Kenney Manufacturing Company, Auburn, R. I., a Corporation of Rhode Island. Filed Nov. 18, 1931. Serial No. 575,820. 14 Claims. (Cl. 156—22.)



1. A supporting bracket for a U-shaped rod adapted interchangeably to receive either the right or left end of the rod, comprising an attaching base, and a formation projecting therefrom and defining a U-shaped receiving recess in which the rod is adapted to be entered from above, said formation having a guiding and locking prong over which the rod is adapted to be centered as it is entered into said recess, said prong lying in a plane substantially parallel with the sides of the recess.

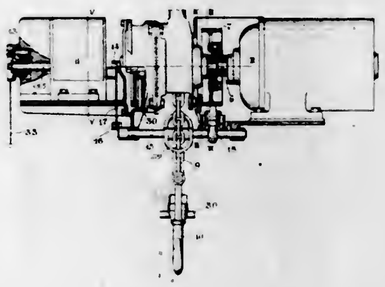
1,891,882. **PRESSURE CONTROL FOR FLUID DISPENSING DEVICES.** ROBERT V. LATHAM, Coral Gables, Fla. Filed Sept. 15, 1930. Serial No. 482,046. 2 Claims. (Cl. 277—21.)

1. In a pressure control and vent means for fluid dispensing devices, a handle having a fluid conduit extended therethrough, a normally closed valve controlling the flow of fluid through said conduit, a manually actuated lever pivoted to the conduit and having connection with said valve, said conduit being provided with a venting branch



having a normally closed outlet valve in the path of travel of and adapted to be engaged by said manually actuated lever and a spring constantly urging said manually actuated lever into engagement with said outlet valve.

1,891,883. **HOISTING APPARATUS.** FRANK E. STAHL, Tonawanda, N. Y., assignor to The Columbus-McKinnon Chain Corporation, Tonawanda, N. Y., a Corporation of New York. Filed July 30, 1930. Serial No. 471,815. 11 Claims. (Cl. 254—173.)

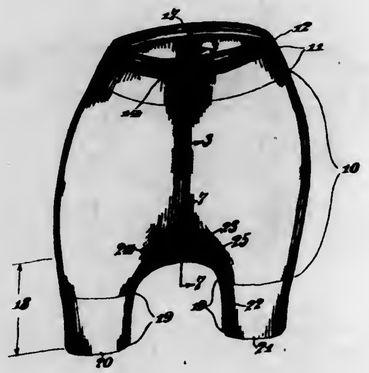


1. In an electrically operated hoisting apparatus, including a cable hoist, a motor and circuit therefor, a cut out for the circuit, and a brake for the motor, means operated by the cable when it approaches the upward and downward limits of its travel to cut out the motor circuit and cause the application of the brake upon the downward travel of the cable.

1,891,884. **UNDERGARMENT.** GUY C. TANNER, Melrose Park, Pa., assignor to Friedberger-Aaron Manufacturing Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed June 1, 1932. Serial No. 614,687. 6 Claims. (Cl. 2—224.)

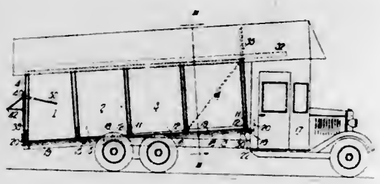
1. A bifurcated nethergarment including a tubular body section formed of knitted fabric highly elastic circumferentially and less elastic vertically, a waist section formed integrally with said body section and also formed of knitted fabric highly elastic circumferentially and less elastic vertically, and being more closely and tightly knitted than said body section, and having its circumference gradually diminishing upwardly when in its normal and undistended condition, a braided elastic retainer

band extending around the entire upper periphery of the knitted fabric in overlapping relation thereto;—said retainer band and knitted sections being united by rows of



sewn stitches extending circumferentially, and transverse connecting threads between said rows of sewn stitches.

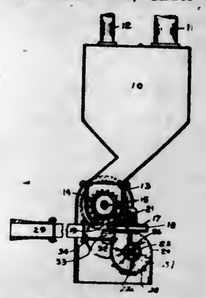
1,891,885. REFUSE VEHICLE. ERNEST THOMAS JAMES TAPP and HAROLD CRASKE, London, England. Filed Feb. 3, 1932, Serial No. 590,760, and in Great Britain Jan. 13, 1931. 5 Claims. (Cl. 298—1.)



1. A freight vehicle body comprising a plurality of substantially similar floor segments longitudinally movable relatively to one another for stacking upon one another to provide a minimum freight space and for extension to provide a greater freight space, an endless flexible member movable in parallel stretches longitudinally of said body, and means carried by one of said segments and operable from one end of said body for connecting such segment to either stretch of said flexible member.

1,891,886. ART OF FEEDING FINELY COMMINUTED FUEL INTO A COMBUSTION CHAMBER. CHARLES M. BUCK, Brooklyn, N. Y. Filed May 10, 1928. Serial No. 276,523. 4 Claims. (Cl. 110—104.)

2. In combination, a pulverized coal hopper having a bottom discharge orifice, a laterally extending conduit into the upper part of which the orifice opens at a point intermediate the ends thereof, a burner at one end of the conduit, means for supplying a blast of air into the opposite end of the conduit in the lower part thereof, a passage in the upper part of said conduit at said opposite end thereof, said passage being open to the atmosphere at one end and having its opposite discharge end in proximity to said orifice, whereby the said blast of air draws a current of air through said passage which current of air moves past said orifice and between it and the blast of air, and the coal, under the influence of



gravity and suction, drops into a stream of air of double strata, one stratum of which moves more slowly than the other, so that mixing occurs in the conduit.

1,891,887. PROCESS FOR PREPARING EGG POWDER. FOREST H. CLICKNER, New Brunswick, N. J., assignor to Endowment Foundation, New Brunswick, N. J., a Corporation of New Jersey. Filed Feb. 11, 1932. Serial No. 592,449. 9 Claims. (Cl. 99—5.)

2. The process of producing egg powder which consists in removing the shells from the eggs, then adding a considerable quantity of water in amount not less than 15% of the mass to dilute the albumen or whites of the eggs for the purposes described, and to insure that the fatty materials will be finely subdivided by a succeeding step in the process, vigorously agitating the mixture to form an emulsion, removing the insoluble or unemulsifiable materials, and then desiccating the emulsion by spraying into a heated atmosphere.

1,891,888. RECOVERING BROMINE FROM SEA WATER AND THE LIKE. JOHN J. GREBE, Midland, Mich., assignor to The Dow Chemical Company, Midland, Mich., a Corporation of Michigan. Filed Dec. 18, 1930. Serial No. 503,232. 6 Claims. (Cl. 23—216.)

1. The method which comprises liberating bromine from a bromide-containing solution in the presence of aniline.

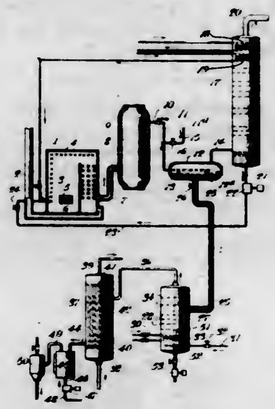
6. The method of recovering bromine from sea water and the like which comprises acidifying the same to a pH value between 3 and 4, adding aniline in substantially the amount theoretically required to form tribromaniline from the bromine content thereof, then adding chlorine sufficient to liberate all of the combined bromine present and separating the precipitated tribromaniline from the aqueous solution.

1,891,889. SUBSTITUTE FOR NATURAL FEED ORE. JOHN M. HUGHES and JOSEPH H. CARTER, Youngstown, Ohio, and LEWIS B. PERKINS, Sharon, Pa., assignors to Sharon Steel Hoop Company, Sharon, Pa., a Corporation of Pennsylvania. Filed June 21, 1930. Serial No. 462,926. 5 Claims. (Cl. 75—48.)

1. A substitute for natural feed ore consisting of a block formed from over 93% by weight of Fe_3O_4 and the balance a binder consisting substantially of Portland cement.

1,891,890. METHOD OF MAKING ASPHALT. PERCY C. KEITH, Jr., Bernardsville, N. J., assignor, by mesne assignments, to Gasoline Products Company, Inc., Newark, N. J., a Corporation of Delaware. Filed July 10, 1928. Serial No. 291,601. 5 Claims. (Cl. 196—74.)

5. The method of making asphalt which comprises heating petroleum oil under pressure in a confined stream to a cracking temperature, retaining the cracked material under pressure in a digestion zone, continuously withdrawing cracked material from the digestion zone, combining therewith petroleum oil containing tar-forming constituents, discharging the combined materials into a zone maintained under reduced pressure to produce a



first vapor and a tar residuum, continuously withdrawing the tar residuum and discharging the same without substantial loss of heat into a zone maintained under vacuum, stripping the tar residuum in said zone maintained under vacuum to the extent necessary to produce a residuum of commercial asphalt.

1,891,891. GRANULAR ORGANIC MATERIAL. OSCAR V. D. LUFT, Mount Lebanon, and CHRISTIAN J. SCHWINDT, Pittsburgh, Pa. Filed Nov. 10, 1931. Serial No. 574,222. 20 Claims. (Cl. 260—123.)

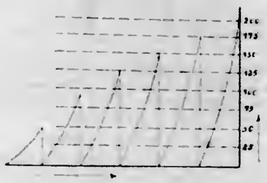
4. A process of preparing crystalline organic material in granular form, which comprises agitating solid particles of the crystalline material and simultaneously adding further amounts of the same material in molten form, whereby the heat given off on solidification of the molten product is taken up by the solid product to produce a slowly hardened covering containing interwoven crystals.

1,891,892. DRIP-CATCHING ATTACHMENT FOR BOTTLES. JAMES A. PIPKIN, Dallas, Tex., assignor to No-Drip Company, Dallas, Tex. Filed Oct. 11, 1929. Serial No. 399,034. 2 Claims. (Cl. 215—100.)



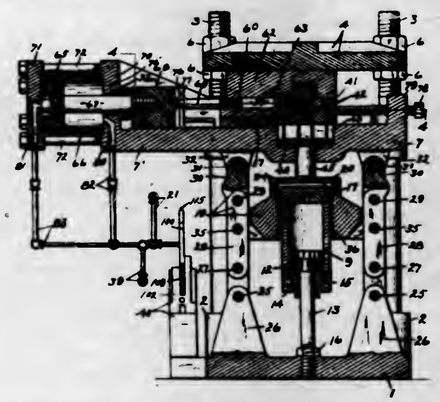
1. A drip-catching attachment for bottles comprising a normally flat, open-ended wrapper having front and rear walls, the top edge of the rear wall extending above the top edge of the front wall, and the bottom edge of the front wall extending below the bottom edge of the rear wall, the extended edges at top and bottom of the wrapper assisting in the opening up of the wrapper from its flat form to a tubular form adapted to be slipped over a bottle.

1,891,893. METHOD OF BRIQUETTING COAL. PETER JOSEPH SPENGLER and JOHANN PETER SPENGLER, Ostwine, Germany. Filed May 8, 1928, Serial No. 276,115, and in Germany Nov. 4, 1927. 10 Claims. (Cl. 44—10.)



1. A method of briquetting coal, comprising submitting a mixture of coal and binding material to repeated pressing, and after each pressing operation removing the pressure and de-aerating the briquette by exposing a surface thereof to atmospheric pressure.

1,891,894. DIE-CASTING MACHINE. NATHAN LESTER, Cleveland, Ohio, assignor to Precision Castings Company, Inc., Syracuse, N. Y., a Corporation of New York. Filed Jan. 19, 1931. Serial No. 509,746. 1 Claim. (Cl. 22—68.)

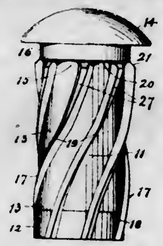


A die-casting machine comprising in combination a pair of die sections, a fixed die-supporting plate for one of the die sections, a movable die-supporting plate for the other die section, a delivery pot secured to the movable die-supporting plate for movement therewith, a plunger mounted for reciprocative movement in said pot, actuating means connected with the plunger for operating said plunger and secured to the movable plate for movement therewith, and separate operating means for moving the movable plate and associated parts towards and from the fixed plate.

1,891,895. DRIVE SCREW. CHARLES E. NAGEL, New York, N. Y., assignor to Shake Proof Lock Washer Co., Chicago, Ill., a Corporation of Delaware. Filed Jan. 2, 1931. Serial No. 506,102. 2 Claims. (Cl. 85—44.)

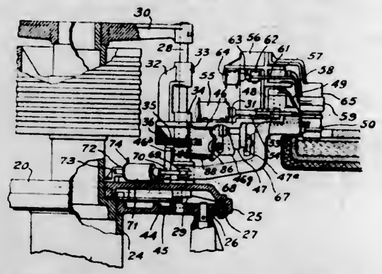
1. A hardened screw comprising a cylindrical stem having a head and a blunt lower end, said stem being

tapered with its smallest diameter adjacent the head, and a helical thread located about the stem to cut a groove in a metal article, said thread including a wood



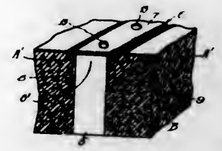
screw configuration gradually merging into a ratchet thread as it ascends, the major diameter of the thread increasing toward the head.

1,891,896. SUCTION GATHERING FORMING MACHINE. KARL E. PEILER, West Hartford, Conn., assignor to Hartford-Empire Company, Hartford, Conn., a Corporation of Delaware. Filed Feb. 11, 1929. Serial No. 338,933. 10 Claims. (Cl. 49—5.)



1. A suction gathering glass forming machine comprising a rotary table, a carrier mounted on said table, a parison forming unit on the said carrier, a severing device and a mold bottom associated with said unit, means including a cam individual to said unit for raising and lowering said carrier to position said unit at different levels, said cam having surfaces thereon for effecting movement of the unit into positions to gather a charge of glass from the surface of a gathering pool, to cooperate with the severing device which severs the glass, for engagement with and disengagement from the mold bottom, and for transferring the parison to the blow mold, and means for rendering said cam operative for raising and lowering said unit.

1,891,897. CROWNING DEVICE FOR EXPANSION JOINTS. ALBERT C. FISCHER, Chicago, Ill., assignor to The Philip Carey Manufacturing Company, a Corporation of Ohio. Filed May 13, 1926. Serial No. 108,948. 4 Claims. (Cl. 94—51.)



2. In a crowning device for a preformed expansion joint strip, a cap adapted to embrace and extend laterally from the crowning edge of the strip, downwardly depending portions on said cap adapted to embrace the sides of the strip, and means on the top of the cap for pulling the cap from embracing relation with the strip.

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Designs	106—No.	85,742 to No.	85,846, Inclusive.
Patents	765—No.	1,891,898 to No.	1,892,662, Inclusive.
Total	1,051		

U. S. COURT OF CUSTOMS AND PATENT APPEALS

INTERPRETATION OF RULE XIII

Printing of Documentary Exhibits

NOVEMBER 28, 1932.

I have been instructed by the court to make the following statement:

"In view of some misunderstanding, it has been thought advisable to explain somewhat the provisions of Rule XIII of the United States Court of Customs and Patent Appeals, relative to the printing of documentary exhibits in the Transcript of Record. This rule was not intended to apply to documentary exhibits impracticable to reproduce in printed form, such as pictures, blue prints, drawings, tabulated forms, and the like. Reproduction of such exhibits in the printed record may be dispensed with by application to the court therefor, or by stipulation of the parties. In addition, the clerk of the court, in the absence of such order or stipulation, will exercise his discretion in selecting from the documentary exhibits such as it may be practicable to print, and is under instructions from the court to administer the rule in a liberal way, to avoid unnecessary expense to litigants."

ARTHUR B. SHELTON,
Clerk.

Attorneys—Disbarment

(ORDER No. 3,228)

U. S. PATENT OFFICE, *Washington, D. C., Nov. 2, 1932.*

Acting under the provisions of section 487 of the Revised Statutes of the United States (U. S. C. title 35, sec. 11), Erich H. Michaelis of 1836 New York Avenue, N. W., Washington, D. C. (formerly of Chicago, Ill.), whose registration is Number 12,225, has this day been disbarred from practice before the United States Patent Office.

THOMAS E. ROBERTSON,
Commissioner.

Adverse Decisions in Interference

In interferences involving the indicated claims of the following patents final decisions have been rendered that the respective patentees were not the first inventors with respect to the claims listed:

Pat. 1,718,680, Wm. G. Borchers, Manifolding machine, decided November 11, 1932, claims 1 and 8.

Pat. 1,797,145, F. A. Howard and N. E. Loomis, Method for the resolution of hydrocarbon vapors, decided November 28, 1932, claim 1.

Pat. 1,812,615, E. W. Wall, Sulphonated substances and process of preparing the same, decided November 29, 1932, claims 3 and 7.

Pat. 1,825,564, J. B. Whitlow, Revolving sign, decided November 10 1932, claim 2.

Pat. 1,844,231, C. H. Sipe and F. S. Snyder, Roll shaft, decided November 28, 1932, claims 1, 2, 3, 4, 5, 6, and 7.

Notice of Cancellation

U. S. PATENT OFFICE, *Washington, Nov. 23, 1932.*

Jack Daniel Distilling Company, its assigns or legal representatives, take notice:

A cancellation proceeding having been instituted by this Office upon the application of Lem Motlow, of Lynchburg, Tenn., to effect the cancellation of the trade-mark registration of the Jack Daniel Distilling Company, of 117 South Broadway, St. Louis, Missouri, No. 125,797, dated June 17, 1919, and the notice of such proceeding sent by registered mail to the said Jack Daniel Distilling Company at the said address having been returned by the post-office as undeliverable, notice is hereby given that unless said Jack Daniel Distilling Company, its assigns or legal representatives, shall enter an appearance therein within 30 days from the first publication of this order the cancellation will be proceeded with as in case of default. This notice will be published in the OFFICIAL GAZETTE for three consecutive weeks.

WM. A. KINNAN,
First Assistant Commissioner.

Condition of Applications Under Examination at Close of Business December 10, 1932

(Total number of applications awaiting action, excluding Trade-Mark Division, 60,832; Trade-Mark Division, 1,040. Oldest new case, June 16, 1932; oldest amended, June 16, 1932.)

Room No.	Divisions, Examiners, and Subjects of Inventions	Oldest new application and oldest action by applicant awaiting office action: New	Amended	No. of applications awaiting action
6624	1. LOEFFLER, F. A., Closure Operators; Fences; Gates; Tillage; Handling Implements	Oct. 14	Oct. 31	221
6708	2. HERMAN, D. (Act.), Fishing and Trapping; Dairy; Animal Husbandry; Presses; Tobacco; Velocipedes.	Aug. 12	Aug. 13	917
4098	3. LINDSEY, A., Heating; Metal Founding; Metallurgy; Metal Treatment; Electric Furnaces	Sept. 12	Sept. 10	677
7083	4. MERRITT, A. D., Conveyers; Hoists; Handling Apparatus; Excavating	Sept. 20	Oct. 24	282
3628	5. MACNAB, J. F., Harvesters; Music; Acoustics; Sound Recording; Knotters	Aug. 19	Sept. 3	279
4936C	6. LEWERS, A. M., Carbon Chemistry	June 28	July 5	1,714
5725	7. JARBOE, C. G., Optics; Photography	Aug. 5	Aug. 5	1,205
7514	8. ADAMS, F. L., Beds; Chairs; Kitchen and Table Articles; Racks and Cabinets	Aug. 13	Sept. 1	743
4624	9. ADAMS, R. E., Pumps; Fluid and Fluid-Current Motors	Sept. 23	Oct. 5	547
6612	10. HUNTER, O. F., Land Vehicles—Animal Draft Appliances, Bodies and Tops	July 27	Aug. 4	667
6087B	11. BENHAM, E. V., Boots, Shoes, and Leggins; Button, Eyelet, and Rivet Setting; Harness; Leather Manufactures; Nailing and Stapling; Whip Apparatus.	Aug. 13	Aug. 10	577
7701	12. HENRY, C. C., Machine Elements	Oct. 1	Oct. 10	311
5096	13. BORLIK, F. J., Gear Cutting, Milling, and Planing; Metal Drawing; Metal Forging and Welding; Metal Rolling; Metal Working; Needle and Pin Making; Turning; Boring and Drilling.	Aug. 12	Aug. 15	906
6097	14. BRUMBAUGH, N. J., Farriery; Metal Bending; Metal Tools and Implements, Making; Sheet Metal Ware, Making; Wire Fabrics; Wire Working; Metal Working, Blanks and Processes.	Sept. 10	Sept. 14	622
4897	15. WORRELL, L. W., Glass; Plastic Block and Earthenware Apparatus; Plastics	July 25	July 25	1,577
5612	16. SPENCER, C. J., Telegraphy; Telephony	Aug. 25	Aug. 25	690
5701	17. ARMSTRONG, H. (Act.), Label Pasting and Paper Hanging; Ornamentation; Paper Manufactures; Printing; Type Casting; Sheet-Material Associating or Folding; Sheet or Web Feeding; Type Setting.	June 21	June 21	1,255
4612	18. PORTER, M. E., Motors, Expansible-Chamber Type; Power Plants; Speed-Responsive Devices	Sept. 12	Sept. 16	477
4096	19. KENNEDY, A. R., Furnaces and Stoves; Heating Systems; Fuel Burners	July 2	July 7	1,630
6613	20. GROVE, S. D., Miscellaneous Hardware; Closure Fasteners; Locks and Latches; Safes; Undertaking.	Sept. 26	Sept. 21	398
7733	21. THOMPSON, T. J., Textiles; Cloth Finishing	Aug. 3	Aug. 16	852
5724	22. RINGLE, D. (Act.), Aeronautics; Firearms, Ordnance, and Explosive Devices; Air Guns, Catapults, and Targets; Boats and Buoys; Ships; Marine Propulsion.	Sept. 26	Oct. 20	371
7892	23. GROESBECK, W. D., Coin Handling; Recorders; Registers	June 21	June 24	783
5053	24. DURAS, C. O., Apparel; Apparel Apparatus; Garment Supporters; Sewing Machines	Oct. 12	Oct. 8	503
5709	25. BLAKELY, C. F., Agitating; Butchering; Classifying Solids; Centrifugal-Bowl Separators; Mills; Threshing; Vegetable and Meat Cutters and Comminutors.	July 14	July 13	1,360
5808	26. ADAMS, W. M. (Act.), Electricity, Generation; Motive Power	July 21	July 20	717
5708	27. CLARK, W. N. (Act.), Brushing, Scrubbing, and Cleaning; Washing Apparatus	Sept. 2	Aug. 23	731
4628	28. BENSON, A. R., Internal-Combustion Engines	June 16	June 16	1,246
5082	29. MORRIS, B. N., Woodworking; Tools; Compound Tools; Furniture; Metal Working, Assembling.	June 20	June 29	625
4074	30. SHIPMAN, J. L., Automatic Temperature and Humidity Regulation, Illuminating Burners; Illumination; Thermostats and Humidostats.	Aug. 13	Aug. 17	732
4716	31. HOLMES, W. N., Gas, Heating and Illuminating; Mineral Oils	July 14	July 14	1,350
4086	32. BARTHOLOMEW, J. A., Gas and Liquid Contact Apparatus; Heat Exchange; Gas Separation	Aug. 31	Sept. 1	688
6096	33. WYMAN, W. I., Bridges; Masonry and Concrete Structures; Metallic Building Structures; Roads and Pavements; Roofs; Wooden Buildings.	July 2	June 24	1,991
6625	34. SAPERSTEIN, S. (Act.), Electricity, Transmission to Vehicles; Pneumatic Dispatch; Railways, Rolling Stock, Switches, and Signals; Store Service; Vehicle Fenders; Track Sanders.	July 21	July 23	782
3600	35. REYNOLDS, E. C., Buckles, Buttons, Clasps, Etc.; Card and Sign Exhibiting; Signals; Toilet	Oct. 19	Nov. 2	262
7624	36. McFAYDEN, A. D. (Act.), Automatic Weighers; Geometrical and Measuring Instruments; Force Measuring.	July 2	July 7	1,437
5689	37. WEAVER, M. E., Electricity, Circuit Makers and Breakers	July 29	July 30	848
7510	38. KRAFFT, C. F., Earth Boring; Hydraulic and Earth Engineering; Mining, Quarrying, and Ice Harvesting; Stoneworking; Walls.	Oct. 15	Nov. 4	111
4874	39. WHITNEY, F. J. (Act.), Fluid-Pressure Regulators; Multiple Valves; Valves; Water Distribution	June 20	June 21	1,235
7880	40. OBERLIN, J. J., Receptacles	July 27	July 29	2,033
6082	41. WHITNEY, M. L., Land Vehicles, Wheels, and Axles: Resilient Tires and Wheels; Wheel Substitutes; Railway Draft Appliances; Spring Devices.	Oct. 6	Oct. 11	443
5882	42. CUTTING, H. O., Electric Signaling	June 20	June 23	1,275
4896B	43. KLINGE, E. F., Baths, Closets, Sinks, and Spittoons; Sewerage; Electricity, Medical and Surgical; Medicines; Surgery; Dentistry; Artificial Body Members.	July 11	July 12	1,505
4087B	44. SHAFFER, C. H., Dispensing; Filling and Closing Portable Receptacles; Refrigeration	June 27	June 20	1,602
7097	45. HILL, H. D., Pulleys and Shafting; Lubrication; Bearings and Guides	Sept. 12	Sept. 12	758
4613	46. TAYLOR, M., Evaporators; Fluid Sprinkling; Fire Extinguishers; Boilers	Sept. 3	Sept. 12	436
7600	47. BARKER, H., Clutches and Power Stops; Brakes; Motors	July 12	July 12	1,786
5731	48. ROEPKE, O. B., Electricity, General Applications	Aug. 12	Aug. 12	625
7725	49. SHEFFIELD, E. L., Check-Controlled Apparatus; Domestic Cooking Vessels; Ventilation; Driers; Liquid Separation or Purification.	June 23	July 2	1,346
4701	50. BLAKE, C. L., Plastic and Liquid Coating Compositions; Coating	June 20	June 20	1,924
5628	51. BACKUS, C. D., Radiant Energy	Aug. 10	Aug. 10	995
7709	52. KNOTTS, M. K., Supports; Chucks; Joint Packing; Pipe and Rod Joints or Couplings; Tool-Handle Fastenings.	Sept. 26	Sept. 28	517
6897	53. PECK, M. K., Books; Manifolding; Printed Matter; Stationery, Educational Appliances; Paper Files and Binders; Tents, Canopies, Umbrellas, and Canes; Curtains, Shades, and Screens.	Sept. 30	Oct. 3	372
5874	54. WAITE, W. E., Electric Lamps; Vapor Electric Devices; Space Discharge Tubes; Light Sensitive Circuits.	July 15	July 15	1,006
6887	55. BOWEN, S. T. {Bread, Pastry, and Confection Making; Cutlery	Sept. 28	Sept. 28	311
	{Designs	Nov. 12	Nov. 25	269
4725	56. PORTER, F. J., Electrochemistry; Laminated Fabrics; Paper Making; Substance Preparation	July 16	July 8	1,186
3623	57. NICOLSON, G. D. G., Cutting and Punching; Bolt, Nut, Rivet, Nail, Screw, Chain, and Horse-Shoe Making; Driven and Screw Fastenings; Jewelry; Nut and Bolt Locks.	Aug. 2	Aug. 6	635
5605	58. DOWELL, E. F., Abrading; Typewriting	July 6	July 11	1,159
4709	59. RICHARD, V. I., Chemistry; Alcohol; Fertilizers; Cement and Lime; Hides, Skins, and Leather; Fuel.	June 24	June 24	1,468
5896	60. GLASS, R. L., Electricity, Heating, and Welding; Batteries; Resistances and Rheostats; Prime Mover Dynamo Plants.	July 9	July 9	1,319
5724	61. PARKS, G. E., Elevators; Winding and Reeling; Pushing and Pulling; Fire Escapes; Ladders; Scaffolds; Horology; Time-Controlling Apparatus.	July 14	July 18	1,175
7525	62. COCHRAN, W. W., Toys; Amusement Devices; Baggage; Package and Article Carriers; Bottles and Jars; Deposit and Collection Receptacles.	Aug. 4	Aug. 4	1,205
4868	63. WINKELSTEIN, A. H., Bleaching and Dyeing; Explosive Pyrotechnic, and Match Compositions; Preserving; Sugar, Starch, and Carbohydrates.	July 7	July 7	1,260
4706	64. NASH, P. N., Acetylene; Distillation; Gas Mixers; Oils, Fats, and Glue	Sept. 21	Sept. 30	363
5624	65. McDERMOTT, F. P., Electricity, Conductors; Conduits and Housings; Repeaters; Relays; Wave Transmission.	June 20	June 30	1,438
3099B	Trade-Marks, Labels, and Prints: F. A. RICHMOND. {Trade-Marks	Nov. 10	Nov. 28	924
	{Labels and Prints	Nov. 10	Nov. 25	116

DECISIONS IN PATENT AND TRADE-MARK CASES

Decision of the Board of Appeals

Ex parte Ekstedt

No. 156,089. Decided October 21, 1931

1. Claims—Indefinite.

There are instances where an applicant may be permitted to describe in his claim an article by the process of making it where there is no other way to distinguish the article but this is not permissible where the description includes negative and functional limitations so that the claims are indefinite and some of them broader than the invention disclosed.

2. Same—Broader Than Invention.

A claim for a filament in which it is stated that the wire is "coiled to helical form in the absence of a mandrel" *Held* broader than the invention since the claim does not set out how the wire is formed but merely how it is not formed.

3. Same—Miscellaneous Objections.

The statement in a claim for a filament that the wire is of "uniform diameter" refers not to a wire of absolute uniformity but to a wire more nearly uniform than the prior art and is merely relative; unless construed more narrowly than the fair meaning of the term implies, the claim defines nothing novel.

[This application has resulted in Patent No. 1,856,243, issued May 5, 1932.]

Application for patent filed December 21, 1926, Serial No. 156,089. Filament for incandescent electric lamp.

Mr. M. F. Reges for applicant.

Before Kinnan, First Assistant Commissioner, and Skinner and Clift, Examiners in Chief

Kinnan, *First Assistant Commissioner:*

The applicant has appealed from the decision of the Examiner denying the patentability of claims 18 to 22 and 24 to 27, inclusive. Claims 18, 21, and 25 are illustrative and are as follows:

18. A filamentary body composed of a wire free from tensional stress having a diametrical dimension of between ½ to 5 mils coiled to helical form in the absence of a mandrel.

21. A filamentary body comprising a wire coiled to helical form and having a uniform diameter at substantially all points along its length.

25. A lamp filament comprising a wire coiled to helical form and having a permanent set resistant to drooping after heating.

The references relied upon are: Lely, 1,560,265, November 3, 1925; Benbow, 1,247,068, November 20, 1917; Keyes, 1,164,614, December 14, 1915; German patent, 377,745, June 26, 1931.

The claims are directed to a filamentary body, specifically an electric lamp filament, of the usual dimension, ½ to 5 mils. The particular features of novelty relied upon to support the claims reside in the wire being so formed as to be free from tensional stress and of a uniform diameter at all points along its length. This form of filament is stated to possess the quality of resisting drooping or sagging when subjected to the usual heating or flashing operation.

The applicant sets forth that it has heretofore been customary to form the necessary coils of these fine lamp filaments by the process of winding them upon mandrels. This, the applicant states, has resulted in the wire being under a certain stress and being also lacking in uniformity of diameter, both of which characteristics are stated to be detrimental to the life of such filaments. To overcome these objections the applicant forms the coils by feeding the wire through wire propelling rollers which drive it into the cavity of a die-block. The surface of the cavity is such as to give to the wire a circular bend so as to produce a convolution and the continued movement of the wire results in there being formed a succession of convolutions, the product being the desired helix which may be later cut into the required lengths.

The Examiner has found much fault, and properly we think, with the form of the claims. While recognizing that there are instances where an applicant may be permitted to describe in his claim the article by the process of making it where there is no other way to distinguish the article yet we find the claims before us possessing negative and functional limitations to the end that they are indefinite and some of them broader than the invention disclosed.

Claim 18 states the wire is "coiled to helical form in the absence of a mandrel." This does not explain how the wire is formed or coiled but merely how it is not formed. There may be other ways than that disclosed by applicant to form a coil in the absence of a mandrel. Applicant has not disclosed any other way than by pushing the wire by means of the propelling rollers and guide into the cavity of the die-block yet his claim is directed to any and all means for forming the coil save the means which employ a mandrel. We regard such a claim as broader than the disclosure and clearly unpatentable. Claim 19 is of the same objectionable character as claim 18 and is deemed unpatentable for the same reason.

Claim 20 seems to us so vague and indefinite that its scope is difficult to determine. A filamentary wire coiled to helical form is, of course, old and since the claim does not state such wire must be free from all tensional stresses but only such as are detrimental to its usefulness when used as a light source in an incandescent electric lamp, we think the claim fails to define any invention. The usual filament coiled on a mandrel may well be free from such tensional stresses as would be seriously detrimental to its use in an electric lamp. It is a matter of common knowledge that the usual commercial filaments are remarkably successful and long-lived as light sources in lamps of this character.

Claims 21, 22, and 24 are different statements to the effect that the filamentary wire is of a uniform diameter at substantially all points along its length. Granting for the present that mandrel formed wire

coils lack the desired uniformity of diameter which the applicant explains is desirable, yet the wire formed in the manner disclosed by applicant is not of an absolutely uniform diameter but is merely more nearly of such a character than the mandrel formed coil. The distinction set forth in these claims therefore is merely relative. It is quite usual to refer to filamentary coils of the character disclosed in the references and used in present day lamps as wires of uniform diameter, meaning that they are substantially so. Unless these claims are construed more narrowly than the fair meaning of their terms implies, they define nothing novel. At best they describe filamentary coils more nearly of uniform diameter than those previously used.

Claim 25 recites but the usual construction of filamentary wire having a helical form and a permanent set and seeks to define thereover by the statement that such a wire is "resistant to drooping after heating." We think it plain enough filamentary wire coils of the prior art are resistant to drooping if the heat is not continued too long nor the temperature raised too high. The claim is so broad as to fail to define from the prior art.

Claims 26 and 27 recite no structure of the coil which is novel but merely state a function of it. We regard the criticism of these claims by the Examiner as proper.

As to the prior art relied upon by the Examiner, it does not show filaments of the character employed in incandescent electric lamps made by the process described by applicant. So far as this art reveals, such filaments have previously been formed upon mandrels. The German patent, however, does disclose a coil spring made by the pushing process used in the forming of the applicant's filament. This patent does not state the diameter of the wire but does note that it may be of any desired diameter. The spring thus formed is presumably, and as stated by the patentee, to be used for tension or compression spring purposes. Nothing is said in the disclosure as to the material being without tension. We are not satisfied this disclosure of the German patent of the method of forming coil springs by pushing them through a properly shaped cavity in a die-block would suggest the adoption of the method of forming the exceedingly fine filament to be used in an incandescent electric lamp. The German patentee does not contemplate subjecting the coil spring to an electric current, and there is wanting, in our judgment, any suggestion that the small lamp filament could be pushed through a die-block cavity at all, much less that such a product would possess the characteristics stated to be sought by the applicant. While we are unable, for the reasons already noted, to hold any of the appealed claims allowable yet recognizing the difficulty in framing a patentable claim without including a step in its manufacture, we suggest that claims 18 and 19 be amended by substituting for the words "in the absence of a mandrel" in claim 18 and "without the aid of a mandrel" in claim 19, the words:—*by a pushing operation.*

We further suggest that claim 27 be worded as follows:

27. A filament for an incandescent electric lamp comprising a wire coiled to helical form by a pushing operation thereby producing a wire without internal stresses, whereby it is not subject to twist during a flashing operation.

If amended as indicated, we recommend allowance of these three claims. Such amendment must be presented within the limit of appeal to the court.

The decision of the Examiner denying the patentability of the claims before us is affirmed.

U. S. Circuit Court of Appeals—Second Circuit

GREENE ET AL. *v.* BEIDLER ET AL.

No. 380. Decided May 2, 1932

1. PRIORITY—REDUCTION TO PRACTICE.
Evidence reviewed and *Held* to establish that the defendant, Beidler, reduced to practice the invention in issue by his "experimental model" since "the thing to be demonstrated, and which was actually demonstrated, was the mounting on the turntable of the paper feeding rolls and the paper cutting device. These parts, including the exposing chamber and the paper roll holder, were embodied in, and their practicability made apparent by" the experimental model.

2. SAME—SAME—APPARATUS TESTED MUST INCLUDE ALL ELEMENTS OF THE ISSUE.
"It must be shown in an interference case, that the apparatus tested included all the elements of the issue in order to establish reduction to practice of the invention."

3. SUIT UNDER SECTION 4915 REVISED STATUTES—TESTIMONY DELIBERATELY WITHHELD IN INTERFERENCE.
Plaintiffs who, in interference proceedings in the Patent Office, deliberately withheld part of the evidence concerning priority of invention should not prevail on the remaining evidence when subsequently offered in suit for a patent under section 4915 Revised Statutes.

APPEAL from the District Court of the United States for the Western District of New York.

Suit by John S. Greene and the Photostat Corporation against George C. Beidler and another, under R. S. § 4915 (35 U.S.C.A. § 63), seeking priority of invention of an improvement in a camera mechanism. A counterclaim was interposed, but on motion of the last-named plaintiff it was dismissed, and, from a decree for plaintiffs, defendants appeal. Reversed.

Mr. Charles J. Williamson, Mr. Frank S. Appleman, and *Mr. Charles G. Hensley* for appellants.

Mr. Edward H. Cumpston for appellees.

Before MANTON, SWAN, and AUGUSTUS N. HAND, Circuit Judges.

MANTON, *Cir. J.:*

This appeal seeks review of a decree of the court below determining the issue of priority of invention between the appellants and appellees as interfering applicants, claiming the same invention. The appellee Greene filed his application on August 20, 1924, and appellant Beidler on April 4, 1924. Priority of invention was awarded Beidler by the Patent Office and this was sustained by a decision of the Board of Appeals of the Patent Office, dated June 5, 1928. A counterclaim was interposed in this suit alleging infringement by the appellees, but on motion of the appellee Photostat Corporation, it was

dismissed. The court below sustained the claim of the appellees upholding Greene as the first inventor.

The subject-matter concerns—

a camera having an exposing chamber and light admitting means, a film holder rotatably mounted in the camera and operative to present two sides of film to the light successively, film drawing means and film severing means associated and movable with the film holder, and operative means stationed in locations with relation to which the film holder is movable for imparting motion to the film drawing means and film severing means when the said film holder is in a predetermined position.

This invention is used for making photostatic copies of documents for records upon film or sensitive sheets supplied to the camera from a roll of paper with a sensitive coating on both sides so that a photoprint may be made on each side of the sheet. It is called a duplex machine. It has (*a*) a film drawing means, such as paper feed rollers; (*b*) a film severing means, such as knives; (*c*) the film drawing means and film severing means movable with the film holder, mounted on and turning with the rotatable holder; and (*d*) operative means stationed in locations with relation to which the film holder is movable for imparting motion to the film drawing means and film severing means when the film holder is in a predetermined position, such as crank devices on the exterior of the stationary casing of the machine.

[1] The record shows appellant's conception and disclosure antedated the conception and disclosure of the appellee. Appellee claims actual reduction to practice on his invention on March 22, 1924. Appellant's machine was completely and successfully used on March 24, 1924, as found by the Court of Customs and Patent Appeals. *Beidler* v. *Caps,* 36 F.(2d) 122. The Patent Office gave January 12, 1924, as appellee's date of conception, but this was nine months after appellant Beidler's reduction to practice in the Spring of 1923. The Patent Office found that appellant Beidler had a demonstrating body made in March or April, 1923. The court below found—

that record discloses that Beidler established a conception of the subject-matter of the count in issue as early as the Spring of 1923 when an experimental model of the camera was made.

This was a reduction to practice as well as conception. *Curtiss Aeroplane* v. *Janin,* 278 F. 454 (C. C. A. 2). In appellant Beidler's demonstrating body of 1923 were full-sized, practical parts. They were shown to be capable of practical use and, in fact, were used in a later machine that was operated. The thing to be demonstrated was not whether photographs could be taken on the opposite sides of doubly sensitized paper; that was known to be possible. The invention did not consist in the lens or means to reproduce the image on the sensitive paper; that was old in the art. But the thing to be demonstrated, and which was actually demonstrated, was the mounting on the turntable of the paper feeding rolls and the paper cutting device. These parts, including the exposing chamber and the paper roll holder, were embodied in, and their practicability made apparent by, the demonstrating body shown in the spring of 1923.

[2] The court below found that there was ample evidence to show that a test was made of a machine of the duplex type on March 22, 1924, by the appellee Greene, and that this was the date of his actual reduction to practice. An examination of the record convinces us that the burden of proof, which rested heavily upon the appellees, to establish Greene's prior conception and reduction to practice has not been sustained. The credible evidence and all the probabilities involved are against the appellees' claims. Three witnesses were called who sought to establish the March 22, 1924, date. Ulrech told of his part in helping on that day to move the machine into a dark room and referred to the prints made, but he gave no evidence as to what was in the machine. Butz could not say whether the feed rolls and severing knives were in the machine. He had no knowledge of these parts. Neither Butz nor Landrock in their testimony, in describing what was done, say anything about any feeding of the paper or cutting off of the paper after the double exposures. It is a significant fact that they failed to say there were present in the machine the feed rolls and the special operating mechanism with the severing knife and its separate operating mechanism. It must be shown, in an interference case, that the apparatus tested included all the elements of the issue in order to establish reduction to practice of the invention. *Henderson* v. *Gilpin,* 39 App. D. C. 428. The testimony of Butz and Landrock is very unsatisfactory. Their testimony comes at a very late day, some seven years after March 22, 1924, and their assistance to Greene at that time was too inconsequential to form the basis of knowledge of the machine. Appellee Greene did not testify. There is a contradiction in the testimony between Greene in the Patent Office proceedings and the testimony of Landrock here as to the spring stop plungers used in the machine. The date claimed for Greene was very suspicious—just two days before appellant Beidler's conceded date of reduction to practice. There seems to have been no particular reason why the test should have been made on Saturday when it might have been made on Monday, March 24th, which was the next working day. No testimony appears to explain why it was important for the Photostat Corporation to ascertain on Saturday afternoon, rather than on the next Monday, what was already known in the photocopying art, namely, whether pictures could be made on opposite sides of double-coated paper. The reason given by Landrock for this is very incredible. Moreover, it appears that the turntable included two castings, one for the turntable itself or the rotating part, and the other for the magazine base, and it is established that the drawings for these two castings were not finished until March 18 and 19, 1924. The dates of these drawings were established by testimony both at this trial and in the Patent Office proceedings. It is unlikely that the time was sufficient to have the castings finished and ready for installation in the machine on March 22, 1924. The testimony of the witness Swan called

by the appellants was more reliable. His account is reasonable and entirely credible. He was a highly skilled mechanic and, apparently, of unusual experience and well qualified to give an intelligent and persuasive account of the events and the work of Greene. We are satisfied that the court below improperly accepted March 22, 1924, as the date when the appellee Greene reduced his invention to practice.

Regardless of the reasons for requiring diligence, an inventor who conceives an invention prior to another, but reduces it to practice after the other, must show that he was at least taking steps by the time of the advent of the latter inventor in making the same invention, either to embody his invention in an actual device which would disclose it to the public, or to file an application for his patent. The appellant Beidler, about the 1st of January, 1924, urged Smith, whom he had engaged, to resume work on the duplex machine in the following phrases: "I wish you would get at the duplex machine and finish it" and "go to work on the machine and stay there. Never mind anything else that happens." From that day until March 24, 1924, appellant Beidler's machine was developed from the demonstrating body to the accepted commercial machine of the latter date. This time was spent in reasonable activity, and the length of time is not unusual under the circumstances. *Griffin* v. *Swenson*, 15 App. D. C. 135; *Dickinson* v. *Swinehart*, 49 App. D. C. 222, 263 F. 474; *Courson* v. *O'Connor*, 227 F. 890 (C. C. A. 7).

We think the evidence justifies the claim that the appellant Beidler showed the exercise of due diligence, especially from January 12, 1924, the alleged date of conception and disclosure by Greene. All probabilities point to the truth of the claim of appellants that the Beidler machine had its beginning on the 1st of January, 1924. It is not disputed and the testimony of Smith and Beidler as to it is trustworthy and should be accepted. *Uihlein* v. *Gen. Elec. Co.*, 47 F.(2d) 997 (C. C. A. 7). The testimony offered to sustain the heavy burden, necessarily assumed by the appellee, does not justify the decree below. *Morgan* v. *Daniels*, 153 U. S. 120, 14 S. Ct. 772, 38 L. Ed. 657; *Curtiss Aeroplane* v. *Janin*, supra.

[3] Moreover, the subject-matter was thoroughly exhausted and examined in the interference proceedings in the Patent Office (*Greene* v. *Beidler*), wherein the appellant Beidler was declared to be the inventor, the first to have successfully reduced the invention to practice and the first to file his application for a patent. And from the testimony as adduced on this trial, we agree with the Examiner of Interferences who held that Greene's attempt to antedate Beidler's well-established filing date of April 4, 1924, was not sufficiently supported to warrant awarding to Greene a reduction to practice at an earlier date, such as would defeat the appellant Beidler's claim. Indeed, the Court of Customs and Patent Appeals found appellant Beidler to have been diligent from January 1, 1924, until the completion of the machine. *Beidler* v. *Caps*, supra. As said in *Barrett Co.* v. *Koppers*, 22 F.(2d) 895, 897 (C. C. A. 3) 367 O. G. 701:

> The law gave the plaintiffs a day in court on the issue of priority. That was the day the interference was heard and if they chose not to avail themselves of their full rights but to gamble on the decision by giving only a part, and the weaker part, of the evidence they had in hand, they did it at their own risk. After losing on such evidence is what otherwise would be a train of futile appeals in the patent tribunals and Court of Appeals of the District of Columbia they cannot come into a District Court and say, now for the first time we shall tell the true story of reduction to practice and demand a patent.

This is substantially the position which the appellees here have taken. It cannot prevail.

[4] The counterclaim interposed alleging infringement is without merit and was properly dismissed. At the time the counterclaim was pleaded, the appellant Beidler's application was still pending in the Patent Office and no patent had been issued on it to support a cause of action for infringement. *Kirk* v. *United States*, 163 U. S. 49, 16 S. Ct. 911, 41 L. Ed. 66; *Marsh* v. *Nichols, Shepherd & Co.*, 128 U. S. 605, 9 S. Ct. 168, 32 L. Ed. 538. Nor is there anything to show that the appellees had used or sold, directly or indirectly, any of the machines in question since the issuance of the patent to the appellant Beidler.

Decree reversed.

Patent Suits

[Notices under sec. 4921, R. S., as amended Feb. 18, 1932]

1,092,462, E. Trobeck, Metal working machine, D. C., N. D. Ohio, E. Div., Doc. E 2766, *The National Acme Co.* v. *The Cleveland Automatic Machine Co.* Patent held valid and infringed Nov. 1, 1932.

1,171,147, M. C. Schweinert, Tire valve; 1,226,608, J. Lines, Valve; 1,807,980, H. P. Kraft, Tire valve; 1,854,201, same, Packing washer for caps; 1,803,378, J. Wahl, Tire valve cap, filed Nov. 1, 1932, D. C., S. D. N. Y., Doc. E 72/120, *A. Schrader's Son, Inc.*, v. *Bridgeport Brass Co.*

1,212,840, F. J. Straub, Building block and method of making same, D. C., M. D. Pa., Doc. 692, *Crozier-Straub, Inc., et al.* v. *J. Galdiere* (*Keystone Concrete Block Co.*). Injunction granted Oct. 29, 1932.

1,226,608. (See 1,171,147.)

1,245,157, Jacobs & Jacobs, Hair waving and drying apparatus; 1,477,878, H. Jacobs, Hair waving device, D. C., S. D. N. Y., Doc. E 70/14, *H. Jacobs* v. *P. E. Gaire, Inc.* Consent decree for plaintiff (notice Oct. 27, 1932).

1,256,492, 1,836,991, W. E. Urschel, Apparatus for snipping string beans, filed Oct. 31, 1932, D. C., W. D. N. Y., Doc. 1591, *B. I. Buck et al.* v. *Ohioholm-Ryder Co., Inc.*

1,304,116, T. J. Stephens, Auxiliary tire valve, filed Oct. 31, 1932, D. C., E. D. N. Y., Doc. E 6647, *W. R. Royer* v. *A. Schrader's Son, Inc.*

1,307,980. (See 1,171,147.)

1,333,995, E. J. Ramsey, Shoe; 1,614,933, same, Shoe construction, D. C., S. D. N. Y., Doc. E. 50/885, *E. J. Ramsey* v. *Endicott-Johnson Corp.* Dismissed (notice Nov. 1, 1932).

1,336,991. (See 1,256,492.) 1,354,201. (See 1,171,147.)

1,402,589, H. A. Farrand, Rule, 1,799,044; 1,799,094, same, Means for controlling resilient rules; 1,828,401, same, Resilient rule, filed Nov. 1, 1932, D. C., S. D. N. Y., Doc. E 72/138, *H. A. Farrand, Inc.*, v. *Manhattan Import Co., Inc.*

1,477,873. (See 1,245,157.)

1,526,982, E. W. Hill, Stencil sheet, D. C., W. D. N. Y., Doc. 59, *A. D. Dick Co.* v. *R. A. Lipscomb.* Patent held valid Oct. 26, 1932.

1,614,933. (See 1,333,995.)

1,618,909, R. B. Benjamin, Electrical connector device, filed Oct. 31, 1932, D. C., E. D. N. Y., Doc. E 6648, *Beaver Mfg. Co. et al.* v. *W. Thomashower et al.*

1,630,934, G. B. Geiser, Support for gutter hanger circles, filed Oct. 28, 1932, D. C., E. D. N. Y., Doc. E 6641, *Berger Bros. Co.* v. *Whitney Metal Products Corp.*

1,663,475, R. E. Cartzdafner, Dump car locking device, D. C., N. D. Ohio, W. Div., Doc. E 1062, *Magor Car Corp.* v. *The Differential Steel Car Co.* Dismissed for lack of prosecution Oct. 1, 1932.

1,718,474, J. W. McQuaid, Piston, filed Oct. 27, 1932, D. C., S. D. Tex. (Houston), Doc. E 532, *D. & M. Machine Works et al.* v. *Texas Rubber & Specialty Corp. et al.*

1,724,493. (See Des. 72,523.)
1,726,486. (See Re. 18,253.)

1,732,708, Withrow & Close, Burner, D. C., N. D. Ohio, E. Div., Doc. E 1020, *The Toledo Pressed Steel Co.* v. *The McCloskey Torch Co. et al.* Dismissed without prejudice for want of prosecution Oct. 1, 1932.

1,733,353. (See Des. 72,523.)

1,753,634, L. C. Wolfe, Carburetor, D. C., E. D. Pa., Doc. 6497, *American Carburetor Improvement Co.* v. *Buick Motor Co. et al.* Consent decree dismissing bill with prejudice Oct. 24, 1932.

1,759,639, M. Belloch, Buckle, D. C., S. D. N. Y., Doc. E 71/104, *M. Belloch* v. *M. Cohen* (*Red Star Casting Co.*). Consent decree for plaintiff (notice Oct. 29, 1932).

1,776,070, C. Hinde, Process of disposing of sulphuric acid materials, filed Oct. 26, 1932, D. C., S. D. Calif. (Los Angeles), Doc. E Y-18-J, *C. Hinde* v. *Richfield Oil Co. of Calif. et al.*

1,799,044. (See 1,402,589.) 1,799,094. (See 1,402,589.)

1,808,373. (See 1,171,147.)

1,819,633, N. Abramson, Miniature flasher, filed Oct. 21, 1932, D. C., S. D. N. Y., Doc. E 72/119, *N. Abramson* v. *New York Merchandise Co., Inc.*

1,828,401. (See 1,402,589.)

Re. 15,515, G. Haiss, Wagon loader, C. C. A., 3d Cir., Doc. 4685, *G. Haiss Mfg. Co., Inc.*, v. *Link Belt Co.* Doc. 4439, *Link Belt Co.* v. *G. Haiss Mfg. Co., Inc.* Doc. 4697, *Link Belt Co.* v. *G. Haiss Mfg. Co., Inc.* Decree affirmed in part Oct. 21, 1932, in each of above cases.

Re. 18,146. (See Des. 72,523.)

Re. 18,253 (of 1,726,486), D. P. Heath, Refrigerator and refrigerating apparatus, filed Oct. 29, 1932, D. C., N. D. Ohio, E. Div., Doc. E 4503, *D. P. Heath* v. *Mullins Mfg. Co.*

Des. 72,523, Z. Maulsby, Burial casket; 1,724,493, Re. 18,146 (of 1,733,353), Maulsby & Maulsby, Fabric forming machine, filed Sept. 17, 1932, D. C. Minn., 4th Div., Doc. E 2499, *J. R. Maulsby* v. *Minneapolis Casket Co., Inc., et al.*

Des. 81,303, W. Schnell, Radiator cap for an automotive vehicle; Des. 84,659, Schnell & Giuntini, Automobile radiator ornament, filed Nov. 1, 1932, D. C., S. D. N. Y., Doc. E 72/122, *Ternstedt Mfg. Co.* v. *S. Kenny* (*Chrome Products Co.*) *et al.*

Des. 82,219, J. W. Hession, jr., Automobile radiator ornament, filed Nov. 1, 1932, D. C., S. D. N. Y., Doc. E 72/121, *General Motors Corp.* v. *S. Kenny* (*Chrome Products Co.*) *et al.*

Des. 84,659. (See Des. 81,303.)

Des. 86,377, A. S. Katz, Light or similar article, filed Nov. 1, 1932, D. C., S. D. N. Y., Doc. E 72/139, *A. S. Katz* v. *Scheinert Bros., Inc.*

Des. 87,434, W. F. Haas, Clasp, D. C., S. D. N. Y., Doc. E 71/292, *B. Blumenthal & Co., Inc.*, v. *S. Gordon et al.* Consent decree for plaintiff (notice Oct. 31, 1932).

T. M. 92,892, Havana Cigar & Tobacco Factories, Ltd., Cigars, filed Oct. 28, 1932, D. C., M. D. Pa. (Scranton), Doc. E 977, *The Havana Cigar & Factories, Ltd.*, v. *C. D. Myers.*

T. M. 180,558, T. M. 224,367, Reid, Murdoch & Co., Foods and ingredients of foods, D. C. Kans., 2d Div., Doc. 707-N, *Reid, Murdoch & Co.* v. *The Renney-Davis Merchantile Co.* Patents held valid (notice Oct. 22, 1932).

T. M. 224,367. (See T. M. 180,558.)

Adjudicated Patents

(C. C. A. Ohio.) Luther & Volck patent, No. 892,603, for process of making arsenate of lead, *Held* not infringed. *Sherwin-Williams Co.* v. *California Spray Chemical Co.*, 61 F.(2d) 297.

Trade-Marks Canceled

100,060. Chewing-gum. Wm. Wrigley Jr. Company, Chicago, Ill. Registered September 29, 1914. Canceled November 30, 1932.

151,250. Certain named paints, oils, varnishes, etc. Sup-R-Lin Products Co., Independence, Mo. Registered January 24, 1922. Canceled November 30, 1932.

174,925. Milk chocolate and almond chocolate. Nissly Swiss Chocolate Company, Inc., Florin, Pa. Registered October 23, 1923. Canceled November 30, 1932.

236,376. Nerve sedative elixir. John K. Stover, doing business as Stover Laboratories, Trenton, N. J. Registered December 13, 1927. Canceled November 30, 1932.

247,060. Safety razor blades. Lester Whitcup, New York, N. Y. Registered September 18, 1928. Canceled November 30, 1932.

Disclaimers

1,573,742.—*Karl E. Peiler*, West Hartford, Conn. FEEDING MOLTEN GLASS. Patent dated February 16, 1926. Disclaimer filed December 2, 1932, by *Hartford-Empire Company.*

Hereby disclaims said claims 1, 3, 4, 6, 7, 10, 30, 34, and 37 for the purpose of complying with what is understood to be required by law and to safeguard said owner's rights under the claims of said patent not hereby disclaimed; all without in any way modifying the scope, or affecting the validity, of said remaining claims.

1,802,521.—*George H. Miner*, San Francisco, Calif. GAME APPARATUS. Patent dated April 28, 1931. Disclaimer filed December 1, 1932, by the assignee, *Amusement Machine Corporation, Ltd.*

Hereby enters this disclaimer to those claims in said specification which are in the following words, to wit:

"21. Ball game apparatus comprising a playing surface inclined to permit playing balls to gravitate thereon, means for directing playing balls onto said surface, a plurality of play-indicating pockets arranged to permit balls to gravitate therein from said surface, said surface having openings arranged at various points therein and through which balls may drop beneath the surface, a plurality of inclined runways extending from said surface to certain of said pockets, and means in one of said runways adapted to be actuated by a ball in movement therein for causing an advance of a previously played ball from one pocket to another.

"22. Ball game apparatus comprising a playing surface simulating a baseball diamond and having a plurality of openings arranged at various points therein and through which balls may drop, means for directing balls onto said playing surface, a strike-indicating pocket into which balls may roll from said surface, an out-indicating compartment, means for conducting a ball which drops through any one of said openings into said out-indicating compartment, and means operating when a predetermined number

of balls is deposited in the strike pocket to cause one of said predetermined number of balls to gravitate into the out-indicating compartment."

1,807,101.—*Ernest J. Lees*, Shaker Heights, Ohio. AUTOMATIC TEMPERATURE CONTROL. Patent dated May 26, 1931. Disclaimer filed December 2, 1932, by the *patentee*.

Hereby enters this disclaimer to claim five (5) which is in the following words, to wit:

"5. In an automatic valve, a valve stem, thermally responsive means for actuating the stem in a plurality of directions and thermally responsive means associated with said first named thermally responsive means to release the valve stem for movement quickly in one direction."

Interference Notices

U. S. PATENT OFFICE, *Washington, Nov. 21, 1932.*

Goody Nectar Company, its assigns or legal representatives, take notice:

An interference having been declared by this office between the application of Harry E. Grigsby, 111 West California Avenue, Oklahoma City, Okla., for registration of a trade-mark and trade-mark registered October 23, 1928, No. 248,458, to Goody Nectar Company, 129 East Main Street, Oklahoma City, Okla., and a notice of such declaration sent by registered mail to said Goody Nectar Company, at the said address, having been returned by the post office as undeliverable, notice is hereby given that unless said Goody Nectar Company, its assigns or legal representatives, shall enter an appearance therein within 30 days from the first publication of this order the interference will be proceeded with as in case of default. This notice will be published in the OFFICIAL GAZETTE for three consecutive weeks.

WM. A. KINNAN,
First Assistant Commissioner.

U. S. PATENT OFFICE, *Washington, December 5, 1932.*

James De Villa, his assigns or legal representatives, take notice:

An interference having been declared by this Office between an application for patent filed by James De Villa, 299 Grove Street, Jersey City, N. J., and an application for patent filed by Christ T. Petkoff, 3937 College Avenue, Kansas City, Mo., and the Office having failed to secure service on De Villa, notice is hereby given that unless said De Villa, his assigns or legal representatives, shall enter an appearance therein within 30 days from the first publication of this order the interference will be proceeded with as in case of default. This notice will be published in the OFFICIAL GAZETTE for three consecutive weeks.

WM. A. KINNAN,
First Assistant Commissioner.

U. S. PATENT OFFICE, *Washington, Dec. 6, 1932.*

Pierre Jerome de Saint Andre Meynardie, his assigns or legal representatives, take notice:

An interference between the patent of Pierre Jerome de Saint Andre Meynardie, 84 Boulevard Exelmans, Paris, France, No. 1,661,489, granted March 6, 1928, and an application for patent filed by Douglas Kent Warner, Watkins Glen, N. Y., having been redeclared by this Office, and the notice of such redeclaration sent by registered mail to said Meynardie at said address having been returned by the post office undeliverable, notice is hereby given that unless said Meynardie, his assigns or legal representatives, shall enter an appearance therein within 30 days from the first publication of this order the interference will be proceeded with as in case of default. This notice will be published in the OFFICIAL GAZETTE for three consecutive weeks.

W. A. KINNAN,
First Assistant Commissioner.

TRADE-MARKS

OFFICIAL GAZETTE, DECEMBER 27, 1932

[VOL. 425. No. 4]

The following trade-marks are published in compliance with section 6 of the act of February 20, 1905, as amended March 2, 1907. Notice of opposition must be filed within thirty days of this publication.

Marks applied for "under the ten-year proviso" are registrable under the provision in clause (b) of section 5 of said act as amended February 18, 1911.

As provided by section 1 of said act, a fee of ten dollars must accompany each notice of opposition.

CLASS 1

Raw or Partly-Prepared Materials

Ser. No. 286,341. SIEMENS-PLANIAWERKE A. G. FUR KOHLEFABRIKATE, Berlin-Lichtenberg, Germany. Filed June 28, 1929.



For Asbestos, Clay, Silica, Silicon Carbide, Crude Coal Tar Oil, Dehydrated Tar, Hard-Coal Pitch, Diatomaceous Earth, Granulated Carbon, Powdered Carbon, Talc, Mica, Rubber, Raw Silk, Cellulose Fibres, and Carbon Material for Welding Electrodes.

Claims use since May 11, 1928.

Ser. No. 331,923. FLORIDA ICE AND COAL COMPANY, Jacksonville, Fla. Filed Nov. 5, 1932.



The words "Coal" and "The Best Yet" are disclaimed apart from the other features of the mark shown in the accompanying illustrative drawings.

For Coal.

Claims use since Nov. 1, 1929.

Ser. No. 332,192. A. C. LAWRENCE LEATHER COMPANY, Peabody, Mass. Filed Nov. 16, 1932.

LAWROSUEDE

No claim being made to the word "Suede" apart from the mark shown in the drawing.

For Leather.

Claims use since Apr. 1, 1931.

CLASS 2

Receptacles

Ser. No. 331,990. IMPERIAL METAL MANUFACTURING CORPORATION, Long Island City, N. Y. Filed Nov. 8, 1932.

PEPSAL

For Pepper and Salt Cellars of Base Metal and Glass and/or Natural and Synthetic Resins and Cellulose Esters and Ethers Which May Be Caused to Assume Definite Shape Either by Some Chemical Reaction or by the Influence of Heat and Pressure in a Metal Mold.

Claims use since Nov. 24, 1931.

Ser. No. 332,048. SHEP-ROID CORPORATION, St. Paul, Minn. Filed Nov. 10, 1932.

SHEP-ROID

For Containers, Such as Buttertubs, Firkins, Boxes, Lard and Grease Buckets, Made Chiefly from Paper; and for Wound Paper Plugs Used for Supporting the Ends of Paper Rolls.

Claims use since Oct. 21, 1932.

CLASS 4

Abrasive, Detergent, and Polishing Materials

Ser. No. 328,843. CHARLES J. MCCARTNEY, New York, N. Y. Filed July 16, 1932.

RESTORIZE

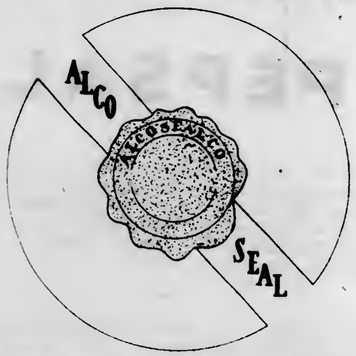
For Dry Cleaning Fluid Used for Cleaning Apparel.
Claims use since Mar. 1, 1932.

Ser. No. 329,901. PANGBORN CORPORATION, Hagerstown, Md. Filed Aug. 27, 1932.



The words "Quality Products", "Blast," "Abrasive", as well as the geographical term "Hagerstown, Maryland" are hereby disclaimed apart from the mark as shown on the drawing.
For Sand-Blast Abrasive.
Claims use since June 11, 1932.

Ser. No. 330,174. ALBERT C. LIVERGOOD, doing business as Alco Seal Co., Philadelphia, Pa. Filed Aug. 22, 1932.



For Cleaner for Automobiles, Furniture, Woodwork, Nickel, and Brass.
Claims use since July 5, 1932.

Ser. No. 330,651. THE COWLES DETERGENT COMPANY, Cleveland, Ohio. Filed Sept. 26, 1932.

ESAL

For Soluble Chemical Compounds for Use as Detergents with and without the Addition of Soap.
Claims use since Aug. 1, 1932.

Ser. No. 330,791. KRESGE DEPARTMENT STORE CORP., Newark, N. J. Filed Sept. 29, 1932.



For Hard, Powdered, and Liquid Soap; Liquid Dry Cleaner, Shaving Cream, Shoe Polish, Washing Compound, Steel Wool and Abrasives—Namely, Abrasive Cloth, Abrasive Pastes, Abrasive Paper, Buffing Compounds, Burnishing Powders, and Emery Cloth.
Claims use since February, 1927.

Ser. No. 331,131. THE J. B. WILLIAMS COMPANY, Glastonbury, Conn. Filed Oct. 10, 1932.

Glider

For Shaving Cream.
Claims use since Aug. 18, 1932.

Ser. No. 331,277. FRANK BAKER, doing business as Baker Manufacturer, San Francisco, Calif. Filed Oct. 15, 1932.



The trade-mark consists of applicant's facsimile signature.
For Soap for General Cleaning Purposes and for Removing Ink Stains and the Like.
Claims use since May 1, 1932.

Ser. No. 331,379. MANHATTAN KREOLE PRODUCTS, INC., Brooklyn, N. Y. Filed Oct. 19, 1932.



No claim is made to the representation of the carton and to the words appearing on the drawing, except to the word "Kreole" and the name "Manhattan Kreole Products, Inc."
For Polishes, Dressings, and Cleaning Preparations Used on Shoes.
Claims use since November, 1931.

Ser. No. 331,626. SILICA PRODUCTS CORPORATION, New York, N. Y. Filed Oct. 27, 1932.



The words "Silica Products" are disclaimed apart from the other features of the mark shown in the drawing.
For Soap.
Claims use since Sept. 6, 1932.

Ser. No. 331,637. THE J. B. FORD COMPANY, Wyandotte, Mich. Filed Oct. 28, 1932.

Cherokee

For Cleaning Compound with Incidental Water-Softening Properties.
Claims use since Nov. 1, 1929.

Ser. No. 331,847. DAVID M. BELL, doing business as Pineglow Products, New York, N. Y. Filed Nov. 3, 1932.

Pineglow

For Soap and Shaving Cream.
Claims use since April, 1931.

CLASS 5

Adhesives

Ser. No. 332,056. SLOANE-BLABON CORPORATION, Trenton, N. J., and Nicetown, Philadelphia, Pa. Filed Nov. 11, 1932.

S-B

For Linoleum Paste and Linoleum Cement.
Claims use since May 23, 1932.

CLASS 6

Chemicals, Medicines, and Pharmaceutical Preparations

Ser. No. 318,469. HENRY TETLOW COMPANY, Philadelphia, Pa. Filed Aug. 26, 1931.

Swan Down



For Face Powder, Talcum Powder, Skin Lotions, and Astringents.
Claims use since Aug. 1, 1931.

Ser. No. 320,147. AKTIEBOLAGET ASTRA APOTEKARNAS KEMISKA FABRIKER, Sodertalje, Sweden. Filed Oct. 17, 1931.

Mysalvin

For Preparation in Powder Form Containing Iodoacetic Acid.
Claims use since July 28, 1931.

Ser. No. 320,404. MAX FACTOR & CO. INC., Los Angeles, Calif. Filed Oct. 24, 1931.



The color lining shown on the drawing is used for shading purposes only. The word "Hollywood" is disclaimed apart from the mark shown in the drawing.
For Powder Foundation-Cream, Makeup Foundation, a Face Cream Used as a Powder Base, Grease Paints in Tubes, Lining Colors, Colors to Line the Face for Theatrical and Expressive Effects, Liquid Body Make-Up, Face Pow-

ders, Cold Creams, Lip Sticks, Liquid Make-Up Remover, Nose Putty, Moist Rouge, Dry Rouge, Brilliantine Liquid and Paste, Skin Freshener, a Cooling Face Lotion, Blackhead Cream, Shampoo, Perfumes, Deodorants, Hair Tonics, Eau de Cologne, Toilet Water, Bleach Mask, Restorative Cream, a Cream to Remove Crowsfeet and Line Wrinkles, Circulation Cream, a Cream to Stimulate Circulation About the Face, Liquifying Cream, a Quick Melting Face Cream, Body Powder, Cleansing Cream, Lemon Cream, Skin and Tissue Cream, Make-Up Blender, a Lotion in Colors for Arms, Neck, and Shoulders to Make Their Respective Color Harmonize With Color of the Face; Hand Lotion, Lip Pomades, Eye Shadows, a Colored Soft Cream to Shadow the Eyelids, Eyebrow Pencils, Eyelash Make-Up, Mascaro, Astringent, Honeysuckle Cream, a Lotion with Astringent Value, Also Used as a Powder Base.

Claims use since Sept. 5, 1931.

Ser. No. 320,608. SOCIETE WORTH, Paris, France. Filed Oct. 29, 1931.

"JE REVIENS"

For Perfumes.

Claims use since June 30, 1931.

Ser. No. 323,452. GILMAN BROTHERS, INC., Boston, Mass. Filed Jan. 26, 1932.

SHAWMUT BRAND

No claim is made to the exclusive use of the word "Brand" apart from the mark shown.

For Drug Preparations—Namely, Russian Mineral Oil, Tincture of Iodine, Cod Liver Oil, Cream of Tartar, Flaxseed Meal, Sodium Bicarbonate, Whole Flaxseed, Senna Leaves, Oxalic Acid, Licorice Powder, Collodion, Orris Root, Powdered Alum, Epsom Salts, Rochelle Salts, Sulphur, Goldthread, Naphthalene Flakes, Naphthalene Balls, German Chamomile, White Mustard Seed, Powdered Potassium Nitrate and Boric Acid.

Claims use since 1923.

Ser. No. 326,101. MRS. Z. B. HINKLE, doing business as Dixie Laboratories, Atlanta, Ga. Filed Apr. 14, 1932.

DIXIE LABORATORIES

For Toilet Water, Perfumed Shampoo Emulsion, Hair Tonic, Antiseptic Tonic for the Hair and Scalp, Quinine Tonic, Vanishing Cream, Antiseptic Vanishing Cream, Antiseptic Lotion for Use After Shaving, Skin Lotion, Hair Dressing, Preparation for Rectifying the Scalp and Hair, for Treating Dandruff, Eczema, Tetter, and Falling Hair; Lilac Bouquet Talcum Powder, Cocoa Butter Cream, Antiseptic Finishing Cream, Cold Cream, Bay Rum, Witch Hazel Lotion, Hair Oil, Preparation for Treating Affections Of the Skin and Scalp, Such as Salt Rheum, Eczema, Ring Worm, Rashes, Seven Year Itch, Barbers' Itch, and Dandruff; and Mentholated Cream for Sunburn, Chapped Hands, Burns, Heat, Rash, Rough Skin, and for Use After Shaving.

Claims use since Jan. 1, 1914.

Ser. No. 326,132. GEORG DRALLE, Hamburg, Germany. Filed Apr. 15, 1932.



All the wording appearing on the drawing, with the exception of "Georg Dralle" is disclaimed apart from the mark as shown.

For Perfumery.

Claims use since 1920.

Ser. No. 326,133. GEORG DRALLE, Hamburg, Germany. Filed Apr. 15, 1932.



All the wording appearing on the drawing, with the exception of "Dr. Dralle's" and "Georg Dralle" is disclaimed apart from the mark as shown.

For Perfumery.

Claims use since 1917.

Ser. No. 326,134. GEORG DRALLE, Hamburg, Germany. Filed Apr. 15, 1932.

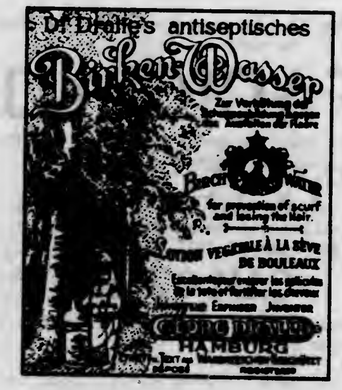


The words "Birken Haarwasser" and "Hamburg" are disclaimed apart from the mark as shown. The portrait appearing on the drawing is fanciful.

For Perfumery.

Claims use since 1906.

Ser. No. 326,135. GEORG DRALLE, Hamburg, Germany. Filed Apr. 15, 1932.



All the wording appearing on the drawing with the exception of "Dr. Dralle's" and "Georg Dralle" is disclaimed apart from the mark as shown.

For Perfumery.

Claims use since 1907.

Ser. No. 328,001. THE DELATONE COMPANY, Chicago, Ill. Filed June 15, 1932.

NUL

For Perspiration Preventatives or Deodorants.

Claims use since June 13, 1922.

Ser. No. 328,670. H. R. NAPP LIMITED, London, England. Filed July 9, 1932.



No claim is made to the geographical matter "3 & 4 Clements Inn, London, W. C.2" appearing on the drawing.

For Pharmaceutical Preparation in Tablet Form, Being Sedative, Soporific, Analgesic, and Hypnotic.

Claims use since Nov. 24, 1927.

Ser. No. 328,846. A. F. PART, INC., New York, N. Y. Filed July 16, 1932.

OMY

For Bath Essence, Bath Oils, Dusting Powder, Etc.

Claims use since 1926.

Ser. No. 328,849. MICHAEL SCHMIDT, INC., New York, N. Y. Filed July 16, 1932.



No claim is made to the exclusive right to use the outline of the label appearing in the drawing.
For Face Powders, Nail Polish, Hair Tonic, Hair and Scalp Ointments, Astringents, Finger Wave Lotions, Hand Lotions, Face Lotions, and Hair Bleach.
Claims use since June 13, 1931.

Ser. No. 329,079. CLAUDE C. COLIE, doing business as American Rubber Products Co., Bloomington, Ill. Filed July 26, 1932.



de Colie
HOLLYWOOD
PREMIER

The surname "Colie" is disclaimed apart from the other features of the mark shown in the drawing.
For Liquid and Dry Powder, Especially Prepared for Use by Morticians.
Claims use since June 1, 1932.

Ser. No. 330,358. HENRY J. SENAY, doing business as The Nedrox Manufacturing Co., West Palm Beach, Fla. Filed Sept. 13, 1932.

"NEDROX"

For Ointments or Salves for Florida Sores, Itch, Poison Ivy, Poison Oak, and Chronic Sores.
Claims use since Dec. 1, 1930.

Ser. No. 330,635. PINE BROS., INC., Philadelphia, Pa. Filed Sept. 24, 1932.

ORADOL

No claim is made to the representation of the prescription symbol.
For Antiseptic Mouth Tablets.
Claims use since Aug. 26, 1932.

Ser. No. 330,712. EVA ROSENKRANTZ, Los Angeles, Calif. Filed Sept. 27, 1932.

SABLE
HAIR
GROWER

No claim being made to the words "Hair Grower" apart from the mark shown.
For Hair Grower.
Claims use since Aug. 23, 1932.

Ser. No. 330,730. STERILE PRODUCTS COMPANY, INC., San Diego, Calif. Filed Sept. 26, 1932.

STERASEPTIC

For Tablets to be Dissolved in Water for Making a Solution to be Used as a Mouth Wash and Gargle.
Claims use since Jan. 18, 1932.

Ser. No. 330,775. BINNEY & SMITH CO., New York, N. Y. Filed Sept. 29, 1932.

TACKAID

For Plasticizer for Use in Connection with Rubber.
Claims use since November, 1931.

Ser. No. 331,311. MCCLELLAND'S OINTMENT CO., Butler, N. J. Filed Oct. 17, 1932.

CAM-O-LAR

For Ointment for the Treatment of Varicose Veins.
Claims use since Sept. 30, 1932.

Ser. No. 331,352. WELLS & RICHARDSON COMPANY, INC., Burlington, Vt. Filed Oct. 18, 1932.

WELLSRICH

For Preparation for Coloring Butter.
Claims use since Aug. 18, 1932.

Ser. No. 331,384. MAX SCHWALB, Jackson Heights, N. Y. Filed Oct. 19, 1932.



No claim is made to the word "Antiseptic" apart from the mark shown on the drawing.
For Powder Preparation for Oral Therapy.
Claims use since April, 1931.

Ser. No. 331,404. HOLLYWOOD-MARVEL PRODUCTS COMPANY, Hollywood, Calif. Filed Oct. 20, 1932.

SONG OF THE FLOWERS

For Perfumes.
Claims use since Apr. 14, 1932.

Ser. No. 331,441. REED & CARNRICK, Jersey City, N. J. Filed Oct. 21, 1932.

ENTACARB

For Alkaline Tablets for Use in Correcting Acid Conditions of the Stomach.
Claims use since Oct. 4, 1932.

Ser. No. 331,468. KERATEZE, INC., East Orange, N. J. Filed Oct. 22, 1932.

Kerateze

For Foot Medications Such as Lotions, Creams, and Deodorants.
Claims use since July 25, 1932.

Ser. No. 331,476. IRENE ROSS, doing business as Rosdex Health Products, Philadelphia, Pa. Filed Oct. 22, 1932.

ROSDEX

For Laxatives.
Claims use since June 16, 1932.

Ser. No. 331,560. ORIZA L. LEGRAND, INC., Wilmington, Del., and New York, N. Y. Filed Oct. 25, 1932.



For Perfumes and Toilet Water.
Claims use since Aug. 10, 1932.

Ser. No. 331,577. GENERAL DYESTUFF CORPORATION, New York, N. Y. Filed Oct. 26, 1932.

CORIAL

For Coal-Tar Dyes.
Claims use since July 19, 1912.

Ser. No. 331,578. GUY T. GIBSON, INC., New York, N. Y. Filed Oct. 26, 1932.

SACHETOIR

For Perfumes and Sachets.
Claims use since Oct. 19, 1932.

Ser. No. 331,614. THE GUARDITE CORPORATION, Chicago, Ill. Filed Oct. 27, 1932.

GUARDITE

For Gaseous Fumigating Material Particularly Adapted for Fumigating and Curing Tobacco, Food Stuffs, and Other Articles and Materials in Confined Spaces.
Claims use since July 1, 1930.

Ser. No. 331,639. EDWARD J. GAUNDER, doing business as Excello Products Co., Buffalo, N. Y. Filed Oct. 28, 1932.

EXCELLO

For Deodorant, Germicide, and Antiseptic Preparation with Incidental Cleaning Properties.
Claims use since July 1, 1928.

Ser. No. 331,641. HERZ LABORATORIES, INCORPORATED, New York, N. Y. Filed Oct. 28, 1932.

ALBASTAN

For Depilatory.
Claims use since Oct. 24, 1932.

Ser. No. 331,672. DERMITONE MANUFACTURING CO., INC., New York, N. Y. Filed Oct. 29, 1932.

Dander-Tone

For Tonic and an Ointment for the Skin and Scalp.
Claims use since Sept. 1, 1932.

Ser. No. 331,674. THE FIRESTONE TIRE & RUBBER COMPANY, Akron, Ohio. Filed Oct. 29, 1932.

Firestone

For Rubber Solvent.
Claims use since Oct. 29, 1926.

Ser. No. 331,848. BROMO-PEP, INCORPORATED, St. Louis, Mo. Filed Nov. 3, 1932.

BROMO-PEP

It's great to take!

No claim is made to the words "Its Great to Take" and "Bromo" apart from the mark as shown.
For Medicine in Powder Form Used as a Treatment for Headaches, Stomach Disorders, Sea Sickness.
Claims use since August, 1931.

CLASS 7

Cordage

Ser. No. 332,174. BROWN COMPANY, Portland, Me., and Berlin, N. H. Filed Nov. 16, 1932.

MYSTRO

For Twines.
Claims use since July 11, 1931.

Ser. No. 332,186. FREYDBERG BROTHERS, INCORPORATED, New York, N. Y. Filed Nov. 16, 1932.

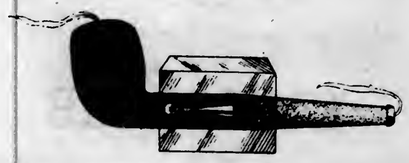
EXCELLO

For Ribbon Composed of Cellulose Composition Material for Tying Packages and Other Uses.
Claims use since Oct. 20, 1932.

CLASS 8

Smokers' Articles, Not Including Tobacco Products

Ser. No. 331,257. KAUFMANN BROS. & BONDY, INC., West New York, N. J. Filed Oct. 14, 1932.



Applicant disclaims the representation of a pipe apart from the mark as shown in the drawing. The trade-mark consists of a pipe having a portion of the stem imbedded in a cube of ice.
For Pipes.
Claims use since Sept. 6, 1932.

CLASS 10

Fertilizers

Ser. No. 331,628. SILICA PRODUCTS CORPORATION, New York, N. Y. Filed Oct. 27, 1932.

SILICA PRODUCTS

The words "Silica" and "Products" are disclaimed apart from the other features of the mark shown in the drawing.
For Fertilizer.
Claims use since Sept. 6, 1932.

Ser. No. 331,991. JOHN A. MILLER, doing business as Meadow Brook Farms, Palmer Township and Nazareth, Pa. Filed Nov. 8, 1932.

FERTILAWN

For Ground Dehydrated Manure.
Claims use since Oct. 1, 1932.

CLASS 13

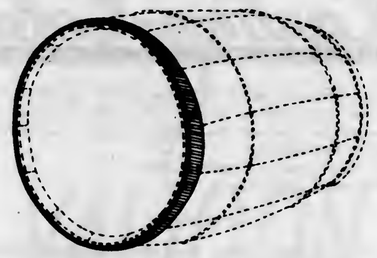
Hardware and Plumbing and Steam-Fitting Supplies

Ser. No. 327,074. THE UNION METAL MANUFACTURING COMPANY, Canton, Ohio. Filed May 13, 1932.

MONOTUBE

For Rolled or Pressed, Straight or Tapered, Plain or Fluted, Metal Pipes, Tubes, and Poles.
Claims use since Apr. 11, 1931.

Ser. No. 328,550. THE COLORADO FUEL AND IRON COMPANY, Denver, Colo. Filed July 5, 1932.



The trade-mark consists in a band of blue color around the containers, to which it is applied by painting. The drawing is lined for blue.
For Staples, Including Fence Staples, Poultry Netting Staples, Copper Vine Staples, Double Pointed Tacks, Tacks, Lath Nails, Shingle Nails, Brads, Plaster Board Nails, Smooth Box Nails, and Barbed Roofing Nails.
Claims use since Mar. 1, 1926.

Ser. No. 331,635. COLUMBIAN ROPE COMPANY, Auburn, N. Y. Filed Oct. 28, 1932.

COROCO

For Tire Chains.
Claims use since Sept. 21, 1932.

Ser. No. 331,724. CONTINENTAL STEEL CORPORATION, Kokomo and Indianapolis, Ind., and Canton, Ohio. Filed Oct. 31, 1932.

Flame Sealed

For Barbed Wire and Wire Fence.
Claims use since Oct. 27, 1932.

Ser. No. 331,744. JOSEPH A. KAPLAN, INC., New York, N. Y. Filed Oct. 31, 1932.

mba
MODERN BATHROOM ACCESSORIES

The exclusive right to the use of the words "Modern Bathroom Accessories" is disclaimed apart from their use in connection with the mark as shown.
For Bath Shower Curtains.
Claims use since January, 1928.

Ser. No. 331,987. THE WM. D. GIBSON COMPANY, Chicago, Ill. Filed Nov. 8, 1932.



For Coil Springs.
Claims use since Aug. 15, 1932.

Ser. No. 331,988. THE WM. D. GIBSON COMPANY, Chicago, Ill. Filed Nov. 8, 1932.



For Coil Springs.
Claims use since Aug. 15, 1932.

Ser. No. 332,013. STANDARD PRESSED STEEL CO., Jenkintown, Pa. Filed Nov. 9, 1932.

UNBRAKO

For Hollow Set Screws, Socket Head Cap Screws, Square Head Set Screws, Socket Head Shoulder Screws, Stripper Bolts, and Pipe Plugs.
Claims use since June 1, 1920.

Ser. No. 332,154. KOHLER CO., Kohler, Wis. Filed Nov. 15, 1932.

AVERTOR

For Bath Tub Hangers.
Claims use since Aug. 22, 1932.

CLASS 14

Metals and Metal Castings and Forgings

Ser. No. 330,892. THE FORGING AND CASTING CORPORATION, Ferndale, Mich. Filed Oct. 3, 1932.

FERNITE

For Alloy Steel Castings, Smooth Hammered Forgings, and Electrically Welded Composite—Being Steel Consisting of Low Carbon Steel and Tool Steel Electrically Welded Together.
Claims use since Mar. 15, 1931.

Ser. No. 330,893. THE FORGING AND CASTING CORPORATION, Ferndale, Mich. Filed Oct. 3, 1932.



For Alloy Steel Castings, Smooth Hammered Forgings, and Electrically Welded Composite—Being Steel Consisting of Low Carbon Steel and Tool Steel Electrically Welded Together.
Claims use since Mar. 15, 1931.

Ser. No. 330,894. THE FORGING AND CASTING CORPORATION, Ferndale, Mich. Filed Oct. 3, 1932.

FCC

For Alloy Steel Castings, Smooth Hammered Forgings, and Electrically Welded Composite—Being Steel Consisting of Low Carbon Steel and Tool Steel Electrically Welded Together.
Claims use since Oct. 3, 1929.

CLASS 15

Oils and Greases

Ser. No. 326,401. TECHNICAL EQUIPMENT CORPORATION, New York, N. Y. Filed Apr. 22, 1932.

LUBRIFLUX

For Lubricants Used in Wire-Drawing.
Claims use since Apr. 7, 1932.

Ser. No. 330,172. C. MARTIN HINGLE, Chicago, Ill. Filed Sept. 7, 1932.

Carbon-Cola

The drawing is lined to indicate that the words "Carbon-Cola" are printed in red. No claim is made herein to the words "Carbon" and "Motor" apart from the mark shown in the drawing.
For Top Cylinder Lubrication Oil.
Claims use since July 1, 1932.

Ser. No. 330,843. THE ATLANTIC REFINING COMPANY, Philadelphia, Pa. Filed Oct. 1, 1932.



The words "Paraffine Base Motor Oil" and the word "Crude" are disclaimed apart from the mark shown in the drawing. The lining on the drawing does not designate color but is used to indicate that the heart symbol is of a different shade than the word features of the mark.
For Lubricating Oils.
Claims use since Sept. 9, 1932.

Ser. No. 331,006. SAMUEL RADBILL, doing business as Columbia Petroleum Products Company, Philadelphia, Pa. Filed Oct. 6, 1932.

Royal Windsor
"THE KING OF MOTOR OILS"
100%
PURE
PARAFFINE BASE
MOTOR
OIL

Registration of the words "Motor Oils 100% Pure Paraffine Base Motor Oil" is not claimed apart from the mark shown.
For Lubricating Oils.
Claims use since July 5, 1932.

Ser. No. 331,041. JAMES F. CONRAN, St. Louis, Mo. Filed Oct. 7, 1932.



For Lubricating Oil.
Claims use since Oct. 1, 1932.

Ser. No. 331,485. ILLINOIS FARM SUPPLY COMPANY, Chicago, Ill. Filed Oct. 22, 1932.

PENN BOND

The word "Penn" is disclaimed apart from the other features of the mark shown in the drawing.
For Lubricating Oils.
Claims use since Oct. 3, 1929.

Ser. No. 331,995. SHELL OIL COMPANY, San Francisco, Calif. Filed Nov. 8, 1932.



For Gasoline and Lubricating Oils.
Claims use since Oct. 13, 1932.

Ser. No. 332,310. THE RIDGE TOOL COMPANY, Elyria, Ohio. Filed Nov. 19, 1932.

RIDGID OIL

For Thread Cutting Oil.
Claims use since Oct. 1, 1932.

CLASS 16

Paints and Painters' Materials

Ser. No. 329,920. BECK, KOLLER & COMPANY, INC., Detroit, Mich. Filed Aug. 29, 1932.



The words "World-Wide Distribution" are disclaimed apart from the mark as shown in the drawing.
For Dry, Paste, and Ready Mixed Paints, Varnishes, Lacquers, Oil Soluble Plastic Resins, and Solutions Thereof in Oils and Mineral Spirits Used as Painters' Materials.
Claims use since Oct. 3, 1931

Ser. No. 329,924. BECK, KOLLER & COMPANY, INC., Detroit, Mich. Filed Aug. 29, 1932.

BECKOSOL

For Dry, Paste, and Ready Mixed Paints, Varnishes, Lacquers, Oil Soluble Plastic Resins and Solutions Thereof in Oils, and Mineral Spirits Used as Painters' Materials.
Claims use since Sept. 16, 1931.

Ser. No. 329,927. BECK, KOLLER & COMPANY, INC., Detroit, Mich. Filed Aug. 29, 1932.

KOPOL

For Soluble Plastic Resins Used as Painters' Materials.
Claims use since Feb. 19, 1929.

Ser. No. 329,930. BECK, KOLLER & COMPANY, INC., Detroit, Mich. Filed Aug. 29, 1932.

SYNTHE-COPAL

The word "Copal" is disclaimed apart from the mark as shown.
For Soluble Ester Gums and Soluble Plastic Resins Employed as Painters' Materials.
Claims use since Mar. 16, 1914.

Ser. No. 330,629. THE R. F. JOHNSTON PAINT COMPANY, Cincinnati, Ohio. Filed Sept. 24, 1932.

VI-VA

For Varnishes, Ready Mixed Paints, Paint Enamels, Gold and Aluminum Enamel, Stains, Lacquers, and Wood Fillers.
Claims use since Aug. 16, 1932.

Ser. No. 331,320. PRATT & LAMBERT-INC., Buffalo, N. Y. Filed Oct. 17, 1932.

VITRALEX

For Varnishes, Paint Enamels, Lacquers, Calcimine, Prepared Shellac; Acid, Bensol, Oil, and Water Stains; Liquid and Paste Varnish Fillers; Paste Wood Fillers; Japan and Oil Dryers; Dry, Liquid, and Paste Paints; Aluminum and Other Metallic Paints, Liquid and Prepared Wax for Polishing Purposes; Coatings and Under-Coatings for Cement and Plaster in the Nature of Paints and Paint Products; Oil Base and Lacquer Base Primers and Surfacers in the Nature of Paint and Paint Products, Glazing and Knifing Putties, Paint and Varnish Removers.
Claims use since Oct. 12, 1932.

Ser. No. 331,424. HERBERT J. BROWNE, doing business as Permagloss Manufacturing Company, Atlanta, Ga. Filed Oct. 21, 1932.

Permagloss

Stays Bright

The words "Stays Bright" are disclaimed apart from the mark as shown on the drawing.
For Cleaning and Polishing Preparation.
Claims use since June 1, 1931.

Ser. No. 331,630. SILICA PRODUCTS CORPORATION, New York, N. Y. Filed Oct. 27, 1932.

SILICA PRODUCTS

The word "Silica" and the word "Products" are both disclaimed apart from the other features of the mark shown in the drawing.
For Varnishes and Dry, Paste, and Ready Mixed Paints.
Claims use since Sept. 6, 1932.

Ser. No. 331,658. F. O. PIERCE COMPANY, Brooklyn, N. Y. Filed Oct. 26, 1932.

PIERESCO

For Flat Paints, Wall Paints, Gloss Paints, Enamel Paints, Waterproof Varnish, and Painters' Wall Size.
Claims use since May 12, 1911.

Ser. No. 331,761. TALENS & SON, INC., Irvington, N. J. Filed Oct. 31, 1932.

Rembrandt

For Retouching Varnish, Picture Varnish, and Painting Medium to be Mixed with Paints.
Claims use since July 1, 1930.

Ser. No. 331,850. GEORGE H. CALLAGHAN, New York, N. Y. Filed Nov. 3, 1932.

Once Over

For Cleaners and Polishers for Motor Cars, Furniture, Woodwork, and the Like.
Claims use since Aug. 15, 1932.

Ser. No. 331,953. GAY-DAY CORPORATION, Chicago, Ill. Filed Nov. 7, 1932.

PAI-NAMEL

No claim is made to the word "Namel" apart from the mark as shown on the drawing.
For Enamel-Like Product or Substance for Finishing Walls, Woodwork, Ceilings, Floors, and Interior Work in General.
Claims use since Oct. 3, 1932.

Ser. No. 332,185. HAL B. FLETCHER, San Francisco, Calif. Filed Nov. 16, 1932.

HAMMELITE

For Rust Preventive and Metal Protective Paints.
Claims use since Apr. 1, 1932.

CLASS 19

Vehicles, Not Including Engines

Ser. No. 330,785. FEDERAL MALLEABLE COMPANY, West Allis, Wis. Filed Sept. 29, 1932.

DRUMETAL

For Finished Castings for Use as Brake Drums for Motor and Other Self-Propelling Vehicles.
Claims use since Sept. 9, 1932.

Ser. No. 331,128. SPONGE-AIRE SEAT COMPANY, INC., Buffalo, N. Y. Filed Oct. 10, 1932.

SPONGE-AIRE

For Seat Cushions of Motor Vehicles.
Claims use since Dec. 1, 1931.

Ser. No. 331,742. INDIAN MOTOCYCLE COMPANY, Springfield, Mass. Filed Oct. 31, 1932.

MOTOPLANE

For Motor Vehicles Particularly Motorcycles and Bicycles.
Claims use since Oct. 24, 1932.

Ser. No. 332,228. H. H. FRANKLIN MANUFACTURING COMPANY, Syracuse, N. Y. Filed Nov. 17, 1932.

Olympic

For Automobiles and Structural Parts Thereof.
Claims use since Oct. 7, 1932.

CLASS 21

Electrical Apparatus, Machines, and Supplies

Ser. No. 320,876. SIEMENS-SCHUCKERTWERKE AKTIENGESELLSCHAFT, Berlin-Siemensstadt, Germany. Filed Nov. 6, 1931.

SIEMENS

For Electrical Machines—Namely, Dynamos, Motors, Transformers, and Accessories Comprising Starters, Choke Coils, Rectifiers, and Resistances; Electrotechnical Instruments and Appliances—Namely, Apparatus for Wire and Wireless Telegraphy and Telephony Comprising Telephone Central Stations and Arrangements for Automatic, Semi-automatic, and Hand Operation, Wall and Table Stations for Central Battery Operation, Wall and Table Stations for Call by Inductors, Line Selectors for Single and Double Lines, Central Change-Over Switches with Lamp Calls and Clearing Indicators, Central Change-Over Switches with Drop Relay Calls and Clearing Indicators, Telephones for Selective Individual Calls, Portable Telephones, Waterproof Telephones, Telephones with Protection Against High Voltages, Loud-Speaking Telephones, Morse Telegraph Apparatus, High-Speed Morse Telegraph Apparatus, Hughes Telegraph Apparatus, Type-Printing Telegraph Apparatus, Distant Printers, Stock Tickers, High-Speed Telegraph Apparatus, Keyboard High-Speed Telegraph Apparatus, Pendulum Telegraph Apparatus, Rotating-Coil High-Speed Telegraph, Telegraph Central Change-Over Switches, Telephone Central Change-Over Switches, Radio Appliances Comprising Receiving Sets and Plants, Assembled Amplifying Units for High and Low Frequency Currents, Loud-Speakers, Head Telephones, Detector Tubes and Crystal Detectors, Coils, and Condensers; Electric Insulating Material—Namely, Glazed Cardboard, Mica, Resins, and Rubber, Including Caoutchouc and Gutta-Percha and Rubber Substitutes; Ignition Systems for Internal-Combustion Engines and Parts Thereof, Comprising Magnetos; Electrical

Safety Installations Particularly for Railroads and Mines—Namely, Lightning Arresters, Police and Fire Alarm Systems, and Long-Distance Indicator Systems Comprising Acoustic Indicators; Insulating, Conductor, and Installation Material for Outdoor and Subterranean Conductors—Namely, Cables, Pupin Coils, Conductor Tubes, Tubular Conductors, Conductors Surrounded by Spun Fabric and Impregnated with Insulating Material, Contacts, Fuses, Switches, Bells, Distributing and Switch Panels of Insulating Material, Counting Panels, Insulators, Brush Contacts, Push Contacts, Microphone Carbons, Electrodes for Electrolytic Purposes, Battery Elements, Storage Batteries, and Metal Masts for Carrying and Tensioning Conductors; Electric-Lighting Devices—Namely, Incandescent Lamps, Arc Lamps, Arc-Lamp Electrodes, Searchlights, Electric Flares; Systems for Lighting Air, Land, and Waterways; Apparatus and Devices in Connection with Said Systems—Namely, Lighted Buoys, Beacon Lights, Glimmering-Light Installations, and Flood-Light Installations; and Electric Installations for Theatres Comprising Stage Reflectors, Stage Regulators, and Stage-Setting Devices; Electric Heating Devices—Namely, Space-Heating Elements Consisting of Radiant Heaters and Heating Ovens, Steam Boilers, Heating Plates, Cooking Plates, Soldering Irons, Water Heaters, Flatirons, Singeing Devices, Burning Devices, Embossing Devices, Devices for Liquefying Metals, Fats, and Impregnating Materials, Gluing Ovens, Hardening Ovens, Melting Ovens, Lacquering Ovens, Rotating Tube Ovens, and Electrodes for the Ovens; Electric Cooking Devices—Namely, Cooking Vessels and Ovens for the Conservation of Fodder; Electric Drying Devices—Namely, Hot-Air Blowers and Drying Ovens; Electrical Apparatus for Separating Impurities and Foreign Substances from Gases and Liquids—Namely, Electrofilters; Electrical Ignition Devices and Parts Thereof Comprising Magnets; Electrical Motors for Operating Agricultural Machines, Tool Machines, and Mining Machines; and Electrically Operated Domestic Machines and Apparatus—Namely, Machines for Removing Dust from Carpets and Furniture, Lawn Mowers, Watering Apparatus (for Fields, Gardens, Lawns, Etc.), Knife-Polishing Machines, Vegetable Cutting and Paring Machines, Rinsing Machines (for Dishes and the Like), Potato-Paring Machines, Meat-Grinding Machines, and Floor Scraping and Waxing Machines.

Claims use since Mar. 4, 1931.

Ser. No. 329,766. WALTER C. BRAUN, doing business as The Barawik Company, Chicago, Ill. Filed Aug. 23, 1932.

Barawik

For Radio Receiving Sets.
Claims use since 1923.

Ser. No. 330,215. THE VICBRIDGE LAMP COMPANY, Chicago, Ill. Filed Sept. 9, 1932.

VICBRIDGE

For Electric Lighting Units for Table, Floor, Wall, and Ceiling, and Wiring Fixtures Therefor.
Claims use since Aug. 23, 1932.

Ser. No. 330,367. THE A. C. GILBERT COMPANY, New Haven, Conn. Filed Sept. 15, 1932.

GILBERT

Applicant is owner of prior registration No. 137,237, covering the same mark.

For Electric Fans, Electric Beverage Mixers, Electric Motors, Electric Switches, Rheostats, Electric Transformers, Electric Batteries, Electric Lamps, Electric Liquid and Plastic Food Mixers, Electric Space Heaters, Electric Ventilating Fans, Electric Vacuum Cleaners, Electric Juice Extractors, and Electric Drills.
Claims use since July 1, 1913.

Ser. No. 330,401. SAMUEL FORESTEK, doing business as The Forestek Plating & Manufacturing Company, Cleveland, Ohio. Filed Sept. 16, 1932.

Fortek

For Electric Grills and Toasters.
Claims use since Sept. 13, 1932.

Ser. No. 331,192. FOREST R. PALMER, doing business as Palmer Electric Mfg. Co., Toledo, Ohio. Filed Oct. 12, 1932.

DU-WA

For Inductance Devices for Use in Place of or in Connection with Aerials and Sound Receiving and Transmitting Electrical Devices Especially for Radio Sets.
Claims use since April, 1932.

Ser. No. 331,241. ATLAS SUPPLY COMPANY, Newark, N. J. Filed Oct. 14, 1932.

ATLAS

For Vacuum Tubes for Use in Radio Apparatus.
Claims use since Sept. 3, 1932.

Ser. No. 331,587. S. H. KRESS & CO., New York, N. Y. Filed Oct. 26, 1932.



For Dry Cell Batteries.
Claims use since July 30, 1930.

Ser. No. 331,712. UNITED SCIENTIFIC LABORATORIES, INC., New York, N. Y. Filed Oct. 29, 1932.

MOTORTONE

For Radio Receiving Sets.
Claims use since Sept. 27, 1932.

Ser. No. 331,749. CLAUDE NEON ELECTRICAL PRODUCTS CORPORATION, LTD., Los Angeles, Calif. Filed Oct. 31, 1932.

LUMENARC

For Gaseous Discharge Tubular Lamps.
Claims use since Oct. 18, 1932.

Ser. No. 332,019. ANACONDA WIRE & CABLE COMPANY, New York, N. Y. Filed Nov. 10, 1932.



No claim is made herein to the word "Coils" apart from the mark shown.
For Electrical Coils.
Claims use since Oct. 7, 1932.

Ser. No. 332,020. ANACONDA WIRE & CABLE COMPANY, New York, N. Y. Filed Nov. 10, 1932.



For Electrical Coils.
Claims use since Oct. 1, 1932.

CLASS 22

Games, Toys, and Sporting Goods

Ser. No. 283,550. THE CHAD VALLEY CO. LTD., Birmingham, England. Filed May 6, 1929.

CHAD VALLEY

For Dolls, Doll Clothes, Doll Houses and Furpiture; Constructional, Cardboard, Inflatable, Mechanical, and Building Block Toys; Toy Bricks, Birds, and Animals; Composition, Wooden, Wheeled, and Metal Toys; Toy Musical Instruments; Educational and Conjuring Toys, Puzzles, Toy Books, Toy Guns, Toy Cannon, Toy Catapults, Christmas Tree Decorations, Toy Crackers and Bon Bons, Skipping Ropes, Hoops, Play Balls, and Toy Theatres; Board, Chart, Floor, and Table Indoor and Outdoor Games Played with Pieces; Toy Figures, Card Games, Dice and Throwing Cups, Markers, Counters, Blowing Tubes; Flickers, Darts, Rings, Pegs, Spinners for Games; Skittles, Targets, Toy Fans, Bellows, Sticks, Nets, Bowls; Toy Artificial Bait and Fish and Fishing Lines; Balls, Bats, Rackets, Mallets, and Cues for Baseball, Cricket, Tennis, Billiards, Bagatelle, and Croquet.
Claims use since January, 1898.

Ser. No. 330,506. THE CRAWFORD, MCGREGOR AND CANBY COMPANY, Dayton, Ohio. Filed Sept. 19, 1932.

Stan-By

For Golf Clubs.
Claims use since on or about Jan. 1, 1932.

Ser. No. 331,681. HEALTH DEVELOPING APPARATUS CO., INC., New York, N. Y. Filed Oct. 29, 1932.

HEDCO

For Rowing Machines and Tableboard Games Played with Balls.
Claims use since Aug. 10, 1932.

Ser. No. 331,870. PHILIP W. PATTERSON, New York, N. Y. Filed Nov. 3, 1932.

GOLF BILLY

For Portable Marble Shooting Prize Game Apparatus.
Claims use since Sept. 29, 1932.

Ser. No. 331,914. JOSEPH A. BEAUDOIN, San Francisco, Calif. Filed Nov. 5, 1932.

WIST AUTOMATIC

For Table Board Game Played with Pieces.
Claims use since Feb. 1, 1922.

Ser. No. 332,305. DEWEY LONGWORTH, Oakland, Calif. Filed Nov. 19, 1932.

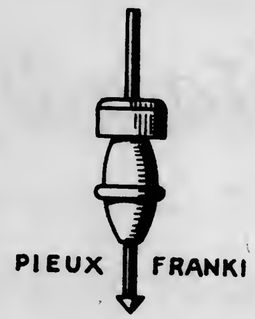
CUP CUDDLER

For Golf Clubs.
Claims use since Oct. 20, 1931.

CLASS 23

Cutlery, Machinery, and Tools, and Parts Thereof

Ser. No. 320,230. COMPAGNIE INTERNATIONALE DES PIEUX ARMÉS FRANKIGNOUL, S. A., Liege, Belgium. Filed Oct. 20, 1931.



The word "Pieux" is hereby disclaimed aside from its use in connection with the mark as illustrated.

For Machines for the Manufacture of Concrete, Such as Steam Rollers, Crushers, Transporters, Compressors, Mechanical Pile Drivers, Screw Pump Compressors, Filtrating Apparatus, Excavators; and Mechanical, Pneumatic, and Hydraulic Apparatus for Drilling and Forcing in Piles and Pile Planks; and Mechanical, Pneumatic, and Hydraulic Apparatus for the Digging of Galleries and Tunnels.
Claims use since May, 1911.

Ser. No. 330,777. THE BRISTOL AEROPLANE COMPANY LIMITED, Bristol, England. Filed Sept. 29, 1932.

TAURUS

For Aircraft Engines.
Claims use since February, 1932.

Ser. No. 331,696. OTIS ELEVATOR COMPANY, Jersey City, N. J., and New York, N. Y. Filed Oct. 29, 1932. Under section 5b of the act of 1905 as amended in 1920.

OTIS

Applicant claims ownership of Certificate Number 204,849, registered Oct. 27, 1925, under the 10-year proviso of Sec. 5b, act of Feb. 20, 1905. Applicant claims also Certificates Numbered 107,869, issued Nov. 28, 1915; 169,693, issued June 26, 1923; 214,019, issued June 8, 1926; 219,894, issued Oct. 26, 1926; 232,006, issued Aug. 30, 1927.
For Dumb Waiters and Guide Rail Lubricators.
Claims use since Jan. 15, 1927.

Ser. No. 331,699. OTIS ELEVATOR COMPANY, Jersey City, N. J., and New York, N. Y. Filed Oct. 29, 1932.



For Dumb Waiters and Guide Rail Lubricators.
Claims use since Jan. 15, 1927.

Ser. No. 331,750. JOHN E. OLEN, Minneapolis, Minn. Filed Oct. 31, 1932.

Bull

For Expansion Rings for Expanding the Walls of Engine Pistons.
Claims use since July 1, 1931.

Ser. No. 331,868. MCCROBY STORES CORPORATION, New York, N. Y. Filed Nov. 3, 1932.

ALADDIN

For Razor Blades.
Claims use since Sept. 20, 1932.

Ser. No. 331,927. GOLDBLATT BROS., INC., Chicago, Ill. Filed Nov. 5, 1932.

Goldblatt's Bond

For Razor Blades.
Claims use since Oct. 15, 1931.

Ser. No. 331,949. DELTA MANUFACTURING COMPANY, doing business as Delta Specialty Company, Milwaukee, Wis. Filed Nov. 7, 1932.

TRIPLE DUTY

For Lathes and Drill Presses.
Claims use since Nov. 8, 1932.

Ser. No. 332,164. MAX STEIN, doing business as Economic Blade Co., New York, N. Y. Filed Nov. 15, 1932.

AKONOMO

For Razor Blades.
Claims use since Oct. 20, 1932.

CLASS 26

Measuring and Scientific Appliances

Ser. No. 320,736. THE C. F. PEASE COMPANY, Chicago, Ill. Filed Nov. 2, 1931.

Kyano

For Machines for Making Blue Prints and Blue Line Prints and Attachments for Such Machines for Applying a Developing Solution to the Prints.
Claims use since Apr. 15, 1931.

Ser. No. 331,177. S. J. CROPLEY, Aurora, Ill. Filed Oct. 12, 1932.

TESTSCOPE

For Scientific Testing Instruments and Combinations Thereof for Testing Normal or Sub-Normal Conditions in All Types of Internal Combustion Engines, and Parts or Attachments Thereof or as May be Added Thereto.
Claims use since Jan. 15, 1932.

Ser. No. 332,084. EASTMAN KODAK COMPANY, Rochester, N. Y. Filed Nov. 10, 1932.

616

For Photographic Film.
Claims use since Dec. 1, 1931.

Ser. No. 332,035. EASTMAN KODAK COMPANY, Rochester, N. Y. Filed Nov. 10, 1932.

SIX-16

For Photographic Cameras.
Claims use since Nov. 20, 1931.

Ser. No. 332,036. EASTMAN KODAK COMPANY, Rochester, N. Y. Filed Nov. 10, 1932.

620

For Photographic Film.
Claims use since Feb. 17, 1931.

Ser. No. 332,037. EASTMAN KODAK COMPANY, Rochester, N. Y. Filed Nov. 10, 1932.

SIX-20

For Photographic Cameras.
Claims use since Jan. 7, 1931.

Ser. No. 332,142. A. W. FABER, INC., Newark, N. J. Filed Nov. 15, 1932.

A.W.F.

For Rulers, Calculating Rules, Squares, Triangles, and T-Squares.
Claims use since January, 1919.

Ser. No. 332,143. A. W. FABER, INC., Newark, N. J. Filed Nov. 15, 1932.

A. W. FABER, "CASTELL"

For Rulers, Calculating Rules, Squares, Triangles, and T-Squares.
Claims use since January, 1919.

Ser. No. 332,165. TAYLOR, TAYLOR & HOBSON, LIMITED, Leicester, England. Filed Nov. 15, 1932.

APERFUL

For Cinematographic Projection Lenses.
Claims use since Feb. 5, 1931.

Ser. No. 332,166. TAYLOR, TAYLOR & HOBSON, LIMITED, Leicester, England. Filed Nov. 15, 1932.

APERMAX

For Cinematographic Projection Lenses.
Claims use since Feb. 9, 1931.

CLASS 27

Horological Instruments

Ser. No. 326,582. THE ELECTRIC AUTO-LITE COMPANY, Toledo, Ohio. Filed Apr. 28, 1932.

REDBREAST
ALARM

The word "Alarm" is disclaimed apart from the mark shown in the drawing for purpose of registration only.
For Time Indicating and Registering Apparatus—Namely, Clocks, Watches, Chronometers, Mechanisms Responsive to Electric Current for Driving the Same, and Parts Thereof.
Claims use since Mar. 23, 1932.

Ser. No. 329,563. SEARS, ROEBUCK AND CO., Chicago, Ill. Filed Aug. 15, 1932.

SIGNET

For Watches.
Claims use since July 8, 1932.

CLASS 28

Jewelry and Precious-Metal Ware

Ser. No. 330,787. GEORG JENSEN & WENDEL A/S, Copenhagen, Denmark. Filed Sept. 29, 1932.

GJ

For Bracelets, Brooches, and Other Jewelry for Personal Wear, Not Including Watches, Trays, Teapots, Coffeepots, Dishes, Plates, Vases, Jars, Pitchers, Sugarbasins, Creamjugs, Waterjugs, Bowls, Cups, Center Ornaments for Tables, Spoons, Knives, Forks, Cigarette-Cases, Cigar-Cases, Signets or Seals, Jugs and Mugs, Tableware, Toilet-ware and Ornamental Ware, All Made of or Plated with Silver, Gold, Platinum, and Other Precious Metals.
Claims use since Sept. 1, 1932.

CLASS 30

Crockery, Earthenware, and Porcelain

Ser. No. 329,020. STEPHEN LEEMAN PRODUCTS CORPORATION, New York, N. Y. Filed July 23, 1932.

&pi-CURIO

The word "Curio" is disclaimed apart from the mark as shown.
For Pottery Bowls, Jars, and Vases.
Claims use since May 20, 1932.

CLASS 31

Filters and Refrigerators

Ser. No. 331,931. SERVEL, INC., New York, N. Y. Filed Nov. 5, 1932.

BARONESS

For Refrigerators, and Refrigerating Apparatus, Not Including Air Conditioning and Ventilating Systems.
Claims use since January, 1931.

Ser. No. 331,932. SERVEL, INC., New York, N. Y. Filed Nov. 5, 1932.

COUNTESS

For Refrigerators, and Refrigerating Apparatus, Not Including Air Conditioning and Ventilating Systems.
Claims use since January, 1931.

Ser. No. 331,933. SERVEL, INC., New York, N. Y. Filed Nov. 5, 1932.

DUCHESS

For Refrigerators and Refrigerating Apparatus, Not Including Air Conditioning and Ventilating Systems.
Claims use since January, 1931.

Ser. No. 331,934. SERVEL, INC., New York, N. Y. Filed Nov. 5, 1932.

EMPRESS

For Refrigerators and Refrigerating Apparatus, Not Including Air Conditioning and Ventilating Systems.
Claims use since January, 1931.

Ser. No. 331,935. SERVEL, INC., New York, N. Y. Filed Nov. 5, 1932.

MARCHIONESS

For Refrigerators and Refrigerating Apparatus, Not Including Air Conditioning and Ventilating Systems.
Claims use since January, 1931.

Ser. No. 331,936. SERVEL, INC., New York, N. Y. Filed Nov. 5, 1932.

PRINCESS

For Refrigerators and Refrigerating Apparatus, Not Including Air Conditioning and Ventilating Systems.
Claims use since January, 1931.

Ser. No. 331,937. SERVEL, INC., New York, N. Y. Filed Nov. 5, 1932.

VISCOUNTESS

For Refrigerators and Refrigerating Apparatus, Not Including Air Conditioning and Ventilating Systems.
Claims use since January, 1931.

CLASS 32

Furniture and Upholstery

Ser. No. 329,770. EHLENBECK & PLATTE, Wuppertal-Vohwinkel, Germany. Filed Aug. 23, 1932.

Epeda

For Beds, Mattresses, Pillows, Upholstered Furniture, and Upholstered Seats and Backs for Furniture, Automobiles, Busses, and Railway-Cars.
Claims use since Mar. 29, 1927.

CLASS 33

Glassware

Ser. No. 329,877. WHITALL TATUM COMPANY, Millville, N. J. Filed Aug. 26, 1932.

WT

For Glass Bottles, Jars, Pots, Jugs, and Funnels.
Claims use since October, 1924.

CLASS 34

Heating, Lighting, and Ventilating Apparatus, Not Including Electrical Apparatus

Ser. No. 305,826. THORNTON W. PRICE, doing business as The Coal Carburetor Company, New Brunswick, N. J. Filed Sept. 18, 1930.

"AUTO-DRAFT"

No claim is made to the use of the word "Draft" apart from the mark as shown.
For Draft Control for Furnaces, Comprising a Gravity Balanced Damper for Admitting Air into a Furnace Smoke Pipe.
Claims use since June 1, 1930.

Ser. No. 326,406. WILCOX, CRITTENDEN AND COMPANY, INCORPORATED, Middletown, Conn. Filed Apr. 22, 1932.

HURRICANE TESTED
MARINE LIGHTS

The words "Marine Lights" and "Hurrican Tested" are disclaimed apart from the mark as shown.
For Combination Oil and Electric Marine Lamps.
Claims use since Jan. 1, 1932.

Ser. No. 331,807. B. F. STURTEVANT COMPANY, Boston, Mass. Filed Nov. 1, 1932.

HUMIDIFILTER

For Air Conditioning Apparatus for Varying the Moisture Content of the Air.
Claims use since Dec. 4, 1929.

CLASS 36

Musical Instruments and Supplies

Ser. No. 331,474. R C A VICTOR COMPANY, INC., Camden, N. J. Filed Oct. 22, 1932.

ELECTRADISK

For Talking Machines and Parts Thereof, Records for Talking Machines, and Record Blanks.
Claims use since June 29, 1932.

CLASS 37

Paper and Stationery

Ser. No. 330,180. OUTSERTS, INCORPORATED, New York, N. Y. Filed Sept. 8, 1932.

OUTSERTS

For Labels Sold to the Trade as Such.
Claims use since July, 1930.

Ser. No. 331,677. FORT HOWARD PAPER COMPANY, Green Bay, Wis. Filed Oct. 29, 1932.

SELFOLD

For Toilet Paper, Paper Towels, Paper Napkins, and Crepe Paper.
Claims use since Oct. 13, 1932.

Ser. No. 332,033. DENNISON MANUFACTURING COMPANY, Framingham, Mass. Filed Nov. 10, 1932.



No registration rights are claimed for the word "Crepe" apart from the mark shown in the drawing.
For Crepe Paper.
Claims use since August, 1932.

Ser. No. 332,115. FITCHBURG PAPER COMPANY, Fitchburg, Mass. Filed Nov. 14, 1932.

DRAMATONE

For Book, Printing, Writing, and Cover Papers.
Claims use since Nov. 3, 1932.

CLASS 38

Prints and Publications

Ser. No. 320,023. THE 80TH (BLUE RIDGE) DIVISION VETERANS' ASSOCIATION, Pittsburgh, Pa. Filed Oct. 13, 1931.



For Military Periodical, Published Monthly.
Claims use since October, 1919.

Ser. No. 325,991. MOVIE STAMPS, INC., New York, N. Y. Filed Apr. 11, 1932.



The word "Movie Stamps" are disclaimed apart from the mark shown in the drawing.
For Trading Stamps.
Claims use since Apr. 1, 1932.

Ser. No. 326,400. SYNDICATE PUBLISHING CO. INC., New York, N. Y. Filed Apr. 22, 1932.

MODERN SCREEN

For Magazine or Printed Periodical Published Monthly and at Other Intervals.
Claims use since Sept. 1, 1930.

Ser. No. 330,593. CENTRAL UNITED NATIONAL BANK OF CLEVELAND, Cleveland, Ohio. Filed Sept. 28, 1932.

"Central-ize"

For Publications Issued from Time to Time Containing Matters of General Interest.
Claims use since May, 1925.

Ser. No. 330,594. CENTRAL UNITED NATIONAL BANK OF CLEVELAND, Cleveland, Ohio. Filed Sept. 28, 1932.



For Publications Issued from Time to Time Containing Matters of General Interest.
Claims use since January, 1921.

Ser. No. 330,703. HOWARD-SCOTT PUBLISHING CO., New York, N. Y. Filed Sept. 27, 1932.



For Magazine Published Monthly and at Other Intervals.
Claims use since Sept. 19, 1932.

Ser. No. 331,115. MICHIGAN LITHOGRAPHING CO., Grand Rapids, Mich. Filed Oct. 10, 1932.

Intensograf

For Catalogues, Direct Mail Advertising Forms and Material; Broadsides, Posters, Cut-Outs, and Lithographed Forms for Window Display.
Claims use since Aug. 1, 1932.

Ser. No. 331,263. MEMPHIS PRESS-SCIMITAR COMPANY, Memphis, Tenn. Filed Oct. 14, 1932.

In Your Neighborhood

For Section or Column Appearing in Newspaper or Periodical.
Claims use since Aug. 30, 1932.

CLASS 39

Clothing

Ser. No. 327,205. VANITY FAIR SILK MILLS, Reading, Pa. Filed May 17, 1932.

Vanity Fair
AIRIELACE

No claim is made to the word "Airie" or the word "Lace" except in the relation shown.
For Knitted and Textile Underwear and Hosiery for Women and Children, Namely—Vests, Bloomers, Drawers, Knickerbockers, Union Suits, Combination Underwear, Step-Ins, Chemises, Corset Covers, Nightgowns, Pajamas, Petticoats, Princess Slips, Bandeaux, Bandeau Chemises; and Knitted and Textile Underwear for Men, Namely—Union Suits, Shirts, and Drawers.
Claims use since May 3, 1932.

Ser. No. 327,752. GROUND GRIPPER SHOE COMPANY, INC., Harrisburg, Pa. Filed June 6, 1932.



The exclusive use of the word "Shoes" and of the pictorial representation of the shoe are disclaimed apart from the mark shown on the drawing.
For Shoes Made of Leather, Canvas, Rubber, or Combinations Thereof.
Claims use since Oct. 2, 1931.

Ser. No. 328,510. SPRING CITY KNITTING CO., Spring City, Pa. Filed July 1, 1932.

Sport-teens

For Men's, Women's, and Children's Knit Underwear.
Claims use since Nov. 27, 1931.

Ser. No. 331,023. PENNANT SPORT TOGS COMPANY, New York, N. Y. Filed Oct. 6, 1932.



No claim is made to the word "Togs" apart from the mark shown in the drawing.

For Children's Middy Blouses, Girls' Dancing Rompers; Gym Apparel—Namely, Athletic Shirts and Blouses, Shorts, Running Trunks, Bloomers, Gymnasium Rompers, Jersey Shirts.

Claims use since July 1, 1932.

Ser. No. 331,136. ARLEESÈ, INC., Miami, Fla. Filed Oct. 11, 1932.

Arleesè

For Ladies' Foundation Garments—Namely, Corsets, Corselettes, Girdles, Brassières, Bandeaux, and Ensembles.

Claims use since Aug. 16, 1932.

Ser. No. 331,195. HENRY POLLAK, INC., New York, N. Y. Filed Oct. 12, 1932.

TRICO-CELLO

The word "Trico" being disclaimed apart from the mark shown.

For Women's Hats.

Claims use since Sept. 24, 1932.

Ser. No. 331,293. SHOREWOOD MILLS, Milwaukee, Wis. Filed Oct. 15, 1932.

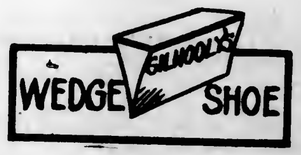


Applicant disclaims the descriptive words "For Men Of Action" apart from the mark as shown on the drawing.

For Athletic Union Suits, Athletic Shirts, and Athletic Shorts of Knitted Fabric.

Claims use since Aug. 15, 1931.

Ser. No. 331,317. PERTH SHOE COMPANY LIMITED, Perth, Ontario, Canada. Filed Oct. 17, 1932.



No claim is made to the exclusive use of the word "Shoe".

For Boots, Shoes, Slippers, and Sandals Made of Leather, Fabric, or Combinations Thereof.

Claims use since Dec. 1, 1930.

Ser. No. 331,413. ROTH CREATIONS, INCORPORATED, New York, N. Y. Filed Oct. 20, 1932.

Beau-Forma

For Corsets, Brassières, Girdles, Underwear, and Dresses, and Foundation Garments.

Claims use since Mar. 1, 1932.

Ser. No. 331,467. JORDAN MARSH COMPANY, Boston, Mass. Filed Oct. 22, 1932.



No claim of exclusive right is made to the word "Fur" apart from the association in which it is shown.

For Articles of Apparel Made of Fur—Namely, Cloaks, Coats, Neck Pieces, Capes, Muffs, and Gloves.

Claims use since Apr. 1, 1932.

Ser. No. 331,521. WESTERN CORSET COMPANY INC., Los Angeles, Calif. Filed Oct. 24, 1932.

Pointie

For Brassières, Foundation Garments, Girdles, Garter Belts, and Women's Underwear.

Claims use since Apr. 25, 1932.

Ser. No. 331,525. ABRAHAM ZWIEBELSON, doing business as Mollie Mayers, New York, N. Y. Filed Oct. 24, 1932.

Joiful

For Brassières.

Claims use since Sept. 15, 1932.

Ser. No. 331,608. PERTH SHOE COMPANY LIMITED, Perth, Ontario, Canada. Filed Oct. 26, 1932.



No claim is made to the exclusive use of the word "Shoe".

For Boots, Shoes, Slippers and Sandals Made of Leather, Fabric, or Combinations Thereof.

Claims use since July 25, 1932.

Ser. No. 331,632. WELLS-LAMONT-SMITH CORPORATION, Minneapolis, Minn. Filed Oct. 27, 1932.



For Work Gloves of Fabric and Combined Fabric and Leather.

Claims use since Aug. 15, 1932.

Ser. No. 331,694. ORMOND HOSIERY SHOPS, INC., New York, N. Y. Filed Oct. 29, 1932.

ORMOND

Silk Stockings



No claim being made to the words "Silk Stockings" or to the word "Ormond" apart from the mark as shown on the drawing.

For Hosiery and Stockings.

Claims use since Aug. 26, 1932.

Ser. No. 331,729. EDISON BROTHERS STORES, INC., St. Louis, Mo. Filed Oct. 31, 1932.

WALK-A-THON

For Leather Shoes.

Claims use since July 1, 1932.

Ser. No. 331,815. BREITSTEIN MANUFACTURING CO., Los Angeles, Calif. Filed Nov. 2, 1932.

BREITMORE
OF
CALIFORNIA

Applicant disclaims exclusive use of the words "of California" except in association with the other features of the mark.

For Ladies' Wearing Apparel—Namely, Coats and Suits.
Claims use since Oct. 1, 1932.

Ser. No. 332,108. B-Z-B KNITTING CO., Rockford, Ill. Filed Nov. 14, 1932.

Ovation

For Hosiery.
Claims use since Oct. 27, 1932.

CLASS 40

Fancy Goods, Furnishings, and Notions

Ser. No. 331,236. UNIVERSAL BUTTON FASTENING & BUTTON COMPANY, Detroit, Mich. Filed Oct. 12, 1932.

UNISHI

For Buttons of Non-Precious Material.
Claims use since Aug. 26, 1932.

CLASS 42

Knitted, Netted, and Textile Fabrics

Ser. No. 317,450. BIANCHINI, FERIER, Lyon, France. Filed July 30, 1931.

LORGANZA

For Piece Goods of Wool, Hair, Natural or Artificial Silk, Hemp, Flax, Jute, Alpha Fibre, Aloe Fibre, Vegetable Fibre, and Mixed Fibres Such as Natural Silk and Artificial Silk, Artificial Silk and a Backing, and Cotton.
Claims use since Jan. 29, 1931.

Ser. No. 320,119. BIANCHINI, FERIER, Lyon, France. Filed Oct. 16, 1931.

TIMONA

For Piece Goods of Hair, Natural or Artificial Silk, Hemp, Flax, Jute, Alpha Fibre, Aloe Fibre, Vegetable Fibre, and Mixed Fibres Such as Natural Silk and Artificial Silk, Artificial Silk and a Backing, and Cotton.
Claims use since July 28, 1931.

Ser. No. 326,184. HEMP JUTE & TEXTILITE MFG. CO., A. G., Vienna, Austria. Filed Apr. 16, 1932.

ONIONAIR

For Burlap in the Piece for Wrapping Purposes.
Claims use since July 30, 1931.

Ser. No. 326,185. HEMP JUTE & TEXTILITE MFG. CO., A. G., Vienna, Austria. Filed Apr. 16, 1932.

VEGETAIR

For Burlap in the Piece for Wrapping Purposes.
Claims use since July 30, 1931.

Ser. No. 328,803. WILLIAM J. STUEBE, New York, N. Y. Filed July 14, 1932.

PEARLETTE

For Cotton Piece Goods Suitable for Use as Curtains, Overdrapes and Furniture Covering.
Claims use since June 25, 1932.

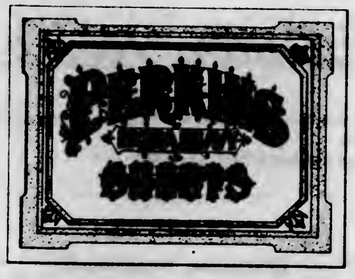
Ser. No. 330,338. COHN HALL MARX CO., New York, N. Y. Filed Sept. 14, 1932.

FOREMAN
SILKS

Applicant disclaims the right to the exclusive use of the word "Silks".

For Silk Piece Goods.
Claims use since July 1, 1932.

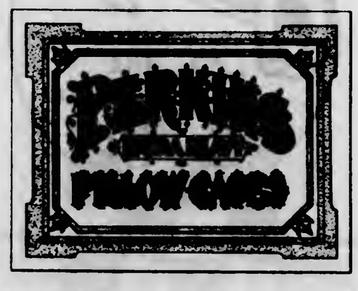
Ser. No. 330,858. MINOT, HOOPER & CO., New York, N. Y. Filed Oct. 1, 1932.



No claim being made to exclusive rights with respect to the words "Extra Heavy" and "Sheets" and to the pictorial representation of the label which appears on the drawing apart from the mark as shown.

For Finished Sheets.
Claims use since 1896.

Ser. No. 330,859. MINOT, HOOPER & CO., New York, N. Y. Filed Oct. 1, 1932.



No claim being made to exclusive rights with respect to the words "Extra Heavy" and "Pillow Cases" and to the pictorial representation of the label which appears on the drawing apart from the mark as shown.

For Finished Pillow Cases.
Claims use since 1896.

Ser. No. 330,860. MINOT, HOOPER & CO., New York, N. Y. Filed Oct. 1, 1932.



No claim being made to exclusive rights with respect to the word "Brand" apart from the mark as shown.

For Finished Sheets and Pillow Cases.
Claims use since 1896.

Ser. No. 331,571. SIDNEY BLUMENTHAL & CO. INC., New York, N. Y. Filed Oct. 26, 1932.

Erminfrost

For Pile Fabrics in the Piece.
Claims use since Oct. 15, 1932.

Ser. No. 331,572. SIDNEY BLUMENTHAL & CO. INC., New York, N. Y. Filed Oct. 26, 1932.

Erminalp

For Pile Fabrics in the Piece.
Claims use since Oct. 15, 1932.

Ser. No. 331,737. GOODALL WORSTED CO., Sanford, Me. Filed Oct. 31, 1932.

Goodall SUMA Cloth

No claim is made to the exclusive use of the word "Cloth" separate and apart from the mark shown in the drawing.

For Fabric Made from Combinations of Mohair, Cotton, Wool, Alpaca, Camel-Hair, Silk, and Artificial Silk, and Also Woolen Piece Goods and Mohair Piece Goods Used for Men's and Boys' Outer Wearing Apparel.
Claims use since Sept. 1, 1932.

Ser. No. 331,740. GOODALL WORSTED CO., Sanford, Me. Filed Oct. 31, 1932.

SUMA

For Fabric Made from Combinations of Mohair, Cotton, Wool, Alpaca, Camel-Hair, Silk, and Artificial Silk, and Also Woolen Piece Goods and Mohair Piece Goods.
Claims use since Sept. 1, 1932.

Ser. No. 332,098. NEISLER MILLS INC., Kings Mountain, N. C. Filed Nov. 12, 1932.

MARGRACE

For Decorative Woven Fabrics in the Piece, i. e., Damask Draperies and Bed Spreads.
Claims use since July 6, 1932.

CLASS 44

Dental, Medical, and Surgical Appliances

Ser. No. 330,828. THE LOEL MANUFACTURING COMPANY, Middleboro, Mass. Filed Sept. 30, 1932.

"MENTOLETTE"

For Menthol Pencils and Inhalers—Namely, Holders and Applicators for Menthol.
Claims use since September, 1918.

Ser. No. 331,336. RALPH A. LEE, doing business as Hy-Tex Rubber Company, Baltimore, Md. Filed Oct. 18, 1932.

HY-TEX

For Prophylactic Rubbers Used for the Prevention of Disease.
Claims use since Aug. 25, 1931.

Ser. No. 331,473. PORUS-LASTIC CORP., Holbrook, Mass. Filed Oct. 22, 1932.

PORU LASTIC

For First Aid or Surgical Bandages.
Claims use since January, 1932.

Ser. No. 331,499. HALLIWELL-SHELTON ELECTRIC CORPORATION, New York, N. Y. Filed Oct. 24, 1932.

Supreme

For Electrical Hair Dryers and Permanent Wave Machines.
Claims use since June 30, 1932.

Ser. No. 331,508. MARVIN-NEITZEL CORPORATION, Troy, N. Y. Filed Oct. 24, 1932.

Marvin Neitzel

For Hospital Supplies—Namely, Surgical Gowns, Surgical Suits, Internes' Suits, Patients' Gowns and Binders.
Claims use since Nov. 1, 1931.

Ser. No. 331,601. KATHERINE WELSH, doing business as D-N Facial Bandage Co., Brooklyn, N. Y. Filed Oct. 26, 1932.

Dolly Night

For Face Lifting Bandage for Use in Beauty Culture and the Like.
Claims use since Sept. 26, 1932.

CLASS 45

Beverages, Nonalcoholic

Ser. No. 331,959. WILLARD D. MILLER, doing business as Fresh Frut Products Co., El Paso, Tex. Filed Nov. 7, 1932.



No claim is made to exclusive use of the word "Quali.t."
For Nonalcoholic, Noncereal, Maltless Beverages and Fruit Juices Sold as Soft Drinks, Upon Beverage Syrups, Flavors, and Extracts.
Claims use since Nov. 2, 1932.

Ser. No. 332,155. LAIRD & COMPANY, INCORPORATED, Eatontown, N. J. Filed Nov. 15, 1932.



No claim is made to the representation of the jug or label per se nor to the word "Brand."
For Cider.
Claims use since Nov. 1, 1932.

Ser. No. 332,379. MONTAQUA MINERAL WELL CO., Joliet, Mont. Filed Nov. 22, 1932.

MONTAQUA

For Mineral Water.
Claims use since May, 1928.

CLASS 46

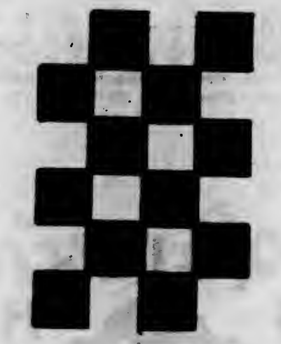
Foods and Ingredients of Foods

Ser. No. 299,587. JOHN MULHERN COMPANY, San Francisco, Calif. Filed Apr. 28, 1930. Under section 5b of the act of 1905 as amended in 1920.

PEERLESS

For Syrups for Food Flavoring Purposes and Fruit Juices for Food Flavoring Purposes.
Claims use since Oct. 7, 1929.

Ser. No. 313,509. RALSTON PURINA COMPANY, St. Louis, Mo. Filed Apr. 18, 1931.



Applicant is the owner of registrations Nos. 35,569 (renewed), 102,844, 102,845, and 124,206.
For Baked Rye Flour Product in Cracker Form.
Claims use since Jan. 1, 1928.

Ser. No. 315,284. SCHUTTER JOHNSON CANDY COMPANY INC., Chicago, Ill. Filed June 1, 1931.

Schutter's
Twin-Milks



No claim is made to the word "Milks" apart from the mark as shown.
For Candy.
Claims use since April, 1930.

Ser. No. 315,913. LINCOLN FRUIT GROWERS ASSOCIATION, Lincoln, Calif. Filed June 16, 1931.

SUNSET ORCHARDS

For Fresh Peaches, Fresh Apricots, and Fresh Plums.
Claims use since 1926.

Ser. No. 317,594. BROOKLYN HOTEL SUPPLY CO., Brooklyn, N. Y. Filed Aug. 3, 1931.

BROHSCO

For Butter, Eggs; Beef and Veal as Follows: Beef and Veal Livers, Forequarters, Neck, Whole Chuck, Rib Roast, Chuck Steak, Pot Roast, Clod, Fore Shank, Brisket (Fresh and Corned), Plate, Navel (Fresh and Corned), Flank Steak Stew, Loin, Buttend Sirloin, Wedge Bone Sirloin, Round Bone Sirloin, Flat Bone Sirloin Steak, Pin Bone Sirloin Steak, Porterhouse Steak, Club Steak, Tenderloin Steak, Rump (Fresh and Corned), Round Steak, Knuckle Soup Bone, Soup Bones, Hock Bones; Mutton and Lamp as Follows: Leg, Loin Chops, English Mutton Chops, Saddle, Ribs or Rack, French Rib Chops, Crown Roast Chops, Breast, Shank, Chuck, Neck; Pork as Follows: Ham (Fresh, Smoked, and Corned), Full Loin, Loin Chops, Rib Chops, Tenderloin, Belly, Bacon (Fresh and Smoked), Leaf Lard, Spare Ribs, Rack Butt, Shoulder Clear Plate, Jowl, Hocks, Feet; Bologna (Fresh and Smoked) as Follows: Ham Bologna, Head Cheese, Liver Bologna, Blood Bologna, Frankfurters, Sausages (Link and Meat); Dressed Poultry as Follows: Chickens, Cocks, Old Roosters, Turkeys, Ducks, Geese, Guinea Hens, Pigeons, and Squab.
Claims use since Mar. 20, 1930.

Ser. No. 318,457. ARTHUR MARROS, New York, N. Y. Filed Aug. 26, 1931.

PUBLIX

No claim is made to the words "Singing Canaries" apart from the mark shown on the drawing.
For Bird Seeds.
Claims use since 1923.

Ser. No. 318,619. BORDEN'S MILK PRODUCTS COMPANY, INC., New York, N. Y. Filed Sept. 1, 1931.

"PONY" MALTED MILK

No claim is made to the words "Malted Milk" apart from the mark as shown in the drawing.
For Creamery Products—Namely, Malted Milk.
Claims use since Aug. 11, 1931.

Ser. No. 321,113. LINDSAY FARM BUREAU FRUIT ASSN., Lindsay, Calif. Filed Nov. 13, 1931.

Life Guard

For Fresh Citrus Fruits.
Claims use since Nov. 1, 1929.

Ser. No. 322,356. CITY MILLS COMPANY, Columbus, Ga. Filed Dec. 22, 1931.



For Wheat Flour and Self-Rising Flour.
Claims use since January, 1910.

Ser. No. 325,109. THE OATMAN CONDENSED MILK COMPANY, doing business as Cardinal Milk Sales Co., Dundee, Ill. Filed Mar. 14, 1932.

BABY'S CHOICE



The portrait of the child shown in the drawing is fanciful.
For Canned, Evaporated, and Condensed Milk.
Claims use since Dec. 21, 1931.

Ser. No. 325,582. PLEZ B. KENNERLY, doing business as Sweetheart Ice Cream Company, Houston Heights, Houston, Tex. Filed Mar. 28, 1932.

PRIZE NIGGER HEAD ICE CREAM



The words "Prize" and "Ice Cream" and the representation of the goods are hereby disclaimed apart from the mark as shown in the drawing.
For Novelty Confection Consisting of Chocolate-Covered Molded Ice-Cream.
Claims use since Apr. 1, 1931.

Ser. No. 328,569. JOE E. WALKER, Grand Rapids, Mich. Filed July 1, 1932.

MAPLEWOOD BRAND



The words "Brand" and "Supreme Quality" are disclaimed apart from the mark as shown on the drawing.
For Dressed Poultry.
Claims use since Jan. 1, 1931.

Ser. No. 328,922. OLIVE ANN MOORE, Oakland, Calif. Filed July 20, 1932.

Gar-More

For Sauces for Fish, Meats, Soups, Salads, Vegetables.
Claims use since May 2, 1932.

Ser. No. 329,045. ESKIMO PIE CORPORATION, Brooklyn, N. Y. Filed July 25, 1932.

King Cole

For Ice Cream, Ices, Sherbets, and Similar Frozen Confections.
Claims use since June 15, 1932.

Ser. No. 329,744. ERNEST D. FEAR, Kansas City, Mo. Filed Aug. 22, 1932.

POLAR FREEZE

For Frozen Confections.
Claims use since July 25, 1932.

Ser. No. 330,165. LIFE SAVERS, INC., Port Chester, N. Y. Filed Sept. 7, 1932.



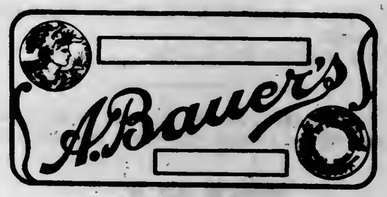
The drawing is lined for shading purposes only. No right of registration is claimed for the words appearing on the drawing except the words "Life Savers." The word "Spear-O-Mint" is claimed as shown in the drawing.
For Candy.
Claims use since Mar. 12, 1932.

Ser. No. 330,805. PACIFIC COAST MACARONI MFG. CO., Seattle, Wash. Filed Sept. 28, 1932.



No claim being made to the use of the word "Brand", or the words "Superior Quality Macaroni Products" apart from the mark as shown.
For Macaroni Products.
Claims use since Mar. 1, 1926.

Ser. No. 330,806. AUGUST BAUER'S SONS, INC., New York, N. Y. Filed Sept. 30, 1932.



No registration rights are claimed in the words "France" and "Paris" appearing in the mark except in association with the other features of the mark.
For Prepared Mustard.
Claims use since June 10, 1932.

Ser. No. 331,016. WAFFLED STEAK MACHINES, INC., Buffalo, N. Y. Filed Oct. 6, 1932.

WAFFLED

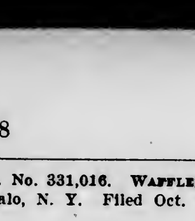
For Sliced Fresh Meats—Namely, Steaks.
Claims use since Sept. 30, 1932.

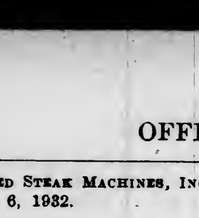
Ser. No. 331,087. MARY K. JONES, Salisbury, N. C. Filed Oct. 8, 1932.



Applicant disclaims the right to the exclusive use of the word "Mints" except in association with the other features of the mark.
For Candy.
Claims use since Apr. 10, 1931.

Ser. No. 331,878. LIBBY, MCNEILL & LIBBY, Chicago, Ill. Filed Oct. 19, 1932.





For Corned Beef.
Claims use since 1875.

Ser. No. 331,479. E. M. TODD CO., Richmond, Va. Filed Oct. 22, 1932.

LUCKY STRIKE

For Packing House Products—Namely, Hams and Bacon and Sausage.
Claims use since Oct. 7, 1932.

Ser. No. 331,663. ALFRED KASPER, doing business as Quieta-Werke, Leipzig, Germany. Filed Oct. 28, 1932.

Diäta

For Coffee.
Claims use since Feb. 14, 1917.

Ser. No. 331,822. ELLIS D. FAIGAR, Philadelphia, Pa. Filed Nov. 2, 1932.

TOASTADOS

For Cooked Banana Chips.
Claims use since Oct. 27, 1932.

Ser. No. 331,825. THE ILLINOIS CANNING COMPANY, Hoopeston, Ill. Filed Nov. 2, 1932.

HONEY KERNEL

No claim is made to the word "Kernel" apart from the mark as shown.
For Canned Corn.
Claims use since Oct. 7, 1932.

Ser. No. 331,890. DEERFOOT FARMS COMPANY, Southboro, Mass. Filed Nov. 4, 1932.



For Sausages, Sausage Meat, Bacon, and Lard.
Claims use since 1912.

Ser. No. 332,176. CHRISTIE & HOOVER, Houston, Tex. Filed Nov. 16, 1932.



No claim is made to any of the words except the word "Southern" and the applicant's name "Christie & Hoover" apart from the mark as shown in the drawing.
For Malt Extracts ahd Malt Syrups for Food Purposes.
Claims use since Nov. 12, 1932.

CLASS 49

Distilled Alcoholic Liquors

Ser. No. 330,455. THE DISTILLERS AGENCY LIMITED, Edinburgh, Scotland. Filed Sept. 19, 1932.



No claim is made to the words "Gold Label" or to the words "Old Scotch Whisky," "Distillers of Scotch Whisky," and "Edinburgh."
For Whisky.
Claims use since October, 1908.

Ser. No. 330,541. JOHN DEWAR & SONS LIMITED, Perth, Scotland, and London, England. Filed Sept. 21, 1932.

"White Label"

No claim is made to the exclusive use of a white label.
For Scotch Whisky.
Claims use since Nov. 30, 1891.

CLASS 50

Merchandise Not Otherwise Classified

Ser. No. 329,156. SMAIL'S SALES SERVICE, INC., Warren, R. I. Filed July 28, 1932.

ROTOFLECTOR

For Non-Illuminated Reflecting Devices for Attachment to the Wheels or Other Part of an Automobile.
Claims use since October, 1931.

TRADE-MARK REGISTRATIONS GRANTED

[ACT OF FEBRUARY 20, 1905]

DECEMBER 27, 1932

299,811. SPARK PLUGS. NATIONAL PALLADIUM COMPANY, Chicago, Ill.
Filed August 29, 1932. Serial No. 329,959. PUBLISHED OCTOBER 11, 1932. Class 21.

299,812. LUBRICATING OIL. STEPHEN OIL CO., Morris, Ill.
Filed August 27, 1932. Serial No. 329,909. PUBLISHED OCTOBER 11, 1932. Class 15.

299,813. ELECTRIC VACUUM CLEANERS AND PARTS THEREOF. ELECTRIC VACUUM CLEANER COMPANY, INC., Cleveland, Ohio.
Filed August 27, 1932. Serial No. 329,891. PUBLISHED OCTOBER 11, 1932. Class 21.

299,814. LUBRICATING OIL. STERNE-JAY CORPORATION, New York, N. Y.
Filed August 26, 1932. Serial No. 329,873. PUBLISHED OCTOBER 11, 1932. Class 15.

299,815. LUBRICATING OIL. STERNE-JAY CORPORATION, New York, N. Y.
Filed August 26, 1932. Serial No. 329,872. PUBLISHED OCTOBER 11, 1932. Class 15.

299,816. LUBRICANT TO BE ADDED TO GASOLINE AND OTHER FUELS FOR USE IN INTERNAL COMBUSTION ENGINES. CAMPBELL'S LU-BRI-CANT CO., Newark, N. J.
Filed August 24, 1932. Serial No. 329,783. PUBLISHED OCTOBER 11, 1932. Class 15.

299,817. LUBRICATING OIL. RADBILL OIL CO., INC., Philadelphia, Pa.
Filed August 19, 1932. Serial No. 329,686. PUBLISHED OCTOBER 11, 1932. Class 15.

299,818. BRACELET WATCHES AND THEIR ATTACHED BRACELETS. BULOVA WATCH COMPANY, INC., New York, N. Y.
Filed August 13, 1932. Serial No. 329,524. PUBLISHED OCTOBER 11, 1932. Class 27.

299,819. BRACELET WATCHES AND THEIR ATTACHED BRACELETS. BULOVA WATCH COMPANY, INC., New York, N. Y.
Filed August 13, 1932. Serial No. 329,523. PUBLISHED OCTOBER 11, 1932. Class 27.

299,820. CLOCKWORK OPERATED ELECTRIC SWITCHES FOR CONTROLLING THE OPERATING AND NON-OPERATING PERIODS OF ELECTRIC REFRIGERATORS. WATERBURY CLOCK COMPANY, Waterbury, Conn.
Filed August 3, 1932. Serial No. 329,320. PUBLISHED OCTOBER 11, 1932. Class 21.

299,821. MOTOR FUEL OIL AND LUBRICATING OIL. ROSWELL J. BUMP, Binghamton, N. Y.
Filed July 30, 1932. Serial No. 329,219. PUBLISHED OCTOBER 11, 1932. Class 15.

299,822. PACKING HOUSE EQUIPMENT CONSISTING OF MEAT TRUCKS. J. W. HUBBARD CO., Chicago, Ill.
Filed July 21, 1932. Serial No. 328,955. PUBLISHED OCTOBER 11, 1932. Class 19.

299,823. LUBRICATING OILS AND PETROLEUM GREASES. KENDALL REFINING COMPANY, Bradford, Pa.
Filed June 6, 1932. Serial No. 327,761. PUBLISHED OCTOBER 11, 1932. Class 15.

299,824. GASOLINE, MOTOR FUEL OILS, LUBRICATING OILS, FURNACE OILS, ILLUMINATING OILS, AND LUBRICATING GREASES. PETROLEUM MARKETERS CO. INC., Long Island City, N. Y.
Filed July 6, 1932. Serial No. 328,711. PUBLISHED OCTOBER 11, 1932. Class 15.

299,825. BATTERY CLAMPS, TERMINALS, AND CONNECTORS, ETC. FIRESTONE BATTERY COMPANY, Akron, Ohio.
Filed June 20, 1932. Serial No. 328,118. PUBLISHED OCTOBER 11, 1932. Class 21.

299,826. SAIL BOATS AND ROW BOATS. DAUNTLESS SHIPYARD, INC., Essex, Conn.
Filed May 20, 1932. Serial No. 327,271. PUBLISHED OCTOBER 11, 1932. Class 19.

299,827. NONALCOHOLIC MALTLESS BEVERAGES SOLD AS SOFT DRINKS. FREDERICK C. NESSLY, doing business as Rah-Na Co., Seattle, Wash.
Filed May 6, 1932. Serial No. 326,828. PUBLISHED SEPTEMBER 20, 1932. Class 45.

299,828. FRESH GRAPES. FREMONT FRUIT ASSOCIATION, doing business as Exeter Emperor Association, Exeter, Calif.
Filed March 26, 1932. Serial No. 325,519. PUBLISHED OCTOBER 11, 1932. Class 46.

299,829. STORAGE BATTERIES. MONARK BATTERY COMPANY, INC., Chicago, Ill.
Filed January 7, 1932. Serial No. 322,799. PUBLISHED MAY 31, 1932. Class 21.

299,830. ELECTRIC PLUGS, ELECTRIC RECEPTACLES, ELECTRIC CUTOUTS, ELECTRIC SOCKETS, ELECTRIC SWITCHES, ELECTRIC TRANSFORMERS, AND ELECTRIC SWITCH PLATES. METEOR ELECTRIC CORPORATION, New York and Brooklyn, N. Y.
Filed January 23, 1932. Serial No. 323,347. PUBLISHED OCTOBER 11, 1932. Class 21.

299,831. CHOCOLATE. MARTHA WASHINGTON CANDIES COMPANY, Chicago, Ill., assignor to Elie Sheets Candies Company, Chicago, Ill., a Corporation of Illinois.
Filed July 3, 1931. Serial No. 316,603. PUBLISHED OCTOBER 11, 1932. Class 46.

299,832. PROPHYLACTIC RUBBER AND MEMBRANEOUS ARTICLES. SAMUEL S. KOHN, doing business as Thrift Rubber Company, Newark, N. J.
Filed May 5, 1931. Serial No. 314,205. PUBLISHED AUGUST 4, 1931. Class 44.

299,833. FRESH CITRUS FRUITS, FRESH VEGETABLES, FRESH DECIDUOUS FRUITS, FRESH CANTALOUPES. RANDOLPH MARKETING COMPANY, San Bernardino, Calif.
Filed February 21, 1931. Serial No. 311,340. PUBLISHED OCTOBER 11, 1932. Class 46.

299,834. LUMBER, FLOORING, PILES, RAILROAD TIES, PAVING BLOCKS, ASPHALT LUMBER, WATERPROOFING COMPOUNDS, (OTHER THAN PAINTS), INTENDED FOR CONSTRUCTION PURPOSES, JOINT FILLERS, BUILDING INSULATION, EMULSIFIED ASPHALT, AND MASTIC PREPARATIONS. JOSEPH MILLER, doing business as Asphalt Laboratories Company, Milwaukee, Wis.
Filed January 16, 1931. Serial No. 310,023. PUBLISHED OCTOBER 11, 1932. Class 12.

299,835. ALLSPICE, CAKE ICINGS, CELERY SALT, CELERY SEED, CHEWING GUM, CHOCOLATE, CINNAMON, COCOA, SHREDDED COCOANUT, COCOA PUDDING, COFFEE, EGG SUBSTITUTE, FLAVORING EXTRACTS FOR FOOD PURPOSES, FRUIT SYRUPS FOR FOOD PURPOSES, GINGER, MAPLE SYRUP FLAVOR, MARSHMALLOW CRÈME, PREPARED MUSTARD, GROUND MUSTARD, GROUND NUTMEG, PAPRIKA, PEANUT BUTTER, BLACK PEPPER, PICKLING SPICES MIXED, PIE FILLING, SPICES, TAPIOCA PUDDING, AND TEAS. THE MILSON COMPANY, Cincinnati, Ohio.
Filed May 2, 1929. Serial No. 283,412. PUBLISHED OCTOBER 11, 1932. Class 46.

299,836. FEED FOR FISH. NICHOLAS WAPLER COMPANY, New York, N. Y.
Filed August 6, 1932. Serial No. 329,891. PUBLISHED OCTOBER 11, 1932. Class 46.

299,837. DESSERT POWDER. THE HUBINGER COMPANY, Keokuk, Iowa.
Filed July 28, 1932. Serial No. 329,144. PUBLISHED OCTOBER 11, 1932. Class 46.

299,838. BREAD. ALFRED C. HILL, doing business as Hill Baking Co., Vernon, Tex.
Filed July 12, 1932. Serial No. 328,780. PUBLISHED OCTOBER 11, 1932. Class 46.

299,839. MACARONI, SPAGHETTI, VERMICELLI, AND NOODLES, AND VARIETIES THEREOF. THE JOHN B. CANEPA COMPANY, Chicago, Ill.
Filed July 11, 1932. Serial No. 328,683. PUBLISHED OCTOBER 11, 1932. Class 46.

299,840. CANNED FRUITS. SUNICAL PACKING COMPANY, San Francisco, Calif.
Filed July 6, 1932. Serial No. 328,628. PUBLISHED OCTOBER 11, 1932. Class 46.

299,841. CANNED, PICKLED, SALTED, SMOKED, AND PRESERVED FISH; CANNED SHELLFISH, CANNED FRUITS AND VEGETABLES, JAMS, JELLIES, AND MARMALADES; CANNED BEEF, VEAL, MUTTON, LAMB, PORK, POULTRY, GAME, AND SAUSAGE; PICKLES, OLIVES, AND OLIVE OIL. JOSÉ LEITE DE OLIVEIRA, Lisbon, Portugal.
Filed June 23, 1932. Serial No. 328,239. PUBLISHED OCTOBER 11, 1932. Class 46.

299,842. COMPOUND CONTAINING PURE CALIFORNIA BRANDY AND CANE SUGAR FOR USE AS A FOOD FLAVORING AND IN THE PREPARATION OF SAUCES, PUDDINGS, AND PASTRIES. FRUIT INDUSTRIES, LTD., San Francisco, Calif.
Filed June 14, 1932. Serial No. 327,974. PUBLISHED OCTOBER 11, 1932. Class 46.

299,843. ICE CREAM CONFECTION. NATIONAL PECTIN PRODUCTS COMPANY, Chicago, Ill.
Filed May 28, 1932. Serial No. 327,561. PUBLISHED OCTOBER 11, 1932. Class 46.

299,844. MACARONI, SPAGHETTI, AND NOODLES. BAYARD S. SCOTLAND, doing business as Economy Macaroni Co., Joliet, Ill.
Filed May 6, 1932. Serial No. 326,832. PUBLISHED OCTOBER 11, 1932. Class 46.

299,845. YEAST. ATLANTIC PACKING CO. INC., New York, N. Y.
Filed April 8, 1932. Serial No. 325,898. PUBLISHED OCTOBER 11, 1932. Class 46.

299,846. APPLE PRODUCTS—NAMELY, CANNED APPLES, APPLE JELLY, APPLE JAM, MARMALADE, APPLE BUTTER, APPLE SAUCE, VINEGAR, AND TABLE APPLES. NATIONAL FRUIT PRODUCT COMPANY, INC., Washington, D. C.
Filed April 1, 1932. Serial No. 325,720. PUBLISHED JUNE 21, 1932. Class 46.

299,847. PAPER TOWELS AND PAPER NAPKINS. NATIONAL PAPER NAPKIN MFG. CO., Chicago, Ill.
Filed March 1, 1932. Serial No. 324,690. PUBLISHED OCTOBER 11, 1932. Class 37.

299,848. PAPER TOWELS AND PAPER NAPKINS. NATIONAL PAPER NAPKIN MFG. CO., Chicago, Ill.
Filed January 18, 1932. Serial No. 322,966. PUBLISHED OCTOBER 11, 1932. Class 37.

299,849. MALT SYRUP FOR FOOD PURPOSES. DAVID KATZ, doing business as Peekskill Products Co., Peekskill, N. Y.
Filed August 15, 1931. Serial No. 313,034. PUBLISHED OCTOBER 11, 1932. Class 46.

299,850. MEN'S, WOMEN'S, AND CHILDREN'S FABRIC GLOVES. STEINBERGER BROS. GLOVE CORP., New York, N. Y.
Filed April 9, 1932. Serial No. 325,960. PUBLISHED OCTOBER 4, 1932. Class 39.

299,851. RIDING BREECHES, JODHPURS, AND RIDING COATS FOR MEN, WOMEN, AND CHILDREN; SLEEVELESS RIDING COATS AND VESTERS FOR WOMEN, KNICKERS AND TROUSERS FOR MEN. I. C. ISAACS & COMPANY, Baltimore, Md.
Filed May 16, 1932. Serial No. 327,154. PUBLISHED OCTOBER 4, 1932. Class 39.

299,852. MEN'S UNDERWEAR. BALLARD KNITTING COMPANY, Norristown, Pa.
Filed June 15, 1932. Serial No. 327,997. PUBLISHED OCTOBER 18, 1932. Class 39.

299,853. MEN'S AND BOYS' OVERALLS, WORK SHIRTS, AND WORK PANTS. N & W OVERALL CO., INC., doing business as W. W. Couch Company, Lynchburg, Va.
Filed June 16, 1932. Serial No. 328,082. PUBLISHED OCTOBER 25, 1932. Class 39.

299,854. CHILDREN'S PLAY SUITS. NORMAN J. WRIGLEY, Atlanta, Ga.
Filed June 16, 1932. Serial No. 328,045. PUBLISHED AUGUST 9, 1932. Class 39.

299,855. JERSEY GARMENTS—NAMELY, JERSEY SUITS FOR BOYS; JERSEY DRESSES FOR GIRLS, MISSES, AND WOMEN; AND FOR JERSEY SWEATERS. SHAWMUT WOOLEN MILLS, Stoughton, Mass.
Filed June 25, 1932. Serial No. 328,311. PUBLISHED OCTOBER 11, 1932. Class 39.

299,856. GIRDLES AND FOUNDATION GARMENTS WITH GARTERS. THE MUNSINGWEAR CORPORATION, Minneapolis, Minn.
Filed June 28, 1932. Serial No. 328,365. PUBLISHED OCTOBER 4, 1932. Class 39.

299,857. MEN'S AND BOYS' SUITS AND OVERCOATS. S. J. LEVY & CO. INC., New York, N. Y.
Filed August 1, 1932. Serial No. 329,262. PUBLISHED OCTOBER 4, 1932. Class 39.

299,858. INFANTS' AND CHILDREN'S UNDERWEAR—NAMELY, KNITTED TRAINING PANTIES. EARNSHAW KNITTING COMPANY, Newton, Mass.
Filed August 4, 1932. Serial No. 329,330. PUBLISHED OCTOBER 25, 1932. Class 39.

299,859. HOSIERY. BOONTON FULL FASHIONED HOSIERY MILLS, Boonton, N. J.
Filed August 10, 1932. Serial No. 329,440. PUBLISHED OCTOBER 18, 1932. Class 39.

299,860. LADIES' AND MISSES' DRESSES, PAJAMAS, APRONS, SMOCKS, BEACH SUITS, JACKETS, WAISTS, SKIRTS, AND UNIFORMS FOR NURSES, WAITRESSES, AND HAIR DRESSERS. OSGOOD & SONS, INC., Decatur, Ill.
Filed August 12, 1932. Serial No. 329,506. PUBLISHED OCTOBER 11, 1932. Class 39.

299,861. MEN'S AND BOYS' DRESS SHIRTS, WORK SHIRTS, FLANNEL SHIRTS, WINDBREAKERS, BLOUSES, PAJAMAS, NIGHT SHIRTS, UNDERSHIRTS, SHORTS, UNION SUITS, MADE OF COTTON, LINEN, RAYON, WORSTED, FLANNEL, WOOLEN, SILK, OR ANY COMBINATION OF THESE AND OTHER TEXTILES. H. D. BOB COMPANY, INC., New York, N. Y.
Filed August 17, 1932. Serial No. 329,592. PUBLISHED OCTOBER 4, 1932. Class 39.

299,862. COLLARS AND CUFFS. MAX RUCH, Berlin, Germany.
Filed July 8, 1932. Serial No. 328,647. PUBLISHED OCTOBER 11, 1932. Class 39.

299,863. HOSIERY. WM. T. KNOTT COMPANY, INC., New York, N. Y.
Filed August 19, 1932. Serial No. 329,683. PUBLISHED OCTOBER 4, 1932. Class 39.

299,864. NEGLIGEE AND DRESS SHIRTS. CLUETT, PEABODY & CO., INC., Troy, N. Y.
Filed August 20, 1932. Serial No. 329,708. PUBLISHED OCTOBER 11, 1932. Class 39.

299,865. WOMEN'S DRESSES. KEARNS BROTHERS, INC., Pinckneyville, Ill.
Filed August 24, 1932. Serial No. 329,799. PUBLISHED OCTOBER 11, 1932. Class 39.

299,866. SWEATERS AND BATHING SUITS. WORCESTER KNITTING COMPANY, Worcester, Mass.
Filed August 24, 1932. Serial No. 329,815. PUBLISHED OCTOBER 11, 1932. Class 39.

299,867. BOYS' AND GIRLS' PLAY SUITS AND OVERALLS. GILES & HIRSCH, INC., New York, N. Y.
Filed August 26, 1932. Serial No. 329,855. PUBLISHED OCTOBER 11, 1932. Class 39.

299,868. OUTER CLOTHING FOR MEN AND BOYS, PARTICULARLY OVERCOATS, SUITS, AND GOLF TROUSERS. H. DAROFF & SONS, INC., Philadelphia, Pa.
Filed August 24, 1932. Serial No. 329,785. PUBLISHED OCTOBER 18, 1932. Class 39.

299,869. MEN'S DRESS SHIRTS, NEGLIGEE SHIRTS, COLLARS. I. JANOV-ABELES SHIRT CO., New York, N. Y.
Filed August 26, 1932. Serial No. 329,857. PUBLISHED OCTOBER 11, 1932. Class 39.

299,870. LUMBERJACKETS, MEN'S AND BOYS' PANTS, COATS, SUITS, AND OVERCOATS. MEYERS PANTS CO. INC., New York, N. Y.
Filed August 31, 1932. Serial No. 330,018. PUBLISHED OCTOBER 18, 1932. Class 39.

299,871. UNDERWEAR FOR MEN, WOMEN, AND CHILDREN. HERMAN M. MCDONALD, Chicago, Ill.
Filed September 2, 1932. Serial No. 330,067. PUBLISHED OCTOBER 18, 1932. Class 39.

299,872. WEARING APPAREL—NAMELY, COMBINATION SUITS, SHIRTS, DRAWERS, SWEATERS, BATHING SUITS, OF KNITTED OR WOVEN MATERIAL. P. H. HANES KNITTING COMPANY, Winston-Salem, N. C.
Filed September 9, 1932. Serial No. 330,200. PUBLISHED OCTOBER 25, 1932. Class 39.

299,873. LADIES' HOSIERY. MEARICK-AMES, INC., Dayton, Ohio.
Filed September 9, 1932. Serial No. 330,203. PUBLISHED OCTOBER 25, 1932. Class 39.

299,874. NON-ALCOHOLIC MALTLESS BEVERAGES SOLD AS SOFT DRINKS. D. NICOLA PAPAROZZI, Newark, N. J.
Filed August 26, 1932. Serial No. 329,865. PUBLISHED OCTOBER 18, 1932. Class 45.

299,875. NON-ALCOHOLIC MALTLESS BEVERAGES SOLD AS SOFT DRINKS, AND GINGER ALE. GLUEK BREWING COMPANY, Minneapolis, Minn.
Filed April 18, 1932. Serial No. 326,211. PUBLISHED OCTOBER 18, 1932. Class 45.

299,876. GOLF BALLS. TALKING GOLF BALL COMPANY, Chicago, Ill.
Filed September 17, 1932. Serial No. 330,435. PUBLISHED OCTOBER 25, 1932. Class 22.

299,877. FISHING REELS. THE ENTERPRISE MANUFACTURING COMPANY, Akron, Ohio.
Filed September 15, 1932. Serial No. 330,366. PUBLISHED OCTOBER 25, 1932. Class 22.

299,878. CASKETS. MICHIGAN CASKET CO., Detroit, Mich.
Filed September 19, 1932. Serial No. 330,485. PUBLISHED OCTOBER 25, 1932. Class 2.

299,879. SOFT DRINKS AND SYRUPS AND EXTRACTS USED IN MAKING THE SAME. ASHEVILLE BOTTLING CO., Asheville, N. C.
Filed September 14, 1932. Serial No. 330,329. PUBLISHED OCTOBER 18, 1932. Class 45.

299,880. READY MIXED PAINTS, DRY PAINT COLORS, PAINT THINNERS, WHITE LEAD, ZINC OXIDE PAINT PIGMENTS, LACQUERS, LACQUER THINNERS, PREPARED SHELLAC READY FOR USE, FLOOR WAX, PUTTY, VARNISH, PAINT ENAMELS, LINSEED OIL, TURPENTINE, CALCIMINE, OIL AND JAPAN COLORS. ATWATER PAINT CO., Los Angeles, Calif.
Filed August 30, 1932. Serial No. 329,976. PUBLISHED OCTOBER 11, 1932. Class 16.

299,881. ASPHALT PLANK, FLOOR TILE, INDUSTRIAL TILE, AND EXPANSION JOINTS. UVALDE ROCK ASPHALT COMPANY, San Antonio, Tex.
Filed August 29, 1932. Serial No. 329,963. PUBLISHED OCTOBER 11, 1932. Class 12.

299,882. COMPOUND FOR CLEANING AND POLISHING AUTOMOBILES, FURNITURE, AND OTHER FINISHED SURFACES. WILLIAM A. DE VRIES, Spokane, Wash.
Filed August 12, 1932. Serial No. 329,516. PUBLISHED OCTOBER 11, 1932. Class 16.

299,883. AUTOMOBILE AND FURNITURE POLISH. THEODORE H. HARTMANN, doing business as Vitro Shine Mfg. Co., St. Louis, Mo.
Filed August 11, 1932. Serial No. 329,469. PUBLISHED OCTOBER 11, 1932. Class 16.

299,884. PERIODICAL PUBLICATION. CORNELIUS PUBLICATIONS, INC., Indianapolis, Ind.
Filed August 9, 1932. Serial No. 329,423. PUBLISHED OCTOBER 11, 1932. Class 38.

299,885. FACIAL TISSUES. RITZ COSMETIC & PERFUME SHOPPE, Elizabeth, N. J.
Filed August 5, 1932. Serial No. 329,356. PUBLISHED OCTOBER 11, 1932. Class 37.

299,886. IRON COMPOUND IN THE FORM OF A DRY POWDER USED TO REPAIR DEFECTS AND BREAKS IN AND MAKE PATCHES ON IRON AND OTHER METALLIC SUBSTANCES, TO MAKE METALLIC JOINTS, AND TO COVER METALLIC SURFACES. SMOOTH-ON MANUFACTURING COMPANY, Jersey City, N. J.
Filed August 3, 1932. Serial No. 329,317. PUBLISHED OCTOBER 11, 1932. Class 12.

299,887. DRY AND READY MIXED PAINTS, PAINT ENAMELS, STAINS, LACQUERS, AND VARNISHES. THE PATTERSON-SARGENT COMPANY, Cleveland, Ohio.
Filed August 2, 1932. Serial No. 329,292. PUBLISHED OCTOBER 11, 1932. Class 16.

299,888. PLASTER AND THERMAL INSULATING MATERIALS. THE WYODAK CHEMICAL COMPANY, Cuyahoga Heights Village, Cleveland, Ohio.
Filed July 27, 1932. Serial No. 329,211. PUBLISHED OCTOBER 11, 1932. Class 12.

299,889. LAMP BOWLS, LAMP SHADES, LAMP CHIMNEYS, AND VASES MADE OF GLASS. THE MANTLE LAMP COMPANY OF AMERICA, Chicago, Ill.
Filed July 5, 1932. Serial No. 328,559. PUBLISHED OCTOBER 11, 1932. Class 33.

299,890. LIQUID ADHESIVE CEMENTS. CLARENCE DORR, doing business as Soldax Company, Hoosick Falls, N. Y.
Filed June 24, 1932. Serial No. 328,267. PUBLISHED OCTOBER 11, 1932. Class 5.

299,891. ENAMELS. W. P. FULLER & CO., San Francisco, Calif.
Filed June 20, 1932. Serial No. 328,120. PUBLISHED OCTOBER 11, 1932. Class 16.

299,892. FOLDERS ISSUED FROM TIME TO TIME CONTAINING INFORMATION OF GENERAL INTEREST. FIRST NATIONAL BANK OF ARIZONA AT PHOENIX, Phoenix, Ariz.
Filed June 2, 1932. Serial No. 327,652. PUBLISHED OCTOBER 11, 1932. Class 38.

299,893. FLUID REFINISH IN THE NATURE OF A PAINT FOR MASONRY FOR RESURFACING AND WATERPROOFING THE SAME. JOSEPH L. HOLDEMAN, Elkhart, Ind.
Filed May 12, 1932. Serial No. 327,014. PUBLISHED OCTOBER 11, 1932. Class 16.

299,894. MALT BEVERAGES CONTAINING LESS THAN ONE-HALF OF ONE PER CENT ALCOHOL BY VOLUME AND EXTRACTS FOR MAKING THE SAME. MONTGOMERIE & CO., LTD., Glasgow, Scotland.
Filed April 21, 1932. Serial No. 326,333. PUBLISHED JULY 26, 1932. Class 48.

299,895. LIVERWURST. KARL SEILER & SONS, Philadelphia, Pa.
Filed August 13, 1932. Serial No. 329,538. PUBLISHED OCTOBER 11, 1932. Class 46.

299,896. SAUCE FOR MEATS, FISH, GAME, AND HOT OR COLD DRESSING FOR SALADS. MESSRS. DANIELS & CO., Cos Cob, Conn.
Filed August 18, 1932. Serial No. 329,626. PUBLISHED OCTOBER 11, 1932. Class 46.

299,897. CANDY. STEPHEN F. WHITMAN & SON, INC., Philadelphia, Pa.
Filed August 9, 1932. Serial No. 329,435. PUBLISHED OCTOBER 11, 1932. Class 46.

299,898. TABLETS FOR HEADACHE, NEURALGIA, ETC. HEXIN, INC., Chicago, Ill.
Filed September 12, 1932. Serial No. 330,258. PUBLISHED OCTOBER 18, 1932. Class 6.

299,899. ETHYL ALCOHOL, BRANDIES, WHISKEYS, RUM, LIQUEURS, AND CORDIALS. JUAN MOLLFULLEDA CONGOST, Arenys de Mar, Barcelona, Spain.
Filed August 5, 1932. Serial No. 329,352. PUBLISHED OCTOBER 25, 1932. Class 49.

299,900. ETHYL ALCOHOL, BRANDIES, WHISKEYS, RUM, LIQUEURS, AND CORDIALS. JUAN MOLLFULLEDA CONGOST, doing business as Hijo de Magin Mollfulleda, Arenys de Mar, Barcelona, Spain.
Filed August 5, 1932. Serial No. 329,348. PUBLISHED OCTOBER 25, 1932. Class 49.

299,901. PAPER BAGS. CAPITAL PAPER COMPANY, Indianapolis, Ind.
Filed September 10, 1932. Serial No. 330,222. PUBLISHED OCTOBER 25, 1932. Class 2.

299,902. NON-ALCOHOLIC, MALTLESS, BIRCH BEER SOLD AS A SOFT DRINK. SYLVINA O. BARNES, Salem, Mass.
Filed July 30, 1932. Serial No. 329,218. PUBLISHED OCTOBER 25, 1932. Class 45.

299,903. WHISKEY. INTERNATIONAL TRADE, FINANCE, & EXPO[illegible] Scotland.
Filed Se[illegible] WITHDRAWN. PUBLISHED OCTOBER 25, 1932. Class 49.

299,904. CONTAINERS OR BAGS OF TRANSPARENT PAPER OR CELLULOSE FILM, USED PARTICULARLY FOR FOOD PRESERVATION. UNITED STATES ENVELOPE COMPANY, Springfield, Mass.
Filed September 6, 1932. Serial No. 330,132. PUBLISHED OCTOBER 25, 1932. Class 2.

299,905. ROWING MACHINES. HEALTH DEVELOPING APPARATUS CO., INC., New York, N. Y.
Filed September 6, 1932. Serial No. 330,127. PUBLISHED OCTOBER 18, 1932. Class 22.

299,906. ROWING MACHINES. HEALTH DEVELOPING APPARATUS CO., INC., New York, N. Y.
Filed September 6, 1932. Serial No. 330,126. PUBLISHED OCTOBER 18, 1932. Class 22.

299,907. TIRES CONSTRUCTED WHOLLY OR PARTIALLY OF RUBBER. WESTERN AUTO SUPPLY COMPANY, Kansas City, Mo.
Filed September 8, 1932. Serial No. 330,111. PUBLISHED OCTOBER 25, 1932. Class 35.

299,908. PLAYING CARDS. MAX TATAR, Chicago, Ill.
Filed September 3, 1932. Serial No. 330,109. PUBLISHED OCTOBER 25, 1932. Class 22.

299,909. ROWING MACHINES. HEALTH DEVELOPING APPARATUS CO., INC., New York, N. Y.
Filed September 3, 1932. Serial No. 330,089. PUBLISHED OCTOBER 18, 1932. Class 22.

299,910. ROWING MACHINES. HEALTH DEVELOPING APPARATUS CO., INC., New York, N. Y.
Filed September 3, 1932. Serial No. 330,088. PUBLISHED OCTOBER 18, 1932. Class 22.

299,911. BRAKE LININGS. KEASBEY & MATTISON COMPANY, Ambler, Pa.
Filed August 29, 1932. Serial No. 329,952. PUBLISHED OCTOBER 25, 1932. Class 35.

299,912. NATURAL MINERAL WATER. NATURAL PRODUCTS COMPANY, Eugene, Oreg.
Filed July 19, 1932. Serial No. 328,908. PUBLISHED OCTOBER 18, 1932. Class 45.

299,913. PORTABLE RECEPTACLES FOR ATTACHMENT TO THE USER'S WEARING APPAREL AND ADAPTED FOR CARRYING CIGARETTE PACKAGES, MATCHES, GOLF TEES, AND SMALL ARTICLES FOR PERSONAL USE. MARTIN DENNIS COMPANY, Newark, N. J.
Filed August 24, 1932. Serial No. 329,801. PUBLISHED OCTOBER 18, 1932. Class 2.

299,914. SHUTTLECOCKS. NATIONAL GAMES CORPORATION, Buffalo, N. Y.
Filed August 22, 1932. Serial No. 329,750. PUBLISHED OCTOBER 25, 1932. Class 22.

299,915. ARTIFICIAL FISHING BAITS—NAMELY, WOBBLERS AND SPINNERS. THE WILLIAMS GOLD REFINING CO., INC., Buffalo, N. Y.
Filed August 15, 1932. Serial No. 329,567. PUBLISHED OCTOBER 25, 1932. Class 22.

299,916. DOLLS. OTTINGER, CAREW and MCLAUGHLIN, New York, N. Y.
Filed August 9, 1932. Serial No. 329,427. PUBLISHED OCTOBER 18, 1932. Class 22.

299,917. DOLLS. OTTINGER, CAREW and MCLAUGHLIN, New York, N. Y.
Filed August 9, 1932. Serial No. 329,426. PUBLISHED OCTOBER 18, 1932. Class 22.

299,918. CONTAINERS, SHIPPING CASES, DISPLAY CASES, DISPLAY STANDS IN THE FORM OF CONTAINERS AND PARTS THEREOF, INCLUDING PADS, LINERS, PARTITIONS, SHELVES, AND DIE-CUT PARTS MADE FROM PAPER BOARD. THE OTTAWA RIVER PAPER COMPANY, Toledo, Ohio.
Filed July 29, 1932. Serial No. 329,198. PUBLISHED OCTOBER 18, 1932. Class 2.

299,919. POWER TRANSMISSION BELTS. RAYBESTOS-MANHATTAN, INC., Passaic, N. J.
Filed July 14, 1932. Serial No. 328,801. PUBLISHED OCTOBER 18, 1932. Class 35.

299,920. FISHHOOKS. THE ENTERPRISE MANUFACTURING COMPANY, Akron, Ohio.
Filed July 7, 1932. Serial No. 328,597. PUBLISHED OCTOBER 18, 1932. Class 22.

299,921. GIRLS', JUNIORS', MISSES', LITTLE WOMEN'S, AND LADIES' COATS. SIEGEL BROS. KIKI MAID COATS INC., New York, N. Y.
Filed October 21, 1931. Serial No. 320,280. PUBLISHED DECEMBER 8, 1931. Class 39.

299,922. LADIES' AND CHILDREN'S DRESSES AND PAJAMAS. CHIC MANUFACTURING CO., Peoria, Ill.
Filed July 13, 1931. Serial No. 316,877. PUBLISHED OCTOBER 25, 1932. Class 39.

299,923. SWEATERS, BATHING SUITS, AND UNDERWEAR FOR MEN, WOMEN, AND CHILDREN. GARDINER-WARRING CO., INC., Florence, Ala.
Filed May 20, 1931. Serial No. 314,796. PUBLISHED OCTOBER 11, 1932. Class 39.

299,924. SWEATERS, BATHING SUITS, AND UNDERWEAR FOR MEN, WOMEN, AND CHILDREN. GARDINER-WARRING CO., INC., Florence, Ala. Filed May 20, 1931. Serial No. 314,797. PUBLISHED OCTOBER 11, 1932. Class 39.

299,925. HOSIERY FOR MEN, WOMEN, AND CHILDREN. METRO HOSIERY CO., INC., New York, N. Y. Filed September 29, 1930. Serial No. 306,195. PUBLISHED OCTOBER 4, 1932. Class 39.

TRADE-MARK REGISTRATIONS RENEWED

39,543. METAL COMPOUNDS FOR CERTAIN NAMED PURPOSES. Registered December 23, 1902. ALLGEMEINE THERMIT-GESELLSCHAFT M. B. H., Essen-on-the-Ruhr, Germany. Renewed December 23, 1932, to Goldschmidt Thermit Company, New York, N. Y., a Corporation of New York, assignee.

40,303. LADIES' LEATHER BOOTS AND SHOES. Registered May 12, 1903. HERVEY E. GUPTILL, Haverhill, Mass. Renewed May 12, 1933, to Hervey E. Guptill Company, Seabrook, N. H., a Firm, assignee.

87,059. A CERTAIN PHARMACEUTICAL PREPARATION. Registered June 25, 1912. MAURICE M. FEINBERG. Renewed June 25, 1932, to Jennie Feinberg, New York, N. Y., successor.

88,243. CANDY. Registered September 10, 1912. CLARENCE ARTHUR CRANE. Renewed September 10, 1932, to B. M. Crane, N. B. Madden, and Mark A. Copeland, executors of the last will of Clarence A. Crane, deceased, Cleveland, Ohio.

89,153. WHOLE-WHEAT FLOUR. Registered November 12, 1912. PETER SCHMITT, Columbus, Nebr. Renewed November 12, 1932.

89,200. SURGICAL BANDAGES. Registered November 19, 1912. EDMUND M. POND. Renewed November 19, 1932, to Arthur H. Smith and Esme A. C. Smith, doing business as Pond Manufacturing Company, Rutland, Vt., a Firm.

89,339. CANDY. Registered December 10, 1912. CLARENCE A. CRANE. Renewed December 10, 1932, to B. M. Crane, N. B. Madden, and Mark A. Copeland, executors of the last will of Clarence A. Crane, deceased, Cleveland, Ohio.

89,986. CERTAIN NAMED CLEANING COMPOUND. Registered January 28, 1913. CAMMEYER. Renewed January 28, 1933, to Cammeyer, Inc., New York, N. Y., a Corporation of New York, assignee.

90,332. LOOM-PICKERS. Registered February 18, 1913. HOLBROOK RAW HIDE COMPANY, Providence, R. I., a Corporation of Rhode Island. Renewed February 18, 1933.

90,423. MOTOR-CYCLES AND AUTOMOBILES. Registered February 25, 1913. SAMUEL A. FLAMM, doing business as Uncle Sam Motor Company, Philadelphia, Pa. Renewed February 25, 1933.

90,660. APPLIANCES AND APPARATUS FOR THE USE OF FUMIGATING, DEODORIZING, AND DISINFECTING PREPARATIONS; ANTISEPTIC GAUZE, AND ABSORBENT WOOL. Registered March 11, 1913, to "Sanitas" Co. (U. S. A.), Jersey City, N. J., as assignee of The "Sanitas" Company, Limited, Limehouse, London, England. Renewed March 11, 1933, to The "Sanitas" Company, Limited, London, England, a Corporation of Great Britain, assignee by mesne assignments.

90,851. GRAPHOPHONES, GRAMOPHONES, AND PARTS THEREOF AND RECORDS FOR SAME. Registered March 25, 1913. THE VITAPHONE CO., Plainfield, N. J. Renewed March 25, 1933, to The Vitaphone Corporation, New York, N. Y., a Corporation of New York, assignee by mesne assignments.

90,863. AUTOMATIC WATER-HEATERS. Registered April 1, 1913. AMERICAN STOVE COMPANY, St. Louis, Mo., a Corporation of New Jersey. Renewed April 1, 1933.

91,123. SPICES, FLAVORING EXTRACTS FOR FOODS, CANNED FRUITS, VEGETABLES, AND FISH. Registered April 15, 1913. PACIFIC COMMERCIAL COMPANY, San Francisco, Calif. Renewed April 15, 1933, to Pacific Commercial Company, New York, N. Y., a Corporation of the Philippine Islands.

91,127. DRESS, NEGLIGEE, AND PLAITED SHIRTS. Registered April 15, 1913. ROGGEN BROS. & CO. Renewed April 15, 1933, to Roggen Bros. & Co. Inc., New York, N. Y., a Corporation of New York, assignee.

91,295. JUTE BAGGING. Registered April 22, 1913. LUDLOW MANUFACTURING ASSOCIATES, Boston, Mass., a Voluntary Association of Massachusetts. Renewed April 22, 1933.

91,305. CERTAIN PACKING FOR MACHINERY AND MACHINERY PARTS. Registered April 29, 1913. THE ANCHOR PACKING COMPANY, Camden, N. J., and Philadelphia, Pa. Renewed April 29, 1933, to The Anchor Packing Company, Philadelphia, Pa., a Corporation of New Jersey.

91,364. CERTAIN NAMED FOODS. Registered April 29, 1913. THE MOREY MERCANTILE COMPANY, Denver, Colo., a Corporation of Colorado. Renewed April 29, 1933.

91,425. BAKING-POWDER. Registered April 29, 1913. PACIFIC COMMERCIAL COMPANY, San Francisco, Calif. Renewed April 29, 1933, to Pacific Commercial Company, New York, N. Y., a Corporation of Philippine Islands.

LABELS

REGISTERED DECEMBER 27, 1932

41,560.—*Title:* ADDO. For Muffin Mixture. THE ADDO CORPORATION, Swampscott, Mass. Published October 19, 1932.

41,561.—*Title:* FRESH IN GLASS ROYAL CUP COFFEE. For Coffee. BATTERTON COFFEE CO. INC., Birmingham, Ala. Published June 15, 1932.

41,562.—*Title:* BABY BEAR. For Fresh Grapes. BIANCHI, MATTEUCCI & PEPE, Stockton, Calif. Published September 29, 1931.

41,563.—*Title:* MODERNE CLEANER. For Combined Water Softener and Cleaner. RAYMOND W. BIELFELDT, doing business as Moderne Chemical Co., Aurora, Ill. Published November 19, 1932.

41,564.—*Title:* BISHOP'S PARRAKEET AND FINCH MIXTURE. For Parrakeet and Finch Seed Mixture. HENRY BISHOP INC., Baltimore, Md. Published October 26, 1932.

CARNEGIE LIBRARY OF ATLANTA

41,565.—*Title:* NUN'S NOMOTTA. For Knitting Worsted. T. BUETTNER & CO., Chicago, Ill. Published October 17, 1932.

41,566.—*Title:* ANDY BOY. For Fresh Broccoli. D'ARRIGO BROS. CO., San Jose, Calif. Published October 17, 1932.

41,567.—*Title:* DUFF'S FRUIT CAKE MIX. For Fruit Cake Mixture. P. DUFF & SONS, INC., Pittsburgh, Pa. Published October 27, 1932.

41,568.—*Title:* CHAIN-WAY LINGERIE GUARDS. For Lingerie Guards. H. C. HILL MFG. CO., Los Angeles, Calif. Published January 8, 1932.

41,569.—*Title:* FOOT FORM SHOES. For Boxes. HOAGUE-SPRAGUE CORPORATION, Lynn, Mass. Published November 7, 1932.

41,570.—*Title:* SERVICE SHOES. For Boxes. HOAGUE-SPRAGUE CORPORATION, Lynn, Mass. Published October 26, 1932.

41,571.—*Title:* JEFFREY'S. For Pure Cane Syrup. DANIEL JEFFREY & SONS, INCORPORATED, Jeanerette, La. Published September 24, 1932.

41,572.—*Title:* SOM TOY. For Chop Suey. HARRY R. KING, Boston, Mass. Published October 7, 1932.

41,573.—*Title:* TOUR-NE-SOL. For Cleansing Cream. A. J. KRANK COMPANY, St. Paul, Minn. Published August 25, 1932.

41,574.—*Title:* DAIRY FRESH COFFEE. For Bottled Coffee. CARL LOUD, Birmingham, Mich. Published November 15, 1932.

41,575.—*Title:* MASON'S BLACK CROWS. For Candy Drops. MASON, AU & MAGENHEIMER CONFECTIONERY MANUFACTURING COMPANY, Brooklyn, N. Y. Published October 17, 1932.

41,576.—*Title:* MI-MO BATH KUSHUN. For Bath Cushions. MI-MO PRODUCTS CO., Rochester, N. Y. Published October 3, 1932.

41,577.—*Title:* MORGANS WHOLE WHEAT DESSERT. For Prepared Whole-Wheat Desserts. H. S. MORGAN, INC., Brooklyn, N. Y. Published September 10, 1932.

41,578.—*Title:* MAGNETIC. For Dusting Sulphur. NATIONAL SULPHUR CO., INC., New York, N. Y. Published April 15, 1932.

41,579.—*Title:* "RED DOT" HOUSEHOLD CLEANER. For Household Cleaner. NEFF POTTERIES, Pasadena, Calif. Published September 28, 1932.

41,580.—*Title:* ANTIPHONES, THE SOUND ABSORBERS. For Antiseptically Prepared Plastic Balls to be Inserted in the Ear to Protect the Ear from Nerve-Wearing Noise. MAX NEGWER, Potsdam, Germany. Published February 1, 1932.

41,581.—*Title:* INDECKSKIT. For Menus and Recipes. PALMER ADVERTISING SERVICE INC., New York, N. Y. Published October 24, 1932.

41,582.—*Title:* RUGGET. For Rugs. PATCHOGUE PLYMOUTH MILLS CORPORATION, New York, N. Y. Published November 11, 1932.

41,583.—*Title:* PHILLIPS FLOUR. For Flour. PHILLIPS MILLING COMPANY INCORPORATED, San Francisco, Calif. Published October 1, 1932.

41,584.—*Title:* PHILLIPS LONG GRAIN RICE. For Rice. PHILLIPS MILLING COMPANY INCORPORATED, San Francisco, Calif. Published October 1, 1932.

41,585.—*Title:* PLACENTIA QUEEN. For Fresh Oranges. PLACENTIA CO-OPERATIVE ORANGE ASSN., Placentia, Calif. Published March 23, 1932.

41,586.—*Title:* QUANDT CORE OIL. For Core Oil (an Oil Used in Foundry Work). QUANDT CHEMICAL CO., San Francisco, Calif. Published October 15, 1932.

41,587.—*Title:* ELECTION. For Game. JOHN RATHBUN, Cincinnati, Ohio. Published July 14, 1932.

41,588.—*Title:* SUNNY COVE. For Fresh Oranges. REDLANDS FOOTHILL GROVES, Redlands, Calif. Published October 16, 1931.

41,589.—*Title:* TIP-TOP HEATLESS LIQUID SOLDER. For Liquid Solder. CARL W. RENSTROM, doing business as Tip-Top Products Co., Omaha, Nebr. Published July 25, 1931.

41,590.—*Title:* PUZZLE POP. For Lollypops. E. ROSEN COMPANY, Providence, R. I. Published October 15, 1932.

41,591.—*Title:* SHELF AND LINING PAPER. For Shelf and Lining Paper. THE ROYAL LACE PAPER WORKS, INC., Brooklyn, N. Y. Published June 10, 1932.

41,592.—*Title:* FINGERPRINTER. For Fingerprint Game Toy Sets. HERBERT RUBIN, doing business as New York Toy & Game Co., New York, N. Y. Published November 17, 1932.

41,593.—*Title:* STUHMER'S. For Pumpernickel. GEO. F. STUHMER & COMPANY, Brooklyn, N. Y. Published August 24, 1932.

41,594.—*Title:* STUHMER'S. For Rye Bread. GEO. F. STUHMER & COMPANY, Brooklyn, N. Y. Published August 24, 1932.

41,595.—*Title:* RAT-E-K-TOR, QUICKLY ERADICATES RATS & MICE. For Powder Preparation for Eradicating Rats and Mice. CLARENCE B. TRAUTWEIN, Chattanooga, Tenn. Published June 2, 1932.

41,596.—*Title:* VAL-HI. For Oranges. VALENCIA HEIGHTS ORCHARDS, INC., Covina, Calif. Published September 29, 1930.

41,597.—*Title:* VANDYK'S DATES. For Dates. VAN DYK & REEVES, INC., Brooklyn, N. Y. Published September 8, 1932.

41,598.—*Title:* MINARET DATES. For Dates. VAN DYK & REEVES, INC., Brooklyn, N. Y. Published August 30, 1932.

41,599.—*Title:* MARGUERITE WINSTEAD FACE LOTION. For Face Lotion. MARGUERITE WINSTEAD, Washington, D. C. Published October 28, 1932.

LABELS RENEWED

11,774. H. L. D. OINTMENT. For Ointment. Registered January 3, 1905. CARRIE A. DAUGHENBAUGH. Renewed January 3, 1933, to Carrie A. Daughenbaugh, doing business as H. L. D. Ointment Co., Allegheny, Pa.

PRINTS

REGISTERED DECEMBER 27, 1932

13,985.—*Title:* BIRNBACH COMPLETE AERIAL KIT. For Radio Aerial Kits. BIRNBACH RADIO CO., INC., New York, N. Y. Published September 17, 1932.

13,986.—*Title:* CARROCCIO'S READY TO SERVE SAUCE. For Prepared Sauce. T. A. CARROCCIO & SONS, New York, N. Y. Published October 11, 1932.

13,987.—*Title:* STOP FORCING YOUR CHILD TO EAT HOT CEREALS! For Cereal Food. GENERAL MILLS, INC., Minneapolis, Minn. Published November 15, 1932.

13,988.—*Title:* LAIRD'S CIDER. For Cider. LAIRD & COMPANY, INCORPORATED, Eatontown, N. J. Published October 10, 1931.

13,989.—*Title:* SINGLE EDGE BLADES. For Razor Blades. TWENTY GRAND BLADE COMPANY, INC., Spencer, Iowa. Published October 1, 1932.

REISSUES

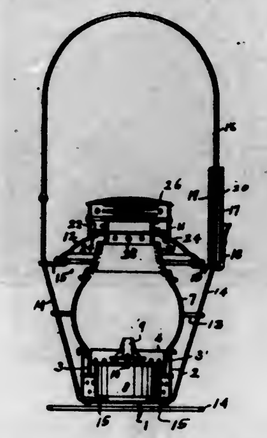
DECEMBER 27, 1932

18,703. PROCESS FOR TREATING EDIBLE NUTS. CAREY K. BIZZELL, Elizabeth, N. J., and JAMES EUSTACE BIZZELL, Brooklyn, N. Y. Original No. 1,887,256, dated Nov. 8, 1932, Serial No. 599,060, filed Mar. 15, 1932. Application for reissue filed Nov. 23, 1932. Serial No. 644,126. 4 Claims. (Cl. 146—219.)

1. In the process of removing skins from nut meats, the steps comprising preparing a hot aqueous solution of an alkaline reagent of the group comprising the carbonates, bicarbonates and hydroxides of sodium, potassium, ammonium, calcium, magnesium and the like, immersing the nut kernels in the said solution and for a time period to permit reaction with the fatty materials of the skins but without permitting reaction upon the meat of the kernels, thereafter simultaneously removing the products of reaction and the skins, and neutralising the so treated kernels by means of dilute acids of the group comprising acetic, malic, citric, tartaric, phosphoric, and hydrochloric acids.

18,704. LANTERN. GUY F. HITCHCOCK, Houston, Tex., assignor of one-half to Thomas H. Meeks, Harris County, Tex. Original No. 1,768,763, dated July 1, 1930, Serial No. 289,962, filed July 2, 1928. Application for reissue filed May 2, 1932. Serial No. 609,339. 5 Claims. (Cl. 240—40.)

1. In a lantern having a frame, a base, and a bail; side bars incorporated into the frame whose lower ends are connected to the base and to the upper ends of which the respective ends of the bail are hingedly connected, and a sleeve slidable on said bail and movable into position over one of the hinges by which the bail is connected to said bars to render the bail substantially rigid with respect



to said bars and a yieldably mounted dog carried by the sleeve and engageable with the frame to hold said sleeve in active position.

DESIGNS

DECEMBER 27, 1932

88,742. SHOE. JEROME EDSON ANDREWS, Andover, Mass. Filed Nov. 10, 1932. Serial No. 45,864. Term of patent 3½ years.



The ornamental design for a shoe, as shown and described.

88,743. SHOE. JEROME EDSON ANDREWS, Andover, Mass. Filed Nov. 10, 1932. Serial No. 45,865. Term of patent 3½ years.



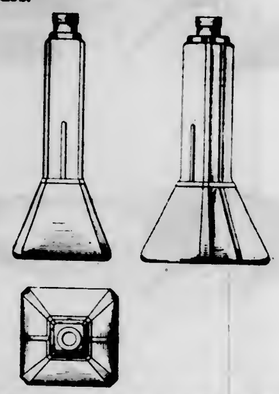
The ornamental design for a shoe, as shown and described.

88,744. PLAQUE. PASQUALE BENEDUCE, Hoboken, N. J., assignor to A. Paladini & Company, New York, N. Y., a Firm composed of Ralph J. Morales, Emilio Pisani, and Katherine Paladini. Filed Apr. 28, 1932. Serial No. 43,643. Term of patent 3½ years.



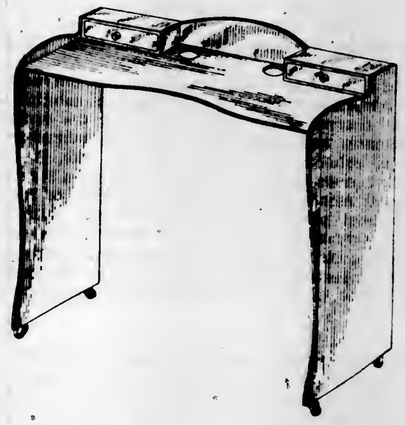
The ornamental design for a plaque as shown and described.

88,745. BOTTLE OR SIMILAR ARTICLE. HYMAN C. BERKOWITZ, Boston, Mass., assignor to Ben-Burk, Incorporated, Boston, Mass., a Corporation of Massachusetts. Filed Oct. 10, 1932. Serial No. 45,285. Term of patent 14 years.



The ornamental design for a bottle or similar article substantially as shown.

88,746. BED DESK. RITA BERMAN, New York, N. Y. Filed Apr. 7, 1932. Serial No. 43,476. Term of patent 8½ years.



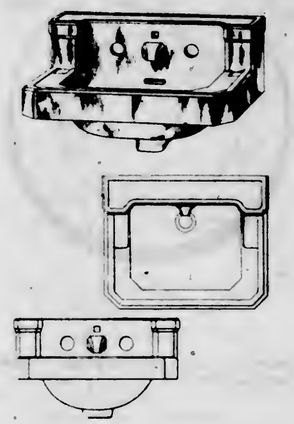
The ornamental design for a bed desk, as shown.

88,747. CONTROL FOR HAIR WAVING APPARATUS. GEORGE EDWARDZ BJÖRKMAN, Djursholm, Sweden. Filed Mar. 30, 1932. Serial No. 43,335. Term of patent 14 years.



The ornamental design for a control for hair waving apparatus, as shown.

88,748. SHELF BACK LAVATORY. GEORGE BRAIN, Tiffin, Ohio, assignor to Standard Sanitary Manufacturing Company, Pittsburgh, Pa., a Corporation of New Jersey. Filed Oct. 20, 1932. Serial No. 45,425. Term of patent 14 years.



The ornamental design for a shelf back lavatory, substantially as shown.

88,749. TEXTILE FABRIC OR SIMILAR ARTICLE. FERNAND BRIDIER, Paris, France, assignor to William Willheim Co., Inc., New York, N. Y. Filed Nov. 12, 1932. Serial No. 45,892. Term of patent 8½ years.



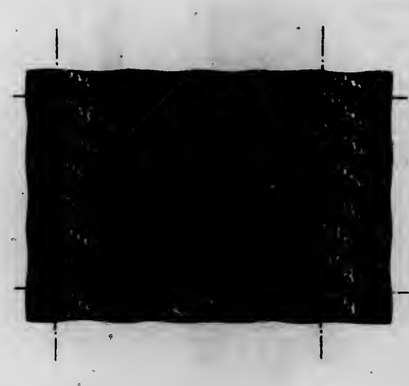
The ornamental design for a textile fabric or similar article as shown and described.

88,750. TEXTILE FABRIC OR SIMILAR ARTICLE. MICHEL BRODSKY, Paris, France, assignor to William Willheim Co., Inc., New York, N. Y. Filed Nov. 19, 1932. Serial No. 46,067. Term of patent 8½ years.



The ornamental design for a textile fabric or similar article as shown and described.

88,751. TEXTILE FABRIC OR SIMILAR ARTICLE. MICHEL BRODSKY, Paris, France, assignor to William Willheim Co., Inc., New York, N. Y. Filed Nov. 19, 1932. Serial No. 46,068. Term of patent 8½ years.



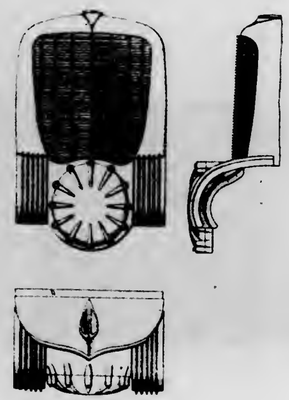
The ornamental design for a textile fabric or similar article as shown and described.

88,752. TEXTILE FABRIC OR SIMILAR ARTICLE. MICHEL BRODSKY, Paris, France, assignor to William Willheim Co., Inc., New York, N. Y. Filed Nov. 19, 1932. Serial No. 46,069. Term of patent 3½ years.



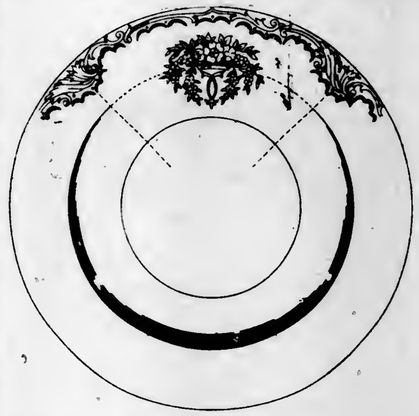
The ornamental design for a textile fabric or similar article as shown and described.

88,753. COMBINED AUTOMOBILE RADIATOR AND FRONT. GORDON MILLER BUEHRIG, Indianapolis, Ind., assignor to Manning & Co., Chicago, Ill., a Corporation of Illinois. Filed Dec. 21, 1931. Serial No. 42,178. Term of patent 3½ years.



The ornamental design for a combined automobile radiator and front substantially as shown.

88,754. PLATE OR SIMILAR ARTICLE. YUKIO BUMA, New York, N. Y., assignor to Morimura Bros. Inc., New York, N. Y., a Corporation of Japan. Filed Mar. 31, 1932. Serial No. 43,349. Term of patent 7 years.



The ornamental design for a plate or similar article, as shown and described.

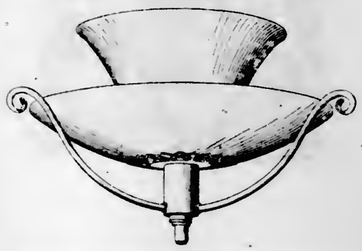
88,755. BOTTLE CAP. BENJAMIN F. CONNER, Wethersfield, Conn., assignor to Colt's Patent Fire Arms Manufacturing Co., Hartford, Conn., a Corporation of Connecticut. Filed Sept. 17, 1932. Serial No. 44,965. Term of patent 7 years.





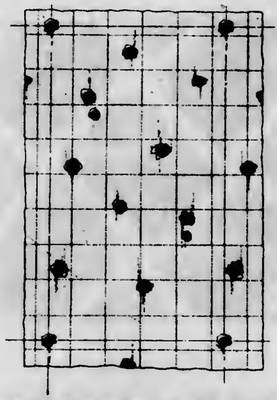
The ornamental design for a bottle cap as shown.

88,756. LIGHTING FIXTURE. WILLIAM COOK, New York, N. Y., assignor to Warman & Cook, Inc., a Corporation of New York. Filed Oct. 26, 1932. Serial No. 45,589. Term of patent 3½ years.



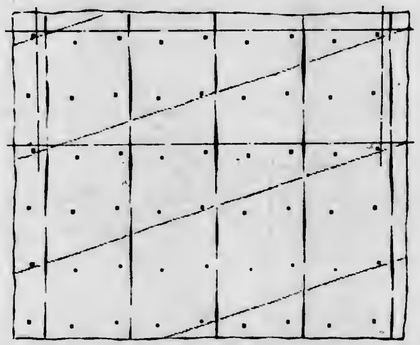
The ornamental design for a lighting fixture as shown and described.

88,757. TEXTILE FABRIC OR THE LIKE. HAROLD CRUGER, Ridgewood, N. J. Filed Nov. 16, 1932. Serial No. 45,997. Term of patent 3½ years.



The ornamental design for a textile fabric or the like, as shown and described.

88,758. TEXTILE FABRIC OR THE LIKE. HAROLD CRUGER, Ridgewood, N. J. Filed Nov. 16, 1932. Serial No. 45,998. Term of patent 3½ years.



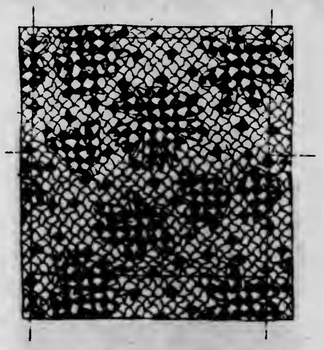
The ornamental design for a textile fabric or the like, as shown and described.

88,759. TEXTILE FABRIC OR THE LIKE. HAROLD CAUGHR, Ridgewood, N. J. Filed Nov. 16, 1932. Serial No. 46,071. Term of patent 3½ years.



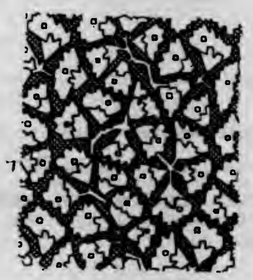
The ornamental design for a textile fabric or the like, as shown and described.

88,760. TEXTILE FABRIC OR THE LIKE. LESLIE DERRIEY, New York, N. Y. Filed Nov. 19, 1932. Serial No. 46,083. Term of patent 3½ years.



The ornamental design for a textile fabric or the like, as shown and described.

88,761. LACE. JEAN DOGNIN, Paris, France, assignor to The Lace Net Importing Co. Inc., New York, N. Y. Filed July 15, 1932. Serial No. 44,350. Term of patent 3½ years.



The ornamental design for lace, substantially as shown and described.

88,762. PITCHER. CHARLES M. EVANS, Sapulpa, Okla., assignor to Bartlett-Collins Company, Sapulpa, Okla., a Corporation of Oklahoma. Filed July 22, 1932. Serial No. 44,408. Term of patent 7 years.



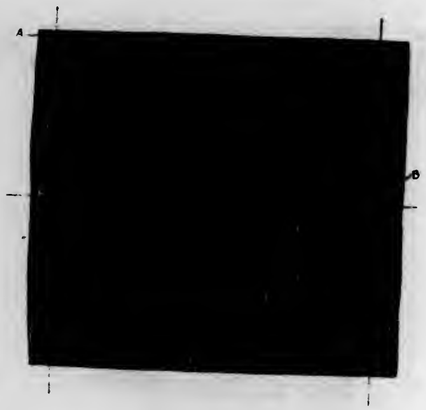
The ornamental design for a pitcher, substantially as shown and described.

88,763. SHOE SOLE. FRED D. FOWLER, Newton, Mass., assignor to The B. F. Goodrich Company, New York, N. Y., a Corporation of New York. Filed Oct. 26, 1932. Serial No. 45,593. Term of patent 14 years.



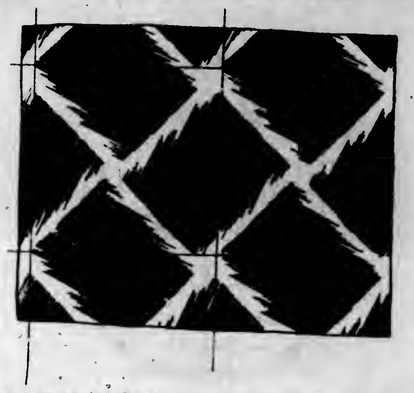
The ornamental design for a shoe sole as shown.

88,764. TEXTILE FABRIC OR THE LIKE. RALPH W. FRAMBACH, Maplewood, N. J. Filed Nov. 8, 1932. Serial No. 45,819. Term of patent 3½ years.



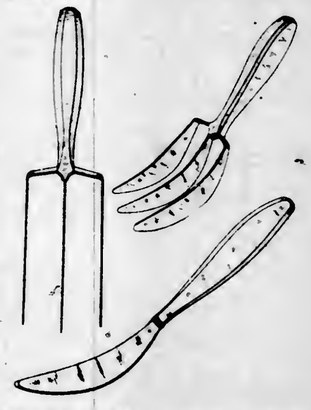
The ornamental design for a textile fabric or the like, as shown and described.

88,765. TEXTILE FABRIC OR THE LIKE. RALPH W. FRAMBACH, Maplewood, N. J. Filed Nov. 8, 1932. Serial No. 45,820. Term of patent 3½ years.



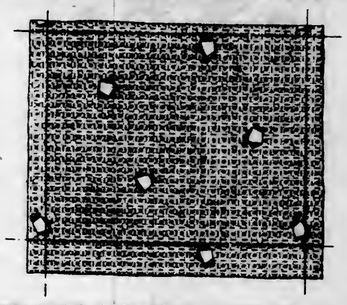
The ornamental design for a textile fabric or the like, as shown and described.

88,766. KNIFE. MARGARET GARRETT, Detroit, Mich. Filed Oct. 31, 1932. Serial No. 45,662. Term of patent 14 years.



The ornamental design for a knife, substantially as shown.

88,767. TEXTILE FABRIC. ROBERT GEORGE, Paris, France, assignor to Cheney Brothers, New York, N. Y., a Corporation of Connecticut. Filed Nov. 12, 1932. Serial No. 45,986. Term of patent 3½ years.



The ornamental design for a textile fabric, substantially as shown and described.

88,768. COMBINED BIRD FIGURE AND PEDESTAL. PAUL GERENT, New Britain, Conn. Filed Oct. 22, 1932. Serial No. 45,506. Term of patent 3½ years.



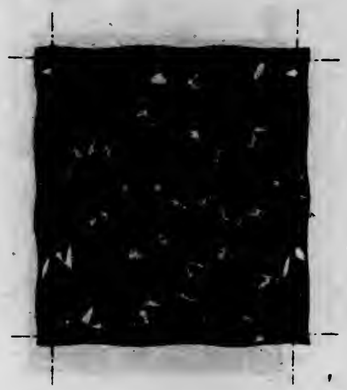
The ornamental design for a combined bird figure and pedestal as shown.

88,769. TEXTILE FABRIC OR SIMILAR ARTICLE. JOSEPH M. GOTTESMAN, Paris, France, assignor to William Willheim Co., Inc., New York, N. Y. Filed Nov. 18, 1932. Serial No. 46,035. Term of patent 3½ years.



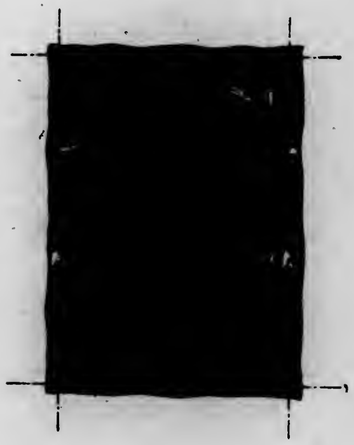
The ornamental design for a textile fabric or similar article as shown and described.

88,770. TEXTILE FABRIC OR SIMILAR ARTICLE. JOSEPH M. GOTTESMAN, Paris, France, assignor to William Willheim Co., Inc., New York, N. Y. Filed Nov. 18, 1932. Serial No. 46,088. Term of patent 3½ years.



The ornamental design for a textile fabric or similar article as shown and described.

88,771. TEXTILE FABRIC OR SIMILAR ARTICLE. JOSEPH M. GOTTESMAN, Paris, France, assignor to William Willheim Co., Inc., New York, N. Y. Filed Nov. 18, 1932. Serial No. 46,089. Term of patent 3½ years.



The ornamental design for a textile fabric or similar article as shown and described.

88,772. TEXTILE FABRIC OR SIMILAR ARTICLE. JOSEPH M. GOTTESMAN, Paris, France, assignor to William Willheim Co., Inc., New York, N. Y. Filed Nov. 18, 1932. Serial No. 46,041. Term of patent 3½ years.



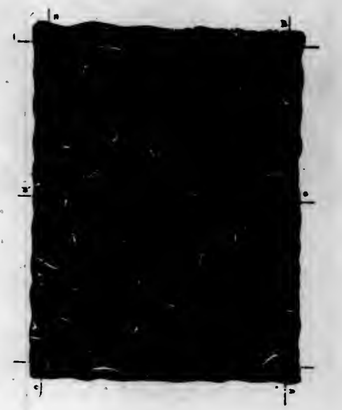
The ornamental design for a textile fabric or similar article as shown and described.

88,773. TEXTILE FABRIC OR SIMILAR ARTICLE. JOSEPH M. GOTTESMAN, Paris, France, assignor to William Willheim Co., Inc., New York, N. Y. Filed Nov. 18, 1932. Serial No. 46,042. Term of patent 3½ years.



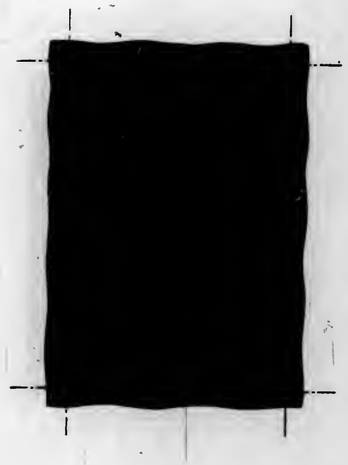
The ornamental design for a textile fabric or similar article as shown and described.

88,774. TEXTILE FABRIC OR SIMILAR ARTICLE. JOSEPH M. GOTTESMAN, Paris, France, assignor to William Willheim Co., Inc., New York, N. Y. Filed Nov. 18, 1932. Serial No. 46,043. Term of patent 3½ years.



The ornamental design for a textile fabric or similar article as shown and described.

88,775. TEXTILE FABRIC OR SIMILAR ARTICLE. JOSEPH M. GOTTESMAN, Paris, France, assignor to William Willheim Co., Inc., New York, N. Y. Filed Nov. 18, 1932. Serial No. 46,044. Term of patent 3½ years.



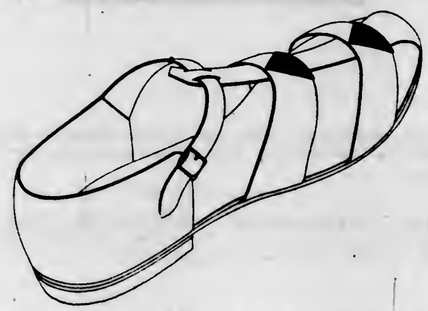
The ornamental design for a textile fabric or similar article as shown and described.

88,776. GAME APPARATUS. CHARLES M. GRAVATT, Asheville, N. C. Filed Sept. 14, 1032. Serial No. 44,881. Term of patent 3½ years.



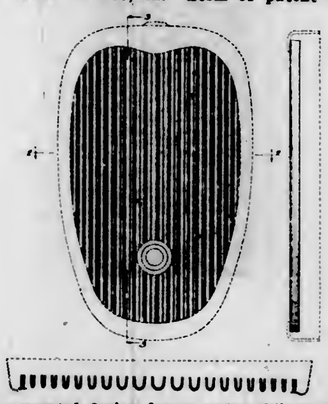
The ornamental design for a game apparatus, substantially as shown.

88,777. SANDAL. WILLIAM H. GRAVES, Culver City, Calif. Filed May 16, 1932. Serial No. 43,822. Term of patent 14 years.



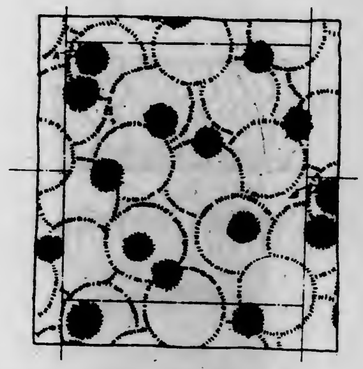
The ornamental design for a sandal substantially as shown.

88,778. AUTOMOBILE RADIATOR SHELL WITH LOUVER TYPE GRILLE. LEE B. GREEN, Lakewood, Ohio, assignor to The Globe Machine & Stamping Company, Cleveland, Ohio, a Corporation of Ohio. Filed Mar. 21, 1932. Serial No. 43,242. Term of patent 7 years.



The ornamental design for an automobile radiator shell with louver type grille, as shown and described.

88,779. TEXTILE FABRIC OR THE LIKE. HARRY GREENE, Brooklyn, N. Y. Filed Nov. 8, 1932. Serial No. 45,825. Term of patent 3½ years.



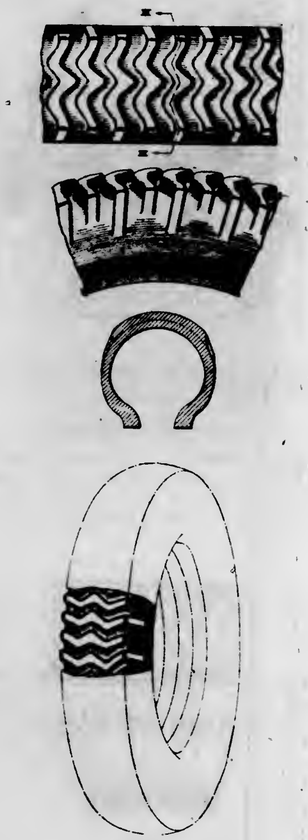
The ornamental design for a textile fabric or the like, as shown and described.

88,780. TIRE. ALFRED C. GUNSAULUS, Akron, Ohio, assignor to The Goodyear Tire & Rubber Company, Akron, Ohio, a Corporation of Ohio. Filed Apr. 29, 1932 Serial No. 43,661. Term of patent 3½ years.



The ornamental design for a tire, as shown.

88,781. TIRE. ALFRED C. GUNDAULUS, Akron, Ohio, assignor to The Goodyear Tire & Rubber Company, Akron, Ohio, a Corporation of Ohio. Filed May 2, 1932. Serial No. 43,690. Term of patent 3½ years.



The ornamental design for a tire, as shown.

88,782. ELECTRIC LAMP. KENNETH R. HALEY, Beaver Falls, Pa., assignor to General Electric Company, a Corporation of New York. Filed Feb. 18, 1931. Serial No. 38,639. Term of patent 14 years.



The ornamental design for an electric lamp substantially as shown and described.

88,783. TEXTILE FABRIC OR SIMILAR ARTICLE OF MANUFACTURE. ALFRED J. HEINKE, Towaco, N. J. Filed Nov. 3, 1932. Serial No. 45,724. Term of patent 3½ years.



The ornamental design for a textile fabric or similar article of manufacture substantially as shown and described.

88,784. TEXTILE FABRIC OR THE LIKE. ALFRED J. HEINKE, Towaco, N. J. Filed Nov. 10, 1932. Serial No. 45,859. Term of patent 3½ years.



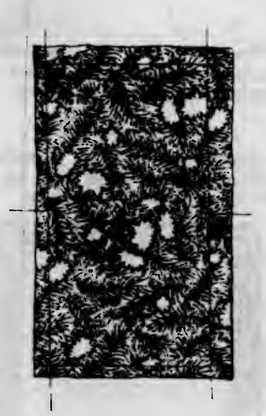
The ornamental design for a textile fabric or the like, as shown and described.

88,785. TEXTILE FABRIC OR THE LIKE. ALFRED J. HEINKE, Towaco, N. J. Filed Nov. 14, 1932. Serial No. 45,954. Term of patent 3½ years.



The ornamental design for a textile fabric or the like, as shown and described.

88,786. TEXTILE FABRIC OR THE LIKE. ALFRED J. HEINKE, Towaco, N. J. Filed Nov. 15, 1932. Serial No. 45,976. Term of patent 3½ years.



The ornamental design for a textile fabric or the like, as shown and described.

88,787. TEXTILE FABRIC OR THE LIKE. ALFRED J. HEINKE, Towaco, N. J. Filed Nov. 15, 1932. Serial No. 45,979. Term of patent 3½ years.



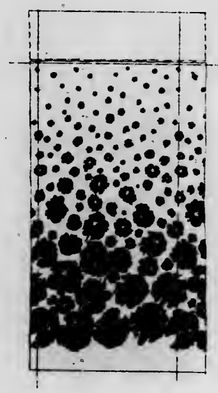
The ornamental design for a textile fabric or the like, as shown and described.

88,788. TEXTILE FABRIC OR THE LIKE. ALFRED J. HEINKE, Towaco, N. J. Filed Nov. 15, 1932. Serial No. 45,980. Term of patent 3½ years.



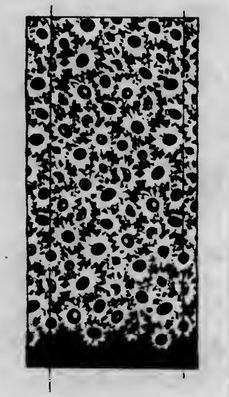
The ornamental design for a textile fabric or the like, as shown and described.

88,789. TEXTILE FABRIC OR THE LIKE. ALFRED J. HEINKE, Towaco, N. J. Filed Nov. 15, 1932. Serial No. 45,982. Term of patent 3½ years.



The ornamental design for a textile fabric or the like, as shown and described.

88,790. TEXTILE FABRIC OR THE LIKE. ALFRED J. HEINKE, Towaco, N. J. Filed Nov. 16, 1932. Serial No. 45,995. Term of patent 3½ years.



The ornamental design for a textile fabric or the like, as shown and described.

88,791. TEXTILE FABRIC OR SIMILAR ARTICLE. CARL R. HELLMAN, New York, N. Y., assignor to William Willheim Co., Inc., New York, N. Y. Filed Nov. 14, 1932. Serial No. 45,956. Term of patent 3½ years.

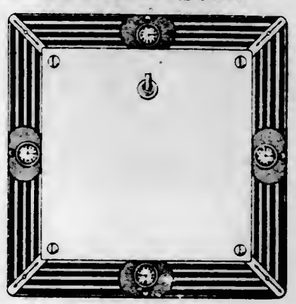


The ornamental design for a textile fabric or similar article as shown and described.

88,792. COMBINED RADIATOR AND FENDER FOR VEHICLES. JAMES R. HUGHES, South Bend, Ind., assignor to The Pierce-Arrow Motor Car Company, Buffalo, N. Y., a Corporation of New York. Filed July 23, 1932. Serial No. 44,429. Term of patent 14 years.

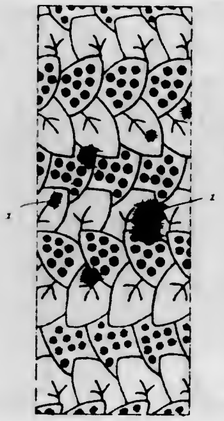
The ornamental design for a combined radiator and fender for vehicles substantially as shown.

88,793. INDIVIDUAL WATCH HANGER. ARTHUR JOHNSON, Hardin, Mont. Filed June 16, 1932. Serial No. 44,105. Term of patent 3½ years.



The ornamental design for an individual watch hanger as shown and described.

88,794. TEXTILE FABRIC. MAX U. JUERSTRICH, Ridgefield, N. J., assignor to The American Fabrics Company, Bridgeport, Conn., a Corporation of Connecticut. Filed Sept. 21, 1932. Serial No. 45,006. Term of patent 3½ years.



The ornamental design for textile fabric, substantially as shown and described.

88,795. TEXTILE FABRIC. MAX U. JUERSTRICH, Ridgefield, N. J., assignor to The American Fabrics Company, Bridgeport, Conn., a Corporation of Connecticut. Filed Sept. 21, 1932. Serial No. 45,007. Term of patent 3½ years.



The ornamental design for textile fabric, substantially as shown and described.

88,796. TEXTILE FABRIC. MAX U. JUERSTRICH, Ridgefield, N. J., assignor to The American Fabrics Company, Bridgeport, Conn., a Corporation of Connecticut. Filed Sept. 21, 1932. Serial No. 45,008. Term of patent 3½ years.



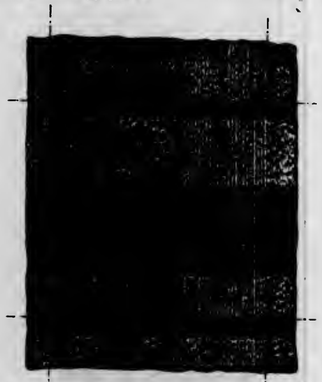
The ornamental design for textile fabric, substantially as shown and described.

88,797. TEXTILE FABRIC OR THE LIKE. WERNER R. KAUFMANN, East Elmhurst, Long Island, N. Y., assignor to Combier & Co. Inc., New York, N. Y., a Corporation of Delaware. Filed Oct. 4, 1932. Serial No. 45,207. Term of patent 3½ years.



The ornamental design for a textile fabric or the like substantially as shown and described.

88,798. TEXTILE FABRIC OR SIMILAR ARTICLE. WERNER R. KAUFMANN, East Elmhurst, Long Island, N. Y., assignor to William Willheim Co., Inc., New York, N. Y. Filed Oct. 22, 1932. Serial No. 45,453. Term of patent 3½ years.



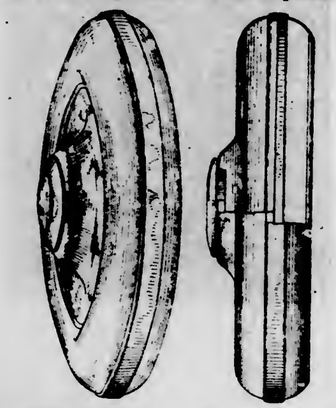
The ornamental design for a textile fabric or similar article as shown and described.

88,799. DOLL. RICHARD G. KRUMME, Mount Vernon, N. Y. Filed Oct. 28, 1932. Serial No. 45,612. Term of patent 3½ years.



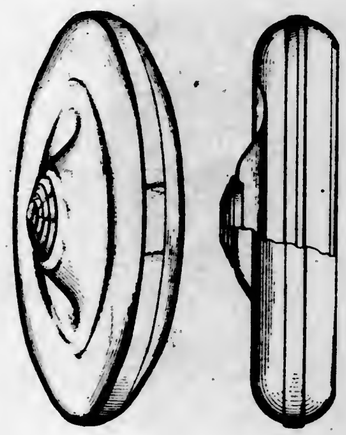
The ornamental design for a doll substantially as shown.

88,800. TIRE COVER FOR SPARE TIRES. CHARLES F. LAMBERT, Grosse Pointe Farms, Mich., assignor to Clayton and Lambert Manufacturing Company, Detroit, Mich., a Corporation of Delaware. Filed Aug. 31, 1932. Serial No. 44,729. Term of patent 14 years.



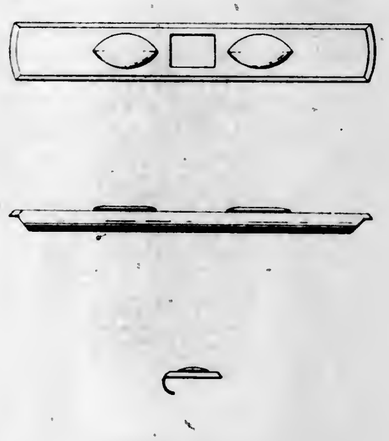
The ornamental design for a tire cover for spare tires, substantially as shown.

88,801. TIRE COVER FOR SPARE TIRES. CHARLES F. LAMBERT, Grosse Pointe Farms, Mich., assignor to Clayton and Lambert Manufacturing Company, Detroit, Mich., a Corporation of Delaware. Filed Sept. 28, 1932. Serial No. 45,103. Term of patent 14 years.



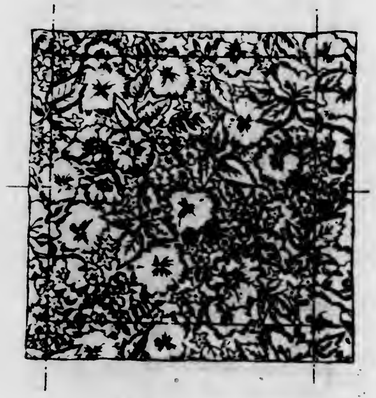
The ornamental design for a tire cover for spare tires, substantially as shown.

88,802. LOCK PLATE. HARRY LIPSCHITZ, Brooklyn, N. Y., assignor to Lido Luggage Co., Inc., New York, N. Y., a Corporation of New York. Filed Sept. 27, 1932. Serial No. 45,078. Term of patent 7 years.



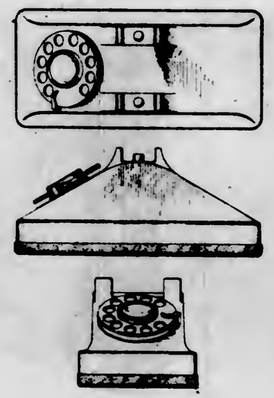
The ornamental design for a lock plate substantially as shown.

88,803. TEXTILE FABRIC OR THE LIKE. JULIA LUKAS, New York, N. Y., assignor to Combier & Co. Inc., New York, N. Y., a Corporation of Delaware. Filed Oct. 6, 1932. Serial No. 45,237. Term of patent 3½ years.



The ornamental design for a textile fabric or the like substantially as shown and described.

88,804. DESK STAND FOR A HAND TELEPHONE. GEORGE R. LUM, New York, N. Y., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Oct. 20, 1932. Serial No. 45,428. Term of patent 14 years.



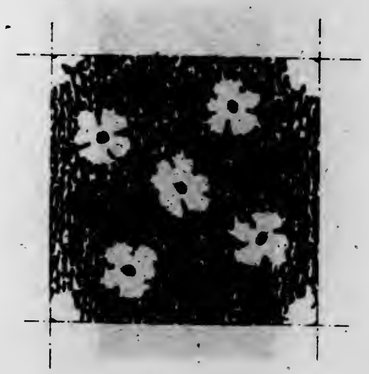
The ornamental design for a desk stand for a hand telephone as shown.

88,805. BRUSH OR SIMILAR TOILET ARTICLE. CLARA OGILVIE MACINNIS, New York, N. Y. Filed Sept. 16, 1932. Serial No. 44,872. Term of patent 7 years.



The ornamental design for a brush or similar toilet article as shown.

88,806. TEXTILE FABRIC OR SIMILAR ARTICLE. JOHN J. MAIBACH, New York, N. Y., assignor to Montgomery Ward & Company, New York, N. Y. Filed Nov. 4, 1932. Serial No. 45,781. Term of patent 3½ years.



The ornamental design for a textile fabric or similar article as shown and described.

88,807. TEXTILE FABRIC OR THE LIKE. JACQUES MAISCH, New York, N. Y. Filed Nov. 15, 1932. Serial No. 45,975. Term of patent 3½ years.



The ornamental design for a textile fabric or the like, as shown and described.

88,808. TEXTILE FABRIC OR THE LIKE. JACQUES MAISCH, New York, N. Y. Filed Nov. 18, 1932. Serial No. 46,053. Term of patent 3½ years.



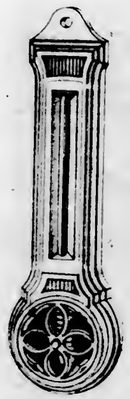
The ornamental design for a textile fabric or the like as shown and described.

88,809. TEXTILE FABRIC OR THE LIKE. JACQUES MAISCH, New York, N. Y. Filed Nov. 25, 1932. Serial No. 46,142. Term of patent 3½ years.



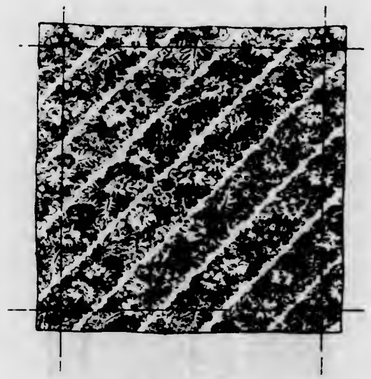
The ornamental design for a textile fabric or the like, as shown and described.

88,810. HUMIDITY INDICATOR. FREDERICK S. MARCELLUS, Scotia, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Oct. 15, 1932. Serial No. 45,373. Term of patent 14 years.



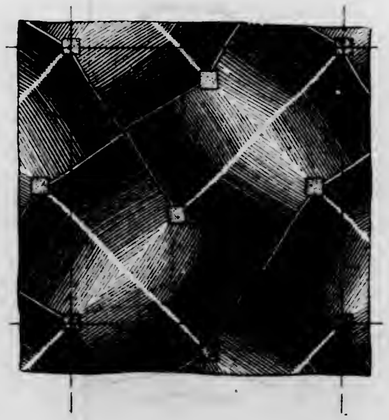
The ornamental design for a humidity indicator substantially as shown.

88,811. TEXTILE FABRIC OR THE LIKE. GEORGES MEGROZ, Bronxville, N. Y., assignor to Wullschleger & Co., New York, N. Y., a Firm. Filed Nov. 16, 1932. Serial No. 46,003. Term of patent 3½ years.



The ornamental design for a textile fabric or the like, as shown and described.

88,812. TEXTILE FABRIC OR THE LIKE. GEORGES MEGROZ, Bronxville, N. Y., assignor to Wullschleger & Co., New York, N. Y., a Firm. Filed Nov. 18, 1932. Serial No. 46,049. Term of patent 3½ years.



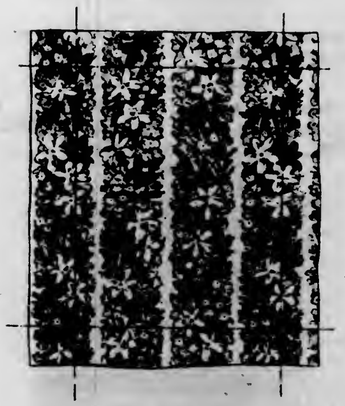
The ornamental design for a textile fabric or the like, as shown and described.

88,813. TEXTILE FABRIC OR THE LIKE. GEORGES MEGROZ, Bronxville, N. Y., assignor to Wullschleger & Co., New York, N. Y., a Firm. Filed Nov. 18, 1932. Serial No. 46,050. Term of patent 3½ years.



The ornamental design for a textile fabric or the like, as shown and described.

88,814. TEXTILE FABRIC OR THE LIKE. GEORGES MEGROZ, Bronxville, N. Y., assignor to Wullschleger & Co., New York, N. Y., a Firm. Filed Nov. 18, 1932. Serial No. 46,051. Term of patent 3½ years.



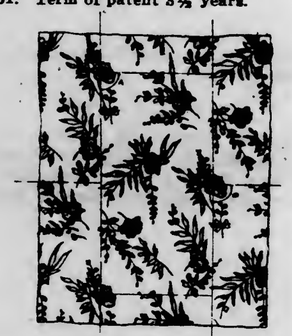
The ornamental design for a textile fabric or the like, as shown and described.

88,815. TEXTILE FABRIC OR THE LIKE. HANS J. NERGER, New York, N. Y. Filed Nov. 18, 1932. Serial No. 46,048. Term of patent 3½ years.



The ornamental design for a textile fabric or the like, as shown and described.

88,816. TEXTILE FABRIC OR THE LIKE. HANS J. NERGER, New York, N. Y. Filed Nov. 19, 1932. Serial No. 46,061. Term of patent 3½ years.



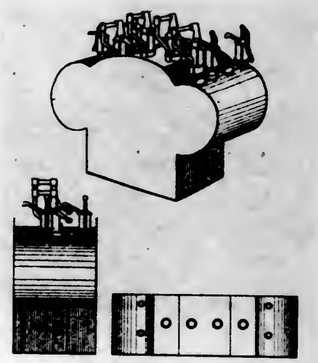
The ornamental design for a textile fabric or the like, as shown and described.

88,817. TEXTILE FABRIC OR THE LIKE. HANS J. NERGER, New York, N. Y. Filed Nov. 19, 1932. Serial No. 46,062. Term of patent 3½ years.



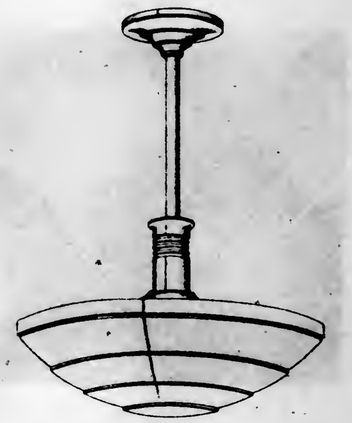
The ornamental design for a textile fabric or the like, as shown and described.

88,818. LIQUID DISPENSER. SWAN E. NORD and RAYMOND M. MULU, Seattle, Wash., assignors to Standard Oil Company of California, San Francisco, Calif., a Corporation of Delaware. Filed Sept. 28, 1932. Serial No. 45,105. Term of patent 3½ years.



The ornamental design for a liquid dispenser, as shown and described.

88,819. LIGHTING FIXTURE. RAYMOND V. OWEN, St. Louis, Mo. Filed Aug. 5, 1932. Serial No. 44,582. Term of patent 3½ years.



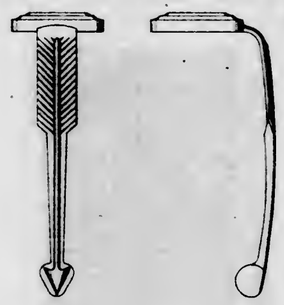
The ornamental design for a lighting fixture, as shown.

88,820. PEDESTAL DESK. HUBBARD G. PARKER, Burlingame, Calif., assignor to Standard Stations, Inc., San Francisco, Calif., a Corporation of Delaware. Filed Oct. 14, 1932. Serial No. 45,368. Term of patent 14 years.



The ornamental design for a pedestal desk, as shown.

88,821. FOUNTAIN PEN AND PENCIL CLIP. JOSEPH B. PLATT, New York, N. Y., and IVAN D. TEWIT, Janesville, Wis., assignors to The Parker Pen Company, Janesville, Wis., a Corporation of Wisconsin. Filed Oct. 13, 1932. Serial No. 45,327. Term of patent 14 years.



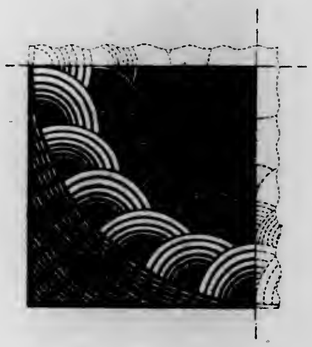
The ornamental design for a fountain pen and pencil clip substantially as shown.

88,822. COMBINATION ASH TRAY AND STAND. BENJAMIN PUTTERMAN, Brooklyn, N. Y., assignor to Yankee Metal Products Corp., a Corporation of New York. Filed Mar. 30, 1932. Serial No. 43,828. Term of patent 7 years.



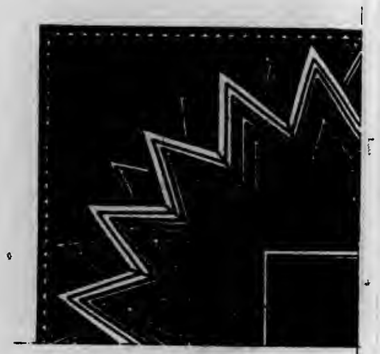
The ornamental design for a combination ash tray and stand substantially as shown.

88,823. TEXTILE FABRIC OR SIMILAR ARTICLE. PAUL REIMAN, New York, N. Y., assignor to William Willheim Co., Inc., New York, N. Y. Filed Nov. 18, 1932. Serial No. 46,032. Term of patent 3½ years.



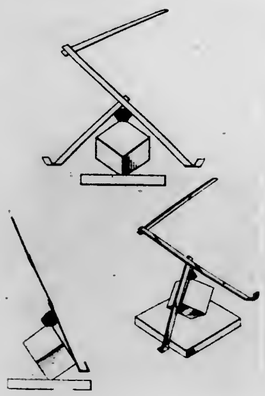
The ornamental design for a textile fabric or similar article as shown and described.

88,824. TEXTILE FABRIC OR SIMILAR ARTICLE. PAUL REIMAN, New York, N. Y., assignor to William Willheim Co., Inc., New York, N. Y. Filed Nov. 18, 1932. Serial No. 46,032. Term of patent 3½ years.



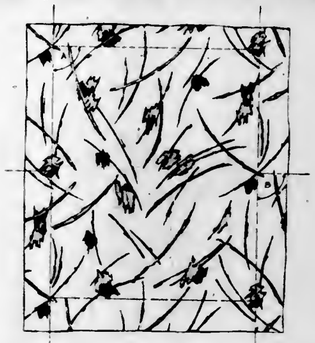
The ornamental design for a textile fabric or similar article as shown and described.

88,825. RACK FOR HOLDING NEWSPAPERS OR THE LIKE. GEORGE F. REINAGEL, Buffalo, N. Y. Filed Apr. 30, 1932. Serial No. 43,675. Term of patent 3½ years.



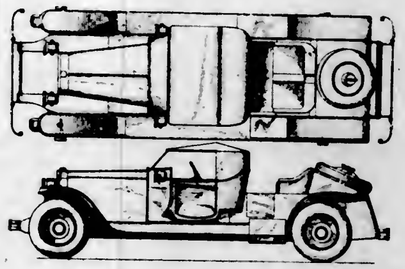
The ornamental design for a rack for holding newspapers or the like substantially as shown.

88,826. TEXTILE FABRIC OR THE LIKE. WILLARD D. ROBERSON, New York, N. Y. Filed Nov. 21, 1932. Serial No. 46,088. Term of patent 3½ years.



The ornamental design for a textile fabric or the like, as shown and described.

88,827. AUTOMOBILE. JOHN BARRY RYAN, New York, N. Y. Filed Dec. 9, 1931. Serial No. 42,016. Term of patent 14 years.



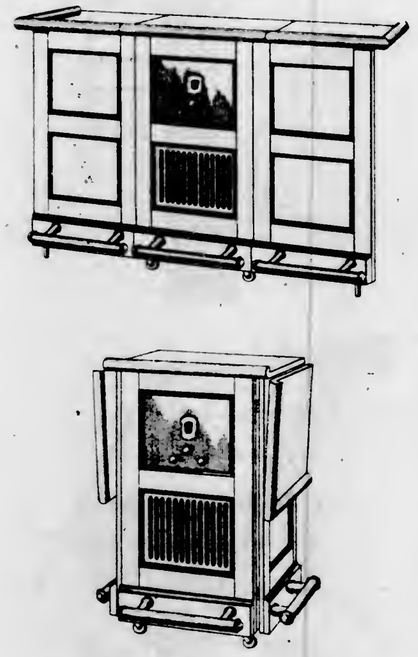
The ornamental design for an automobile as shown.

88,828. TEXTILE FABRIC OR THE LIKE. ROBERT SCHEY, New York, N. Y., assignor to Combier & Co. Inc., New York, N. Y., a Corporation of Delaware. Filed Oct. 4, 1932. Serial No. 45,209. Term of patent 3½ years.



The ornamental design for a textile fabric or the like substantially as shown and described.

88,829. COMBINED FOLDING BAR AND RADIO CABINET. EDWIN G. SCHLOSS and MYRON J. SCHLOSS, New York, N. Y. Filed Aug. 24, 1932. Serial No. 44,686. Term of patent 3½ years.



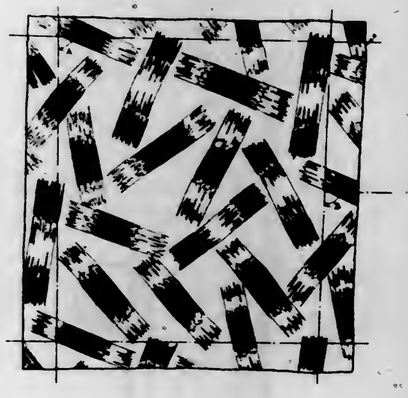
The ornamental design for a combined folding bar and radio cabinet as shown and described.

88,830. TEXTILE FABRIC OR SIMILAR ARTICLE. JACK SCHWEIZER, New York, N. Y., assignor to William Willheim Co., Inc., New York, N. Y. Filed Nov. 12, 1932. Serial No. 45,916. Term of patent 3½ years.



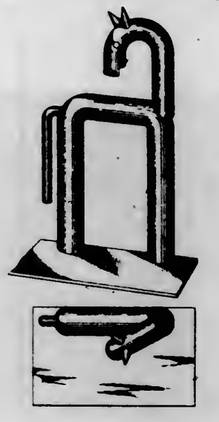
The ornamental design for a textile fabric or similar article as shown and described.

88,831. TEXTILE FABRIC OR THE LIKE. JACK SCHWEIZER, Rye, N. Y. Filed Nov. 15, 1932. Serial No. 45,971. Term of patent 3½ years.



The ornamental design for textile fabric or the like, as shown and described.

88,832. BOOK END OR SIMILAR ARTICLE. WALTER VON NESSEN, New York, N. Y., assignor to The Chase Companies, Incorporated, Waterbury, Conn., a Corporation. Filed Nov. 5, 1932. Serial No. 45,773. Term of patent 7 years.



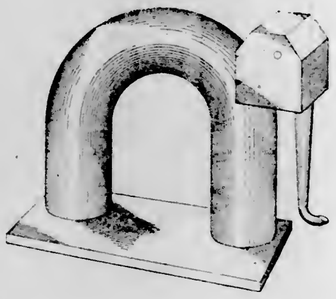
The ornamental design for a book end or similar article as shown.

88,833. BOOK END OR SIMILAR ARTICLE. WALTER VON NESSEN, New York, N. Y., assignor to The Chase Companies, Incorporated, Waterbury, Conn., a Corporation. Filed Nov. 5, 1932. Serial No. 45,774. Term of patent 7 years.



The ornamental design for a book end or similar article as shown.

88,839. TEXTILE FABRIC OR SIMILAR ARTICLE. VON NESSEN, New York, N. Y., assignor to The Chase Companies, Incorporated, Waterbury, Conn., a Corporation. Filed Nov. 5, 1932. Serial No. 45,775. Term of patent 7 years.



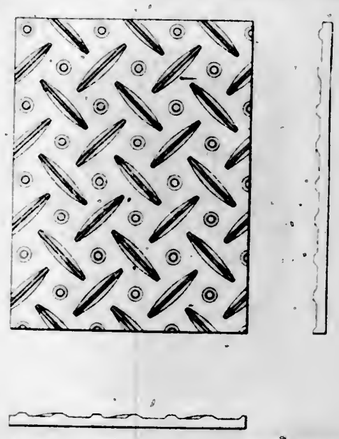
The ornamental design for a book end or similar article as shown.

88,835. AWNING. KARL N. WATKINS, Los Angeles, Calif. Filed Aug. 18, 1931. Serial No. 40,877. Term of patent 3½ years.



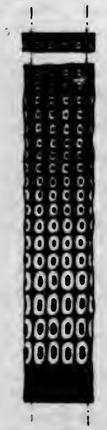
The ornamental design for an awning, as shown.

88,836. TREAD PLATE. ROY L. WHEELER, Mount Oliver, Pa., assignor to Aluminum Company of America, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Oct. 14, 1932. Serial No. 45,366. Term of patent 14 years.



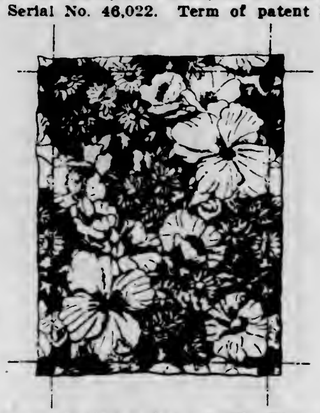
The ornamental design for a tread plate, as shown.

88,837. TEXTILE FABRIC OR SIMILAR ARTICLE. WILLIAM WILLHEIM, New York, N. Y. Filed Nov. 18, 1932. Serial No. 46,020. Term of patent 3½ years.



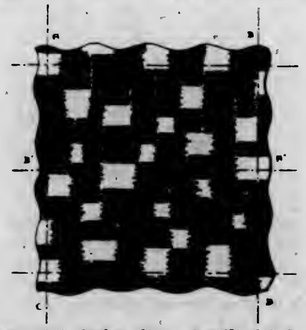
The ornamental design for a textile fabric or similar article as shown and described.

88,838. TEXTILE FABRIC OR SIMILAR ARTICLE. WILLIAM WILLHEIM, New York, N. Y. Filed Nov. 18, 1932. Serial No. 46,022. Term of patent 3½ years.



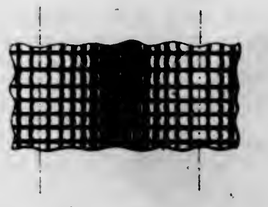
The ornamental design for a textile fabric or similar article as shown and described.

88,839. TEXTILE FABRIC OR SIMILAR ARTICLE. WILLIAM WILLHEIM, New York, N. Y. Filed Nov. 18, 1932. Serial No. 46,024. Term of patent 3½ years.



The ornamental design for a textile fabric or similar article as shown and described.

88,840. TEXTILE FABRIC OR SIMILAR ARTICLE. WILLIAM WILLHEIM, New York, N. Y. Filed Nov. 18, 1932. Serial No. 46,025. Term of patent 3½ years.



The ornamental design for a textile fabric or similar article as shown and described.

88,841. TEXTILE FABRIC OR SIMILAR ARTICLE. WILLIAM WILLHEIM, New York, N. Y. Filed Nov. 18, 1932. Serial No. 46,026. Term of patent 3½ years.



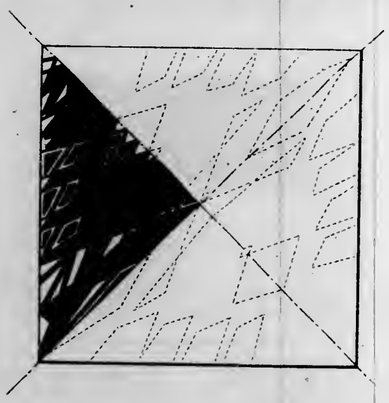
The ornamental design for a textile fabric or similar article as shown and described.

88,842. TEXTILE FABRIC OR SIMILAR ARTICLE. WILLIAM WILLHEIM, New York, N. Y. Filed Nov. 18, 1932. Serial No. 46,027. Term of patent 3½ years.



The ornamental design for a textile fabric or similar article as shown and described.

88,843. TEXTILE FABRIC OR SIMILAR ARTICLE. WILLIAM WILLHEIM, New York, N. Y. Filed Nov. 22, 1932. Serial No. 46,103. Term of patent 3½ years.



The ornamental design for a textile fabric or similar article as shown and described.

88,844. TEXTILE FABRIC. ROBERT GEORGE, Paris, France, assignor to Cheney Brothers, New York, N. Y., a Corporation of Connecticut. Filed Sept. 28, 1932. Serial No. 45,118. Term of patent 3½ years.



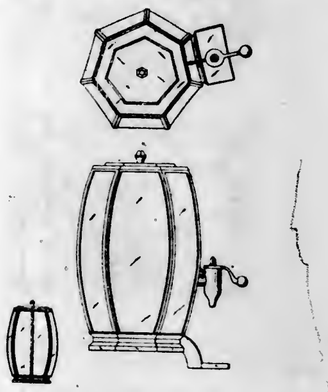
The ornamental design for a textile fabric, substantially as shown and described.

88,845. COMBINED CLOCK CASE AND DIAL. PAUL LUX, Waterbury, Conn., assignor to The Lux Clock Manufacturing Company, Waterbury, Conn., a Corporation of Connecticut. Filed Nov. 9, 1932. Serial No. 45,853. Term of patent 3½ years.



The ornamental design for a combined clock case and dial as shown.

88,846. BEVERAGE DISPENSING CONTAINER. JOHN M. TRAVIS, St. Louis, Mo. Filed Nov. 3, 1932. Serial No. 45,719. Term of patent 14 years.

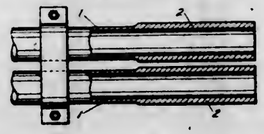


The ornamental design for a beverage dispensing container, as shown.

PATENTS

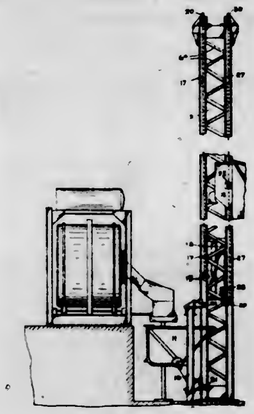
GRANTED DECEMBER 27, 1932

1,891,898. METHOD OF MAKING RETURN BENDS. THOMAS F. BIRMINGHAM, Hammond, Ind., assignor to The Superheater Company, New York, N. Y. Filed Dec. 22, 1930. Serial No. 504,049. 3 Claims. (Cl. 29—157.6.)



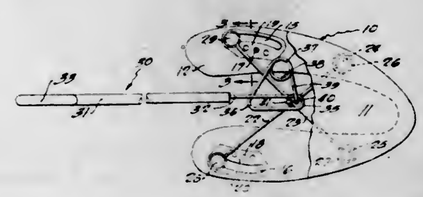
1. The process of making a return bend with pipes whose wall thickness is sufficient to resist the stresses to which they will be exposed but insufficient to permit of the necessary welding, which comprises making two pipes of the wall-thickness required for strength except at the ends to be joined by return bends, said ends being thicker than required for strength and thick enough for welding, holding said pipes in the relative position they are to occupy in the finished product, heating the ends to welding heat, slitting the juxta-posed walls of the two pipes for a suitable distance from their ends, pressing portions adjacent to the slits outward and simultaneously causing them to abut in pairs and unite in a weld.

1,891,899. MAST DISTRIBUTING APPARATUS. JAMES E. BUSHNELL, North Plainfield, N. J., assignor to Ransome Concrete Machinery Company, Plainfield, N. J., a Corporation of New Jersey. Original application filed Feb. 21, 1928, Serial No. 255,894. Divided and this application filed Apr. 11, 1930. Serial No. 443,270. 7 Claims. (Cl. 187—2.)



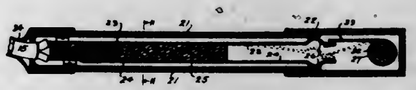
1. In a device of the character described, the combination of an upright mast having spaced vertical tracks, a movable element thereon, connections between said tracks defining a recess facing outwardly with respect to the mast, cable means for moving said element, a portion of said means being disposed in the recess between said tracks.

1,891,900. SHOE FORM. WILLIAM J. DE WITT, Auburn, N. Y., assignor to Shoe Form Co., Inc., Auburn, N. Y., a Corporation of New York. Filed Dec. 16, 1931. Serial No. 581,344. 13 Claims. (Cl. 12—128.3.)



1. A shoe form comprising a hollow toe portion, the walls whereof terminate in flanges, a crossbrace connecting said flanges, a rivet pivotally securing one end of said crossbrace to a flange, the other flange having an arcuate slot therein and a rivet carried by the other end of said crossbrace and adapted to move in said slot, the areas of said flanges engaged by said rivets being raised to reduce the frictional contact of the rivets with the insole of the shoe in which the form is inserted during the pivotal movement of the brace.

1,891,901. TIME CONTROL FOR RADIOS. ERICK W. ERICKSON, Enumclaw, Wash. Filed Aug. 17, 1931. Serial No. 557,439. 2 Claims. (Cl. 200—35.)

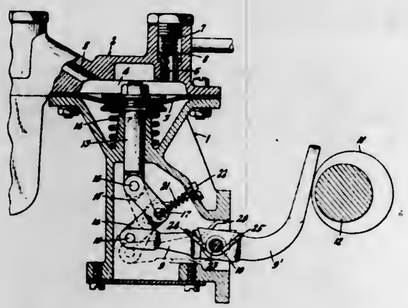


1. In a time controlled switch, the combination with a time-released spring-wound key; of an elongated container clamped thereon, having a wire entering and leaving the container; two spring separated terminals for the wire positioned within said container; and a rotatable lever arm within said container and connected to said key, and adapted to engage one of said terminals to complete the circuit when the key is actuated and when the end of the elongated container is prevented from further rotation.

1,891,902. FUEL PUMP OPERATING PART. ABRAHAM M. BABITCH, Flint, Mich., assignor to A C Spark Plug Company, Flint, Mich., a Company of Michigan. Filed Aug. 2, 1928. Serial No. 297,021. 3 Claims. (Cl. 103—38.)

1. In means for imparting a variable stroke to a pumping element conditionally reciprocable in a pump chamber; a handling element attached to said reciprocable element; actuating means comprising a section which is reciprocable by a cam; and intermediate means pivotally connected with a section of said actuating means and with

said handling element,—one of the mentioned means comprising sections which are connected by a pivotal joint and



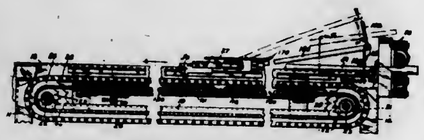
are provided with resilient means tending to prevent parallelism of said sections and to prevent transmission of a thrust therethrough.

1,891,903. REFRIGERATED BED AND COUCH. HAROLD E. BANG, New York, N. Y. Filed May 25, 1931. Serial No. 539,792. 6 Claims. (Cl. 5—284.)



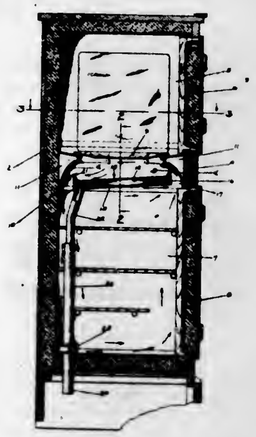
1. A refrigerated sleeping contrivance, comprising a frame having a head and foot portion, a spring structure supported between the head and foot portion, a refrigerator chamber located beneath the spring structure and having a portion extending upwards at the foot portion of the bed terminating in an opening directly above the spring structure, means for controlling the size of said opening and a refrigerating system supported on the frame and adapted to cool the refrigerator chamber.

1,891,904. TUBE DRAWING MACHINE. GEORGE E. BARNHART, Pasadena, Calif. Filed Sept. 12, 1927. Serial No. 219,161. 7 Claims. (Cl. 205—3.)



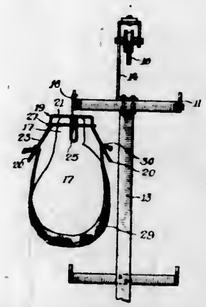
1. In an organization of the general character described, rotatable dies, releasable engaging means for an article to be drawn through said dies, a chain for moving said releasable engaging means toward or from said dies, and means for rotating said dies from said chain, said last named means consisting of a shaft, a sprocket loosely mounted on said shaft engaged by said chain, a coiled spring on said shaft having one end secured to said shaft and the other end secured to said sprocket, a ratchet secured to said shaft, a dog on said sprocket adapted to engage said ratchet, and gearing connecting said shaft to said dies.

1,891,905. REFRIGERATOR. JOHN BECK, Ashland, Wis. Filed Sept. 1, 1928. Serial No. 303,401. 1 Claim. (Cl. 62—46.)



In a refrigerator, an ice chamber in the upper part of the structure having an open bottom, a bottom chamber in the lower part of the structure, an inclined pan in the upper part of the lower chamber below said open bottom and adapted to receive water from melting ice, said pan having air-tight joints between its ends and the contiguous walls of the chamber and having its edges spaced from the other walls of the chamber to provide air-circulating passages, upwardly and inwardly directed surfaces defining the outer walls of said air-circulating passages, and means adjacent to the lower edge of the pan for conducting water from said pan, the whole arranged so that air will be circulated through the lower chamber in one direction only, upwardly along the wall opposite said water outlet means and upwardly along the lower, inclined wall of the pan, through the adjacent air-circulating passage, transversely of the structure in contact with the ice and between the ice and the upper, downwardly inclined wall of the pan, through the other air-circulating passage, and downwardly along the wall of the structure adjacent to said water outlet means.

1,891,906. APPARATUS FOR SMOKING MEAT. ALONZO N. BENN, Chicago, Ill. Filed Oct. 12, 1929. Serial No. 399,136. 11 Claims. (Cl. 99—2.)



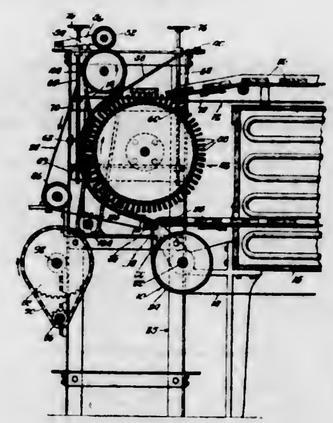
1. An apparatus for smoking meat comprising a skeleton member carried by one end of the meat and having a pair of V-shaped arms arranged in opposed relation, and a smoking cloth looped around the opposite end of the meat for preshaping the same and having its ends arranged for engagement with said arms.

1,891,907. APPARATUS FOR SMOKING MEAT. ALONZO N. BENN, Chicago, Ill. Filed Feb. 28, 1930. Serial No. 432,031. 5 Claims. (Cl. 99—2.)



1. An apparatus in the form of a skeleton member for smoking meat comprising a pair of wires each bent into an intermediate portion for engaging one end of the meat and oppositely disposed end portions which together form arms extending downwardly along the sides of the meat, the extremities of said end portions being disposed in abutting relation, a third wire bent into a loop enclosing said arms below the plane of said intermediate portion, attaching prongs provided on said arms, and a smoking cloth secured at its ends to said prongs and bound around the opposite end of the meat.

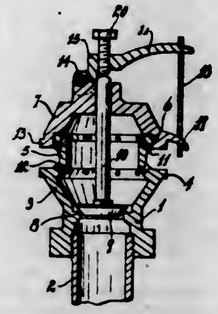
1,891,908. MEANS FOR AND METHOD OF HANDLING CANDY GOODS. DOMINICK M. BERNOTOW, Chicago, Ill. assignor to Bunte Brothers, Chicago, Ill., a Corporation of Illinois. Filed Jan. 11, 1930. Serial No. 420,250. 7 Claims. (Cl. 198—167.)



1. In a conveyor device of the class described for candy goods and material of like nature, a rotary drum device having a cushion-like peripheral portion for directly engaging and receiving material to be conveyed, and a conveyor means positively movable in timed relation with respect to and adjacent the peripheral portion of said rotary means and adapted to cooperate therewith in conveying material positioned therebetween.

1,891,909. AUTOMATIC SPRAY HEAD. CLAUD H. BILLS, La Habra, and GLENN G. GRISWOLD, Pico, Calif. Filed Aug. 26, 1930. Serial No. 477,844. 2 Claims. (Cl. 169—40.)

1. A spray head comprising a body having a ring shaped groove in its outer surface, said body having a plurality of oppositely disposed converging outlet ducts formed in opposite sides of said groove, a cap on the top of the body, a flange on the body adjacent the ducts on one side of said groove, and a flange on the lower end of said cap, adjacent



the ducts on the other side of said groove, said flanges being formed so as to be in line with the ducts opposite thereto.

1,891,910. GARTER PAD FORM AND HOOK. WALTER BERLIN, New York, N. Y. Filed July 29, 1931. Serial No. 553,753. 4 Claims. (Cl. 241—6.)

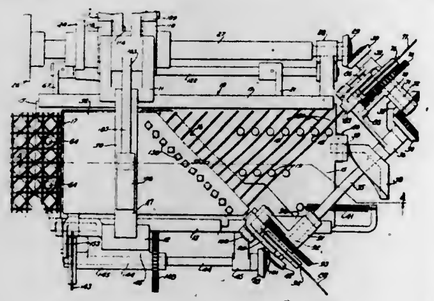


1. A garter pad form and hook, comprising a pad of substantially hexagonal shape having both the top and the bottom sides horizontal, a garter support upon the bottom side of said pad, a band attached upon another side of the hexagonal pad and terminating in an eye member at its other end, an isosceles pad having a base side along the side of the rexagonal pad to which said band is attached, a hook fixed upon the vertex opposite the base side of said isosceles pad and capable of coacting with the eye member on the band, and means for adjustably holding said isosceles pad so that its position may be changed wherein its base is at various inclinations to the side of the hexagonal pad which connects with said band, comprising means for pivotally supporting one vertex on the base of said isosceles pad on said hexagonal pad, a bar attached upon said base of the isosceles pad and pivotally mounted at the pivot point of the said isosceles pad, and means for holding the bar in fixed adjusted positions.

1,891,911. PROCESS OF DECOMPOSING TITANIUM ORES. JOHANNES BROOS and GEORG KÄS, Ludwigshafen-on-the-Rhine, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed Mar. 10, 1927, Serial No. 174,400, and in Germany Mar. 11, 1926. 9 Claims. (Cl. 23—202.)

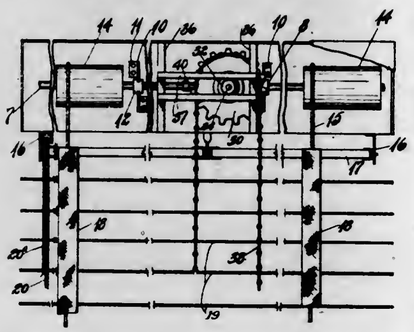
1. The process of decomposing raw titanium ores and removing the iron therefrom which comprises directly treating the raw ore with dilute sulphuric acid in the presence of a reducing substance for the ferric ions.

1,891,912. MEANS AND METHOD OF PRODUCING FABRIC. EARL C. BUNNELL, Stratford, Conn. Filed July 24, 1930. Serial No. 470,334. 22 Claims. (Cl. 139—28.)



1. A method of weaving consisting in forming a shed through a series of strands, inserting a strand through said shed, feeding the fabric thus formed forwardly, forming a shed through said fabric and a third strand, and locking the third strand to said fabric by passing a fourth strand through the last named shed.

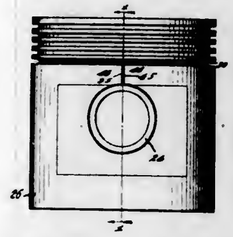
1,891,913. MECHANICAL ROLLER LIFT. FRED J. BURNS, Saginaw, Mich., assignor to Columbia Mills, Incorporated, Saginaw, Mich., a Corporation of New York. Filed Feb. 27, 1931. Serial No. 518,667. 5 Claims. (Cl. 156—17.)



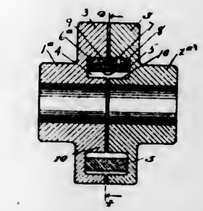
2. A Venetian blind having a plurality of slats, means for raising and lowering said slats including a support, a transversely shiftable shaft mounted thereon, means for driving said shaft, and including a driving pinion having a driving member associated therewith, a non-rotatable ratchet mounted on said pinion, a guide wheel adjacent said driving member, a track on which said guide member is adapted to travel, and pawls on the driving member and engageable with said ratchet for holding the mechanism in set position.

1,891,914. ALLOY PISTON. CHARLES R. BUTLER, Indianapolis, Ind. Filed Mar. 13, 1929. Serial No. 346,517. 3 Claims. (Cl. 74—108.)

1. A composite piston, comprising a piston head and piston-ring belt, piston-pin bosses, carrying struts interconnecting said head and said piston-pin bosses, a piston skirt carried from said piston-pin bosses, said skirt having portions which extend and lie between the bosses and the head, and which fill substantially the entire space between said parts, and which portions are spaced from said carrying struts and are free from direct attachment to the upper sides of the piston-pin bosses and are provided with slits extending lengthwise of the piston, and a circumferentially extending control band of different metal from the aforesaid parts of the piston and embedded in the metal of the skirt between the ring belt and the transverse plane of the piston-pin axis and extending across said slits, said ring belt and said skirt being separated by a circumferential slot.

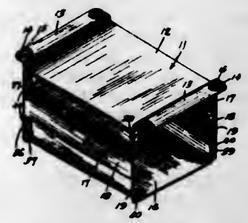


1,891,915. FLEXIBLE COUPLING. CHARLES HASKELL CLARK, New York, N. Y. Filed July 18, 1928. Serial No. 293,723. 5 Claims. (Cl. 64—96.)



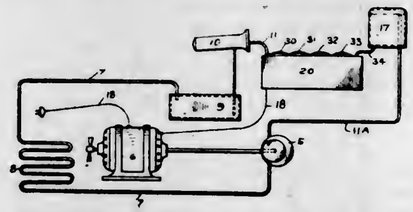
1. A coupling having hubs adapted to be mounted upon shafts to be coupled, said hubs having axially projecting opposed flanges formed with opposed registering axial recesses, each said recess being angular in cross-section, and each said hub being formed with an axial projection extending into its recess and centrally bored in continuation of the bore in said hub, said axial projection affording support to the extreme inner end portion of the shaft to which said hub is applied, in combination with a resilient open-frame coupling spider extending axially and floatingly between said hubs and corresponding in cross-sectional shape and in size to said recesses and simultaneously fitting snugly in both said recesses to transmit motion from one of said hubs to the other.

1,891,916. OZONIZER. ARTHUR W. CONLEY, Cleveland, Heights, Ohio, assignor, by mesne assignments, to The Corozone Company, Wilmington, Del., a Corporation of Delaware. Filed Dec. 10, 1928. Serial No. 324,870. 9 Claims. (Cl. 204—32.)



1. An ozonizer comprising: a core having a plurality of spaced transversely extending legs; a transformer comprising a primary coil disposed about one of said transverse legs, and a secondary coil disposed about another of said transverse legs; a flexible electrode sheet wrapped about said transformer secondary coil, flexibly conforming to the contour of said secondary coil and connected to one secondary terminal of said secondary coil, a second flexible electrode sheet wrapped about said secondary coil flexibly conforming to the contour of said secondary coil, connected to another secondary terminal of said secondary coil, and connected to a third leg of said core, and an insulating sheet interposed between said electrode sheets.

1,891,917. COOLING DEVICE FOR PHOTOGRAPHIC APPARATUS. ALBERT C. DENSLOW, New York, N. Y., assignor to Staten Island Shipbuilding Co., Staten Island, N. Y., a Corporation of New York. Filed Mar. 5, 1929. Serial No. 344,385. 4 Claims. (Cl. 95—89.)

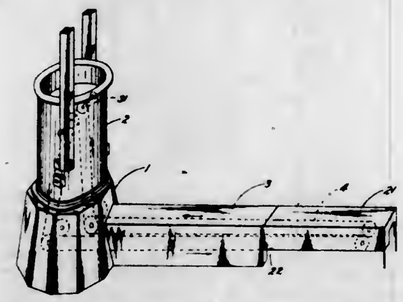


1. In a device of the character described, a developing tank, a plurality of chemical solution compartments adapted to receive a film for immersion therein, a cooling chamber disposed in each compartment, said chambers being communicably connected and means for circulating a refrigerant through said chambers.

1,891,918. MOLDING COMPOSITION AND PROCESS. EDWARD R. DILLEHAY, Glen Ellyn, Ill., assignor to The Richardson Company, Lockland, Ohio, a Corporation of Ohio. Filed Apr. 12, 1929. Serial No. 354,711. 12 Claims. (Cl. 18—55.)

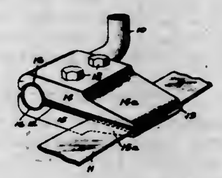
1. That process of molding articles of bituminous composition which comprises forming a mold charge of said composition while plastic, rolling said mold charge in a condensation resin molding powder, whereby it becomes coated therewith and molding said coated charge by plastic flow under heat and pressure.

1,891,919. ENAMELING FURNACE. CHAUNCEY ARNOLD DUTTON, Shaker Heights Village, Ohio, assignor to Ferro Enamel Corporation, Cleveland, Ohio, a Corporation of Ohio. Filed Dec. 3, 1930. Serial No. 499,724. 26 Claims. (Cl. 25—143.)



1. An enameling furnace comprising a vertical burning chamber, heating means intermediate the ends of said chamber and a horizontal preheating and cooling chamber.

1,891,920. ELECTRICAL CONNECTING DEVICE. REGINALD O. EATON, Wesleyville, Pa., assignor to General Electric Company, a Corporation of New York. Filed Nov. 28, 1928. Serial No. 322,447. 7 Claims. (Cl. 173—268.)



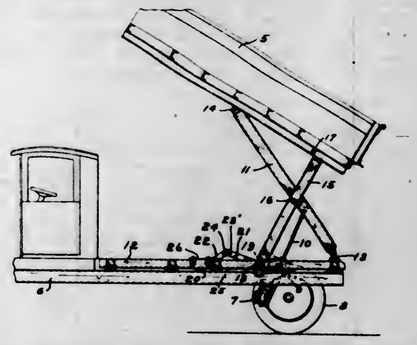
1. A terminal clamp for connecting a conductor of round cross section and a conductor of the ribbon type, comprising a pair of clamping plates provided with registering grooves, a soft metal strip bent into a loop, to incase portions of said conductors, and means for drawing said plates toward each other to substantially surround said loop so as to compress said loop into yielding engagement with said conductors, said round conductor being encased by said loop within the grooves in said plate.

1,891,921. CABINET FOR FILING FLAT SHEETS. IRVING W. ECKSTEIN, Jamestown, N. Y. Filed Jan. 28, 1930. Serial No. 423,968. 20 Claims. (Cl. 45—2.)



1. In a filing cabinet, a movable slide for supporting flatwise a pack of sheets, and a stationary plate above said slide which is bulged downwardly progressively towards the center thereof so as to bear upon the median portion of said pack thereby displacing air from between the sheets and holding the latter in close contact.

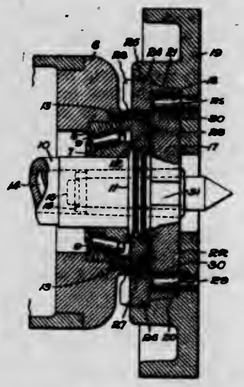
1,891,922. DUMPING MECHANISM. CHARLES G. EISENBERG, Jr., Wauwatosa, Wis., assignor to The Heil Co., Milwaukee, Wis., a Corporation of Wisconsin. Filed Dec. 17, 1930. Serial No. 502,961. 8 Claims. (Cl. 298—11.)



1. In combination, a frame, a body, a main beam having one end pivotally associated with said frame and having its opposite end swingably associated with said

body, a second beam having one end pivotally associated with said body and having its medial portion pivotally attached to a medial portion of said main beam, guide means carried by the opposite end of said second beam and cooperable with a runway on said frame, a toggle interchangeably cooperable with said run-way for connecting said guide means supporting end of said second beam with said frame, and a hoist for moving said guide means and for relatively moving the links of said toggle.

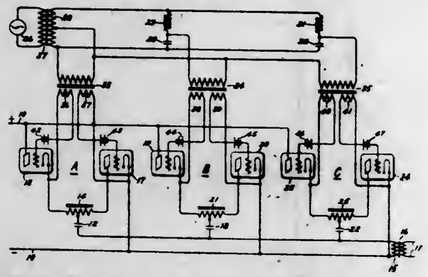
1,891,923. WORK-ROTATING STRUCTURE FOR MACHINE TOOLS. HERBERT L. FLATHER, Nashua, N. H. Filed Nov. 16, 1931. Serial No. 575,225. 20 Claims. (Cl. 82—30.)



1. In a work-rotating structure for machine tools, the combination of a head-stock, a spindle supported by said head-stock, a work-rotating body supported by said spindle, and means to secure said body to said spindle, said means being disposed about a part of said head-stock and having a part disposed within a part of said body.

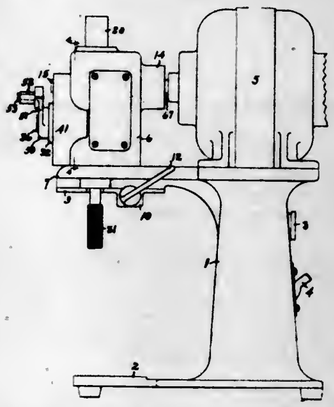
20. In a work-rotating structure for machine tools, the combination of a head-stock having an external, tapered surface, a spindle supported by said head-stock and concentric with said projection, a work-rotating body supported by said spindle and having an internal screw-thread, and a ring having an external screw-thread normally engaging the screw-thread of said body and securing the latter to said spindle, said ring having an internal, tapered surface normally spaced from said external, tapered surface and engageable therewith by moving said ring rearwardly when said body is removed from said spindle.

1,891,924. ELECTRIC POWER CONVERTING APPARATUS. FREDERICK W. FRINK, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Nov. 22, 1930. Serial No. 497,501. 2 Claims. (Cl. 175—363.)



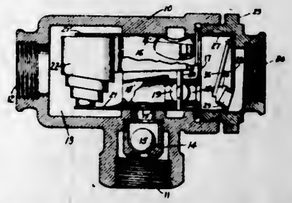
1. In combination, a direct current supply circuit, a plurality of resonant circuits, each including a capacitor, a pair of electric valves, a charging circuit for said capacitor including one of said valves, and a discharging circuit for said capacitor including the other of said electric valves, means for periodically and alternately rendering the valves included in each resonant circuit conductive, means for producing a phase displacement between the conductivity cycle of the valves included in the several resonant circuits, the natural frequency of said resonant circuits being substantially an integral multiple of that of said conductivity controlling means, and a load circuit associated with the several capacitor charging and discharging circuits.

1,891,925. KITCHEN APPLIANCE. WILLIAM F. HACKETT, New York, N. Y. Filed Apr. 9, 1932. Serial No. 604,182. 7 Claims. (Cl. 74—7.)



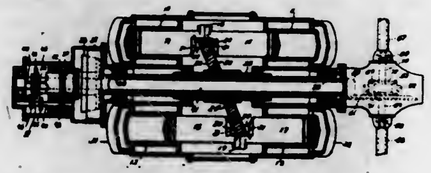
1. In a device as described the combination comprising a support, a driving motor mounted on said support, a housing mounted on said support, a vertical shaft journaled on a fixed axis in said housing, at least two horizontal transverse shafts journaled in said housing and operatively connected to said vertical shaft, a connection between one of the horizontal shafts and the motor and means forming part of each of said shafts including both ends of the vertical shaft for attaching implements to be operated.

1,891,926. MIXING VALVE. CHESTER I. HALL, Philadelphia, Pa., assignor, by mesne assignments, to General Electric Company, a Corporation of New York. Filed Apr. 15, 1930. Serial No. 444,567. 13 Claims. (Cl. 236—12.)



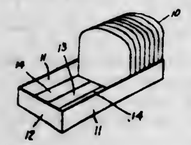
1. A mixing device for hot and cold fluid including in combination a casing having a mixing chamber, and an outlet and cold fluid inlet oppositely disposed, a normally closed valve intermediate said outlet and inlet connected to be actuated by the flow of fluid from said chamber for admitting hot fluid thereto, and a valve at one end of said chamber for controlling the admission of cold fluid thereto through said cold fluid inlet to maintain a predetermined temperature of the fluid in the mixing chamber, said last valve being controlled by a thermostatic coil element within said mixing chamber adjacent said outlet.

1,891,927. POWER TRANSMISSION MECHANISM. EDWIN S. HALL, New Haven, Conn., assignor to Michell-Crankless Engines Corporation, New York, N. Y., a Corporation of New York. Filed Mar. 26, 1930. Serial No. 438,986. 4 Claims. (Cl. 180—49.)



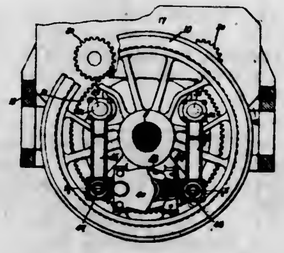
1. In combination, an engine comprising a shaft, cylinders and pistons effective to drive the shaft, disposed about said shaft in balanced relation and parallel thereto, a head for said cylinders at each end of the engine, a second shaft concentric with and overlapping said engine shaft, driving connections between said shafts supported adjacent one of said heads and a differential gearing connected to said second shaft and mounted adjacent the other head.

1,891,928. OPEN BOTTOM VENTILATED PAPER TRAY. JOSEPH J. HESS, Indianapolis, Ind., assignor to International Printing Company, a Corporation of Indiana. Filed Sept. 26, 1929. Serial No. 395,272. 3 Claims. (Cl. 229—37.)



1. A rectangular elongated paper tray for sliced bread and other bakery products, having no top and with relatively low side and end walls flexibly connected at the corners, and with longitudinal side bottom flaps flexibly connected with the side walls and inturned toward each other and appreciably spaced apart, and with end bottom flaps independent of the side bottom flaps and flexibly connected with the end walls and inturned and secured to the side bottom flaps, said flaps being of a width materially less than one half the length of the wall adjacent the flap supporting wall, whereby there is an appreciable, elongated ventilating space in the bottom of the tray for the greater portion of its length.

1,891,929. FLEXIBLE COUPLING. RAY A. HINKLEY, Erie, Pa., assignor to General Electric Company, a Corporation of New York. Filed Mar. 26, 1930. Serial No. 439,207. 16 Claims. (Cl. 64—27.)

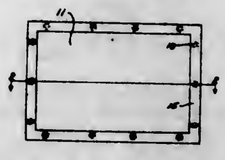


1. A flexible coupling including two rotatable elements, two arms each pivotally connected intermediate the ends thereof to one of said rotatable elements, means for pivotally connecting the adjacent ends of said arms together on substantially the same axis, said ends being relatively slidable, and means for connecting the other ends of said arms to the other of said rotatable elements.

1,891,930. PRODUCTION OF ORGANIC COMPOUNDS CONTAINING OXYGEN FROM CARBON MONOXIDE AND HALOGENATED NONAROMATIC HYDROCARBONS. HEINRICH HOPFF, Ludwigshafen-on-the-Rhine, and MANFRED DUNKEL, Mannheim, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed May 27, 1929, Serial No. 366,519, and in Germany May 29, 1928. 10 Claims. (Cl. 260—112.)

1. The process for the production of organic oxygen compounds which comprises acting with carbon monoxide and a halide selected from the group consisting of the halides of aluminium and of boron, on a halogenated non-aromatic hydrocarbon which may contain not more than one halogen atom connected with a carbon atom at a pressure above 10 atmospheres.

1,891,931. MEANS FOR MANUFACTURE OF LAMINATED GLASS. AUGUST W. HORNIG, Chicago, Ill. Filed Mar. 8, 1929, Serial No. 345,520. Renewed Apr. 28, 1932. 5 Claims. (Cl. 49—81.)



1. In a tray for use in the manufacture of laminated glass, the combination of a baseplate; a pad covering the baseplate; a frame superimposed upon the pad; and bolts connecting the baseplate and the frame, and penetrating the pad, arranged to hold the baseplate, the pad and the frame in vertical alignment while permitting limited upward motion of the frame and unimpeded compression of the parts to be laminated and the pad.

1,891,932. MOUNTING FOR A PANEL. LYTLE GALE HUNTER, Flushing, N. Y. Filed Aug. 15, 1931. Serial No. 557,295. 20 Claims. (Cl. 20—56.4.)

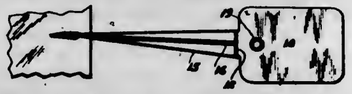


1. In combination, a frame having an opening, a panel disposed in said opening and smaller than the opening, a backing for said panel, a resilient strip of compressible material engaging said panel inwardly of its edge and holding the panel against the backing, and parts on the strip and on the frame disposed outwardly of said opening and having overlapping surfaces extending transversely to the plane of the panel and engaging each other to hold the strip against inward movement.

1,891,933. SAFETY PRICE TAG. JAMES WILLIAM HUTT, Toronto, Ontario, Canada. Filed Sept. 24, 1931. Serial No. 564,757. 9 Claims. (Cl. 40—20.)

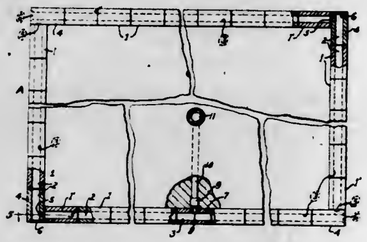
1. A safety price tag consisting of a ticket, a tab integral therewith and foldable against a face of the ticket,

a flexible element for looping through an opening in an article, and means for inseparably fastening the tab



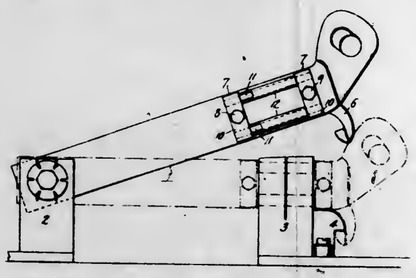
against a face of the ticket with the ends of the looped portion of the flexible element securely held by the folding and fastening of the tab.

1,891,934. BUILDING FOUNDATION. WILFORD P. JOY, Webster Groves, JOSEPH A. AMEND, University City, and EDWARD FRAUENFELDER, Webster Groves, Mo., assignors to St. Louis Duntile Company, a Corporation of Missouri. Filed May 29, 1929. Serial No. 366,877. 4 Claims. (Cl. 72—126.)



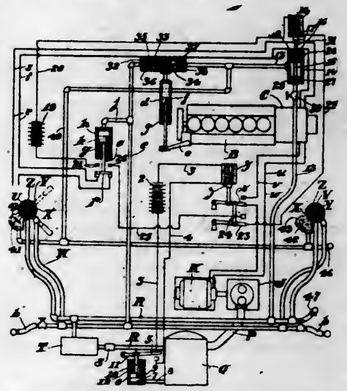
2. A building foundation comprised of a plurality of foundation units of substantially like shape and dimensions including a pair of units arranged at an angle with respect to each other to provide a corner of the foundation, each of said units being provided with a passageway extended therethrough which serves to produce a part of a drainage channel and one of said angularly arranged units being provided with a connecting passageway formed through an otherwise imperforate wall thereof to provide means of communicating between the first mentioned passageway of the unit and the corresponding passageway in the associated angular unit, said foundation units having substantially plane upper faces on which other units comprising the foundation may be placed.

1,891,935. ELECTRICAL CONNECTER. HOWARD G. LAPSLEY, New York, N. Y., assignor to General Devices and Fittings Company, a Corporation of Michigan. Filed Oct. 18, 1929. Serial No. 400,487. 2 Claims. (Cl. 200—170.)



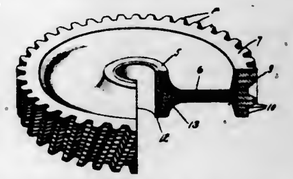
1. In an electrical connecter, a contact member having a pair of contact jaws, a movable blade member adapted to be inserted between said jaws, a pair of contact rollers rotatably supported lengthwise on opposite sides of said blade for engaging the exterior sides of said jaws incident to insertion of said blade member between said jaws, and means on said blade holding said contact rollers yieldably pressed in direction against said blade.

1,891,936. CONTROLLING DEVICE FOR LOCOMOTIVES. HERMANN LEMP, Glen Rock, N. J., assignor to Ingersoll-Rand Company, Jersey City, N. J., a Corporation of New Jersey. Filed July 17, 1930. Serial No. 468,526. 14 Claims. (Cl. 290—17.)



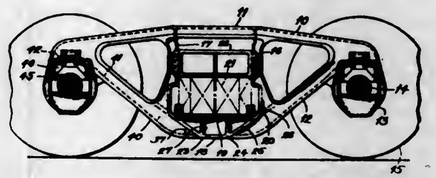
12. On a vehicle, the combination of an engine, a pressure actuated speed control therefor, a generator driven by the engine, an electric motor supplied with current from the generator, a compressor driven by the motor, and means for automatically connecting and disconnecting the motor to and from the generator during operation of the vehicle.

1,891,937. NONMETALLIC GEAR WHEEL. CLARENCE W. MANSUR, Malden, Mass., assignor to General Electric Company, a Corporation of New York. Filed Mar. 27, 1928. Serial No. 265,166. 18 Claims. (Cl. 74—28.)



1. A non-metallic gear wheel or gear wheel blank comprising a web and a rim, the web being formed from spinnable textile fibers united by an adhesive to form a material of one degree of hardness and the rim being formed from individual segments of non-metallic material placed end to end and having a degree of hardness greater than the material of the web between which is interspersed material the same as that forming the web whereby the segments are embedded in material the same as that forming the web.

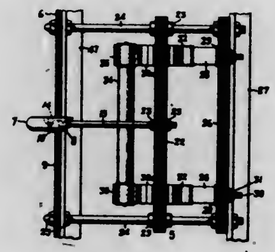
1,891,938. SIDE FRAME. MARK H. MARTIN, Reading, Pa., assignor to Birdsboro Steel Foundry and Machine Company, Birdsboro, Pa., a Corporation of Pennsylvania. Filed Mar. 16, 1929. Serial No. 347,482. 46 Claims. (Cl. 105—197.)



1. A side frame comprising a hollow, bottom tie member, shelves extending laterally from said member in a plane

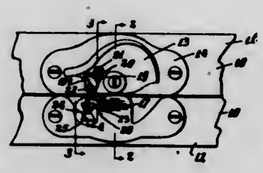
common with the upper side thereof to form a spring plank seat, and ribs and flanges extending outwardly from said member beneath said shelves to form trusses therewith.

1,891,939. SAFETY SWITCH. SAMUEL W. MAUGER, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Sept. 4, 1930. Serial No. 479,730. 3 Claims. (Cl. 200—50.)



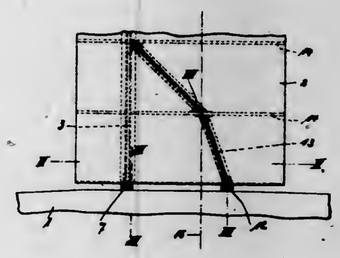
1. A fused switch having in combination, a switch board, provided with a swinging panel, a fixed base board disposed rearwardly of said swinging panel, a movable base disposed intermediate said fixed base and swinging panel, means for guiding the said movable base, a plurality of contacts mounted in said movable base and adjacent to said fixed base, removable electrical fuses mounted on the side of said movable base adjacent to said swinging panel and connecting said contacts by pairs, contacts mounted in said fixed base in alignment with said movable contacts, means extending through said swinging panel for reciprocating said movable base, and means for interlocking said swinging panel therewith whereby it may be swung open only when said switch is in open position.

1,891,940. AUTOMATIC WINDOW-SASH LOCK. HARRY ELI MCALLISTER, Mariners Harbor, N. Y. Filed Oct. 6, 1931. Serial No. 567,180. 7 Claims. (Cl. 292—336.)



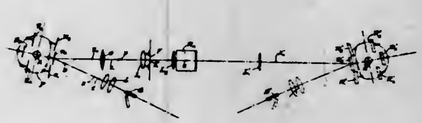
1. In a latch for the meeting rails of a window having an inner and an outer sash, having a pivoted cam element on the inner sash engageable with a stationary finger element on the outer sash and means for urging said cam into a latching position, an arm hinged on said cam for moving in the vertical and having a bottom pin engageable through apertures in the cam and a stationary member beneath the cam for holding the cam in its unlatched position, a trip swivelly held on the finger element in a manner to move in the horizontal, and resilient means for urging said trip towards said finger.

1,891,941. FLYING MACHINE. WILLY MESSERSCHMITT, Augsburg, Germany. Filed Feb. 19, 1930, Serial No. 429,604, and in Germany Feb. 28, 1929. 4 Claims. (Cl. 244—31.)



1. A flying machine having a fuselage, a pair of cantilever wings, a front spar in each wing, two fittings for securing said wing to said fuselage spaced apart on said front spar, an auxiliary spar connected with said front spar, and a third fitting at said auxiliary spar.

1,891,942. OPTIC PROJECTION. NICHOLAS MILLER, River Forest, Ill. Filed Feb. 13, 1930. Serial No. 428,125. 4 Claims. (Cl. 88—16.8.)



1. In an optic projector, a series of compensating reflectors adapted to compensate for the movement of the film pictures; a source of light, and means for directing the light field upon the compensating reflectors; a film picture aperture; a lens system and a relatively fixed reflector, positioned to receive the light field reflected from the compensating reflectors, and to direct said light field upon the film picture aperture; an objective disposed between the aperture and the compensating reflectors, for projecting the picture rays from the aperture, upon the compensating reflectors.

1,891,943. METHOD OF MAKING GROUND RODS. FRANCIS B. NIMICK, Coraopolis, Pa., assignor to Colonial Steel Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed July 22, 1931. Serial No. 552,403. 5 Claims. (Cl. 29—155.5.)

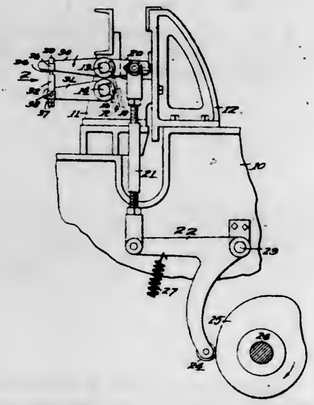
1. The method of making ground rods which comprises covering a hard metal bar with a close-fitting tubular

sheath that is open at one end and is of more ductile metal that has high electrical conductivity, heating the composite structure to forging temperature and shaping the



composite structure to form ribs extending longitudinally thereof, and to cause said ductile metal to completely enclose the said end of the said bar.

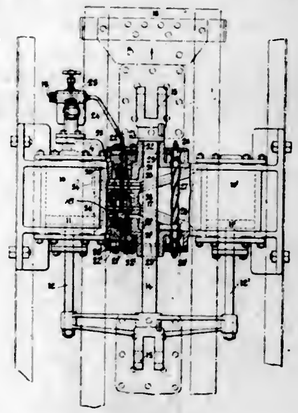
1,891,944. REED LOOM. GUSTAF E. NORDSTROM, Gardner, Mass., assignor to American Fibre Corporation, Gardner, Mass., a Corporation of Massachusetts. Original application filed July 24, 1930, Serial No. 470,365. Divided and this application filed Jan. 10, 1931. Serial No. 507,887. 6 Claims. (Cl. 139—191.)



1. In a reed loom, a lay, beater members mounted thereon, supporting members for said lay, the lower ends of said supporting members being guided for forward and rearward movement in fixed cam slots, and separate eccentric actuating devices directly connected to substantially spaced end and middle portions respectively of said supporting members.

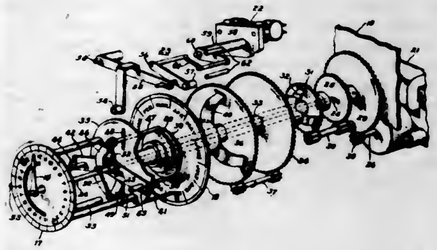
1,891,945. SHAKER CONVEYER ENGINE. TAGE GEORG NYBORG, Worcester, England, assignor of one-half to Mark Frederick Higgins, Worcester, Worcestershire, England. Filed May 16, 1928, Serial No. 278,065, and in Great Britain Oct. 4, 1927. 12 Claims. (Cl. 121—122.)

1. In a shaker conveyer engine comprising two cylinders in spaced relationship, one on either side of the centre of the conveyer, a piston slidable in each cylinder and a piston rod to each piston, a rigid yoke connecting the two



piston rods together and a drawbar arranged between and parallel to the cylinders and connected at one end to the said yoke.

1,891,946. TIME SWITCH. WILLARD E. PORTER, Swampscott, Mass., assignor to General Electric Company, a Corporation of New York. Filed Aug. 24, 1931. Serial No. 558,950. 5 Claims. (Cl. 200—38.)



1. In an astronomical time switch, a 24-hour dial and a 365-day dial spaced apart and rotatively mounted on a common axis of rotation, a pair of astronomical cams rotated with the day dial and "on" and "off" switch operating arms rotated with the hour dial located between said dials, said arms extending radially from and being adjustable about said common axis of rotation with respect to the hour dial, a pair of axially extending pins resting on the cams and connected to the switch arms through links at points intermediate the ends of the arms, means for resiliently holding the pins on the cam surfaces and means rotated with the hour dial for otherwise constraining the movement of the pins to radial directions, said pins and links being rotated as a unit with said hour dial and switch arms while permitting relative adjustment of the positions of the switch arms as the pins are moved over the cam surfaces, and means for rotating the hour dial unit one revolution in 24 hours and the day dial one revolution in 365 days with respect to the hour dial.

1,891,947. SUPPORT FOR SAXOPHONES AND SIMILAR MUSICAL INSTRUMENTS. EDWARD V. POWELL, Arlington, Mass. Filed Aug. 8, 1929. Serial No. 384,879. 12 Claims. (Cl. 224—5.)

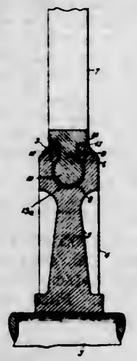
1. In a support for musical instruments such as saxophones, the combination of an instrument supporting

member, an adjusting member comprising a snubbing post and a guide, and a cord having two standing parts secured to said adjusting member, extending thence downwardly to said supporting member, and moving parts



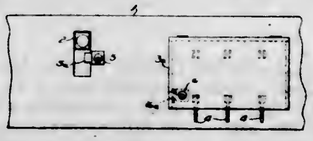
extending thence in an upward direction to and beyond said adjusting member, one of said moving parts extending about said snubbing post and the other through said guide.

1,891,948. ELASTIC FLUID TURBINE. CHESTER W. RICE, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Oct. 2, 1931. Serial No. 566,498. 5 Claims. (Cl. 253—77.)



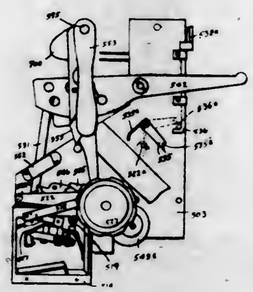
1. A rotary member having a part for carrying buckets and a bucket having a part secured thereto, one of said parts being provided with an annular recess of rounded cross section, the other part being provided with an annular projection loosely fitting into the annular recess to permit during operation the bucket to turn sidewise for setting up frictional resistance between said parts whereby oscillatory energy of the bucket is absorbed by the frictional resistance.

1,891,949. INTERLOCK FOR ELECTRICAL CIRCUITS. WILLIAM DEAN RISHER, Massillon, Ohio, assignor, by mesne assignments, to Republic Steel Corporation, Youngstown, Ohio, a Corporation of New Jersey. Filed Oct. 28, 1929. Serial No. 401,827. 4 Claims. (Cl. 200—5.)



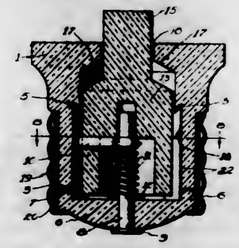
1. In combination with an electrical circuit having a plurality of switches, means for insuring proper sequence of opening and closing of said switches, said means including separate locks for said switches operable by a single key, which is not removable from either lock except when such lock is locked, and a bolt for positively preventing the closing of one of said switches.

1,891,950. COMBINATION MANUAL AND COIN AUTOMATIC PUMP. LEO E. RUSH, Indianapolis, Ind., assignor to Rush Pump Company, La Fayette, Ind., a Corporation. Filed June 24, 1929. Serial No. 373,229. 32 Claims. (Cl. 194—1.)



18. In a motor actuated pump, the combination of a pump, a power motor for operating the same, a reservoir connected to the pump, a discharge from the pump, a control for said discharge, coin actuated means arranged to control said motor, pump and discharge, and means returning the coin if the motor is not actuated.

1,891,951. FUSE PLUG. JOSEPH M. RUMMLER, Chicago, Ill. Filed May 25, 1932. Serial No. 613,438. 11 Claims. (Cl. 200—125.)

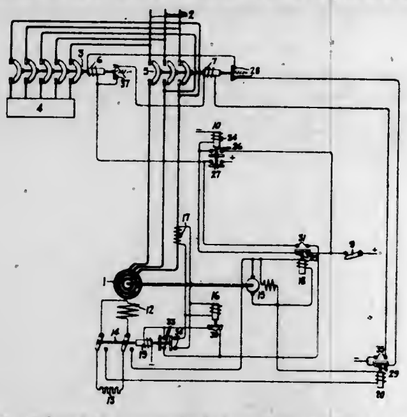


1. A multi-fuse structure comprising a hollow body member, a rotor mounted in said body member and axially shiftable relative thereto, fuse elements disposed within said body member between said rotor and the inner wall of said body member, means urging said rotor axially relative to said body member, means carried by said rotor for selectively contacting said fuse elements, a terminal having connection with said last named means, and a second terminal having connections with said fuse elements collectively.

1,891,952. AUTOMATIC CONTROL EQUIPMENT. HAROLD T. SEELEY, Yeadon, Pa., assignor to General Electric Company, a Corporation of New York. Filed Dec. 21, 1929. Serial No. 415,719. 4 Claims. (Cl. 171—118.)

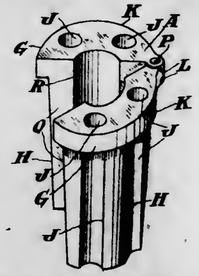
1. In combination, an alternating current supply circuit, a translating device, means for connecting said device to said circuit, means responsive to the current supplied by said supply circuit to said device, switching means for controlling the operation of said device, means

controlled by said current responsive means for effecting the operation of said switching means when the current supplied to said device decreases below a predetermined



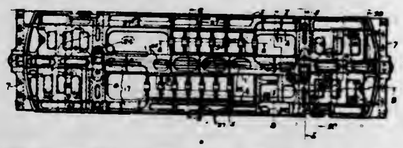
value, and means controlled by said switching means for changing the effectiveness of said current responsive means.

1,891,953. GUIDE FOR DRILL STEELS. OLIVER H. SELLARS, Glen Ridge, N. J., assignor to Ingersoll-Rand Company, Jersey City, N. J., a Corporation of New Jersey. Filed Sept. 5, 1930. Serial No. 479,881. 1 Claim. (Cl. 308—4.)



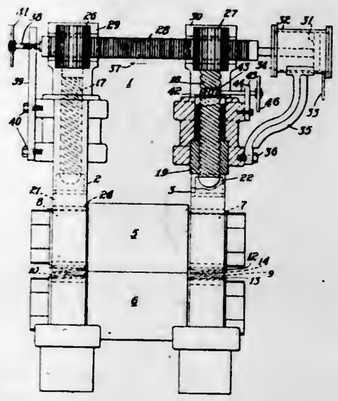
A guide adapted to be inserted into a drill hole, comprising a pair of members having outer tapered surfaces, lateral external flanges at the ends of larger diameter of the members, means extending through the flanges for pivotaly connecting the members together, said members having semi-circular grooves in their inner adjacent surfaces and cooperating to form a circular guideway to slidably guide a drill steel, and passages in the flanges and the outer surfaces of the members to permit the escape of detritus from a drill hole.

1,891,954. CAR UNDERFRAME. WILLIAM M. SHEEHAN, St. Louis, Mo., assignor, by mesne assignments, to General Steel Castings Corporation, Granite City, Ill., a Corporation of Delaware. Filed Feb. 15, 1929. Serial No. 340,197. 66 Claims. (Cl. 105—172.)



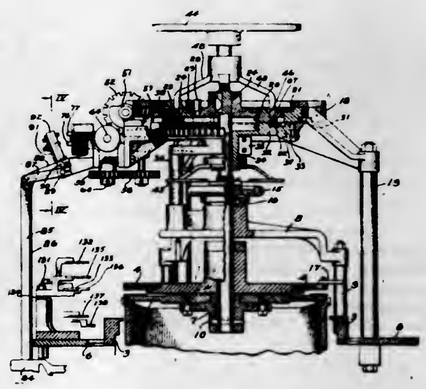
1. In a railway vehicle, an underframe including an engine sub-base, a cab carried on said underframe, and a liquid compartment located between said sub-base and the end of said underframe and below said cab.

1,891,955. ROLLING MILL. BARTON R. SHOVER, Pittsburgh, Pa., assignor to Allegheny Steel Company, a Corporation of Pennsylvania. Filed Nov. 23, 1929. Serial No. 409,240. 15 Claims. (Cl. 80—56.)



1. In a rolling mill having upper and lower rolls and a screw-down for each end of the upper roll, and means for simultaneously operating the other screw-down in response to operation of the first mentioned screw-down comprising a pinion on each screw-down, a rack disposed to mesh with said pinions and means for operating one of said screw-downs in response to an excessive vertical pressure against said upper roll, and means yieldably limiting the movement of said rack in one direction, and means positively limiting the movement of said rack in the other direction.

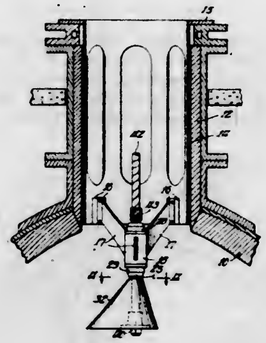
1,891,956. CIRCULAR KNITTING MACHINE. JULIUS SIRMAY, Philadelphia, Pa., assignor to Jacquard Knitting Machine Company, Inc., Philadelphia, Pa., a Corporation of New York. Filed May 29, 1930. Serial No. 457,213. 16 Claims. (Cl. 66—26.)



11. In a circular rib knitting machine having a stationary needle cylinder and dial, and a rotating cam cylinder and dial cam cap, the combination of a dogless mechanism for holding the dial stationary with respect to the cylinder, said dogless mechanism including a locking member provided with gear teeth, a gear engaging said teeth and means for turning said gear for racking the dial.

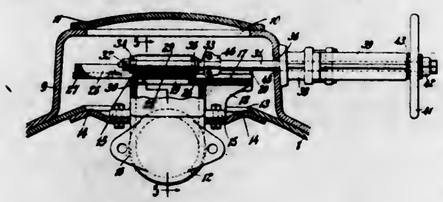
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1,891,957. DEVICE FOR DISTRIBUTING WOOD CHIPS IN PULP DIGESTERS. BERNARD F. SMITH, Appleton, Wis., assignor to Paper Patents Company, Neenah, Wis., a Corporation of Wisconsin. Filed Dec. 5, 1931. Serial No. 579,226. 5 Claims. (Cl. 92—7.)



1. The combination with a pulp digester, of mechanism for distributing chips therein, comprising a conical member formed with a downwardly and outwardly tapered chip-deflecting surface presenting varying angles of inclination to its axis, means for rotatably mounting said conical member below the charging nozzle of the digester in the path of the falling stream of chips, and means for rotating said conical member.

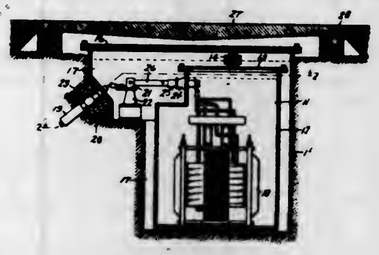
1,891,958. STEAM DOME SHUT-OFF VALVE. HERBERT W. SNYDER and HARRY SCHEIB, Lima, Ohio. Filed May 2, 1928. Serial No. 274,453. 5 Claims. (Cl. 137—111.)



1. In a locomotive the combination of a steam dome, an off-take having an upwardly open intake end positioned well up into the dome, a normally open slide valve adapted to seat on said upwardly open end, and a control means for the valve including an operating stem extended through a dome wall, said valve being relatively adjustable with respect to the stem so as to permit alignment and firm seating thereof on said upwardly open end, together with a frame movable with said valve which is adapted to rest upon and protect the valve seat while the valve is in open position.

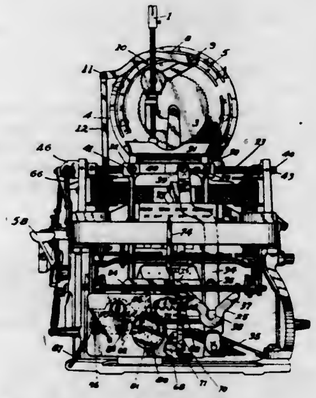
1,891,959. TRANSFORMER. SEVERN D. SPRONG, Brooklyn, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Apr. 14, 1932. Serial No. 605,247. 7 Claims. (Cl. 247—4.)

1. The combination with an outer sealed metal casing arranged at least partly underground with its bottom and sides in contact with the surrounding earth, insulating liquid within said casing, an inner metal casing immersed in the liquid within said outer casing, insulating liquid within said inner casing, a transformer im-



mersed in the liquid within said inner casing, underground cables extending into said outer casing, and connections between said cables and said transformer.

1,891,960. TIME RECORDER. ELMER G. STRECKFUSS, Cincinnati, Ohio, assignor to The Cincinnati Time Recorder Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Aug. 16, 1929. Serial No. 386,458. 12 Claims. (Cl. 234—43.)



1. In a time recorder, a recording mechanism operator, a tray shifting member, a positioning means for said shifting member, a time movement connected to position said means, a tray latch, means for actuating the shifting member and controlling the position of the tray latch, said means including an element movable into and out of position for engagement with the recording mechanism operator whereby the said means is actuated upon actuation of the recording mechanism operator, and a member normally holding the element out of engaging position, said time movement operatively related to said member.

1,891,961. LOCK FOR METER BOX COVERS. LLOYD J. TAYLOR, Wichita Falls, Tex., assignor to Taylor Foundry Company Inc., Wichita Falls, Tex. Filed Mar. 24, 1931. Serial No. 524,884. 5 Claims. (Cl. 70—14.)

1. A lock for meter box covers including a weighted member carried by said cover and normally lying beneath

the edge of the support for said cover and a cam extending at right angles from said weighted member



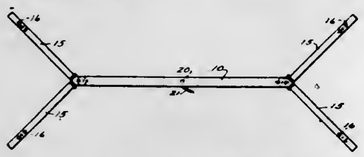
against which a key is urged to rock said weighted member to a position to escape the edge of said support to effect removal of said cover from said flange.

1,891,962. FLUID COMPOSITION. ANDREW T. K. TSENG, Detroit, Mich., assignor to Hydraulic Brake Company, Los Angeles, Calif., a Corporation of California. Filed Oct. 24, 1927. Serial No. 228,499. 12 Claims. (Cl. 252—5.)

1. A fluid for use in fluid pressure apparatus comprising a diacetone alcohol and an oil characterized by a low solidifying point, stability at a high temperature and inertness toward rubber.

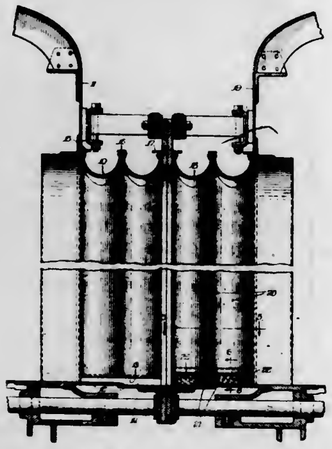
12. A hydraulic solution composed of castor oil, diacetone alcohol, and a neutralizing agent.

1,891,963. CASKET BIER. LOUIS A. WEBER, Shaker Heights, and JACOB ALLAN WEBER, Cleveland Heights, Ohio. Filed Sept. 17, 1930. Serial No. 482,485. 1 Claim. (Cl. 240—2.)



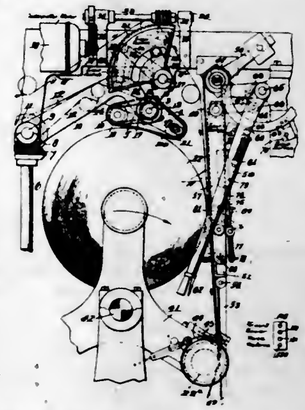
In a collapsible bier comprising a central translucent panel member and two pairs of wing members hinged thereto and adjacent the edge thereof, said central panel having top, bottom and end rails, a lamp support on one of the rails and a lamp carried by the support and disposed behind the translucent panel.

1,891,964. VESTIBULE DIAPHRAGM. EDWARD E. WHITMORE, Chicago, Ill., assignor to The Adlake Company, Chicago, Ill., a Corporation of Illinois. Filed Dec. 8, 1930. Serial No. 500,773. 3 Claims. (Cl. 105—15.)



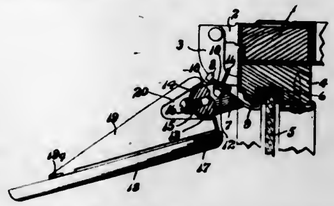
1. In a railway car vestibule diaphragm of the accordion type, vertically extending legs made of heavy fabric, and feet of chrome leather attached to the lower ends of the legs as downward continuations of the latter, said feet being initially oversize to permit the same to be trimmed off in an unfinished edge even with the floor plates of the vestibule at the time of application, and being more flexible than the legs, whereby to absorb by deformation the stresses received from the floor plates.

1,891,965. QUICK CHANGE WEB SPLICING DEVICE. HENRY A. WISE WOOD, New York, N. Y., assignor to Wood Newspaper Machinery Corporation, New York, N. Y., a Corporation of Virginia. Filed Apr. 10, 1930, Serial No. 443,083. Renewed July 29, 1932. 22 Claims. (Cl. 242—58.)



1. In a web splicing mechanism, the combination with means for movably supporting a running roll and a fresh roll, of a set of tension straps mounted with one end above the level of the fresh roll and extending down past the running roll, means for holding said straps with a yielding pressure against the running roll independently of the size of that roll, and means acting between the tension straps for forcing the web against the fresh roll to cause it to be attached thereto.

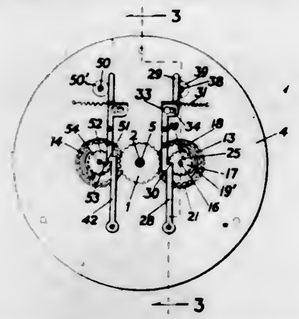
1,891,966. REAR VIEW MIRROR BRACKET. FLOYD G. WITHROW, Grand Rapids, Mich. Filed Jan. 22, 1929. Serial No. 334,232. 5 Claims. (Cl. 45—97.)



1. In combination with a body for a motor vehicle having a door, hinge members connected to the door, complementary hinge members connected to the body, said hinge members on the door and body being pivotally connected together, of a supporting bracket detachably and securely connected to the movable hinge member of one of the hinges of said door at a point spaced from the pivotal connection of the said hinge member, and a rear vision mirror adjustably mounted on said bracket and extending outwardly with respect to the door, said mirror being movable with the door when it is swung in opening or closing the door.

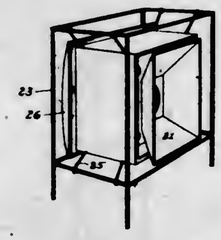
5. A signal support for automobiles comprising a member secured to the hinge of an automobile door and a retaining plate secured to said member and also to the door.

1,891,967. CLOCK. WESLEY BARTIKOSKI, Duluth, Minn. Filed Mar. 26, 1931. Serial No. 525,428. 5 Claims. (Cl. 200—39.)



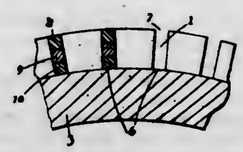
1. In a clock, an electric switch, a manually rotatable shaft, a ratchet wheel fixed on said shaft, a gear loose on said shaft and driven by the clock, a latch pivoted on said gear and engaging said ratchet wheel to rotate the same with said gear in one direction, said latch permitting manual rotation of said ratchet wheel in the same direction relatively to said gear, a pivoted lever, means on said ratchet wheel to rock said lever, and means controlled by said lever to operate said switch when the lever is actuated by said means on the ratchet wheel.

1,891,968. LOUD-SPEAKER APPARATUS. WILLIAM C. BIDWELL and ALBERT L. CUTLER, Portland, Oreg. Filed Feb. 25, 1932. Serial No. 595,134. 12 Claims. (Cl. 181—31.)



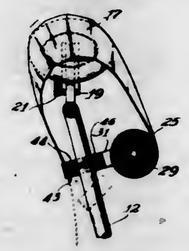
1. Loud-speaker apparatus, consisting of a base-board of rectangular configuration, extensions to said base-board directed in right-angled relation from the respective edges thereof, a loud-speaker secured to said base-board about its approximate center axis, and walls directed from said base-board and extension, respectively, enclosing a tone-box surrounding said loud-speaker.

1,891,969. POWER TRANSMISSION COUPLING. JAMES BISBY, London, England, assignor to The Falk Corporation, Milwaukee, Wis., a Corporation of Wisconsin. Filed Feb. 3, 1930, Serial No. 425,490, and in Great Britain Feb. 4, 1929. 3 Claims. (Cl. 64—96.)



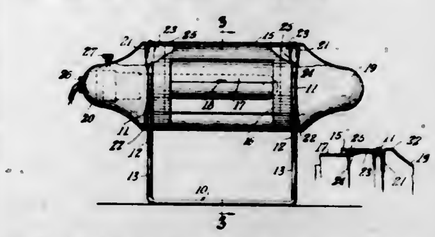
1. A flexible coupling for transmitting power from a driving shaft to a driven shaft comprising a cylindrical driving member, a cylindrical driven member facing said driving member, axially directed grooves formed externally on said driving member, similar grooves on the said driven member, and flexible connecting means positioned in said grooves in alignment, said means comprising a plurality of spring strips each of zig-zag form with its limbs passing through said grooves, said strips being arranged with their planes of mutual contact lying concentric with the cylindrical surfaces of the driving and driven members.

1,891,970. SANITARY HEADREST FOR CHAIRS. EDGAR B. CLEARWATER, Chicago, Ill. Filed Aug. 27, 1931. Serial No. 559,688. 2 Claims. (Cl. 155—176.)



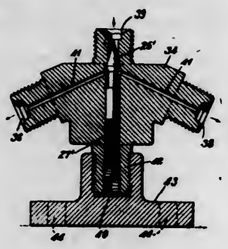
1. In a sanitary head rest, the combination of an upwardly projecting shank with a pair of angularly disposed head pads carried by said shank for supporting the head of an occupant, a roll supporting device comprising securing means for securing said device upon said shank, resilient means for rotatably supporting a roll of paper and for frictionally and resiliently engaging said roll to resist unrolling of the paper, and said resilient means also comprising clamping means for engaging both sides of the end of a strip of paper extending from said roll upward in front of said shank, over said pads, and downward to said clamping means, whereby the paper is secured by said device at spaced points and the paper between said points is loose enough to conform itself to the angular disposition of said pads.

1,891,971. CONVERTIBLE BED AND TABLE LAMP. LOUIS CRANE, Bronx, N. Y. Filed Apr. 28, 1931. Serial No. 532,216. 1 Claim. (Cl. 240—53.)



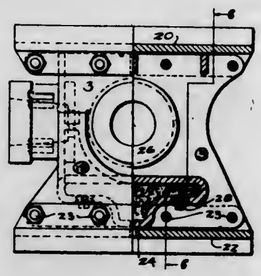
In a device of the class described, a lamp fixture comprising a fixture body and a fixture support, the former composed of a cylindrical centre portion provided with an opening, a shutter operatively mounted within that portion and behind said opening and adapted to slide across the latter and having limiting means for defining its operation, interchangeable end members associated and in frictional engagement with said center portion, means provided with said end members for forming guides for said shutter, other means provided with said end members for accomodating and engaging said fixture support and for limiting their inward movement relative to said centre portion, said fixture support having provisions for revolvingly suspending said fixture by its end members and being so formed as to facilitate positioning of the fixture either upon a platform or table for use as desk lamp, or its suspension from a bed end or the like for use as bed lamp.

1,891,972. LUBRICATING SYSTEM. DE LANCEY W. DAVIS, Sayre, and JOHN P. LAUX, Bethlehem, Pa. Filed Dec. 18, 1931. Serial No. 581,961. 2 Claims. (Cl. 184—7.)



1. An oil distributing device for lubricator systems comprising, in combination: a valve casing having an inlet passage inwardly terminating in a frusto conical valve seat, the surface of said seat extending therebeyond to provide a distributing chamber; a plurality of outlet passages leading from said chamber at uniformly spaced points thereabout; a conical valve body, spring-pressed toward said seat; the apex of said valve body when forced from said seat standing centrally of said inlet passage whereby to equally distribute oil to said outlet passages.

1,891,973. LOCOMOTIVE CROSSHEAD AND GUIDE CONSTRUCTION. DANIEL S. ELLIS, Hackensack, N. J. Filed Feb. 18, 1929. Serial No. 340,993. 15 Claims. (Cl. 308—5.)



1. A locomotive cross head comprising in a one-piece casting an inner wall of U-shaped section, and an outer wall spaced from one side and the bottom of said U-shaped wall and forming therewith a pocket for lubricant, there being a discharge passageway through the lower portion of said outer wall.

1,891,974. METHOD OF PURIFYING GASES. FRANZ FISCHER, Mulheim-on-the-Ruhr, Germany. Filed Apr. 28, 1928, Serial No. 273,775, and in Germany May 5, 1927. 2 Claims. (Cl. 204—9.)

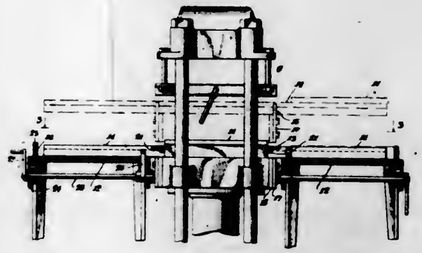
1. A continuous method of treating a gaseous mixture which contains hydrogen sulphide, which consists in treating said mixture with an alkaline solution of potassium ferricyanide, so that the potassium ferricyanide is converted to potassium ferrocyanide and sulphur is separated, removing the sulphur, then subjecting the solution containing the potassium ferrocyanide to electrolytic action so that the potassium ferrocyanide is regenerated into potassium ferricyanide and hydrogen is evolved, while adding to the regenerated solution of potassium ferricyanide the alkali which is produced by said electrolytic action.

1,891,975. PUNCTURE SEALING DEVICE FOR PNEUMATIC TIRES AND OTHER GAS FILLED CONTAINERS. MICHAEL JOSEPH GALVIN, Toronto, Ontario, Canada, assignor of forty-nine per cent to Arthur Pritchard Reid and David Dunlop Bennett, Toronto, Ontario, Canada. Filed Mar. 10, 1932. Serial No. 598,041. 1 Claim. (Cl. 152—13.)



The combination with a puncturable fluid container, of a multiplicity of discs each face of each disc being provided with annular concentric ribs spaced apart to form an annular suction or vacuum interspace to hold the disc over the puncture perforation when in contact with the tube wall and under slightly varying pressure.

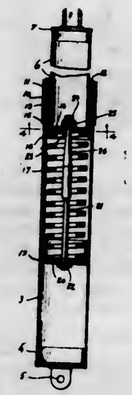
1,891,976. MOLD OPENING APPARATUS. GEORGE GOEBEL, Bridgeport, Conn., assignor to Canfield Rubber Company, Bridgeport, Conn., a Corporation of Connecticut. Filed Dec. 15, 1931. Serial No. 581,164. 15 Claims. (Cl. 18—17.)



15. The combination with a molding press and a separable mold used therein having projections on both its upper and lower members, of a table to support the mold, manually operated locking means to engage the lower mold part projections and lock said part to the table, and members carried by the movable part of the press engaging the projections on the upper part of the mold while on the table to separate said part from the lower part thereof.

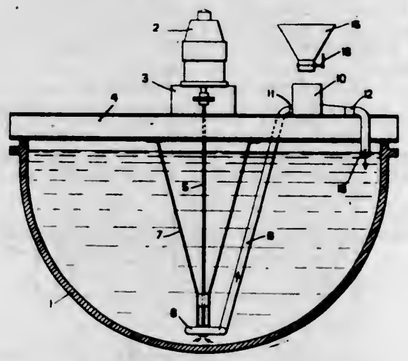
1,891,977. AIRPLANE STRUT CONSTRUCTION. JOHN H. GOULD, Detroit, Mich., assignor to Aircraft Products Corporation of America, Detroit, Mich., a Corporation of Michigan. Filed May 6, 1929. Serial No. 360,848. 6 Claims. (Cl. 267—34.)

1. In an airplane strut construction, the combination of a cylinder associated with the landing gear, a second cylinder associated with the plane body with the two cylinders telescopingly arranged, a spring attached to the second cylinder and disposed within the first, a piston in said first cylinder positioned adjacent one end of the spring, said first named cylinder having a quantity of fluid therein which backs the said spring and piston, said piston having a port therethrough for the passage of oil whereby,



in landing impact, the plane is resiliently supported by action of the spring and by bodily movement of the spring by passage of said oil through the said port.

1,891,978. PROCESS FOR REFINING LEAD. WALTER F. GROSS, Elizabeth, and CHARLES N. SAPPINGTON, Perth Amboy, N. J., assignors to American Smelting and Refining Company, New York, N. Y., a Corporation of New Jersey. Filed Jan. 22, 1927. Serial No. 162,732. 2 Claims. (Cl. 75—15.)



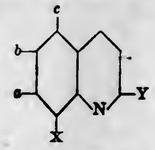
1. The process of refining lead contaminated with copper which comprises forming a molten bath of such lead, continuously removing a portion of the molten lead from said bath and causing said portion to flow externally of said bath in a thin stream having an exposed surface, adding sulphur to said surface at a rate to produce the desired reaction, and returning the products of reaction to said bath.

1,891,979. METHOD OF MOLDING GRAPHITE REFRACTORY COMPOSITIONS. ALBERT M. HANAUER, Pittsburgh, Pa., assignor to Lava Crucible Company of Pittsburgh, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Dec. 28, 1931. Serial No. 583,610. 7 Claims. (Cl. 18—47.5.)

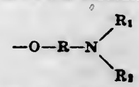
1. In the production of molded articles from graphite compositions containing water, the method of accelerating drying of the formed article comprising replacing part of the water used in making said compositions by a liquid more volatile than water.

1,891,980. BASIC ETHERS OF HALOGENATED QUINOLINE. MAX HARTMANN and HANS ISLER, Riehen near Basel, Switzerland, assignors to the Firm: "Society of Chemical Industry in Basle", Basel, Switzerland. Filed Mar. 24, 1930, Serial No. 438,638, and in Switzerland Apr. 5, 1929. 6 Claims. (Cl. 260—38.)

1. As new products basic ethers of the general formula

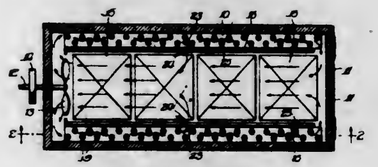


wherein at least one of the letters a, b, or c stands for halogen, and one of the letters X or Y for hydrogen and the other for a side chain of the formula



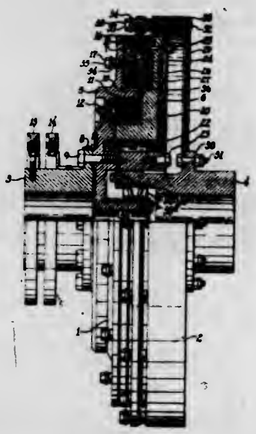
R meaning an alkylene radicle containing at least two carbon atoms, and R_1 and R_2 standing for alkyl, cyclohexyl or an alkylene chain, which products are bases forming salts soluble in water on addition of acids, and are useful in therapeutics as antiseptics.

1,891,981. HEAT TREATING OVEN. CLARENCE A. HERBST, Chicago, Ill., assignor to Economy Fuse and Manufacturing Co., Chicago, Ill., a Corporation of New York. Filed Feb. 18, 1931. Serial No. 516,666. 6 Claims. (Cl. 34—19.)



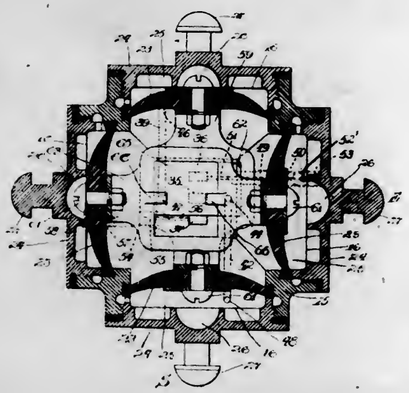
1. A heat treating oven comprising a closed chamber, a pair of heat radiating shields at the sides of the chamber spaced from the walls thereof, means for circulating the air within the chamber longitudinally between the shields in one direction and longitudinally between the shields and the walls of the chamber in the opposite direction, means for heating the air as it flows between the shields and the walls of the chamber and means for adding heat units to the air as it flows longitudinally between the shields to compensate for the absorption of heat by the material treated.

1,891,982. ELECTROMAGNETIC CLUTCH. HOWARD E. HODGSON, Wauwatosa, Wis., assignor to Cutler-Hammer, Inc., Milwaukee, Wis., a Corporation of Delaware. Filed Apr. 9, 1930. Serial No. 442,729. 7 Claims. (Cl. 192—84.)



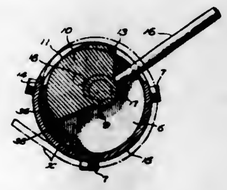
1. In a magnetic clutch, the combination with cooperating field and armature members, of a spring disk driving connection therebetween, a friction element to be clamped between said members and a spring disk for supporting said element.

1,891,983. PULSATOR FOR MILKING MACHINES. FLOYD G. HODSDON, La Grange, Ill., assignor to International Harvester Company, a Corporation of New Jersey. Filed Nov. 6, 1930. Serial No. 493,717. 17 Claims. (Cl. 31—63.)



1. In a milking machine pulsator, a hollow body open to the atmosphere, means for supplying vacuum to the body, passages adapted to communicate vacuum and atmosphere to teat cups connected with the pulsator, and a single valve member horizontally slidable along a right angular path in the body for controlling the flow of atmosphere and vacuum to the teat cups.

1,891,984. MANDREL FOR CARPET ROLLING MACHINES. NORMAN W. HOFFMAN, Bloomsburg, Pa., assignor to The Magee Carpet Co., Bloomsburg, Pa., a Corporation of Pennsylvania. Filed June 10, 1932. Serial No. 616,559. 10 Claims. (Cl. 242—74.)



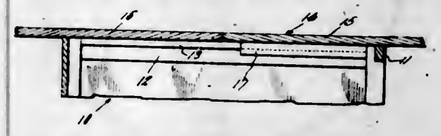
1. A collapsible mandrel comprising a cylindrical body member having a longitudinal segmental opening in the periphery thereof, and a member mounted for circular movement in and relative to said body member and provided with a curved surface normally disposed in said opening in substantially tangent relation to the periphery of the cylindrical body member.

1,891,985. FINISHING TOOL. ERNEST HOPE, Leicester, England, assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Jan. 12, 1929, Serial No. 332,203, and in Great Britain Jan. 17, 1928. 5 Claims. (Cl. 51—194.)



1. An abrading tool comprising a supporting body, a cover of yieldable material for said body, said body and said yieldable cover being adapted to support an abrasive cover upon said yieldable cover, and a pair of clamping jaws disposed respectively inside and outside of said yieldable cover, said jaws being constructed and arranged to grip both the abrasive cover and said yieldable cover and to move inwardly of said body to tension the abrasive cover.

1,891,986. CABINET AND EXTENSIBLE TOP THEREFOR. SAM B. HUTTON, Trenton, N. J., assignor to Eastern Cabinet Company, Trenton, N. J. Filed Jan. 26, 1932. Serial No. 588,998. 2 Claims. (Cl. 45—9.)

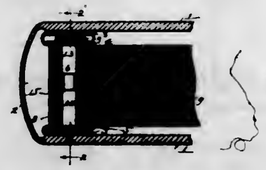


1. In combination, a frame including a pair of relatively spaced transverse rails, a table top comprising a pair of hingedly connected sections, L-shaped seats secured to the under side of one of the table top sections and engaging said rails, said cleats being in length substantially half the length of said rails and having abutting engagement with portions of the frame for restricting transverse movement of said one table top section relative to said frame, a spring latch member secured to the under side of said one table top section and adapted to engage said frame when the said table top section is at its limit of movement in one direction relative to said frame; and said one table top section being also provided on its under side with a pocket for receiving a portion of said latch, the relative arrangement of said pocket and latch being such as to permit movement of the latch to a position as not to interfere with the desired shifting of said one table top section.

1,891,987. TREATING CRUDE OIL. JAMES B. JENNINGS and GEORGE P. ESTES, McPherson, Kans. Filed Oct. 8, 1931. Serial No. 567,755. 7 Claims. (Cl. 196—4.)

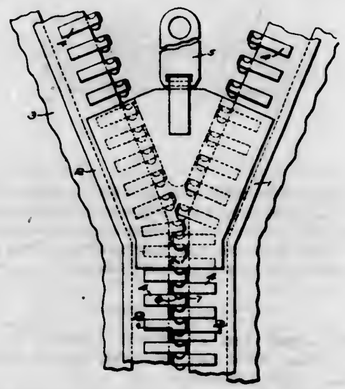
6. A substance for removing B. S. from petroleum comprising a mixture of approximately 25% of castor oil, 15% of spirits of nitre, 10% of common salt, and 50% of gasoline.

1,891,988. LOOSE LEAF BINDER. CORNELIUS EVAN JOHNSON and WILLIAM H. EDWARDS, Grand Rapids, Mich., assignors to Grand Rapids Loose Leaf Binder Company, Grand Rapids, Mich., a Corporation of Michigan. Filed July 13, 1931. Serial No. 551,928. 8 Claims. (Cl. 129—23.)



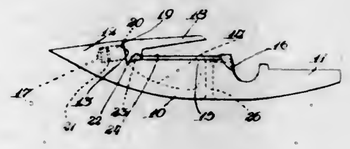
2. In a loose leaf binder: a pair of binding strips adapted to clamp the leaf body between them and to be readily perforated at desired points to receive the hereinaftermentioned post; a binding post comprising longitudinally adjustably connected members extending through perforations in the binding strips respectively, one of said members being mounted on one of said strips; a locking device adapted to releasably engage the other one of said members and having spurs adapted to be thrust through the other binding strip for securing said device thereto.

1,891,989. METHOD OF FORMING AND ATTACHING SEPARABLE FASTENER ELEMENTS. GUSTAV JOHNSON, West Roxbury, Mass., assignor to United-Carr Fastener Corporation, Cambridge, Mass., a Corporation of Massachusetts. Original application filed July 14, 1928, Serial No. 292,896, now Patent No. 1,865,393, dated June 28, 1932. Divided and this application filed Feb. 2, 1929. Serial No. 337,035. 2 Claims. (Cl. 18—59.)



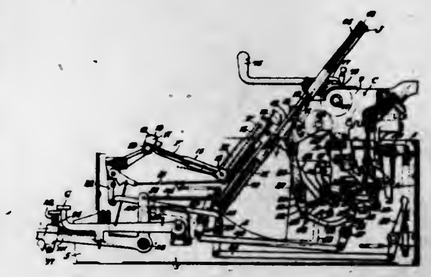
1. The method of forming and attaching multiple operative fasteners to a stringer which comprises passing a stringer between opposed mold forms, supplying moldable material to said mold forms and applying the molded material to the edge of the stringer in the form of fasteners applied to the stringer at predetermined spaced intervals.

1,891,990. MOWER GUARD. EDWARD A. JOHNSTON, Chicago, Ill., assignor to International Harvester Company, a Corporation of New Jersey. Filed Jan. 20, 1930. Serial No. 421,921. 9 Claims. (Cl. 56—311.)



1. The method of making a mower guard comprising the steps of forming a body provided with a shoulder on its top, providing a recess in the shoulder extending into the body, providing a lip having a shoulder and an end adapted to fit said recess, and lastly assembling the lip and body by pressing the end into said recess to cause said shoulders to abut.

1,891,991. TYPEWRITING MACHINE. JOHN J. KITTEL, St. Albans, N. Y., assignor to Royal Typewriter Company, Inc., New York, N. Y., a Corporation of New York. Filed May 25, 1931. Serial No. 539,919. 16 Claims. (Cl. 197—22.)

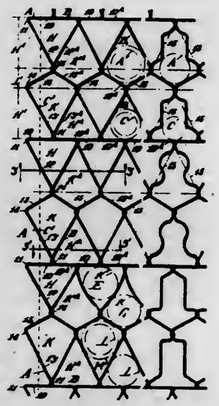


1. In a typewriting machine, the combination with a type carrier, of flat types mounted on said carrier and having printing faces disposed at an angle to each other, a flat platen normally disposed in a plane parallel to the printing face of one type when said type is in printing position and movable into another plane disposed in parallelism with the printing face of the other type when said other type is in printing position, means for moving the platen from one position to the other, and means for locking the platen against movement in one printing position thereof.

1,891,992. WIRE MESH FABRIC. ARTHUR A. G. LAND, Chicago, Ill. Filed Feb. 20, 1931. Serial No. 517,293. 13 Claims. (Cl. 245—6.)

1. A chain-link type of wire fabric comprising zigzag strands transversely of the fabric intertwisted to form longitudinal rows of mesh which mesh are alternately

triangular and deltoid shaped, with certain of the mesh sides having a bent portion bowed toward one of the



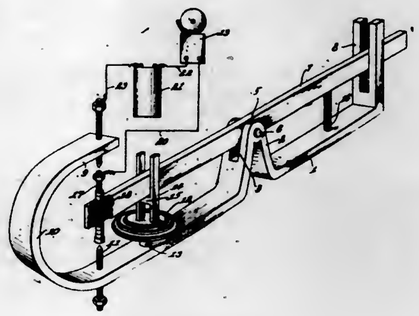
other sides of the mesh, thereby reducing the effective mesh openings of the mesh into which the bent portions extend.

1,891,993. CIRCUIT CLOSING DEVICE. BERNARD LARSON, Hammond, Ind. Filed Dec. 9, 1931. Serial No. 579,958. 4 Claims. (Cl. 200—52.)



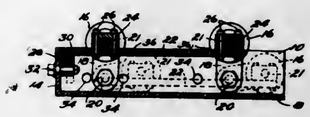
1. A circuit make and break device for incorporation in an electrical theft alarm circuit of the class described comprising an elongated cylinder of electricity conducting material, a hanger therefor, a circuit wire electrically connected thereto, a pendulum in said cylinder, a flexible suspension member for said pendulum, the pendulum and suspension member being of electricity conducting material, a companion circuit wire electrically connected with said suspension member, a shaft mounted for rotation on said hanger, said shaft being constructed to accommodate a key, and a winding cord connected with the suspension member and wound on said shaft.

1,891,994. ALARM FOR INCUBATORS OR BROODERS. JOHN J. MACHACEK, Weston, Nebr., assignor of one-half to Joseph Egr, Valparaiso, Nebr. Filed Apr. 4, 1931. Serial No. 527,837. 1 Claim. (Cl. 200—140.)



A temperature control switch comprising an elongated base of electrical conductive material having its intermediate portion offset in V-shape and slotted and apertured to provide spaced bearings disposed in a plane above the base, a pivot in said bearings and extending across the slotted portion of the V-shaped offset, an arm extending parallel with the base and apertured intermediate its ends to receive the pivot to permit the arm to rock within the slotted portion of the V-shaped offset of the base, said base having a curved portion at one end with one end of the arm movable therebetween and connected to an electric circuit of an alarm, a contact carried by and insulated from the arm and connected to the electric circuit of the alarm, a thermostat carried by the base, a forked member movable with the thermostat and receiving the arm to impart pivotal movement thereto for engaging and disengaging the contact of said arm with the base, and a tension means between the arm and the base to urge said arm into engagement with the forked member.

1,891,995. PIPE DOLLY. JOHN P. MARCY, Kansas City, Mo. Filed Feb. 29, 1932. Serial No. 595,951. 8 Claims. (Cl. 248—30.)

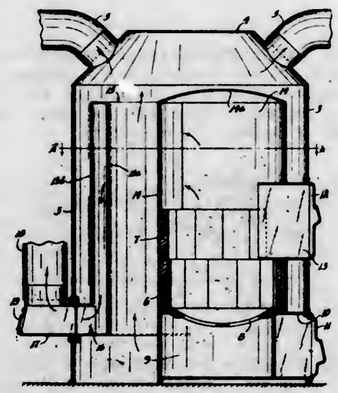


1. A pipe dolly comprising a body; a series of rollers mounted on said body for movement to and from a position projected from the body; and means to maintain said rollers in the projected position including a link interconnecting the series of rollers and releasably secured to said body.

1,891,996. HOT AIR FURNACE. GEORGE W. MILLER, Amery, Wis. Filed Nov. 26, 1930. Serial No. 498,334. 2 Claims. (Cl. 126—99.)

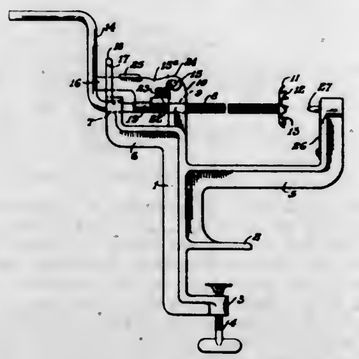
1. In a hot air furnace, an exterior casing of substantially elliptical cross section, an inner casing of substantially crescent shape in cross section dividing the interior

of said first mentioned casing to form a substantially cylindrical furnace chamber, a radiator chamber of arcuate cross section and an air heating flue between said chambers, a fire pot disposed in the lower portion of said furnace chamber, the portion of said furnace chamber above



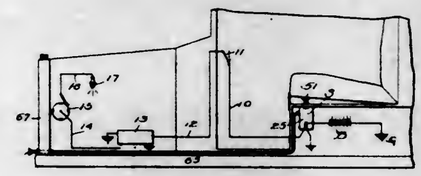
said fire pot constituting a combustion chamber, said combustion chamber having open communication with said radiator chamber through widely spaced longitudinal passages extending substantially the full height of said combustion chamber.

1,891,997. VEGETABLE SLICER. HARRY W. MOORE, Dayton, Ohio. Filed Jan. 31, 1931. Serial No. 512,668. 2 Claims. (Cl. 146—166.)



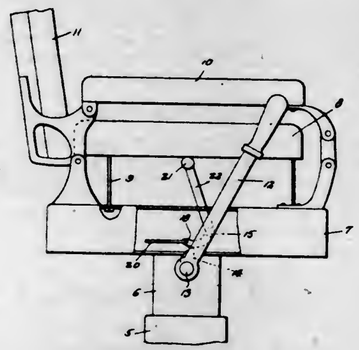
1. A device of the type described comprising a frame of Y formation, a horizontal prong secured to one arm of the Y, a knife also secured to said arm, an upright member secured to the opposite arm of said Y to form with said opposite arm a U shaped support, a feed screw slidable through said support toward said prong, means carried by the forward end of said screw to support and rotate a vegetable slicer, a latch bar pivoted at one end to the upright member, a stop carried by the said opposite arm of the Y, to hold the latch bar down, a recessed threaded projection on the latch bar to engage the feed screw when said bar is under the stop, a handle on the inner end of the feed screw to engage and release the latch bar from the stop, and a compression spring between the upright member and the under surface of the latch bar.

1,891,998. ELECTRIC SWITCH DEVICE. RALPH L. NAFZIGER, Kansas City, Mo., assignor to The Nafziger Corporation, Kansas City, Mo., a Corporation of Missouri. Filed Oct. 8, 1929. Serial No. 396,947. 5 Claims. (Cl. 123—146.5.)



1. In an automobile or the like having an internal combustion engine, an ignition circuit therefor and a driver's station, the combination therewith of a switch device under the control of the presence of a person in said station for controlling said circuit, with means for operating the switch device at a place remote from said station and independently of the presence of a person thereat.

1,891,999. ADJUSTABLE BARBER CHAIR SEAT. RUDOLPH NAGEL, Miami, Okla. Filed July 9, 1930. Serial No. 466,851. 1 Claim. (Cl. 155—25.)



In a barber chair having a seat and including a chair elevating control hand lever and a cam operated by said lever, a seat elevating mechanism comprising a shaft on the chair, an offset cranked foot member carried by the shaft, a bar for engagement against the bottom side of the seat, and means rigidly connecting the bar and the shaft and means rotatably and slidably mounting said shaft on the chair whereby said shaft may be moved to dispose the foot in the path of the cam, and be thereby rotated to tilt said bar about the shaft as an axis and raise the seat vertically.

1,892,000. HALOGENATED DIHYDROXY DIPHENYL. FERDINAND W. NITARDY, Brooklyn, N. Y.; WALTER G. CHRISTIANSEN, Glenn Ridge, N. J.; and SIDNEY E. HARRIS, Brooklyn, N. Y., assignors to E. R. Squibb & Sons, New York, N. Y., a Corporation of New York. Filed Oct. 7, 1931. Serial No. 567,466. 12 Claims. (Cl. 260—154.)

1. Compounds having the general formula

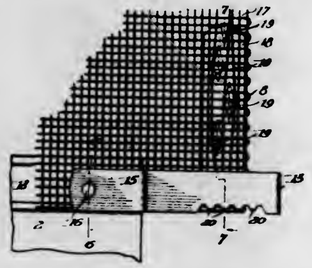
$$C_6H(OH)_2XYC_6H_5$$

wherein X represents a halogen and Y represents hydrogen or a halogen.

8. In the preparation of compounds having the general formula $C_6H(OH)_2XYC_6H_5$ wherein X represents a halogen

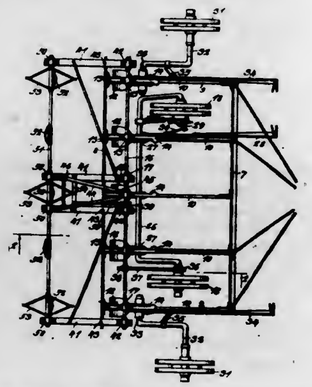
and Y represents hydrogen or a halogen, the step of treating a solution of phenyl dihydroxy benzene with a reactant selected from the group consisting of free halogens and substances capable of readily yielding free halogens.

1,892,001. WINDOW SCREEN REENFORCEMENT. ALVIN F. NYE, Rochester, N. Y., assignor of one-half to William Keyel, Penfield, N. Y. Filed Sept. 9, 1931. Serial No. 561,882. 3 Claims. (Cl. 156—89.)



2. In a sliding wire screen construction, the combination with a frame guide embodying a side channel member, of a wire screen having a lateral selvage edge located, within the channel and reenforced with extra longitudinal woven wires, and a sheet metal reenforcement comprising a doubled sheet metal strip clasped about and secured to the bottom of said edge and to the rail and projecting laterally into the channel, said reenforcement having a rigid vertical extension secured by fasteners through the reenforcing wires of the selvage.

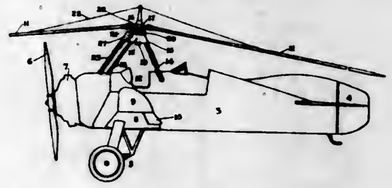
1,892,002. COMBINED LISTER AND DAM FORMING DEVICE. CHARLES T. PEACOCK, Arriba, Colo. Filed Feb. 15, 1932. Serial No. 592,983. 8 Claims. (Cl. 97—55.)



1. A lister comprising, in combination, a frame, means for supporting the frame, a plurality of shovels attached to the frame and adapted to form spaced trenches, a plurality of supporting bars having their front ends connected to the frame and extending rearwardly to a point to the rear of the shovels, a shaft carried by the rear ends of the bars and rotatably connected to them, a plurality of scraper blades attached to the shaft, said blades being located directly behind the shovels and adapted to project into the trenches to form dams, means for holding the shaft against rotation, and means for releasing the shaft at predetermined intervals whereby the scraper blades will rotate about the axis of the shaft.

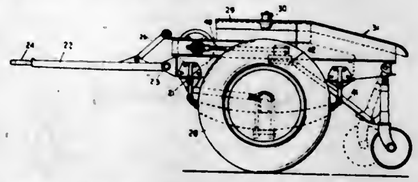
6. A lister comprising, a substantially rectangular frame, means for supporting the frame, a plurality of shovels attached to the frame and positioned to form trenches when the frame is moved over the surface of a field, a second frame attached to the first and projecting rearwardly thereof to a point to the rear of the shovels, a shaft rotatably connected with the second frame, a plurality of scraper blades attached to the shaft, and an escapement mechanism for controlling the turning of the shaft.

1,892,003. AIRCRAFT HAVING SUSTAINING ROTORS. JOSEPH S. PECKER, Philadelphia, Pa., assignor to Autogiro Company of America, Philadelphia, Pa., a Corporation of Delaware. Filed July 31, 1931. Serial No. 554,268. 7 Claims. (Cl. 244—19.)



2. In an aircraft, a sustaining rotor, a mounting structure providing for removal of the rotor, and driving means for the rotor including a driven part and a cooperating driving part, the normal relative disposition of said parts being such as to interfere with removal of the rotor, together with means providing for relative displacement of said parts without the rotor, together with means providing for relative dismounting thereof to facilitate rotor removal.

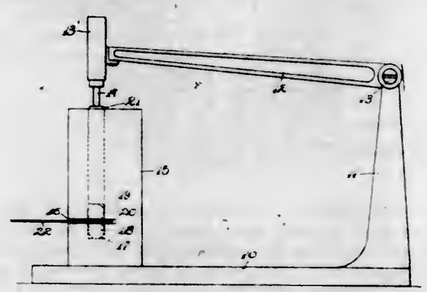
1,892,004. TRACTOR-TRAILER COMBINATION. FREDERICK MALCOLM REID, Detroit, Mich., assignor to Fruehauf Trailer Company, Detroit, Mich., a Corporation of Michigan. Filed Nov. 13, 1930. Serial No. 495,359. 6 Claims. (Cl. 280—33.1.)



2. The combination of a tractor, a normally inclined rocking fifth wheel on the tractor, a semi-trailer underneath one end of which the tractor is adapted to move whereby said trailer is elevated by the inclined fifth wheel, an upper fifth wheel rigid on the semi-trailer for connection to the lower fifth wheel on the tractor, a dolly comprising a wheeled axle and frame, a lower fifth wheel rigid with the frame, an incline fixed as regards the frame, a tongue pivoted to the dolly arranged to be connected to a tractor, said dolly being adapted to be backed under the semi-trailer whereby the same is lifted by the incline and the upper and lower fifth wheel members connected, auxiliary means for engaging the ground and supporting the dolly frame against substantial tripping as the trailer rides up the incline, said auxiliary means comprising a movable structure and means for moving it to and from operative position.

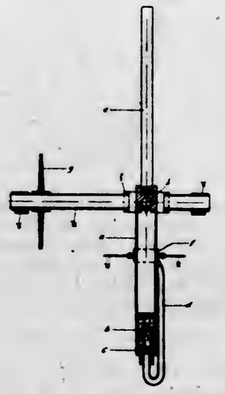
1,892,005. GAUGE. ALBERT C. RICHMOND, La Grange, Ill., assignor to International Harvester Company, a Corporation of New Jersey. Filed Dec. 15, 1930. Serial No. 502,281. 2 Claims. (Cl. 33—147.)

1. In a thickness gauge for flat strips, said gauge comprising a vertically disposed block having a horizontal passage-way formed therethrough, a pocket formed in the block below the passageway, a ball seated loosely in the pocket, said ball projecting slightly into the passageway, a vertical bore formed in the block above the pocket, a second ball located in said bore and normally resting



on the first mentioned ball, whereby the strip to be gauged may be passed between the balls, a weight slidably arranged in the vertical bore and resting on the upper ball, an indicator gauge carried above the block, and gauge operating means contacting the weight.

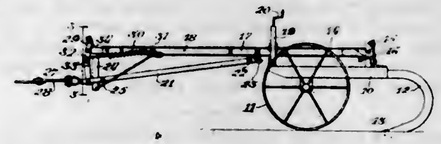
1,892,006. MEANS FOR CONTROLLING AEROPLANES IN FLIGHT. BERNARD ROBERTS, Auckland, New Zealand. Filed Aug. 6, 1931, Serial No. 555,618, and in New Zealand May 21, 1931. 3 Claims. (Cl. 244—29.)



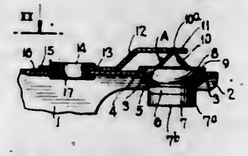
1. An aeroplane elevator and aileron operating means including a lever mounted so as to be capable of backward and forward and/or side movement, the lower portion of said lever including a chamber, a weight in said chamber adjustable under the influence of fluid pressure towards or from the axes about which said lever moves and means for forcing fluid into and withdrawing the fluid from said chamber to adjust the position of said weight.

1,892,007. YIELDABLE DRAFT DEVICE FOR GROUND WORKING IMPLEMENTS. CHARLES W. ROBINSON, Hamilton, Ontario, Canada, assignor, by mesne assignments, to International Harvester Company, Chicago, Ill., a Corporation of New Jersey. Filed June 11, 1931. Serial No. 543,602. 3 Claims. (Cl. 97—184.)

1. The combination of a horizontal implement frame, a pair of wheels on which the frame is rockably supported, a ground engaging tool carried by the frame behind said wheels, a forwardly and downwardly extending draft link connected to the frame by a transverse pivot located rearwardly on the frame, and a connection between the front and of the frame and the draft link breakable under draft overload to allow the frame to rock on its wheels.

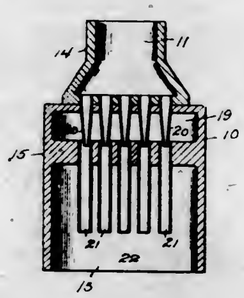


1,892,008. CIRCUIT BREAKER. OSCAR A. ROSS, New York, N. Y. Filed Dec. 2, 1930. Serial No. 499,429. 8 Claims. (Cl. 200—166.)



1. A circuit breaking device comprising, a contact supporting member having an opening formed therein between the forward and rearward sides thereof, a rearwardly facing seat formed on the rearward side of the member surrounding the opening therein, a resilient member supported by the contact supporting member having an extension positioned spaced rearwardly of the seat therein, a self-aligning contact member having a seating portion and a contacting portion, the seating portion having a forwardly facing convex seating surface arranged to frictionally engage the rearwardly facing seat on the contact supporting member and the contacting portion extending forwardly from the seating portion spaced through the opening beyond the forward end thereof, a rearwardly protruding extension formed on the seating portion rearwardly of the seating surface thereon, the end of the extension engaging the extension of the resilient member and the point of engagement of the extensions forming substantially the nucleus from which the arc of the seating surface on the seating portion of the self-aligning contact member is generated.

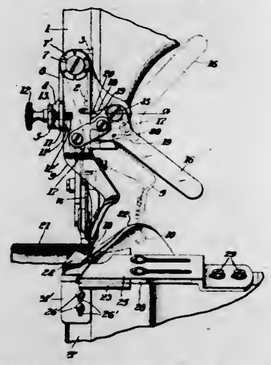
1,892,009. MUFFLER. EDWARD A. SAGUI, Lyndhurst, N. J. Filed Nov. 14, 1930. Serial No. 495,586. 2 Claims. (Cl. 137—160.)



1. A muffler comprising a member having a cylindrical outlet portion and a top wall and having a partition near and parallel to the said top wall and having an air

inlet extending to one side of and parallel with the member and in direct communication with the space between the partition and the top wall, nozzles secured in the partition and extending through the major length of the outlet portion, and a second member secured on the top wall and having an inlet at its outer end, and nozzles secured to said second member and extending part way into said first mentioned nozzles and spaced therefrom to form an adequate passage for air.

1,892,010. SEWING MACHINE ATTACHMENT. RUDOLPH J. SAILER, Townley, N. J., assignor to The Singer Manufacturing Company, Elizabeth, N. J., a Corporation of New Jersey. Filed Feb. 20, 1932. Serial No. 594,255. 8 Claims. (Cl. 112—136.)

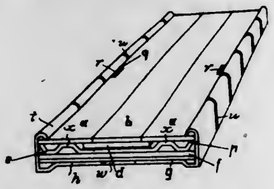


1. In a sewing machine attachment, supporting means, an arm pivotally carried by said means for movement from operative position to an out-of-the-way position, a work-engaging device operatively connected to said arm, a manually operated lever fulcrumed on said supporting means, a link-connection between said lever and arm, and a cam-nose on said lever constructed and arranged to wedge against said arm at or near the out-of-the-way position of the latter.

1,892,011. PROCESS FOR THE PRODUCTION OF KETONES FROM SECONDARY ALCOHOLS. HERRMAN SANDKUHL, Buderich, Germany, assignor to Firm: Rheinische Kampfer-Fabrik Gesellschaft mit beschrankter Haftung at Dusseldorf-Oberkassel, Germany. Filed May 31, 1930, Serial No. 458,934, and in Germany June 14, 1929. 4 Claims. (Cl. 260—134.)

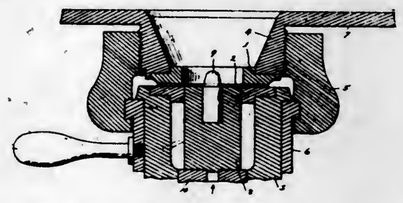
1. A process for the production of ketones from secondary alcohols of the same number of carbon atoms which consists in leading the alcohol in the gaseous state with steam but in the absence of oxygen over dehydrogenating catalysts at a temperature not exceeding 300° C.

1,892,012. FLEXIBLE SLIDE RULE. HANS SEEHASE, Berlin-Treptow, Germany. Filed Jan. 31, 1929, Serial No. 336,572, and in Germany Oct. 22, 1927. 6 Claims. (Cl. 235—70.)



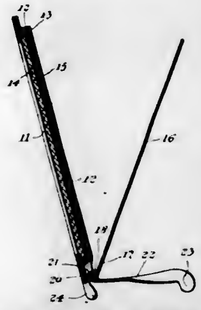
1. A slide rule comprising fixed and movable scales, the individual scales being flat strips arranged in a single plane, and resilient means for holding said scales engaged at their edges and in their plane.

1,892,013. METHOD FOR TESTING SHEET METAL. ERICH SIEBEL, Dusseldorf, Germany, assignor to Steel City Testing Laboratory, Detroit, Mich. Filed Dec. 11, 1930, Serial No. 501,720, and in Germany Aug. 10, 1929. 2 Claims. (Cl. 265—12.)



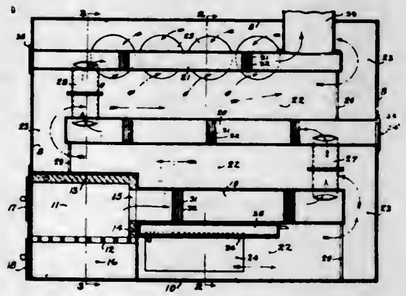
1. In the method of testing sheet metal for deep drawing, the steps of forming an opening in the sample, locating the sample so that the center of said opening will be in the axis of a draw punch, gripping the sample peripherally to prevent any flow of the metal from the gripping zone, and drawing that metal located over the draw punch and within the gripped zone.

1,892,014. PICTURE FRAME. RALPH SINGER, Niles Center, and ORESTE J. AGNINI, Maywood, Ill. Filed Oct. 23, 1931. Serial No. 570,604. 4 Claims. (Cl. 40—148.)



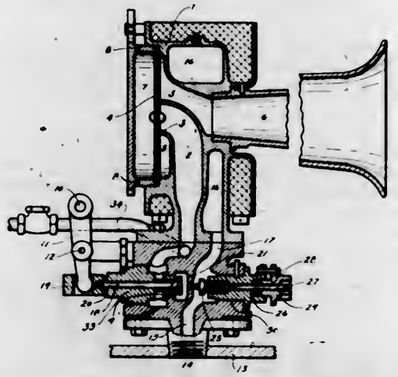
1. A construction of the class described comprising a frame member; a back member therefor hinged thereto; a spring holding said back member normally closed; and an easel member carried by said back member and arranged to support said frame member in operative position on a supporting surface.

1,892,015. WARM AIR HEATING SYSTEM. ARTHUR LEROY SMITH, Seattle, Wash. Filed Sept. 8, 1931. Serial No. 561,561. 10 Claims. (Cl. 126—108.)



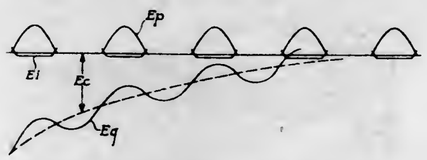
1. In a warm air heating unit, a housing, a fire box in the lower portion of said housing, a plurality of hot gas conduits in said housing in spaced apart relation one above another in contacting relation with the side walls of said housing, said conduits affording warm air passageways therebetween and leaving openings at alternate ends by which said warm air passageways communicate with each other, the interior of said hot gas conduits forming a continuous passageway for heated products of combustion, the lowermost hot gas conduit communicating with said firebox, a smoke pipe connected with the uppermost hot gas conduit and air inlet and air take off means connected with said warm air passageways.

1,892,016. SIGNAL. STEN E. B. SODERBERG, Passaic, N. J., assignor to Leslie Company, Lyndhurst, N. J. Filed Feb. 29, 1932. Serial No. 595,859. 5 Claims. (Cl. 116—142.)



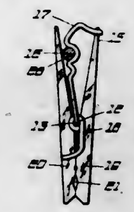
1. In apparatus of the class described, the combination of an audible fluid operated signal, a boiler, a conduit from the steam space of the boiler to the signal, a steam jacket encasing portions of the signal and communicating with the conduit, a valve controlling the conduit, a further valved conduit to supply a second operating fluid to the signal, adjustable means separate from said first-named valve to regulate the rate of flow of the steam when the valve is open, and means between the valve and the boiler to shut off first named conduit.

1,892,017. TIMING DEVICE. CARROLL STANSBURY, Wauwatosa, and GLENDON C. BROWN, Milwaukee, Wis., assignors to Cutler-Hammer, Inc., Milwaukee, Wis., a Corporation of Delaware. Filed Dec. 10, 1931. Serial No. 580,092. 13 Claims. (Cl. 219—4.)



1. In combination, a power supply, a translating device supplied thereby, an electron tube controlling the continuity of circuit thereof and having a control electrode, means to impress upon said electrode a potential rendering said tube conductive to effect completion of the circuit of said translating device, energy storing and discharging means associated with said electrode and having a transient effect thereon to cause said tube to interrupt said circuit of said translating device and means associated with said translating device to complete a circuit to effect discharge of said storing means upon interruption of said last mentioned circuit.

1,892,018. CLOTHESPIN. EPHRAIM H. STANTON, San Pablo, Calif. Filed Apr. 5, 1932. Serial No. 603,276. 4 Claims. (Cl. 24—137.)



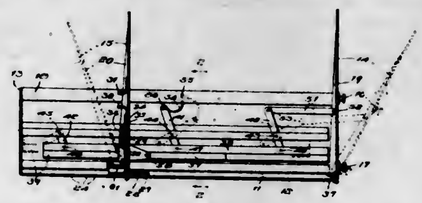
1. In combination with a clothes pin, a pair of spanning elements secured to one handle of the clothes pin and having recesses formed which are adapted to coact with the other handle for gripping a clothes line therebetween.

1,892,019. MANUFACTURE OF EASILY SOLUBLE BENZYLMORPHINE SALTS. ARTHUR STOLL and ERNST BURCKHARDT, Basel, Switzerland, assignors to Firm of Chemical Works formerly Sandos, Basel, Switzerland. Filed May 10, 1930, Serial No. 451,504, and in Germany May 24, 1929. 5 Claims. (Cl. 260—25.)

1. A process for the preparation of new stable crystallized and easily water soluble salts of benzylmorphine, consisting in treating benzylmorphine in a solvent with an alkylsulphonic acid containing not more than 5 carbon-atoms.

4. The new crystallised alkylsulphonic salts of benzylmorphine which are white compounds, easily soluble in water, yielding stable and neutral solutions and giving with molybdenum-sulphuric acid reagent a violet coloration.

1,892,020. VERTICAL FILING DRAWER. FREDERICK L. G. STRAUBEL, Green Bay, Wis., assignor of one-eighth to O. C. Straubel, Green Bay, Wis., and two-eighths to C. W. Straubel, Youngstown, Ohio. Filed Sept. 24, 1930. Serial No. 484,038. 14 Claims. (Cl. 129—26.)

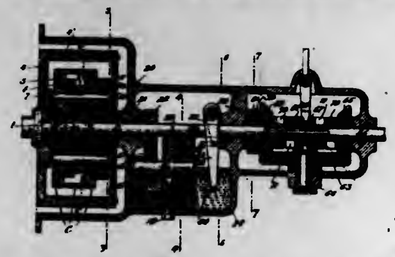


2. A drawer having a tiltable front, a tiltable follower, connections between the front and follower adapted to cause an outward tilting or return movement of the front to impart corresponding movement to the follower, the axes of rotation of said front and follower being underneath the bottom of the drawer, said connections adapted to hold said follower in upright position except as actuated by said connections by the tilting of the front.

1,892,021. TRANSMISSION MECHANISM. KARL JOSEF STRIOL, New York, N. Y. Filed June 16, 1931. Serial No. 544,726. 13 Claims. (Cl. 74—84.)

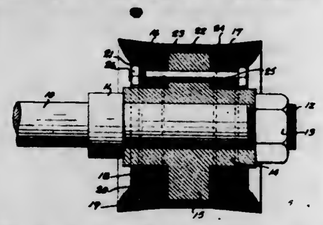
1. Power transmission mechanism comprising a motor, a driving shaft and a driven shaft, reducing variable speed, planetary gearing means between said shafts, a rotary fluid pump rotatably connected to the gearing means to control the action thereof, valve means adapted

to progressively control the speed ratio of the gearing by controlling the fluid passage through the pump and manually operated means adapted simultaneously to con-



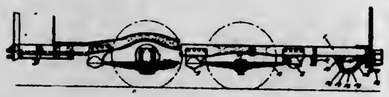
trol the action of the motor and the valve means and means to establish direct driving relation between the driving and driven shafts.

1,892,022. PISTON FOR SLUSH PUMPS AND THE LIKE. CLARK L. TYLER, Torrance, Calif. Filed Nov. 20, 1930. Serial No. 496,935. 9 Claims. (Cl. 74—108.)



1. A piston for slush pumps and the like comprising a piston rod, a sleeve secured to the piston rod, said sleeve having an outwardly extending flange, opposed cup washers detachably secured against opposite sides of the flange, and a ring presenting a non-metallic outer surface encircling the flange for preventing the flange from contacting with cylinder walls.

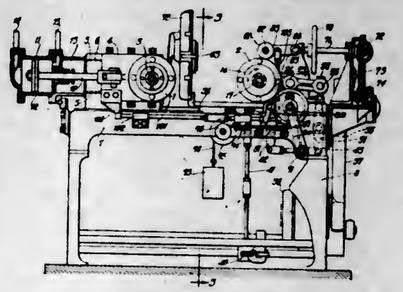
1,892,023. FRAME SUPPORT. JOHN A. WERNSTAN, Cincinnati, Ohio, assignor to The Cincinnati Car Corporation, Cincinnati, Ohio, a Corporation of Ohio. Filed Jan. 12, 1931. Serial No. 508,072. 5 Claims. (Cl. 280—106.)



2. A new article of manufacture for use as a nose skid comprising a bottom portion, wall portions and U-shaped corner members having side walls engaging and embracing said wall portions for attachment to a frame.

1,892,024. APPARATUS FOR MAKING THE FOUNDATION OF PNEUMATIC TIRES. HARRY WILLSHAW, Wylde Green, and WILLIAM ALEXANDER COWLES and HAROLD SMITH, Birmingham, England, assignors, by direct and mesne assignments, of one-half to Dunlop Rubber Company Limited, a British Corporation, and one-half to Francis Shaw and Company Limited, Manchester, England, a Limited Stock Company of England. Filed Aug. 19, 1930, Serial No. 476,824, and in Great Britain Aug. 24, 1929. 10 Claims. (Cl. 154—11.)

1. An apparatus of the type described which comprises a bead core winding drum having an outer cylindrical member and an inner supporting member on which said outer member is removably mounted, means rotating



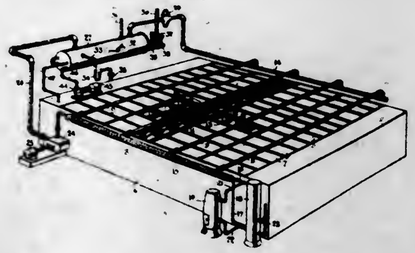
about a fixed center to wind a fabric around said core, and means to adjust the axis of said drum to bring said core on a level with the axis of said rotating means.

1,892,025. SPLICE BAR FOR RAIL JOINTS. DAVID P. WOLHAUPTER, Washington, D. C., assignor to The Rail Joint Company, New York, N. Y., a Corporation of New York. Filed Mar. 31, 1932. Serial No. 602,322. 8 Claims. (Cl. 238—243.)



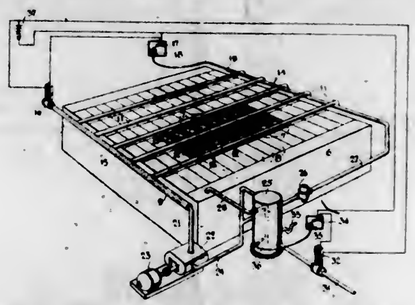
1. A splice bar having vertically extending corrugations, the top and bottom portions of said bar being directed inwardly relative to the portion thereof intermediate said top and bottom portions.

1,892,026. AIR AGITATION FOR CAN ICE PLANTS. WILLIAM E. ZIEBER, York, Pa., assignor to York Ice Machinery Corporation, York, Pa., a Corporation of Delaware. Filed Nov. 8, 1930. Serial No. 494,400. 17 Claims. (Cl. 62—159.)



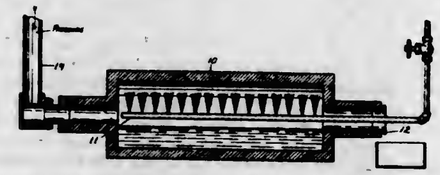
17. The method of supplying air to the drop pipes of ice cans, which consists in adjusting the moisture content of such air to establish a dew point near to but definitely above 32° F. and adding heat to such air before its flow to said drop pipes, in quantity sufficient to neutralize the loss of heat in such flow, whereby the air will issue from the drop pipes slightly above 32° F. and in a substantially saturated condition.

1,892,027. AIR AGITATION FOR CAN ICE PLANTS. WILLIAM E. ZIEBER, York, Pa., assignor to York Ice Machinery Corporation, York, Pa., a Corporation of Delaware. Filed Dec. 11, 1931. Serial No. 580,418. 10 Claims. (Cl. 62—159.)



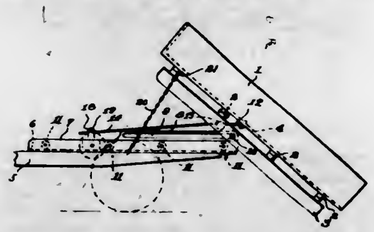
1. The method of conditioning air for use in the drop pipes of can ice plants, which consists in cooling air to approximately freezing temperature, washing such air with water at a temperature slightly above freezing; and maintaining the temperature of such water, by regulating the supply of warmer make-up water to the washer.

1,892,028. METHOD AND APPARATUS FOR COOLING MILL ROLLS. STERLING W. ALDERFER, Akron, Ohio. Filed Apr. 6, 1928. Serial No. 267,965. 5 Claims. (Cl. 62—170.)



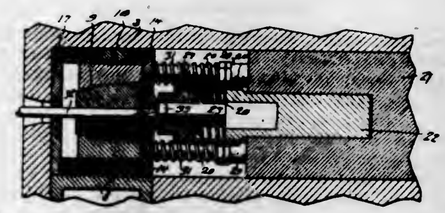
1. An apparatus for cooling rolls for the uses and purposes set forth, comprising a hollow roll, a pipe extending in the roll and having means for spraying the interior of the roll, and means for effecting circulation of air through the roll thereby increasing the rate of evaporation of the water in the interior of the roll above the rate of evaporation obtainable with a static body of air in the roll.

1,892,029. TILTING DUMP TRUCK. THOMAS RUTLEDGE ALEXANDER, Kaikoula, New Zealand. Filed Apr. 16, 1931, Serial No. 530,692, and in New Zealand Sept. 1, 1930. 2 Claims. (Cl. 298—14.)



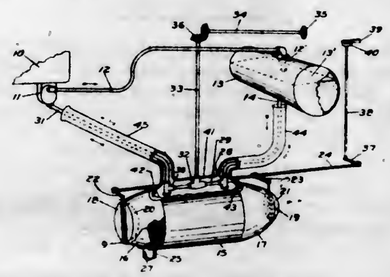
1. A tilting dump truck comprising a wheel supported chassis, guide members secured along opposite sides of the chassis and provided with longitudinally slotted inner portions, rollers mounted on said guide members, a body, longitudinally disposed runners on the body and operating along the guide members and supported by the rollers thereon, brackets on the body, a transverse rod supported by the brackets, a pair of rack members pivotally supported on said rod, a fulcrum pin extending laterally between said runners and having its ends passing through the longitudinal slots in the inner portions of said guide members, a transverse spindle passing through said guide members, two gear wheels carried by said spindle to mesh respectively with the said two rack members, means for retaining the rack members in gear with the gear wheels including brackets rigid with respect to the guide members, and rollers rotatably supported on the brackets and positioned in spaced relation above the gear wheels and the rack bars, means for rotating said spindle in the desired direction until the truck body passes the centre of gravity whereupon it tilts about said fulcrum pin, and means between the runners and the chassis for regulating the angle of tilt.

1,892,030. APPARATUS FOR MAKING FORGED ARTICLES. HAROLD N. ANDERSON, Lakewood, Ohio. Filed Sept. 3, 1929. Serial No. 390,004. 6 Claims. (Cl. 10—11.)



6. In a device of the character described, means for holding a bar of stock, a trimming die surrounding and in fixed relation to said stock when held by said holding means, means including a heading punch and a relatively movable, head-shaping surrounding die through which the punch is movable for upsetting an end of said stock by a definite, predetermined movement to form thereon a head of predetermined general shape, and means whereby a further movement of said heading punch renders inactive said holding means and forces said head through said trimming die for imparting thereto a different shape.

1,892,031. LUBRICATION SYSTEM. ANDREW A. ANDRAKE, Cleveland, Ohio, assignor to The Glenn L. Martin Company, Cleveland, Ohio, a Corporation of Ohio. Filed Aug. 31, 1927. Serial No. 216,560. 6 Claims. (Cl. 184—104.)



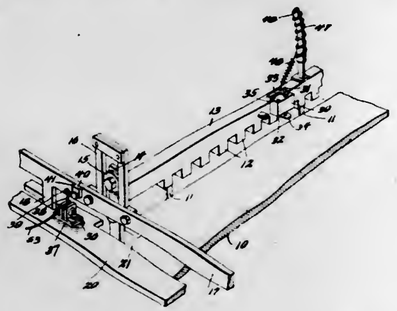
1. In a lubricating system for vehicle engines, an oil pipe in said system located outside of the engine, a tube enclosing a portion of said pipe, one end of said tube being higher than the other, a substantially closable chamber at the lower end of the tube, and a detachable heating unit having an opening therethru located in said chamber.

1,892,032. SCALE. TUNIS C. ARNOLD, Boise, Idaho. Filed Feb. 14, 1929. Serial No. 339,928. 3 Claims. (Cl. 33—161.)



1. A scale holder comprising a U-shaped body formed with staggered perforations at its intermediate portion and slots formed in the opposite inner wall faces merging with said perforations, hook members extending through said perforations and seating in said slots, the outer faces of the hook members being flush with the inner wall faces of said U-shaped member, scale members formed with longitudinally extending grooves in their outer faces and positioned between the arms of said U-shaped member, said hook members engaging the grooves in said scale members, and means for clamping said hook members in fixed position.

1,892,033. STOP SWITCH FOR COLLATING MACHINES. HARRY V. ASHBY, Erie, Pa. Filed Sept. 13, 1927, Serial No. 219,346. Renewed May 14, 1932. 8 Claims. (Cl. 192—127.)



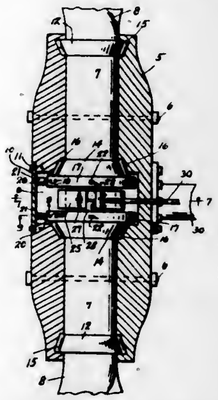
1. In combination with a sheet manipulating machine comprising a moving carriage having mechanism thereon adapted to take a sheet singly from a pile, move the sheet, and release it, a device mounted on said carriage and adapted to make an electrical contact which will operate to stop the machine, and other means for completing the circuit through said contact at one point only in the cycle of the sheet manipulating machine.

1,892,034. BRAKE MECHANISM FOR MOTOR VEHICLES. WILLIAM J. BESLER, Plainfield, N. J. Filed Nov. 15, 1927. Serial No. 233,389. 4 Claims. (Cl. 188—152.)



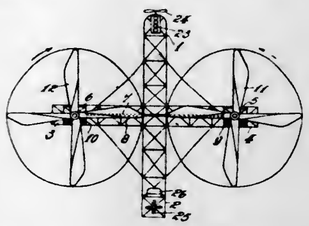
2. In a combined fluid-control valve and coupling member for a brake pedal and a brake rod of a motor vehicle, a casing provided with valve ports and means whereby an adjustable lost-motion connection is effected between the brake pedal and brake rod, a pivoted valve member disposed on the outside of said casing and arranged to cooperate with the valve ports therein and means for actuating said pivoted valve member upon relative movement between the brake rod and brake pedal.

1,892,035. ADJUSTABLE PROPELLER. THOMAS BURSON and CHARLES W. JENKINS, Negley, Ohio. Filed May 19, 1931. Serial No. 538,522. 3 Claims. (Cl. 170—163.)



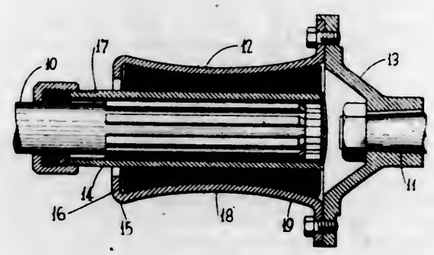
1. A reversible pitch aircraft propeller comprising a sectional hub comprising front and back sections which form a central interior closed chamber, and a pair of opposed radial openings in the hub leading into the chamber, a propeller blade having a shank rotatably fitting in each radial opening and extending into the chamber, an inspection plate covering an opening in the front section which leads into the chamber for placing lubricant therein, propeller shaft attaching means on the rear section of the hub, a propeller shaft attached to the rear section of the propeller; an eccentric lug projecting inwardly from the inward end of each shank, the inward ends of said shanks being spaced from each other, a transversely shiftable member located between the inward ends of the shanks and provided with opposed notches for receiving the lugs on the shanks, means carried on the propeller shaft having members slidable through the rear section of the hub and connected to the shiftable member for moving the same on the axis of the propeller for rotating the propeller blades to change the pitch thereof while the propeller is rotating.

1,892,036. HELICOPTER. DENIS REMY CAMPENS, Berchem-Antwerp, Belgium. Filed Mar. 3, 1932, Serial No. 596,527, and in Belgium Apr. 17, 1931. 5 Claims. (Cl. 244—19.)



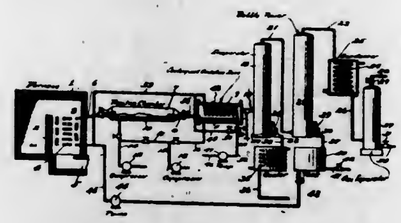
1. A helicopter comprising in combination: a cross-shaped fuselage, an oscillating frame on each side of the fuselage arranged at each end of the transverse cross member, the oscillation axis of said frames being substantially horizontal and parallel to the longitudinal cross member, a lifting propeller at the top side of each oscillating frame, a separate motor in each oscillating frame for driving the lifting propeller, a fly-wheel in each oscillating frame driven by said motor, a tractor propeller at the front end of the longitudinal cross member, a motor driving the tractor propeller, ailerons underneath the transverse cross member, a horizontal and a vertical rudder, a stabilizing propeller at the rear end of the longitudinal cross member, means to drive the last-mentioned stabilizing propeller, a landing structure comprising wheels and shock-absorbing devices, automatic coupling system of the two lifting propellers, and means to control the operation of the lifting, stabilizing and tractor propellers, substantially as set forth.

1,892,037. UNIVERSAL JOINT. MAURICE A. CREWS, Philadelphia, Pa., assignor to Budd Wheel Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Feb. 4, 1931. Serial No. 513,265. 3 Claims. (Cl. 64—96.)



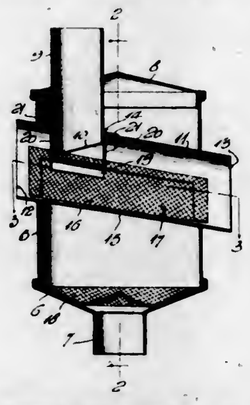
1. A universal joint comprising, in combination, annularly spaced telescoped inner and outer driving and driven members interconnected by a rubber sleeve telescoped therewith and occupying an annular space therebetween to effect a driving connection between said inner and outer members, the inner face of the outer member being of curved longitudinal cross section and having a minimum diameter in its central region and maximum diameter in the neighborhood of its axial extremities.

1,892,038. PROCESS AND APPARATUS FOR CONVERSION OF HYDROCARBON OILS. ROY CROSS, Kansas City, Mo., assignor, by mesne assignments, to Gasoline Products Company, Inc., Wilmington, Del., a Corporation of Delaware. Filed Sept. 30, 1926. Serial No. 138,806. 11 Claims. (Cl. 196—142.)



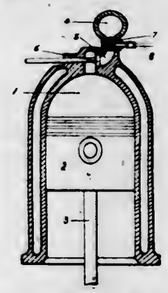
4. A process for the conversion of hydrocarbon oils comprising raising the oil to a cracking temperature in a heating zone, passing the heated oil to an enlarged reaction zone, introducing an oxygen containing gas into said enlarged reaction zone to maintain a high temperature therein, directing the oil from the reaction zone to a zone of reduced temperature in which the oil is maintained at a temperature materially below 700° F. and substantially in the liquid phase, introducing an oxygen containing gas into the oil in the zone of reduced temperature to produce antiknock hydrocarbon derivatives of oil while maintaining the pressure in excess of five hundred pounds per square inch and cooling the zone of reduced temperature to prevent the formation of undesirable products.

1,892,039. CISTERN FILTER. CLARENCE BAYLESS DEMAREE, Eminence, Ky., assignor of one-half to Joseph Hughes Rucker, Lawrenceburg, Ky. Filed Nov. 30, 1931. Serial No. 578,102. 3 Claims. (Cl. 210—89.)



3. A filter comprising a casing having a top and a bottom, the latter being provided with a clean water outlet, an inclined waste tube extending across said casing and having a central longitudinal imperforate portion at its lower side, a water inlet opening in its upper side and two screened water discharge openings along the edges of said central longitudinal imperforate portion, and a water inlet pipe extending downwardly from said casing top into said water inlet opening.

1,892,040. INTERNAL COMBUSTION ENGINE. MARIE JOSEPH ANTOINE DE MALVIN DE MONTAZET and IVAR JOHANSON, Argenteuil, France. Filed June 26, 1930, Serial No. 463,996, and in France June 27, 1929. 6 Claims. (Cl. 123—137.)

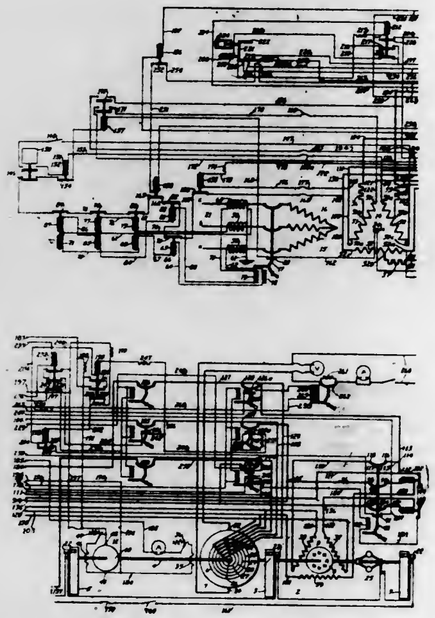


1. A device for supplying fuel to internal combustion engines, comprising the combination of a closure member arranged between the combustion chamber of the engine cylinder and an enclosed space into which the fuel is injected after its first atomization, an atomizer of any known type adapted to be put into communication at the desired moment with the combustion chamber and with the enclosed space by means of the closure member suitably displaced, and a fuel admission pipe permitting the introduction of the said fuel into the atomizer.

1,892,041. AUTOMATIC ROTARY CONVERTER AND METHOD OF STARTING THE SAME. ROBERT C. ECCLESTON and IRA S. NIPPES, Ridgway, Pa., assignors to Elliott Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed July 27, 1927. Serial No. 208,735. 14 Claims. (Cl. 171—118.)

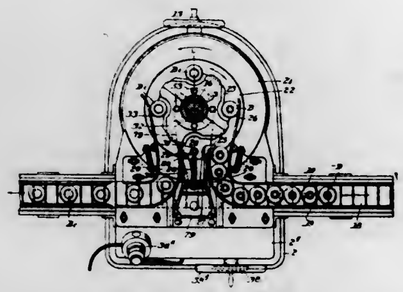
1. In a rotary converter system, a rotary converter having a plurality of slip rings, a transformer compris-

ing a plurality of subdivided winding sections, means for selectively connecting the end terminals of each section with a pair of slip rings, and means for connecting an



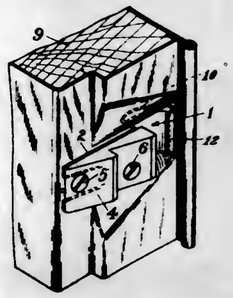
intermediate terminal of each of said sections with one of the pair of slip rings cooperating with the section, said means comprising impedance devices in circuit with the slip rings and transformer terminals.

1,892,042. CONTAINER HANDLING APPARATUS. LOUIS DE MARKUS and FRED A. FOUSER, Pittsburgh, Pa., assignors to McKenna Brass & Manufacturing Company, Inc., Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Feb. 4, 1929. Serial No. 337,241. 8 Claims. (Cl. 198—22.)



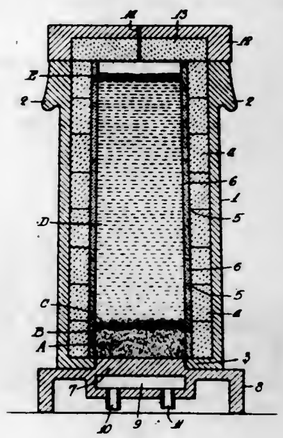
1. Apparatus for handling containers comprising a disk having a rim, the disk and the rim cooperating to form a container supporting surface, and means for rotating the disk and the rim at different angular velocities but in the same direction.

1,892,043. LATCH LUBRICATOR. JOHN R. DOOTY, Liberal, Kans., assignor to Clarence P. Williams, Miami, Okla. Filed July 6, 1931. Serial No. 548,986. 2 Claims. (Cl. 292—340.)



1. An oiling device for the free end of a latch-bolt, consisting of a single plate of thin metal having a pad of fibrous material for receiving oil, said pad caught in a convolute portion of said plate adjacent one end thereof, said plate having two integral legs for insertion between a keeper and its supporting member for rigidly positioning the pad at one end of the keeper for seating the free end of a latch-bolt.

1,892,044. METHOD OF CASTING INGOTS. BYRON E. ELDRED, New York, N. Y., and HOMER CLYDE SNOOK, Summit, N. J.; said Eldred assignor to said Snook. Filed Apr. 9, 1931. Serial No. 528,762. 6 Claims. (Cl. 22—213.)



1. In the art of casting an elongated steel ingot to be further elongated by rolling or the like, a process which includes forming an elongated upright mold of insulating material constituting the lining of an exterior cast iron casing mold; charging said mold with liquid steel hot enough to insure initial super-molten temperature for all of said liquid and for the top and side walls of said insulating liner mold; cooling the lower end of the liquid so as to form a solid layer having a substantially horizontal top; and thereafter causing solidification to progress upward in a substantially horizontal plane by abstracting heat from the liquid downwardly and substantially uniformly throughout all parts of the preformed surface.

1,892,045. CONTACT FINGER FOR ELECTRICAL CONTROLLERS AND SWITCHES. GEORGE ELLIS, St. Catharines, Ontario, Canada, assignor, by mesne assignments, to Niagara Falls Smelting & Refining Corporation, Buffalo, N. Y., a Corporation of New York. Filed July 2, 1928. Serial No. 290,011. 8 Claims. (Cl. 200—166.)



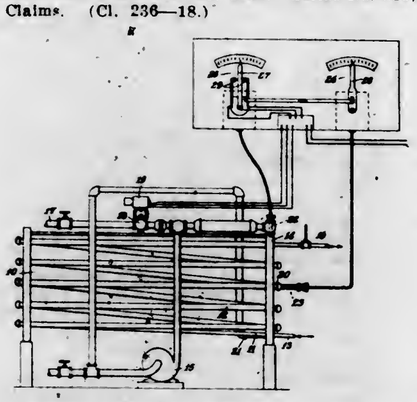
1. The combination with a contact finger having one of its ends bent back to form a loop, and a contact tip removably carried on said loop, of means movably mounted on said finger for preventing the legs of the loop from disengaging the tip.

1,892,046. SMOKER'S ASH TRAY. THOMAS WHITELAW FAIRLIE, Cathcart, Glasgow, Scotland. Filed July 14, 1931, Serial No. 550,751, and in Great Britain July 17, 1930. 2 Claims. (Cl. 131—51.)



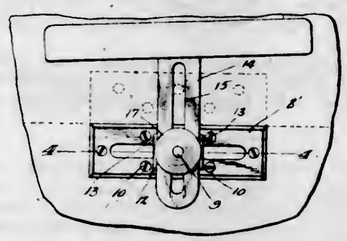
1. An ash tray comprising a fixed casing surmounted by a frame or hopper like top and a trough like receptacle pivotally or rotatably mounted within said casing and operatively connected to the frame or hopper like top in such manner that by raising the latter the receptacle is automatically turned about its pivot to discharge its contents and on the hopper like top being returned to its normal position the receptacle is again reversed.

1,892,047. TEMPERATURE REGULATING SYSTEM. FRED A. FAUST, Naugatuck, Conn., assignor to The Bristol Company, Waterbury, Conn., a Corporation of Connecticut. Filed Jan. 28, 1932. Serial No. 589,408. 9 Claims. (Cl. 236—18.)



1. In an apparatus of the class described and comprising a conduit for heating liquid having a fixed rate of flow therethrough, a conduit for medium in heat-exchange relation thereto and variable in volume as well as temperature: means for maintaining automatically a determinable normal outlet temperature of the medium as discharged from said medium conduit, said means comprising a pair of thermo-sensitive elements located in the heating liquid conduit, the one substantially at the inlet thereof and both subject to the temperature of the liquid flowing therethrough; and means controlled by said thermo-sensitive elements whereby the heating action of the heating liquid is controlled solely by variations of temperature of said heating liquid at different portions of the conduit.

1,892,048. ADJUSTABLE AUTO ARMREST. HARRINGTON SOLON GENUNG, Eveleth, Minn. Filed May 10, 1930. Serial No. 451,477. 1 Claim. (Cl. 155—198.)



An arm rest for vehicle doors covered with upholstering material comprising in combination a supporting plate having an elongated horisontally disposed opening formed adjacent to one edge thereof, said supporting plate adapted to be secured to a door under the upholstery material, a finishing plate secured to the supporting plate to clamp the upholstering material therebetween, said finishing plate having an elongated opening registering with the opening in the supporting plate, a plate having outwardly extended parallel end portions, adjustably mounted on the supporting plate, a shank having an elongated opening and disposed at an angle to the opening of the supporting plate, said shank being held between the outwardly extended parallel end portions to prevent rotative movement of the shank with respect to the last mentioned plate, a bolt extending through the plates and elongated opening of the shank to adjustably secure the shank to the plates, and a padded block secured to one end of the shank.

1,892,049. GARMENT HANGER. WILLIAM E. GIBSON, Henderson, Tenn. Filed Sept. 14, 1931. Serial No. 562,769. 12 Claims. (Cl. 223—63.)



1. In a device of the character described, the combination with a garment hanger, of protector sections pivoted to portions of the hanger, said sections having arms projecting inwardly beyond the pivots, and resilient means connected with the inner end portions of the arms for holding the sections in closed positions and for operating the sections.

1,892,050. EXPANSION CHAMBER TYPE GAS GUN. BYRON C. GOSS, Cleveland, Ohio. Filed Aug. 22, 1930. Serial No. 477,144. 3 Claims. (Cl. 20—1.01.)



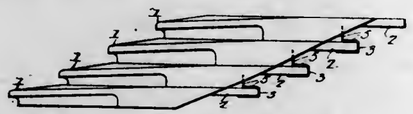
1. In a system of gas protection against robbery, the combination of a plurality of expansion chambers into which an irritating gas is discharged, a multiplicity of

distributing outlets from each of said expansion chambers, said expansion chambers having a relatively large diameter compared with the outlets, gas shells detachably connected to the inlet ends of said expansion chambers, said gas shells electrically connected in series, and a shunt cooperating with each of said gas shells to maintain an unbroken circuit through all of the said gas shells.

1,892,051. ELECTROPLATED CHROMIUM ARTICLE. DANIEL GRAY, Oneida, and BURDETTE K. NORTHROP, Hamilton, N. Y., assignors to Oneida Community, Limited, Oneida, N. Y., a Corporation of New York. Filed Feb. 14, 1929. Serial No. 340,012. 1 Claim. (Cl. 204—1.)

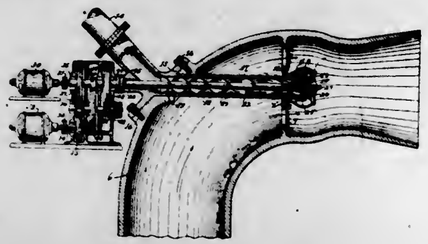
An electroplated product comprising a base of chromium, a coating of copper firmly adhering to the chromium, and a coating of silver firmly adhering to the copper coating.

1,892,052. AIR REGULATOR FOR TUYÈRES. CLIFFORD E. HARRISON, Philadelphia, Pa., assignor to American Engineering Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Oct. 29, 1929. Serial No. 403,244. 9 Claims. (Cl. 110—32.)



1. A tuyère comprising a plurality of cavities constituting passages for draft air and having rearward extensions intermediate said cavities, and resilient metallic clips frictionally gripping said extensions and comprising a plurality of displaceable extensions projecting across the mouths of said cavities and constituting a means for controlling the flow of draft air through the passages.

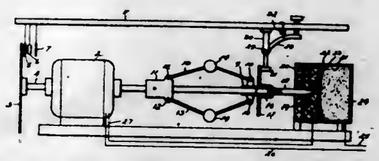
1,892,053. POWDERED FUEL BURNER. HERMAN C. HEATON, Chicago, Ill. Filed Feb. 8, 1927. Serial No. 166,644. 12 Claims. (Cl. 110—104.)



1. In a powdered fuel burner, an air conduit, a container extending into said conduit, a conveyor in said container and an impeller at the end of said container, said impeller having diverging openings therethrough which communicate directly with the end of said container.

1,892,054. CENTRIFUGAL VARIABLE RESISTANCE GOVERNOR. ALVA KENNETH HINCHMAN, Gloucester, N. J. Original application filed Sept. 13, 1929, Serial No. 392,476. Divided and this application filed Apr. 28, 1931. Serial No. 533,421. 1 Claim. (Cl. 171—229.)

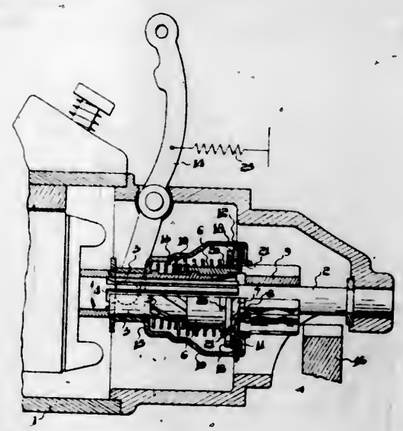
In a device of the kind described, a motor, a centrifugal governor mounted upon the shaft of said motor and including a sleeve slidable along the motor shaft, an electrical resistance unit comprising a casing of non-conducting material located in end-wise alignment with the motor shaft, a diaphragm of electrical conductive material mounted within said casing and capable of flexion, finely divided carbon within the compartment formed by the casing and diaphragm, a plate of electrical conductive material in engagement with said diaphragm, a trunnion of non-conducting material mounted on the sleeve of the centrifugal governor and journalled in the casing for co-action with the plate, for applying pressure thereto to be transmitted to the diaphragm and thence to the carbon, a source of electrical energy, and a circuit including said source, the motor and the resistance unit.



1,892,055. AZO DYESTUFFS. KARL HOLZACH, Ludwigshafen-on-the-Rhine, HANS KAZIKALLA, Mannheim, and WERNER MUELLER, Ludwigshafen-on-the-Rhine, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Mar. 8, 1929, Serial No. 345,590, and in Germany Mar. 10, 1928. 5 Claims. (Cl. 260—97.)

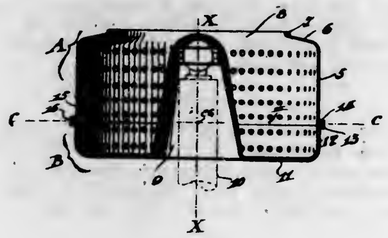
1. As new articles of manufacture the o-hydroxyazo dyestuffs obtainable by coupling a diazotized sulfonated o-hydroxyamino compound of the benzene or naphthalene series with an unsulfonated monohydric phenol containing only substituents selected from the group consisting of halogen and alkyl groups at least two of which must be present and one must be in the para position to the hydroxy group.

1,892,056. ENGINE STARTER. MAUNSELL B. JACKSON and KENNETH M. CLIPSHAM, Toronto, Ontario, Canada, assignors to Leaside Engineering Co., Limited, Leaside, Ontario, Canada. Filed May 29, 1928. Serial No. 281,527. 31 Claims. (Cl. 74—7.)



1. An engine starter including a longitudinally movable rotatable member; a sleeve having a threaded connection with the member; a starter pinion adapted to be moved axially to mesh with a gear of an engine to be started; and normally operative drive connecting means including a spring actuated toothed clutch between the sleeve and pinion adapted to permit the pinion to overrun the sleeve, the member when moved axially being adapted to mesh the pinion with the gear and to cause the said sleeve to rotate the pinion to clear its teeth if they should collide with the teeth of the gear.

1,892,057. ROTARY CONTAINER FOR CENTRIFUGAL MACHINES. HENRY JANSSEN, Wyomissing, Pa., assignor to Textile Machine Works, Wyomissing, Pa., a Corporation of Pennsylvania. Filed Sept. 2, 1930. Serial No. 479,276. 7 Claims. (Cl. 210—76.)



1. A rotary container for centrifugal machines consisting of two cylindrical sections joined substantially in the horizontal plane of their combined center of gravity.

1,892,058. CLOTH CUTTING MACHINE. OSCAR I. JUDELSHON, Park Ridge, N. J. Filed Jan. 6, 1931. Serial No. 506,895. 25 Claims. (Cl. 164—69.)

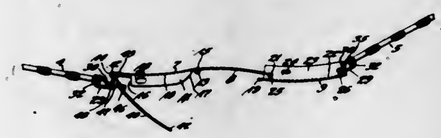


1. A fabric cutting machine having a shaft adapted to support a roll of fabric, a revolvable cutting knife arranged to cut through said roll of fabric while supported on said shaft, and a detachable bearing device for one end of said fabric shaft, adapted to permit the removal and replacement of the rolls of fabric thereon, including a pivotal supporting member mounted to slide on a shaft, a crotch member adapted to straddle said pivotal member, and eccentric means for adjusting said crotch member to vary the alignment of said fabric supporting shaft.

1,892,059. METHOD OF TREATING PAPER WRAPPING STRIP. JOSEPH A. KENNEDY, Pawtucket, R. I., assignor to Anaconda Wire and Cable Company, New York, N. Y., a Corporation of Delaware. Filed May 19, 1930. Serial No. 453,717. 7 Claims. (Cl. 91—70.)

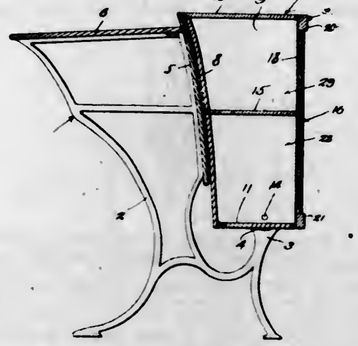
1. A method of processing rolls of paper strip to be used as wrapping in the manufacture of insulated conductors, consisting of treating the rolls in a bath of wax to saturate the paper, and thereafter treating the rolls in an aqueous soap solution to permeate and partially displace the wax with the soap at the edges of the strip to render such edges soft and pliable.

1,892,060. EXTENDIBLE CLASP OR CONNECTING DEVICE FOR STRAPS, BANDS, AND BRACELETS. CHARLES H. KESTENMAN, Providence, R. I., assignor to Kestenman Bros. Mfg. Co., Providence, R. I., a Corporation of Rhode Island. Filed Aug. 12, 1931. Serial No. 556,516. 6 Claims. (Cl. 24—71.)



1. In a device of the type specified, the combination of a base-member, an extension-member hinged to one end of the base-member to adapt it to fold against the latter, a slide on said extension-member slidable between its hinge and free end, means for connecting the slide to the end of a bracelet, a second extension-member hinged to the opposite end of the base-member, a top-member hinged to the outer end of the second extension-member, and means for connecting the top-member to the opposite end of the bracelet.

1,892,061. CUPBOARD DESK. JAMES KILLIUS and CHARLES H. DE FREHN, Johnstown, Pa. Filed Nov. 5, 1931. Serial No. 573,180. 6 Claims. (Cl. 45—6.)

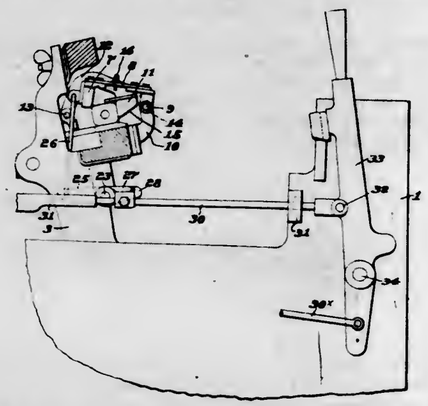


1. In an article of furniture, horizontally spaced frames, each having a forwardly projecting portion, a back connecting the frames and located above and to the rear of said forwardly projecting portions, a cabinet having its rear part abutting against the back, and means for mounting the lower end of the cabinet detachably on the forwardly projecting portions of the frames, the upper end of the cabinet being exposed, and the space above the upper end of the cabinet being open and unincumbered.

1,892,062. LOOM STOPPING MECHANISM. VERNER LINDSJO, Hopedale, Mass., assignor to Draper Corporation, Hopedale, Mass., a Corporation of Maine. Filed Sept. 28, 1931. Serial No. 565,457. 8 Claims. (Cl. 139—290.)

1. In a shuttle changing loom, the combination of the lay, a shuttle box having a box plate which is moved from

normal weaving position for change of shuttles, a stop member mounted on the lay, linkage connections between the box plate and stop member controlled in its position



by the box plate, and means actuated by the stop member to effect loom stoppage when the box plate fails to return to normal weaving position after a change of shuttles.

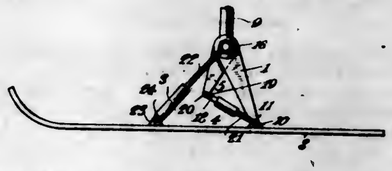
1,892,063. PERMANENT HAIR WAVING APPARATUS. FRANZ XAVER MAIER, Munich, Germany. Original application filed June 28, 1930, Serial No. 464,568, and in France Nov. 15, 1929. Divided and this application filed Nov. 17, 1931. Serial No. 575,655. 2 Claims. (Cl. 132—36.)



1. In a hair curler, a bobbin shaped core, a unitary packing surrounding said core including an inner sleeve for enclosing the hair and an outer waterproof covering, said covering and sleeve having a fibrous layer of cotton like material interposed between them, a clip engaging the packing against its edges, a semi-circular metallic casing fitted over a portion of the packing and containing a heating element, a handle fixed to the casing and projecting upwardly therefrom, wire terminals connected to the heating element and enclosed in said handle, said handle consisting of a member formed to receive said terminals, a cover plate separated from said member by a heat insulating layer, a lever pivoted to the cover plate and having an inwardly directed end engaging the packing below a longitudinal edge of the casing, and a spring urging said lever to engage said packing.

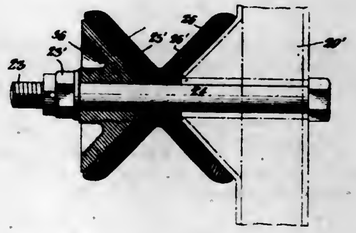
1,892,064. AEROPLANE LANDING SKI. ROSCOE I. MARKEY, Buffalo, N. Y., assignor to The Aviation Patent and Research Corporation, New York, N. Y., a Corporation of New York. Filed May 8, 1930. Serial No. 449,401. 6 Claims. (Cl. 244—2.)

1. In combination with an aeroplane landing ski, a pedestal comprising an energy absorbing unit which provides in itself a flexible mounting for said ski on the supporting axle of said aeroplane, said unit comprising a support from said axle and pivotally connected to said ski to resistingly permit the rotation of said ski about said axle and the vertical and transverse movement of said



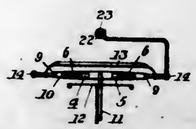
ski with relation to said axle, a second shock absorbing member having a pivotal connection to said ski at a point in advance of said axle, said member being rigidly connected to the axle assembly.

1,892,065. AEROPLANE ENGINE MOUNT. ROSCOE I. MARKEY, Farmingdale, N. Y., assignor to The Aviation Patent and Research Corporation, New York, N. Y., a Corporation of New York. Filed Dec. 10, 1931. Serial No. 580,021. 3 Claims. (Cl. 248—14.2.)



1. An engine mounting for vehicle engines comprising a mounting ring, conically shaped seats carried by said ring, contiguous blocks of yielding non-metallic material mounted in said seats, conical bearing members carried by the engine and disposed concentrically to the first seats, and adjustable means for maintaining the bearing members in position with the yielding means under compression.

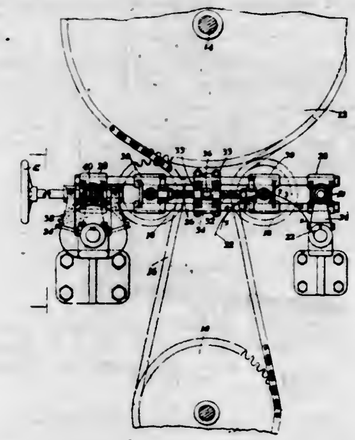
1,892,066. THERMIONIC TUBE. FREDERICK S. MCCULLOUGH, Edgewood, Pa. Filed Nov. 20, 1926. Serial No. 149,596. 3 Claims. (Cl. 250—27.5.)



1. An electron tube having a cathode, a grid surrounding the cathode, an anode outside of the grid on one side of the grid and cathode only, and a conducting shield enclosing the other side of the grid and cathode, said shield being connected with the cathode.

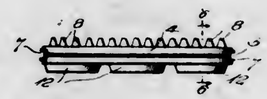
1,892,067. CHAIN TRANSMISSION GEARING. KINGSLEY DOUGLAS MCMILLAN, Glasgow, Scotland, assignor to Hans Renold Limited, Manchester, England, a British Company. Filed Oct. 17, 1930, Serial No. 489,422, and in Great Britain Nov. 27, 1929. 11 Claims. (Cl. 64—5.)

4. The combination with chain power-transmission gearing of two movable jockey-wheels both engaging the same side of the chain and each engaging and deflecting a separate one of two free lengths of chain, means for moving the jockey-wheels towards and away from one another by equal amounts, and means independent of said first-



mentioned means for moving both jockey-wheels in company along arcuate paths such that the tension in the chain is constant at all points of said paths.

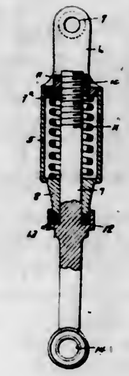
1,892,068. MASSAGE DEVICE. ROBERT J. METZLER, Newark, N. J. Filed Dec. 5, 1930. Serial No. 500,388. 1 Claim. (Cl. 128—62.)



A massage device comprising a body of soft rubber formed with a longitudinally extending handle receiving passage open at both ends, the body and passage being rectangular in cross section and front and rear walls of the body being appreciably thinner than side walls thereof, reinforcing beads extending along side walls of the body longitudinally thereof intermediate their sides edges and across ends of the body about margins of the open ends of said passage to reinforce the body and prevent tearing at ends of the passage when a handle is forced through the passage, and a handle having transversely concaved front and rear faces engaged through the passage for the entire length thereof with walls of the body closely contacting with faces of the handle and conforming to the contour thereof.

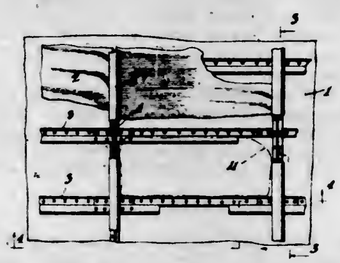
1,892,069. PITMAN. JUNIUS G. MILLER, Oshkosh, Wis. Filed July 8, 1932. Serial No. 621,483. 1 Claim. (Cl. 74—48.)

A pitman for well drilling machines comprising in combination a cylindrical barrel open at one end, and closed at its opposite end, oppositely disposed ears integral with the barrel at opposite sides of the open end thereof, and provided with means for connecting them with a beam, a pin integral with the barrel at the closed end thereof, said pin being tapered and having an aperture extending therethrough, a rod extending through the aperture in the pin, a nut threaded on one end of the rod and operating within said barrel, a spring in the barrel and engaging the nut for normally urging the rod in one direction longitudinally of the barrel, a cup-shaped member provided on the rod intermediate the ends of the latter and adapted to receive the smallest end of said pin for limiting move-



ment of said rod in one direction, and an annular washer of resilient material disposed about the rod and fitted within said cup-shaped member for engaging said end of said pin, said rod on the free end thereof being also provided with a wrist pin bearing.

1,892,070. SOUND ABSORBING MONOCOQUE FUSELAGE. ROY G. MILLER, Farmingdale, N. Y., assignor to The Aviation Patent and Research Corporation, New York, N. Y., a Corporation of New York. Filed Jan. 14, 1932. Serial No. 586,500. 5 Claims. (Cl. 244—30.)

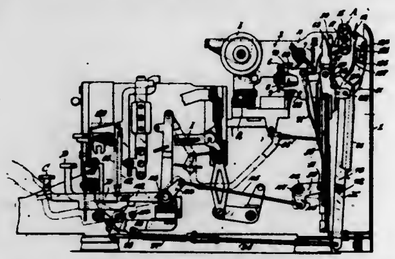


1. In an aeroplane fuselage construction, a plurality of web frames having enlarged chord members a plurality of intercostal longitudinal stringers intersecting said frames, an outer skin connected to said webs and stringers, an inner covering of non-metallic material adapted to rest on said stringers and be removably secured thereto under the overlapping edges of said chord members.

1,892,071. TYPEWRITING MACHINE. LEWIS C. MYERS, Freeport, and GEORGE F. HANDLEY, Glendale, N. Y., assignors to Royal Typewriter Company, Inc., New York, N. Y., a Corporation of New York. Filed Dec. 17, 1931. Serial No. 581,702. 8 Claims. (Cl. 197—178.)

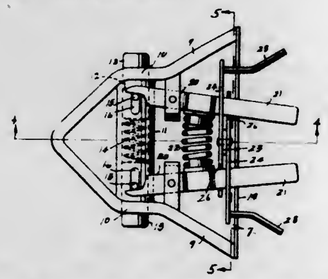
1. In a tabulating mechanism for typewriting machines, the combination with a main frame, of a carriage mounted thereon, a series of column stops mounted on the carriage and spaced apart at letter space intervals, a series of column stop levers mounted on the main frame for cooperation with said column stops, a series of decimal key

levers, a tabulator key, and operating connections between the respective decimal key levers and the stop levers and between the tabulator key and one only of the



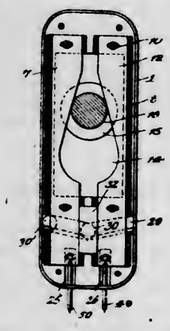
stop levers whereby the decimal key lever associated with the one stop lever and the tabulator key may be independently operated for actuating said one stop lever.

1,892,072. VEHICLE COUPLING. WILLIAM C. NABORS, Mansfield, La. Filed June 5, 1931. Serial No. 542,333. 8 Claims. (Cl. 280—33.1.)



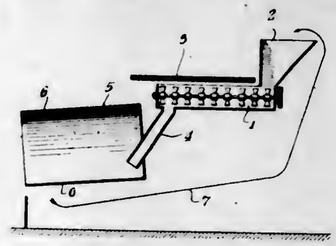
8. A coupling member including a housing, interlocking dogs mounted therein and movable into active and inactive position, yieldable means normally tending to hold said dogs in said active position, pivotally mounted levers in the housing engageable with said dogs and formed with extended handles, yieldable means operating on said levers and effective to normally hold said dogs in inactive position and releasable latches engageable with said handles and effective when engaged to hold said levers inactive whereby said dogs are permitted to move to active position.

1,892,078. ELECTRIC SWITCH. CHARLES E. NICHOLAS, Los Angeles, Calif. Filed July 2, 1930. Serial No. 465,255. 2 Claims. (Cl. 200—52.)



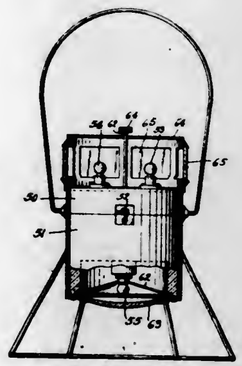
1. Circuit closing means for an electric alarm device adapted to be loosely hung on a metallic knob comprising a metallic casing, a pair of conductive plates insulated from said casing and spaced apart with their adjacent edges convergingly disposed upwardly and forming with each other an upwardly diminishing aperture adapted to receive said knob at its lower end and bridging of which is effected by engagement of the shank of the knob with said edges of said plate upon lowering the casing thereof.

1,892,074. CONVERSION OF PULVEROUS MATERIAL INTO A NODULIFORM STATE. NIELS NIELSEN, Copenhagen, Denmark, assignor to F. L. Smidth & Co., New York, N. Y., a Corporation of New Jersey. Filed Nov. 28, 1930, Serial No. 498,743, and in Great Britain May 13, 1930. 2 Claims. (Cl. 18—1.)



1. Apparatus for the conversion of material from pulverous into noduliform state comprising in combination a mixing worm, means to supply a moistening agent over an extended length of the worm, and a nodulizing drum receiving directly from the moistening and mixing worm the material treated therein.

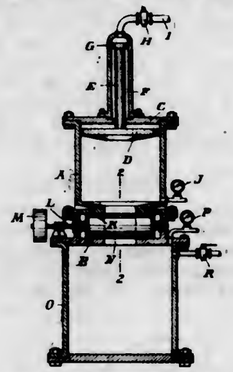
1,892,075. ELECTRIC LANTERN. FRED W. NOFFS, Bellwood, Ill. Filed Apr. 9, 1931. Serial No. 528,772. 6 Claims. (Cl. 240—10.63.)



1. An electric lantern comprising a casing, a dry cell container therefor removable therefrom as a unit, said container comprising two separable sections having registering recesses therein for holding dry cells, contact members in each recess, separable conductors connecting said contacts in an electric circuit, a lamp in said circuit, and a switch for controlling current to said lamp.

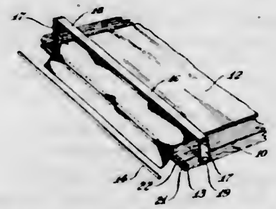
1,892,076. PROCESS RELATING TO BAKING AND DOUGH-MAKING. EFRAIM RABINOWITSCH, Paris, France, assignor of one-half to Eugen Rivoche, Paris, France. Filed May 21, 1931, Serial No. 539,068, and in Germany May 24, 1930. 2 Claims. (Cl. 99—10.)

1. In a process for rendering active the constituents of cereals acting as enzymes, and for opening up the cells of grain for making dough and baking purposes, dry cleansing said grain and repeatedly exposing said grain



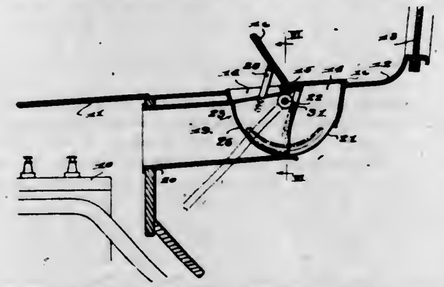
to a high continuously increasing pressure and then to continuous or a partial vacuum, to effect a disruptive opening of the cells of said grain.

1,892,077. HECTOGRAPH. HARVEY J. REARDON, Chicago, Ill., assignor to The Classroom Teacher, Inc., Chicago, Ill., a Corporation of Illinois. Filed May 4, 1932. Serial No. 609,116. 6 Claims. (Cl. 101—415.1.)



1. A hectograph comprising a base having a groove formed in an end thereof, an apron extended over said base having a manifolding sheet attached thereto and including a flexible end portion receivable in said groove, a rod member receivable in said groove to hold said apron portion therein, and a substantially U-shaped clamping member including arms pivotally mounted on said base on the sides thereof, said clamping member including a portion extending between said arms adapted in effective position for bearing engagement with said rod member to bind the same and said apron portion in said groove.

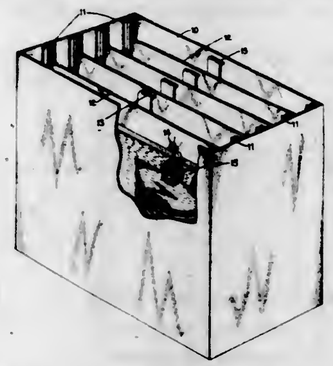
1,892,078. AUTOMOBILE. OTTO W. RODEMICH and DAVID C. SMITH, Toledo, Ohio, assignors to Toledo Patents, Inc., a Corporation of Ohio. Filed May 26, 1931. Serial No. 540,074. 14 Claims. (Cl. 20—40.5.)



1. In an automobile the combination of a windshield, a cowl, a source of supply of warm air, said cowl having

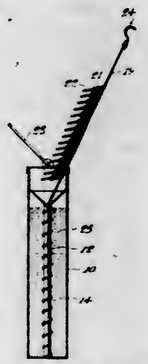
a pair of vertical openings extending transversely in its upper side, closures individual to the openings, means for opening and closing the closures one at a time, and means forming part of said opening and closing means whereby opening one of said closures automatically places the corresponding opening in direct communication with the source of supply of warm air, and closes the other opening.

1,892,079. APPARATUS FOR SOFTENING BOX TOE STIFFENERS. HARRY FRANK ROSS, New York, N. Y., assignor to The Adams Mfg. Co. Inc., New York, N. Y., a Corporation of New York. Filed June 18, 1930. Serial No. 461,937. 5 Claims. (Cl. 91—46.)



1. Apparatus for softening box-toe stiffening pieces comprising absorbent material stiffened with a composition capable of being softened by absorption of water, comprising a flat rack having means for holding a plurality of stiffening pieces, and a receptacle into which the rack may be inserted downwardly, said receptacle having guide means for removably supporting the rack in vertical position to permit draining of water from the stiffening pieces.

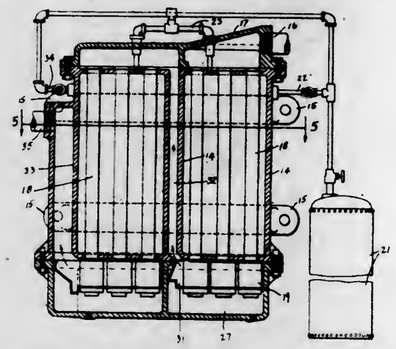
1,892,080. MULLING APPARATUS. HARRY FRANK ROSE, New York, N. Y., assignor to The Adams Mfg. Co. Inc., New York, N. Y., a Corporation of New York. Filed May 5, 1931. Serial No. 535,196. 4 Claims. (Cl. 91—46.)



1. Apparatus for softening box-toe stiffening pieces capable of being softened by temporary submergence in a body of water and by subsequent absorption of the water retained therefrom, including a relatively narrow tank with a pair of relatively closely spaced walls, vertically disposed members in said tank, a trough-shaped member slidable upon said vertical members and extend-

ing into relatively close proximity to the aforesaid walls, so as to be vertically guided thereby, a rack for stiffening pieces removably associable with said trough shaped member, and adapted for vertical introduction into the tank, and resilient means adapted to be compressed upon depression of the trough-shaped member by forced introduction of the rack into the tank, and also adapted to extend to elevate the trough-shaped member and the like upon removal of pressure from the rack.

1,892,081. APPARATUS FOR CONDITIONING AIR. CLINTON F. SHADLE, Indianapolis, Ind., assignor, by direct and mesne assignments, to Air Development Company, Inc., a Corporation of New York. Filed Feb. 1, 1929. Serial No. 336,871. 8 Claims. (Cl. 183—32.)



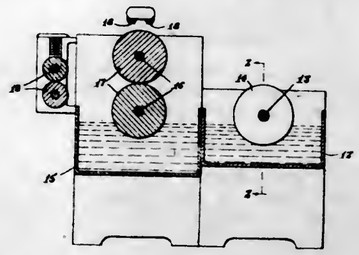
1. An apparatus of the character described, comprising a plurality of air conditioning units, each unit including a plurality of tubes extending therethrough, a refrigerating chamber surrounding said tubes, connections for passing a refrigerating medium through said chamber, means for forcing air under pressure through said tubes, and moisture separators, one associated with the discharge end of each tube.

1,892,082. PLIERS. NEWTON J. SHEKERJIAN, New York, N. Y. Filed Aug. 17, 1931. Serial No. 557,691. 2 Claims. (Cl. 81—52.)



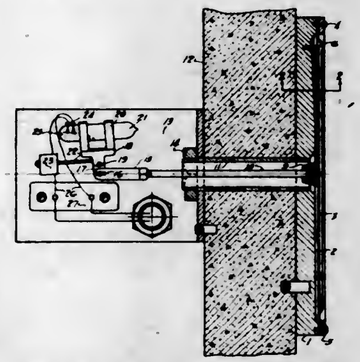
1. In a pivoted jaw tool in combination a pair of pivoted handle members having integral opposing jaws, the opposing surface of each of said jaws having longitudinal channels therein, longitudinal rib members projecting from the opposite sides of said channels, removable jaw memberrs receivable in said longitudinal channels, said removable jaw members having channels formed on opposite sides thereof to cooperate with said rib members, means cooperating with the backs of said removable jaw members to hold the same securely in adjustable positions, said means comprising a series of teeth formed on the back of the jaw members, a tooth block received in a well in said integral jaw members, and means for holding said tooth block against the teeth of said removable jaw to lock said removable jaw in position.

1,892,083. METHOD OF WAXING BLANKS. MELVIN H. SIDEBOTHAM, West Newton, Mass., assignor to Specialty Automatic Machine Company, Chelsea, Mass., a Corporation of Massachusetts. Filed July 16, 1931. Serial No. 551,143. 3 Claims. (Cl. 91—68.)



1. The method of producing box blanks having a limited amount of wax thereon, said method consisting in first applying oil-repelling material to marginal surface portions of the blanks, then applying melted wax to the same surface portions of the blanks, and then subjecting the blanks to a squeesing operation.

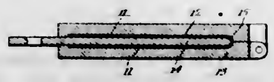
1,892,084. CIRCUIT CLOSER. EDWARD W. SPRAGUE, Allentown, Pa., assignor to Fuller Company, Catasauqua, Pa., a Corporation of Delaware. Filed July 23, 1930. Serial No. 469,973. 3 Claims. (Cl. 200—52.)



3. A circuit closed actuated by the pressure of bulk materials, comprising the combination of an elastic, flexible diaphragm, responsive to the pressure of the materials, the diaphragm being secured at its edge to a base casting and provided with an annular corrugation near its periphery to increase its elasticity, the base casting having a flat countersunk face lying in a plane parallel and closely adjacent to the diaphragm to support substantially the entire effective area of the diaphragm and to limit it to a slight inward movement, a supporting tube arranged to pass through a wall of a receptacle for the storage of materials and secured in a central aperture

in the base casting, a switch housing secured to the outer end of the tube, a pivotally mounted electric switch arranged within the housing, a connecting rod arranged within the tube, pivotally connected to the switch on a shorter radius from its pivot than the radius of the switch so that a limited motion of the connecting rod will open or close the switch, the opposite end of the connecting rod being held centrally in contact with the diaphragm by means of a spring and a counter-weight secured to the switch above and behind the pivot to maintain the end of the connecting rod in contact with the diaphragm and to force the latter outwardly when the pressure of materials is relieved.

1,892,085. DECORATED MOLDED RUBBER AND METHOD OF PRODUCING SAME. JACOB STEIN, Brooklyn, N. Y. Filed Jan. 2, 1930. Serial No. 418,111. 5 Claims. (Cl. 18—59.)



1. The method of decorating molded rubber articles with designs of definite shape and contrasting color, which includes producing a decorated design from a sheet of rubberized fabric having a rubber surface and a cloth surface, arranging said design of contrasting color with respect to the rubber stock which is to form the body of the article so that the design will be between said stock and the mold with the cloth surface of the design opposing said rubber stock, and subjecting the mold and its contents to a molding operation.

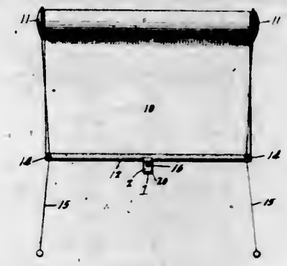
1,892,086. SLACKLINE EXCAVATOR. JOSHUA H. STREET, Chattanooga, Tenn. Filed Sept. 5, 1931. Serial No. 561,482. 5 Claims. (Cl. 37—117.)



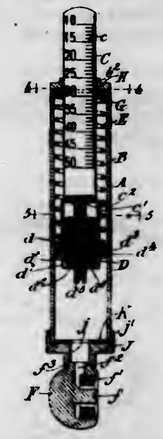
1. In a slackline excavator a carriage, a bucket hingedly connected at its front end to the carriage and adapted to swing upwardly toward the carriage while the bucket is being filled, flexible means for connecting the carriage to the back end of the bucket to support the bucket in an inclined or load retaining position after the filling operation, and means on the bucket cooperating with the carriage for yieldingly stopping the upward movement of the back of the bucket relative to the carriage.

1,892,087. CURTAIN PULL. WALTER J. STUBER, Philadelphia, Pa., assignor to Carey-McFall Co., Philadelphia, Pa., a Corporation of Pennsylvania. Filed Aug. 16, 1930. Serial No. 475,706. 3 Claims. (Cl. 156—40.)

1. A curtain pull composed of sheet material and formed from a blank comprising a central portion forming the bottom of the pull, a finger-grip portion on each side of the central portion, a head portion forming a continuation of each finger-grip portion, and a flange portion along each of the opposite side edges of each of the finger-grip portions.



1,892,088. PRESSURE GAUGE. JOHN WAHL, Rosedale, and OTTO MELZER, Hollis, N. Y., assignors to A. Schrader's Son. Inc., New York, N. Y., a Corporation of New York. Filed Apr. 30, 1927. Serial No. 187,909. 7 Claims. (Cl. 73—111.)

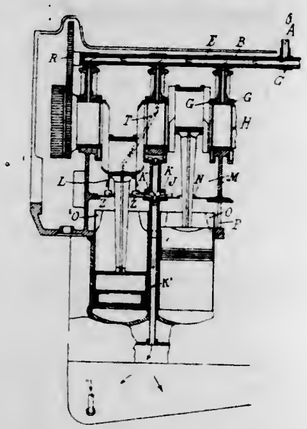


1. A pressure gauge comprising a casing, a piston movable in said casing, means for resisting the action of pressure when applied to the piston, a pressure indicating member movable by but disconnected from said piston and cooperating with means on the casing to indicate pressures and adjustable means carried by said piston, engageable from the exterior of the casing after the gauge parts are assembled therein, for setting the normal zero position of the indicating member so that it will accurately register the pressures.

1,892,089. LUBRICATING DEVICE FOR INTERNAL COMBUSTION ENGINES. CHARLES RAYMOND WARRICK, Rueil, France, assignor to Henri et Maurice Farman, Billancourt, Seine, France. Filed Apr. 23, 1928, Serial No. 272,339, and in France May 13, 1927. 8 Claims. (Cl. 184—6.)

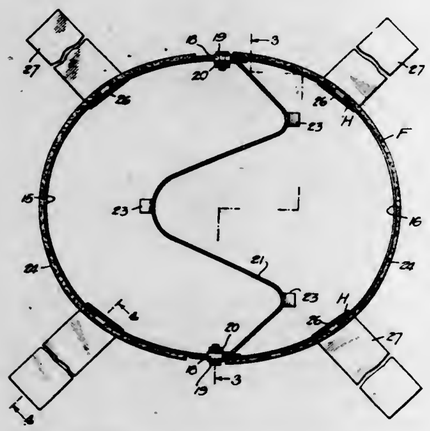
1. In a multi-cylinder internal combustion engine, a crankshaft, bearings for said crankshaft, supports for said bearings, a lubricant inlet pipe, a rotary transversally yielding distributor connected with said inlet pipe, said distributor comprising a stationary cylindrical member mounted in said supports, a plurality of coaxial hollow

members rotatably mounted within said cylindrical member, means for driving one of said hollow members, means for operatively connecting said hollow members and transmitting the rotation to one another each hollow



member having at least one port, said ports being adapted to register with corresponding channels extending through said cylindrical member, said crankshaft supports and said bearings, respectively.

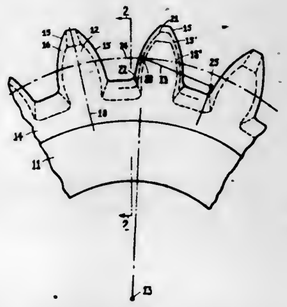
1,892,090. HAT-SHAPING DEVICE. SAM WIELGUS, Phoenix, Aris. Filed Mar. 3, 1930. Serial No. 432,959. 7 Claims. (Cl. 223—21.)



1. A hat-shaping device comprising a frame adapted to be inserted into the crown of a hat for maintaining the hat crown in a predetermined form, and brim shaping members carried by the frame and bendable into various shapes about the hat brim to embrace and hold the hat brim in a predetermined form.

1,892,091. CUTTING TOOL FOR GENERATING NON-INVOLUTE GEARS AND GEAR SHAPED ARTICLES. ERNEST WILDHABER, Brooklyn, N. Y. Filed Mar. 6, 1930. Serial No. 433,732. 16 Claims. (Cl. 29—103.)

1. Cutting tool for generating non involute gears and gear shaped articles, comprising a cutter body having teeth projecting outwardly from an axis, said teeth having relieved and curved side surfaces forming cutting edges at the intersection with cutting faces, the profiles of a relieved side surface in two planes perpendicular to said axis being curves diverging from each other on both ends, said profiles being viewed lengthwise of said axis.



11. Cutting tool for generating non involute gears and gear shaped articles, comprising a cutter body having teeth projecting outwardly from an axis, said teeth being arranged in a circle and having relieved and curved side surfaces forming convex cutting edges at the intersection with cutting faces, opposite relieved side surfaces of a cutting tooth being symmetrical with respect to a plane containing said axis, a relieved side surface being formed to make line contact with its tangential planes, said tangential planes having differing inclinations with respect to said axis, a tangential plane applied at the center portion of said surface having a minimum inclination with respect to said axis.

1,892,092. BOX. ALEXANDER BARAD, New York, N. Y., assignor to Hunter Candy Corporation, New York, N. Y., a Corporation. Filed Aug. 13, 1931. Serial No. 556,911. 3 Claims. (Cl. 229—28.)

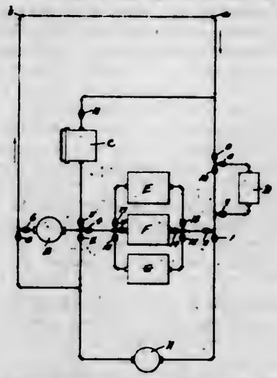


1. A box comprising a cardboard body, and inwardly extending cushion flaps cut from the top wall of said body and bent inwardly on lines scored inwardly of and parallel to both the side and end walls of said body.

1,892,093. METHOD OF REMOVING RUST, SCALE, AND SEDIMENT FROM THE INTERIOR OF METAL SURFACES. FRANCIS C. BATTISTELLA, Baldwin, N. Y., assignor to Sanitation Holding Corporation, New York, N. Y., a Corporation of Delaware. Filed Dec. 10, 1929. Serial No. 413,133. 12 Claims. (Cl. 87—27.)

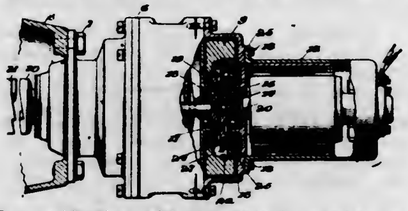
3. The method of removing rust and scale from a closed piping system in situ which consists in circulating therethrough and under pressure a solution of phosphoric acid and acetic acids having the capacity of attacking and removing the rust and scale, facilitated by the erosion of the flowing solution, in filtering under pressure to separate the solids removed with and by such solution and in recirculating the filtered solution under pressure through the piping.

6. The method of removing rust and scale from a closed piping system in situ which consists in circulating therethrough and under pressure a solution of a relatively weak acid having the capacity of attacking and removing the rust and scale, facilitated by the erosive action of the flowing solution, such solution also con-



taining an inhibitor for preventing the solution from attacking the metal walls, in filtering under pressure to separate the solids removed with and by such solution and in recirculating the refiltered solution under pressure through the piping.

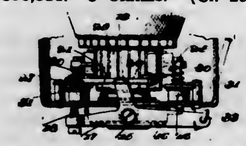
1,892,094. ENGINE STARTING APPARATUS. ROLAND CHILTON, Keyport, N. J., assignor, by mesne assignments, to Eclipse Machine Company, Elmira Heights, N. Y., a Corporation of New York. Filed Jan. 30, 1929. Serial No. 336,313. 12 Claims. (Cl. 290—48.)



7. In combination with a rotatable member to be driven, driving means therefor including centrifugally actuated members, yielding means for normally maintaining said centrifugally actuated members in non-driving position, and means for imparting a combined radial and longitudinal movement to said centrifugally actuated members to move the same into driving engagement with the member to be driven.

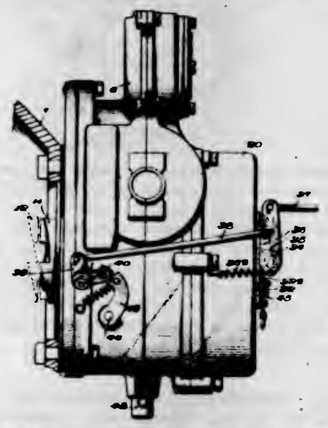
11. An engine starter including a driving member adapted to crank a member of the engine to be started, an inertia device operatively connected therewith, an electric motor coaxially aligned with the inertia device, and centrifugal means for automatically connecting the motor to the inertia device following energization of the motor.

1,892,095. ENGINE STARTING APPARATUS. ROLAND CHILTON, Keyport, N. J., assignor, by mesne assignments, to Eclipse Machine Company, Elmira Heights, N. Y., a Corporation of New York. Filed Jan. 30, 1929. Serial No. 336,314. 5 Claims. (Cl. 290—38.)



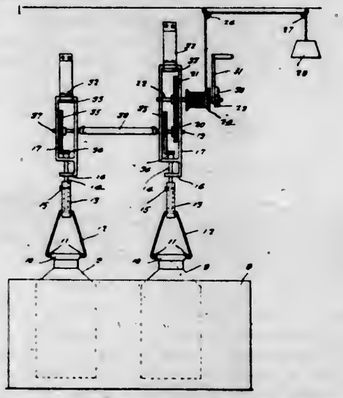
1. In apparatus of the class described, a member adapted to be moved into driving engagement with a member of an engine to be started, inertia means including a flywheel, a motor having an armature and commutator brushes, said armature being drivably connected to said flywheel, torque multiplying means for drivably connecting the flywheel and engine engaging member, means including a resilient device common to all of said brushes for disengaging said brushes from said commutator, and interconnecting means for controlling the action of said engine engaging member and said brush disengaging means.

1,892,096. ENGINE STARTING APPARATUS. ROLAND CHILTON, Keyport, N. J., assignor to Eclipse Machine Company, Elmira Heights, N. Y., a Corporation of New York. Filed Apr. 26, 1929. Serial No. 358,378. 12 Claims. (Cl. 290—38.)



11. In engine starting apparatus of the type embodying an electric motor adapted to drive an engine-engaging member, commutator brushes for said motor, and common means for moving said brushes to inoperative position and for simultaneously moving said engine-engaging member into engine-engaging position, said means including a lever movable about its transverse and longitudinal axes, and means for imparting movement to said lever about both said axes.

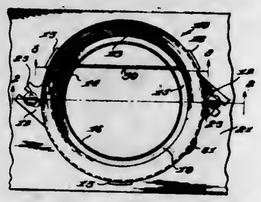
1,892,097. MILK COOLING APPARATUS. RALPH R. CLAYTON, Yorkville, Ill. Filed Aug. 26, 1931. Serial No. 559,525. 3 Claims. (Cl. 259—50.)



1. In a device of the character described, an elongated frame, rigid bracket arms secured to one end of the frame for supporting it from and in spaced relation to a support, said frame at its other end being provided

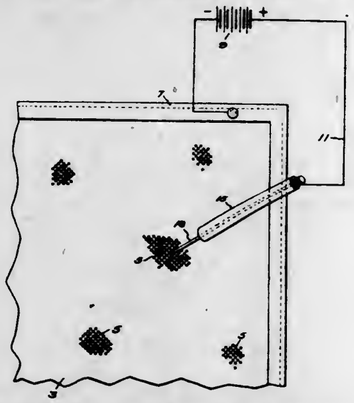
with a depending arm having a laterally disposed end spaced from and paralleling the lower end of the frame, a shaft rotatably supported by said lateral end of the arm and the proximate end of the frame, a bail, a socket member pivotally connected with the closed end of the bail, said socket member receiving the lower end of said shaft, and means for securing said socket member on said shaft at the desired adjustment longitudinally of said shaft.

1,892,098. SPINNING MACHINE EQUIPMENT. ARCHIE CLOCKER and GEORGE F. MACFARLANE, Wilkes-Barre, Pa. Filed Jan. 27, 1930. Serial No. 423,802. 2 Claims. (Cl. 118—59.)



1. A guiding and lubricating device for the travelers of spinning machines comprising an annular lubricant-receiving pan structure having inner and outer walls; a traveler guide ring disposed over said pan structure; an annular opening between said guide and said inner wall; and a sleeve in detachable telescoping engagement with said inner wall, said sleeve being of sufficient height above said guide ring to retain the traveler in operative position during substantial deformation of said traveler under the stresses of operation.

1,892,099. MODIFYING PHOTOGRAPHIC IMAGES. ARTHUR W. CORNELL, Boston, Mass., assignor to Forbes Lithograph Manufacturing Company, Boston, Mass., a Corporation of Massachusetts. Filed Mar. 3, 1931. Serial No. 519,738. 8 Claims. (Cl. 204—1.)



1. The method of modifying a photographic image which comprises placing it in an electric circuit by means of a retouching tool contacting therewith in the presence of a reducing agent which is electrolytically activated.

1,892,100. TREATMENT OF A SODIUM CARBONATE-SODIUM SULPHID RESIDUAL LIQUOR. LINN BRADLEY, Montclair, N. J., and EDWARD P. MCKEEFE, Plattsburg, N. Y., assignors to Bradley-McKeefe Corporation, New York, N. Y., a Corporation of New York. Filed Apr. 4, 1928. Serial No. 267,476. 22 Claims. (Cl. 23—129.)

1. The process of treating a solution containing sodium monosulphide, which comprises adding to such solution maintained at a temperature of at least 60 deg. C., available SO_2 in amount sufficient to form a volatile sulphide from the sulphur content of the sodium sulphide.

15. The method of treating a solution which contains sodium monosulphide and sodium carbonate, which comprises adding to the solution a material containing sodium sulphite and sodium bicarbonate, removing sulphid-sulphur from the mixture while maintaining it at a temperature of at least 60° C., treating at least a portion of the resulting solution with available SO_2 under conditions to form sodium bicarbonate without substantial loss of CO_2, and utilizing at least a portion of the solution so formed for treating a solution containing sodium sulphide.

22. The process of treating a solution containing sodium sulphide and sodium carbonate, which comprises introducing into the solution maintained at at least 60 deg. C. an amount of available sulphur dioxide which is sufficient to form a substantial amount of a volatile sulphide and to convert the greater part of the sodium content of the sodium sulphide and a part of the sodium content of the sodium carbonate into a sulphite of sodium, and removing a volatile sulphid from the solution.

1,892,101. PROCESS FOR TREATING POLYMERIZABLE UNSATURATED COMPOUNDS. HERMAN A. BRUSON, Germantown, Pa., assignor to The Resinous Products & Chemical Company, Philadelphia, Pa. Filed Apr. 24, 1931. Serial No. 532,701. 19 Claims. (Cl. 260—1.)

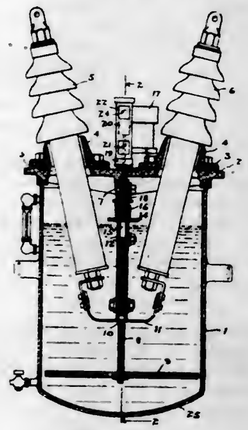
1. A process of treating polymerizable unsaturated organic compounds which comprises heating them to reaction temperature with an aryl diazonium fluoborate.

6. A process for treating rubber which comprises heating it with an aryl diazonium fluoborate.

16. A process of treating indene which comprises heating it to reaction temperature with an aryl diazonium fluoborate.

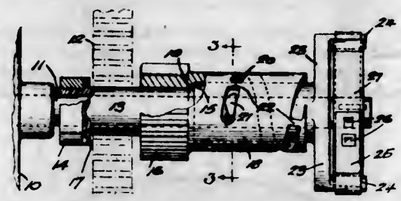
18. A process of treating pinene which comprises heating it to reaction temperature with an aryl diazonium fluoborate.

1,892,102. LARGE CAPACITY OIL FUSE. PERCY E. HART, deceased, Toronto, Ontario, Canada, by Ethel Eagen Hart, executrix, Toronto, Canada. Filed June 19, 1931. Serial No. 545,513. 8 Claims. (Cl. 200—120.)



1. In a large capacity oil fuse the combination of spaced electric-terminals, an insulating partition interposed between said terminals, said partition having an opening therethrough, fusible conductors extending through said partition opening and connected with said terminals, displaceable means mounted on each side of said partition for closing said partition openings against pressure from either side on the rupture of said fusible conductors, and means co-operating with both of said displaceable means for effecting the positive and simultaneous displacement thereof.

1,892,103. STARTER GEARING. LESLIE H. HOUGEN, Miami, Fla. Filed Feb. 24, 1932. Serial No. 594,933. 5 Claims. (Cl. 74—7.)



1. A starter gearing including a sleeve adapted to be mounted on a starter shaft so that the free end of the shaft projects therebeyond, said sleeve having an intermediate shoulder and a collar at one end thereof opposing said shoulder, a gear slidable and rotatable on said sleeve between the collar and shoulder, a corrugated washer against the collar forming a spring abutment member for the gear in its operative position, said gear having a cylindrical extension around the other end portion of the sleeve, provided with a helical slot, a pin carried by the sleeve and projecting into said slot, one end of the sleeve having angular diametrically opposed extensions forming arms paralleling the axis of the sleeve, a driving head secured to the projecting end of the starter shaft between said arms, having driving extensions opposing the arms, and springs in connection with the driving head and with said arms normally holding the said driving extensions spaced from the arms and adapted to dampen the initial driving shock.

1,892,104. MOUNTING FOR PANELS. LYTLE GALE HUNTER, Flushing, N. Y. Filed Feb. 20, 1932. Serial No. 594,217. 5 Claims. (Cl. 20—56.4.)



1. A panel mounting comprising a frame surrounding an opening, a panel in the opening of smaller size than the opening, a single strip of resilient flexible material disposed against the face of the panel adjacent its edge and extending around the opening and having its ends substantially abutting each other, and interengaging elements on said strip and frame disposed outwardly from the edge of the panel and holding the strip in place.

1,892,105. IGNITION INSULATION COMPOSITION. OLIVER B. HUSKEY, Los Angeles, Calif. Filed Mar. 14, 1931. Serial No. 522,792. 2 Claims. (Cl. 134—1.)

2. A composition for insulating electrical elements consisting of boiled linseed oil 52%, japan dryer 26%, olive oil 20%, pumice stone 1%, and a suitable coloring material constituting the remaining 1%.

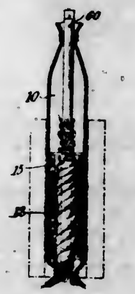
1,892,106. APPARATUS FOR USE IN WAVING HAIR. BENNO FREDERICK JANCKE, New York, N. Y., assignor to Shelton-Jancke Corporation, New York, N. Y., a Corporation of New Jersey. Filed Nov. 15, 1923, Serial No. 674,888. Renewed May 26, 1926. 19 Claims. (Cl. 219—24.)

18. A method of waving hair which comprises arranging a prepared strand of hair in close proximity to electro-conductive material and heating said material by subjecting it to a high frequency variable electro-magnetic



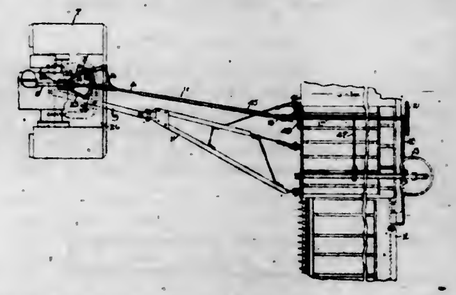
field, the positioning of the hair with respect to the said material being such that heat thus generated will pass from the said material to the hair.

1,892,107. HAIR WAVER. BENNO F. JANCKE, New York, and FREDERICK KORF and WILLIAM FREDERICK ZENTLER, Crestwood, N. Y., assignors to Shelton-Jancke Corporation, New York, N. Y., a Corporation of New Jersey. Filed Feb. 18, 1924. Serial No. 693 605. 20 Claims. (Cl. 132—36.)



1. An article for use in hair waving adapted to enclose a prepared strand of hair, consisting of an inner absorbent layer adapted to be saturated with a solution, a metal element closely surrounding said layer adapted to generate heat on excitation from a source of electrical energy, whereby the heat is applied close to the saturated absorbent, and a flexible envelope enclosing the absorbent and adapted to retain and confine the vapors generated by the heat.

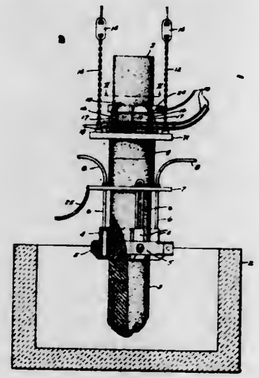
1,892,108. MOTION TRANSMITTING MECHANISM. ELLSWORTH T. JOHNSON, Moline, Ill., assignor to Deere & Company, Moline, Ill., a Corporation of Illinois. Filed Sept. 27, 1929. Serial No. 395,532. 20 Claims. (Cl. 180—77.)



1. In a motion transmitting means adapted to transmit motion from one pivotally connected vehicle to another comprising a plurality of shafts, means for substantially

distributing the angularity between the shafts, in substantially all relative angular positions of said vehicles, comprising bearings on three of the shafts, a bracket engaged to the bearing of one shaft and provided with means for pivotally supporting an intermediate shaft, a link pivotally engaged to the bracket and other links pivotally engaged to the first link and to the other bearings.

1,892,109. APPARATUS FOR FEEDING ELECTRIC FURNACE ELECTRODES. JAMES G. MARSHALL, Niagara Falls, N. Y., assignor to Electro Metallurgical Company, a Corporation of West Virginia. Filed June 2, 1931. Serial No. 541,711. 6 Claims. (Cl. 13—14.)



1. In an electric furnace an apparatus for feeding an electrode comprising in combination a clamp yieldingly holding said electrode, means including an annular yoke for supporting said clamp in a stationary position with respect to the furnace, and means operative against said yoke as an abutment for sliding the electrode through said clamp.

1,892,110. LEVEL VARIATION INDICATING APPARATUS. WYNN MEREDITH, Oakland, Calif. Filed Aug. 5, 1929. Serial No. 383,713. 6 Claims. (Cl. 33—206.)



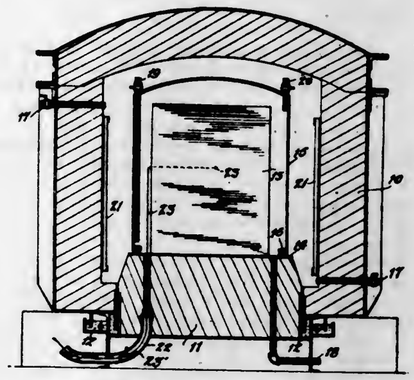
1. In apparatus of the character described, a pair of barometric pressure responsive devices spaced a substantial distance apart, indicating means, and means for causing said devices to act upon said indicating means in opposition, whereby an indication is afforded of the difference in barometric pressures on said devices.

1,892,111. CARTON AND CONTAINER FOR CIGARETTES AND LIKE ARTICLES. DESMOND WALTER MOLINS, Deptford, London, England, assignor to The Molins Machine Company, Ltd., London, England, a Corporation of Great Britain. Filed May 29, 1929, Serial No. 366,994, and in Great Britain June 11, 1928. 4 Claims. (Cl. 206—56.)



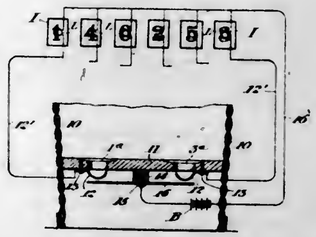
8. A carton or container for cigarettes and like articles consisting of a pocket having an opening in one face thereof through which cigarettes may be withdrawn, a closure member hinged to said pocket for normally covering said opening, said closure member being provided with means for gripping cigarettes, whereby the manipulation of said closure member to uncover the said opening serves to withdrawn cigarettes from the pocket, and means within said pocket for moving the cigarettes toward the closure member and into position to be gripped thereby.

1,892,112. ANNEALING FURNACE. WILLIAM E. MOORE, Pittsburgh, and GEORGE L. SIMPSON, Coraopolis, Pa., assignors to Pittsburgh Research Corporation, Pittsburgh, Pa. Filed Dec. 2, 1931. Serial No. 578,582. 36 Claims. (Cl. 263—40.)



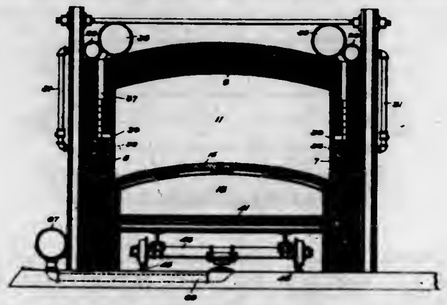
1. In a heat treating furnace, a base, a heating hood therefor, a shield adapted to rest on said base, said shield having a groove carried at its lower edge, and a gasket arranged in said groove and adapted to engage said base.

1,892,113. SALES STIMULATOR GAME. ROBERT E. MORGAN, New York, N. Y., assignor to Baskill, Inc., New York, N. Y., a Corporation of New York. Filed Mar. 26, 1932. Serial No. 601,382. 11 Claims. (Cl. 273—95.)



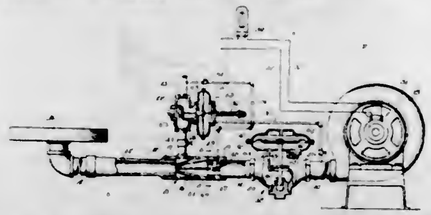
1. A sales stimulator, game, amusement device or the like, comprising a basket-like member having an upstanding substantially vertical wall of openwork construction, for enabling the player to see the bottom of the basket through said wall, the bottom of the basket being provided with a plurality of numbered holes, for receiving a thrown ball, an indicator having numbered spaces thereon corresponding to the numbered holes, and ball-operated means, electrically connected with the holes and with the indicator, for indicating the holes into which the ball is thrown.

1,892,114. SMELTING ZINC AND THE LIKE. WILLIAM A. OGG, Newton, Mass. Filed Jan. 15, 1931. Serial No. 508,926. 4 Claims. (Cl. 75—28.)



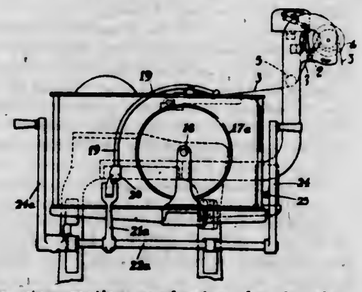
1. The method of recovering metal values from crude oxides of vaporizable metals characterized by spreading the crude oxide on a foraminous support and exposing it beneath an externally heated wall while passing a reducing gas up through the support.

1,892,115. COMBUSTION SYSTEM. GARNET W. MCKEE, Rockford, Ill. Filed Aug. 24, 1929. Serial No. 388,117. 14 Claims. (Cl. 158—119.)



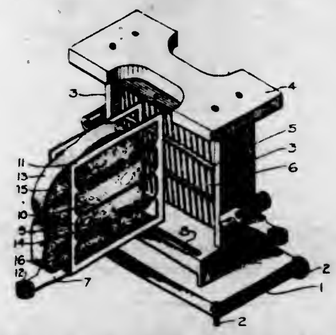
1. A combustion system comprising, in combination with a burner, a mixing device for supplying a fuel mixture to said burner, a line for supplying gas to said device, a line for supplying air to said device, a regulator interposed in said air line and comprising a valve and means tending to close said valve, said means being responsive to the pressure in said air line at the inlet side of said valve to effect a gradual opening of said valve when air under pressure is admitted to said air line.

1,892,116. STOP MOTION MECHANISM FOR DRAWING FRAMES USED IN THE TREATMENT OF FIBROUS SUBSTANCES. ALBERT FEARNLEY PARKER, Halton, near Leeds, England, assignor to Fairbairn Lawson Combe Barbour Limited, Leeds, England. Filed Dec. 30, 1931, Serial No. 583,982, and in Great Britain Dec. 30, 1930. 4 Claims. (Cl. 19—165.)



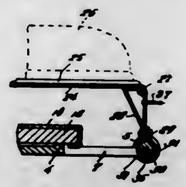
1. In stop motion mechanism for drawing and like machines used in the treatment of fibrous substances, a detector for contacting with the sliver or like fibrous substances, a pivotal arm for supporting said detector, a member forming an enclosed space for a freely moving body, said body, an electric terminal carried by but insulated from said enclosing member so that the freely moving body may complete the circuit, an electromagnet situated in said circuit and devices operated by said magnet to effect a stoppage of the machine.

1,892,117. COOKING DEVICE. GEORGE B. PERKINS, Pasadena, Calif. Filed Nov. 11, 1930. Serial No. 494,885. 2 Claims. (Cl. 53—5.)



1. A cooking device comprising spaced electrical heating elements between which an article of food may be placed, a support for an article of food retained in one position during the cooking operation, and movable at the completion of the operation to eject said article, supports between the article and the heating elements, heat-insulating shields carried by said supports, and automatic means moving the shields into contact with the article of food and actuated by the movement of the support.

1,892,118. METHOD OF FASTENING IRONING BOARDS. CHARLES A. SIVON, Pasadena, Calif. Filed Feb. 24, 1931. Serial No. 517,860. 1 Claim. (Cl. 68—10.)

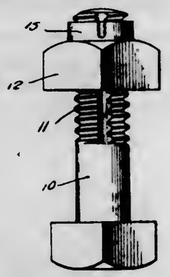


In an ironing board construction, an ironing board support, said support being provided with a transversely extending groove, a supporting rod, said support being engageable on the rod with the rod engaged in the groove, an iron stand, a vertically disposed supporting plate for the iron stand, said supporting plate being provided with depending clamp bands for encircling the grooved portion of the ironing board support and the rod to prevent displacement of the ironing board support from the supporting rod.

1,892,119. NUT LOCK. JAMES C. THOMPSON, Cleveland, Ohio, assignor of one-half to Cecil B. Lemon, Lakewood, Ohio. Filed Jan. 17, 1931. Serial No. 509,490. 1 Claim. (Cl. 151—2.)

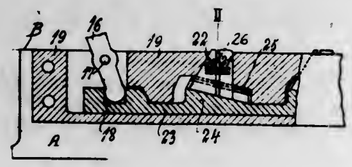
The combination with a bolt having a longitudinal groove, one wall of which is obliquely disposed with relation to its opposed wall, a nut adapted to be threaded thereon, an integral uninterrupted annular unthreaded flange of relatively soft material projecting from one

end of the nut, and a substantially V-shaped indent struck inwardly from said flange and positioned in said groove, one side of said indent being substantially



straight, and the other side inclined to cooperate with the obliquely disposed wall of the groove to remove the indent therefrom upon retrograde movement of the nut.

1,892,120. AUTOMATIC MACHINERY FOR MAKING FISHHOOKS. MATHIAS TOPP, Gjovik, Norway, assignor to O. Mustad & Sön, Oslo, Norway, a Company of Norway. Filed July 25, 1928, Serial No. 295,249, and in Norway July 30, 1927. 6 Claims. (Cl. 29—9.)



1. In a machine for making fish hooks, a horizontal work surface on which the blanks are to be supported for operation thereon, a transporter reciprocal in a horizontal plane adjacent the surface, a cam mounted in the transporter, vertically movable jaws supported by the cam, means to reciprocate the cam to project and retract the jaws at right angles to the movement of the transporter, and means to advance the latter longitudinally of the surface when the jaws are projected and return the transporter to its initial position when the jaws are retracted and means to open said jaws when retracted and to close them when projected.

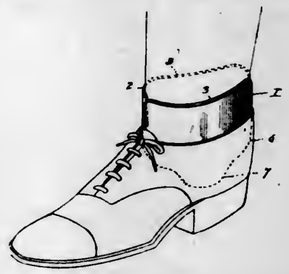
1,892,121. TRAILER. ALFRED O. WILLIAMS, Battle Creek, Mich., assignor to Clark Tructractor Company, Buchanan, Mich., a Corporation of Michigan. Filed Jan. 17, 1930. Serial No. 421,350. 3 Claims. (Cl. 280—49.)

1. A truck comprising a plurality of boards which together form a substantially rectangular platform, a plurality of metallic braces disposed under said platform transversely of said boards and platform, batter plates attached to the edges of said platform, an angle iron disposed at each end of the platform with one of its legs laid over the upper surface of said boards and the other leg extended downward over the ends of the boards and over said batter plates, bolts projected through said boards and angle irons to hold the latter in place, a coupler attached to each angle iron at the center of the



end of the platform, a stake pocket attached to each end of each angle iron, and wheels mounted below said platform.

1,892,122. HOSE PROTECTOR. HOWARD M. YOST, Washington, D. C. Filed Jan. 2, 1930. Serial No. 418,141. 1 Claim. (Cl. 36—70.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)



As a new article of manufacture, a blacking-guard for stockings consisting of two separate pieces of flexible material of identical size and shape adapted to be inserted within the upper edge of the shoe on opposite sides of the ankle of the user and extend up the leg above the top of the shoe each having lower centrally arranged extensions adapted to be forced partly beneath the foot to retain said pieces against accidental vertical and longitudinal movement while polishing the shoe.

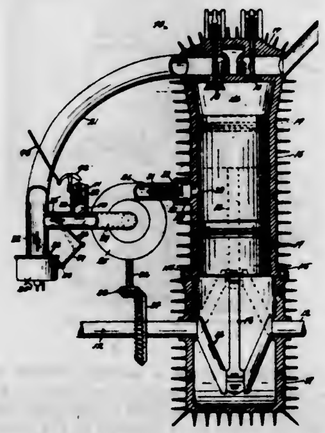
1,892,123. ADHESIVE COMPOSITION AND METHOD OF MAKING SAME. WILLIAM F. ZIMMERLI, Fairlawn, and ROBERT S. HAVENHILL, Akron, Ohio, assignors to The B. F. Goodrich Company, New York, N. Y., a Corporation of New York. Filed Apr. 12, 1928. Serial No. 269,601. 5 Claims. (Cl. 87—17.)

1. The herein described method of making a spreadable adhesive composition which comprises dispersing in reclaimed rubber a resin gum in amounts substantially within the range of 50 to 200 parts of reclaimed rubber to 100 parts of resin gum until a smooth end-product is produced, and thereafter reducing the viscosity of the mass to desired consistency by the addition of organic solvents.

1,892,124. SUPERCHARGING INTERNAL COMBUSTION ENGINE. FRANK ARELL, Inglewood, Calif. Filed Nov. 22, 1928. Serial No. 321,176. 5 Claims. (Cl. 123—75.)

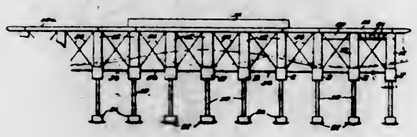
1. In an improvement in internal combustion engines the combination with a cylinder having a tapered inlet end enlarged to form a combustion chamber with an inlet

valve opening into said chamber and also having an inlet port arranged about one-third the distance above the lower dead center of the piston travel, a carbureter in communication with said valve, a piston movable in said cylinder to intake a fuel mixture at low pressure through said inlet valve to partly charge said cylinder, of a by-



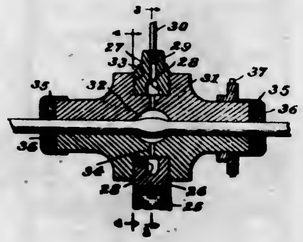
pass pipe connection from said carbureter to the port in said cylinder, a control valve at the inlet end of said pipe connection, a check valve at the discharge end of said pipe connection, a super-charger interposed in said pipe connection between said valves, and a relief valve interposed between said control valve and supercharger.

1,892,125. SEADROME. EDWARD R. ARMSTRONG, Holly-oak, Del. Filed June 18, 1930. Serial No. 462,046. 36 Claims. (Cl. 114—0.5.)



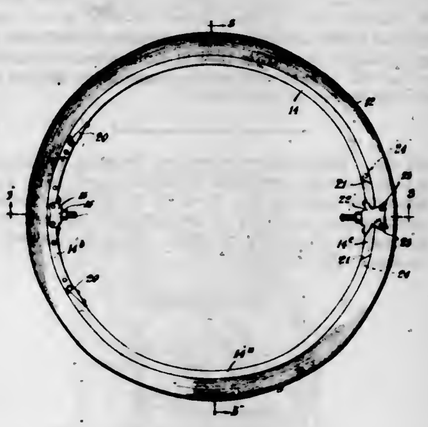
1. A water-supported seadrome, comprising a superstructure and a plurality of horizontally spaced buoyancy units connected to said superstructure to support the same, each of said units having a buoyancy tank immersed in and supported by the water and a buoyant connecting column between said buoyancy tank and said superstructure of lesser horizontal cross-section than said buoyancy tank, said column being located above the water level at the trough of a wave and being in part located below the water level at the crest of a wave, so that when a unit is at the trough of a wave its buoyancy tank alone is exposed to the denser water at the trough and when a unit is at the crest of a wave its buoyancy tank and a part of its column are exposed to the water of lesser density at the crest of a wave, whereby the lifting efforts of individual buoyancy units are equalized by the differing densities of the water at different parts of the wave.

1,892,126. METHOD OF AND MEANS FOR WORKING GLASS. JAMES BAILEY, Corning, N. Y., assignor to Corning Glass Works, Corning, N. Y., a Corporation of New York. Filed Nov. 30, 1929. Serial No. 410,799. 10 Claims. (Cl. 49—17.1.)



1. Glass working apparatus which includes a mold for receiving a hollow mass of molten glass, means for rotating the mold and means encircling the mold for exhausting the space between the glass and the walls of the mold.

1,892,127. DEMOUNTABLE WHEEL RIM. FREDERICK WILLIAM BAKER, Oldswinford, Stourbridge, England, assignor to Trinity Wheel Corporation, New York, N. Y., a Corporation of New York. Filed July 13, 1926. Serial No. 122,184. 7 Claims. (Cl. 301—35.)

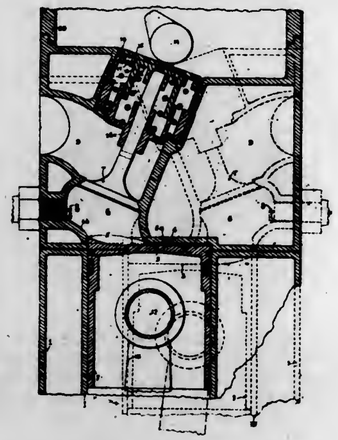


1. A wheel rim having axially separable parts, a locking ring for fastening said parts together and including a plurality of sectors, one of the sectors being rigidly secured to one of said parts and the other sectors movable into clamping position for holding the axially separable parts together, and a coupler carried directly upon one of the separable parts, said coupler carrying a section of the locking ring and adapted to maintain the sectors in interlocked engagement with each other when the ring is in position for fastening the parts together.

1,892,128. NITRODERIVATIVE OF BUTYLCYMENE AND THE PROCESS OF PREPARING THE SAME. HENRI BARBIER, Geneva, Switzerland. Filed May 29, 1930, Serial No. 457,498, and in Germany Apr. 12, 1930. 7 Claims. (Cl. 260—142.)

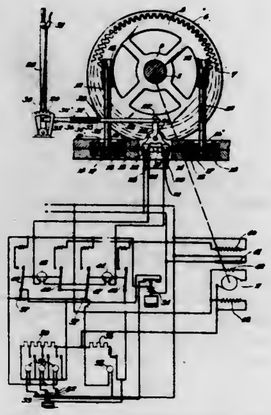
1. A di-nitroderivative of tertiary butylcymene.

1,892,129. INTERNAL COMBUSTION ENGINE. JEAN A. H. BARKEIJ, Los Angeles, Calif., assignor to George C. Arvedson, New York, N. Y. Filed Apr. 27, 1928. Serial No. 273,802. 27 Claims. (Cl. 123—191.)



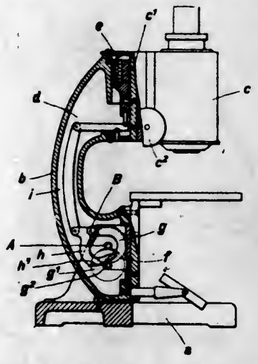
1. In an internal combustion engine, the combination of a cylinder, a piston reciprocating therein, a cylinder-head, a combustion chamber in said head communicating with the space in said cylinder, swept by the piston, through a restricted passage formed by the undersurface of said head and said piston when in top position, an inlet and exhaust valve and ignition means in said combustion chamber, one of said valves at least being located near and above said restricted passage, in inverted position opening downwardly in said combustion chamber, the cross-section of said restricted passage being greater than the cross-section of said valve.

1,892,130. CONSTANT TENSION WINCH, VARIABLE LOAD MOTOR CONTROL SYSTEM, AND THE LIKE. MELVIN B. BENSON, New York, N. Y., assignor, by mesne assignments, to Walter N. Seligsberg, New York, N. Y., as trustee. Filed Nov. 12, 1930. Serial No. 495,035. 19 Claims. (Cl. 254—173.)



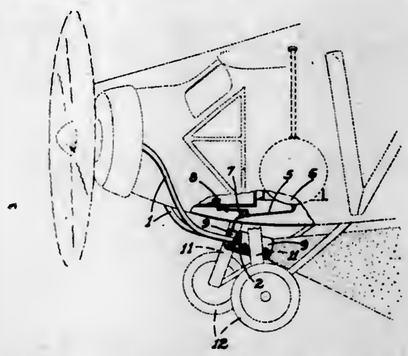
1. In a winch, a drum and gear to be driven, a motor for driving said drum and gear, an intermediate gear meshing with the drum gear and having a different number of teeth therefrom, means driven by said motor causing said intermediate gear to rotate the drum gear, yielding means for preventing the rotation of said intermediate gear and a control for said motor actuated by said yielding means.

1,892,131. MICROSCOPE STAND. MAX BERGER, Jena, Germany, assignor to the Firm Carl Zeiss, Jena, Germany. Filed Nov. 25, 1930, Serial No. 497,978, and in Germany Dec. 4, 1929. 2 Claims. (Cl. 88—39.)



1. On a microscope stand a carrier adapted to hold a microscope tube and being movably mounted on the stand, a lever mounted in the upper part of the stand and acting on the carrier, a pinion head disposed at the lower part of the stand, a gearing being situated in the lower part of the stand and coupled to the pinion head, and a push-rod connecting this gearing with the said lever.

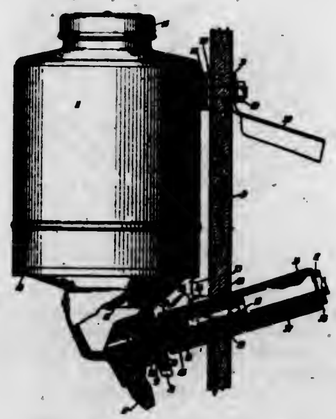
1,892,132. ATOMIZING ATTACHMENT FOR AIRPLANE ENGINE EXHAUSTS. JOHN L. BERNEY, Modesto, Calif., assignor to E. R. Hawke, Modesto, Calif. Filed Sept. 29, 1931. Serial No. 565,719. 4 Claims. (Cl. 244—1.)



1. In combination with the exhaust pipe of an internal combustion engine, a Venturi tube attached at its forward end to the outer end of the pipe and forming a continuation thereof, and means to discharge a liquid to be atomized into the tube intermediate its ends.

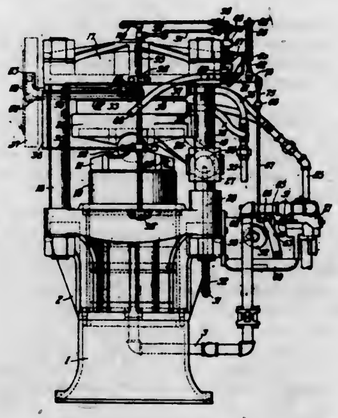
1,892,133. SUPPLY INSTALLATION FOR CENTRAL CHASSIS LUBRICATION. JOSEPH BIJUR, New York, N. Y., assignor to Auto Research Corporation, a Corporation of Delaware. Original application filed Apr. 9, 1927, Serial No. 182,362. Divided and this application filed May 21, 1927. Serial No. 193,090. 7 Claims. (Cl. 184—28.)

1. A supply installation for a chassis lubricating system including a pump cylinder having a piston therein manually operable from in back of the dashboard, one or more outlets from the pump cylinder at the part thereof in back of the dash through which may escape any lubri-



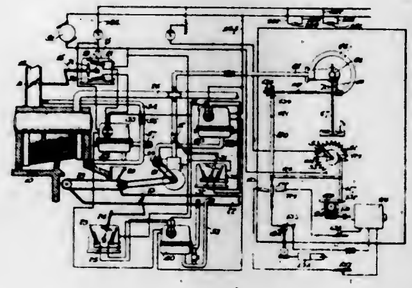
cant passing beyond the pump piston, and a drain sleeve encircling the cylinder intercepting such escaped lubricant and leading the same to escape from in front of the dashboard.

1,892,134. PRESS. JOSEPH W. BISHOP, Muskegon Heights, Mich., assignor, by mesne assignments, to United Research Corporation, Long Island City, N. Y., a Corporation of Delaware. Filed Jan. 25, 1930. Serial No. 423,527. 7 Claims. (Cl. 18—5.8.)



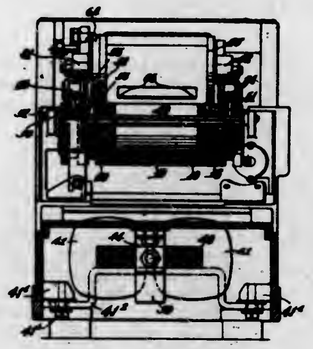
1. In a press, the combination of a fixed platen, a movable platen, means for applying fluid under low pressure to said movable platen for pressing it against said fixed platen, means for applying fluid under high pressure to said movable platen, means for releasing fluid pressure from said movable platen, a power driven shaft, a series of cams on said shaft, one for each of said means, and operative connections between each of said cams and the corresponding means whereby said means are actuated in the sequence in which they are above recited, at regular predetermined time intervals.

1,892,135. CONTROL SYSTEM. EDWARD S. BRISTOL, Philadelphia, Pa., assignor to Leeds & Northrup Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Dec. 12, 1929. Serial No. 413,482. 15 Claims. (Cl. 236—26.)



1. A combustion control system comprising a deflecting element, actuating means therefor responsive to departure of vapor pressure from a predetermined value, means for varying the rate of combustion controlled by said deflecting element when displaced from neutral position, means controlled by said deflecting element causing it to assume said neutral position for any pressure to which said actuating means is subjected, and means preventing said deflecting element from remaining in neutral position until said pressure attains said predetermined value.

1,892,136. PLATEN FOR PRINTING MACHINES. PAUL J. CLARK, Longport, N. J. Filed Nov. 20, 1930. Serial No. 496,843. 5 Claims. (Cl. 101—236.)

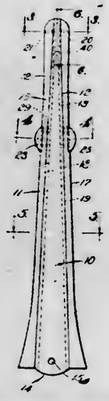


1. A platen having rubber along one portion of its length and cork along another portion of its length, a print roll for intermittent operation by the platen, and mechanism effecting driving engagement between the print roll and platen, the print roll having printing and non-printing portions engaging the platen respectively along the cork and rubber surfaces thereof.

1,892,137. PELT OR FUR STRETCHER. GERALD M. COLF, Los Angeles, Calif. Filed Feb. 16, 1931. Serial No. 515,918. 9 Claims. (Cl. 149—21.)

2. A pelt stretcher of the character described including, a longitudinally tapered central section, side sections at

the opposite edges of the central section, the central section being operable longitudinally between the side sections, and sliding connections between the side sections and the central section operable to move the side sections to-

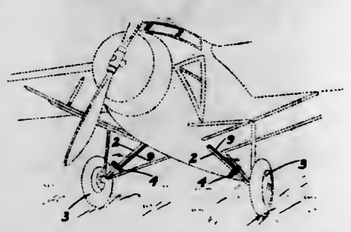


ward one another to positions where their inner edges are in abutment throughout substantial portions of their lengths and their outer longitudinal edges are substantially parallel.

1,892,138. HEAT AND SOUND INSULATING MATERIAL. ELTON R. DARLING, Danville, Ill., assignor to The Pacific Lumber Company, San Francisco, Calif., a Corporation of Maine. Filed July 25, 1929. Serial No. 381,083. 2 Claims. (Cl. 106—18.)

1. A heat and sound insulating composition consisting of substantially three parts by weight of rounded sand-like particles of organic matter derived from redwood bark and one part by weight of exfoliated sonolite, wherein the sonolite prevents excessive packing together of said particles, thereby increasing the sound and heat-insulating value of the individual particles.

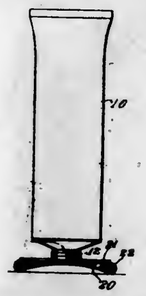
1,892,139. AIRPLANE SPRAY DEVICE. JOHN P. DESMET, Modesto, Calif., assignor to E. R. Hawke, Modesto, Calif. Filed Sept. 29, 1931. Serial No. 565,720. 3 Claims. (Cl. 244—1.)



1. In combination with an airplane, a propeller mounted thereon in position to be rotated by the air stream induced by the flight of the airplane, Venturi tubes in the blades of the propeller extending from the leading to the following edges thereof, and means to supply liquid to the Venturi tubes.

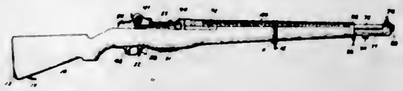
1,892,140. COLLAPSIBLE CONTAINER. ARTHUR S. FOGLER, Terre Haute, Ind. Filed Dec. 2, 1929. Serial No. 410,947. 4 Claims. (Cl. 221—60.)

1. A collapsible container having a threaded nipple provided with a discharge opening, and a base on which the container is supported so as to stand upright with the nipple extending downwardly, said base comprising an upwardly extending threaded cooperating hub portion in which the nipple engages and being provided with an outward peripheral portion of flexible material, the said base being concaved on the underside thereof, whereby to form



a supporting portion for the container capable of being attached by suction to smooth surfaces, and further being adapted to serve as a closure for the said discharge opening in the nipple.

1,892,141. SEMIAUTOMATIC RIFLE. JOHN C. GARAND, Springfield, Mass. Filed Apr. 21, 1930. Serial No. 446,079. 24 Claims. (Cl. 42—3.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)



1. The combination with a gun stock, of a guard, a receiver, a latch carried by one of said elements and means on the other of said elements adapted to be engaged by said latch to secure the stock, guard and receiver in assembled relation.

7. The combination with a gun provided with a receiver, of a bolt reciprocable in the receiver, a firing pin in the bolt, an extractor carried by the bolt and means on the extractor cooperating with the pin to limit movement thereof.

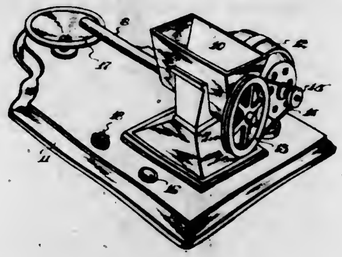
20. The combination with a gun of the gas operated type; of an upper band embodying a gas cylinder, a sight base and a muzzle gland receiving opening; and a muzzle gland secured in said opening to regulate the flow of gas to the cylinder.

1,892,142. APPARATUS FOR CONTROLLING AND DIRECTING LIGHT. DELAMERE B. GARDNER, Los Angeles, Calif. Filed June 16, 1930. Serial No. 461,406. 3 Claims. (Cl. 178—6.)



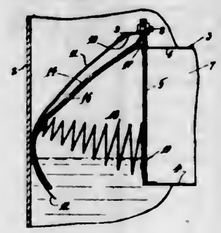
1. An apparatus for controlling and directing light including means for causing a flame of relatively constant brilliancy and high candle power, a lens for directing a sheet of light toward a focal line, a composite rotary mirror beyond said focal line, a partition adjacent the focal line of said light and having a slot therethrough interposed between said mirror and flame, and means interposed between said partition and mirror for directing the sheet of light onward to said mirror.

1,892,143. CIGARETTE MAKING MACHINE. WALTER F. GORDON, Dallas, Tex. Filed Mar. 10, 1932. Serial No. 597,893. 4 Claims. (Cl. 131—5.)



1. A cigarette making machine including a barrel having a material receiving opening adjacent one end, and a conveyor for cutting and transporting shredded tobacco in the manufacture of cigarettes and arranged to operate in said barrel, said conveyor comprising a cylindrical body having a knife edged strip of material spirally wound thereupon and whose operative diameter equals the inner diameter of said barrel whereby to afford a cutting surface for said tobacco during transportation thereof through said barrel.

1,892,144. SEAL FOR FLOATING DECKS. ALVAH M. GRIFFIN, Los Angeles, Calif., assignor, by mesne assignments, to Chicago Bridge & Iron Company, Chicago, Ill., a Corporation of Illinois. Filed Feb. 23, 1927, Serial No. 170,169. Renewed May 29, 1929. 6 Claims. (Cl. 220—26.)



1. In a sealing construction for volatile liquid, the combination of a tank for the liquid, a floating deck supported on the liquid in the tank, a plurality of plates hinged to the deck, means for yieldingly pressing the plates against the wall of the tank, and a continuous flexible gas-tight curtain sealing the space between the deck and the plates, said curtain having its inner edge adjacent the deck and its outer edge adjacent the plates, and its intermediate portion of such formation as to be movable under gas pressure into position as a sealing liner for the plates.

1,892,145. MECHANICAL PENCIL. WALTER B. GUYOT, Janesville, Wis., assignor to The Parker Pen Company, Janesville, Wis., a Corporation of Wisconsin. Filed June 28, 1930. Serial No. 464,692. 30 Claims. (Cl. 120—18.)

1. In a mechanical pencil, a propelling mechanism including a pair of relatively rotatable telescoping tubes, a support, means securing one of said tubes to said support non-rotatably, and means supporting the other of said tubes rotatably and detachably upon the said one tube, said first securing means preventing disassembly of said tubes except upon detachment of said one tube from its support.

30. In a mechanical pencil, propelling mechanism comprising two relatively rotatable units one of which includes a rotatable guide tube, a rotatable member, clutch means between said member and tube connecting the same for



positive drive movement, and means to throw out said clutch at a predetermined time in the rotation of said member so that upon continued rotation of said member said tube will remain stationary.

1,892,146. ELECTRICAL WIRING SYSTEM. NORMAN P. HARSHBERGER, Pasadena, Calif. Filed Sept. 16, 1929. Serial No. 392,827. 2 Claims. (Cl. 250—16.)

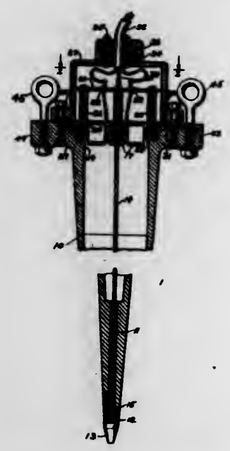


1. A wiring system for electrical instruments comprising a plurality of flat sheets of insulating material laid one on another, a set of non-crossing electrical conductors laid on each sheet according to a predetermined circuit arrangement, and binding posts extending through said plurality of sheets to the surface of the upper sheet to form accessible connecting members, the conductors of each sheet connecting certain pairs of said binding posts, and some of said binding posts being connected at various portions of their length with the conductors on a plurality of the sheets to link all of the sets of conductors together and thus form a complete circuit, said binding posts being tubular in form for slidably receiving terminals of units of the electrical instruments.

1,892,147. VIBRATION DETECTOR. HARVEY C. HAYES, Washington, D. C. Filed Sept. 23, 1927. Serial No. 221,520. 6 Claims. (Cl. 177—352.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)

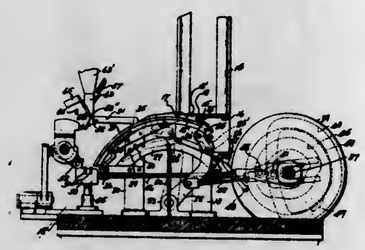
2. In a vibration detector a plurality of magnetic poles, a magnetic conductor adjacent said poles and bodily movable relative thereto to vary the flux, a plurality of coils located in said fields of variable flux, and means elec-

trically connecting said coils, certain of said magnets being arranged at substantially right angles and certain of said coils being connected in series so that a vibration



of given amplitude will induce substantially the same combined current in said coils regardless of the direction of reception within a range of 90°.

1,892,148. MECHANISM FOR OPENING AND FILLING BAGS. GEORGE I. HOBL, Newport, R. I., assignor to Cartoning Machinery Corporation, Newport, R. I., a Corporation of New Jersey. Original application filed Dec. 26, 1929, Serial No. 416,516. Divided and this application filed June 20, 1931. Serial No. 545,681. 12 Claims. (Cl. 226—49.)



1. In a machine of the kind described, in combination, means to successively deliver collapsed bags to a vertically reciprocable filling station, a filling funnel, and means cooperative with said funnel for discharging air blasts through the funnel end to open a bag preparatory to insertion of said funnel by downward movement thereinto, and later for expanding the bag for reception of material delivered through said funnel after the latter is downwardly inserted within the bag.

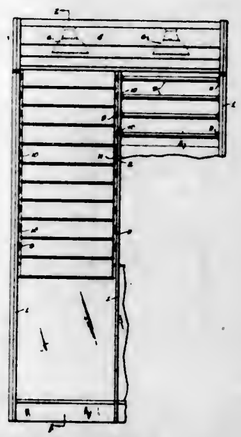
1,892,149. SLIDING DOOR CLAMP. ALBERT HULLEY and WILLIAM J. HULLEY, City Island, N. Y. Filed Apr. 20, 1931. Serial No. 531,351. 11 Claims. (Cl. 296—47.)

1. A sliding door clamp of the class described comprising, a bracket attached to and rigid with the sliding door, said bracket extending beyond the periphery of the door, a guide adjacent to said bracket, a movable member pivoted onto said bracket and having a jaw adjacent the guide whereby movement of the movable mem-



ber will release or clamp the guide to thereby maintain the sliding door in a certain fixed position, and means to actuate the movable member.

1,892,150. DISPLAY RACK. FREM E. HUTCHINS, Lakewood, and CLYDE F. LOSEE, Cleveland, Ohio. Filed Feb. 6, 1932. Serial No. 591,886. 9 Claims. (Cl. 40—83.)

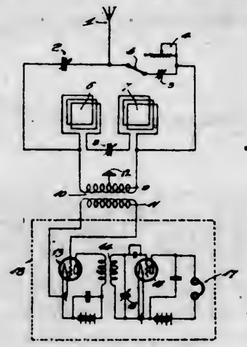


1. A display rack comprising a pair of upright standards secured together in spaced relation to each other, a source of light arranged at the upper portion of the rack closely in front of and intermediate the planes of the standards for producing downwardly projecting rays of light, strips of material to be displayed extending between the standards and arranged one above the other and disposed with their faces toward the front, and means to support the strips with their faces in partially overlapping relationship and defining a curvilinear surface concave toward said light.

1,892,151. DIRECTION FINDING SYSTEM. LAWRENCE A. HYLAND, Washington, D. C., assignor to Wired Radio, Inc., New York, N. Y., a Corporation of Delaware. Filed Apr. 18, 1929. Serial No. 356,135. 5 Claims. (Cl. 250—11.)

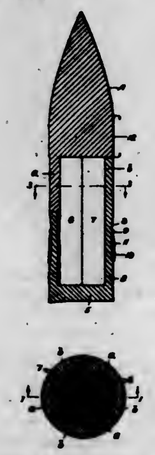
1. In a direction finding system, the combination of an antenna having a substantially nondirectional characteristic, a directional antenna, said directional antenna com-

prising a plurality of sections, a condenser connected to said sections for tuning said directional antenna, a condenser connected between said nondirectional antenna and one of the sections of said directional antenna, a resistance unit, a second condenser, means connected with said resistance unit and said last mentioned condenser



for selectively connecting either said resistance or said last mentioned condenser into circuit between another one of the sections of said directional antenna and said nondirectional antenna, and a coupling device associated with the circuits of said antennæ for transferring energy therefrom.

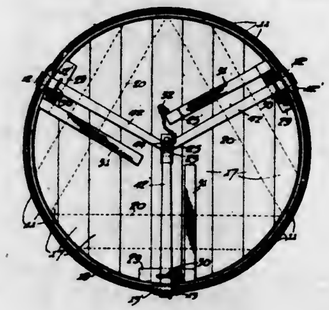
1,892,152. PROJECTILE. RALPH E. JONES, U. S. Army, Fort George G. Meade, Md. Filed Nov. 6, 1931. Serial No. 573,454. 8 Claims. (Cl. 102—26.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)



1. A projectile comprising a head having spaced rearwardly extending fingers, a hollow body having spaced forwardly extending fingers to fit between the fingers of the head, the fingers on the body being of greater width and less thickness than the fingers on the head, a plurality of segments of equal width within the body and the interfitted fingers, alternate pairs of segments having a moderately close contact with the body and an extremely close contact with the fingers of the head.

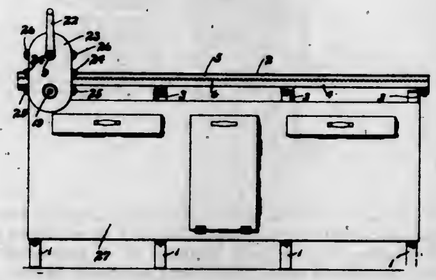
1,892,153. COLLAPSIBLE HOGSHEAD. ROBERT J. KENNEDLE, Durham, N. C. Filed Mar. 31, 1931. Serial No. 526,707. 13 Claims. (Cl. 217—69.)

3. Means for detachably securing a removable head of a hogshead in place, said means comprising a hoop to surround the body of the hogshead adjacent one end of the latter with its end portions overlapping and having an opening adjacent each of its ends and a flat head-securing bar insertable through said openings of said hoop and



an opening in the body of the hogshead transversely of the outer face of said removable head, and detachable interengaging means between said bar and said removable head.

1,892,154. PRINTING PRESS. JAMES EDGAR LEE, Grand Haven, Mich., assignor to Challenge Machinery Company, Grand Haven, Mich., a Corporation of Michigan. Filed Aug. 5, 1930. Serial No. 473,152. 9 Claims. (Cl. 101—269.)

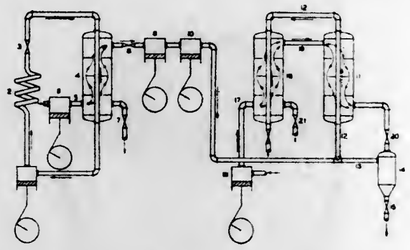


1. A printing press including a table having a flat upper surface, bearer bars located one at each side of the table formed with rack teeth at their lower sides, a platen roller carriage mounted to traverse said table and having wheels bearing upon the upper sides of said bearer bars, said upper sides of the bearer bars being located in a plane not higher than the upper surface of the table, means for turning the roller and gearing connected with the roller and operable simultaneously therewith meshing with the rack teeth on said bearer bars.

1,892,155. PROCESS AND APPARATUS FOR LIQUEFYING AND RECTIFYING AIR OR OTHER GASEOUS MIXTURES. ISAAC H. LEVIN, Pittsburgh, Pa. Filed July 31, 1930, Serial No. 472,020, and in France Aug. 3, 1929. 20 Claims. (Cl. 62—175.)

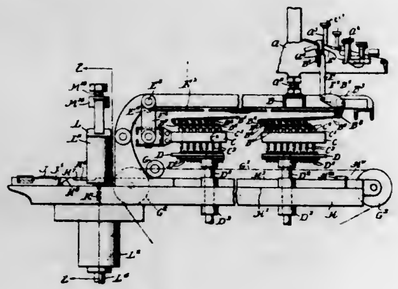
1. An apparatus for liquefying a gas comprising means for compressing a portion of the gas, means for compressing, cooling and expanding a refrigerant, means to bring the cold expanded refrigerant into heat transfer contact with the compressed gas whereby the gas will be cooled and the refrigerant will be heated to room temperature, means to expand the cooled gas in an expansion valve and/or ex-

pansion engine producing external work, means to employ the cooled gas as a refrigerant to cool by heat transfer contact another portion of compressed gas whereby the



refrigerant will be heated to room temperature and the compressed gas will be cooled, means to expand and partially liquefy the gas.

1,892,156. TYPE CASTING MACHINE AND MATRIX THEREFOR. CHESTER A. MACOMIC, Chicago, Ill. Filed Jan. 8, 1931. Serial No. 507,393. 11 Claims. (Cl. 199—65.)



1. A matrix, for use with a type casing machine, having means for yieldingly moving a plurality of matrices, and for stopping each of said matrices at a predetermined point, the matrix comprising a long relatively narrow bar having type impressions along one face thereof, a spring abutment at one end of said bar and a stop at the other end of said bar.

1,892,157. FLOWERPOT. MICHAEL MAIER, Portland, Oreg., assignor of one-third to Loyal Clark and one-third to Arthur C. F. Wilkins, Seattle, Wash. Filed May 4, 1931. Serial No. 534,902. 2 Claims. (Cl. 47—34.)



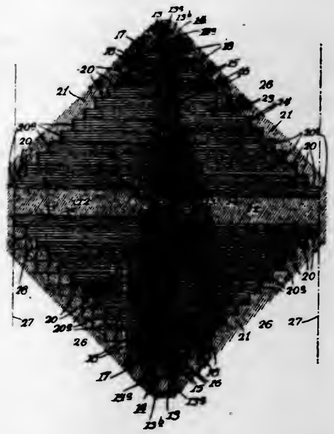
1. A flower pot of the class described, comprising a body element made of resilient live rubber and the major portion of the body element being filled with minute voids to aerate growing things being developed within the body element.

1,892,158. SHORT RANGE BULLET. JOHN MATTHEWS, Philadelphia, Pa. Filed May 26, 1931. Serial No. 540,066. 3 Claims. (Cl. 102—26.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)



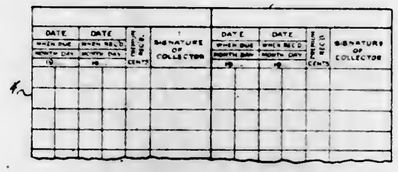
1. A bullet comprising a hollow body, a closed base for the body having a thickness substantially double the thickness of the body, and a tapered nose cut off to form an aperture with a flared mouth and having a diameter substantially one-third the diameter of the body, and the rear portion of the body being enlarged to form a bearing approximately one-half caliber in length.

1,892,159. METHOD OF MINING. DAVID MCCRINDLE and JAMES B. MEDILL, La Salle, Ill., assignors to Matthiessen & Hegeler Zinc Co., La Salle, Ill., a Corporation of Illinois. Filed July 21, 1930. Serial No. 469,556. 7 Claims. (Cl. 262—1.)



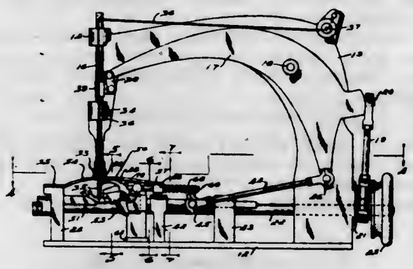
1. The method of mining coal and the like which consists in excavating a pair of adjacent parallel lateral extensions outwardly from the region of a vertical shaft, maintaining the working face of one of said lateral extensions in advance of the working face of the other one, building a plurality of parallel supporting walls along the excavated area of each extension to support the roof and form haulage-ways therebetween, forming through said supporting walls a plurality of diagonal haulage-ways directed toward said shaft and communicating with the haulage-ways formed between said supporting walls along the junction of said lateral extensions, excavating extensions in close spaced relation extending longitudinally from the opposite sides of said lateral extensions, maintaining the working face of each longitudinal extension in advance of the working face of the next longitudinal extension which is further removed from the region of said shaft, and building supporting walls in the excavated areas of said longitudinal extensions to form roadways along the junction lines of adjacent extensions to communicate with said diagonal haulage-ways of said lateral extensions.

1,892,160. CARBON CARD INDEX. JAMES O. MCDONALD, Dallas, Tex. Filed Jan. 6, 1932. Serial No. 585,027. 2 Claims. (Cl. 282—27.)



1. A carbon card index of the nature set forth comprising a card ruled for writing and bearing printed indicia on both sides and including a sheet of transfer paper gummed to the card to provide a seal of the record to be made; in combination with a receipt book or folder, bearing printed indicia and ruled for writing, said folder or book having said indicia on its front and adapted to be folded back to back with said card index or ruled card between the parts of the book or folder.

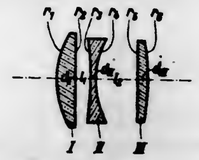
1,892,161. TUFTING MACHINE. FLOYD M. MURPHEY, Adrian, Mich., assignor, by mesne assignments, of one-half to Lenawee Textiles, Inc., Adrian, Mich., a Corporation of Michigan. Filed Aug. 1, 1930. Serial No. 472,268. 8 Claims. (Cl. 112—79.)



1. In a sewing machine, a base frame, a main shaft journaled on said frame, a bell crank rocker arm fulcrumed on said frame, connections between said shaft and arm for rocking said bell crank, a strand carrying needle reciprocated by one end of said bell crank, fabric feeding mechanism actuated by said main shaft, linearly reciprocating loop forming mechanism actuated by the other end of said bell crank, and means for cutting the loops successively as formed.

1,892,162. PHOTOGRAPHIC THREE-LENS OBJECTIVE. ROBERT RICHTER, Jena, Germany, assignor to the Firm Carl Zeiss, Jena, Germany. Filed May 12, 1931, Serial No. 536,813, and in Germany May 27, 1930. 2 Claims. (Cl. 88—57.)

1. A photographic three-lens objective, corrected astigmatically, having an aperture ratio ranging between 1:5 and 1:4, consisting of two converging lenses, each of these lenses being a single piece of glass, and a dispersive lens so enclosed between the said converging lenses that it is separated from them by air spaces, the air space between the front converging lens and the dispersive lens being inferior to the air space between the dispersive lens and the rear converging lens, the absolute values of the radii of curvature of the first and fourth surfaces amounting to 20 to 26% of the focal length of the objective, the mutual distance of the vertices of these two surfaces being greater than 7.5% of the focal

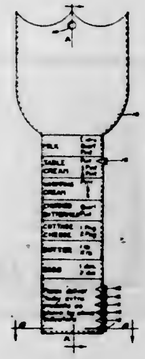


	I	II	III
r_1 =	+ 23.25	d_1 =	4.5
r_2 =	∞	l_1 =	3.7
r_3 =	- 78.6	d_2 =	1.3
r_4 =	+ 22.85	l_2 =	10.0
r_5 =	+ 205.0	d_3 =	2.5
r_6 =	- 59.96		

	I	II	III
n_D =	1.5227	1.6128	1.6423
v =	58.9	37.0	48.0

length, and the mutual distance of the front and rear vertices of the objective being inferior to one quarter of the focal length.

1,892,163. ORDER INDICATOR. MANUEL F. ROSE, Alameda, Calif. Filed Apr. 5, 1932. Serial No. 603,241. 1 Claim. (Cl. 116—135.)

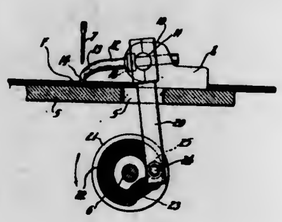


A device of the character described comprising an oblong sheet metal plate, the edges of said plate being bent at an angle with respect to the face thereof, a plurality of names representing different products provided on the face of the plate, characters designating different quantities provided on the face of the plate with said names, and a plurality of indicators slidably mounted on one of the bent edges of the plate and adapted to be individually moved to and from said names and characters substantially as set forth.

1,892,164. SEWING MACHINE FOR STITCHING OVER FASTENER MEANS. LEO ROSEMAN, Newark, N. J. Filed Feb. 4, 1931. Serial No. 513,255. 3 Claims. (Cl. 112—2.)

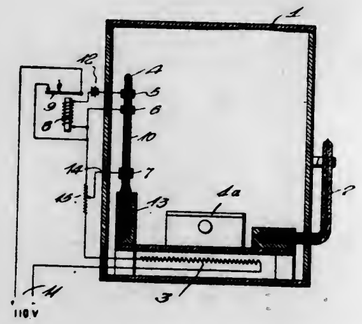
1. In a sewing machine provided with a sewing mechanism including a reciprocating needle, a drive shaft to actuate said sewing mechanism, a rock-shaft, a stop-arm carried by said rock-shaft with its forward end disposed at one side of the machine needle and adapted to be moved into and out of the path of movement of fasteners

on material fed to the sewing mechanism, a box cam fixed on said drive shaft, said cam having in a face thereof a cam raceway the major portion of which is concentric to the drive shaft and a minor portion of which forms an inwardly offset drop section functioning



to momentarily release said stop-arm and its finger from normal fastener arresting position, and a lever arm fixed to said rock-shaft and having a means projected into said cam raceway so as to ride therein, whereby stop-arm positioning oscillations of said rock-shaft are positively controlled in both directions.

1,892,165. TEMPERATURE CONTROL SYSTEM. CORBIN F. RUDOLPH, Washington, D. C. Filed Nov. 20, 1930. Serial No. 497,024. 4 Claims. (Cl. 236—68.)



1. In a temperature control system for frequency determining elements the combination of a thermostat comprising a heat responsive element, a heating member located adjacent said frequency determining element, a power source, a series circuit connecting said heating member with said power source, a relay disposed in said series circuit, connections between said relay and said thermostat for controlling the operation of said relay, and a shunt path through the heat responsive element of said thermostat connected with said series circuit for preconditioning the operation of said thermostat according to slight changes in ambient temperature adjacent said frequency determining element.

1,892,166. FOLDING CHAIR. VINCENT RUIZ, New York, N. Y., assignor to Jacob Thomas Basseches, New York, N. Y. Filed Nov. 28, 1928. Serial No. 322,809. 12 Claims. (Cl. 155—145.)

1. A folding chair comprising a frame including a back, a seat pivotally mounted on said frame, arm rests mounted on said frame, pivotal mounting means for said arm rests, the pivotal connection for said arm rests being arranged to permit a lateral pivotal movement of the arm

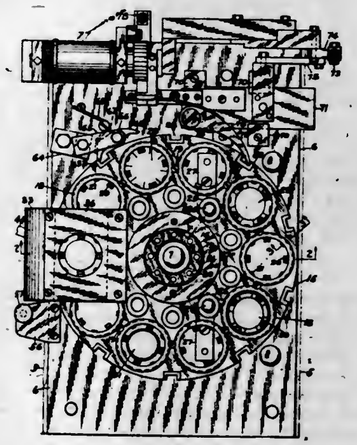


rests within the confines of said frame, and operating means connected with said seat for folding said arm rests in the aforementioned position.

1,892,167. PLASTIC COMPOSITION AND METHOD OF MAKING SAME. WALDO L. SEMON, Cuyahoga Falls, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y., a Corporation of New York. Filed Apr. 12, 1928, Serial No. 269,605. Renewed May 19, 1932. 7 Claims. (Cl. 87—17.)

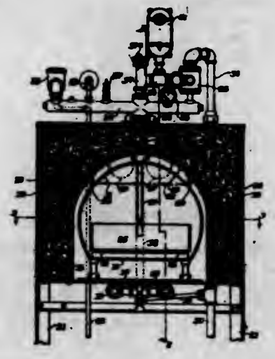
1. The method of preparing a plastic adhesive composition which comprises fluxing a brittle resinous material with vulcanized rubber in substantially equal proportions by weight.

1,892,168. DIAL DIE MACHINE. CHARLES S. SIEGEL, New York, N. Y., assignor to Dial Engineering Corporation, a Corporation of New York. Filed Dec. 4, 1928. Serial No. 323,769. 15 Claims. (Cl. 113—42.)



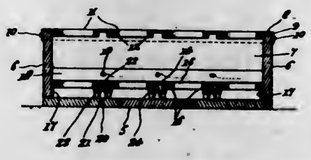
3. A die form mechanism including a die holder formed in U-shape, a die therein, said die holder having a recess in its upper part for feeding material through said U-shaped die holder, and a reciprocable punch for cutting material against said die.

1,892,169. APPARATUS FOR COOKING FOOD. EDMOND M. SIMONDS, Wilmette, Ill. Filed Aug. 18, 1928. Serial No. 299,876. 4 Claims. (Cl. 126—20.)



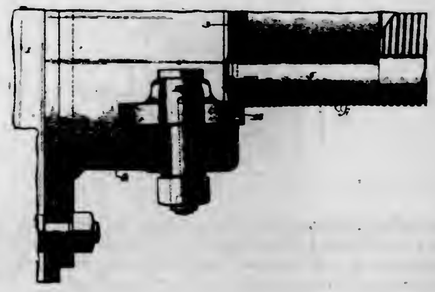
1. In a cooking apparatus, in combination, a cooking receptacle adapted to confine steam under pressure, a heat-confining casing enclosing same, heating means for supplying heat to said receptacle, a header arranged externally of the casing and in communication with said receptacle, a regulating device for the heating means responsive to pressure in the header, and selectively operable means for venting pressure from the header.

1,892,170. CRATE. WILLIAM F. SNEED, Jr., Lakeland, Fla. Filed Apr. 28, 1931, Serial No. 532,312. Renewed Nov. 1, 1932. 1 Claim. (Cl. 217—19.)



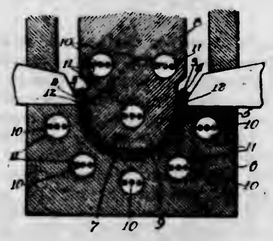
An improved crate comprising a crate body, composed of a bottom, sides and ends, an upper sheet metal plate, having openings therein with down-turned marginal flanges, said plate resting upon the sides and ends of the crate and having down-turned external flanges embracing the outer faces of the side and end walls and being affixed to said walls, a lower plate having openings therein with the reinforced marginal flanges lying in the lower portion of the crate body, legs at the sides of the plate bent downwardly therefrom and resting upon the bottom and in contact with the side walls of the crate, and flanges bent upwardly from the lower plate and lying in contact with the end walls of the crate and affixed thereto, longitudinal reinforcing ribs having diverging legs resting upon the bottom of the crate and having upper joining ridges contacting with the lower side of the lower plate, said ribs having split and out-turned ends placed against and affixed to the end walls of the crate.

1,892,171. TAKE-UP FRAME FOR WIRE OPERATING UNITS. WILLIAM H. SOMMER, Peoria, Ill. Filed Nov. 15, 1930. Serial No. 495,987. 5 Claims. (Cl. 242—78.)



1. In a device of the character described, in combination a take-up block, a guard at one end of the block, an anti-friction device disposed within and partially protruding from said guard, for pushing a wire as it is formed into successive coils thereon, outwardly on the block.

1,892,172. METHOD OF MAKING BEARING SLEEVES. BERGEN STOCKFLETH, Niles, Mich., assignor, by mesne assignments, to The Cleveland Graphite Bronze Company, Cleveland, Ohio, a Corporation of Ohio. Filed Feb. 4, 1929. Serial No. 337,484. 16 Claims. (Cl. 29—149.5.)

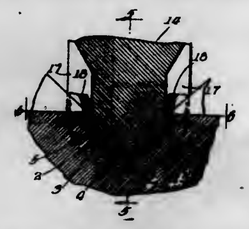


1. The herein described improvements in methods for forming a bearing liner or sleeve preformed of a harder metal back and a relatively softer bearing metal lining, the backing having first been coated inside and out with a bonding metal such as tin, which method consists in subjecting the preformed sleeve to a relatively heavy forming pressure applied radially thereto by suitable die members and maintaining the die members heated to a point below the melting point of the lining and bonding metal, and whereby the lining, backing, and outer coating of the bonding metal are elongated circumferentially and thinned radially and caused to accurately conform to the forming surfaces of the die members without disrupting the bond between the backing and the lining.

1,892,173. METHOD OF MAKING THIN WALLED METAL ARTICLES. BERGEN STOCKFLETH, Niles, Mich., assignor, by mesne assignments, to The Cleveland Graphite Bronze Company, Cleveland, Ohio, a Corporation of Ohio. Filed Feb. 11, 1929. Serial No. 339,170. 7 Claims. (Cl. 29—149.5.)

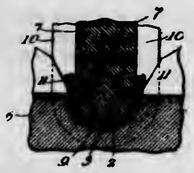
1. The herein described step in the pressure method of making a substantially semi-cylindrical lined bearing

sleeve comprising a tough strong supporting back such as steel and a bearing metal lining bonded thereto, and which consists in applying sufficient pressure to a roughly formed bearing by means of dies having semi-cylindrical



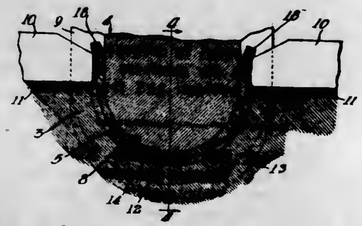
co-operating pressure surfaces to cause the metals of the sleeve to be thinned radially and elongated substantially parallel to the die surfaces, thereby causing the waves or irregularities in the backing to be "ironed out".

1,892,174. METHOD OF MAKING BEARING SLEEVES. BERGER STOCKFLETH, Niles, Mich., assignor, by mesne assignments, to The Cleveland Graphite Bronze Company, Cleveland, Ohio, a Corporation of Ohio. Filed Mar. 5, 1929. Serial No. 344,869. 2 Claims. (Cl. 29—149.5.)



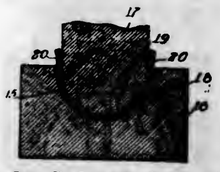
1. The herein described method of making substantially half-cylindrical bearing sleeves having relatively hard, tough backs and bearing metal linings, which method consists in providing substantially half-cylindrical backs which are crescent shaped in transverse cross-section, and applying the bearing metal thereto to form a lining somewhat thicker than the finished thickness of the lining, and subjecting the rough sleeve thus formed to pressure applied substantially radially to the thicker part of the back, the pressure being sufficient to thin the back to substantially uniform thickness, and also to thin the lining to some extent the back and the lining being simultaneously substantially equally elongated.

1,892,175. METHOD OF MAKING BEARING SLEEVES. BERGER STOCKFLETH, Niles, Mich., assignor, by mesne assignments, to The Cleveland Graphite Bronse Company, Cleveland, Ohio, a Corporation of Ohio. Filed June 10, 1929. Serial No. 369,714. 5 Claims. (Cl. 29—149.5.)



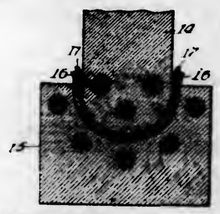
5. The herein described method of making half cylindrical bearing sleeves provided with end flanges, which consists in providing rough blanks having end flanges of less diameter than the finished flanges and flared slightly outwardly and by pressure forming the flanges in parallelism and enlarging their diameter to the desired size.

1,892,176. METHOD OF MAKING A BIMETAL BEARING SLEEVE. BERGER STOCKFLETH, Niles, Mich., assignor, by mesne assignments, to The Cleveland Graphite Bronze Company, Cleveland, Ohio, a Corporation of Ohio. Filed Mar. 1, 1930. Serial No. 432,506. 3 Claims. (Cl. 29—149.5.)



1. The herein described method of making a bi-metal bearing sleeve, which consists in preparing a flat blank of sheet metal suitable for the backing part of the sleeve, and a thin sheet of the bearing metal of substantially the same rectilinear dimensions, roughening one side at least of the backing blank, coating the roughened side at least of the backing blank with a suitable bonding metal such as tin, and pressing the bearing metal blank upon the roughened and tinned surface of the backing blank between flat metallic surfaces of at least the dimensions of the pieces to be pressed, while the two are pressed together and held quiescent heating them at least to a temperature at which the bonding metal will melt, preforming the blank roughly into a substantially half-cylindrical form, and then sizing and finishing the sleeve by applying pressure thereto radially sufficient to thin the sleeve radially and elongate it in a direction substantially parallel to the die surfaces.

1,892,177. METHOD OF MAKING BEARING SLEEVES. BERGER STOCKFLETH, Niles, Mich., assignor, by mesne assignments, to The Cleveland Graphite Bronze Company, Cleveland, Ohio, a Corporation of Ohio. Filed Mar. 1, 1930. Serial No. 432,507. 6 Claims. (Cl. 29—149.5.)

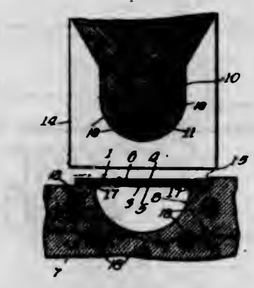


1. The herein described method of making a bearing sleeve, having a relatively hard metal back and a bearing metal lining, which consists in preforming the two parts roughly to their finished forms and dimensions, roughening the inner side of the back and coating it with a bonding metal such as tin, nesting the two parts together and applying heat and pressure to cause them to properly bond, cooling the roughly sized sleeve and subjecting it to radial pressure sufficient to compress the sleeve radially and elongate the metals of the sleeve substantially equally in a direction substantially parallel with the cooperating die surfaces.

1,892,178. METHOD OF MAKING BEARING SLEEVES. BERGER STOCKFLETH, Niles, Mich., assignor, by mesne assignments, to The Cleveland Graphite Bronse Company, Cleveland Ohio, a Corporation of Ohio. Filed Dec. 15, 1930. Serial No. 502,442. 3 Claims. (Cl. 29—149.5.)

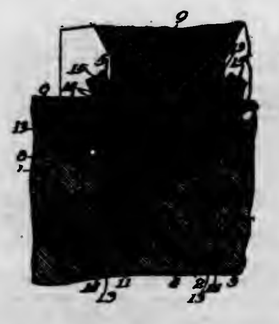
1. The herein described method of making bi-metal bearing sleeves which consists in providing pieces of

bi-metal in flat form each of suitable size for forming a half-cylindrical bearing sleeve, placing one of the pieces in flat form upon a suitable half-cylindrical die, forcing a suitable plunger down upon the flat piece to form the flat piece into the die and, by the continuous operation



of the plunger pressing the formed piece between the die and the plunger with sufficient pressure to thin the sleeve radially and cause the metals of the sleeve to be elongated in a direction substantially parallel with the surfaces between which it is pressed.

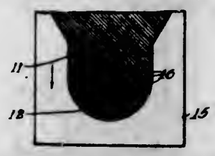
1,892,179. METHOD OF MAKING BEARING SLEEVES. BERGER STOCKFLETH, Niles, Mich., assignor, by mesne assignments, to The Cleveland Graphite Bronze Company, Cleveland, Ohio, a Corporation of Ohio. Filed Jan. 2, 1931. Serial No. 506,196. 6 Claims. (Cl. 29—149.5.)



1. The herein described method of making a bi-metal bearing sleeve of the kind described, which consists in first making a bi-metal blank for the sleeve, the blank consisting of a harder, tougher metal back and a relatively softer bearing metal lining, the lining both mechanically and molecularly bonded to the back and the lining being relatively thin and subjecting the blank to sufficient pressure applied substantially radially thereto in suitable dies, to thin the sleeve radially and cause substantially equal elongation of the metals of the sleeve in a direction substantially parallel to the die surfaces.

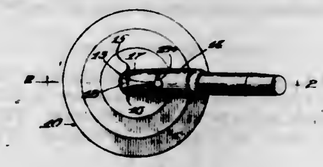
1,892,180. METHOD OF MAKING BEARING SLEEVES. BERGER STOCKFLETH, Niles, Mich., assignor, by mesne assignments, to The Cleveland Graphite Bronse Company, Cleveland Ohio, a Corporation of Ohio. Filed Jan. 2, 1931. Serial No. 506,197. 4 Claims. (Cl. 29—149.5.)

1. The herein described method of making bi-metal bearing sleeves which consists in preforming a backing shell substantially to the form and dimensions of the back in the finished sleeve, coating at least the inner surface of the shell with a suitable bonding metal such as tin, heating the coated shell to a temperature sufficient to cause the bonding metal to form a molten film on the inner surface of the shell, preparing the lining metal in sheet form, with suitable die members pressing a piece of the sheet lining material into the inner concave surface of the shell and into intimate and firm con-



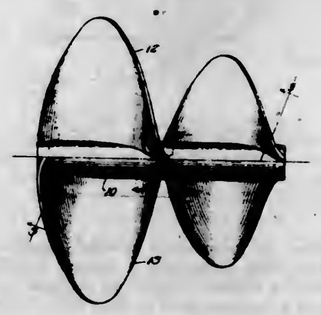
tact with the molten film of bonding metal thereon, and holding the lining pressed against the shell for an interval to permit the lining to become heated to a point of malleability, and then subjecting the sleeve to sufficient pressure to cause a thinning of the sleeve and its elongation circumferentially.

1,892,181. DESK SET STRUCTURE. IVAN D. TEFFT, Janesville, Wis., assignor to The Parker Pen Company, Janesville, Wis., a Corporation of Wisconsin. Filed Feb. 1, 1932. Serial No. 590,177. 16 Claims. (Cl. 120—108.)



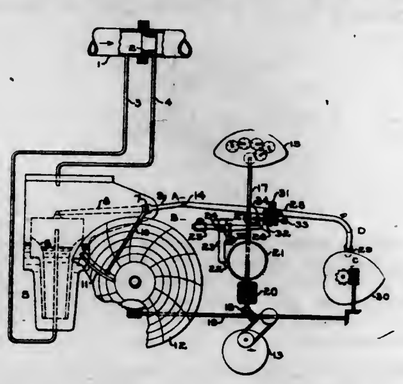
1. In structure of the class described, a base having a seat-pocket in its top surface, and a spring member supported by said base and extending across said pocket, said spring member being capable of yielding movement toward and from said pocket.

1,892,182. SCREW PROPELLER. EDWARD A. L. THAYER, Chicago, Ill. Filed Apr. 30, 1931. Serial No. 533 962. 6 Claims. (Cl. 170—156.)



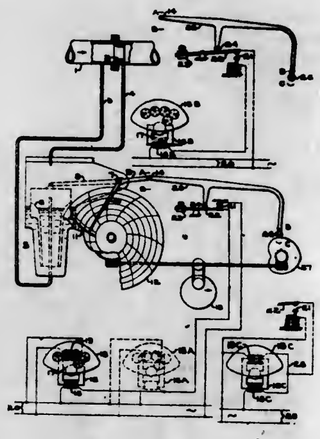
1. A screw propeller comprising a hub for engaging a power shaft, and a plurality of substantially helicoidal blades on said hub, the front and rear portions of each of said blades being concavo-convex when viewed in cross-section with the convex faces facing each other and the respective concave and convex faces merging in a substantially flat surface between the ends of said blades.

1,892,183. INTEGRATING MECHANISM. HARVARD H. GORRIN, Cleveland, Ohio, assignor to Bailey Meter Company, a Corporation of Delaware. Filed Aug. 10, 1931. Serial No. 556,153. 37 Claims. (Cl. 235—61.)



1. Mechanical apparatus for integrating a variable with respect to time comprising in combination, a member positioned responsive to the value of the variable, means actuated at a substantially uniform time rate, and mechanical means for periodically accumulating time increments of individual value dependent upon the first-named means.

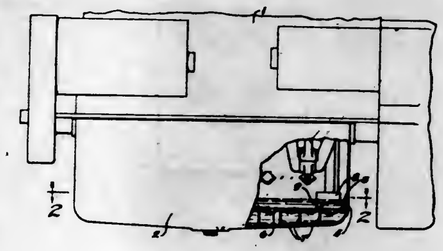
1,892,184. INTEGRATING MECHANISM. RAW E. WOOLLEY, Shaker Heights, Ohio, assignor to Bailey Meter Company, a Corporation of Delaware. Filed Aug. 10, 1931. Serial No. 556,157. 54 Claims. (Cl. 235—61.)



1. Apparatus for periodically remotely electrically effecting an actuation, comprising a member positioned by a time responsive element and by an element responsive to the value of a variable such as fluid rate of flow.

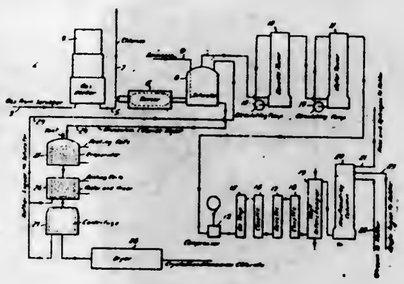
1,892,185. CRANKCASE WITH FALSE BOTTOM. FRANK O. CLEMENTS, Detroit, Mich., assignor to General Motors Research Corporation, Detroit, Mich., a Corporation of Delaware. Filed Apr. 28, 1928. Serial No. 273,655. 7 Claims. (Cl. 210—57.)

1. In combination with an internal combustion engine, of an oil pan, a partition wall therein extending across the pan in spaced relation with the bottom thereof to afford a sediment chamber, said wall having openings therein with the adjacent material on each side of the several



openings inclined downwardly to provide deflectors against the return of sediment through said openings, and an oil pump in said pan above the partition wall.

1,892,186. PRODUCTION OF ARGON AND NEON. ELAM C. CURTIS, Niagara Falls, N. Y., assignor to The Mathieson Alkali Works, New York, N. Y., a Corporation of Virginia. Filed Nov. 7, 1930. Serial No. 493,962. 2 Claims. (Cl. 23—209.)

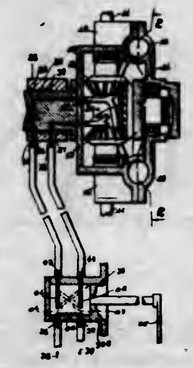


1. The production of gases of the group comprising argon and neon as by-products of the synthesis of ammonia from atmospheric nitrogen, by burning the hydrogen in the residual gas mixture remaining after separation of ammonia and containing hydrogen, nitrogen, argon and neon, with chlorine, removing the hydrochloric acid so produced from the resulting gas mixture, compressing and cooling the remaining gases to liquefy the nitrogen and argon, separating the neon therefrom and fractionating the remaining gases to separate the argon from the nitrogen.

1,892,187. VARIABLE AND REVERSIBLE PITCH PROPELLER. WILLIAM M. DRENNON, Anaheim, Calif., assignor of one-tenth to W. L. Everett, Anaheim, Calif. Filed June 18, 1930. Serial No. 460,887. 1 Claim. (Cl. 170—163.)

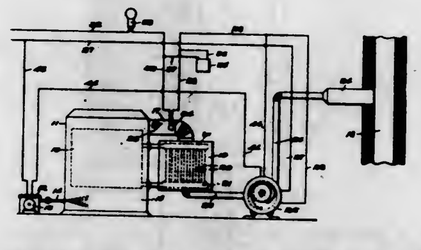
In a propeller structure in which the individual propeller-blades are turnably mounted and operative by a gear-mechanism, a turnable piston-structure with piston tops facing and moving in a circular direction in operative connection with said gear mechanism, and a cylinder having radially disposed partitions to form cylinder-heads and

having connections for a pressure medium in the cylinder-walls at different points away from such heads and adapted to hold said piston-structure on opposite sides of such cyl-



inder-heads in predetermined positions near certain of such points when the pressure medium is passed through certain of the connections.

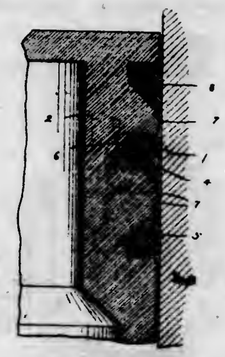
1,892,188. COMBUSTION CONTROL DEVICE. GEORGE E. GOODRIDGE, Reading, Mass., assignor to Arthur H. Ballard, Incorporated, Boston, Mass., a Corporation of Massachusetts. Filed Dec. 8, 1928. Serial No. 323,266. 4 Claims. (Cl. 158—4.)



1. In a heating system, a furnace provided with a fluid fuel burner and a flue for the products of combustion thereof, a power-driven draft producing device of the positive displacement type connected to create a draft in said furnace; and means for starting and stopping said power-driven device and said fluid fuel burner, said means providing for starting said power driven device to establish a draft before starting said burner and for stopping said power driven device when said burner is stopped to thereby not only suspend induced draft through the system but also check any natural draft therethrough by the character of said power driven device; whereby provision is made for the establishment of an induced draft prior to starting of said burner to avoid excessive pressures in said combustion chamber, the maintenance of proper draft during operations of said burner and the checking of natural draft after stoppage of said burner to prevent dissipation of heat thereby, thus to improve the efficiency of the system.

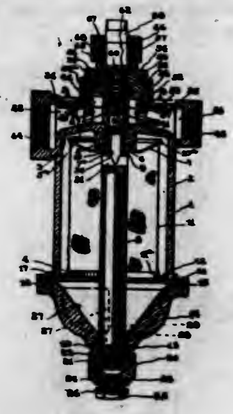
1,892,189. PISTON PACKING. FREDERIC C. HECKROTH, Duluth, Minn., assignor of one-half to Peter L. Berke, Duluth, Minn. Filed May 2, 1932. Serial No. 608,753. 1 Claim. (Cl. 74—108.)

In combination a piston having three cooperative packing ring grooves, one wall of all of the grooves being horizontal and parallel, one wall of two of the grooves being inclined and parallel, and one wall of the other groove being inclined but in the opposite direction to the inclined walls of the other grooves, a packing ring for each groove having a minor and major parallel wall, and said piston be-



ing provided with a minor stepped groove at the terminus of the inclined wall of each groove for cooperative association with the minor wall of each ring.

1,892,190. STRAINER. PHILIP SHERMAN RUSSELL, Detroit, Mich., assignor to Detroit Lubricator Company, Detroit, Mich., a Corporation of Michigan. Filed Feb. 25, 1928. Serial No. 256,833. 12 Claims. (Cl. 210—165.)

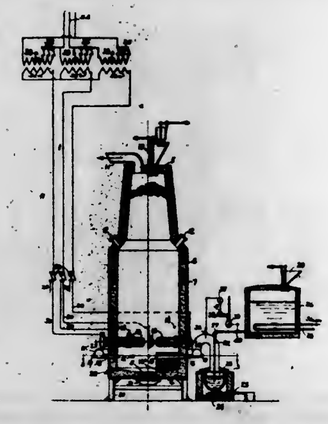


1. A device of the character described, comprising a hollow casing having an end wall, a sleeve having a longitudinal bore and depending from said wall, an upwardly and outwardly flaring plate overlying the free end of said sleeve and having a central aperture alined with said bore, means to seal said plate to said sleeve, a strainer element secured to and sealed along the periphery of said plate, and an outlet passage leading from the interior of said casing through said end wall.

1,892,191. APPARATUS FOR THE MANUFACTURE OF CARBON BISULPHIDE. CLARENCE C. SCHWEGLER, Midland, Mich., assignor to The Dow Chemical Company, Midland, Mich., a Corporation of Michigan. Filed Oct. 9, 1930. Serial No. 487,449. 9 Claims. (Cl. 13—23.)

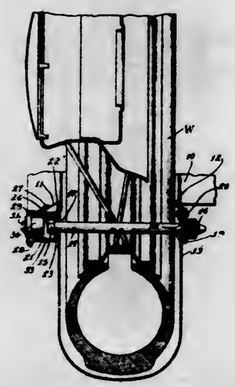
1. In an electric furnace for the manufacture of carbon bisulphide, the combination of a chamber to contain a body of carbon material, a plurality of electrodes laterally in-

sorted in the lower part of said chamber, a source of electrical supply to said electrodes, switch means for disconnecting each electrode independently, a plurality of sulphur



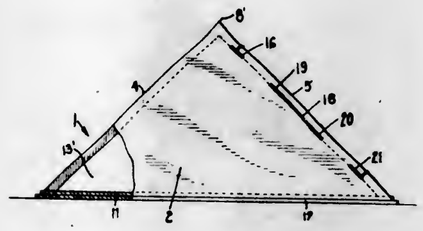
vapor inlets below said electrodes, a source of sulphur vapor supply and valve means for independently controlling each of said inlets.

1,892,192. FENDERWELL LOCK FOR SPARE WHEELS OR TIRES. FREDERICK A. SMITH, North Chicago, Ill., assignor to Oakes Products Corporation, North Chicago, Ill., a Corporation of Michigan. Filed June 22, 1931. Serial No. 545,942. 2 Claims. (Cl. 70—90.)



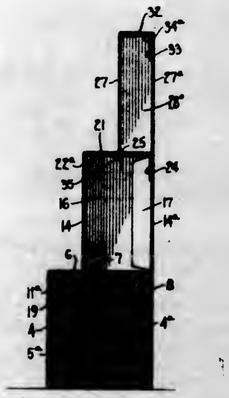
1. The combination with a fender having a depending skirt or roll along its outer edge and a frame depending from said fender adjacent to said skirt forming a well for receiving a spare wheel or tire, aligned openings in the front and rear walls of said well frame below the top wall of the fender, a fitting rigidly secured to the front wall of the well frame and having an opening in its inner wall in alignment with the well frame passageways, a bolt shiftable through said fitting opening and well wall passageways to extend transversely through said well below the top thereof, and to prevent unauthorized removal of a spare wheel or tire, the head of said bolt being within said fitting, said skirt having an opening through which the outer end of said fitting projects, a flange on said fitting formed to intimately engage against the outer side of said skirt to strengthen said skirt, and lock mechanism on said fitting for preventing access to the bolt head therein.

1,892,193. NAPKIN HOLDER. ABRAHAM SINGER, New York, N. Y. Filed June 5, 1931. Serial No. 542,326. 8 Claims. (Cl. 211—50.)



1. A napkin holder, said napkin holder comprising spaced triangularly shaped side pieces and a connecting bottom piece, a support comprising a plate secured to said bottom piece, said support being larger in area than said bottom piece, apertures in two of the opposed edges of the spaced side pieces, and a string extending thru the apertures of the opposed edges of the side pieces.

1,892,194. ADVERTISING DEVICE. JOHN A. TAYLOR, Elmhurst, N. Y., assignor to Niagara Lithograph Company, New York, N. Y., a Corporation of New York. Filed Sept. 15, 1931. Serial No. 562,858. 2 Claims. (Cl. 40—126.)



1. An advertising device comprising a series of connected and superposed sections, each said section having front walls, each section below the top section also having a top wall, each section above the lower section having a vertical wall provided with means which enter and which are adapted to engage the top wall of the preceding lower section, said device being made of a single sheet of cardboard cut and scored in order to provide the parts of said device.

1,892,195. CONTAINER. MILO C. TROYER, Shipshewana, Ind. Filed Mar. 9, 1931. Serial No. 521,046. 7 Claims. (Cl. 206—41.)

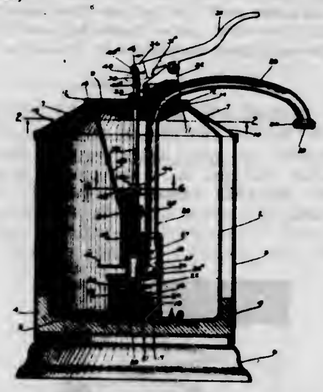
1. A container of the character described comprising a pair of box-like sections operatively and separably connected together to enable opening and closing thereof and to

admit and contain a package provided with a severable wall, and package impaling and package wall severing means mounted within the container, whereby the package



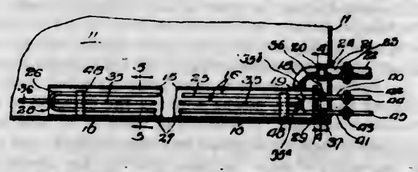
wall is severed when said severing means is actuated, said impaling and wall severing means being separate means and successively operated.

1,892,196. LIQUID DISPENSING DEVICE. LYNN THOMPSON, Minneapolis, Minn., assignor, by mesne assignments, to Olive Symons, Minneapolis, Minn. Filed Sept. 27, 1929. Serial No. 395,634. 4 Claims. (Cl. 225—35.)



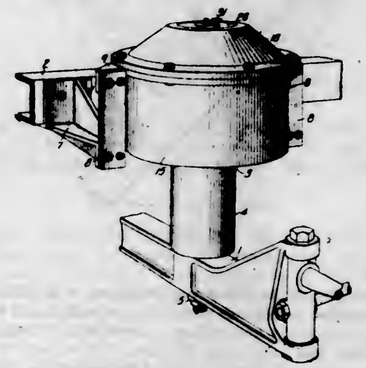
1. A device for dispensing liquids, comprising a pump including a casing having an open bottom to provide an intake passage, and having an outlet passage in its upper portion, a conduit having one end connected with said outlet passage and extending upwardly therefrom and curved outwardly and downwardly to provide a seamless discharge passage for the pump, a valved plunger operatively mounted in said casing, a lever for operating said plunger, and means for regulating the quantity of liquid dispensed per stroke of the plunger.

1,892,197. HEATER FOR OIL TANKS. ADAM G. P. ZERWER, Whiting, Ind., assignor of one-fifth to John H. Fetterhoff and one-fifth to George J. Zerwer, Whiting, Ind. Filed Oct. 10, 1931. Serial No. 568,089. 8 Claims. (Cl. 257—198.)



1. Steam pipe construction for a heater of the character described comprising inlet pipe means and return pipe means having their main parts extending substantially parallel to each other and joined together at their outer ends to form a loop, and pipe means forming an auxiliary loop having an inlet part and a return part joined together at their outer ends, the inner ends of said auxiliary loop parts being joined in communication with said first-mentioned inlet and return pipe means respectively.

1,892,198. CHASSIS SUPPORT. GEORGE F. YEVSEYEFF, Detroit, Mich. Filed Dec. 9, 1927. Serial No. 238,847. 11 Claims. (Cl. 267—34.)



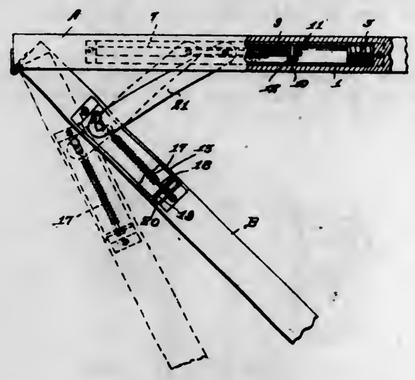
1. In a chassis-supporting device including a casing and casing-supporting means including a member reciprocable in the casing, vertically rigid and laterally resilient hangars fixed to the casing and chassis for supporting the chassis from the casing, and laterally cushioning means connected with the casing and the chassis.

1,892,199. ONE-WAY PLOW. RUDOLPH J. ALTGELT and CAMERON H. GEMMERLING, South Bend, Ind., assignors to Oliver Farm Equipment Company, a Corporation of Delaware. Filed June 5, 1930. Serial No. 459,811. 19 Claims. (Cl. 97—53.)



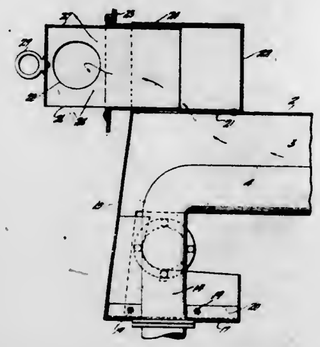
1. The combination with a one way plow having a diagonally disposed beam, a plurality of discs secured rearwardly of said beam, a land wheel for supporting the rear end of said beam, a dirigible furrow wheel supporting the forward end of said beam, a draft member pivoted directly to said beam and operatively connected to said furrow wheel for forming the draft connection for said plow for controlling the direction of travel of the same and a floating end thrust bearing carried by the rearmost disc and movably related to said beam for sustaining the end thrusts of all of said discs.

1,892,200. DOOR CHECK AND CLOSER. WILLIAM ANDERSON, Seattle, Wash. Filed Nov. 9, 1931. Serial No. 574,021. 1 Claim. (Cl. 16—66.)



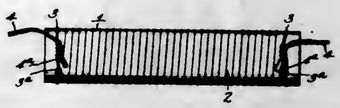
In a device of the character described, a longitudinally slotted tubular casing adapted to be embedded and secured within a door frame and having a closed end, a plug closing its opposite end and being provided with a bore to allow for the ingress and egress of air with respect to the tubular casing, means for controlling the passage of air through the bore, a piston mounted for movement within the tubular casing, a piston rod carrying said piston, a right angle bent end included in said piston rod and extending through the slot of the casing, a metallic frame adapted to be embedded and secured within a door, a crank shaft journaled in the metallic frame, a coil spring having connection with the crank shaft, means for adjusting the tension of said coil spring, and a link having its ends connected to the crank shaft and right angle bent end of the piston rod respectively.

1,892,201. AUTOMOBILE HEATER. ALBERT L. BLACKMER, Peterson, Iowa. Filed Mar. 19, 1930. Serial No. 436,934. 2 Claims. (Cl. 98—2.)



1. In combination with a dash of an automobile, a device of the kind described, comprising a hot air collector having an open end extended through the dash into the passenger compartment, the said hot air collector having openings also through its upper and lower sides at the engine side of the dash, a hot air distributor slidably mounted in the hot air collector through the open end thereof leading into the passenger compartment, the said distributor being open at its under side and having an opening also through its upper side adapted to be exposed within the passenger compartment as the distributor is pulled out, and to register with the upper opening of the hot air collector at the engine side of the dash when pushed in.

1,892,202. RESISTANCE UNIT. FREDERIC H. BULLINGS, Bronxville, N. Y., assignor to Ward Leonard Electric Company, a Corporation of New York. Filed July 14, 1930. Serial No. 467,674. 1 Claim. (Cl. 201—64.)



A resistance device comprising a support, a resistive conductor thereon, a metal wire embracing said support and having its ends twisted together, a conductive wire terminal held in position on said support by said element, said metal wire and conductive wire being wound one around the other, said resistive conductor being directly mechanically and electrically connected with said conductive wire, said metal wire being of a metal having a higher tensile strength and lower coefficient of expansion than the metal of said conductive wire, and an insulating coating covering said resistive conductor and terminal connection.

1,892,203. MATTRESS AND ITS MANUFACTURE. OLIVER M. BURTON and FRED R. ZIMMERMAN, Chicago, Ill., assignors, by mesne assignments, to Burton-Dixie Corporation, Chicago, Ill., a Corporation of Delaware. Filed Dec. 31, 1929. Serial No. 417,792. 4 Claims. (Cl. 5—360.)



1. In a roll-edge mattress, the combination of a spring-assembly having upright spiral-springs, paddings for the top and bottom of said spring-assembly, fabrics covering said top and bottom assembly paddings, a padded boxing around the edge of the mattress including an inner fabric, an outer fabric, padding between said inner and outer fabrics, and means quilting said inner and outer boxing-fabrics through said boxing-padding and terminating inwardly from the longitudinal margins of said inner and outer boxing-fabrics practically in register with the top and bottom edges of said spring-assembly, means securing the edge portions of said inner boxing-fabric to the inner sides of said top and bottom cover-fabrics inwardly away from the margins of the latter, means securing the margins of said cover-fabrics and the corresponding margins of said outer boxing-fabric together forming roll-edge casings, and paddings in said roll-edge casings, whereby the propensity of said spring-assembly to expand tends to maintain said inner boxing-fabric taut and thus preserves the puffed effect of said outer boxing-fabric.

1,892,204. INDUCTANCE COIL. CORNELIS BOL, Eindhoven, Netherlands, assignor to Radio Corporation of America, a Corporation of Delaware. Filed Feb. 1, 1930, Serial No. 425,095, and in the Netherlands Mar. 2, 1929. 7 Claims. (Cl. 175—359.)

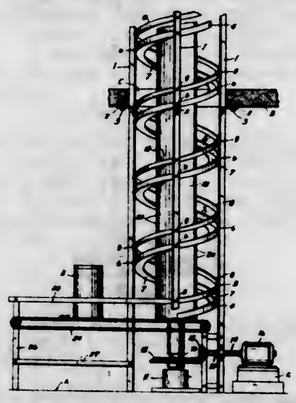


1. A method of producing a shielded inductance coil which consists in disposing an inductance coil within a shielding container, adjusting the spatial relationship between the said container and said coil to adjust the value of the coil inductance to a desired quantity, and evacuating the container.

1,892,205. PROCESS FOR PREVENTING ACCUMULATION OF SOLID MATTER IN OIL WELLS, PIPE LINES AND FLOW LINES. MELVIN DE GROOTE, St. Louis, Mo., assignor, by mesne assignments, to Tretolite Company, Webster Groves, Mo., a Corporation of Missouri. Filed Feb. 23, 1926. Serial No. 90,141. 3 Claims. (Cl. 166—21.)

1. A process for preventing the accumulation of solid matter in an oil well or pipe line, characterised by introducing into a substantially clean producing well or oil flowing line that is producing or which contains liquid comprising non-cutting oil, a minute quantity of a soluble deflocculent agent containing a modified organic detergent-forming material, for holding the suspended solid material in said liquid in a non-flocculent condition.

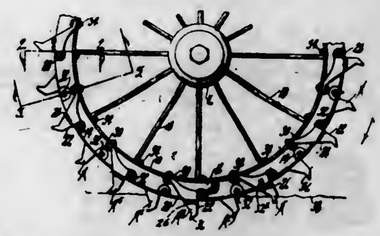
1,892,206. CONVEYER. FRANK J. DIETZ, Baltimore, Md., assignor to Alvey Manufacturing Company, St. Louis, Mo., a Corporation of Missouri. Filed Jan. 14, 1932. Serial No. 586,508. 3 Claims. (Cl. 198—212.)



1. A conveyer comprising a comparatively steep helical conveyer way, guiding means around the outside of said way, a rotary element located centrally of said way, said rotary element having concave seats throughout the length of the way constituting inner guiding means for keeping articles on said way without allowing them to tilt and also constituting means for controlling the movement of articles thereon.

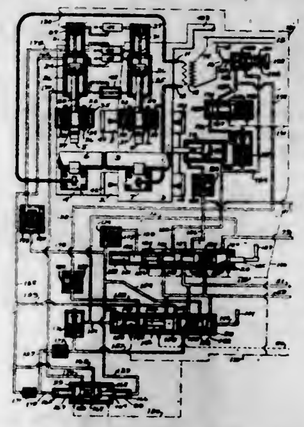
1,892,207. RIM AND LUG FOR TRACTION WHEELS. JOHN J. BUKEN, Cumberland, Iowa. Filed Mar. 21, 1932. Serial No. 600,290. 4 Claims. (Cl. 301—44.)

1. In a traction wheel construction, a cylindrical rim having a circumferentially extending raised divider rib therearound and traction lugs on said rim and divider rib, each traction lug comprising a blade having an upwardly and rearwardly slanting rear face and a substantially vertical front face when said lug is beneath



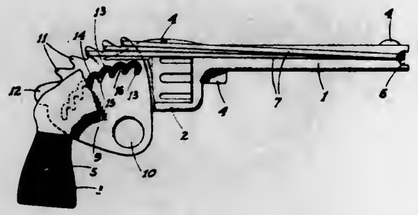
the axle of said traction wheel, said lug having an attaching ear at its forward edge attached to said divider rib and an attaching ear at its rear edge attached to said rim.

1,892,208. WELDING MACHINE. WALTER FERRIS, Milwaukee, JOHN P. FERRIS, Whitefish Bay, and GLEN MACOMBER, Waukesha, Wis., assignors to The Oilgear Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed Nov. 28, 1930. Serial No. 498,656. 23 Claims. (Cl. 219—4.)



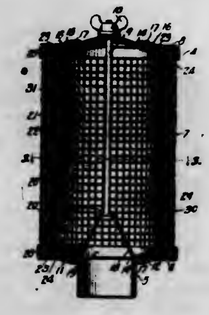
12. A welding machine, comprising a frame, a carriage arranged upon said frame to slide thereon, a hydraulic clamp motor carried by said frame in a stationary position, a hydraulic clamp motor connected in parallel with said stationary clamp motor and secured to said carriage to move therewith, a stationary clamp having one of its jaws fixed to said frame and its other jaw movable toward and from its fixed jaw by said stationary clamp motor, a movable clamp having one of its jaws fixed to said carriage and its other jaw movable toward and from its fixed jaw by said movable clamp motor, a hydraulic motor for operating said carriage, a pump connected to all of said motors for supplying liquid thereto to operate the same, means for directing pressure liquid from said pump to said clamp motors to operate the same and cause said clamps to exert a gripping force between the jaws thereof and for blocking the connection between said pump and said clamp motors to discontinue further delivery of liquid to said clamp motors and to trap the pressure liquid therein, means for then directing liquid from said pump to said carriage motor to operate the same, and an energy accumulator arranged between each clamp motor and the clamp jaw operated thereby for maintaining said gripping force substantially constant after the delivery of liquid to said clamp motors has been discontinued.

1,892,209. TOY GUN. JOSEPH B. FISHER, Strathmore, Calif. Filed Mar. 25, 1932. Serial No. 601,120. 5 Claims. (Cl. 124—14.)



1. In a toy gun to shoot elastic bands, a vertical plate projecting through and movably mounted in the stock of the gun, upstanding lugs along the upper edge of the plate to engage individual bands at one end, said bands being adapted to be stretched and engaged at the other end with the front end of the gun, a trigger element formed with the plate, and means between the stock and plate acting when the plate is in a cocked position and with the pulling pressure of the bands thereon, to hold the plate at its upper edge against forward movement but permitting such movement to a predetermined extent to take place upon the pulling of the trigger, and causing the upper forward end of the plate and the adjacent lug to be pulled down.

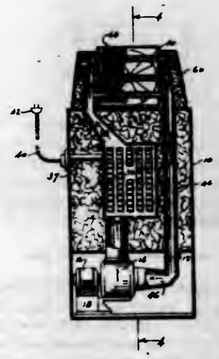
1,892,210. FILTER. JOHN A. GORDON, Kansas City, Mo. Filed May 20, 1930. Serial No. 453,912. 2 Claims. (Cl. 183—73.)



1. In a filter, head members each having spaced concentric flanges, concentrically spaced cylindrical wire mesh members mounted between said flanges and spaced from the head members, a filtering body between said wire mesh members including an embedded coextensive reinforcing member of wire mesh, the ends of said filtering body being retractively bent over the inner wire member and seated in compressed condition between the head flanges, and means for urging the filter heads toward each other.

1,892,211. ELECTRIC HEATER. LESLIE A. HOPKINS, Detroit, Mich. Filed Nov. 10, 1930, Serial No. 494,490. Renewed Oct. 26, 1931. 10 Claims. (Cl. 219—39.)

1. In a heater including an insulating casing, a fan casing, an air duct, whose lower end is connected to the fan casing outlet, electrical heating units in said duct between its ends, a pipe having its lower end connected to the fan casing inlet, connections between the upper ends of the duct and pipe, and a fan in said casing serving to draw air down thru said pipe and force it upwardly thru said duct, said connections being exposed to the medium to be heated by said heater and being



provided with exteriorly projecting heat radiating fins which serve to radiate to the medium the heat imparted to the air in said duct by said electrical heating units.

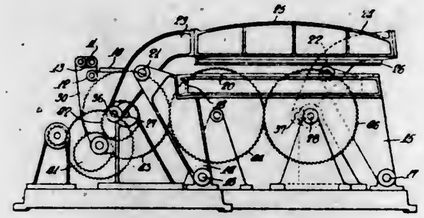
1,892,212. GAUGE. ALTON KIRKPATRICK, Lansdowne, Pa. Filed Oct. 23, 1926. Serial No. 143,587. 4 Claims. (Cl. 73—54.)



2. A gauge glass mounting comprising a casing having therein an aperture for a gauge glass, members projecting radially from said casing, and means for sealing a joint between said casing and a gauge glass inserted in said aperture, said means comprising a packing and a member having a part engaging said packing and a part sleeved on said casing and held against rotation by said radial projections, and a retainer engaging said sleeve and casing to move said sleeve relatively to said casing.

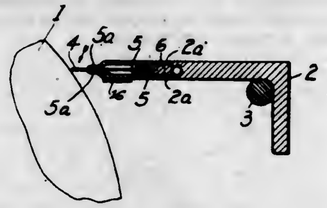
1,892,213. CUT-OFF MECHANISM. SAMUEL M. LANGSTON, Wenonah, N. J. Filed Sept. 9, 1931. Serial No. 561,925. 11 Claims. (Cl. 164—49.)

1. In combination, feeding means for continuously advancing sheet material, a pair of cooperating knives extending diagonally with respect to the direction of feed of the sheet material, and means for moving said cutting



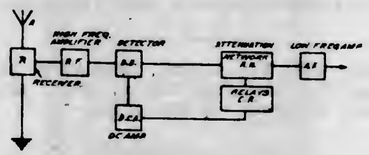
knives during their cutting period back and forth in the direction of feed of said material and toward and from each other.

1,892,214. DOCTOR MECHANISM FOR ROLLS AND CYLINDERS. FREDERICK W. LODDING, Worcester, Mass. Filed June 22, 1929. Serial No. 372,889. 13 Claims. (Cl. 92—74.)



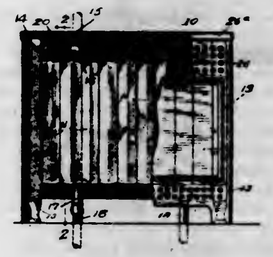
1. In a device of the class described, a thin flexible blade providing a straight scraping edge, and means for frictionally clamping said blade from opposite sides parallel to its edge and adjacent thereto to permit lateral adjustment of said blade by the application of a force outside of the area of frictional engagement by said clamping means.

1,892,215. AUTOMATIC CURRENT REGULATING DEVICE. GASTON ADELIN MATHIEU, London, England, assignor to Radio Corporation of America, a Corporation of Delaware. Filed Dec. 14, 1927, Serial No. 239,843, and in Great Britain Jan. 7, 1927. 4 Claims. (Cl. 178—44.)



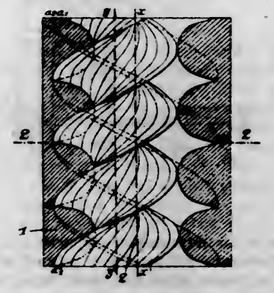
1. An automatic limiting and regulating device, suitable for use in signalling systems and comprising signal intensity reducing means, means for varying the attenuation or weakening properties of the intensity reducing means comprising a plurality of relays energized by currents substantially proportional to the intensity of the signals to be limited and regulated and adapted to be actuated in succession by rising values of said intensity, so that the attenuation or weakening properties of the said intensity reducing means are varied according to variations in the said signal intensity, a winding associated with each of said relays in such a manner that its response to the energising currents may be adjusted, a resistance in series with each of the response adjusting windings and means for short-circuiting said resistances except when their appropriate relays are actuated.

1,892,216. RADIATOR. ANDRÉ M. MERTZANOFF, New York, N. Y., assignor to American Radiator Company, New York, N. Y., a Corporation of New Jersey. Filed Apr. 30, 1929. Serial No. 359,334. 3 Claims. (Cl. 257—136.)



2. A radiator comprising a plurality of intermediate sections and end sections communicatively connected by apertures adjacent to their upper and lower ends; said last-named apertures being arranged horizontally in alignment, said intermediate sections being shorter than said end sections whereby to provide extended surfaces on said end sections projecting vertically beyond said intermediate sections, and the inner opposing sides of the extended portions of said end sections provided with pipe-receiving apertures disposed below said lower line of apertures, substantially as specified.

1,892,217. GEAR MECHANISM. RENÉ JOSEPH LOUIS MOINEAU, Paris, France. Filed Apr. 27, 1931, Serial No. 533,187, and in France May 18, 1930. 10 Claims. (Cl. 74—41.)

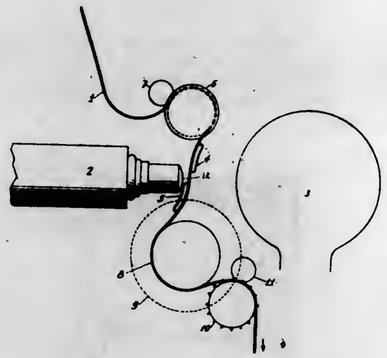


1. A device of the type described comprising two helical gear members disposed within one another, the outer member having one helical thread more than the other, and the two members being so arranged and shaped that every thread of the inner member is constantly in contact with the outer member in any transverse section, the pitches of the helices of the two members being, in any transverse section in the same ratio as the numbers of threads of said members respectively.

1,892,218. FILM PASS. MILTON HARRISON FAGE, Cohoes, N. Y., assignor to Radio Corporation of America, a Corporation of Delaware. Filed Dec. 17, 1929. Serial No. 414,634. 8 Claims. (Cl. 179—100.2.)

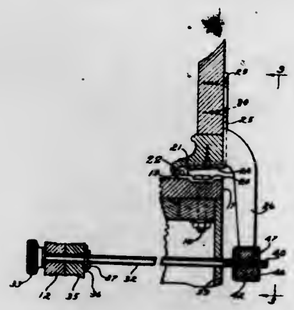
1. Apparatus for controlling the motion of a moving film for use in sound recording and reproduction which

includes, a stationary curvilinear guide means adapted to co-act with the film on one side thereof, and a second



curvilinear guide adapted to co-act with said film on the opposite sides thereof, said guides being so disposed that the motion of the film therebetween is a straight line.

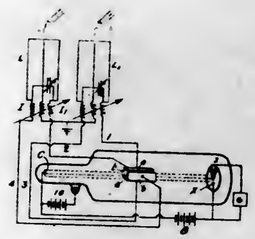
1,892,219. MIRROR SUPPORTING AND ADJUSTING DEVICE. GUST C. PETERSON, Jamestown, N. Y. Filed Apr. 16, 1930. Serial No. 444,734. 3 Claims. (Cl. 45—5.)



1. A device for adjustably supporting a mirror on an article of furniture comprising a pair of pivotally joined fixed and movable elements, said fixed element being mounted on the outside of said article of furniture, flanges on said movable element engaged with the frame of and supporting said mirror, a rotatable rod mounted in said article, a channel member threadedly engaging with said rod, and means linking said channel member with said movable element whereby rotation of said rod causes said mirror to be tilted forwardly or backwardly.

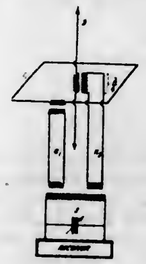
1,892,220. THERMIONIC TUBE FOR DIRECTIONAL RECEPTION. WILHELM RUNGE, Berlin, Germany, assignor to Telefunken Gesellschaft für Drahtlose Telegraphie m. b. H., Berlin, Germany, a Corporation of Germany. Filed Oct. 27, 1927, Serial No. 229,045, and in Germany Nov. 5, 1926. 5 Claims. (Cl. 250—11.)

1. A receiving system, comprising means for the generation of a cathode ray pencil, deflection means comprising two pairs of parallel plates disposed at right angles to each other, and an electron collector adjacent the normal path of said ray, the said electron collector comprising a wedge shaped sector the surface of which is at right



angles to the direction of the uninfluenced cathode rays, all of the sector being outside the normal path of said rays.

1,892,221. POLARIZATION DIVERSITY RECEPTION. WILHELM RUNGE, Berlin, Germany, assignor to Telefunken Gesellschaft für Drahtlose Telegraphie m. b. H., Berlin, Germany, a Corporation of Germany. Filed Jan. 30, 1929, Serial No. 336,125, and in Germany Feb. 18, 1928. 1 Claim. (Cl. 250—2.)



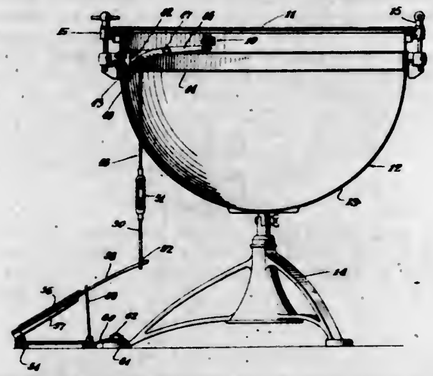
An arrangement for the reception of electromagnetic waves comprising a vertical antenna and a horisontal antenna at right angles to each other, said antennæ being connected to transmission lines with a joint radio frequency circuit, one of said transmission lines being longer than the other by a length equivalent to one quarter of the communication wave whereby the oscillations of both antennæ are fed to said radio frequency circuit with a phase displacement angle of 90 degrees.

1,892,222. HIGHWAY GUARD. WALLACE W. RUSSELL, Kansas City, Mo. Filed Feb. 15, 1932. Serial No. 592,916. 8 Claims. (Cl. 256—13.1.)



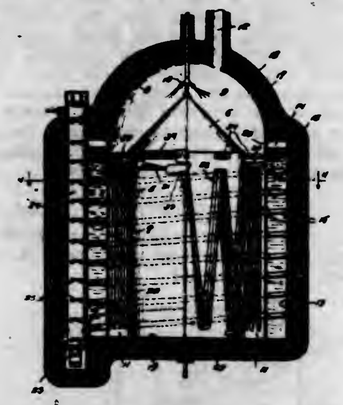
1. A highway guard including a support, a cable carried by the support, and resilient means supporting the cable in spaced relation with the support, including adjustable means for tensioning the cable.

1,892,223. PERCUSSION INSTRUMENT. LORENZO SANSONE and CESARE FRANCO, New York, N. Y. Filed June 12, 1931. Serial No. 543,785. 5 Claims. (Cl. 84—419.)



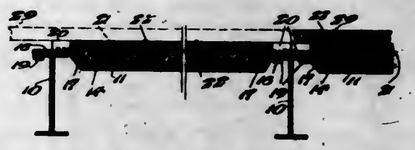
1. In combination with a percussion musical instrument having a head, a damper member mounted within said instrument and means for moving said damper member into engagement with the head of said instrument, said damper member including a supporting base, a plurality of strings in spaced relation thereto and means for mounting said strings on said supporting base, said means including, at one end of said base, a "U" shaped channel member and a piece of resilient material carried within said channel member forming a bridge for spacing said strings from said base, a block member at the end portion of said base for securing the ends of said strings, and, at the opposite end of said base, a sliding string carrier to which the opposite ends of said srings are secured, and means for adjustment of said string carrier longitudinally of the supporting base.

1,892,224. APPARATUS FOR FREEZING CANNED GOODS. DANIEL G. SOREBE, El Monte, Calif. Filed Nov. 9, 1931. Serial No. 573,974. 7 Claims. (Cl. 62—101.)



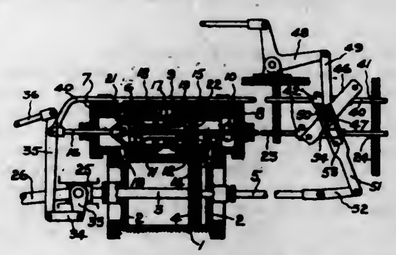
7. In an apparatus for freezing canned goods, a vertical cylindrical chamber having a refrigerant bath therein, a settling chamber in heat-interchanging relation with said first-named chamber, absorption coils within said settling chamber, means for circulating the refrigerant of the bath through said first-named chamber and said coils, means for continuously passing cans of goods through said first-named chamber, and means for expanding a compressed refrigerant and supplying the same to said settling chamber.

1,892,225. BUILDING CONSTRUCTION. FREDERICK M. VENZIE, Philadelphia, Pa. Filed Apr. 18, 1931. Serial No. 531,072. 3 Claims. (Cl. 72—66.)



1. In a building construction of the character stated, the combination of flanged floor beams and pre-cast slabs supported by said beams, said slabs having embedded therein longitudinally extended reinforcing rods, the terminals of which rods extend beyond the slab ends and are clinched with respect to the uppermost of the flanges of said beams to interlock adjacent slabs with respect to one another and to said beams, and additional longitudinally extended rods similarly embedded in said slabs, which latter rods of adjacent slabs are twisted together independently of said beams, the ends of said slabs each being provided with lugs arranged for abutting relation with adjacent slabs, there being a space between adjacent lugs for twisting accommodation.

1,892,226. VALVE GEAR. FRANCIS W. VERNON, Vancouver, British Columbia, Canada. Filed Mar. 18, 1930. Serial No. 436,795. 3 Claims. (Cl. 121—146.)

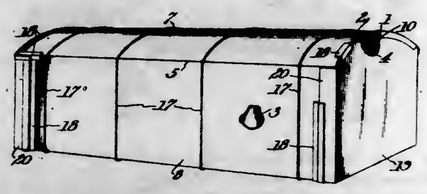


1. In a steam engine, a steam chest having steam inlet ports communicating with a working cylinder, which cylinder is provided with a working piston and piston rod, a sleeve valve having ports communicating with the steam inlet ports to the cylinder, a piston valve slidably mounted in the sleeve valve, a piston rod to said piston valve, a rod associated with the sleeve valve parallel to said valve piston rod, a rocking slide having a fulcrum, means pivotally connecting the slide on one side of the fulcrum with the rod associated with the sleeve valve and on the other side with the piston valve rod, and means for imparting movement to the fulcrum parallel to and between the piston valve rod and the sleeve valve rod in response to the movement of the working piston.

1,892,227. HARDENED ARTIFICIAL MATERIALS AND PROCESS OF PREPARING THEM. ARTHUR VOSS, Frankfort-on-the-Main-Hochst, Germany, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Original application filed Jan. 7, 1930, Serial No. 419,191, and in Germany Sept. 29, 1927. Divided and this application filed Apr. 27, 1931. Serial No. 533,357. 12 Claims. (Cl. 260—4.)

1. The process which comprises treating phenolaldehyde condensation products containing carboxyl groups with a nitrogen base selected from the group consisting of ammonia, aliphatic amines and cyclic amines and heating the water-soluble compounds thus obtained with a polyhydric alcohol to a temperature of between 100° C. and 200°C.

1,892,228. GRAVE VAULT COVER. EDWARD G. YOCHHEIM, Rittman, Ohio, assignor to The Ohio Boxboard Company, Rittman, Ohio, a Corporation of Ohio. Filed Jan. 6, 1931. Serial No. 506,985. 1 Claim. (Cl. 27—19.)



A grave vault cover, including a wrapper member of such form as to extend longitudinally of the vault from end to end thereof and having portions to cover the top and sides of the vault, said wrapper provided at its ends with flaps extending from said top and side covering portions and adapted to be folded inwardly into contact with the ends of the vault, and end pieces applied to said flaps and supported thereby out of contact with the ends of the vault.

1,892,229. DYESTUFFS OF THE DIBENZANTHRONE SERIES. KARL ZAHN and KURT SCHIMMELSCHMIDT, Frankfort-on-the-Main-Hochst, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Oct. 20, 1930. Serial No. 490,091. 2 Claims. (Cl. 260—61.)

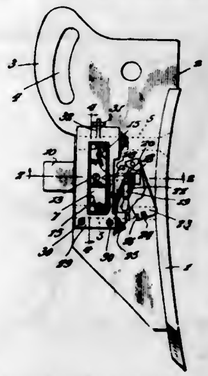
1. As new products, compounds of the following formula:



wherein R stands for alkyl being valuable dyestuffs which dissolve in concentrated sulfuric acid to an olive green solution and in organic solvents to a blue solution, yielding with alkaline hydrosulfite a blue vat from which the fiber is dyed excellently fast navy blue tints.

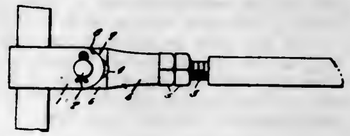
1,892,230. PLOW. NOAH ETCYL BARNES, Smallett, Mo. Filed Nov. 19, 1931. Serial No. 576,151. 3 Claims. (Cl. 97—198.)

1. The combination with a plow-blade, and its support, the blade and the support having bolt-receiving openings and the support having a chamber disposed between and communicating with the bolt-receiving openings and being provided with a socket between and parallel with the bolt-receiving openings, bolts fitted in the bolt-receiving openings of the blade and support and binding the blade to the support and provided with recesses in their sides defining transverse shoulders, a cam disk mounted in the chamber in the support and having its cam face engaging the shoulders of the bolts and provided in its bore with a key, a turn shaft rotatably mounted in the



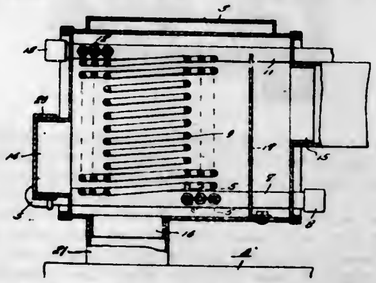
socket in the support and provided with a longitudinal keyway whereby it may be slid into or out of engagement with the disk, and means for detachably connecting the disk to said turning shaft.

1,892,231. KNIFE HOOK ADJUSTING SLEEVE. RICHARD P. BARNES, Spindale, N. C. Filed May 26, 1931. Serial No. 540,179. 1 Claim. (Cl. 287—100.)



1. A heat reclaimer comprising a casing, means for connecting the front portion thereof to the furnace section of a chimney pipe, means for connecting the rear portion to the chimney section of said pipe whereby the products of combustion from the furnace will pass through said casing, a baffle in the rear part of the casing and extending upwardly from the bottom thereof, header pipes passing through the casing, coils vertically arranged and having their ends connected with the header pipes, a jacket surrounding the casing, a supply pipe connected to one side of the jacket adjacent the bottom thereof, a pipe connected with the opposite side of the jacket adjacent the top thereof, means for connecting the last-mentioned pipe to the inlet header and an outlet pipe connected with the outlet header.

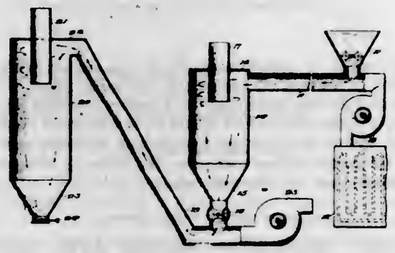
1,892,232. HEAT RECLAIMER. WILLIAM BONSLETT, McHenry, Ill. Filed July 29, 1932. Serial No. 626,181. 4 Claims. (Cl. 257—229.)



1. A heat reclaimer comprising a casing, means for connecting the front portion thereof to the furnace section

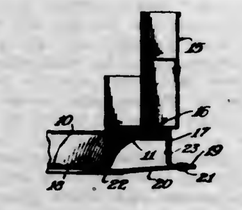
of a chimney pipe, means for connecting the rear portion to the chimney section of said pipe whereby the products of combustion from the furnace will pass through said casing, a baffle in the rear part of the casing and extending upwardly from the bottom thereof, header pipes passing through the casing, coils vertically arranged and having their ends connected with the header pipes, a jacket surrounding the casing, a supply pipe connected to one side of the jacket adjacent the bottom thereof, a pipe connected with the opposite side of the jacket adjacent the top thereof, means for connecting the last-mentioned pipe to the inlet header and an outlet pipe connected with the outlet header.

1,892,233. METHOD OF AND APPARATUS FOR DRYING CASEIN. FRANK LEWIS CHAPPELL, Hobart, N. Y. Filed July 14, 1930. Serial No. 467,922. 7 Claims. (Cl. 34—24.)



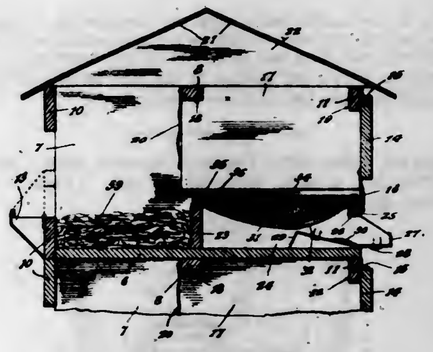
4. The method of curing pressed casein curd which comprises providing a current of heated air, injecting steam into said air current, chopping the pressed curd into particles the size of bird shot, feeding the chopped curd particles into dispersed suspension in the current of air, collecting the partially cured casein particles from the air, providing a current of hot dry air having a temperature between 120 and 350 degrees Fahrenheit, feeding the collected, partially cured casein particles into dispersed suspension in said hot dry air, maintaining said suspension in said hot dry air until the particles have been properly cured, and finally collecting the casein particles from the hot air in their properly cured, finely divided state.

1,892,234. MERCHANDISE HOLDER ATTACHABLE TO SERVICE TRAYS. EDWARD G. DE FOE, Oak Park, and CARL BRAMMING, Chicago, Ill., assignors to Red Boy, Inc., Chicago, Ill., a Corporation of Delaware. Filed Jan. 22, 1932. Serial No. 588,075. 5 Claims. (Cl. 45—51.)



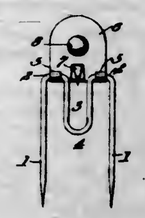
1. In a merchandise holding and displaying device adapted for application to a service tray comprising a flat central portion and an upwardly and laterally inclined marginal portion, a merchandise receptacle, a pair of spaced attachment brackets carried at the bottom of the receptacle, said brackets being of inverted U shape, one of the vertical legs of each bracket being provided with a foot adapted to rest on the upper surface of the flat central portion of the tray, and a clamping element pivoted to the other leg of the bracket and adapted to have its free end swung under the flat portion of the tray, in proximity to the aforesaid foot, when the marginal portion of the tray is embraced between the vertical legs of the bracket.

1,892,235. HEN'S NEST. WILLIAM T. ESCH, Kalama, Wash. Filed Aug. 18, 1930. Serial No. 476,183. 10 Claims. (Cl. 119—48.)



1. A laying tray comprising a frame open at its back and having front and side walls, a bottom for the rear portion of said frame having an upstanding flange at its rear, recesses being formed in the side walls having upper walls extending forwardly at an upward incline and the forward portion of the bottom being bent upwardly and secured against the upper walls of the recesses, and a seat carried by said frame and formed with an egg passage located above the forward portion of the bottom in front of the deflector.

1,892,236. HINGED PIN FASTENER. PAUL E. FENTON, Thomaston, Conn., assignor to Scovill Manufacturing Company, Waterbury, Conn., a Corporation of Connecticut. Filed July 16, 1931. Serial No. 551,230. 9 Claims. (Cl. 24—152.)



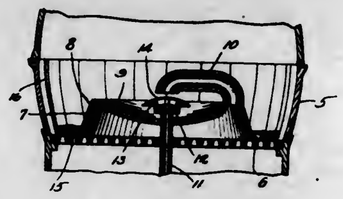
3. In a pin fastener, a double pronged pin having a cross bar extending between the prongs of the pin and provided with a loop, said loop deflected from the plane of said prongs, a cap hinged to said cross bar between said prongs and loop and having a prong engageable with the material to which the pin fastener is applied, said cap provided with a snap fastening element distinct from said prong and adapted for engagement with said loop to lock said cap and its prong in fixed relation to said pin and material, the deflected arrangement of said loop facilitating insertion of the pin fastener in the material.

1,892,237. MANUFACTURE OF VALVES IN PAPER SACKS. GEORGE S. HOOVER, Wellsburg, W. Va. Filed Dec. 7, 1929. Serial No. 412,431. 10 Claims. (Cl. 93—8.)



1. In bag-making machinery, the combination of means for forming cuts at intervals in one side portion of a continuously traveling bag tube, and means operable by engagement with a cut portion of the tube to fold one side thereof into the tube to form a valve.

1,892,238. BURNER. CYRUS C. JOHNSON, Salina, Kans. Filed Jan. 6, 1931. Serial No. 507,023. 1 Claim. (Cl. 158—99.)

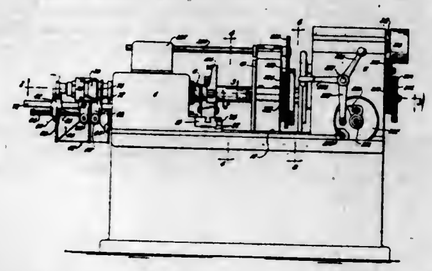


In a burner, a grate, a hollow body portion mounted on the grate to receive air through the grate, the upper surface of the body portion being formed with a depression providing a burner bowl, a gas feed pipe extending through the center of the bowl, a supporting ring on the upper end of the pipe, said ring having depressions, a burner head, fingers formed integral with the head and resting in the depressions to removably support the head, and a delivery tube communicating with the hollow body portion and extending to a point directly above the head to deliver air thereto, and the wall of the body portion sloping outwardly towards the grate.

1,892,239. MACHINE TOOL. ELMER E. KELLEY, Windsor, Vt. Filed July 7, 1930. Serial No. 466,149. 25 Claims. (Cl. 29—43.)

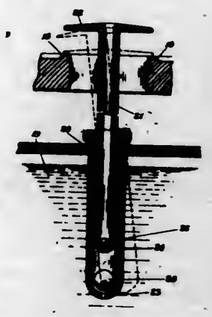
1. A machine tool of the class described comprising in combination, a plurality of spindles rotatable in a head stock, a spindle shaft and driving connections between said shaft and spindles, a tool slide reciprocable transversely of said spindles, a pair of engageable members in said slide, a driving tube around said shaft carrying a cam for alternately engaging said engageable members for moving said slide back and forth.

25. A machine of the class described comprising in combination, a support having a head and a gear box at opposite ends thereof, a spindle rotatable in said head, a turret support reciprocable on said support between said head and box, a spindle shaft and a tube independently rotatable on a common axis and extending between said head and box, a turret rotatable in said turret support on the axis of rotation of said shaft and tube, means associated with said tube and turret whereby the latter is rotated by the former, a main shaft rotatable in said box, driving connections between said main and spindle shafts, axially aligned separate rotatable parts, driving connections between one of said parts and said tube, a releasable clutch on said main shaft, driving connections between said clutch and said one of the separate parts whereby the tube may be driven from the main shaft at a certain speed, driving connections between said spindle shaft and the other one of the separate parts whereby said shaft is driven from the spindle shaft at a relatively



slower speed, a clutch mechanism associated with said separate parts operable to clutch the same together when the clutch on the main shaft is released whereby the tube is driven from the spindle shaft at a less speed than said certain speed and driving connections between said tube and said turret support whereby the latter is reciprocated accordingly as the former rotates.

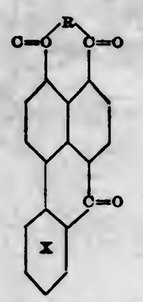
1,892,240. LUBRICATED ROCKER ARM. EDELBERT JOHN KNAPP, Norton, Kans. Filed Nov. 12, 1931. Serial No. 574,657. 2 Claims. (Cl. 184—7.)



1. A rocker arm positioned above an oil bath and out of direct contact therewith, fixed and movable bearings at opposite extremities of said rocker arm, the free extremity of said rocker arm describing an arcuate path intersecting a horizontal line through said fixed bearing, said rocker arm being provided with an aperture intermediate its extremities, means for conducting lubricant to the upper surface of said rocker arm at a point intermediate the extremities thereof, said means including a tubular member loosely suspended within the oil bath and having its upper portion extending above the surface of the oil, a hollow piston slidable in said tubular member and projecting through the aperture in said rocker arm, said tubular member and said hollow piston being each provided with valves for retarding the reverse flow of oil therein, a head on said hollow piston whereby the rocking of said rocker arm is communicated to said hollow piston to force oil therethrough and onto the surface of said rocker arm, and channels for conducting the lubricant alternately to the bearings at the opposite extremities of said rocker arm during the rocking movements thereof.

1,892,241. BENZANTHRONE DERIVATIVES AND PROCESS OF PREPARING THEM. GEORG KRINZLEIN, HEINRICH GREUNE and HEINRICH VOLLMANN, Hochst-on-the-Main, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Mar. 27, 1928, Serial No. 265,220, and in Germany Apr. 16, 1927. 12 Claims. (Cl. 260—61.)

9. As new products, the compounds of the following general formula:

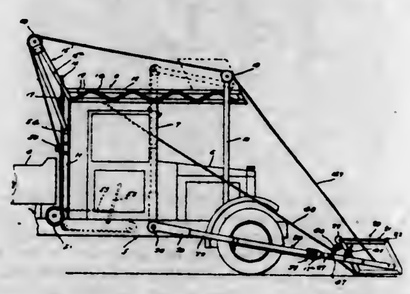


wherein R stands for oxygen or a N-aryl group and the nucleus marked X may contain a substituent of the group consisting of alkyl, halogen and methoxy.

1,892,242. SUBSTITUTION PRODUCTS OF DIBENZOPYRENEQUINONES. MAX ALBERT KUNZ, Mannheim, and KARL KOESSELS and ERICH BERTHOLD, Ludwigshafen-on-the-Rhine, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed July 20, 1929, Serial No. 379,867, and in Germany July 26, 1928. 3 Claims. (Cl. 260—61.)

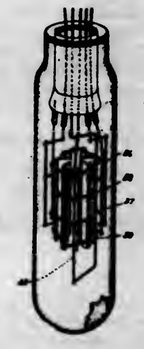
3. As new articles of manufacture, uniform compounds corresponding to the formula: R—X in which R stands for the radicle of 3.4.8.9-dibensopyrene-5.10-quinone and X for a hydroxy or alkoxy group, which groups are introduced into the dibensopyrenequinone molecule by a process comprising substituting a diazotised amino group.

1,892,243. LOADING ATTACHMENT FOR TRUCKS. GEORGE LAMBERT, Norwich, Conn. Filed Nov. 21, 1931. Serial No. 576,569. 6 Claims. (Cl. 214—78.)



1. The combination of the frame, body and cab of a truck with a loading apparatus comprising, a slideway structure supported above said cab, swingable arms pivotally connected at inner ends to said frame, end sections pivoted on the outer ends of said arms, a bucket carried by said sections, releasable latch mechanism to lock said sections to said arms in extended operative position, means to swing said arms to move said bucket between a forward loading position, a rear dumping position and a position intermediate thereof, and manually operable means connected to said latch mechanism to operate said mechanism and permit the sections to swing relative to the arms whereby the bucket may rest on said slideway when the arms are in an intermediate position.

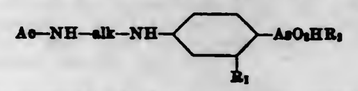
1,892,244. ELECTRICAL DISCHARGE DEVICE. IRVING LANGMUIR and KENNETH H. KINGDON, Schenectady, N. Y., assignors to General Electric Company, a Corporation of New York. Filed Oct. 1, 1924, Serial No. 740,998. Renewed Oct. 30, 1931. 16 Claims. (Cl. 250—27.5.)



4. An electric discharge device comprising a container, an electron-emitting cathode having a generally rectilinear extension, a plurality of cooperating electrodes in said container each of which consists of plate-shaped members mounted radially with respect to said cathode, the plate members of one electrode being mounted in interleaved relation with the plate members of the cooperating electrode, each plate being substantially in the plane which includes said electron emitting cathode.

1,892,245. SUBSTITUTED AMINO-PHENYL-ARSONIC ACID. FRITZ MIETZSCH and HEINRICH KLÖB, Elberfeld, Germany, assignors to Winthrop Chemical Company, Inc., New York, N. Y., a Corporation of New York. Filed Jan. 21, 1930, Serial No. 422,484, and in Germany Jan. 29, 1929. 8 Claims. (Cl. 260—14.)

1. The compounds of the probable general formula:

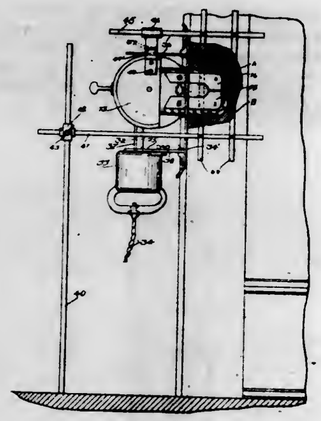


wherein Ac stands for an acyl group, alk stands for an alkylene radical which may be substituted by a hydroxy group, R_1 stands for hydrogen, halogen or the hydroxy group and R_2 stands for hydrogen, alkali metal or alkaline earth metal, these new compounds being whitish powders of weakly basic character soluble in alcohol and water and insoluble in acetone and ether.

1,892,246. WOODWORKING TOOL. ALFRED R. MOHNS, Newark, N. J. Filed Aug. 11, 1931. Serial No. 556,441. 1 Claim. (Cl. 144—73.)

A woodworking tool of the class described comprising a main frame, a driving sprocket carried by said frame, said frame having transversely extending grooves therein, a second frame composed of two members having each an extension formed with a slot, which extends at right angles to the groove, bolts slidably ar-

ranged in the groove passing through the slot for clamping the two parts of the second frame in adjusted position on the main frame, guiding sprockets carried by the sec-

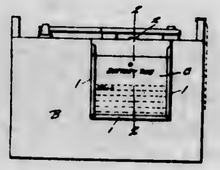


ond frame, and an endless cutting member engaging the last-mentioned sprocket and the driving sprocket on the main frame.

1,892,247. PROCESS OF PREPARING PROTEINASES FREE FROM PEPTIDASES. WILHELM NEUGEBAUER, Wiesbaden-Biebrich, Germany, assignor to Kalle & Co. Aktiengesellschaft, Wiesbaden-Biebrich, Germany. Filed Jan. 22, 1931, Serial No. 510,593, and in Germany Jan. 31, 1930. 9 Claims. (Cl. 167—78.)

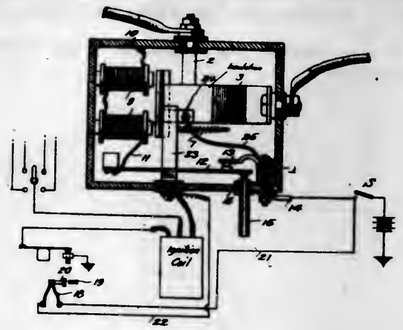
9. The process of preparing proteinase preparations free from peptidases which comprises causing hydrochloric acid of 5 per cent strength to act upon a solution of pancreas trypsin until the solution has attained at pH value of 3.5, allowing the mixture to stand for a shore time and treating the solution thus obtained with a sodium carbonate solution until a pH value of about 8 has been reached.

1,892,248. BATTERY TAG HOLDER. FRANK G. PLOWICK, Detroit, Mich. Filed Aug. 16, 1932. Serial No. 629,054. 1 Claim. (Cl. 40—16.)



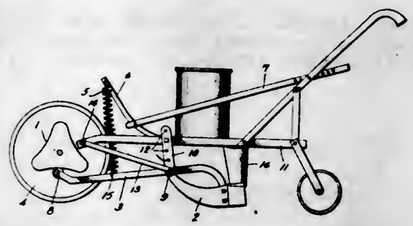
A holder for a battery tag comprising a member of plate-like form having flanges at its sides and bottom for receiving the edges of a tag and means for detachably connecting the holder to a battery, said means consisting of bent-over tongue connected to the upper edge of the plate-like member and having its extremity reduced and bent over to form a projection for penetrating a part of a battery.

1,892,249. SAFETY STARTER SWITCH. EDWIN J. POOLE, Cleveland, Ohio. Filed Nov. 17, 1930. Serial No. 496,251. 8 Claims. (Cl. 290—38.)



1. In combination with an internal combustion engine, its ignition switch and its starter switch, said starter switch including a movable contact, a spring actuated latch member located in the path of said movable contact for preventing closing of the starter switch, magnetic means for moving said latch member to permit closing movement of the starter switch, a circuit for said magnetic means under the control of the ignition switch, and means for breaking the circuit of the magnetic means when the engine begins to operate.

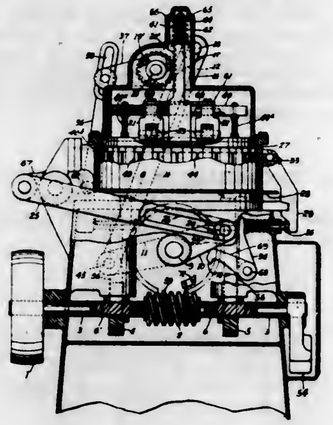
1,892,250. APPARATUS FOR SEED PLANTERS. JOHN W. RANDOLPH, Auburn, Ala., dedicated to the free use of the Public. Filed July 28, 1931. Serial No. 555,568. 5 Claims. (Cl. 111—18.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)



1. In a planter having a traction wheel, the combination with a furrow opener attached to an oscillating lever arm, pivoted at its intermediate point to a support attached to said planter frame, of mechanism operated by the traction wheel of the planter and acting on said lever arm for variably forcing said furrow opener beneath the surface of the ground under the advance movement of said planter.

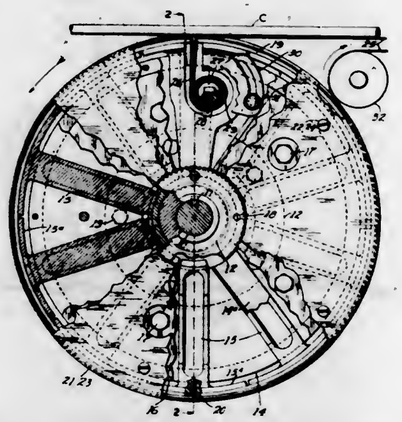
1,892,251. AUTOMATIC DOUGH DIVIDING AND ROLLING MACHINE. GOTTFRIED RAUSCH, Amendorf near Halle-on-the-Saale, Germany. Filed Feb. 26, 1931, Serial No. 518,356, and in Germany Mar. 1, 1930. 20 Claims. (Cl. 107—20.)

1. In a dough dividing and rolling machine, the combination with a press plate and dividing knives for compressing and dividing the dough, of mechanism including a rotatable crank, means for continuously rotating said



crank in one direction, and lost motion linkage actuated by said crank for operating said press plate and dividing knives intermittently in predetermined timed relation.

1,892,252. EXPANSION PULLEY. RUPERT E. RUNDELL, Rockville Center, N. Y., assignor to American Machine & Foundry Company, a Corporation of New Jersey. Filed Jan. 24, 1930. Serial No. 423,168. 5 Claims. (Cl. 64—8.)



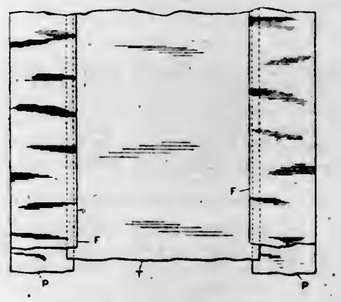
1. In an expansion pulley for driving tapes and the like, the combination with radially expansible mechanism, of an expansible split rim surrounding said mechanism, and traction providing means surrounding said rim, said means including a lining tape wrapped about said rim and having its ends extending through the slot in the rim, and a rotatable arbor to which said ends are secured and releasable means for locking said arbor against rotation.

1,892,253. DIRECTIVE ANTENNA SYSTEM. JOHN C. SCHELLENG, Millburn, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Aug. 16, 1930. Serial No. 475,726. 7 Claims. (Cl. 250—11.)



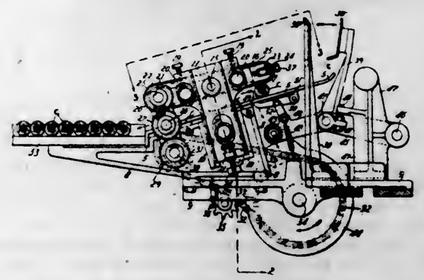
2. The method of improving radio transmission utilizing a transmitting antenna connected to a source of energy which comprises supplying in-phase currents to all sections of said antenna and tilting said antenna at such an angle to the vertical that its horizontal projection is equal to one wave length or a multiple thereof.

1,892,254. CIGAR ENVELOPING. FRANK REINHOLD SCHMITT, Queens Village, N. Y., assignor to International Cigar Machinery Company, a Corporation of New Jersey. Filed Mar. 15, 1930. Serial No. 436,151. 5 Claims. (Cl. 229—87.)



3. A cigar envelop having a transparent midsection, and opaque end sections, said midsection being constructed of cellulose hydrate, and said end sections being constructed of metal foil with a paper backing.

1,892,255. REROLLER FOR CIGAR MACHINES. WALTER HERMAN SCHUESSLER, Philadelphia, Pa., assignor to International Cigar Machinery Company, a Corporation of New Jersey. Filed Feb. 16, 1932. Serial No. 593,351. 6 Claims. (Cl. 131—39.)



1. The combination with a delivery table, of an inclined chute arranged to deliver cigars to said table, a device for

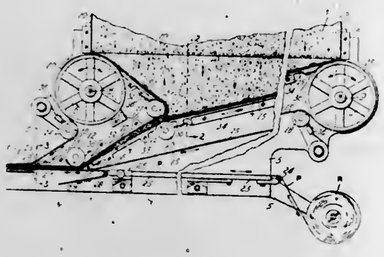
rerolling cigars on said chute, means for intermittently delivering cigars to said chute, and a stop arranged in the path of the cigars on said chute and controlled by said means to permit the passage of cigars when said means delivers a cigar to said chute.

1,892,256. SAFETY RAZOR. THOMAS C. SHEEHAN, Upper Montclair, N. J., assignor to Durham Duplex Razor Company, a Corporation of New York. Filed Mar. 3, 1931. Serial No. 519,809. 5 Claims. (Cl. 30—12.)



1. A safety razor comprising a blade, a guard engaging one side of said blade and having blade abutments, mechanism including a rotatable member for locking said blade and said guard together, and a yielding cam actuated by said member and engaging said blade to move it transversely and align its cutting edge against said abutments.

1,892,257. CIGARETTE FEED TOBACCO COMPRESSOR. ELBERON DOUGLAS SMITH, Brooklyn, N. Y., assignor to American Machine & Foundry Company, a Corporation of New Jersey. Filed Aug. 20, 1931. Serial No. 558,370. 28 Claims. (Cl. 131—39.)

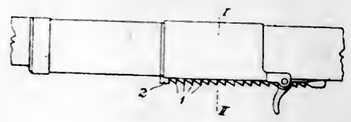


17. In a cigarette machine for forming freely falling showered tobacco into a continuous rod, the combination with a travelling web having at least a portion of its carrying surface inclined to the horizontal, of a chute acting to guide the tobacco onto said inclined carrying surface, mechanism for forwarding the tobacco stream formed on the web to the rod forming means, and a belt compressor for compressing the tobacco stream, said tobacco compressing belt having a run parallel to the axis of the cigarette rod acting on the upper side of the tobacco stream.

1,892,258. PRODUCTION OF MODIFIED CASTOR OIL. HANNS UFER, Ludwigsbafen-on-the-Rhine, Germany, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Filed Jan. 17, 1930, Serial No. 421,596, and in Germany Aug. 15, 1928. 14 Claims. (Cl. 87—12.)

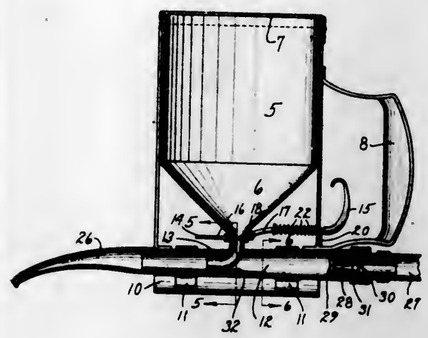
1. The process for the production of modified castor oil which comprises heating castor oil in the presence of a quantity not exceeding a few per cent by weight of the oil of an acid compound of the non-oildizing mineral acids containing oxygen, but in the absence of a substantial quantity of an oxidizing agent.

1,892,259. HAND-GUARD FOR AUTOMATIC FIREARMS. RUDOLF VON FROMMER, Budapest, Hungary. Filed Mar. 23, 1932, Serial No. 600,740, and in Hungary Mar. 24, 1931. 8 Claims. (Cl. 42—71.)



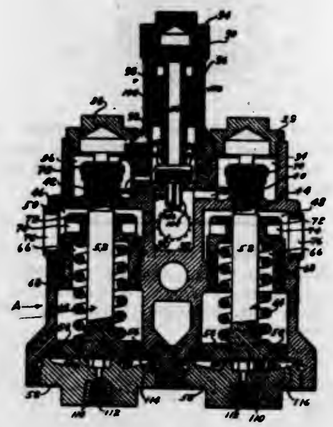
1. In an automatic fire arm, a hand-guard constituted by a protecting projection of the gunstock arranged under the path of the sliding cover, sharp teeth on said projection adapted to make disagreeable, that is, painful the catching of said projection.

1,892,260. PNEUMATIC DASH GUN. LOUIS D. WICK, Spokane, Wash., assignor to Frank J. Gainelli, Spokane, Wash. Filed Jan. 17, 1931. Serial No. 509,355. 1 Claim. (Cl. 91—45.)



A pneumatic dash gun having in combination a receptacle adapted to contain a plastic substance, and having a conical bottom portion, an L-shaped discharge pipe connected to the bottom, a discharge regulating valve comprising a plate having a V-shaped opening slidably installed through a slot transversely of the discharge pipe, means for locking said valve in various positions whereby its V-slot permits a greater or less discharge from the receptacle, a delivery pipe connected to the bottom of the receptacle, the lower reach of the L-shaped discharge pipe projecting into the delivery pipe and in alignment therewith leaving a space between the discharge and delivery pipes, a discharge nozzle for the delivery pipe, a flexible supply pipe for projecting compressed air through the delivery pipe whereby suction is created in the L-shaped discharge pipe, and a conically orificed plug within the delivery pipe having concave ends whereby a whirling motion is imparted to compreased air in its passage through the delivery pipe.

1,892,261. PRESSURE RETAINING VALVE. PETER F. WILSON, Clearlake, Wash. Filed Apr. 26, 1932. Serial No. 607,555. 9 Claims. (Cl. 303—77.)



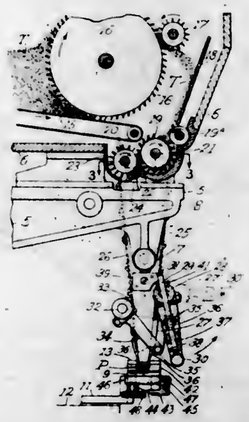
1. In an air brake system in combination with the train line, auxiliary reservoir and triple valve, a pressure retaining device connected with the triple valve to receive exhaust therefrom, said device including a body portion connected with the train line and having a plurality of valves therein normally preventing release of the triple valve exhaust from the device, said valves being so arranged and mounted as to be independently operable sequentially in response to progressively increased train line pressure.

1,892,262. HAIR-WAVE SETTING DEVICE. LUCY BRETT ANDREW, Forest Hills, N. Y. Filed Jan. 24, 1931, Serial No. 510,870. Renewed Apr. 1, 1932. 2 Claims. (Cl. 132—31.)



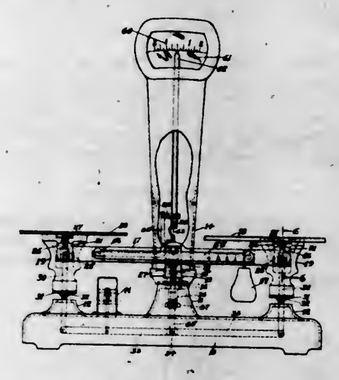
1. A hair-wave setting device comprising an elongated loop of flexible wire and a protective connecting tip for the free ends of the wire, whereby the tipped portion of the loop can be readily pushed under the hair and the projecting members of the loop then be variably spread in spaced contact with the hair and bent into position to clamp the hair upon the underlying portion of the loop.

1,892,263. CIGARETTE MACHINE TOBACCO FEED. WILHELM B. BRONANDER, Montclair, N. J., assignor to American Machine & Foundry Company, a Corporation of New Jersey. Filed Apr. 21, 1931. Serial No. 531,757. 14 Claims. (Cl. 131—39.)



1. In a cigarette machine feed, the combination with a chute, of means above said chute for showering tobacco thereinto, means for removing tobacco from the bottom of said chute, and means working in said chute for breaking up pieces of stem entering said chute.

1,892,264. SCALES. FREDERICK E. CARLSON, New Britain, Conn., assignor to Landers, Frary & Clark, New Britain, Conn., a Corporation of Connecticut. Filed July 30, 1929. Serial No. 382,093. 14 Claims. (Cl. 265—54.)

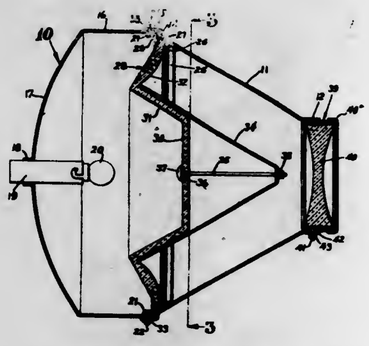


1. In a weighing apparatus, and in combination a pointer, a scale cooperating therewith, spring supporting means for the pointer biasing the pointer laterally and angularly to its equilibrium position, a scale beam, and a tensioned connection between the scale beam and the pointer.

1,892,265. HEADLIGHT. WALTER E. CUMMINS, Santa Maria, Calif. Filed Aug. 3, 1931. Serial No. 554,632. 4 Claims. (Cl. 240—41.3.)

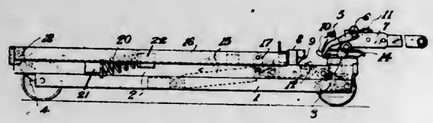
1. In a headlight, a body having a lamp therein, a reflector mounted in the rear of said lamp, an annular lens member mounted in advance of said reflector, a

focusing lens and a conical shield in said body projecting from the inner circumference of the annular lens and with its apex directed towards the focusing lens, said body having an outer frusto-conical member thereon connecting the outer circumference of the annular lens and



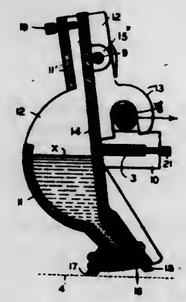
the outer circumference of the focusing lens, said shield and said member defining a tapering passage exterior to said shield and leading from said annular lens to said focusing lens, the exterior surface of said shield being non-reflecting.

1,892,266. LIFTING TRUCK. CHARLES ROLAND FAGIN, Cincinnati, Ohio, assignor, by mesne assignments, to The Yale & Towne Manufacturing Company, Stamford, Conn., a Corporation of Connecticut. Filed Feb. 4, 1928. Serial No. 251,771. 6 Claims. (Cl. 254—10.)



1. In a lifting truck, a main frame, an elevating frame, a spring supported frame, a plurality of links pivotally connected to said elevating frame and said spring supported frame to connect the latter to the former, and lifting mechanism on said main frame to lift said elevating frame and said spring supported frame.

1,892,267. STENCIL BRUSH. JAMES FLOCKHART, San Francisco, Calif. Filed Dec. 13, 1930, Serial No. 502,112. Renewed May 24, 1932. 7 Claims. (Cl. 101—128.)



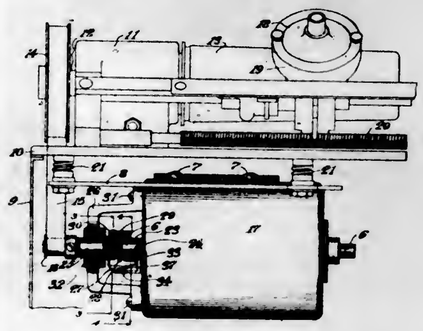
1. A stencil brush including a front plate having enclosing ends; a rear plate pivoted between said ends and meeting the lower end of said front plate to form an ink fountain; spreaders in the lower edges of each of said plates respectively.

1,892,268. SCREEN STENCIL FRAME. JAMES FLOCKHART, San Francisco, Calif. Filed Dec. 13, 1930, Serial No. 502,114. Renewed May 24, 1932. 5 Claims. (Cl. 101—415.1.)



1. A stencil frame including a base frame having a groove therein; means for clamping the margin of a screen on said frame and means for forcing said screen adjacent said margin into said groove.

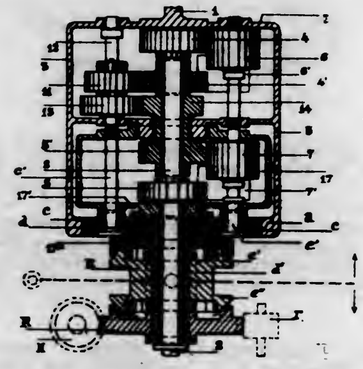
1,892,269. PHONOGRAPH CLUTCH. VICTOR L. FREYMAN, Bridgeport, Conn., assignor to Dictaphone Corporation, Bridgeport, Conn., a Corporation of New York. Filed Aug. 9, 1928. Serial No. 298,504. 6 Claims. (Cl. 192—28.)



1. The combination in a dictation machine, of a motor having a rotatable shaft, a drive-dog fixed to one end of the motor shaft, a bracket mounted on one end of the motor, a second shaft rotatably supported by the bracket in end to end alignment with the motor shaft, means pivotally mounted on the second shaft and operable in a plane which is substantially coincident with the axis of the shaft and adapted to engage the drive-dog to connect the two shafts, and means for actuating the dog-engaging means to disconnect the two shafts.

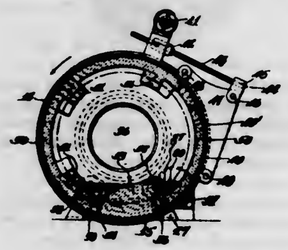
1,892,270. VARIABLE SPEED GEARING. LEON FREDERIC GRANIER, Aix, France. Filed Dec. 30, 1931, Serial No. 583,896, and in France Jan. 3, 1931. 5 Claims. (Cl. 74—34.)

1. In a variable speed gearing operating by means of planet wheels, the combination of: a driving shaft; a sun and planet wheel gear driven by said driving shaft; a second sun and planet wheel gear arranged with its axis in alinement with the axis of said first named sun and planet wheel gear; independent gear wheels arranged to turn around the axis of said sun and planet wheel gears; independent gear wheels arranged to turn about an axis parallel to that of said sun and planet wheel gears and co-operating with said first named independent gear wheels to transmit power from one of said sun and planet wheel gears to the other in such manner that the said sun and planet wheel gears run at speeds differing very little from one another; and a device com-



prising gear wheels for braking said independent gear wheels to effect the speed variations, substantially as described.

1,892,271. METHOD AND APPARATUS FOR PUDDLING. CHARLES HART, Media, Pa., assignor to Wrought Iron Company of America, Philadelphia, Pa., a Corporation of Pennsylvania. Filed June 14, 1930. Serial No. 461,100. 19 Claims. (Cl. 263—33.)



1. The method of effecting a gravity separation in a fluid furnace charge by means of a dam which consists in progressing the dam by angularly moving the furnace until the dam is below the surface of the charge, collecting adjacent to the dam the skimmings flowing over the dam while retaining charge below the dam, reversing the direction of progression of the dam to return a quantity of the skimmings to the charge and discharging the remaining skimmings.

1,892,272. TIE FORM. EDWARD H. HAUBROOK, Seattle, Wash. Filed Mar. 3, 1930. Serial No. 432,635. 1 Claim. (Cl. 223—19.)

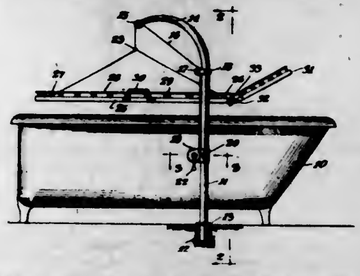


A tie shaping device consisting of a wire frame formed from a single piece of wire; a fixed side member having a handle secured thereto; an outward extension from said handle terminating in a hook; a resilient side member disposed to spring away from the fixed side member and adapted to normally be retained by said hook under partial compression.

1,892,273. FUSIBLE ALLOY AND METHOD OF MAKING THE SAME. WILFORD J. HAWKINS, Brooklyn, N. Y., assignor to American Machine & Foundry Company, a Corporation of New Jersey. Filed Sept. 13, 1927. Serial No. 219,366. 4 Claims. (Cl. 75—1.)

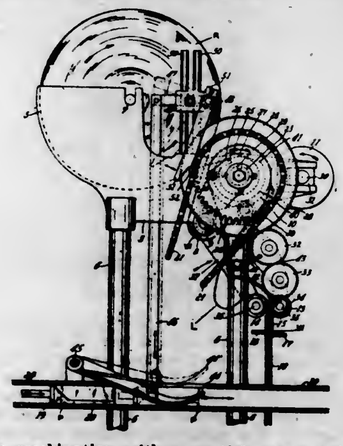
2. An alloy composed of lead, approximately one-tenth of one per cent of phosphide of lead, and approximately one per cent of brightening metal.

1,892,274. MEANS FOR BATHING PATIENTS. MINNIE HENSCHEN, West New York, N. J. Filed July 27, 1931. Serial No. 553,339. 2 Claims. (Cl. 4—185.)



2. In a device for giving patients a bath, a post having its lower end turnably embedded in a socket in the bathroom floor near the bath-tub and having a curved upper end, a pulley carried by said end, a frame, a bed supported by springs carried by said frame, lateral handles on said frame, a head rest for said bed adapted to be angularly disposed to the bed by a toothed segment, a collar on said post carrying a pulley, a cable guided over said pulley on said curved upper post end, said cable branched to suspend the ends of the frame therefrom, a bracket on said post, and a drum on which the end of said cable is wound, and means to wind and unwind said cable onto and from said drum.

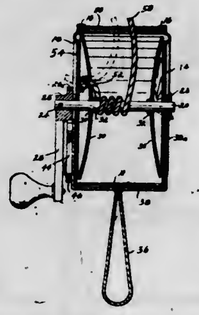
1,892,275. PAPER FEED CONTROL FOR WRAPPING MACHINES. THORMOD JENSEN, Brooklyn, N. Y., assignor to American Machine & Foundry Company, a Corporation of New Jersey. Filed Aug. 20, 1931. Serial No. 558,381. 5 Claims. (Cl. 93—2.)



1. The combination with an article runway for wrapping machines, of mechanism for pulling paper off a reel

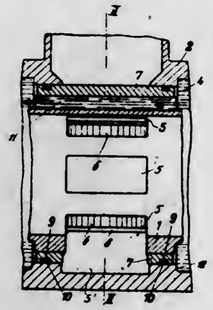
continuously, means for intermittently feeding the paper pulled off into the path of an article in said runway, said means being connected to said mechanism to operate only when the mechanism operates and devices coacting with said runway and said mechanism to render said mechanism and means inoperative in the absence of an article in the runway.

1,892,276. CLOTHESLINE REEL. CORNELIUS B. JOHNSON, Des Moines, Iowa, assignor to The First Investment Corporation. Filed Apr. 14, 1930. Serial No. 444,192. 4 Claims. (Cl. 242—101.)



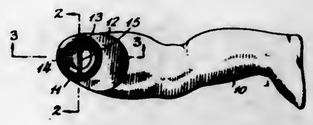
1. A clothes line reel, comprising a hollow cylindrical casing, a shaft extended through the end walls thereof, a handle on said shaft outside the casing, concavo-convex spool members fixed on said shaft within the casing with their concave faces outward, a handle having a yoke portion with its arms pivoted on said shaft outside the casing, stops on the outside of the casing to limit the rotary movement of the casing with relation to the handle, one side of said casing and one of said spool members having threading holes, which may be aligned in a certain position of the rotary movement of the shaft, said casing having in its outer wall a hole through which a clothes line may be inserted arranged on the same side of the shaft as said first described hole, whereby a clothes line may be threaded on the reel in the manner described.

1,892,277. CYLINDER FOR INTERNAL COMBUSTION ENGINES. HUGO JUNKERS, Dessau, Germany. Filed Apr. 4, 1931, Serial No. 527,702, and in Germany Apr. 30, 1930. 7 Claims. (Cl. 123—173.)



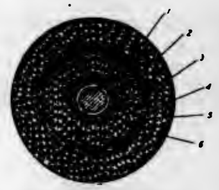
1. An engine cylinder with a row of ports formed in the cylinder wall, the wall sections intermediate the ports of said row having the form of channels open towards the circumference of the cylinder, and a sleeve adapted to be placed on said cylinder and having ports and webs registering with the ports and channel sections in said cylinder so as to convert said channel sections into closed canals.

1,892,278. LIMB FOR TOY FIGURES. JOSEPH L. KALLUS, Brooklyn, N. Y. Filed Mar. 31, 1931. Serial No. 526,624. 2 Claims. (Cl. 46—40.)



1. A limb for toy figures comprising a section of molded material, an annular projection molded at one end of said section and constituting the wall of a recess, and an attaching device having a portion embedded in said projection and a continuing portion in open registry with said recess to constitute an attaching means, said embedded portion being molded in place and having a periphery curved in accordance with the annular form of said projection.

1,892,279. COMMUNICATION CABLE. ARCHIE R. KEMP, Westwood, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed July 29, 1930. Serial No. 471,602. 11 Claims. (Cl. 178—45.)



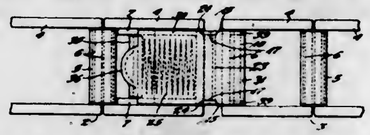
1. A submarine cable having magnetic material for increasing the inductance, and in which, for relieving the magnetic material from strains due to pressure and bending, it is impregnated, filled or surrounded with a pressure equalizing compound characterized in that the pressure equalizing compound comprises a polymerized cyclic terpene hydro-carbon mixed with a gum (including natural gum and synthetic substitutes therefor) composed largely of hydro-carbon of composition $(C_5H_8)_n$.

1,892,280. PRODUCTION OF COLORED COMPOSITIONS. HANS KESSELER, Mannheim, and LUDWIG KIEFLAENDER, Ludwigshafen-on-the-Rhine, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Sept. 24, 1928, Serial No. 308,181, and in Germany Nov. 8, 1927. 6 Claims. (Cl. 8—6.)

1. A colored composition comprising an organic, water-soluble, artificial resin, which in plastic condition possesses sufficient internal cohesion to withstand an intensive mechanical mixing and kneading treatment without disruption, and a water-insoluble dyestuff incorporated in said resin in such a highly dispersed state that it does not settle out from dilute solutions of the composition in water.

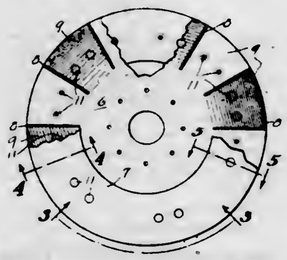
1,892,281. CLASP FOR BRACELETS, STRAPS, LINKAGES, OR THE LIKE. CHARLES H. KESTENMAN, Providence, R. I., assignor to Kestenman Bros. Mfg. Co., Providence, R. I., a Corporation of Rhode Island. Filed Aug. 4, 1931. Serial No. 555,003. 14 Claims. (Cl. 24—201.)

1. In a clasp for connecting the end links of a chain or linkage, the combination of a base-member across which one end link is adapted to rest, a spring held on the base-member engaging the cross-bar of said end link of the linkage to retract it within the clasp, means releasably attached to the base-member to retain the spring in place thereon, and a latch-member hinged to the base-member to adapt it to engage through the opposite



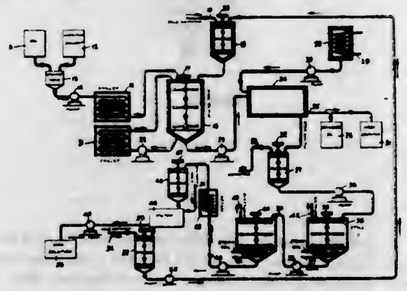
end link of the linkage and provided with means to latch with the base-member to hold the parts in connected relationship.

1,892,282. FRICTION DISK FOR CLUTCHES, BRAKES, AND THE LIKE. GEORGE S. LANE, San Anselmo, Calif., assignor to Wallace Sheehan, San Francisco, Calif., trustee. Filed Dec. 2, 1929. Serial No. 410,973. 17 Claims. (Cl. 192—107.)



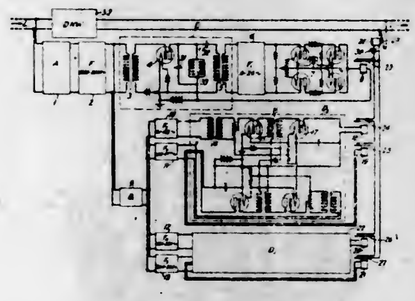
1. In a device of the character described, a mat disk, a continuous friction disk fastened on each face thereof, and corrections between the face of the mat disk and the underside of the friction disk to decrease the stiffness of said mat disk from the inner and toward the outer periphery in proportion to the increase of the circumferential rubbing surface of the friction disks from the inner and toward the outer peripheries thereof.

1,892,283. TREATING HYDROCARBON OIL. ROBERT E. MANLEY, Port Arthur, Tex., assignor to The Texas Company, New York, N. Y., a Corporation of Delaware. Filed Dec. 27, 1927. Serial No. 242,621. 2 Claims. (Cl. 196—19.)



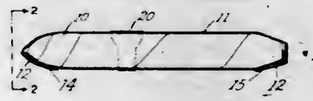
1. The process of dewaxing lubricating oil which comprises subjecting the oil to a separating treatment, while chilled and maintained at a low temperature whereby precipitation of wax constituents is effected and while intimately mixed with an inert comminuted solid filter-aid material containing not more than 5% by weight of free water comprising a filter-aid recovered from a previous operation of dewaxing lubricating oil, whereby said precipitated wax constituents and filter-aid material are separated from the oil, and finally separating the filter-aid material from the wax whereby the filter-aid may be reused in a similar cycle of operations.

1,892,284. VOICE OPERATED CIRCUIT. ROBERT C. MATHES, Wyoming, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Apr. 18, 1929. Serial No. 356,136. 18 Claims. (Cl. 179—170.)



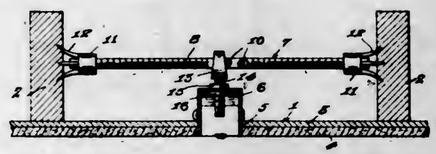
1. In a voice operated relay circuit, a path over which voice frequency currents and relatively sustained alternating currents may be transmitted, tandem detectors associated with said path, a relay controlled by the second detector, and means associated with the first detector for rendering said second detector selectively responsive to currents confined to a frequency range from about 25 cycles per second downwards.

1,892,285. CIGAR PACKAGE. JOSEPH A. NEUMAIR, Hollis, N. Y., assignor to International Cigar Machinery Company, a Corporation of New Jersey. Filed June 9, 1931. Serial No. 543,211. 2 Claims. (Cl. 131—11.)



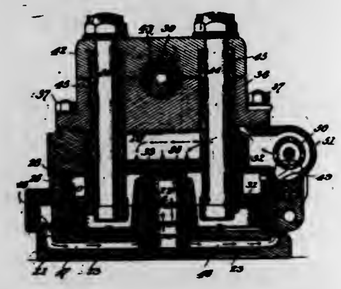
1. A cigar envelop formed of cellophane and having folded ends and a longitudinal seam, and provided with a permanently tacky sealing strip secured over said longitudinal seam and folded ends, and also provided with a thread under said sealing strip having its ends projecting transversely of the cigar envelop, whereby said ends of the thread may be seized to tear said sealing strip from the cigar envelop.

1,892,286. SWITCH BOX HANGER. FILMORE J. NYBERG, Julesburg, Colo. Filed Oct. 26, 1931. Serial No. 571,249. 5 Claims. (Cl. 247—22.)



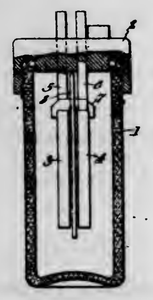
1. A hanger for boxes comprising a foldable anchoring element, means adjustably carried by said element for biting into opposite beams of a wall for supporting said element across an opening in the wall, and adjustable means carried by said element for securing a box in the opening.

1,892,287. DRILL SHARPENER. GUSTAV C. PEARSON, LORENZO E. CROFT, and IVAN S. CARPENTER, Denver, Colo., assignors to Gardner-Denver Company, Denver, Colo., a Corporation of Delaware. Filed Oct. 31, 1929. Serial No. 403,788. 7 Claims. (Cl. 76—5.)



1. In apparatus of the character set forth, the combination with a supporting spider frame including a peripheral ring and a central cylinder extending above the ring, of a second cylinder based on the ring and surrounding the first cylinder, a piston operating in the second cylinder, relatively movable coacting die members on the second cylinder, a connection between the piston and one of said die members, a piston in the first cylinder acting in opposition to the first mentioned piston, and means for directing motive fluid against the pistons.

1,892,288. STORAGE BATTERY. RAYMOND D. SHIPP, Indianapolis, Ind., assignor, by mesne assignments, to Prest-O-Lite Storage Battery Corporation, a Corporation of Indiana. Filed Jan. 2, 1925. Serial No. 204. 5 Claims. (Cl. 136—81.)



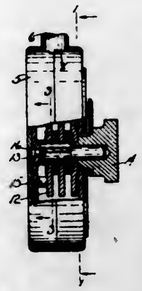
1. In a storage battery cell, the combination with a container, and a pair of electrodes supported entirely from above, of a yoke resting on the electrodes and embracing them from spreading, and a separator attached to said yoke and suspended from it between the electrodes, the lower portion of the container being entirely free from sediment catching surfaces in proximity to the electrodes.

1,892,289. HASP LOCK. ELMER B. STONE, New Britain, Conn., assignor to The American Hardware Corporation, New Britain, Conn., a Corporation of Connecticut. Filed June 22, 1928. Serial No. 287,443. 3 Claims. (Cl. 70—115.)



1. A hasp lock including a keeper plate, lock mechanism located in said plate and including a locking plate having an opening therein, a bolt projecting into said opening, said locking plate being slidably mounted and having a projection extending through the edge of the keeper plate near the front thereof, and a pivotally mounted hasp having a loop extending through an opening in the face of the keeper plate and into said opening in said locking plate for engagement by said bolt.

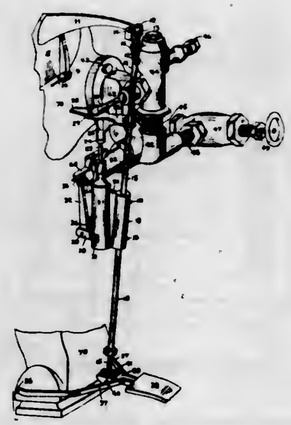
1,892,290. PERMUTATION LOCK. ELMER B. STONE, New Britain, Conn., assignor to The American Hardware Corporation, New Britain, Conn., a Corporation of Connecticut. Filed May 12, 1931. Serial No. 536,699. 2 Claims. (Cl. 70—118.)



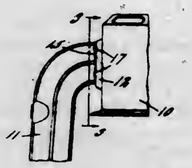
1. A lock including an arbor, ribs extending lengthwise of said arbor, tumblers mounted on said arbor for rotation thereon independently thereof, and having notches to receive said ribs, to obstruct rotating movement of said tumblers but to be frictionally released therefrom to permit normal rotation of the tumblers for unlocking operation, and means for rotating said tumblers.

1,892,291. BEDPAN WASHER. LOUIS TALAS, New York, N. Y., assignor to Kny-Scheerer Corporation, New York, N. Y., a Corporation of New York. Filed Oct. 22, 1930. Serial No. 490,347. 10 Claims. (Cl. 141—1.)

1. In a bedpan washer foot operated means for opening the door, water supply means, means to open the water supply means for feeding a measured supply of water to the bedpan washer, means to hold open the means controlling said water supply a sufficient time to insure its positive operation and an automatic locking means to prevent the opening of said door while said water supply is being fed to said bedpan washer.



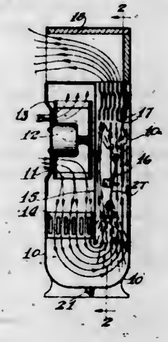
1,892,292. MEANS FOR ATTACHING THE TUBES AND SHELLS OF LANTERNS. ROBERT P. THRONE, Syracuse, N. Y., assignor to R. E. Dietz Company, New York, N. Y. Filed Mar. 5, 1931. Serial No. 520,827. 2 Claims. (Cl. 285—41.)



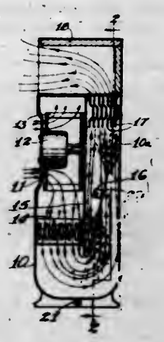
1. In a tubular lantern, a joint between a tube and a wall having an opening through which an end of said tube extends, said joint comprising an abutment on the tube spaced from one end thereof and abutting one face of the wall at the margin of the opening, the end of the tube being flanged over against the opposite face of said wall surrounding said opening, said wall and end flange having interfitting crimps formed therein and extending from said opening in a direction crosswise of said opening edge at the crimp.

1,892,293. METHOD OF ATOMIZING LIQUIDS AND ABSORBING THE SAME BY GASES. PAUL D. VANVLIET, River Forest, Ill., assignor to Air Control Systems, Inc., Chicago, Ill., a Corporation of Delaware. Filed Apr. 18, 1932. Serial No. 605,919. 10 Claims. (Cl. 261—115.)

1. The method of mixing a liquid and a gas which consists in causing the formation of a relatively thin, continuous film of liquid wherein the liquid travels outwardly along radial lines from a center of dispersion causing the continuous discharge from substantially the entire edge of such film of separated and finely divided liquid particles, the film being substantially unbroken and unsupported, and exposing the film and the particles with a current of gas traveling in general parallelism with and on both sides of the plane of the film.



1,892,294. MEANS FOR ATOMIZING LIQUIDS AND IMPREGNATING GASES THEREWITH. PAUL D. VAN VLIET, River Forest, Ill., assignor to Air Control Systems, Inc., Chicago, Ill., a Corporation of Delaware. Filed Apr. 18, 1932. Serial No. 605,920. 10 Claims. (Cl. 261—115.)

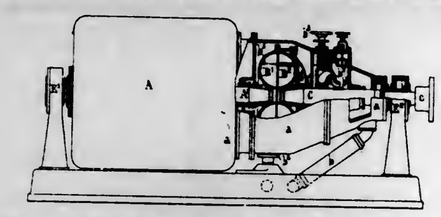


1. In a device for treating a gas, a treating chamber, atomizing means positioned in said chamber, and discharging from a predetermined center a relatively flat thin film of liquid extending radially from said center, and means for maintaining through said chamber a flow of the gas to be treated in a direction in general parallelism with the plane of the film.

1,892,295. APPARATUS FOR ABSORBING AND MEASURING THE POWER DEVELOPED BY PRIME MOVERS. GEORGE HENRY WALKER, Worcester, England, assignor to Heenan & Froude Limited, Worcester, England. Filed June 16, 1930, Serial No. 461,611, and in Great Britain Aug. 13, 1929. 5 Claims. (Cl. 265—24.)

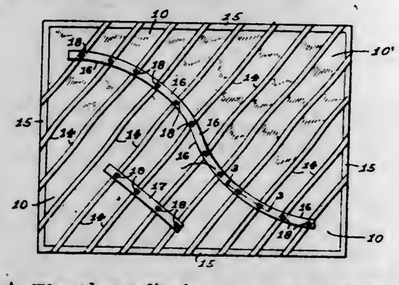
1. Means for absorbing and measuring the power developed at the shaft of an engine or other prime mover

comprising a dynamo electric machine, a slipping hydraulic clutch interposed between the shaft of the prime



mover and the dynamo electric machine and weighing mechanism to register any torque resisting rotation of the shaft.

1,892,296. PIANO. FRANK J. W. WEISER, Elmhurst, Ill. Filed Mar. 31, 1932. Serial No. 602,208. 3 Claims. (Cl. 84—219.)



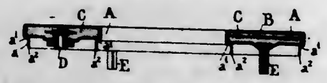
2. A crowned sounding-board having treble and bass string-bridge members on its front and ribs on its back, a supplemental bridge member having substantially the same contour as said treble bridge member and mounted on the ribs in registry with said treble bridge member, all of said bridge members being independent of the string-plate.

1,892,297. CLOSURE FOR TANKS. OSCAR B. WELKER, Middletown, Conn., assignor to The Welker-Hoops Manufacturing Company, Middletown, Conn., a Corporation of Connecticut. Filed Jan. 2, 1929. Serial No. 329,819. 7 Claims. (Cl. 220—24.)



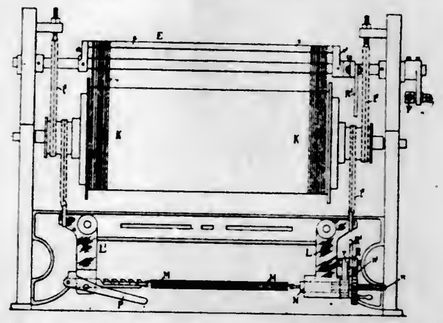
1. A tank cap including a base, a support projecting downwardly therefrom and having a marginal lip creating an open end in said support, a coiled spring of substantially conical shape upheld by said lip, and a clamping member having clamping ends projecting radially through said support and having a recess within which the end of said spring is seated.

1,892,298. ELECTRICAL HEATING ELEMENT. GEORGE BRAY, Leeds, England, assignor to Geo. Bray & Company Limited, Leeds, England. Filed Jan. 28, 1931, Serial No. 511,909, and in Great Britain Feb. 8, 1930. 3 Claims. (Cl. 219—37.)



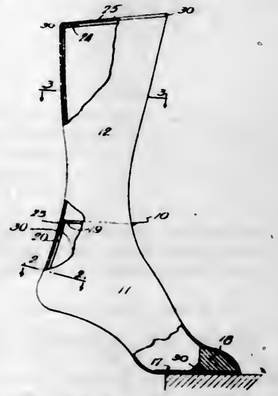
1. A casing for an electric heating element of the type referred to comprising an upper channel shaped part, a lower channel shaped container to fit inside the upper part to form a double wall around the periphery and a downwardly projecting continuous flange on the upper part extending substantially the depth of the casing below the lower edge of the lower channel.

1,892,299. LOOM FOR WEAVING. ROBERT COTTON, Haslingden, England. Filed Oct. 14, 1931, Serial No. 568,794, and in Great Britain Oct. 29, 1930. 2 Claims. (Cl. 139—106.)



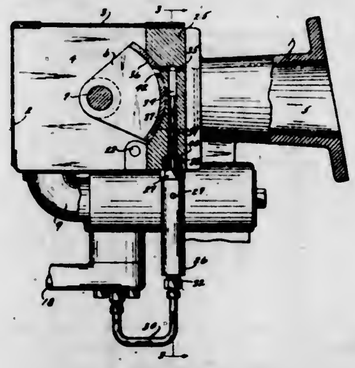
1. In a loom for weaving, apparatus for controlling the tension of the warp yarns comprising in combination a swinging back rest over which the warp yarns pass, a connecting rod connected thereto extending to the front of the loom, a catch at the free end of said connecting rod, a dagger affixed on the stop rod of the slay adapted to engage the connecting rod as the slay beats-up and rock the back rest, two cranked beam weighting levers pivoted to the loom frame to the horizontal arms of which the chains or ropes from the warp beam ruffles are attached, an adjustable spring disposed between and connecting the two vertical arms, a tension screw and ratchet nut and pawl adjustment for the spring and means to connect the screw and ratchet nut with the swinging back rest to gradually reduce the tension of the spring and the weight upon the warp beam as the diameter of the warps on the beam decreases.

1,892,300. PEDIFORM ARTICLE. WILLIAM J. DE WITT, Auburn, N. Y., assignor to Shoe Form Co., Inc., Auburn, N. Y., a Corporation of New York. Filed June 11, 1929. Serial No. 370,029. 3 Claims. (Cl. 223—18.3.)



1. A hollow pediform article comprising a foot form having an opening at the toe portion and a leg form united into a composite form, said foot form having at its toe portion an inwardly projecting flange, an insole attached to said flange and covering the opening in the toe portion of the foot form and a weight resting upon said insole.

1,892,301. CARBURETOR. RICHARD M. DILWORTH, Lakewood, Ohio, assignor to The Electro-Motive Company, Cleveland, Ohio, a Corporation of Ohio. Filed May 8, 1930. Serial No. 450,786. 8 Claims. (Cl. 261—46.)

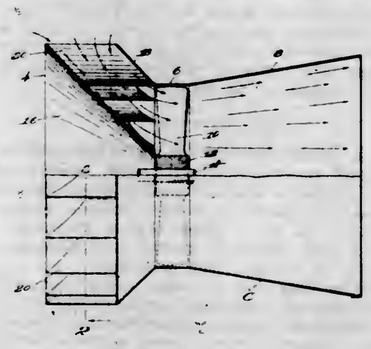


1. In a carburetion device of the class described and having a throttle valve, auxiliary accelerating means comprising an auxiliary fuel container having connection with the outlet passage of the device by which flow of fuel may be induced into said passage by pressure depression therein, and air bypass means associated with said throttle valve to render said pressure depression ineffective to induce said flow when the throttle valve is closed.

1,892,302. PREPARATION OF ORGANIC COMPOUNDS OF THE ANTHRAQUINONE SERIES. PHILIP HERKIMER GROGGINS, Washington, D. C. Filed June 30, 1931. Serial No. 548,043. 18 Claims. (Cl. 260—60.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)

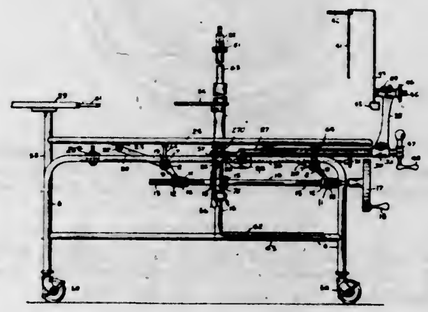
1. A process which comprises heating chloro-anthraquinone with aqueous ammonia in an autoclave under pressure in the presence of potassium chlorate and ammonium nitrate at a temperature of 150° C. to 225° C.

1,892,303. METHOD AND APPARATUS FOR PROPELLING FLUIDS. HAROLD F. HAGEN, Dedham, Mass., assignor to B. F. Sturtevant Company, Hyde Park, Mass., a Corporation of Massachusetts. Filed July 2, 1927. Serial No. 202,986. 17 Claims. (Cl. 230—120.)



1. The method of controlling the inflow of fluid to a rotary propeller having inclined blades which consists in inducing in the body of the fluid at a fixed radial distance from the axis of the blades a uniform linear velocity of spin opposite to the direction of rotation of the blades and opposite to the spin velocity tended to be imparted by the blades at such radial distance from the axis, and permitting free radial and rotary movement of the fluid to allow the fluid to assume a spin velocity at each point which is substantially in inverse proportion to the radial distance from the axis.

1,892,304. FRACTURE OPERATING TABLE. GEORGE W. HAWLEY, Bridgeport, Conn., assignor to Kny-Scheerer Corporation, New York, N. Y., a Corporation of New York Filed Oct. 18, 1930. Serial No. 489,505. 9 Claims. (Cl. 128—71.)



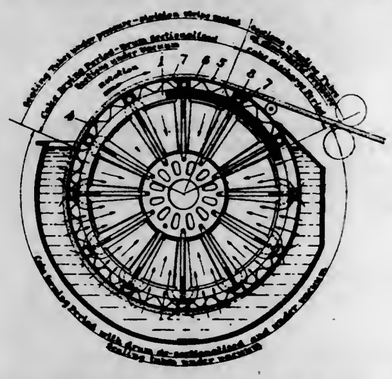
3. In a fracture operating table a frame, a top vertically and longitudinally movably mounted on said frame, means for operating said top entirely from the foot of said table comprising a pair of links pivotally mounted on said frame and each connected at their upper ends to said top and at their lower ends to a collar internally threaded and mounted over a threaded section on a shaft rotatably secured in a fixed longitudinal position in said frame and having a wheel and handle secured to the foot end of the same, and a pair of leg and foot supporting elements pivotally supported at their inner ends on said frame and turning horizontally through arcuate guide elements in each of which is mounted a locking rod operated from the foot end of the table for locking said leg and foot supporting elements in the desired position in said arcuate elements.

1,892,305. VEHICLE SPRING AND SHOCK ABSORBER SUSPENSION. ALBERT F. HICKMAN, Eden, N. Y., assignor to Hickman Pneumatic Seat Co., Inc., Eden, N. Y., a Corporation of New York. Filed Nov. 24, 1930. Serial No. 497,653. 28 Claims. (Cl. 267—16.)



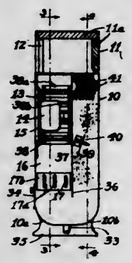
14. A vehicle spring suspension associated with the frame and axle of a vehicle and comprising a main spring connected with said axle; a link pivotally connected at one of its ends to said spring; a lever pivotally connected to the other end of said link and journaled on the vehicle frame at such a point that the pivotal centers of said link are able to lie in the same straight line with the axis of said lever; and means for resiliently restraining rotation of said lever about its axis.

1,892,306. FILTER. GERALD O. HILLIER, Berkeley, Calif., assignor to Oliver United Filters Inc., San Francisco, Calif., a Corporation of Nevada. Filed Oct. 13, 1930. Serial No. 488,382. 19 Claims. (Cl. 210—202.)



1. In a continuous filter having a substantially endless filtering area, division strips comprising collapsible tubes for sectionalizing and desectionalizing said filterng area.

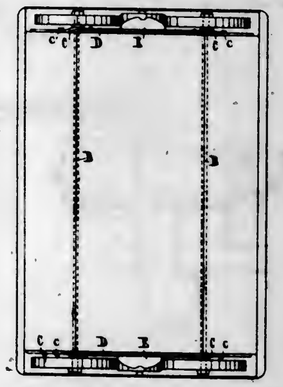
1,892,307. AIR CONDITIONING MECHANISM. WAYNE D. JORDAN, Evanston, Ill. Filed June 15, 1931. Serial No. 544,428. 18 Claims. (Cl. 257—138.)



17. In a mechanism for conditioning air, the combination of a casing containing substantially parallel passageways, a first one of said passageways having an air inlet opening at one of its ends and otherwise closed at said one end and open at its other end, a fan in said first passageway for moving air therein towards the other end thereof, atomizing means in a second of said passageways, said second passageway being open at each of its ends, a third of said passageways by-passing said atomizing means and open at each of its ends, the said other end of said first passageway being in open communication with one end of each of said second and said third passageways, a hood on said casing, the other end of each of said second and said third passageways opening into said hood, said hood having a discharge opening through one of its walls, whereby air delivered from said first passageway passes into said second and third passageways and is then mixed in said hood and delivered therefrom into the room containing said mechanism, and a heating element extending across the discharge end of said first passageway and also across the admission end of said third passageway.

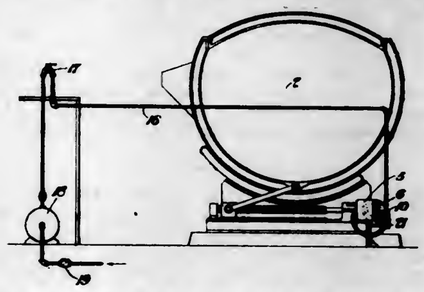
1,892,308. CARPET SWEEPER. WILLIAM HENRY KENYON, Accrington, England, assignor to Entwisle & Kenyon Limited, Accrington, England. Filed Jan. 2, 1930, Serial No. 418,103, and in Great Britain Mar. 12, 1929. 1 Claim. (Cl. 15—41.)

A carpet sweeper comprising in combination a casing, two axles upon which the casing is carried, wheels rotatably mounted on each end of each axle, a brush centrally disposed between the axes mounted to rotate within the casing, a spindle carrying the brush, a pulley on each end of the brush spindle engaging a wheel on each axle by which the spindle and brush are rotated, C springs one end of each of which is affixed to the outside of the casing and the other end of each to the wheel axles to



support the casing on the axles, flats on the axles, keyhole slotted washers mounted on the flats on the axles to prevent rotation thereof and close the axle holes in the casing and further C springs outside the casing extending between the axles with their ends affixed to the washers to keep the wheels in driving contact with the brush pulleys.

1,892,309. AUXILIARY DRIVE FOR HOT METAL MIXERS. FRED E. KLING, Youngstown, Ohio. Filed Aug. 12, 1931. Serial No. 556,684. 6 Claims. (Cl. 266—39.)

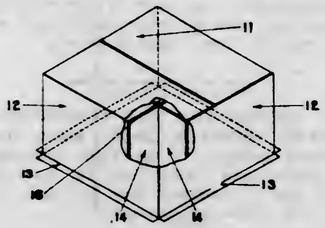


1. In combination with a hot metal mixer having a rotatable operating shaft, a fluid pressure motor, a fluid pressure transmission line for said motor and means for connecting said motor to said operating shaft by fluid pressure transmitted through said line.

1,892,310. DERIVATIVES OF NAPHTHAZARINE AND PROCESS OF PREPARING THEM. GEORG KRAENZLEIN and ROBERT WELDE, Frankfort-on-the-Main-Hochst, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed July 17, 1929. Serial No. 379,065, and in Germany Aug. 4, 1928. 7 Claims. (Cl. 260—56.)

5. As new compounds the condensation products which are obtainable by causing an aliphatic aldehyde to react with a naphthazarine intermediate product obtainable by treating a compound of the group consisting of 1.5- and 1.8-dinitro-naphthalene with sulfuric acid in the presence of a reducing agent according to known processes, the said new condensation products being insoluble in water and sparingly soluble in most of the organic solvents.

1,892,311. HOLLOW CORE OR BLOCK FOR USE IN CONCRETE STRUCTURES. ALEXANDER SIMPSON MACDONALD, Sydney, New South Wales, Australia. Filed Jan. 12, 1931, Serial No. 508,204, and in Australia May 26, 1930. 1 Claim. (Cl. 25—131.5.)

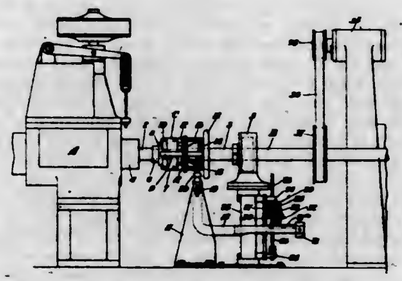


A hollow dome for use in the formation of concrete structures comprising a shell of box-like formation, and a core formed from a single sheet of material adapted to be fitted in the dome and including a top and four sides, said sides having their adjacent ends spaced to provide gaps, said sides being flexibly connected with the top whereby they, may be moved inwardly to close the gaps to facilitate the withdrawal of the core from the dome.

1,892,312. METHOD OF PICKLING FERROUS METALS. JAMES RAYMOND MCELHANEY, Vandergrift, Pa., assignor to American Sheet and Tin Plate Company, a Corporation of New Jersey. Filed June 16, 1931. Serial No. 544,927. 2 Claims. (Cl. 148—8.)

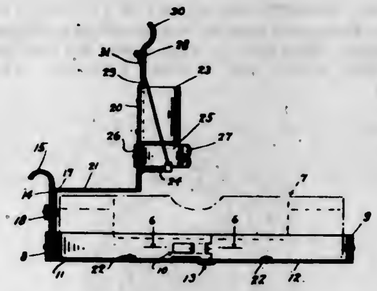
1. In methods of pickling ferrous metal the step consisting in immersing the material to be pickled in water heated to between 150 and 212 degrees Fahrenheit preparatory to its introduction into the acid pickling solution.

1,892,313. ENGINE STOP. GEORGE H. MCFEATERS, Johnstown, Pa. Filed May 15, 1929. Serial No. 363,328. 5 Claims. (Cl. 192—140.)



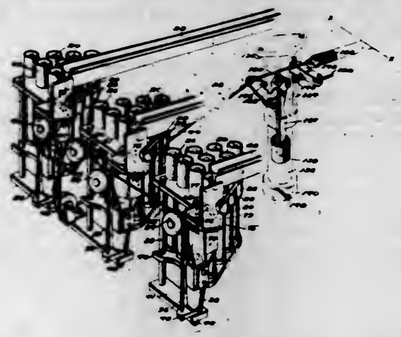
1. The combination with a two-part shaft arranged end for end in alinement, one of said shaft parts being a driving member and the other part being a driven member, of a separable coupling for said shaft parts, said coupling comprising a fixed coupling disk on the driving part of said shaft, a second fixed coupling disk on the driven part of said shaft, said coupling disks having diametrically arranged slots in their periphery, yieldable connecting fingers pivotally mounted in the slots in said disk on said driving part of said shaft and adapted to enter the slots in said disk on the driven part of said shaft to form a driving connection between said disks, means tending to normally disengage said fingers from the slots in the disk on said driven part of said shaft, means for positively holding said fingers in the slots in said disk on said driven part of said shaft, and means operable by the speed of the driving part of said shaft when said shaft exceeds a predetermined maximum speed for automatically rendering said last named means inoperative.

1,892,314. CIGAR AND CIGARETTE EXTINGUISHER. ARTHUR A. MILLER, Selinsgrove, Pa. Filed Jan. 12, 1932. Serial No. 586,203. 4 Claims. (Cl. 131—51.)



1. In a structure of the class described, in combination, an open-ended cylinder constituting a holding receptacle, supporting means therefor, a plate hingedly attached to the supporting means and arranged in vertically spaced position beneath the lower end of said cylinder and occupying a normal horisontal plane to allow the lighted end of the cigarette to be seated thereon, and means interposed between the plate and lower end of the cylinder for crushing and extinguishing the ignited end of the cigarette.

1,892,315. BOWLING ALLEY. FRANK J. MILLER, East Orange, N. J. Filed Sept. 20, 1930. Serial No. 483,297. 12 Claims. (Cl. 273—45.)



1. A bowling alley comprising an alley board, a plurality of pins, a plurality of vertical pin housing tubes formed in said alley board, means for raising and maintaining said pins upright above the tops of said tubes, a ball adapted to be projected along said alley board toward said pins, and means for automatically withdrawing said pins into said tubes and below the level of said alley board when knocked over.

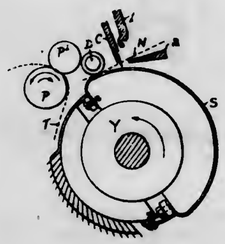
1,892,316. NONCORROSIVE STEEL ALLOY. H. ALTON MITCHELL, ALFRED W. GREGG, and RAYMOND H. FRANK, Columbus, Ohio, assignors to The Bonney-Floyd Company, Columbus, Ohio, a Corporation of Ohio. Filed Dec. 26, 1929. Serial No. 416,764. 4 Claims. (Cl. 75—1.)

1. A non-oxidizing alloy containing the following ingredients in substantially the relative proportions given:

	Per cent
Carbon	.50
Manganese	14.00
Aluminum	11.00
Silicon	.50

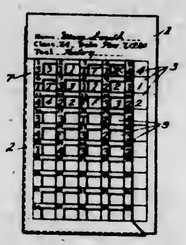
the balance being principally iron with the exception of incidental impurities such as phosphorus and sulphur.

1,892,317. COMBING MACHINE FOR TEXTILE FIBERS. JOHN WILLIAM NASMITH, Heaton, Mersey, Manchester, England. Filed Dec. 11, 1929, Serial No. 413,340, and in Great Britain Aug. 3, 1929. 8 Claims. (Cl. 19—118.)



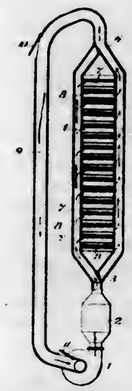
1. In a combing machine of the moving nipper type, as a complete detaching and piecing means for a tuft of short or long fibers presented by the nippers and combed, a combing cylinder segment, and a roller group consisting of a single detaching roller making intermittent contact with such segment for tuft detaching purposes, and a pair of piecing rollers, the detaching roller being in clearing relation with the upper roller of the piecing roller pair but out of actual contact therewith; and the said piercing roller pair being rotatable alternately backwardly and forwardly in timing with the contact timing of detaching roller and combing cylinder segment, the extent of movement of the piercing rollers being independent of the detaching movement.

1,892,318. EXAMINATION DEVICE. SIDNEY L. PRESSEY, Columbus, Ohio. Filed Dec. 24, 1931. Serial No. 583,044. 5 Claims. (Cl. 35—12.)



1. An examination device of the class described, comprising a key substantially rectangular configuration closed along two of its adjacent edges and open along its remaining edges to form a corner pocket, at least one of the sides of said key being provided with vertical and horizontal rows of perforations, each of said perforations bearing identifying and distinguishing indicia and having space immediately adjacent thereto where the right answer to the corresponding question may be marked, and an answer card receivable within the pocket of said key, said card having at least one of its sides provided with answer receiving spaces arranged to align with the perforations in the key when the edges of said card are in engagement with the closed edges of the key.

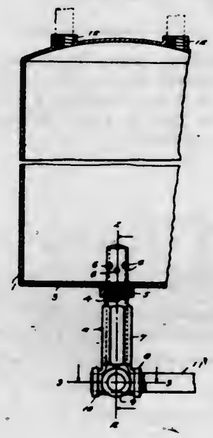
1,892,319. DEVICE FOR THE CONDITIONING AND DRYING OF CEREALS. ERNST ROTH, Niederuzwil, Switzerland, assignor to the Firm Gebruder Buhler, Uzwil, Switzerland. Filed Apr. 29, 1931, Serial No. 533,818, and in Germany May 14, 1930. 2 Claims. Claim. (Cl. 123—13.)



1. In a device for the conditioning and drying of an uninterrupted stream of cereals, the combination with a treatment chamber for the goods, of an air entrance passage and an air exit passage adjoining said treatment chamber, branch conduits open at the bottom extending through said chamber and alternately communicating at one end with either of said passages for admission or eduction of air respectively, an air heating device connected with both of said passages at one end of said chamber, a blower preceding said air heating device, an air return connected with both of said passages at the other end of said chamber and extending to the intake end of said blower, and air control means at each end of said chamber for selectively connecting one of said passages with the air supply and simultaneously the other passage with the air return for preventing precipitation of moisture and impurities in the air circulation means.

1,892,320. BOTTOM SUPPLY AND SPRAY TUBE FOR DOMESTIC BOILERS. GEORGE W. SILTZ, Port Chester, N. Y. Filed May 23, 1931. Serial No. 539,611. 1 Claims. (Cl. 123—13.)

A bottom supply tube for domestic boilers comprising a tubular member closed at the upper end and provided with a plurality of relatively small radially arranged dischange ports near said upper end, a nut member formed with the tubular member below the ports, exterior threads carried by the tubular member between the nut member



and the ports, and a T-shaped connection carried by the lower end of the tubular member and affording at least two inlets to said tubular member.

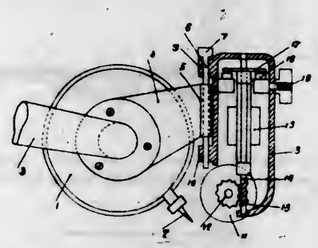
1,892,321. BRACE END. WILLIAM ARTHUR SMITH, Wanstead, London, England. Filed July 25, 1932, Serial No. 624,557, and in Great Britain Sept. 17, 1931. 6 Claims. (Cl. 24—73.)



1. A brace end adapted to be removably associated with a flexible brace strap, comprising two relatively slidable parts, one of which is formed as a cam surface to produce a wedging action on the brace strap which is passed between said parts, the other part incorporating side lugs with inturned extremities which co-operate with said cam surface and interengaging portions being formed on said lugs and in said cam surface to produce an additional retaining action between the said parts in the locking position.

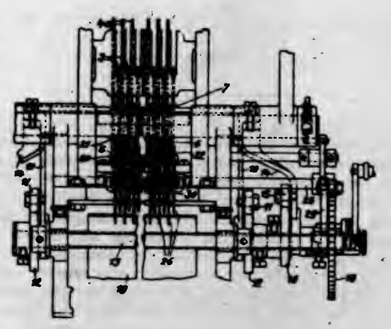
1,892,322. DEVICE PLAYING RECORDS WITH A CONSTANT LINEAR SPEED. GEORGES SAINT MARTIN, Paris, France. Filed Mar. 2, 1932, Serial No. 596,321, and in France Mar. 17, 1931. 2 Claims. (Cl. 274—1.)

1. A device for decreasingly braking a record driven at constant angular speed for making the sound groove advance at a constant linear speed comprising in combination the sound arm, the needle carried by it, a casing pivotally secured to the sound arm and adapted to move vertically with reference thereto, a wheel carried by the casing and adapted to roll over the record surface without slipping with reference thereto to the rear of the needle, a centrifugal regulator carried by the casing and driven by the wheel and means controlled by the regulator for



damping the movement of the wheel and thereby of the record with an energy increasing with the speed of the wheel.

1,892,323. DOBBY. HUGO STÄUBLI, Zurich, Switzerland, assignor to Messrs. Gebr. Stäubli & Co., Horgen, Switzerland. Filed July 28, 1930, Serial No. 471,350, and in Switzerland Nov. 6, 1929. 15 Claims. (Cl. 139—67.)

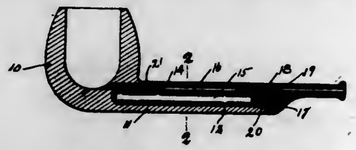


1. A dobby, comprising an endless pattern card, two series of movable hooks for lifting the threads of the warp, a lifting knife for each of said series of hooks adapted to engage with these hooks and to perform a reciprocating movement together with the hooks engaged with it and a short movement relatively to these hooks at one of its dead points, a series of movable members for each series of hooks to temporarily hold said hooks out of engagement with the associated lifting knife, one movable supporting means for each of said two series of members adapted to carry these members and to control the position of the lifting hooks relatively to the lifting knife and to receive that movement which is determinative for the engagement of said hooks on the associated lifting knife during the lost motion of the corresponding lifting knife pick reading needles associated with the pattern card, and operable connections between the needles and the movable members.

1,892,324. SMOKING PIPE. FRED L. WARNER, Hartford, Conn. Filed May 29, 1929. Serial No. 366,780. 8 Claims. (Cl. 131—12.)

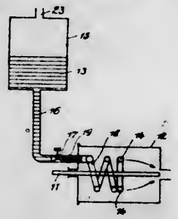
1. A smoking pipe comprising in combination, a bowl having a stem extension thereon, a nicotine retaining receptacle inserted within a recess within said extension, said receptacle having an enlarged cavity extending to and open at the free end of said extension, said receptacle also having a continuous passage from end to end, one end thereof entering the cavity within the bowl, means to ad-

mit a limited quantity of air to said passage, communicating means between said passage and cavity, and a mouthpiece inserted within the cavity of said receptacle having



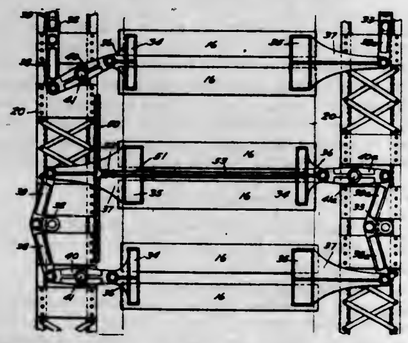
an opening extending therethrough and communicating with said passage and cavity and having a shoulder closing the outer end of said passage.

1,892,325. MEANS FOR CONVERTING THE ELECTRIC ARC INTO AN ELONGATED FLAME. ENGELBERT WIST, Vienna, Austria. Original application filed Mar. 28, 1929, Serial No. 350,582, and in Austria Feb. 26, 1929. Divided and this application filed Feb. 25, 1930. Serial No. 431,227. 2 Claims. (Cl. 219—14).



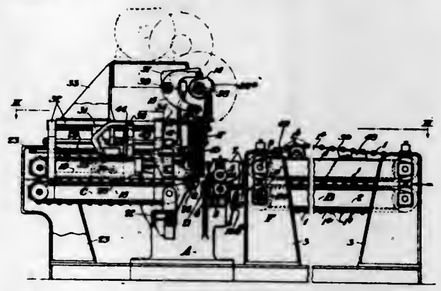
1. A device for forming an elongated electric arc comprising an electrode of metal, a second electrode of carbon, one of the electrodes being of rod shape, the other electrode being tubular and disposed in concentric spaced relation to the rod-shaped electrode, means for forming an electric arc between the electrodes, and means for directing a blast of gaseous hydrocarbon longitudinally of the rod-shaped electrode and confined by the tubular electrode, with the blast passing across the arc for the elongation of the latter in the direction of the blast, the gaseous hydrocarbon serving to renew the carbon electrode without affecting the metal electrode.

1,892,326. APPARATUS FOR GRINDING AND POLISHING GLASS. WALTER O. AMSLER, Toledo, Ohio, assignor to Simplex Engineering Company, Washington, Pa., a Corporation of Delaware. Filed June 12, 1926. Serial No. 115,505. 14 Claims. (Cl. 51—57.)



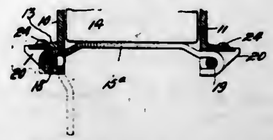
14. In a grinding and polishing apparatus, a surfacing element, and means for imparting a compound longitudinal and transverse movement to the surfacing element relative to the path of advance of the material with the transverse movement of the ends of the element being through arcs of different radii so that said longitudinal movement is considerably greater than the transverse movement to insure even grinding.

1,892,327. SHEARS. DARIO BUCCICONE, Gary, and ROLLAND E. PETERSON, Aetna, Ind., assignors to American Sheet and Tin Plate Company, a Corporation of New Jersey. Filed Dec. 4, 1931. Serial No. 579,080. 6 Claims. (Cl. 164—59.)



1. A cross-cut shear for shearing multiple length sheets and packs into single lengths comprising a pair of shear knives, means for reciprocating at least one of said knives, means for conveying the work to be sheared into and through the shear, said means including constantly moving continuous conveyer chains arranged one above the other and carrying work-engaging idler rollers which project beyond the chain links and between which the work is pinched, a stop member adapted to be normally in the path of the sheet or pack and to be automatically moved out of the path of the work during the cutting stroke of said movable shear knife to permit the sheared portion of said work to pass thereunder and to be automatically moved down into the path of the work again during the return stroke of said movable shear knife.

1,892,328. DRAFT GEAR CARRIER. CHARLES R. BUSCH, Orange, N. J., assignor to Buffalo Brake Beam Company, New York, N. Y., a Corporation of New York. Filed Apr. 13, 1928. Serial No. 269,726. 5 Claims. (Cl. 213—61.)



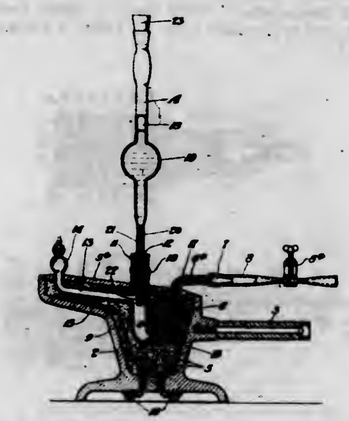
1. In combination with the center sill of a railway car comprising spaced apart longitudinally extending flanged bars, and a draft gear; a carrier plate forming the sole support of the draft gear between the center sill bars, coupling pins detachably connecting both ends of the carrier plate with parts of the center sill bars, to permit either end of the plate as may be selected upon removal of one coupling pin to swing downwardly and to one side of the space occupied by the draft-gear for depositing the draft gear from the space between the bars of the center sill free from obstruction by the supporting plate.

1,892,329. TEST LAMP. STANTON I. CHARLESWORTH, ARCH W. HARRIS, and CARL P. LINDER, Cleveland, Ohio. Filed Dec. 26, 1928. Serial No. 328,552. 5 Claims. (Cl. 158—53.)

1. A constant feed pipette for use with sulfus test lamps and the like comprising a tubular body having an enlarged

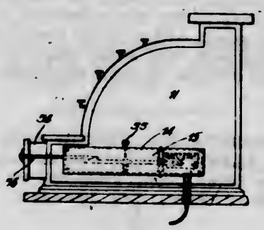
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bulb-like reservoir intermediate its ends and having its lower portion reduced in diameter to form a wick chamber,



an air-tight closure at the upper end of said body, and a wick mounted in said wick chamber.

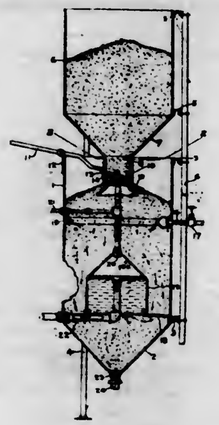
1,892,330. ALARM SWITCH. WILLIAM A. CORNIN, New York, N. Y. Filed Feb. 18, 1931. Serial No. 516,748. 3 Claims. (Cl. 200—52.)



1. In combination with a support having a drawer slidably mounted therein, a housing mounted on said support, an arm secured to said drawer and extending into said housing, a shoulder on the free end of said arm, an electric circuit control switch mounted within said housing having a pivoted actuating member, a catch member loosely connected to said actuating member, a shoulder formed on the free end of said catch member, spring means acting upon said catch member to dispose said shoulder thereon in the path of the shoulder on said arm, and a manipulating element carried by said catch member and extending exteriorly of said housing by which said catch member may be moved against the action of said spring means to dispose the shoulder thereon out of the path of the shoulder on said arm.

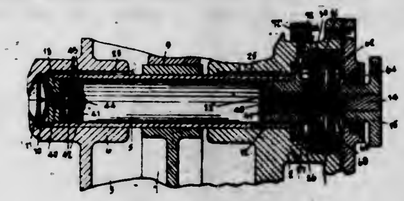
1,892,331. METHOD AND APPARATUS FOR DISSOLVING SALTS. THOMAS FORSTER COURTHOPE, Geneseo, and WILLIAM H. MCGUIRE, Retsof, N. Y., assignors to Retsof Mining Company, Scranton, Pa., a Corporation of New York. Filed Sept. 9, 1929. Serial No. 391,482. 7 Claims. (Cl. 23—272.)

1. A salt dissolving apparatus comprising a vat for solid material to be dissolved, said vat having a closed bottom and an open top, a solution-receiving chamber in said vat having an open bottom and a closed top, said chamber being separate from the inner wall of the vat and arranged above its bottom, means for introducing a solvent into the vat at a point above said chamber, and an



outlet for the solution in said chamber arranged at a point adjacent the top of the chamber and determining the highest level of the solution in the chamber.

1,892,332. OIL SEAL JOINT FOR COMPRESSOR UNITS. PHILIP W. DES ROCHES, Detroit, Mich. Filed Feb. 9, 1928. Serial No. 253,152. 19 Claims. (Cl. 286—11.)

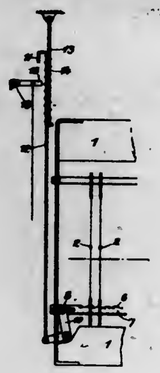


1. In a fluid seal for relatively moving parts of an apparatus, a chamber, a shaft located in the chamber and a bearing part for rotatably supporting the shaft, the space between the bearing part and the shaft communicating with the interior of the chamber, thrust bearing members for engaging an end part of the shaft, a member for pressing the end of the shaft against the thrust bearing members, a second chamber, the end part of the shaft located in the said second chamber, a fluid located in the second chamber means for subjecting the fluid to a pressure which coacts to sustain the end thrusts of the thrust bearing members against the end part of the shaft.

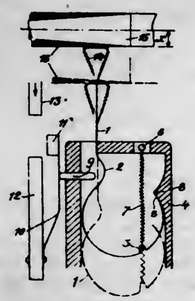
1,892,333. WARP STOP MOTION FOR LOOMS. ERNST BOLI, Ruti, Switzerland, assignor to Maschinenfabrik Rüti vormals Caspar Honegger, Ruti, Switzerland. Filed Mar. 21, 1930, Serial No. 437,813, and in Switzerland Mar. 22, 1929. 2 Claims. (Cl. 139—364.)

1. In a warp stop motion for looms, the combination with a heddle frame provided with a series of heddles, a stationary toothed bar supported by the heddle frame, a counter-toothed bar longitudinally movable in the said

frame, both toothed bars being movable together with the heddle frame, means for longitudinally moving the second toothed bar independently of the motion of the heddle frame, a push member pivotally mounted on a vertically movable rod controlled by the movable toothed bar and capable of operating the stopping device, a striking member fixed to the slay and capable of acting upon the lower push member and a roller mounted in the front part of the machine and capable of rocking the said push member out of the path of the striking member before the slay has completed its forward swinging movement.

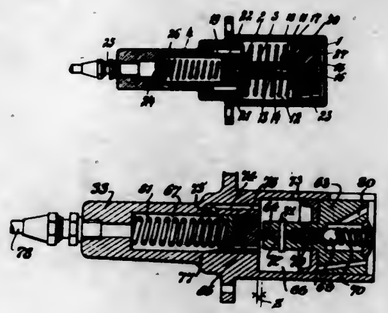


1,892,334. WEFT FEELER FOR AUTOMATIC LOOMS. ERNST EGLI, Ruti, Switzerland, assignor to Maschinenfabrik Rüti vormals Caspar Honegger, Ruti, Switzerland. Filed Apr. 1, 1930, Serial No. 440,794, and in Switzerland Apr. 18, 1929. 1 Claim. (Cl. 139—281.)



In an automatic loom, the combination of means for initiating the change of the cops, a side slipping feeler, including rounded corners, a helical spring wound around the feeling surface of the said feeler and its rounded corners, a pin adapted for longitudinal displacement and normally out of contact with the feeler, a spring-supported member adapted to be moved by the pin, a member which is in operative connection with the cop changing motion to act upon this motion, a push member connected to the slay, a kink and an inclined surface in the said feeler normally spaced from the said sliding pin and to push the spring supported member between the other said member and the push member to act upon the said pin only after a non-operative laterally slipping of the feeler-member, no appreciable resistance being opposed to this slipping movement.

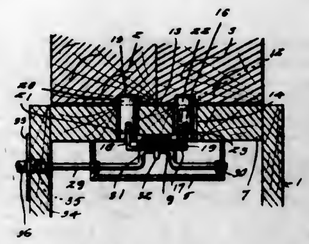
1,892,335. HYDRAULIC BRAKE. ERNST ENGEL, Frankfort-on-the-Main, Germany, assignor to Alfred Teves Maschinen- und Armaturen-Fabrik Gesellschaft mit beschrankter Haftung, Frankfort-on-the-Main, Germany, a Corporation. Filed Nov. 10, 1930, Serial No. 494,765, and in Germany Sept. 21, 1929. 8 Claims. (Cl. 60—54.6.)



1. In a hydraulically operated brake system, a cylinder, a brake take-up piston and a co-axial connected brake applying piston, both pistons being accommodated in said cylinder, and an excess pressure valve located in the coaxial connection between said pistons and opening to said cylinder ahead of the brake take-up piston and connecting said cylinder with a sump whereby after the play in the brake has been taken up the brake take-up piston is rendered inoperative.

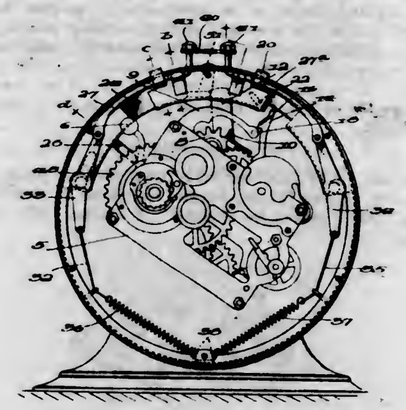
4. In a hydraulic brake system, a large piston for preparing the brakes for application, a small piston for applying the brakes, valve means for rendering the larger piston inoperative during the application of the brakes and a control piston subject to the brake applying pressure for opening said valve means when the brake applying pressure is sufficient to apply the brakes.

1,892,336. COMBINATION WINDOW SASH LOCK AND BURGLAR ALARM. WELBORN D. ENGLAND and COURT B. CHAFFEE, Luray, Tenn. Filed May 17, 1930. Serial No. 453,324. 2 Claims. (Cl. 200—55.)



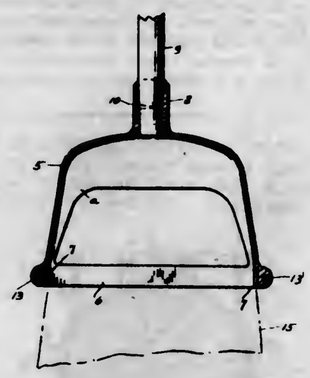
1. A lock circuit closer, comprising a casing having horizontal openings, a leaf spring arranged vertically within the casing and secured at its lower end thereto and having its upper end located near said openings, bolts projecting through said openings beyond the casing and normally held in projected position by the upper end of the spring, means connecting the bolts to the upper end of the spring for movement about horizontal axes, a contact located in the casing above one of the bolts and insulated from the casing, such bolt being held by gravity out of engagement with said contact, a contact located in the casing beneath the other of the bolts and insulated from the casing, and means yieldingly supporting said other bolt out of engagement with its contacts.

1,892,337. ALARM CLOCK. ROBERT O. FERGUSON, Bristol, Tenn. Filed July 28, 1931. Serial No. 553,630. 11 Claims. (Cl. 116—106.)



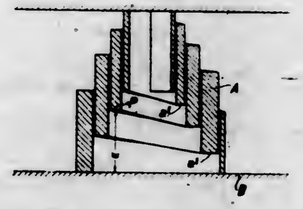
1. An alarm clock having in combination with the usual gong and time controlled striking mechanism, means for causing the gong to be actuated intermittently, only, under the time controlled mechanism, and automatic means for actuating the gong continuously, only, upon an abnormal rise of temperature.

1,892,338. BROOM HOLDER. GEORGE GENTSLINGER, Wapakoneta, Ohio. Filed Oct. 21, 1931. Serial No. 570,171. 1 Claim. (Cl. 15—177.)



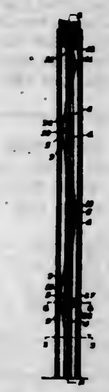
A broom holder comprising a U-shaped frame having inwardly disposed flanges, a broom handle socket at the hight portion of the frame, a fixed cross member between the ends of the frame, a removable bar at the ends of the frame in parallel relation to the fixed bar removable securing means between the removal bar and the end portions of the frame, and laterally disposed guide lugs on the removable bar for abutment against the inner sides of the end portions of the frame when the holder is assembled.

1,892,339. CONICAL SPIRAL SPRING. SIEGFRIED GROSS, Essen, Germany, assignor to Fried. Krupp Aktiengesellschaft, Essen-on-the-Ruhr, Germany. Filed Aug. 8, 1928, Serial No. 297,209, and in Germany Aug. 29, 1927. 2 Claims. (Cl. 267—62.)



1. A conical spiral spring having a graduated cross section decreasing from its base to its tip with said graduated cross section so related to the pitch with which said spring is wound that the coils thereof abut on one spring abutment at least approximately simultaneously, upon the ultimate load being exerted.

1,892,340. FOLDABLE DOOR STRUCTURE. FREDERICK A. GUTH, Columbus, Ohio. Filed Oct. 17, 1930. Serial No. 489,417. 10 Claims. (Cl. 20—19.)

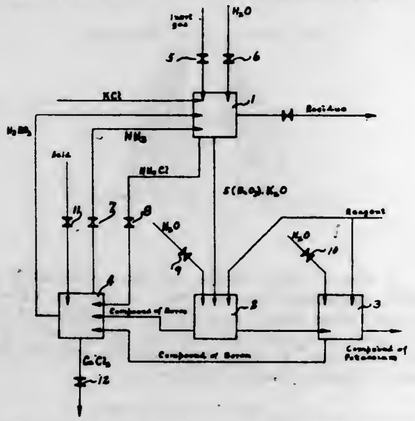


7. A structure comprising a plurality of door panels hingedly united to one another and mounted to rock about horizontally extending pivot studs fixed centrally at the ends of the panels and arranged for vertical sliding movement within grooves provided therefor in the side edges of the door opening, a shaft journaled for rotation above said door structure and extending the full width thereof, an arm provided at each end of said shaft, and connecting means between said arms and panels whereby the panels are held in a true horizontal plane and capable of being raised and lowered without bind.

1,892,341. MANUFACTURE OF POTASSIUM SALTS FROM POTASSIUM CHLORIDE. LOUIS HACKSPILL, Strasbourg, DOMINIQUE CLAUDE, Le Raincy, LOUIS EMILE ANDRES, Wissembourg, and PIERRE ALEXANDRE ANTOINE ROLLET, Strasbourg, France. Filed Jan. 23, 1931, Serial No. 510,842, and in Germany Feb. 5, 1930. 5 Claims. (Cl. 23—184.)

1. The process of manufacturing a potassium compound of the group consisting of the nitrate, the phosphate, the

sulphate, and the hydroxide, which consists in treating natural potassium chloride with boric acid to form potassium pentaborate, and decomposing the pentaborate with a reagent chosen from the group containing nitric acid, phosphoric acid, sulphuric acid, and lime to remove the boric acid and to obtain the desired potassium salt.

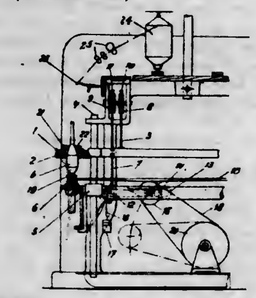


5. The process of manufacturing potassium hydroxide, which consists in treating natural potassium chloride with boric acid and ammonia to obtain potassium pentaborate and ammonium chloride, repeatedly dissolving the pentaborate in water and mixing it with lime water to form potassium hydroxide in solution and to precipitate calcium borate, adding the previously formed ammonium chloride to decompose the calcium borate, and heating the mixture above 100° C. to separate out the calcium chloride and to recover the boric acid and the ammonia.

1,892,342. PROCESS FOR THE PREPARATION OF BEERS WEAK IN ALCOHOL. ALBRECHT HASELBACH, Namslau, Germany. Filed May 28, 1930, Serial No. 456,799, and in Germany May 28, 1929. 3 Claims. (Cl. 195—1.)

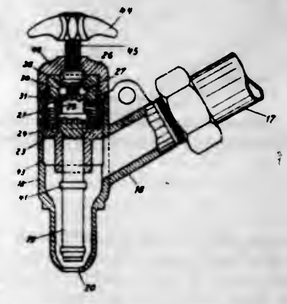
1. Process for the preparation of beer poor in alcohol, consisting in preparing the original wort with an addition of hops of about 2 lbs. per cwt. of mashed malt and using a top-fermenting yeast normally employed for wort containing 1 lb. of hops per cwt. of malt and fermenting and storing for about 1 week and 4 to 6 weeks respectively.

1,892,343. RING SPINNING AND RING DOUBLING MACHINE HAVING A MOVABLE SPINDLE RAIL. HEINRICH OTTO HESS, Winterthur, Switzerland, assignor to Firm Actiengesellschaft Joh. Jacob Rieter & Cie., Winterthur, Switzerland. Filed Apr. 26, 1930, Serial No. 447,639, and in Switzerland May 10, 1929. 4 Claims. (Cl. 118—41.)



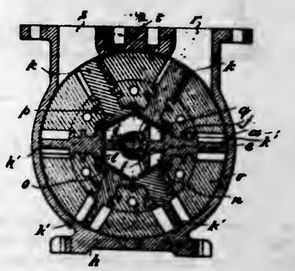
1. In a ring spinning and ring doubling machine of the type described, a stationary driving drum, endless driving means for actuating the spindles of the machine, pulleys for the said endless driving means for guiding and tightening the same, a vertically movable spindle rail carrying the said spindles, means for moving the said pulleys in unison with the said spindle rail, means for so automatically displacing the said pulleys relatively to the said driving drum, as to continuously equalize the required length for the said endless driving means, said means including a single individual movable tension roller, said roller being of double width whereby the end of the endless drive means, which runs on the drive drum as well as the end which runs off said drum is guided and tensioned.

1,892,344. APPARATUS FOR DISPENSING OILS AND FATS. PETER HUBER, Zurich, Switzerland. Filed Dec. 16, 1930. Serial No. 502,692. 3 Claims. (Cl. 137—153.)



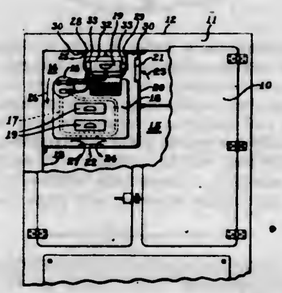
1. A supply valve comprising a cylindrical body having a discharge spout and also having an inlet duct for fluid under pressure, a cylindrical piston in the body movable toward the spout and movable in the reverse direction by pressure of the fluid in the valve body, a valve arranged to open and close the spout and extending through and movable to a limited extent in the piston and provided with a stop to limit closing movement independently of the piston, and also with a stop engageable by the piston when the latter moves to closing position, a spring active to move the piston normally to closing position, a spring active to move the valve to closing position when the piston so moves and yieldable means countervailed by said springs to prevent casual movement of the valve when the latter is in either open or closed position.

1,892,345. PUMP, COMPRESSOR, ENGINE, AND THE LIKE. CECIL HUGHES, Downend, near Bristol, England. Filed Nov. 8, 1929, Serial No. 405,779, and in Great Britain July 5, 1929. 2 Claims. (Cl. 103—143.)



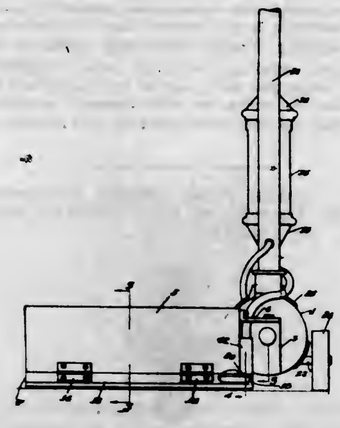
1. A rotary pump or the like comprising a stator casing having a circular chamber, inlet and outlet ports communicating with said chamber at spaced points and an abutment between said ports, a rotor mounted for rotation in said chamber and having spaced peripheral flanges, a shaft arranged diametrically in the rotor and having vanes at its ends terminating at the periphery of the rotor and arranged in the space between the flanges, said vanes being of greater width in one dimension than in the dimension at right angles to the first and means to cause said vane shaft to rotate when the rotor is in rotation, said abutment having a channel therein extending from one of said ports to the other and corresponding in width with the least dimension of the vanes to enable the vanes to pass therethrough from one port to the other.

1,892,346. REFRIGERATING APPARATUS. HARRY B. HULL, Dayton, Ohio, assignor to Frigidaire Corporation, Dayton, Ohio, a Corporation of Delaware. Filed Mar. 31, 1928. Serial No. 266,286. 16 Claims. (Cl. 62—113.)



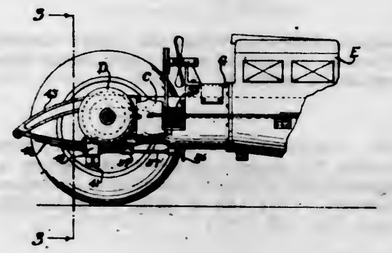
1. In a refrigerator, the combination with a receptacle containing a congealed substance, of means for releasing said substance from the receptacle when inverted, said means comprising a container adapted to contain a warm fluid, and adapted to receive said receptacle, and a valve actuated by the movement of the receptacle within the container and into contact with the valve for admitting warm fluid to said container.

1,892,347. FLOOR WASHING MACHINE. WALTER C. JEROME, Worcester, Mass. Filed Mar. 19, 1930. Serial No. 437,070. 8 Claims. (Cl. 15—50.)



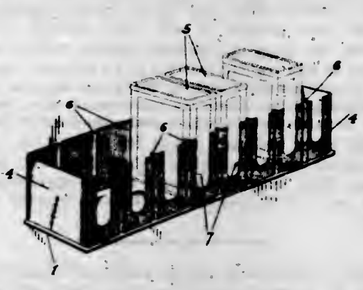
1. In apparatus of the class described, a brush, a casing for said brush, a trough to receive water from said brush, and a pipe in said trough having holes in the top and a reversible pump means to direct water in either direction through said holes.

1,892,348. ENGINE CRANKING MECHANISM. BROR G. JOHNSON, Chicago, Ill. Original application filed Feb. 3, 1931, Serial No. 513,164. Divided and this application filed June 8, 1931. Serial No. 542,780. 4 Claims. (Cl. 74—7.)



1. In an automobile provided with transmission mechanism and an engine and means for driving said mechanism by said engine, a member mounted on said driving means and concentric of the shaft of said engine to turn therewith, an operating shaft and operating means thereon, a bellcrank journalled on said operating shaft and having means thereon engaging said operating means and to be moved into engagement with said member to actuate it, and shaft means alongside of said operating shaft and extending beyond said transmission mechanism and including means for swinging said bellcrank and the means thereon positively into and out of operative engagement with said member and to hold them in position, said extending shaft means with the bellcrank and also said operating shaft being separably engageable and operable from the outside of said transmission mechanism for cranking the engine.

1,892,349. SPICE CAN HOLDER. CHARLES ADOLPH JOHNSEN, Wheatland, Calif. Filed Dec. 8, 1929. Serial No. 411,838. 1 Claim. (Cl. 211—71.)



A can rack including a base, a container on the base comprising a relatively stiff rectangular wall having pairs of narrow ribs struck inwardly in opposed relation dividing the container into equal sized can locating areas, the wall in front of each area being cut away to expose the face of a can placed in the compartment.

1,892,350. CLASPING DEVICE FOR BRACELETS. CHARLES H. KESTENMAN, Providence, R. I., assignor to Kestenman Bros. Mfg. Co., Providence, R. I., a Corporation of Rhode Island. Filed Dec. 26, 1930. Serial No. 504,704. 7 Claims. (Cl. 24—232.)

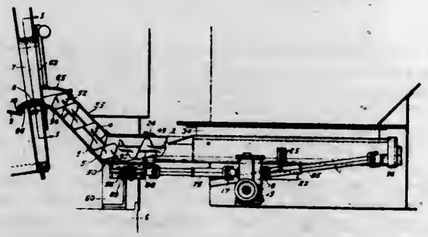
1. In combination with the bail of a wrist-watch, a pair of members having alining bearings adapted to receive the bail on the watch to pivotally connect said members thereto, a hook at the end of one member for engaging with the

end link of a bracelet, and a detent-latch projecting from the opposite member in position to extend across the mouth of the hook on the first member and shaped to adapt it to



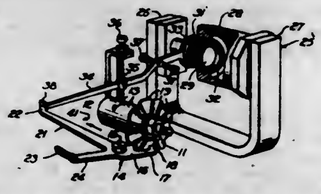
snap over the edge of said hook and engage therewith to retain the two members in clasped relationship with the end link held in the hook.

1,892,351. LOCOMOTIVE STOKER. PAUL A. KETCHPEL, Pittsburgh, Pa., assignor, by mesne assignments, to The Standard Stoker Company, Incorporated, a Corporation of Delaware. Filed Aug. 4, 1928. Serial No. 297,408. 1 Claim. (Cl. 110—101.)



In combination, a furnace provided with a firebox having an upstanding wall with a firing opening therein, a fuel bin for said furnace, a feed conduit extending between said bin and said firing opening comprising a transfer section located beneath the floor of the bin and a single inclined elevator section communicating in end to end relation with and extending upwardly and forwardly from the front end of said transfer section to the lower portion of said firing opening, said transfer section and elevator section being rigid with respect to one another at their junction, the upper forward end of the elevator section opening endwise directly into said lower portion of the firing opening, pressure fluid distributing means arranged adjacent the lower portion of said firing opening to receive fuel from the upper end of said elevator section, a screw conveyor in said transfer section and a separate screw conveyor in said elevator section, the screw in said transfer section being driven from its end remote from the screw in said elevator section, which last named screw is driven from its lower end, and means for driving the screw in said elevator section including a shaft fixed with the screw and extending downwardly and rearwardly through the bottom wall of the transfer section to a point exterior thereof.

1,892,352. PRINTING TELEGRAPH APPARATUS. EDWARD E. KLEINSCHMIDT, Highland Park, Ill., assignor to Teletype Corporation, Chicago, Ill., a Corporation of Delaware. Filed June 27, 1931. Serial No. 547,198. 8 Claims. (Cl. 178—33.)



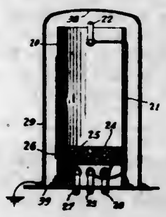
1. In a telegraph selector operable by alternative line conditions, a selector mechanism capable of assuming two selective positions in accordance with said conditions, a relay armature adapted to determine said mechanism in either of its positions, a field magnet for said armature, and a winding secured to said armature and movable with it under control of said line conditions for thereby causing the movement of said mechanism.

1,892,353. STOKER. NATHAN M. LOWER, Bellevue, Pa., assignor to The Standard Stoker Company, Incorporated, a Corporation of Delaware. Filed Nov. 26, 1928. Serial No. 322,053. 4 Claims. (Cl. 110—101.)



4. In combination, a boiler having a firebox provided with a wall having a firing opening therein, a fuel feed casing mounted externally of the firebox in communication with said opening, a distributing jet member secured to said casing and projecting forwardly into said opening, a substantially horizontal plate for receiving fuel thereon having its rear end in contact with said jet member and means extending substantially vertically through said jet member for rigidly securing said plate thereto.

1,892,354. HIGH-FREQUENCY TRANSFORMER. WILLIAM A. MACDONALD, Little Neck, N. Y., assignor to Hazeltine Corporation, Jersey City, N. J., a Corporation of Delaware. Filed Nov. 28, 1930. Serial No. 498,785, and in Australia Sept. 26, 1928. 18 Claims. (Cl. 175—359.)



1. A radio-frequency transformer comprising a secondary winding having a length greater than its diameter and a primary winding located within said secondary winding, said primary winding having an axial length which is small in comparison with that of said secondary winding, the number of turns on said primary winding being greater than the number of turns on said secondary winding.

1,892,355. SPARK PLUG. JOSEPH MARKOWSKI, Chicago, Ill. Filed Oct. 19, 1929. Serial No. 400,755. 2 Claims. (Cl. 123—169.)



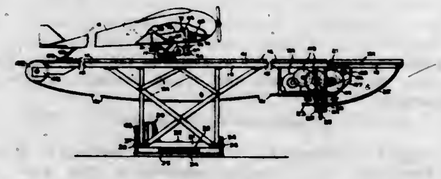
1. In a spark plug, a shell, an insulator insertable in said shell through the bottom thereof, an electrode in the form of a sleeve engaged in said shell to retain said insulator in place, diametrically opposed sparking points carried by said sleeve, an electrode in said insulator, a resilient split sleeve removably associated with said last electrode, opposed sparking points carried by said split sleeve, and means for maintaining the points on said sleeve in a vertical plane normal to the vertical plane of said first said points.

1,892,356. SPOOL. WALLACE C. MILLS, Rockford, Ill., assignor to J. L. Clark Manufacturing Co., Rockford, Ill., a Corporation of Illinois. Filed Dec. 5, 1930. Serial No. 500,183. 6 Claims. (Cl. 242—128.)



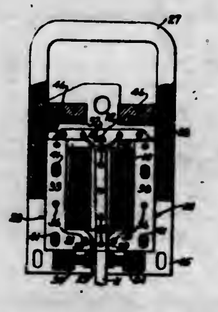
6. A spool having a sheet metal core, a head also formed of sheet metal and secured on the end of the core, with an annular crevice between the parts, and means pressed from the core bridging said crevice to interrupt the continuity thereof.

1,892,357. AIRPLANE CATAPULT. EDWARD E. MOE, Omaha, Nebr. Filed Apr. 27, 1931. Serial No. 533,116. 9 Claims. (Cl. 244—2.)



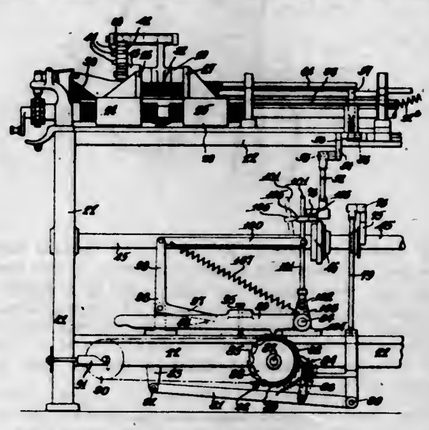
8. A launching device for airplanes, comprising a platform, a belt on the platform, a pair of normally closed clamping jaws carried by the belt adapted to engage a depending portion of an airplane, and co-operating jaw opening means carried by the jaws and the forward end of the platform for opening the jaws as the airplane leaves the platform.

1,892,358. ELECTROMAGNETIC DEVICE. OSCAR MORGENSTERN, Chicago, Ill., assignor to Teletype Corporation, Chicago, Ill., a Corporation of Delaware. Filed Sept. 17, 1931. Serial No. 563,330. 8 Claims. (Cl. 175—339.)



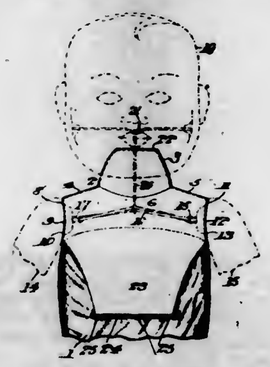
1. In an electromagnet, a field magnet, oppositely disposed L shaped pole pieces, terminating said magnet, a T shaped armature intermediate said pole pieces and pivoted for alternative electro motive response, pole faces upon extreme ends of said pole pieces alternately effective to exert magnetic attraction upon its corresponding portion of the transversal of said armature, pole faces upon mean ends of said pole pieces adapted to exert magnetic attraction upon opposite sides of the longitudinal portion of said armature, and a controlling coil encircling said armature and adapted to produce a flux in accordance with the current impressed thereon for either contributing to or traversing the constant flux generated by said field magnet for correspondingly positioning said armature.

1,892,359. FULL FASHION KNITTING MACHINE. ERNST OSCAR NEBEL, Philadelphia, Pa. Filed Feb. 1, 1928. Serial No. 250,980. 15 Claims. (Cl. 66—129.)



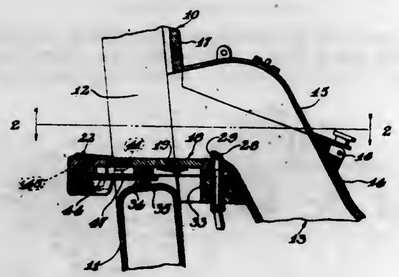
3. In a full-fashion stocking knitting machine, a main yarn carrier, means for moving said main yarn carrier to effect the knitting of a fabric, a narrower for controlling said main yarn carrier to effect the narrowing of the fabric, a reinforcing yarn carrier to interknit reinforcing yarn with said main yarn and a pattern-controlled narrower-mounted means limiting to variable extents the movement of said reinforcing yarn carrier from the edge of the fabric inwardly to produce a variable delineation where the reinforcing yarn terminates in its innermost position of interknitting with the main yarn extending throughout the entire selvage below the welt.

1,892,360. DOLL STRUCTURE. NUNZIO PAGANELLO, Brooklyn, N. Y. Filed Dec. 4, 1930. Serial No. 499,906. 3 Claims. (Cl. 46—40.)



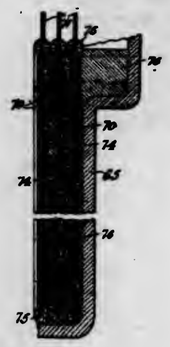
1. A doll structure having a lower body portion, an upper body portion including a breast, a back and a neck formed of a single piece of relatively thin sheet metal, and means integral with the lower end of the breast and back for impinging upon and removably securing said upper body portion to said lower body portion.

1,892,361. STOKER MECHANISM. FRANK C. PICKARD, Erie, Pa., assignor to The Standard Stoker Company, Incorporated, a Corporation of Delaware. Filed May 25, 1929. Serial No. 365,878. 12 Claims. (Cl. 110—101.)



5. As a new article of manufacture; a forward section of a fuel distributor for stokers comprising a table having a flat top face indented on either side by laterally extending channels curving outwardly to the side edges of said table, hook membera extending rearwardly and curving upwardly from the lower rearward edge of the table, and passages extending horizontaly through said table beneath the top face thereof.

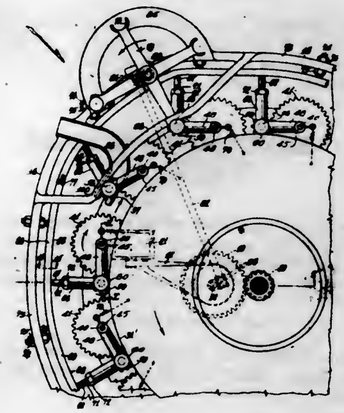
1,892,362. ELECTRICAL CONDENSER AND METHOD OF MAKING THE SAME. GREENLEAF WHITTIER PICKARD, Newton Center, Mass., assignor, by mesne assignments, to General Electric Company, a Corporation of New York. Original application filed Dec. 29, 1922, Serial No. 609,552. Divided and this application filed Dec. 6, 1927. Serial No. 238,066. 16 Claims. (Cl. 175—41.)



1. In an electrical condenser, a metallic armature plate having a coating of sulfur thereon forming a dielectric and a conductor of lower melting point than said sulfur coating and lying in close and intimate contact with said coating forming the opposite polarity armature of said condenser.

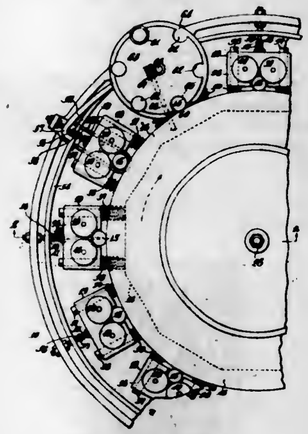
1,892,363. MULTIPLE EXTERNAL GRINDER. CLIFFORD T. RAULS, Brookline, Pa. Filed Sept. 21, 1926. Serial No. 136,771. 21 Claims. (Cl. 51—58.)

1. In an external grinder, a grinding wheel, a turntable movable about the axis of the wheel, a plurality of independent duplicate rotating work-holders spaced about the table, positive feeding mechanism common to all of the work-holders progressively moving them toward the wheel



as they progress about it and means for relatively traversing the work-holders and wheel during the grinding operation.

1,892,364. EXTERNAL GRINDER. CLIFFORD T. RAULS, Brookline, Pa. Original application filed Sept. 21, 1926, Serial No. 136,771. Divided and this application filed Mar. 1, 1929. Serial No. 343,802. 9 Claims. (Cl. 51—48.)



1. In an external grinder a central grinding wheel, spaced pairs of rollers spaced from the wheel in the plane thereof to adapt each pair to present a work piece to the wheel, means for bodily moving the pairs of rollers around the wheel and for positively feeding the rollers inwardly of the wheel along a definite path of grinding, and other means for driving one of each of the pairs of rollers to rotate the respective work pieces.

1,892,365. EYEGLASS MIRROR. JOHN ROWAN, New York, N. Y. Filed Nov. 13, 1930. Serial No. 495,835. 2 Claims. (Cl. 88—41.)

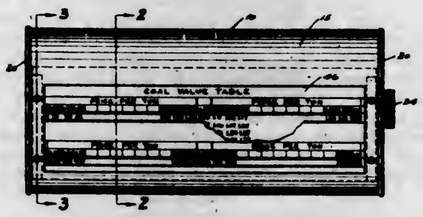


1. An eyeglass mirror for eyeglasses and the like, comprising a gooseneck of pliable non-resilient material, a mirror attached on one end of said gooseneck, and means on the other end of said gooseneck for mounting on the frame or the like of a pair of eyeglasses.

1,892,366. METHOD OF EXTRACTING FATTY OIL. MASANORI SATO and CHIYOMATSU ITO, Dairen, China, assignors to Minami Manshu Tetsudo Kabushiki Kaisha, Dairen, Manchuria, China. Filed June 20, 1929, Serial No. 372,310, and in Japan Sept. 6, 1928. 1 Claim. (Cl. 87—6.)

The method of extracting fatty oil from soya beans, which consists in adding alcohol as a solvent to said beans, heating the mixture under pressure to a temperature above the boiling point of the alcohol at ordinary atmospheric pressure and below 120° C. thereby to extract oil from said beans, and cooling the extracted liquor to a temperature below 50° C. thereby to separate the oil from the alcohol.

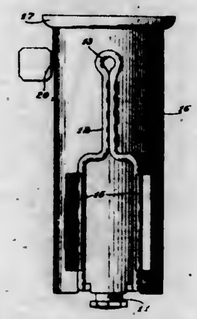
1,892,367. COMPUTING DEVICE. THOMAS R. SHAW, Minneapolis, Minn. Filed Mar. 7, 1930. Serial No. 433,916. 6 Claims. (Cl. 235—86.)



1. In a device of the character described, a casing including a base, upstanding front and rear flanges upon said base and having guideways at the opposite end portions thereof, removable end walls for said casing substantially vertically slidable in said guideways, and a web supporting roller mounted in said end walls to connect the same, said removable end walls and said web supporting roller together constituting a separable unit of the device.

1,892,368. DISPENSING TUBE SUPPORT. JOHN F. SMITH and HARRY SMITH, San Francisco, Calif. Filed Apr. 1, 1931. Serial No. 526,828. 4 Claims. (Cl. 221—60.)

1. In a dispensing device for use with collapsible tubes and other dispensing containers, the combination of a resilient wall engaging member having means for securing it to a wall and oppositely disposed downwardly projecting parallel portions, tube engaging means upon the lower extremities of said downwardly projecting parallel portions, and a tube concealing means slidably engaging the downwardly projecting parallel portions of said re-



silient wall engaging member for concealing the tube and urging said tube engaging means into clamping engagement with the neck of a collapsible tube when in use.

1,892,369. SELF-FILLING FOUNTAIN PEN. GIUSEPPE TIBALDI, Florence, Italy. Filed Nov. 14, 1931, Serial No. 574,981, and in Italy Jan. 9, 1931. 6 Claims. (Cl. 120—46.)



1. In a fountain pen, a hollow barrel, a compressible sac therein, a spring for compressing the sac, and a rotary screw in said barrel directly abutting one end of the spring to contract and force the latter against the sac when screwed into the barrel.

1,892,370. DEVICE FOR MAKING EDIBLE CONFECTIONS. VICTOR TORRES and ROSS TORRES, San Gabriel, Calif. Filed July 1, 1929. Serial No. 375,009. 11 Claims. (Cl. 107—48.)

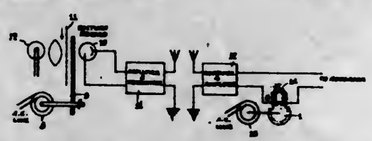
1. A device for filling hollow edible shells with a semi-solid material embodying: a hollow body having an aper-

ture in one end thereof and adapted to support said shell with its open end adjacent said aperture; and a core mem-



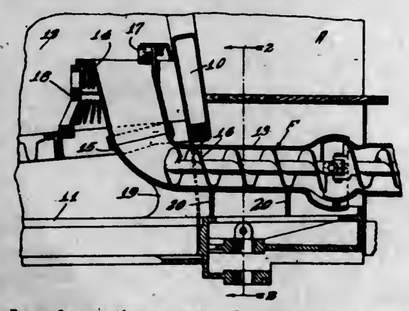
ber in said body with a portion thereof positioned in the open end of said shell.

1,892,371. METHOD OF PICTURE TRANSMISSION. FRANZ TUCZEK, Berlin, Germany, assignor to Siemens & Halske, Aktiengesellschaft, Siemensstadt, near Berlin, Germany, a Corporation of Germany. Filed Oct. 8, 1930, Serial No. 487,117, and in Germany Sept. 6, 1929. 2 Claims. (Cl. 178—6.)



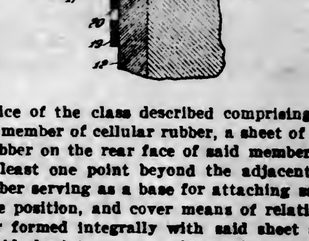
1. The method of producing picture reversal and regulating the modulation in picture telegraph apparatus which comprises generating carrier currents and modulating said currents by currents representing the varying intensities of light and shadow of the picture elements of the transmitted record, simultaneously generating at the receiving point other currents of the same frequency as the carrier current generated, and adding the two generated currents in predetermined phase relationship so as to produce either positive or negative picture reproduction at the receiving point.

1,892,372. LOCOMOTIVE. EDWIN ARCHER TURNER, New York, N. Y., assignor to The Standard Stoker Company, Incorporated, a Corporation of Delaware. Original application filed Nov. 20, 1929, Serial No. 408,484, now Patent No. 1,829,425, dated Oct. 27, 1931. Divided and this application filed Oct. 24, 1931. Serial No. 570,810. 5 Claims. (Cl. 105—173.)



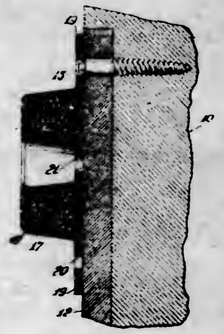
1. In a locomotive, a main frame structure having a stoker conduit section formed integrally with a part thereof, and longitudinally and transversely extending walls tying said conduit section to the aforesaid part of the frame.

1,892,373. TABLE. LEONARD ELMER TYSON, Manitowoc, Wis. Filed Apr. 15, 1931. Serial No. 530,282. 3 Claims. (Cl. 312—114.)



3. In a table having a box top for the display of merchandise including side walls, a bottom wall and a removable transparent top wall resting on the upper edges of the side walls, means for detachably securing the top wall in position embodying a clamping plate having a depending straight wall for engaging one side wall of the table top and a jaw engaging over an edge of the removable transparent top wall, and releasable means for detachably locking the straight wall of the clamping plate to the mentioned side wall including a key operated lock having a bolt and a keeper, the bolt and keeper forming a part of the straight wall and mentioned side wall.

1,892,374. ANTIRATTLER DEVICE FOR DOORS. OLIVER C. RITZ WOLLER, Chicago, Ill. Filed May 10, 1930. Serial No. 451,441. 3 Claims. (Cl. 16—86.)



1. A device of the class described comprising, in combination, a member of cellular rubber, a sheet of relatively compact rubber on the rear face of said member and projecting at least one point beyond the adjacent portions of the member serving as a base for attaching said device in operative position, and cover means of relatively compact rubber formed integrally with said sheet and serving with said sheet to encase said member completely so as to prevent the escape of air therefrom, whereby the device offers strong and constant resistance compression when squeezed between cooperating pressure-applying parts.

1,892,375. ELECTRICAL DEVICE AND METHOD OF FORMING INSULATING DIELECTRICS THEREIN. WILLIAM MASON BAILEY, Lynn, Mass., assignor, by mesne assignments, to General Electric Company, a Corporation of New York. Filed Dec. 2, 1929. Serial No. 411,014. 8 Claims. (Cl. 175—41.)

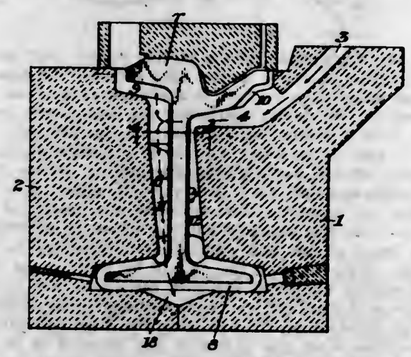
1. A capacitor comprising an armature member, an internal hollow armature member within the first armature

member and supported therefrom, said inner armature member being hollow and provided with a perforation adjacent and substantially alined with a perforation in the



outer armature member, and a supporting member for the inner armature member passing thru the perforation of the outer armature member.

1,892,376. MOLD FOR WELDING RAILS. EDWARD F. BEGTRUP, Jersey City, N. J. Filed Mar. 21, 1932. Serial No. 600,239. 6 Claims. (Cl. 22—116.)



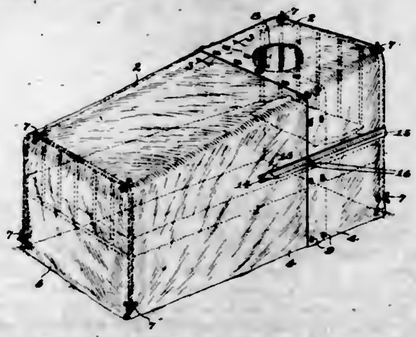
1. A mold for forming sound homogeneous rail joint welds, having interior walls bounding the joint defining space or cavity surrounding and separating the rail ends, at least one of said walls having a directional channel therein in substantial alignment with the space between the rail ends, and a pouring gate having its discharge end opposite the channel and in alignment with the space between the rail ends so as to deliver the molten metal transversely of the mold space to said channel without substantial contact with the metal of the rail ends while in transit.

1,892,377. STUFFING BOX. KARL BERGSKAUG, Brooklyn, N. Y. Filed Oct. 15, 1930. Serial No. 488,703. 2 Claims. (Cl. 285—45.)



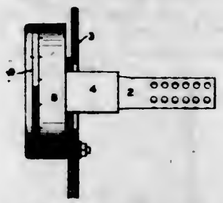
1. A stuffing box for tubes including, in combination, a tube sheet formed with a bore extending through the same, said bore comprising two unequal diameters, a shoulder formed in said bore and defining the boundary between those portions of the bore presenting greater and lesser diameters, smooth side walls in said bore in the section of greatest diameter and adjacent said shoulder, the remainder of said section of greatest diameter being screw threaded, a tube slidable within said bore and of a diameter substantially that of said bore section of lesser diameter whereby an annular space is provided between said tube and said smooth bore in the section of greatest diameter of the latter, a wound strip packing inserted in said annular space and against the smooth walls and of a width no greater than the smooth portion of the walls and adapted to fill the same and a screw threaded ferrule for cooperation with the screw threads in said bore, said ferrule being formed with a smooth outer wall adjacent the leading edge thereof for slidable contact with the smooth side walls of said bore of greatest diameter, said leading edge adapted to engage said packing to compress the same in the space between the tube and the smooth bore and beyond said screw threaded portion, while the opposite end of the ferrule projects outside the outer face of the tube sheet.

1,892,378. TENT CONSTRUCTION. SARAH EDITH BERNSTEIN, Washington, D. C. Filed Feb. 21, 1928. Serial No. 256,032. 2 Claims. (Cl. 135—5.1.)



1. A tent adapted to enclose a bed and supported solely thereby, comprising two sections, a head section secured to the head of the bed and a foot section secured to the foot of the bed, means for detachably connecting the two sections along a line nearer the head than the foot of the bed, one of said sections having a ventilating aperture, and said tent having means for communicating with the outside.

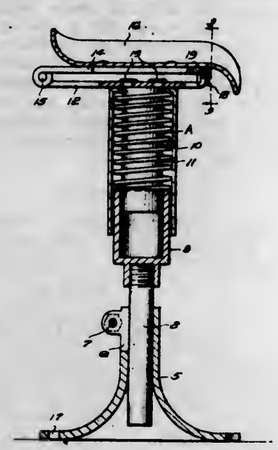
1,892,379. INDICATING DEVICE. CHARLES D. BOLIN, St. Louis, Mo. Filed Apr. 17, 1930. Serial No. 445,163. 2 Claims. (Cl. 73—119.)



1. In an oven thermometer, a support comprising an element adapted to be projected through the wall of an oven and a casing supporting portion outside the oven, a central shaft, an indicating element carried at its outer end, said element comprising a portion having an extended arcuate peripheral surface, a cup-shaped casing embracing the indicating element and having a narrow circumferentially extending scale opening through its side wall adjacent to its bottom and scale indications adjacent said opening, said arcuate surface of the indicating element having a rotative path of movement in alignment with and adjacent said opening and bearing a continuous extended marking on its periphery contrasting with the marking of the casing adjacent the scale opening, said marking having

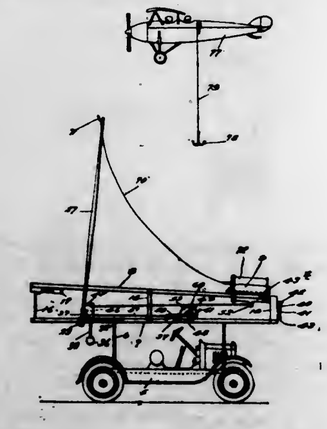
terminus whereby it may cooperate with the scale to effect temperature indication, and temperature responsive means for rotating the indicator shaft.

1,892,380. SUPPORT FOR SEATS. ALBERT BREVICK, Thunder Hawk, S. Dak. Filed Apr. 1, 1931. Serial No. 526,905. 3 Claims. (Cl. 155—52.)



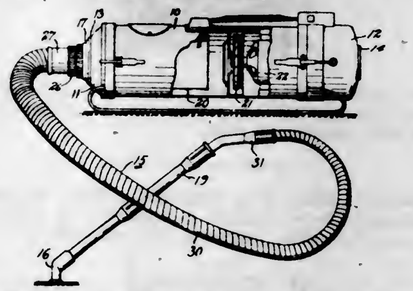
1. A device of the character described comprising a two part telescopic structure, the uppermost of which comprises a sleeve-like dust cap and the lowermost of which comprises a cup member upon which said dust cap is slidably disposed, a spring disposed within the dust cap and bearing between said parts, a forwardly and rearwardly extending bracket mounted upon the upper end of said sleeve-like dust cap, a seat hinged to the rear end of said bracket, and a spring detent between the underside of said seat and forward end of said bracket.

1,892,381. AIRPLANE PICK-UP DEVICE. HENRY G. BUSHMEYER and ARCHIE W. CARD, Mineola, N. Y., assignors to Aero Pickup Service Corp., a Corporation of New York. Filed Feb. 23, 1929. Serial No. 342,153. 4 Claims. (Cl. 258—1.)



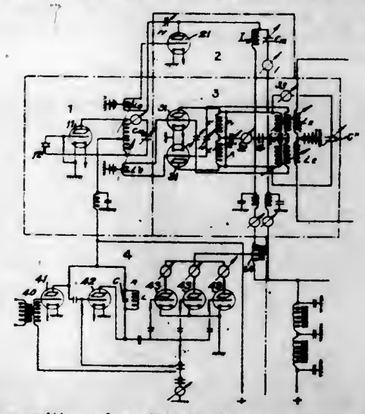
1. In an apparatus of the class described, a trackway, a carriage movable on the trackway, means under tension for urging movement of the carriage in one direction, releasable means for holding the carriage against said movement, a mechanism for holding a flexible member attached to paraphernalia in the carriage in an extended position, and means operatively connecting said mechanism with said holding means for said carriage.

1,892,382. VACUUM CLEANER. FREDRIK CARLSTEDT, Stockholm, Sweden, assignor to Electrolux Corporation, Dover, Del., a Corporation of Delaware. Filed Dec. 29, 1931, Serial No. 583,670, and in Germany Dec. 18, 1930. 5 Claims. (Cl. 15—16.)



1. The combination with a vacuum cleaner unit including a casing having a suction inlet adjacent the floor, of a hose adapted to be held in the hand at one end and secured to said inlet at the other end and of such length as to have a portion thereof resting on the floor when an end is held in the hand comprising a flexible section of varying internal and external diameter to provide varying cross-sectional area and varying weight per unit length, the smallest cross-sectional area being at the end to be held in the hand and the largest cross-sectional area being at the end adapted to be attached to said suction inlet, whereby the end to be held in the hand is relatively light and the part resting on the floor is relatively heavy and the cross-sectional area increases in the direction of air flow with the hose connected to the suction inlet, and a suction tool adapted to be connected with the end of the hose of small diameter.

1,892,383. HIGH FREQUENCY SIGNALING. HENRI CHIARIX, Paris, France, assignor to Société Francaise Radio-Electrique, Paris, France, a Corporation of France. Filed Apr. 29, 1931, Serial No. 533,674, and in France May 6, 1930. 6 Claims. (Cl. 250—17.)

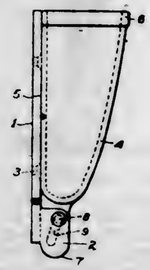


1. Transmitter of modulated high frequency currents comprising a Wheatstone bridge consisting of four impedances and having tuning means inserted in the diagonals thereof, means for applying to one of these diagonals a carrier wave, means for applying to the other diagonal another continuous wave of the same frequency but in quadrature with the foregoing carrier wave, amplitude modulation means for this latter continuous wave, two symmetrical circuits coupled to the Wheatstone bridge each circuit comprising amplifiers in cascade, a common circuit associated with the output from the amplifiers and an antenna coupled to the said common circuit.

1,892,384. METAL ALLOY. JOHN L. COX, Springfield Township, Montgomery County, and FRANCIS B. FOLEY, Philadelphia, Pa. Filed Oct. 7, 1931. Serial No. 567,474. 2 Claims. (Cl. 75—1.)

1. A metal alloy comprising cromium 20 to 25%, copper 10 to 15%, nickel 1 to less than 4%, silicon 2 to 8%, the balance of the composition being principally iron; the alloy being characterised by high resistance to sulphuric acid and fair resistance to hydrochloric acid.

1,892,385. ASH CONTAINER. HERMAN DELAROSA, Pittsburgh, Pa. Filed Jan. 17, 1931. Serial No. 509,426. 1 Claim. (Cl. 206—19.5.)

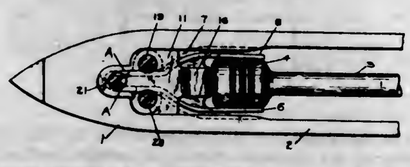


A folding receptacle comprising a wall bracket having a hinge lug projecting at the bottom thereof, a container open at the top having a depending tongue at the bottom thereof and having a flat side for engagement with said bracket, said lug being provided with a hinge pin, and the tongue of the container being provided with a cam slot cooperating with said pin to hold said container with its flat side against the face of the wall bracket when the top of the slot rests on said pin, and to withdraw said container out of contact with said bracket when it is lifted a distance corresponding to the length of said slot for the purpose of tilting the same.

1,892,386. PREPARATION OF STYRENE. GEORGE L. DONOVON, Wilmington, Del., assignor to E. I. du Pont de Nemours & Company, Wilmington, Del., a Corporation of Delaware. Filed Dec. 21, 1929. Serial No. 415,795. 7 Claims. (Cl. 260—168.)

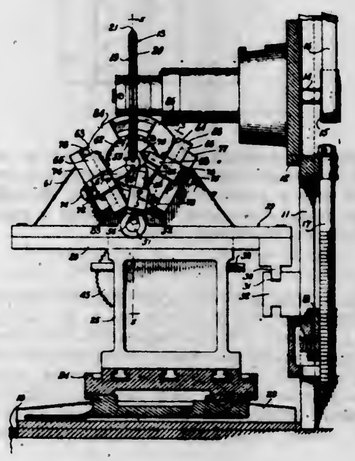
1. The method of producing a vinyl benzene consisting in forming a quaternary salt of the corresponding halogenated ethyl benzene, in separating ont the quaternary salt, and in breaking down the quaternary salt.

1,892,387. SHUTTLE. FREDRIC E. DOUGLAS, Hopedale, Mass., assignor to Draper Corporation, Hopedale, Mass., a Corporation of Maine. Filed Feb. 9, 1932. Serial No. 591,850. 6 Claims. (Cl. 139—207.)



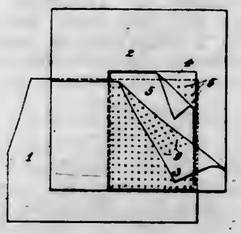
1. A shuttle including a body having a bobbin supporting spring located in a cavity in one end thereof, said spring including opposed bobbin gripping jaws the shank portion of each of which is provided with a laterally extending ear, a rigid plate covering said ears, and fastening devices passing through the plate, the ears and the shuttle body to thereby secure the spring in the said cavity.

1,892,388. WHEEL DRESSING MECHANISM. JOHN EDGAR, Rockford, Ill., assignor to Barber-Colman Company, Rockford, Ill., a Corporation of Illinois. Original application filed Nov. 4, 1927, Serial No. 230,966. Divided and this application filed Jan. 9, 1928. Serial No. 245,841. 12 Claims. (Cl. 125—11.)



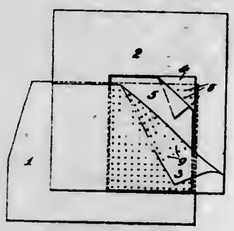
8. A dressing mechanism comprising, in combination, a support, a pair of guides having bracket arms arcuately adjustable about a common center on said support, two slides mounted respectively on said guides, two dressing tools one operatively mounted on each slide, two longitudinal gear racks one on each slide, a gear disposed between and in mesh with said racks, said gear being rotatable on said center, a shaft for rotating said gear, and means for oscillating said shaft.

1,892,389. METHOD OF AND MEANS FOR PERMANENTLY WAVING HAIR. RALPH L. EVANS, New York, N. Y., assignor to Zotos Corporation, New York, N. Y., a Corporation of New York. Original application filed Jan. 21, 1932, Serial No. 587,890. Divided and this application filed Nov. 10, 1932. Serial No. 641,979. 5 Claims. (Cl. 132—36.2.)



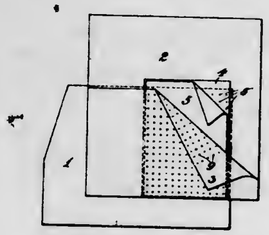
1. Imparting a permanent wave to hair by subjecting the hair to heat generated by the reaction of an exothermic material with a moistening medium, the natural development of the heat being delayed by combining a suitable medium with the moistening medium.

1,892,390. METHOD OF AND MEANS FOR PERMANENTLY WAVING HAIR. RALPH L. EVANS, New York, N. Y., assignor to Zotos Corporation, New York, N. Y., a Corporation of New York. Original application filed Sept. 21, 1932, Serial No. 634,132, which is in turn a division of application, Serial No. 587,980, filed Jan. 21, 1932. Divided and this application filed Nov. 11, 1932. Serial No. 642,141. 6 Claims. (Cl. 132—36.2.)



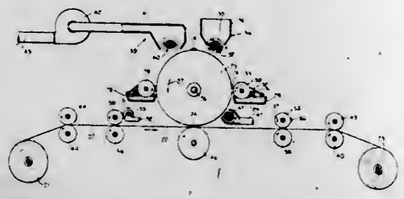
1. Imparting a permanent wave to hair by subjecting the hair to heat generated by the reaction of an exothermic material with a moistening medium, the development of the heat being accelerated by combining a suitable medium with the moistening medium.

1,892,391. METHOD OF AND MEANS FOR PERMANENTLY WAVING HAIR. RALPH L. EVANS, New York, N. Y., assignor to Zotos Corporation, New York, N. Y., a Corporation of New York. Original application filed Sept. 22, 1932, Serial No. 634,290, which in turn is a division of application filed Jan. 21, 1932, Serial No. 587,890. Divided and this application filed Nov. 12, 1932. Serial No. 642,359. 9 Claims. (Cl. 132—36.2.)



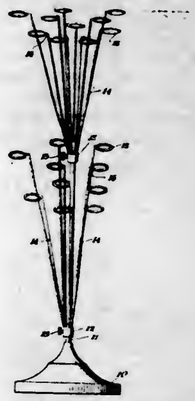
1. Imparting a permanent wave to hair by subjecting the hair to heat generated by the reaction of an exothermic material with a moistening medium, the development of the heat being extended over a considerable period of time by combining a suitable medium with the moistening medium.

1,892,392. PROCESS OF APPLYING INDICIA TO CELLOPHANE AND THE LIKE. WILLIAM F. GRUPE, Lyndhurst, N. J. Filed Nov. 11, 1930. Serial No. 494,839. 10 Claims. (Cl. 101—211.)



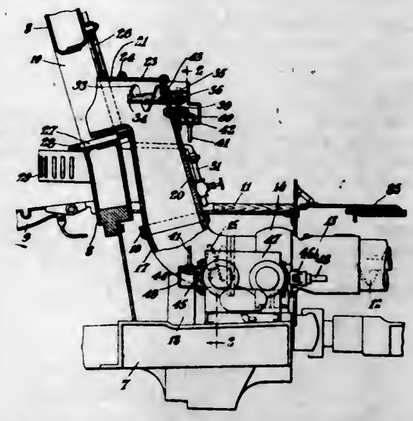
1. The process of impressing cellophane and like enclosing material with indicia embodying metallized medium in an outline corresponding to the die, which comprises imparting substantially continuous motion to the material and the die, applying unctuous material to the die while in motion, then applying metallized medium upon the layer of unctuous material on the die while in motion, and then applying the die thus prepared in impressing contact with the material.

1,892,393. FLOWER HOLDER. WILLIAM HALM, Long Island City, N. Y. Filed July 28, 1931. Serial No. 553,525. 2 Claims. (Cl. 47—41.)



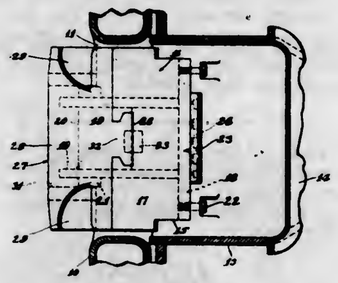
1. A flower holder comprising a weighted base having a central vertical bore, a post held at its lower end securely in the bore of said post, a plurality of sockets on said post in superposition, set screws for locking said sockets in any of their adjusted positions to said post, a plurality of wire strands secured with their lower ends in said sockets bunched about said post, and open rings or loops formed at the outer ends of said strands for the passage and support of the stems of flowers and bunches thereof, said strands adapted to be bent for engagement with said post for shipping purposes and to be bent at an angle to said post for the display of flowers.

1,892,394. OUTSIDE FEED STOKER. ANDREW M. HUNT, New York, N. Y., assignor to The Standard Stoker Company, Incorporated, a Corporation of Delaware. Filed July 13, 1928. Serial No. 292,447. 7 Claims. (Cl. 110—101.)



1. In combination with a boiler firebox having a firing opening in the backwall thereof, a conduit curbing from a lower portion to an upwardly extending portion, the upper end of said conduit terminating adjacent said firing opening, a distributor plate extending within said firebox, a nozzle between said plate and said conduit, a conveying apparatus for delivering fuel to the lower portion of the conduit and forcing the fuel into its upwardly extending portion, and operative mechanical means including a spiral screw disposed in a substantially horizontal plane longitudinally of the firebox and extending across the upper end of the upwardly extending portion of said conduit for delivering the fuel forwardly therefrom onto said plate in front of said nozzle.

1,892,395. STOKER FUEL DISTRIBUTOR. ANDREW M. HUNT, San Francisco, Calif., assignor to The Standard Stoker Company, Incorporated, a Corporation of Delaware. Filed Dec. 20, 1928. Serial No. 327,261. 9 Claims. (Cl. 110—101.)



7. In a stoker, a distributor plate comprising a rear section and a front section, the rear section having means for supporting the front section against swinging downward movement, said rear and front sections each being provided with one element of an interlocking means cooperating to detachably connect said front and rear sections, said interlocking means being arranged with no part thereof protruding above the fuel receiving surface of either of said sections.

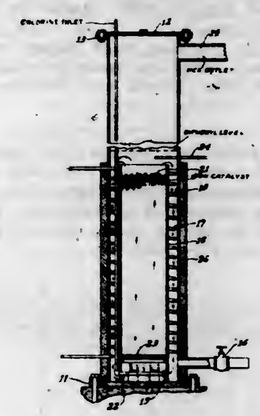
1,892,396. PURIFICATION OF NONVOLATILE ORGANIC ACIDS. ALPHONS O. JAEGER, Crafton, Pa., assignor to The Selden Company, Pittsburgh, Pa., a Corporation of Delaware. Filed Sept. 7, 1928. Serial No. 304,616. 5 Claims. (Cl. 260—108.)

1. A method of separating non-volatile organic acids which are capable of forming volatile anhydrides from relatively volatile organic acids or anhydrides, which comprises subjecting a mixture containing at least one compound included in the group consisting of non-volatile organic acids and anhydrides of non-volatile organic acids associated with other organic compounds volatile with steam to the action of steam at a temperature below that at which the non-volatile acids are transformed into their anhydrides and permitting the steam and volatile organic acids and other volatile impurities to leave the mixture.

1,892,397. PROCESS FOR THE PRODUCTION OF CHLORINATED DIARYLS. RUSSELL L. JENKINS, Anniston, Ala., assignor to Swann Research, Inc., a Corporation of Alabama. Filed Sept. 28, 1929. Serial No. 395,737. 8 Claims. (Cl. 260—161.)

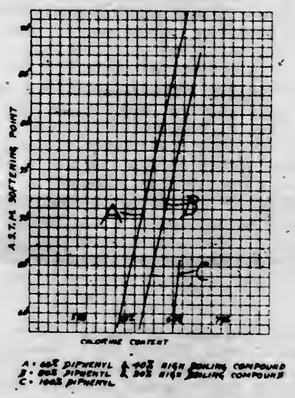
2. The method of chlorinating diaryl compounds which comprises providing a mass of the compound to be chlorinated, introducing chlorine gas centrally into the bottom of the mass in the presence of an iron catalyst and effecting a flow of the compound over the catalyst by means of the chlorine gas.

8. A non-uniformly chlorinated diphenyl having a chlorine content of from 40% to 55% in which the viscosity increases from approximately 35 seconds Saybolt at 210° F. to 43 seconds Saybolt as the chlorine content increases from 40% to 50%, and in which the viscosity



increases from approximately 43 seconds Saybolt to 60 seconds Saybolt at 210° F. as the chlorine content increases from 50% to 55%.

1,892,398. NONCRYSTALLINE HIGHLY CHLORINATED DIARYL RESIN. RUSSELL L. JENKINS, Anniston, Ala., assignor to Swann Research, Inc., a Corporation of Alabama. Filed Sept. 28, 1929. Serial No. 395,738. 13 Claims. (Cl. 260—161.)



4. As a new composition of matter, a chlorinated, noncrystalline diaryl resin, consisting of a mixture of chlorinated diphenyl and other complex chlorinated diaryls.

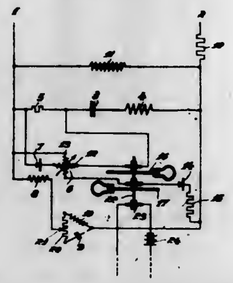
1,892,399. METHOD OF PRODUCING CLEAR TRANSPARENT CHLORINATED DIARYL RESINS. RUSSELL L. JENKINS and JOSEPH A. SIKARSKI, Anniston, Ala., assignors to Swann Research, Inc., a Corporation of Alabama. Filed Sept. 27, 1929. Serial No. 395,741. 6 Claims. (Cl. 260—161.)

2. As a new composition of matter, a chlorinated diaryl composition comprising a chlorinated mixture of diphenyl admixed with other diaryls, which is transparent resinous, non-crystalline and solid at ordinary temperature.

1,892,400. DIPHENYL RESIN AND METHOD OF PRODUCING THE SAME. RUSSELL L. JENKINS and JOSEPH A. SIKARSKI, Anniston, Ala., assignors to Swann Research, Incorporated, a Corporation of Alabama. Filed Apr. 28, 1930. Serial No. 446,434. 14 Claims. (Cl. 268—2.)

1. Process of producing light colored resins of the chlorinated diaryl type, comprising chlorinating diphenyl together with other diaryls and distilling the chlorinated product.

1,892,401. FREQUENCY MEASURER. GEORG KEINATH, Berlin-Charlottenburg, Germany, assignor to Siemens & Halske, Aktiengesellschaft, Siemensstadt near Berlin, Germany, a Corporation of Germany. Filed Jan. 8, 1931, Serial No. 507,423, and in Germany Jan. 17, 1930. 8 Claims. (Cl. 172—245.)



1. In a frequency measurer a resonance circuit tuned to the proper value of the frequency to be measured, a mechanical rectifier energized by the frequency to be measured, a current sensitive measuring apparatus, and connections between said apparatus and said resonance circuit, said connections including the interrupter of said mechanical rectifier.

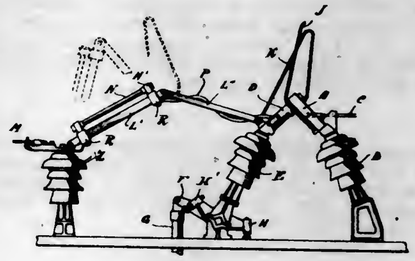
1,892,402. CIGAR. FREDERICK LANKERING, Paterson, N. J. Filed May 11, 1931. Serial No. 536,359. 3 Claims. (Cl. 131—52.)



1. A blunt end cigar having in combination, a cylindrical body of short filler having an untapered blunt end and adapted to define the smoking end of the cigar, a binder around said body of filler and terminating substantially at the blunt end of the filler, a wrapper around said binder and blunt end, means defining an opening in said blunt end, a draft opening forming plug in said opening, said wrapper when stretched to surround the blunt end constituting said draft opening defining means, the said wrapper being adapted to be stretched and forced into said opening by said plug, and forming a lining for the outer end portion of said opening, that portion of the filler adjacent the draft opening being compacted by said wrapper, and further compacted by the insertion of the plug.

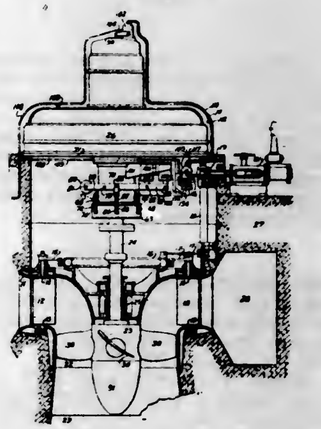
1,892,403. COMBINATION AIR-BREAK SWITCH. JOEL S. LAWSON, St. James, N. Y. Filed May 2, 1928. Serial No. 274,424. 8 Claims. (Cl. 200—114.)

1. An air-break switch for high tension circuits comprising a stationary switch blade, movable means, including an insulator movable toward and away from the switch blade and always simultaneously in its entirety with said means, to limit the current flowing through



the switch and means for finally breaking the circuit, at a point remote from the blade, and only after the switch blades have been separated.

1,892,404. HYDRAULIC TURBINE. HJALMAR S. MESSING, Milwaukee, Wis., assignor to S. Morgan Smith Company, York, Pa., a Corporation of Pennsylvania. Filed Aug. 13, 1931. Serial No. 556,798. 2 Claims. (Cl. 253—143.)



1. The combination with a runner having a hollow hub and a plurality of blades carried by the hub and movable into different angular positions, and a cross head mounted in the hub of the runner and movable axially thereof and connected to the blades for adjusting the positions thereof, of actuating means for the cross head comprising a rectilinearly movable member, means coacting with said member when said member is moved rectilinearly in either direction and operative by the rotating movement of the runner, a shaft operatively connected with said means, a speed reducer mounted in the hub of the runner and operatively connected with said shaft, and a screw driven by said speed reducer and operatively connected with said cross head.

1,892,405. TOY GUN. JOSEPH A. METZGER, Buffalo, N. Y. Filed Dec. 5, 1931. Serial No. 579,251. 7 Claims. (Cl. 124—14.)

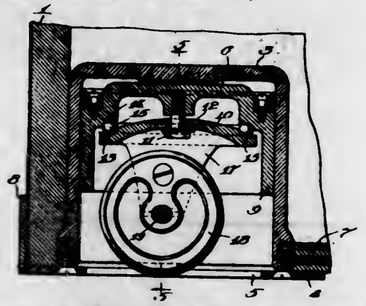
1. A toy gun formed of sheet metal having two side members connected together to form a barrel and a grip

or stock, said members having portions channel-shaped and reversed one within the other to form said barrel,



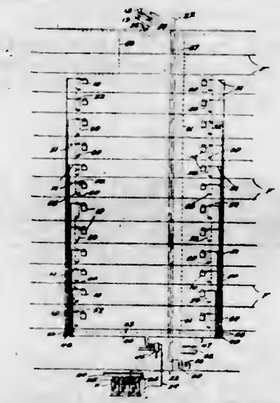
one of said side members having retainer lugs at the outer edges of the flanges of its channeled portions to retain the two side members in nested condition.

1,892,406. SHIPPING CONTAINER. GEORGE RUDOLPH MEYERCORD and OLIN H. BASQUIN, Chicago, Ill., assignors to Haskelite Manufacturing Corporation, a Corporation of New York. Filed Dec. 21, 1931. Serial No. 582,381. 7 Claims. (Cl. 280—44.)



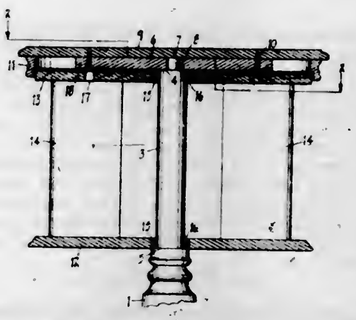
1. In combination, a container having in the bottom distributed vertical cylinders open at the lower end, pistons in said cylinders, turntables below the pistons and connected thereto for rotary movements about the long axes of the corresponding cylinders, rollers below and rotatably connected to the turntables, the rollers being eccentrically disposed with respect to the cylinders, and means for admitting air under pressure into the cylinders above the pistons.

1,892,407. REFRIGERATION SYSTEM. ERNEST B. MILLER, Baltimore, Md., assignor to The Silica Gel Corporation, Baltimore, Md., a Corporation of Maryland. Filed Oct. 10, 1929. Serial No. 398,774. 18 Claims. (Cl. 62—118.)



1. In a refrigeration system, in combination, a plurality of individual evaporator units, a plurality of adsorber units each complete with activating equipment, manifolded vapor lines from said evaporators to said adsorber, a condenser connected to said adsorbers by a vapor line and to said evaporators by manifolded liquid lines, means to activate but one adsorber at a time and means to regulate the temperature of said evaporators by control of the adsorber on activation dependent on pressure in said manifolded vapor lines.

1,892,408. COMBINED BOOK TABLE AND RACK. JOHN H. PAALMAN, Grand Rapids, Mich., assignor to Paalman Furniture Company, Grand Rapids, Mich. Filed June 19, 1930. Serial No. 462,168. 8 Claims. (Cl. 45—31.)



1. A combined table and rack comprising a pedestal provided with an upright spindle shouldered at its upper end, there being a shoulder at the lower end of the spindle, a top supporting plate fixedly mounted on the upper end of said spindle in supporting engagement with the said shoulder thereof, a table top secured to said top supporting plate by fastenings manipulated from the under side thereof, said top having an annular rim, a rack comprising a shelf, a disk-like top member and upright spaced connecting members, said shelf and rack top member having bearing openings to receive said spindle and provided with annular bushings, the shelf being in supporting engagement with the shoulder at the lower end of the spindle, and annular bearing members on said spindle coacting with said bushings, said rim on said table top being disposed in overlapping relation to the edge of said rack top member, said rack top member having an opening therein adapted to be brought into alinement with said table top fastenings to facilitate the attachment of the table top after the rack has been mounted on the spindle.

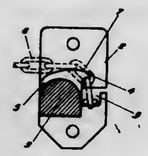
1,892,409. PROCESS OF DIGESTING WOOD. SPENCER W. PRENTISS, Wellesley, Mass., assignor to Potlatch Forests, Inc., Lewiston, Idaho, a Corporation of Maine. Filed Dec. 16, 1931. Serial No. 581,521. 6 Claims. (Cl. 18—47.5.)

1. The process of treating finely divided wood which comprises digesting said wood under heat and pressure in an aqueous alkaline phenol solution, adding an aldehydic body to the digested product, then heating the same, removing the surplus liquid and then molding the resultant solid material by subjecting said material to heat and pressure.

1,892,410. TANNING PROCESS. OTTO RÖHM, HERBERT FISCHER, and HEINRICH HESS, Darmstadt, Germany. Filed Apr. 25, 1927, Serial No. 186,573, and in Germany Apr. 30, 1926. 1 Claim. (Cl. 149—5.)

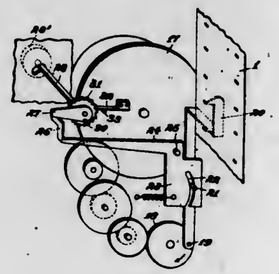
For use in tanning processes, a colloidal tanning liquor, comprising a mixture of iron salts and silicates, to which mixture phosphoric acid has been added.

1,892,411. CHAIN AND KNOT BINDER. JOSÉ SEGIMÓN, Barcelona, Spain. Filed Jan. 29, 1931, Serial No. 511,939, and in Spain Dec. 29, 1930. 3 Claims. (Cl. 24—116.)



3. A device of the character described, comprising a pair of plates, a solid connecting member disposed between said plates and maintaining them in spaced relation, said connecting member being provided with a peripheral channel disposed centrally thereof, the bottom wall of said channel being of convex formation transversely of the connecting member and the outer edges of the side walls of said channel conforming to the curvature of the bottom wall at one edge of said solid member and merging into straight portions forming hooks extending beyond the opposite edge of said member, each of said plates being provided with an opening disposed immediately below said hook-shaped portions.

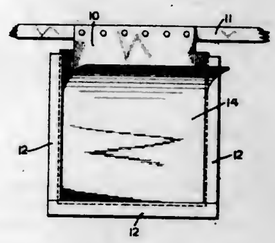
1,892,412. MOTION FILM CAMERA WITH SPRING MOTOR DRIVE. OTTO STEINER, Berlin-Spandau, Germany, assignor to Siemens & Halske, Aktiengesellschaft, Siemensstadt near Berlin, Germany, a Corporation of Germany. Filed May 29, 1931, Serial No. 540,832, and in Switzerland June 5, 1930. 8 Claims. (Cl. 88—18.4.)



1. A film camera with spring motor drive, having a film-feeding mechanism normally operated by said motor drive, means for rendering the film-feeding mechanism inoperative to feed the film during continued operation of the spring motor drive, a film counter normally operated by said motor drive, and means for throwing the film counter out of action automatically whenever said first-mentioned means is operated to render the film-feeding mechanism inoperative to feed the film, while the spring motor drive continues to operate.

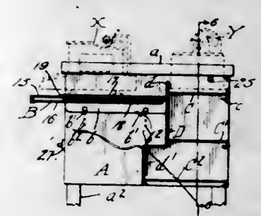
1,892,413. HANGER. ROSCOE TEATS and STANLEY HUGHES, Denver, Colo., assignors to American Smelting and Refining Company, New York, N. Y., a Corporation of New Jersey. Filed July 24, 1928. Serial No. 295,095. 3 Claims. (Cl. 204—6.)

1. In combination with a cadmium cathode sheet, a hanger therefor comprising a strap of cadmium metal, the ends of said strap being cut diagonally to provide spaced points, said points being extended through said sheet from



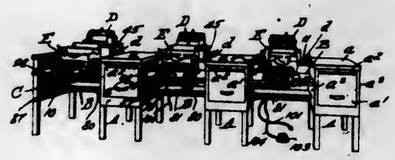
opposite sides and in spaced relationship whereby metal may be deposited above said points on at least one side of said sheet.

1,892,414. TYPEWRITER DESK. CHARLES B. ULRICH, Jamestown, N. Y., assignor to Art Metal Construction Company, Jamestown, N. Y. Filed Dec. 22, 1927. Serial No. 241,754. 5 Claims. (Cl. 45—6.)



5. A desk including a pair of pedestals, a pair of shelves connecting said pedestals for supporting a typewriter and a phonographic reproducing machine respectively, one of said shelves having a pair of spaced, relatively long recesses therein, a pad of a highly resilient material arranged in each of said recesses for engagement by a pair of feet on a typewriter to support such machine for preventing the transmission of vibrations therefrom to said phonographic reproducing machine, and means extending about the edges of said recesses to prevent lateral distortion of said pads due to the weight of said typewriter.

1,892,415. DESK. CHARLES B. ULRICH, Jamestown, N. Y., assignor to Art Metal Construction Company, Jamestown, N. Y. Filed July 16, 1929. Serial No. 378,632. 6 Claims. (Cl. 45—6.)

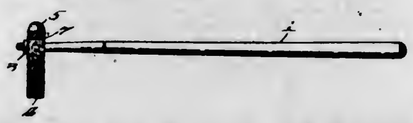


1. A transcribing desk having a pair of spaced side sections, a shelf for a typewriting machine extending between and engaging said sections, a shelf for a phonographic reproducing machine in rear of said first shelf and which is disposed between and the ends of which terminate

short of said side sections, and pockets for phonographic records depending from and extending between the opposite ends of said rear shelf and the adjacent side sections, and an upright transverse partition closing the fronts of said pockets and the space beneath said shelf, and a second shelf extending from the lower end of said partition backwardly beneath said other shelf, whereby a rearwardly facing compartment is provided beneath said first shelf between said pockets.

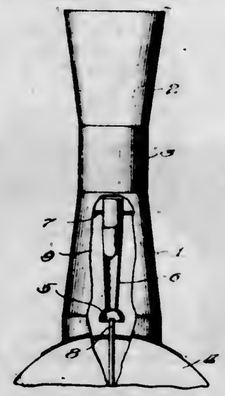
6. A group of transcribing desks comprising a plurality of alternating side sections and shelf sections connected together in a row, each of said side sections including an upright front, and each of said shelf sections having a support for an electrically operated phonographic reproducing machine and having wiring for providing current thereto from a source of supply, a switch on each shelf section for controlling the current to the machine thereon, and said switch being mounted on a part of said section near the front of an adjacent side section and having an operating member, which, when in "on" position, projects forwardly beyond said front of said side section so that all switches turned on may be seen by an observer looking along the front of said group of desks from an end of the group, and said operating members being adapted to project rearwardly from the front of said side sections so as to be hidden by said side sections from said observer when in "off" position.

1,892,416. TYMPANI STICK. BEN VITTO, Chicago, Ill. Filed Nov. 6, 1931. Serial No. 573,311. 5 Claims. (Cl. 84—422.)



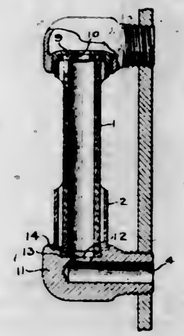
1. A tympani stick comprising a handle, a flat head fixed on one end of the handle in a plane at right angles thereto; said head comprising a hard central finger-like core, a comparatively stiff cushion on opposite sides of and across one end of the core, the edge of the cushion being curved in the arc of a circle about said end of the core, and a strip of soft cushioning material overlying and extending along the edge of said cushion.

1,892,417. STACK FOR PRODUCING FORCED DRAFT. HOWARD M. WOLF, Muncie, Ind., assignor to The Broderick Company, a Corporation of Indiana. Filed Oct. 22, 1931. Serial No. 570,374. 2 Claims. (Cl. 230—96.)



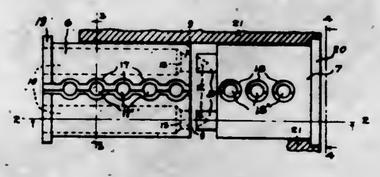
1. In combination, a smoke stack in the form of a Venturi tube, a second, inner Venturi tube smaller in cross-sectional area than the stack fixed within and coaxial with the stack, said inner Venturi tube consisting of a long upper section tapering only slightly from the smaller end toward the top and a short flaring lower section or bell, the upper end of the inner Venturi tube being positioned in the vicinity of the contracted part of the stack and the lower end of the inner Venturi tube opening out into the stack, and means to produce within the inner tube and below the contracted part thereof an upwardly-directed jet.

1,892,418. LIQUID GAUGE. CHARLES F. WRAY, Rochester, N. Y., assignor to National Brass Manufacturing Company, Rochester, N. Y., a Corporation of New York. Filed Dec. 24, 1929. Serial No. 416,226. 7 Claims. (Cl. 73—54.)



1. A liquid gauge comprising a transparent tube, a guard tube therefor, a pair of spaced couplings, one of said couplings having seats for said tubes, and the other coupling having a threaded opening for the guard tube and a chamber adjacent said opening to provide a cavity and permit the guard tube to be projected therein when disengaged from its threaded opening.

1,892,419. SECTIONAL KEY PLUG FOR LOCKS. FRANK ELLISON BEST, Seattle, Wash., assignor to Frank E. Best, Inc., Seattle, Wash., a Corporation of Washington. Filed Aug. 12, 1929. Serial No. 385,279. 4 Claims. (Cl. 70—47.)



1. In a pin tumbler lock, a key plug formed of a plurality of sections secured together in end to end relation and embracing jointly the tumbler pin holes of said key plug and a key stop formed at two abutting ends of said sections.

1,892,420. CLOSURE OPERATING MECHANISM. THOMAS BRADY, East Orange, N. J., assignor to Otis Elevator Company, New York, N. Y., a Corporation of New Jersey. Filed Feb. 5, 1930. Serial No. 426,084. 17 Claims. (Cl. 187—52.)

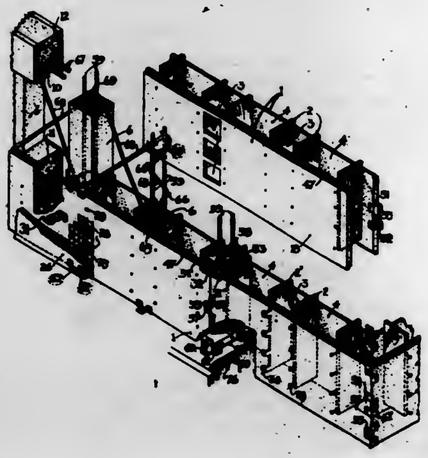
1. In an elevator installation; an elevator car; closure means for affording access to said car; an armature carried by said closure means; an electromagnet for said armature; means for moving said electromagnet in the

direction of movement of said closure means; and means responsive to said electromagnet, upon energization thereof, for causing the operation of said moving means to move



said electromagnet, said moving means, upon operation, acting solely through the lines of force between said electromagnet and said armature to move said closing means.

1,892,421. BUILDING CONSTRUCTION. ERNEST O. BROSTROM, Kansas City, Mo. Filed Jan. 11, 1929. Serial No. 331,740. 15 Claims. (Cl. 72—31.)



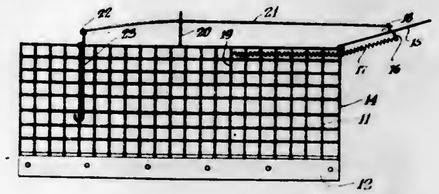
1. In building construction, form work comprising separate duplicate units each composed of side panels separated by spacing members, said units being mounted in courses one above the other in staggered and self-sustaining relation with said spacing members in alinement to form continuous pouring spaces for concrete material, whereby said material, when poured, interlocks with units in assembled position.

1,892,422. CLASP. ARTHUR M. COLE, Attleboro, Mass., assignor to General Findings & Supply Co., Attleboro, Mass., a Firm composed of Edwin F. Leach and Stephen H. Garner. Filed May 21, 1931. Serial No. 538,962. 8 Claims. (Cl. 24—236.)



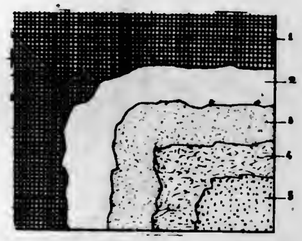
1. A clasp having a body part of sheet stock folded upon itself and provided with a hook at one end and a resilient tongue to close said hook, a U shaped stiffening spring at the fold of said body part to assist the movement of the tongue outwardly to closed position, and a connecting link for holding said spring in working position.

1,892,423. TRAP. ROCCO D'AMATO, New York, N. Y. Filed Feb. 18, 1929, Serial No. 341,014. Renewed Nov. 3, 1932. 1 Claim. (Cl. 43—61.)



A trap comprising a cage having a roof, a door hingedly attached to the roof to close the cage, an eyelet on said door, a rod slidably mounted on the cage and having one end engaging said eyelet to retain the door in open position, bait carrying means attached to the other end of said rod, said rod being slidably disengaged from engagement with said eyelet upon disturbance of the bait-carrying means, said door in open position lying at an obtuse angle to the open end of the cage, a coiled spring attached at one end to the roof of the cage and at the other end to said door, said spring when the trap is set extending along the roof a part of its length and along the door the other part of its length, the latter being bent about the edge of the roof at the open end of the cage so that said parts of the spring form an obtuse angle therebetween.

1,892,424. MOVING PICTURE SCREEN. BALDANO DE GERONIMI, Genoa, Italy. Filed Nov. 13, 1928, Serial No. 319,192, and in Germany May 9, 1928. 6 Claims. (Cl. 88—24.)



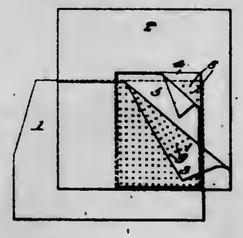
1. A screen for cinematograph and similar projections comprising a base, a filling coating applied thereto, three coats of a white paint applied to the filling coating and

containing zinc sulphide, zinc oxide, barium sulphate and finely powdered white asbestos, two coats of a slow drying varnish applied to the last coat of white paint, and a covering of a white metallic powder applied to the second coat of varnish.

1,892,425. RAPID DRYING SYNTHETIC RESINS. CARLETON ELLIS, Montclair, N. J., assignor to Ellis-Foster Company, a Corporation of New Jersey. Filed Mar. 12, 1930. Serial No. 435,863. 10 Claims. (Cl. 260—8.)

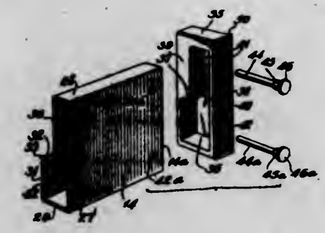
1. The process of producing rapidly drying resins which comprises forming a synthetic glyceride type resin containing rapid and slow drying ingredients, and removing the slow drying ingredients by treating the reaction resin with a solvent for the slow drying ingredients that exhibits not more than slight solvent action on the remainder of the resin.

1,892,426. METHOD OF AND MEANS FOR PERMANENTLY WAVING HAIR. RALPH L. EVANS, New York, N. Y., assignor to Zotos Corporation, New York, N. Y., a Corporation of New York. Original application filed Jan. 21, 1932, Serial No. 587,890. Divided and this application filed Sept. 22, 1932. Serial No. 634,290. 11 Claims. (Cl. 132—36.2.)



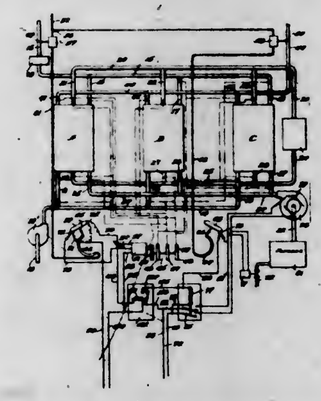
1. Imparting a permanent wave to hair by subjecting the hair to heat generated by the reaction of an exothermic material with a moistening medium, the natural development of the heat being extended over a considerable period of time without raising its temperature, by combining a suitable medium with the exothermic material.

1,892,427. BEDSTEAD. IRVING A. FEATHERMAN, Brooklyn, N. Y. Filed Sept. 26, 1930. Serial No. 484,592. 7 Claims. (Cl. 5—286.)



5. In a bedstead, in combination, an elongated, hollow, tubular side rail comprising an outer vertical wall, a top horizontal wall, a bottom horizontal wall, an inner vertical wall extending upwardly from said bottom wall, a second inner vertical wall extending downwardly from said top wall, and a downwardly and outwardly inclined wall interconnecting said first and second inner vertical walls, said inclined wall forming with said first inner vertical wall an elongated edge, said first inner vertical wall having a vertical slot and said inclined wall having a slot extending from said first mentioned slot, and a spring rest of angular construction having a vertical flange and a horizontal flange, said vertical flange extending within said slots, and said vertical slot being of such length that the undersurface of said horizontal flange contacts said edge and is supported directly thereby.

1,892,438. CYCLE CONTROL SYSTEM. BAYARD P. FONDA, Baltimore, Md., assignor to The Silica Gel Corporation, Baltimore, Md., a Corporation of Maryland. Filed Apr. 9, 1931. Serial No. 528,923. 10 Claims. (Cl. 183—4.)



1. The method of operating an adsorber comprising passing a mixture of gases, vapors or gases and vapors therethrough, adsorbing certain of said gases or vapors in the adsorbent in the adsorber detecting the presence in the effluent gases or vapors from said adsorber of more than a certain percentage of the adsorbable gases or vapors and automatically stopping the flow of said mixture through said adsorber by the detection of an excess percentage.

1,892,429. CIGAR ACCESSORY. BENJAMIN FRANKEL, New York, N. Y. Filed Dec. 1, 1931. Serial No. 578,233. 4 Claims. (Cl. 131—52.)

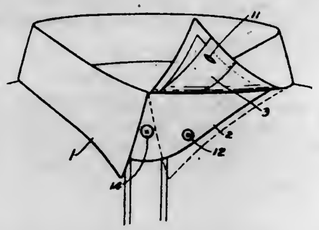


1. A piercing device for a cigar or the like comprising a shank member having a longitudinally extending portion of enlarged diameter intermediate the ends thereof, the portions of said shank member at the ends of said longitudinally extending portion being of smaller diameter than the latter, said longitudinally extending portion being curved longitudinally and peripherally, and a head at one end of said shank member.

1,892,430. COLLAR. MARCUS FRIEDMAN, Brooklyn, N. Y. Filed July 16, 1932. Serial No. 622,886. 2 Claims. (Cl. 2—131.)

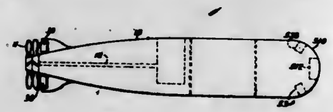
1. In a shirt collar of the type in which the outer portion is made of an outer layer of material, an intermediate layer of material, and an inner layer of material, said inner layer of material folded over at points adjacent the ends forming flaps extending continuously from the

upper to the lower edges, reinforcing said collar and holding the ends of the outer portion straight, said flaps having buttonholes therein, and buttons on said neck bank



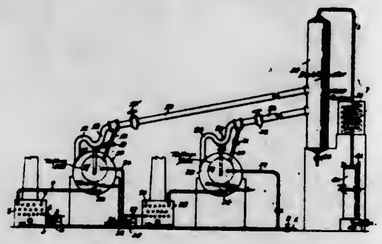
corresponding with said buttonholes to hold the ends of said outer portion continuously from the upper to the lower edges thereof.

1,892,431. ECHO TORPEDO. JOHN HAYS HAMMOND, Jr., Gloucester, Mass. Filed Apr. 2, 1928, Serial No. 266,583. Renewed Apr. 23, 1931. 28 Claims. (Cl. 114—21.)



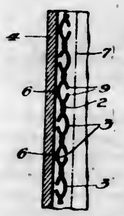
1. In combination with a self-propelled body, means for automatically steering said body on a predetermined course, means for propagating compressional waves means associated therewith for receiving reflected compressional waves, and means operable in response to said reflected compressional waves for altering said course.

1,892,432. PROCESS FOR THE CONVERSION OF HYDROCARBON OILS. WILLIAM R. HOWARD, Washington, D. C., assignor to Universal Oil Products Company, Chicago, Ill., a Corporation of South Dakota. Filed Dec. 31, 1921, Serial No. 526,174. Renewed May 12, 1927. 6 Claims. (Cl. 196—48.)



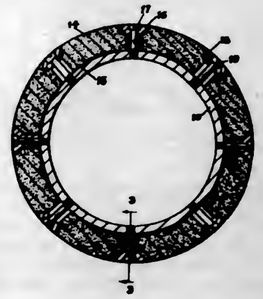
1. A process of converting hydrocarbon oil consisting in passing oil in a coil through a heating zone where it is heated to a cracking temperature, in introducing the highly heated oil to a vapor chamber, in discharging vapors from said chamber to a reflux condenser, in introducing reflux condensate from said condenser to a reflux still disposed within said vapor chamber, in discharging vapors from the reflux still to the reflux condenser, in withdrawing unvaporized reflux condensate from said still and introducing said condensate to a second still where the same is heated to cracking temperatures, and in discharging vapors from said second still while maintaining the entire apparatus under a superatmospheric pressure.

1,892,433. PROTECTIVE LINING FOR VESSELS. LYMAN C. HUFF, Chicago, Ill., assignor to Universal Oil Products Company, Chicago, Ill., a Corporation of South Dakota. Filed Dec. 1, 1930. Serial No. 499,296. 4 Claims. (Cl. 220—63.)



1. In combination, a chamber having a granular heat-resistant lining on an inner wall thereof, and reinforcing means for said lining, comprising a crimped wire mesh, the crests and troughs of said crimps lying in parallel planes and spaced a greater distance from each other than twice the diameter of said wire.

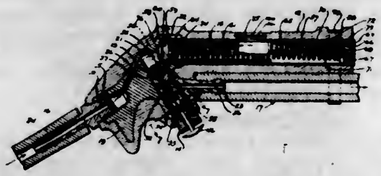
1,892,434. SEGMENTAL GRINDING WHEEL. THURE LARSSON, Worcester, Mass., assignor to Norton Company, Worcester, Mass., a Corporation of Massachusetts. Filed June 12, 1926. Serial No. 115,629. 14 Claims. (Cl. 51—209.)



1. A grinding wheel comprising a chuck having a substantially circular supporting surface, a plurality of abrasive segments mounted as an annulus against said surface in an adjusted position and extending beyond one edge thereof to present a substantially continuous flat grinding surface, clamping devices on the chuck in engagement with the segments which are separately adjustable to press the segments against said supporting surface, a single stop mounted on and adjustable relative to the chuck, and means cooperating therewith which serves to locate the stop in one of several predetermined positions, and thereby align the grinding faces of the segments in each adjusted position.

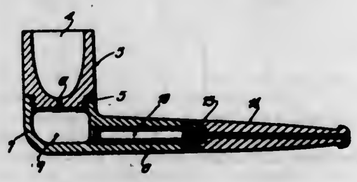
1,892,435. COMBINED TIRE GAUGE AND FILLING VALVE. AMOS S. MARCHUS, Oakland, Calif. Original application filed Mar. 15, 1928, Serial No. 261,790. Divided and this application filed June 8, 1929. Serial No. 367,866. 3 Claims. (Cl. 152—11.5.)

1. A device for the purpose indicated comprising a body formed for hand-grasp having a chamber extending from the entrance at one side of the body toward the opposite side, and stopping short of said opposite side; ducts in the body communicating with said chamber, the first arranged for inlet connection with a source of fluid pressure, a second leading for discharge connection with a place of use, and a third leading for discharge connection with the pressure gauge, and a valve apparatus comprising a valve-seating and housing element having ports and valve seating areas with valve means and valve operating connections for controlling the fluid pressure inflow from the source and its delivery to the place of use and to the pressure gauge, said element with the remainder of said valve apparatus mentioned being arranged for introduction into



said chamber through said entrance and for fluid-tight fitting in the chamber at operative positions therein, of the several parts of said valve apparatus, and having at the outer extremity means for sealing fluid-tight the entrance to said chamber, and having arranged for protrusion fluid-tight therethrough for exterior manipulation, a thrust member for operating the valves.

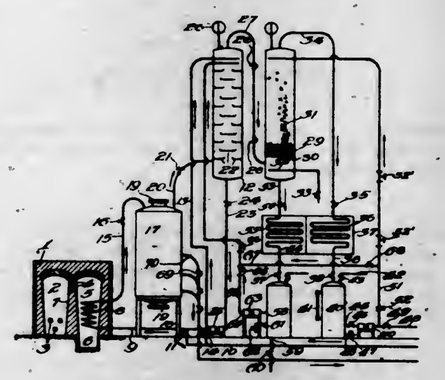
1,892,436. SMOKING PIPE DEVICE. ANTHONY J. MAURO, New York, N. Y. Filed June 22, 1929, Serial No. 373,021. Renewed June 4, 1932. 1 Claim. (Cl. 131—12.)



An appliance for insertion into the stems of smoking pipes comprising the cylindrical body, the interior of which constitutes a saliva trap, tubes extending inwardly from opposite ends of said body and in spaced relation to the side walls thereof, said tubes terminating in spaced relation with respect to each other, and an external groove provided in said cylindrical body adjacent one end thereof and adapted to receive a packing for sealing the joint between the cylindrical body and the bore in the stem into which the cylindrical body is adapted to be inserted.

1,892,437. PROCESS AND APPARATUS FOR TREATING HYDROCARBON OIL. JACQUE C. MORRELL and JOSEPH G. ALTHER, Chicago, Ill., assignors to Universal Oil Products Company, Chicago, Ill., a Corporation of South Dakota. Filed Feb. 6, 1925. Serial No. 7,214. 8 Claims. (Cl. 196—94.)

6. A process for treating cracked hydrocarbon oil vapors comprising subjecting such vapors to dephlegmation in a zone maintained under a superatmospheric pressure, passing the uncondensed dephlegmated vapors to a fractionating column, preventing premature condensation of the major portion of the dephlegmated vapors in said fractionating column by introducing steam to physically commingle with the vapors in said fractionating column, causing the commingled steam and vapors to have an obstructed passage through said column, maintaining the commingled steam and vapors in said column under a substantially atmospheric pressure, subjecting the commingled steam and vapors subsequent to their passage from said column to condensation, and thereafter effecting a separation of the resultant water and distillate.



1,892,438. MIRROR SUPPORT FOR PROJECTORS. ELMER C. RICHARDSON and PETER MOLE, Los Angeles, Calif., assignors to Mole-Richardson, Inc., Los Angeles, Calif., a Corporation of California. Original application filed Feb. 24, 1931, Serial No. 517,738. Divided and this application filed Nov. 24, 1931. Serial No. 576,962. 2 Claims. (Cl. 240—41.)

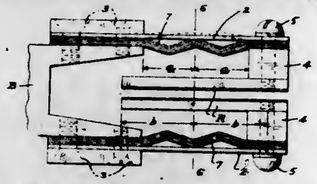


1. In a reflector support for illuminating projectors, a concave frangible reflector, a supporting ring having an annular recess therein for receiving the forward edge of said reflector, a plurality of hooks spaced around said ring, and a coil spring secured between each adjacent pair of said hooks and extending across the rear of said reflector.

1,892,439. SEMIFLOATING ELECTRIC CONTACT. JAMES U. SMITH, Berkeley, Calif. Filed Dec. 2, 1930. Serial No. 499,505. 9 Claims. (Cl. 200—166.)

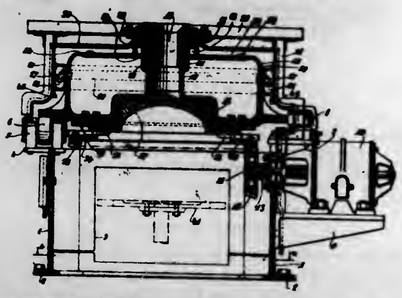
1. A device of the character described comprising a support, a pair of interspaced spring arms secured at their inner ends to said support and extending outwardly therefrom, said arms having contact shoes secured to their

outer ends and the shoes lying between the arms and being substantially parallel to each other and to the arms, said spring arms being flexible both longitudinally and



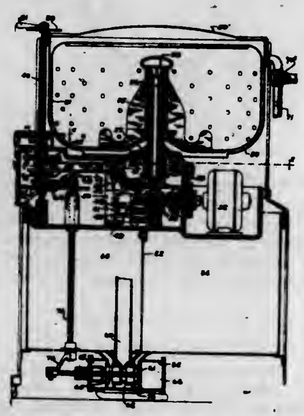
tortionally and adapted to exert an inward pressure on the shoes at a point substantially centrally of their length and width.

1,892,440. CENTRIFUGAL CASTING MACHINE. ALBRECHT VON FRANKENBERG, Gelsenkirchen, Germany, assignor, by mesne assignments, to Durafer (Inc.), Dover, Del., a Corporation of Delaware. Filed Sept. 11, 1930. Serial No. 481,156. 12 Claims. (Cl. 22—65.)



1. A casting machine comprising a base, a mold, means to mount the mold on the base with a capacity for rotation about its vertical axis, a core, means on the mold to secure the core removably to the lower side thereof, means to lower the core with the casting away from the mold, teeth on the mold, and means on the base to engage the teeth and rotate the mold.

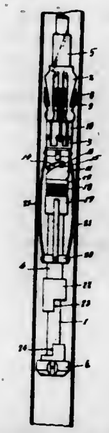
1,892,441. WASHING MACHINE. NATHANIEL B. WALES and CHARLES ROBERTS, New York, N. Y., assignors to Harry Bohn, Dayton, Ohio, trustee. Filed Apr. 7, 1927, Serial No. 181,635. Renewed Jan. 7, 1932. 25 Claims. (Cl. 68—18.)



1. A washing machine, comprising an upper tub and washing receptacle movably mounted therein, a cleansing liquid tank and a rinsing water tank supported beneath said tub, and means to selectively deliver liquid to and from the said lower tanks to the said tub comprising a pump and a distributor valve arranged to open communication successively, first, from the cleansing liquid tank to the washing receptacle, second, from the washing receptacle to the cleansing liquid tank, third, from the rinsing water tank to the washing receptacle, and, fourth, from the washing receptacle to the rinsing water tank.

4. A washing machine comprising a tub and a washing receptacle movably mounted therein and means to impart to the receptacle an oscillatory movement, means to impart to the receptacle a rotational movement and timing mechanism to cause the last mentioned means to be rendered operable after the receptacle has been oscillated for a predetermined time.

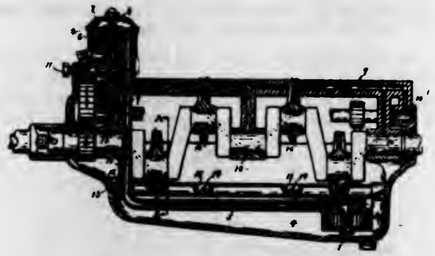
1,892,442. SLIP MECHANISM. NEWTON W. WICKERSHAM, Los Angeles, Calif., assignor to Perkins Cementing, Inc., Los Angeles, Calif., a Corporation of California. Filed Mar. 28, 1932. Serial No. 601,561. 2 Claims. (Cl. 103—219.)



1. A slip mechanism comprising a sleeve, a slip expander mounted on said sleeve having slip seats thereon extending upwardly and outwardly, said sleeve extending below said expander, slips mounted on said slip seats, an upper collar slidably mounted on said sleeve below said expander, means connecting each slip to said upper collar, a lower collar slidably mounted on said sleeve and spaced below said upper collar, a plurality of outwardly bowed casing-engaging springs having their upper and lower ends secured to said upper and lower collars respectively, said upper collar being movable on said sleeve from an uppermost position in which said slips are in set position to a lowermost position in which said slips are in contracted position, a slot in said upper collar opening from the bottom edge thereof and extending upwardly and then downwardly, a pin projecting from said sleeve and engageable with said slot by relative rotation between said upper collar and said sleeve to lock said upper collar into its lowermost position, a third collar rigidly connected to said sleeve between said upper and lower collars, a spiral spring surrounding said shaft between said pin and said third collar, said spring being compressed between said upper and third collar when said pin is rotated into engagement with said slot, and means for rotating said sleeve.

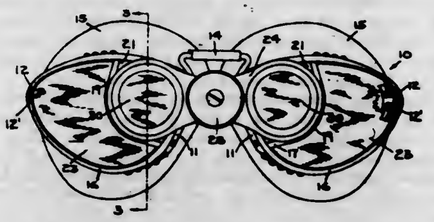
1,892,443. LUBRICATING SYSTEM FOR HYDROCARBON ENGINES AND THE LIKE. CHARLES A. WINSLOW, Vallejo, Calif. Filed Feb. 14, 1927. Serial No. 168,061. 31 Claims. (Cl. 184—6.)

1. In combination with a hydro-carbon engine, a lubricating system comprising a reservoir, parts to be lubricated, a means of forcing lubricant from the reservoir to said parts to be lubricated through independent lubricating systems, one a force feed system containing a means of filtering the lubricant passing therethru, and a



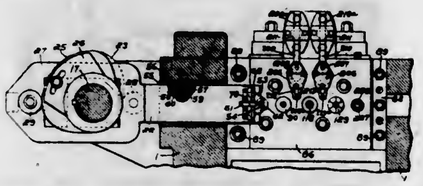
means of metering the amount of lubricant to the parts to be lubricated in proportion to the load upon same, and the other a splash system operative by resistance of lubricant through the pressure system.

1,892,444. TELESCOPIC GOGGLES. CARL L. BAUSCH, Rochester, N. Y., assignor to Bausch & Lomb Optical Company, Rochester, N. Y., a Corporation of New York. Filed Nov. 6, 1929. Serial No. 405,173. 6 Claims. (Cl. 88—41.)



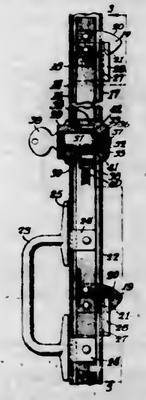
1. A device of the character described comprising a frame, a metallic rim secured in said frame, a plate carried by said rim, said plate having an opening, an optical system carried by said plate in alignment with said opening and a lens member mounted in said rim.

1,892,445. MACHINE FOR PRODUCING BOLTS, SCREWS, AND THE LIKE. LOUIS S. BURBANK, Worcester, Mass., assignor, by mesne assignments, to The Waterbury Farrel Foundry and Machine Company, Waterbury, Conn., a Corporation of Connecticut. Filed June 7, 1928. Serial No. 283,469. 15 Claims. (Cl. 10—12.)



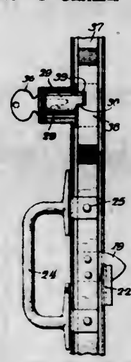
1. In a machine of the class described, a series of stationary dies arranged in a straight line, a corresponding series of punches arranged in a straight line on a reciprocatory head adapted to move all the punches in unison, means for presenting a blank to the first punch and die, and a series of transfer fingers mounted between adjacent dies each having an oscillatory movement from one die to another, with respect to a neutral non-blank engaging position between adjacent dies, out of the line of said punches.

1,892,446. LATCH MECHANISM. JOHN E. CARR, Aurora, Ill., assignor to All-Steel-Equip Company, a Corporation of Illinois. Filed May 1, 1930. Serial No. 448,906. 6 Claims. (Cl. 70—74.)



1. In a device of the class described, a door, a rotatable lock plug, a single gravity operative latch bar vertically movable with respect to the door, a cup-shaped cam secured to the end of the lock plug, means for limiting the rotation of the lock plug and cam to a given angle, and a finger on the latch bar engageable with the cam arm when in locked position but free from obstruction when the cam arm is in unlocked position.

1,892,447. LOCK MECHANISM. JOHN E. CARR and JOHN KNELL, Aurora, Ill., assignors to All-Steel-Equip Company, a Corporation of Illinois. Filed May 1, 1930. Serial No. 448,907. 5 Claims. (Cl. 70—74.)

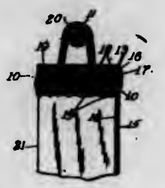


1. In a device of the class described, a door including a front panel member, a latch bar member movable with respect to the door, a handle rigidly secured to the bar, means to lock the latch bar against movement including a rotatable key plug having a semi-cylindrical head having a radius not greater than that of said plug, said head being directly engageable with an integral portion of one of said members.

1,892,448. CURTAIN AND DRAPE STRUCTURE. WILLIAM C. CHAPMAN, Chicago, Ill. Filed May 9, 1932. Serial No. 609,998. 8 Claims. (Cl. 156—10.)

1. The combination in a curtain or drape of a curtain body in the form of a sheet of flexible material having a plurality of inverted U-shaped loops secured in spaced-apart relation along one edge of the curtain body with the depending legs of said inverted U-shaped loops secured in normal spaced-apart relation thereon so that the said

loops shall lie substantially wholly within the adjacent normal plane of the curtain body whereby to cause the latter to tend to assume normally a pleated condition

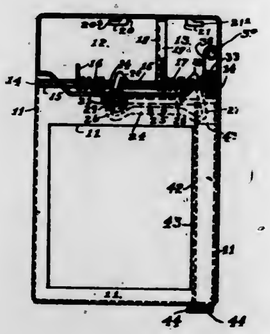


when said U-shaped loops are threaded from alternate sides of the normal planes of said loops upon an elongated curtain support.

1,892,449. PROCESS OF TREATING CHOCOLATE LIQUOR CONTAINING PROTEINS, STARCHES AND FATS. FRANZ PETER DENGLER, Chicago, Ill., assignor to Lloyd M. Brown, Chicago, Ill. Filed June 5, 1929. Serial No. 368,743. 8 Claims. (Cl. 87—28.)

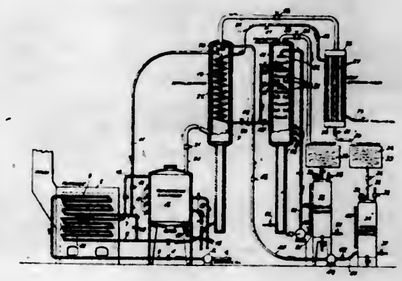
1. The process of treating chocolate liquor, which comprises comminuting the same, suspending it in acidulated water, treating it therein with papain and pepsin—whereby the fat will become disassociated from the non-fatty constituents of the vegetable matter and will rise to the surface of the water,—and removing said fat from the water.

1,892,450. CIGARETTE LIGHTER AND CASE COMBINED. SAMUEL DOMINUS, Brooklyn, N. Y. Filed Dec. 22, 1931. Serial No. 582,563. 11 Claims. (Cl. 206—41.4.)



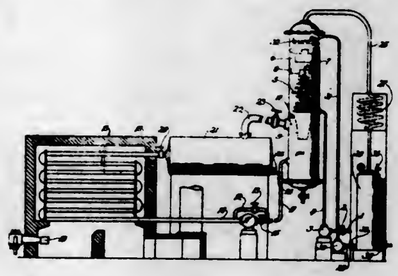
1. In a cigarette lighter and case combined a main body for enclosing therein cigarettes, an ignition means on said body for lighting a cigarette, a cover on said body for closing the same, comprising multiple sections, one of said sections being disposed over said ignition means, another of said sections being disposed over a part of said body which is outside of said ignition means, a means for locking said one section when said ignition means is not used, a means for locking said other section, a manual means for successively disengaging each of said locking means, adapted to be actuated by one hand of the operator holding said case, thereby releasing said sections, and an automatic means for imparting a rapid motion to said one section when the locking means thereof is released, thereby actuating said ignition means.

1,892,451. PROCESS AND APPARATUS FOR CRACKING PETROLEUM OILS. CARBON P. DUBBS, Wilmette, Ill., assignor to Universal Oil Products Company, Chicago, Ill., a Corporation of South Dakota. Original application filed Nov. 27, 1922, Serial No. 603,401. Divided and this application filed July 10, 1926. Serial No. 121,705. 4 Claims. (Cl. 196—48.)



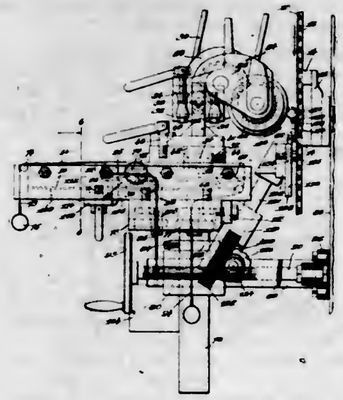
1. An apparatus for cracking hydrocarbon oil comprising an enlarged chamber within which a body of oil is adapted to be maintained under cracking conditions of temperature and pressure, a reflux condenser, means for conveying vapors evolved from the oil from said enlarged chamber to said reflux condenser, a heating coil disposed within a furnace, means for introducing incoming charging oil to a section of the heating coil disposed in the coolest portion of the furnace, means for conveying reflux condensate from said reflux condenser to a section of the heating coil disposed in the hottest portion of the furnace, and means for uniting the charging oil subsequent to its flow through the section of the coil positioned in the coolest portion of the furnace with the reflux condensate entering the section of the coil positioned in the hottest portion of the furnace, and means for conveying the heated charging oil and reflux to said enlarged chamber.

1,892,452. PROCESS FOR CRACKING HYDROCARBON OIL. CARBON P. DUBBS, Wilmette, Ill., assignor to Universal Oil Products Company, Chicago, Ill., a Corporation of South Dakota. Filed Jan. 12, 1922. Serial No. 528,793. 5 Claims. (Cl. 196—48.)



1. A process for cracking hydrocarbon oils, consisting in simultaneously preheating the oil and dephlegmating the oil vapors by introducing the oil to be treated into a coil having imperforate side walls extending through the hottest portion of the dephlegmating stage, discharging the oil from the coil into a portion of the dephlegmating stage above the inlet of said coil and permitting the preheated oil to come in intimate contact with the vapors rising through said dephlegmating stage, drawing off the oil and condensate from the dephlegmating stage and subjecting them to a cracking temperature in a heating zone, passing the heated oil to a vaporising stage, subjecting the vapors evolved therein to dephlegmating and condensing actions and withdrawing the unvaporised oil from the vaporising stage, and maintaining a regulated vapor pressure upon the system.

1,892,453. APPARATUS FOR CENTERLESS GRINDING OR POLISHING. RUFUS W. FULLER, Deerfield, Mass., assignor to Production Machine Company, Greenfield, Mass., a Corporation of Massachusetts. Filed Jan. 20, 1927. Serial No. 162,300. 22 Claims. (Cl. 51—103.)



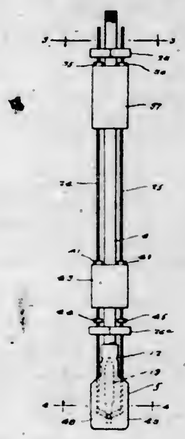
1. A grinding or polishing machine having, in combination, a work rest, an abrasive element, a work holding and feeding device to engage peripherally with the work and to feed it transversely of the abrasive element, and means for mounting the abrasive element and the work holding and feeding device having provision for recessive movement between them, and means for causing relative movement between the work holding and feeding device and the abrasive element as the grinding or polishing proceeds to accommodate taper work.

1,892,454. CIRCUIT INTERRUPTER. JOHN G. ALBRIGHT, Cleveland, Ohio. Filed Mar. 10, 1931. Serial No. 521,447. 6 Claims. (Cl. 200—113.)



1. A circuit control device, comprising: a support; a leaf spring secured at one end to said support; a first contact operable by the free end of said leaf spring; a balance wheel mounted on said support; a second contact operable by said balance wheel; a spring for urging said balance wheel to a position in which said second contact engages said first contact; and a thermally-responsive means connected at one end to said leaf spring intermediate the ends thereof, and adapted when heated by an electric current passing therethrough to elongate and permit said leaf spring to impart movement to said second contact and balance wheel to move said second contact against the action of said spring out of engagement with said first contact, thus interrupting the circuit through said thermally-responsive means, and when cooled through the interruption of the flow of current therethrough to contract and flex said leaf spring back to its initial position to permit said balance wheel to rotate in an opposite direction under the influence of said spring and move said second contact into engagement with said first contact to reestablish the circuit through said thermally-responsive means.

1,892,455. AUTOMATIC PRODUCING VALVE. BERNARD H. AYERS, Nobe, W. Va. Filed Oct. 29, 1932. Serial No. 640,275. 4 Claims. (Cl. 166—2.)

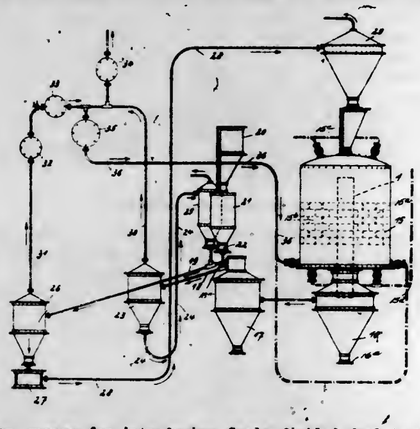


1. A device of the character described comprising a valve body having an opening traversing the same, a restricted portion in the opening constituting a valve seat, a valve operable in the opening and adapted to be engaged with or withdrawn from the valve seat, a tubing connected to the valve body in communication with the opening therein, longitudinally movable members supported on the exterior of the tubing, means connecting the said means and the valve, float means movable relative to the tubing and the said means, upper stops on the said means engageable by the float means for lifting the said means and withdrawing the valve from engagement with the seat, lower stops engageable by the float means for depressing the said means for moving the valve into engagement with the seat, and auxiliary float means engageable with the lower stops for carrying the weight of the said operating means for preventing downward movement of the said operating means when the float means is depressed below the upper stops, until the float means reaches and engages the lower stops.

1,892,456. APPARATUS FOR PRODUCING WATER GAS. WALTER BENNHOLD, Furstenwalde, Germany. Filed Oct. 23, 1928, Serial No. 314,367, and in Germany Oct. 26, 1927. 1 Claim. (Cl. 48—78.)

An apparatus for generating water gas, having in combination; a water gas generating chamber, regenerators adjacent the chamber, means for admitting air and steam to the chamber, means for admitting finely divided fuel to the chamber, a primary dust and ash separator beneath and connected to the water gas generating chamber.

a second separator connected to the primary separator, two parallel inclined pipes for conveying water gas and drying finely divided fuel connected to the second sepa-



rator, means for introducing finely divided fuel to each of said pipes and means for conveying the dried fuel into said first-named fuel admission means.

1,892,457. PROCESS OF STABILIZING CEREAL BEVERAGES. DONATO COZZOLINO, San Jacinto, Calif., assignor to Giulia Cozzolino, San Jacinto, Calif. Filed Apr. 15, 1930. Serial No. 444,612. 3 Claims. (Cl. 99—11.)

3. In a process of stabilizing cereal beverages, the step of treating the beverage with a solution of tannic acid, siliceous clay, and a proteolytic enzyme, together forming a compound which has an affinity and absorbing power for all undesirable albuminoids in the beverage.

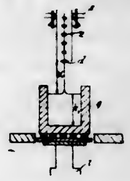
1,892,458. PROCESS AND APPARATUS FOR THE MANUFACTURE OF GLASS. ANDRÉ DO-HUU CHAN, Cirey-sur-Vezouze, France, assignor to Société Anonyme des Manufactures des Glaces & Produits Chimiques de Saint Gobain, Chauny & Cirey, Paris, France. Filed Nov. 18, 1930, Serial No. 496,529, and in France Nov. 28, 1929. 4 Claims. (Cl. 49—33.)



3. In a sheet glass forming machine the combination with a pair of rolls having a forming pass between them, of means for changing the inclination of the line of centers of the two rolls, a wall mounted for movement around on axis located at its lower edge, supports on which the limiting wall is mounted for such movement and movable around the axis of the lower roll at a radius equal to the radius of such roll, and means for independently moving the supports in their path of movement and for swinging the limiting wall around its axis.

1,892,459. PROCESS FOR DRAWING A GLASS BAND FROM THE SURFACE OF THE MOLTEN GLASS METAL. BERNHARD ENGELS, Waldenburg-Altwasser, Germany. Filed Nov. 6, 1931, Serial No. 573,491, and in Germany Nov. 7, 1930. 1 Claim. (Cl. 49—83.1.)

The hereinbefore described method of drawing glass in selected form from a bath of molten glass exhausted in the drawing, which comprises drawing the glass upwardly in the selected form by traction exerted thereon and maintaining constant the distance between the point



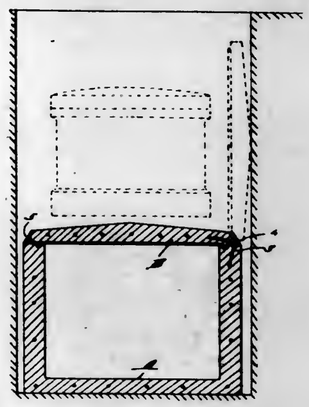
of application of the traction and the surface of the bath by a relative movement between the traction means and the container for the bath of glass.

1,892,460. LANDING AND LAUNCHING DEVICE FOR AIR VEHICLES. OLIVER P. GAYMAN, Canal Winchester, Ohio. Filed Feb. 11, 1932. Serial No. 592,360. 2 Claims. (Cl. 244—18.)



1. In combination with an airplane having a wing structure, said wing structure being formed with a plurality of longitudinally spaced openings formed therein, recesses formed in said wing structure and in communication with said openings, centrifugal blowers arranged in said recesses and having their inlets in registration with said openings, the outlet from said blowers being located within said recesses and arranged toward the rear of the wing structure.

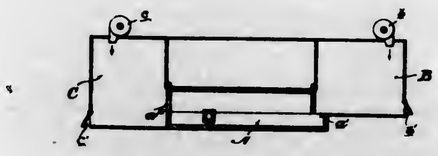
1,892,461. CONCRETE BURIAL VAULT. ROBERT C. GEHRIG, Jr., Schuylkill Haven, Pa. Filed Sept. 28, 1932. Serial No. 635,265. 1 Claim. (Cl. 72—7.)



A burial vault formed of reinforced concrete and comprising a body having the upper edge of each vertical wall thereof flat with a groove in said edge slightly spaced from the inner face of the wall, a cover of less width and length than the exterior width and length of the body with its edges straight and arranged at right angles to the upper edges of the walls of the body with each edge of the cover spaced inwardly from the outer margin of an upper edge of the body, ribs on the under face

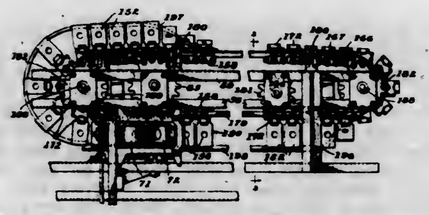
of the cover spaced inwardly from the edges of said cover, said ribs complementary to said grooves and fitting in the grooves of the body, hinges for fastening one side edge of the cover to a side wall of the body, said hinges having their leaves embedded in the cover and upper portion of said side wall of the body with their barrels located in the space formed by said side edge of the cover and the corresponding upper edge of said side wall, and sealing compound placed between adjacent parts of the cover and body and in the grooves and filling the spaces formed by the side edges of the cover and the outer portions of the upper edges of the body with some of the compound completely covering those portions of the hinges extending into the space formed by said side edge of the cover and the adjacent upper edge of said side wall of the body.

1,892,462. CONTROL OF HEAT CONDITIONS IN GLASS FURNACES. EUGENE GENTIL, Paris, France. Filed May 10, 1930. Serial No. 451,475. 1 Claim. (Cl. 49—54.)



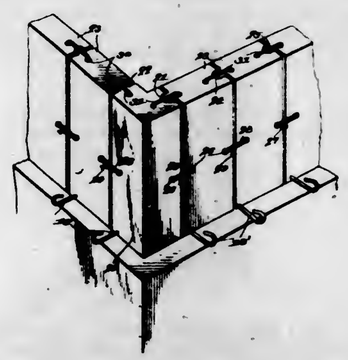
The hereinbefore described method of controlling the heat conditions in a glass melting furnace having ports therein, which includes maintaining constant relative air pressures outside of said ports in spite of variation in atmospheric conditions.

1,892,463. GLASS WORKING MACHINE. DAVID E. GRAY, Corning, N. Y., assignor to Corning Glass Works, Corning, N. Y., a Corporation of New York. Original application filed June 3, 1927, Serial No. 196,214. Divided and this application filed Oct. 31, 1928. Serial No. 316,313. 6 Claims. (Cl. 49—65.)



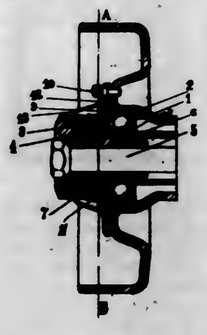
1. In a glass forming machine, a moving conveyer comprising articulated links moving in a horizontally closed path, plates carried by the links, said plates forming on the operative run of the conveyer a continuous glass supporting surface and means for lowering the plates out of glass supporting position near the end of the operative run of the conveyer.

1,892,464. HOT TOP FOR INGOT MOLDS. WILLIAM H. HAWS, Johnstown, Pa., assignor of one-half to William W. Hoffman, Johnstown, Pa. Filed Jan. 21, 1931. Serial No. 510,254. 5 Claims. (Cl. 22—147.)



1. A hot top for ingot molds comprising a series of refractory sections arranged in edge to edge relation, each of said sections having transverse apertures formed adjacent the vertical edges thereof and positioned in the same horizontal plane, and fastening means extended through registered apertures for loosely interconnecting said sections.

1,892,465. PROTECTING DEVICE FOR BALL BEARINGS. ADOLPHE KEGRESSE, Courbevoie, France. Filed Nov. 10, 1930, Serial No. 494,717, and in France Nov. 18, 1929. 4 Claims. (Cl. 286—11.)



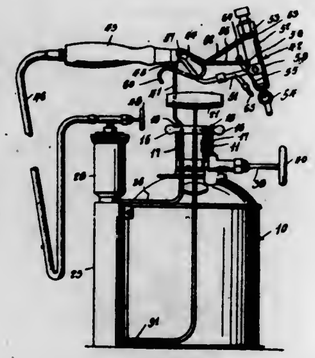
1. Means for protecting a shaft bearing on which a hub rotates, comprising an outer bearing element attached to the hub, an inner bearing element attached to the shaft, an abutment ring engaging the inner bearing element, said abutment ring being provided with a grooved portion, a felt packing ring mounted on said grooved portion, and means attached to the hub for keeping foreign bodies out of the bearing elements comprising a layer of leather fastened to the hub and bearing against the felt packing ring and a coil spring forcing the leather against the felt packing ring.

1,892,466. PAPER BOTTLE. EDWARD JOHN KLEESS, Springfield, N. Y. Filed July 8, 1930. Serial No. 466,603. 4 Claims. (Cl. 225—4.5.)



1. A bottle comprising a body of waterproof paper, a neck ring or nozzle of compressible material mounted in the upper end of said body, a stopper for said ring, and means encircling said ring and compressing the same into the sidewall of said stopper.

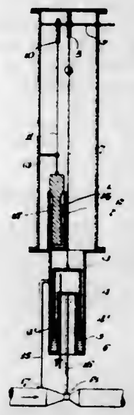
1,892,467. CARBURETOR, BLOW TORCH, AND SOLDER MELTER. MATHOD LAPANJA, Canton, Ohio. Filed Jan. 31, 1930. Serial No. 424,959. 3 Claims. (Cl. 261—121.)



1. A unitary structure of the class described comprising a tank, a pump disposed in said tank axially thereof and operable to supply the same with compressed air, a discharge valve for said pump opening into said tank, said pump extending exteriorly of the tank and communicating with the atmosphere, a closure for the pump, a piston operable in the pump, a control valve device having a casing carried by the tank, a fuel cylinder carried by the tank on the exterior thereof, means on the exterior of the tank whereby the tank communicates with the cylinder through said valve casing and means on the exterior of the tank whereby the tank communicates with the cylinder adjacent the base of the latter.

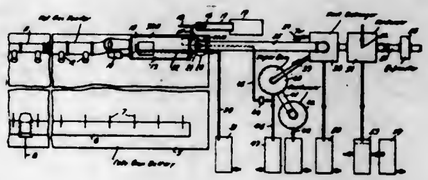
1,892,468. METER. JOHN W. LEDOUX, Swarthmore, Pa. Filed Dec. 22, 1928. Serial No. 327,850. 6 Claims. (Cl. 73—167.)

1. Apparatus of the character described comprising a casing, a hollow device having a submerged open end and movable in said casing, said casing containing a liquid sealing said hollow device, means for communicating differential pressures to said casing within and without said device, a shaped weight, a tension member connecting said weight with said hollow device, a container, a liquid in said container in which said weight is immersed, said



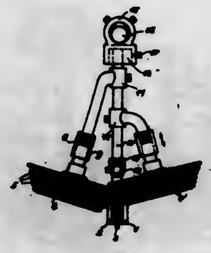
weight being so shaped that its varying displacement in its immersing liquid interposes a varying resistance to the movement of said hollow device, and means for increasing the leverage of said weight as said hollow device moves from its datum or no-flow position.

1,892,469. METHOD AND APPARATUS FOR DISTILLING TAR AND SIMULTANEOUSLY PRODUCING HIGH AND LOW MELTING POINT PITCHES. STUART PARMELEE MILLER, Englewood, N. J., assignor to The Barrett Company, New York, N. Y., a Corporation of New Jersey. Filed Aug. 29, 1929. Serial No. 389,141. 10 Claims. (Cl. 202—30.)



1. The method of distilling tar from a coal distillation or gasification plant with highly heated foul fuel gases from the distillation of coal and producing high melting point pitch, pitch of lower melting point and distillate which comprises bringing tar or pitch in the form of an intense spray into direct and intimate contact with the hot gases whereby the tar is distilled and high melting point pitch is produced, bringing partially distilled tar into direct contact with the gases and vapors resulting from this distillation to distill the partially distilled tar and produce low melting point pitch, collecting at least a portion of this low melting point pitch as a separate product and bringing the combined gases and vapors resulting from said first and second distillations into indirect heat-exchange relation with tar, whereby distillate is condensed from the gases and the tar is heated above the boiling point of lower boiling constituents, collecting vapors of such constituents and cooling them to produce a clean oil product and distilling at least a portion of the partially distilled tar thus produced by direct contact with the hot gases and vapors from the first distillation.

1,892,470. BAND SAW BLADE GUIDE. ANTON STEFAN PRAGHERSTORFER, Vienna, Austria. Filed Feb. 26, 1931, Serial No. 518,515, and in Austria Feb. 26, 1930. 12 Claims. (Cl. 143—162.)



1. In a guide for the blade of a band saw, the combination of: a conical roller for supporting the back edge of the blade, and steps provided on the conical surface of said roller and running round the said surface.

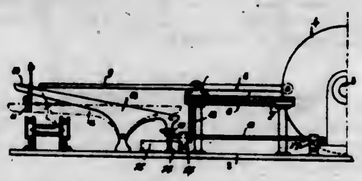
1,892,471. MANUFACTURE OF PAPER. HAROLD R. RAFTON, Andover, Mass., assignor to Raffold Process Corporation, a Corporation of Massachusetts. Filed Mar. 24, 1930. Serial No. 438,644. 17 Claims. (Cl. 92—38.)

1. In a process of manufacturing paper filled with alkaline filler, wherein both alkaline filler and material capable of deterioration by alkaline filler are employed, the cyclic procedure comprising the returning of substantially all the solids which are delivered to the web forming device but which do not pass through the driers, to the fibrous mix under conditions favoring the minimizing of the time of contact of said solids with the constituents of the mix.

1,892,472. MANUFACTURE OF PAPER. HAROLD ROBERT RAFTON, Andover, Mass., assignor to Raffold Process Corporation, a Corporation of Massachusetts. Filed Mar. 31, 1930. Serial No. 440,645. 25 Claims. (Cl. 92—21.)

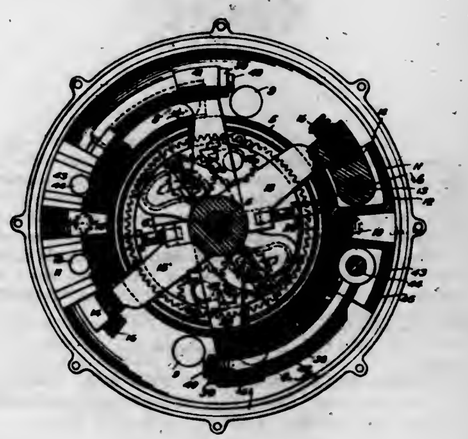
1. The method of manufacturing sized paper filled with alkaline filler which comprises sizing fibrous material, mixing the resulting product with other fibrous material and alkaline filler under conditions favoring the minimizing of the time of contact of the ingredients of the combined mix, passing the combined mix on to a web-forming device, and thereafter making paper therefrom.

1,892,473. DEVICE FOR THE PERIODIC DISTRIBUTION OF A LIQUID SUBSTANCE ON A PLANE SURFACE, CINEMATOGRAPHIC FILMS OR OTHERS. ARMAND RODDE, Paris, France. Filed May 31, 1930, Serial No. 458,581, and in Belgium June 8, 1929. 4 Claims. (Cl. 91—12.)



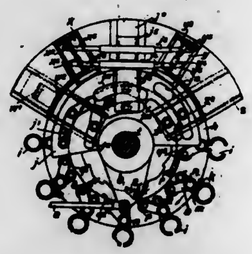
1. Apparatus for periodically distributing a liquid substance on a film, comprising means for moving the film in a right line, a member mounted for reciprocating movement at an angle to the film, means to impart reciprocating movement to said member, a fount, a tiltable member extending across and above the film and under the inner end of which said fount is located, a holder slidably mounted on said tiltable member, a liquid applying instrument pivotally connected to said holder and depending therefrom, a connecting rod between the holder and the reciprocating member and means to alternately move the tiltable member to substantially horizontal position and at the instroke of the holder to tilt said tiltable member so that its inner end lowers said instrument into the fount.

1,892,474. ROTARY GAS ENGINE. GILBERT G. SATRUM, Canton, S. Dak. Filed Oct. 23, 1931. Serial No. 570,687. 1 Claim. (Cl. 123—11.)



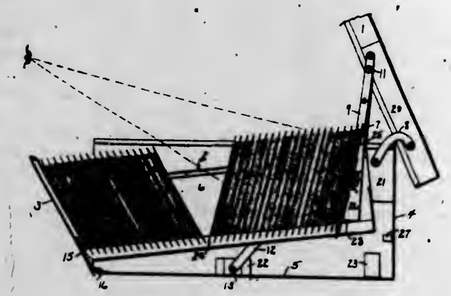
A rotary internal combustion engine including a hollow casing having an annular cylinder thereon and said cylinder having an inner opening communicating with the casing, and said cylinder having upper and lower pairs of respective fuel intake and exhaust ports and having spark plugs entering the sides thereof, oppositely disposed main piston heads in the cylinder, a shaft journaled in the casing, an arm centrally fixed to the shaft having offset ends which enter the cylinder and are pivoted to the pistons, compressible buffers extending from the said ends of the arms, auxiliary pistons in the cylinder, arched rods pivotally secured to said pistons, an arm freely journaled on the shaft and to whose ends the rods are connected, segmental skirts carried by the auxiliary pistons for normally closing the intake and exhaust ports, segmental rings for closing the opening in the cylinder and for permitting the passage of the arms into said cylinder, adjustable means carried by the shaft holding the rings positioned, the main and auxiliary pistons when brought to the opposite side of the spark plugs designed to afford abutments for the explosions, means for latching the arms of the auxiliary pistons for preventing the retrograde movement of the auxiliary pistons from such explosions and said main pistons when traveling over the intake ports designed to suck an explosive mixture into the cylinder and the buffers on the arms of the said main pistons adapted to contact with the arms of the auxiliary pistons to release the latching means and timing means operated by the turning of the shaft for rapidly advancing the auxiliary pistons toward the main pistons to cause said auxiliary pistons to scavenge the exploded mixture through the exhaust ports, to close the intake ports and to arrange themselves in latched position when the main and auxiliary pistons are brought to the opposite sides of the spark plugs.

1,892,475. TUBE-CLOSING MACHINE. HUGO OTTO GEORG SCHILLING, Hamburg, Germany, assignor of one-half to Alfred Gustav Pühl, Hamburg, Germany. Filed Apr. 26, 1930, Serial No. 447,754, and in Germany Apr. 29, 1929. 4 Claims. (Cl. 113—1.)



1. In a tube closing machine the combination comprising a plurality of closing mechanisms, a common tube carrier adapted to move intermittently, tube holders supported by said carrier and adapted to be automatically closed and opened, a pawl and ratchet mechanism effecting the advance movement of said tube carrier, a member controlling the movements of said closing mechanisms, said controlling member being coupled with said pawl and ratchet mechanism for operating said closing mechanisms upon the retreating movement of said pawl.

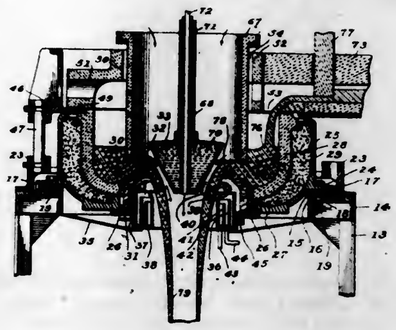
1,892,476. FILING CABINET OR FILE BOX. FREDERICK L. G. STRAUBEL, Green Bay, Wis. Filed Sept. 8, 1931. Serial No. 561,650. 4 Claims. (Cl. 129—16.)



1. A filing cabinet or file box comprising an outer casing of sides, back and bottom, a tilting front member, an inner filing receptacle, a cover, pivoted means for attaching the cover to the outer casing for swinging movement and means in connection therewith whereby the inner filing receptacle is raised at its rear end, by the opening of the cover, substantially as and for the purpose described.

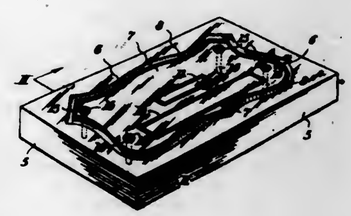
1,892,477. TUBE DRAWING. WALTER C. WEBER, Corning, N. Y., assignor to Corning Glass Works, Corning, N. Y., a Corporation of New York. Filed Dec. 18, 1930. Serial No. 503,293. 19 Claims. (Cl. 49—17.1.)

1. In a glass tube making apparatus, a container for molten glass having an outlet orifice for the glass, means for cooling a portion of the glass in the container, and means surrounding the orifice for causing the molten glass



which issues through it to assume the form of a hollow stream.

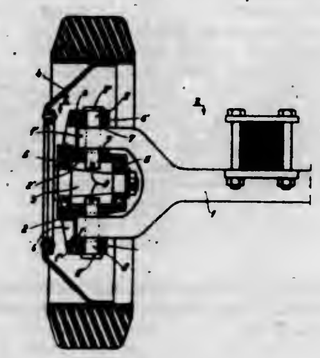
1,892,478. MEANS FOR FABRICATING METALLIC LABELS. FRED WEINDEL, Jr., Allentown, Pa., assignor to L. F. Grammes & Sons, Inc., Allentown, Pa., a Corporation of Maryland. Filed Dec. 8, 1930. Serial No. 500,797. 2 Claims. (Cl. 101—30.)



1. A die for fabricating embossed labels from thin sheet metal, said die having suitable depressions for outlining a surrounding and infield embossing as well as suitably allocated spot depressions, and sharp studs upstanding centrally of the said spot depressions with their points below the face of the die, whereby, as a label is stamped, the embossments formed as a consequence of the spot depressions are concurrently slightly pierced by the studs and the metal locally fractured to facilitate subsequent passage therethrough of securing means without local distortion of said embossments.

1,892,479. MOUNTING FOR STEERING WHEELS OF VEHICLES. ACHILLE ARATO, Turin, Italy. Filed Nov. 13, 1930, Serial No. 495,466, and in Italy Nov. 23, 1929. 4 Claims. (Cl. 280—96.3.)

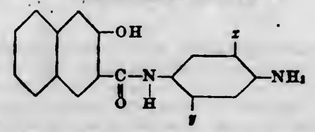
1. A mounting for steering wheels on a vehicle axle having work arms at each end, comprising a box entering the space intermediate said arms, a wheel-carrying pivot journalled near its two ends in said box, two opposed parts radially projecting from the external edge of said box, a lug at the end of each part forming with the adjacent wall of said box a seat for one of said fork arms, and alined



pivot pins each extending through corresponding holes in one of said fork arms and in the adjacent lug and wall of said box providing a seat therefor.

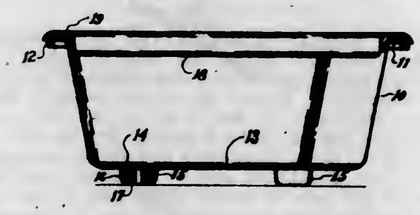
1,892,480. AZO-DYESTUFFS. GERALD BONHÔTE, Basel, Switzerland, assignor to Firm Society of Chemical Industry in Basle, Basel, Switzerland. Filed June 14, 1932, Serial No. 617,240, and in Switzerland July 1, 1931. 4 Claims. (Cl. 260—124.)

1. The compounds of the general formula



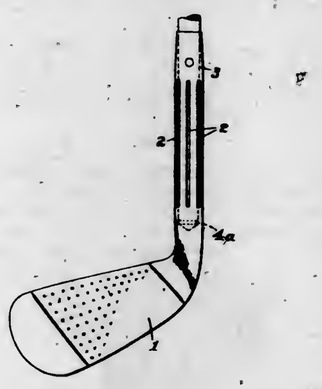
in which x is an alkoxy-group and y is an alkoxy-group or an alkyl-group, which products are light powders which dissolve in caustic alkalies to a yellow solution, and which, when treated on the fiber with nitrous acid and then with alkalies, dye the same fast black tints.

1,892,481. SINK STRAINER. CHARLES M. CARLSON, Canton, Ohio, assignor to The Republic Stamping and Enameling Company, Canton, Ohio, a Corporation of Ohio. Filed Nov. 26, 1930. Serial No. 498,392. 5 Claims. (Cl. 210—149.)



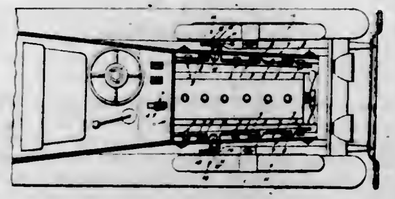
1. A sink strainer having a bottom wall, rubber feet upon the under side of said bottom wall, and tubular rivets located through said rubber feet and through the bottom wall for connecting the rubber feet to the bottom wall.

1,892,482. GOLF CLUB. ROBERT J. CASH, Jr., Los Angeles, Calif. Filed Feb. 7, 1930. Serial No. 426,652. 9 Claims. (Cl. 273—77.)



1. A golf club having a hosel slotted in the general direction of its length with a shaft fixed to the upper end of the hosel above the slotted portion, said shaft extending below the point of fixture and free from fixed connection with the slotted part of the hosel and throughout said extended portion, substantially as described.

1,892,483. ATTACHMENT FOR AUTOMOBILES FOR LOCKING THE HOOD OF THE MOTOR AND THE SPARE WHEELS. IGNACIO DE LA BORBOLLA, Mexico, Mexico. Filed Dec. 9, 1931. Serial No. 579,980. 3 Claims. (Cl. 292—33.)

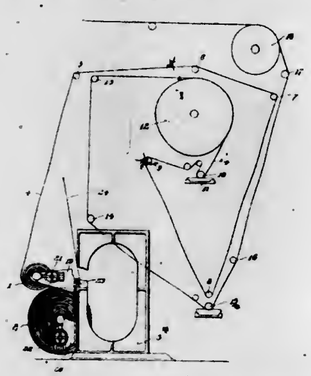


1. An attachment for locking the hood of an automobile from the inside, consisting of a fork having two prongs guided by staples provided on the chassis of the car, each prong being provided with a number of lateral hooks which may engage and disengage corresponding ears on the inner lower wall of the hood, and with a lateral bar which protrudes through a slit in the hood and engages an angular piece whose greater arm will lock the corresponding spare wheel or unlock it according to the movement of the said lateral bar.

1,892,484. MACHINE FOR COATING PAPER, FABRIC, OR THE LIKE. THOMAS HENRY LANCELOT DIXON, Letchworth, England. Filed Mar. 13, 1930, Serial No. 435,509, and in Great Britain Mar. 15, 1929. 1 Claim. (Cl. 242—58.)

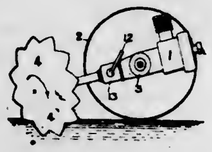
In a machine for continuous operation to coat a web, a coating means for the web, a frame carrying the coating means, a roll on one side of the frame adjacent the base thereof from which the machine is adapted to upwardly draw the web, a second roll on the frame, said second roll being located above and outwardly offset with respect to the first mentioned roll from which a replenishing supply

of the web is adapted to be drawn by the machine, and means guiding the web into the machine including a member on the frame above the rolls and substantially in vertical line with the axis of one of said rolls so that an ex-



hausting end of web will automatically be positioned adjacent the attaching zone of the free end of the replenishing web for expeditious connection thereto while the machine is in motion.

1,892,485. REVERSIBLE ROTARY PLOW. LÉON DUFOUR, Versoix near Geneva, Switzerland. Filed Feb. 1, 1932, Serial No. 590,230, and in France Oct. 7, 1931. 2 Claims. (Cl. 97—34.)



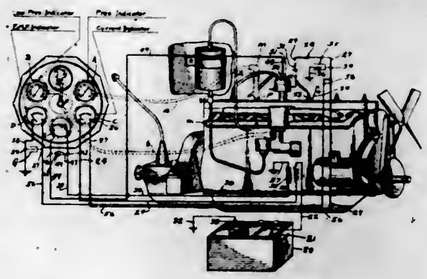
1. A reversible rotary plow comprising in combination a motor, a rotary toothed concave cutting disc, interconnecting means between the motor and the cutting disc, movable cutting disc supporting means so arranged as to allow positioning of the cutting disc with its concavity turned either to the right or to the left, said interconnecting means including a reversing mechanism to produce inversion of the direction of rotation of the cutting disc when the latter is positioned to have its concavity turned either to the right or to the left.

1,892,486. GLUE AND METHOD FOR MAKING PLYWOOD. HENRY V. DUNHAM, Bainbridge, N. Y. Filed Sept. 24, 1929. Serial No. 394,925. 11 Claims. (Cl. 87—17.)

11. A glue base comprising 90 parts of dried blood albumin, 15 to 30 parts of dried milk casein, 30 to 45 parts of highly proteinaceous seed metal and about 100 parts of fine comminuted cellulose, such base when mixed with water and alkalies producing a smooth glue having a "life" much longer than the life of a similar glue without the casein and seed meal.

1,892,487. METHOD OF TESTING MOTORS. PAUL N. ELDERKIN, Los Angeles, Calif. Filed Mar. 5, 1929. Serial No. 344,539. 2 Claims. (Cl. 175—183.)

1. The method of testing a high tension ignition system of an internal combustion engine to determine the efficiency of the usual condenser included in such system, which consists in imposing a variable resistance in the circuit including the condenser, increasing said resistance until a skip or failure in firing of one or more of the



cylinders of the engine occurs, and while maintaining said resistance in the circuit interposing another condenser in the circuit.

1,892,488. MANUFACTURE OF WIRE NET GLASS AND APPARATUS THEREFOR. JOSEPH GASKELL, St. Helens, England, assignor to Pilkington Brothers Limited, Liverpool, England. Filed June 21, 1932, Serial No. 618,461, and in Great Britain July 3, 1931. 3 Claims. (Cl. 49—32.)



3. Apparatus for making wire glass comprising a glass rolling apparatus, means for rotatably supporting a roll of wire net from which the wire net is drawn under tension by the glass forming rolls, three brakes adapted to act on the roll of wire net, one centrally and one near each end thereof, and means whereby each of the three brakes may be put into operative or into non-operative position.

1,892,489. CELLULOSE DERIVATIVES CONTAINING NITROGEN AND PROCESS OF MAKING SAME. ROBERT HALLER, Riehen near Basel, and ALPHONSE HECKENDORN, Basel, Switzerland, assignors to Society of Chemical Industry in Basle, Basel, Switzerland. Filed Dec. 4, 1931, Serial No. 479,102, and in Switzerland Dec. 10, 1930. 5 Claims. (Cl. 260—100.)

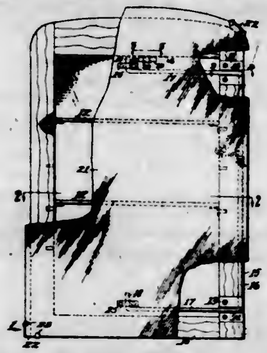
1. Process for the manufacture of cellulose derivatives containing nitrogen, comprising treating swollen cellulose with a cyanide and then with a halogen.

1,892,490. DENTAL CROWN, COATED ON THE FRONT WITH ENAMEL, MADE OF NOBLE METAL OR NOBLE METAL MATERIAL AND PROCESS FOR ITS PRODUCTION. RUDOLF HEJCMANN, Budapest, Hungary. Filed July 31, 1931, Serial No. 554,373, and in Hungary July 28, 1930. 4 Claims. (Cl. 32—29.)

1. A dental crown comprising a rear half of noble metal alloy of the normal kind, a front half of an alloy comprised of 100 parts by weight of fine gold, 15 parts by weight of fine silver, 10 parts by weight of chemically pure copper and 12.5 parts by weight of platinum, and an enamel coating on said front half of the same coefficient of thermal expansion as said front half of the crown.

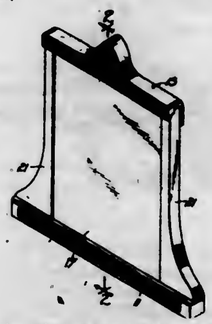
3. A method of producing dental crowns consisting in separately making a rear half of the usual noble metal alloy and a front half of a second noble metal alloy, soldering the two halves together in a butt joint with flush inner and outer surfaces so as to form one piece with perfectly smooth outer and inner surfaces, then uniformly recessing, to a depth of about 0.2 mm. the portion of the front half which is going to be enamelled while leaving a margin about 0.4 mm. wide then uniformly distributing in the recess so formed, a layer of about 0.2 mm. thick of enamel material stirred up to a pulp with a turbidifying medium in the usual manner, and finally smoothing and burning in the enamel at about 750° C., said second alloy for the front half of the crown consisting of approximately 100 parts of fine gold, 15 parts of fine silver, 10 parts of chemically pure copper, and 12.5 parts of platinum; said enamel consisting of approximately 6.50 parts of silicon, 2.00 parts of borax, 1.65 parts of calcined soda, 0.30 parts of sodium nitrate, 1.20 parts of cryolite and 0.50 parts of tin oxide, all parts by weight.

1,892,491. WALL CABINET. FRANK MASTRANGELO and ALPHONSO MASTRANGELO, Fitchburg, Mass., assignors to Angel Novelty Company, Fitchburg, Mass., a Corporation of Massachusetts. Filed Mar. 22, 1932. Serial No. 600,475. 4 Claims. (Cl. 312—189.)



1. In a wall cabinet, the combination with a cabinet casing comprising a vertical front exposed face having a transverse horizontal groove in its front face, a hinge member having a slot registering therewith secured on said front face, the front face having a groove under the hinge member for receiving a pivot member, a vertical pivot member having a part located in the last named groove and having an arm projecting at right angles therefrom through the said slot, and a door for the cabinet to which said arm is pivotally connected on a vertical axis.

1,892,492. FRAME. HERMAN MOLNER, Chicago, Ill. Filed Feb. 12, 1932. Serial No. 592,598. 2 Claims. (Cl. 40—152.)



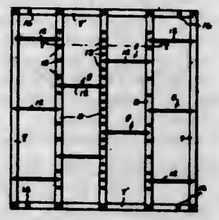
1. A frame for the purpose described including a flat rigid back member having a forwardly projecting flange at its lower edge, said flange having a groove in its upper face extending from side to side of the back and having its rear wall coplanar with the front face of the back member, and a cap member extending along the top of the back member and having a groove therein to receive the upper edge of said back member, the front wall of said groove having a rabbet formed at its inner corner confronting the groove in said flange, the rear wall of the groove in the cap projecting below the front wall, and screws passing through the rear wall into said back member to hold the cap removably on the back member.

1,892,493. WINDOW LATCH. WILLIAM QUICK, London, SYDNEY EDWARD THOMAS, Hounslow, and FREDERICK WILLIAM BERWICK, London, England. Filed Oct. 3, 1928, Serial No. 310,080, and in Great Britain Nov. 17, 1927. 3 Claims. (Cl. 292—342.)



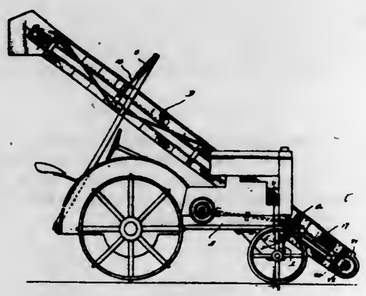
3. In combination with a guideway member, a closure member slidable in said guideway member, latching means carried by one of said members and adapted to frictionally engage the other member and secure said closure member against movement, means normally urging said latching means into engaging position and means for releasing said latching means, said last-named means including a shaft mounted to rock on an axis parallel to said slidable closure and a cam carried by said shaft and operable by the rocking movement of said shaft in either direction.

1,892,494. MOP CLEANING DEVICE. HARRY F. REYNOLDS, Seattle, Wash. Filed Aug. 4, 1931. Serial No. 555,038. 6 Claims. (Cl. 15—142.)



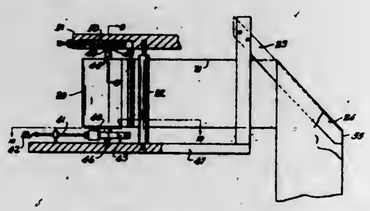
1. In a device of the class described, a frame; spaced apart upwardly extending teeth connected to said frame; and an elevated trackway positioned above and adjacent the upper ends of said teeth, said elevated trackway comprising a plurality of inverted U shaped members connected to said frame in relatively staggered relation.

1,892,495. COMBINATION TRACTOR AND ELEVATOR UNIT. HERBERT A. VORTHMANN, Council Bluffs, Iowa. Filed Dec. 24, 1931. Serial No. 583,118. 1 Claim. (Cl. 198—233.)



In combination with a tractor, a bar rigidly connected to the front axle thereof and having one end located above one of the front wheels, a vertically arranged plate having its center pivotally connected with said end of the bar and having trunnions at its ends arranged in a horizontal plane at right angles to the axis of the tractor, an elevator having depending members at its sides adjacent the front thereof provided with holes for receiving the trunnions, a frame pivoted to a rear part of the tractor and straddling a fender, the rear part of the elevator passing through said frame, a pulley at the upper end of the frame, a cable passing over the pulley and connected with a part of the elevator for raising and lowering the elevator.

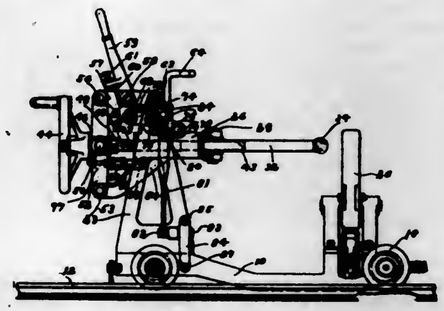
1,892,496. APPARATUS FOR MAKING MANIFOLD FORMS. LOUIS J. WILLARD, Norwalk, Ohio, assignor to The Rotary Printing Company, Norwalk, Ohio, a Corporation of Ohio. Original application filed Apr. 24, 1929, Serial No. 357,744. Divided and this application filed Feb. 24, 1930. Serial No. 430,591. 4 Claims. (Cl. 242—55.)



2. In a device of the character described, the combination with a support, of a roll of transfer material positioned thereon, one end of the roll being relatively fixed against lateral and axial movement, and means for selectively tilting the other end of the roll with reference to the support in any direction at right angles to the axis of the roll.

1,892,497. OUTFEED CARRIAGE. VICTOR H. WINQUIST, Seattle, Wash., assignor to Mill Engineering and Supply Company, Seattle, Wash., a Corporation of Washington. Filed Apr. 13, 1931. Serial No. 529,652. 11 Claims. (Cl. 143—105.)

8. An outfeed carriage consisting of a frame disposed for longitudinal movement; a transverse shaft supported by said frame; a carriage head pivotably supported by said shaft; log engaging claws pivotably supported by said head; locking means adapted to position said claws; a kick-off shaft disposed transversely of the carriage, a releasing lever slidably secured to said kick-off shaft and adapted to engage the locking means in a manner to release the same; an operating bar disposed parallel to



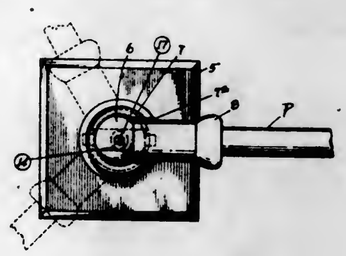
the axis of movement of the carriage and means for operatively connecting the operating bar to the kick-off lever.

1,892,498. BUILDING CONSTRUCTION. WILLIAM HUNTINGTON ADAMS, Norwalk, Conn. Filed June 26, 1929, Serial No. 373,763. Renewed May 9, 1932. 3 Claims. (Cl. 72—32.)



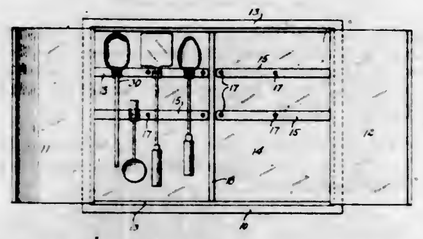
1. A sectional block comprising a mass of cementitious material reinforced by sheet metal and having at least two of its edges formed with a projecting tongue adapted to form one half of a joint with a similar block the edges of said sheet metal being split and angularly disposed to reinforce said tongue.

1,892,499. SECURING MEANS FOR RECEIVING RECEPTACLES FOR PENS. HORACE L. BLACKMAN, Janesville, Wis., assignor, by mesne assignments, to Pen Desk Set Company, a Corporation of Illinois. Filed Aug. 19, 1926. Serial No. 130,116. 13 Claims. (Cl. 120—108.)



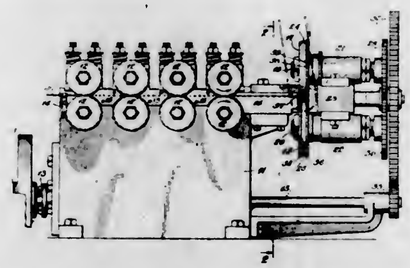
1. In a desk set having a pen-receiving receptacle unit and a base, a securing means for the receiving receptacle unit comprising a recessed spring mounted in the lower part of the receiving receptacle unit, a slotted spring mounted in the base, and a bolt engaging the recess and slot of said springs to tensionally join said springs.

1,892,500. SUPPORTING DEVICE FOR KITCHEN UTENSILS AND THE LIKE. FREDERICK W. BLECKLEY, East Orange, N. J. Filed Apr. 6, 1928. Serial No. 267,890. 1 Claim. (Cl. 211—89.)



In a device of the general nature of that herein described, in combination, a supporting member having a back face and a flat front face and mounted in spaced relation to a wall, a sheet metal device having a flat face adapted to lie against the front face of said member, a tool supporting means comprising a pair of horizontally spaced arms adapted to engage and support an article placed therebetween, said arms being made of a substantially non-resilient bendable material so that they may be bent into a shape appropriate for releasably holding a particular tool, and means connecting said tool supporting means to said sheet metal device, said device being made of a resilient material and having an upper portion extended rearwardly to overlie the upper edge of said supporting member and a downward resilient extension of said portion for engaging the back face of said supporting member at a point intermediate the upper and lower edges of the latter sufficient to hold said flat faces in engagement and to hold said device against tilting about either a horizontal or a vertical axis.

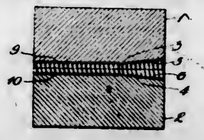
1,892,501. MACHINE FOR PRODUCING COIL WIRE STRUCTURES. GORMAN C. BURD and OTTO BRATS, Adrian, Mich., assignors to American Cable Company, Inc., a Corporation of Delaware. Filed Mar. 6, 1931. Serial No. 520,585. 11 Claims. (Cl. 153—64.)



1. In a machine for coiling wire to form springs and the like, a pair of rotatable dies having complemental curved peripheral die surfaces arranged in opposed relation to each other and adapted to act progressively upon wire stock to deform said stock helically, and means to feed wire stock between said dies in a direction substantially parallel with the axis of rotation of said dies.

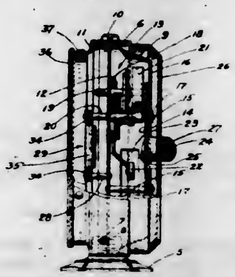
1,892,502. WIRE COIL FORMING MEANS. GORMAN C. BURD and OTTO BRATS, Adrian, Mich., assignors to American Cable Company, Inc., a Corporation of Delaware. Filed Apr. 18, 1931. Serial No. 531,130. 5 Claims. (Cl. 140—123.)

1. Forming means for deforming a helically coiled wire structure to impart thereto a contour of progressively varying radius, said means comprising a plurality of dies respectively having internal arcuate forming surfaces provided with arcuate grooves so disposed as to constitute



a substantially continuous helical groove of progressively varying radius when said dies are assembled in co-operative position.

1,892,503. AUTOMATIC FIRE ALARM. ELLIS A. DAN, Danbury, Conn. Filed May 19, 1932. Serial No. 612,296. 3 Claims. (Cl. 116—106.)

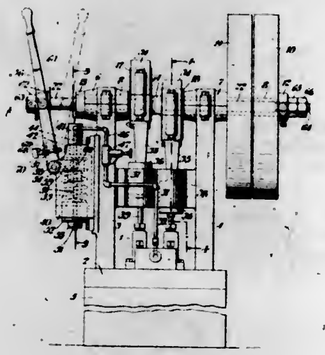


1. In a portable self-contained automatic fire alarm, a base, a ring-like casing secured to said base, a plate within said casing and dividing it into a pair of open sided sections, a dust cap closing one side of said casing, a clock work mechansm disposed between and supported by said cap and plate, said clock work mechanism including a strike, a bell supported at the side of said cap opposite said plate and arranged to be engaged by said strike to sound an alarm on operation of said clock work mechanism, said clock work mechanism including a pair of operating shafts extending through said plate and of which one shaft is a winding shaft, an element at the side of the plate opposite said dust cap, a stationary stud at said side of the plate, said element anchored at one end to said stud and at its other end secured to the other of said shafts in a manner to prevent rotation of said shaft independent of the element whereby to prevent operation of the clock work mechanism, a removable perforated plate closing the side of said casing opposite said dust cap whereby the clock work mechanism may be wound without removing the dust cap and whereby air may circulate about said element, and said element adapted to soften and separate intermediate its ends on the temperature in its vicinity reaching a predetermined point whereby one of its ends may rotate with the shaft to which it is attached and permit operation of said clock work mechanism to sound an alarm.

1,892,504. VARIABLE THROW ECCENTRIC MECHANISM. FRANK L. DAVIS, Jr., Kenilworth, N. J., assignor to The Watson-Stillman Co., New York, N. Y., a Corporation of New Jersey. Filed Oct. 18, 1929. Serial No. 400,599. 3 Claims. (Cl. 103—38.)

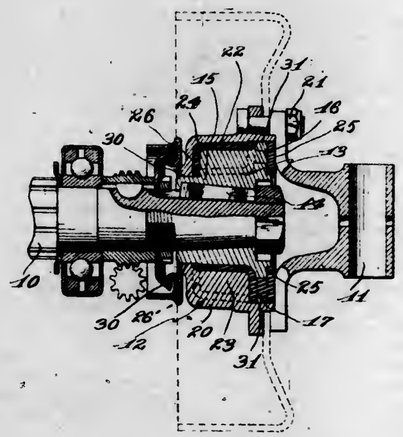
1. An eccentric mechanism comprising a tubular shaft; an eccentric held to rotate with said shaft and mounted to shift transversely thereof to vary its eccentricity; an adjusting member mounted to shift longitudinally in said shaft and bearing a transversely directed cam face; a thrust connection between said cam face and the eccentric for shifting the latter to increase its throw when the adjusting member is shifted in one direction; spring means tending constantly to shift the adjusting member

in said direction; spring means to resist said shifting of the eccentric, tending constantly to reduce the eccentric throw; fluid pressure operated means to shift the adjusting member in the reverse direction to relieve the



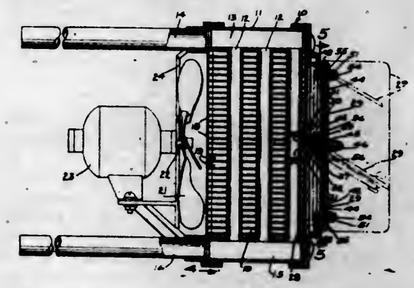
cam pressure and permit said second spring means to reduce the eccentric throw; and adjusting means to vary the force of said first spring means acting upon the adjusting member.

1,892,505. METHOD OF MAKING A SHOCK INSULATING DEVICE. EDWIN R. EVANS, Detroit, Mich. Original application filed Aug. 24, 1925, Serial No. 52,183. Divided and this application filed Oct. 22, 1928. Serial No. 314,271. 1 Claim. (Cl. 18—59.)



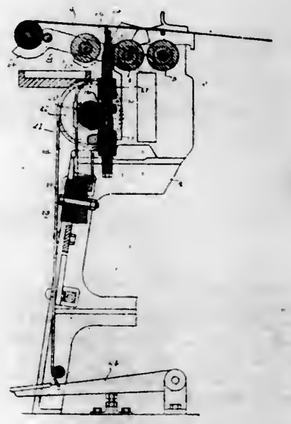
The method of making a shock insulating device which consists in providing a hub member with a plurality of circumferentially spaced lugs, a bearing at one end, and an annular base at the other end forming a bearing and having a series of openings therein, providing a casing with a plurality of circumferentially spaced lugs and bearings at opposite ends thereof, placing an unmoulded mass of rubber dough in the casing member and inserting the hub member thereinto with the bearings on the hub member in engagement with the bearings on the casing member and with the lugs on one member staggered with relation to the lugs on the other member, moving said members relatively while guided by said bearings to completely fill the space enclosed by said members with the rubber dough and to extrude the excess rubber through the openings in said base and form a pad on the outer surface of said base, and subsequently curing the rubber dough to provide an integral shock absorbing member free of initial strain.

1,892,506. DEFLECTOR FOR AUTOMOBILE HEATERS. HENRY W. FINK, Minneapolis, Minn., assignor to Tropic-Aire, Incorporated, Minneapolis, Minn., a Corporation of Delaware. Filed Jan. 30, 1930. Serial No. 424,572. 10 Claims. (Cl. 257—137.)



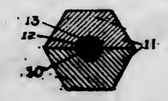
4. In combination, a heating element having an open face, a heat deflector for said heating element consisting of a plurality of deflector plates situated adjacent said open face, means supporting said deflector plates for rotative movement as a unit in a plane approximately parallel to said open face, and means for supporting each deflector plate for independent movement about a plurality of separate axes toward and away from said open face, each of said deflector plates being adapted to remain, against the probability of accidental displacement, at any adjusted position to which set with respect to any of said axes.

1,892,507. SETTING FRAME. CHARLES FROHLICH, Amsterdam, N. Y., assignor to Bigelow-Sanford Carpet Co. Inc., New York, N. Y., a Corporation of Massachusetts. Filed Jan. 14, 1930. Serial No. 420,781. 18 Claims. (Cl. 28—55.5.)



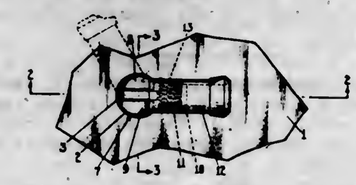
1. A setting machine of the type having means for guiding a plurality of yarns and spool winding means for winding the guided yarns on a spool, distinguished by a clipping mechanism for severing the yarn strands leading to the spool having a plurality of individually pivoted clipping devices arranged in a single line transversely of the yarn strands.

1,892,508. LEAD PENCIL AND METHOD OF MAKING THE SAME. NARCISO GONZÁLEZ, New York, N. Y., assignor to Eagle Pencil Company, New York, N. Y., a Corporation of Delaware. Filed Mar. 27, 1931. Serial No. 525,868. 13 Claims. (Cl. 120—83.)



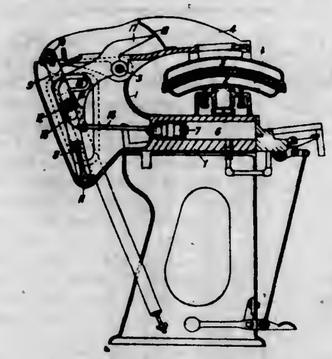
11. As a new article of manufacture a pencil lead having a grease impervious coating.

1,892,509. DESK SET. WALTER GUYOT, Janesville, Wis., assignor, by mesne assignments, to Pen Desk Set Company, a Corporation of Illinois. Filed Jan. 12, 1927. Serial No. 160,596. 20 Claims. (Cl. 120—108.)



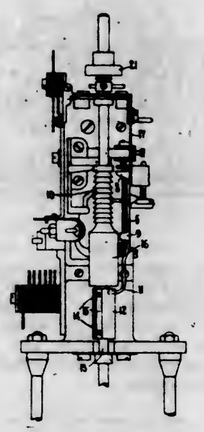
1. In a desk set, the combination with a base of a pen receiving sleeve, said sleeve being secured to a bifurcated ball, a mounting member having a bearing surface cooperating with said ball, an upwardly projecting member mounted on said base which fits intermediate said bifurcations, a pivot pin which pivotally secures said ball and upwardly projecting member together.

1,892,510. LAUNDRY PRESS. WILLIAM JACK, Clydebank, Scotland, assignor of nine-tenths to D. & J. Tullis, Limited, Clydebank, Scotland, a Company of Great Britain. Filed June 3, 1932, Serial No. 615,078, and in Great Britain Aug. 28, 1931. 3 Claims. (Cl. 68—9.)



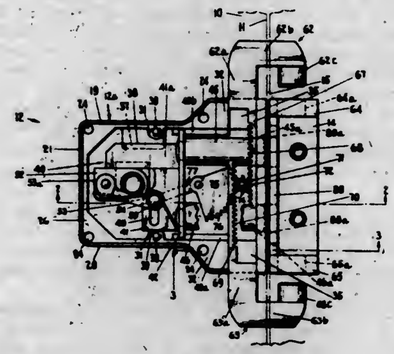
1. A garment press of the type described comprising a frame, a lower buck supported by said frame, a leyer of the first order movable about a fulcrum on said frame, a toggle interposed between said frame and said lever and including two links united by a pivot pin, a scroll cam mounted on said frame to swing about an axis coinciding with the fulcrum of said lever and cooperating with said pin so that said pin acts as a follower to said cam and so that, in the movement of the cam, said toggle is caused to bend and to straighten, an upper buck carried by and participating in the movements of said lever, a pressure fluid cylinder, a piston reciprocable in said cylinder under the influence of pressure fluid admitted to and exhausted from said cylinder, and a connecting rod operatively connecting said piston with said cam, said fulcrum and said cylinder being formed as a self-contained unit.

1,892,511. AUTOMATIC SWITCH. HERBERT JACKSON, St. Helens, England, assignor to Associated Telephone & Telegraph Company, Chicago, Ill., a Corporation of Delaware. Filed Sept. 22, 1930, Serial No. 483,561, and in Great Britain Oct. 11, 1929. 8 Claims. (Cl. 179—27.52.)



1. In an electromagnetic switch of the type in which a wiper-carrying shaft is elevated a number of steps by a pawl and ratchet mechanism, wherein a second pawl and ratchet mechanism functions to then rotate the shaft to position its wipers upon desired bank contacts, wherein restoration of the shaft to its initial position is brought about by the action of a spring and by gravity, and wherein the operation of a double dog associated with the vertical and rotary ratchet mechanisms permits the restoration to take place, the combination of actuating means upon the shaft engaging and moving the double dog for the purpose set forth, consequent to a predetermined distance of rotation of the shaft.

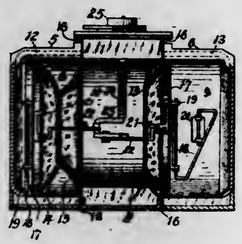
1,892,512. LOCK. CHARLES KEMP, New York, N. Y., assignor to Kemp Lock Inc., New York, N. Y., a Corporation of New York. Filed Sept. 20, 1930. Serial No. 488,174. 11 Claims. (Cl. 292—39.)



1. In a lock, a pair of bolts and means for projecting said bolts simultaneously in transverse directions, said

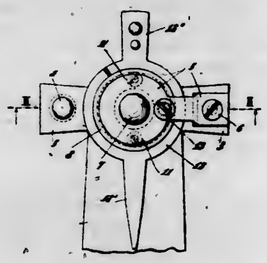
means comprising a rack portion on one of said bolts, a pinion meshing with said rack portion and a geared member meshing with said pinion, and having a pin and slot connection with said other bolt.

1,892,513. GAS METER. OTTO GOLDKAMP, San Diego, Calif., assignor to The Sprague Meter Company, Bridgeport, Conn. Filed Jan. 21, 1929. Serial No. 333,799. 2 Claims. (Cl. 73—1.)



1. A gas meter comprising a body having a central gas measuring chamber, side covers each having a gas measuring chamber, diaphragms each composed of two flexible units of unequal diameters, the larger units suspended between the side covers and body, said units having central openings, and means for connecting the units at the margins of said openings.

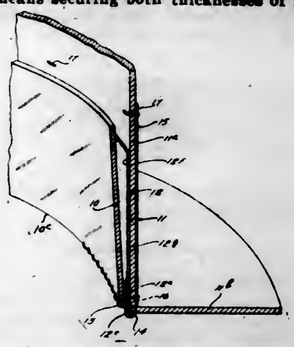
1,892,514. TIMEPIECE. THEODOR KOCH, Sr., Buren, Switzerland, assignor to M. Louis Gray, New York, N. Y. Filed Feb. 18, 1928, Serial No. 255,468, and in Switzerland Mar. 18, 1927. 4 Claims. (Cl. 58—107.)



1. In a clockwork movement, the combination of a balance-cock having a head, a bearing member having a central perforation for receiving one end of the arbor, slidably mounted on said head, an abutment member movably mounted on said head in overlying relation to said bearing member, a shock absorbing member movable with respect to said abutment member and bearing against the latter, and means for adjustably limiting movement of said shock absorbing member.

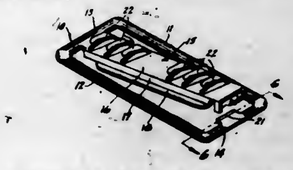
1,892,515. HAT CONSTRUCTION AND ART OF MAKING THE SAME. FRANK H. LEE, Danbury, Conn., assignor to The Frank H. Lee Company, Danbury, Conn., a Corporation of Connecticut. Filed Aug. 23, 1930. Serial No. 477,248. 9 Claims. (Cl. 2—181.)

1. In hat construction, in combination, a substantially frusto-conical sweatband, a substantially cylindrical band member having one face thereof waterproofed and the other face thereof substantially rough, said second-mentioned band being interposed between said sweatband and the hat body but with the rough face thereof exposed toward the hat body and having its lower edge portion turned upwardly to expose the smooth face thereof toward the hat body, means securing both thicknesses of said second-



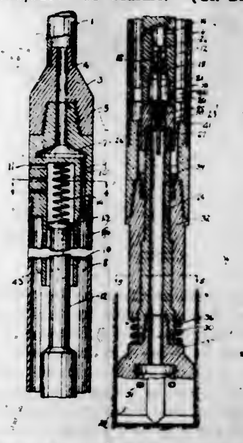
mentioned band to said sweatband, and means securing said two thicknesses of said second-mentioned band to said hat body.

1,892,516. SLIDE BUCKLE. CHARLES A. MOSGROVE, Waterbury, Conn., assignor to The Autoyre Company, Inc., Oakville, Conn., a Corporation of Connecticut. Filed June 25, 1931. Serial No. 546,691. 14 Claims. (Cl. 24—186.)



1. In a buckle, a frame, a cross member secured at one end to the frame and extending across the frame and having a free end, a projecting member on the frame and extending toward the cross member, and means on one of said members adapted to engage the other of said members to secure the free end of the cross member to the frame.

1,892,517. WELL DRILLING APPARATUS. HARRY PENNINGTON, San Antonio, Tex. Filed Nov. 28, 1927. Serial No. 236,049. 48 Claims. (Cl. 255—4.)



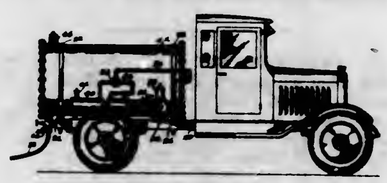
40. In a hammer bit, a casing, an anvil therein, a hammer having a recessed lower end adapted to strike said anvil, a fluid passage thru said hammer and said anvil, and a valve mounted to close said passage.

1,892,518. GLASS RUN CHANNEL. JAMES S. REID, Shaker Heights, Ohio, assignor to The Reid Products Company, Cleveland, Ohio, a Corporation of Ohio. Filed Mar. 30, 1931. Serial No. 526,403. 5 Claims. (Cl. 296—445.)



1. A glass run channel, comprising a generally U-shaped channel structure having a base and a pair of side walls, said side walls having their outer edges turned inwardly toward each other for yielding glass engaging purposes, and a pair of finishing strips, one for each side wall, each of said finishing strips having its inner edge secured to the outer surface of one of said side walls intermediate the inner and outer edges thereof.

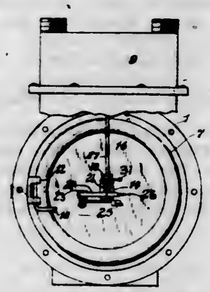
1,892,519. TRANSPORTING MEANS FOR LIQUIDS. LOUIS SCHOTTGEN, Fort Murray, N. J. Filed Apr. 5, 1930. Serial No. 441,854. 4 Claims. (Cl. 221—74.)



1. Transporting means for liquids comprising a tank, a flanged leakage proof piston mounted in the tank to provide liquid and air compartments, a valved nipple connected to the liquid compartment for the inlet and outlet of the liquid, an air relief valve connected to the liquid compartment to allow for the escape of gas from the liquids, an air pipe connected to the air compartment, a pump cylinder having inwardly opening valves at one side and outwardly opening valves at its opposite side, a suction pipe connected to the inwardly opening valves, a pressure pipe connected to the outwardly opening valves, a supply tank connected to the pressure pipe, and a manually operated two-way valve carried by the air pipe of the tank and connected at one side to the air supply tank and at its other side to said suction pipe, said valve having one of its ports always in communication with the inwardly opening valves of said pump cylinder, whereby said tank is adapted to retain liquids therein during transportation without any agitation.

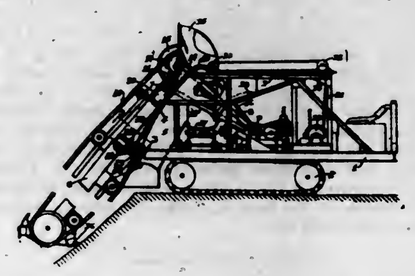
1,892,520. GAS METER. HENRY H. SPRAGUE, Bridgeport, Conn., assignor to The Sprague Meter Company, Bridgeport, Conn. Filed Jan. 4, 1929. Serial No. 330,224. 1 Claim. (Cl. 73—1.)

In a gas meter of the character described, comprising in combination, flexible diaphragms, a crank plate, a stud mounted thereon, a link journaled on the stud and also to one of the diaphragms, a member, means adjustably mounting said member on the crank plate, a link connecting said member with the other of said diaphragms, a crank shaft adapted to be operatively connected with valves, a support anchored to the before mentioned stud, one end of the crank shaft being journaled in said support, a lever secured to the crank shaft, an adjusting screw carried by the lever and in contact with



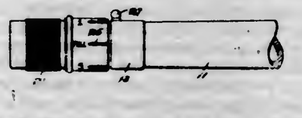
the support to effect a rotation of the crank shaft, and a spring for maintaining the crank shaft in any of its adjusted positions.

1,892,521. TRENCHING MACHINE. GEORGE A. VAUGHN and CHARLES L. GEORGE, Findlay, Ohio, assignors to The Buckeye Traction Ditcher Company, Findlay, Ohio, a Corporation of Ohio. Filed Dec. 26, 1931. Serial No. 583,883. 18 Claims. (Cl. 37—90.)



15. In a machine of the class described, a swinging frame mounted for vertical swinging movements about an axis disposed at the lower end thereof, excavating means carried by the outer end of said frame for swinging movements therewith and vertical swinging movements relative thereto, said excavating means including a boom and a bucket-carrying chain having different points of connection with the frame spaced from each other in a direction longitudinally to the boom, means for driving the chain from its point of connection with the frame, and means for controlling the respective swinging movements of the frame and excavating means.

1,892,522. ADJUSTABLE GUN CHOKE AND METHOD OF CONSTRUCTING THE SAME. EZEKIEL F. WHITE, West Hartford, Conn. Filed Mar. 24, 1931. Serial No. 524,811. 15 Claims. (Cl. 42—79.)

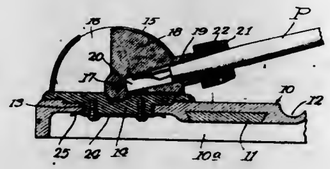


1. The method of forming a choke shell for a gun barrel which consists in constructing a metallic shell having a cylindrical bore, separating one end of the

shell into longitudinal segments, contracting the separated end of the shell, and, while the latter is held contracted, shaping the bore into cone-shaped form.

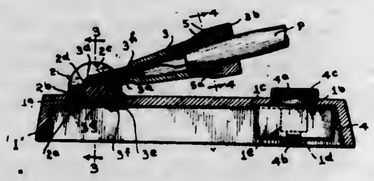
3. An adjustable choke for gun barrels comprising a shell portion having its mouth separated into detached segments, with means to contract the mouth of said shell to provide a choked condition, said shell when fully contracted presenting a bore of true cone-shaped form.

1,892,523. DESK SET FOR FOUNTAIN PENS. ALEXANDER INNES FERRIER, Flint, Mich., assignor, by mesne assignments, to Pen Desk Set Company, Chicago, Ill., a Corporation of Illinois. Filed June 6, 1927. Serial No. 196,867. 38 Claims. (Cl. 120—108.)



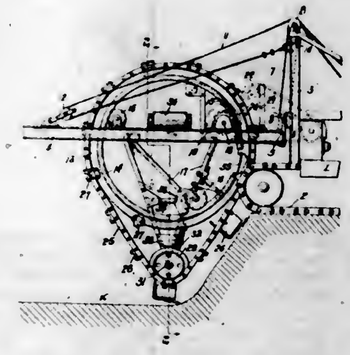
1. In a device of the class described, in combination, a base having a circular aperture therein, a partially slotted dome-shaped housing provided with a reduced lower extremity adapted to engage within the said aperture, mounted on the base for rotation on an axis vertical thereto, a pen holding member carried by the housing to rotate therewith on the axis thereof the said member being pivotally mounted within the said slot in the housing to rotate on a horizontal axis with respect thereto, friction spring means within the slot to yieldably retain the pen holding member adjusted relative to the housing, and a friction spring carried by the reduced lower extremity of the housing and adapted to engage the underside of the base to retain the housing adjusted relative to the said base.

1,892,524. FOUNTAIN PEN DESK SET. ALEXANDER I. FERRIER, Detroit, Mich., assignor to Pen Desk Set Company, Chicago, Ill., a Corporation of Illinois. Filed Jan. 30, 1929. Serial No. 336,195. 22 Claims. (Cl. 120—108.)



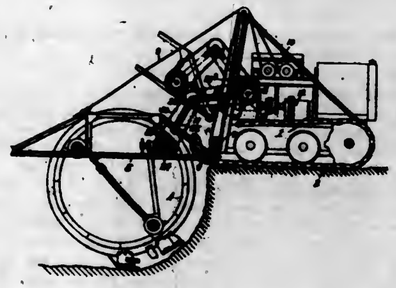
1. A desk pen set comprising a base having an aperture therein, a substantially hemispherical housing slotted on its upper surface rotatably mounted in said aperture, the said housing being provided with an internal cylindrical recess, a pen supporting member mounted within the said housing, the said pen supporting member comprising a pen retaining portion, a stem portion adapted to travel within the aforesaid slot and a cylindrical bearing portion mounted within the recess in the housing, and resilient means carried by the housing adapted to frictionally engage the cylindrical bearing.

1,892,525. TRENCHING MACHINE. CHARLES L. GEORGE and WILLIAM G. VAN VOORHIS, Findlay, Ohio, assignors to The Buckeye Traction Ditcher Company, Findlay, Ohio, a Corporation of Ohio. Filed Feb. 15, 1932. Serial No. 592,950. 10 Claims. (Cl. 37—86.)



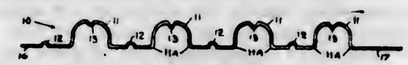
1. In a wheel-type excavator, a boom, a rotatable wheel carried by the boom for projecting into a trench being dug, a chain and bucket excavating means, and means carried by and projecting below the boom and cooperating with the wheel to guide the course of movement of the excavating means and causing a portion thereof at the trench side of the boom to be extended a greater distance from the wheel center than others.

1,892,526. TRENCHING MACHINE. CHARLES L. GEORGE, Findlay, Ohio, assignor to The Buckeye Traction Ditcher Company, Findlay, Ohio, a Corporation of Ohio. Original application filed Mar. 25, 1932, Serial No. 601,209. Divided and this application filed July 14, 1932. Serial No. 622,413. 1 Claim. (Cl. 37—94.)



In combination, in a trenching machine, a main frame, a relatively adjustable digging wheel-carrying frame, transverse drive and driven shafts carried respectively by said frames, an intermediate shaft, an arm swingingly connected to each end of the drive shaft and having a yoke at its free end, the arms of which receive the intermediate shaft, an arm swingingly projecting from each end of the driven shaft and having a yoke with its arms mounted on and the intermediate shaft in cooperating relation to respective yokes of the first-mentioned arms, a pair of fixedly connected sprocket-wheels mounted on the intermediate shaft between the arms of each cooperating set of yokes, a sprocket-wheel on the outer end of each of the drive and driven shafts, sprocket-chains connecting each sprocket-wheel on the drive shaft to the respective sprocket-wheel on the intermediate shaft and a sprocket-chain connecting each sprocket-wheel on the driven shaft to a respective sprocket-wheel on the intermediate shaft.

1,892,527. PACKING MATERIAL. FRED D. GRAY, Herkimer, N. Y., assignor to Holed-Tite Packing Corporation, a Corporation of New York. Filed Apr. 20, 1929. Serial No. 356,625. 3 Claims. (Cl. 229—14.)

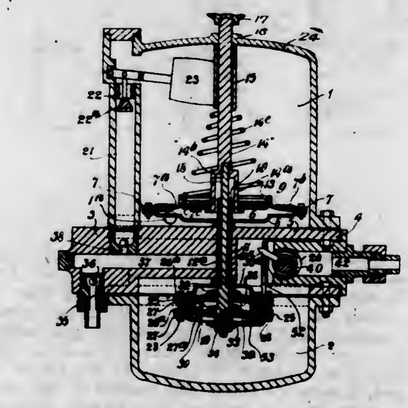


1. A reinforcement packing for collapsible containers comprising a sheet of material having a plurality of spaced channels extending substantially the width thereof, some of said channels being relatively deep and having ribs in the walls thereof.

1,892,528. CATHODE COATING COMPOSITION AND METHOD OF MAKING THE SAME. JOHN ALLEN HEANY, New Haven, Conn., assignor to Sirian Lamp Company, Newark, N. J., a Corporation of Delaware. Filed Sept. 7, 1928. Serial No. 304,609. 22 Claims. (Cl. 250—27.5.)

1. A cathode coating composition comprising an oxide of an alkaline earth metal and a tungate soap binder.

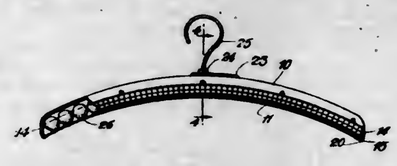
1,892,529. LIQUID FUEL PUMPING APPARATUS. FRANCIS JOSEPH STAWELL JONES, Porthcawl, Wales. Filed Apr. 13, 1932, Serial No. 604,959, and in Great Britain Jan. 29, 1932. 15 Claims. (Cl. 103—152.)



1. A pump for circulating liquid fuel from a source of supply to a carburetor comprising a chamber adapted to receive liquid fuel and a pump unit accommodated therein, another chamber adapted to receive a circulated liquid for example lubricating oil, means for utilizing the energy of the said circulated liquid or lubricating oil delivered into the second mentioned chamber for operating said pump unit, and means connecting the interiors of the said pump and liquid fuel receiving chamber whereby the liquid fuel is transferred from said pump unit to the chamber accommodating the pump, and a gravity supply outlet in said liquid fuel receiving chamber.

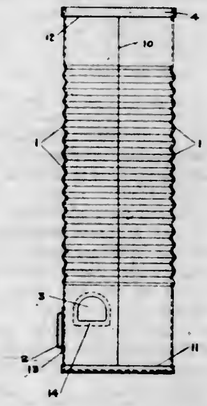
1,892,530. GARMENT HANGER. LOKARR KALINA, Brooklyn, N. Y. Filed Nov. 25, 1930. Serial No. 498,001. 6 Claims. (Cl. 223—64.)

1. A garment hanger comprising a main body portion channel-shaped in cross-sectional form, a foraminous insecticide carrier, and a plurality of projections extending inwardly of the side walls of said main body portion and



adapted for engagement with certain of the openings of the foraminous member for securing the insecticide carrier to the main body portion.

1,892,531. ICE AND BRINE TANK FOR REFRIGERATOR CARS. HARRY HENRY MCKEE, Chicago, Ill., assignor, by mesne assignments, to Industrial Patents Corporation, Chicago, Ill., a Corporation of Delaware Filed Oct. 13, 1930. Serial No. 488,287. 3 Claims. (Cl. 220—1.)

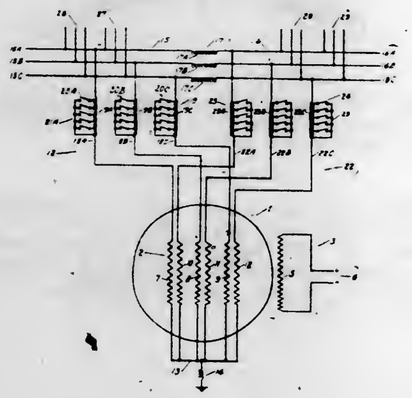


1. An ice tank for refrigerator cars comprising an upright tubular body member formed of sheet ferrous metal the meeting edges of which are welded, a ferrous reinforcing edge about the top of the tubular body and welded thereto, a sheet metal ferrous bottom member having upright flanged portions welded to the bottom portion of the tubular body and ferrous fitting members located on the outside of the tubular body and welded to the lower vertical side portions thereof, the tubular body being circumferentially corrugated intermediate its ends, the fitting members being secured to an uncorrugated section which is located between the corrugated section on the one hand and the flange of the bottom member on the other, the bottom member being provided with pressed in ridges for adding strength and rigidity to the tank structure, the exposed sections of the several ferrous parts being protected by suitable coating material.

1,892,532. PROCESS FOR THE PRODUCTION OF 1-(PARA AMINOPHENYL)-2-METHYLAMINO-PROPANOL-1. MAX OBERLIN, Darmstadt, Germany. Filed July 19, 1930, Serial No. 469,265, and in Germany Aug. 7, 1929. 3 Claims. (Cl. 260—128.5.)

2. The compound 1-(para aminophenyl)-2-methylamino-propanol-1 having a melting point of 114–116° C., soluble in water, more difficultly soluble in alcohol and chloroform, very difficultly soluble in ether, insoluble in petrol-ether.

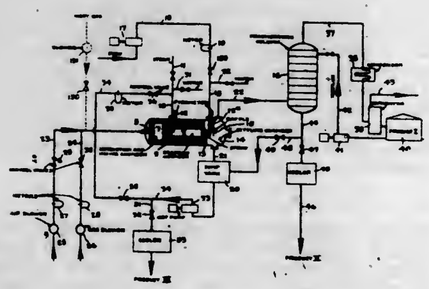
1,892,533. METHOD OF AND MEANS FOR GENERATING AND DISTRIBUTING CURRENT FLOW. LESLIE L. PERRY and ALLEN M. ROSSMAN, Wilmette, Ill., assignors to Sargent & Lundy, Incorporated, Chicago, Ill., a Corporation of Illinois. Filed Apr. 25, 1929. Serial No. 358,090. 18 Claims. (Cl. 171—97.)



1. In combination a generator having multiple windings and a common field, bus sections connected individually to the windings, reactors connecting said bus sections in series with each other, and means connected in series relation to one of said windings for equalizing the load upon said windings.

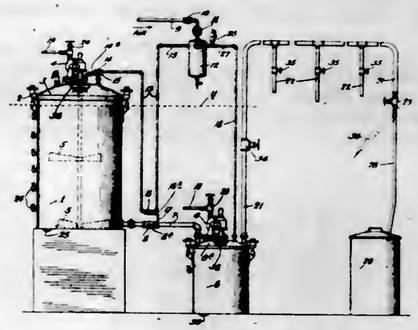
10. In a system comprising a generator having an armature provided with two separate windings, separate bus bars for the windings tied together through reactors, the method of equalizing the current flow of the two windings for unequal loads on the bus bars which comprises modifying the potential impressed on the bus bars by one of the separate windings to bring the bus bar potential of the winding of less current flow above that of the bus bar potential of the winding of greater current flow.

1,892,534. PROCESS FOR DISTILLATION AND CONVERSION OF MINERAL OILS. ERNEST WAYNE REMBERT, Bayonne, N. J., assignor of three-fourths to Tide Water Oil Company, Bayonne, N. J., a Corporation of New Jersey. Filed May 11, 1929. Serial No. 362,192. 6 Claims. (Cl. 196—61.)



1. A continuous process for effecting thermal conversion of hydrocarbon oils and similar materials, which comprises continuously producing hot and substantially nonoxidising combustion gases at a temperature above 2500° F. and, without previously altering the temperature of these gases, continuously introducing in fine division the hydrocarbons to be converted and mixing them with the hot gases so intimately that thermal equilibrium at a temperature above 950° F. is attained in all portions of the mixture practically instantaneously, passing the mixture at this temperature through an elongated reaction zone, and then instantly reducing the temperature to one at which the reactions are definitely arrested, by bringing the mixture into direct contact with finely divided cooling liquid, the entire time of mixing, attainment of thermal equilibrium, conversion and cooling being not in excess of one to a few seconds.

1,892,535. RESERVE PRESSURE TANK SYSTEM. CARL SANDERS, Detroit, Mich., assignor to Binks Manufacturing Co., Chicago, Ill., a Corporation of Delaware. Filed Dec. 31, 1930. Serial No. 505,746. 9 Claims. (Cl. 137—78.)

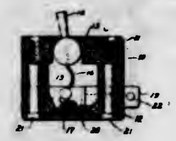


1. A liquid supply system comprising a main liquid tank, an auxiliary liquid tank disposed at a lower level than the main tank, a connecting duct leading from the lower portion of the main tank to the lower portion of the auxiliary tank, a liquid distribution pipe leading from the lower portion of the auxiliary tank, a liquid trap disposed at a higher elevation than the top of the main tank, a main air-supply pipe leading to the upper portion of the trap, a first air pipe leading from the upper portion of the trap to the upper portion of the main tank, and a second air pipe leading from the upper portion of the trap downwardly to the upper portion of the auxiliary tank.

1,892,536. PROCESS OF EXTRACTING PECTIN FROM PECTIC MATERIALS. PHILIP B. MYERS and GEORGE L. BAKER, Newark, Del.; dedicated, by mesne assignments, to the People of the United States of America. Filed Dec. 21, 1929. Serial No. 415,877. 4 Claims. (Cl. 99—11.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 870 O. G. 757.)

3. The process of extracting pectin from pectic material which comprises heating a mixture of water, acid and said pectic material to any temperature between the limits of 60° C. and 110° C., for a period of time ranging from 5 to 60 minutes, and then quickly cooling the mixture, the acid being present in an amount such that after the extraction process the pH of the mixture lies between 3.0 and 1.30.

1,892,537. ELECTRIC SNAP SWITCH. HANS PRAGER, Annaberg, Germany, assignor to General Electric Company, a Corporation of New York. Filed May 12, 1932, Serial No. 610,926, and in Germany May 11, 1931. 3 Claims. (Cl. 200—68.)



1. In an electric switch, a casing of insulating material having a central chamber, a switch handle seated in an opening formed in said casing, a spring secured to the switch handle and projecting into the central chamber of the casing, a movable contact carried by the free end of said spring, a stationary contact secured to the casing, and a projection from the bottom of the central chamber in the path of movement of the movable contact to cause the spring to be flexed to move the contact with a snap action when the switch handle is moved.

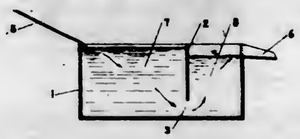
1,892,538. VACUUM SWITCH. DAVID C. PRINCE, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Mar. 23, 1928. Serial No. 264,115. 6 Claims. (Cl. 200—144.)



1. In combination, an evacuated receptacle, a switch mounted therein, said switch comprising a pair of contact members and means for operating the contacts and flexibly supporting the receptacle to reduce jars and shocks comprising a conducting rod secured to each of said contact members and a sylphon bellows sealed to each rod and to the evacuated receptacle.

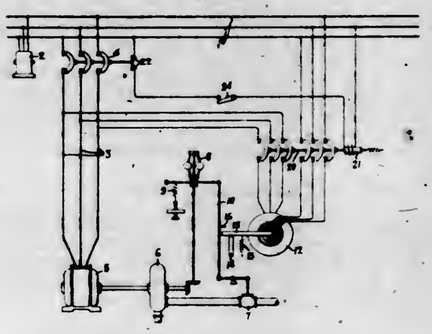
1,892,539. METHOD AND MEANS FOR SEPARATING EGG WHITES. RICHARD WILLIAM REGENSBURGER, Chicago, Ill., assignor, by mesne assignments, to Industrial Patents Corporation, Chicago, Ill., a Corporation of Delaware. Filed Jan. 30, 1931. Serial No. 512,402. 2 Claims. (Cl. 146—2.)

1. The procuring of egg white substantially pure, and free from air bubbles, emulsified yolk, and solid substances, by the method which consists in initially providing main liquid body of egg white in two adjacent container sections which are in constant communication with each other at the lower portions thereof, which container sections are respectively referred to as the large receiving section and the small final discharge section, from which discharge section there is an overflow leading from the upper portion thereof, maintaining the liquid body which is in said final delivery section at a height up to the overflow, maintaining that portion of the liquid body which is in the receiving section always as high or even higher than the height of the liquid body in the final section, and delivering the incoming egg products to be purified along a gentle sloping path to and



into the top of that portion of the main liquid body which is in the receiving section and in a manner to avoid turbulence or agitation and as a consequence of the delivery of the incoming egg products into the receiving section causing a flow of a corresponding amount of egg white from the receiving section into the communicating passageway and of a corresponding amount of egg white from the communicating passageway into the final discharge section and a consequent delivery of a corresponding amount of purified egg white from the receiving section out through the overflow thereof.

1,892,540. CONTROL SYSTEM. HAROLD T. SEELEY, Yeadon, Pa., assignor to General Electric Company, a Corporation of New York. Filed Dec. 5, 1929. Serial No. 411,881. 2 Claims. (Cl. 171—119.)

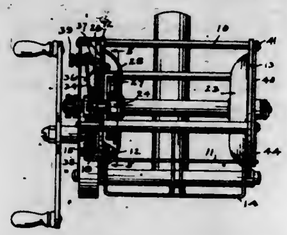


1. In combination, two disconnected alternating current circuits, and means for controlling the frequency of one of said circuits including regulating means normally set to maintain the frequency of one of said disconnected circuits higher than the frequency of the other circuit, and means dependent upon a predetermined phase relation between the voltages of said circuits for modifying while the normal setting of the regulating means remains unchanged the regulating effect of said regulating means so as to equalize the frequencies of said circuits.

1,892,541. AUTOMATIC BRAKE CONTROL. CHESTER E. SHELBURN, Shelbyville, Ind. Filed May 7, 1932. Serial No. 609,786. 11 Claims. (Cl. 242—84.5.)

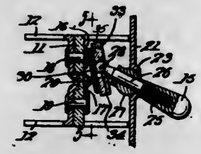
4. In a fishing reel, a spool, a spool shaft, head and tail plates revolubly carrying the shaft, a bail rockably carried between said plates, a friction disk carried by said shaft to revolve therewith and to be slidable longitudinal-

ly therealong, means carried by one of said plates to engage said disk without said disk engaging said spool, a lever for actuating said means, connecting means be-



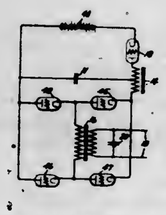
tween said ball and said lever, and spring means yieldingly holding said ball in a down-turned position and said lever in an actuated position.

1,892,542. ELECTRIC SWITCH. JASON C. STEARNS, Worcester, Mass. Filed June 20, 1930. Serial No. 462,650. 2 Claims. (Cl. 200—68.)



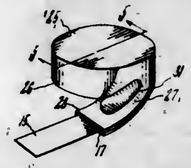
2. In an electric switch, the combination of a casing having an annular bearing, a handle having a portion fitting and turning in said bearing, a plunger on the inner end of the handle, a spring in the handle tending to force the plunger outwardly and the spherical portion against the annular bearing, a flat insulating plate having a recess in which the end of the plunger fits, a flat contact plate carried by said insulating member, and a pair of separated contacts one of which is of projecting V-shape and so located that the flat contact plate can be moved by the handle and plunger over it, to cause the flat plate to rock about the V-shaped contact as a fulcrum.

1,892,543. ELECTRIC VALVE CONVERTING SYSTEM. RICHARD TRÖGER, Berlin-Zehlendorf-Mitte, Germany, assignor to General Electric Company, a Corporation of New York. Filed May 12, 1932, Serial No. 610,961, and in Germany May 27, 1931. 10 Claims. (Cl. 175—363.)



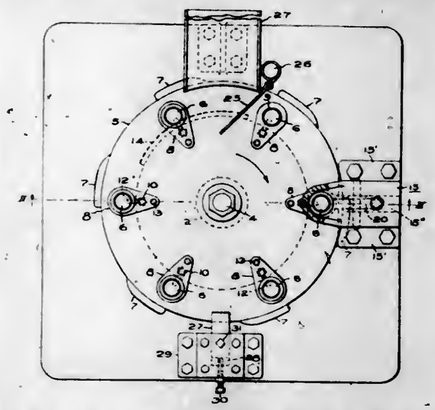
1. An electric valve converting system comprising a source of current, a capacitor, a circuit for charging said capacitor from said source including an electric valve, a discharging circuit for said capacitor including a second electric valve, a periodic current load circuit energized from one of said capacitor circuits, one of said valves being common to said load circuit and one of said capacitor circuits, means for controlling the conductivity of said valves to charge and discharge said capacitor at a frequency substantially higher than that of said load circuit, and means for maintaining said valve in the load circuit nonconductive during alternate half cycles of said load current.

1,892,544. DISPENSER FOR TAPES. HANS H. WANDERS, Hingham, Mass. Filed May 20, 1931. Serial No. 538,765. 15 Claims. (Cl. 242—55.2.)



3. A device for dispensing tape, comprising a box adapted to hold a roll of tape, and a nozzle projecting from said box and shaped to twist the tape in the nozzle through a quarter turn.

1,892,545. MARKING MACHINE FOR SLEEVE BEARINGS. JOHN J. WARD, New Castle, Pa., assignor to Johnson Bronze Company, New Castle, Pa., a Corporation of Pennsylvania. Filed Oct. 10, 1931. Serial No. 568,062. 3 Claims. (Cl. 101—7.)



1. In a sleeve bearing marking machine, the combination of a rotary member provided with a plurality of spaced cams and upstanding sleeve conveyor pins, elevatable stripper plate carried by the rotary member one in association with each pin, a magazine member for sleeves, an escapement lever within the magazine member for retaining sleeves therein adapted to be actuated by the rotor cams to deliver a sleeve to each pin passing the magazine, a marking tool rigidly held within the path of the rotary member and adapted to mark each sleeve in passing engagement therewith, means for elevating each stripper plate and sleeve thereon after being marked, and means for removing the sleeve from the plate in passing same.

1,892,546. DRUMMER TOY. HOWARD N. BARNUM, Cleveland, Ohio, assignor to Wolverine Supply and Manufacturing Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed May 6, 1932. Serial No. 609,665. 3 Claims. (Cl. 46—40.)

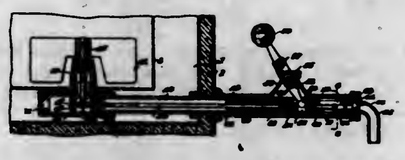
1. In a drummer toy comprising a hollow figure, a drum at the front of the figure and arms movably associated with the figure and carrying impact members to strike the drum, the combination therewith of a pair

of alined tubular shafts extending into said figure and journaled in the side walls thereof, one of said shafts being fixed to each of said arms to swing the latter, a cylindrical rod over which the inner ends of the shafts are telescoped to support the shafts in alinement, an



angularly disposed finger fixed to each of said shafts within the figure, a pair of disks within the figure having serrated perimetral edges, one of said fingers engaging the perimetral edges of each of said disks, and a motor within said figure arranged to rotate said disks.

1,892,547. BEVERAGE DISPENSER. LEON L. BENHAM, Irondequoit, and HARRY L. FERREE and WESLEY J. BALKWILL, Rochester, N. Y., assignors to Richardson Corporation, Rochester, N. Y., a Corporation of New York. Filed Jan. 19, 1931. Serial No. 509,600. 6 Claims. (Cl. 225—21.)



6. A beverage dispenser comprising a beverage container, an agitator movable in the beverage container, a faucet for dispensing beverage from the container, hand operated means movable independently of the faucet but operable to open the same, and means positively connecting said hand operated means with the agitator whereby the agitator is operated by any movement of the hand operated means.

1,892,548. COMPOUND AND PROCESS FOR TREATING VEGETABLE AND ANIMAL FIBERS AND FABRICS. RICHARD FRIEDLMANN, Radebeul, Germany. Filed Sept. 14, 1931, Serial No. 562,821, and in Germany Apr. 19, 1930. 8 Claims. (Cl. 8—2.)

1. The process for treating textile or fibrous material, said process comprising acting upon said material in an aqueous bath with p-toluenesulfondichloramide in the presence of an alkali-metal compound of alkaline reaction at a temperature above that of the atmosphere.

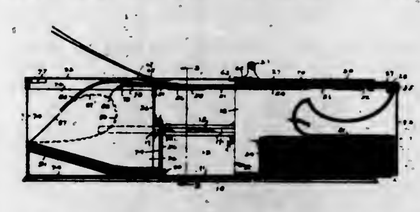
1,892,549. ROCK DRILL. ELMER G. GARTIN, Claremont, N. H., assignor to Sullivan Machinery Company, a Corporation of Massachusetts. Filed Jan. 17, 1929. Serial No. 333,155. 6 Claims. (Cl. 121—9.)

1. In a rock drilling apparatus, a rock drill, fluid actuated feeding mechanism therefor comprising telescoping cylinder and piston elements, means for retaining said elements in collapsed position comprising a sleeve projecting into said cylinder, a retaining device carried by said piston for engaging said sleeve to hold the piston and cylinder in collapsed position, and passage means



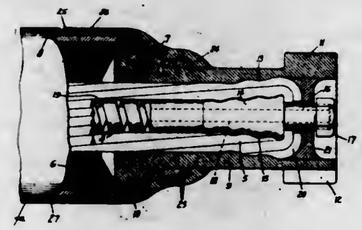
extending laterally through the wall of said sleeve and around the end thereof for supplying fluid to said piston for moving the same thereby to release said retaining means and effect feeding movement.

1,892,550. AUTOGRAPHIC MANIFOLDING MACHINE. LUTHER R. HANNA, Indianapolis, Ind. Filed Sept. 12, 1932. Serial No. 632,661. 20 Claims. (Cl. 282—16.)



1. In an autographic manifolding machine, a supporting housing, a carriage movable lengthwise of the housing and having means to support a plurality of superposed strips of paper provided with forms arranged in sets, a platform on the carriage forming a writing table and so arranged that said strips may be led over the rear end thereof to receive one set of forms on the platform to have their forward ends at the front of the platform, fixed pins carried by the housing forwardly of the carriage adapted to engage said forward form ends and hold them against rearward movement when the carriage is moved rearwardly, and means lifting said ends from said pins permitting said set of forms to be shifted forwardly beyond said pins upon forward movement of the carriage.

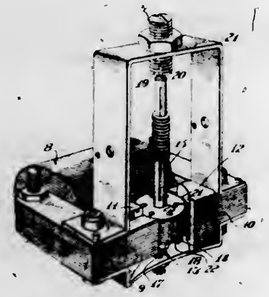
1,892,551. END CAP OR HEAD FOR ELECTRIC CABLES. WILLIAM C. HAYMAN, Schenectady, and CARL A. PIERCY, Ballston Lake, N. Y., assignors to General Electric Company, a Corporation of New York. Filed Nov. 22, 1929. Serial No. 409,111. 9 Claims. (Cl. 175—376.)



1. A pulling head for an electric cable having an insulated, stranded conductor containing a fluid receiving channel, and an enclosing sheath, which comprises a tubular bushing into which the strands extend, a portion of the inner wall of the bushing being conical, an enlargement at the inner end of the bushing of less diameter than the sheath which is covered by and is secured to the sheath, a means integral with the outer end of the bushing also of less diameter than the sheath which is

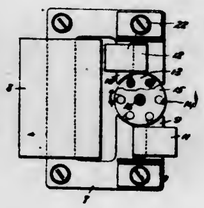
adapted to receive a pulling device, and a tapered plug which is located within the channel of the cable and forces the strands outwardly into engagement with the conical wall of the bushing, said plug having a shoulder at one end over which the ends of the strands are bent.

1,892,552. ALTERNATING CURRENT MOTOR AND METHOD OF CONTROLLING THE SPEED THEREOF. FREDERICK C. HOLTZ, Springfield, Ill., assignor to Sangamo Electric Company, Springfield, Ill., a Corporation of Illinois. Filed Oct. 1, 1921. Serial No. 504,623. 28 Claims. (Cl. 172—278.)



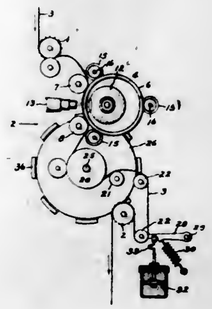
11. A self-starting, single-phase synchronous motor comprising a field member having split salient poles and means for dephasing the flux in one portion of each pole, whereby a rotating component field is established for starting purposes, and a relatively rotating member having a conducting portion providing a plurality of short-circuited paths for operating on the induction-motor principle and having magnetizable material forming a salient-pole construction, the salient poles of the field member and of the relatively rotating member being so related that the motor is caused to lock into synchronism at a speed less than the normal induction-motor speed.

1,892,553. INDUCTION REACTION MOTOR. FREDERICK C. HOLTZ, Springfield, Ill., assignor to Sangamo Electric Company, a Corporation of Illinois. Filed Dec. 18, 1923. Serial No. 681,381. 5 Claims. (Cl. 172—278.)



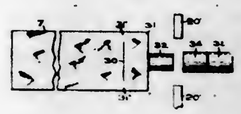
2. An induction reaction motor comprising a shaded pole primary stator member and a squirrel cage secondary rotor member, said secondary member comprising a cylindrical core of magnetic material provided with a plurality of symmetrically disposed slots forming a reaction motor secondary of a greater number of poles than the primary member and having the bars of the squirrel cage located in the bottoms of said slots and slightly disposed to one side of said slots toward the direction of rotation.

1,892,554. FILM SUPPORTING AND DRIVING APPARATUS. EDWARD W. KELLOGG, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed July 27, 1928. Serial No. 295,780. 18 Claims. (Cl. 271—2.3.)



1. Apparatus for imparting a steady movement to a film comprising a sprocket, a rotatable drum engaged by the film and having a flywheel connected therewith such that the speed of the flywheel depends upon the tension of the film between the drum and the sprocket, means for increasing the flexibility of the film between the drum and the sprocket, and damping means for preventing hunting.

1,892,555. METHOD OF FABRICATING SHEET METAL BEARINGS. CARL H. LEIS, New Castle, Pa., assignor to Johnson Bronze Company, New Castle, Pa., a Corporation of Pennsylvania. Filed Aug. 19, 1931. Serial No. 558,060. 4 Claims. (Cl. 29—149.5.)

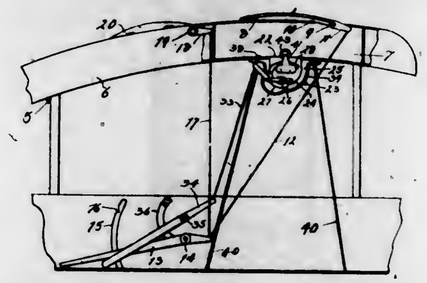


4. A method of progressively forming sleeve bearings from a strip of sheet metal, which consists of first partly shearing the blank from the strip transversely leaving it intact with the strip at the edges, then shearing the blank from the strip at its intact portions and in the same operation bend the blank into a channel, bend the channel into a preliminary tubular form, and then form the same into a sized tubular bearing.

1,892,556. SAFETY APPLIANCE FOR AIRPLANES. THOMAS B. LYLES, Terre Haute, Ind. Filed Sept. 24, 1931. Serial No. 564,867. 1 Claim. (Cl. 244—21.)

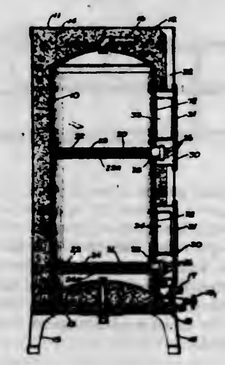
In a device of the kind described, the combination of an airplane having a parachute compartment in the wing structure, a support secured to the underside of the wing structure and having a space in communication with the parachute compartment through an opening in the bottom

of the wing structure, means to brace the wing structure in the region of the support, a C-shaped hook pivoted in said support, a parachute to be housed in the compartment and released therefrom for lowering the airplane to the ground when the airplane is disabled, a pulley block



attached to the parachute and detachably connected with the hook and manually operable means controlling the positions of said hook, whereby it may be moved to a retracted position to permit the pulley block to become disengaged therefrom for releasing the parachute.

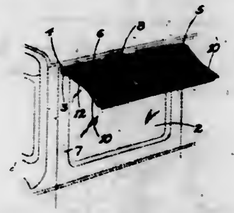
1,892,557. LIQUID HEATER. FRANCIS H. MCCORMICK, Glen Ellyn, Ill., assignor to Edison General Electric Appliance Company, Chicago, Ill., a Corporation of New York. Filed Aug. 11, 1930. Serial No. 474,820. 11 Claims. (Cl. 219—38.)



1. A liquid heater comprising a tank, means for applying heat to different portions of said tank, means dependent upon the temperature of the liquid in one of said portions for controlling said heating means so that said heating means applies heat to said different portions selectively, and means dependent upon the temperatures of the liquid in said portions respectively for controlling said heating means so as to render the heating means for each portion ineffective when the liquid in that portion has attained a predetermined high temperature.

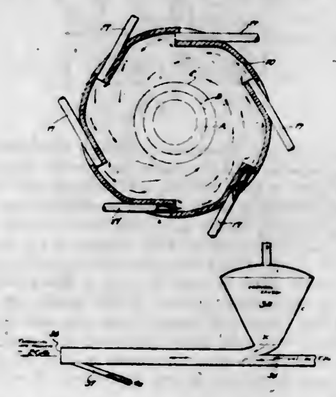
1,892,558. SUNSHADE FOR AUTOMOBILES. BENJAMIN F. WALKER, Stockton, Calif. Filed Nov. 10, 1930. Serial No. 494,480. 2 Claims. (Cl. 156—44.)

1. In a sunshade including spaced bracket ears, a roller extending between the ears and having end spindles, and arm units, a shade element secured along one edge to the roller and arm units extending between the ears and the opposite edge of the roller; blocks on the arm units abutted against the inner adjacent faces of the ears, washer elements abutting against the opposite faces of the blocks, and combination clamping and pivot screws passing



through the contacting ears, blocks and washers; the adjacent inner ends of the screws being bored to a certain depth to form bearings for the roller-spindles.

1,892,559. METHOD OF DISSOCIATING NATURAL GAS. CHARLES B. HILLHOUSE, New York, N. Y. Filed Mar. 4, 1930. Serial No. 433,049. 12 Claims. (Cl. 23—212.)



1. The process of dissociating natural gas which includes feeding natural gas to a dissociator, maintaining an axial flame therein, the passing of a shower of carbon heated to and maintained at incandescence by said flame through the gas to be dissociated, and the entering of new natural gas into the dissociator tangentially along the wall so that dissociated carbon can shower through it.

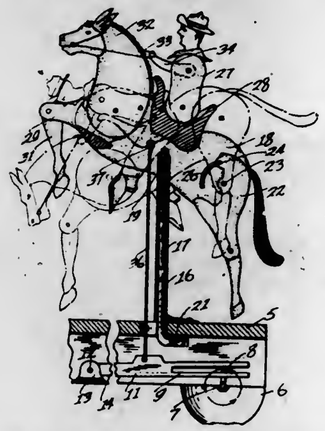
11. The process of dissociating natural gas which comprises maintaining in a chamber an axial heating flame feeding natural gas to said chamber tangentially to the wall, passing carbon particles past said flame and between the flame and said natural gas, to be heated thereby, passing the heated carbon through said natural gas to dissociate same through the heat continuously taken up by the suspended carbon particles from heat from the flame and as incandescent solid black bodies contacting with the enveloping natural gas which is thereby dissociated into hydrogen and carbon, and this carbon in turn adding itself to the original carbon to become suspended incandescent solid black bodies and so augment the process.

1,892,560. TREATING FERROUS SHEETS AND PLATES. JOSHUA C. WHETZEL, Pittsburgh, Pa., assignor to American Sheet and Tin Plate Company, a Corporation of New Jersey. Filed Sept. 25, 1931. Serial No. 565,208. 5 Claims. (Cl. 148—4.)

3. The method of preventing sticking in box annealing sheets and plates which consists in chemically treating the rolled and pickled sheets and plates by immersion in an aqueous mixture of a manganese compound of a con-

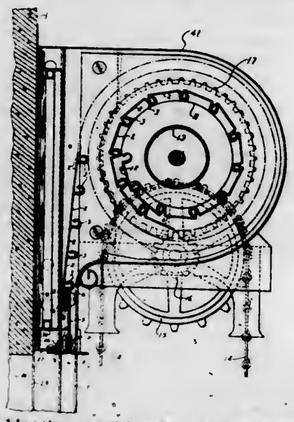
centration of from .001 to 0.2 per cent. characterized by being salts of the oxy acids of manganese or oxygen compounds of manganese dioxid, piling the treated materials and then box annealing the pile.

1,892,561. TOY. WILLIAM O. YANCEY, San Francisco, Calif. Filed Dec. 28, 1931. Serial No. 583,567. 1 Claim. (Cl. 46—45.)



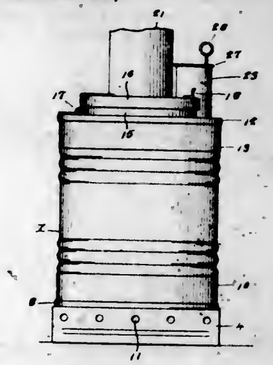
In a device of the character described, a vehicle having supporting wheels, an axle connected thereto and rotated by said wheels, a lever having a bifurcated end and pivoted to said vehicle, a crank formed in said axle and adapted to be positioned in the bifurcated end of said lever, a tubular support mounted on said vehicle, a rod extending through said support and rotatable therein and having its lower extremity bent to form a stop, a figure simulating the body of an animal pivoted to the upper end of said rod, a link rod connected to said lever and said figure and in parallelism with said first mentioned rod, and adapted to actuate said figure upon movement of said lever and to simultaneously limit the lateral movement of said figure.

1,892,562. ROLLING DOOR WITH GLASS-COVERED OPENING. HUGH COOKE ARMSTRONG, Columbus, Ohio, assignor of one-fourth to William M. Ginder, Columbus, Ohio. Filed Mar. 9, 1931, Serial No. 521,264, and in Canada Mar. 9, 1931. 40 Claims. (Cl. 189—56.)



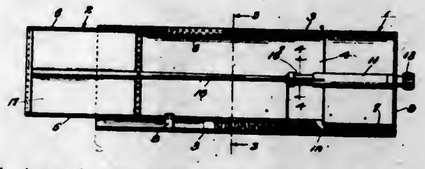
1. In combination, a rolling door having a window therein and a closure mounted independent of the door operated by the door for closing the window.

1,892,563. SAFETY HEATER. TELESPHORE BABIN, Houma, La. Filed Oct. 16, 1931. Serial No. 569,298. 1 Claim. (Cl. 126—65.)



A stove comprising a frame having openings to permit air to circulate therethrough, overlapping horizontal supporting flanges on the upper edges of the frame, a circular shaped plate resting on and detachably secured to said flanges, an annular upstanding flange on said plate, a cylindrical drum having one end resting on the plate and frictionally gripped by said annular flange to cooperate with the plate in forming a fire box, and a cover removably mounted on the upper end of the drum and having an exhaust opening to receive a smoke pipe.

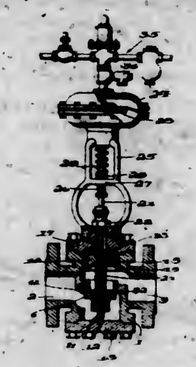
1,892,564. WATCH-HAND GAUGE. THOMAS S. BARBEE, Shelbyville, Tenn. Filed Dec. 17, 1931. Serial No. 581,714. 6 Claims. (Cl. 33—178.)



1. A watch hand gauge comprising a pair of connected relatively movable members, an elongated tapered pin secured to one of said members at the end of greatest diameter and having its other end free, a scale carried by one of the members, and an elongated body mounted on the other member from the one carrying the pin to extend longitudinally of the gauge and formed to receive the pointed end of said pin to force a watch hand to the limit of its movement thereon.

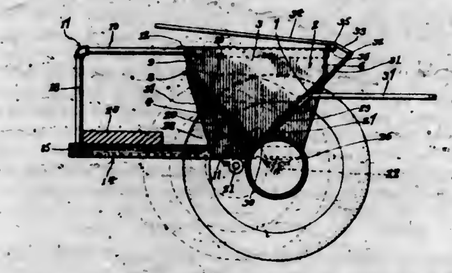
1,892,565. HIGH-PRESSURE RELIEF VALVE. LYLE W. BROWNE, Marshalltown, Iowa, assignor to The Fisher Governor Company, Marshalltown, Iowa. Filed Oct. 12, 1931. Serial No. 568,469. 11 Claims. (Cl. 137—53.)

7. A pressure relief valve comprising a valve body having inlet and outlet openings, a main valve disc for regulating the flow of fluid through said openings, a cylinder in said valve body, a pressure balancing piston carried by said valve disc and adapted to reciprocate within said cylinder, a passageway extending through said valve disc and piston, a valve stem slidably mounted in said passageway and loosely connected to said main valve disc, an auxiliary valve carried at one end to said valve stem and adapted to close said passageway, the other end of said stem being operatively secured to a pressure responsive element, a conduit extending through a portion of said valve stem and opening at one end within said passageway above said auxiliary valve, and at the other end in said cylinder above said balancing piston, whereby when said auxiliary valve is opened by the operation of said pressure responsive element, the pressure on the underside of said disc is transmitted through said passageway and conduit



to said cylinder to balance said piston, the continued movement of said pressure responsive element causing said main valve to open.

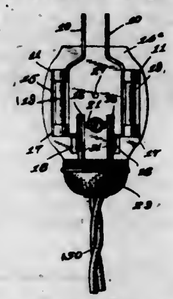
1,892,566. MOBILE SPREADER. FRED D. COPPOCK, Greenville, Ohio. Filed Dec. 10, 1931. Serial No. 580,141. 11 Claims. (Cl. 275—2.)



1. A spreader including a hopper like body part for carrying the material to be spread and having an outlet in its bottom, rotatable supporting means for said body part, said means including a spreader roll bodily rotating therewith, said roll arranged below and having the major portion of its circumference located adjacent said outlet, and adjustable means carried by said body part for extension below said outlet and coacting with said roll to provide a passage of selected area positioned adjacent the vertical median of said body part for discharging the material in the direction of travel of the spreader, said rotatable supporting means including a pair of wheels, the ratio of the diameters between the wheels and roll being such for determining the thickness of the material spread, said adjustable means including a pair of gates slidably connected to the front and rear of the bottom of said body part and for depending below said outlet, said supporting means including a rotatable axle carrying said wheels and roll, means for selectively positioning said axle forwardly and rearwardly of the vertical median of said body part, and means operated from the rear of the body part for adjusting said gates.

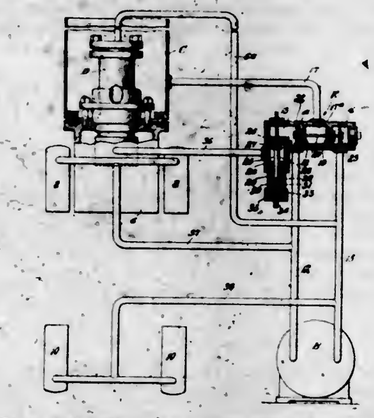
1,892,567. LIGHTNING ARRESTER. DOUGLAS L. CRADDOCK, Leaksville, N. C. Filed June 22, 1932. Serial No. 618,723. 3 Claims. (Cl. 200—115.)

1. A lightning arrester comprising a shell consisting of complemental sections, and means for securing the same together, a plate mounted on the inner face of one of said sections and provided with outturned extremities, a bolt securing the plate in place and extending to the exterior of the section to provide a ground connection, prongs seated in channels in the sections, contacts seated in recesses in the sections, and fuses connecting the prongs and contacts, the contact seating recesses opening at the end of the shell



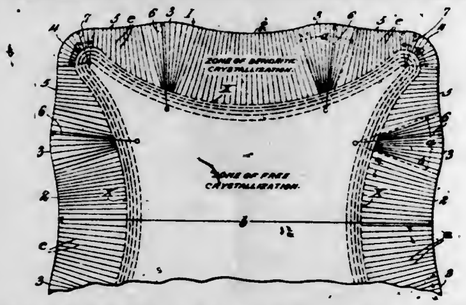
for the reception of the prongs of an attachment plug to dispose said prongs between said contacts and the end of said plate but spaced from the latter.

1,892,568. SURGE VALVE FOR HYDRAULIC PRESSES OR THE LIKE. WALTER ERNST, Mount Gilead, Ohio, assignor to The Hydraulic Press Manufacturing Company, Mount Gilead, Ohio. Filed Dec. 12, 1930. Serial No. 501,994. 6 Claims. (Cl. 138—17.)



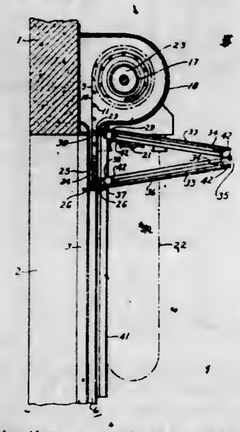
1. In a hydraulic press or the like, the combination with a cylinder having an opening in its top; of a surge tank supported directly above said cylinder; a ram mounted for reciprocation in said cylinder, movement of the ram during a part of a working stroke creating suction in said cylinder; a valve casing mounted in the opening in said cylinder and having a vertically extending bore the upper end of which faces and opens into said surge tank, said valve casing being provided with a plurality of radially extending passages communicating with said bore and opening directly into the interior of said cylinder, and with a circular valve seat formed in said bore and located adjacent to and above said radial passages, said seat being tapered downwardly and outwardly towards said passages; a spring pressed valve element mounted for vertical movements in said bore and being provided with a seat-engaging surface tapered downwardly and outwardly whereby fluid in passing downwardly through said bore, will be smoothly deflected outwardly towards and through said radial passages, said valve being adapted to be opened by suction in said cylinder; a pressure chamber disposed within said surge tank and above said valve element; and a pressure responsive plunger mounted in said pressure chamber and being adapted to be actuated by fluid pressure for moving said valve element to its open position against the urge of said spring during a return stroke of said ram.

1,892,569. INGOT. EMIL GATHMANN, Baltimore, Md. Filed Oct. 27, 1932. Serial No. 639,889. 7 Claims. (Cl. 22—218.)



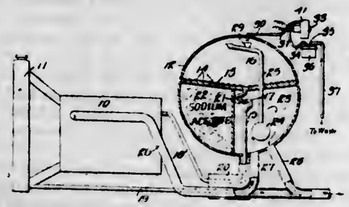
1. A metallic ingot of generally rectangular cross section having sides and outwardly arched corners interposed between and connecting said sides, the radii of said outwardly curved corners being of a length less than one tenth but greater than one twentieth of the minimum cross sectional dimension of the ingot and the arcs defining said outwardly curved corners being subtended by angles materially greater than ninety degrees.

1,892,570. ROLLING DOOR. WILLIAM M. GINDER, Columbus, Ohio. Filed Mar. 9, 1931. Serial No. 521,237. 25 Claims. (Cl. 189—56.)



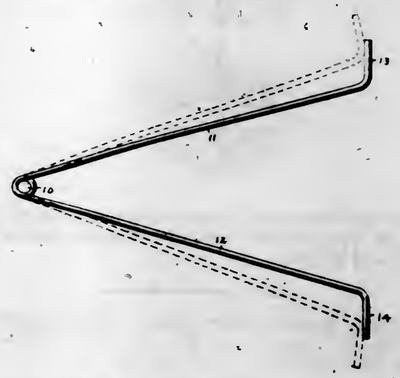
21. In combination, a vertically movable door having window openings, and a pivotally supported folding sash operated by the door and adapted to close said openings.

1,892,571. DEVICE FOR HEATING AUTOMOBILE MOTORS. ROBERT BLYTHE GOODWIN, Memphis, Tenn. Filed Mar. 31, 1932. Serial No. 602,846. 7 Claims. (Cl. 123—174.)



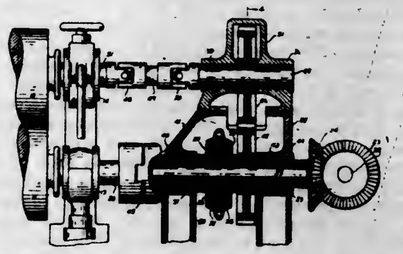
7. A device for maintaining heat in the cooling fluid of an automobile comprising a tank mounted on said automobile having fluid connections to the cooling system, means mounted in said tank which upon cooling creates a vacuum therein to draw the fluid from said cooling system, and means for effecting the discharge of the fluid from said tank to said cooling system, substantially as set forth.

1,892,572. FENCE GUARD WIRE BRACE. WILLIAM G. HAEHL, near Manilla, Ind. Filed Mar. 9, 1932. Serial No. 597,655. 1 Claim. (Cl. 256—8.)



A fence guard wire brace structure adapted to be detachably coupled with a fence post, comprising attaching means carried by said post, a pair of normally sprung apart leg portions, foot portions angularly disposed with respect to said leg portions and extending through said attaching means and a fence guard wire attaching eye formed integral with said leg portions and acting to spring said leg portions apart to abut said attaching means, and for extending the said foot portions through the said attaching means to couple the said brace with the fence post.

1,892,573. DRIVE FOR PRESS ROLLS OR THE LIKE. TOM HARVEY, Middletown, Ohio. Filed Apr. 17, 1931. Serial No. 530,793. 5 Claims. (Cl. 74—7.)



1. In a paper making machine of the class described, in combination, two rotary rolls adapted to squeeze and feed a web of material between them, differential driving means for applying power equally to both said rolls and positively drive them at the same peripheral speed, fixed bearings for the parts of the differential driving means maintaining the axes thereof in definite predetermined positions, movable bearings for at least one of said rolls, means for adjusting said movable bearings to effect the maintaining of a predetermined pressure between the said rolls in operation, and a flexibly jointed driving connection from said differential driving means to the roll having movable bearings and extending between said movable roll bearing and one of the fixed bearings of the driving means.

1,892,574. PLUG COCK. GUSTAV HUBN, Berlin, Germany. Filed Mar. 30, 1931, Serial No. 526,463, and in Germany Oct. 15, 1930. 3 Claims. (Cl. 251—97.)



1. In a plug cock comprising a casing, a turn-plug fitted therein and having a threaded stem, a handle-carrying ring threaded to engage the threads on said stem, and a coupling member for coupling said ring with the plug stem, the plug being adapted to be lifted off and pressed into its seat in the casing axially by turning the threaded ring, the coupling member consisting of a two-armed lever pivotally connected with the plug stem, the longer arm of which has a notch, a pin in the threaded ring engaging into said notch in the coupling position, the shorter arm of said lever forming an oblique point, the latter being guided and stopped by an oblique sliding face and an oblique recess formed on said casing.

1,892,575. HAIR CURLER. JOSEPH JACOBS, Bridgeport, Conn., assignor to The Hayes-Donahue Manufacturing Co., Inc., Milford, Conn., a Corporation. Filed Sept. 10, 1932. Serial No. 632,475. 4 Claims. (Cl. 132—38.)



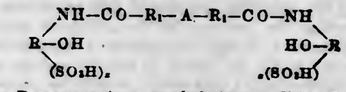
1. A hair curler comprising two separate strips of bendable metal covered with non-metallic material and lying adjacent and laterally of each other and extending longitudinally of each other, a clasp firmly fixed to one end of each strip, said clasps each having an eye through which the other ends of the strips extend, whereby the clasps may be moved toward or away from each other by sliding the strips longitudinally relatively to each other.

1,892,576. COATING MATERIAL. EDWARD F. JOHNSTON, Wilmington, Del. Filed Apr. 10, 1931. Serial No. 529,805. 5 Claims. (Cl. 91—68.)

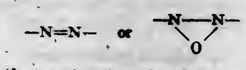
1. A freely flexible and transparent ink printed sheet wrapping material comprising a substantially transparent base having an ink imprint thereon, and a transparent waterproof layer over said printing having as a principal ingredient a high viscosity cellulose derivative selected from a group consisting of high viscosity nitrocellulose and high viscosity cellulose acetate, and containing an oil, a gum, and a base softening agent.

1,892,577. DERIVATIVES OF AMINO-NAPHTHOL SULPHONIC ACIDS. GEORG KALISCHER, Frankfort-on-the-Main, Germany, assignor to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed June 8, 1932, Serial No. 616,157, and in Germany Oct. 4, 1928. 5 Claims. (Cl. 260—69.)

1. Derivatives of amino-naphthol sulphonic acids corresponding probably to the general formula



wherein R represents a naphthalene radicle, R_1 a phenyl radicle which may contain a further substituent of the group consisting of halogen and alkoxy, A stands for the group



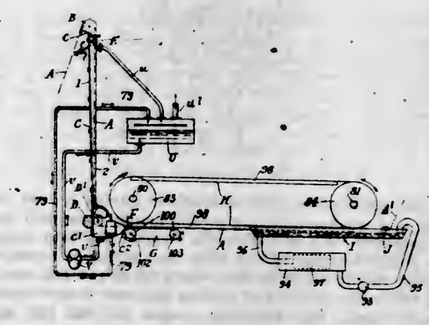
and x means the number 1 or 2, which products represent weakly yellowish colored substances and are distinguished by an excellent affinity to the vegetable fiber yielding when combined with diazo-compounds on the fiber or in substance very intense dyestuffs of full, clear and fast shades.

1,892,578. FEED FOR FOUNTAIN PENS. WILLIAM KELLY KERR, Tulsa, Okla. Filed June 22, 1932. Serial No. 618,671. 2 Claims. (Cl. 120—52.)



1. In a fountain pen, a pen section having a smooth inwardly tapered seat, a feed bar having a smooth tapered portion, and a nib fitting in a depression in said tapered portion said depression terminating short of the rear end of the feed bar and being shaped to cause the outer surface of the nib to correspond to the taper of the feed bar whereby the feed bar and the nib are held frictionally in said tapered seat.

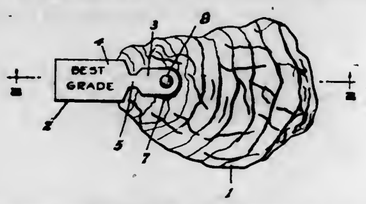
1,892,579. APPARATUS FOR THE PRODUCTION AND MANUFACTURE OF MATERIAL IMPREGNATED WITH CELLULOSE REGENERATED FROM VISCOSE OR OTHER CELLULOSIC SOLUTIONS. ARTHUR HUGOR KILNER, St. John's Wood, England. Filed May 3, 1932, Serial No. 608,886, and in Great Britain Apr. 16, 1931. 16 Claims. (Cl. 91—17.)



1. Apparatus for producing a material impregnated with cellulose, comprising in combination, and approximately vertical receptacle containing cellulosic solution,

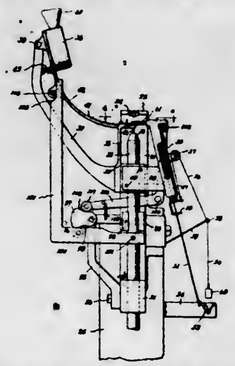
a roller for feeding fabric to be treated into said receptacle, sealing rollers adjacent the lower end of said receptacle, a casing constituting a horizontal extension at the lower part of and in communication with the said receptacle and having at its rear end an outlet orifice through which said fabric is drawn from said sealing rollers, means for forcing cellulosic solution into said receptacle, means for maintaining vacuum in the space between said feeding roller and the cellulosic solution in said receptacle, means for controlling the pressure of the cellulosic solution in said receptacle, a trough containing a coagulating medium through which the fabric is drawn, and an approximately horizontally traveling stretching mechanism mounted above said coagulating medium for stretching the impregnated fabric laterally during its passage from said outlet orifice towards and through said trough without any substantial part of the said mechanism contacting with the said coagulating medium in said trough.

1,892,580. SHELL TAG. JAMES U. LESTER, Brooklyn, N. Y. Filed Aug. 13, 1932. Serial No. 628,623. 4 Claims. (Cl. 40—3.)



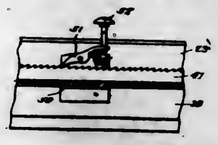
1. The combination of a shell and means for identifying the same, said means comprising a flexible waterproof tag projecting from said shell and having a hole at one end, and a connecting medium adhering to the shell and passing through said opening and terminating in an enlarged head, said medium being formed of an originally plastic material which becomes hardened after a short interval of time.

1,892,581. EXTRA WASHER APPLYING MACHINE. HARRY LEVINE, Brighton Beach, N. Y. Filed Feb. 20, 1931. Serial No. 517,362. 5 Claims. (Cl. 218—15.)



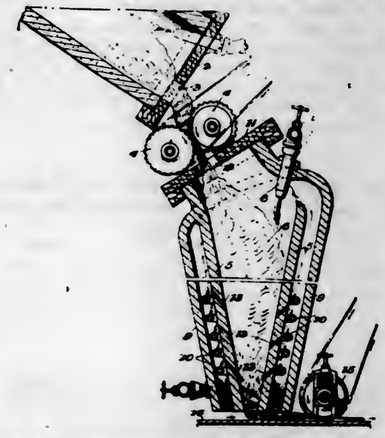
1. In combination with a machine having a base and eyelet and washer applying means mounted on said base and provided with an actuating element for said means, of a frame secured to the base and having a nosepiece disposed in the plane of said applying means but spaced from the latter, eyelet and washer applying means carried by said frame, and actuating means for the last said means operatively connected with said actuating element, said frame being relatively adjustable to vary the spacing of its washer and eyelet applying means with reference to the washer and eyelet applying means of the machine.

1,892,582. ELECTRIC CAN OPENER. ELSA L. MCCOLLOM, Villa Grove, Ill. Filed Aug. 11, 1931. Serial No. 556,442. 4 Claims. (Cl. 30—8.)



1. A can opener comprising in combination a turntable, driving means therefor, a rim for the turntable capable of rotation relative thereto, a plurality of bars slidably mounted on the turntable radially relative thereto, a can engaging jaw on each bar, a rod extending obliquely through each bar and secured at its ends to said rim, a spring for each rod anchored to the turntable and secured at one end to one end of its rod, means for imparting rotation to the turntable relative to the rim to cause said bars to move radially in one direction relative to the turntable, and said springs being adapted to cause said rim to rotate relative to the turntable upon release of the last named means whereby to cause said bars to move radially relative to the turntable in an opposite direction.

1,892,583. FEEDER FOR ARGILLACEOUS MATERIALS. WILLIAM B. PINE, Okmulgee, Okla. Filed July 22, 1930. Serial No. 469,905. 12 Claims. (Cl. 25—1.)

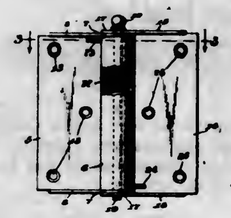


4. In an apparatus for producing articles of argillaceous materials heated to a plastic or semi-plastic but not completely fused condition, in combination with means for forming said materials, means for advancing said materials to said forming means in their heated and plastic or semi-plastic but not completely fused condition, including a feeding device having walls forming a passage decreasing in cross section toward the bottom of said device and leaving a discharge opening at its bottom, said passage being of sufficient height that said plastic materials pack together toward the bottom thereof, means for heating said materials in said passage, and means whereby air and gas in said mass escape from said passage.

1,892,584. SPRING HINGE. JOHN O. OLSON, Seattle, Wash. Filed Nov. 10, 1931. Serial No. 574,127. 1 Claim. (Cl. 16—189.)

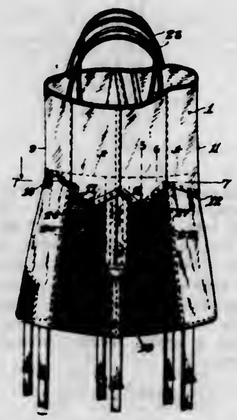
A spring hinge comprising a pair of leaves each having right angle arms terminating in ears, the arms of one leaf being somewhat wider than the arms of the other leaf thereby providing offset abutments at right angles to said leaf, a stiffener flange having its ends fixed to said abutments and disposed at right angles to said leaf, a

cylindrical container having its ends fixed to the ears of the leaf having the wider arms and having slots in its end portions, a coiled spring within said container having one of its end portions projecting through one of said slots and bearing against the leaf having the narrow arms, the other end portion of the spring projecting through the other slot of the cylinder, bearing against



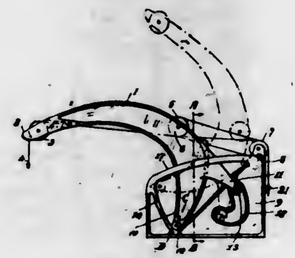
the stiffener flange, and its end abutting against the leaf with the wide arms, the inner edge of the leaf having the narrow arms forming a longitudinal shoulder, and shoulders formed on the offset abutments of the wider arms and arranged to engage the longitudinal inner edge shoulder of the other leaf whereby the two leaves are normally held in parallel relation.

1,892,585. UNDERGARMENT FOR WOMEN. PHILIP H. ROBBINS, New York, N. Y. Filed July 30, 1931. Serial No. 554,099. 11 Claims. (Cl. 2—30.)



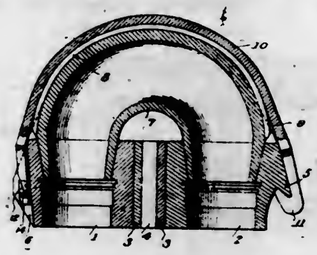
1. An undergarment comprising a girdle portion and a brassiere portion united to form a combination garment, the one overlying the other for a certain distance at the point of connection therebetween, said brassiere portion being fixedly secured at spaced points below the upper edge of the girdle portion, and the remainder of the brassiere portion being connected to the girdle portion by spaced pairs of straps, the straps of each pair diverging with respect to each other, one end of the straps of each pair being anchored at a common point on the brassiere portion, the other ends of the straps of each pair being anchored at spaced points on the girdle portion.

1,892,586. BOAT APPARATUS FOR LOWERING LIFE-BOATS TO THE WATER FROM SHIPS. CAMILLO SACHERDOTI, Milan, Italy. Filed Nov. 4, 1931. Serial No. 572,987. 5 Claims. (Cl. 9—22.)



1. In an apparatus for lowering life boats from ships, a base having two guide tracks therein, a davit having at its lower end members engaging said tracks, one of said tracks comprising a substantially horizontal portion and a substantially vertical portion extending upwardly from one end of said horizontal portion.

1,892,587. TUBE COUPLING. HARRY SCHMIDT, East St. Louis, Ill. Filed May 2, 1932. Serial No. 608,778. 6 Claims. (Cl. 285—20.)

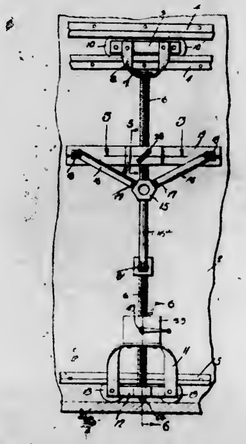


1. A coupling of the character described comprising a pair of sections, means for securing the sections in parallelism with respect to each other, a tubular U-shape coupling member having tapered ends disposed in the sections and in wedging association therewith, a rib formed with the tubular U-shaped coupling member, and clamping means provided with a groove to receive said rib and detachably secured to the sections for securing the tubular U-shape coupling member to the sections.

1,892,588. TREATMENT OF VEGETABLE LECITHIN. ALBERT SCHWIDER, Hamburg, Germany, assignor to Hanseatische Muhlenwerke Aktiengesellschaft, Hamburg, Germany, a Corporation. Filed Nov. 18, 1931, Serial No. 574,917, and in Germany Nov. 11, 1930. 5 Claims. (Cl. 260—98.)

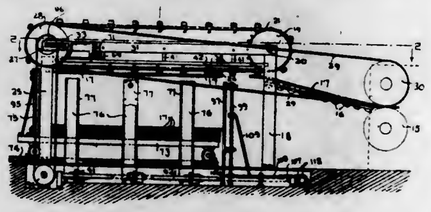
1. Method for purifying free vegetable lecithin which comprises subjecting vegetable lecithin to the action of dibenzoyl peroxide.

1,892,589. DECKING STRUCTURE. CLIFFORD L. SNYDER, Detroit, Mich., assignor to Evans Products Company, Detroit, Mich., a Corporation of Delaware. Filed Apr. 17, 1931. Serial No. 530,992. 18 Claims. (Cl. 105—368.)



1. In decking apparatus of the character described, a vertical screw shaft, a roller carriage support for mounting the ends of the shaft on the wall of a car, and a deck structure including a head, means vertically adjustable on the screw shaft, and arms connecting the head to said means.

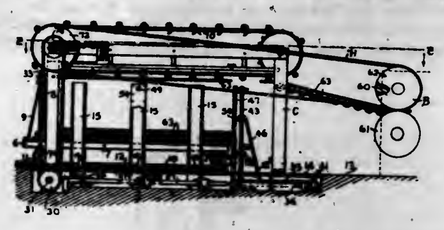
1,892,590. METAL SHEET STACKING MACHINE. JAMES W. STEELE, Elm Grove, W. Va., and ALONZO DEITCH, Martins Ferry, Ohio, assignors of one-third to Harry Cy. Thomas, Martins Ferry, Ohio. Filed Oct. 30, 1929. Serial No. 403,642. 9 Claims. (Cl. 198—41.)



1. In a stacker for metallic sheets, a series of electric magnets; means for carrying said electric magnets in train along a horizontal path; and means for energizing the magnets during the travel of the same along said path for engaging and carrying sheets of metal, and means for de-energizing certain only of said magnets for releasing said sheets of metal at a pre-determined point for stacking.

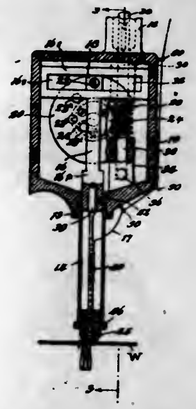
1,892,591. SHEET JOGGING AND REGISTERING MACHINE. JAMES W. STEELE and ALONZO DEITCH, Martins Ferry, Ohio, assignors of one-third to Harry Cy. Thomas, Martins Ferry, Ohio. Original application filed Oct. 30, 1929, Serial No. 403,642. Divided and this application filed Oct. 26, 1931. Serial No. 571,254. 4 Claims. (Cl. 271—69.)

1. In a sheet jogging and registering machine, a platform, abutments arranged at one side and one end of said platform, an elongate yieldable stacker arranged at an end of said platform opposite one of said abutments, an elongate yieldable stacker arranged at a side of said platform opposite one of said abutments, both of said stackers provided with means at the lower end thereof for rolling over a substantially level surface so that said stackers will travel at all times in the same horizontal plane and reciprocating means imparting lateral reciprocation of said first stacker with respect to said machine and longi-



tudinal reciprocation of said second stacker with respect to said machine, said stackers engaging sheets and jogging them against said abutments and into side and end registry one with the other.

1,892,592. TUFTING MACHINE. GEORGE L. WESTCOTT, Dalton, Ga., assignor to "Cabin Crafts", Dalton, Ga., a Corporation of Georgia. Filed Apr. 20, 1932. Serial No. 606,424. 9 Claims. (Cl. 112—80.)



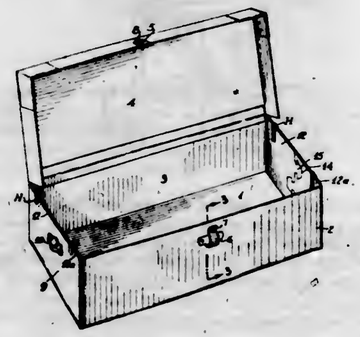
1. In a tufting machine, a portable casing, means at one end of said casing for connection with a flexible driving device, a helical gear adapted to be driven by said driving device, a spur gear engaged with and driven by said helical gear, a pivotally mounted block rotated about the axis of said spur gear, a rectilinearly movable plunger having a transverse slot in one end thereof, said block engaging the walls of said slot to cause movement of said plunger, and a needle secured in said plunger and reciprocated thereby.

1,892,593. GOLF GAME BOARD. FRANK I. STILES, Miami, Fla. Filed Mar. 11, 1931. Serial No. 521,842. 4 Claims. (Cl. 273—32.)



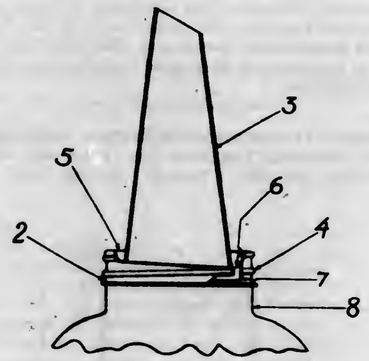
1. In a game board apparatus, the combination with a board or frame representative of a golf field and covered with a suitable material which has a tendency to retard the progress of a golf ball passing over the same, of indicia on the board near the outer or field-end thereof indicating scores that can be made by a player, and vertically movable spaced wires arranged transversely of the board between the indicia.

1,892,594. CONTAINER. ABRAHAM STONE, Brooklyn, N. Y. Filed June 17, 1932. Serial No. 617,808. 6 Claims. (Cl. 229—35.)



1. A container having a bottom wall and a front wall and a rear wall, said front wall and said rear wall having end-wall members turnably connected to their lateral edges, the aligned end-wall members having interlocking projections and recesses, said projections being wholly parallel to said end wall members when the device is assembled, said projections and recesses then forming butt joints.

1,892,595. POURING DEVICE. JOSEPH F. TICHY, Flushing, N. Y., assignor of one-half to George H. Bruns, Jamaica, N. Y. Filed Nov. 23, 1931. Serial No. 576,628. 8 Claims. (Cl. 221—208.)



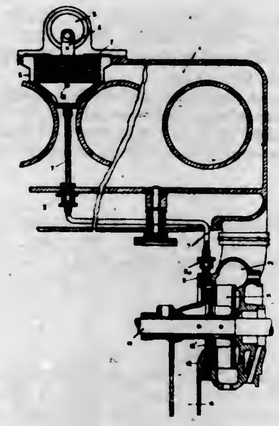
1. In a pouring device comprising a cover-spout attached to a vessel containing a liquid, a groove recessed in the top of the cover and circumjacent to the base of the spout, an orifice in the bottom of the groove, and a vent means affixed to the inner surface of the cover at the orifice in the groove, whereby any liquid adhering to the outside of the spout will be collected in the groove and diverted into the vessel through the orifice and vent tube, thus preventing said liquid from coming into contact with the outside of vessel.

1,892,596. FOOTWEAR. FREDERICK ARTHUR WOOD, London, England. Filed Mar. 18, 1931, Serial No. 522,843, and in Great Britain Mar. 18, 1930. 4 Claims. (Cl. 36—12.)



1. A boot or shoe comprising an upper, an insole secured inside said upper, a rand secured outside said upper with one side presented to the edge surface of the insole and one edge extending beneath the under surface of the insole, and an outer sole independently secured with its upper portion within the underneath cavity constituted by the downwardly depending portion of the rand.

1,892,597. AUTOMATIC DEVICE FOR LIMITING THE SPEED OF INTERNAL COMBUSTION ENGINES, MORE PARTICULARLY OF TRACTOR ENGINES OR THE LIKE. TRANQUILLO ZERBI, Turin, Italy, assignor to Fiat Societa Anonima, Turin, Italy. Filed May 22, 1930, Serial No. 456,469, and in Italy Oct. 26, 1929. 4 Claims. (Cl. 123—108.)

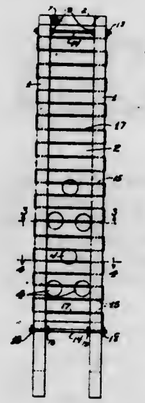


1. In combination with an internal combustion engine, an automatic speed limiting device comprising an expanding box acting on the engine suction, a chamber in which said expanding box is placed, a pipe connecting said chamber with the cooling water circulating system of the engine, and a small auxiliary pump for generating a water pressure in said chamber.

1,892,598. CORN SHELLER. MICHAEL ALDERMAN, Jr., Brewster, Fla. Filed May 19, 1930. Serial No. 453,808. 1 Claim. (Cl. 130—10.)

A seed corn sheller, comprising a trough-like body having a partly open bottom, and having one end partly closed, the sides of the body, below the outer edges thereof being provided with equidistantly spaced alining openings, a strong wire threaded through said opening, and the transverse strands of the wire within the trough affording sheller blades, bolts passing through openings in the sides of the body adjacent to the ends thereof, said bolts having inner and outer nuts screwed thereon to contact with

the inner and outer faces of the sides of the body for bracing and for spacing said sides, and the ends of the wire being wound around the outer ends of the bolts and

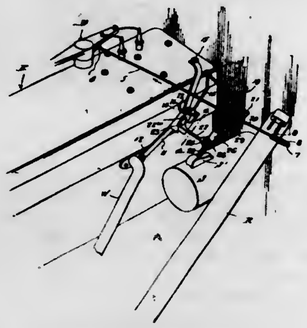


being engaged by outer nuts on said respective bolts for holding the said wire on the body and for regulating the tension of said wire.

1,892,599. MANUFACTURE OF GELATINE. EDWARD ATHERTON, Warwick, England. Filed Aug. 16, 1930, Serial No. 475,843, and in Great Britain May 26, 1930. 8 Claims. (Cl. 99—11.)

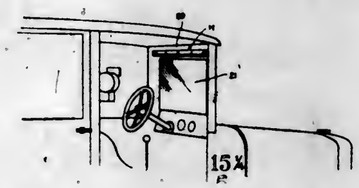
1. A process of sterilizing and puffing gelatine containing normal atmospheric moisture which consists in subjecting said gelatine to a temperature of approximately 900° F. for an approximate period of three and one-half seconds.

1,892,600. SPARK CONTROL. MACK ALLEN BEATTY, Garden Grove, Calif. Filed Jan. 29, 1931. Serial No. 512,136. 2 Claims. (Cl. 123—186.)



1. The combination with the spark control mechanism and the plunger of the starting motor switch of an internal combustion engine; of means operatively connecting the starting motor switch plunger with the spark control mechanism to move the latter to spark retarding position when said plunger is depressed for closing the starting motor switch and including a lever operatively engaging said plunger and pivoted adjacent thereto, and also having a cam shaped head, a second lever pivoted adjacent the first named lever and also having a cam shaped head arranged to be engaged by the said head of the first mentioned lever whereby the second lever is rotated when the said switch plunger is depressed, and means operatively interconnecting the second named lever with said spark control mechanism.

1,892,601. AUTOMOBILE UMBRELLA HOLDER. WILLIAM BEEHLER, Baltimore, Md. Filed Dec. 29, 1928. Serial No. 329,254. 7 Claims. (Cl. 224—29.)



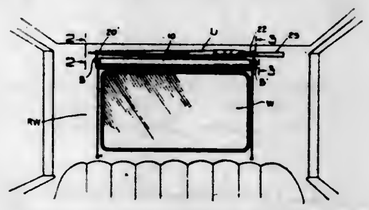
1. An umbrella holder for automobiles comprising an enclosure of flexible sheet material having a front opening with detachable fastening means and adapted to snugly receive and enclose an umbrella, and means therein for positively and detachably engaging portions of the umbrella and preventing chafing of the umbrella cover upon the enclosure and for securing the enclosure to the automobile.

1,892,602. AUTOMOBILE UMBRELLA HOLDER. WILLIAM BEEHLER, Baltimore, Md. Filed Dec. 29, 1928. Serial No. 329,255. 3 Claims. (Cl. 224—29.)



1. In combination with an automobile body including a seat having a back, an umbrella holder secured on the seat-back-top and adapted to removably retain an umbrella in horizontal position, the holder being in the form of a case of substantially porous and absorbent fabric, and a strip of substantially waterproof material along the lower side of the case.

1,892,603. AUTOMOBILE UMBRELLA HOLDER. WILLIAM BEEHLER, Baltimore, Md. Filed Dec. 29, 1928. Serial No. 329,256. 3 Claims. (Cl. 156—24.)



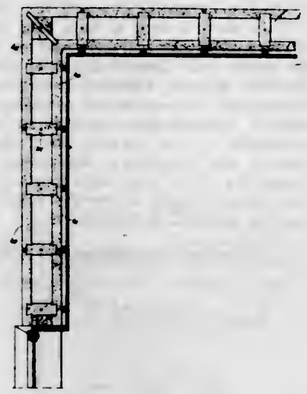
1. A supporting bracket of the class described comprising a base plate for attachment to a support or the like, an arm for supporting an end of a shade roll member, and means for resiliently embracing a part of an umbrella, both the arm and means supported by the base having the respective shade and umbrella engaging portions equidistantly spaced from the plane of the base.

1,892,604. UMBRELLA HOLDER FOR VEHICLES. WILLIAM BEEHLER, Baltimore, Md. Filed Jan. 29, 1930. Serial No. 424,240. 19 Claims. (Cl. 135—33.)



16. An umbrella holder for purposes set forth, comprising a supporting base and a closure flap of flexible sheet material dimensioned to enclose and retain an umbrella, the closure flap having at its free edge a substantially stiff re-enforcing member.

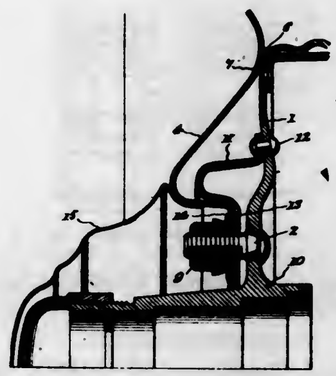
1,892,605. WALL CONSTRUCTION. PAUL BETZLER, Jackson Heights, N. Y. Filed Oct. 20, 1931. Serial No. 569,869. 7 Claims. (Cl. 72—16.)



2. A wall construction composed of two transversely spaced wall elements, each consisting of a plurality of superimposed horizontal sections, each section comprising a longitudinal series of substantially flat tiles placed edge to edge, said tiles having edge recesses extending from the inner towards the outer surface thereof, tie members separately insertable within said recesses, extending between said wall elements, acting as transversal positioning and binding members connecting said wall elements to each other to form a single structure, said tie members interlocking with the recesses of both adjoining edges of tiles in adjoining superimposed longitudinal sections, and a base formed with two transversely spaced longitudinal runways, adapted to receive and retain the lower edge portion of tiles composing the lowermost longitudinal section, said tie members and said runways restraining said wall elements against both inward and outward displacement with respect to each other.

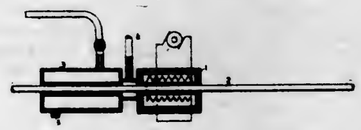
1,892,606. VEHICLE WHEEL. PIERRE MARCEL BOURDON, Paris, France, assignor to Michelin et Cie., Clermont-Ferrand, France, a Corporation of France. Filed Dec. 28, 1931, Serial No. 583,507, and in France Jan. 3, 1931. 5 Claims. (Cl. 301—6.)

1. In a vehicle wheel, a hub including a hub flange and a brake drum, a resilient disk having an intermediate annular portion bearing against said brake drum and formed with an inner freely and resiliently supported ring portion with perforations therein, and fastening means comprising bolts carried by the hub for extending



through the perforations of said ring portion, and a resilient looped ring having one edge free interposed between said ring portion and the hub flange and apertured to receive said bolts.

1,892,607. METHOD FOR MAKING A TUBE. HARRY W. BUNDY, Detroit, Mich., assignor to Bundy Tubing Company, Detroit, Mich., a Corporation of Michigan. Filed Jan. 31, 1931, Serial No. 512,673, and in Sweden Oct. 27, 1930. 10 Claims. (Cl. 113—88.)

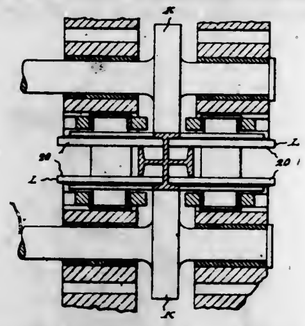


2. The method of making a tube which consists in electroplating a layer of copper on both sides of a steel strip, forming the strip into a tube, passing the tube through a heating zone at a substantially uniform rate, and in a non-oxidising environment and at a temperature high enough to alloy the copper with the steel and weld the seams of the tube, coordinating the speed of movement of the tube with the period of application of effective welding temperature to the tube to alloy the copper coating with the steel over both sides of the strip and to weld the overlapping portions of the strip together, the copper supplying material for the weld and being sufficient in amount to leave a substantially uniform coating on the surface of the finished tube, proportioning the period of treatment to the temperature to prevent running of the coating on the tube, and cooling the tube in a non-oxidising environment whereby a welded and uniformly coated tube substantially free from deleterious oxides is produced by a single heat operation.

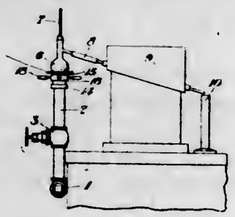
1,892,608. METHOD OF ROLLING STEEL COLUMNS. LEO JOSEPH CATON, New York, N. Y. Filed June 12, 1930. Serial No. 460,612. 2 Claims. (Cl. 80—66.)

1. The method of rolling a steel column from a single piece of steel, which involves rolling said piece toward

and to a condition where the same is of cruciform section because including intersecting webs, and then rolling the opposite end portions of both webs toward and to a substantially T flange shape.

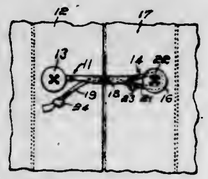


1,892,609. LABORATORY DISTILLATION APPARATUS. STANTON I. CHARLESWORTH, Cleveland Heights, and ARCH W. HARRIS, Cleveland, Ohio. Filed June 16, 1931. Serial No. 544,878. 9 Claims. (Cl. 23—292.)



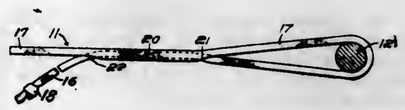
1. In a distillation apparatus, a hollow body, means for conducting heat into said body, and means carried by said body for supporting a flask, said means being adjustable to vary the approach of the flask to said body.

1,892,610. GARMENT FASTENER. ROBERT T. DAWES, Hudson, Mass. Filed Oct. 29, 1931. Serial No. 571,768. 2 Claims. (Cl. 24—73.)



1. A fastening device comprising an elongate flexible member having anchoring means at one end, said flexible member having a stretchable and contractible integral sleeve spaced from the anchoring means and the opposite free end of said flexible member, said flexible member being bent upon itself to form a loop of adjustable length with said opposite free end portion extending longitudinally through and permanently projecting beyond the sleeve, said projecting free end portion normally being of substantially uniform diameter from its point of emergence from the sleeve to its extremity and being of such length as to permit ready seizure by the fingers of the operator for exerting pull to shorten the length of the loop and also to furnish available material for lengthening the loop after it has been shortened, said sleeve being capable of stretching longitudinally and of contracting transversely, thereby gripping that portion of the free end disposed therein when subjected to longitudinal tension, said sleeve being contractible longitudinally at will to cause it to expand transversely when said longitudinal tension is released, thereby releasing said portion of said free end and permitting longitudinal movement thereof through the sleeve, whereby the effective length of the fastening device and the size of said loop may be adjusted as desired.

1,892,611. GUY ROPE. ROBERT T. DAWES, Hudson, Mass. Filed Oct. 29, 1931. Serial No. 571,770. 4 Claims. (Cl. 135—15.)



1. An adjustable guy rope comprising an elongate braided cord having a flexible free end, and a sleeve integral with said elongate member and spaced from said free end, said sleeve being constructed and arranged so that said free end may be inserted longitudinally through said sleeve and project outwardly toward the opposite end of said cord thereby to form a loop, said sleeve being capable of stretching longitudinally and of contracting transversely about and thereby gripping the free end of said elongate member disposed therein when said member is subjected to longitudinal tension, said sleeve being retractible longitudinally at will to cause it to expand transversely thereby releasing the free end of the elongate member and permitting longitudinal movement thereof through the sleeve when said tension is released, whereby the effective length of the guy rope and size of said loop may be adjusted as desired.

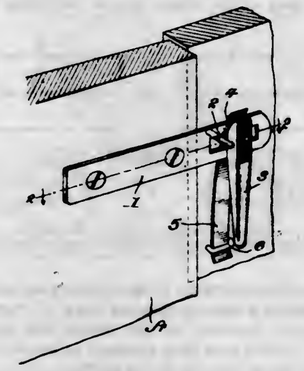
1,892,612. EGG CARTON. CHARLES RICHARD DUGDALE, Fairhaven, Mass. Filed May 22, 1931. Serial No. 539,389. 5 Claims. (Cl. 229—29.)



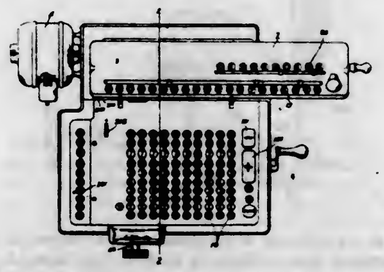
1. An egg carton comprising a single sheet of cardboard cut and creased to form front, rear and end walls, a top integral with the rear wall, and a two part bottom, said bottom parts respectively integral with the front and rear walls and extending up between said walls with their free inner edges contacting to form a partition bisecting the carton lengthwise, said bottom being provided with slots, and transverse partitions extending through said slots and having their opposite ends suitably secured to the inside of the front and rear walls.

1,892,613. GATE AND DOOR LATCH. JAMES E. EDGIN, Charlotte, Tenn., assignor to Isac W. Edgin, Charlotte, Tenn. Filed Nov. 3, 1930. Serial No. 493,121. 1 Claim. (Cl. 292—304.)

The combination of a hasp, a staple engageable with the hasp, a leaf spring fixed at one end and having its opposite free end passed through the staple to tension the said hasp for urging the same outwardly from the staple when engaged therewith, and a lever swingingly supported by the staple and having its axis of movement close to one end thereof and adapted to be shifted to align with said staple to permit the hasp to ride from the latter off said lever, the said lever being formed with a cam end next to its axis of movement to engage the spring to push it away from the hasp when the lever is in alignment with the staple whereby the spring may hold the lever substantially in alignment with the staple.



1,892,614. AUTOMATIC MULTIPLICATION MECHANISM FOR CALCULATORS. HUGO ENDERS, Belleville, N. J., assignor to Monroe Calculating Machine Company, Orange, N. J., a Corporation of Delaware. Filed Aug. 17, 1927. Serial No. 213,570. 11 Claims. (Cl. 235—63.)

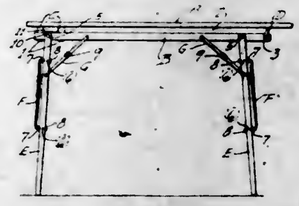


1. In a calculating machine having a transversely shiftable carriage, numeral wheels thereon, and actuating mechanism for said numeral wheels, carriage shifting means comprising a train of mechanisms, a spring retracted clutch interposed in said train, means for latching said clutch in active carriage shifting position, and means for releasing the latch during a carriage shifting movement, said clutch being adapted to remain in active position during the remaining shifting impulse.

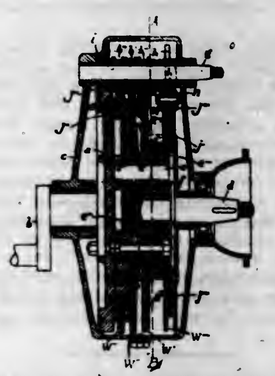
3. In a calculating machine having a transversely shiftable carriage, numeral wheels thereon, and actuating mechanism for said numeral wheels, carriage shifting means including a zero shift key operable to determine a shift in a given direction, and means for locking said key in inoperative position when the numeral wheel carriage stands in extreme shifted registering position.

1,892,615. IRONING-BOARD STRUCTURE. HENRY L. FISCHACHER, Boston, Mass. Filed Apr. 21, 1930. Serial No. 445,865. 4 Claims. (Cl. 68—10.)

1. In a folding ironing-board structure, in combination, a body-beam, a pair of blocks disposed in spaced relation upon the beam adjacent an end thereof, an ironing-board resting adjacent an end thereof upon the blocks and disposed longitudinally over the body-beam, the body-beam being of reduced width relatively to the board, bolts passed through the beam, blocks, and board for securing the same together, pairs of legs pivotally attached to the beam adjacent its opposite ends, and a third block fixed to the beam intermediate the first blocks, said legs being adapted for unfolding to support the board upon a supporting surface and for oppositely folding under the beam for collapsing the structure and one pair of said legs being engageable at an end when unfolded with the third block for stiffening the structure during ironing operations.



1,892,616. POWER TRANSMISSION MECHANISM. CHARLES EDOUARD HENRIOD, Areuse, Switzerland. Filed Dec. 30, 1929, Serial No. 505,595, and in France Jan. 7, 1930. 10 Claims. (Cl. 74—84.)

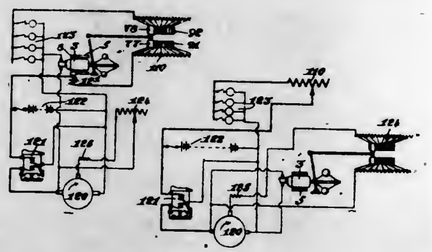


1. In a power transmission mechanism having a driving shaft carrying a flywheel, a driven shaft coaxial with the driving shaft, a gear wheel on said driven shaft, a planetary member having a plurality of coaxial planetary gears meshing with said gear wheel on the driven shaft, a plurality of gear wheels adapted to rotate idly about the axis of said two coaxial shafts and geared each with a planetary gear of said planetary member, and means for locking said idle gear wheels against rotation, said flywheel being provided with a plurality of cylindrical cavities adapted to receive said planetary gears and corresponding each in diameter to one of the planetary gears for guiding said gears in their movement of rotation about their axis and compelling the planetary member to follow the movement of the flywheel.

1,892,617. AUTOMATIC REGULATING, CONTROLLING, AND SWITCHING MEANS FOR ELECTRICAL TRAIN LIGHTING AND LIKE INSTALLATIONS. ALFRED EDWARD HONEY, Ilford, England, assignor to J. Stone & Company Limited, Deptford, England, a Corporation of Great Britain. Filed Feb. 24, 1930, Serial No. 430,891, and in Great Britain Mar. 1, 1929. 28 Claims. (Cl. 171—318.)

1. Automatic switching means for train lighting and like installations, comprising an electric motor having a cobalt steel permanent field magnet built up of a plu-

rality of opposed horseshoe magnets of constricted cross-section at the points of junction between their limbs at which points the pole pieces are formed, a centrifugal governor driven by said motor, a control switch device and an operative mechanical connection between said governor and switch device.



13. Train lighting or like electrical installation having a variable voltage generator and embodying automatic voltage regulating means for a consuming circuit, comprising an electric motor consisting of an armature, a permanent field magnet and an auxiliary excitable field magnet connected to said installations, electrical connections between said motor and the generator, a centrifugal governor driven by said armature, a rheostat device disposed in series with said consuming circuit and an operative mechanical connection between said governor and rheostat device.

26. A battery charging installation embodying a generator, a generator excitation circuit, a battery and a battery charging regulator comprising a variable speed electric motor, said generator, battery and regulator being connected in a battery charging circuit, electrical connections between said motor and the battery poles, a centrifugal governor driven by the motor, speed controlling contacts located in the motor armature and field circuits and operatively connected with said governor, small speed changes resultant upon predetermined charging voltage variations being magnified by the action of said contacts, a sectional resistance in the excitation circuit of the generator, a progressive switching device associated with said sectional resistance and mechanical actuating means between said governor and switching device.

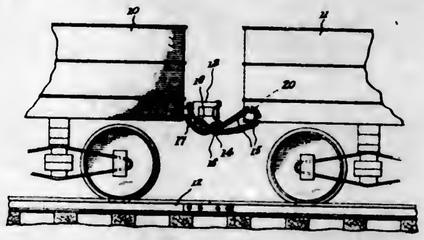
1,892,618. PACKING FOR JOINTS. NORMAN HUBBARD, Elizabeth, N. J., assignor to The Babcock & Wilcox Company, Bayonne, N. J., a Corporation of New Jersey. Filed Feb. 3, 1928. Serial No. 251,503. 4 Claims. (Cl. 154—455.)



1. A packing member comprising a compressible layer and a ductile sheath therefor, said sheath having formed at one edge thereof a bead adapted to be flattened over the edges of the joint when the packing is in place.

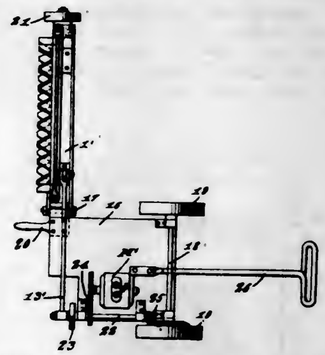
1,892,619. EMERGENCY COUPLING FOR RAILROAD CARS. PATRICK LEE HUDGINS, Decatur, Ga., assignor of sixty per cent to S. A. Love, De Kalb County, Ga. Filed May 18, 1931. Serial No. 538,332. 1 Claim. (Cl. 213—11.)

In an emergency car coupling, a single length chain having a hook on one end for adjustably engaging the other end portion of the chain and closing the chain into a continuous flexible chain, said continuous chain adapted to be looped at one end upwardly over a draw bar head and behind the same to engage the horn of the head, said continuous chain having the runs crossed beneath the drawbar head, a ring interposed in one run of the chain at a point to lie beneath the coupler and slidably receiving the opposite run of the chain, the other end loop of the chain beyond said ring adapted to



be engaged with a portion of an adjacent car and with the hook adjusted to take up general slack in the chain, and a turnbuckle disposed in the chain for drawing the same taut to hold said cars together to permit draft to be transmitted from one car to the other.

1,892,620. HEDGE AND LAWN MOWER. NOAH T. LANCASTER, Gastonia, N. C. Filed May 28, 1930. Serial No. 456,635. 1 Claim. (Cl. 56—25.)

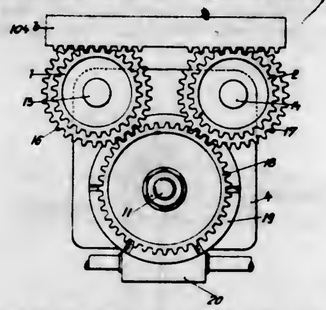


In a lawn mower, a platform, wheels journaled at the rear end of the platform, a shoe at one forward corner of the platform, the other forward corner of said platform being cut away, a support projected laterally from the platform at the shoe corner thereof, a traction wheel at the outer end of said support, a hinge interposed between the platform and the support to permit vertical swinging movement of said support, a cutter operating in said support, and driven connections between the cutter and the wheels of the platform and having a power motor upon the support.

1,892,621. GEAR CUTTING MACHINE. EMIL LISSER, Zurich, Switzerland, assignor to Maag Gear-Wheel and Machine Company Ltd., Zurich, Switzerland. Filed Oct. 27, 1930, Serial No. 491,595, and in Germany Oct. 31, 1929. 2 Claims. (Cl. 90—9.)

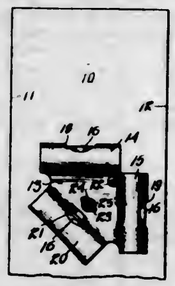
1. Cutting machine for the manufacture of gear wheels operating on the rolling principle which comprises a unitary rectilinear toothed cutter, a main driving spindle, a plurality of auxiliary rotary work supports arranged in parallel disposition and at equal distances from said cutter and each adapted to support at least one blank to be toothed in tangential relationship to said cutter, driving means for causing said supports to perform a synchronous and identic motion relative to said cutter, whereby said blanks are machined simultaneously, said means including a pinion on each of said supports adapted to be clutched

to a blank and a gear wheel mounted on said main driving spindle and arranged in mesh with said pinions, said main driving spindle being spaced at a greater distance from



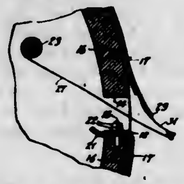
said cutter than said pinions whereby said main driving spindle may be used as a support when cutting the teeth on a blank of large diameter.

1,892,622. PLUMB AND LEVEL. JOHN MAYES, Port Austin, Mich., assignor to Mayes Bros. Tool Manufacturing Company, Port Austin, Mich., a Corporation. Filed Feb. 27, 1928. Serial No. 257,434. 1 Claim. (Cl. 33—213.)



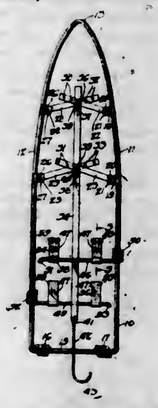
In combination with a straight edge, a plate having the form of an isosceles right triangle and adapted to be secured to the straight edge, said plate having at each edge a cylindrical receptacle adapted to receive a spirit vial, one spirit vial being mounted parallel with the longitudinal edges and one parallel to the end edges of the straight edge the third of said vials being mounted at a 45 degree angle to the straight edge, the plate having means for pivotally attaching it to the straight edge and securing it in adjusted position about said pivotal point, substantially as set forth.

1,892,623. MEANS FOR SECURING A BLANKET TO A PRINTING PRESS CYLINDER. THOMAS L. MCELROY, Flatbush, N. Y. Filed Dec. 2, 1930. Serial No. 499,602. 5 Claims. (Cl. 101—415.1.)



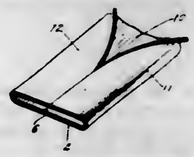
1. In combination with a cylinder having a transverse opening in its periphery, a transverse plate normally disposed in the opening and having a roughened face for normally engaging and pressing a blanket against the cylinder at the opening, the plate being provided with teeth extending from its inner edge for engaging the blanket, and means to secure the plate to the cylinder.

1,892,624. FUR STRETCHER. OSCAR L. NELSON, Prentice, Wis. Filed May 31, 1930. Serial No. 458,620. 8 Claims. (Cl. 149—21.)



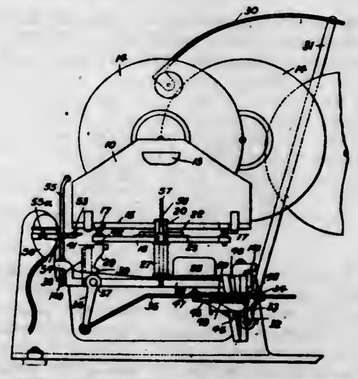
2. A device of the character described comprising an expansible frame including side rails, means for expanding and contracting the frame, members slidable on said rails, and means on said members for gripping a pelt stretched on said frame.

1,892,625. BRAKE LINING. CARL F. OGREN, Trenton, N. J., assignor to Thermoid Rubber Company, Trenton, N. J., a Corporation of New Jersey. Filed June 4, 1929. Serial No. 368,407. 4 Claims. (Cl. 154—52.)



1. A strip of brake lining comprising a fabric frictioned with rubber and skimmed on at least one of its surfaces with a rubber sheet.

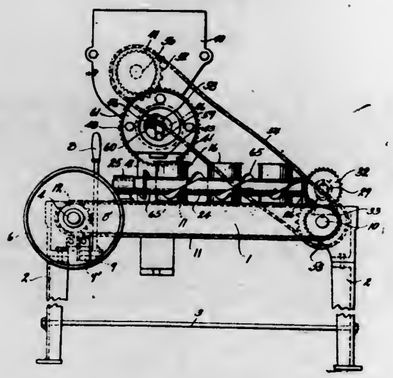
1,892,626. TALKING MACHINE OF THE MAGAZINE PLAYER TYPE. WILLIAM ROBERT OYSTON, Parkville, Victoria, Australia, assignor to Continuous Gramophones Limited, London, England. Filed Feb. 28, 1929, Serial No. 343,506, and in Australia May 22, 1928. 18 Claims. (Cl. 274—10.)



2. In a talking machine for playing a number of double-faced records in sequence in which the records are positioned vertically in a record magazine and moved by a

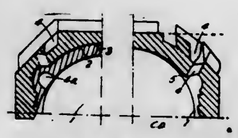
record transfer mechanism from the magazine to a playing position on a vertically-positioned turntable and after playing returned to said magazine, the combination of a rotatable support for the magazine, means for advancing said magazine transversely of said support to bring another record disc into line with the record transfer mechanism of the talking machine, and means for producing periodically a half-revolution of said support and magazine following the return of a record disc thereto, said magazine being advanced transversely of said support at each alternate half-revolution thereof.

1,892,627. SALTER. PAUL E. PEARSON, Seattle, Wash., assignor to Continental Can Company, Inc., a Corporation of New York. Filed May 1, 1930. Serial No. 449,035. 5 Claims. (Cl. 226—99.)



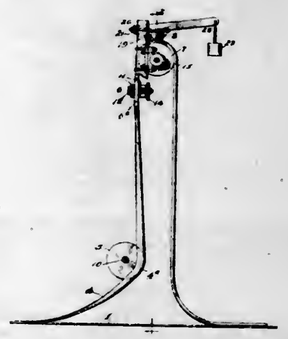
1. A machine of the character described comprising a material containing hopper, a continuously moving conveyer by which cans are delivered in succession beneath the hopper to receive material therefrom, a worm shaft adjacent the conveyer and operable to space the cans and to time their delivery to and from receiving position, a dispensing valve in the hopper operable in synchronism with the worm shaft to deliver measured amounts of material to each can while in receiving position, a driving means for the valve mechanism including a releasable connection, and means operable incident to the absence of cans in regular order of delivery to the hopper to actuate the releasable connection to temporarily discontinue actuation of the valve mechanism.

1,892,628. JOURNAL BEARING. WALTER PEYINGHAUS, Egge, Germany. Filed June 13, 1929, Serial No. 370,711, and in Germany June 16, 1928. 2 Claims. (Cl. 308—56.)



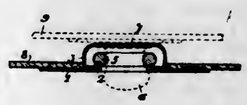
1. A journal bearing for drip lubrication comprising a hard metal base having its bearing surface of greater radius of curvature than the journal and a longitudinal oil groove therein which is shaped to produce drip lubrication at its upper edge, a soft metal lining having a similarly shaped groove therein, and means for supplying oil to the upper edge of the groove in the lining and to the upper edge of the groove in the base if and when the lining melts.

1,892,629. METHOD OF AND APPARATUS FOR MAKING TUBING. FRED B. PEIFFER, Akron, Ohio, assignor to Seiberling Rubber Company, a Corporation of Delaware. Filed Apr. 26, 1930, Serial No. 447,531. Renewed May 27, 1932. 17 Claims. (Cl. 154—9.)



1. The method of making tubing for the production of inner tubes, which consists in providing a length of tube stock in sheet form, feeding said length linearly and subjecting the same in its travel to a continuous folding operation to give it the form of a continuous tube, the portion of the traveling stock subjected to the folding operation being caused to occupy such position that the force of gravity will not tend to interfere with the folding operation.

1,892,630. PRESS FASTENER. VOJTĚCH PUC, Prague, Czechoslovakia. Filed Oct. 13, 1930, Serial No. 488,505, and in Czechoslovakia Dec. 31, 1929. 1 Claim. (Cl. 24—218.)



A press-button-fastener comprising the combination with a stud having a head and a constricted neck portion, of a socket having a double-walled disc portion with an opening therein, a portion extending perpendicularly from said disc portion, and in one piece with the latter and forming a chamber, a spring for engaging the stud, loosely disposed in said chamber, so as to be capable of radial movement therein, said perpendicularly extending portion of the socket having a plurality of notches in the unsupported edge remote from the disc portion with the notched edge bent over inwards so as to form an enclosing wall for said spring with an opening therein for the insertion of the head opposite the opening in the disc portion, said enclosing wall being so spaced from the disc portion as to allow of substantial free displacement of the spring in the axial direction.

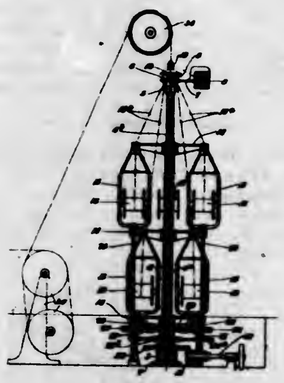
1,892,631. DEVICE FOR REGULATING THE PUMPING PERIODS OF WELLS. JAMES S. QUIGG, Dewey, Okla. Filed Feb. 25, 1932. Serial No. 595,212. 5 Claims. (Cl. 103—23.)

1. A device for periodically controlling the pumping action of a pump comprising a power driven reciprocating rod provided with a yoke, a latch rod connected with an operating element of a pump and provided with a catch, a drum provided with a cam adapted to engage periodically the latch rod and move the catch into operative relation with the yoke for causing the latch rod to be reciprocated by the power driven rod and the pump to be actuated periodically, the cam providing a weight for



the drum tending to rotate the drum and move the cam to an inoperative position, means for causing rocking of the drum for moving the cam into operative relation with the latch rod, means for retaining the drum and likewise the cam in an operative position temporarily, and means for releasing the retaining means periodically to permit the drum and cam to move to an inoperative position.

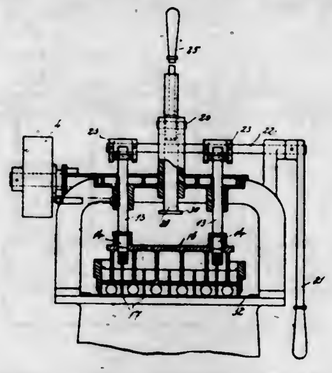
1,892,632. MANUFACTURE OF DEAD LAY WIRE ROPE. ALBERT S. RAIRDEN, Hamden, Conn. Filed July 11, 1927. Serial No. 204,916. 2 Claims. (Cl. 117—20.)



1. In a dead lay rope machine for laying up dead lay wire rope, a central hollow shaft through which the core is adapted to be passed, a plurality of strand spools carried by and rotatable with said shaft, a twister-head secured to one end of said shaft, a combined guide and bending ring secured to said shaft at a point slightly below said head, said ring being of materially less diameter than said head, and a die adjustably mounted above said head.

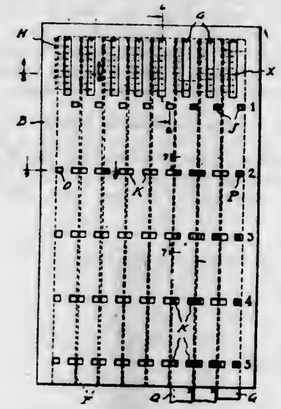
1,892,633. MACHINE FOR DIVIDING AND WORKING DOUGH. BRUNO RIEGEL, Halle-on-the-Saale, Germany, assignor to Herm. Bertram, Hallesche Dampfbackofen-Fabrik Hallesche Misch-u. Knetmaschinen-Fabrik m. b. H., Halle-on-the-Saale, Germany. Filed Mar. 20, 1931, Serial No. 524,123, and in Germany Mar. 21, 1930. 2 Claims. (Cl. 107—20.)

1. In a machine for dividing and working dough, a support for the dough, a dividing and working head comprising a set of dividing knives and a press plate, means for moving said dividing and working head in a defined path in a horizontal plane, means for raising and lowering said working head, said press plate beng free with respect



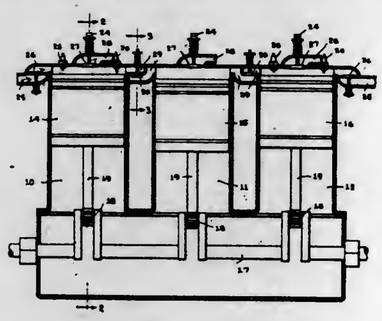
to said raising and lowering means to move upwardly or downwardly within certain limits, said press plate being of a specifically light material.

1,892,634. CALCULATING DEVICE. IVAN RUBINSKY, Beirut, Syria. Filed Dec. 15, 1930, Serial No. 502,506, and in Syria Jan. 20, 1930. 2 Claims. (Cl. 235—69.)



2. A calculating device comprising a tablet formed with parallel guide slots and having windows in its face, the windows being arranged in parallel spaced rows, the uppermost row of windows being narrow and communicating each with one guide slot, the remaining rows of windows having the terminal windows thereof of the same width as the first said windows and communicating with the outermost guide slots, the intermediate windows in the remaining rows being double the width of the first said members and communicating each with two adjacent guide slots, and numeral bearing strips inserted in the guide slots and having the numerals thereof arranged at opposite longitudinal edges, and indicating means to permit adjustment of the strips in the guide slots according to a number to be multiplied, the rows of windows bearing digit indications of the multiplier, the strip adjusting means consisting of slots communicating with the guide slots and opening onto the face of the tablet, the latter having the digits arranged in consecutive order beside said slots, and the numeral bearing strips being formed with pointer receiving perforations spaced according to the numerals on said strips.

1,892,635. INTERNAL COMBUSTION ENGINE. ALFRED SCHWARZ, Upper Montclair, N. J., assignor, by meane assignments, to Holly Motors Corporation, New York, N. Y., a Corporation of Delaware. Filed Apr. 9, 1930. Serial No. 442,858. 7 Claims. (Cl. 123—1.)



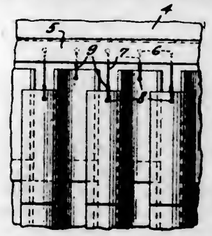
4. In an internal combustion engine, an explosion cylinder, a receiving cylinder, a passage connecting said cylinders, a valve in said passage opening toward the receiving cylinder, pistons reciprocating in said cylinders, a crank shaft, a second explosion cylinder, a second passage connecting the second explosion cylinder with the receiving cylinder, a piston in the second explosion cylinder, a valve in the second passage opening toward the receiving cylinder, connections between all of the pistons and the crank shaft arranged to cause the pistons in the explosion cylinders to move in unison in the same direction during reciprocation thereof while the piston in the receiving cylinder is arranged to lag slightly behind the pistons in the explosion cylinders, and means to fire charges in the explosion cylinders alternately and before the piston in the receiving cylinder reaches top dead-center.

1,892,636. FLUID LIFT FOR USE IN WELLS. GUY P. SLATER, Sand Springs, Okla. Filed Aug. 24, 1929. Serial No. 388,186. 4 Claims. (Cl. 121—123.)



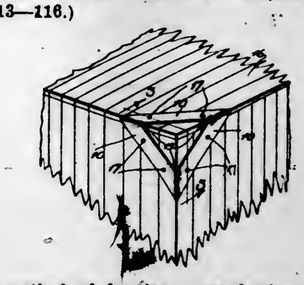
1. In a structure of the class described, a working cylinder, a piston within the cylinder and embodying inner and outer sections having separate intake and exhaust ports, a sleeve valve between said sections and having means controlling said ports, said sleeve valve and said inner section of the piston being provided with separate sets of notches, spring pressed dogs pivoted between the ends thereof to the outer section of said piston and having bills adapted to interlock with said notches to hold the valve in a predetermined position with respect to the inner section of said piston, the outer portions of said dogs being free, and means carried by said cylinder and being in the path of the free outer portions of said dogs to engage the same and thereby swing the dogs outwardly from the notches of the sleeve valve and the inner section of the piston.

1,892,637. ROOF CONSTRUCTION. LA VERNE G. SMITH, West Hollywood, Calif. Filed Apr. 6, 1931. Serial No. 528,159. 1 Claim. (Cl. 108—10.)



A roof construction including a roof frame, strips covering the frame and having overlapped edges, headed fasteners securing the strips to the frame and covered by the overlapped edges of said strips, cement securing the overlapped edges of the strips together and covering the headed fasteners, and tying elements secured to the fasteners adjacent the heads thereof and extending outwardly from the overlapped edges of the strips and passed through openings in tiles or shingles and each tying element bent about itself after passing through the opening of the respective shingle or tile for securing said shingles or tiles in overlapped relation to cover the overlapped edges of the strips and the headed fasteners and ties.

1,892,638. METHOD OF MAKING REENFORCING CORNER STRAPS FOR EXPORT BOXES AND THE LIKE. CLIFFORD L. SNYDER, Detroit, Mich., assignor to The Evans Auto Loading Co. Inc., Detroit, Mich. Filed Jan. 23, 1930. Serial No. 422,826. 2 Claims. (Cl. 113—116.)

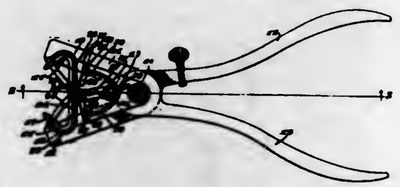


1. The method of forming a reenforcing corner strip for boxes and the like consisting of cutting a blank of triangular formation wherein the sides of the triangle consist of parallel curved strips, then drawing this shape from a single plane into the form of a triangular pyramid whose sides are at right angles to each other, and at the same time straightening the curved parallel sides of the triangle to a straight parallelism.

1,892,639. ANIMAL RINGER. WILLIAM H. STANLEY, Charles City, Iowa. Filed July 23, 1930. Serial No. 470,099. 1 Claim. (Cl. 128—382.)

A nose ring applying tool comprising a pair of jaws connected together by a pivot pin, a plate pivoted upon said pin and extending along both jaws, said jaws having

seats at their inner sides adapted to receive a ring, said plate having a ring holder adapted to retain a stack of rings, said ring holder having a slot disposed upon the plane of the median longitudinal dimension of the plate and at a right angle thereto, means for limiting the rela-



tive swinging movement of the jaws and plate, a follower having an extension slidable in the slot of the ring holder, and means for supporting the follower upon the plate at a point between the pivot pin and the ring holder and upon the median longitudinal dimension of the plate.

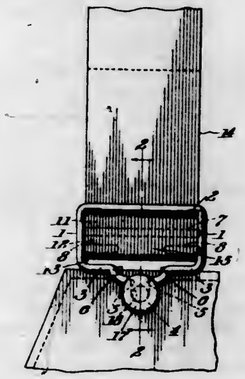
1,892,640. CORD CONTROL FOR VACUUM CLEANERS. CLARENCE V. UTLEY, Columbus, Ohio. Filed Mar. 14, 1930. Serial No. 435,878. 1 Claim. (Cl. 242—107.)



A cord reel comprising a handle including a pair of sections each having a bore, a tube extending in said bores to arrange the sections in spaced relation and adapted to house electrical conductors extending between said sections, sleeves fitted to the opposing ends of the sections and projecting beyond said ends, fastening means securing the sleeves and tube to the sections, a self-winding reel for supporting the electrical conductors journalled on the tube with the ends thereof received and journalled in the sleeve, and a guide element connecting the sleeves and extending parallel with the reel to be engaged by the conductors of the reel during its movements onto and off the reel.

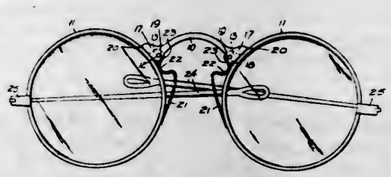
1,892,641. SLIDE BUCKLE. PAUL E. FENTON, Thomaston, Conn., assignor to Scovill Manufacturing Company, Waterbury, Conn., a Corporation of Connecticut. Filed Aug. 24, 1932. Serial No. 630,298. 6 Claims. (Cl. 24—73.)

3. In a slide buckle for association with a looped strap, a frame comprising side members, top and bottom members and intermediate bars adjacent to said top and bottom members respectively, the intermediate bar adjacent to said bottom member comprising two parts carried by said side members respectively and having their ends spaced apart to provide an opening therebetween, said two-part bar adapted to engage the loop of said strap, said bottom member provided with a button-engaging loop so spaced



relatively to said two-part bar that a button engaged by said button loop cannot escape therefrom in the presence of the strap loop upon said two-part intermediate bar and spanning the opening between the spaced-apart ends of same, each part of said two-part bar provided with a prong capable of engaging said strap to prevent relative movement thereof.

1,892,642. COLLAPSIBLE EYE GLASS FRAME. JOSEPH GASPARI, New York, N. Y., assignor to J. Gaspari & Company, Inc., New York, N. Y., a Corporation of New York. Filed Mar. 19, 1929. Serial No. 348,208. 6 Claims. (Cl. 88—44.)

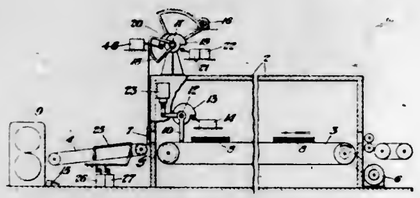


1. Folding eye glass frames, comprising a pair of lens rims, each thereof having a radially projecting notched ear portion, a rigid bridge piece having its ends notched and pivotally connected to the ears of the rims, and flat spring members for engaging, holding the rims open, and supporting the frames on the nose of the wearer, each spring being fixed at one end to the periphery of the rim, the intermediate portion projecting substantially tangentially to the rim to form the nose engaging portion, and the free end being curved away from the rim and having its tip yieldably engaging in the notches of the ear and bridge piece to hold the rim in open position, said notches being disposed to coincide in the latter position.

1,892,643. FURNACE DOOR AND CONVEYER CONTROL. HOWARD G. MCILVRIED and KLINE B. WEST, Gary, Ind., assignors to American Sheet and Tin Plate Company, a Corporation of New Jersey. Filed Sept. 9, 1931. Serial No. 561,976. 4 Claims. (Cl. 263—8.)

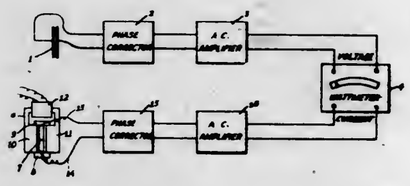
1. In combination with a continuous heating-furnace having a discharge opening closed by a door, means for

moving work through said furnace, means arranged in the path of work moved by said first named means and adjacent said opening for stopping the movement of work



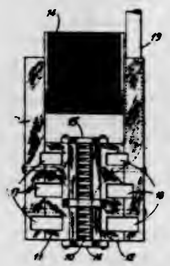
through said furnace, means for moving said door and means for moving said second named means out of the path of work units upon movement of said door.

1,892,644. SYSTEM RESPONSIVE TO THE ENERGY FLOW OF SOUND WAVES. HARRY F. OLSON, New York, N. Y., assignor to Radio Corporation of America, a Corporation of Delaware. Filed May 29, 1931. Serial No. 541,095. 20 Claims. (Cl. 181—0.5.)



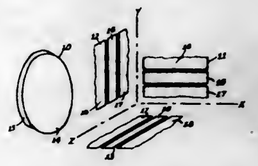
1. The method of measuring the energy flow of a sound wave comprising the steps of (1) converting separately the energy of different components of the sound wave into electrical variations (2) combining the electrical variations to obtain their product and (3) indicating the total energy flow of the sound wave from the product of the electrical variations.

1,892,645. SOUND PICK-UP DEVICE. HARRY F. OLSON, Collingswood, and JULIUS WEINBERGER, Haddonfield, N. J., assignors to Radio Corporation of America, a Corporation of Delaware. Filed May 20, 1932. Serial No. 612,466. 8 Claims. (Cl. 179—121.)



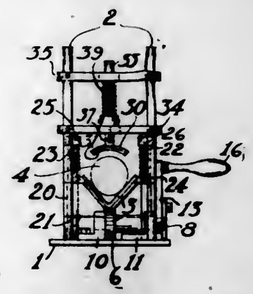
1. A microphone including a single means one portion of which is responsive to the pressure gradient of a sound wave and another portion of which is responsive to the pressure of said wave.

1,892,646. SYSTEM RESPONSIVE TO THE ENERGY DENSITY OF SOUND WAVES. IRVING WOLFF, New York, N. Y., assignor to Radio Corporation of America, a Corporation of Delaware. Filed May 29, 1931. Serial No. 540,898. 20 Claims. (Cl. 181—0.5.)



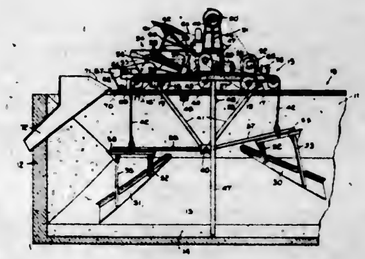
1. The method of measuring the energy of a sound wave comprising the steps of (1) measuring separately the energy of different components of the sound wave, (2) combining the measured energies, and (3) indicating the total energy of the sound wave from the combined energies.

1,892,647. LABEL PRESS. JOSEPH BAHELKA, Linden, N. J., assignor to Stanco, Incorporated. Filed Jan. 23, 1932. Serial No. 588,279. 5 Claims. (Cl. 216—9.)



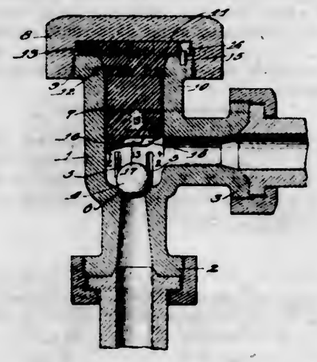
5. A machine according to claim 4 in which the trough has a smooth surface to permit sliding of the articles longitudinally of the trough upon withdrawal of the trough and plate members from each other whereby additional articles can be inserted in the trough.

1,892,648. SEDIMENTATION DEVICE. SAMUEL I. BOUSMAN, Denver, Colo., assignor to The Dorr Company, Inc., New York, N. Y., a Corporation of Delaware. Original application filed June 1, 1929, Serial No. 367,783. Divided and this application filed July 23, 1932. Serial No. 624,317. 8 Claims. (Cl. 210—55.)



1. In a sedimentation system including a grit chamber, the combination of means travelling longitudinally of said chamber for collecting in a longitudinal zone settled solids including grit, means connected with such collecting means to travel therewith for removing said settled solids from said longitudinal zone, and means traveling with said collecting means for separating the grit from the solids and liquid removed from the chamber.

1,892,649. CHECK VALVE. CLARENCE O. BUENGER, Chicago, Ill., assignor to Hills-McCanna Company, Chicago, Ill., a Corporation of Illinois. Filed May 15, 1930. Serial No. 452,612. 6 Claims. (Cl. 251—121.)



1. In a valve of the character described, a removable plug having its lower end so shaped that the greater portion of its surface is higher than the remaining portion, said remaining portion comprising a triangular shaped rib for the end of said plug.

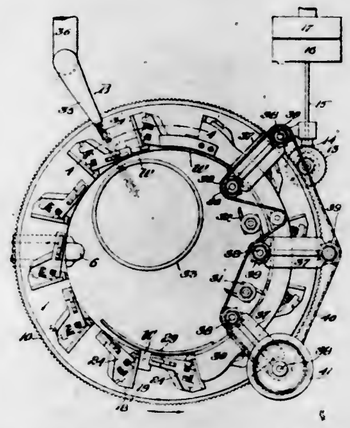
1,892,650. WATER-SOLUBLE SLUDGE ACID AND METHOD OF PREPARING THE SAME. STEWART P. COLEMAN and JOHN A. COLEMAN, Houston, Tex., assignors to Standard Oil Development Company, a Corporation of Delaware. Substitute for application Serial No. 72,052, filed Nov. 28, 1925. This application filed Jan. 13, 1932. Serial No. 586,458. 4 Claims. (Cl. 260—159.)

2. A process for preparing water-soluble sludge acids from sludge obtained by the sulphuric acid treatment of petroleum oils and containing residual sulphuric acid, comprising, washing the sludge with water, settling and drawing off the aqueous layer, adding alkali insufficient to neutralise the sulphuric acid retained by the sludge, washing again with water, settling and discarding the aqueous layer, and separating the sludge acids from the sludge.

1,892,651. WOODWORKING MACHINE. NICHOLAS L. GULLIFORD, Peabody, Mass.; Archibald T. Gulliford, administrator of said Nicholas L. Gulliford, deceased, assignor to Gulliford Wood Heel Company, Lynn, Mass., a Firm composed of Archibald T. Gulliford and Pearce H. Gulliford. Filed Mar. 29, 1924. Serial No. 702,949. 21 Claims. (Cl. 12—47.1.)

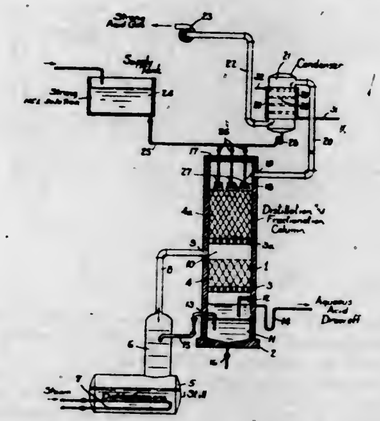
1. A machine for grooving heel blocks comprising relatively movable elements including a work holder and a rotary cutter having heel breast and shank lip forming portions, one of said elements being movable past the other in a curved path lying in a plane transverse to the cutter axis to cause the cutter to form a transversely concave groove in the breast of the heel block and a shank lip having a concave end surface.

17. A machine for grooving heel blocks having, in combination, a rotary cutter having a convexly curved cutting edge including a breast shaping portion and a shank lip forming portion, and a continuously movable work carrier for moving heel blocks past said cutter in a curved path lying in a plane transverse to the cutter axis to cause said cutter to form a transversely and vertically concaved heel breast and a longitudinally projecting shank lip.



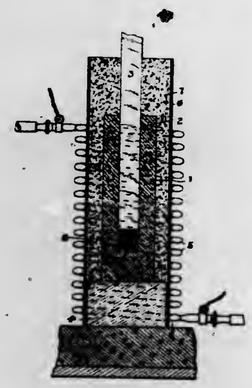
19. A machine for shaping wood heels having, in combination, a heel block holder, rotary cutter means for operating upon the heel block, mechanism for relatively moving said cutter means and holder for causing the former to operate upon said heel block, said cutter means being so shaped and so mounted relative to the path of such relative movement as to form the heel breast surface and shank lip and to concave the end of the shank lip.

1,892,652. PREPARATION OF STRONG HYDROGEN HALIDE GAS. SHELDON B. HEATH, Midland, Mich., assignor to The Dow Chemical Company, Midland, Mich., a Corporation of Michigan. Filed Oct. 4, 1929. Serial No. 397,256. 11 Claims. (Cl. 202—46.)



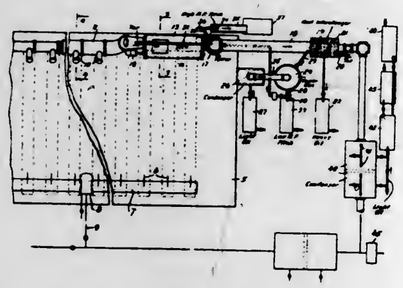
1. In a method of preparing a strong hydrogen halide gas of the class consisting of hydrogen bromide and hydrogen chloride, the step which consists in fractionally distilling an aqueous solution thereof having a concentration in excess of the constant boiling point mixture by contacting the same with the vapors of an organic compound at the boiling point of the latter, such compound being immiscible and unreactive with, and having a higher boiling point than, such aqueous acid.

1,892,653. PROCESS OF MANUFACTURING A COMPOSITION OF MATTER. PHILIP M. MCKENNA, Unity Township, Westmoreland County, Pa., assignor to Vanadium Alloys Steel Company, Latrobe, Pa., a Corporation of Pennsylvania. Filed Oct. 28, 1930. Serial No. 491,734. 3 Claims. (Cl. 75—1.)



1. The process of manufacturing a material for tools and the like wherein the particles are welded together, which process comprises subjecting to pressure a mixture comprising finely divided tungsten carbide and tantalum and simultaneously subjecting the mixture to high frequency electric currents in the presence of temperatures materially less than the melting points of either of the said ingredients.

1,892,654. METHOD AND APPARATUS FOR DISTILLING TAR. STUART PARMELEE MILLER, Englewood, N. J. Filed Jan. 16, 1929. Serial No. 332,779. 8 Claims. (Cl. 202—80.)



1. The method of distilling coal tar by direct contact with highly heated coke oven gases, which comprises distilling pitch by spraying it into the gases in a still with such thoroughness and intensity that the gases are rapidly cooled to a temperature approximating that to which the resulting pitch is heated, regulating the operation so as to produce a high melting point pitch and hot enriched gases leaving the still, passing the hot enriched gases in indirect contact with the coal tar to preheat the tar, regulating the rate of supply of the tar to the preheater so as to preheat it to a temperature sufficient to effect partial distillation thereof, separating the resulting vapors of lower boiling point oils from the preheated and partially distilled tar residue, withdrawing the distillate from such partial distillation, and supplying the tar residue to the still in the form of low melting point pitch to be there further distilled to produce high melting point pitch whereby the distillate produced in the still by direct contact with the hot coke oven gases is a distillate relatively free from low boiling point oils, which can be readily condensed from admixture with the gases on cooling.

1,892,655. PROCESS FOR TREATING MINERAL OILS. REGINALD K. STRATFORD, Sarnia, Ontario, Canada, assignor to Standard Oil Development Company, a Corporation of Delaware. Filed Mar. 26, 1929. Serial No. 350,130. 3 Claims. (Cl. 196—13.)

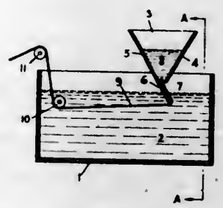
1. The process for purifying liquid petroleum hydrocarbon oil which comprises agitating the oil with a selective solvent, comprising about 65 to 95% of phenol and 35 to 5% of a polyhydric alcohol to extract impurities, and removing the solvent and extracted impurities from the purified oil.

1,892,656. TABLE. LOUIS J. VIEHMANN, Douglaston Manor, N. Y., assignor to Teepe-Whitney Corporation, Long Island City, N. Y., a Corporation of New York. Filed Mar. 31, 1930. Serial No. 440,395. 8 Claims. (Cl. 45—113.)



1. An extension table comprising a frame, a main table top, a longitudinal member upon its under side dividing the same into two longitudinal recesses, securing means on said longitudinal member and movably engaging said frame to permit of combined vertical and transverse tilting movements of said top, a pair of leaves normally housed wholly within the longitudinal recesses in the underside of said top, and means for slidingly supporting said leaves upon said frame for movement thereof from inoperative to operative positions, and vice versa in a horizontal plane, substantially as specified.

1,892,657. METHOD OF CASTING CELLULOSE SHEETS FROM SOLUTIONS OF CELLULOSE. CARL HERMANN VON HOESSLE, Radebeul-Dresden, Germany, assignor to Chemische Fabrik Von Heyden, Aktiengesellschaft, Radebeul, near Dresden, Germany, a Corporation of Germany. Filed Nov. 3, 1930, Serial No. 493,023, and in Germany Nov. 7, 1929. 5 Claims. (Cl. 18—56.)



4. The method of casting a cellulose solution into a smooth thin sheet by interaction with a precipitating agent that method comprising spreading the cellulose solution on a plane surface into a smooth liquid sheet outside the aforesaid agent acting upon the sheet with aforesaid agent thereby gelatinising the sheet and stretching it by drawing the sheet around the sharp edge at the lower end of the aforesaid plane surface.

1,892,658. TREATING WOOD. PETER J. WIEZEVICH, Elizabeth, N. J., assignor to Standard Oil Development Company, a Corporation of Delaware. Filed Dec. 21, 1931. Serial No. 582,500. 7 Claims. (Cl. 99—12.)

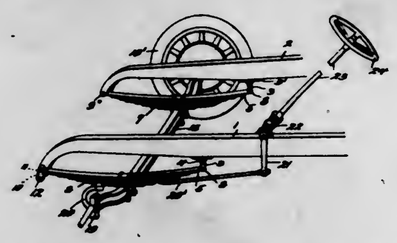
1. An improvement in the process of impregnating wood, fiber board and the like with compositions in which Montan or a similar high melting wax is a major ingredient which comprises subjecting the wood to a pretreating step comprising contact with an acidic gas.

1,892,659. EXPANSION JOINT FOR PAVEMENTS. WILLIAM R. MEADOWS, Elgin, Ill., assignor to Construction Materials Patents, Inc., Lockland, Ohio, a Corporation of Ohio. Filed Nov. 1, 1926. Serial No. 145,887. 6 Claims. (Cl. 94—18.)



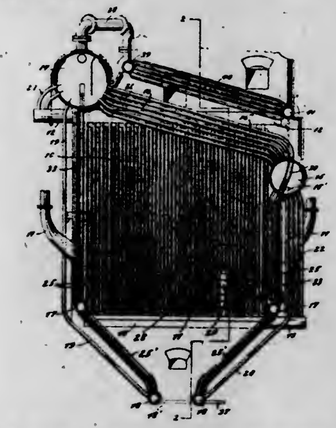
1. The method of manufacturing an expansion joint in which a material flotable in melted bituminous material is to be uniformly incorporated comprising first thoroughly mixing into said bituminous material a material capable of involving said flotable material, and thereafter adding said flotable material, which latter is involved and thoroughly distributed throughout the bituminous material.

1,892,660. SPRING SUSPENSION FOR MOTOR VEHICLES. PIERRE LEMAIGRE, St. Denis, France, assignor, by mesne assignments, to Milton Tibbetts, trustee. Filed Oct. 20, 1928. Serial No. 313,797. 8 Claims. (Cl. 267—54.)



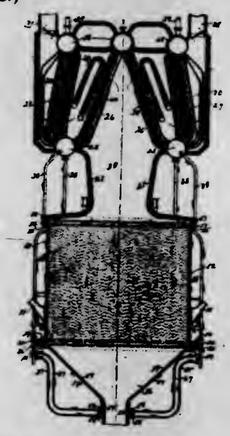
1. In a motor vehicle, the combination with the frame and the axle, of side supporting springs between the frame and axle, means connecting the spring to the frame at one side of the vehicle providing movement of the axle about a definite axis on the frame, and means connecting the spring to the frame at the other side of the vehicle providing movement of the axle about an axis shiftable slightly lengthwise of the vehicle against the action of the weight of the part of the vehicle supported by the spring.

1,892,661. BOILER FURNACE. CHARLES A. HULSART, Westfield, N. J., assignor, by mesne assignments, to Fuller Lehigh Company, a Corporation of Delaware. Filed May 13, 1927. Serial No. 190,998. 5 Claims. (Cl. 122—235.)



1. In a boiler, a furnace, and water tubes along a wall of said furnace connected to adjacent tubes through openings in the sides of said tubes.

1,892,662. POWDERED FUEL FURNACE. HOWARD J. KERR, Westfield, N. J., assignor, by mesne assignments, to Fuller Lehigh Company, a Corporation of Delaware. Filed Apr. 7, 1927. Serial No. 181,710. 7 Claims. (Cl. 122—235.)



1. In a boiler, a primary combustion chamber, wall cooling tubes for said chamber and fuel burners, some of said tubes being cut away and others bent outwardly to accommodate said burners, said cut away tubes being connected to said bent tubes.

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